

MINIMUM CRITERIA DETERMINATION CHECKLIST

TIP Project No. **B-5408**
W.B.S. Project No. **46123.1.1 / 17BP.14.R.184**

Project Location: Bridge No. 386 over Allens Creek on SR 1148 in Haywood County

Project Description: The purpose of this project is to replace Haywood County Bridge No. 386 on SR 1148 (Lanier Lane) over Allens Creek (see Figure 1). Bridge No. 386 is 45 feet long. The replacement structure will be a bridge approximately 50 feet long, providing a minimum 24-foot, 10-inch clear deck width. The bridge will include two 10-foot lanes and 2-foot, 5-inch 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. A temporary on-site detour bridge will be constructed just north of the existing bridge to provide access during construction. Temporary construction easements will be required to accommodate the proposed improvements.

The approach roadway for the proposed replacement structure will extend approximately 147 feet from the east end of the new bridge and 38 feet from the west end of the new bridge. The approaches will be widened to include a 20-foot pavement width. The roadway will be designed as a Rural Local Route using Sub-Regional Tier Guidelines with a 20 mile per hour design speed. Traffic will be detoured on-site during construction by a 50' one-lane structure downstream (north) of the existing structure. The proposed improvements are shown in Figure 2.

Purpose and Need: NCDOT Bridge Management Unit records indicate Bridge No. 386 has a sufficiency rating of 37.42 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to a substructure condition appraisal of 4 out of 9 according to Federal Highway Administration (FHWA) standards. The bridge also meets the criteria for functionally obsolete due to a structural appraisal of 3 out of 9.

The superstructure and substructure of Bridge 386 have timber elements that are 62 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. 386 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.

Bridge No. 386 carries approximately 120 vehicles per day, with fewer than 200 vehicles per day projected for the future. The substandard deck width is becoming increasingly unacceptable, and replacement of the bridge will result in safer traffic operations. Components of both the timber/I-beam superstructure and timber substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The posted weight limit on the bridge is down to 15 tons for all vehicles. The bridge is approaching the end of its useful life. Replacement of the bridge will result in safer traffic operations.

Anticipated Permit or Consultation Requirements: A Nationwide Permit (NWP) 23 (33 CFR 330.5(a) 23)) under the U.S. Army Corps of Engineers' Section 404 permitting will likely be required for impacts to "Waters of the United States". Other permits that may apply include a NWP No. 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge demolition.

In addition, an NCDWR 401 Water Quality General Certification (GC) may be required in conjunction with the Nationwide Permit. Other required 401 certifications may include a GC 4094 for temporary construction access and dewatering. The Corps holds the final discretion as to what permit will be required to authorize project construction.

Special Project Information:

Environmental Commitments: The list of project commitments (greensheets) is located at the end of the checklist.

Estimated Costs:

The estimated cost is \$770,000 (\$70,000 for right-of-way acquisition and \$700,000 for construction).

Project Schedule:

This project is included in the NCDOT 2017 Bridge Program as a state-funded project. Right-of-way acquisition and construction are scheduled for Fiscal Years 2019 and 2021, respectively.

Estimated Traffic:

Current	120 vpd
Year 2035	<200 vpd
TTST/Dual	1% / 2%

Pedestrian and Bicycle Accommodations: Bridge railing for pedestrians is proposed for this project due to the potential for pedestrian movements in this residential setting.

Bridge Demolition: Bridge No. 386 is constructed entirely of timber and steel. Based on standard demolition practices, it should be possible to remove the existing bridge with no resulting debris in the water.

Alternatives Considered:

Onsite Detour – Replacement of Bridge No. 386 on the existing alignment with a temporary onsite detour was chosen as the best alternative, since this neighborhood bridge serves the adjacent community and Lanier Lane provides the only access for residences, a business, and agricultural fields on Cougar Court and Cunningham Drive.

The following additional alternatives were considered but are not recommended: No Build, Rehabilitation, Staged Construction, and New Alignment.

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 May 2017. Two responses were received, one from a resident and one from a business representative. Both were requesting more information about the project, including access constraints and construction impacts. Coordination with both parties is ongoing to help integrate their interests into the project design and right-of-way acquisition process. Based on the lack of controversy, it was determined a public meeting is not warranted at this time.

Protected Species:

The biological conclusions for the northern long-eared bat, Indiana bat, and gray bat species are unresolved. The NCDOT-Biological Surveys Group will be responsible for further habitat assessment and, if needed, surveys for these species. Construction authorization will not be requested until ESA compliance is satisfied for these species.

PART A: MINIMUM CRITERIA

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Will the proposed project involve land disturbing activity of more than ten acres that will result in substantial, permanent changes in the natural cover or topography of those lands? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Will the proposed project require the expenditure of more than ten million dollars in public funds? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Is the proposed project listed as a type and class of activity which would qualify as a Non-Major Action under the Minimum Criteria rules? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If “yes”, under which category? **9**

(Note: If either Category #8 or #15 is used, complete Part D of this checklist.)

If “yes” is selected for either Question 1 or 2 and “no” is selected for Question 3, then the project does not qualify as a Non-Major Action. A state environmental impact statement (SEIS) or state environmental assessment (SEA) will be required.

PART B: MINIMUM CRITERIA EXCEPTIONS

- | | YES | NO |
|--|--------------------------|-------------------------------------|
| 4. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Will the proposed activity endanger the existence of a species on the Department of Interior’s threatened and endangered species list? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>The biological conclusions for three bat species (gray bat, northern long-eared bat, and Indiana bat) are Unresolved, but are anticipated to be either No Effect or May Affect Not Likely to Adversely Affect findings. Construction authorization will not be requested until ESA compliance is resolved. All other protected species have received a No Effect conclusion.</i> | | |
| 6. Would the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Would the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or groundwater impacts? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9. Is the proposed activity expected to have a significant adverse effect on shellfish, finfish, wildlife, or their natural habitats? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. Is the proposed activity of such an unusual nature, or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the NCDOT? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Note: If any of Questions 4 through 11 in part B are answered “YES”, the proposed project does not qualify as a Non-Major Action. A SEIS or SEA will be required.

PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

	YES	NO
<u>Ecological Impacts</u>		
12. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The biological conclusions for three bat species (gray bat, northern long-eared bat, and Indiana bat) are Unresolved, but are anticipated to be either No Effect or May Affect Not Likely to Adversely Affect findings. Construction authorization will not be requested until ESA compliance is resolved. All other protected species have received a No Effect conclusion.</i>		
13. Does the action require the placement of fill in waters of the United States?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Does the project require stream relocation or channel changes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Is the proposed action located in an Area of Environmental Concern, as defined in the Coastal Area Management Act?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Cultural Resources</u>		
17. Will the project have an “effect” on a property or site listed on the National Register of Historic Places?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Questions in PART C are designed to assist the Engineer in determining whether a permit or consultation with a state or federal resource agency may be required. If any question in PART C is answered “YES”, refer to the Environmental Guidance section of this document and contact the appropriate individual for assistance.

PART D: (To be completed when either category #8 or #15 of the rules is used.)

- 19. Project length: N/A
- 20. Right of Way width: N/A
- 21. Total Acres of Disturbed Ground Surface: N/A
- 22. Total Acres of Wetland Impacts: N/A
- 23. Total Linear Feet of Stream Impacts: N/A
- 24. Project Purpose: N/A

Reviewed by:

12-11-17

Date

J. W. Stroud

J. Wilson Stroud, Project Manager
Project Management Unit
North Carolina Department of Transportation

1/3/18

Date

Beverly G. Robinson

Beverly G. Robinson, CPM, Senior Project Manager
Project Management Unit
North Carolina Department of Transportation

1/3/18

Date

Laura E. Sutton

Laura Sutton, PE, Team Lead
Project Management Unit
North Carolina Department of Transportation

12/11/2017

Date

DocuSigned by:

John Jamison

John Jamison, PWS, Consultant Project Manager
HDR Engineering, Inc. of the Carolinas

PROJECT COMMITMENTS:

Haywood County
Bridge No. 386 on SR 1148 over Allens Creek
WBS Element No. 46123.1.1 / 17BP.14.R.184

Hydraulics Unit – FEMA Coordination

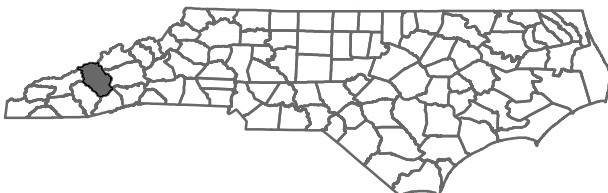
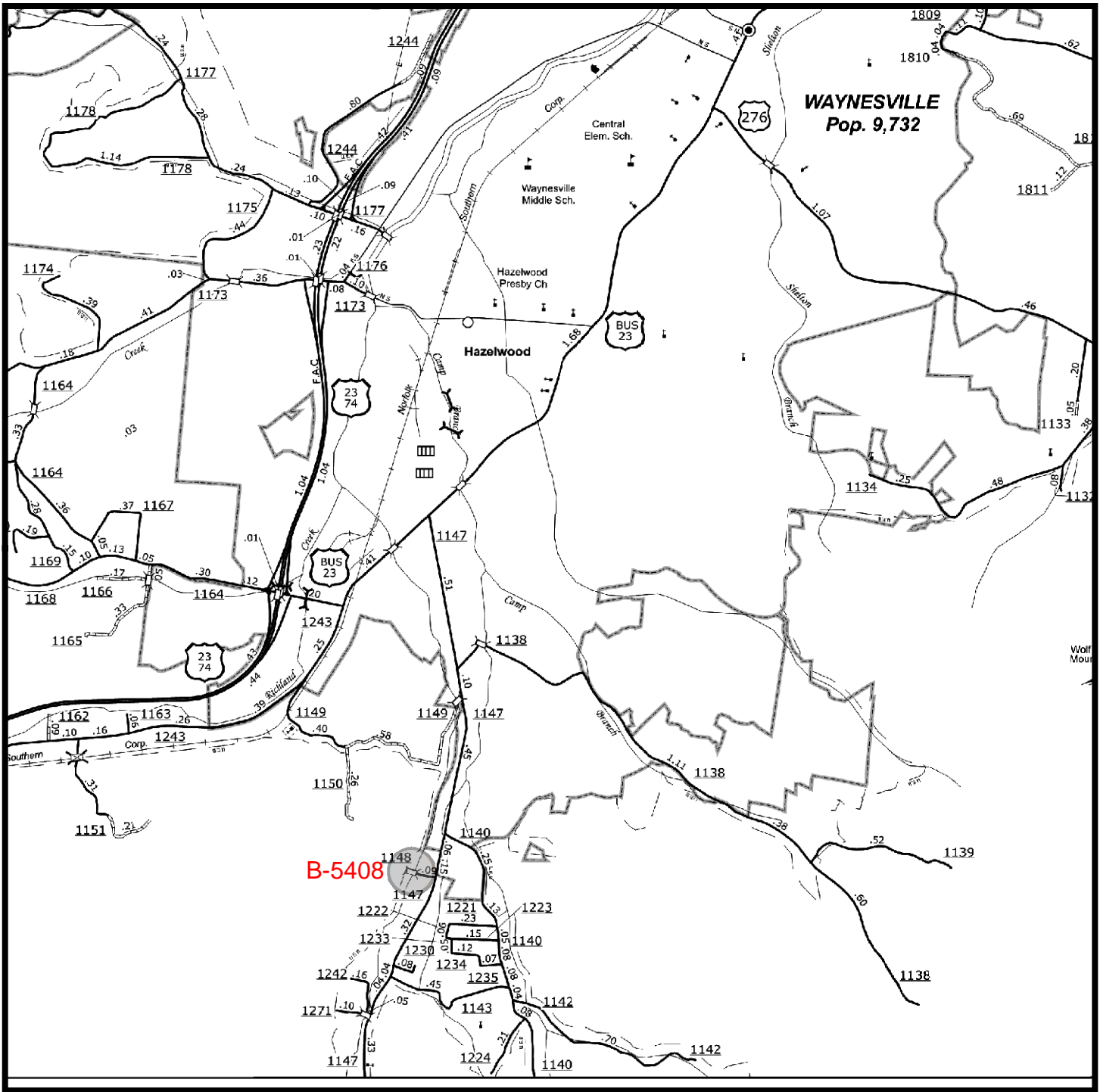
The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine whether NCDOT'S Memorandum of Agreement applies to this project or whether approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR) will be required.


Division 14 Construction-FEMA

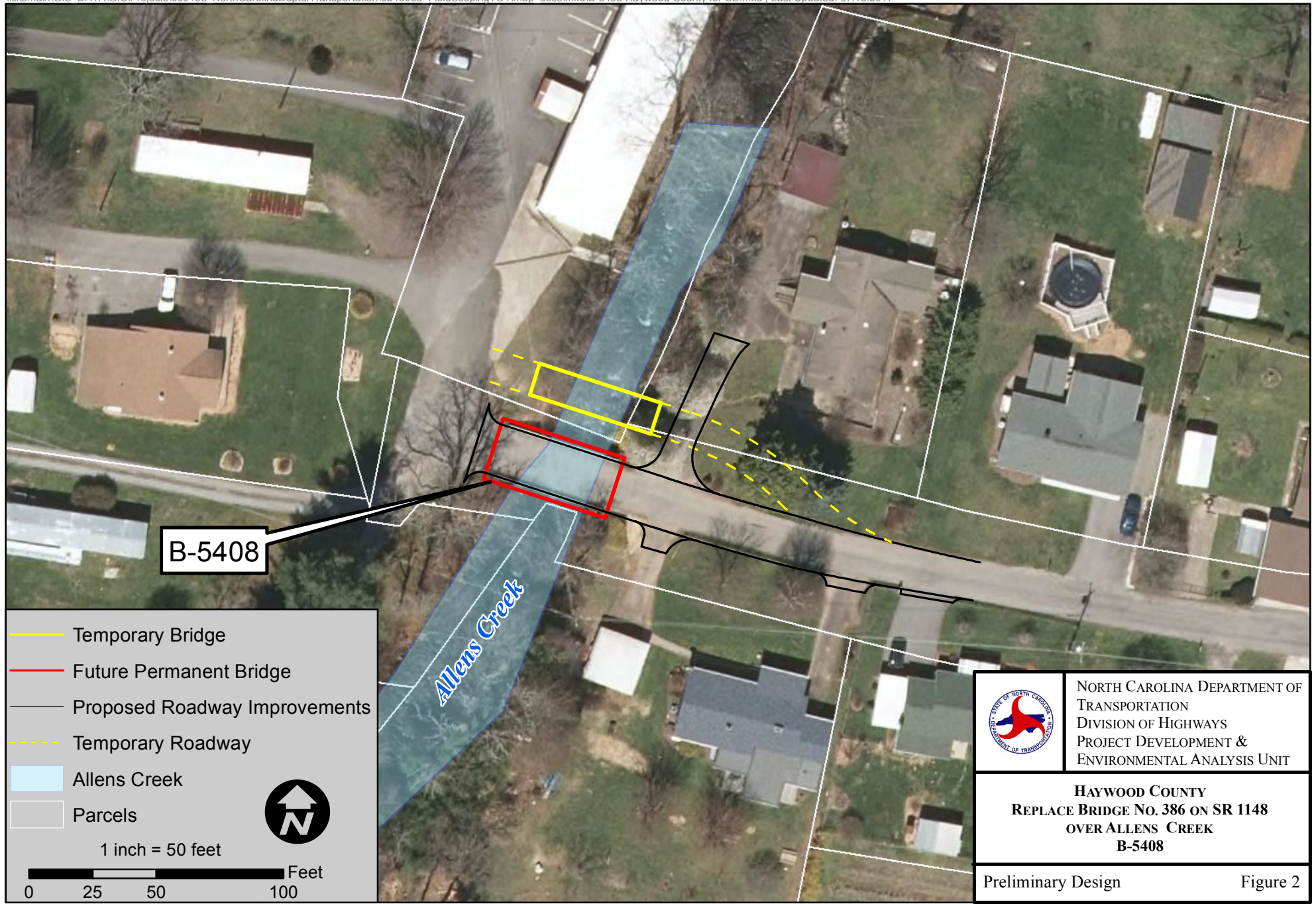
This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located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

Division 14 and Environmental Analysis Unit – Biological Surveys Group

The biological conclusions for the northern long-eared bat, Indiana bat, and gray bat species are **unresolved**. The Division 14 Office will submit requests for bat surveys to the EAU Biological Surveys Group (BSG). The BSG will then be responsible for further habitat assessment and, if needed, surveys for these species. The BSG will send information on the above surveys and assessments to the USACE for their coordination with the USFWS. The USACE will be using the SLOPES (Standard Local Operating Procedures for Endangered Species). Construction authorization will not be requested until ESA compliance is satisfied for these species.



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS BRANCH</p>
<p>HAYWOOD COUNTY REPLACE BRIDGE NO. 386 ON SR 1148 OVER ALLENS CREEK B-5408</p>	
<p>Figure 1</p>	



15-03-0037



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-5408	County:	Haywood
WBS No.:	46123.1.1	Document Type:	CE
Fed. Aid No:	N/A	Funding:	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal
Federal Permit(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Permit Type(s):	N/A
Project Description: Replacement of Bridge No. 386 on SR 1148 (Lanier Lane) over Allens Creek.			

SUMMARY OF HISTORIC ARCHITECTURE 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 March 27, 2015. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is 100' from the centerline each way, 175' from the west end of the bridge and 360' from the east end of the bridge. Based on aerial imagery, Google Street View, and Haywood GIS/Tax information, the area is a mix of mid- to late 20th century one-story frame vernacular houses and mobile homes. All of the buildings are unremarkable and not eligible for National Register listing. Bridge No. 386, built 1955, is not eligible for National Register listing based on the NCDOT Historic Bridge Inventory. 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 Haywood County survey 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.

SUPPORT DOCUMENTATION

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

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Kate Hubbard

3/27/2015

NCDOT Architectural Historian

Date

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

15-03-0037



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-5408** County: **Haywood**
 WBS No: **46123.1.1** Document: **CE**
 F.A. No: **na** Funding: State Federal

Federal Permit Required? Yes No Permit Type: **Unknown at this time**

Project Description:

The project calls for the replacement of Bridge No. 386 on SR 1148 (Lanier Lane) over the Allen Creek in Haywood County. The archaeological Area of Potential Effects (APE) for the project is defined as a 600-foot (182.88 m) long corridor running 400 feet (121.92 m) east and 200 feet (60.96 m) west mostly along Lanier Lane from the center of Bridge No. 386. Although Lanier Lane ends just west of Bridge No. 386, a linear projection of the APE for 200 feet is inferred. The corridor is approximately 200 feet (60.96 m) wide extending 100 feet (30.48 m) on either side of the road from its present center.

SUMMARY OF CULTURAL RESOURCES REVIEW

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

Bridge No. 386 is located just south of Waynesville in the southern half of Haywood County, North Carolina. The project area is plotted along the eastern edge of the Hazelwood USGS 7.5' topographic quadrangle (Figure 1).

A map review and site file search was conducted at the Office of State Archaeology (OSA) on April 31, 2015. No previously recorded archaeological sites have been identified within the APE or a mile of the bridge. According to the North Carolina State Historic Preservation Office online data base (HPOWEB 2015), there are no known historic architectural resources within the APE that may yield intact archaeological deposits. Topographic maps, USDA soil survey maps, aerial photographs (NC One Map), historic maps (North Carolina maps website), and Google Street View application were examined for information on environmental and cultural variables that may have contributed to prehistoric or historic settlement within the project limits and to assess the level of ground disturbance.

Bridge No. 386 and Lanier Lane cross Allen Creek roughly east to west. The creek flows to the north into Richland Creek. These waterways are part of the French Broad drainage basin. The APE is situated on a broad floodplain (Figure 2). Ground disturbance is moderate to severe with closely spaced houses, paved driveways, landscaped lawns, and buried utilities throughout the APE.

The APE according to the USDA soil survey report for Haywood County is made up entirely of the Dellwood-Urban land complex (DhA) (see Figure 2). This soil type is composed of gravel, cobbles, and sand in thin strata. It is moderately well drained with slope at 0 to 3 percent. It is also subject to occasional floods. The original soil properties of the Dellwood series have been altered in the urban developed areas as a result of disturbance. It is unlikely for significant and intact archaeological deposits to be present.

15-03-0037

A review of the site files show that few investigations have been carried out in the vicinity. Most work has been conducted over a mile away to the north. No previously known sites are reported in the area.

Lastly, a historic map review was conducted. Most maps prior to the 20th century provide few details concerning the project area as they primarily show only settlements and major routes. The 1907 USGS Cowee topographic map is one of the first to provide a reliable location for the project area (Figure 3). Although several nearby roads and structures are depicted, no features are plotted within the project limits. The 1938 State Highway map for Haywood County shows an increase in development to the east of Allen Creek, but again no crossing is provided. It is not until the publication of the 1954 Soil Survey map for the county and later maps that a crossing is shown over Allen Creek at or near the current bridge site. Homes and outbuildings are also shown within the project area, but none are significant. It appears from the map review that no deposits associated with significant historic structure should be encountered within the APE.

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 defined archaeological APE for the proposed replacement of Bridge No. 386 over Allen Creek consists of disturbed soils from urban development, which are unlikely to yield significant archaeological deposits. In addition, the historic maps suggest that no significant former historic structures and/or features are in the APE. As long as impacts to the subsurface occur within the defined APE, no further archaeological work is recommended for the replacement of Bridge No. 386 in Haywood County. If construction should affect subsurface areas beyond the defined APE, further archaeological consultation might be necessary.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Photocopy of County Survey Notes Other: **Images from historic maps**

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



C. Damon Jones
NCDOT ARCHAEOLOGIST II

4/6/15

Date