

RESOLUTION NO. 2019 – 943E

A RESOLUTION TO ADOPT A STREETScape PLAN

AVENT FERRY ROAD STREETScape

WHEREAS, the Street Design Manual provides technical specifications used in construction of public improvements; and

WHEREAS, Map T-1 Street Plan classifies Aventura Ferry Road as an Avenue 4-Lane Divided street type from Western Boulevard to Gorman Street and a Avenue 2-lane Divided from Gorman Street to Tryon Road.; and

WHEREAS, the recommendations of the Aventura Ferry Corridor Study include a custom streetscape design that maintains these street type classifications; and

WHEREAS, Aventura Ferry Road is identified on the prioritized list of streetscape improvements; and

WHEREAS, the amendment reflects community's vision to guide future streetscape improvements along the corridor; and

WHEREAS, the amendment supports the goals of the Aventura Ferry Corridor Plan and serve the larger public interest by enhancing safety for all modes of travel; and

WHEREAS, these amendments were reviewed and discussed with extensive public input.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF RALEIGH, NORTH CAROLINA that the Street Design Manual be amended to include the custom streetscape design associated with the Aventura Ferry Corridor Study as shown in Attachment A.

Adopted: September 17, 2019

Distribution: Planning – Aull, Bowers, Crane, Klem, Walter, Sandeep

Attachment A

WESTERN BOULEVARD TO VARSITY DRIVE: OPTION A



WESTERN BOULEVARD TO VARSITY DRIVE: OPTION B



Varsity Drive to Gorman Street



PRIVATE PROPERTY		SIDEWALK ZONE	BIKE ZONE	TRAFFIC ZONE		MEDIAN ZONE	TRAFFIC ZONE		BIKE ZONE	SIDEWALK ZONE	PRIVATE PROPERTY			
		SIDEWALK	BIKE LANE	TRAVEL LANE	TRAVEL LANE	MEDIAN	TRAVEL LANE	TRAVEL LANE	BIKE LANE	SIDEWALK				
		6'	6'	2.5'	10-11'	10-11'	11'	10-11'	10-11'	2.5'	6'	6'		
EXISTING CURB-TO-CURB VARIABLE														
84' ROW MIN.														

PRIVATE PROPERTY	SIDEWALK ZONE			BIKE ZONE			TRAFFIC ZONE			MEDIAN ZONE			TRAFFIC ZONE			BIKE ZONE			SIDEWALK ZONE			PRIVATE PROPERTY
	MAINTENANCE	SIDEWALK	TREE PLANTER	BIKE LANE	BIKE LANE	TRAFFIC LANE	TRAFFIC LANE	TRAFFIC LANE	TRAFFIC LANE	BIKE LANE	BIKE LANE	BIKE LANE	TREE PLANTER	SIDEWALK	MAINTENANCE							
	2'	6'	6'	2.5'	4'	3'	11'		11'		11'	3'	4'	2.5'	6'	6'	2'					
52' CURB-TO-CURB																						
80' ROW																						

Streetscape Recommendations

The corridor was divided into four segments along Avent Ferry Road to develop alternative roadway configurations:

1. Western Boulevard to Varsity Drive
2. Varsity Drive to Gorman Street
3. Gorman Street to Athens Drive
4. Athens Drive to Tryon Road

A series of alternatives were created and refined to study each segment. Typical street sections were created, utilizing existing right-of-way to provide a planning-level design including roadways, transit, and bicycle and pedestrian facilities. The alternatives were analyzed using existing traffic conditions to assess the corridor LOS and queuing delays at intersections.

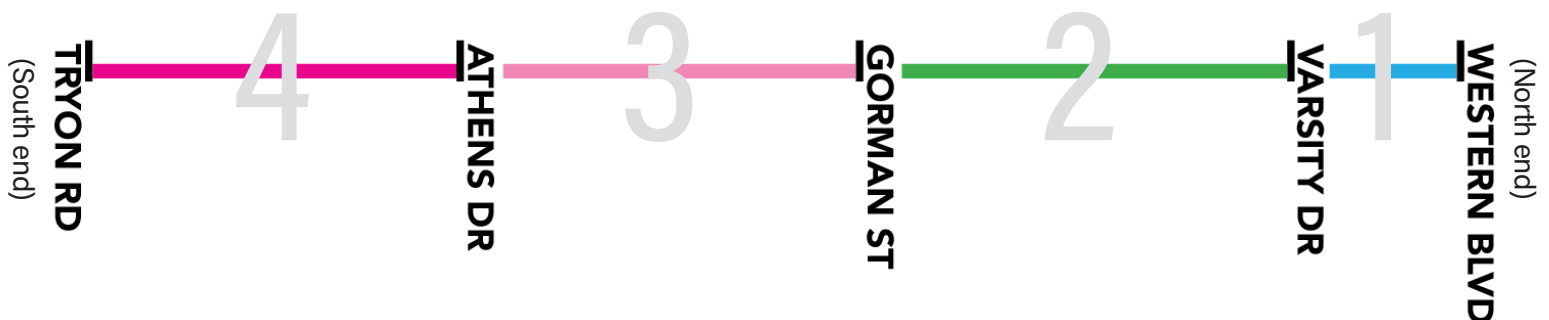
There are a few noteworthy features that apply to all four segment lane configurations. The proposed dedicated bicycle lanes would be buffered from vehicular traffic, allowing a continuous path along Avent Ferry Road between Western Boulevard and Tryon Road. Some elements of the roadway design, such as lane widths and the median width, are narrower than City of Raleigh roadway design standards; however, the proposed streetscape details are recommended for adoption as a streetscape plan. Improvements outside of private redevelopment should be budgeted as CIP items for implementation. Please see the implementation table in the final chapter for more detailed information.

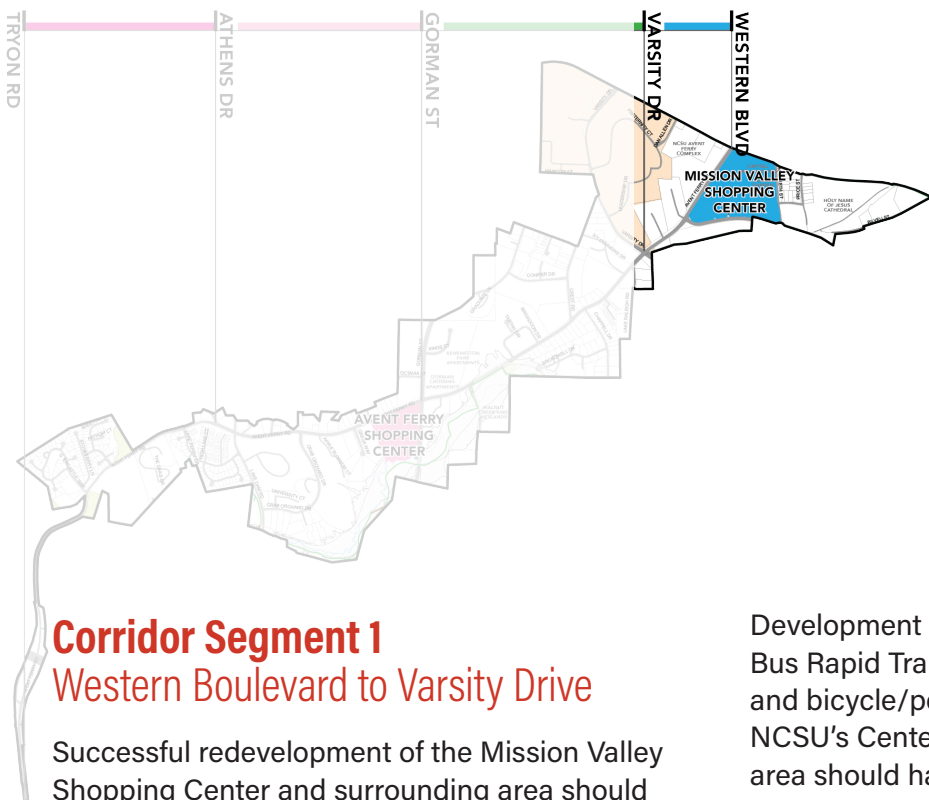
Assessment Criteria

Initially, each segment had two to three potential alternatives. The alternatives were created based on the character of the street segment and public comments from the October 2017 Avent Ferry Public Design Workshops. While the alternatives drew heavily from public feedback, the typical sections were refined to fit within the existing right-of-way and to meet engineering and safety standards. The alternatives were assessed on the following criteria:

- **Vehicular Traffic Level of Service:** Would the proposed typical section meet the acceptable LOS for the City of Raleigh? Which alternative would provide the best level of service during the AM and PM peak hours?
- **Accommodating Bicycle and Pedestrian Facilities:** Which typical sections would provide safe and efficient bicycle and pedestrian mobility?
- **Fitting with Character of the Corridor, the Complete Street Approach, and Future Redevelopment Opportunities:** Would the typical section create a vibrant place with transit and active transportation options? Would it serve the local traffic along the corridor? Would it facilitate future planned or proposed redevelopment along the corridor?

As alternatives were analyzed, each were refined and new lane configurations tested to establish a typical section to better meet each of the above criteria.





Corridor Segment 1 Western Boulevard to Varsity Drive

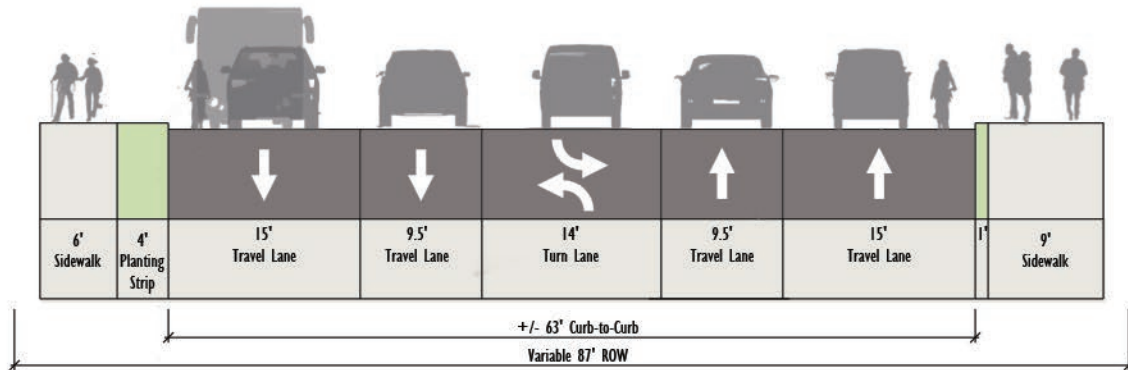
Successful redevelopment of the Mission Valley Shopping Center and surrounding area should serve as a catalyst for further investment in the corridor. The highest residential density and highest allowable building height in the corridor should be developed here. Height should taper to the rear of the site away from Avent Ferry Road.

Development should capitalize on the proposed Bus Rapid Transit line on Western Boulevard and bicycle/pedestrian traffic moving between NCSU's Centennial and Main Campuses. This area should have a distinctly urban feel with tree-lined streets flanked by a variety of retail establishments on the ground level. Parking should primarily be structured and screened from street view.

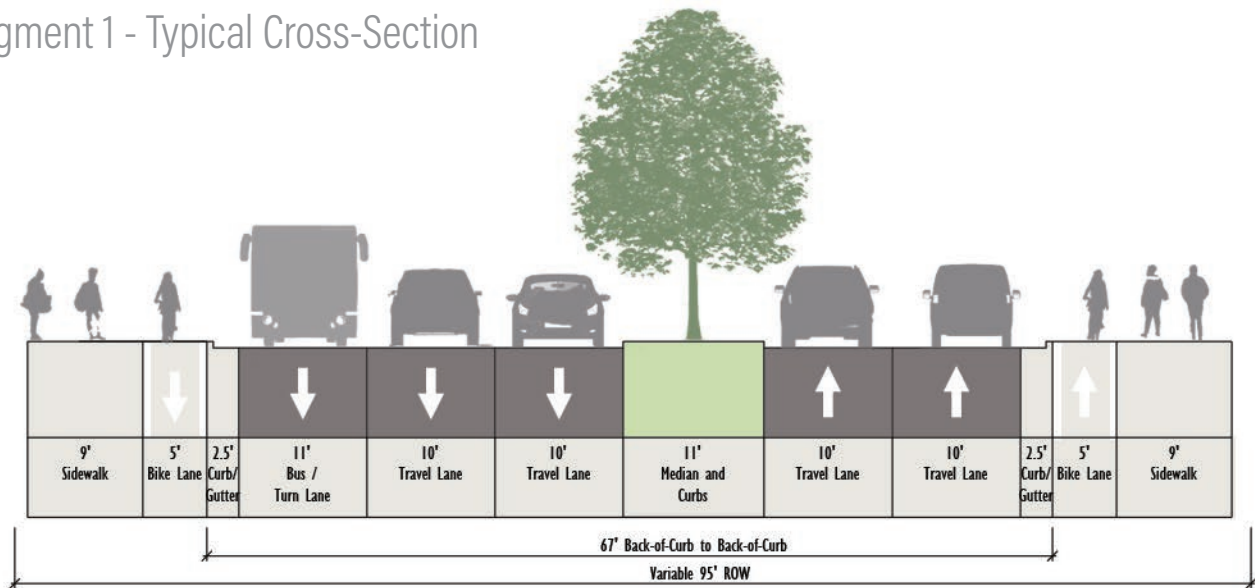


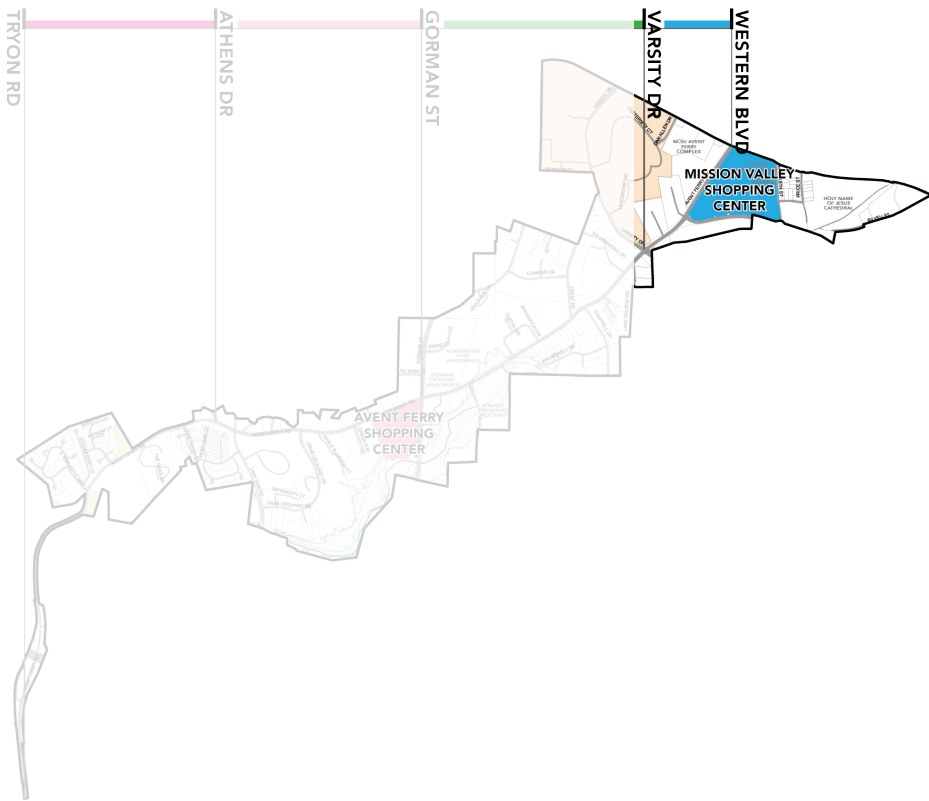
Looking north on Avent Ferry towards Mission Valley and Western Blvd.

Segment 1 - Existing Conditions



Segment 1 - Typical Cross-Section





Segment 1 - Option A



SIDEWALK ZONE		BIKE ZONE		TRAFFIC ZONE			MEDIAN ZONE	TRAFFIC ZONE		BIKE ZONE		SIDEWALK ZONE		
AMENITY + SIDEWALK		BIKE LANE	TREE PLANTER	BUS/TURN LANE	TRAVEL LANE	TRAVEL LANE	MEDIAN	TRAVEL LANE	TRAVEL LANE	TREE PLANTER	BIKE LANE	AMENITY + SIDEWALK		
14'		5'	4'	2.5'	11'	10'	10'	11'	10'	10'	2.5'	4'	5'	14'
ADD'T'L ROW REQUIRED		67' CURB-TO-CURB VARIABLE 113' ROW										ADD'T'L ROW REQUIRED		

Segment 1 - Option B

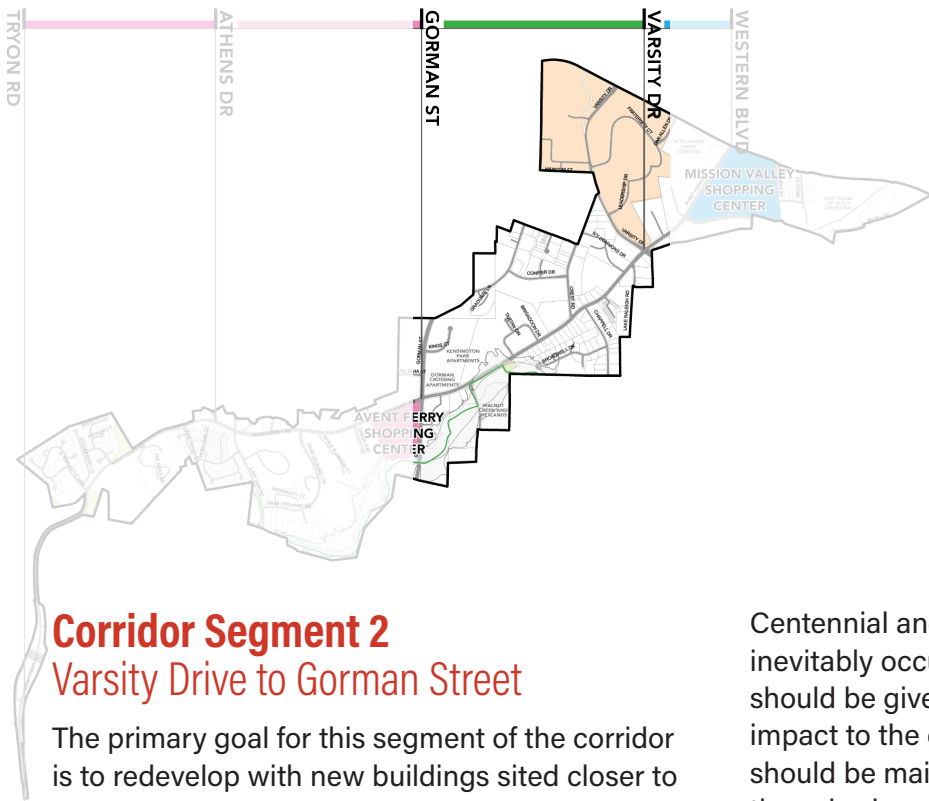
Segment 1 - Recommended Cross Section - Western Blvd to Varsity Drive

The recommended design for this segment is two 10' northbound vehicle travel lanes, one northbound 11' que jump/turn lane, two 10' southbound vehicle travel lanes, an 11' center planting strip/median, 5' raised and buffered bicycle lanes on both sides of the street and 14' sidewalks on both sides of the street.

If the proposed pedestrian tunnel crossing at Western Boulevard is constructed on only one side of Avent Ferry, a two-way bicycle track is recommended for that side of the road to provide safe access for people on bicycles (option B).



TRAFFIC ZONE		BIKE ZONE			SIDEWALK ZONE	
TRAVEL LANE	TRAVEL LANE		BIKE LANE	BIKE LANE	TREE PLANTER	AMENITY + SIDEWALK
10'	10'	2.5'	3'	5'	5'	4'
						14'
						ADD'T'L ROW REQUIRED



Corridor Segment 2 Varsity Drive to Gorman Street

The primary goal for this segment of the corridor is to redevelop with new buildings sited closer to the street with a well-connected internal street network. Building height should be moderate and contribute to a residential feel.

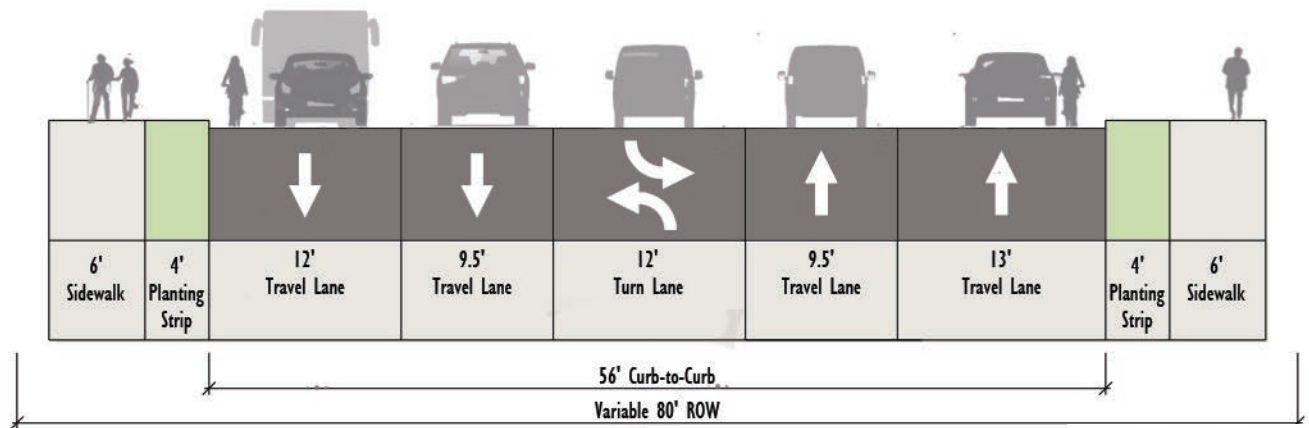
Housing demand in the area suggests additional housing density is appropriate between

Centennial and Gorman Street. As redevelopment inevitably occurs in these areas, consideration should be given to the development form and impact to the corridor's character. Setbacks should be maintained for consistency with the suburban character of the area, with taller buildings deeper within the site.

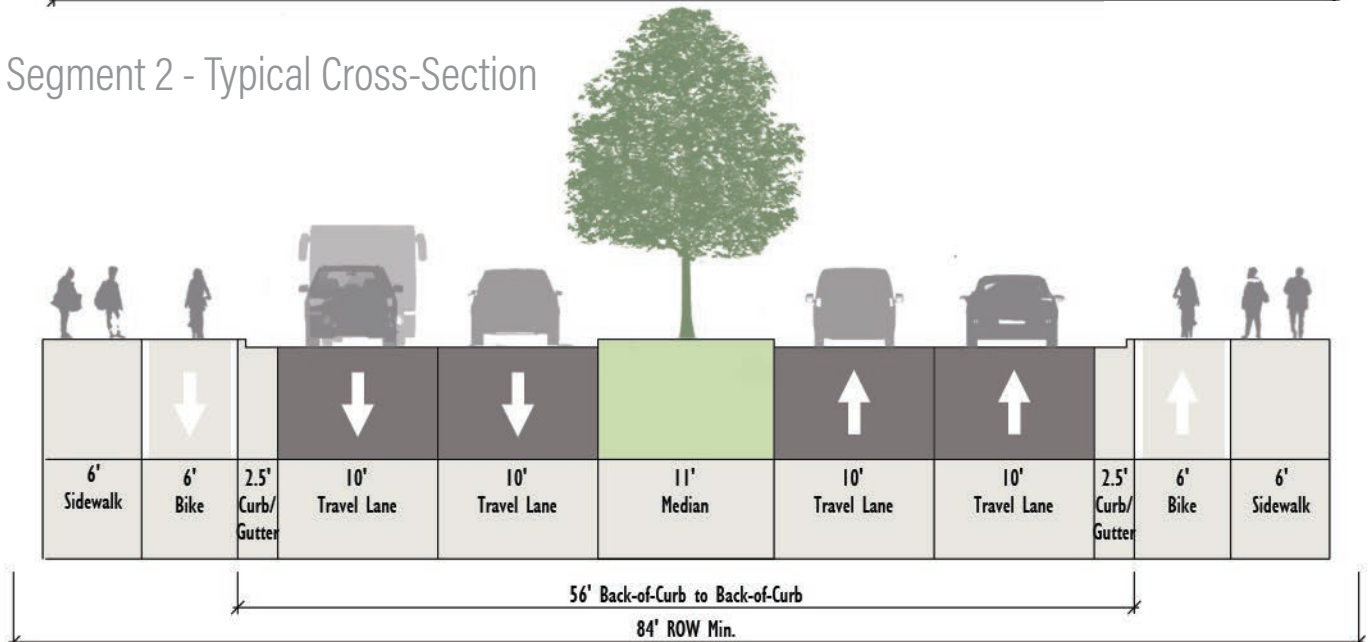


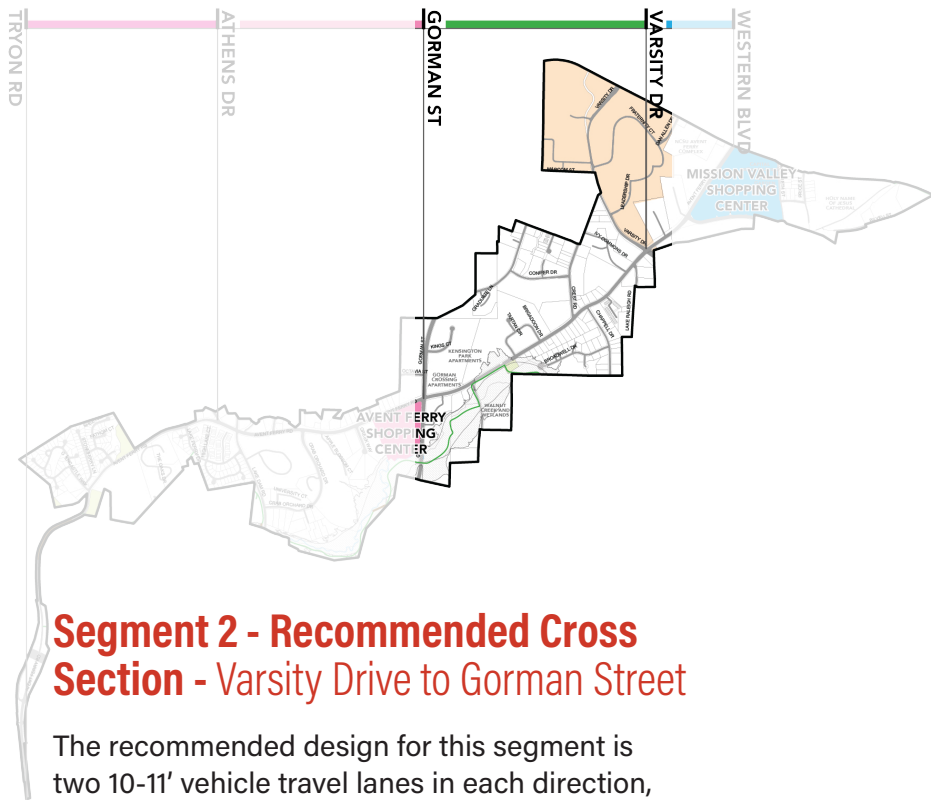
Looking northwest on Avent Ferry.

Segment 2 - Existing Conditions



Segment 2 - Typical Cross-Section



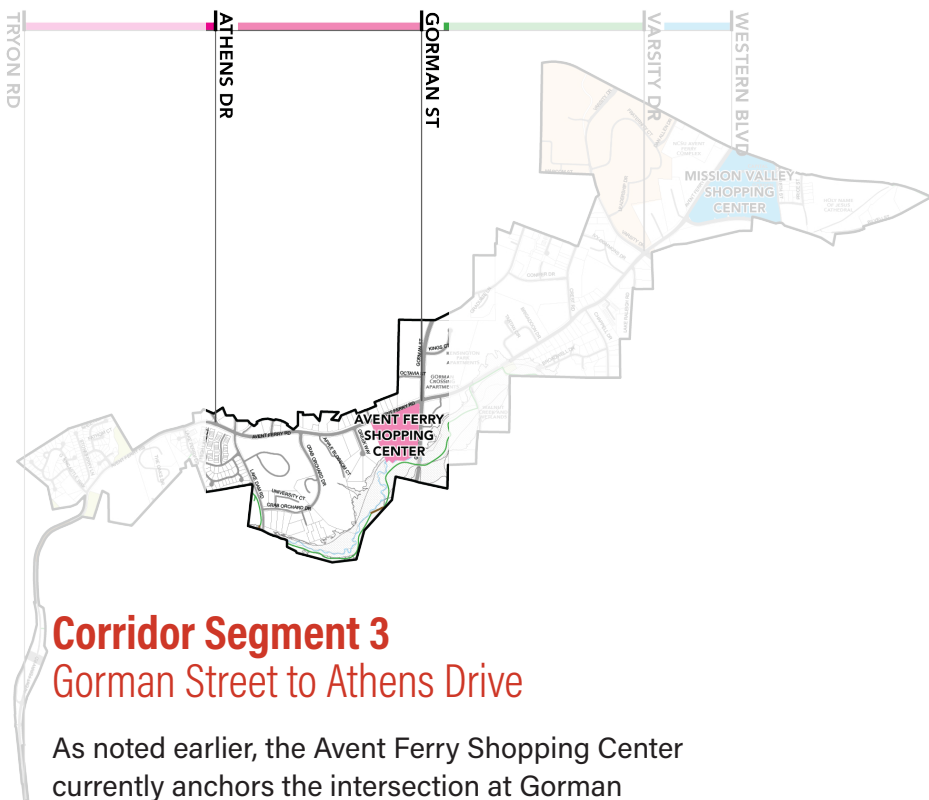


Segment 2 - Recommended Cross Section - Varsity Drive to Gorman Street

The recommended design for this segment is two 10-11' vehicle travel lanes in each direction, an 11' center planting strip/median, 6' raised and buffered bicycle lanes on both sides of the street and 6' sidewalks on both sides of the street.



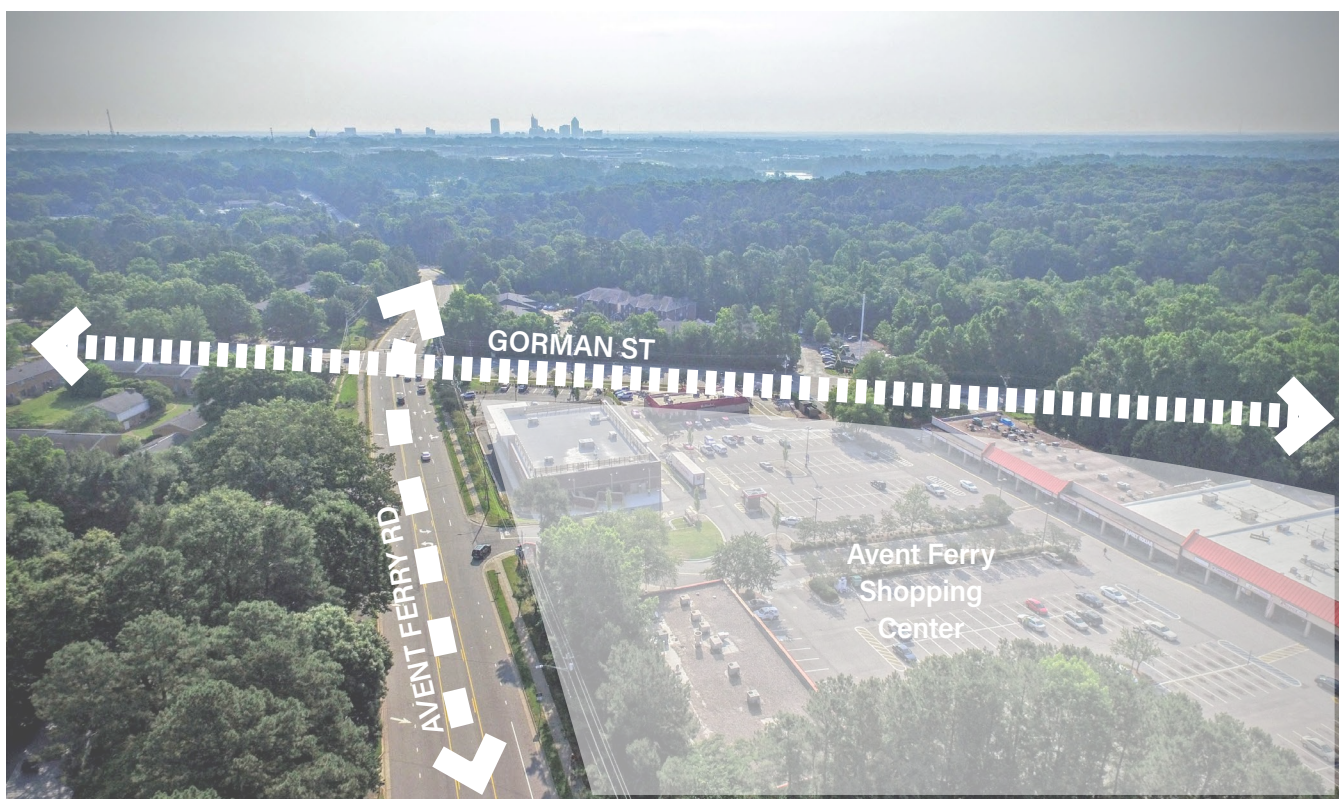
PRIVATE PROPERTY	SIDEWALK ZONE	BIKE ZONE		TRAFFIC ZONE		MEDIAN ZONE	TRAFFIC ZONE			BIKE ZONE	SIDEWALK ZONE	PRIVATE PROPERTY
	SIDEWALK	BIKE LANE		TRAVEL LANE	TRAVEL LANE	MEDIAN	TRAVEL LANE	TRAVEL LANE		BIKE LANE	SIDEWALK	
	6'	6'	2.5'	10-11'	10-11'	11'	10-11'	10-11'	2.5'	6'	6'	
EXISTING CURB-TO-CURB VARIABLE												
84' ROW MIN.												



Corridor Segment 3

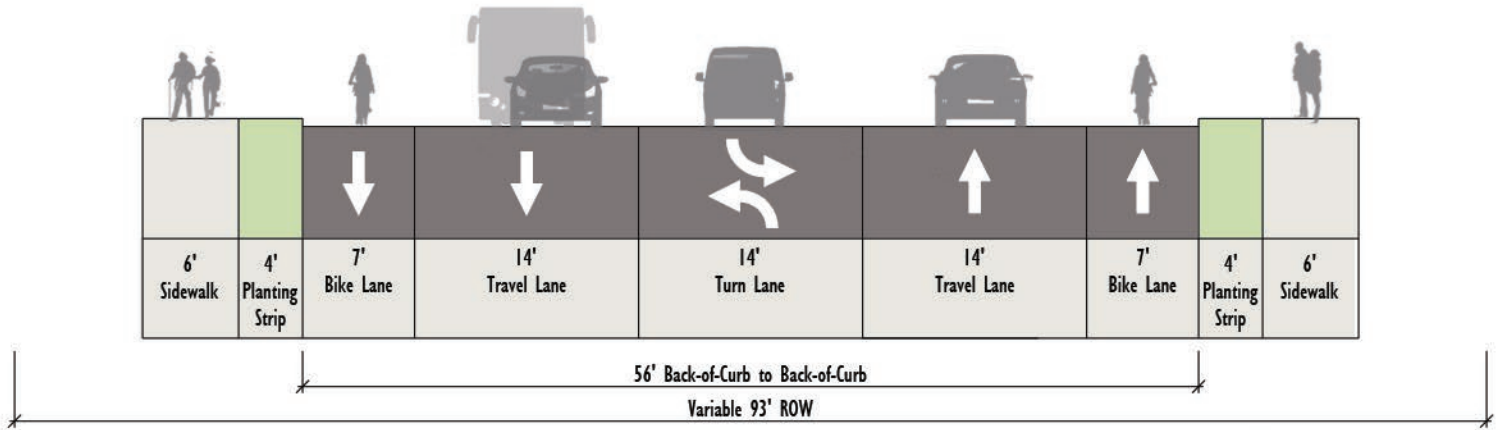
Gorman Street to Athens Drive

As noted earlier, the Aventura Shopping Center currently anchors the intersection at Gorman Street and provides a number of retail services to the surrounding neighborhood. This pattern should be enhanced by updating the center into a high-quality Neighborhood Mixed-Use Center that adds residential and office space to the tenant mix.

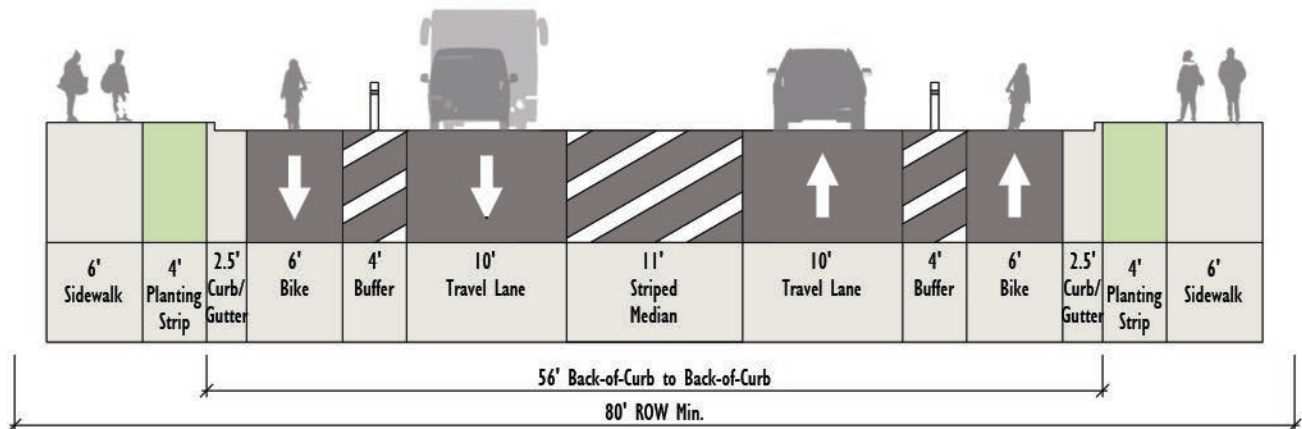


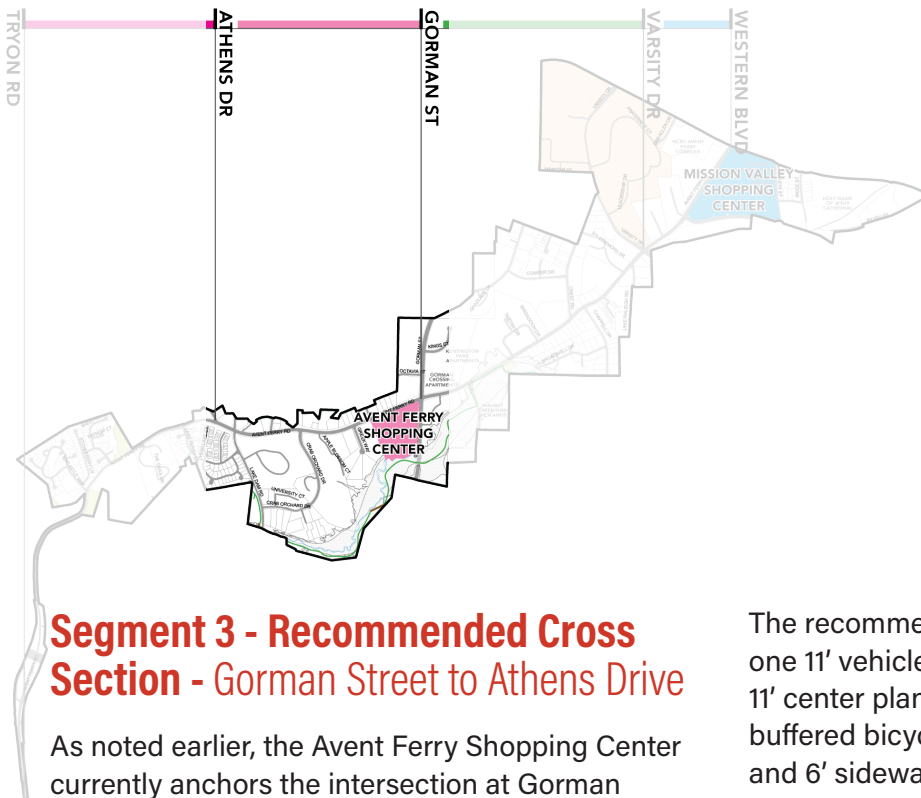
Looking north on Aventura Dr with the Aventura Shopping Center highlighted.

Segment 3 - Existing Conditions



Segment 3 - Typical Cross-Section





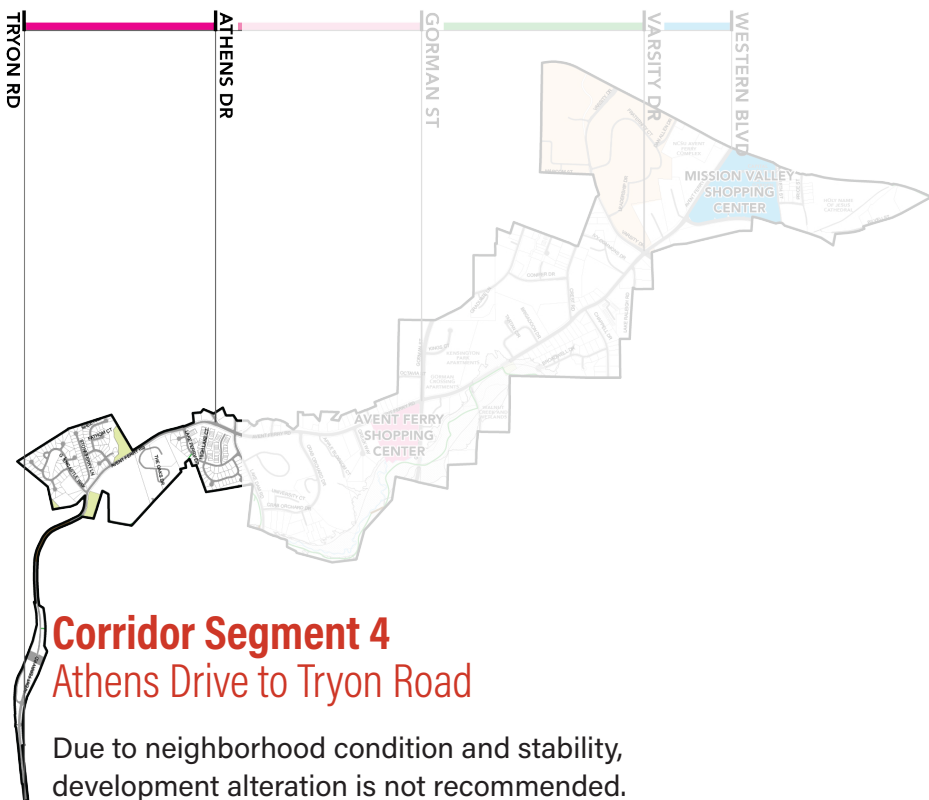
Segment 3 - Recommended Cross Section - Gorman Street to Athens Drive

As noted earlier, the Avent Ferry Shopping Center currently anchors the intersection at Gorman Street and provides a number of retail services to the surrounding neighborhood. This pattern should be enhanced by updating the center into a high-quality Neighborhood Mixed-Use Center that adds residential and office space to the tenant mix.

The recommended design for this segment is one 11' vehicle travel lane in both directions, an 11' center planting strip/median, 6' on-street, buffered bicycle lanes on both sides of the street and 6' sidewalks on both sides of the street.



PRIVATE PROPERTY	SIDEWALK ZONE		BIKE ZONE			TRAFFIC ZONE	MEDIAN ZONE	TRAFFIC ZONE	BIKE ZONE			SIDEWALK ZONE		PRIVATE PROPERTY
	SIDEWALK	TREE PLANTER		BIKE LANE		TRAVEL LANE	MEDIAN	TRAVEL LANE		BIKE LANE		TREE PLANTER	SIDEWALK	
	6'	6'	2.5'	6'	3'	11'	11'	11'	3'	6'	2.5'	6'	6'	
EXISTING 56' CURB-TO-CURB														



Corridor Segment 4

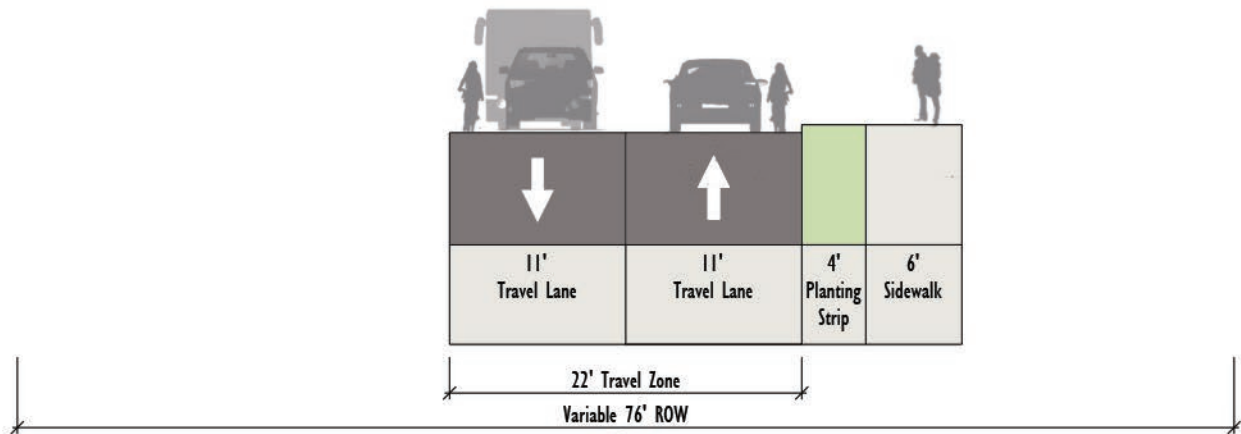
Athens Drive to Tryon Road

Due to neighborhood condition and stability, development alteration is not recommended. Since this portion of the corridor is anchored and largely occupied by Lake Johnson Park, the primary focus should be to close gaps in the sidewalk and greenway network.

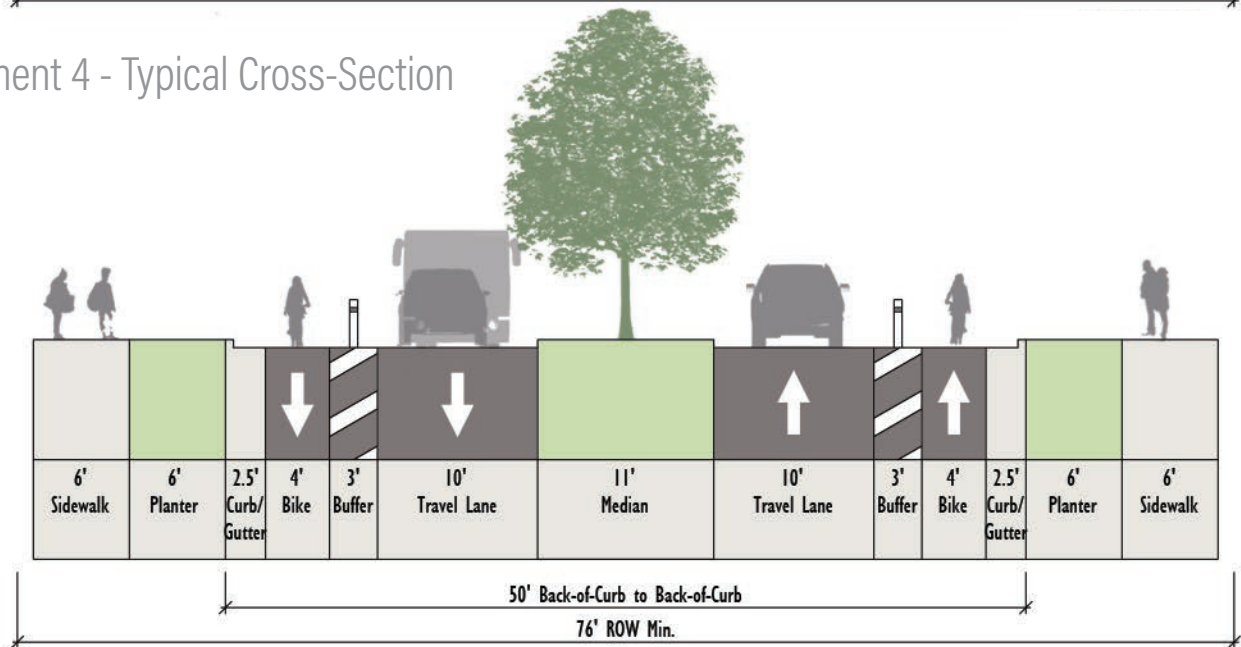


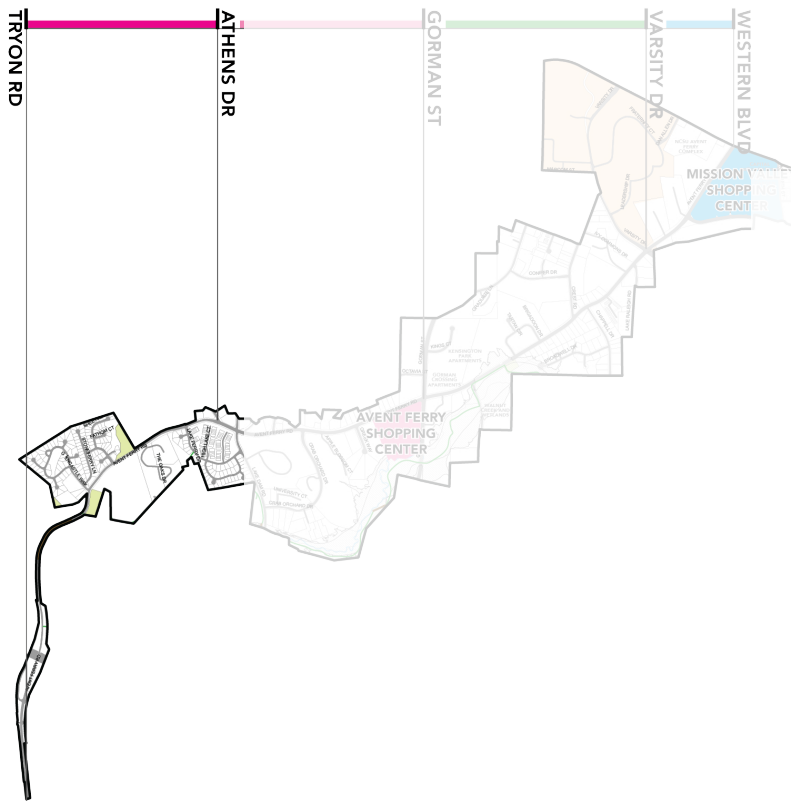
Looking north on Aventura Ferry towards Lake Johnson.

Segment 4 - Existing Conditions



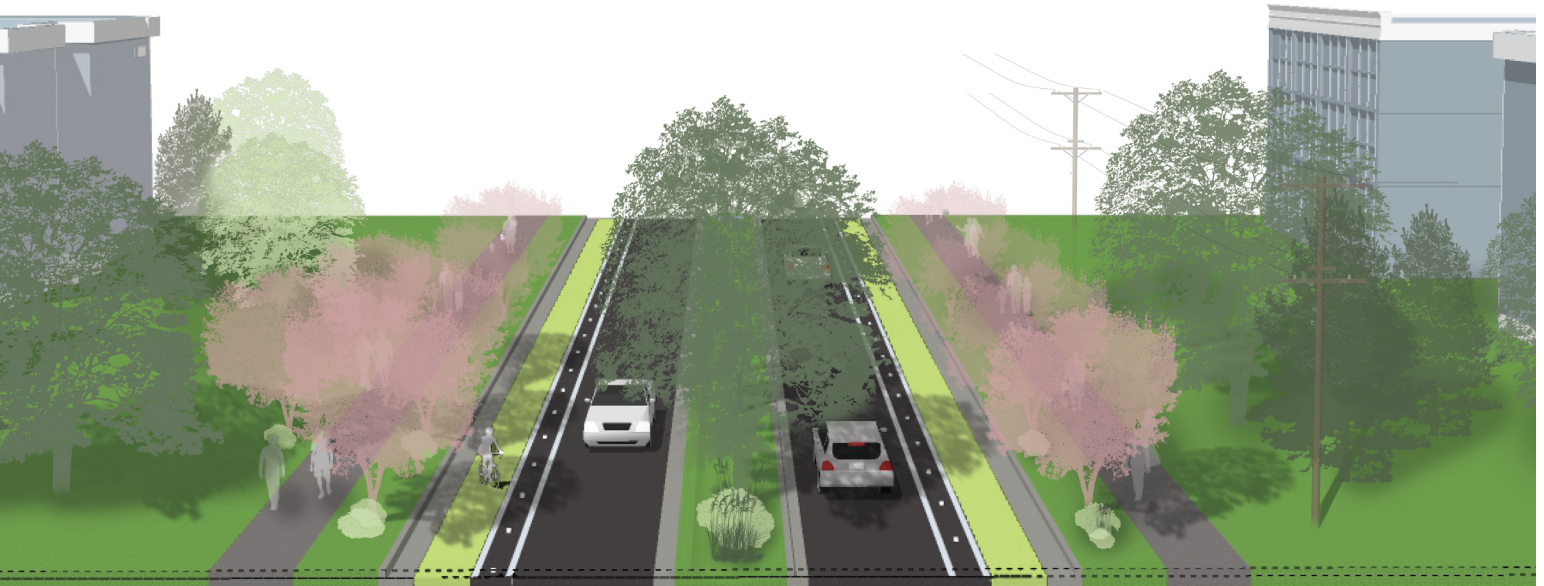
Segment 4 - Typical Cross-Section





Segment 4 - Recommended Cross Section - Athens Drive to Tryon Road

The recommended design for this segment is one 11' vehicle travel lane in each direction, an 11' center planting strip/median, 4' on-street, buffered bicycle lanes and 6' sidewalks on both sides of the street.



PRIVATE PROPERTY	SIDEWALK ZONE			BIKE ZONE			TRAFFIC ZONE	MEDIAN ZONE	TRAFFIC ZONE	BIKE ZONE			SIDEWALK ZONE			PRIVATE PROPERTY
	MAINTENANCE	SIDEWALK	TREE PLANTER	BIKE LANE			TRAVEL LANE	MEDIAN	TRAVEL LANE	BIKE LANE			TREE PLANTER	SIDEWALK	MAINTENANCE	
	2'	6'	6'	2.5'	4'	3'	11'	11'	11'	3'	4'	2.5'	6'	6'	2'	
52' CURB-TO-CURB																
80' ROW																