

Type I or II Categorical Exclusion Action Classification Form

WBS Element: 17BP.11.R.157

A. Project Description:

Replace Bridge No. 35 on SR 1422 (Fox Ridge Road) over Glade Creek in Alleghany County.

The replacement structure will be a 39-inch box beam approximately 100-feet long. The bridge will include two 12-foot lanes and 5-foot offsets. The bridge length is based on preliminary design information and is set by minimum hydraulic design requirements.

Project construction will extend approximately 200-feet from each end of the new bridge.

Traffic will be maintained off-site during construction using SR 1433, SR 1444, US 21, and SR 1430. The detour is approximately 8 miles long.

The project is shown in Figure 1.

B. Description of Need and Purpose:

The purpose of the project is to address a 50-year old bridge with a posted weight of 15 tones for vehicles and 18 tons for trucks. Bridge 020035 has a sufficiency rating of 27.27 and is structurally deficient.

C. Categorical Exclusion Action Classification:

Type I(A) - Ground Disturbing Action

D. Proposed Improvements:

23 CFR 771.117 (c)

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:

Design: SR 1422 has a functional classification of a Local Rural and will be designed using Sub-Regional Tier Guidelines.

Pedestrian and Bicycle Accommodations: The bridge is not located on a designated bike route nor is there an indication of significant bike or pedestrian usage.

Bridge Demolition: Bridge No. 35 is constructed of concrete, timber and steel and should be possible to remove with no resulting debris in the water based on standard demolition practices.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)				
Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31. <i>If any question 1-7 is checked "Yes" then NCDOT certification for FHWA approval is required.</i> <i>If any question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.</i>				
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked "Yes".)			Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	☐	☒	
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	☐	☒	
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 question 8-31 is checked "Yes" then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	☒	☐	
9	Is the project located in anadromous fish spawning waters?	☐	☒	
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?	☐	☒	

Other Considerations for Type I and II Ground Disturbing Actions (continued)		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	☐	☒
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	☐	☒
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?	☒	☐
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?	☐	☒
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	☐	☒
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	☐	☒
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	☐	☒
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	☐	☒
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	☐	☒
24	Will maintenance of traffic cause substantial disruption?	☐	☒
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	☐	☒
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?	☐	☒
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	☐	☒
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	☐	☒
29	Is the project considered a Type I under the NCDOT Noise Policy?	☐	☒
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	☒	☐
31	Are there other issues that arose during the project development process that affected the project decision?	☐	☒

G. Additional Documentation as Required from Section F (ONLY for questions marked 'Yes'):**Question 8: Federally Protected Species**

Northern long-eared bat (NLEB): The bridge is not located in or near a county containing known NLEB maternity trees or hibernation sites. Furthermore, NCDOT staff surveyed for evidence of bats on February 19, 2020 and no signs of bats were observed. As a result, NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) Rule, codified at 50 C.F.R. § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for NLEB.

Question 11: Trout Streams

Although all of Alleghany County is designated as a trout watershed, not all streams in Alleghany County contain trout. NCWRC has reviewed this project and has indicated that there is no need to request a trout moratorium for the proposed construction. However, since Best Usage Classification for Glade Creek is C;Tr, the project should adhere to Design Standards for sensitive watersheds (DSSW).

Question 16: Regulatory Floodway

Alleghany County is a participant in the Federal Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a **Flood Hazard Zone, designated as Zone AE, for which the 100-year base flood elevations and corresponding regulatory floodway have been established.** Glade Creek is a FEMA mapped stream studied by the North Carolina Floodplain Mapping Program by Limited Detail methods. The bridge is located on DFIRM Panel 4000.

No structures will be adversely affected by the surface water elevation from the proposed project.

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine the 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). This project involves construction activities on or adjacent to FEMA-regulated streams(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.

Question 30: Farmland Soils

Farmland soils eligible for protection under FPPA are present in the project footprint. A Natural Resource Conservation Service (NRCS) Farmland Conversion Impact Rating has been completed for this project and a total score of 52 out of 160 points was calculated for the project site. Since the total of the points assigned in Part VI of the NRCS Farmlands Conversion Form AD-1006 is less than 60, no mitigation for farmland loss is required for the project in accordance with FPPA.

H. Project Commitments (attach as Green Sheet to CE Form):

NCDOT PROJECT COMMITMENTS

Replace Bridge No. 35 on SR 1422 (Fox Ridge Road) over Glade Creek
Alleghany County

WBS Element: 17BP.11.R.157

Division Construction – Trout Streams

NCWRC has reviewed this project and has indicated that there is no need to request a trout moratorium for the proposed construction. However, since the Best Usage Classification for Glade Creek is C;Tr, the project will adhere to Design Standards for Sensitive Watersheds (DSSW).

NCDOT Hydraulics Design 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).

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.

I. Categorical Exclusion Approval:

WBS Element: 17BP.11.R.157

Prepared By:

4/2/2020

Date

DocuSigned by:

Stacy B. Oberhausen

E3EB7119684E2416

Stacy B. Oberhausen, PE, CPM
TGS Engineers**Prepared For:**Highway Division 11
North Carolina Department of Transportation**Reviewed By:**

4/2/2020

Date

DocuSigned by:

Kevin Hining

7B471A8BF00249F

Kevin Hining, Division Environmental Officer
NCDOT, Division 11**Approved**

- If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.

**Certified**

- If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
- If classified as Type III Categorical Exclusion.

4/2/2020

Date

DocuSigned by:

Joe L. Laws

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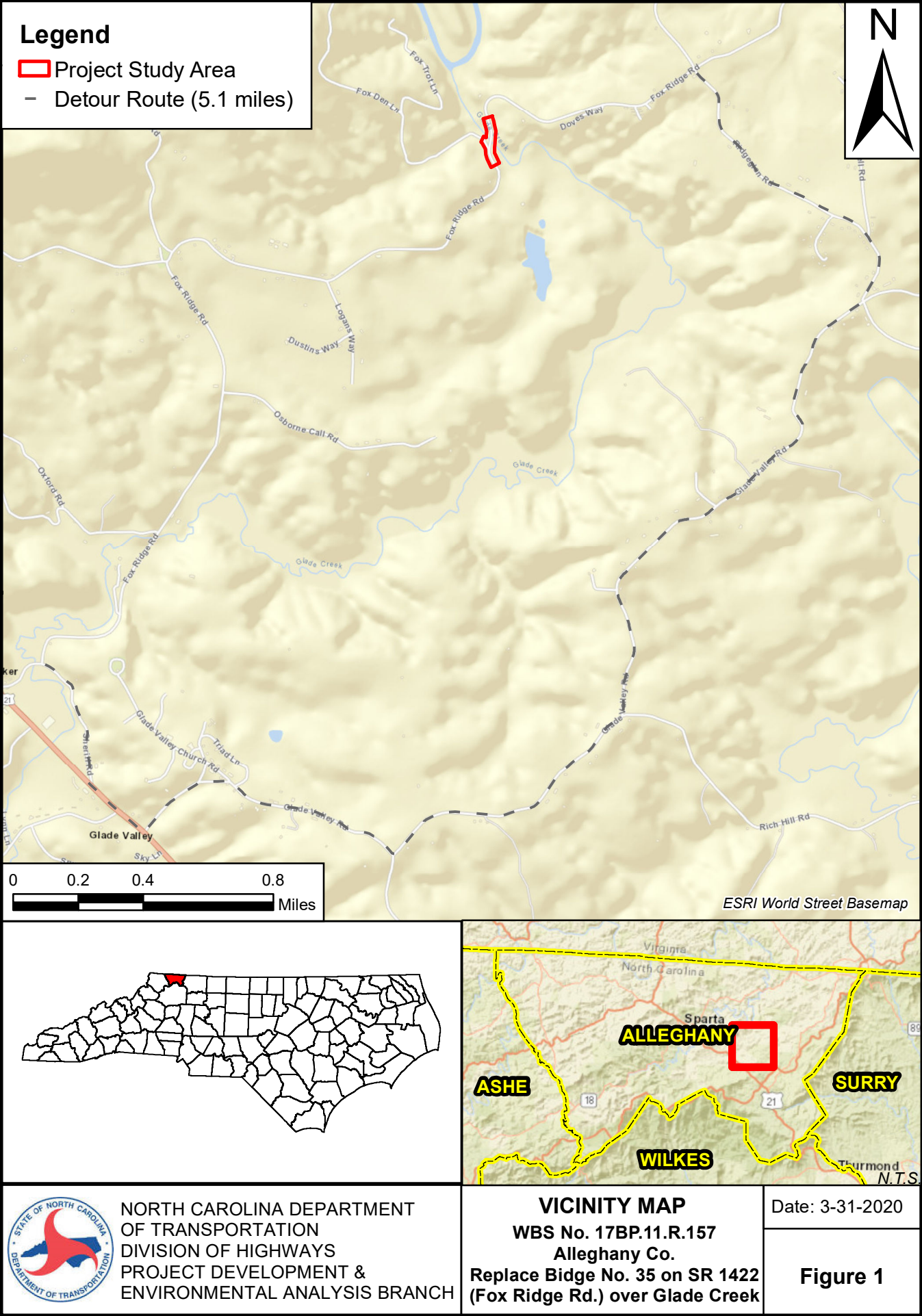
Joe Laws, PE, Division Bridge Project Manager
North Carolina Department of Transportation, Division 11FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

N/A

Date

for John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

Note: Prior to ROW or Construction authorization, a consultation may be required (please see Section VII of the NCDOT-FHWA CE Programmatic Agreement for more details).



NCDOT Bat Bridge Habitat Assessment Form Updated 6/28/19



Bat Habitat Assessment Form

Observers: Kevin Hining
 Date: 2/19/20
 County: Allegheny
 Waterbody/Road/Rail: Glade Creek

NCDOT Bridges
 TIP or DOT project number: 17BP.11.R.157
 Road Name/SR Number: Fox Ridge Rd. / SR 1422
 Bridge Number: Allegheny # 35

% Surrounding habitat w/in 1 mi.
 of project footprint (approx)

Urban/commercial _____

Suburban/residential _____

Natural/rural 50

Agricultural 50 - xmas trees + cattle

Any trees >3" DBH within project footprint?

N/A

yes

no

Any shaggy trees or snags >5" DBH?

N/A

yes

no

If yes to shag/snag, how much sunlight do they receive during the day? N/A

1-3 hours

4-6 hours

7+ hours

If yes to shag/snag, list species of habitat trees >5" dbh _____

If snags >5" DBH are present in sunlit areas, provide photos and location. _____

If large hollow trees are present, provide photos and location. _____

Presence of:

Caves

In project footprint

yes

no

In vicinity (0.5 mi)

yes

no

Abandoned mines

yes

no

yes

no

If 'yes' to any of the above, provide photos, description, and location.

Major water source in project footprint:

N/A

river

stream/creek

pond

lake

swamp

Suitable drinking habitat in the form of non-stagnant, smooth or slack water?

yes

no

N/A

Artificial lighting

unknown

yes

no

Guard rails

none

concrete

timber

metal

Deck type

concrete

metal

timber

open grid

Beam type

none

concrete

steel

timber

End/back wall type

concrete

timber

masonry

Creosote evidence

yes

no

Suitable roosting crevices present (($\frac{1}{2}$ - $1\frac{1}{4}$ " wide)

yes

no

Deck drains

yes

no

Max height of bridge deck above ground/water (ft):

14

Night roost habitat protected

yes

no

Bridge alignment:

N/S

E/W

NW/SE

NE/SW

Hours of sun exposure to bridge

<3

>3

Human disturbance under bridge

high

med

low

none

Below section completed only if bats/evidence of bats observed:

Emergence count performed? (If yes, complete form next page)

yes

no

Evidence of bats using bird nests, if present?

yes

no

Evidence of bats using bridge? (photos needed)

yes

no

Type of Evidence

guano

staining

bats observed

none

Roost Type

crevice

open area

none

Bat species present (list each species, locations and estimated number of each species):

none

19-09-0008



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:		County:	Alleghany
WBS No.:	17BP.11.R.157	Document Type:	CE
Fed. Aid No:		Funding:	☒ State ☐ Federal
Federal Permit(s):	☒ Yes ☐ No	Permit Type(s):	USACE
<u>Project Description:</u> Replace Bridge No. 35 on SR 1422 (Fox Ridge Rd Rd) over Little River.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<u>Description of review activities, results, and conclusions:</u> Review of HPO quad maps, relevant background reports, historic designations roster, and indexes was undertaken on September 19, 2019. Based on this review there are no NR, DE, LL, SL or SS in the Area of Potential Effects (APE). Aerial photos and Alleghany tax record indicates a c. 1935 house. A site visit confirmed that this house has been demolished. There are no structures over 50 years of age in the APE, other than Alleghany Bridge No. 35 which was constructed in 1970. No Survey is required at this time. <u>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:</u> Using HPO GIS website and county tax data provides reliable information regarding the structures in the APE. These combined utilities are considered valid for the purposes of determining the likelihood of historic resources being present.
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SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Shelby Reap

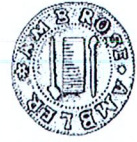
NCDOT Architectural Historian

Sept 19, 2019

Date



**NO NATIONAL REGISTER OF HISTORIC PLACES
ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES
PRESENT 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: **Bridge 35** *County:* **Alleghany**
WBS No: **17BP.11.R.157** *Document:* **Federal CE**
F.A. No: **N/A** *Funding:* ☐ State ☒ Federal

Federal Permit Required? ☒ Yes ☐ No *Permit Type:* **USACE**

Project Description: NCDOT is proposing to replace Bridge No. 35 on SR 1422 over Glade Creek in Alleghany County, North Carolina. The Area of Potential Effects (APE) measures 1,000 feet (304.8 meters) in length and 150 feet (45.72 meters) in width (75 feet [22.86 meters] from the SR 1422 centerline). The APE encompasses 3.44 acres (1.39 hectare) and encompasses all areas of potential ground disturbing activity.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

The North Carolina Department of Transportation (NCDOT) Archaeology Group reviewed the subject project and determined:

- ☒ **There are no National Register listed or eligible ARCHAEOLOGICAL SITES present within the project's area of potential effects. (Attach any notes or documents as needed)**
- ☐ No subsurface archaeological investigations were required for this project.
- ☒ **Subsurface investigations did not reveal the presence of any archaeological resources.**
- ☐ Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- ☒ **All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.**

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

The APE was defined as the area of possible direct construction impacts from the proposed replacement of Bridge No. 35 on SR 1422 over Glade Creek (Figure 1). A map review and site file search were conducted at the Office of State Archaeology (OSA) on November 1, 2019. No previously recorded sites were identified within or adjacent to the APE. Additionally, no previously recorded sites are located within one mile of the project area.

Data from the North Carolina State Historic Preservation Office HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) revealed no recorded historic properties or known cemeteries within or near the APE. In addition, topographic maps, historic maps available at the NCMAPS website, USDA soil survey maps, and aerial photographs were reviewed to gauge environmental factors that could have influenced historic or precontact settlement within the project limits, and to assess the level of modern, slope, agricultural, hydrological, and other erosive-type disturbances within and surrounding the archaeological APE. The earliest detailed maps of the project area include the 1889 Whytheville and Wilkesboro topographic maps, which depict the road in the same general location as at present. No structures were illustrated within the APE.

An examination of soils in Alleghany County provided on the National Resources Conservation Services Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>) indicated the following USDA soil types within the APE: Chandler silty loam, 25-45 percent slopes; Comus fine sandy loam (rosman); and Watauga loam, 10-25 percent slopes. Table 1 summarizes soil data for the survey areas (Soil Survey Staff 2020). The soils mapped in the APE include well drained to somewhat excessively drained silt loam and sandy loam on floodplains and ridge slopes.

Table 1. Soil Types in the Area of Potential Effects (APE)

Soil Type	Map Unit Symbol	Percent of Survey Area	Permeability	Locations
Chandler silt loam, 25-45% slopes	CaF	27.2	Somewhat excessively drained	Mountain slopes, ridges
Comus fine sandy loam (rosman)	Cy	15.4	Well drained	Flood plains
Watauga loam 10-25% slopes	WaE	57.4	Well drained	Mountain slopes, ridges

ARCHAEOLOGY SURVEY

New South Associates, Inc. (New South) conducted an intensive archaeological survey of the APE on February 3, 2020 (Figure 2). This survey sought to identify and evaluate archaeological sites for NRHP eligibility according to criteria outlined in 36 CFR §60.4. The survey included a visual inspection and systematic shovel-testing in the APE.

The project area lies within the Blue Ridge Mountains physiographic province. Topography primarily consists of sloping ridges. Vegetation in the APE includes a fallow field, Christmas tree farm, planted pines, and mixed pine and hardwoods with a sparse understory of scrub vegetation. Residential properties are located throughout the area, many on graded landforms (Figures 3-4).

Survey of the APE involved examining shovel test locations that were pre-plotted at 15-meter intervals. One shovel test transect was placed on each side of the road. Excavated tests measured 30-centimeters in diameter and were excavated to sterile subsoil or impenetrable substrate. Soils were screened through 0.25-inch hardware cloth. Shovel test results were recorded using smartphones equipped with a *Memento* data collection application. Data collected for each excavated test included Munsell soil color designation, USDA NRCS texture class, depths, and the presence/absence of cultural material. A total of 44 shovel tests were pre-plotted. Field technicians visited all test locations during the survey and exempted 10 from excavation due to clear disturbances, buried utility lines, and excessive slope. The 34 excavated shovel tests did not produce any archaeological resources (Appendix A).

The stratigraphy throughout the APE varied and was heavily disturbed by modern construction of roads, the bridge, and driveways, as well as from grading and erosion from up slope from the APE. Examples of soil profiles include Shovel Test 29 in the northern portion of the project area and Shovel Test 43 in the

southern half. The profile of Shovel Test 29 was disturbed from road construction and consisted of gray (10YR 5/1) silty loam mottled with brown (10YR 5/3) micaceous silt loam with decayed bedrock (Figure 5A). The shovel test was terminated at 20 centimeters below surface due to a rock impasse. Shovel Test 43 was located in the fallow field and exhibited five centimeters of brown (10YR 4/3) silt loam, which represented an A horizon, over a yellowish brown (10YR 5/6) silty clay B horizon (Figure 5B).

SUMMARY OF FINDINGS

New South conducted an intensive survey of the APE for the proposed replacement of Bridge No. 35 on SR 1422 over Glade Creek in Alleghany County, North Carolina. Background research indicated there were no previously recorded resources within or near the APE. Fieldwork included the investigation of 44 shovel test locations and excavation of 34 shovel tests. The survey did not identify any archaeological materials or sites within the APE. Therefore, no additional work is recommended. If there are design changes that could impact subsurface areas outside of the defined APE, further archaeological studies may be necessary.

This project falls within a North Carolina County in which the Catawba Indian Nation, the Eastern Band of Cherokee Indian, the Cherokee Nation of Oklahoma, and the United Keetoowah Band of Cherokee Indian has expressed an interest: Alleghany County. It is recommended that you contact each federal agency involved with your project to determine their Section 106 Tribal consultation requirements.

Sarah Stephens
Archaeologist
New South Associates, Inc.

REFERENCE CITED

Soil Survey Staff

2020 *Web Soil Survey of Selected Area in Stanly County, North Carolina*. Natural Resources Conservation Service, United States Department of Agriculture, Washington, D.C.

SUPPORT DOCUMENTATION

See attached: ☒ Map(s) ☐ Previous Survey Info ☒ Photos ☐ Correspondence
Signed:

NCDOT ARCHAEOLOGIST

Britt Halvorsen

Date

3.20.2020