

**Least Environmentally Damaging
Practicable Alternative
and
Avoidance and Minimization
(Concurrence Points 3 and 4A)**

**US 701 Bypass
From South of SR 1166 (Pleasant Plains Road)
to North of US 74-US 76 Bypass in Whiteville
Columbus County**

Federal Aid Project NHS-701(15)
WBS Project 41499.1.1
STIP Project R-5020



**North Carolina Department of Transportation
July 13, 2016**

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NEPA/Section 404 Merger Meeting Concurrence Points 3/4A

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Meeting Agenda

1. Introductions and Sign-in
2. Purpose of Meeting
3. Project Review
 - Overview & Project Status
 - Environmental Impacts Evaluation of Detailed Study Alternatives
4. LEDPA Discussion (Concurrence Point 3)
5. Concurrence on LEDPA / Completion of Concurrence Point 3 Signature Form
6. Avoidance and Minimization Discussion (Concurrence Point 4A)
7. Concurrence on Avoidance and Minimization / Completion of Concurrence Point 4A Signature Form

1.0 INTRODUCTION AND PROJECT SUMMARY

1.1 Purpose of Today's Meeting

The purpose of today's meeting is to reach concurrence on the Least Environmentally Damaging Practicable Alternative (LEDPA) (Concurrence Point 3) and Avoidance and Minimization (Concurrence Point 4A) for the proposed widening of US 701 Bypass. Formal concurrence on the LEDPA and avoidance and minimization measures will be requested during this meeting.

1.2 Project Description

The proposed project involves widening US 701 Bypass (Madison Street/J.K. Powell Boulevard) in Whiteville to a multi-lane facility from south of SR 1166 (Pleasant Plains Road) to north of US 74-US 76 Bypass. The project area is shown on Figure 1 and Figure 2. The proposed typical section is a four-lane median divided facility with curb and gutter. The project is included in NCDOT's 2016-2025 State Transportation Improvement Program (STIP) as Project R-5020. The proposed project is approximately 5.1 miles long.

The 2016-2025 STIP includes the proposed project construction phasing and schedule as follows:

- **R-5020A** – SR 1166 (Pleasant Plains Road) to SR 1437 (Virgil Avenue). Section A is currently unfunded for right-of-way acquisition and construction.
- **R-5020B** – SR 1437 (Virgil Avenue) to US 74-US 76 Bypass. The current schedule for Section B includes right-of-way acquisition in Fiscal Year (FY) 2018 and construction in FY 2020.

1.3 Project Purpose

The purpose of the proposed project is to increase the traffic carrying capacity and safety of US 701 Bypass within the project limits.

1.4 Project Status

At the project scoping meeting, the merger team agreed the project should be brought into the NEPA/404 merger process at bridging decisions and alignment review (Concurrence Point 2A). The merger team last met on March 17, 2015 in Whiteville. The purpose of the meeting was to reach concurrence on Concurrence Point 2A. The merger team concurred on NCDOT's recommended hydraulic structure, dual 145-foot long bridges over Soules Swamp.

The environmental assessment for the project was approved by FHWA on June 13, 2015 and distributed to federal, state and local agencies. A public hearing for the project was held on September 15, 2015 at Whiteville High School.

As discussed previously, right-of-way acquisition and construction for R-5020B are scheduled for fiscal years 2018 and 2020, respectively, in the 2016-2025 STIP. Right-of-way acquisition and construction for R-5020A are unfunded in the 2016-2025 STIP.

2.0 ALTERNATIVES EVALUATED IN ENVIRONMENTAL ASSESSMENT

One build alternative was analyzed in the Environmental Assessment (EA) for the proposed US 701 Bypass widening project: a best-fit widening of existing US 701 Bypass to a four-lane divided facility with a 23-foot wide raised median. With the Build Alternative, there are two options under consideration in the vicinity of the existing US 701 Bypass grade separation over the Carolina Southern Railroad and Main Street in Whiteville:

- The **At-Grade** option would remove the existing structure over Main Street and lower the grade of US 701 Bypass in order to construct an at-grade intersection at Main Street and an at-grade rail crossing (see Figure 2C – At-Grade). (Note that the Carolina Southern Railroad rail line was abandoned at the time of the approval of the Environmental Assessment, which is why an at-grade option was under consideration. As discussed in Section 5.0, the rail line has since been purchased and the new owner plans to upgrade and reactivate the rail line.)
- The **Grade Separation** option would replace the existing structure with two new bridges to carry the proposed four-lane US 701 Bypass over Main Street and the rail line (see Figure 2C – New Bridges).

The rail line is currently rarely used. It has been inoperable because some of the bridges carrying the railroad tracks on the line are in need of repair. However, the railroad was purchased from Carolina Southern by RJ Corman Railroad Company in January 2015, and RJ Corman has indicated they intend to upgrade and re-activate the rail line.

Typical Section

As shown on Figure 3, the proposed project would improve existing US 701 Bypass to a four-lane median divided facility with curb and gutter. A 23-foot-wide raised grass median is proposed, with 12-foot-wide inside lanes and 14-foot-wide outside lanes to accommodate bicyclists. The proposed typical section includes 1.5-foot-wide mountable curb and gutter adjacent to the median and 2.5-foot-wide curb and gutter on the outside lanes. Ten-foot-wide berms are proposed to accommodate sidewalks.

Right-of-Way and Access Control

The proposed US 701 Bypass right-of-way varies from 110 feet to 200 feet. No control of access is proposed.

3.0 PUBLIC HEARING AND AGENCY COMMENTS ON THE EA

3.1 Public Hearing

Following circulation of the EA, a public hearing was held on September 15, 2015 at Whiteville High School. The hearing was conducted as an informal open house. NCDOT representatives were available to talk to citizens about the project and answer their questions. Eighty-one citizens registered their attendance at the public hearing. Citizens had the opportunity to submit written comments and questions at the hearing or via mail and e-mail after the hearing through October 15, 2015. A total of 22 written comments were submitted at the hearing and during the subsequent comment period.

The majority of written comments received expressed concerns regarding project impacts on individual properties, many of which are businesses. Concerns included the number of businesses that may be displaced by the project and changes in the way businesses are accessed. During final design, minor changes to the project design may be possible to reduce project impacts to some properties.

The City of Whiteville Fire Chief and Rescue Unit Chief both provided written comments requesting left turns be allowed from SR 1705 (Flowers-Pridgen Road) onto US 701 Bypass. The Fire Chief also noted rail activity at the US 701 Bypass crossing would adversely affect emergency response if a grade separation is not provided. NCDOT has, and will continue to, coordinate with emergency service providers to ensure appropriate emergency vehicle access is maintained both during and following construction. The median design proposed along US 701 Bypass will allow

access for emergency vehicles. The proposed typical section includes 1.5-foot-wide mountable curb and gutter adjacent to the median, which will allow emergency vehicles to drive across the median if needed. In addition, the Grade Separation option is the preferred alternative for the proposed project at the existing Carolina Southern Railroad tracks.

The City of Whiteville Planning Director provided written comments suggesting sidewalks be constructed for the length of the proposed project. Existing sidewalks along US 701 Bypass disturbed by project construction will be replaced with new five-foot-wide sidewalks. New sidewalks can be provided in areas where none currently exist, if the City of Whiteville agrees to participate in the construction cost and accept maintenance and liability for the new sidewalks.

3.2 Agency Comments on the EA

The EA was approved on June 3, 2015 and circulated to the following federal, state, and local agencies for review and comments. An asterisk (*) indicates a written response was received from that agency.

- US Department of the Army – Corps of Engineers
- US Environmental Protection Agency
- US Fish and Wildlife Service
- * NC Department of Administration – State Clearinghouse
- * NC Department of Environmental Quality (NCDEQ)
- Cape Fear Rural Planning Organization
- Columbus County
- City of Whiteville

Substantive agency comments on the EA and NCDOT’s responses (in italics) are briefly summarized below:

- NCDEQ – Division of Water Resources (DWR) commented that the environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. In addition, appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification. *NCDOT will work with NCDEQ-DWR and USACE to determine appropriate mitigation during the Section 401 Water Quality Certification and Section 404 Permit application processes.*
- NCDEQ – Division of Waste Management, Hazardous Waste Section, provided a list of four active hazardous waste generators that may be within or nearby the project study area. *Three of the identified facilities (Harris Auto Body Shop, Rite Aid #11529, and CVS Pharmacy #7570) are within the study area for the proposed project. Because these three sites are located along existing US 701 Bypass, the roadway widening associated with the preliminary design for the preferred alternative may impact all three sites. Preliminary site assessments to identify the nature and extent of any contamination will be performed on any hazardous materials sites impacted prior to right-of-way acquisition. Table 15 of the approved EA (Known & Potential Hazardous Materials Sites) has been appended to include these three sites.*
- NCDEQ – Division of Waste Management, Superfund Section, provided a list of four sites within an approximate one-mile radius of the proposed project. Based on the nature of the project, the identified sites are not anticipated to affect the proposed project or vice versa. However, because the Packer Property lies close to the footprint of the project, it is recommended that site files be reviewed if groundwater near the site is expected to be

encountered. One of the identified facilities (Packer Property) is within the study area for the proposed project in the northwest quadrant of the US 701 Bypass/Jewel Street intersection. Because this site is located along existing US 701 Bypass, the roadway widening associated with the preliminary design for the preferred alternative may impact the site. Preliminary site assessments to identify the nature and extent of any contamination will be performed on any hazardous materials sites impacted prior to right-of-way acquisition. Table 15 of the approved EA (Known & Potential Hazardous Materials Sites) has been appended to include this site.

4.0 SUMMARY OF IMPACTS

Figure 2 shows environmental features in the project area. A summary of potential environmental impacts for the detailed study alternatives is provided in Table 1.

Table 1. Summary of Anticipated Impacts for Detailed Study Alternatives

Feature ¹		Impacts ²
Project Length (miles)		5.11
Relocations ³	Residential	14 (6)
	Business	20 (3)
	Non-Profit	0
	Total Relocations	34 (9)
Minority / Low Income Populations Disproportionately High & Adverse Impacts		No
Historic Properties (adverse effect)		None
Community Facilities Impacted		1 Synagogue, Leder Park
Section 4(f) Impacts		<i>De minimis</i> impact to Beth Israel Hebrew Center
Noise Impacts (impacted properties)		47
Prime Farmland (acres)		6.2
Forest (acres)		10.6 (At-Grade) 12.6 (Grade Separation)
Wetlands (acres)		6.9 (At-Grade) 8.7 (Grade Separation)
Streams (linear feet)		831
Floodplain (acres)		11.9 (At-Grade) 14.7 (Grade Separation)
Federally-Protected Species		No effect
Potential UST/Hazmat Sites (no.)		29
Cost	Right-of-Way Cost	\$10,500,000
	Utility Relocation Cost	\$11,000,000
	Construction Cost	\$24,800,000 At Grade
		\$27,400,000 Grade Separation
Total Cost	\$46,300,000 At Grade	
	\$48,900,000 Grade Separation	

¹ Impact calculations are based on preliminary design slope stake limits plus an additional 25 feet.

² Impacts are same for both options for crossing Main Street and Carolina Southern Railroad unless noted.

³ Numbers in parentheses indicate minority-owned residences or businesses.

5.0 NCDOT PREFERRED ALTERNATIVE

NCDOT selected the Grade Separation option as the preferred alternative for the proposed project. RJ Corman Railroad Company has purchased the rail line from Carolina Southern and has begun upgrading and intends to re-activate the rail line. The NCDOT Rail Division recommended the Grade Separation option based on the potential for RJ Corman to generate new rail business on the rail line. The purpose of the proposed project is to increase the traffic carrying capacity and safety of US 701 Bypass within the project limits. Improvements to and elimination of at-grade highway-rail crossings throughout North Carolina have reduced train-car collisions and resulting fatalities. Grade separations at railroads also reduce delays caused by having to wait for trains to clear at-grade crossings. For these reasons, NCDOT continues to partner with railroads and others to improve or eliminate at-grade crossings. Creating an at-grade crossing where there is currently a grade separation would go against these efforts. In addition, as noted by the City of Whiteville Fire Chief, rail activity at the US 701 Bypass crossing would adversely affect emergency response if a grade separation is not provided.

The Grade Separation option is the most practicable alternative for the reasons discussed above. The Grade Separation option also minimizes impacts to the human environment. As shown in Table 1, the impacts to the natural environment are similar between the two alternatives, although the Grade Separation option has slightly higher wetlands, floodplains, and forest impacts as a result of the extra fill required to construct the dual bridges over Main Street in comparison to the At-Grade option.

6.0 AVOIDANCE AND MINIMIZATION

6.1 Streams and Wetlands

Water resources in the study area are part of the Lumber River Basin (USGS Hydrologic Unit 03040206). There are nine streams, 23 wetlands, and one non-jurisdictional pond in the study area. The physical characteristics and anticipated impacts associated with the streams identified in the study area are summarized in Table 2. Wetland data and anticipated impacts are presented in Table 3.

There are no designated High Quality Waters or water supply watersheds (WS-I or WS-II) within one mile downstream of the study area. All of the streams within the study area have a best usage classification of C;Sw. No streams within the study area, or within one mile downstream of the study area, are identified on the North Carolina 2014 Final 303(d) list of impaired waters. There are no designated anadromous fish waters or Primary Nursery Areas present in the study area.

The proposed project crosses one man-made ditch that was determined to be jurisdictional based on the presence of an ordinary high water mark. The ditch is an unnamed tributary to Soules Swamp and is identified on Figure 2C as a “tributary to Waters of the U.S.” It runs parallel to Main Street and the railroad tracks under Bridge 42. Although it was determined jurisdictional based on the presence of an ordinary high water mark, it is nonmitigable.

One pond (PZ) is located in the study area (see Figure 2A). This pond consists of an artificially excavated pit that is sustained by high groundwater levels. It has no surface water connection to any jurisdictional stream features. The proposed project would not impact this pond.

Table 2. Physical Characteristics of Study Area Streams

Stream Name, Map ID (Figure No.)¹	Bank Height (feet)	Bankfull Width (feet)	Water Depth (inches)	Stream Type	Length in Study Area (linear feet)	Anticipated Impacts (linear feet)²
UT to Deep Branch, SA (2A)	1.5	8	12	Perennial	434	92
UT to Richardson Swamp, SB (2B)	3.5	6	6	Intermittent	223	49
UT to Richardson Swamp, SC (2B)	4	7	6	Perennial	225	82
UT to Richardson Swamp, SD (2B)	2	8	12	Perennial	207	52
UT to Mollie Branch, SU (2E)	5	8	12	Intermittent	186	18
UT to Richardson Swamp, SV (2B)	4	8	12	Intermittent	180	25
UT to Deep Branch, SX (2A)	1	3	6	Intermittent	339	0
UT to Deep Branch, SY (2A)	2	5	6	Intermittent	865	513
Soules Swamp (2C)	12	100	72	Perennial	558	0
Total					3,217	831

¹Impact calculations are based on preliminary design slope stake limits plus an additional 25 feet.

²Stream impacts are the same for both options for crossing Main Street and the Carolina Southern Railroad.

Table 3. Jurisdictional Wetlands in Study Area

Wetland ID (Figure No.) ¹	NCWAM Classification	Hydrologic Classification	DWR Wetland Rating	Area (acres)	Anticipated Impacts (acres) ²	
					At- Grade	Grade Separation
WA (2A)	Bottomland Hardwood Forest	Riparian	62	0.5	0.1	
WB (2A)	Bottomland Hardwood Forest	Riparian	58	0.2	<0.1	
WBB (2E)	Headwater Forest	Riparian	50	0.2	0.0	
WC (2A)	Bottomland Hardwood Forest	Riparian	58	0.3	0.1	
WCC (2E)	Headwater Forest	Riparian	50	0.2	0.0	
WDD (2E)	Headwater Forest	Riparian	50	0.4	0.0	
WF (2B)	Bottomland Hardwood Forest	Riparian	60	0.3	0.0	
WG (2B)	Basin Wetland	Riparian	16	0.1	0.0	
WH (2B)	Headwater Forest	Riparian	31	0.1	<0.1	
WI (2B)	Bottomland Hardwood Forest	Riparian	58	0.3	0.2	
WJ (2B)	Basin Wetland	Non-Riparian	16	0.3	0.3	
WL (2C)	Riverine Swamp Forest	Riparian	78	23.6	5.8 ³	7.6
WN (2E)	Headwater Forest	Riparian	34	1.2	0.0	
WO (2C)	Riverine Swamp Forest	Riparian	48	0.8	<0.1	0.0
WP (2C)	Riverine Swamp Forest	Riparian	59	0.3	0.0	
WS (2B)	Headwater Forest	Riparian	16	0.1	0.0	
WU (2B)	Riverine Swamp Forest	Riparian	62	0.1	0.0	
WV (2B)	Riverine Swamp Forest	Riparian	52	0.3	0.1	
WW (2A)	Bottomland Hardwood Forest	Riparian	54	0.1	0.0	
WX (2A)	Bottomland Hardwood Forest	Riparian	54	0.2	<0.1	
WY (2A)	Headwater Forest	Riparian	12	0.1	0.0	
WZ (2A)	Riverine Swamp Forest	Riparian	70	0.5	0.3	
WZZ (2B)	Bottomland Hardwood Forest	Riparian	16	0.4	<0.1	
Total				30.6	6.9	8.7

¹Impact calculations are based on preliminary design slope stake limits plus an additional 25 feet.

²Impacts are the same for both options for crossing Main Street and the Railroad unless otherwise noted.

³Impacts to wetland WL for At-Grade option do not include 1.4 acres of temporary impacts associated with construction detour.

6.2 Section 404 Avoidance and Minimization Measures

Because the project involves widening an existing road and wetlands are present on both sides of the road where it crosses Soules Swamp, potential avoidance and minimization options are limited. However, during the development of the preliminary design, efforts were made to avoid and minimize impacts to wetlands and streams wherever practicable. The following minimization measures are proposed for Waters of the US:

- The proposed curb and gutter was extended to avoid impacts to a cemetery adjacent to the existing road (see Figure 2A), which also reduced impacts to wetlands in this area.
- At Wetland Site WL (Soules Swamp) existing US 701 Bypass will be widened to the east, this will reduce wetland impacts by approximately 0.9 acre.
- During final design, the use of steeper side slopes (3:1 max) in wetland areas will be evaluated as a means of reducing wetland impacts.
- The preferred alternative would bridge the man-made ditch (i.e., unnamed tributary to Soules Swamp) parallel to Main Street and the railroad tracks (see Figure 2C), thereby not impacting this tributary to Waters of the U.S.

6.3 Additional Avoidance and Minimization

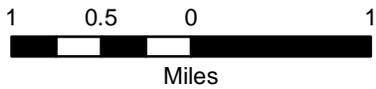
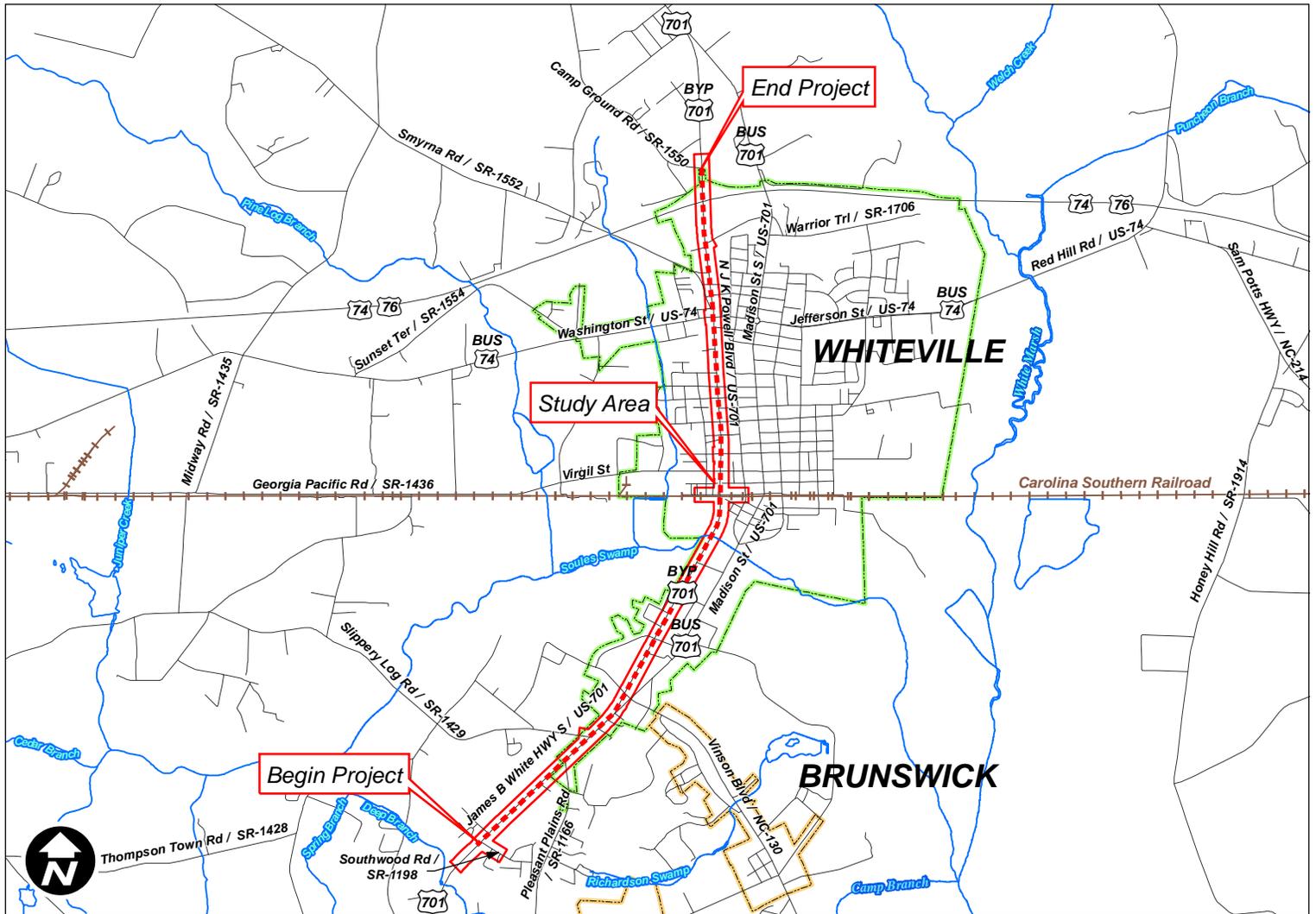
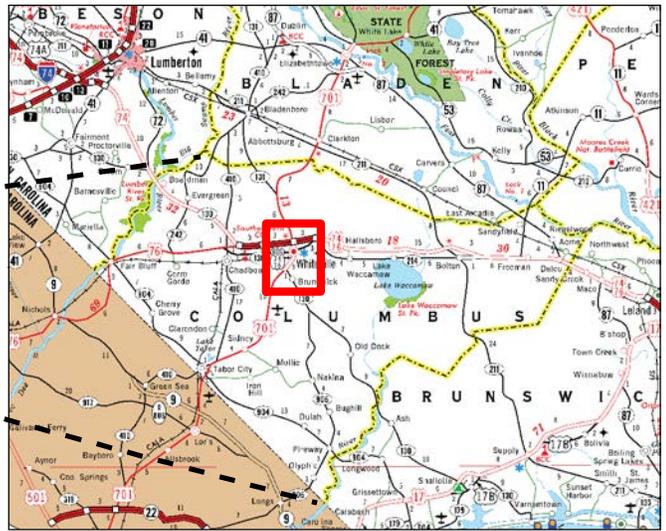
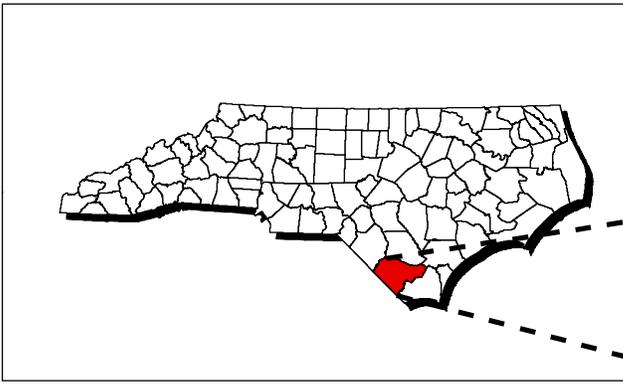
The widening of existing US 701 Bypass varies between symmetrical widening and widening east or west of the existing roadway, as needed, to minimize impacts to land use and important environmental features. The following sections discuss the proposed design in further detail with respect to avoiding and minimizing impacts to historic resources and recreational facilities.

Historic Resources

The proposed project widens existing US 701 Bypass to the west in the vicinity of the Beth Israel/Whiteville Hebrew Center in order to minimize impacts to the historic property. NCDOT will create and implement a landscape plan for the portion of the property along US 701 Bypass in coordination with the property owner.

Recreational Facilities

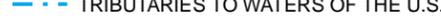
The proposed project will widen existing US 701 Bypass to the west in the vicinity of Whiteville High School and Leder Park to avoid impacts to the recreational facilities adjacent to US 701 Bypass at the school and the park.

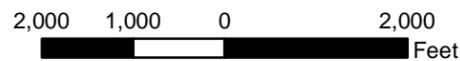


	<p>North Carolina Department of Transportation Project Development and Environmental Analysis Unit</p>
<p>US 701 Bypass from South of SR 1166 (Pleasant Plains Road) to North of US 74-76 Bypass in Whiteville Columbus County TIP Project R-5020</p>	
<p>Figure 1</p>	



Legend

-  PROPOSED EDGE OF PAVEMENT
-  PROPOSED CUT OR FILL
-  PROPOSED EASEMENT
-  PROPOSED RIGHT OF WAY
-  EXISTING RIGHT OF WAY LINE
-  JURISDICTIONAL STREAM
-  TRIBUTARIES TO WATERS OF THE U.S.
-  DELINEATED WETLAND
-  DELINEATED POND
-  RAILROAD
-  100 YEAR FLOODPLAIN
-  LIBRARY
-  HISTORIC PROPERTY BOUNDARY
-  STUDY AREA
-  SCHOOL
-  CHURCH
-  CEMETERY
-  HAZARDOUS MATERIAL SITE
-  BUSINESS
-  PARK
-  BRUNSWICK TOWN LIMITS
-  WHITEVILLE CITY LIMITS



**Preliminary Design-
Subject to Change**

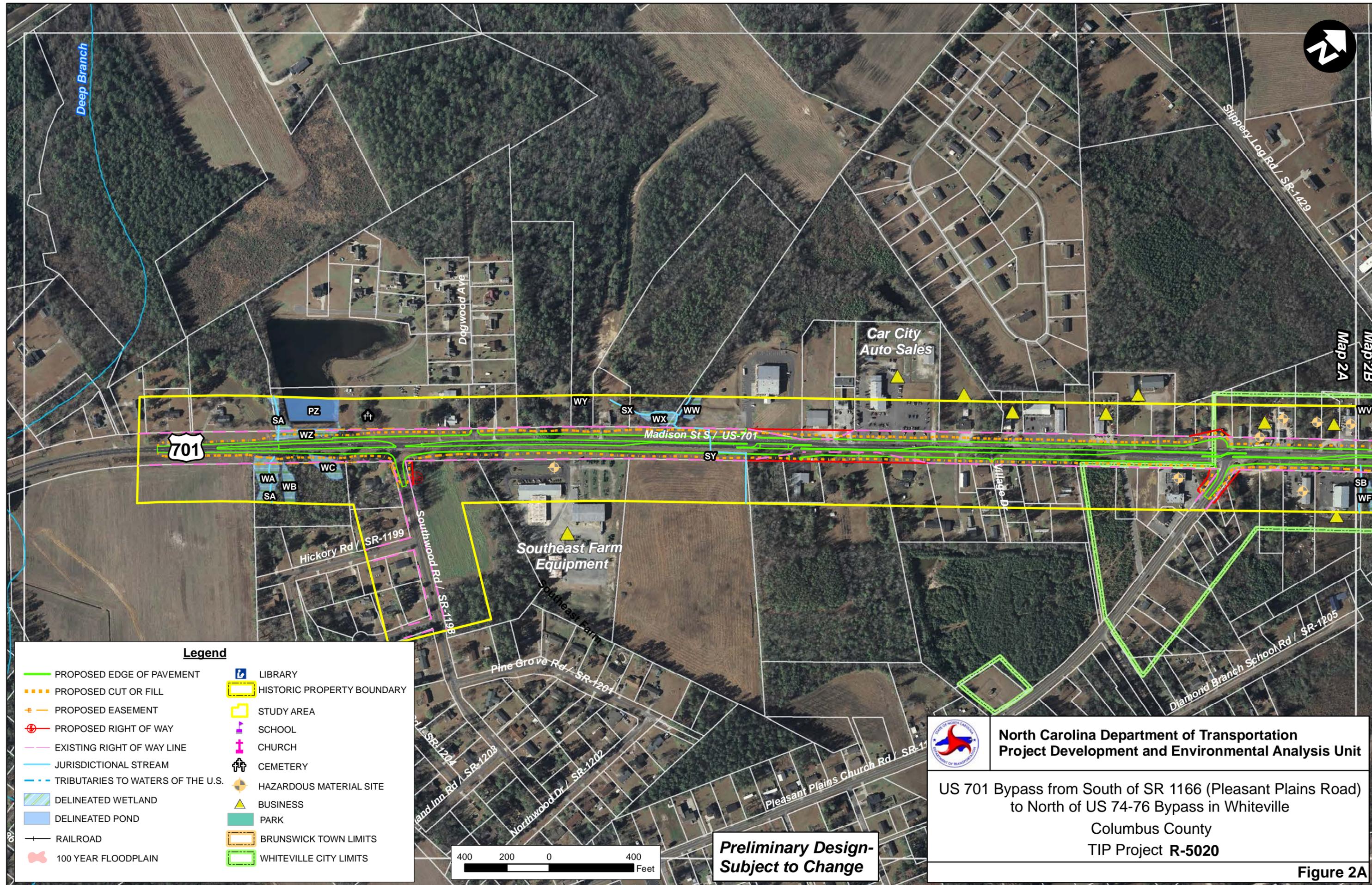


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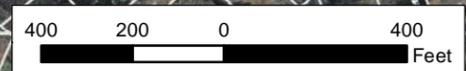
Columbus County
TIP Project **R-5020**

Figure 2



Legend

PROPOSED EDGE OF PAVEMENT	LIBRARY
PROPOSED CUT OR FILL	HISTORIC PROPERTY BOUNDARY
PROPOSED EASEMENT	STUDY AREA
PROPOSED RIGHT OF WAY	SCHOOL
EXISTING RIGHT OF WAY LINE	CHURCH
JURISDICTIONAL STREAM	CEMETERY
TRIBUTARIES TO WATERS OF THE U.S.	HAZARDOUS MATERIAL SITE
DELINEATED WETLAND	BUSINESS
DELINEATED POND	PARK
RAILROAD	BRUNSWICK TOWN LIMITS
100 YEAR FLOODPLAIN	WHITEVILLE CITY LIMITS

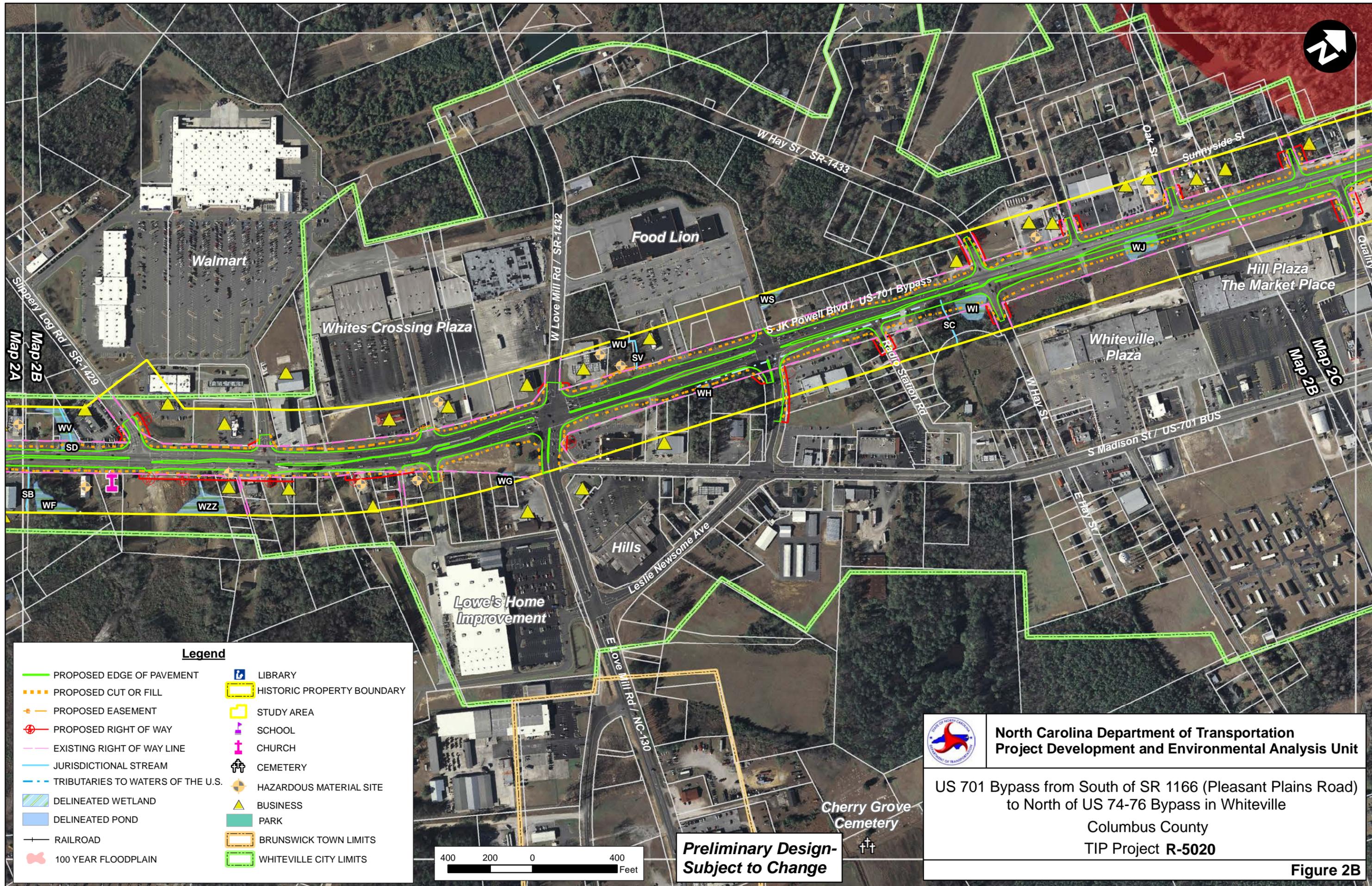


**Preliminary Design-
Subject to Change**

**North Carolina Department of Transportation
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US 701 Bypass from South of SR 1166 (Pleasant Plains Road)
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Figure 2A



Legend

- PROPOSED EDGE OF PAVEMENT
- PROPOSED CUT OR FILL
- PROPOSED EASEMENT
- PROPOSED RIGHT OF WAY
- EXISTING RIGHT OF WAY LINE
- JURISDICTIONAL STREAM
- TRIBUTARIES TO WATERS OF THE U.S.
- DELINEATED WETLAND
- DELINEATED POND
- RAILROAD
- 100 YEAR FLOODPLAIN
- LIBRARY
- HISTORIC PROPERTY BOUNDARY
- STUDY AREA
- SCHOOL
- CHURCH
- CEMETERY
- HAZARDOUS MATERIAL SITE
- BUSINESS
- PARK
- BRUNSWICK TOWN LIMITS
- WHITEVILLE CITY LIMITS



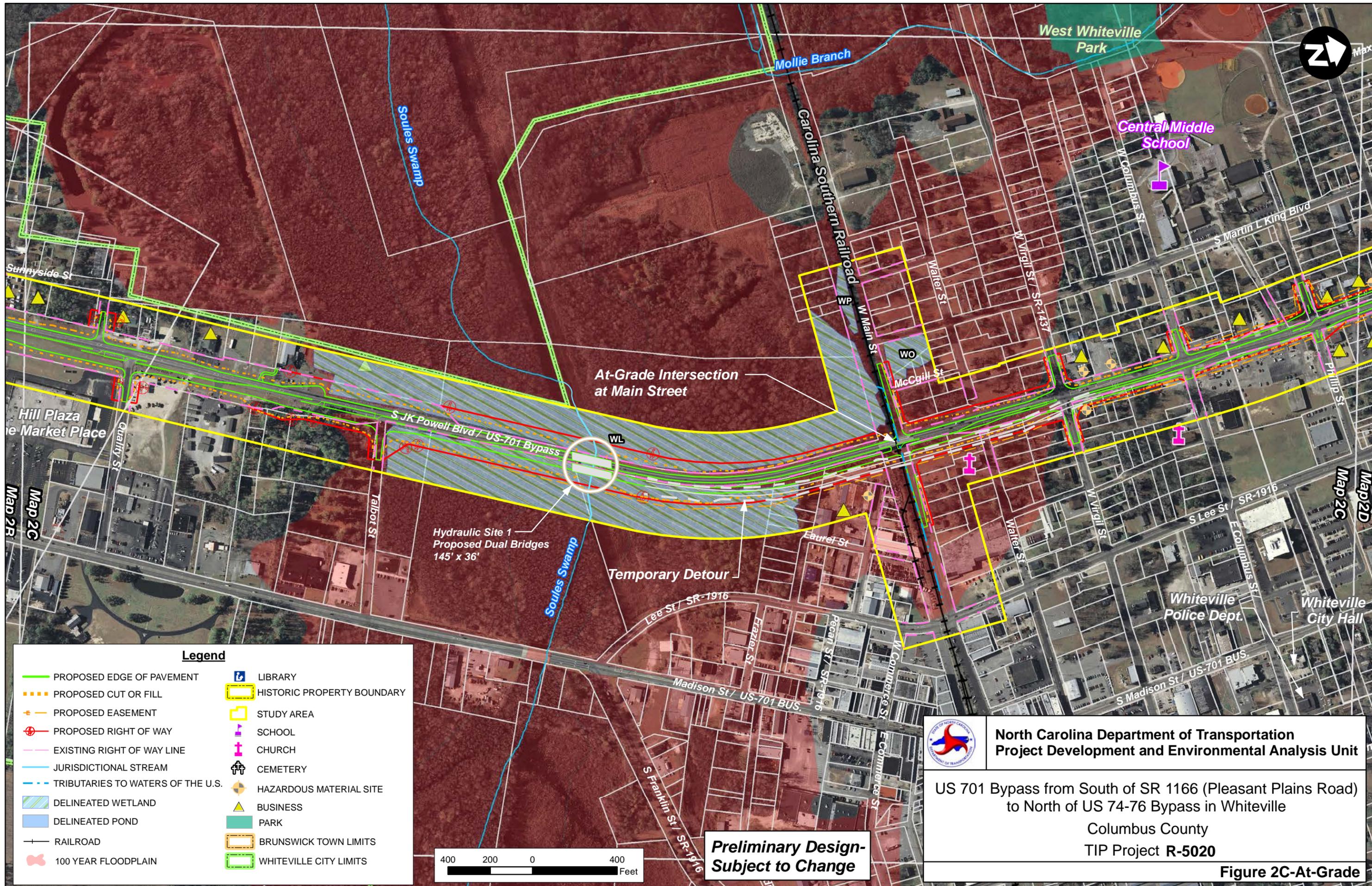
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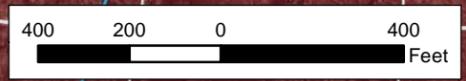
**Preliminary Design-
Subject to Change**

Figure 2B



Legend

PROPOSED EDGE OF PAVEMENT	LIBRARY
PROPOSED CUT OR FILL	HISTORIC PROPERTY BOUNDARY
PROPOSED EASEMENT	STUDY AREA
PROPOSED RIGHT OF WAY	SCHOOL
EXISTING RIGHT OF WAY LINE	CHURCH
JURISDICTIONAL STREAM	CEMETERY
TRIBUTARIES TO WATERS OF THE U.S.	HAZARDOUS MATERIAL SITE
DELINEATED WETLAND	BUSINESS
DELINEATED POND	PARK
RAILROAD	BRUNSWICK TOWN LIMITS
100 YEAR FLOODPLAIN	WHITEVILLE CITY LIMITS



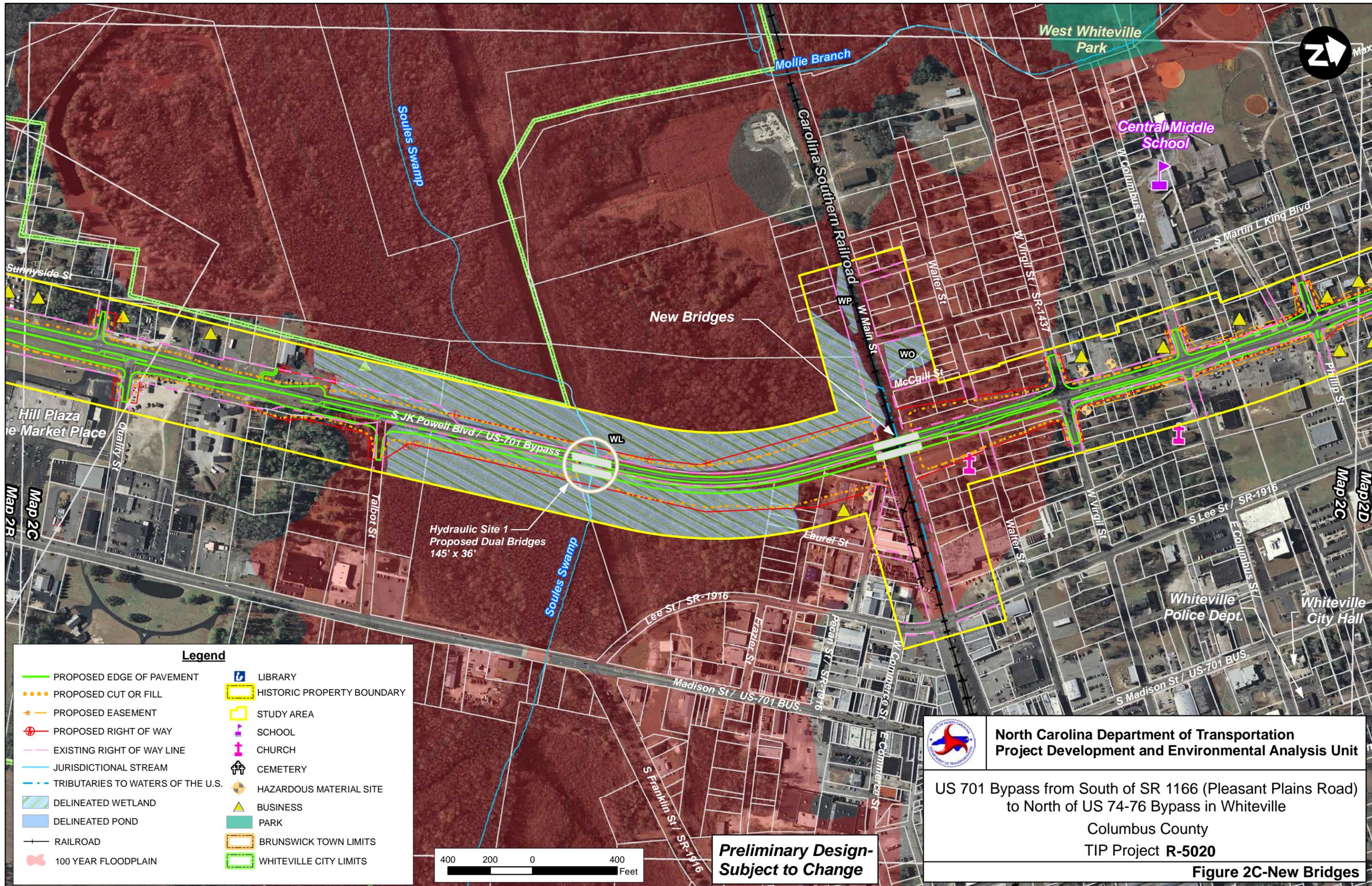
**Preliminary Design-
Subject to Change**



**North Carolina Department of Transportation
Project Development and Environmental Analysis Unit**

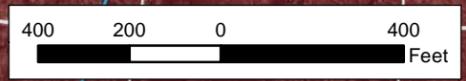
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Figure 2C-At-Grade



Legend

PROPOSED EDGE OF PAVEMENT	LIBRARY
PROPOSED CUT OR FILL	HISTORIC PROPERTY BOUNDARY
PROPOSED EASEMENT	STUDY AREA
PROPOSED RIGHT OF WAY	SCHOOL
EXISTING RIGHT OF WAY LINE	CHURCH
JURISDICTIONAL STREAM	CEMETERY
TRIBUTARIES TO WATERS OF THE U.S.	HAZARDOUS MATERIAL SITE
DELINEATED WETLAND	BUSINESS
DELINEATED POND	PARK
RAILROAD	BRUNSWICK TOWN LIMITS
100 YEAR FLOODPLAIN	WHITEVILLE CITY LIMITS

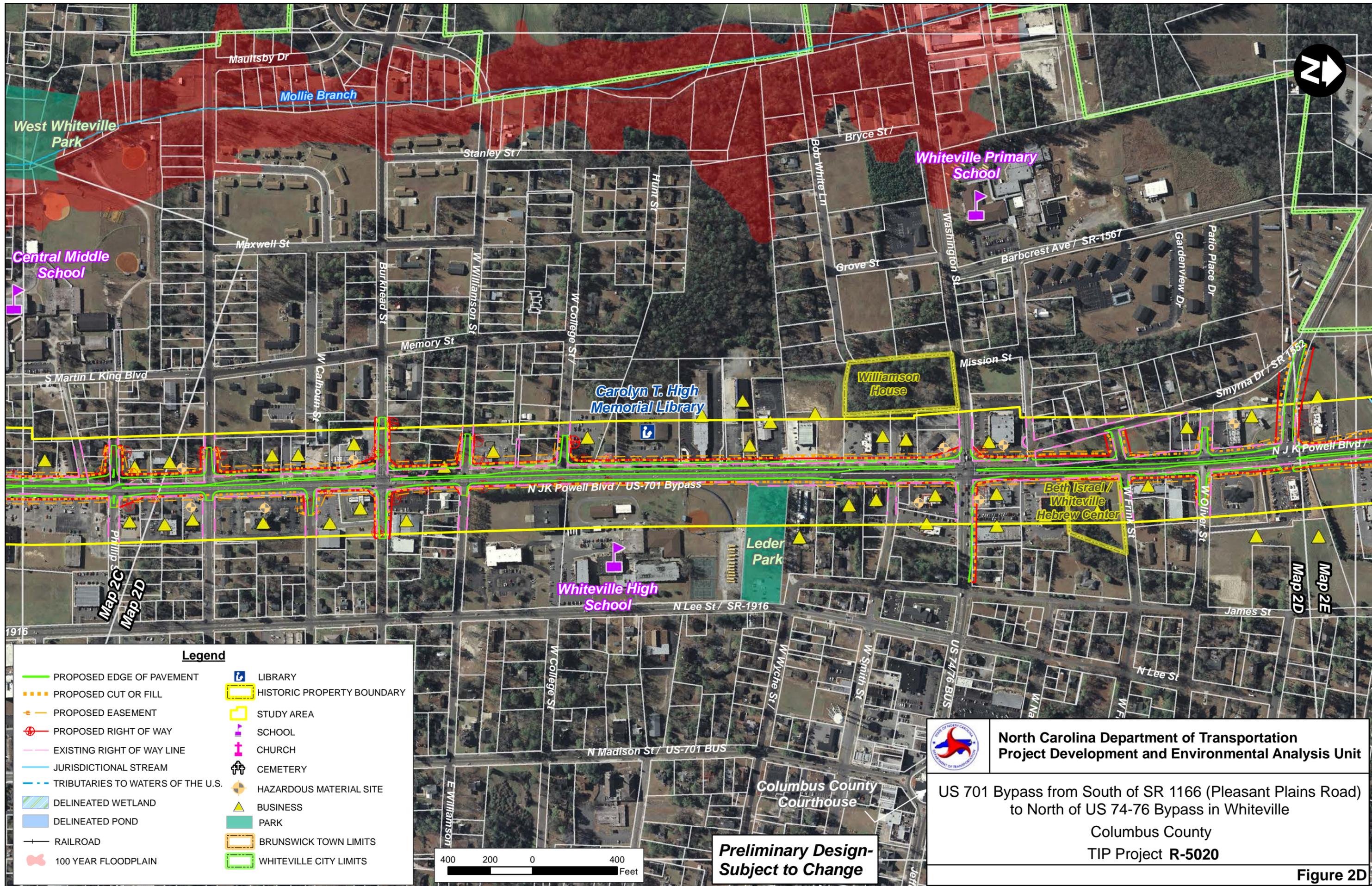


**Preliminary Design-
Subject to Change**

**North Carolina Department of Transportation
Project Development and Environmental Analysis Unit**

**US 701 Bypass from South of SR 1166 (Pleasant Plains Road)
to North of US 74-76 Bypass in Whiteville**
Columbus County
TIP Project R-5020

Figure 2C-New Bridges



Legend

PROPOSED EDGE OF PAVEMENT	LIBRARY
PROPOSED CUT OR FILL	HISTORIC PROPERTY BOUNDARY
PROPOSED EASEMENT	STUDY AREA
PROPOSED RIGHT OF WAY	SCHOOL
EXISTING RIGHT OF WAY LINE	CHURCH
JURISDICTIONAL STREAM	CEMETERY
TRIBUTARIES TO WATERS OF THE U.S.	HAZARDOUS MATERIAL SITE
DELINEATED WETLAND	BUSINESS
DELINEATED POND	PARK
RAILROAD	BRUNSWICK TOWN LIMITS
100 YEAR FLOODPLAIN	WHITEVILLE CITY LIMITS

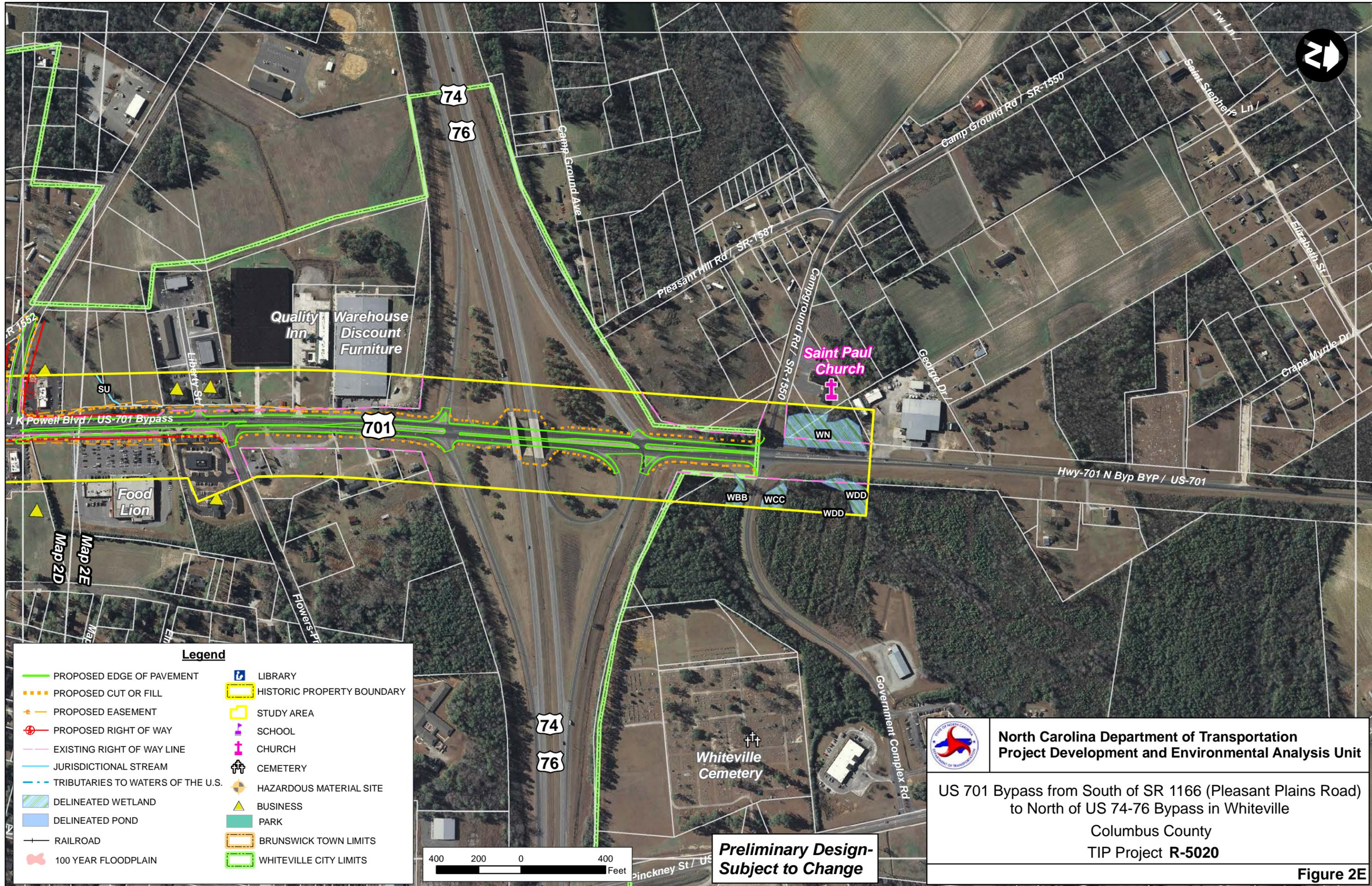


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Figure 2D



Legend

PROPOSED EDGE OF PAVEMENT	LIBRARY
PROPOSED CUT OR FILL	HISTORIC PROPERTY BOUNDARY
PROPOSED EASEMENT	STUDY AREA
PROPOSED RIGHT OF WAY	SCHOOL
EXISTING RIGHT OF WAY LINE	CHURCH
JURISDICTIONAL STREAM	CEMETERY
TRIBUTARIES TO WATERS OF THE U.S.	HAZARDOUS MATERIAL SITE
DELINEATED WETLAND	BUSINESS
DELINEATED POND	PARK
RAILROAD	BRUNSWICK TOWN LIMITS
100 YEAR FLOODPLAIN	WHITEVILLE CITY LIMITS



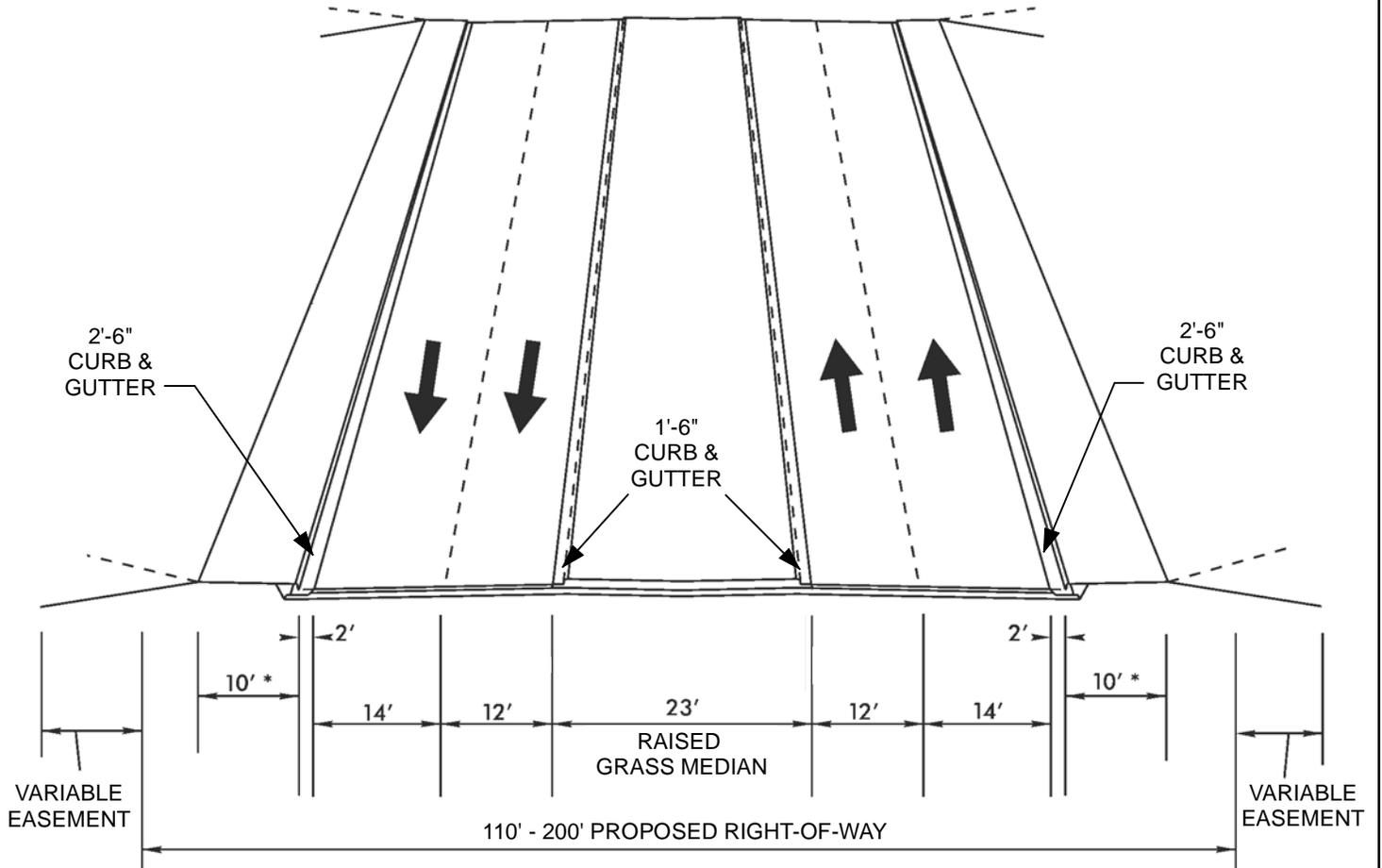
**Preliminary Design-
Subject to Change**



**North Carolina Department of Transportation
Project Development and Environmental Analysis Unit**

US 701 Bypass from South of SR 1166 (Pleasant Plains Road)
to North of US 74-76 Bypass in Whiteville
Columbus County
TIP Project R-5020

Figure 2E



**Proposed 10-foot berm will accommodate sidewalks. Any existing sidewalks affected by the project will be replaced. New sidewalks can be provided if the City of Whiteville agrees to participate in the cost and accept maintenance and liability.*

	<p align="center">Proposed Typical Section</p> <p align="center">US 701 Bypass from South of SR 1166 (Pleasant Plains Road) to North of US 74-76 Bypass in Whiteville Columbus County TIP Project R-5020</p>	<p>Prepared for: North Carolina Department of Transportation</p> <p>Note: Not to Scale</p>	<p>Figure No.</p> <p align="center">3</p>
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