

STUDY AREA & GOALS

Study Goals

- Develop an attractive and cohesive transportation plan that creates a safer environment for residents and broader community
- Develop a holistic program of improvements that addresses all modes of transportation
- Foster public involvement to build consensus and establish stakeholder support
- Determine most effective traffic calming methods to reduce traffic speeds
- Provide safe access to transit facilities and ensure improvements address transit operations
- Consider environmental, community, and economic issues through the PEL process to inform decision making and NEPA



WINTER 2025 PUBLIC SURVEY RESULTS

Q1 What's your vision for the Augustine Cut Off Corridor? Consider yourself, your family, your business, or your organization using Augustine Cut Off over the next 15 years. What does it look like? How do you get to and from work, school, businesses, and local parks? What would make it better? Please list words or brief phrases that define the future you envision. Please provide any additional input about the project.

Answered: 44 Skipped: 6

Of the 44 individuals who provided a vision statement:

- 34 were supportive of traffic calming and providing facilities for people walking and biking
- 4 were not supportive of the study
- 5 were neutral

Example supportive statement:

- This road is a key connector to different neighborhoods and recreational areas. However, it is unsafe for bikes and pedestrians due to sections where there are no shoulders or sidewalks. At these points, you must walk/ride in the street (in the traffic lane). As a resident of the Cutoff who uses this road multiple times a day for walking the dog, exercising, and driving, safety is my main priority.

Example non-supportive statement:

- Less traffic. Limit future commercial development in order to reduce traffic on Augustine Cut Off. Improve Edgewood Road intersection. IMO, the bike and pedestrian lanes currently in place are sufficient.

Q2 During the March 3 Public Workshop, attendees developed the following improvements for people who use a mobility device, walk, or take transit along Augustine Cut Off. Please rank these recommendations in order of importance from highest to lowest.

Answered: 47 Skipped: 3

Provide a continuous shared use path along ACO between Incyte and Edgewood Road (open to people walking, biking, and running)

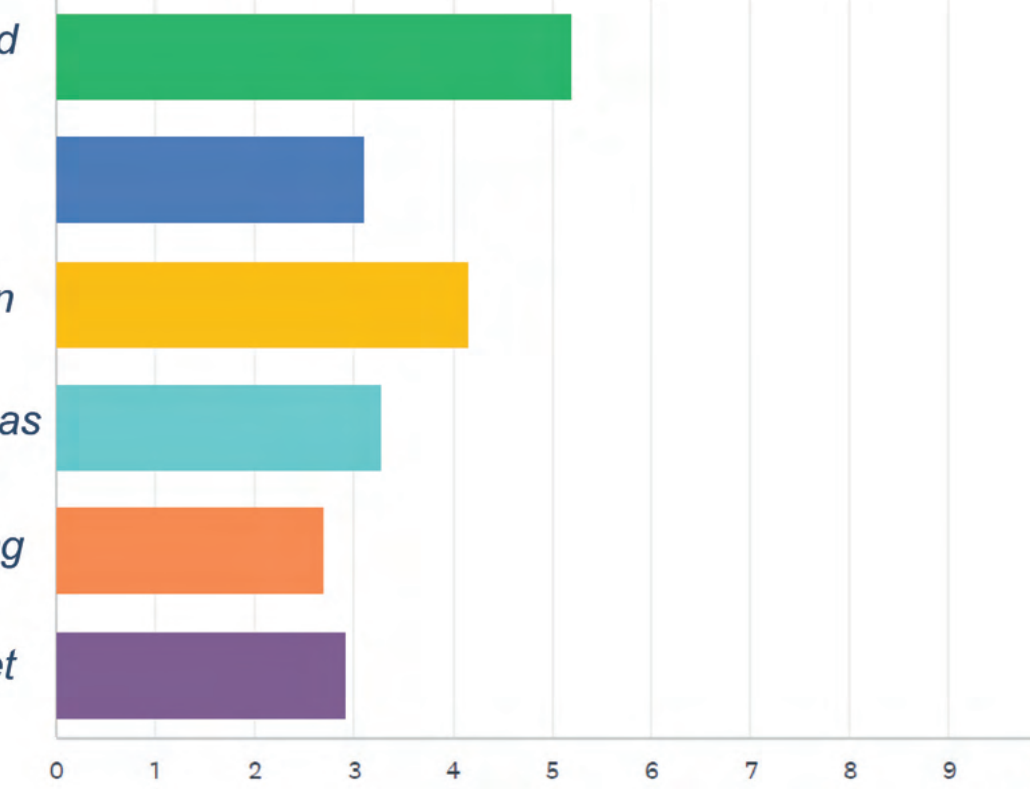
Provide sidewalks on ACO north of 18th Street (open to people walking and running, not biking)

Improve accessibility and connectivity to existing shared use paths (in front of Incyte and in Alapocas State Park)

Add more crosswalks across ACO (possible locations include Alapocas Dr, Cantera Rd, Stone Hill Rd, Rock Manor Ave, and Edgewood Rd)

Ensure pedestrian facilities are maintained with sweeping and plowing

Add a new pedestrian connection between ACO and North 18th Street



Q3 Do you have any other ideas to improve conditions for people who use a mobility device, walk, or take transit?

Answered: 30 Skipped: 20

- Streetlights/lighting
- Reduce speeds
- Continuous path/protected lane
- Ensure trash bins don't obstruct shoulder
- People aren't looking for these services on Augustine Cut Off
- Maintain traffic light at Augustine Cut Off and
- Cross walks would need stop signs or traffic lights – cars don't yield to unsignalized crossings
- Colored crossings instead of standard black and white

Q4 During the March 3 Public Workshop, attendees recommended the following improvements for people who bike (or ride scooters, skateboards, or other faster wheeled devices) along Augustine Cut Off. Please rank these recommendations in order of importance from highest to lowest.

Answered: 47 Skipped: 3

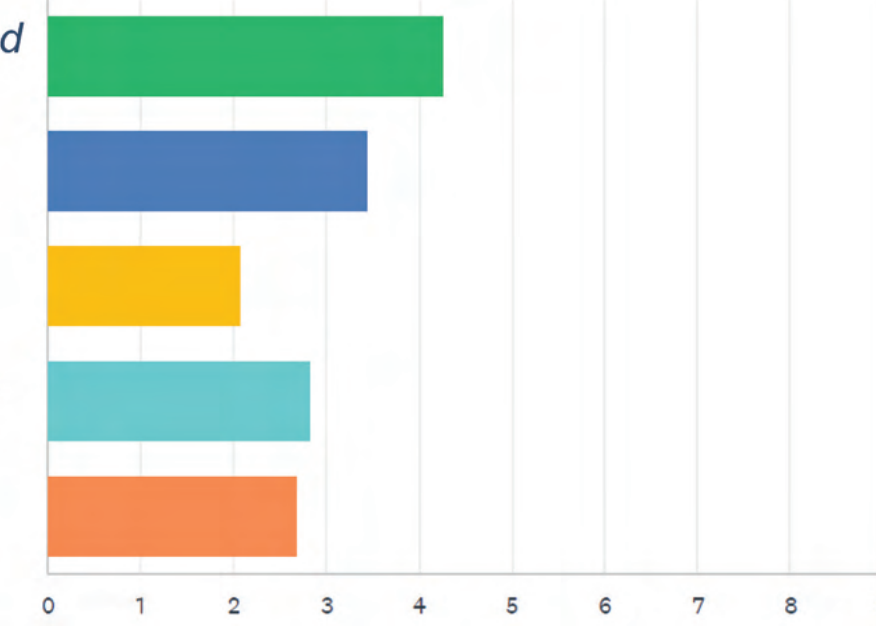
Provide a continuous shared use path along ACO between Incyte and Edgewood Road (open to people walking, biking, and running) with good signage

Provide continuous bike lanes along ACO, similar to what is provided in Centerville on Route 52

Ensure bike facilities are maintained with sweeping and plowing

Explore options to separate people walking from people biking, especially in the downhill portion of the corridor

Ensure transitions into and out of the bike facility are safe and intuitive



Q5 Do you have any other ideas to improve conditions for people who bike (or ride scooters, skateboards, or other faster wheeled devices)?

Answered: 30 Skipped: 20

- Fix areas with no bike lane
- Keep bike path separate from pedestrian path for safety
- Provide designated continuous area for bikes
- Pylons would not be enough separation from traffic to feel safe
- Minimize need to cross Augustine Cut to stay on trail
- Explore bike specific traffic signals
- Reduce traffic on the road
- Connect to Brandywine Park trail without crossing the bridge
- Educate bicyclists about rules of the road
- Clarify what devices are not allowed on greenway – mopeds and motorized dirt bikes
- Ban faster devices
- Enforce no parking on northbound ACO between 18th Street and Cantera Road

Q6 During the March 3 Public Workshop, attendees recommended the following improvements for people who drive a motor vehicle along Augustine Cut Off. Please rank these recommendations in order of importance from highest to lowest.

Answered: 47 Skipped: 3

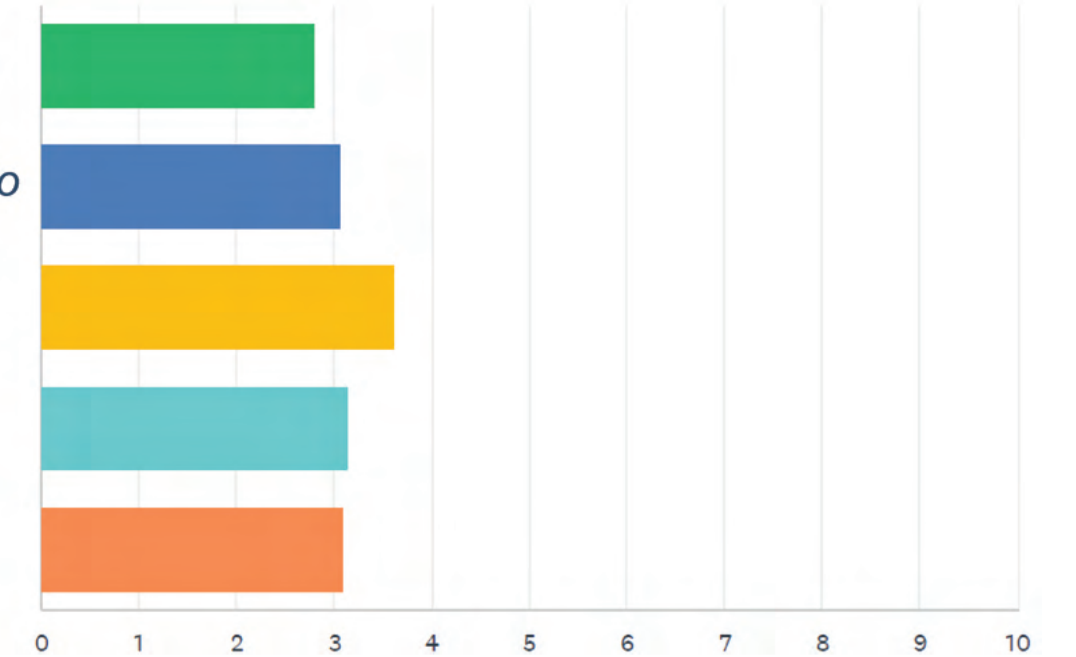
Provide a roundabout at Alapocas Drive and Augustine Cut Off

Provide a better left turn from southbound Augustine Cut Off onto 18th Street

Implement traffic calming to slow down motor vehicles and improve safety for drivers

Maintain a consistent speed limit along the Augustine Cut Off corridor

Address safety issues turning in or out of Edgewood Road



Q7 Do you have any other ideas to improve conditions for people who drive a motor vehicle?

Answered: 28 Skipped: 22

- Keep it open to cars
- Reduce traffic – this shouldn't be a major artery into the city
- Lower speed limit/enforce existing speed limit
- Reduce lane width
- Improve visibility around curves
- Add permeable pavement or rain gardens to reduce flooding that causes hazards
- Improve signalization at Alapocas Drive and ACO to make it easier to turn left into the community
- Keep traffic light at Alapocas Drive and ACO
- No traffic circle – would slow motor vehicle traffic and eliminate pedestrian traffic
- Fix large pothole on northbound ACO

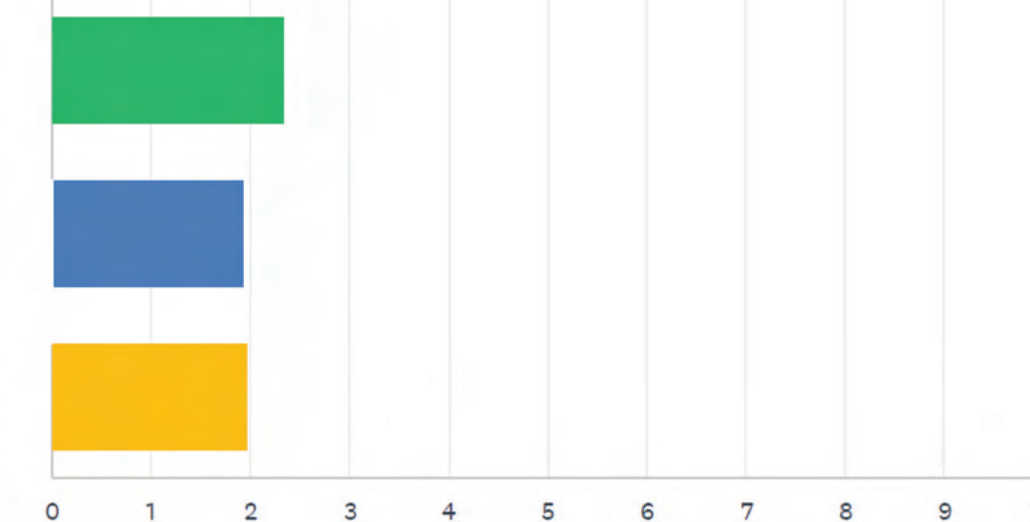
Q8 During the March 3 Public Workshop, attendees recommended the following improvements for all road users along Augustine Cut Off. Please rank these recommendations in order of importance from highest to lowest.

Answered: 47 Skipped: 3

Implement traffic calming measures along Augustine Cut Off to slow down motor vehicle speeds

Beautify the Augustine Cut Off corridor by creating a park like setting with a neighborhood feel

Clarify operations for all modes of travel (walking, biking, and driving) at the Augustine Cut Off and 18th Street intersection



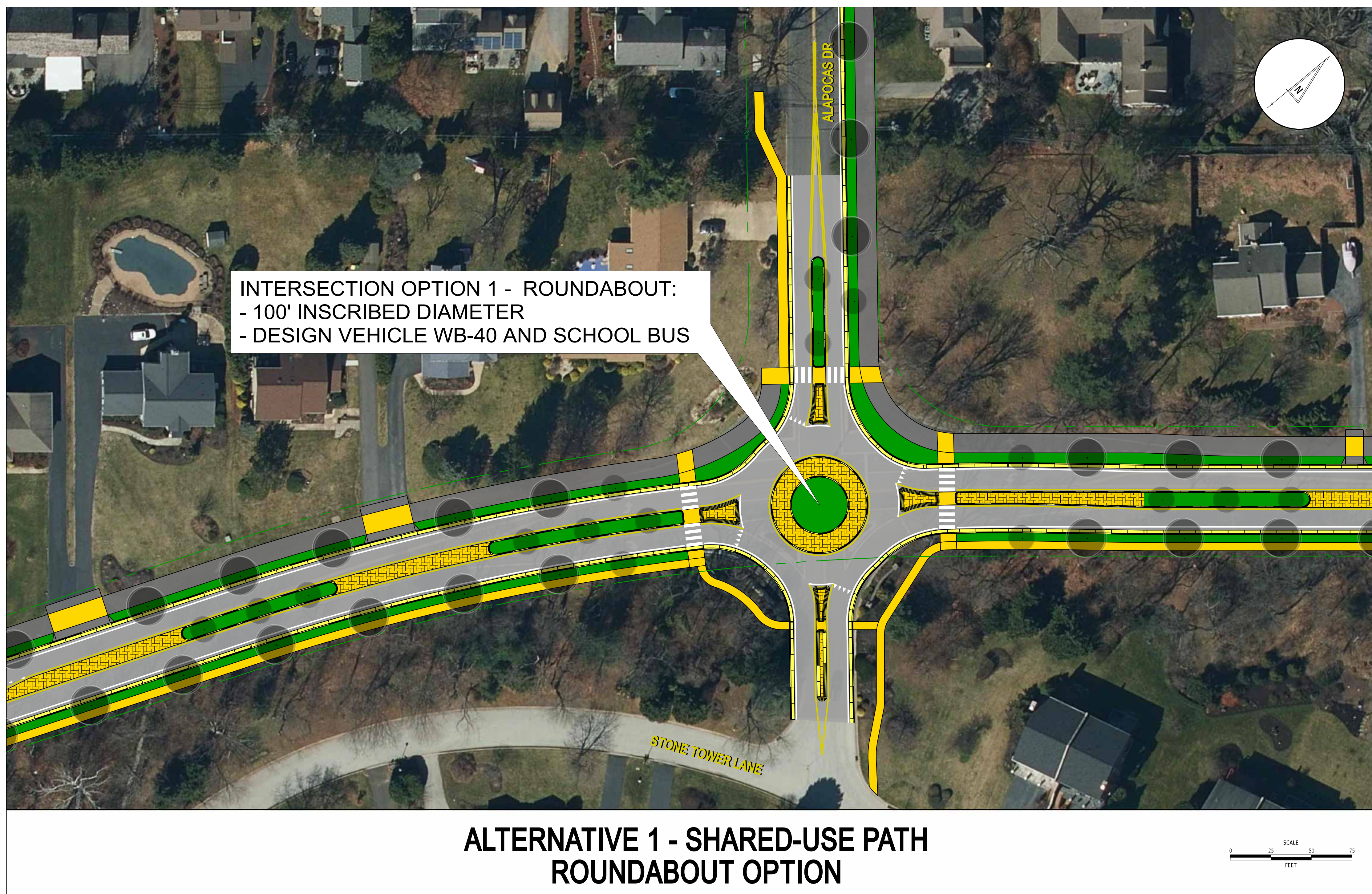
Q9 Are there any other improvements needed to improve conditions for all road users?

Answered: 27 Skipped: 23

- Improve signage turning onto 18th Street
- Prioritize community over property owners
- Safe and continuous separation from traffic lanes
- Reduce traffic – this is a residential road
- Enforce speed limit
- Retain on-street parking, especially between Cantera and Stone Hill Road
- Cleaning, sweeping, and repaving

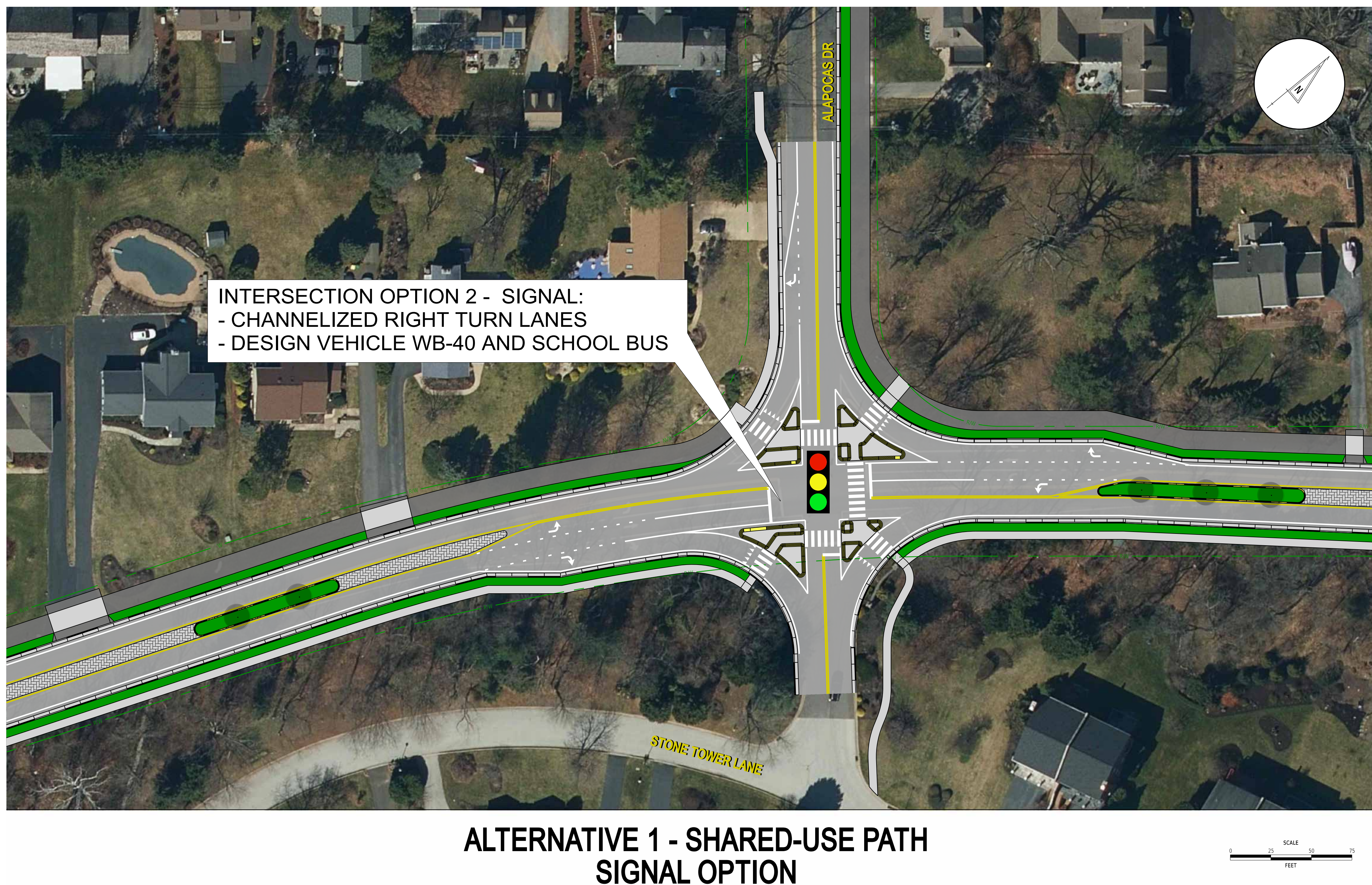
ALTERNATIVE 1 - SHARED USE PATH ALAPOCAS DRIVE INTERSECTION OPTIONS

Roundabout Option



- 100' Diameter
- Mountable inside truck apron to accommodate trucks
- Reduces pedestrian and vehicle conflict points
- Refuge islands allow pedestrians and bikes to cross single directional travel
- Provides traffic calming
- Opportunities for landscaping
- Reduced long-term maintenance
- Stays within the right of way

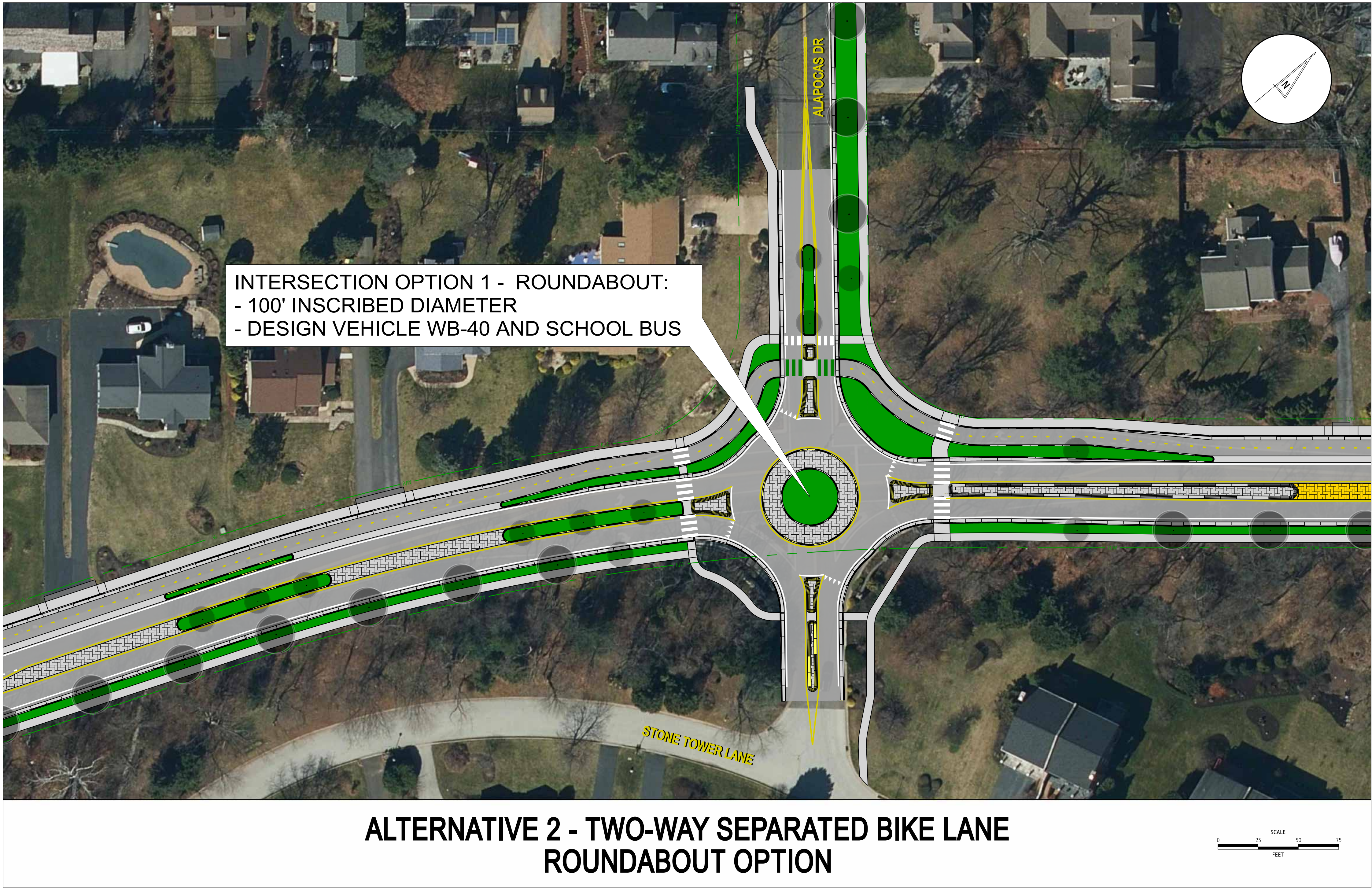
Signal Option



- Signal controlled multi-staged crossing for pedestrians and bikes
- Potential right of way impacts
- Does not provide traffic calming

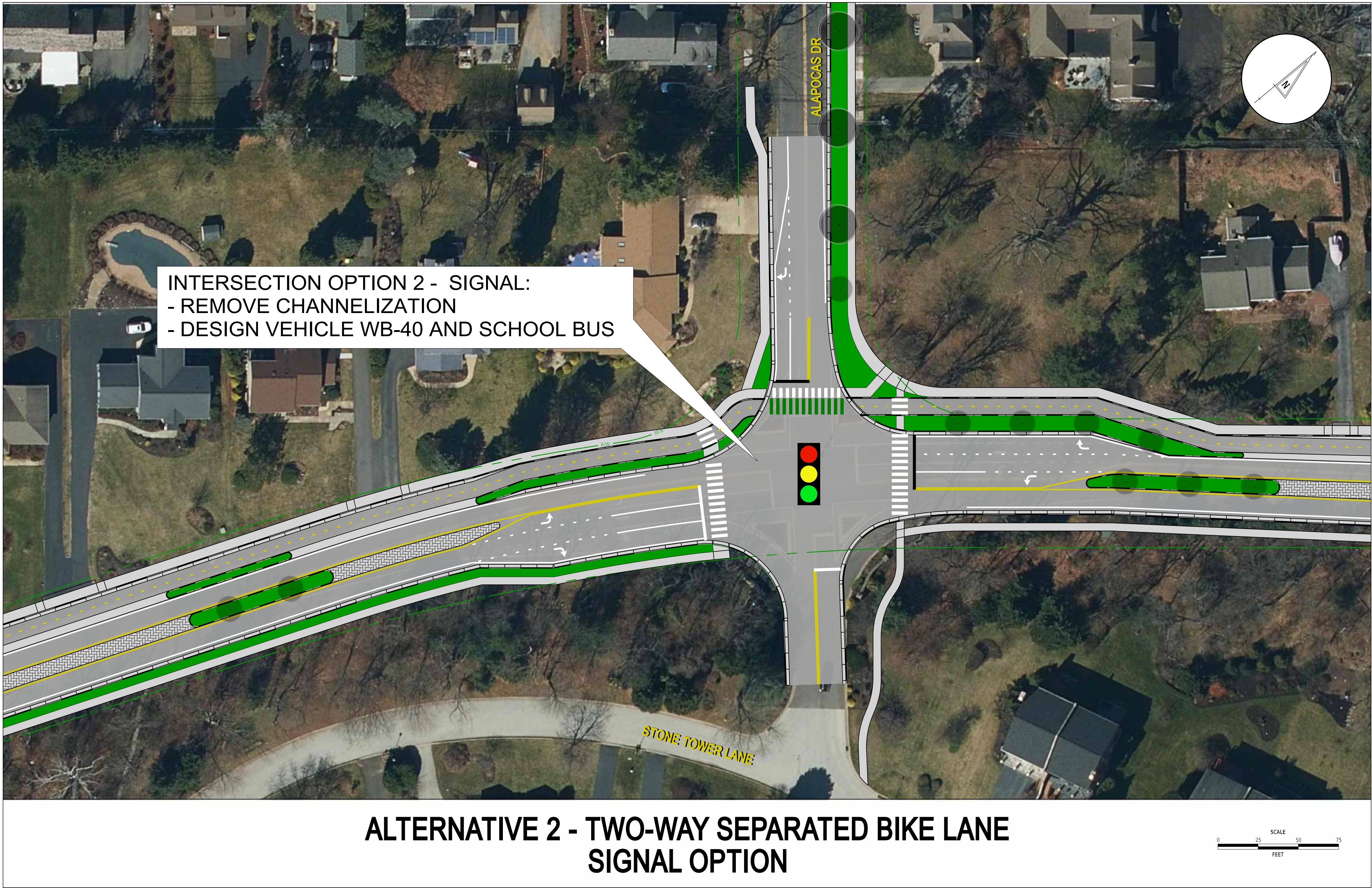
ALTERNATIVE 2 - TWO-WAY SEPARATED BIKE LANE ALAPOCAS DRIVE INTERSECTION OPTIONS

Roundabout Option



- 100' Diameter
- Mountable inside truck apron to accommodate trucks
- Reduces pedestrian and vehicle conflict points
- Separate crosswalks for bikes and pedestrians at Alapocas Drive
- Refuge islands allow pedestrians and bikes to cross single directional travel
- Provides traffic calming
- Opportunities for landscaping
- Reduced long-term maintenance

Signal Option



- Signal controlled crossing for pedestrians and bikes
- Separate crosswalks for bikes and pedestrians at Alapocas Drive
- Increased crossing distances and number of travel lanes
- Right of way impacts
- Does not provide traffic calming

ALAPOCAS DRIVE INTERSECTION

Artistic Rendering of Roundabout at Alapocas Drive & Augustine Cut Off

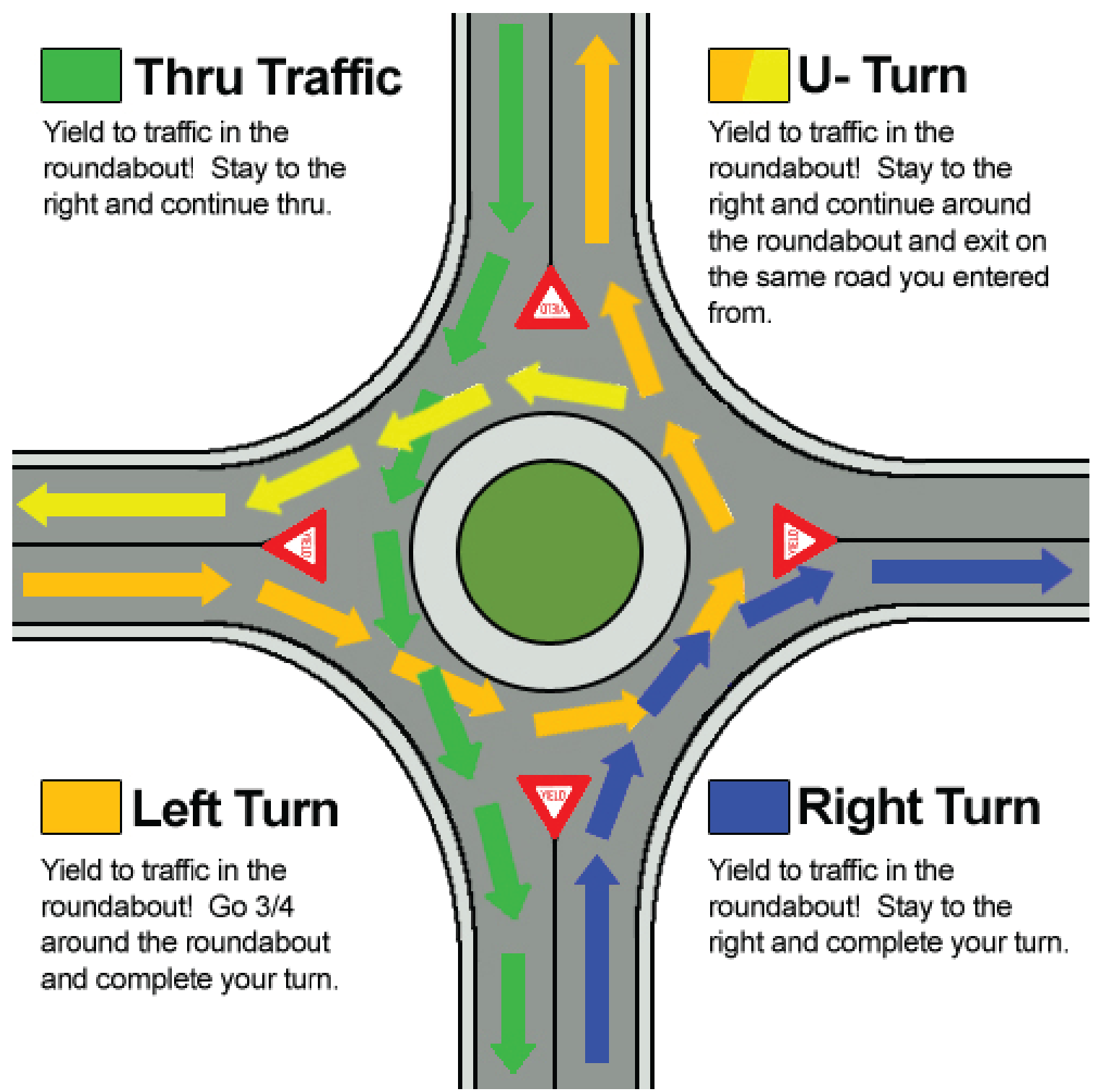


Roundabout Compared to a Signalized Intersection

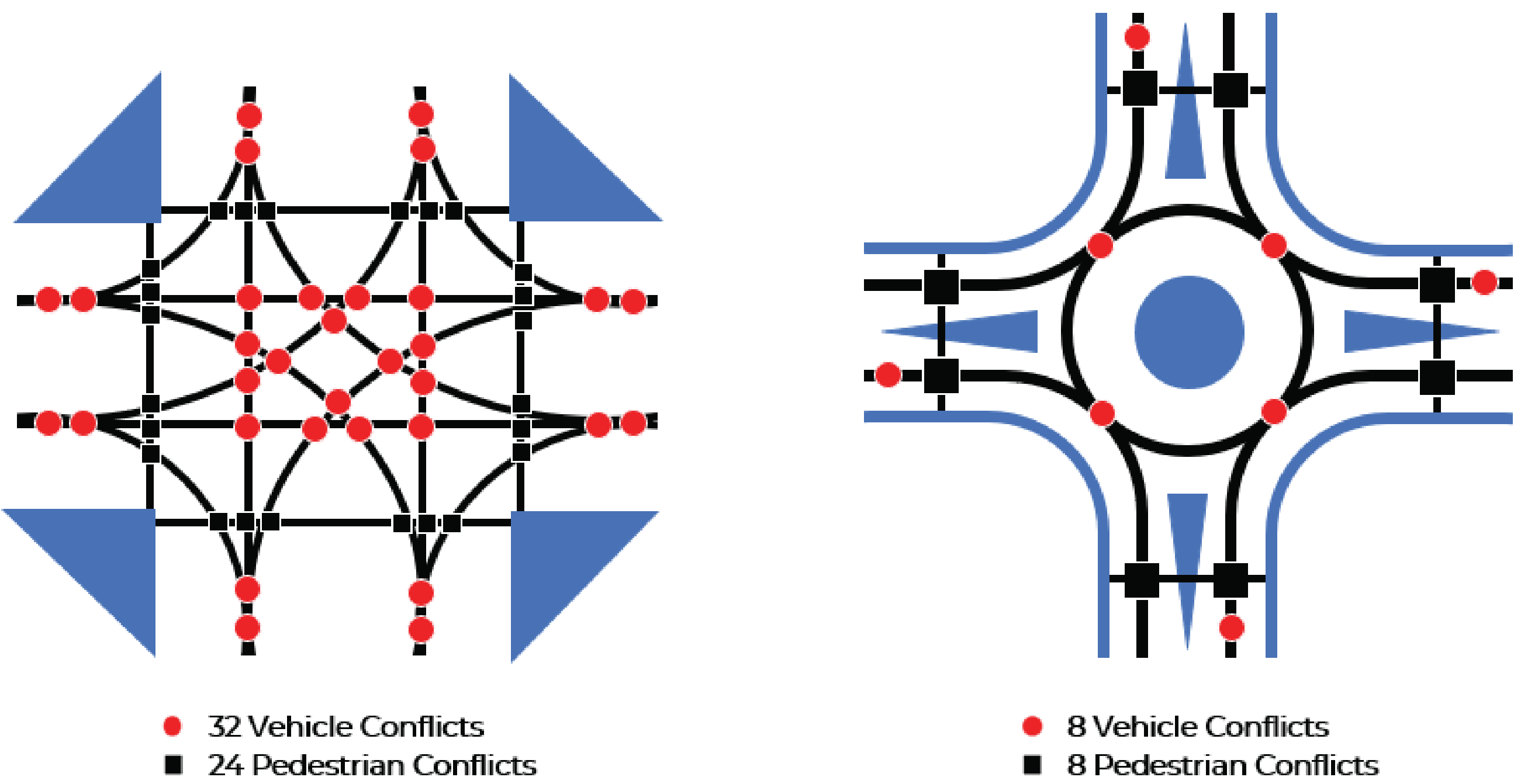
	Single-Lane Roundabout	Signalized Intersection
Safety		
Conflict Points	8 vehicle conflict points 8 pedestrian conflict points	32 vehicle conflict points 24 pedestrian conflict points
Crash Severity	Eliminates Most Dangerous Crash Types	Does not eliminate most dangerous crash types
Traffic Calming Benefit	Yes	No
Bike/Pedestrian Design		
Bike/Pedestrian Crossing Distance	Shorter	Longer
Median Refuge Islands	Yes	No
Signal Controlled Crossing	No	Yes
Motor Vehicle Operations		
Delay	Lower	Higher
Queue Length	Shorter	Longer
Additional Considerations		
Space Required	Lower	Higher
Long-Term Operational Costs	Lower	Higher
Long-Term Landscaping Costs	Higher	Lower

Safety and Traffic Benifits of Roundabouts

Roundabouts have low-speed one-way traffic with yields at each entry point



Roundabouts reduce the potential for crashes due to fewer conflict points



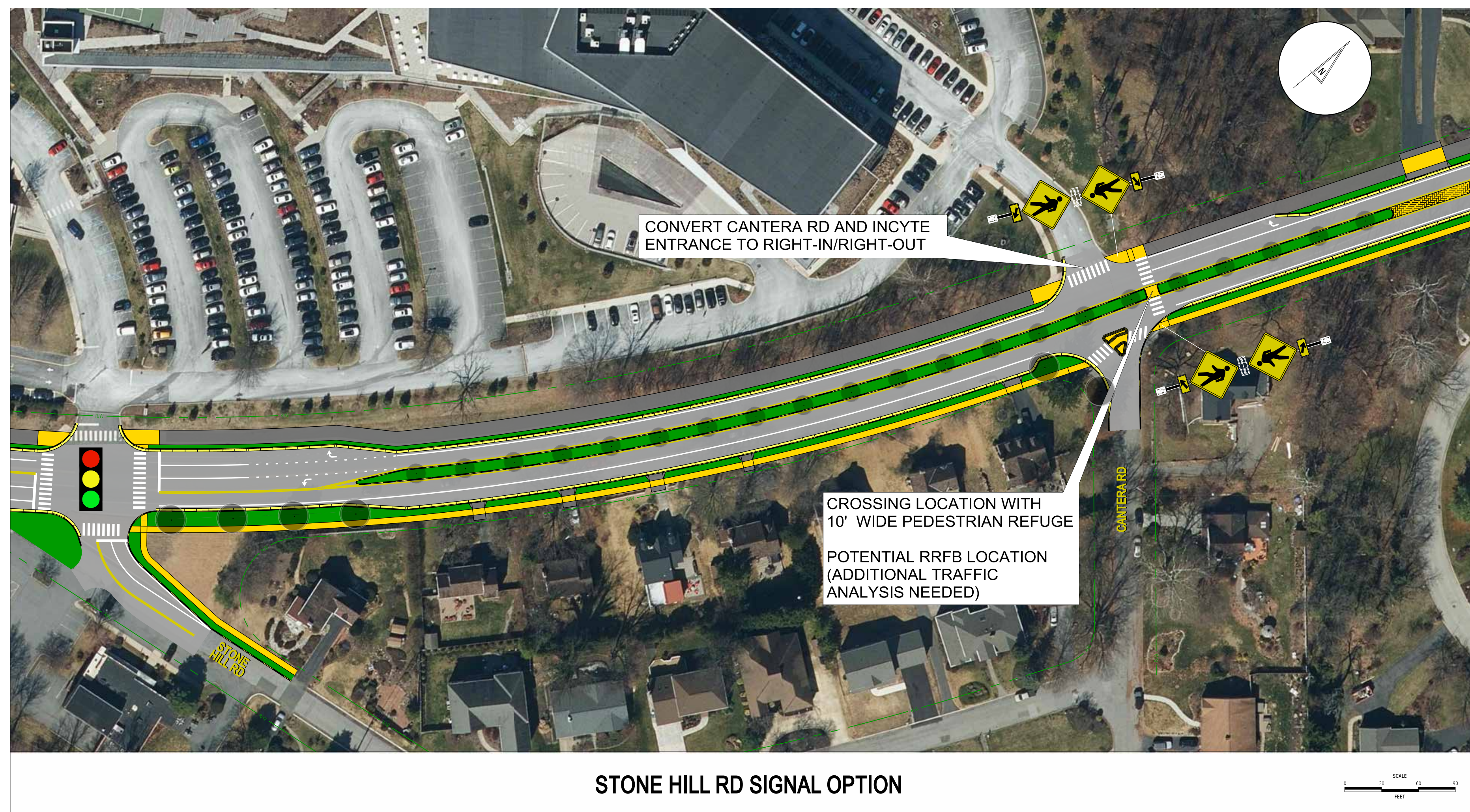
The Alapocas Drive roundabout generally reduces delays and traffic queue lengths

Average Delay per Vehicle	Existing Signal			Roundabout			Proposed Signal		
	AM Peak	School Dismissal	PM Peak	AM Peak	School Dismissal	PM Peak	AM Peak	School Dismissal	PM Peak
NB Augustine Cutoff	10 sec	8 sec	7 sec	5 sec	9 sec	9 sec	7 sec	9 sec	6 sec
SB Augustine Cutoff	16 sec	12 sec	10 sec	9 sec	6 sec	6 sec	17 sec	13 sec	10 sec
EB Alapocas Drive	26 sec	26 sec	17 sec	5 sec	4 sec	3 sec	23 sec	21 sec	15 sec
WB Stone Tower Lane	1 sec	35 sec	37 sec	4 sec	2 sec	3 sec	1 sec	15 sec	36 sec

Median / 95 th Percentile Queue Length	Existing Signal			Roundabout			Proposed Signal		
	AM Peak	School Dismissal	PM Peak	AM Peak	School Dismissal	PM Peak	AM Peak	School Dismissal	PM Peak
NB Augustine Cutoff	86 ft / 188 ft	101 ft / 228 ft	86 ft / 173 ft	32 ft / 84 ft	64 ft / 205 ft	48 ft / 149 ft	80 ft / 180 ft	107 ft / 207 ft	79 ft / 141 ft
SB Augustine Cutoff	143 ft / 241 ft	74 ft / 167 ft	83 ft / 152 ft	57 ft / 121 ft	22 ft / 67 ft	24 ft / 58 ft	151 ft / 262 ft	72 ft / 140 ft	86 ft / 161 ft
EB Alapocas Drive	113 ft / 198 ft	97 ft / 223 ft	50 ft / 106 ft	48 ft / 113 ft	33 ft / 72 ft	21 ft / 49 ft	68 ft / 125 ft	75 ft / 164 ft	42 ft / 79 ft
WB Stone Tower Lane	0 ft / 0 ft	1 ft / 10 ft	6 ft / 27 ft	3 ft / 17 ft	0 ft / 0 ft	3 ft / 18 ft	6 ft / 27 ft	1 ft / 10 ft	5 ft / 23 ft

ADDITIONAL DESIGN OPTIONS

New Signal at Stone Hill Road



- Incorporating a previously designed traffic signal at Stone Hill Road would allow for crossover closure at Cantera Road
- Cantera Road and Incyte entrance would be right-in right-out only
- Residents with driveways facing Augustine Cut Off would require U-turn for ingress/egress
- This treatment could be used with *Alternative 1 - Shared Use Path*, or *Alternative 2 - Two-Way Separated Bike Lane*
- The shared use path alternative is shown here

Traffic Calming Option between Alapocas Drive and North of Edgewood Road

- This treatment is an alternative to a continuous median between Alapocas Drive and Edgewood Road (SUP shown)
- Shorter median islands create a horizontal deflection which may calm traffic speeds along this otherwise straight section of road
- This will not impact the alignment of the shared use path or two-way separated bike lane on the southbound side of the road

