

**Section 404/NEPA Merger Project Team Meeting
Alternatives Considered for NC 210 Improvements**

NC 210 from US 17 to south of SR 1518 (Old Folkstone Road)
Onslow County

STIP Project U-5949

North Carolina Department of Transportation



Merger Concurrence Point 2

August 22, 2019

1. Introduction

Project Description

The North Carolina Department of Transportation (NCDOT) proposes to widen NC 210 from US 17 to south of SR 1518 (Old Folkstone Road) in Onslow County, North Carolina. The project is approximately 6.14 miles long and is identified in the State Transportation Improvement Program (STIP) as Project No. U-5949, WBS No. 46896.1.1. The project location is shown in attached **Figures 1 and 2** in Appendix A.

Purpose and Need of Project

The Merger Team concurred with the project Purpose and Need on May 23, 2019 (Concurrence Point No. 1 [CP 1]).

The need for this study can be summarized as follows:

- *Traffic congestion exists along the existing facility and is expected to worsen in the future.*

Based on the NCDOT 2018 Traffic Analysis Report for U-5949, average vehicle per day (vpd) totals ranged between 9,000 (south of the NC 210/Old Folkstone Road intersection) and 17,400 (along NC 210 west of its intersection with NC 172) within the project area. These volumes are forecasted to increase to between approximately 13,800 and 31,800 along NC 210, respectively, in 2040 without construction of the project (see schematic on page 9).

Specifically, near the US 17/NC 210 intersection, the 2017 AADT ranges between 16,400 and 22,200 vpd on US 17 and is 10,800 vpd on NC 210. These volumes are projected to increase to 33,000 and 42,400 vpd along US 17 and to 18,000 on NC 210 in 2040 without construction of U-5949.

For a typical two-lane street (including those with exclusive left-turn lanes) with a 45-mph speed limit, the approximate daily volumes for general planning use are 15,900 vpd for LOS D and 18,300 vpd for LOS E (HCM 6th Edition, Chapter 16, Urban Street Facilities – Applications). Most sections of NC 210 north of Old Folkstone Road are forecasted to have AADT above these volume thresholds in 2040.

Along the NC 210 project corridor, there are three schools and a major military base which collectively intensify the traffic congestion during peak hours. Most intersections are estimated to experience peak hour travel demands equivalent to at least 9% of the daily volumes.

The **purpose** for the proposed action is as follows:

- *Alleviate motorized vehicle congestion along NC 210 between US 17 and south of Old Folkstone Road (SR 1518).*

The measure of performance for evaluating this improvement will be level of service (LOS). The project is intended to achieve an overall LOS D or better within the project area during peak hour operations. Where feasible, the goal of the project will also be to bring signalized and unsignalized movements to LOS D or better.

Purpose of this meeting

The purpose of this Merger Team meeting is to discuss the preliminary study alternatives and determine which alternatives should be carried forward for detailed analysis and design (Concurrence Point No. 2 [CP 2]). The meeting will be held on August 22, 2019 at 10:00 am in the Structure Design Conference Room in Building A of the NCDOT Century Center in Raleigh, NC.

2. Project Updates

Project Schedule

The existing project schedule is show below. Dates will be updated after the new STIP is adopted in September 2019.

- | | |
|---------------------------------------|-------------------|
| • Data Collection (including Traffic) | Began June 2017 |
| • Initial Project assessments | Began August 2017 |
| • Design Public Hearing Map | TBD |
| • Combined State EA/FONSI | TBD |
| • Right of Way Plans | FY 2022 |
| • Let to Construction | FY 2025 |

Cost (programmed in STIP)

- | | |
|-----------------|---------------------|
| • Right of Way | \$4,312,000 |
| • Construction | \$41,486,000 |
| • Utilities | \$1,000,000 |
| • Total: | \$46,798,000 |

3. Merger Concurrence Point 2 – ALTERNATIVES TO BE STUDIED IN DETAIL

Segments

Due to the length of the proposed project (approximately 5.8 miles), the corridor was divided into four segments where possible widening transitions could be made to allow for the evaluation of manageably-sized sections on an individual basis in order to develop an overall “best fit” alternative for the project. The segments along NC 210 are as follows:

- (1) **Segment 1:** US 17 to north of Rifle Range Road (USMC/MARSOC entrance)
- (2) **Segment 2:** North of Rifle Range Road to just north of Betty Dixon Road
- (3) **Segment 3:** Just north of Betty Dixon Road to south of NC 172
- (4) **Segment 4:** South of NC 172 to south of Old Folkstone Road

Figures 2 and 3 in Appendix A show the extent of each segment.

Typical Section

The project team has developed one typical section for use along NC 210. The base typical section, Typical Section No. 1, is a four-lane divided section with a variable 23- to 36-foot raised grass median, 1-foot-6-inch mountable curb and gutter along the inside lanes, and 8-foot-11-foot (with guardrail) shoulders (4 feet of which will consist of full-depth paved shoulder). The travel lanes consist of two 12-foot lanes in each direction.

The traffic analyses completed for the project considered both a four-lane widening and a three-lane section (one travel lane in each direction with a center left-turn lane). In the three-lane scenario, only three signalized intersections on NC 210 (at US 17, Rifle Range Rd / USMC Base Entrance, and Ridge Field Ave / Dixon Middle School Entrance) were modeled to operate at LOS D or better in the future design year 2040. Unsignalized side-street approaches on NC 210 (e.g., Dixon High School Entrance, Dixon Rd, Manchester Ln) may experience excess peak hour delays (LOS F) due to the increased travel demands and decreased gaps in the NC 210 through traffic.

In Segment 1, while the three-lane traffic analysis shows LOS D or better at the two signalized intersections (at US 17 and Rifle Range Rd / USMC Base Entrance), the analysis results would be much different without the (existing) five-lane sections on NC 210 just east of US 17 and in the vicinity of the USMC Base Entrance. The auxiliary lanes may boost capacity at individual intersections; however, the merge required because of the lane drops is undesirable from a safety perspective and will become increasingly problematic with higher travel demands in the future. In addition, the downstream lane drops will exacerbate the upstream queue lengths in the future. For example, at the Rifle Range Rd / USMC Base Entrance intersection, the northbound NC 210 through traffic queue is estimated to exceed 800-feet during the 2040 PM peak hour.

Therefore, the three-lane option was not carried forward for this project due to the excessive side-street delays at unsignalized intersections, undesirable safety and queue performance in Segment 1, and inadequate capacity in the other segments.

Lane continuity is an important consideration in corridor improvement decisions. Given the overall future travel demands / capacity needs and the limitations of the three-lane option, the four-lane widening alternative is recommended for the NC 210 project corridor.

Figure 4 of Appendix A illustrates this typical section, as well as the proposed typical sections for the Stones Creek bridge crossing (Typical Section No. 2), US 17 (Typical Section No. 3), NC 172 (Typical Section No. 4), and Old Folkstone Road (Typical Section No. 5). The design assumptions outlining the parameters for each roadway typical section are shown below in Table 1.

Table 1 – U-5949 Design Assumptions

ROUTE	NC 210	US 17	NC 172	Old Folkstone Road (SR 1518)
LINE	-L-	-Y1-	-Y11-	-Y13-
TRAFFIC DATA				
ADT LET YR = 2016	17,400	22,200	17,400	7,200
ADT DESIGN YR = 2040	33,400	42,600	30,000	17,200
TTST	1%	2%	1%	1%
DUALS	2%	2%	2%	2%
DHV	9%	8%	10%	10%
DIR	60%	60%	55%	55%
CLASSIFICATION	*Minor Arterial	Principal Arterial	*Minor Arterial	Major Collector
TERRAIN TYPE	Level	Level	Level	Level
DESIGN SPEED (mph)	50 mph	60 mph	50 mph	50 mph
POSTED SPEED (mph)	Var. 45/55 mph	55 mph	45 mph	45 mph
PROP. R/W WIDTH (ft)	Var. Contain SS+	Existing	Existing	Existing
CONTROL OF ACCESS	No	Partial	No	No
RUMBLE STRIPS (Y/N)	N	N	N	N
TYPICAL SECTION TYPE	4-Ln Median Divided (w/ C & G Median & Shoulders)	4-Ln Median Divided w/ Shoulders	3-Ln Shoulder w/ Turn Lanes	2-Ln Shoulder w/ Turn Lanes
LANE WIDTH (ft)	12'	12'	12'	12'
SIDEWALKS (Y/N)	N	N	N	N
BICYCLE LANES (Y/N)	N	N	N	N
MEDIAN WIDTH (ft)	23' - 36'	46'	N/A	N/A
MED. PROTECT. (GR/BARRIER)	N/A	N/A	N/A	N/A
SHOULDER (total)				
MEDIAN (ft)	N/A	6'	N/A	N/A
OUTSIDE w/o GR (ft)	8'	12'	8'	8'

ROUTE	NC 210	US 17	NC 172	Old Folkstone Road (SR 1518)
OUTSIDE w/ GR (ft)	11'	15'	11'	11'
PAVED SHOULDER				
OUTSIDE TOTAL/FDPS (ft)	4'4'	10'4'	4'4'	4'4'
MEDIAN TOTAL/FDPS (ft)	C&G	4'4'	N/A	N/A
GRADE				
MAX.	6%	3%	6%	6%
MIN.	0.3%	0.3%	0.3%	0.3%
K VALUE				
SAG	96	136	96	96
CREST	84	151	84	84
HORIZ. ALIGN.				
MAX. SUPER.	.06	.08	.06	.06
MIN. RADIUS (ft)	833'	1200'	833'	833'
SPIRAL (Y/N)	N	N	N	N
CROSS SLOPES				
PAVEMENT	2.5%	2.5%	2%	2%
PAVED SHOULDER	2.5%	2.5%	2%	2%
TURF SHOULDER	8%	8%	8%	8%
MEDIAN DITCH	N/A	N/A	N/A	N/A
DITCH TYPICAL (A,B)	A	A	A	A
CLEAR ZONE (ft)	24' - 28'	30'	24' - 28'	24' - 28'

NOTE: * Minor Arterials are designed using collector criteria per general Roadway Design Guidance from Unit Head in 3/2016.

Identified Alternatives

Multiple alignment alternatives have been identified and a preliminary evaluation completed.

No-Build Alternative

The No-Build Alternative is the baseline comparative alternative for the design year (2040). The No-Build Alternative would not provide any substantial improvements to the NC 210 corridor or any intersections therein.

Build Alternatives

Three build alternatives were developed (Symmetrical, Right Side [West], and Left Side [East]) for further analysis. All alternatives would include the following:

- (1) The widening of existing NC 210 to a four-lane divided facility with 12-foot lanes, a variable 23- to 36-foot raised grass median, 1-foot-6-inch mountable curb and gutter along the inside lanes, and 8-foot-11-foot (with guardrail) shoulders (4 feet of which will consist of full-depth paved shoulder).

- (2) All alternatives have the same intersection configurations:
 - a. At NC 210 and US 17, the intersection design will be the same regardless of alternative selection
 - b. At both the NC 210/USMC base entrance and the NC 210/ NC 172 intersection, traditional intersections are proposed
 - c. A superstreet design is proposed at all remaining intersections

A general description of each alternative follows:

Symmetrical

The symmetrical widening alternative would follow NC 210 along its existing alignment, with the assumption that roughly the same amount of widening will occur on either side of the centerline throughout the project.

Right Side (West)

With the project extending from US 17 to south of Old Folkstone Road, the right-side (West) alternative utilizes existing pavement on the left side (East) and widening for a median and additional lanes to the West.

Left Side (East)

With the project extending from US 17 to South of Old Folkstone Road, the left-side (East) alternative utilizes existing pavement on the right side (West) and widening for a median and additional lanes to the East.

Preliminary Impacts

Preliminary impacts have been calculated for each of the above alternatives. These impacts are based off of preliminary slope stakes and general corridor alignment only. The designs were done utilizing final surveys and DTMs; therefore, impacts were calculated based on preliminary slopes stakes plus 25 linear feet. **Tables 2a-2d** summarize the potential impacts of each alternative by segment.

Table 2a – U-5949 Alternative Impacts by Segment – Segment 1 (1.61 miles)

	Resource	Alternative			
		Symmetrical Widening	West Widening	East Widening	
Segment 1 (US 17 to Rifle Range Road [USMC/MARSOC entrance])	Natural Environment Resources				
	Streams (No./ Lin. Ft.)	2/555	1/49	2/141	
	Wetlands (No./Acres)	7/1.6	6/1.09	9/1.27	
	Protected Species	0	0	0	
	Human Environment and Cultural Resources				
	Historic Properties	Eligible	1 (Dixon MS - old property)	1 (Dixon MS - old property)	1 (Dixon MS - old property)
		Listed	0	0	0
	Archaeological Sites		TBD	TBD	TBD
	Estimated No. of Buildings Impacted (Potential Displacements) ¹	Residences	6	9	0
		Commercial	0	0	0
		Industrial	0	0	0
		Public (Property)	1 (Dixon MS - old property)	1 (Dixon MS - old property)	0
		Church	0	0	0
		Other ²	0	0	0
	Conservation Easement Property (Acres)	SCGL	1.06	1.75	0.59
	USMC (MARSOC) Property (Acres)	Outside Fence	8.64	3.10	12.9
		Inside Fence	0.03	0	0.26

Table 2b – U-5949 Alternative Impacts by Segment – Segment 2 (1.59 miles)

	Resource	Alternative			
		Symmetrical Widening	West Widening	East Widening	
Segment 2 (Rifle Range Road to Betty Dixon Road)	Natural Environment Resources				
	Streams (No./ Lin. Ft.)	1/75	1/49	1/104	
	Wetlands (No./Acres)	13/2.58	12/2.33	14/2.47	
	Protected Species	0	0	0	
	Human Environment and Cultural Resources				
	Historic Properties	Eligible	0	0	0
		Listed	0	0	0
	Archaeological Sites		TBD	TBD	TBD
	Estimated No. of Buildings Impacted (Potential Displacements) ¹	Residences	1	2	0
		Commercial	0	0	0
		Industrial	0	0	0
		Public	0	0	0
		Church	0	0	0
		Other ² (Type)	2 (Radio Tower, Water Tower)	1 (Water Tower)	1 (Radio Tower)
	Conservation Easement Property (Acres)	SCGL	4.39	7.13	1.38
		Everett Creek Preserve	1.59	0.28	2.80
	USMC (MARSOC) Property Impacted (Acres)	Outside Fence	7.92	3.73	11.87
		Inside Fence	0	0	0
	EMS Property (Impact)		Concrete Pad, Property	Concrete Pad, Property	Property
	Water Tower (Impact)		Property	Tower, Property	Property
	MARSOC Communications Tower (Impact)		Structure, Property	Property	Structure, Property, Antenna
	Substation Property (Impact)		None	None	Property, Structure

Table 2c – U-5949 Alternative Impacts by Segment – Segment 3 (1.06 miles)

	Resource	Alternative			
		Symmetrical Widening	West Widening	East Widening	
Segment 3 (Betty Dixon Road to NC 172)	Natural Environment Resources				
	Streams (No./ Lin. Ft.)	1/52	1/11	1/57	
	Wetlands (No./Acres)	2/0.4	2/0.2	2/0.55	
	Protected Species	0	0	0	
	Human Environment and Cultural Resources				
	Historic Properties	Eligible	0	0	0
		Listed	0	0	0
	Archaeological Sites		TBD	TBD	TBD
	Estimated No. of Buildings Impacted (Potential Displacements) ¹	Residences	0	0	0
		Commercial	4	8	4
		Industrial	0	0	0
		Public	0	0	0
		Church	0	0	0
		Other ²	0	0	0
	Conservation Easement Property (Acres)	SCGL	0	0	0

Table 2d – U-5949 Alternative Impacts by Segment – Segment 4 (1.88 miles)

	Resource	Alternative			
		Symmetrical Widening	West Widening	East Widening	
Segment 4 (NC 172 to south of Old Folkstone Road)	Natural Environment Resources				
	Streams (No./ Lin. Ft.)	3/415	3/347	3/426	
	Wetlands (No./Acres)	7/0.83	5/0.75	9/1.01	
	Protected Species	0	0	0	
	Human Environment and Cultural Resources				
	Historic Properties	Eligible	0	0	0
		Listed	0	0	0
	Archaeological Sites		TBD	TBD	TBD
	Estimated No. of Buildings Impacted (Potential Displacements) ²	Residences	1	0	1
		Commercial	0	3	1
		Industrial	0	0	0
		Public	0	0	0
		Church	0	0	0
	Other ²	0	0	0	

¹Building types were determined using the Onslow County Parcel data, 2016 Onslow County building shapefile, and aerial photography. If aerial photography indicated an incorrect assignment by one or both of the other sources, the aerial was used as the determining resource.

²For properties, “Other” indicated properties that were designated as Building Site (with no residential information), Undeveloped, Right-of-Way, etc. For buildings, “Other” indicated buildings that were unidentifiable as another type using any of the resources. It also included features such as pump stations, water towers, etc. that did not fit any other categories.

The Concurrence Point 2 concurrence form, which includes the alternatives to be studied in detail, is attached to this package in Appendix A.

Appendix A
Concurrence Point 2 Supporting Documentation

Section 404/NEPA Merger Team Meeting Agreement

Concurrence Point No. 2: Detailed Study Alternatives Carried Forward

Project Name/Description: Widen NC 210 y from US 17 to south of SR 1518 (Old Folkstone Road) in Onslow County, North Carolina., WBS No. 46896.1.1, **State Transportation Improvement Program (STIP) Project No. U-5949.**

A concurrence meeting was held with members of the Merger Team on August 22, 2019 to discuss the Detailed Study Alternatives to be carried forward for the proposed project. Multiple design alternatives and their respective preliminary impacts were presented in the meeting package and reviewed during the CP2 meeting. The Project Team has concurred on this date with the Detailed Study Alternatives to be Carried Forward as described below.

The Detailed Study Alternatives to be Carried Forward include:

- A “Best-Fit” Alignment Alternative that consists of the following widening scenarios for each of the four project segments:

- **Segment 1** – Symmetrical / West / East Widening

Specific Avoidance/Minimization Considerations for Segment 1:

- **Segment 2** – Symmetrical / West / East Widening

Specific Avoidance/Minimization Considerations for Segment 2:

- **Segment 3** – Symmetrical / West / East Widening

Specific Avoidance/Minimization Considerations for Segment 3:

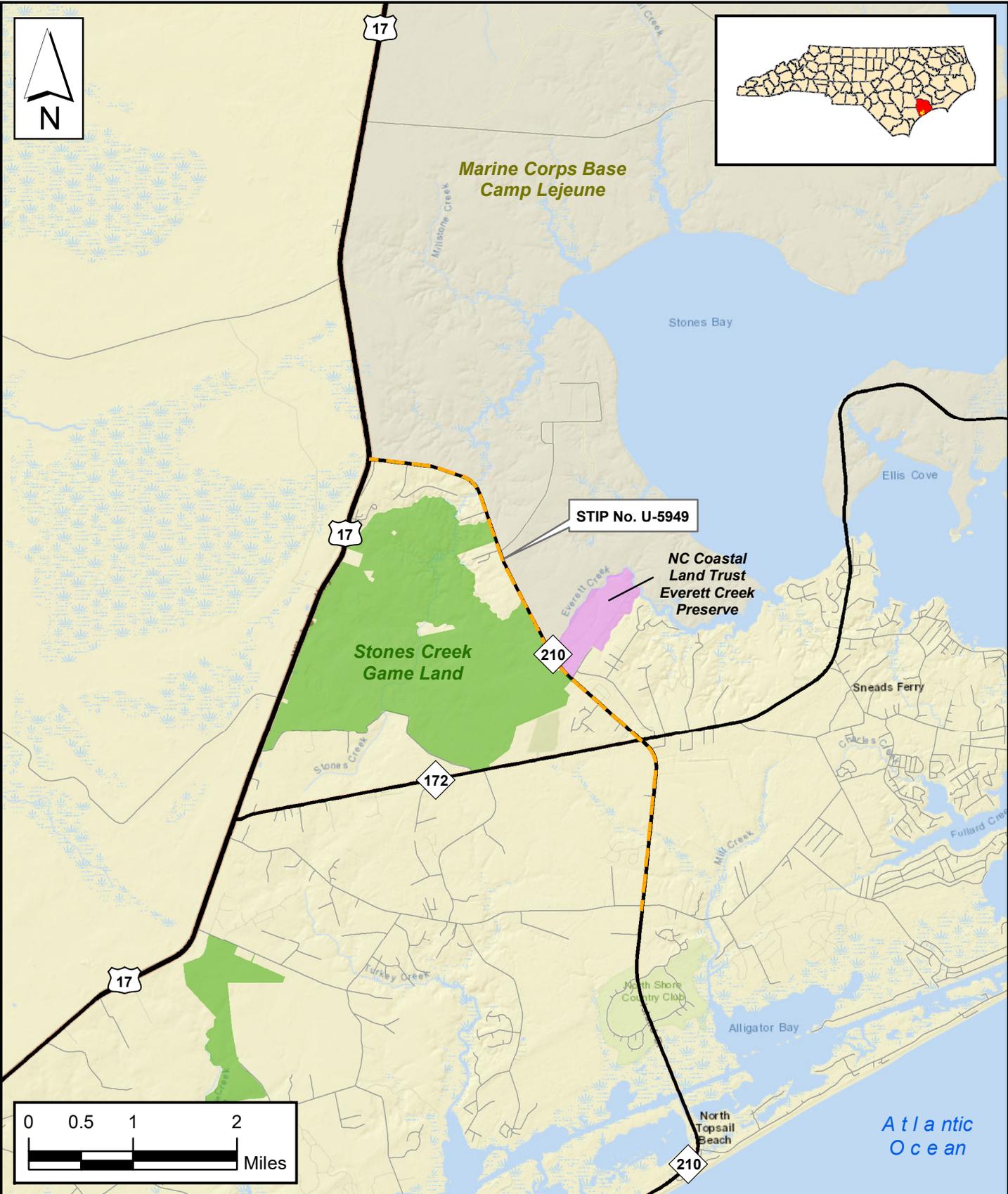
- **Segment 4** – Symmetrical / West / East Widening

Specific Avoidance/Minimization Considerations for Segment 4:

- Additional Alternative described below:

- **Segment __:**

US Army Corps of Engineers	_____	
	Brad Shaver	DATE
US Fish & Wildlife Service	_____	
	Gary Jordan	DATE
NC Division of Water Resources	_____	
	Joanne Steenhuis	DATE
NC Wildlife Resources Commission	_____	
	Travis Wilson	DATE
US Environmental Protection Agency	_____	
	Amanetta Somerville	DATE
NC Department of Transportation	_____	
	Krista Kimmel	DATE
NC State Historic Preservation Office	_____	
	Renee Gledhill-Earley	DATE
NC Division of Coastal Management	_____	
	Cathy Brittingham	DATE
Jacksonville Metropolitan Planning Organization	_____	
	Anthony Prinz	DATE



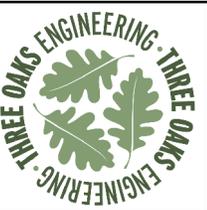
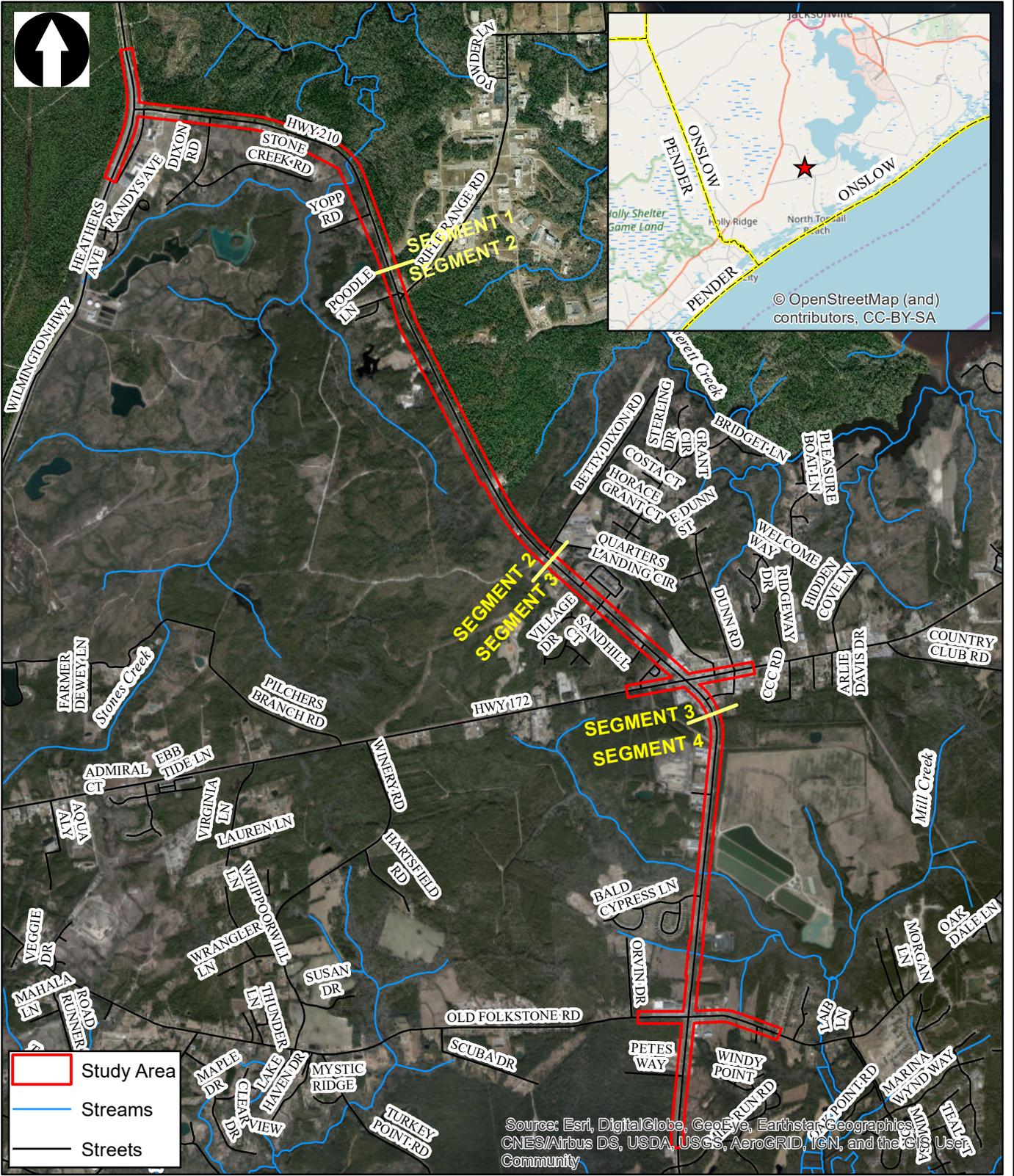
NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS

Project Location
WIDEN NC 210 FROM
US 17 TO SOUTH OF
SR 1518 (OLD FOLKSTONE RD)

ONSLOW COUNTY
NORTH CAROLINA

County:	ONSLOW
Div: 3	STIP# U-5949
WBS:	46896.1.1
Date:	NOVEMBER 2017

Figure
1

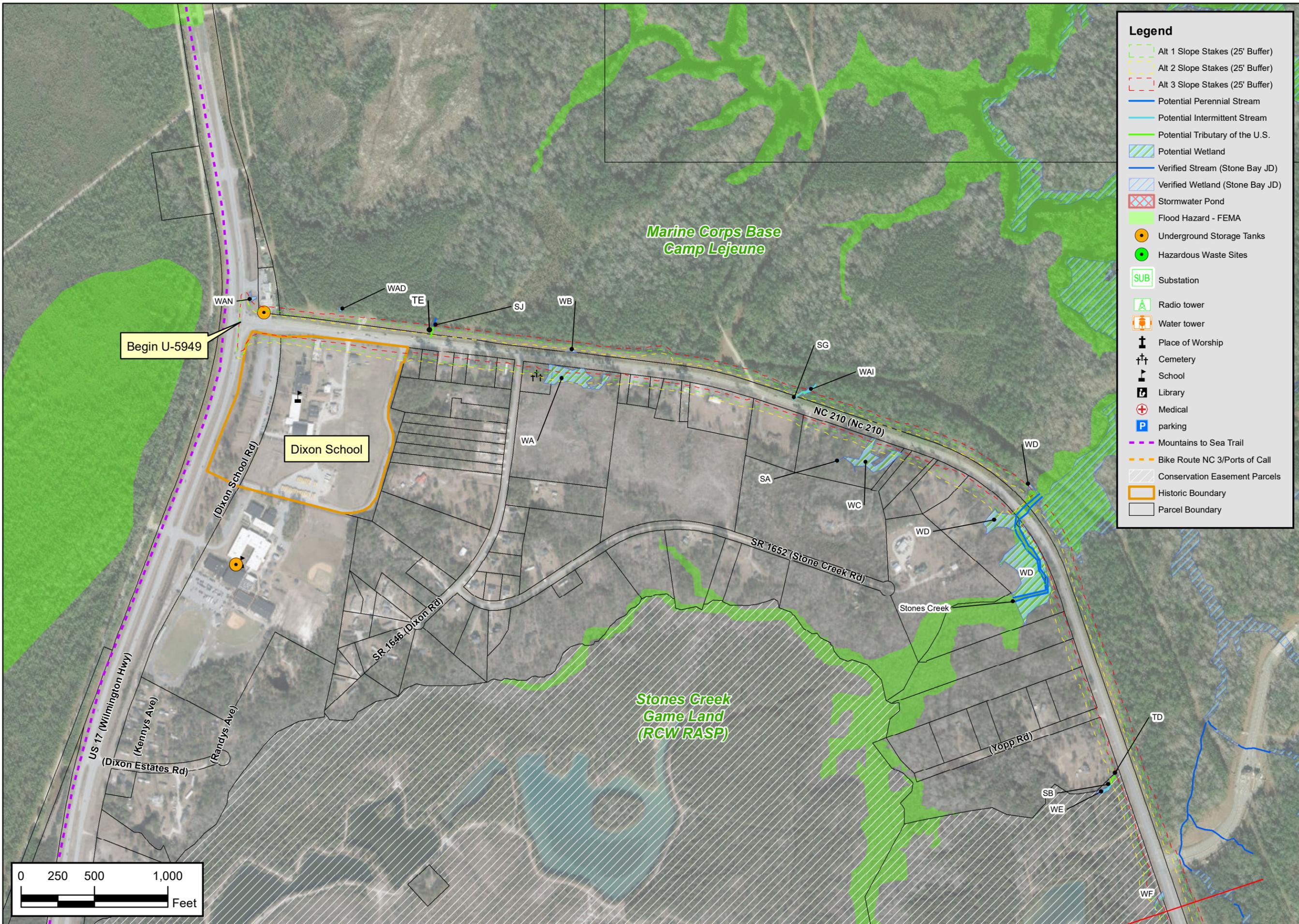


Prepared For:

Project Study Area
 Widen NC 210 from
 US 17 to south of
 SR 1518 (Old Folkstone Rd)
 Onslow County, North Carolina

Date: July 2019
 Scale: 0 1,000 2,000 Feet
 Job No.: 17-006
 Drawn By: CMR
 Checked By: NH

Figure
2



Legend

- Alt 1 Slope Stakes (25' Buffer)
- Alt 2 Slope Stakes (25' Buffer)
- Alt 3 Slope Stakes (25' Buffer)
- Potential Perennial Stream
- Potential Intermittent Stream
- Potential Tributary of the U.S.
- Potential Wetland
- Verified Stream (Stone Bay JD)
- Verified Wetland (Stone Bay JD)
- Stormwater Pond
- Flood Hazard - FEMA
- Underground Storage Tanks
- Hazardous Waste Sites
- SUB Substation
- RT Radio tower
- WT Water tower
- † Place of Worship
- †† Cemetery
- 🎓 School
- 📖 Library
- 🏥 Medical
- P parking
- Mountains to Sea Trail
- Bike Route NC 3/Ports of Call
- Conservation Easement Parcels
- Historic Boundary
- Parcel Boundary



NORTH CAROLINA DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 HIGHWAY DIVISION 3

ENVIRONMENTAL FEATURES MAP
 WIDEN NC 210 FROM US 17 TO SOUTH
 OF SR 1518 (OLD FOLKSTONE RD)

ONSLOW COUNTY
 STIP PROJECT U-5949



By:
C ROWELLS

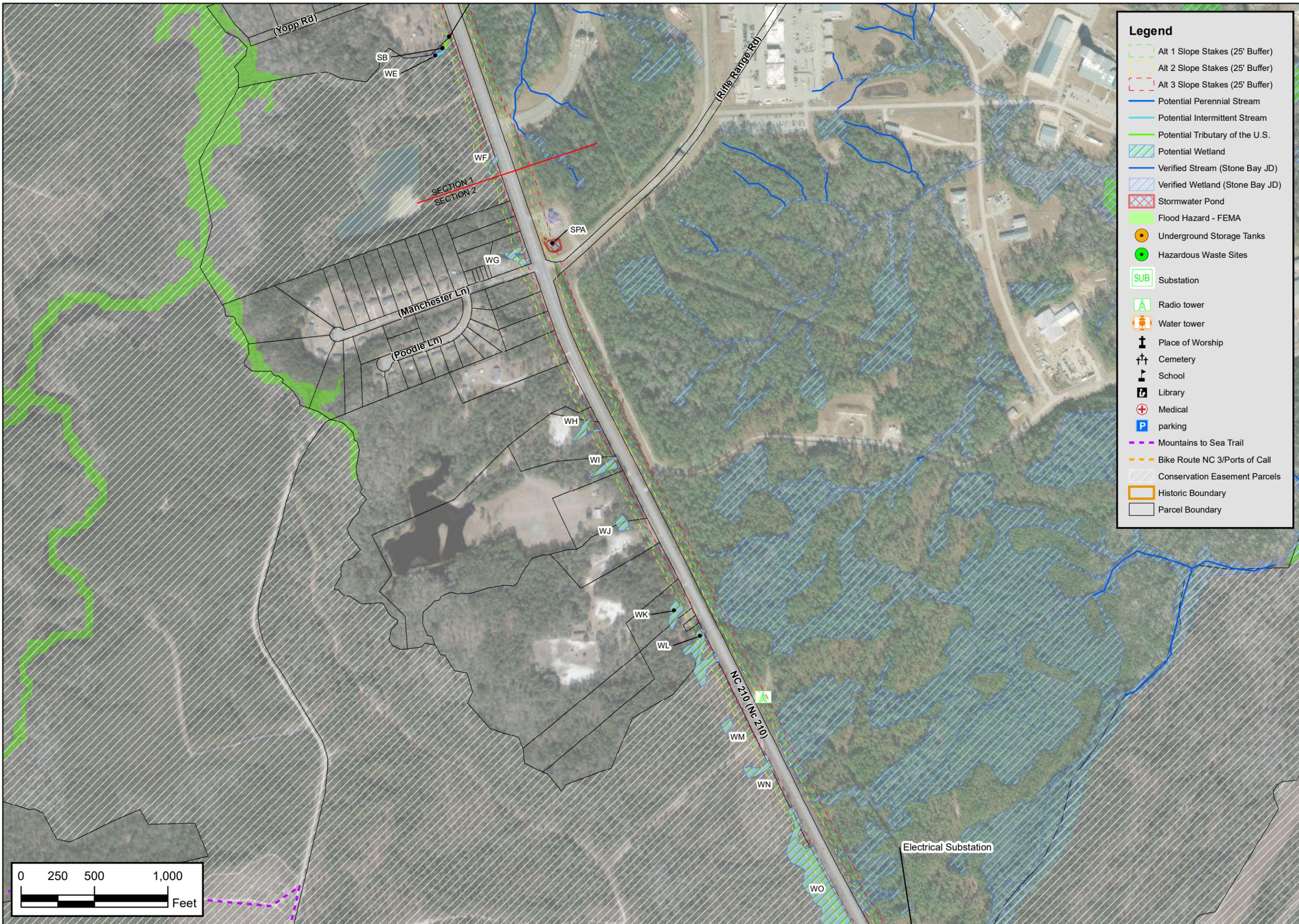
County:
ONSLow

Div: 3	STIP# U-5949
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Date:
JULY 2019

Figure

3a



Legend

- Alt 1 Slope Stakes (25' Buffer)
- Alt 2 Slope Stakes (25' Buffer)
- Alt 3 Slope Stakes (25' Buffer)
- Potential Perennial Stream
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- Potential Tributary of the U.S.
- Potential Wetland
- Verified Wetland (Stone Bay JD)
- Stormwater Pond
- Flood Hazard - FEMA
- Underground Storage Tanks
- Hazardous Waste Sites
- SUB Substation
- ▲ Radio tower
- ▲ Water tower
- ✝ Place of Worship
- ✝✝ Cemetery
- 🎓 School
- 📖 Library
- 🏥 Medical
- P parking
- - - Mountains to Sea Trail
- - - Bike Route NC 3/Ports of Call
- Conservation Easement Parcels
- Historic Boundary
- Parcel Boundary



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY DIVISION 3

ENVIRONMENTAL FEATURES MAP
WIDEN NC 210 FROM US 17 TO SOUTH
OF SR 1518 (OLD FOLKSTONE RD)

ONSLow COUNTY
STIP PROJECT U-5949



By:
C ROWELLS

County:
ONSLow

Div: 3	STIP# U-5949
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Date:
JULY 2019

Figure

3b



Legend

- Alt 1 Slope Stakes (25' Buffer)
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- Hazardous Waste Sites
- SUB Substation
- ▲ Radio tower
- ▲ Water tower
- ✚ Place of Worship
- ✚✚ Cemetery
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- 📖 Library
- 🏥 Medical
- P parking
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- Conservation Easement Parcels
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- Parcel Boundary



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY DIVISION 3

ENVIRONMENTAL FEATURES MAP
WIDEN NC 210 FROM US 17 TO SOUTH
OF SR 1518 (OLD FOLKSTONE RD)

ONSLOW COUNTY
STIP PROJECT U-5949



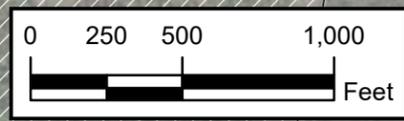
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County:
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Div: 3	STIP# U-5949
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Date:
JULY 2019

Figure
3c



Sound
ict Park



Legend

- Alt 1 Slope Stakes (25' Buffer)
- Alt 2 Slope Stakes (25' Buffer)
- Alt 3 Slope Stakes (25' Buffer)
- Potential Perennial Stream
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NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY DIVISION 3

ENVIRONMENTAL FEATURES MAP
WIDEN NC 210 FROM US 17 TO SOUTH
OF SR 1518 (OLD FOLKSTONE RD)

ONSLow COUNTY
STIP PROJECT U-5949



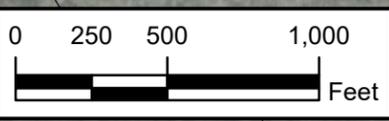
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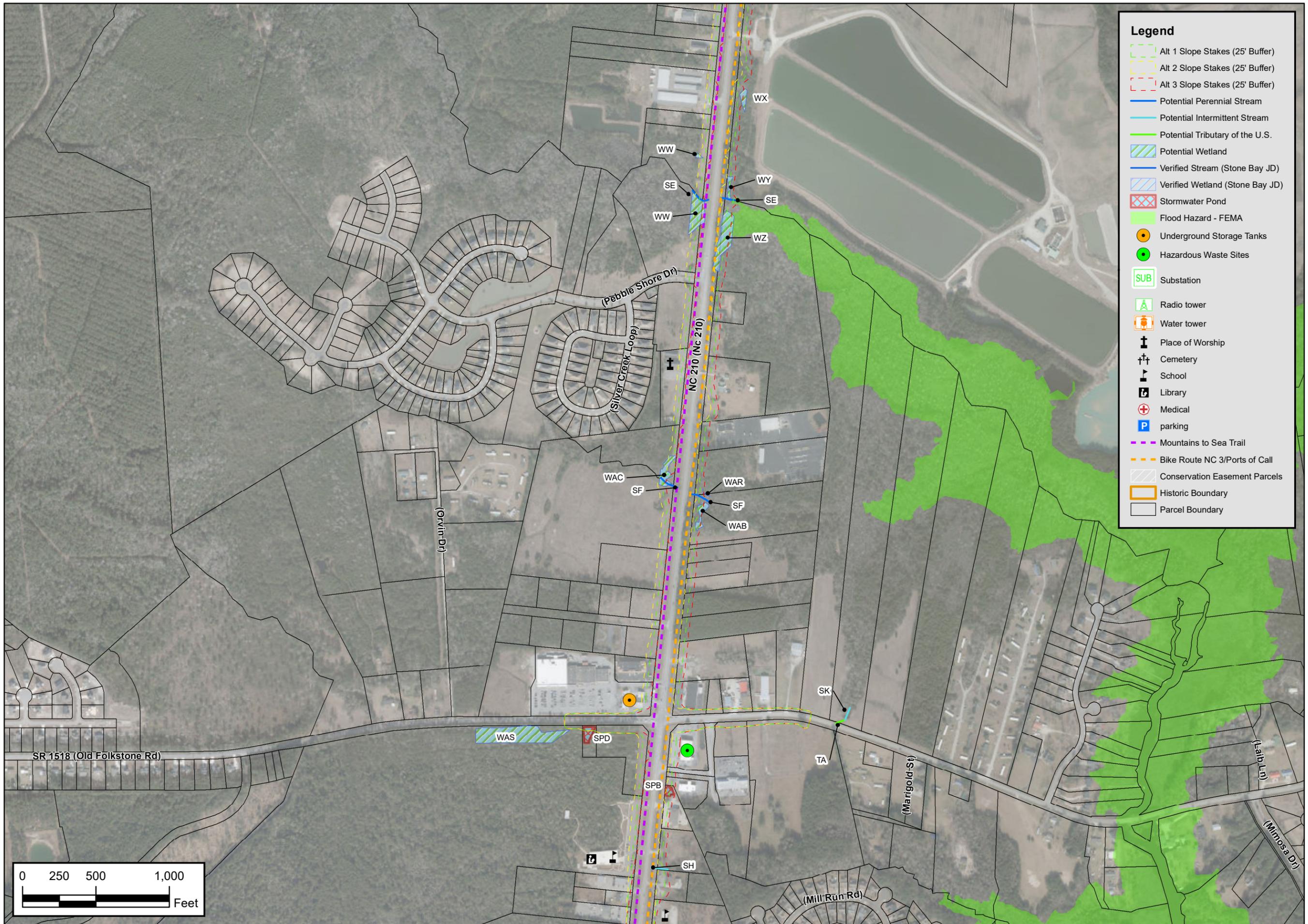
County:
ONSLow

Div: 3	STIP# U-5949
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Date:
JULY 2019

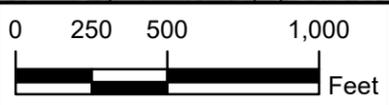
Figure
3d





Legend

- Alt 1 Slope Stakes (25' Buffer)
- Alt 2 Slope Stakes (25' Buffer)
- Alt 3 Slope Stakes (25' Buffer)
- Potential Perennial Stream
- Potential Intermittent Stream
- Potential Tributary of the U.S.
- Potential Wetland
- Verified Stream (Stone Bay JD)
- Verified Wetland (Stone Bay JD)
- Stormwater Pond
- Flood Hazard - FEMA
- Underground Storage Tanks
- Hazardous Waste Sites
- SUB Substation
- RT Radio tower
- WT Water tower
- + Place of Worship
- + Cemetery
- S School
- L Library
- + Medical
- P parking
- Mountains to Sea Trail
- Bike Route NC 3/Ports of Call
- Conservation Easement Parcels
- Historic Boundary
- Parcel Boundary



ESRI Aerial Photograph



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
HIGHWAY DIVISION 3

ENVIRONMENTAL FEATURES MAP
WIDEN NC 210 FROM US 17 TO SOUTH
OF SR 1518 (OLD FOLKSTONE RD)

ONSLOW COUNTY
STIP PROJECT U-5949



By:
C ROWELLS

County:
ONSLOW

Div: 3	STIP# U-5949
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Date:
JULY 2019

Figure
3e



Legend

- Alt 1 Slope Stakes (25' Buffer)
- Alt 2 Slope Stakes (25' Buffer)
- Alt 3 Slope Stakes (25' Buffer)
- Potential Perennial Stream
- Potential Intermittent Stream
- Potential Tributary of the U.S.
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- ✝ Place of Worship
- ✝✝ Cemetery
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ENVIRONMENTAL FEATURES MAP
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ON SLOW COUNTY
STIP PROJECT U-5949



By:
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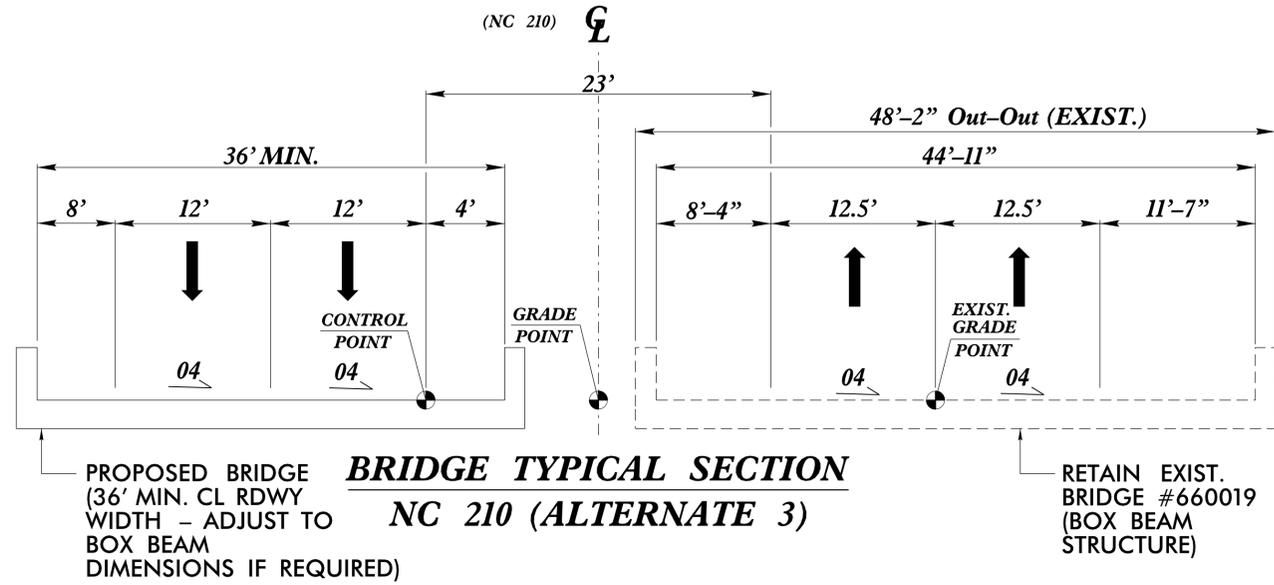
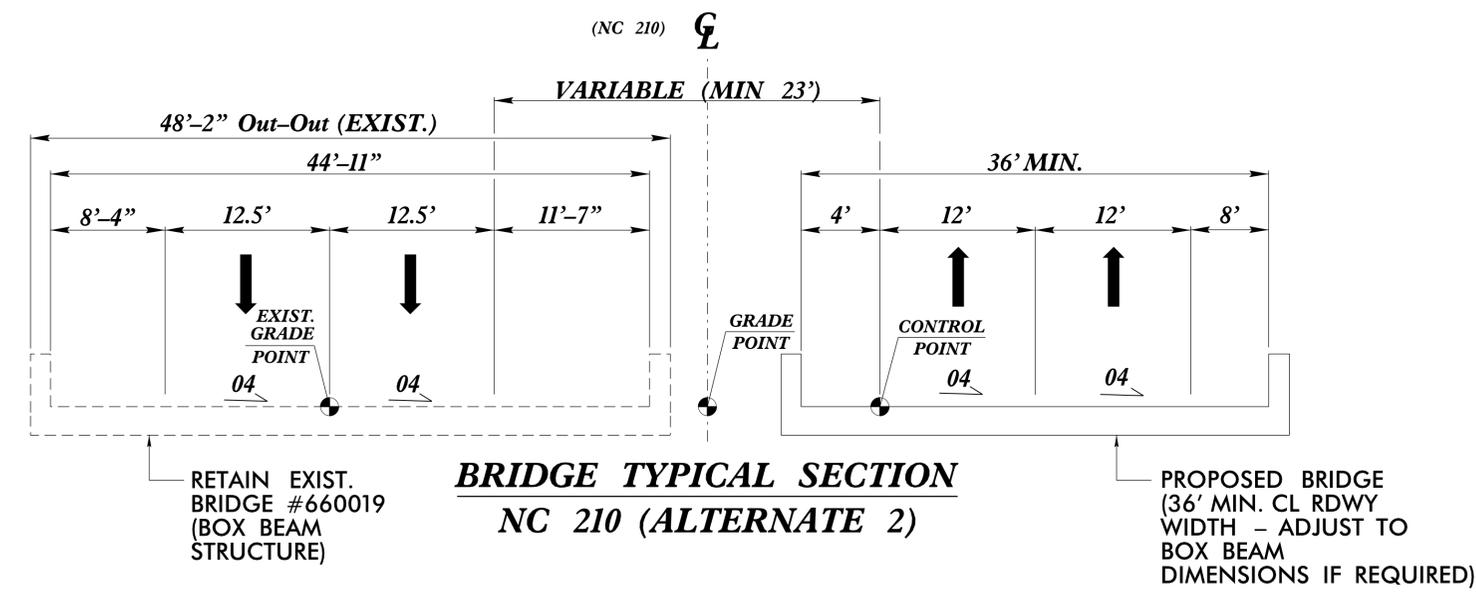
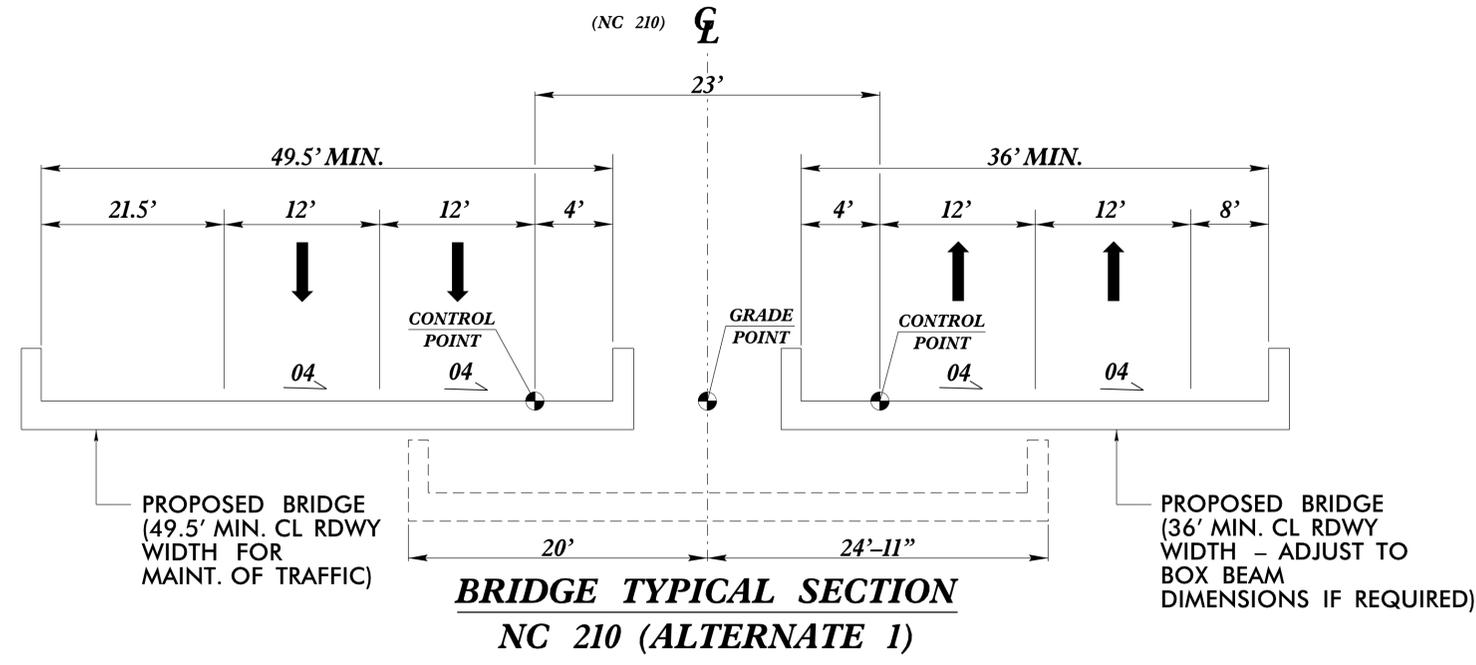
Date:
JULY 2019

Figure

3f

6/2/09

PROJECT REFERENCE NO. <i>U-5949</i>	SHEET NO. <i>2A-2</i>
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared in the Office of: SUMMIT DESIGN AND ENGINEERING SERVICES	NC FIRM LICENSE No. P-0339 504 Woodlawn Drive Hillsborough, NC 27278 (919) 732-2883 (919) 732-6676 (FAX)



15-JUL-2016 15:20
15-0845-01.dwg
Laurie.Hobbs



May 14, 2019

Ms. Suzanne Young
PE, President
Three Oaks Engineering
324 Blackwell Street, Suite 1200
Durham, NC 27701

RE: N.C. Department of Transportation (NCDOT) Project No. U-5949, widening of NC 210 from US 17 to Old Folkstone Road

Dear Ms. Young:

Thank you for contacting the North Carolina Coastal Land Trust (NCCLT) regarding NCDOT's proposed widening of N.C. Highway 210 in Onslow County (Project No. U-5949). As I highlighted in an earlier email to you, NCCLT owns 240.68 acres of land, our Everett Creek Preserve, along N.C. Highway 210 in Sneads Ferry. NCCLT is very concerned about the proposed highway widening as it may impact this nature preserve.

NCCLT purchased 148.35 acres of the preserve in July 2007 (Phase I) for \$3,445,000 with \$1,722,500 in grant funding from North Carolina Clean Water Management Trust Fund (CWMTF) and \$1,722,500 from the U.S. Department of the Navy (Navy). The State of North Carolina has a conservation easement over this portion of the property recorded at Deed Book 2916, Pages 113-126 in the Onslow County Registry. The Navy has a restrictive easement over this property as well recorded in Deed Book 2916, Pages 97-103.

NCCLT purchased the remaining 92.33 acres of the preserve in October 2011 (Phase II) for \$1,237,500 with \$495,000 in grant funds from the CWMTF and \$742,500 from the Navy. A State Clean Water Management Trust Fund conservation easement for this portion of the property was recorded at Deed Book 3670, Pages 175-195 and a Navy restrictive easement was recorded at Deed Book 3670, Pages 166-174. Both the Phase I and Phase II easements protect the conservation and military values of the property. NCCLT manages the property as a nature preserve and has done considerable work to enhance and restore longleaf pine habitat. NCCLT has also used the property for passive recreation and environmental education and has a pending license agreement with Nature Connect, an organization dedicated to outdoor environmental education for children.

NCCLT's Everett Creek Preserve has mature, high quality longleaf pine forest in the western portion of the preserve and along Highway 210. NCCLT received Partners for Fish and Wildlife Habitat grant funds from the U.S. Fish and Wildlife Service (USFWS) to do some

mechanical mid-story removal as well as prescribed burning to enhance longleaf pine habitat for the federally endangered red-cockaded woodpecker as well as to plant longleaf pine in previously cleared areas. Under our USFWS Partners Agreement, NCCLT may be required to pay back any funds used for areas that would be destroyed or taken out of conservation.

Due to the high ecological significance of the longleaf pine ecosystem (considered an endangered ecosystem by U.S. Department of the Interior) as well as the significant amount of funding contributed by both the State of North Carolina and U.S. Department of the Navy to conserve this property (and their respective perpetual easements), NCCLT requests consideration by NCDOT to avoid the Everett Creek Preserve in the proposed widening of Highway 210. Since the Everett Creek Preserve is adjacent to Dixon Elementary School with a traffic light at the intersection of Betty Dixon Road and Highway 210, perhaps this section of road (that then goes into a business district), could be designed at a lower speed which might reduce the need to widen this section.

NCCLT would like to meet with you as well as NCDOT representatives to further discuss the possibility of avoidance of the Everett Creek Preserve as design plans continue for the proposed widening of N.C. Highway 210 in Onslow County. Thank you for your consideration.

Respectfully,

A handwritten signature in black ink, appearing to read "Janice L. Allen", written in a cursive style.

Janice L. Allen
Deputy Director

Cc: Camilla Herlevich, Executive Director, NCCLT, Wilmington, NC
Lee Leidy, Attorney and Northeast Region Director, Elizabeth City, NC