### **Categorical Exclusion Action Classification Form**

STIP Project No.	BR-0116
WBS Element	48825.1.1
Federal Project No.	N/A

#### A. Project Description:

The purpose of this project is to replace Nash County Bridge No. 80 on SR 1403 over Gideon Swamp. Bridge No. 80 is 86 feet long. The replacement structure will be a bridge approximately 95 feet long providing a minimum 30-foot 10 inch clear deck width. The bridge will include two 10-foot lanes and 5-foot 5 inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements.

The approach roadway will extend approximately 185 feet from the south end of the new bridge and 207 feet from the north end of the new bridge. The approaches will be widened to include a 20-foot pavement width providing two 10-foot lanes. Three-foot shoulders will be provided on each side (7-foot shoulders where guardrail is included). The roadway will be designed as a Local Route with a 55 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

### B. <u>Description of Need and Purpose</u>:

NCDOT Bridge Management Unit records indicate Bridge No. 80 has a sufficiency rating of 44.56 out of a possible 100 for a new structure.

The superstructure and substructure of Bridge No. 80 have timber elements that are seventy-one 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. Timber components of Bridge No. 80 are experiencing an increasing degree of deterioration that can no longer be addressed by reasonable maintenance activities, therefore the bridge is approaching the end of its useful life.

The replacement of Bridge No. 80 is part of the *Growing Rural Economy* and Agriculture through Transportation and Technology Enhancement or Replacement in North Carolina (GREATTER-NC) Project under the United States Department of Transportation's 2018 Better Utilizing Investments to Leverage Development (BUILD) Grant program. The purpose of the grant and this bridge replacement project is to provide transportation infrastructure to support economic development and improve physical and digital connectivity in rural communities in North Carolina. The posted

weight restriction on Bridge No. 80 prohibits large or heavy vehicles, typically used in transporting agricultural and manufactured products, from using the bridge. Vehicles above the posted weight must detour 9.5 miles to avoid the bridge. Replacing the existing bridge will eliminate posted weight limits by providing a safe crossing for all legal loads and will make accommodations for broadband installation in order to support economic competitiveness.

### C. <u>Categorical Exclusion Action Classification:</u>

Type IA

### D. Proposed Improvements -

**28.** Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

### E. Special Project Information:

#### **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 1403.

Rehabilitation – The bridge was constructed in 1948 and reconstructed in 1982. The timber materials within the bridge are reaching the end of their useful life. Rehabilitation would require replacing the timber components 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 1403 is acceptable, a new alignment was not considered as an alternative.

Offsite Detour (Preferred) - Traffic will be detoured offsite during the construction period. The offsite detour includes NC 43, SR 1401, and SR 1004 for Eastbound traffic. For Westbound traffic the offsite detour will be NC 43 and SR 1310. Nash County Schools Transportation responded that the offsite detour route would have a low impact on their operations. Nash County Emergency Services did not respond to a request for comment. The condition of all roads, bridges, and intersections are acceptable without improvement and Division 4 concurs with the use of the detour.

#### **Design Issues:**

Traffic Current – 310 vpd, TTST - 3%, Dual – 3% Rural Local Route – Sub Regional Tier Guidelines Design Speed – 55 mph No Design Exceptions Required

#### **Estimated Costs:**

The estimated costs are as follows:

ROW: \$ 5,625 <u>Const:</u> \$ 1,050,000 Total: \$ 1,055,625

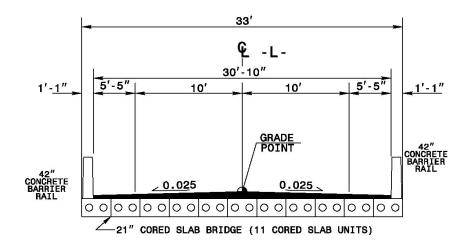
#### Pedestrian and Bicycle Accommodations:

This portion of SR 1403 is not a part of a designated bicycle route nor is it listed in the Transportation Improvement Program (TIP) as a bicycle project. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

#### **Anticipated Permit or Consultation Requirements:**

A Nationwide Permit will likely be required from the U.S. Army Corps of Engineers (USACE) for impacts to "Waters of the United States" resulting from this project. In addition, an NCDWR Section 401 Water Quality General Certification (GC) may be required prior to the issuance of a Section 404 Permit. The USACE holds the final discretion as to what permit will be required to authorize project construction.

### **Typical Section for Bridge:**



# **Public Involvement:**

A newsletter was sent to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

# F. Project Impact Criteria Checklists:

Type I & II - Ground Disturbing Actions			No		
FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA (FHWA Signature Required If "Yes" Selected)					
• Ty	If the proposed improvement (identified above in Sections C & D) is a:  • Type I Action for #s 2, 3, 6, 7, 8, 9, 12, 18, 21, 22, 23, 24, 25, 26, 27, 28, &/or 30; &/or				
	ype II Action wer the threshold criteria questions (below) and questions 8 - 31 for ground distur	bing ac	tions.		
In additio	n, if any of questions 1-7 are marked "yes" then the CE will require FHWA approv	⁄al.			
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?		$\boxtimes$		
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?				
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?				
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?				
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?				
6	Does the project require an Individual Section 4(f) approval?				
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?				
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.					
Other Considerations			No		
8	Does the project result in a finding of "may affect not likely to adversely affect" or less for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?		$\boxtimes$		
9					
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?				

11	Does the project impact waters of the United States in any of the designated mountain trout streams?				
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?				
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?				
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains? Are there project commitments identified?				
Other Co	nsiderations (continued)	Yes	No		
15	Does the project involve hazardous materials and landfills?		$\boxtimes$		
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	$\boxtimes$			
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?				
18	Does the project require a U.S. Coast Guard (USCG) permit?		$\boxtimes$		
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?		$\boxtimes$		
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?		$\boxtimes$		
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?		$\boxtimes$		
22	Does the project involve any changes in access control?		$\boxtimes$		
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?		$\boxtimes$		
24	Will maintenance of traffic cause substantial disruption?		$\boxtimes$		
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?		$\boxtimes$		
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?		$\boxtimes$		
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?		$\boxtimes$		
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?		$\boxtimes$		
29	Is the project considered a Type I under the NCDOT's Noise Policy?		$\boxtimes$		
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?		$\boxtimes$		
31	Are there other issues that arose during the project development process that affected the project decision?		$\boxtimes$		

#### G. Additional Documentation as Required from Section F

**Question 1 – Endangered Species:** The US Fish and Wildlife Service has developed a 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) (*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 Nash County, where BR-0116 is located. This level of incidental take is authorized from the effective date of a final listing determination through April 30, 2020.

**Question 8 – Endangered Species:** Per the Natural Resources Technical Report the biological conclusions for the Yellow Lance and the Tar River spinymussel are unresolved. Surveys for these species will be conducted by the NCDOT Biological Surveys Group if necessary.

**Question 10 – Buffer Rules -** This project is located in the Tar-Pamlico River Basin (USGS HUC 03020102). Potential jurisdictional features within the study area are therefore subject to streamside riparian zones protected under provisions administered by the North Carolina Department of Environmental Quality (NCDEQ).

**Question 16 – Floodplain:** This project is located in a FEMA Limited Detail study. The project will result in a decrease of 0.1' in the 100 year Base Flood Elevation.

### H. <u>Project Commitments</u>

See attached Project Commitments Greensheet.

### I. <u>Categorical Exclusion Approval</u>

STIP Project I WBS Element Federal Projec	48825.1.1
Prepared By:	Grag S. Pwwis  Greg S. Purvis, PE, Project Manager  Wetherill Engineering
7/23/2019	Docusigned by:  Gry S. Purvis
Date	Greg S. Puns Greg S. Puns Wetherill Engineering
Prepared For:	North Carolina Department of Transportation Structures Management
Reviewed By:	
7/24/2019	Levin Fischer
Date	Kevin Fischer, PE Assistant State Structures Engineer – Program Management and Field Operations, Structures Management Unit North Carolina Department of Transportation
7/23/2019	Phil Harris
Date	Philip ទី: Harris, III, PE Unit Head – Environmental Analysis Unit North Carolina Department of Transportation
Appro	<ul> <li>If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of "no" to question 3.</li> <li>If Type I or Type II (Ground Disturbing) Categorical Exclusions with an answer of "no" to all of the threshold questions (1 through 7) of Section F.</li> </ul>
Certif	<ul> <li>If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of "yes" to question 3.</li> <li>If Type I or Type II (Ground Disturbing) Categorical Exclusions with an answer of "yes" to any of the threshold questions (1 through 7) of Section F.</li> <li>If classified as Type III Categorical Exclusion.</li> </ul>
FHWA Approved	d: For Projects Certified by NCDOT (above), FHWA signature required.
	N/A
Date	John F. Sullivan, III, PE, Division Administrator Federal Highway Administration

#### **PROJECT COMMITMENTS:**

Nash County Bridge No. 80 on SR 1403 Over Gideon Swamp W.B.S. No. 48825.1.1 T.I.P. No. BR-0116

#### NCDOT Division Four – Offsite Detour

In order to have time to adequately reroute school busses, Nash County Schools will be contacted at least one month prior to road closure. Contact person is Brian Littke - Director of Transportation at (252)-459-5220.

Nash County Emergency Services will be contacted at least one month prior to road closure to make the necessary temporary reassignments to primary response units. Contact person is Scott Strufe – Emergency Services Director at (252)-459-1634.

#### NCDOT Hydraulic Unit – FEMA Coordination

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).

#### NCDOT Division Four Construction, Resident Engineer's Office -FEMA

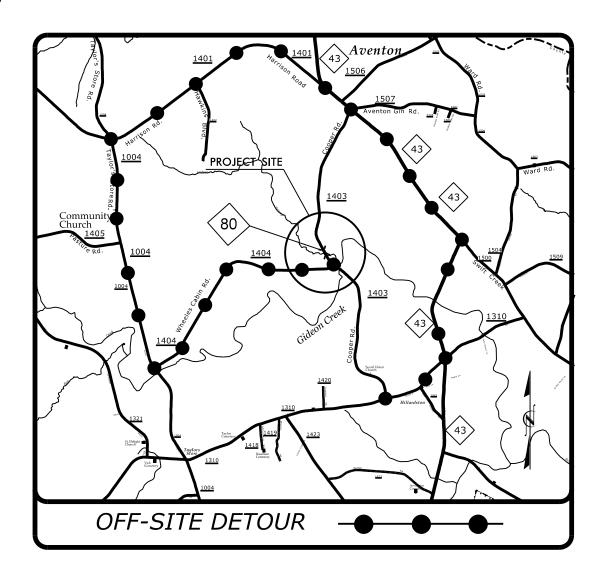
This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located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

#### **NCDOT Hydraulic Unit – Buffer Rules**

The Tar-Pamlico River Basin Rule applies to this project.

#### NCDOT Environmental Analysis Unit – Section 7

Section 7 will need to be resolved for Yellow Lance and the Tar River spinymussel prior to permitting and construction.



# BR-0116

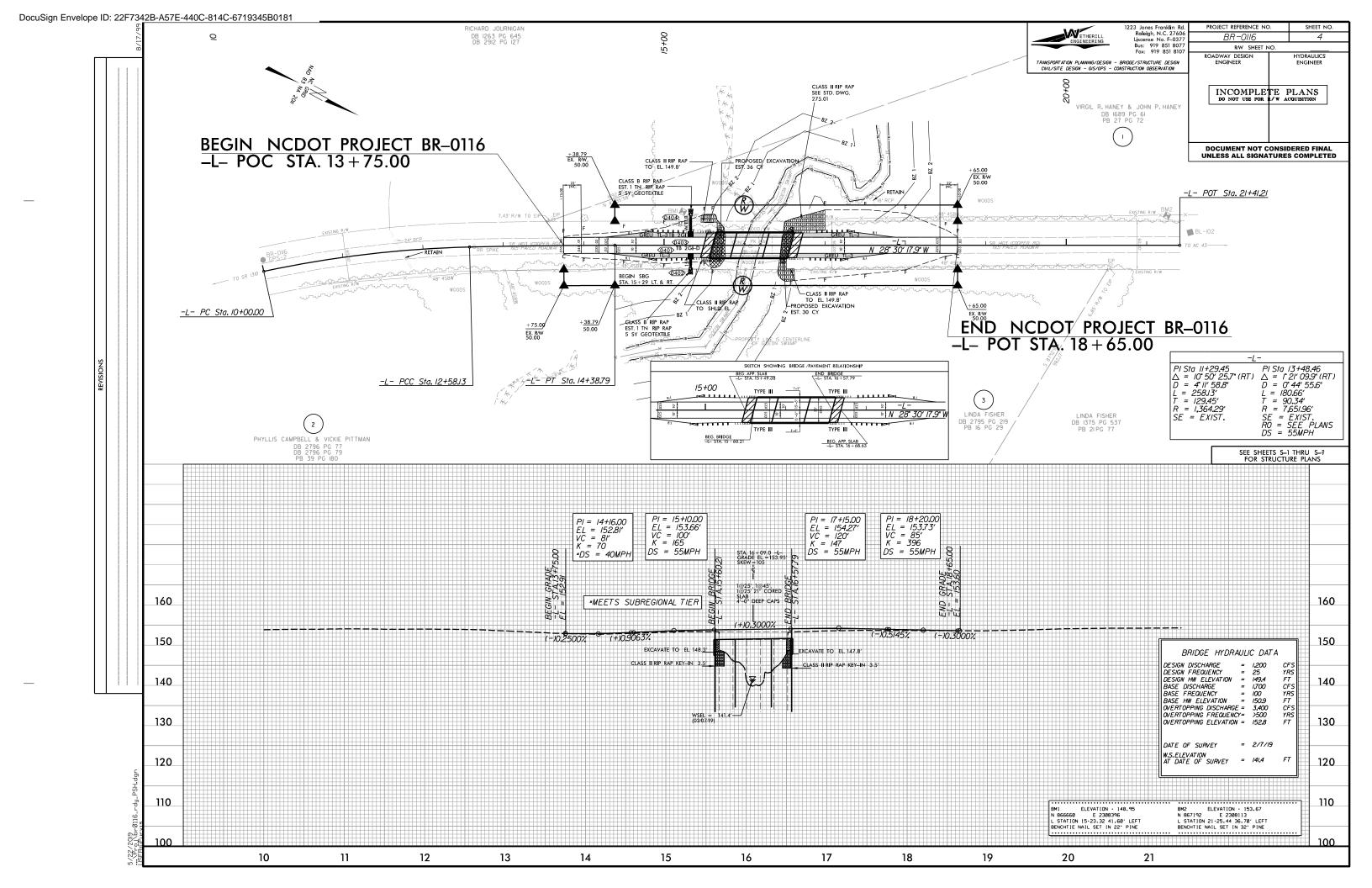
REPLACE BRIDGE NO. 630080 OVER GIDEON SWAMP ON SR 1403 (COOPER RD.)

NASH COUNTY

WBS 67116.1.1

NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION 4

VICINITY MAP - FIGURE 1





### 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

Project No:	BR-0116	County:	Nash
WBS No.:	67116.1.1	Document Type:	
Fed. Aid No:		Funding:	X State Federal
Federal Permit(s):	X Yes No	Permit Type(s):	USACE

<u>Project Description</u>: Replace Bridge No. 80 on SR 1403 (Cooper Road) over Gideon Swamp (no off-site detour specified in review request).

#### SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

DESCRIPTION OF REVIEW ACTIVITIES, RESULTS, AND CONCLUSIONS: HPOWeb reviewed on 5 November 2018 and yielded one SL and no NR, LD, DE, or SS properties in the Area of Potential Effects (APE). Nash County current GIS mapping and aerial photography indicated a partly developed APE containing mostly cultivated fields and woodland with several above-ground resources dating from the 1910s to the 2010s (viewed 5 November 2018). The several pre-1970 resources are located 1000 feet or more from the existing bridge, beyond likely project impact. Similarly, the study-listed Battle-Cooper House (NS0531) stands approximately 1000 feet north of the existing bridge and 685 feet east of SR 1403 (Cooper Road) with intervening fields and woodland; the property is intersected by the APE at its western edge along cultivated fields. Bridge No. 80, constructed in 1948, is not eligible for the National Register as it is neither technologically nor aesthetically significant. Google Maps "Street View" confirmed the absence of critical architectural or landscape resources standing in the APE (viewed 5 November 2018).

### No architectural survey is required for the project as currently defined.

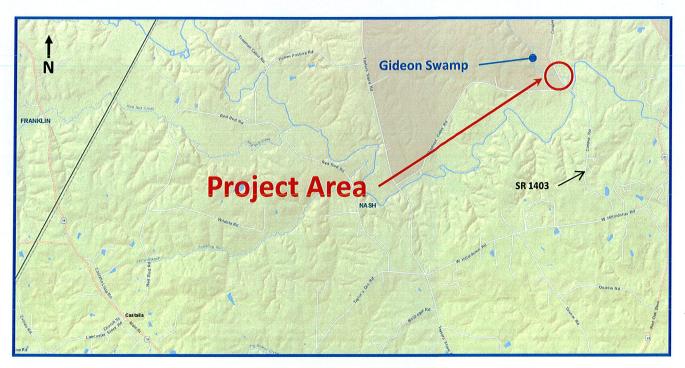
WHY THE AVAILABLE INFORMATION PROVIDES A RELIABLE BASIS FOR REASONABLY PREDICTING THAT THERE ARE NO UNIDENTIFIED SIGNIFICANT HISTORIC ARCHITECTURAL OR LANDSCAPE RESOURCES IN THE PROJECT AREA: APE equates with the study area provided in the review request (see attached). The comprehensive county architectural survey (1984), as well as later studies record no properties in the APE besides that noted above (Richard L. Mattson. The History and Architecture of Nash County, North Carolina (Nashville, NC: Nash County Planning Department, 1987)). County GIS/tax materials and other visuals support the absence of significant architectural and landscape resources in the APE. No National Register-listed properties are located in the APE.

Should the design of the project change, please notify NCDOT Historic Architecture as additional review may be necessary.

	SUPPOR	T DOCUMEN	NIATION	
X Map(s)	Previous Survey Info.	Photos	Correspondence	Design Plans
			THE THE PART OF TH	
	FINDING BY NCDO	T ARCHITEC	TURAL HISTORIA	N
Historic Arc	FINDING BY NCDO' hitecture and Landscapes N	O SURVEY R	EQUIRED	
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	OT Architectural Historian			Date

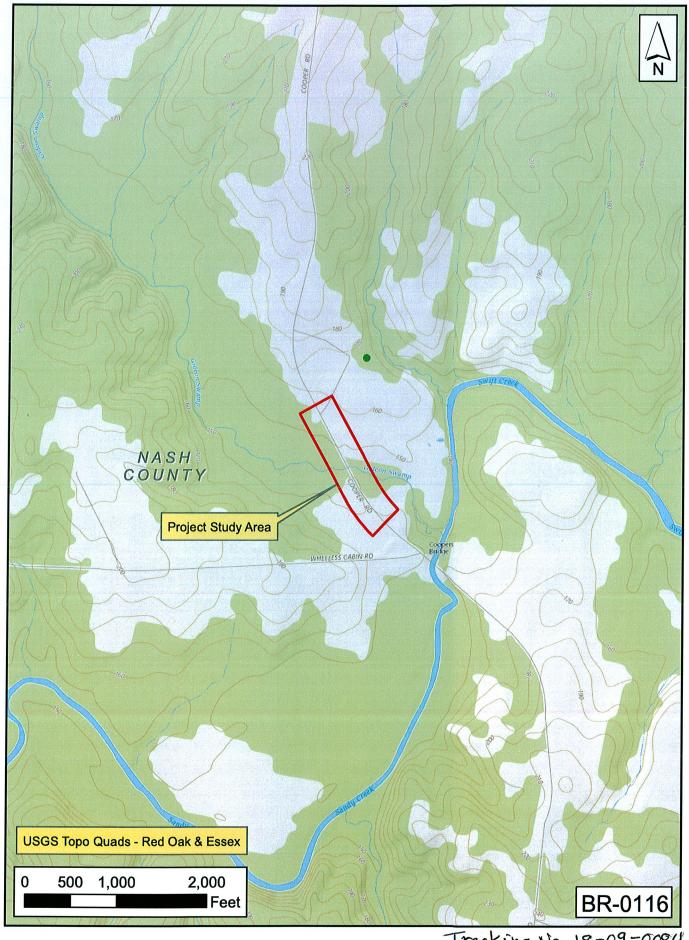
BR-0116, Nash County WBS No. 67116.1.1 Tracking No. 18-09-0084

Page 2 of 2



BR-0116 Bridge No. 80 Replacement Nash County WBS No. 67116.1.1 Base map: HPOWeb, nts

NCDOT – Historic Architecture November 2018 Tracking No. 18-09-0084



Tracking No. 18-09-0084



### 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 R -0116 Br No 80	County:	Nash	
WBS No:	67097.1.1	Document:	MCC	
F.A. No:		Funding:	State	☐ Federal
Federal Permit R	equired? Xes	☐ No Permi	t Type: usace	e

**Project Description:** NCDOT proposes to replace Bridge No. 80 over Gideon Swamp on SR 1403 (Cooper Road) in Nash County. The proposed replacement will be in place on the same alignment. An offsite detour has been identified. The project length is 0.093 miles, or about 500 feet in length. The ROW will be expanded to a width of 100 feet from 60 feet (~20 feet either side of SR 1403). For purposes of this review, the archaeological Area of Potential Effects (APE) is the entire length of the project and will include the expanded ROW and all necessary easements. This is a state funded undertaking that will require USACE permitting, therefore Section 106 of the National Historic Preservation Act applies for archaeological review.

#### SUMMARY OF CULTURAL RESOURCES REVIEW

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

The bridge to be replaced is in a rural setting. USGS mapping (Red Oak and Essex) and aerial photography was studied (see Figures 1 and 2). Bing streetview tools were available at this location and used, showing wooded or timbered lots alongside the western APE and trees along Gideon Swamp. There are some agricultural fields in the immediate vicinity. There are no structures nearby the APE.

According to USGS mapping and GIS resources (data layer created by NCDOT archaeologist Paul J. Mohler), no cemetery is present at the APE or immediately nearby.

No known archaeological sites are present at or within the APE according to research conducted at the Office of State Archaeology. Site 31Ns71 is located south of the APE at the next intersection along SR 1403, though the lithic debitage only site was recommended as not eligible for listing on the National Register of Historic Places (Bib # 3295). Other sites in the vicinity include 31Ns21, 31Ns28, and 31Ns29 though little information was available about these resources. Few systematic surveys have been conducted in the nearby area, though some environmental reviews (ex. ER 94-8792) were inactive very closeby having not been recommended for archaeological surveys.

A review of historic maps was conducted. Little of interest was noted at the project APE location.

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

The bridge replacement for a small existing structure will be constructed using an offsite detour. New impacts to undisturbed soils are likely to be minimal on this replace in place project over Gideon Swamp. Much of the APE has already been modified by the construction associated with the previous bridge and roadway. The often wet soils present next to the bridge are considered less desirable for habitation, and they are not favorable for the presence of intact, significant archaeological sites where impacts are likely to

Project Tracking No.:

18-09-0084

be the greatest. There are no known archaeological resources present within the APE. For archaeological review, this federally permitted undertaking should be considered compliant with Section 106.

SUPPORT DOCUMENTATION						
See attached:	<ul><li>✓ Map(s)</li><li>✓ Photocopy</li></ul>	Previous Survey Info	Photos Other:	Correspondence		
FINDING BY NCDOT ARCHAEOLOGIST						
NO ARCHAEOLOGY SURVEY REQUIRED						
Bural.	Out			5/08/2019		
NCDOT ARCH	HAEOLOGIST	_	_	Date		

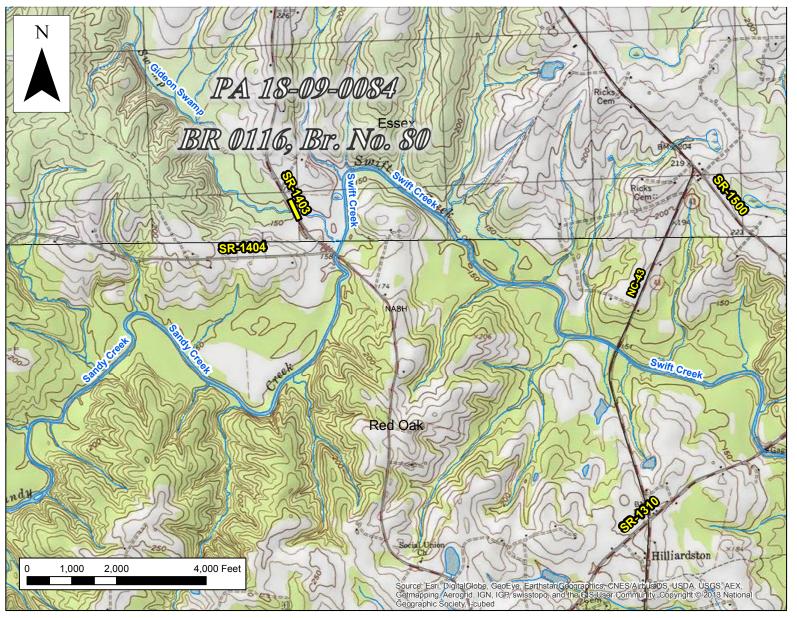


Figure 1. Vicinity of PA 18-09-0084, the replacement of Br. No. 80 on SR 1403 (Cooper Road) in Nash County, shown on USGS mapping (Essex and Red Oak). The APE is shown in yellow.

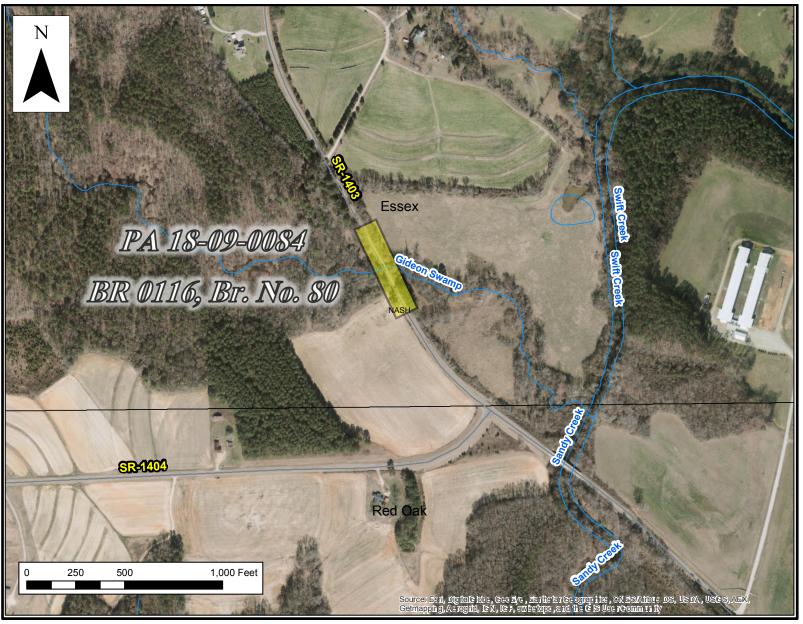


Figure 2. Aerial map of the proposed replacement of Br. No. 80 on SR 1403 (Cooper Road) over Gideon Swamp. The approximate APE is shown in yellow.