

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project No.	<u>B-4620</u>
W.B.S. No.	<u>38438.1.2</u>
Federal Project No.	<u>BRZ-2455(3)</u>

A. Project Description:

The proposed project will replace Robeson County Bridge Nos. 121 and 123 on SR 2455 (White Pond Road) over Ashpole Swamp. (See **Figures 1-4**.) Bridge Nos. 121 and 123 are both 81 feet long with a 24-foot clear roadway width (two 10-foot travel lanes and two-foot shoulders).

The proposed project is included in the 2016-2025 North Carolina *State Transportation Improvement Program* (STIP). The project is scheduled for right-of-way acquisition and construction in state fiscal years 2017 and 2018, respectively.

The replacement structure for Bridge No. 121 will be a bridge approximately 145 feet long, and the replacement structure for Bridge No. 123 will be a bridge approximately 130 feet long. Both bridges will have a 30-foot, 10-inch clear roadway width and will include two 11-foot travel lanes and a 3-foot, 4-inch offset to the bridge rail on one side and 5-foot, 6-inch offset on the other. The roadway grade of the new structures will be approximately one foot higher than the existing structures to maintain the hydraulic requirements. The proposed project will extend from approximately 170 feet west of Bridge No. 121 to approximately 170 feet east of Bridge No. 123, a distance of approximately 930 feet.

SR 2455 will be widened to two 11-foot lanes with six-foot grassed shoulders (two-foot paved) within the project limits. A small amount of additional right-of-way will be required at the proposed bridge crossing. The typical sections and preliminary roadway design are included in **Figures 2 and 5**.

Traffic will be maintained by an off-site detour during construction (see **Figure 1**). The offsite detour for this project will include SR 2455 (E. Raynham Road), NC 130, and NC 904. The need for school bus turnarounds will be determined through coordination with Robeson County Public Schools during final design. Potential impacts of bus turnarounds on both ends of the project have been considered in this document.

B. Purpose and Need:

The purpose of the proposed project is to replace an obsolete bridge.

NCDOT Bridge Management Unit records indicate Bridge No. 121 has a sufficiency rating of 18.1 (May 2014) and Bridge No. 123 has a sufficiency rating of 16.9 (May 2014) out of a possible 100 for a new structure.

Bridge Nos. 121 and 123 are considered structurally deficient due to the superstructure condition appraisals of 7 out of 9 and substructure condition appraisals of 3 out of 9 (Bridge No. 121) and 4 out of 9 (Bridge No. 123) according to Federal Highway Administration (FHWA) standards. The bridges also meet the criteria for functionally obsolete due to structural appraisals of 3 out of 9 and deck geometry appraisals of 4 out of 9.

Bridge Nos. 121 and 123 were built in 1948. The superstructures of Bridge Nos. 121 and 123 have timber elements that are 68 years old. 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. In addition, the substandard deck width of the bridges is becoming increasingly unacceptable and replacement of the bridge will result in safer traffic operations.

Existing SR 2455 in the vicinity of Bridge Nos. 121 and 123 has two 10-foot lanes and six-foot grassed shoulders.

Bridge Nos. 121 and 123 carry 900 vehicles per day (2013) with 1,500 vehicles per day projected for the future (2035). The posted weight limits for Bridge No. 121 are 23 tons for single vehicles and 40 tons for truck tractor semi-trailers. The posted weight limits for Bridge No. 123 are 22 tons for single vehicles and 38 tons for truck tractor semi-trailers.

C. Proposed Improvements:

Circle one or more of the following Type II improvements which apply to the project:

1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)
 - e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane)
 - i. Slide Stabilization
 - j. Structural BMP's for water quality improvement

2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - l. Installing bridge safety hardware including bridge rail retrofit
3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.
 - a. Rehabilitating, reconstructing, or replacing bridge approach slabs
 - b. Rehabilitating or replacing bridge decks
 - c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
 - d. Replacing a bridge (structure and/or fill)
4. Transportation corridor fringe parking facilities.
5. Construction of new truck weigh stations or rest areas.
6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.
7. Approvals for changes in access control.
8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such

construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.

12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3(b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.
13. Acquisition and construction of wetland, stream and endangered species mitigation sites.
14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

D. Special Project Information:

The current estimated cost for the project is as follows:

Construction Cost	\$791,397
Right-of-Way Acquisition	\$7,500
Utilities	\$1,008,603
Total Project Cost	\$1,807,500

Estimated Traffic:

Current (2013)	-	900 vpd
Design Year (2035)	-	1,500 vpd
TTST	-	2%
Dual	-	6%

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

Pedestrian and Bicycle Accommodations: This portion of SR 2455 is not a part of a designated bicycle route nor is it listed in the Transportation Improvement Program (STIP) as a bicycle project. Due to the rural nature of the project area, very little bicycle or pedestrian activity is expected along this portion of SR 2455. Neither permanent nor temporary bicycle nor pedestrian accommodations are required for this project.

Bridge Demolition: Bridges No. 121 and 123 are constructed entirely of timber and steel with the superstructure and bridge rails constructed of reinforced concrete. It should be possible to remove these bridges with no resulting debris in the water based on standard demolition practices.

Utilities: Utility impacts are considered low. An underground telephone line is along the northwest shoulder of SR 2455 throughout the project limits. A power

line is aerial along the southeast side of the project. There is evidence of a water line on the southeast shoulder of SR 2455. There is no evidence of Cable TV, sanitary sewer or gas utilities at or near the project.

Alternatives Discussion:

No-Build – The no-build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 2455.

Rehabilitation – The bridges were constructed in 1948, and the timber materials within the bridges are reaching the end of their useful life. Rehabilitation would require replacing the timber components which would constitute effectively replacing the bridges.

Offsite Detour – Bridge Nos. 121 and 123 will be replaced on the existing alignment. Traffic will be detoured offsite (see **Figure 1**) during the construction period. The offsite detour for this project will include SR 2455 (E. Raynham Road), NC 130, and NC 904. The majority of traffic on the road is through traffic. The detour for the average road user would result in approximately 6 minutes additional travel time (5.5 miles additional travel). Up to a 12-month duration of construction is expected on this project.

Robeson County Emergency Services has indicated the detour is acceptable. Seven school bus routes use this section of SR 2455 for a total of 14 daily trips. The Robeson County Public Schools Transportation Director indicated the effect of the approximately five mile off-site detour would be severe, based on the overtime required to pay school bus drivers and recommends the project be constructed during the summer if possible. The need for school bus turnarounds will be coordinated with Robeson County Public Schools during final design. Potential impacts of bus turnarounds on both ends of the project have been considered in this document. The condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement.

New Alignment/Onsite Detour – Constructing the proposed bridges on new alignment would result in substantially higher stream and wetland impacts and construction costs. Given that the alignment of SR 2455 in the area is acceptable, a new alignment was not considered a viable alternative.

Floodplains: Robeson County is a participant in the National Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). Based on the most current information available from the NC Floodplain Mapping Program (FMP), there is a designated flood hazard zone at this stream crossing. The proposed bridge replacement will provide equivalent or greater conveyance than that of the existing bridge. NCDOT will ensure compliance with applicable floodplain management ordinances.

The Hydraulics Unit will coordinate with the NC 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).

Permit Requirements: A Nationwide Permit (NWP) 23 will likely be applicable for this project. A NWP No. 33 may also apply for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction and rehabilitation. The US Army Corps of Engineers holds the final discretion as to what permit will be required. If a Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NC Division of Water Resources will also be required.

Agency Coordination: NCDOT has sought input from the following agencies as a part of the project development process: US Army Corps of Engineers, US Coast Guard, US Environmental Protection Agency, US Department of Agriculture, NC Department of Environment and Natural Resources (now NC Department of Environmental Quality), NC Wildlife Resource Commission, and Robeson County. No special concerns regarding the project were expressed by any agency.

Public Involvement: A project initiation and notification letter was sent out to each adjacent property owner in February 2013. Property owners were notified environmental surveys were being conducted on or near their property and were invited to comment and submit general questions about the project. No comments were received. It was determined that a newsletter and workshop were not necessary.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions

<u>ECOLOGICAL</u>	<u>YES</u>	<u>NO</u>
(1) Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<u> X </u>
(2) Does the project involve habitat where federally listed endangered or threatened species may occur?	<input checked="" type="checkbox"/>	<u> </u>
(3) Will the project affect anadromous fish?	<input type="checkbox"/>	<u> X </u>
(4) If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) of an acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	<u> </u>	<input checked="" type="checkbox"/>
(5) Will the project require the use of U. S. Forest Service lands?	<input type="checkbox"/>	<u> X </u>
(6) Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<u> X </u>
(7) Does the project involve waters classified as Outstanding Resources Waters (ORW) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<u> X </u>
(8) Will the project require fill in waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<u> X </u>
(9) Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?	<input type="checkbox"/>	<u> X </u>
<u>PERMITS AND COORDINATION</u>	<u>YES</u>	<u>NO</u>
(10) If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)?	<input type="checkbox"/>	<u> N/A </u>
(11) Does the project involve Coastal Barrier Resources Act resources?	<input type="checkbox"/>	<u> X </u>
(12) Will a U. S. Coast Guard permit be required?	<input type="checkbox"/>	<u> X </u>
(13) Could the project result in the modification of any existing regulatory floodway?	<input type="checkbox"/>	<u> X </u>
(14) Will the project require any stream relocations or channel changes?	<input type="checkbox"/>	<u> X </u>

<u>SOCIAL, ECONOMIC, AND CULTURAL RESOURCES</u>		<u>YES</u>	<u>NO</u>
(15)	Will the project induce substantial impacts to planned growth or land use for the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(16)	Will the project require the relocation of any family or business?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(17)	Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(18)	If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(19)	Will the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(20)	Will the project substantially alter the usefulness and/or land use of adjacent property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(21)	Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(22)	Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(23)	Is the project anticipated to cause an increase in traffic volumes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(24)	Will traffic be maintained during construction using existing roads, staged construction, or on-site detours?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(25)	If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(26)	Is there substantial controversy on social, economic, or environmental grounds concerning the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(27)	Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(28)	Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(29)	Will the project affect any archaeological remains which are important to history or pre-history?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- (30) Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)? **X**
- (31) Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended? **X**
- (32) Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers? **X**

F. Additional Documentation Required for Unfavorable Responses in Part E

Response to Question 2:

Suitable habitat for the American alligator (listed as threatened due to similarity of appearance) is present in the project area. Species listed as T (S/A) do not require Section 7 consultation with the US Fish and Wildlife Service. Construction activities may temporarily displace individual alligators if any are present in the study area. However, proposed activities are not likely to have any permanent detrimental impacts to this species. A review of NC Natural Heritage Program (NCNHP) records, updated October 2015, indicates no known occurrences of American alligator within one mile northeast of the study area.

Although not specifically listed for Robeson County, the northern long-eared bat (NLEB) has been listed as threatened by the US Fish and Wildlife Service. The Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration, the US Army Corps of Engineers and NCDOT for the NLEB 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 Robeson County.

Response to Question 4:

The proposed project will affect approximately 0.33 acre of wetlands (measured from slope stakes plus 10 feet for the roadway impacts and assuming a potential school bus turnaround impacting wetlands). It is expected a Nationwide Permit (NWP) 23 will likely be applicable for this project. A NWP No. 33 may also apply for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The US Army Corps of Engineers holds the final discretion as to what permit will be required. If a Section 404 permit is required, then a Section

401 Water Quality Certification (WQC) from the NC Division of Water Resources will also be required.

G. CE Approval

TIP Project No.	<u>B-4620</u>
W.B.S. No.	<u>38438.1.2</u>
Federal Project No.	<u>BRZ-2455(3)</u>

Project Description:

The proposed project will replace Robeson County Bridge Nos. 121 and 123 on SR 2455 (White Pond Road) over Ashpole Swamp. (See **Figures 1-4.**) Bridge Nos. 121 and 123 are 81 feet long with a 24-foot clear roadway width (two 10-foot travel lanes and two-foot shoulders).

The proposed project is included in the 2016-2025 North Carolina *State Transportation Improvement Program* (STIP). The project is scheduled for right-of-way acquisition and construction in state fiscal years 2017 and 2018, respectively.

The replacement structure for Bridge No. 121 will be a bridge approximately 145 feet long, and the replacement structure for Bridge No. 123 will be a bridge approximately 130 feet long. Both bridges will have a 30-foot, 10-inch clear roadway width and will include two 11-foot travel lanes and a 3-foot, 4-inch offset to the bridge rail on one side and 5-foot, 6-inch offset on the other. The roadway grade of the new structures will be approximately one foot higher than the existing structures to maintain the hydraulic requirements. The proposed project will extend from approximately 170 feet west of Bridge No. 121 to approximately 170 feet east of Bridge No. 123, a distance of approximately 930 feet.

Categorical Exclusion Action Classification:

 TYPE II(A)
 X TYPE II(B)

Prepared By:

<u>11/29/2016</u>	DocuSigned by: <i>Meredith Van Duyn</i>
Date	Meredith H. Van Duyn, PE, Project Manager RS&H Architects-Engineers-Planners, Inc.

Approved:

<u>11/30/2016</u>	DocuSigned by: <i>Joseph H. Miller</i>
Date	Joseph Miller, PE, Project Planning Engineer NCDOT Project Development and Environmental Analysis

<u>11/30/2016</u>	<i>James A. McInnis, Jr.</i>
Date	James A. McInnis, Jr., PE, Project Engineer NCDOT Project Development and Environmental Analysis

For Type II(B) Projects:

<u>11/30/2016</u>	DocuSigned by: <i>Ronald Lucas Jr.</i>
Date	John F. Sullivan, III, PE, Division Administrator Federal Highway Administration

PROJECT COMMITMENTS:

**Robeson County
Bridges No. 121 and 123 on SR 2455 (White Pond Road)
over Ashpole Swamp
Federal Aid Project No. BRZ-2455(3)
WBS No. 38438.1.2
TIP Project No. B-4620**

NCDOT Division 6

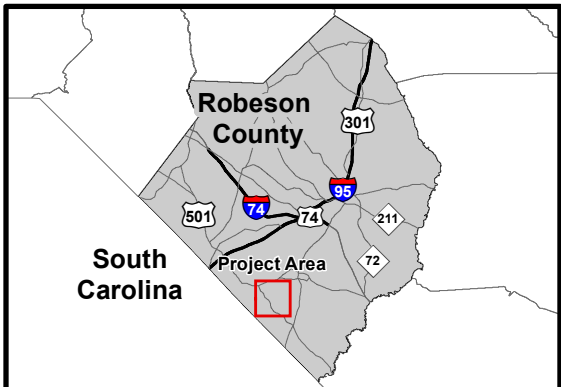
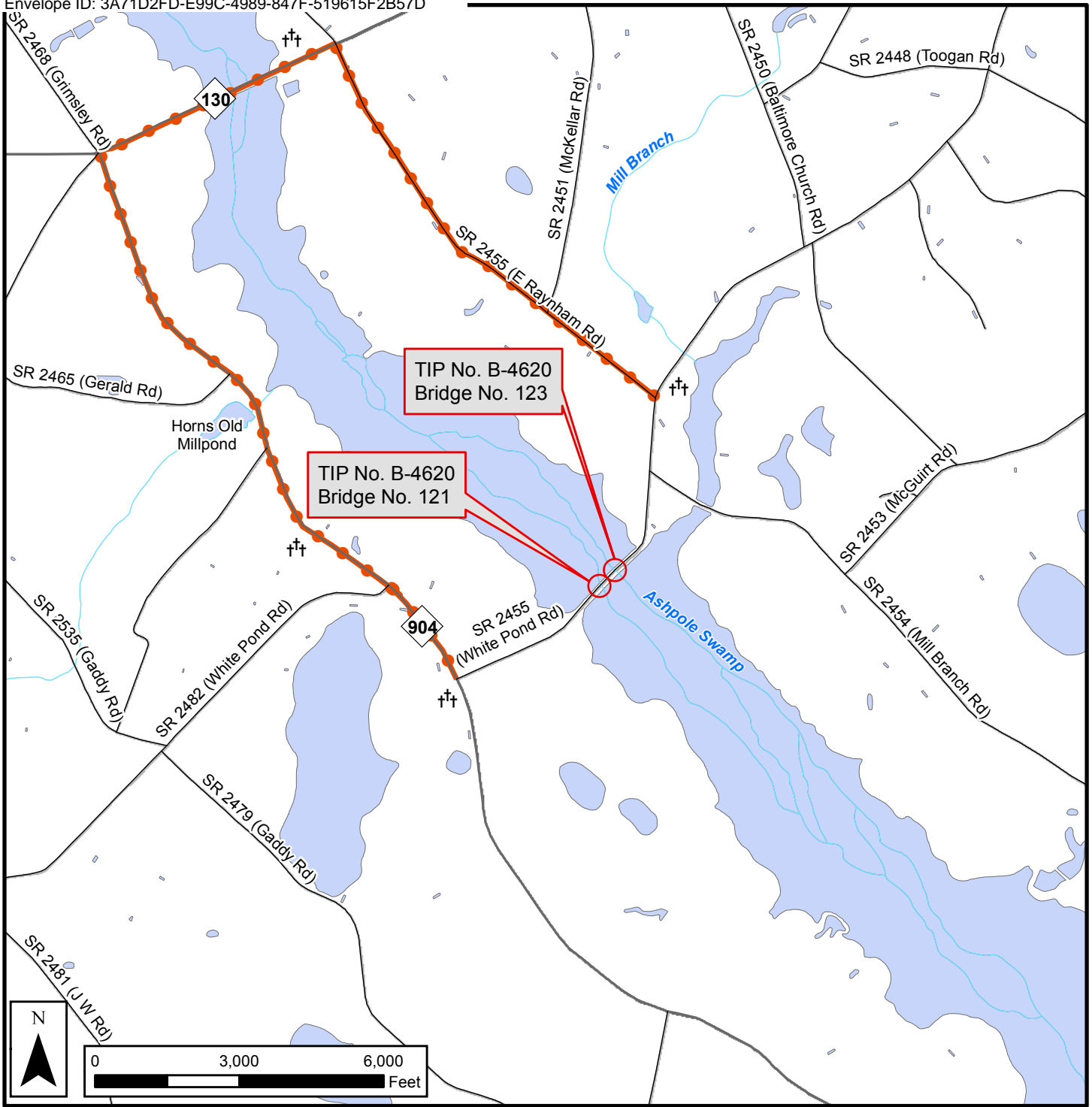
The Division will coordinate with Robeson County Public Schools and local emergency response officials at least one month prior to road closure to allow time for alternate route planning. The need for school bus turnarounds will be determined through coordination with Robeson County Public Schools during final design.

Public Schools of Robeson County: (910) 671-6000
Robeson County Emergency Services: (910) 671-3150
Robeson County EMS: (910) 671-3250

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

NCDOT Hydraulics Unit

The Hydraulics Unit will coordinate with the NC 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).



Legend

- Detour Route
- Cemetery













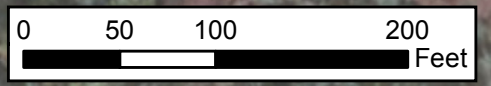
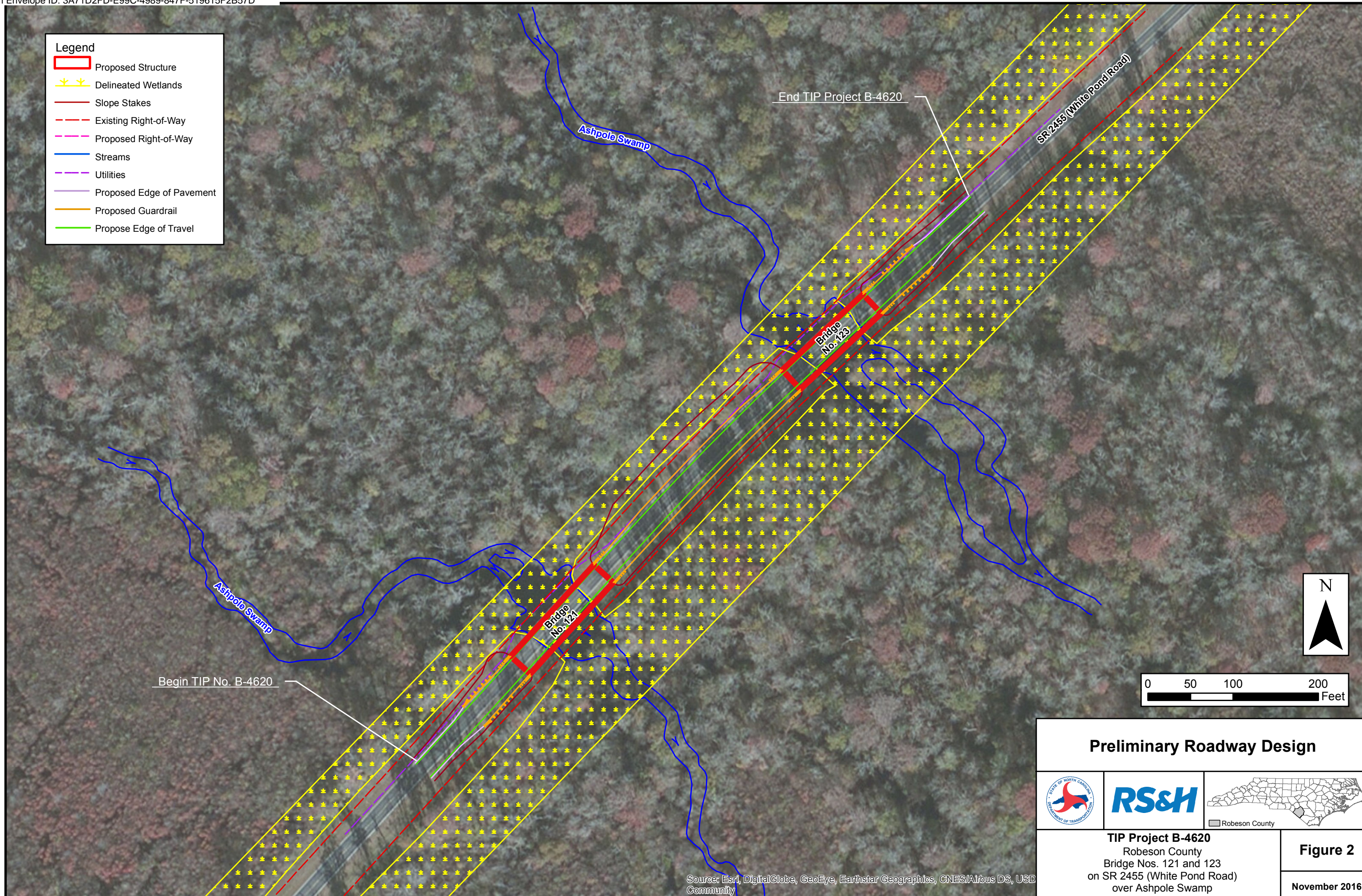
Bridge Nos. 121 and 123 on SR 2455
(White Pond Road) over Ashpole Swamp
Robeson County



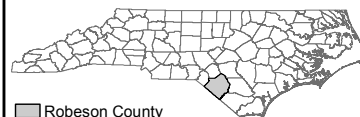
TIP No. B-4620
Division: 6

Figure: 1
Vicinity Map

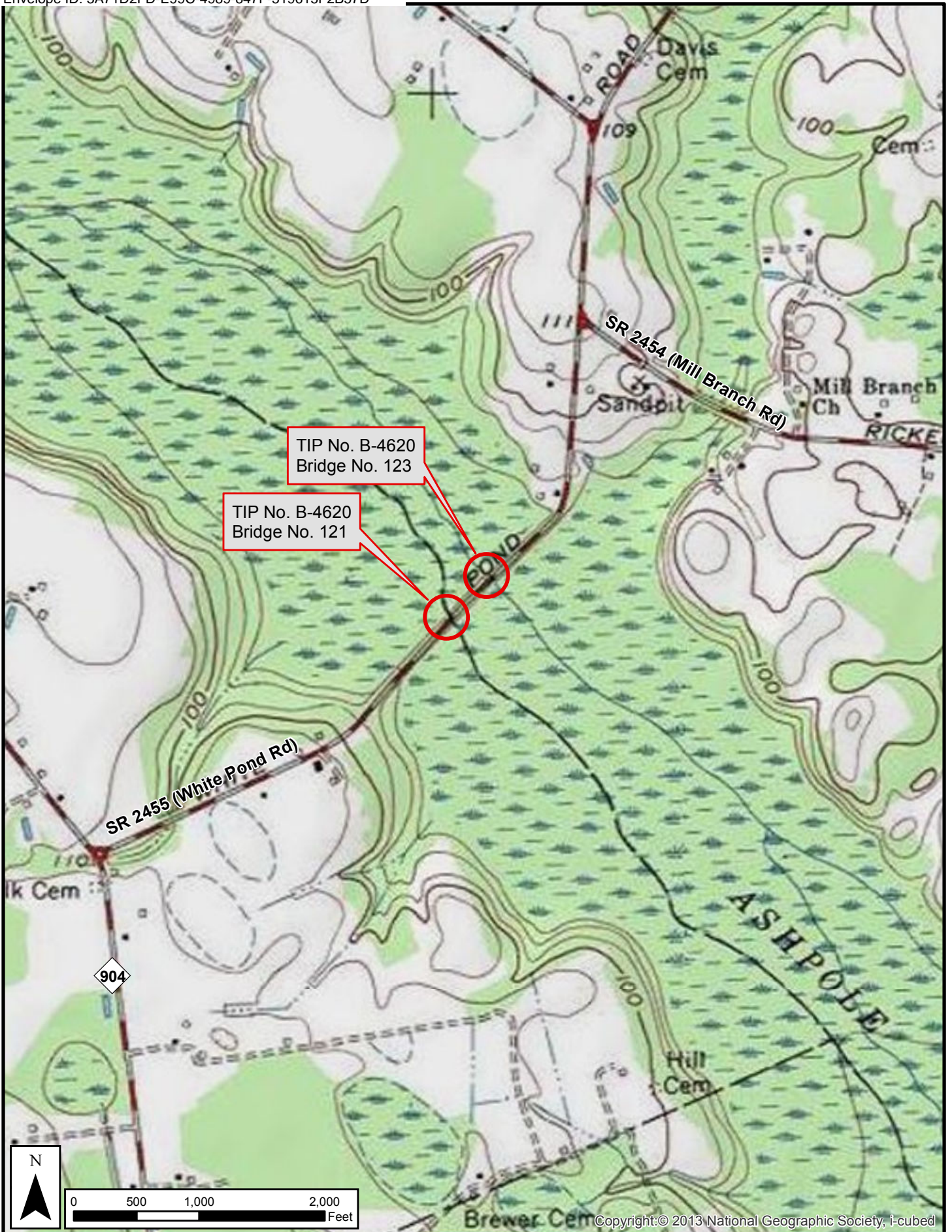
Legend

-  Proposed Structure
-  Delineated Wetlands
-  Slope Stakes
-  Existing Right-of-Way
-  Proposed Right-of-Way
-  Streams
-  Utilities
-  Proposed Edge of Pavement
-  Proposed Guardrail
-  Propose Edge of Travel



Preliminary Roadway Design		
		 Robeson County
TIP Project B-4620 Robeson County Bridge Nos. 121 and 123 on SR 2455 (White Pond Road) over Ashpole Swamp		Figure 2 November 2016

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA Community



RS&H

Bridge Nos. 121 and 123 on SR 2455
(White Pond Road) over Ashpole Swamp
Robeson County

TIP No: B-4620
Division: 6

Figure: 3
Topographic
Map



Bridge No. 121 facing SW toward NC 904



Bridge No. 123 facing SW toward NC 904



East side of Bridge No. 121



East side of Bridge No. 123



Ashpole Swamp east side of Bridge No. 121



Ashpole Swamp west side of Bridge No. 123

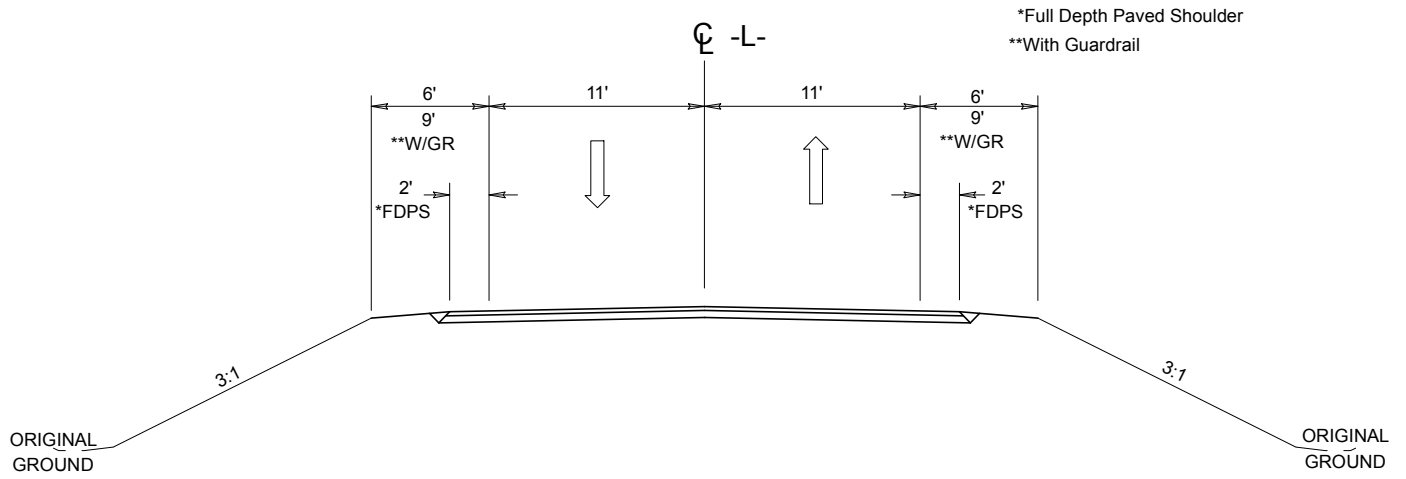


Bridge Nos. 121 and 123 on SR 2455
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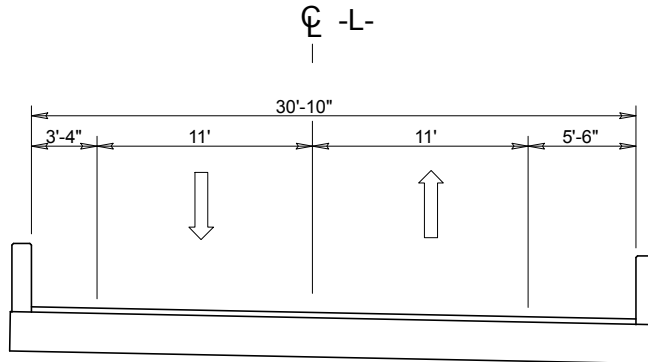
TIP No: B-4620

Division: 6

Figure: 4
Project
Area Photos



TYPICAL SECTION FOR SR 2455



TYPICAL SECTION ON PROPOSED BRIDGES



Bridge Nos. 121 and 123 on SR 2455
(White Pond Road) over Ashpole Swamp
Robeson County

TIP No. B-4620

Division: 6

Figure: 5
Typical
Sections