# Categorical Exclusion Action Classification Form 

STIP Project No. WBS Element Federal Project No.

| B-5409 |
| :---: |
| 17BP.14.R.185 (formerly 46124.1.FD1) |
| BRZ-1893(2) |

A. Project Description: (Include project scope and location, including Municipality and County. Refer to the attached project location map and photos.)
The purpose of this project is to replace Henderson County
Bridge No. 58 on SR 1893 (Mid Allen Road) over Devils Fork
Creek. The project is about 2 miles east of Hendersonville
and approximately 1000 feet east of I-26. Land use
surrounding the bridge is primarily agricultural with a
mix of field crops and apple orchards. North of the bridge
along Dana Road are several residential areas that
comprise the Dana Community. Bridge No. 58 is 40 feet
long. The replacement structure will be a bridge
approximately 70 feet long, providing a minimum 26-foot
clear deck width. The bridge will include two 11-foot
lanes and 2-foot offsets. The bridge length is based on
preliminary design information and is set by hydraulic
requirements. The roadway grade of the new structure will
be approximately the same as the existing structure.
The approach roadway improvements will extend
approximately 120 feet from the north end of the new
bridge and 160 feet from the south end of the new bridge,
for a total project length of 350 feet. The approaches
will match the existing 22-foot pavement width providing
two 11-foot lanes. Six-foot shoulders (including 2-foot
paved shoulders) will be provided on each side (9-foot
shoulders where guardrail is included). The roadway will
be designed as a Local Route using Subregional Tier
guidelines with a 40 mile per hour design speed. Minor
amounts of additional rights-of-way and easement will be
acquired.
Traffic will be detoured off-site during construction (see
Figure 1 and Offsite Detour description on page 3).

## B. Description of Need and Purpose:

NCDOT Bridge Management Unit records indicate Bridge No. 58 has a sufficiency rating of 55.64 out of a possible 100 for a new structure. The bridge is considered functionally obsolete due to a deck geometry appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards.

The superstructure and substructure of Bridge No. 58 have timber elements that are over forty 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. 58 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.

## C. Categorical Exclusion Action Classification: (Check one)

$\qquad$ TYPE I
TYPE II
TYPE III
D. Proposed Improvements - Include ALL Type I and Type II Action Classifications. For Type III CEs, leave blank.
23. Federal funded projects that receive less than $\$ 5,000,000$ of Federal funds.
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: (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).

Schedule and Funding:
Right-of-way acquisition and construction are scheduled for FY 2020 and FY 2022, respectively. The project has
estimated costs of $\$ 60,000$ for right-of-way and $\$ 735,000$
for construction, for a total of $\$ 795,000$. The project will
be funded under the 2017 NCDOT Bridge Program.

Cost Estimates:
The estimated costs, based on 2017 prices, are as follows:

| Structure | $\$ 273,600$ |
| :--- | ---: |
| Roadway Approaches | 191,538 |
| Structure Removal | 25,625 |
| Misc. \& Mob. | 29,922 |
| Eng. \& Contingencies | 67,038 |
| Total Construction Cost | $\$ 675,050$ |
| Right-of-way Costs | 60,000 |
| Total Project Cost | $\$ 735,050$ |

Estimated Traffic:

| Current | - | 3000 | vpd |
| :--- | :--- | :--- | :--- |
| Year 2040 | - | 4200 | vpd |
| TTST | - | $1 \%$ |  |
| Dual | - | $2 \%$ |  |

Accidents: Traffic Engineering has evaluated a recent five year period and found no accidents occurring in the vicinity of the project.

Design Exceptions: There are no anticipated design
exceptions for this project.
Pedestrian and Bicycle Accommodations: This portion of SR 1893 (Mid Allen Road) is not a part of a designated bicycle route, nor is it listed in the STIP as a bicycle project. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

Bridge Demolition: Bridge No. 58 is constructed entirely of timber and steel and should be possible to remove with no resulting debris in the water, based on standard demolition practices.

Alternatives Discussion:
Offsite Detour (Preferred) - Bridge No. 58 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 1793, SR 1006, and SR 1525. The majority of traffic on the road is through traffic. The detour for the average road user would result in 4 minutes additional travel time (2.4 miles additional travel). Up to a 6-month duration of construction is expected on this project.

Other alternatives were considered, including no build, rehabilitation, new alignment, an onsite detour and staged construction, but none of these is recommended.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone, the detour is acceptable. The Henderson County Fire Marshal (which encompasses all of Emergency Services) and Henderson County Schools Transportation Director have both indicated that the detour is acceptable. There is a farm operation abutting the project site, and coordination with that operation will be ongoing throughout final design and during construction to minimize effects from the detour. NCDOT Division 14 has indicated the condition of all roads, bridges, and intersections on the offsite detour are acceptable without improvement and concurs with the use of the detour.

Resource Agency Involvement: An April 10, 2015 letter from the NC Wildlife Resources Commission stated that a trout moratorium was not being requested and only standard recommendations should apply to the project. No other pertinent agency comments have been noted.

Public Involvement: An initial landowner letter was mailed in February 2015 to notify the nearby property owners of the impending project and on-the-ground data collection efforts. A newsletter was mailed to landowners and residents in the project vicinity in March 2017. One response was received, in the form of an email from a
nearby resident supporting replacement of the bridge as proposed. Based on the lack of controversy and requests for further information, it was determined a public meeting is not warranted at this time.

## F. Project Impact Criteria Checklists:

| Type I \& II - Ground Disturbing Actions | Yes | No |
| :--- | :---: | :---: |
| FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA |  | X |
| (FHWA Signature Required If "Yes" Selected) |  |  |

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
- Type II Action
then answer the threshold criteria questions (below) and questions 8-31 for ground disturbing actions.
In addition, if any of questions 1-7 are marked "yes" then the CE will require FHWA approval.

| 1 | Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)? | $\square$ | X |
| :---: | :---: | :---: | :---: |
| 2 | Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)? | $\square$ | X |
| 3 | Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement? | $\square$ | X |
| 4 | Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations? | $\square$ | X |
| 5 | Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition? | $\square$ | X |
| 6 | Does the project require an Individual Section 4(f) approval? | $\square$ | X |
| 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)? | $\square$ | X |

If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.

| Other Considerations | Yes | No |  |
| :---: | :--- | :---: | :---: |
| 8 | Does the project result in a finding of "may affect not likely to adversely affect" <br> or less for listed species, or designated critical habitat under Section 7 of the <br> Endangered Species Act (ESA)? | $\boxed{ }$ | $\square$ |
| 9 | Does the project impact anadromous fish? | $\square$ | $\boxed{\square}$ |
| 10 | Does the project impact waters classified as Outstanding Resource Water <br> (ORW), High Quality Water (HQW), Water Supply Watershed Critical <br> Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged <br> Aquatic Vegetation (SAV)? | $\square$ | $\boxed{ }$ |


| Other Considerations (continued) | Yes | No |
| :---: | :--- | :--- |
| 11 | Does the project impact waters of the United States in any of the designated <br> mountain trout streams? | $\square$ |
| 12 | Does the project require a U.S. Army Corps of Engineers (USACE) Individual <br> Section 404 Permit? | $\square$ |
| 13 | Will the project require an easement from a Federal Energy Regulatory <br> Commission (FERC) licensed facility? | $\square$ |
| 14 | Does the project include a Section 106 of the NHPA effects determination <br> other than a no effect, including archaeological remains? Are there project <br> commitments identified? | $\square$ |
| 15 | Does the project involve hazardous materials and landfills? |  |
| 16 | Does the project require work encroaching and adversely affecting a <br> regulatory floodway or work affecting the base floodplain (100-year flood) <br> elevations of a water course or lake, pursuant to Executive Order 11988 and <br> 23 CFR 650 subpart A? | $\boxed{~ X ~}$ |

G. Additional Documentation as Required from Section F

Response to Question 8: An aquatic survey was conducted on October 16, 2015, with the assistance of Jay Mays of the USFWS. No Appalachian elktoe, nor any other aquatic mollusk fauna, were found during the survey. The biological conclusion is No Effect.

Response to Question 16: Henderson 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 100year base flood elevations and corresponding regulatory floodway have been established along Devils Fork Creek. The Hydraulic Unit will coordinate with FEMA to determine if a Conditional Letter of Map Revision (CLOMR) and a subsequent final Letter of Map Revision (LOMR) are required for this project. If required, the Division will submit sealed asbuilt construction plans to the Hydraulic Unit upon project completion certifying the project was built as shown on the construction plans.

STIP Project B-5409
Bridge No. 58 in Henderson County

On SR 1893 (Mid Allen Road) over Devils Fork Creek Federal-Aid Project BRZ-1893(2)<br>WBS No. 17BP.14.R.185 (formerly 46124.1.FD1)<br>Categorical Exclusion

## Hydraulics - FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine whether NCDOT'S Memorandum of Agreement applies, or whether a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR) are required.

## Division 14 Construction- FEMA Coordination

This project involves construction activities on a FEMA-regulated stream. 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.

## Division 14 Construction - Offsite Detour

Henderson County Emergency Services (828-697-4728) and Henderson County Schools' Transportation staff (828-697-4739) will be contacted prior to the closure of Bridge No. 58 so that impacts to their services can be minimized.

## Division 14 Construction - Offsite Detour

There is a farm operation abutting all four quadrants of the project site, and coordination with that operation is advised prior to construction to minimize effects from the temporary closure of the bridge crossing.
I. Categorical Exclusion Approval

| STIP Project No. | B-5409 |  |
| :--- | :---: | :---: |
| WBS Element |  |  |
|  | 17BP.14.R.185 (formerly 46124.1.FD1) |  |
| Federal Project No. |  |  |

Prepared By:
10/2/2017


Date
John Jamison, PWS, Senior Environmental Scientist
HDR Engineering, Inc. of the Carolinas

Prepared For: NCDOT Project Development
North Carolina Department of Transportation

Reviewed By:
$\frac{10-2-17}{\text { Date }}$
J. Wilson Stroud, Assistant Project Manager Central Project Delivery


Laura Sutton, PE, Senior Project Manager Central Project Delivery North Carolina Department of Transportation

- If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of "no" to question 3.
- 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.

- If Type I (Non-Ground Disturbing) Categorical Exclusion with an answer of "yes" to question 3.
- 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.
- If classified as Type III Categorical Exclusion.

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

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





## HISTORIC ARCHITECTURE AND LANDSCAPES NO HISTORIC PROPERTIES PRESENT OR AFFECTED 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-5409 | County: | Henderson |
| :--- | :--- | :--- | :--- |
| WBS No.: | $46124.1 . F D 1$ | Document <br> Type: | CE |
| Fed. Aid No: | BZR-1893 | Funding: | $\square$ State Federal |
| Federal <br> Permit(s): | $\boxtimes$ Yes $\square$ No | Permit <br> Type(s): |  |
| Project Description: <br> Replacement of Bridge No. 58 on SR 1893 (Mid Allen Road) over Devils Fork Creek. |  |  |  |

## SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

There are no National Register-listed or Study Listed properties within the project's area of potential effects.
There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.
There are no properties within the project's area of potential effects.
There are properties over fifty years old within the area of potential effects, but they do not meet the criteria for listing on the National Register.
$\boxtimes \quad$ There are no historic properties present or affected by this project. (Attach any notes or documents as needed.)

## Date of field visit:

## Description of review activities, results, and conclusions:

Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on March 13, 2015. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is approximately $675^{\prime}$ from each end of the bridge and $100^{\prime}$ from the centerline each way. A 1905 stone house, 809 Mid Allen Road, is located southwest of the bridge. A survey was required, however after a more thorough evaluation of mapping, aerials, and street view a determination can be made without a site survey. 809 Mid Allen Road, built 1905, is a one-and-ahalf story frame house with stone veneer. A one-story porch, which wraps around the main south elevation and the east elevation, appears to be a later addition as the gable end over the entryway on the main south elevation is partially obscured. There is a one-story addition on the west elevation and a one story addition on the east elevation. A one-story frame garage and one-story frame barn are also on the property and sit directly north of the house. Interstate 26 cuts through fields directly west of the house. 809 Mid Allen Road is an unremarkable, early $20^{\text {th }}$ century vernacular house with several alterations to its workmanship, design, and materials. The addition of Interstate 26, which cuts through what was most likely a larger parcel directly to the west of the house diminishes its setting and feeling. 809 Mid Allen Historic Architecture and Landscapes NO HISTORIC PROPERTIES PRESENT OR AFFECTED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.

Road is not eligible for National Register listing due to loss of integrity; it is also not a remarkable example of its type. Bridge No. 58, built 1976, and a house north of the bridge, built 2000 based on Henderson County GIS/Tax Information, are under fifty years of age and not eligible for NR listing. There are no National Register listed or eligible properties within the APE. If design plans change, additional review will be required.

## SUPPORT DOCUMENTATION

$\square$ Map (s) $\quad \square$ Previous Survey Info. $\quad \square$ Photos $\square$ Correspondence $\square$ Design Plans

## FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes - NO HISTORIC PROPERTIES PRESENT OR AFFECTED


NCDOT Architectural Historian


Date


## NO NATIONAL REGISTER OF HISTORIC PLACES ELIGIBLE OR LISTED ARCHAEOLOGICAL SITES PRESENT OR AFFECTED 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-5409 |  | County: | Henderson |
| :--- | :--- | :--- | :--- | :--- |
| WBS No: | 46124.1.FD1 |  | Document: | CE |
| F.A. No: | BRZ-1893(2) |  | Funding: | $\square$ State $\quad$ Federal |
| Federal Permit Required? | $\boxed{y y y}$ | $\square$ No Permit Type: unspecified |  |  |

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## SUMMARY OF ARCHAEOLOGICAL FINDINGS

The North Carolina Department of Transportation (NCDOT) Archaeology Group reviewed the subject project and determined:
$\boxtimes \quad$ There are no National Register listed ARCHAEOLOGICAL SITES within the project's area of potential effects.
No subsurface archaeological investigations are 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. There are no National Register Eligible or Listed ARCHAEOLOGICAL SITES present or affected by this project. (Attach any notes or documents as needed)

Brief description of review activities, results of review, and conclusions:
To determine the cultural resource potential of the APE, numerous sources of information were considered. First, preliminary construction design, funding, and other data was examined for defining the potential impacts to the APE ground surfaces and for determining the level of effort necessary for Section 106 compliance. Next, a map review and site file search was conducted at the Office of State Archaeology (OSA) on Friday, March 20, 2015. One previously documented archaeological site ( $31 \mathrm{HN71}$ ) has been recorded within the boundaries or adjacent to the project's APE. In addition, numerous prehistoric archaeological sites have been documented nearby on landforms similar or identical to those in the project study area. In general, environmental factors including advantageous hydrology, drainage and topography suggest an elevated potential for the presence of cultural resources, particularly to the prehistoric end. To be sure, an in-field subsurface survey of the APE is recommended prior to construction/replacement activities.
An on-ground investigation of the APE was conducted on Wednesday, May 20, 2015. First, a walk-over of all APE ground surfaces was completed. This served to identify any above-ground archaeological or historical remains, and to determine the location and extent of subsurface investigation necessary for project compliance. Surface visibility was $100 \%$ in the northwestern and southern quadrants, while an apple orchard in the northeastern quadrant allowed only a $25 \%$ visibility in the areas around the tree trunks. Special attention was given to the location of 31 HN 71 in the northwestern quadrant. Here, the entire APE, as well as those areas adjacent to the APE, was searched for prehistoric artifacts related to the occupation of 31HN71. However, no indication of this archaeological site could be uncovered through surface reconnaissance of the APE. The entire project study area was photographed and descriptive notes were taken at this time. As previously mentioned, the two southern quadrants were characterized by recently plowed agricultural fields. Slope and the SR1793 roadway prevented the excavation of more than three shovel test pits in each of these quadrants. The northeastern quadrant was in mature apple orchard. Because of the highly impactful nature of plant/tree growing and due to the area being sprayed with insecticide during the survey, no shovel testing was conducted within this quadrant. Based on the initial reconnaissance, a total of eleven shovel test pits necessitated excavation.

A single transect was established roughly 75 ft from the project center-line along each side of the road. Shovel test pits were spaced at 100 ft intervals, measured $30 \mathrm{~cm}-40 \mathrm{~cm}$ in diameter, and were numbered sequentially south to north. Shovel testing began about 300 ft south of the creek along each transect. A total of eight ( 8 ) shovel test pits were excavated in order to cover the APE in the two western quadrants ( 3 in southwest; 5 in northwest). Across the road to the east, three shovel test pits were dug in the plowed field along the eastern transect. A typical shovel test pit contained a brown loamy sand ( 10 YR4/3) to 40 cmbs atop a second stratum of dark yellowish brown sandy clay loam (10YR4/4) to 70 cmbs . In some instance, a layer of black or very dark grayish brown hydric soil was contained within a shovel test. This is probably due to the soils at this floodplain location experiencing occasional flooding and somewhat poorly drained soils. No shovel tests were dug in the northeastern quadrant due to the insecticide sprayer in the apple orchard. However, based on the lack of artifacts on the surface and within the shovel tests across the street, it is very unlikely that 31HN71 extends across Mid Allen road.
Following archaeological survey of the project APE in Henderson County, North Carolina, no further archaeological input or work is recommended. 31HN71 could not be re-located in the APE and additional investigation of the APE is unlikely to recover meaningful data. A finding of "no historic properties affected" is considered appropriate for the project.

## SUPPORT DOCUMENTATION

## See attached: $\square$ Map(s) $\quad \square$ Previous Survey Info $\quad \square$ Photos $\quad \square$ Correspondence Other:

## Signed:




[^0]:    Project Description: This project proposes to replace Bridge No. 58, which carries SR1893 (Mid Allen Rd) over Devils Fork Creek in Henderson County, North Carolina. According to the environmental input request, the undertaking involves the in-place replacement of the structure along the existing alignment, thereby minimizing potential surface and subsurface disturbances at this location. An off-site detour route or staged construction effort is anticipated [SR1793 (Tracy Grove Rd) to SR1006 (Howard Gap Rd) to SR1525 (Dana Rd)]. The archaeological Area of Potential Effects (APE) is centered upon Bridge 58 and measures 1,500ft in length (750ft from each bridge end-point) and 150ft in width (75ft from each side of the SR1893 center-line).

