

8th St. Bike Access to GT Campus



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Georgia Tech  **Capital Planning
& Space Management**

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Problem Description

The goal of this project is to design a safe and convenient bicycle access corridor between Georgia Tech's West Campus and Atlanta's Westside neighborhood.

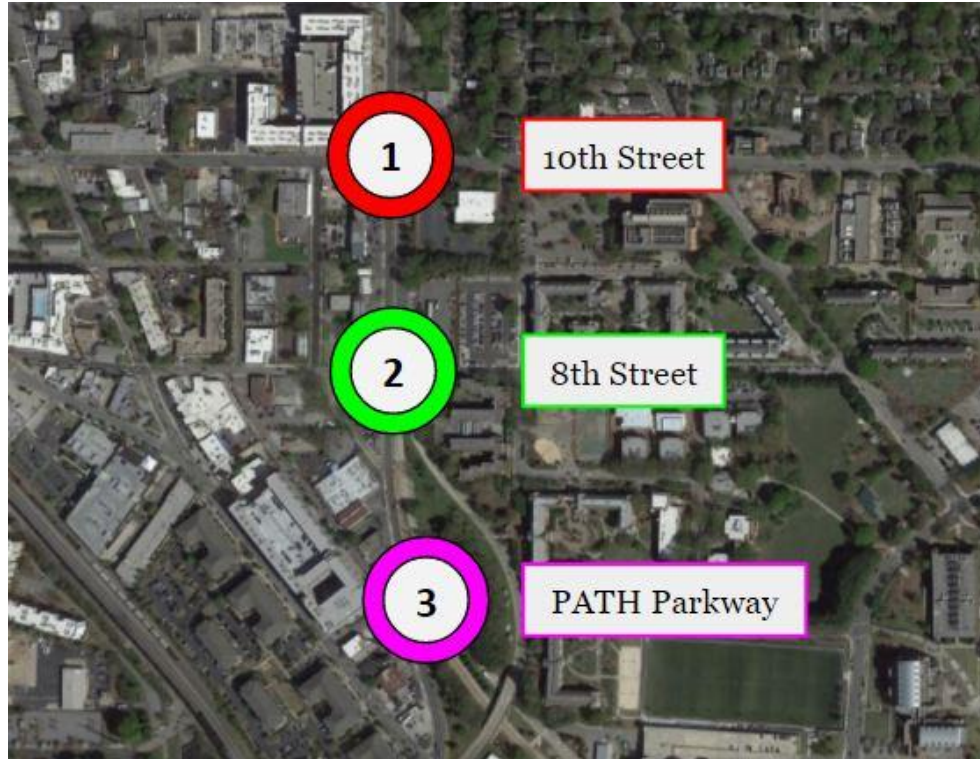


Existing Conditions

- **Primary Intersections - Along Northside Drive**
 - 10th Street / Northside Drive
 - 8th Street / Northside Drive
 - PATH Parkway / Hampton Street / Northside Drive
- **Development**
 - Existing
 - Planned



Primary Intersections - Along Northside Drive



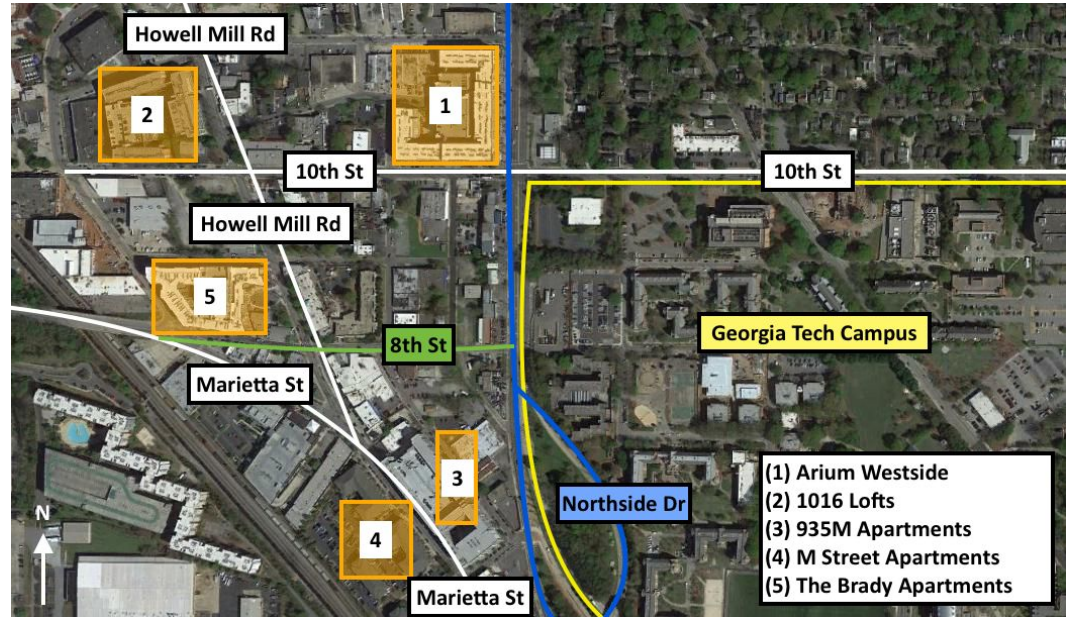
Existing Conditions - Development

- **Residential**

- (1) Arium Westside
- (2) 1016 Lofts
- (3) 935M Apartments
- (4) M Street Apartments
- (5) The Brady Apartments

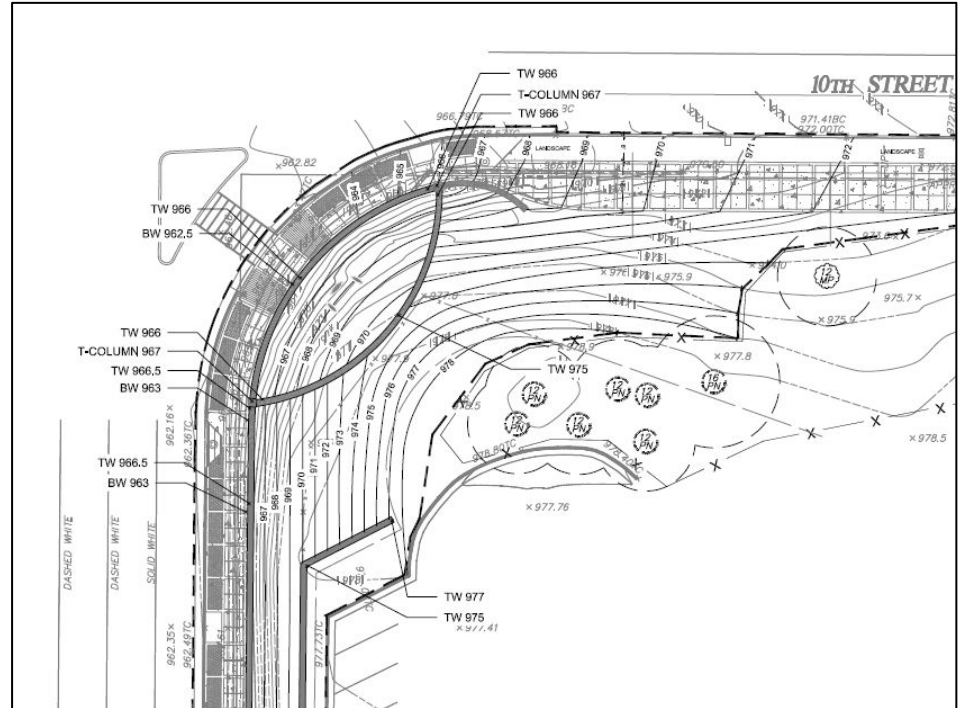
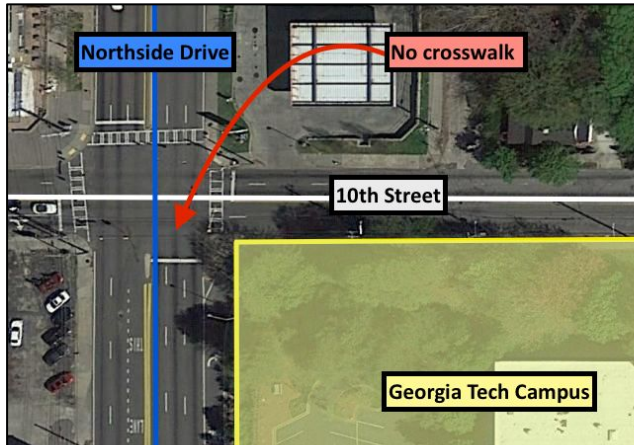
- **Commercial**

- Retail
- Breweries
- Coffee boutiques



Planned Development

- **10th Street at Northside Drive**
 - Installation of designated bicycle path and multi-use path
 - Along corner of 10th Street and Northside Drive



Project Stakeholders

- **Designers**

- Transplant Design, LLC
- Georgia Tech Capital Planning and Space Management (GTCPSM)
- PATH Foundation

- **Protectors**

- Georgia Tech Police Department (GTPD)
- Atlanta Police Department (APD)

- **Users**

- Bicycle Infrastructure Improvements Committee (BIIC)
- Other cyclists and pedestrians



Transplant's Design Alternatives

- **Georgia Tech's Bicycle Master Plan**
 - 8th Street Bicycle Boulevard
 - Connection of Northside Drive to Hemphill Avenue
- **Four Design Alternatives**
 - 8th Street Connection to PATH Parkway
 - Overpass Across Northside Drive
 - Curran Street Connection to PATH Parkway
 - Signalized Bicycle Path Across Northside Drive



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One Grand Idea

Incorporating one of the four alternatives into the envisioned 8th Street Bicycle Boulevard



Design Alternatives - Alternative 1

8th Street Connection to PATH Pkwy



Design Alternatives - Alternative 2

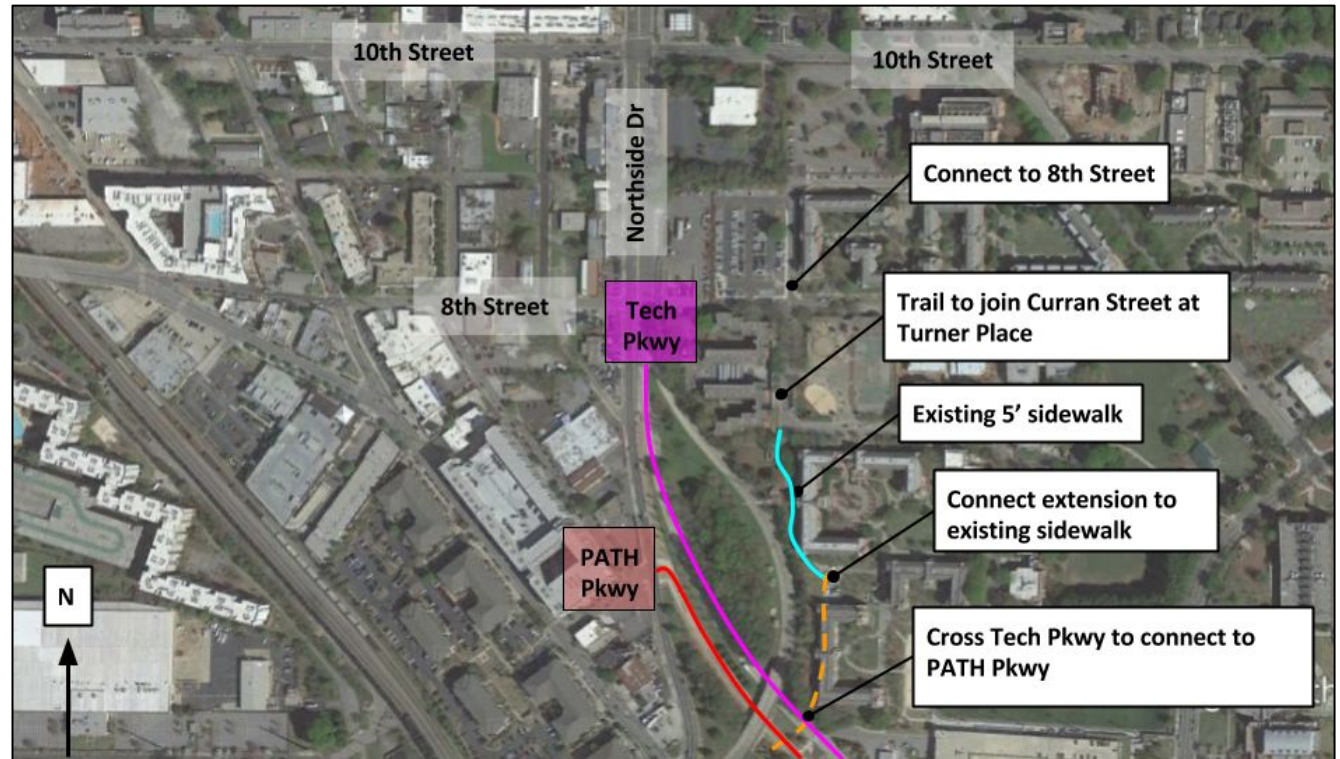
Overpass Across Northside Drive

- Grade-separated bikeway and pedestrian bridge accommodating two lanes of bicycle traffic
- 5% grade recommended by AASHTO Guidelines
- Return to grade along the north edge of WR29 parking lot on Georgia Tech's campus



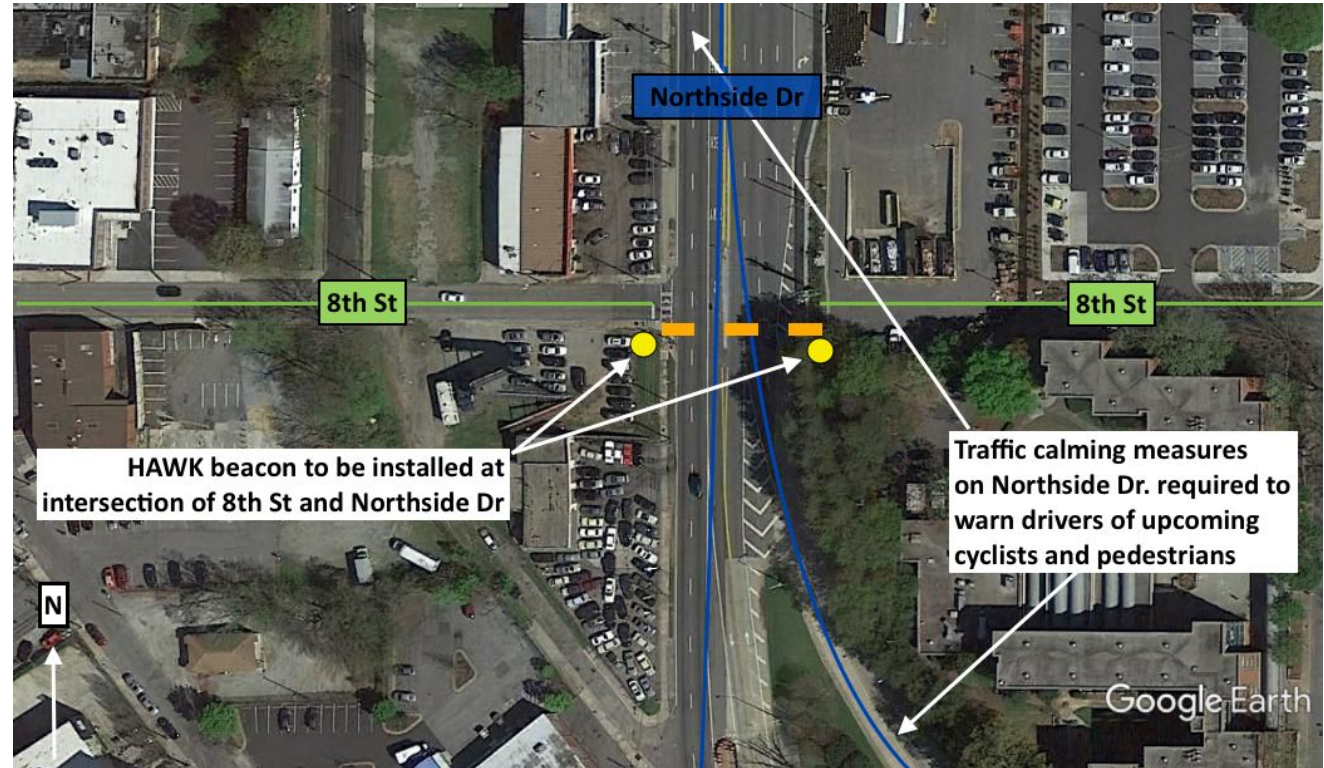
Design Alternatives - Alternative 3

Curran Street Connection to PATH Parkway



Design Alternatives - Alternative 4

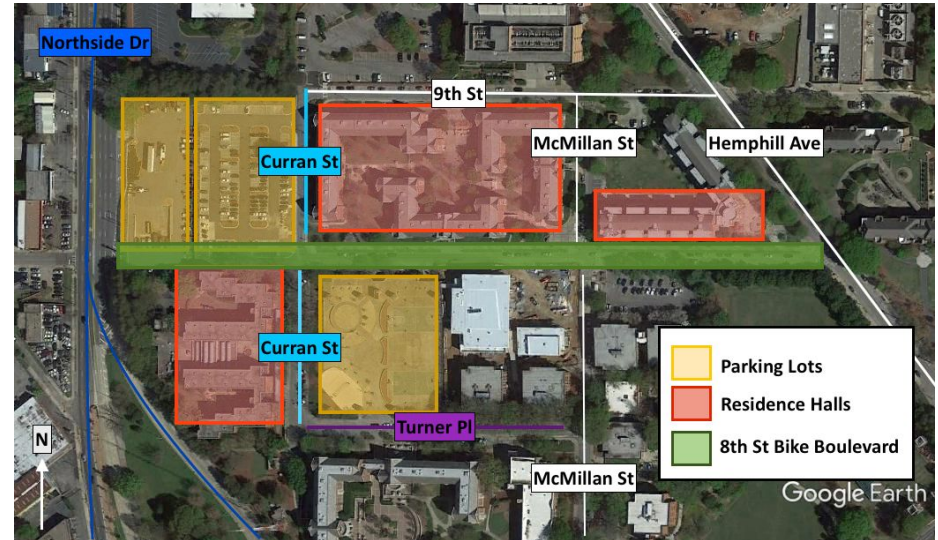
Signalized Bicycle Path Across Northside Drive



One Grand Idea - 8th Street Bicycle Boulevard

8th Street Bicycle Boulevard

- Two-way designated bicycle path painted onto existing roadway
- Replaces existing on-street parallel parking
- Extends entire length of 8th Street between Hemphill Avenue and Curran Street



Alternative Evaluation Parameters

- Comparative analysis with summation score: **lowest = best**

Parameter	8th Street Connection to PATH Parkway	Overpass Across Northside Drive	Curran Street Connection to PATH Parkway	Signalized Bicycle Path Across Northside Drive
Connectivity	3	1	4	2
Construction Cost	2	4	1	3
Safety	3	2	1	4
Alignment w/ GT Bicycle Master Plan	2	4	3	1
Design Constraints	2	4	1	3
TOTAL:	12	15	10	13



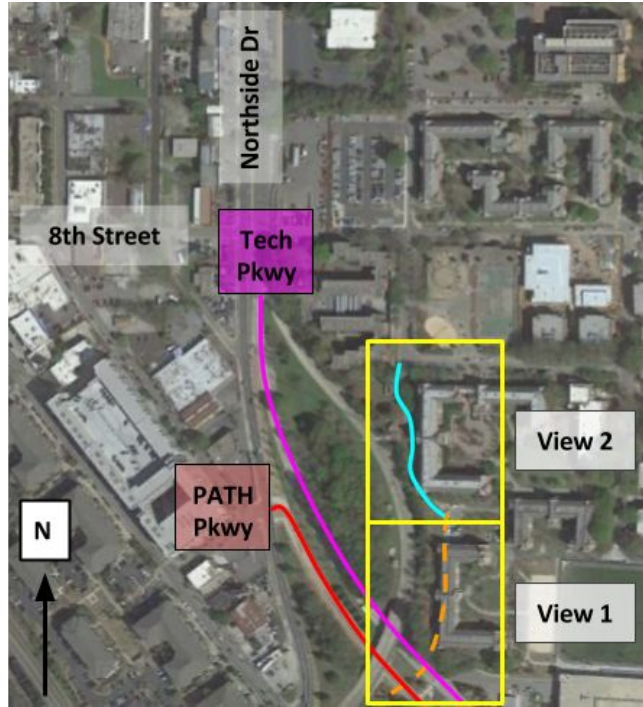
Proposed Alternative Selection

- Comparative analysis with summation score: **lowest = best**

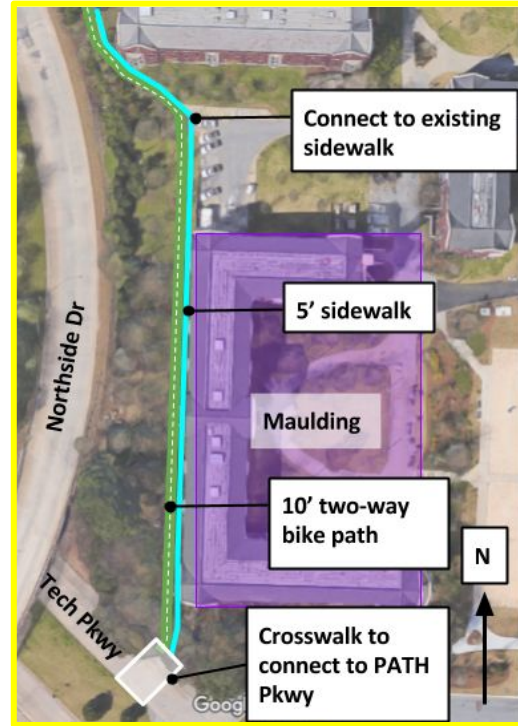
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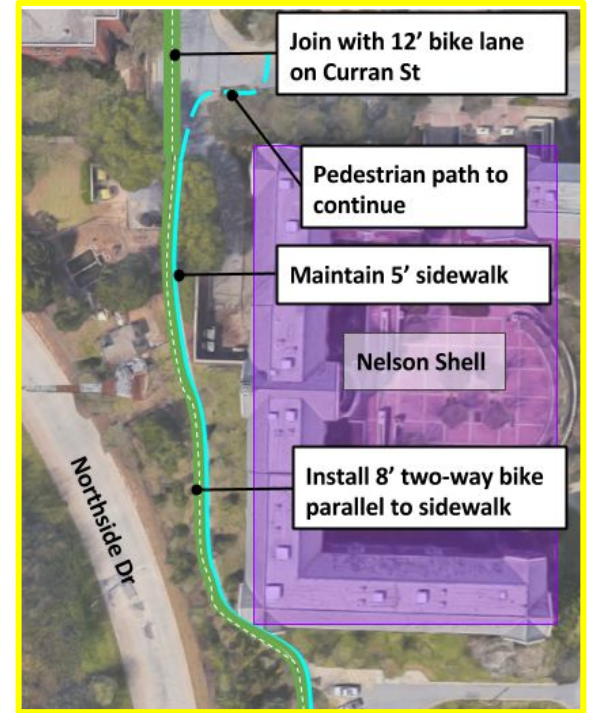
Design of Proposed Alternative



Overall View



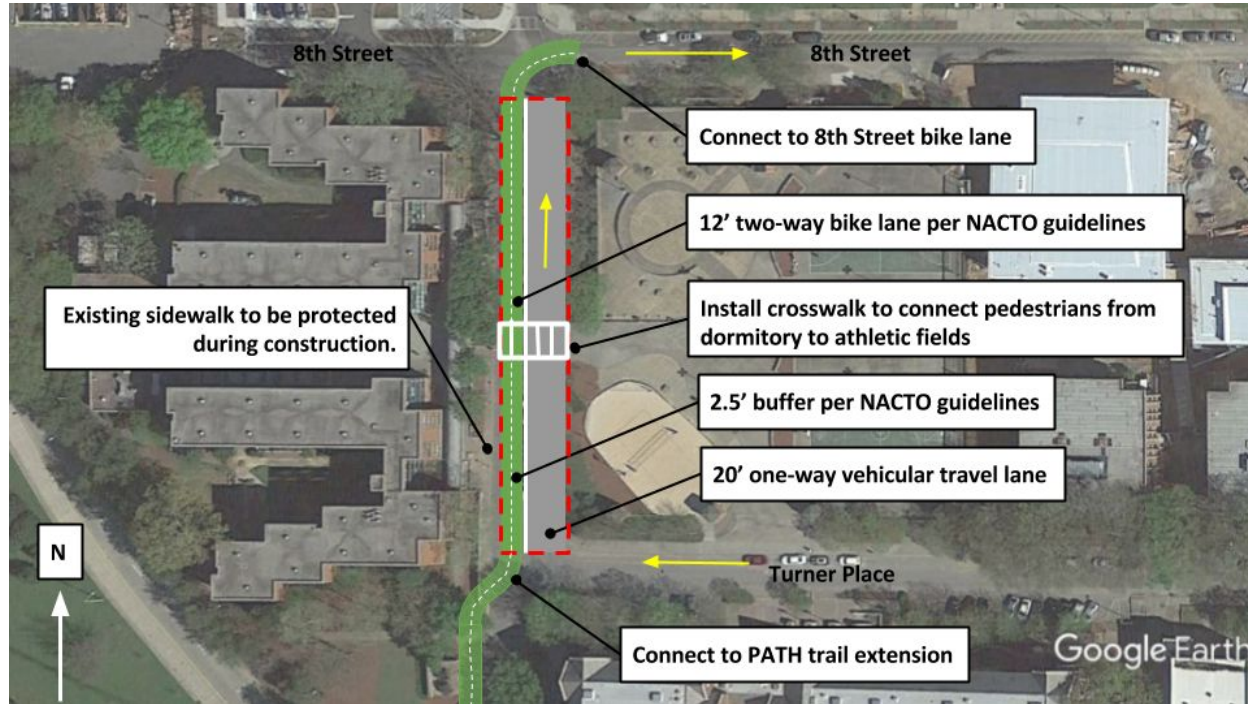
View 1



View 2



Design of Proposed Alternative



Design of Proposed Alternative



Project Costs

- **Demolition**
- **Construction**
 - Traffic Rerouting
 - Ancillary Costs
 - Labor Costs
- **Summary of Probable Project Costs**



Demolition



Curb and gutter removal



Tree removal

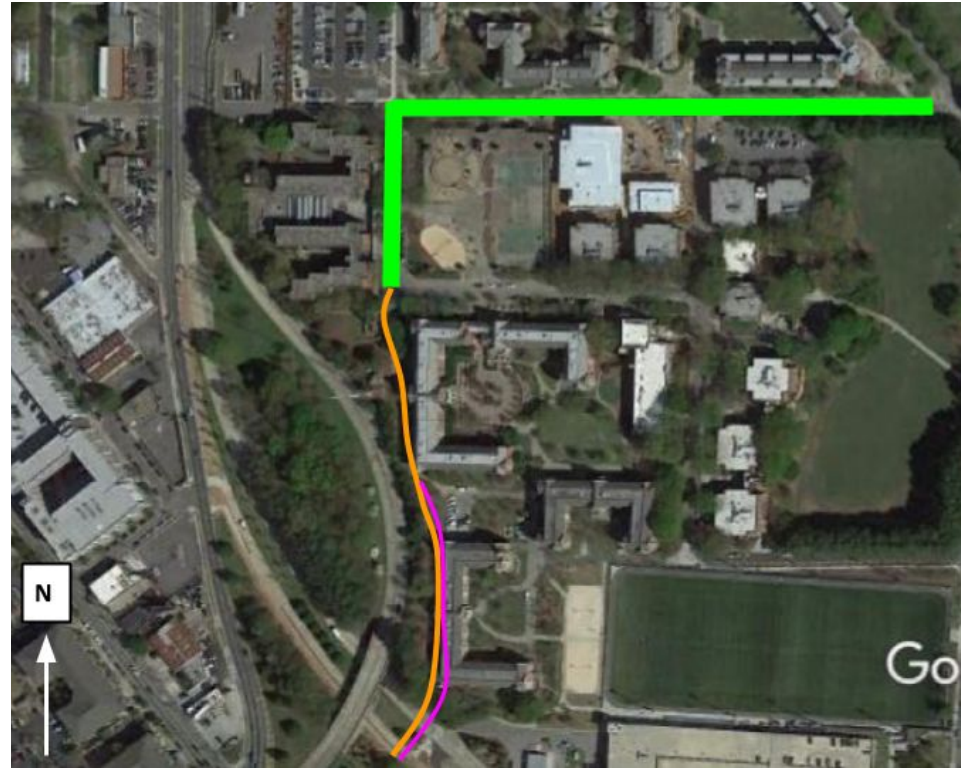


Construction

Repainting Curran St & 8th St

Bicycle path

Extending sidewalk



Summary of Probable Project Costs

Curran Street Connection to PATH Parkway

Demolition and Site Clearance

Expenditure	Quantity	Roundup	Unit	Unit Price	CF	Item Total	Group Total
Curb and gutter	52.5	60	LF	\$5	10%	\$330	
Clearing / grubbing	0.19	0.5	AC	\$3,000	10%	\$3,300	
Erosion Control	0.19	0.5	AC	\$7,500	10%	\$8,250	
							\$11,880

Construction

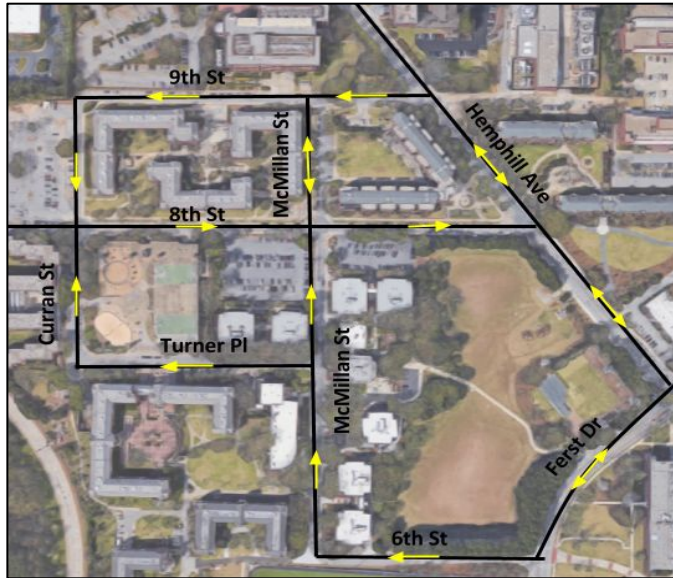
Expenditure	Quantity	Roundup	Unit	Unit Price	CF	Item Total	Group Total
Concrete Sidewalk	250	250	SY	\$46.00	10%	\$11,500	
Heavy Duty Asphalt Pavement	666	670	SY	\$36.00	10%	\$24,120	
Pavement striping	1505.17	1510	LF	\$12.00	10%	\$18,120	
Bollards	4	5	EA	\$800.00	10%	\$4,000	
Signage	10	10	EA	\$100.00	10%	\$1,000	
							\$58,800

Total Cost for Demolition, Site Clearance, and Construction

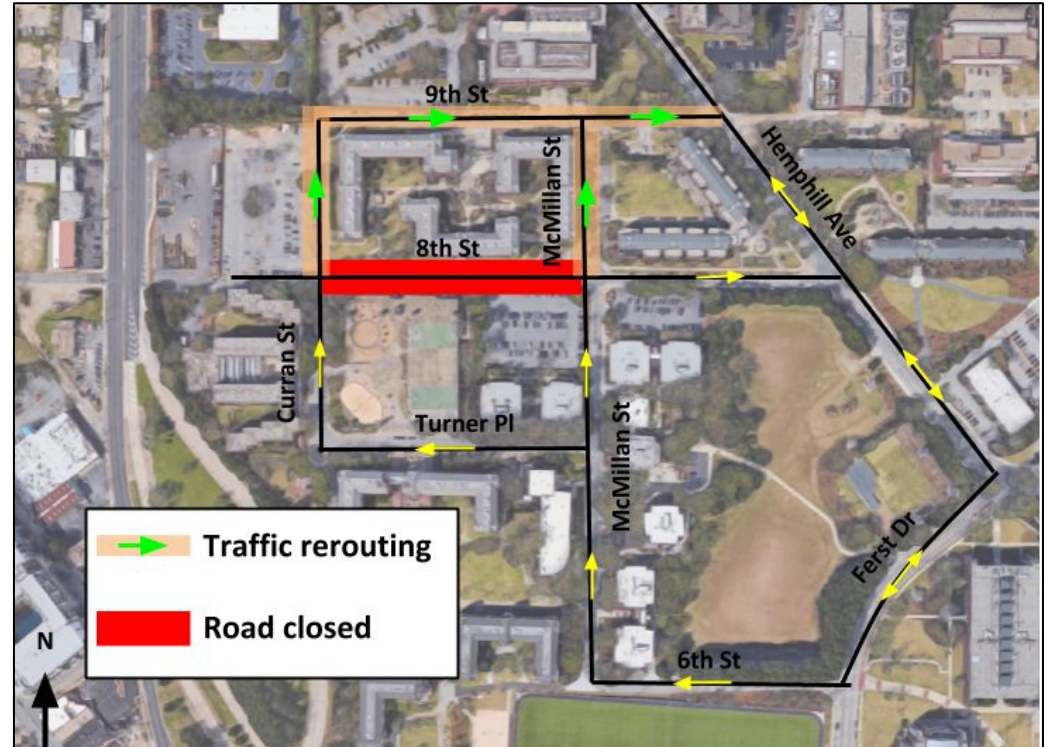
\$70,700



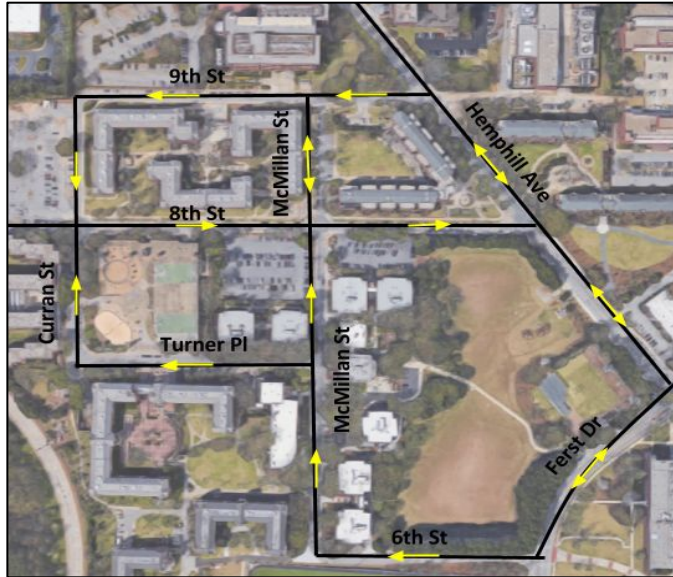
Traffic Control - Phase 1



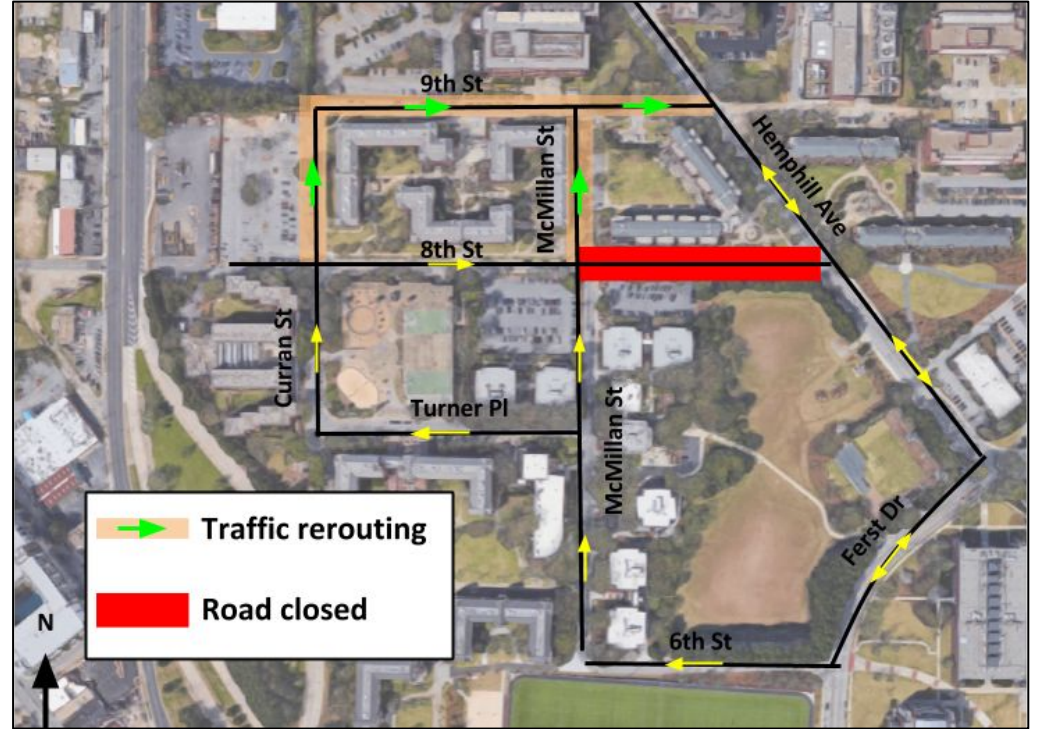
Existing traffic patterns



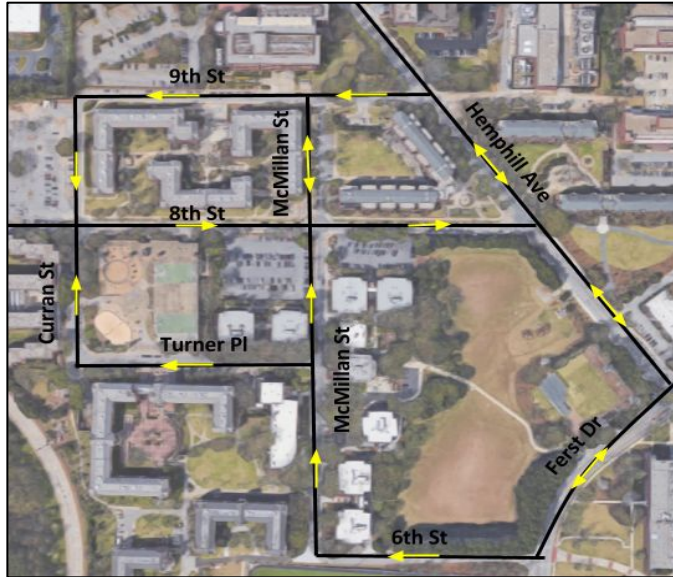
Traffic Control - Phase 2



Existing traffic patterns



Traffic Control - Phase 3



Existing traffic patterns



Probable Schedule of Completion

Project Category	Time After Project Start (weeks)				
	0-3	3-6	6-9	9-12	12-15
8th Street Repainting	Traffic Control - Phase I	Traffic Control - Phase II	--	--	--
Curran Street Repainting	--	--	Traffic Control - Phase III	--	--
PATH Parkway Extension	Clear vegetation, begin regrading	Regrade and flatten any remaining areas of need	Pave new paths	Create crosswalk at the intersection of expanded PATH Pkwy over Tech Pkwy	Install landscaping per GT Landscape Master Plan. Install GT standard lighting.



Summary

Problem Statement: The goal of this project is to design a safe and convenient bicycle access corridor between Georgia Tech's West Campus and Atlanta's Westside Neighborhood.

Proposed Design: Curran Street connection to PATH Parkway

Probable Project Cost: \$70,700

Probable Schedule of Completion: 12-15 weeks





Transplant
Q & A





Transplant
Thank You!

