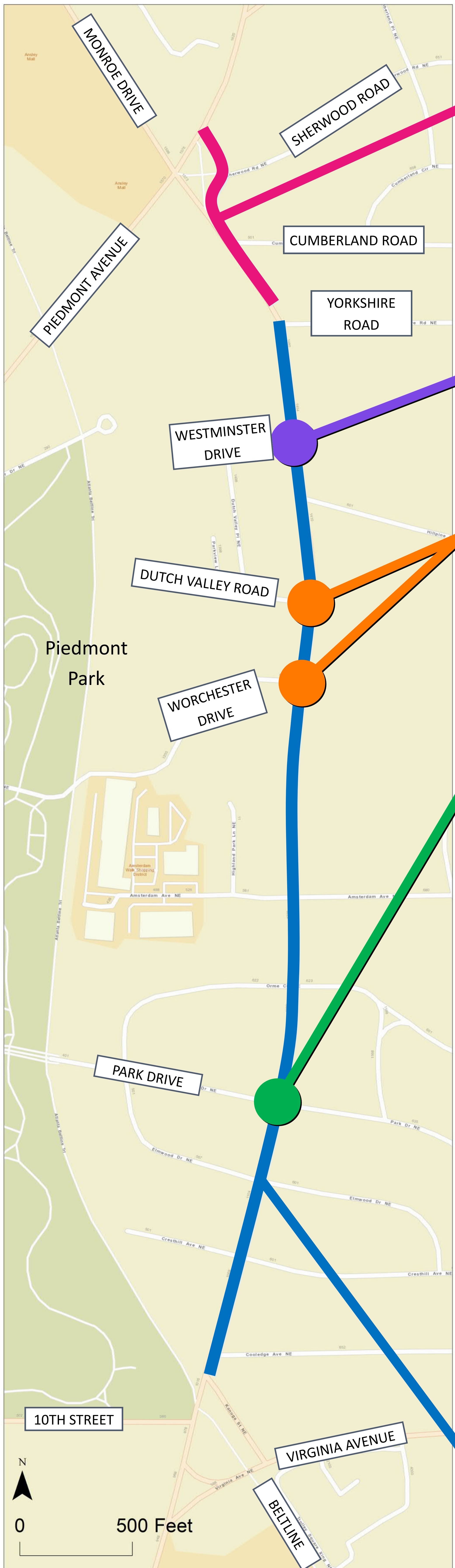


Monroe Drive / Boulevard Complete Streets: Improvement Opportunities

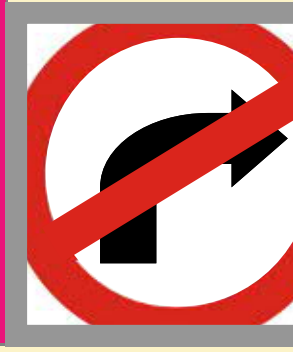
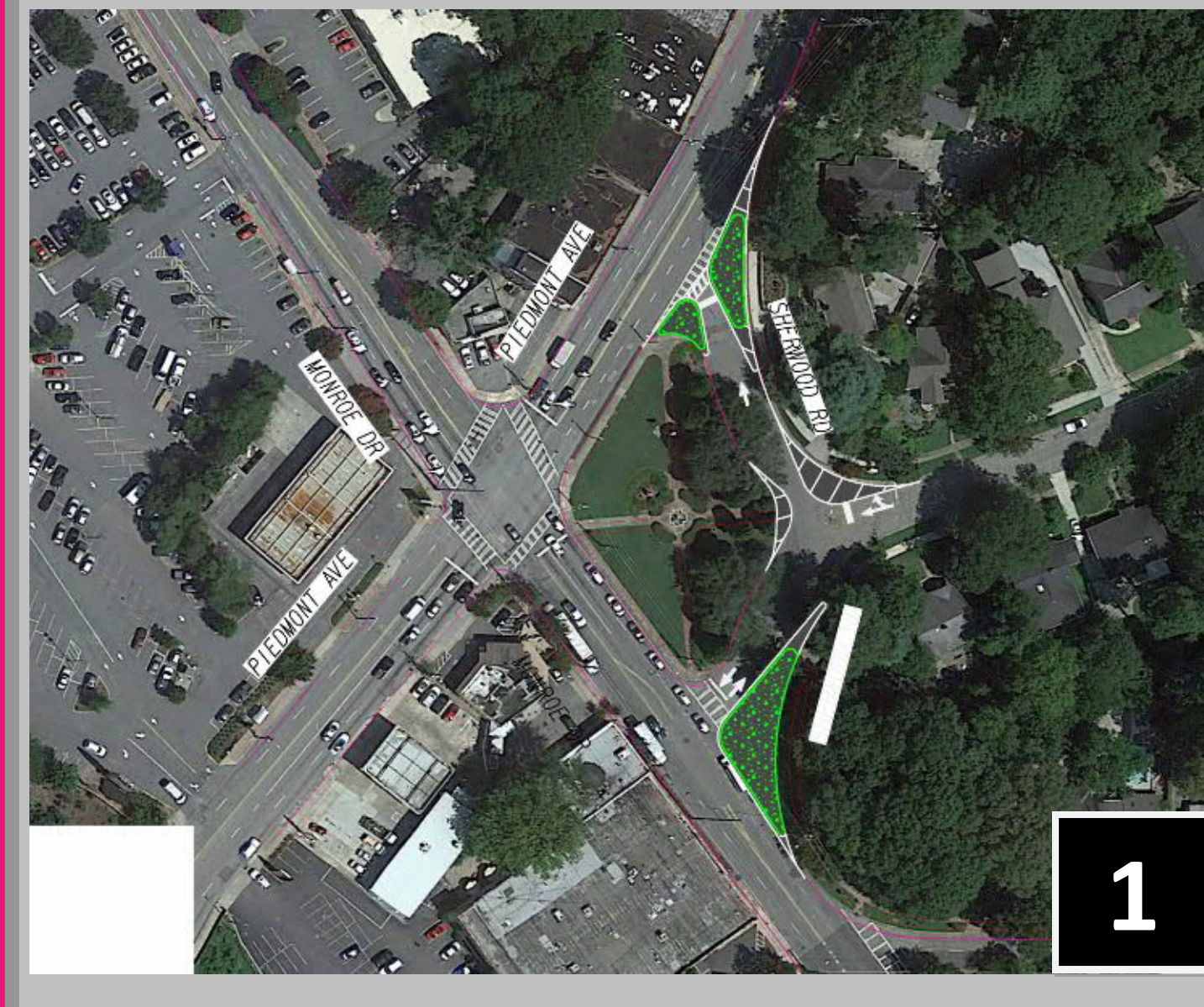


Piedmont Avenue to 10th Street



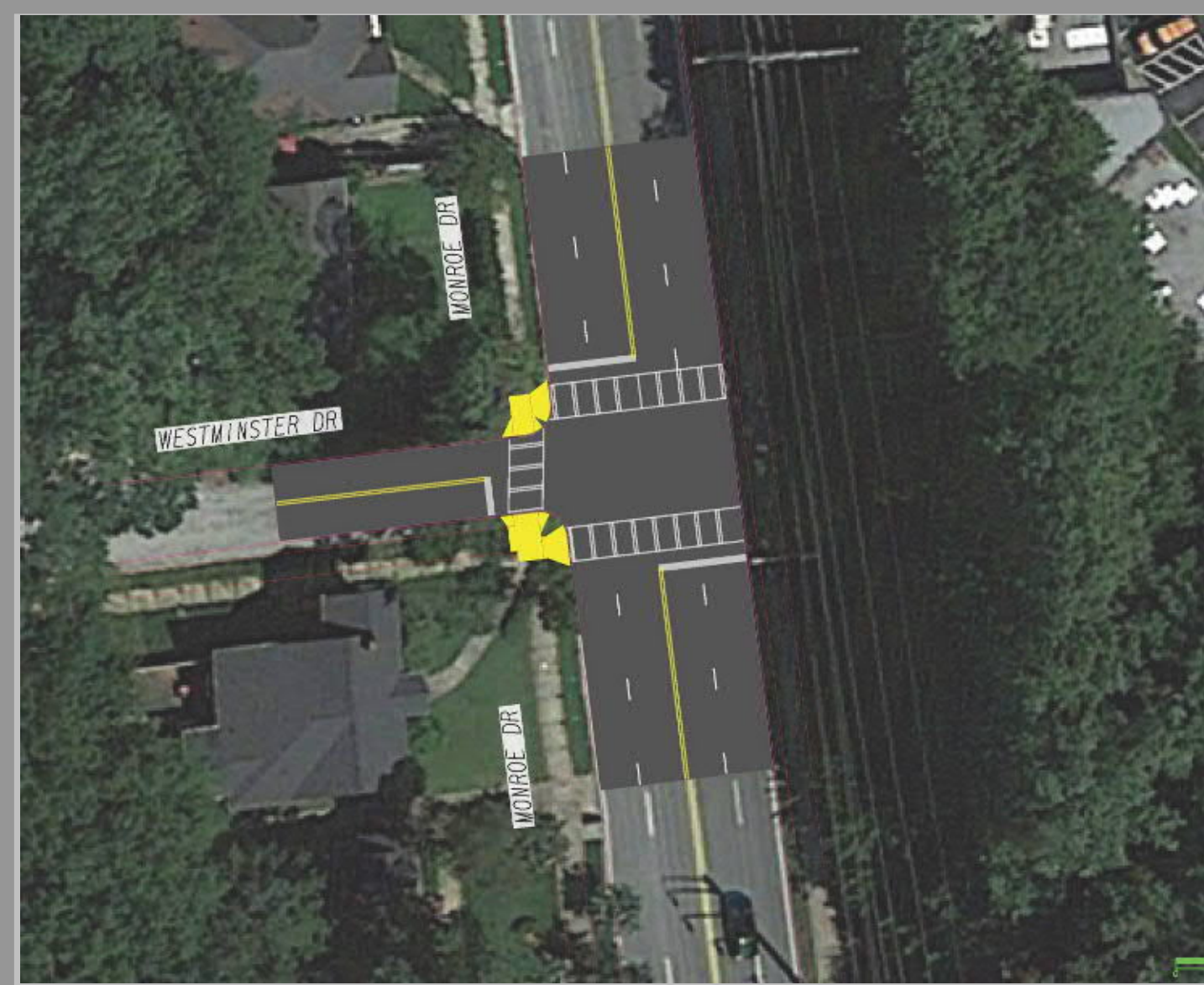
Preliminary Design Concepts

Monroe Drive at Sherwood Drive
Traffic Calming and Turn Restrictions



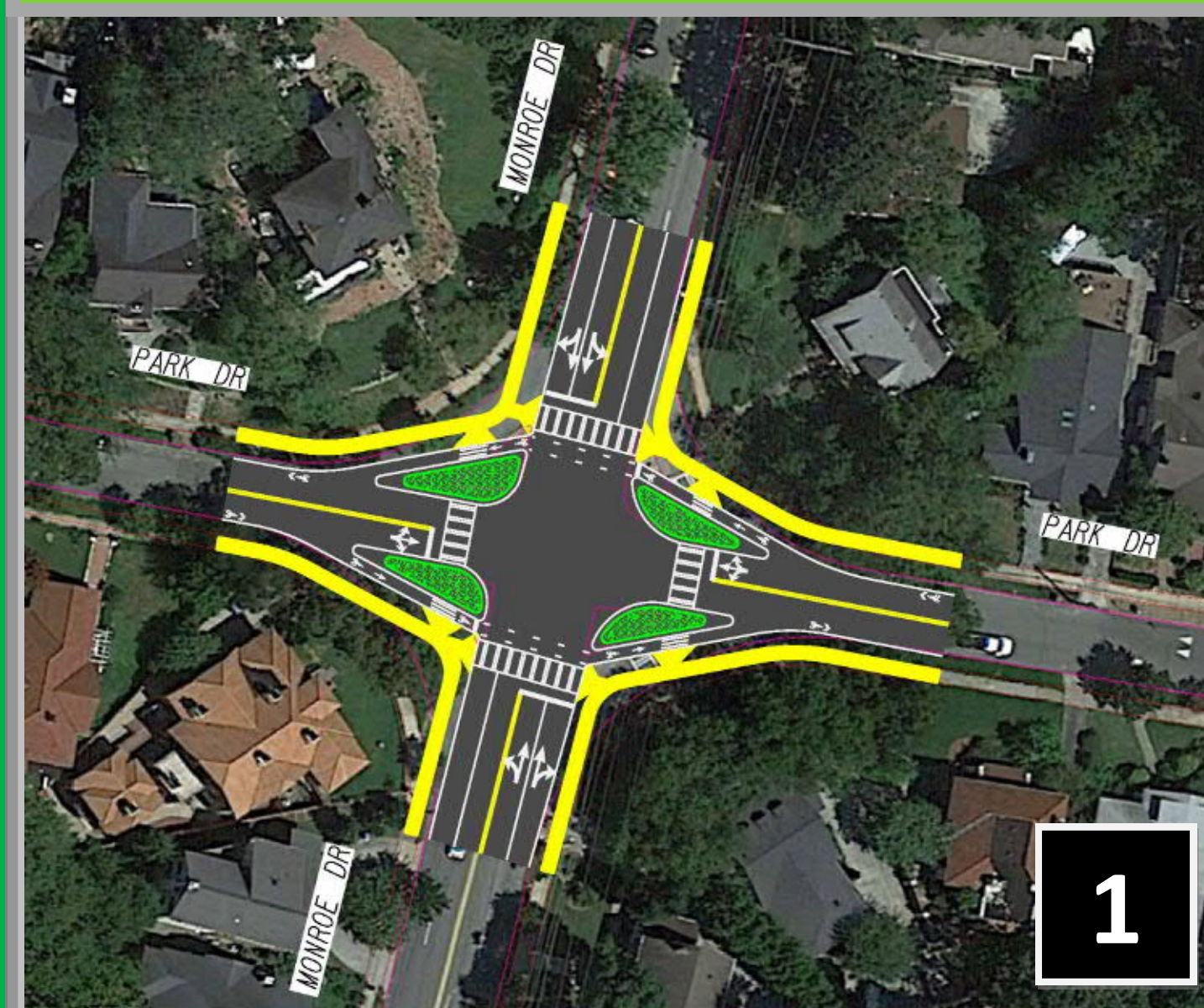
Evening right turn restrictions into Sherwood Rd, Cumberland Rd, and Yorkshire Rd

Add signal at the intersection of Monroe Drive and Westminster Drive

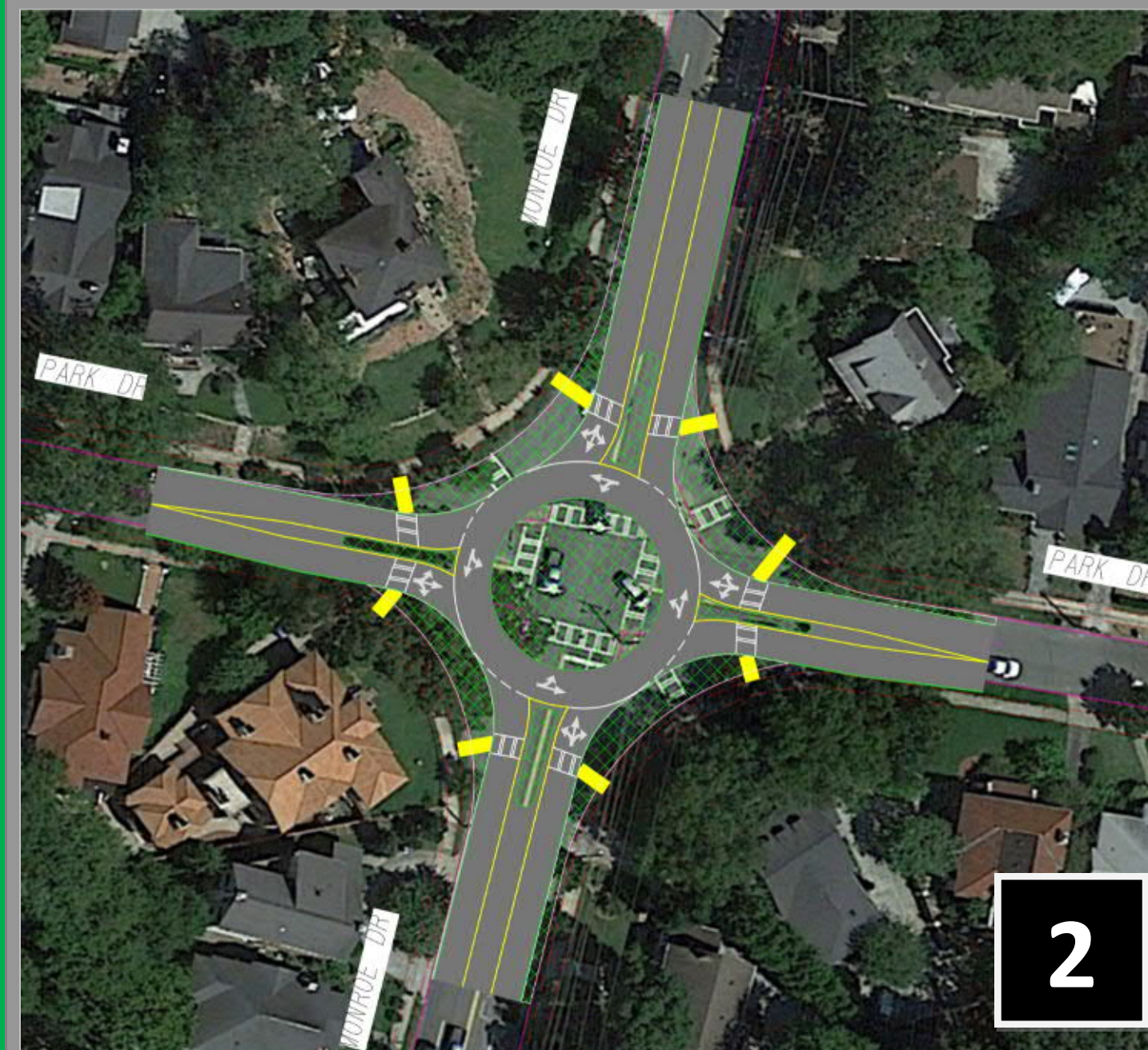


Add crosswalk to Monroe Drive at Dutch Valley Rd and Worcester Dr

Monroe Drive at Park Drive
Remove Channelized Right Turns

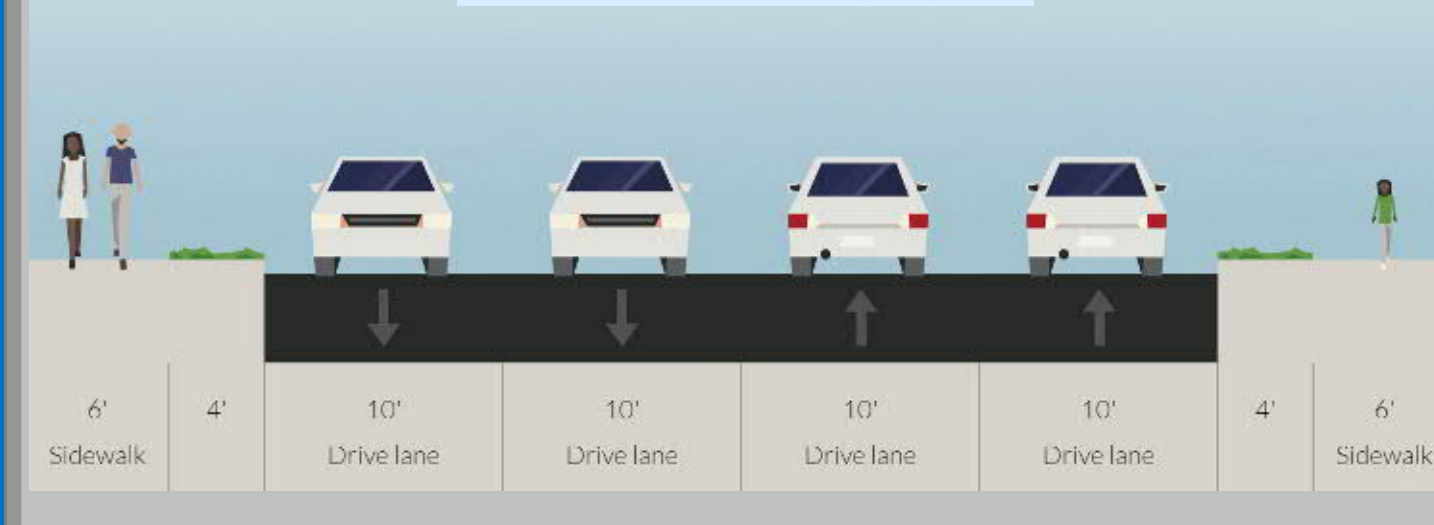


Monroe Drive at Park Drive Roundabout



Monroe Drive from 10th Street to Yorkshire Road
Road Diet

Existing Cross-section



Concept Cross-section



Benefits & Impacts

Alternative Modes:

- Decreased pedestrian crossing length
 - Slower vehicle speeds in conflict areas
- #### Safety:
- Reduced vehicle conflict points at Piedmont Avenue and Sherwood Drive
- #### Performance:
- Minimal impacts to delay
- #### Constructability:
- Plausible within existing right-of-way

Safety:

- Negligible impacts to vehicle or pedestrian safety

Performance:

- Negligible impacts on capacity or vehicle travel times

Constructability:

- Plausible within existing right-of-way

Alternative Modes:

- Protected pedestrian crossing to Piedmont Park

Safety:

- Potential to decrease pedestrian crashes by 69%*
- No increase in vehicle safety

Performance:

- No impact to capacity or vehicle travel times

Constructability:

- Plausible within existing right-of-way

Safety:

- Potential to reduce vehicle-pedestrian collisions by 70%**

Performance:

- No significant impact to capacity or vehicle travel times

Constructability:

- Plausible within existing right-of-way

Alternative Modes:

- Reduced pedestrian / vehicle conflicts
- Shortens crossing distances
- Provides dedicated bicycle crossing

Safety:

- Enhanced safety expected due to minimized bicyclist exposure to vehicles***

Performance:

- Decreased delay to Eastbound traffic with signal timing
- Increased delay to Westbound traffic

Constructability:

- Plausible within existing right-of-way

Alternative Modes:

- Slows vehicles moving through intersection

Safety:

- Potential to reduce vehicle crashes by 1% and injury collisions by 60%****

Performance:

- Eastbound and Westbound delay decreased with dual-lane roundabout
- Increased delays with single-lane roundabout

Constructability:

- Potential impacts to properties in the corners

Alternative Modes:

- Reduces crossing distances
- Widened sidewalk and buffer

Safety:

- Potential to reduce vehicle crashes by 29%****

Performance:

- Increases in PM peak hour travel times southbound (+140%) for those traveling from north of Piedmont Avenue by 2026
- Increases in AM peak hour travel times northbound (+40%) by 2026

Constructability:

- Plausible within existing right-of-way

Comments and Concerns Addressed

MONROE DRIVE AT SHERWOOD DRIVE

- Concerns over the amount of high-speed cut-through traffic (Public Comment)

MONROE DRIVE AT MORNINGSIDE-LENOX PARK NEIGHBORHOOD

- Concerns over increased cut-through traffic into neighborhoods (Public Comment)
- Consider closing the right turn from Monroe onto Sherwood Road (Public Comment)

MONROE DRIVE AT WESTMINSTER DRIVE, WORCHESTER DRIVE, AND DUTCH VALLEY ROAD

- Create safer pedestrian crossings (Public Comment)

MONROE DRIVE AT PARK DRIVE

- Explore the option of installing a roundabout at the intersection of Monroe Drive and Park Drive to calm traffic (Public Comment)
- Balance traffic calming with efficient vehicle flow (Public Comment)
- Bicycle accommodations should be protected and/or separated from vehicular traffic (Public Comment)
- Create safer pedestrian and bicycle crossings (Public Comment)
- When implementing the Monroe Drive road diet, install a roundabout at the Park Drive intersection (Virginia-Highland Master Plan)

MONROE DRIVE FROM YORKSHIRE ROAD TO 10TH STREET

- Support for a road diet (Public Comment)
- Convert Monroe Drive to 2 lanes with a center turn lane (Public Comment)
- Reduce Monroe Drive from 4 lanes to 3 lanes, accommodating one vehicle in either direction with a center median and turn lane (BeltLine Subarea 6 Master Plan)
- Utilize excess travel lane dimensions for on-street bike lanes until additional funding can be secured to widen the sidewalks along the roadway (Virginia-Highland Master Plan)

* Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations (FHWA, 2005)

** Evaluating Pedestrian Safety Improvements (Van Houten et al., 2012)

*** Road Factors and Bicycle-Motor Vehicle Crashes at Unsignalized Priority Intersections (Schepers et al., 2011)

**** Highway Safety Manual (AASHTO, 2010)