



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON III
SECRETARY

March 6, 2019

MEMORANDUM TO: Internal/External Scoping & Merger Screening Meeting Attendees

FROM: Nora McCann
NCDOT Project Manager

SUBJECT: External Scoping & Merger Screening Meeting for
SR 2200 (Cox Road) from I-85 to US 29/74 Selective Widening &
Operational Improvement in
Gastonia, Gaston County,
WBS. No. 46986.1.1
TIP Project U-6044

The North Carolina Department of Transportation has started the project development, environmental and engineering studies for the proposed widening and operational improvements of SR 2200 (Cox Road) between US 29/74 (Franklin Boulevard) and I-85 in Gastonia, Gaston County. The project proposes to ease congestion and improve safety. An External Scoping & Merger Screening Meeting has been scheduled for March 20, 2019, at 3:00 PM in the Structure Design Conference Room at NCDOT's Century Center Complex, Building A, located at 1000 Birch Ridge Drive, Raleigh, NC. If you are unable to attend the External Scoping & Merger Screening Meeting in person, please see the directions for remote participation in the Outlook meeting invitation sent to you.

The general purpose of this meeting is to begin early coordination with our agency partners by discussing the known information about the project and project area. The meeting handout is located on the following website:

<https://xfer.services.ncdot.gov/pdea/MergerMeetings/>. Please review this material and be prepared to discuss any additional known information regarding your resource and/or area of expertise as it may concern the project. We would especially appreciate any information you might have that would be helpful in identifying and evaluating important issues or topics that should be considered.

Thank you for your assistance in the project development process. If you have any questions concerning the project, please contact Ms. Nora McCann, NCDOT Project Manager at (919) 707-6043 or by email at namccann@ncdot.gov. Please include the NCDOT Project Numbers in all correspondence and comments.



TIP U-6044 SR 2200 (Cox Road) from I-85 to
US 29/74 Selective Widening &
Operational Improvement

External Scoping & Merger Screening Meeting Agenda
March 20, 2019

OBJECTIVE OF MEETING

- Exchange information about the project and project study area
- Understand project background and the problem
- Reach agreement on problem/purpose of project
- Propose potential solutions
- Identify questions, concerns, major constraints, or issues that may influence project decisions
- Identify constraints and red flags
- Discuss next steps

AGENDA

1. Introduction
2. Existing Conditions
3. Project Need
4. Project History
5. Project Study Area Characteristics and Constraints
6. Design Concepts
7. Merger Screening
8. Questions and Concerns
9. Review Schedule
10. Next Steps

PROJECT DATA SHEET

Date: 05/29/2018
Rev.: 03/06/2019

TIP No.: U-6044	County: Gaston
Federal-aid No.: none	WBS No.: 46986.1.1 SPOT ID: H150539
NCDOT Division: 12	Scoping Meeting Date: 03/20/2019

Project Description:

- Length: 0.3 miles
- Termini (US Hwy / SR): US 29/74 to I-85
- MPO / RPO: Gaston – Cleveland – Lincoln MPO
- NEPA / 404 Merger Candidate? Yes No Unknown
- General Description of Project:

SR 2200 (Cox Road) from I-85 to US 29/74– Selective Widening and Operational Improvements

Design Data (Existing Conditions):

- Functional Classification: Principal Arterial
- Strategic Transportation Network: US 74 is part of Corridor U
- CTP Designation (Facility Type): Boulevard
- Type of Access Control: None
- Typical Section: Seven 11 foot lanes (measured in GIS) with curbs and gutters and scattered sidewalks
- Right of Way: Variable to 110 feet along corridor (measured in GIS)
- Posted Speed: 35 mph on Cox Road (SR 2200) and 45 mph on Franklin Boulevard (US 29/74)
- Structure Inventory (bridges, RCBC, walls, etc):

Culvert 443: Gaston Mall Drive over Duharts Creek – Two 48ft x14ft plate arch (100ft long)
 Culvert 440: SR 2200 (Cox Road) over Duharts Creek – Triple 8ft x 7ft reinforced concrete box culvert (110ft long)
 Culvert 67: US29/74 over Duharts Creek – Triple 8ft x 6ft reinforced concrete box culvert (89ft long)
 Municipal crossing (non-NBIS): E0204 US 29/74 over Unnamed Tributary

- Other TIP Projects in the Area

I-5719	I-85 from US 321 to NC 273. Widen to eight lanes. Letting Date: FY 2021
I-5893	I-85 from Mile Marker 14 to Mile Marker 22. Pavement rehabilitation.
EB-5701	US 29/74 (East Franklin Boulevard) from SR 2200 (Cox Road) to City Limits. Construct missing sidewalk on north side. Letting Date: FY 2021
U-6043	US 29 (Franklin Boulevard), US 74 SR 2200 (Cox Road) to 400 Feet East of Lineberger Road. Add lane in the eastbound direction. Letting Date: FY 2023

- Railroad Involvement:

None

Long Range Plan History:

SR 2200 is listed as “needs improvement” in the current CTP. The area is zoned CBD Central Business District according to City of Gastonia Zoning Map. The intersection of Cox Road and Franklin Boulevard has been identified as a “node of redevelopment and connectivity” as early as the 2025 CTP. The pace of development in the area is maintained and the CTP has identified these corridors and intersections as crucial. Further plans to extend Gaston Mall Drive in 2030, confirms the Town’s and MPO’s commitment to future land use plans and the redevelopment of the area.

Traffic Data (AADT):

Current Year	2016	30,100-32,900	3% TRUCKS
Design Year	2040	30,900-36,200	3% TRUCKS
Source of Traffic Data:	Traffic Forecast for STIP Project I-5719: I- 85 Widening, Gaston County, March 8, 2017. (Assuming no-build scenario for STIP Project I-5719)		

Cost Estimates:

	Construction And Utilities	Right-of-Way	Total
DRAFT STIP (January 2019) Estimate	\$26,800,000	\$4,900,000	\$31,700,000

Project Schedule:

Environmental Document	2019
Right-of-Way	June 2024 according to the 2027 Draft STIP
Let	June 2026 according to the 2027 Draft STIP

Initial Scoping Comments:

Traffic Congestion: Based on preliminary traffic analysis performed in fall 2018, the corridor is over capacity and the level of service (LOS) at the Cox Road/Franklin Boulevard intersection will be E by 2040 according to preliminary capacity analysis performed in January 2019.

Bicycle & Pedestrian: Sporadic sidewalks exist, but additional sidewalk to complete the connection between residential and commercial areas, as well as provide access to transit, is needed. No evidence of pedestrian activity was observed but it is likely that safety is a concern due to the volume of traffic. Many grassed areas linking the sidewalks are worn from foot traffic. In some locations, pedestrians have to walk in the street. This occurs at Franklin Boulevard crossing Duhart's Creek where the guardrail is at the edge of pavement and there is no space behind the guardrail. In other several locations, the right-of-way is close to the edge of travel and businesses have landscaped within the right-of-way up to the curb making traversing the terrain difficult. The City of Gastonia's Greenway Plan recommends a greenway along Duhart's Creek and roadside trails along Franklin Boulevard from Cox Road east to Main Street. The GCLMPO CTP recommends the same roadside trails as the City. The Franklin Boulevard Corridor Study identified a parallel street network bound between Franklin Boulevard and I-85. Pedestrian traffic counts have been performed by the GCLMPO in 2015. Additional coordination is required.

Utilities:

- AT&T Phone (copper and fiber)
- City of Gastonia Sewer
- PSNC Gas
- City of Gastonia Water
- City of Gastonia Power
- Gastonia Memorial Hospital Fiber

Water Resources: Duhart's Creek is the largest stream in the project study area. Flowing from the northwest to southeast, it crosses Gaston Mall Drive, SR 2200, and US 29/74 as well as flows under the Gaston Mall parking lot. Short reaches of a number of smaller unnamed tributaries also scatter the project area.

Historic Architecture and Archaeology Resources: None

EJ: Census data indicates a notable presence of populations meeting the criteria for Environmental Justice within the Demographic Study Area (DSA), but no minority or low-income communities were observed within the Direct Community Impact Area (DCIA) during the field visit and/or were noted by local planners.

LEP: None

Design Data (Proposed Conditions):

- CTP Designation (Facility Type): Boulevard
- Type of Access Control: None
- Typical Section: To be determined depending on alternative selected
- Right of Way: Existing to 280 ft dependent on alternative selected
- Design Speed: 40 mph on Cox Road (SR 2200) and 50 mph on Franklin Boulevard (US 29/74)

EXTERNAL SCOPING / MERGER SCREENING

SR 2200 (Cox Road) from I-85 to US 29/74 Selective Widening & Operational Improvement Gaston County STIP Project No. U-6044

March 20, 2019

OBJECTIVE

The objective of this meeting is to review the project scope, share project knowledge and to screen the need for this project's involvement in the Merger Process.

PROJECT DESCRIPTION

State Transportation Improvement Program (STIP) Project No. U-6044 proposes to make improvements to SR 2200 (Cox Road) from I-85 to US 29/74 (Franklin Boulevard) in Gaston County North Carolina. Project location maps with environmental constraints are attached. This project is included in the 2018-2017 approved STIP and in the 2020-2029 Draft STIP. This project is funded for right-of-way acquisition in Fiscal Year 2024 and is also funded for construction to begin in Fiscal Year 2026 in the approved STIP. This project is state-funded.

LENGTH

Approximately 0.3 miles

ESTIMATED COSTS

Right-of-Way	\$ 4.9 million for a grade-separation (STIP)
Construction and Utilities	\$ 26.8 million for a grade separation (STIP)

PROJECT HISTORY

The Gaston-Cleveland-Lincoln Metropolitan Planning Organization's 2040 Comprehensive Transportation Plan identified this stretch of SR 2200 (Cox Road) as "needs improvement" in both highway and pedestrian categories. The City of Gastonia included the intersection of Cox Road/Armstrong Road and Franklin Boulevard in the *2016 Franklin Boulevard Corridor Access and Alternative Development Mobility Strategy* recognizing that this location is vital to the safety and mobility of the traveling public in the region as well as the traffic capacity of the overall facility.

This stretch of SR 2200 currently serves 30,100 to 32,900 vehicles per day (2016 Average Annual Daily Traffic) and provides an important north-south connection between Interstate 85 and US 29/74 in

addition to access to several retail centers. By the design year of 2040, SR 2200 is expected to serve 30,900 to 36,200 vehicles per day.

PROJECT SETTING

The Project Study Area (PSA) is located in central Gaston County in North Carolina within the city limits of the City of Gastonia. It runs from Franklin Boulevard (US 29/74) to the I-85 interchange and encompasses several shopping centers on either side of Cox Road. (See Figure 1.) Development in the area is commercial along Franklin Boulevard and to the north while residential development is primarily on the south side of Franklin Boulevard. SR 2200 is referred to as Cox Road north of Franklin Boulevard and as Armstrong Park Road south of Franklin Boulevard.

Cox Road and Franklin Boulevard are both classified as principal arterials in the Statewide Functional Classification System. They are not National Highway System Routes.

Intersections

- Along Cox Road/ Armstrong Park Road:
 - Club Drive
 - Thomas Trail
 - Planer Terrace
 - Franklin Boulevard (US 29/74)
 - Gaston Mall Drive
 - Ruby Lane
 - Three commercial driveways
 - Thirteen residential driveways
- Along Franklin Boulevard
 - Glenwood Drive
 - Twenty-two commercial driveways

Duhart's Creek is the largest stream in the project study area. Flowing from the northwest to southeast, it crosses Gaston Mall Drive, SR 2200, and US 29/74 as well as flows under the Gaston Mall parking lot. Short reaches of a number of smaller unnamed tributaries also scatter the project area. (Refer to Figure 3 and Water Resources discussion below.)

DESIGN CONCEPTS

Functional plans for four concepts have been prepared:

- Concept 1 ("Enhanced Conventional") is an at-grade intersection with additional northbound and southbound lanes on Cox/Armstrong Park Road. (Figure 2A)
- Concept 2 ("South Bound Elevated Lefts") is a grade separated intersection. In this design, the southbound left-turn lanes from Cox Road would be bridged over Franklin Boulevard. (Figure 2B)
- Concept 3 ("North-south Elevated Throughs") is a grade separated intersection. Northbound and southbound through movements will be bridged over Franklin Boulevard. This design was proposed in the Franklin Boulevard study mentioned above. (Figure 2C) This was referred to as Alternative 1 in the *Franklin Boulevard Corridor Access and Alternative Development Mobility Strategy*.

- Concept 4 (“Southbound Displaced Lefts”) is an at-grade intersection with partial displaced left-turn (continuous flows) lanes from southbound Cox Road onto eastbound Franklin Boulevard. (Figure 2D)

There are no concepts developed for a new location.

HAZARDOUS MATERIAL SITES

A Phase I Assessment of the project area will be performed. A preliminary screening using NEPAassist, reveals that the US EPA has nine facilities with the project study area are listed in the Resource Conservation and Recovery Act (RCRA) database:

- Craig Motor Company (Powell Oldsmobile-Cadillac)
- National Tire and Battery
- The Gaston Gazette
- The Home Depot
- Portrait Innovations
- Public Service Gas Company of NC
- Target Store
- Hughes-Lytle Pontiac-Buick –GMC Trucks (Sale Pontiac Buick, Inc.)
- Toyota of Gastonia

An active gas station exists in the southwest quadrant of Cox Road and Franklin Boulevard. All locations will be reviewed as appropriate during final design.

NONATTAINMENT AREAS

The project is located in a Maintenance Area for Ozone 8-hr.

PUBLIC SCHOOLS AND FACILITIES

Public Schools

No public schools are located on the project corridor. However, Gardner Park Elementary School lies approximately 0.5 miles south of the southern terminus of the project on Armstrong Park Drive.

Other Cultural Resources

Covenant Baptist Church is located about 0.5 miles south of the southern project terminus on Armstrong Park Drive. STIP Project No. U-6044 will not impact the church but construction may cause delays in the area.

Gaston Memorial Park is also located approximately 0.5 miles south of the southern terminus of the project on Armstrong Park Drive and also will not be impacted by the project.

WATER RESOURCES

Eleven jurisdictional streams were identified in the study area (Table 1). The location of these streams is shown on Figure 3. North Carolina Stream Assessment Method (NCSAM) forms were not prepared because the streams show no significant degradation. NCDWR stream identification forms were prepared for applicable streams and are included a preliminary jurisdictional determination package. All

jurisdictional streams in the study area have been designated as warm water streams for the purposes of stream mitigation.

Table 1. Jurisdictional characteristics of water resources in the study area

Map ID	Length ³ (ft.)	Classification	Compensatory Mitigation Required	River Basin Buffer
SA	47	Perennial	Yes	Not Subject
SB ¹ (Duhart's Creek) ¹	4,450	Perennial	Yes	Not Subject
SC	865	Perennial	Yes	Not Subject
SD	35	Intermittent	Undetermined	Not Subject
SE	59	Intermittent	Undetermined	Not Subject
SF	18	Intermittent	Undetermined	Not Subject
SG	152	Intermittent	Undetermined	Not Subject
SH ²	33	Perennial	Yes	Not Subject
SI ²	39	Intermittent	Undetermined	Not Subject
SJ ²	47	Perennial	Yes	Not Subject
SK	1,353	Perennial	Yes	Not Subject
Total	7,098			

¹ A portion of Duhart's Creek occurs inside the wetland-stream/stormwater treatment/enhancement complex.

² These segments occur inside the wetland-stream/stormwater treatment/enhancement complex.

³ The length shown is the portion of the stream in the study area.

Six jurisdictional wetlands were identified within the study area (Table 2). The location of these wetlands and the pond is shown on Figure 3. All wetlands in the study area are located within the Catawba River basin [USGS Hydrologic Unit 03050102]. USACE wetland determination forms and NCWAM forms for each applicable site are included in the PJD package. (The PJD package and request can be found at <https://connect.ncdot.gov/site/Preconstruction/division/div12/U-6044/Natural%20Environment/>)

Table 2. Jurisdictional characteristics of wetlands in the study area

Map ID	NCWAM Classification	NCWAM Rating	Hydrologic Classification	Area (ac.) in Study Area
WA	Non-Tidal Freshwater Marsh	Medium	Riparian	0.38
WB ¹	Bottomland Hardwood Forest	Medium	Riparian	1.27
WC ¹	Bottomland Hardwood Forest	Medium	Riparian	3.56
WD	Headwater Forest	High	Riparian	0.04
WE	Headwater Forest	High	Riparian	0.03
WF	Headwater Forest	Medium	Riparian	0.01
Total				5.29

¹These wetlands occur inside the wetland-stream/stormwater treatment/enhancement complex.

One surface water was identified in the study area (Table 3). The location of the surface water is shown in Figure 3. PA outfalls to WC, which is part of a wetland-stream/stormwater treatment/enhancement complex.

Table 3. Surface waters in the study area

Surface Water	Jurisdictional	Map ID of Connection	Area (ac) in Study Area
PA	Yes	WC	0.27

All efforts have been made during functional design to avoid impacts to streams and wetlands to the greatest extent possible. Minimization of these impacts will be assessed during final design.

Table 4. Potential impacts to streams based on functional designs

Concept 1	Stream	Existing Impact (ft)	Additional Impact ¹ (ft)	Description
-L- Left	Duhart's	110	0	-
-L- Right			20	Culvert extension
-Y1- Left	SK	unknown	0	-
-Y1- Right			10	Culvert extension
TOTAL			30 FT	
Concept 2	Stream	Existing Impact (ft)	Additional Impact ¹ (ft)	Description
-L- Left	Duhart's	110	0	-
-L- Right			35	Culvert extension
-Y1- Left	SK	unknown	0	-
-Y1- Right			10	Culvert extension
TOTAL			45 FT	
Concept 3	Stream	Existing Impact (ft)	Additional Impact ¹ (ft)	Description
-L-	Duhart's	110	0	-
-L-			50	Culvert extension
-Y1-	SK	unknown	0	-
-Y1-			10	Culvert extension
TOTAL			60 FT	
Concept 4	Stream	Existing Impact (ft)	Additional Impact ¹ (ft)	Description
-L-	Duhart's	110	0	-
-L-			45	Culvert extension
-Y1-	SK	unknown	0	-
-Y1-			10	Culvert extension
TOTAL			55 FT	

¹ Rough estimate based on required additional width of pavement and extra berm.

None of the proposed concepts will impact any of the wetlands listed in Table 2.

REGULATIONS

The project location in Gaston County is not identified as having trout waters or habitat for anadromous fish, therefore construction moratoria are not anticipated.

There are no designated anadromous fish waters or Primary Nursery Areas (PNA) in the study area.

There are no designated High-Quality Waters (HQW), Outstanding Resource Waters (ORW) or water supply watersheds (WS-I or WS-II) within or within 1.0 mile downstream of the study area. The North Carolina 2016 Final 303(d) list of impaired waters identifies no streams within the study area as an impaired water.

The project is located within the Catawba Basin. Only the main stem of the Catawba River is covered by the Catawba River Buffer Rules as administered by NCDWR. The study area does not include the main stem of the Catawba River. Streams within the study area are not subject to any regulated riparian buffer rules.

There are no benthic monitoring sites, ambient monitoring system (AMS) sites, or NC Stream Fish Community Assessment Program sites within 1.0 mile downstream of the project site.

FEDERALLY THREATENED AND ENDANGERED SPECIES

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. Due to the lack of known occurrences within a mile, the lack of observations, and the minimal impact anticipated for this project, it has been determined that this project will not affect this species.

Table 5 includes the threatened and endangered species listed for Gaston County North Carolina.

Table 5. Federally protected species listed for Clay County, NC

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Glyptemys muhlenbergii</i>	Bog Turtle	T (S/A)	Yes	No Effect
<i>Myotis septentrionalis</i>	Northern Long-Eared Bat	T	Yes	Unresolved
<i>Hexastylis naniflora</i>	Dwarf-flowered heartleaf	T	No	No Effect
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	E	Yes	No Effect

T = Threatened E = Endangered T (S/A) = Threatened due to similarity of appearance.

TERRESTRIAL COMMUNITIES

Six terrestrial communities were identified in the study area: headwater forest, mesic mixed hardwood forest, wetland-stream/stormwater treatment/enhancement complex, non-tidal freshwater marsh, successional land, and maintained/disturbed land. Figure 4 shows the location and extent of these terrestrial communities in the study area.

FARMLANDS

There are no active farms or voluntary agricultural districts (VAD) in the project area. The project study area is located in an urbanized area and therefore the Farmland Protection Policy Act does not apply.

POTENTIAL SECTION 4(f), 6(f) and SECTION 106 PROPERTIES

Historic Sites

A screening for historic architecture and landscapes was performed in July 2018 while a screening for archaeological resources was completed in August 2018. It was determined that no surveys were required for either resource.

Parks

There are no parks, refuge, or recreation areas open to the public within the PSA.

Land and Water Conservation Funds

No lands under the protection of Section 6(f) of the Land and Water Conservation (LWCF) Act are located in the project study area.

RELOCATIONS

The project study area (PSA) contains 63 residential parcels and 56 business parcels, however the residential parcels comprise less than five percent of the PSA.

Table 6 includes anticipated impacts to residences and businesses along the project corridor. A value of 1 to 5 has been assessed to each potential impact – 1 being the least intrusive impact such as a construction easement and 5 being the most intrusive: relocation. As these scores are based on functional designs, they are very subjective. The concepts will be developed to minimize these impacts once a preferred alternative is selected.

Table 6. Potential property impacts due to STIP Project No. U-6044

Location	Potential Impacts*			
	Concept 1	Concept 2	Concept 3	Concept 4
Marathon Gas	2	2	5	2
100 Ruby Ln.	4	4	5	4
301 Armstrong Park Rd.	0	0	3	0
313 Armstrong Park Rd.	0	0	2	0
321 Armstrong Park Rd.	0	0	1	0
331 Armstrong Park Rd.	0	0	1	0
339 Armstrong Park Rd.	0	0	1	0
340 Armstrong Park Rd.	0	0	1	0
330 Armstrong Park Rd.	0	0	1	0
320 Armstrong Park Rd.	0	0	2	0
300 Armstrong Park Rd.	0	0	2	0
246 Armstrong Park Rd.	1	1	3	1
232 Armstrong Park Rd.	2	2	4	2
Chipotle	4	4	5	4
Panera Bread/Kirkland's	0	1	0	0
Cook Out	1	2	1	1
Steak & Shake	1	2	1	1
Valvoline	1	2	1	1

Location	Potential Impacts*			
	Concept 1	Concept 2	Concept 3	Concept 4
Adventure Landing	1	2	1	1
Mattress Firm	1	1	1	1
Walgreen's	1	3	4	3
Chuck E Cheese	0	0	2	0
Vitamin Shoppe	1	2	3	1
Kay Jewelers	1	2	3	1
Longhorn Steakhouse	1	1	4	2
Wells Fargo	1	2	5	2
Total Impact Assessment Score	23	33	62	27
Number of Business Relocations	0	0	3	0
Number of Residence Relocations	0	0	1	0
Number of Other Relocations	0	0	0	0
TOTAL RELOCATIONS*	0	0	4	0

* Scores were assigned as follows: 5 = likely relocation, 4 = potential relocation, 3 = significant right-of-way impact that could cause operational dysfunction, 2 = less severe right-of-way impact, 1 = construction easement, 0 = no impact. Only impacts that scored 5 were counted in the "Number of Relocations".

ENVIRONMENTAL JUSTICE

While minority and low-income populations are present in the project study area, no notably adverse community impacts are anticipated with this project; thus, impacts to minority and low-income populations do not appear to be disproportionately high and adverse. Benefits and burdens resulting from the project are anticipated to be equitably distributed throughout the community. No disparate impacts are anticipated under Title VI and related statutes.

PERMITS

Section 404

The proposed documentation for the project has been designated as a Minimum Criteria Determination Checklist for the purposes of State Environmental Policy Act (SEPA) documentation. Depending on the design alternative chosen, a Nationwide Permit (NWP) 23 will likely be applicable. A NWP No. 33 may also apply for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The USACE holds the final discretion as to what permit will be required to authorize project construction. If a Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NCDWR will be needed.

Tennessee Valley Authority (TVA)

STIP Project No. U-6044 does not located in the TVA's watershed therefore no permit pursuant to Section 26a of the TVA Act will be required.

Federal Aviation Administration (FAA)

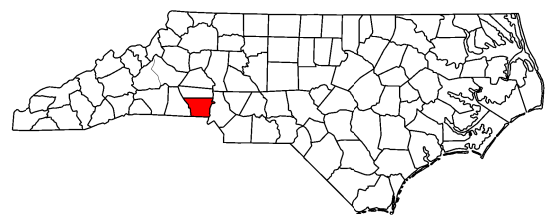
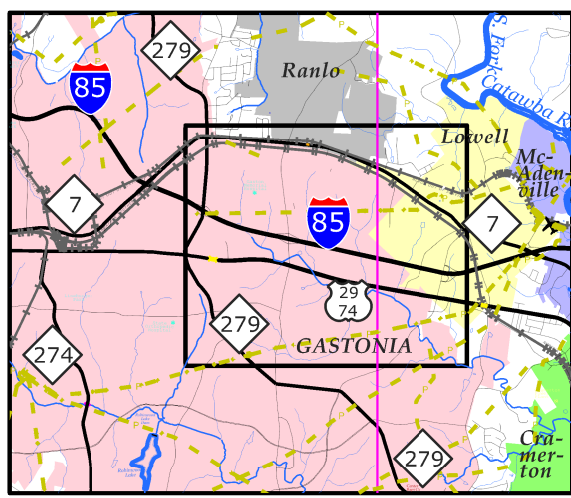
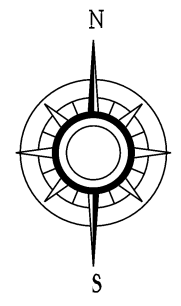
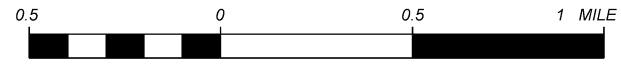
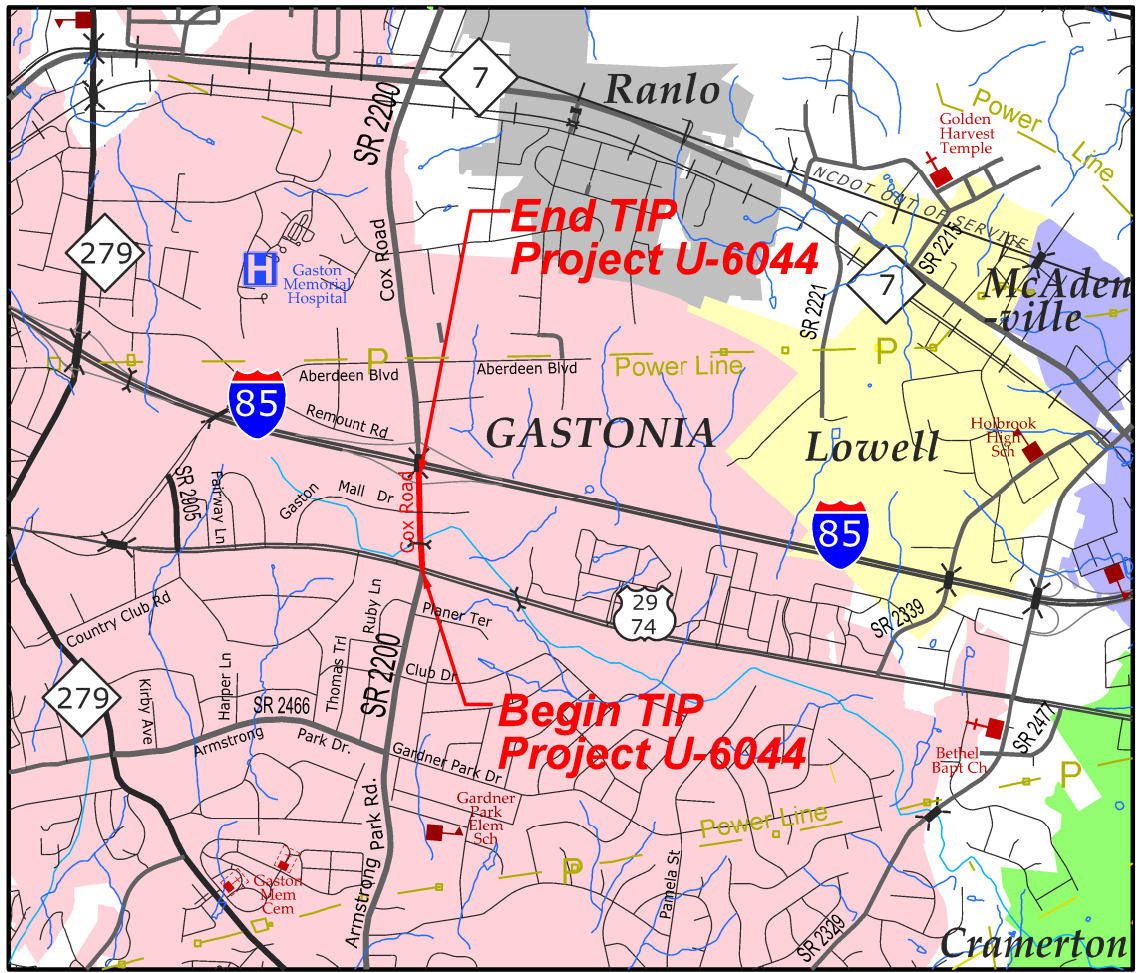
STIP Project No. U-6044 does not impact any flight path or FAA facilities.


SUMMARY

Table 7 summarizes the overall anticipated environmental impacts for STIP Project No. U-6044 based on the above discussions.

Table 7: Summary of overall anticipated environmental impacts due to Cox Road improvements

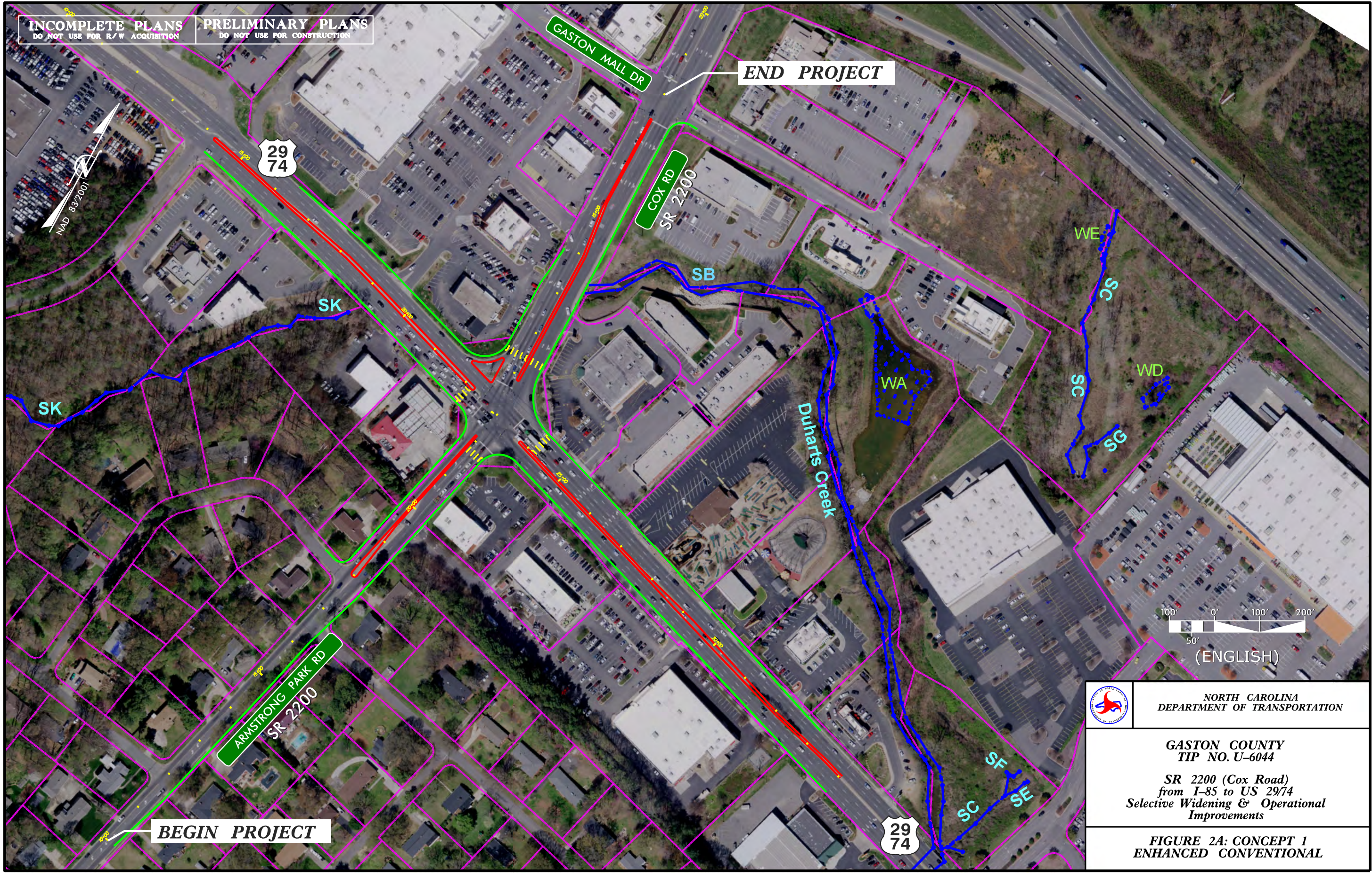
Environmental Impacts	No Impact	Impact
Hazardous Material Sites		A gas station is located in southwest quadrant of SR 2200 and US 29/74 intersection
Public Schools and Facilities	●	
Other Public Facilities	●	
Jurisdictional Streams		SR 2200 and US 29/74 each cross Duhart's Creek.
Jurisdictional Wetlands	●	
Floodplains		SR 2200 and US 29/74 each cross Duhart's Creek.
Buffers	●	
Trout or Primary Nursery Areas	●	
Federally Protected Species	●	
Terrestrial Communities		Successional land runs along the east side of SR 2200.
Historic Sites – Section 4(f) and Section 106	●	
Other Cultural Resources – Potential 4(f)	●	
LWCF Section 6(f)	●	
Relocations		Based on functional designs, as many as 7 relocations could occur depending on design concept chosen.
Property Impacts (other than relocation)		Based on functional designs, as many as 18 properties could be impacted depending on design concept chosen.
Environmental Justice	●	



	<p align="center">NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</p>	
	<p align="center">GASTON COUNTY TIP NO. U-6044</p> <p align="center"><i>SR 2200 (Cox Road) from US 29/74 to I-85 Selective Widening and Operational Improvements</i></p>	
<p align="center">FIGURE 1: VICINITY MAP</p>		

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



100' 0' 100' 200'
50'
(ENGLISH)



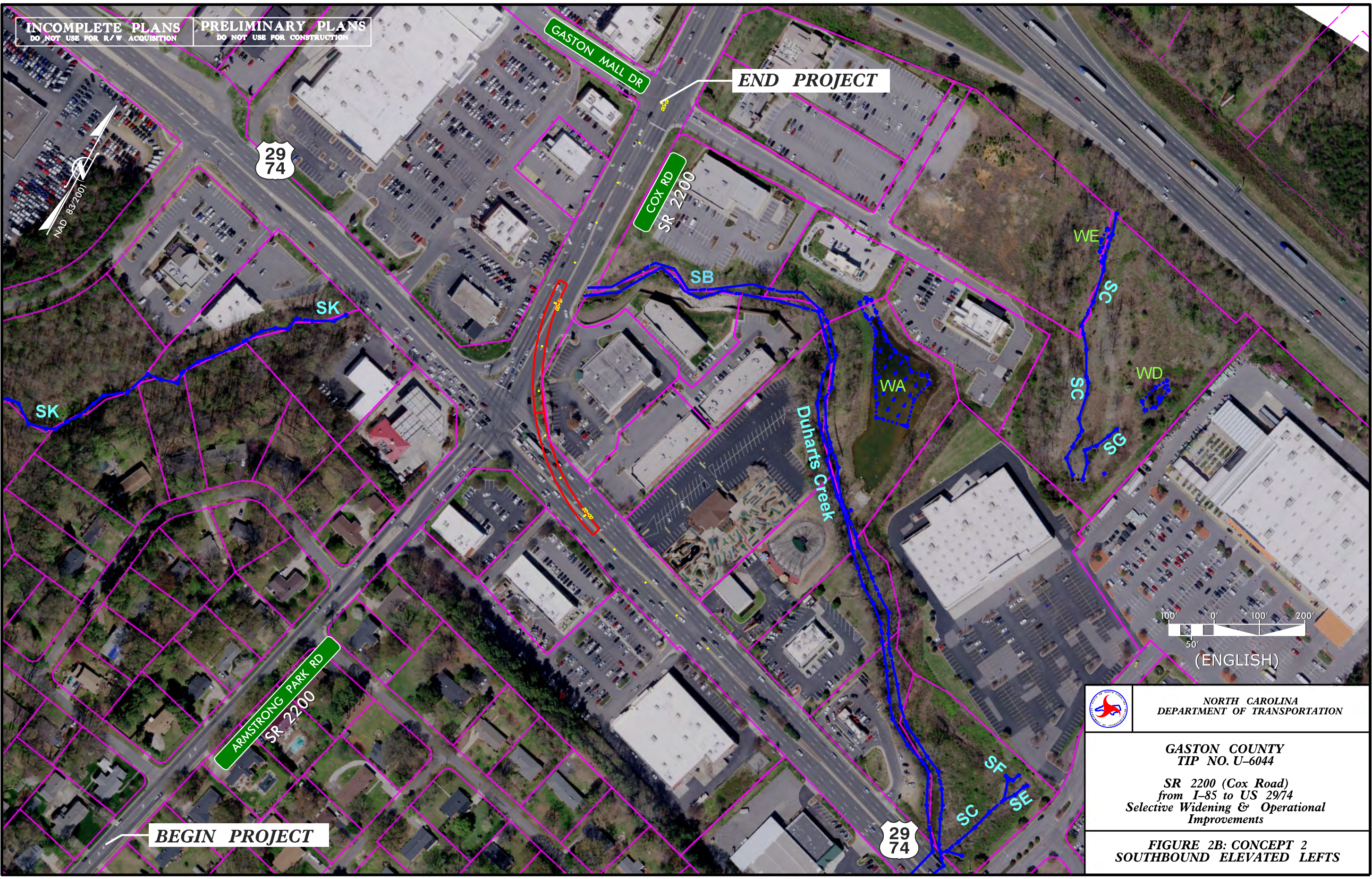
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GASTON COUNTY
TIP NO. U-6044
SR 2200 (Cox Road)
from I-85 to US 29/74
Selective Widening & Operational
Improvements

FIGURE 2A: CONCEPT 1
ENHANCED CONVENTIONAL

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

GASTON COUNTY
TIP NO. U-6044

SR 2200 (Cox Road)
from I-85 to US 29/74
Selective Widening & Operational
Improvements

FIGURE 2B: CONCEPT 2
SOUTHBOUND ELEVATED LEFTS

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



29
74

GASTON MALL DR

END PROJECT

COX RD
SR 2200

SK

SB

WE

SC

WD

SG

SK

WA

Duharts Creek



(ENGLISH)

ARMSTRONG PARK RD
SR 2200

BEGIN PROJECT

29
74



NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

GASTON COUNTY
TIP NO. U-6044

SR 2200 (Cox Road)
from I-85 to US 29/74
Selective Widening & Operational
Improvements

FIGURE 2C: CONCEPT 3
NORTH-SOUTH ELEVATED THROUGHES

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

29
74



END PROJECT

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Improvements

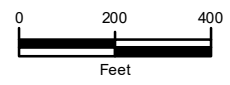
FIGURE 2D: CONCEPT 4
SOUTHBOUND DISPLACED LEFTS

29
74

SF
SE
SC



- ▭ Project Study Area
- ▨ Delineated Wetlands
- ▨ Delineated Surface Waters
- Delineated Streams



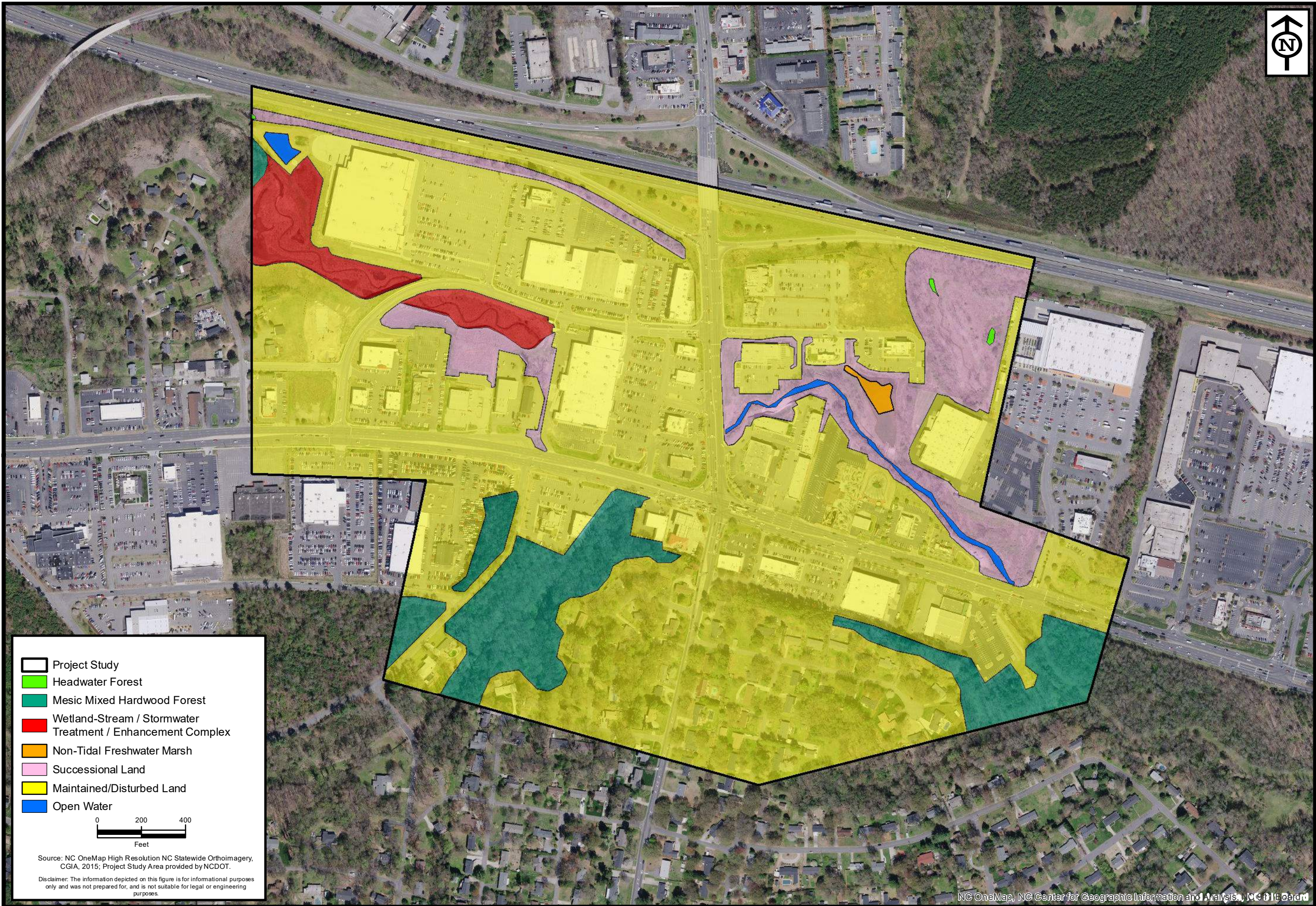
Source: NC OneMap High Resolution NC Statewide Orthoimagery, CGIA, 2015; Project Study Area provided by NCDOT.

Disclaimer: The information depicted on this figure is for informational purposes only and was not prepared for, and is not suitable for legal or engineering purposes.

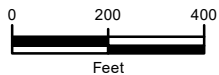
Project:	ER15052.20
Date:	Aug 2018
Drwn/Chkd:	CW/JH
Figure:	3

Jurisdictional Features Map
Cox Road Improvements
 Gaston County, North Carolina
 TIP No. U-6044





- Project Study
- Headwater Forest
- Mesic Mixed Hardwood Forest
- Wetland-Stream / Stormwater Treatment / Enhancement Complex
- Non-Tidal Freshwater Marsh
- Successional Land
- Maintained/Disturbed Land
- Open Water



Source: NC OneMap High Resolution NC Statewide Orthimagery, CGIA, 2015; Project Study Area provided by NCDOT.

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Project: ER15052.20
Date: Aug 2018
Dwn/Chkd: KT/JH
Figure: 4

Terrestrial Communities Map
Cox Road Improvements
Gaston County, North Carolina
TIP No. U-6044

