



NORTH CAROLINA
Department of Transportation



Replacement of U.S. 74/29 Bridge over Catawba River and Improvements to the Intersection of U.S. 74/29 and N.C. 7

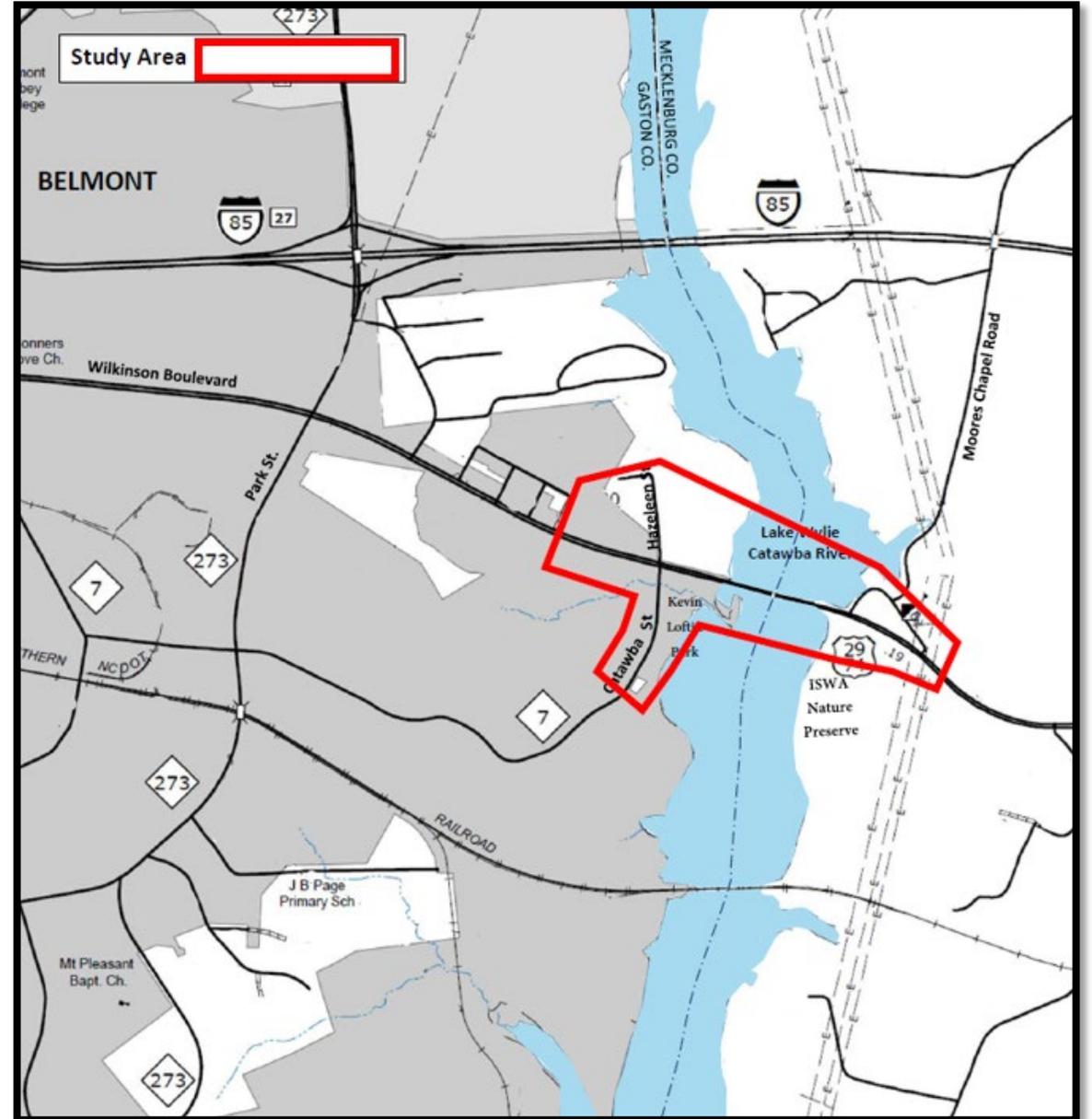
State Transportation Improvement Program Project Nos: B-6051 & U-6143

September 2022

PROJECT LOCATIONS B-6051 & U-6143

Project B-6051 proposes to replace the bridge over the Catawba River in Gaston and Mecklenburg Counties

Project U-6143 proposes improvements to intersections on U.S. 74/29 and N.C. 7 on the Gaston County side



Purpose of the Projects

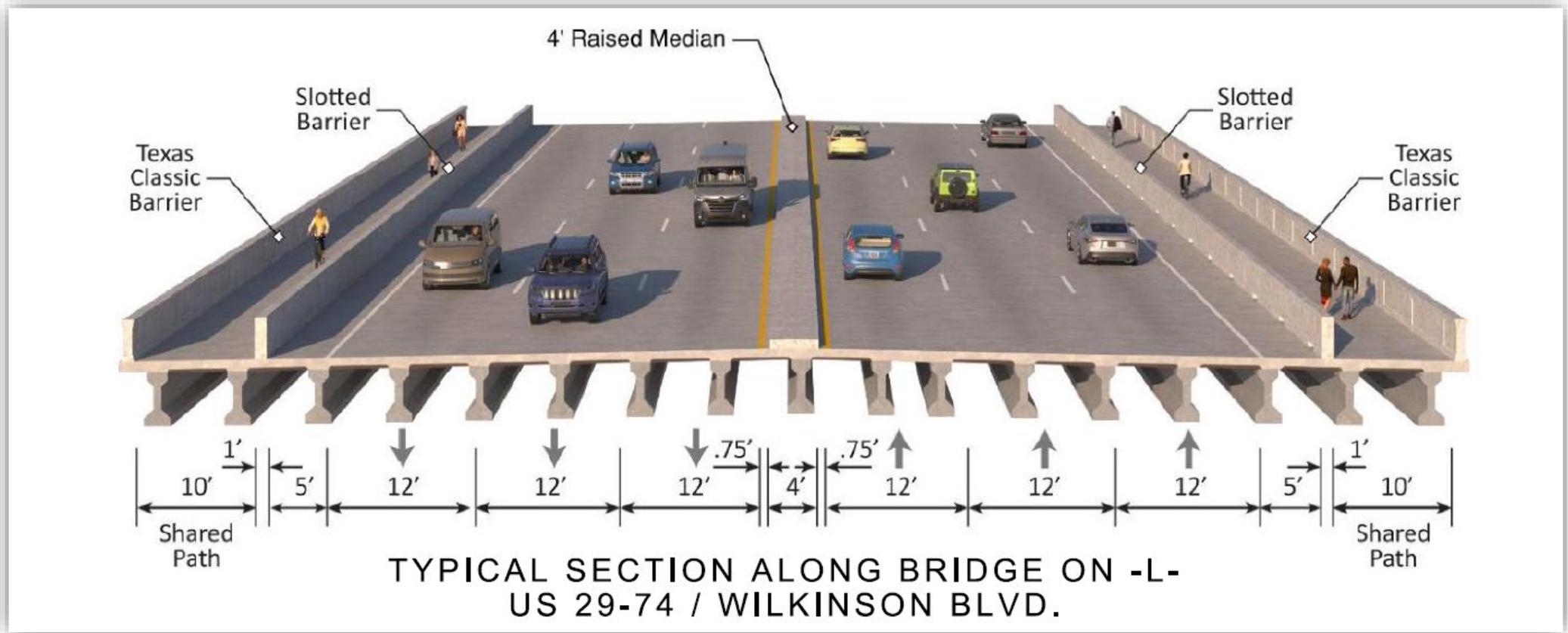
The Purpose of the **B-6051** bridge replacement project is to:

- provide adequate width on new bridge to support connection of the lanes on the eastern and western approaches to the U.S. 74 Bridge over the Lake Wylie/Catawba River
- provide adequate vertical clearance on new bridge over Lake Wylie/Catawba River for emergency and navigational purposes

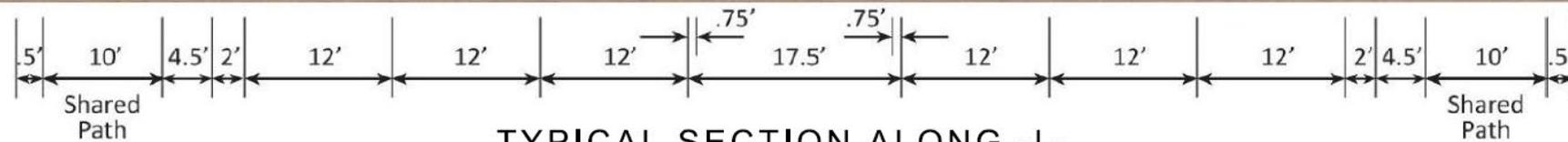
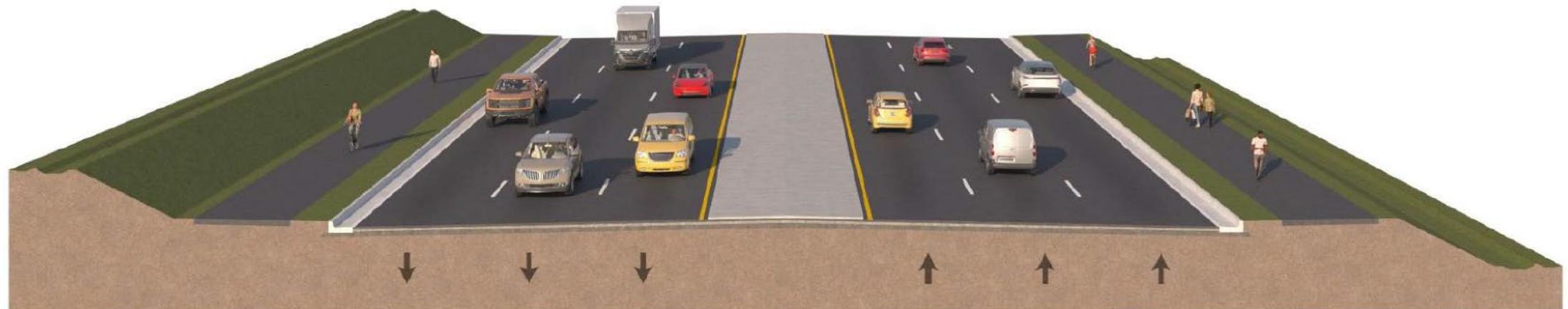
The Purpose of **U-6143** intersection improvements is to:

- address deficiencies with the intersection of Wilkinson Boulevard (U.S. 74/29) Catawba Street (N.C. 7)

Bridge Typical Section



Roadway Typical Section

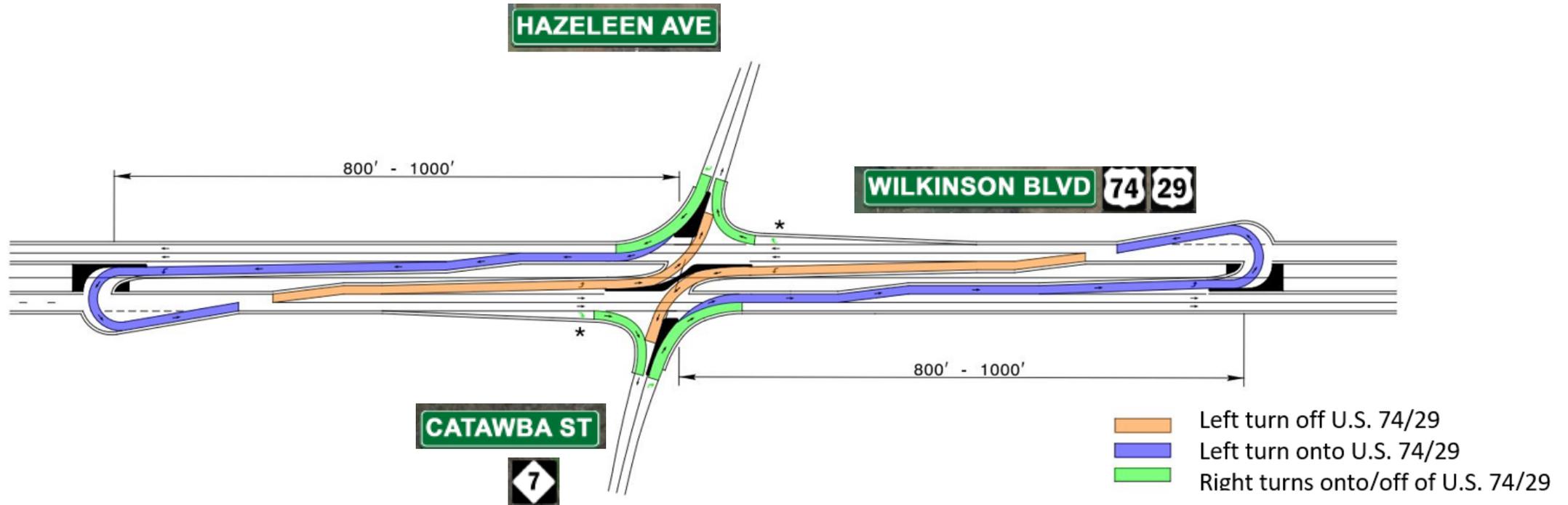


TYPICAL SECTION ALONG -L-
US 29-74 / WILKINSON BLVD.

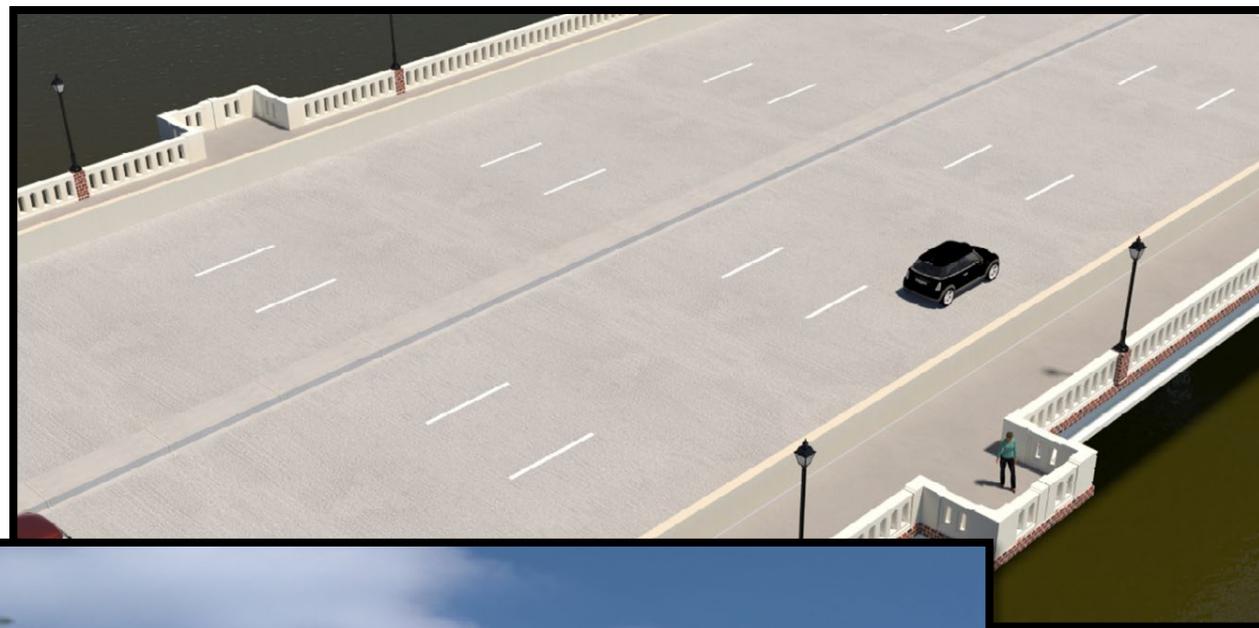
Proposed CATS Silver Line Light Rail



Reduced Conflict Intersection



Bridge Aesthetics

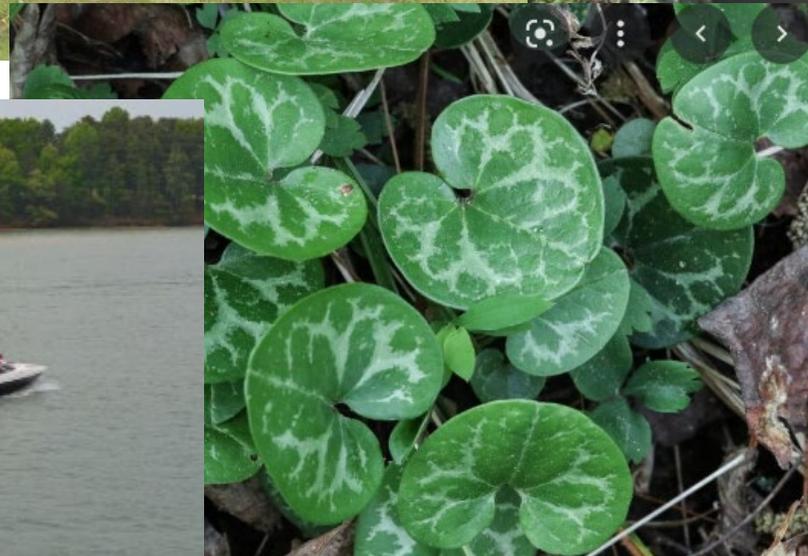


Bicycle & Pedestrian Accommodations





Impacts

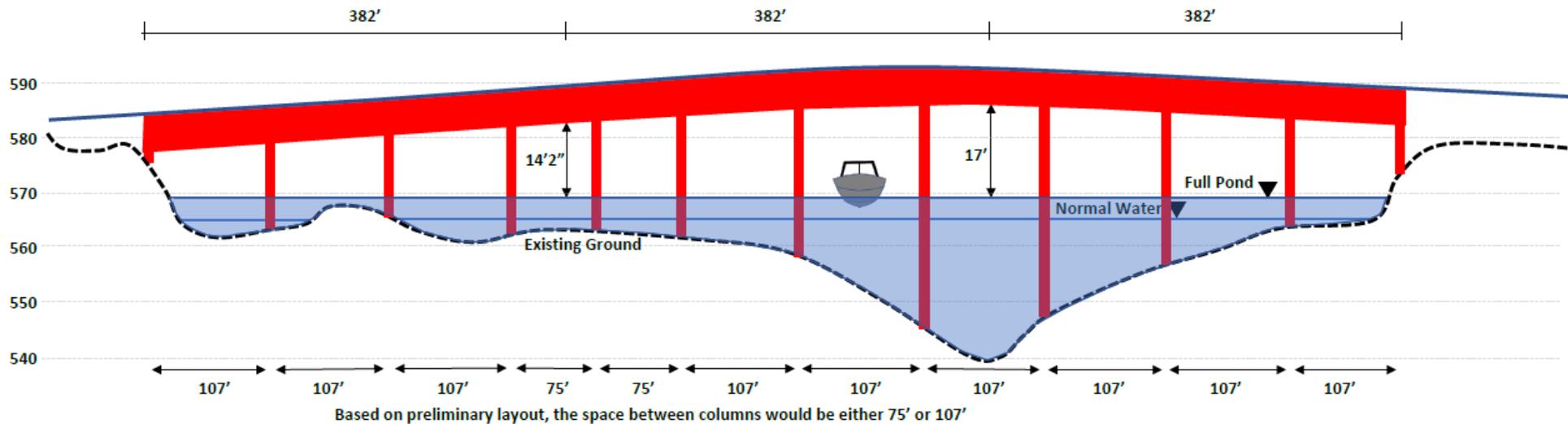


Navigation Impacts

NCDOT contacted USCG who has indicated that a USCG permit is not required. However, Lake Wylie is subject to FERC Licensing and the lake is used for substantial volumes of recreational boating.

The existing bridge has relatively low clearance. Based on coordination with Duke Energy, Emergency Services, the Lake Wylie Marine Commission and NCWRC the new bridge will be raised over the navigational channel of the river to provide 16' of clearance above full pond elevation. Coordination has also taken place with the City of Belmont who owns and operates the boat ramp just southwest of the bridge.

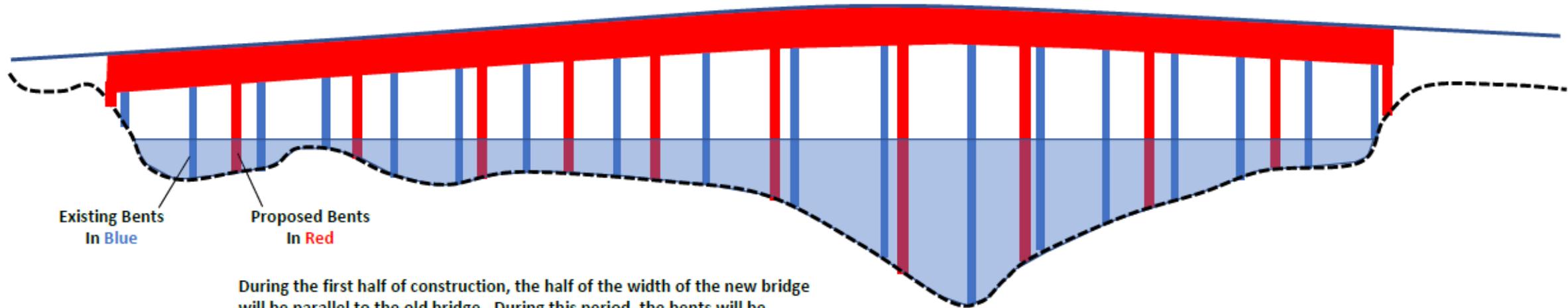
A Boater Safety Plan is being developed in coordination with these same agencies for safety during construction.



Navigation Impacts

The **bents** of the old bridge will be staggered from the location of the new bridge. The old bents will be removed down to the mudline.

B-6051 Existing and Proposed Bents During Construction



Existing Bents
In Blue

Proposed Bents
In Red

During the first half of construction, the half of the width of the new bridge will be parallel to the old bridge. During this period, the bents will be staggered. NCDOT will work the Lake Wylie Marine Commission, Emergency Response Services, and Duke Energy to develop a plan for safe navigation during all phases of construction.

Stream and Wetland Impacts



Stream and Wetland Impacts

B-6051/U-6143 Section 404 Impacts

Crossing 1 - West of Lake Wylie Impacts (lf)			Crossing 2 - East of Lake Wylie Impacts (lf)						
Stream	Permanent	Temporary	Stream	Permanent	Temporary	Wetland Impacts (ac)		Surface Waters (ac)	
SB	42	10	SA Downstream Wilkinson	297	10	WA	0.03	Lake Wylie/Catawba River*	0.59
SC Upstream	91	8	SA Upstream Wilkinson	9	8	WB	0.13		
SC Downstream	82	8				WC	0.02		
SD	109	10				WD	0.14		
						WE	0.01		
Total	324	36	Total	306	18		0.33		0.59

Based on information to this point, it appears the project may fit with the GP 50.

Drainage

Bridge – During Construction, water will drain directly into the lake but upon completion of the new structure, all water will be kept on the deck of the bridge and drained to storm drainage features off either end of the bridge.

In coordination earlier this year between NCDOT and NCDEQ-DWR determined that hazardous spill catch basins would no longer be required and therefore will not be included as part of this project. NCDOT's Stormwater Best Management Practices Tool Box was utilized to best handle the runoff flowing into Catawba River.

These permit drawings illustrating these features will be completed in the near future and permit applications are anticipated in the next month.

Threatened & Endangered Species

The project study has been surveyed and cleared for the following T&E Species concerns for Gaston and Mecklenburg County:

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Glyptemys muhlenbergii</i>	bog turtle	T (S/A)	Yes	Not Required
<i>Lasmigona decorata</i>	Carolina heelsplitter	E	No	No Effect
<i>Hexastylis naniflora</i>	dwarf-flowered heartleaf	T	Yes	No Effect
<i>Rhus michauxii</i>	Michaux's sumac	E	Yes	No Effect
<i>Myotis septentrionalis</i>	northern long-eared bat	T	Yes	4(d)
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E	Yes	No Effect
<i>Echinacea laevigata</i>	smooth coneflower	E	Yes	No Effect

¹ IPaC data checked on April 21st, 2022

E - Endangered

T - Threatened

T(S/A) - Threatened due to similarity of appearance

Impacts Historic Properties



There are two eligible properties within the study area. The western portion of Gaston College Kimbrell Campus is eligible, and Bridge No. 91 is eligible.



Community

Environmental Justice – there are low-income populations within the census blocks but none within the DCIA. As there are no direct project impacts and as traffic will be maintained and bicycle pedestrian impacts enhanced as part of the project, there are no EJ impacts anticipated for this project.

Farmland – there are no farmland impacts within the project study area.

LEP – Census data indicates no populations within the census block associated with the study area.

Indirect or Cumulative Effects - The project will not alter travel patterns, notably reduce travel time, affect access to properties in the area, or open areas for development or redevelopment.

Impacts To Historic Properties



The impact to the historic portion of Gaston College was adding a guy wire within an existing utility easement and was determined No Adverse Effect by HPO.



The removal of the existing bridge constitutes an Adverse Effect. The 106 MOA is currently being processed.

Impacts to Parks

There are minor impacts to parks along the roadside, but these impacts were coordinated with the park managers so as to not adversely affect the activities, features or attributes of the park. There are also enhancements in bicycle and pedestrian connectivity with the parks and the surrounding area as well as improved driveway access. We are therefore anticipating a De-minimis 4(f).



WILKINSON BLVD

74 29

CATAWBA ST

7

Park Boundary

Park Boundary

Park Boundary

Park Boundary

Kevin Loftin Riverfront Park

Multi Use Paths (MUP) Added

Drainage and Utility Easements

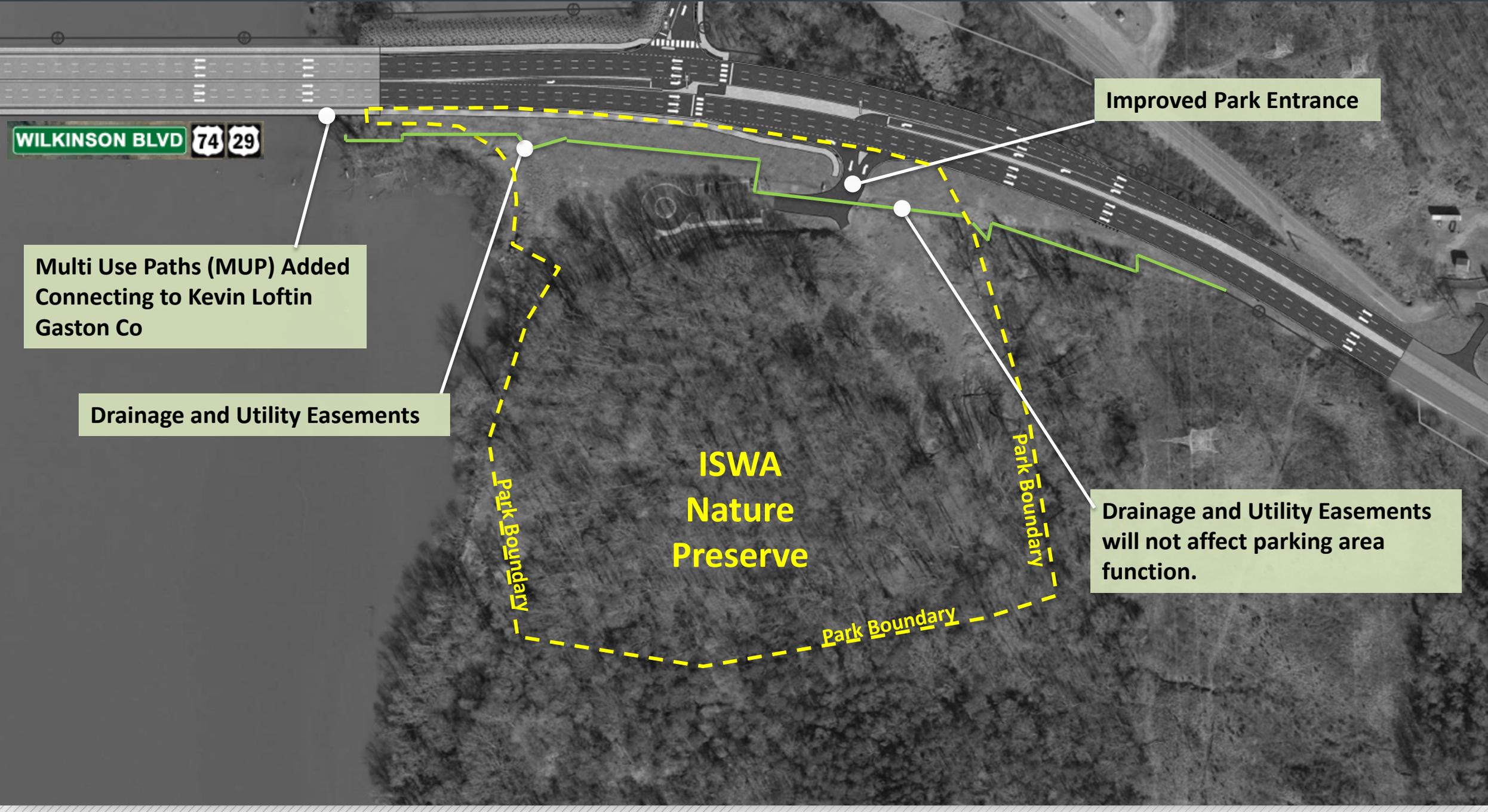
Maintain Existing Trails

Connect MUP with Park Trails

Drainage and Utility Easements

Add a sidewalk

Improved Driveway Entrance



Improved Park Entrance

Multi Use Paths (MUP) Added Connecting to Kevin Loftin Gaston Co

Drainage and Utility Easements

ISWA Nature Preserve

Drainage and Utility Easements will not affect parking area function.

Park Boundary

Park Boundary

Park Boundary

WILKINSON BLVD 74 29

Public Involvement Input

Public Input was received via a website from August 12 through August 26, 2022. <https://publicinput.com/US74-29-Catawba-River>

108 Comments were received.

- 10% expressed support for the project
- 1 % expressed opposition
- 89% had suggestions or questions about the following topics:
 - Bicycle/Pedestrian (29)
 - Construction and Timing (17)
 - CATS Silver Line (13)
 - Bridge Design (6)
 - ROW/Property Impacts (6)
 - Parks (5)
 - Reduced Conflict Intersection (4)
 - Moores Chapel Rd (3)

Cost Breakdown

Activity	Estimated Cost*
Utility Relocation	\$ 0.6 Million
Right of Way Acquisition	\$ 4.0 Million
Construction	\$ 52.0 Million
Total Cost	\$ 56.6 Million

** Estimated costs as shown in currently adopted State Transportation Improvement Program
Subject to Change*

B-6051/U-6143 Project Schedule

Milestone	Date*
Complete Preliminary Design & Public Involvement	Summer 2022
Complete Environmental Study (Categorical Exclusion)	Fall 2022
Complete Right of Way Design	Fall 2022
Begin Right of Way Acquisition and Construction	Fall 2022
Begin Construction	Summer 2023
Complete Construction	Summer 2026

*** Future Dates Subject to Change**

Thank You

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