



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

**Section 404/NEPA Merger Project Team Meeting  
STIP Project No. U-2509  
US 74 (Independence Boulevard)  
From West of Idlewild Road to I-485 (Charlotte Outer Loop) in Mecklenburg County**

**Merger Update Since 2016  
March 21, 2019**

**1. Project Description:**

US 74 (Independence Boulevard) Improvements from West of Idlewild Road to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County, STIP No. U-2509, F.A. Project No. NHS-74(70), WBS No. 38965.1.1.

**2. Purpose of this meeting:**

The purpose of this Merger Team meeting is to provide the Merger Team with an update on project progress since the last Merger Team meeting (CP 2A in 2016). The meeting will be held on March 21, 2019 in the Structures Design Conference Room at the Century Center Building A at 8:00 AM.

**3. Purpose and Need of Project:**

The Merger Team met and concurred with the project Purpose and Need on March 19, 2015 (Concurrence Point No. 1 [CP 1]).

The need for this study can be summarized as follows:

- *Existing US 74 does not provide reliable travel time and connectivity for residents, business patrons, and commuters in Southeastern Charlotte and Matthews.*
- *Traffic estimates indicate that US 74 will require additional capacity to achieve a goal of LOS D for users by the design year (2040).*
- *This project is needed to provide reliable travel time, system sustainability, and connect to a system of express lanes planned on US 74 to the northwest, I-485 to the south, and the Monroe Bypass/Connector toll road to the southeast.*

The purpose for the proposed action is as follows:

- *To provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within the study area.*

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS  
1548 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1548

*Telephone:* (919) 707-6000  
*Fax:* (919) 250-4224  
*Customer Service:* 1-877-368-4968

*Website:* [www.ncdot.gov](http://www.ncdot.gov)

*Location:*  
1000 BIRCH RIDGE DRIVE  
RALEIGH, NC 27610

**4. Concurrence Point Agreements:**

- Concurrence Point 1 – March 19, 2015
- Concurrence Point 2 – May 18, 2016
- Concurrence Point 2A – June 20, 2016

**5. Description of Updates:**

During the project development process, design changes have occurred. These design changes include alterations to driveways and access points, a shift of Independence Pointe Parkway further south as it crosses I-485 (after consultation with CPCC, the Town of Matthews, and Mecklenburg County), the addition of an express lane access at Sharon Amity Road, design adjustments due to traffic analysis recommendations, addition of retaining walls to minimize impacts, and the addition of bicycle and pedestrian accommodations that have been approved for cost share and betterment by the Town of Matthews and the City of Charlotte.

Some of these design changes have affected the previously signed concurrence points. The study area has been expanded to encompass the designs, and results of the Traffic Analysis has recommended eliminating the Sardis Road North City Design because of poor traffic operations performance. Traffic analysis has also recommended extending the improvements on Sam Newell Road beyond the culvert south of Independence Pointe Parkway. The designs now incorporate an 80 foot bridge replacing the culvert, as was agreed upon on the signed CP 2A form.

In the current draft STIP, the U-2509 project has been split into U-2509A and U-2509B. The parallel collector roads will be completed under U-2509A and the improvements to US 74 (Independence Boulevard) will be completed under U-2509B. The Environmental Assessment (EA) will cover the entire project and report impacts split by U-2509A and U-2509B, along with a total amount. A summary of the impacts of the preliminary design, split by U-2509A and U-2509B, have been prepared and will be shared with the Merger Team.

Please direct any comments or questions about this merger package to Wilson Stroud, 919-707-6045, [wstroud@ncdot.gov](mailto:wstroud@ncdot.gov); Keith Lewis, 919-334-5619, [kdlewis@vhb.com](mailto:kdlewis@vhb.com); or Don Brown, 919-334-5609, [dbrown@vhb.com](mailto:dbrown@vhb.com).

DB/WS



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DEPARTMENT OF TRANSPORTATION

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SECRETARY

**AGENDA**

STIP No. U-2509  
Merger Update  
March 21, 2019

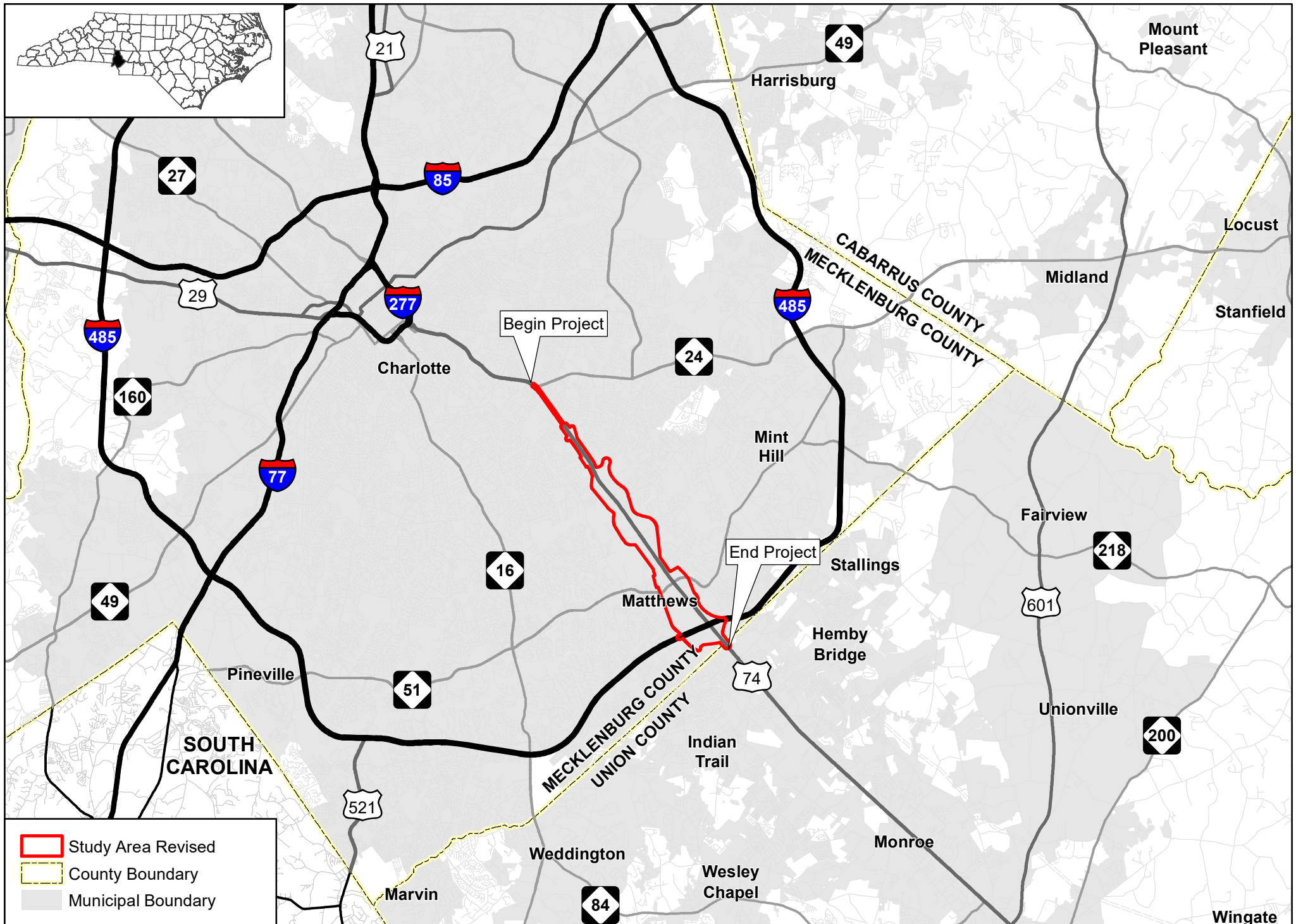
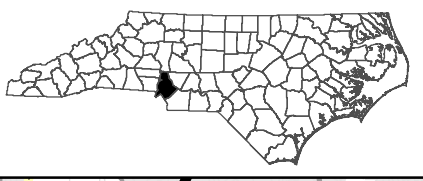
1. Introductions and Purpose of Meeting
2. Project Description and Overview
3. Updates Since Last Merger Meeting (2016)
  - a. Driveway and Access Considerations
  - b. Shift of Independence Pointe Parkway Further South as it Crosses I-485
  - c. Addition of Express Lane Access Point (Sharon Amity Road)
  - d. Traffic Analysis Recommendations
  - e. Bicycle and Pedestrian Accommodations Approved by Charlotte and Matthews
  - f. Retaining Walls
4. CP1 – Purpose and Need and Study Area
  - a. Expanded Study Area since CP1 due to 3.b., c., and d. above
5. CP2 – Detailed Study Alternatives
  - a. Sardis Road North Interchange Alternatives – Traffic analysis indicates the City Design Alternative will function below LOS D, not providing acceptable traffic operations, and thus will not meet the purpose and need of the project. (December 12, 2018)
  - b. Independence Pointe Parkway Alternatives – Summary of Impacts
6. CP2A – Sam Newell Road culvert extension revised to ~80-foot bridge (Site 9 on CP2A form)
7. Impacts of Preliminary Design
8. U-2509 A and B Draft STIP
9. Next Steps/Schedule
10. Conclusions/Final Comments

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS  
1548 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1548

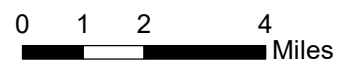
*Telephone:* (919) 707-6000  
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*Customer Service:* 1-877-368-4968

*Website:* [www.ncdot.gov](http://www.ncdot.gov)

*Location:*  
1000 BIRCH RIDGE DRIVE  
RALEIGH, NC 27610



- Study Area Revised
- County Boundary
- Municipal Boundary



# Project Vicinity Map

**US 74 (Independence Boulevard) Improvements**  
 From West of Idlewild Road to I-485 in Mecklenburg County  
 U-2509

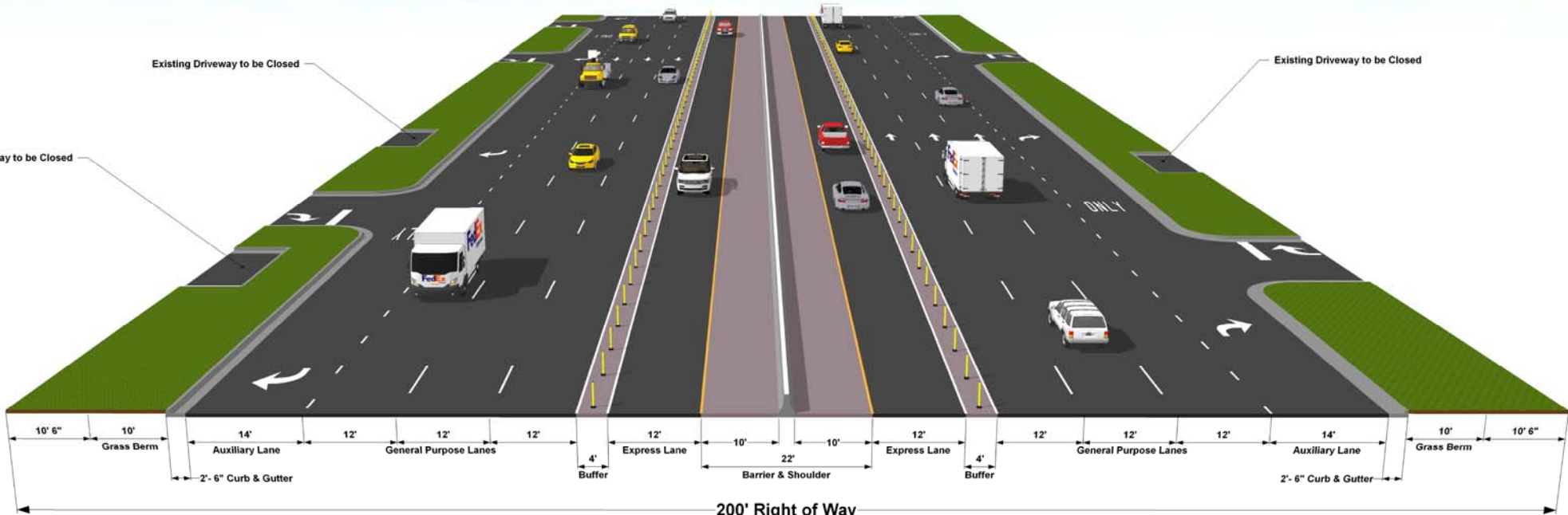


3/16/2015

Existing Driveway to be Closed

Existing Driveway to be Closed

Existing Driveway to be Closed



200' Right of Way

**Section 404/NEPA Merger Project Team Meeting Agreement  
Concurrence Point No. 1  
Purpose and Need and Study Area**

**TIP Project No.:** U-2509

**FA Project No.:** NHS-74(70)

**WBS No.:** 38965.1.1

**Project Name/Description:**

US 74 (Independence Boulevard) Improvements from Conference Drive to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

A concurrence meeting was held with members of the Merger Team on March 19, 2015 to discuss the Purpose & Need and Study Area of the proposed project. Information about the existing and projected traffic conditions along the corridor was presented in the meeting package. The Project Team has concurred on this date with the Purpose & Need and Study Area as described below.

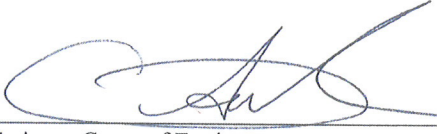
The study area for this project includes proposed improvements to existing US 74 (Independence Boulevard) and an existing network of parallel roads and their proposed connections. The study area ranges from 500 to approximately 2,000 feet on either side of the existing US 74 centerline. The study area also includes an expanded area around the I-485 interchange to evaluate express lanes connection alternatives and an extension to the southeast along US 74 to include connection alternatives to the proposed Monroe Connector/Bypass toll lanes.

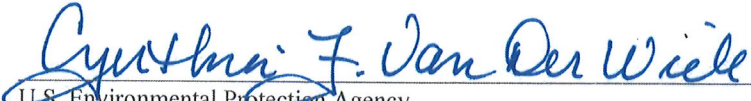
The need for this study can be summarized as follows:

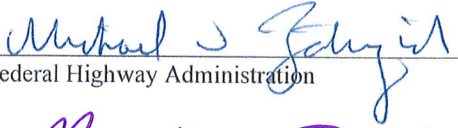
- *Existing US 74 does not provide reliable travel time and connectivity for residents, business patrons, and commuters in Southeastern Charlotte and Matthews.*
- *Traffic estimates indicate that US 74 will require additional capacity to achieve a goal of LOS D for users by the design year (2040).*
- *This project is needed to provide reliable travel time, system sustainability, and connect to a system of express lanes planned on US 74 to the northwest, I-485 to the south, and the Monroe Bypass/Connector toll road to the southeast.*


The purpose for the proposed action is as follows:

- *To provide reliable travel time and improve mobility along the US 74 corridor, provide system sustainability, and maintain and improve connectivity across and along US 74 to, from, and between adjacent communities within the study area.*

  
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U.S. Army Corps of Engineers

  
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U.S. Environmental Protection Agency

  
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Federal Highway Administration

  
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U.S. Fish and Wildlife Service

Renee Hedrick-Earley 3.20.15

N.C. Department of Cultural Resources Historic Preservation Office

*[Signature]*

N.C. Department of Environment and Natural Resources -- Division of Water Resources

*[Signature]*

N.C. Department of Transportation, PDEA Unit

*[Signature]*

N.C. Wildlife Resources Commission

*[Signature]* for Bob Cook

Charlotte Regional Transportation Planning Organization

**Section 404/NEPA Merger Project Team Meeting Agreement**  
**Concurrence Point No. 1 Amendment**  
**Purpose and Need and Study Area**

**TIP Project No.:** U-2509

**FA Project No.:** NHS-74(70)

**WBS No.:** 38965.1.1

**Project Name/Description:**

US 74 (Independence Boulevard) Improvements from west of Idlewild Road to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

A concurrence meeting was held with members of the Merger Team on March 19, 2015 to discuss the Purpose & Need and Study Area of the proposed project. Information about the existing and projected traffic conditions along the corridor was presented in the meeting package. The Project Team concurred on that date with the Purpose & Need and Study Area as described in the signed CP 1 Form.

The study area for this project has been amended because of shifts in alignment. The revised study area attached is accepted by the merger team as of March 21, 2019.

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U.S. Army Corps of Engineers

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U.S. Environmental Protection Agency

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Federal Highway Administration

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U.S. Fish and Wildlife Service

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N.C. Department of Cultural Resources Historic Preservation Office

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N.C. Department of Environment and Natural Resources – Division of Water Resources

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N.C. Department of Transportation, PDEA Unit

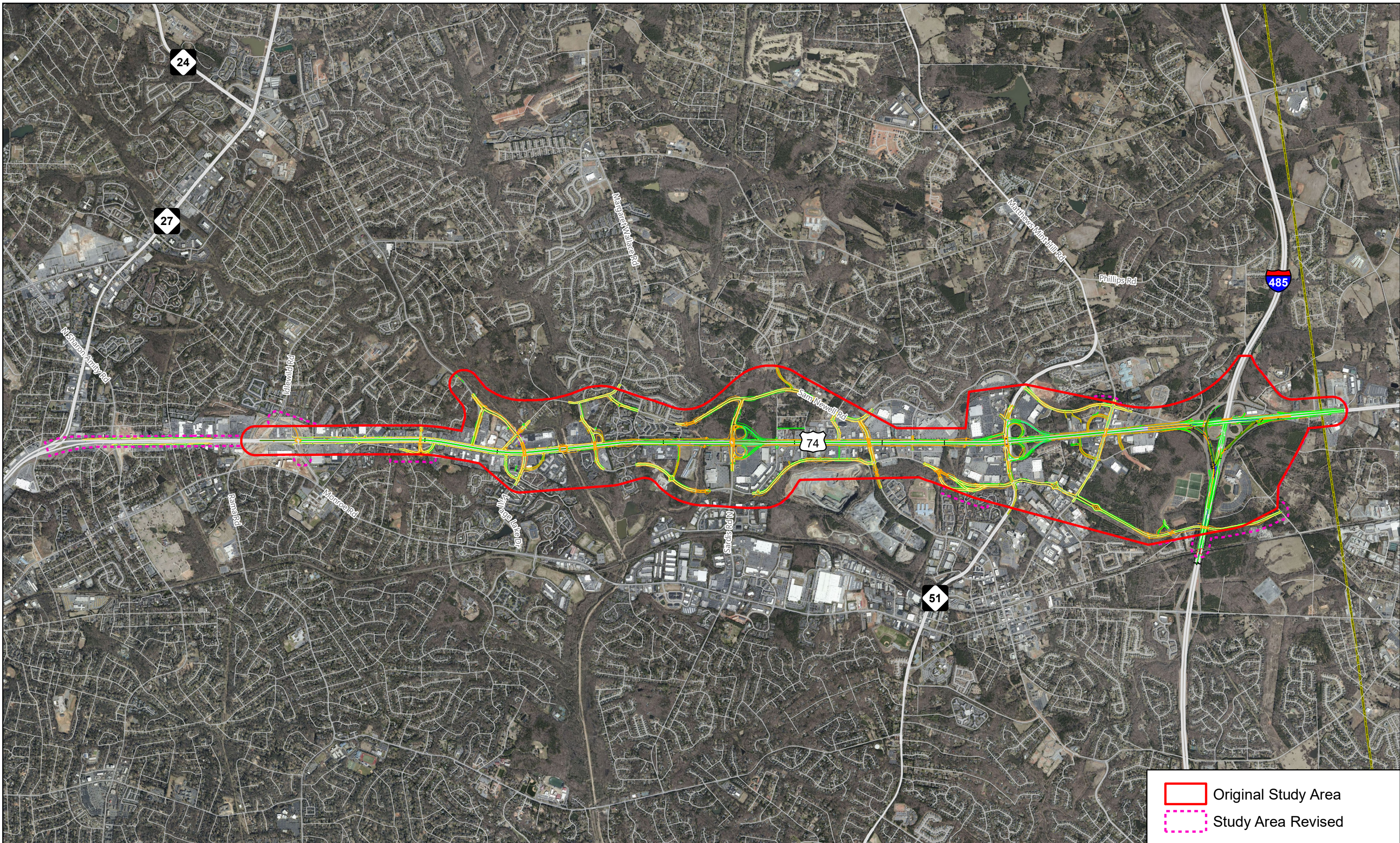
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N.C. Wildlife Resources Commission

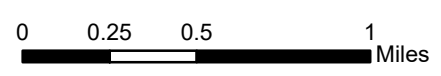
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Charlotte Regional Transportation Planning Organization





 Original Study Area  
 Study Area Revised



Study Area Revision  
March 2019

US 74 (Independence Boulevard) Improvements  
From West of Idlewild Road to I-485 in Mecklenburg County  
U-2509



**Section 404/NEPA Merger Project Team Meeting Agreement**  
**Concurrence Point No. 2**  
**Detailed Study Alternatives Carried Forward**

**TIP Project No.:** U-2509

**FA Project No.:** NHS-74(70)

**WBS No.:** 38965.1.1

**Project Name/Description:**

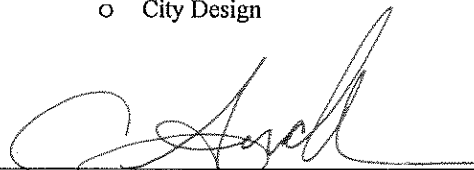
US 74 (Independence Boulevard) Improvements from Conference Drive to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

A concurrence meeting was held with members of the Merger Team on May 18, 2016 to discuss Detailed Study Alternatives to be carried forward for the proposed project. In addition to the No-Build Alternative, the Project Team has concurred on this date that the Detailed Study Alternatives to be Carried Forward include:

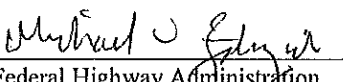
**Expressway Concept**

Improvements to US 74 from Conference Drive to I-485, to include widening and the addition of grade separations and interchanges, to bring the facility to the level of an Expressway (with limited segments of freeway) as well as the addition of Express Lanes in the median. Express Lane connections to the proposed I-485 Express Lane project to the south (STIP Project I-5507) and the proposed Monroe Bypass/Connector Toll Road (STIP Projects R-3329 and R-2559) will be included, as well as the connection of parallel roads and the construction of an interchange at Sardis Road North, as described below.

- **Parallel Roads being considered:**
  - Krefeld Drive Extension (Krefeld Drive to Sardis Road North)
  - Arequipa Drive/Northeast Parkway (Margaret Wallace Road to Sam Newell Road)
  - Krefeld Drive/Independence Pointe Parkway (Crownpoint Executive Drive to Sam Newell Road)
  - Northeast Parkway (Overcash Drive to Matthews-Mint Hill Road)
  - Independence Pointe Parkway Alternatives (Windsor Square Drive to Matthews Township Parkway [NC 51])
    - Option 1
    - Option 2
    - Option 3
  - Independence Pointe Parkway (Matthews Township Parkway [NC 51] to Campus Ridge Road)
  
- **Sardis Road North Interchange Alternatives:**
  - Half-Clover
  - City Design

 5/25/2016  
\_\_\_\_\_  
U.S. Army Corps of Engineers

 5-18-16  
\_\_\_\_\_  
U.S. Environmental Protection Agency

 5-18-16  
\_\_\_\_\_  
Federal Highway Administration

*Mark L. Zwick* 5/27/16  
U.S. Fish and Wildlife Service

*Rene Bleckhill-Earley* 5-23-16  
N.C. Department of Natural and Cultural Resources - State Historic Preservation Office

*Donna Hood* 5/18/16  
N.C. Department of Environment and Natural Resources - Division of Water Resources

*D.W. Attn* 5-18-16  
N.C. Department of Transportation, PDEA Unit

*Marla Chambers* 6/2/2016  
N.C. Wildlife Resources Commission

*Carl Lane* 6/6/2016  
Charlotte Regional Transportation Planning Organization

# Section 404/NEPA Merger Project Team Meeting Agreement

## Concurrence Point No. 2A

### Bridging and Alignment Review

**TIP Project No.:** U-2509

**FA Project No.:** NHS-74(70)

**WBS No.:** 38965.1.1

**Project Name/Description:**

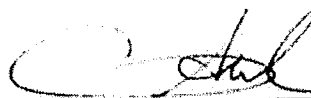
US 74 (Independence Boulevard) Improvements from Conference Drive to I-485 (Charlotte Outer Loop) in Charlotte and Matthews, Mecklenburg County.

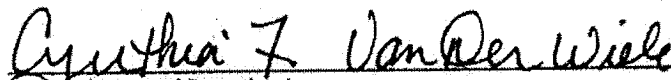
A concurrence meeting was held with members of the Merger Team on June 20, 2016, in conjunction with a field review meeting, to discuss the Bridging Decisions and Alignment Review for the proposed project. The project team has concurred on the recommendations for the following major drainage structures, as presented in the Preliminary Hydraulics Study for Environmental Impacts prepared in April 2016 and revised based on the field review:

U-2509 Mecklenburg County				
Site	Alignment	Stream	Existing Structure Size	Recommended Structure Size
1	East WT Harris Blvd -Y9-	UT to Campbell Creek	1 @ 8' x 6' RCBC	Extend Existing 1 @ 8' x 6' RCBC Downstream end only
2	Margaret Wallace Rd -Y8-	Campbell Creek	4 @ 13' x 9' RCBC	150' Bridge
3	US 74 -L-	McAlpine Creek	4 @ 40' Bridge	225' Bridge
4	Northeast Parkway Extension -Y12-	Irvins Creek	N/A (New Location Alignment)	250' Bridge w/ 72" overflow pipe
5	US 74 -L-	Irvins Creek	1 @ 38' x 18.5' Concrete Arch Bottomless Arch on Footings	Extend existing 1 @ 38' x 18.5' Bottomless Concrete Arch Upstream and Downstream
6	Krefeld Drive Extension -Y10-	Irvins Creek	N/A (New Location Alignment)	300' Bridge
7	US 74 -L-	UT to Irvins Creek Trib 1	1 @ 66" RCP at inlet 1 @ 72" RCP at outlet	Extend existing 1 @ 66" RCP Upstream end only
8	US 74 -L-	Irvins Creek Trib 1	2 @ 8' x 10' RCBC	Extend existing 2 @ 8' x 10' RCBC Upstream and Downstream
9	Sam Newell Rd -Y14-	Irvins Creek Trib 1	1 @ 18' x 7.8' Structural Plate Arch	Terminate Road Improvements prior to site if possible. If not, recommend 80' Bridge
10	Independence Pointe Pkwy Extension -Y15-	Irvins Creek Trib 1	N/A (New Location Alignment)	Alternatives 1 and 2 - 250' Bridge and Realign Stream so no crossing at Site 14; Alternative 3 - 250' Bridge
11	Independence Pointe Pkwy Extension -Y15-	UT to Irvins Creek Trib 1	N/A (New Location Alignment)	2 @ 8' x 7' RCBC Bury inverts 1'
12	Independence Pointe Pkwy Extension -Y15-	UT to Irvins Creek Trib 1	1 @ 16.4' x 8.2' Structural Plate Arch	Extend existing 1 @ 16.4' x 8.2' Structural Plate Arch Downstream end only
13	CPCCL Lane Extension -Y19-	Foumle Creek	N/A (New Location Alignment)	2 @ 8' x 7' RCBC Bury inverts 1' with Equalizer Pipes
14	Independence Pointe Pkwy Extension -Y15-	UT to Irvins Creek Trib 1	N/A (New Location Alignment)	Alternatives 1 and 2 - Realign Stream so only crosses at Site 10; Alternative 3 - no crossing

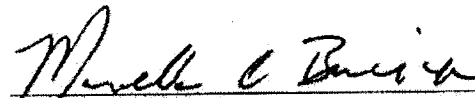
Additionally, the project team has concurred on the review of the preliminary alignment for each Detailed Study Alternative resulting from CP 2, including these adjustments, if necessary:

- NA
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_


 6/20/2016  
U.S. Army Corps of Engineers


 6.27.2016  
U.S. Environmental Protection Agency

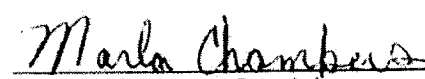
 7-5-2016  
Federal Highway Administration

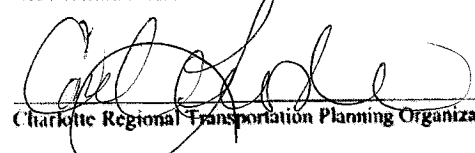
 6/20/16  
U.S. Fish and Wildlife Service

 7-5-16  
N.C. Department of Natural and Cultural Resources - State Historic Preservation Office

 6/20/16  
N.C. Department of Environment and Natural Resources - Division of Water Resources

 6-20-16  
N.C. Department of Transportation, PDEA Unit

 6/20/2016  
N.C. Wildlife Resources Commission

 7/5/2016  
Charlotte Regional Transportation Planning Organization

Feature	Impacts						
	U-2509A				U-2509B		
	Parallel Collector Roads	Independence Point Parkway Extension <sup>1</sup> Alternatives			US 74, Y-Lines, Ramps & Loops	Sardis Road Interchange Alternatives	
		Option 1	Option 2	Option 3		Half Clover	City Design
Project Road Lengths (miles)	7.98	0.63	0.65	0.68	17.42	1.00	0.17
Traffic Volumes	2040 No-Build 66,900 to 87,700 vpd; 2040 Build 102,400 (GP) & 7,400 (EL) to 111,200 (GP) & 10,700 (EL) vpd						
Traffic Noise	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Relocations							
Residential Relocations	5	0	24	36	18	0	0
Business Relocations	7	0	0	0	60	3	0
Human Environment							
Low Income Populations Present (Y/N)	Y	N	N	N	Y	Y	N
Minority Populations Present (Y/N)	Y	N	N	N	Y	Y	Y
Limited English Proficiency Populations Present (Y/N)	Y	N	N	N	Y	Y	Y
Historic Properties	0	0	0	0	0	0	0
Archaeological Sites	0	0	0	0	0	0	0
Geoenvironmental	0	0	0	0	2	0	0
Schools	0	0	0	0	0	0	0
Public Lands/Parks	2	1	1	1	4	0	1
Section 4(f) <sup>2</sup>	<i>De minimis</i>	<i>De minimis</i>	<i>De minimis</i>	<i>De minimis</i>	<i>De minimis</i>	NA	<i>De minimis</i>
Places of Worship	0	0	0	0	0	0	0
Cemeteries	0	0	0	0	0	0	0

Feature	Impacts						
	U-2509A				U-2509B		
	Parallel Collector Roads	Independence Point Parkway Extension <sup>1</sup> Alternatives			US 74, Y-Lines, Ramps & Loops	Sardis Road Interchange Alternatives	
		Option 1	Option 2	Option 3		Half Clover	City Design
<b>Natural Environment</b>							
Maintained/ Disturbed Community (ac.) <sup>3</sup>	26.33	2.17	3.33	3.76	116.03	4.98	0
Mesic Mixed Hardwood Forest (Piedmont Subtype) Community (ac.) <sup>3</sup>	32.51	4.40	3.42	4.22	23.22	2.41	0.71
Piedmont Alluvial Forest Community (ac.) <sup>3</sup>	9.24	3.64	3.41	2.35	9.13	0	1.29
Pine Forest Community (ac.) <sup>3</sup>	15.76	0	0	0	2.75	3.3	0.19
Stream Impacts (linear ft.) <sup>4</sup> Plus bridged lengths	2,249 837 bridged	1,702 232 bridged	1,392 232 bridged	1,034 131 bridged	2,196 1,517 bridged	0 0 bridged	444 0 bridged
Ponds (ac.) <sup>4</sup>	0	0	0	0	0	0	0
Wetland Impacts (ac.) <sup>4</sup>	1.67	0.21	0.21	0.20	1.34	0	0.06
100-Year Floodplain and Floodway (ac.) <sup>3</sup>	3.09	2.05	2.04	1.08	8.06	0	0
Water Supply Critical Areas (Y/N) <sup>3</sup>	N	N	N	N	N	N	N
Endangered Species (Y/N)	Y	Y	Y	Y	Y	Y	Y
Federal Lands (ac.)	0	0	0	0	0	0	0
Prime Farmland Soils (ac.)	NA	NA	NA	NA	NA	NA	NA
Statewide Farmland Soils (ac.)	NA	NA	NA	NA	NA	NA	NA
Unique Farmland Soils (ac.)	NA	NA	NA	NA	NA	NA	NA

Feature	Impacts						
	U-2509A				U-2509B		
	Parallel Collector Roads	Independence Point Parkway Extension <sup>1</sup> Alternatives			US 74, Y-Lines, Ramps & Loops	Sardis Road Interchange Alternatives	
		Option 1	Option 2	Option 3		Half Clover	City Design
Wildlife Refuge or Gamelands (Y/N) <sup>3</sup>	N	N	N	N	N	N	N
VADs (Y/N)	N	N	N	N	N	N	N
Railroad Crossings	0	0	0	0	0	0	0
<b>Preliminary Cost Estimate per 2020-2029 Draft STIP</b>							
Right of Way	\$10,000,000				\$96,480,000		
Utilities	\$2,000,000				\$10,000,000		
Construction	\$38,000,000				\$446,440,000		
Total Cost	<b>\$50,000,000</b>				<b>\$552,920,000</b>		

<sup>1</sup>(Windsor Square Drive to Matthews Township Parkway [NC 51])

<sup>2</sup>Based on public lands/parks, FHWA has determined de minimis impacts.

<sup>3</sup>Calculated with slope stakes plus 10-foot buffer.

<sup>4</sup>Calculated with slope stakes plus 25-foot buffer.

All other items were calculated based on proposed right of way.

Traffic Noise Report is in progress.