Type I and II Ground Disturbing Categorical Exclusion Action Classification Form

STIP Project No.	B-6010
WBS Element	48207.1.1
Federal Project No.	BRZ-1341 (004)

A. <u>Project Description</u>: (Include project scope and location, including Municipality and County. Refer to the attached project location map and photos.)

Bridge Replacement for Bridge 560302 over Shut-In Creek on SR 1183 (Upper Shut-In Road), Madison County, NC. The bridge will be replaced with a single span bridge.

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

The project is needed to replace a structurally deficient bridge.

C. Categorical Exclusion Action Classification: (Check one)

☑ TYPE I
☑ TYPE II

- 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. <u>Special Project Information</u>: (Provide a description of relevant project information, which may include: vicinity map, costs, alternative analysis (if any), traffic control and staging, and resource agency/public involvement).

The bridge will use stage construction to the south of the existing structure with temporary signals to safely maintain a single travel lane.

Type I &	II - Ground Disturbing Actions				
FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA					
If any of	questions 1-7 are marked "yes" then the CE will require FHWA approval.	Yes	No		
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?		\boxtimes		
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?		\boxtimes		
6	Does the project require an Individual Section 4(f) approval?		\boxtimes		
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" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	\boxtimes			
9	Does the project impact anadromous fish?		\boxtimes		
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)?		\boxtimes		
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?		\boxtimes		
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?		\boxtimes		
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?		\boxtimes		

Other Co	onsiderations (continued)	Yes	No
15	Does the project involve hazardous materials and landfills?		\mathbb{X}
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)?		\boxtimes
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?		\mathbb{X}
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?		\mathbb{X}
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)?		X
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), 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)?		\mathbf{X}
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)?		X
31	Are there other issues that arose during the project development process that affected the project decision?		\mathbf{X}

G. Additional Documentation as Required from Section F

8. The Northern Long-eared Bat (NLEB) is listed as a threatened species on the current U.S. Fish and Wildlife Service (USFWS) list of protected species in Madison County. However, the project study area is not located within a county or watershed know to contain NLEB hibernation or maternity roost sites. Therefore, the project has met the criteria required for the USFWS 4(d) Rule, and any associated take is exempt. Due to the exemption under the 4(d)

ruling, it has been determined that the proposed project "May Affect, Not Likely to Adversely Affect" the NLEB.

The Gray bat is listed as endangered on the USFWS list of proposed species for Madison County. The bridge was surveyed for signs of bat presence/usage and no evidence of either was found. Due to the stream size, structure type (steel beams), no evidenced of bat usage, and distance from the French Broad River, the project will have "No Effect" on the gray bat.

11. Shut-In Creek is within a Corps Designated Trout Watershed and is Class C, Trout by NC DEQ. Since the project is bridge to bridge, stream impacts will be limited to bank stabilization, if necessary.

21. The project is located within Pisgah National Forest. Project commitments will be developed during the Biological Evaluation preparation and added to the special conditions for bridge construction.

H. Project Commitments

Madison County Bridge 560302 Federal Project No. BRZ-1341(004) WBS No. 48207.1.1 TIP No. B-6010

The project is located within US Forest Service property. All conditions of the Biological Evaluation and easement will apply.

The project will not impact any properties or archaeological sites listed or eligible for listing on the National Register of Historic Places. NCDOT will complete Section 106 Tribal consultation following completion of the design.

All activities will follow NCDOT best management practices for erosion control.

Categorical Exclusion Approval

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STIP Project No.	B-6010		
WBS Element	48207.1.1		
Federal Project No.	BRZ-1341 (004)		
Prepared By:	CocuSigned by:		
3/15/2019	Roger D. Bryan		
	. Bryan ^{22738EB8411} Environmental Officer		
Prepared For:	Division 13 arolina Department of Transportation		
Reviewed By:			
3/15/2019	DocuSigned by: Unityphen D. Mulli		
	pher D. Medilin, P.E. n Bridge Program Manager		
Approved	If all of the threshold questions (1 through 7) of Section F are answered "no," NCDOT approves this Categorical Exclusion.		
Certified	If any of the threshold questions (1 through 7) of Section F are answered "yes," NCDOT certifies this Categorical Exclusion.		
3/15/2019	DocuSigned by: Steve Cannon		
Date Steve C Project	Cannon, P.E. Development Engineer		
<u>FHWA Approved:</u> For Proje required.	cts Certified by NCDOT (above), FHWA signature		
	Sullivan, III, PE, Division Administrator Highway Administration		



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:	B-6010	County:	Madison
WBS No:	48205.1.1	Document:	СЕ
<i>F.A. No:</i>	BRZ-1183(006)	Funding:	State Kederal
Federal Permit Requ	<i>uired</i> ? 🛛 Yes 🗌 No	Permit Type:	USACE

Project Description:

The project calls for the replacement of Bridge No. 302 on SR 1183 (Upper Shut-in Road) over Shut-in Creek in Madison County (TIP B-6010). The archaeological Area of Potential Effects (APE) for the project is defined as an approximately 600-foot (182.88 m) long corridor running 300 feet (91.44 m) northeast and southwest from the center of the bridge. The corridor is approximately 100 feet (30.48 m) wide extending 50 feet (15.24 m) from either side of the centerline.

SUMMARY OF ARCHAEOLOGICAL FINDINGS

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

 \boxtimes

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 archaeolog

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.

SUMMARY OF CULTURAL RESOURCES REVIEW Brief description of review activities, results of review, and conclusions:

NC DOT has conducted an archaeological investigation for the proposed replacement of Bridge No. 302 in Madison County, North Carolina. The project area is located southwest of Hot Springs in the western portion of the county and plotted in the southwest corner of the Paint Rock USGS 7.5' topographic quadrangle (Figure 1).

Background Research

A site files search was conducted by Casey Kirby at the Office of State Archaeology (OSA) on December 12, 2018. No known archaeological sites are identified within the APE, and no previous investigations or reviews have been carried out within the project area. In addition, no known sites are reported within a mile of the bridge. This is due to a lack of archaeological investigations in the region.

According to the North Carolina State Historic Preservation Office online data base (HPOWEB 2018), there are no known historic architectural resources within the APE that may yield intact archaeological deposits.

County and regional maps prior to the 20th century that were inspected provide only general details concerning the region illustrating just major roads and settlements. The 1901 USGS Asheville topographic map is one of the first to provide a reliable location for the project (Figure 2). This map depicts a road similar to the current road, but it does not appear to cross Shut-in Creek at the current bridge location. The former road is situated east of the creek and forks at the edge of the project limits. The first branch heads south up the East Fork of Shut-in Creek, which today is a forest trail, while the second branch continues southwest along the east bank of Shut-in Creek. No structures are plotted in the nearby vicinity. The 1936 Soil Map for Madison County shows the same picture (Hearn et al. 1936) (Figure 3). It is not until later highway maps that the present bridge and road layout are plotted. In general, historic resources are not likely to be encountered.

The USDA soil survey map for Madison County shows the Northcove-Maymead complex (NtD) covering the entire APE (USDA NRCS 2018) (Figure 4). This is a well drained stony soil type with a slope of 15 to 30 percent. The series typically has a low probability for significant archaeological resources due to a slope of 15 percent or more. However, rock shelter may be present, and the contour image suggest small benches, which are not recognized on the soil map. Therefore, an archaeological survey was recommended.

Fieldwork Results

The archaeological field reconnaissance and survey for the replacement of Bridge No. 302 was carried out on February 6, 2019. This included the placement of two judgmental shovel tests (STs) on benches in the northeast and southwest quadrants and a surface inspection (see Figure 4). No cultural material was identified during testing, and no cultural features such as rock shelters were observed along the slopes.

The APE is located on U.S. Forest Service property. Bridge No. 302 and Upper Shut-in Road run northeast to southwest over Shut-in Creek, which flows to the north into the French Broad River. The creek runs parallel with the road. A forest with dense secondary growth covers the area.

The northeast quadrant consists of a bench and steep hillside slope (Figure 5). The bench appears to be man-made from cutting of the adjacent hillside. The subsurface test (ST# 2) in this quadrant reveals approximately 10 cm of dark brown (10YR 3/3) loamy sand over a rock layer. Attempts to penetrate this layer failed. Additional shovel probs to the north and south of the ST confirmed more rocks at or just below the surface. A gravel pull-off is also located in this quadrant having been cut or graded into the landform. Along the hillside, no shovel tests were excavated as the slope exceeded 15 percent or more. The northwest and the southeast quadrants consist of a narrow rocky bench between the road and the creek (Figures 6 and 7). The bench slopes sharply into the creek with little to no soil present above the rocks. The bench was surface inspected, and shovel probs were placed in areas where no large rocks were visible at the surface. The probs confirmed the existence of rocks just under a thin surface layer (less than 5 cm) or leaf litter. As a result, no STs were excavated in these quadrants. Finally, the southwest quadrant contains a small rocky bench next to the bridge with a steep slope towards the west (Figures 8 and 9). A shovel test (ST# 1) was excavated near the bridge where no rocks were visible at the surface. The soil stratigraphy along this section of the bench consists of two layers. The upper surface layer is a 30 cm thick dark brown (10YR 3/3) loamy sand. It is followed by 10 cm thick strong brown (7.5YR 4/6) sandy clay loam over a rock layer. The rock layer is impassable with shovels. As the landform moves west, the large rocks begin to appear at the surface and the slope increases. No shovel tests were excavated in these locations due to the rock impasse or steep slope.

Summary and Recommendations

The archeological investigations for the proposed replacement of Bridge No. 302 in Madison County identified no archaeological resources within the APE. The area mostly consists of either large rocks at the surface or just under a thin surface layer. Other portions of the APE contain steep hillside slopes. A small area just northwest of the bridge was the only location suitable for cultural material; however, a subsurface test produced negative results. It is very unlikely that any significant cultural resources are present. No further archaeological work is recommended for this bridge replacement project. However, if design plans change to impact areas outside of the APE, then further archaeological work will be required.

Please note, this project falls within a North Carolina County in which the Eastern Band of Cherokee Indians, the Cherokee Nation, and the United Keetoowah Band of Cherokee Indians have expressed an interest. It is recommended that you contact each federal agency involved with this project to determine their Section 106 Tribal consultation requirements.

SUPPORT DOCUMENTATION

See attached: Signed:	Map(s)	Previous Survey Info	Photos	Correspondence
10	0			

C. Damon Jones NCDOT ARCHAEOLOGIST

3/6/19 Date

REFERENCES CITED

Hearn, Edward, Eugene Goldston, William Davis, C. Croom, and Samuel Davidson

1920 Soil Map for Madison County, North Carolina. U.S. Department of Argiculture, Government Printing Office, Washington D.C. On file at North Carolina Collections, University of North Carolina, Chapel Hill.

HPOWEB

2018 North Carolina State Historic Preservation Office GIS Web Service. http://gisNCDCR.gov/hpoweb/. Accessed December 18, 2018.

United States Department of Agriculture Natural Resources Conservation Services (USDA NRCS) 2018 Madison County Soil Survey. Available online at http://webosilsurvey.nrcs.usda.gov/app/. Accessed December 18, 2018.

United States Geological Survey (USGS)

- 1901 Asheville, North Carolina-Tennessee 30 minute quadrangle map. Reprinted in 1907.
- 2013 Paint Rock, North Carolina 7.5 minute quadrangle map.



Figure 1. Topographic Setting of the Project Area, Paint Rock (2013), NC, USGS 7.5' Topographic Quadrangle.



Figure 2. The 1901 Asheville USGS topographic map showing the location of the project area.



Figure 3. The 1936 Soil Map for Madison County showing the location of the project area.



Project Tracking No.:

Figure 4. Aerial View of the project area showing soils, contours, development, and ST placement.

Project Tracking No.:



Figure 5. View of the bench and slope in the northeast quadrant, looking southwest.



Figure 6. View of the bench adjacent to Shut-in Creek in the northwest quadrant, looking southwest.



Figure 7. View of the bench adjacent to Shut-in Creek in the southeast quadrant, looking northeast.



Figure 8. View of the bench and the location of ST# 1 in the southwest quadrant, looking southwest.



Figure 9. View of the slope in the southwest quadrant, looking northeast.



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:	B-6010	County:	Madison	
WBS No.:	48205.1.1	Document	CE	
		Туре:		
Fed. Aid No:	BRZ-1183(006)	Funding:	State K Federal	
Federal	Yes No	Permit		
Permit(s):		Type(s):		
Project Description: Replace Bridge No. 302 over Chut in Creek on SR 1183 (Upper Shut in				
Road)				

SUMMARY OF HISTORIC ARCHICTECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:

Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on December 12, 2018. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is defined on the following maps. There are no structures within the APE. There are no National Register listed or eligible properties and no survey is required. If design plans change, additional review will be required.

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

HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Madison County survey, Madison County GIS/Tax information, and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present. There are no National Register listed or eligible properties within the APE and no survey is required.

Map(s)	SUPPOR Previous Survey Info.	T DOCUMEN	TATION Correspondence	Design Plans		
FINDING BY NCDOT ARCHITECTURAL HISTORIAN						
Historic Arch	nitecture and Landscapes N	O SURVEY RI	EQUIRED			

NCDOT Architectural Historian

14board

Date



Project Location.



State Historic Preservation Office GIS.

Historic Architecture and Landscapes NO SURVEY REQUIRED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement. Page 3 of 3