

MINIMUM CRITERIA DETERMINATION CHECKLIST

<b>STIP Project No.</b>	<b>B-4501</b>
<b>WBS Project No.</b>	<b>38392.1.2</b>

**Project Location:** Replace Bridge No. 325 over branch of Northeast Cape Fear River on SR 1004 (Rones Chapel Road) in Duplin County (Figure 1).

**Project Description:** The purpose of this project is to replace Duplin County Bridge No. 325 on SR 1004 (Rones Chapel Road) over branch of Northeast Cape Fear River, which is structurally deficient. Bridge No. 325 is 60 feet long. The replacement structure will be a bridge approximately 90 feet long providing a minimum 30 feet clear deck width. The bridge will include two 11-foot lanes and 4-foot offsets as a minimum. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 320 feet from the northwest end of the new bridge and 390 feet from the southeast end of the new bridge. The approaches will be widened to include a 30-foot pavement width providing two 11-foot lanes and 4-foot paved shoulders on each side. A six-foot shoulder width will be provided on each side (9-foot shoulders where guardrail is included). The roadway will be designed as a Rural Local Collector using Sub-Regional Tier Guidelines with a 60 mile per hour design speed.

Traffic will be detoured off-site during construction (Figure 2).

**Purpose and Need:** NCDOT Bridge Management Unit records indicate Bridge No. 325 has a sufficiency rating of 25.7 out of a possible 100 for a new structure.

The bridge is considered structurally deficient due to substructure condition appraisal of 4 out of 9 according to Federal Highway Administration (FHWA) standards. However, the bridge also has a low appraisal for structural evaluation.

Built in 1970, the substructure of Bridge No. 325 has timber elements that are forty-seven years old and reinforced concrete caps. Timber components have a typical life expectancy between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few elements are damaged or prematurely deteriorated. However, past a certain degree of deterioration, most timber elements become impractical to maintain and upon eligibility are programmed for replacement. The timber piles of Bridge No. 325 have experienced longitudinal cracking and deterioration up to 5" deep. Continued deterioration of the piles cannot be addressed by reasonable maintenance activities.

Additionally, components of both the concrete superstructure and substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The substructure is exhibiting spalling with exposed rebar along concrete caps. The steel bearing plates have corroded with up to 50% section loss. The posted weight limit on the bridge is 23 tons

for single vehicles and 26 tons for truck-tractor semi-trailers. The bridge is approaching the end of its useful life.

**Anticipated Permit or Consultation Requirements:** A Nationwide Permit (NWP) 3 and corresponding Water Quality Certification 4085 will likely be required for this project.

The U.S. Army Corps of Engineers (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 from the N.C. Division of Water Resources will be needed.

In addition, this project will require a U.S. Coast Guard exemption letter (Appendix B). Bridge No. 325 crosses an U.S. Coast Guard Unobstructed Water. It is not tidally influenced and the bridge is located approximately 60 miles upstream from the tidally influenced waters. The bridge has a normal water depth of six feet. The vertical clearance from water surface to bottom of bridge is approximately three feet and the horizontal clearance between bents is 30 feet. The proposed structure will maintain the existing vertical clearance and improve horizontal clearance by removing the existing center bent.

**Special Project Information:**

**Estimated Costs:** The estimated costs, based on 2017 prices, are included in Table 1.

**Table 1  
Estimated Costs**

Structure	\$ 301,950
Roadway Approaches	\$ 200,395
Structure Removal	\$ 40,260
Misc. & Mob.	\$ 104,395
Eng. & Contingencies	\$ 103,000
Total Construction Cost	\$ 750,000
Right-of-Way Cost*	\$ 24,300
Utility Cost	\$ 0
Total Project Cost	\$ 774,300

\* Right-of-way estimate is contingent upon the assumption that the James C. Grady property septic drain system is not located within the proposed right-of-way.

**Estimated Traffic:**

Year 2015	-	2600 vpd
Year 2040	-	3300 vpd
TTST	-	1%
Dual	-	2%

**Accidents:** Traffic Engineering has evaluated a recent four-year period and found two crashes occurring in the vicinity of the project. None were associated with the geometry of the bridge or its approach roadways.

**Design Exceptions:** There are no anticipated design exceptions for this project.

**Pedestrian and Bicycle Accommodations:** This portion of SR 1004 (Rones Chapel Road) is not part of a designated bicycle route nor is it listed in the State Transportation Improvement Program (STIP) as a bicycle project. Sidewalks do not exist on the existing bridge and there is no indication of pedestrian usage on or near the bridge. Neither permanent nor temporary bicycle or pedestrian accommodations are required or recommended for this project.

**Bridge Demolition:** Bridge No. 325 is constructed entirely of timber, reinforced concrete, and steel and it should be possible to remove with no resulting debris in the water based on standard demolition practices.

**Alternatives Discussion:**

**No-Build** - The no-build alternative would result in eventually closing the road which is unacceptable given the traffic served by SR 1004 (Rones Chapel Road).

**Rehabilitation** - The bridge was constructed in 1970 and the timber materials within the bridge are reaching the end of their useful life. Rehabilitation would require replacing the timber piles which would constitute effectively replacing the bridge.

**Onsite Detour** - An onsite detour was not evaluated due to the presence of an acceptable offsite detour.

**Staged Construction** - Staged construction was not considered because of the availability of an acceptable offsite detour.

**New Alignment** - Given that the alignment for SR 1004 (Rones Chapel Road) is acceptable and an acceptable offsite detour exists, a new alignment was not considered as an alternative.

**Offsite Detour** - Bridge No. 325 will be replaced on the existing alignment (Figure 3). Traffic will be detoured offsite (Figure 2) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include James Street, Church Street, N.C. 55, S.R. 1937 (Kelly Springs Road), S.R. 1558 (Graham Road), and S.R. 1559 (Jones Turner Road). The detour for the average road user would result in eight minutes additional travel time (4.3 miles additional travel). Up to a 12-month duration of construction is expected on this project. The Division agrees with the use of an offsite detour.

**Agency Comments:** NCDOT has sought input from the following agencies as a part of the project development process: U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish & Wildlife Service, N.C. Department of Environment & Natural resources, N.C. Department of Cultural Resources (SHPO), N.C. Wildlife Resources Commission, Eastern Carolina Rural Planning Organization, Duplin County, Duplin County Schools, and Duplin County Emergency Services.

The N.C. Division of Parks and Recreation requested that NCDOT consider including a small parking area and canoe launch as part of the bridge replacement (Appendix B). The Department indicated that provision of a parking area and launch as part of this project would likely not be pursued for several reasons. Bridge No. 325 is being replaced on existing location and a canoe launch and service path would create additional wetland impacts. Additionally, the bridge is located adjacent to a sharp curve which is not a suitable place to site a driveway.

**Public Involvement:** A landowner notification letter was sent to all property owners directly affected by this project. Property owners were invited to comment. No comments have been received to date.

Based upon coordination with the NCDOT Public Involvement Group, a Public Meeting was held for this project on March 30, 2017. A newsletter announcing the meeting was sent to all those living adjacent to the bridge and along the detour route. Seven citizens attended the meeting in addition to the project team staff. No comments have been received to date.

**PART A: MINIMUM CRITERIA**

- |   | YES                                 | NO                       |
|---|-------------------------------------|--------------------------|
| 1. Is the proposed project listed as a type and class of activity which would qualify as a Non-Major Action under the Minimum Criteria rules? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If "yes", under which category?   | Category # 9                        |                          |

**PART B: MINIMUM CRITERIA EXCEPTIONS**

- |  | YES                      | NO                                  |
|--|--------------------------|-------------------------------------|
| 2. Would the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the NCDOT?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Will the proposed activity endanger the existence of a species on the Department of Interior's threatened and endangered species list?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- |     |   |                          |                                     |
|-----|---|--------------------------|-------------------------------------|
| 7.  | Would the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or groundwater impacts?       | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8.  | Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits of shellfish, finfish, wildlife, or their natural habitats? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9.  | Is the proposed project likely to precipitate significant, foreseeable alterations in land use, planned growth, or development patterns?                              | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. | Does the proposed action divide or disrupt an established community?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. | Does the proposed action bypass an existing community?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. | Is the proposed action likely to have a significant detrimental impact on ambient noise levels for adjoining areas?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13. | Is the proposed action likely to have a significant impact on travel patterns or traffic volumes?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 14. | Does the proposed action require the relocation of significant numbers of people?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS**

- | <u>Ecological Impacts</u>  | YES                                 | NO                                  |
|--|-------------------------------------|-------------------------------------|
| 15. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 16. Does the action require the placement of fill in waters of the United States?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 17. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs? | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 18. Does the project require stream relocation or channel changes?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 19. Is the proposed action located in an Area of Environmental Concern, as defined in the Coastal Area Management Act?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Cultural Resources

- |     |   |                          |                                     |
|-----|---|--------------------------|-------------------------------------|
| 20. | Will the project have an “effect” on a property or site listed on the National Register of Historic Places?                 | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 21. | Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Documentation for Parts A, B, and C:

**Question 15:** The U.S. Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the USACE and NCDOT for the northern long-eared bat (NLEB) (*Myotis septentrionalis*) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is **May Affect, Likely to Adversely Affect**. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Duplin County.

**Question 16:** One jurisdictional wetland was identified within the study area (Figure 4). Wetland classification, quality rating data, and estimated impacts are presented in Table 2. The wetland is within the Cape Fear River basin (USGS Hydrologic Unit 03030007). Additional information regarding this wetland can be found in the Natural Resources Technical Report.

**Table 2**  
**Jurisdictional Characteristics and Estimated Wetland Impacts**

Map ID	NCWAM Classification	Hydrologic Classification	NCDWR Wetland Rating	Impacts* (acres)
WA & WB	Bottomland Hardwood Forest	Riparian	59	0.47

Note: \* Impacts are based on construction limits plus a 25-foot buffer

Exact impact acreages, including required extent of fill placement, will be determined during final design. The amount of water resources and wetlands within the study area, described above, represents the maximum extent of potential fill in Waters of the United States.

Reviewed by:

10/13/2017

Date

DocuSigned by:  
*Bob Deaton*  
54D17B5EF76644B...

Bob Deaton  
Project Development Engineer  
Project Delivery Team

10/27/2017

Date

DocuSigned by:  
*Brian Yamamoto*  
C40E81E700254E9...

Brian Yamamoto, PE  
Deputy Team Lead  
Project Delivery Team

Prepared by:

10/11/2017

Date

DocuSigned by:  
*Aileen S. Mayhew*  
B8BA757910214D2...

Aileen S. Mayhew, PE  
Mott MacDonald

## **PROJECT COMMITMENTS**

**Duplin County  
Bridge No. 325 on SR 1004  
Over Branch of Northeast Cape Fear River  
WBS No. 38392.1.2  
STIP No. B-4501**

**October 2017**

### **Division Three Construction, Resident Engineer's Office - Offsite Detour**

In order to have time to adequately reroute school buses, Duplin County Schools will be contacted at (910) 296-0479 at least one month prior to road closure.

Duplin County Emergency Services will be contacted at (910) 296-2160 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

### **Hydraulics Unit - FEMA Coordination**

The Hydraulics Unit will coordinate with the N.C. Floodplain Mapping Program (FMP) to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

### **Hydraulics Unit / Division 3 Construction - FEMA**

This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division Resident Engineer shall submit sealed as-built construction plans to the Hydraulics Unit upon project completion certifying the project was built as shown on the construction plans.

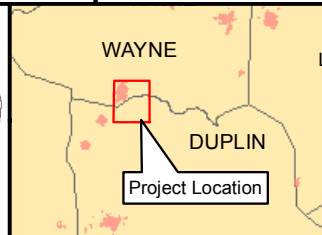
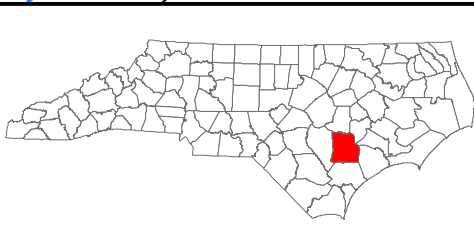
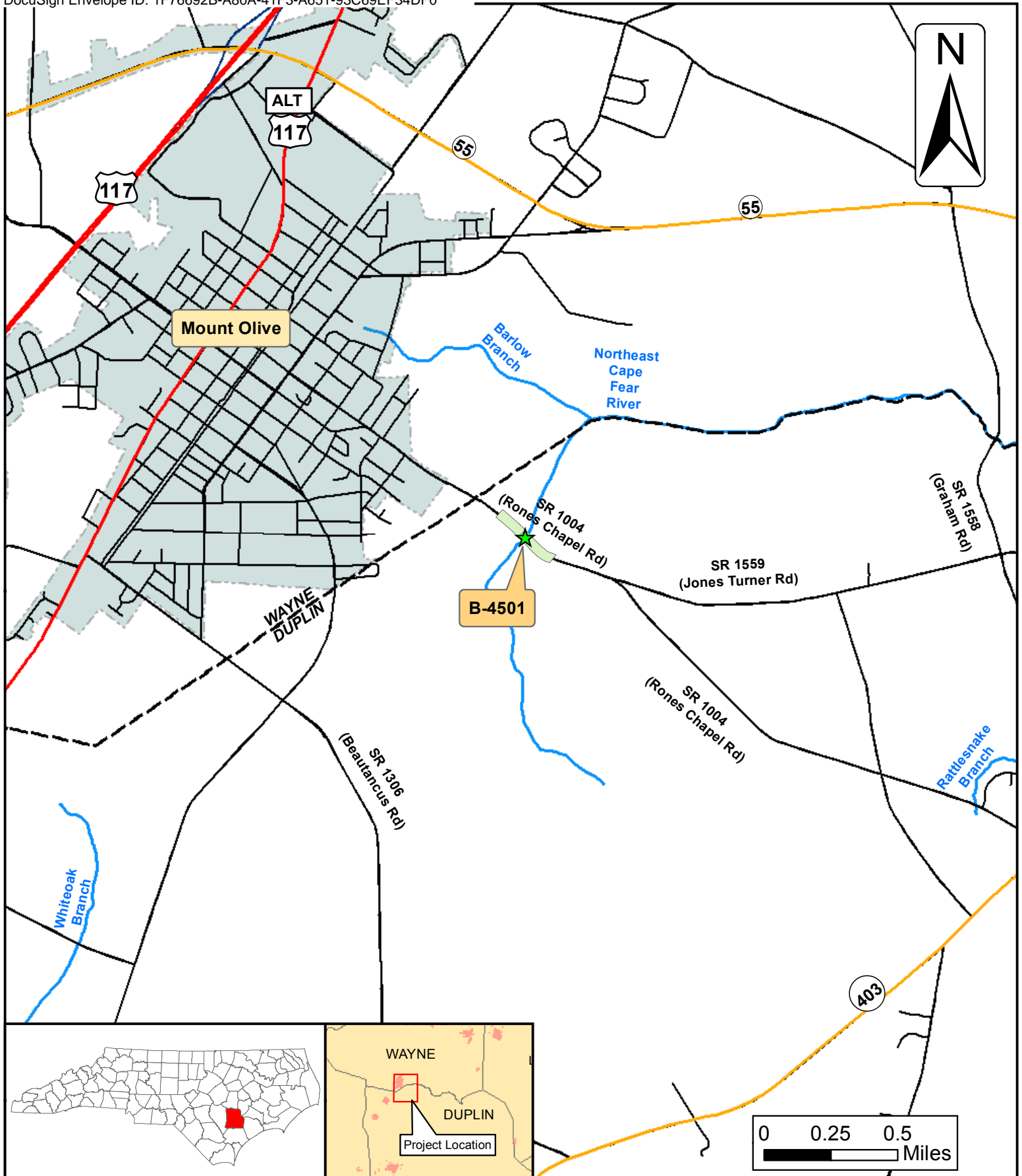
### **GeoEnvironmental Section - Impacts to Underground Storage Tanks (UST's)**

If further design indicates potential impacts to UST's, preliminary site assessments for soil and groundwater contamination will be performed prior to right of way purchase.



# **APPENDIX A**

## **Figures**



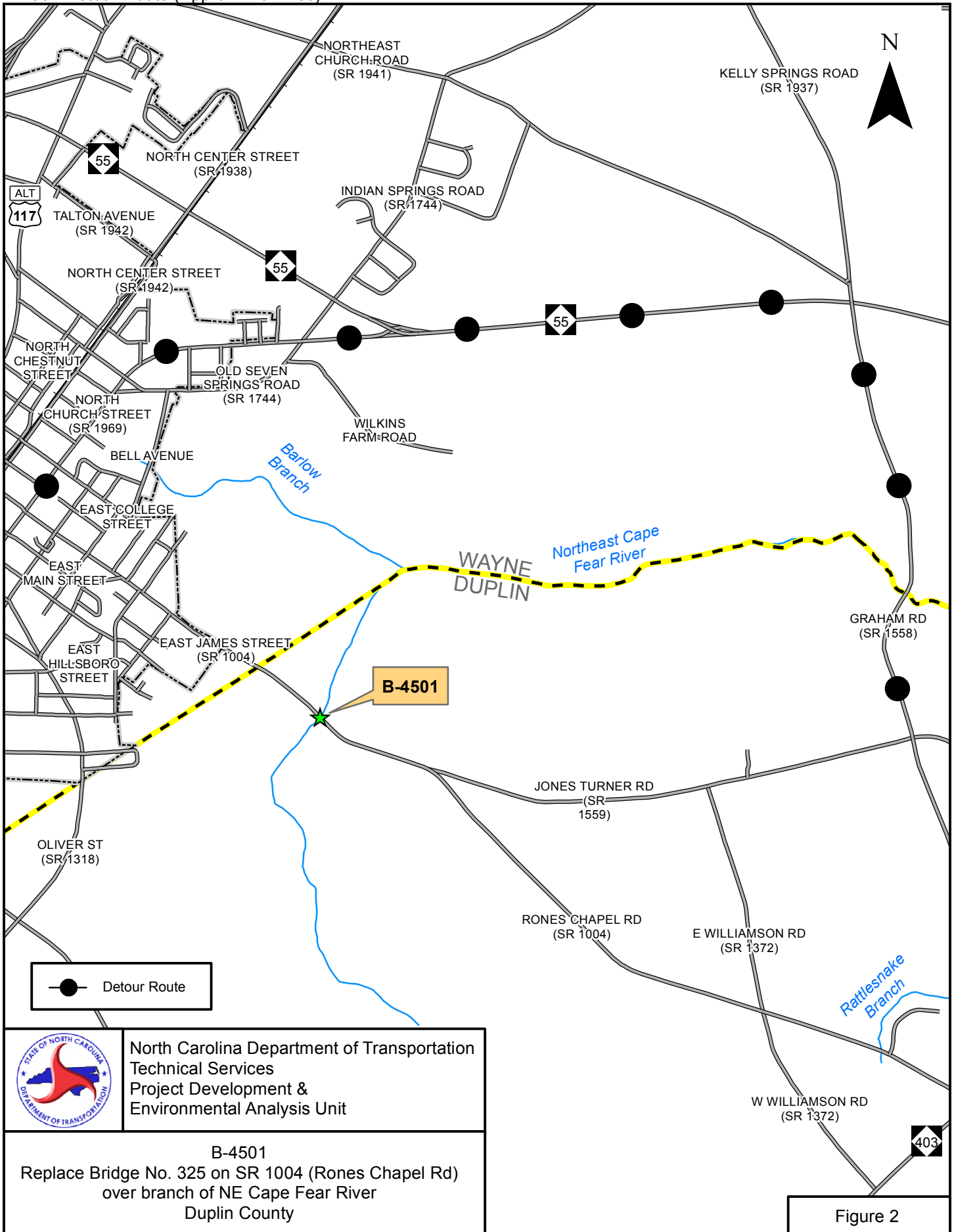
North Carolina Department of Transportation  
Project Development & Environmental Analysis Unit

B-4501  
Replace Bridge No. 325 on SR 1004 (Rones Chapel Rd)  
over branch of NE Cape Fear River  
Duplin County

Vicinity Map

Figure 1

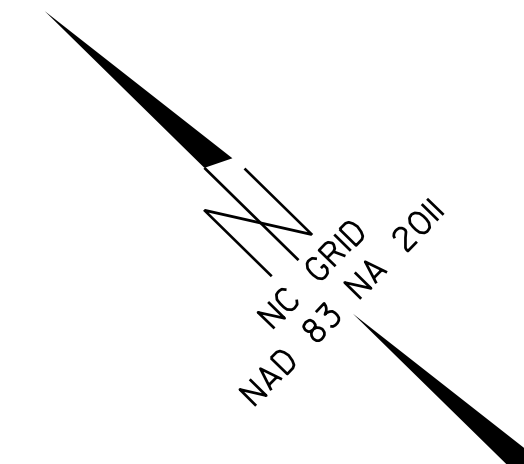
B-4501 Detour Route (Approx. 4.3 miles)



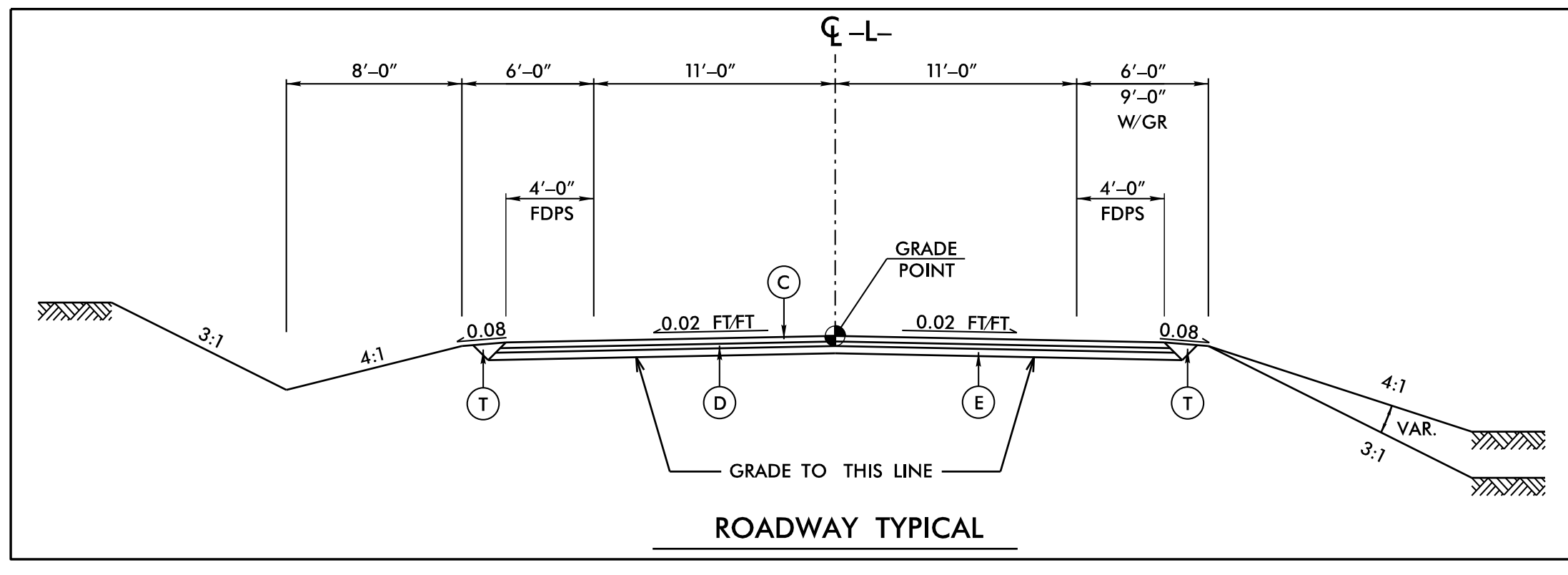
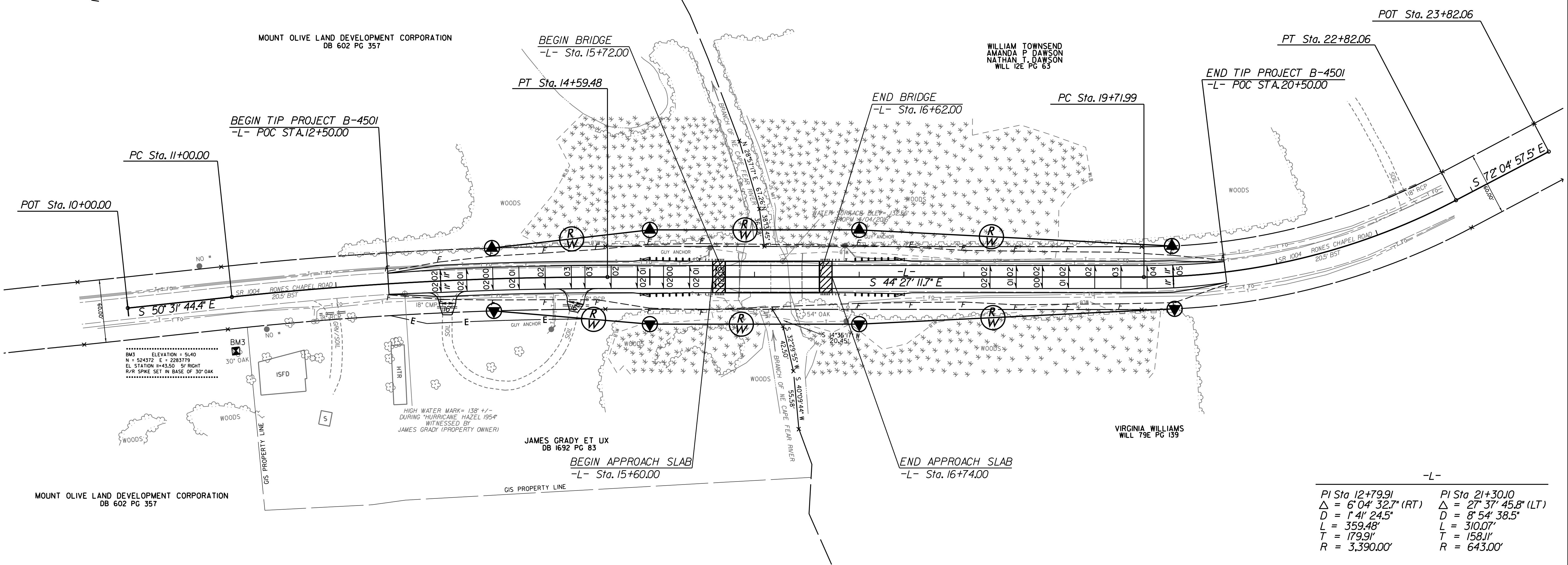
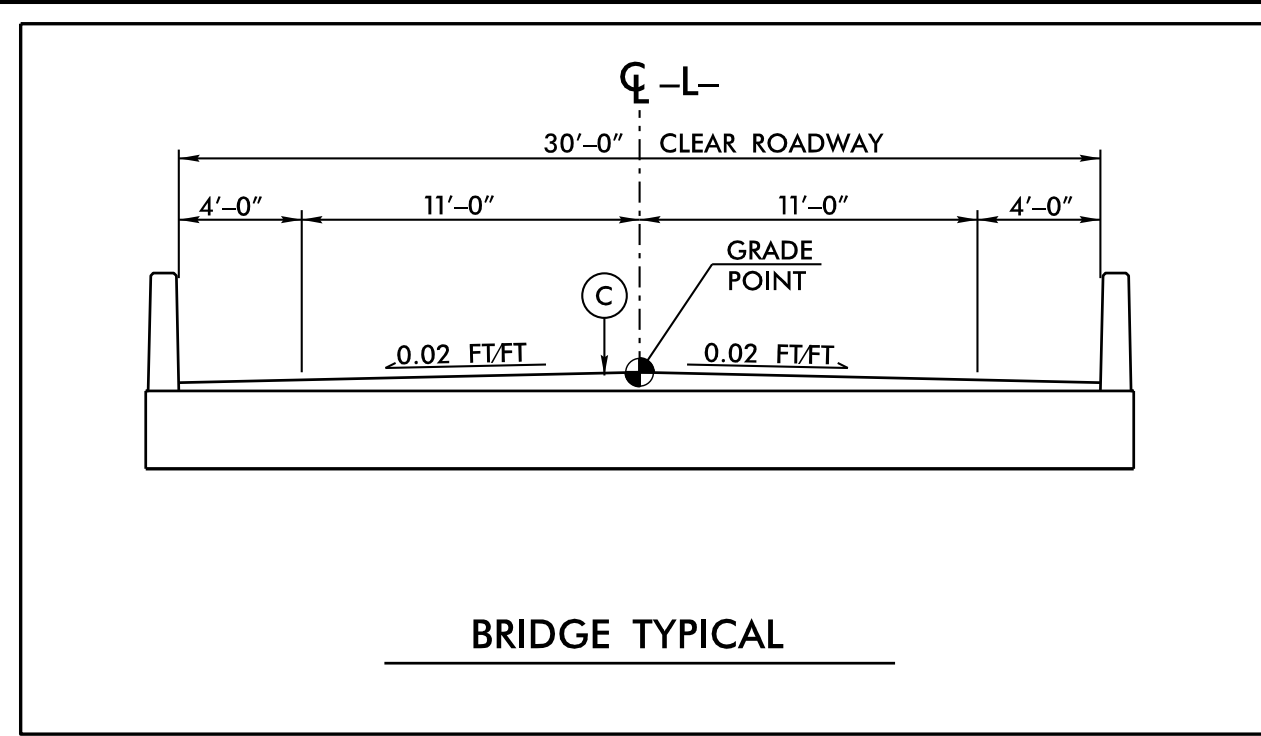
# DUPLIN COUNTY

## B-4501

### REPLACE IN PLACE WITH OFFSITE DETOUR



PROJECT REFERENCE	
B-4501 - DUPLIN 325	Figure 3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-06697 Prepared in the Office of:	
<b>M</b> PO Box 700 Fuquay-Varina, NC 27526 MOTT MACDONALD www.mottmac.com	
HORIZONTAL SCALE 0 25' 50'	
BRIDGE APPROACH SLAB FOR -L- PROFILE SEE SHEET 5	






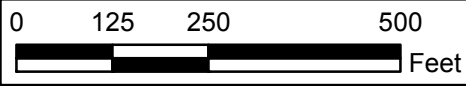
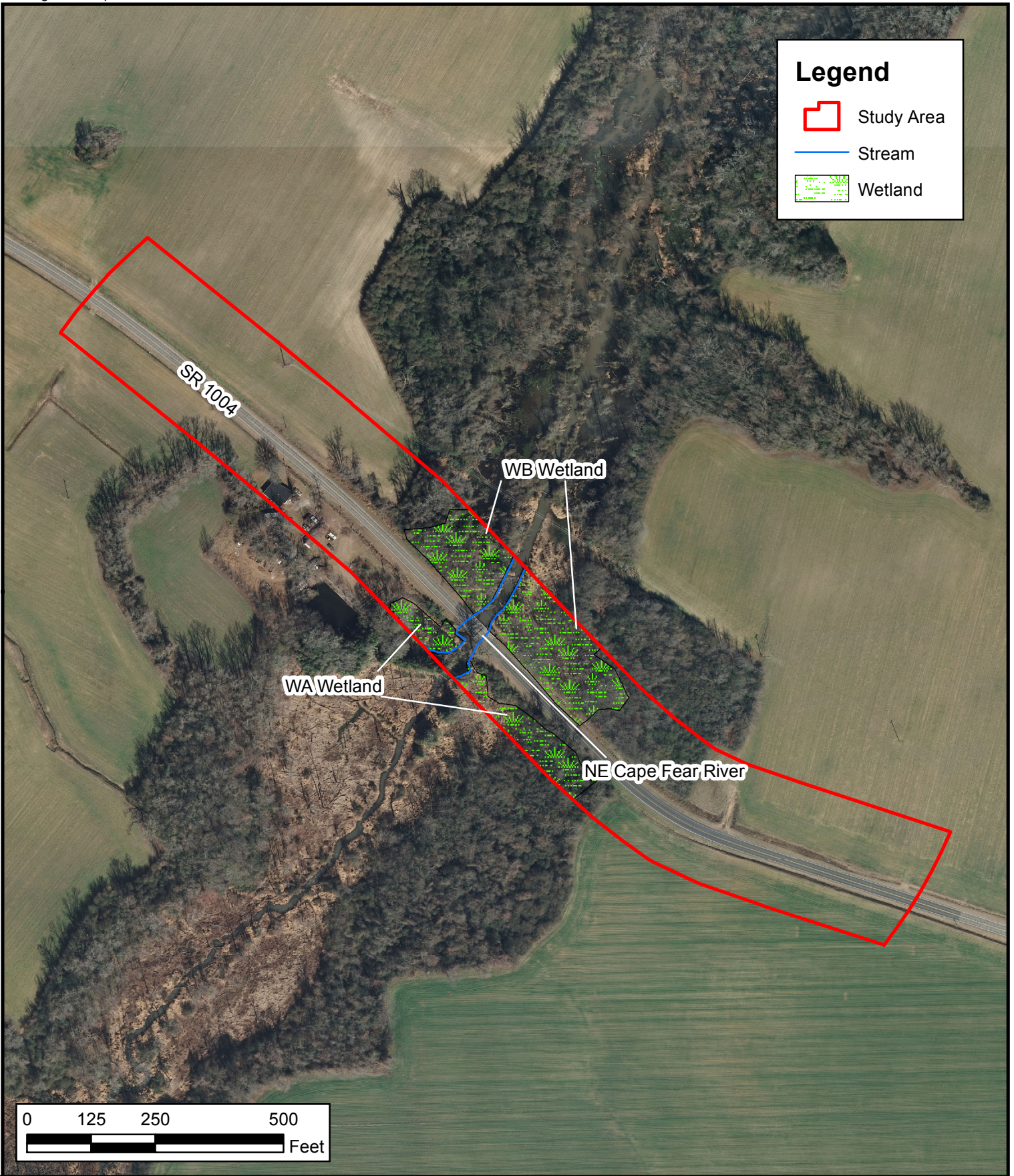
PI Sta 12+79.91 $\Delta = 6' 04' 32.7''$ (RT) $D = 1' 41' 24.5''$ $L = 359.48'$ $T = 179.91'$ $R = 3,390.00'$	PI Sta 21+30.10 $\Delta = 27' 37' 45.8''$ (LT) $D = 8' 54' 38.5''$ $L = 310.07'$ $T = 158.11'$ $R = 643.00'$
--	---

ANTICIPATED DESIGN DATA			
DESIGN SPEED	= 60 MPH	DESIGN EXCEPTION	= NONE
ADT (2015)	= 2600	DESIGN STANDARDS	= SUB REGIONAL TIER
ADT (2040)	= 3300	MAX GRADE	= 5%
TTST	= 1%	K SAG	= 136
DUALS	= 2%	K CREST	= 151
K	= 10	SE MAX	= 06
DHV	= 55	CLASSIFICATION	= RURAL MINOR COLLECTOR
MIN. RADIUS	= 1330	TERRAIN	= LEVEL

11/21/2016 4:12:24 PM  
 R:\Roadway\Proje\B4501\rdy-psh.dgn  
 Ph: 156655

### Legend

-  Study Area
-  Stream
-  Wetland



NORTH CAROLINA DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PROJECT DEVELOPMENT AND  
ENVIRONMENTAL ANALYSIS UNIT

**JURISDICTIONAL FEATURES MAP  
BRIDGE REPLACEMENT  
BRIDGE NO. 325 OVER  
NE CAPE FEAR RIVER**

TIP PROJECT B-4501  
2013 AERIAL



County:	Duplin
Div: 3 TIP #	B-4501
WBS:	38392.1.2
Date:	April 2015

**Figure 4**

# **APPENDIX B**

## **Reference Letters**

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
United States Coast Guard  
Fifth Coast Guard District

431 Crawford Street  
Portsmouth, VA 23704-5004  
Staff Symbol: (dpb)  
Phone: (757) 398-6587  
Fax: (757) 398-6334  
Email: [Mickey.D.Sanders2@uscg.mil](mailto:Mickey.D.Sanders2@uscg.mil)  
Or [CGDFiveBridges@uscg.mil](mailto:CGDFiveBridges@uscg.mil)

16590  
21 JUN 2017

Mr. Bob Deaton, P.E.  
NCDOT – Project Development & Environmental Analysis  
1020 Birch Ridge Drive  
Raleigh, NC 27610

Dear Mr. Deaton:

Coast Guard review of your proposed project as provided in your email dated May 16, 2017, is complete.

Based on the documentation provided and our research, it is determined that a Coast Guard bridge permit will not be required for the proposed SR 1004 (Rones Chapel Road) Bridge across the Northeast Cape Fear River, at mile 116.4 and position (35° 11.4N, 78° 02.9W), at Duplin County, NC.

In addition, navigational lighting at the aforementioned bridge is not required, as per Title 33 Code of Federal Regulations, Part 118.40 (b).

The fact that a Coast Guard bridge permit is not required does not relieve you of the responsibility for compliance with the requirements of any other Federal, State, or local agency who may have jurisdiction over any aspect of the project.

If you have any further questions, please contact Mr. Mickey Sanders at the above listed address or telephone number.

Sincerely,

A handwritten signature in blue ink that reads "Hal R. Pitts".

HAL R. PITTS  
Bridge Program Manager  
By direction of the Commander  
Fifth Coast Guard District

Copy: CG Sector North Carolina, Waterways Management  
U. S. Army Corps of Engineers, Wilmington District



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

April 24, 2015

Aileen S. Mayhew, PE  
Transportation Planning Engineer  
Hatch Mott MacDonald  
7621 Purfoy Rd, Suite 115  
Fuquay-Varina, NC 27526

Subject: Scoping/Start of Study – Proposed Replacement of Bridge No. 325 on SR 1004 (B-4501)

Dear Ms. Mayhew,

The North Carolina Division of Parks and Recreation (DPR) has reviewed the project area using available Geographic Information System (GIS) data of the proposed replacement of Bridge No. 325 on SR 1004 over the Northeast Cape Fear River in Duplin County, NC. DPR understands that NCDOT is seeking comments from stakeholders in preparation for project development per your e-mail sent February 5, 2015.

DPR's State Trails Program is responsible for coordinating the planning, development and management of this states paddle trails. Based on our review, DPR respectfully requests that NCDOT consider including a small parking area and canoe launch as part of this bridge replacement. This would allow for pedestrian and paddle access to the Cape Fear River.

Ms. Jan Trask with DPR's State Trails Program can be reached at (919) 707-9325 if there are additional questions or concerns. DPR appreciates the opportunity to comment on this proposed project.

Sincerely,

Justin Williamson  
Environmental Review Coordinator  
Division of Parks and Recreation  
NC Department of Environment and Natural Resources  
(919) 707-9329 / [Justin.williamson@ncparks.gov](mailto:Justin.williamson@ncparks.gov)



15-01-0002



## HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

### PROJECT INFORMATION

<b>Project No:</b>	B-4501	<b>County:</b>	Duplin
<b>WBS No.:</b>	38392.1.2	<b>Document Type:</b>	PCE or CE
<b>Fed. Aid No:</b>		<b>Funding:</b>	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
<b>Federal Permit(s):</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Permit Type(s):</b>	Unknown at this time
<b><u>Project Description:</u></b> Replace Bridge No. 325 on SR 1004 (Rones Chapel Road) over branch of Northeast Cape Fear River. Project length is approximately 2,000 feet. It is unknown if there will be an off-site detour at this time. Bridge 325 is structurally deficient with a structural evaluation of 3 out of 9.			

### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

**Description of review activities, results, and conclusions:**

Review of HPO quad maps, HPOweb GIS mapping, historic designations roster, and indexes was conducted on 1/20/15. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects (APE). Built in 1970, Bridge No. 325 is not yet eligible for listing to the National Register of Historic Places (NRHP) due to insufficient age. Duplin County GIS mapping and property records revealed no other properties over the age of fifty years old that could be considered potentially eligible for the NRHP. The APE lies in northern Duplin County outside of Mount Olive. It consists of mostly cleared farmland, forested areas, and a couple of residences. Therefore, because there are no historic or potential historic properties within the project APE, a survey is not required for this project.

**Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:**

HPO quad maps, HPOweb GIS mapping, Google Street View, Google maps and Duplin County property records are considered valid tools for the purposes of determining the likelihood of historic resources being present. A survey is not required for this project.

**SUPPORT DOCUMENTATION**

Map(s)     Previous Survey Info.     Photos     Correspondence     Design Plans

**FINDING BY NCDOT ARCHITECTURAL HISTORIAN**

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

  
\_\_\_\_\_  
NCDOT Architectural Historian

1/21/15  
\_\_\_\_\_  
Date

15-01-0002



## NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



### PROJECT INFORMATION

Project No: **B-4501** County: **Duplin**  
 WBS No: **38392.1.2** Document: **PCE OR CE**  
 F.A. No: **N/A** Funding:  State  Federal

Federal Permit Required?  Yes  No Permit Type: **undetermined**

**Project Description:** NCDOT proposes to replace Bridge No. 0325 on SR 1004 (Rones Chapel Road) over a branch of the Northeast Cape Fear River in Duplin County. The project was originally reviewed for archaeological compliance and level of effort in March, 2015. The project was then described as having a study area of approximately 2,000 ft. and a width of 250 ft. with greater emphasis to the north, about 11.5 acres. At that point, no alternatives have been forwarded, though the expanded study area on the north side allows for a possible on-site detour. The entire study area was considered the Area of Potential Effects for the project, allowing for multiple design options including a possible on-site detour on the north side of the existing bridge. An archaeological survey was recommended on an "Archaeological Survey Required Form" dated March 25, 2015. Since that time, however, designs have been proposed, resulting in a much reduced APE. The current plans, attached to this form, does not include an on site detour and is also very much shorter, reducing from 2000 feet to 800 feet. As a smaller replace-in-place project with an offsite detour, impacts are contained along the existing transportation facility and no further consideration or archaeological survey is required. The project is state funded, though USACE permitting will be required, therefore Section 106 of the National Historic Preservation Act applies.

### SUMMARY OF CULTURAL RESOURCES REVIEW

**Brief description of review activities, results of review, and conclusions:**

Please reference the project's March 25, 2015 "Archaeological Survey Required Form" for a detailed analysis of soils, topography, and extent of modern disturbances that tend to favor poor archaeological integrity. The form discusses that the surrounding wetlands close to the bridge generally have low probability for containing archaeological resources but points out that there may be conditions favorable to finding archaeological sites, perhaps intact, on the higher ground to either end of the then 2000-ft project length. Since the current length and width of the project has been reduced by more than half, the project APE now contains a large portion of wetland soils and none of the higher, drained, level soils at the creek margins that has higher probability of intact, significant resources. There are no known archaeological sites within the APE.

**Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:**

As a direct result of a refined, smaller preferred alternative with an offsite detour, the current APE no longer contains much high or moderate probability landforms for containing archaeological sites. Since this will be a replace in place bridge replacement and maintains the same alignment, the majority of the APE has already been disturbed by the existing transportation facility, leaving little likelihood of intact, significant resources. No archaeological survey is required for the preferred alternative.

15-01-0002

**SUPPORT DOCUMENTATION**

See attached:  Map(s)     Previous Survey Info     Photos     Correspondence  
 Photocopy of County Survey Notes    Other:

**FINDING BY NCDOT ARCHAEOLOGIST**

NO ARCHAEOLOGY SURVEY REQUIRED

  
NCDOT ARCHAEOLOGIST

**12/14/2016**

Date