

North Carolina Department of Transportation

NEPA/SEPA Consultation Form

STIP Project No.	B-5626
WBS Element	45581.1.1
Federal Aid Project No.	N/A

A. Project Description, Location, and Purpose:

The purpose of this project is to replace Bridge No. 31 on NC 50 over Sandy Run Swamp in Onslow County that was originally built in 1956. The bridge is currently considered structurally deficient with a sufficiency rating of 34.63 out of a possible 100 for a new structure and a substructure rating of 3 out of 9. The existing 5-span bridge is 86 feet long with 2 lanes. It consists of a reinforced concrete deck over timber joists. The existing bridge has recently been repaired and the repairs have improved its rating; however, the bridge is still deficient and further rehabilitation of the existing bridge is not practical due to its age and deteriorated condition.

The replacement structure will be a three-span bridge approximately 135 feet long on existing alignment. The bridge will include two 12-foot travel lanes. The proposed improvements to the approach roadway will extend approximately 450 feet from the northeast end of the new bridge and 350 feet from the southwest end of the new bridge. Two-foot paved shoulders will be provided on each side with 6- to 9-foot grassed shoulders where guardrail is included. The roadway is a major collector. It will be designed using NCDOT Sub-Regional Tier design standards with a 60 mile per hour design speed.

Traffic will be detoured off-site during construction. The offsite detour for this project would include SR 1105 and SR 1104 (Haws Run Road and Padgett Road, respectively). The detour for the average road user would result in approximately 8.75 miles of additional travel. Due to the volume of summer tourist traffic, construction will be planned for the offseason.

B. Consultation Phase: (Check one)

- ☐ Right-of-Way
- ☒ Construction
- ☐ Other: Identify the trigger – (e.g., design change, change in impacts)

C. NEPA/SEPA Class of Action Initially Approved as: (Check one)

- ☒ FHWA Class II Type I(A) CE

8/7/2019

D. Changes in Proposed Action & Environmental Consequences:

Design Changes

A utility construction element was added to the project during Summer 2019 for a waterline relocation. However, this addition was an issue the project team knew would need to be addressed from the project onset. This relocation is confined to the project study area, and occurs within the project right-of-way.

Water Resources

Water resources in the study area are part of the Cape Fear River basin [US Geological Survey (USGS) Hydrologic Unit 03030007]. Sandy Run Swamp was the only stream identified in the study area. Nine jurisdictional wetlands were originally identified within the study area and have changed since the NRTR. After the completion of the NRTR, a Division 3 Verification Meeting was held in January 2017 to review jurisdictional features. At this meeting, NCDOT was instructed to connect Wetlands WH, WG, and WD, remove a ditch connecting two areas of Wetland WB and remove Wetland WF. After these adjustments were made, the number of wetlands decreased to seven wetlands. The seven wetlands verified were: WA, WB1, WB2, WC, WD, WE, and WI (refer to the Jurisdictional Features Map).

Protected Species

As of October 8, 2020, the United States Fish and Wildlife (USFWS) lists seventeen federally protected species, under the Endangered Species Act (ESA), for Onslow County. In addition, the National Marine Fisheries Service (NMFS) lists two federally protected species. For each species, the presence or absence of habitat is included below along with the Biological Conclusion rendered based on survey results. Biological conclusions for all species are found in the table below.

ESA Federally protected species listed for Onslow County

Common Name	Scientific Name	Federal Status	Habitat Present	Biological Conclusion
American alligator	<i>Alligator mississippiensis</i>	Threatened (S/A)	N/A	Not required
Atlantic sturgeon*	<i>Acipenser oxyrinchus oxyrinchus</i>	Endangered	No	No Effect
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGPA	No	No Effect
Cooley's meadowrue	<i>Thalictrum cooleyi</i>	Endangered	Yes	MANLAA
Eastern Black rail	<i>Laterallus jamaicensis</i>	Threatened	No	No Effect
Golden sedge	<i>Carex lutea</i>	Endangered	Yes	MANLAA
Green sea turtle	<i>Chelonia mydas</i>	Threatened	No	No Effect
Hawksbill sea turtle	<i>Eretmochelys imbricate</i>	Endangered	No	No Effect
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	Endangered	No	No Effect
Leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	No	No Effect
Loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	No	No Effect
Piping plover	<i>Charadrius melodus</i>	Threatened	No	No Effect
Pondberry	<i>Lindera melissifolia</i>	Endangered	Yes	No Effect
Red-cockaded woodpecker	<i>Picoides borealis</i>	Endangered	No	No Effect
Rough-leaved loosestrife	<i>Lysimachia asperulaefolia</i>	Endangered	Yes	MANLAA
Rufa red knot	<i>Calidris canutus rufa</i>	Threatened	No	No Effect
Seabeach amaranth	<i>Amaranthus pumilus</i>	Threatened	No	No Effect
Shortnose sturgeon*	<i>Acipenser brevirostrum</i>	Endangered	No	No Effect
West Indian manatee	<i>Trichechus manatus</i>	Endangered	No	No Effect

*NMFS species; S/A = Similarity in appearance; MANLAA – May Affect, Not Likely to Adversely Affect; BGPA - Bald and Golden Eagle Protection Act

Since the completion of the NRTR and MCDC, Cooley's meadowrue, rough-leaved loosestrife and golden sedge were resurveyed by NCDOT biologists on June 13, 2019. No specimens were observed within the study area. However, there are numerous known occurrences of the species within the Pine Savanna Natural Community, located adjacent to the project. This bridge replacement will be a replace in-place and will not disturb the known populations in close proximity.

Cooley's meadowrue

USFWS optimal survey Window: mid-June - early July

Cooley's meadowrue was not found within the study area during the June 13, 2019 resurvey. A review of North Carolina National Heritage Program (NHP) records, updated January 2021 identified that three known populations of Cooley's meadowrue are located within 1.0 mile of the project area. EO ID 17067 is located near the border to the project area, EO ID 5817 is approximately 0.7 mile from the study area, and EO ID 2221 is approximately 0.5 miles away. Cooley's meadowrue biological conclusion of "May Affect, Not Likely to Adversely Affect" remains valid.

Golden sedge

USFWS optimal survey window: mid-April – mid-June

Golden sedge was not found within the study area during the June 13, 2019 resurvey. A review of North Carolina National Heritage Program (NHP) records, updated January 2021 identified that two known populations of golden sedge within one mile of the study area. EO ID 23947 is approximately 0.05 miles from the study area, and EO ID 9521 is 0.5 mile from the study area. Golden sedge biological conclusion of "May Affect, Not Likely to Adversely Affect" remains valid.

Rough-leaved loosestrife

USFWS optimal survey window: mid-May – June

Rough-leaved loosestrife was not found within the study area during the June 13, 2019 resurvey. A review of North Carolina National Heritage Program (NHP) records, updated January 2021 identified that one known population of rough-leaved loosestrife within one mile of the study area. EO ID 29869 is located approximately one mile from the project site. Rough-leaved loosestrife biological conclusion of "May Affect, Not Likely to Adversely Affect" remains valid.

Pondberry

USFWS optimal survey window: February - March and September - October

A survey for pondberry was conducted on October 24, 2019. No pondberry were observed. A review of North Carolina National Heritage Program (NHP) records, updated January 2021, indicates no known occurrences of pondberry species within 1.0 mile of the project area. The biological conclusion for pondberry remains No Effect.

Eastern Black rail

USFWS optimal survey window: year round

One additional species has been added since completion of the NRTR and MCDC. The eastern black rail has been added to the ESA species list for Onslow County. There is no suitable habitat for the eastern black rail in the study area. The study area has forested wetlands and not large marsh areas. A review of North Carolina National Heritage Program (NHP) records, updated January 2021, indicates no known occurrences of eastern black rail within 1.0 mile of the project area. A biological conclusion of No Effect has been given for the eastern black rail.

All other biological conclusions for the ESA species listed above remain valid.

Northern long-eared bat

USFWS optimal survey window: June 1 – August 15

The US Fish and Wildlife Service has revised the previous Programmatic Biological Opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. Although this programmatic covers Divisions 1-8, NLEBs are currently only known in 19 counties, but may potentially occur in 11 additional counties within Divisions 1-8. NCDOT, FHWA, and USACE have agreed to two conservation measures which will avoid/minimize mortality of NLEBs. These conservation measures only apply to the 30-current known/potential counties shown on Figure 2 of the PBO at this time. The programmatic determination for NLEB for the NCDOT program is **May Affect, Likely to Adversely Affect**. The PBO will ensure compliance with Section 7 of the Endangered Species Act for ten years (effective through December 31, 2030) for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Onslow County, where B-5626 is located.

Measures to Avoid/Minimize Mortality

- 1) No tree clearing will occur within 150 feet of a known maternity roost tree May 1 – June 30 in order to protect non-volant young. Winter roost trees are not considered maternity roost trees. After screening the project via NHP, updated in January 2021, no roost trees were identified within the study area for B-5626.
- 2) At individual project sites where a total of 1.0 acre or more of tree clearing will occur, no tree clearing will occur during the portion of the day that the air temperature is <40 degrees Fahrenheit in order to protect NLEBs that may be in torpor. This restriction is only subject to the known/potential range (30 coastal counties) shown in Figure 2 of the 2020 PBO.

Historic Architecture and Archaeology

NCDOT has reviewed the Section 106 effects findings for historic properties within the project's area of potential effects (APE), that were made as part of the NEPA analysis. NCDOT has confirmed that there is no new information that would alter the original Section 106 findings and, therefore, they remain valid.

E. Conclusion:

The above NEPA/SEPA documentation has been reevaluated (as required by either 23 CFR 771 or by NC General Statute Chapter 113A Article 1). It has been determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted in Section D. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

F. Coordination

NCDOT personnel have discussed the current project parameters with qualified NCDOT representatives and FHWA (where applicable). The NCDOT Project Manager, Jacquelyn Bowles, PE, hereby verifies the involvement of the following staff and the incorporation of their technical input:

Design Engineer:	Andy Batts, PE	3/16/21
Environmental Specialist:	Deanna Riffey	3/12/21
FHWA (if applicable):	N/A	
Hydraulic Engineer:	Brian Radakovic	3/2/21

G. Consultation Approval for NCDOT Project B-5626

Prepared By:

3/31/2021

Date

DocuSigned by:
Kim L. Gillespie, PE
Kim L. Gillespie, PE, Project Manager
NCDOT, Project Management Unit

Prepared For:

DocuSigned by:
Jacquelyn Bowles, PE
Jacquelyn Bowles, PE
NCDOT – Structures Management Unit

Reviewed By:

4/1/2021

Date

DocuSigned by:
Colin Mellor
Colin Mellor, Eastern Region Team Lead
NCDOT – Environmental Policy Unit

☒ **Approved** In adherence with 23 CFR 771 (NEPA) or NC General Statute Chapter 113A Article 1 (SEPA), NCDOT approves this Consultation.

or

☐ **Certified** NCDOT staff certifies if FHWA signature was previously required or where changes have resulted in FHWA signature being required.

4/1/2021

Date

DocuSigned by:
David Stutts
David Stutts, PE, PEF Project Engineer, Structures Management Unit
North Carolina Department of Transportation

FHWA Approved: FHWA signature required for Type I(B) CE, Type II(B) CE, Type III CE, FONSI or ROD.

Date

N/A
John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

H. Project Commitments (as of March 12, 2021)

PROJECT COMMITMENTS

T.I.P Project No. B-5626
Replacement of Bridge No. 31 on NC 50 over Sandy Run Swamp
Onslow County
WBS Element 45581.1.1

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Current statuses to the project commitments are printed in italics.

NCDOT Division 3 Construction

A detour will increase ride times for school buses and emergency services. In order to minimize disruptions to these services, NCDOT Division 3 will notify Onslow County Schools (910)-455-2211 at least one month prior to construction in order to have time to adequately reroute school buses. NCDOT Division 3 will notify Onslow County Emergency Services (910)-347-4270 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

NCDOT Hydraulics Unit - FEMA

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).

Coordination resulted in approval on May 13, 2019 for the FEMA NFIP (National Flood Insurance Program) under NCDOT's MOA with the FMP. This commitment has been completed.

NCDOT Division 3 Construction – FEMA Floodplains and Floodways

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.

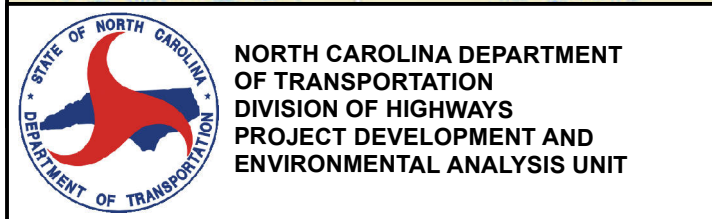
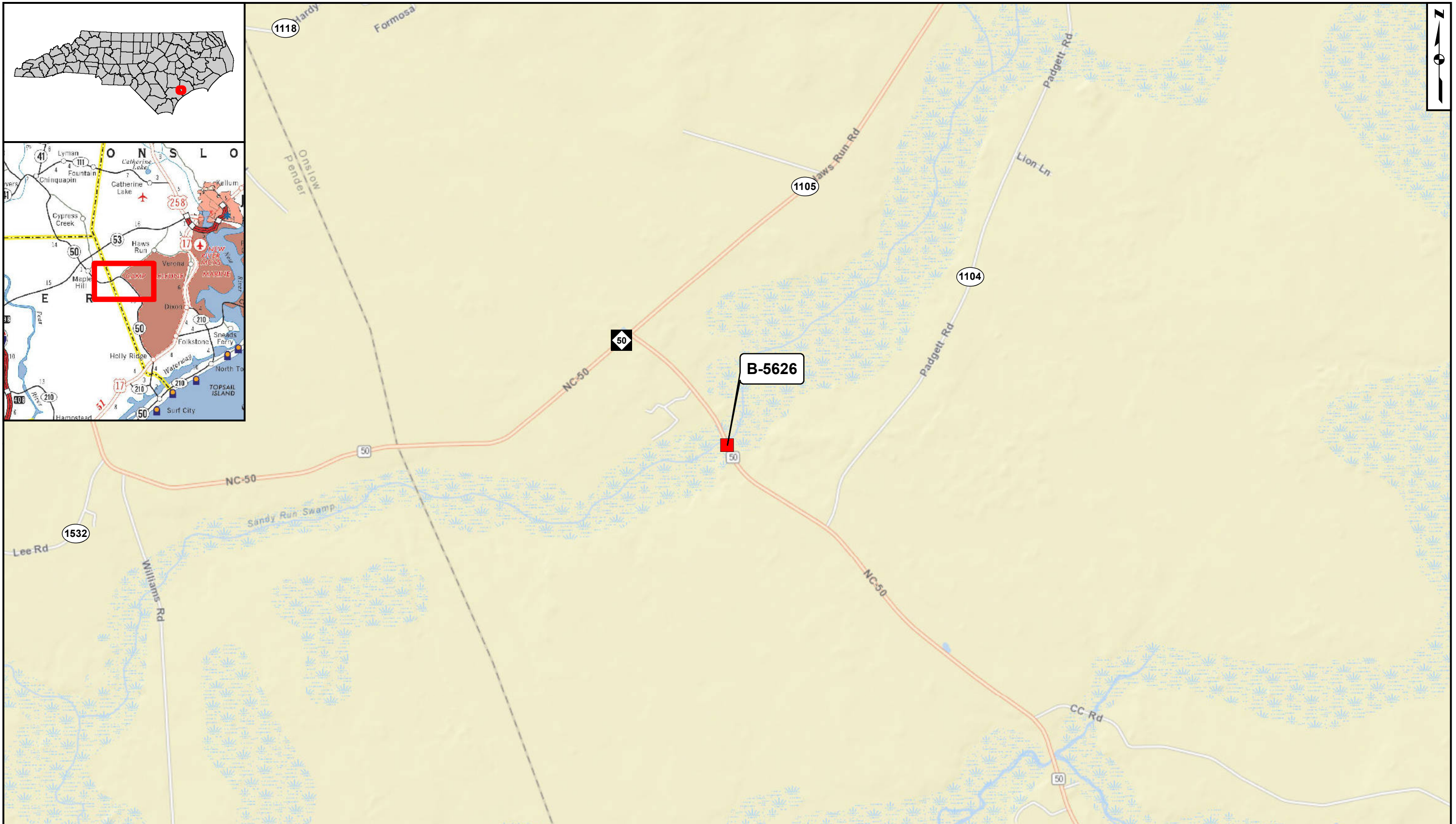
NCDOT Division 3 Construction

The property south of the bridge is owned by the State of North Carolina, is managed by the Department of Parks and Recreation, and is one of several large tracts forming the Sandy Run Savannas State Natural Area. Use of portions of the State Natural Area are restricted through formal designation as a Dedicated Natural Area. Proposed replacement of Bridge No. 31 will not exceed existing right-of-way into the Sandy Run Savannas State Natural Area. This property will not be utilized during construction for the staging of equipment or materials. Construction will be halted and coordination with the State Parks and Recreation Department will be initiated if construction or staging exceeds the existing right of way into a Dedicated Natural Area.

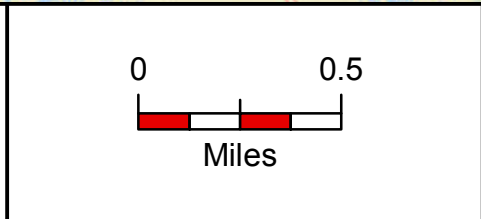
Due to the amount of traffic along NC 50 throughout the summer tourist season, construction of the new structure shall take place during the off-season months of September to May to avoid extensive delays in traffic flow.

COMMITMENTS FROM PERMITTING

No new special commitments were developed during permitting.



VICINITY MAP
Replace Bridge No. 31 on NC 50
over Sandy Run Swamp in Onslow County
TIP Project B-5626



Div: 3	TIP# B-5626
Date: DECEMBER 2015	

Figure
1

