

**Wilkes County
Bridge No. 29 on SR 1001 (Oakwood Rd.)
over Cub Creek
Federal Aid Project No. BRZ-1001(29)
W.B.S. No. 33831.1.1
State Project No. 8.2761801
S.T.I.P. No. B-4676**

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

DATE

Gregory J. Thorpe, PhD,
Manager, Project Development & Environmental Analysis Unit

DATE

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

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CATEGORICAL EXCLUSION

Documentation Prepared in
Project Development and Environmental Analysis Unit By:

_____ DATE	_____ Tracy Walter Project Planning Engineer Bridge Project Development Section
_____ DATE	_____ Bryan D. Kluchar, PE Project Engineer Bridge Project Development Section

PROJECT COMMITMENTS:

**Wilkes County
Bridge No. 29 on SR 1001 (Oakwood Rd.)
Over Cub Creek
Federal Aid Project No. BRZ-1001 (29)
State Project No. 8.2761801
W.B.S. No. 33831.1.1
S.T.I.P. No. B-4676**

Structure Design – Sidewalk

The proposed structure should be designed to provide a vertical barrier between the vehicular and pedestrian traffic.

Roadway Design, Division 11 – Future Greenway

Allowance will be made for a future ten-foot greenway path under the bridge on the north side of Cub Creek.

Roadway Design, Division 11 – Road Closure

Division has committed to not closing SR 1001 for more than a six month period during the replacement project. All efforts should be made to minimize the road closure period.

PDEA Bridge Section – Section 6(f)

The replacement project will require conversion of property protected under Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965 as well as PARTF of the NCDENR Parks and Recreation Trust Fund. Appropriate Section 6(f) documentation shall be complete prior to purchase of Right-of-Way for this project.

Hydraulic Unit – FEMA Coordination

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

Division 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.

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INTRODUCTION: Bridge No. 29 is included in the latest approved North Carolina Department of Transportation (NCDOT) Transportation Improvement Program and is eligible for the Federal-Aid Highway Bridge Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal “Categorical Exclusion”.

I. PURPOSE AND NEED STATEMENT

NCDOT Bridge Management Unit records indicate Bridge No. 29 has a sufficiency rating of 8.89 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to Superstructure and Substructure ratings of 4 out of 9 as well as a Structural Evaluation of 3 out of 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA’s Highway Bridge Program. The structure is also considered to be functionally obsolete due to Structural Evaluation and Deck Geometry evaluations of 2 out of 9.

Components of the concrete superstructure as well as the concrete 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 25 tons for single vehicles and 29 tons for truck-tractor semi-trailers. The bridge has reached the end of its useful life. Replacement of the bridge will result in safer traffic operations.

II. EXISTING CONDITIONS

The project is located within the town limits of Wilkesboro in Wilkes County, near the intersection of SR 1001 (Oakwood Rd.) and SR 2557 (Old US 421/East Main Street); see Figure 1. Development in the area is commercial and residential in nature.

SR 1001 is classified as a urban local route in the Statewide Functional Classification System and is not a National Highway System Route.

In the vicinity of the bridge, SR 1001 has a 21-foot pavement width with 2-foot grass shoulders (see Figure 3). The roadway grade is in a sag vertical curve through the project area. The existing bridge is on a tangent. The roadway is situated approximately 14.0 feet above the creek bed.

Bridge No. 29 is a three-span structure that consists of precast, prestressed concrete channels with an asphalt-wearing surface. The end bents and interior bents consist of precast

prestressed concrete caps on timber piles. The existing bridge (see Figure 3) was constructed in 1969. The overall length of the structure is 81 feet. The clear roadway width is 29.7 feet.

There are utilities attached to the existing structure as well as overhead power lines cross the branch just south of the bridge. Utility impacts are anticipated to be low.

The current traffic volume of 7,200 vehicles per day (VPD) is expected to increase to 9,000 VPD by the year 2035. The projected volume includes one percent truck-tractor semi-trailer (TTST) and three percent dual-tired vehicles (DT). The posted speed limit is 35 miles per hour in the project area. Two school buses cross the bridge daily on their morning and afternoon routes.

There were five accidents reported in the vicinity of Bridge No. 29 during a recent five-year period. None of the five accidents were associated with the alignment or geometry of the bridge or its approach roadway. All five were either driver related error or animal caused accident.

This section of SR 1001 is not part of a designated bicycle route nor is it listed in the S.T.I.P. as needing incidental bicycle accommodations. However, it is located within the Urban Area Boundary of the Town of Wilkesboro and is a popular route for a local bike association. A separate pedestrian bridge exists alongside the existing structure which will be incorporated into the proposed design. The Town of Wilkesboro has stated temporary pedestrian accommodations will not be required during construction (see letter).

A feasibility study indicates that SR 1001 (Oakwood Road) would need to be upgraded to a four lane facility in the future. However, upgrading to a four lane divided facility is not included in the 20 year Long Range Transportation Plan (LRTP).

The Town of Wilkesboro has recently completed a stream restoration for Cub Creek which began at the intersection of Cub Creek and Bridge Street and continued east along Cub Creek to Oakwood Road.

III. ALTERNATIVES

A. Project Description

The replacement structure will consist of a bridge approximately 182-foot long. The bridge length is based on preliminary design information and is set by hydraulic requirements. The bridge will be of sufficient width to provide for one 12-foot lane with a minimum of 4-foot offset (left side) and a 14'-9" lane with a minimum of 2'-0" offset (right side). The roadway grade of the new structure will be approximately seven-foot higher than the existing grade. A five-foot sidewalk, on the west side of the proposed bridge, will be separated from the travel lanes by a vertical barrier.

The existing roadway will be widened to a 32-foot pavement width to provide two 12-foot lanes. Six-foot shoulder will be provided along west side, four feet of which will be paved in

accordance with the current NCDOT Design Policy (The shoulder will include three additional feet where guardrail is required); eight-foot shoulder will be provided along the east side with 2'-6" curb and gutter. This roadway will be designed as a local route.

B. Reasonable and Feasible Alternatives

Two alternatives for replacing Bridge No. 29 that were studied in detail are described below.

Alternate 1

Alternate 1 involves replacement of the structure along the existing roadway alignment. Improvements to the approach roadways will be required for a distance of approximately 300 feet to the west and 330 feet to the east of the new structure. This alternate would be designed using subregional tier guidelines with a design speed of 35 miles per hour. A vertical and horizontal curve design exception would be required. Traffic would need to be detoured offsite during the construction period (see figure 1).

Alternate 2 (Preferred)

Alternate 2 involves replacement of the structure along a new roadway alignment to the south. Improvements to the approach roadways will be required for a distance of approximately 377 feet to the west and 395 feet to the east of the structure. This alternate will be designed using subregional tier guidelines with a design speed of 40 miles per hour. Traffic would need to be detoured offsite during the construction period (see figure 1).

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 US 421 Bypass, NC18, and NC18/NC268. 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 (2.5 miles additional travel). Up to a six-month duration of construction is expected on this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone the detour is acceptable. NCDOT Division 11 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concur with the use of the detour.

C. Alternatives Eliminated From Further Consideration

The "do-nothing" alternative will eventually necessitate closure of the bridge. This is not acceptable due to the traffic service provided by SR 1001.

"Rehabilitation" of the old bridge is not practical due to it being functionally obsolete. The superstructure components do not lend for widening; therefore, meeting FHWA requirements would require complete structure replacement.

Staged Construction is not feasible for this bridge because of the superstructure components. An Alternate involving replacement of the structure along a new roadway alignment to the north was proposed. Traffic would be maintained along the existing structure during the construction period. Improvements to the approach roadways will be required for a distance of approximately 400 feet to the west and 420 feet to the east of the structure. This alternate would have been designed using subregional tier guidelines with a design speed of 25 miles per hour. A vertical and horizontal curve design exception as well as a horizontal sight distance design exception would be required. This alternate would decrease horizontal sight distance as well as require the posted speed limit to be decreased. This alternate was determined not to improve travel conditions at the location of the bridge; therefore, was determined not to be feasible and was removed from further study.

D. Preferred Alternative

Bridge No. 29 will be replaced along a new alignment as shown by Alternative 2 in Figure 2a. Although cost and impacts to park property are higher than Alternate 1, Alternative 2 is considered to be a better replacement alternative than Alternate 1.

NCDOT Division 11 concurs with the selection of Alternative 2 as the preferred alternative.

IV. ESTIMATED COSTS

The estimated costs, based on 2014 prices, are as follows:

	Alternative 2 Preferred
Structure	\$ 829,000
Roadway Approaches	\$ 540,000
Detour Structure and Approaches	N/A
* Structure Removal	\$ 29,000
Misc. & Mob.	\$ 218,000
Eng. & Contingencies	\$ 254,000
Total Construction Cost	\$ 1,850,000
** Right-of-way Costs	\$ 88,000
Utility Costs	\$ 99,000
Total Project Cost	\$ 2,037,000

* Structure Removal cost includes existing bridge and existing pedestrian bridge.

** The Right-of-way costs include an additional cost for the conversion of Section 6(f) and PARTF property for Alternate 2.

V. NATURAL ENVIRONMENT

Physical Characteristics

The study area lies in the northern mountains physiographic region of North Carolina. Topography in the project vicinity is comprised of gently rolling hills with narrow, level floodplains along most streams and a more substantial floodplain along the Yadkin River. Elevations in the study area range from 950 to 1050 foot above sea level. Land use in the project vicinity consists primarily of residential and industrial development interspersed with forestland and some agriculture.

Water Resources

Water resources in the study are part of the Yadkin River basin [U.S. Geological Survey (USGS) Hydrologic Unit 03040101]. One stream; Cub Creek, was identified in the study area. Cub Creek is identified by a NCDWQ Index Number of 12-41 and has a Best Usage Classification (BUC) of “C”.

There are no designated High Quality Waters (HQW), Outstanding Resource Waters (ORW) or water supply watersheds (WS-I or WS-II) within 1.0 mile downstream of the study area. Cub Creek is not designated as a North Carolina Wildlife Resources Commission (WRC) trout stream. The North Carolina Final 2012 303(d) list does not identify Cub Creek as impaired water and there are no 303(d) streams within 1.0 mile of the study area.

Biotic Resources

Two terrestrial communities were identified in the study area: maintained/disturbed and alluvial forest. The majority of the study area consists of habitat that is considered maintained/disturbed where the vegetation is periodically mowed, such as roadside shoulders and residential lawns. Alluvial forest communities occur along the floodplain of Cub Creek where periodic overbank flooding occurs.

Terrestrial communities in the study area may be impacted by project construction as a result of grading and paving of portions of the study area.

Jurisdictional Topics

One jurisdictional stream was identified in the study area; Cub Creek, and is classified as a perennial stream. Cub Creek is not subject to river basin buffers. No jurisdictional wetlands were identified in the study area.

Permits

In accordance with provisions of Section 404 of the Clean Water Act (33 USC 1344), a section 404 Nationwide Permit (NWP) 23 from the USACE is likely to be applicable for all impacts to Waters of the United States resulting from this project. A NWP 33 may be required for this project. A North Carolina Division of Water Quality (DWQ) Section 401 Water Quality General Certification is required prior to the issuance of the Section 404 NWP 23 and/or NWP 33.

Federally Protected Species

Plants and animals with a federal classification of Endangered or Threatened are protected under the provisions of Section 7 and Section 9 of the Endangered Species Act of 1973. As of September 10, 2010, the United States Fish and Wildlife (USFWS) list one federally protected species for Wilkes County.

Bog turtle

Biological Conclusion: Not Required

The Bog turtle has been assigned a classification of T(S/A); Threatened due to similarity of appearance, by the USFWS. Species listed as threatened due to similarity of appearance do not require Section 7 consultation with the USFWS. However, this project is not expected to affect the bog turtle because no suitable habitat is present within the study area. A review of NCNHP records on August 1, 2011 indicates no known bog turtle occurrence within 1.0 mile of the study area.

Bald and Golden Eagle Protection Act

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominate trees are utilized for nesting sites, typically within 1.0 mile of open water. Suitable habitat for the bald eagle is not present in the study area or within a distance of 660 feet on all sides.

VI. HUMAN ENVIRONMENT

Section 106 Compliance Guidelines

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at Title 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and afford the Advisory Council a reasonable opportunity to comment on such undertakings.

Historic Architecture

NCDOT – Human Environment Unit, under the provisions of a Programmatic Agreement with FHWA, NCDOT, HPO, OSA and the Advisory Council on Historic Preservation (effective July 1, 2009), reviewed the proposed project and determined that no surveys are required.

Archaeology

NCDOT – Human Environment Unit, under the provisions of a Programmatic Agreement with FHWA, NCDOT, HPO, OSA and the Advisory Council on Historic Preservation (effective July 1, 2009), reviewed the proposed project and determined that no surveys are required.

Community Impacts

No adverse impact on families or communities is anticipated. Right-of-way acquisition will be limited. No relocatees are expected with implementation of the proposed alternative.

No adverse effect on public facilities or services is expected. The project is not expected to adversely affect social, economic, or religious opportunities in the area.

The project is not in conflict with any plan, existing land use, or zoning regulation. No change in land use is expected to result from the construction of the project.

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impact to prime farmland of all land acquisition and construction projects. There are no soils classified as prime, unique, or having state or local importance in the vicinity of the project. Therefore, the project will not involve the direct conversion of farmland acreage within these classifications.

The project will not have a disproportionately high and adverse human health and environmental effect on any minority or low-income population.

Noise & Air Quality

The project is located in Wilkes County, which has been determined to comply with the National Air Quality Standards. The proposed project is located in an attainment area; therefore, 40 CFR Parts 51 and 93 are not applicable. This project is not anticipated to create any adverse effects on the air quality of this attainment area.

This project will not result in any meaningful changes in traffic volume, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently this effort is exempt from analysis for MSAT's.

Noise levels may increase during project construction; however, these impacts are not expected to be substantial considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

VII. GENERAL ENVIRONMENTAL EFFECTS

The project is expected to have an overall positive impact. Replacement of an inadequate bridge will result in safer traffic operations.

The bridge replacement will not have an adverse effect on the quality of the human or natural environment with the use of the current North Carolina Department of Transportation standards and specifications.

The proposed project will require right-of-way acquisition or easement from land protected under Section 4(f) of the Department of Transportation Act of 1966. Acquisition of Right-of-Way will not result in an adverse effect to the activities, features, or attributes of Cub Creek Park; therefore, by virtue of approval of this Categorical Exclusion the FHWA has made a de minimus call for this park (see Town of Wilkesboro letter(s)); impacts to the park will no longer subject to Section 4(f) requirements of avoidance or minimization.

NC Division of Parks & Recreation (on behalf of US Department of Interior – National Park Service (USDOI – NPS)) and the Town of Wilkesboro has identified the Cub Creek Park property being impacted by the NCDOT project as property protected by Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965 as well as PARTF of NCDENR Parks and Recreation Trust Fund. NCDOT is working with the Town of Wilkesboro as well as NCDENR to establish a compensatory area of property of equal or greater value for the conversion of Section 6(f) property. The conversion property areas as well as the replacement property area will be defined in the required USDOI-NPS LWCF Proposal Description and Environmental Screening Form.

An examination of records at the North Carolina Department of Environment and Natural Resources, Division of Environmental Management, Groundwater Section and the North Carolina Department of Human Resources, Solid Waste Management Section revealed no underground storage tanks or hazardous waste sites in the project area.

Wilkes County is a participant in the National Flood Insurance Program. There are no practical alternatives to crossing the floodplain area. Any shift in alignment will result in an impact area of about the same magnitude. The proposed project is not anticipated to increase the level or extent of upstream flood potential.

The US Coast Guard has determined that a US Coast Guard Permit is not required for this project.

VIII. COORDINATION & AGENCY COMMENTS

NCDOT has sought input from the following agencies as a part of the project development: U.S. Army Corps of Engineers, NC Department of Natural Resources, US Fish & Wildlife Service, NC Wildlife Resource Commission, NC Division of Parks & Recreation, North Carolina State Historic Preservation Office, Wilkes County Planning Department, and Town of Wilkesboro.

The NC Wildlife Resource Commission and U.S. Fish & Wildlife Service in standardized letters provided a request that they prefer any replacement structure to be a spanning structure.

Response: NCDOT will be replacing the existing structure with a new bridge.

The Town of Wilkesboro requested NCDOT provide a hard separation between vehicular traffic and pedestrian traffic on the bridge.

Response: NCDOT will provide a vertical barrier to provide a separation between vehicular and pedestrian traffic.

The Town of Wilkesboro requested the road remain open during construction.

Response: NCDOT will minimize the road closure to no more than a six month period.

NC Division of Water Quality requested discussion of a four lane facility be provided in the document.

Response: A feasibility study indicates that SR 1001 (Oakwood Road) will need to be upgraded to a four lane facility in the future. Funding for upgrading the existing facility to four lanes is not currently provided within the 20 year LRTP.

The Army Corps of Engineers and Wilkes County Planning Department had no special concerns for this project.

IX. PUBLIC INVOLVEMENT

A letter was sent by the Location & Surveys Unit to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

A newsletter was sent in 2007 to businesses and residents living along SR 1001 to provide information concerning the proposed project. Responses provided gave additional area information as well as favor for the project. No comments received were in opposition of the project.

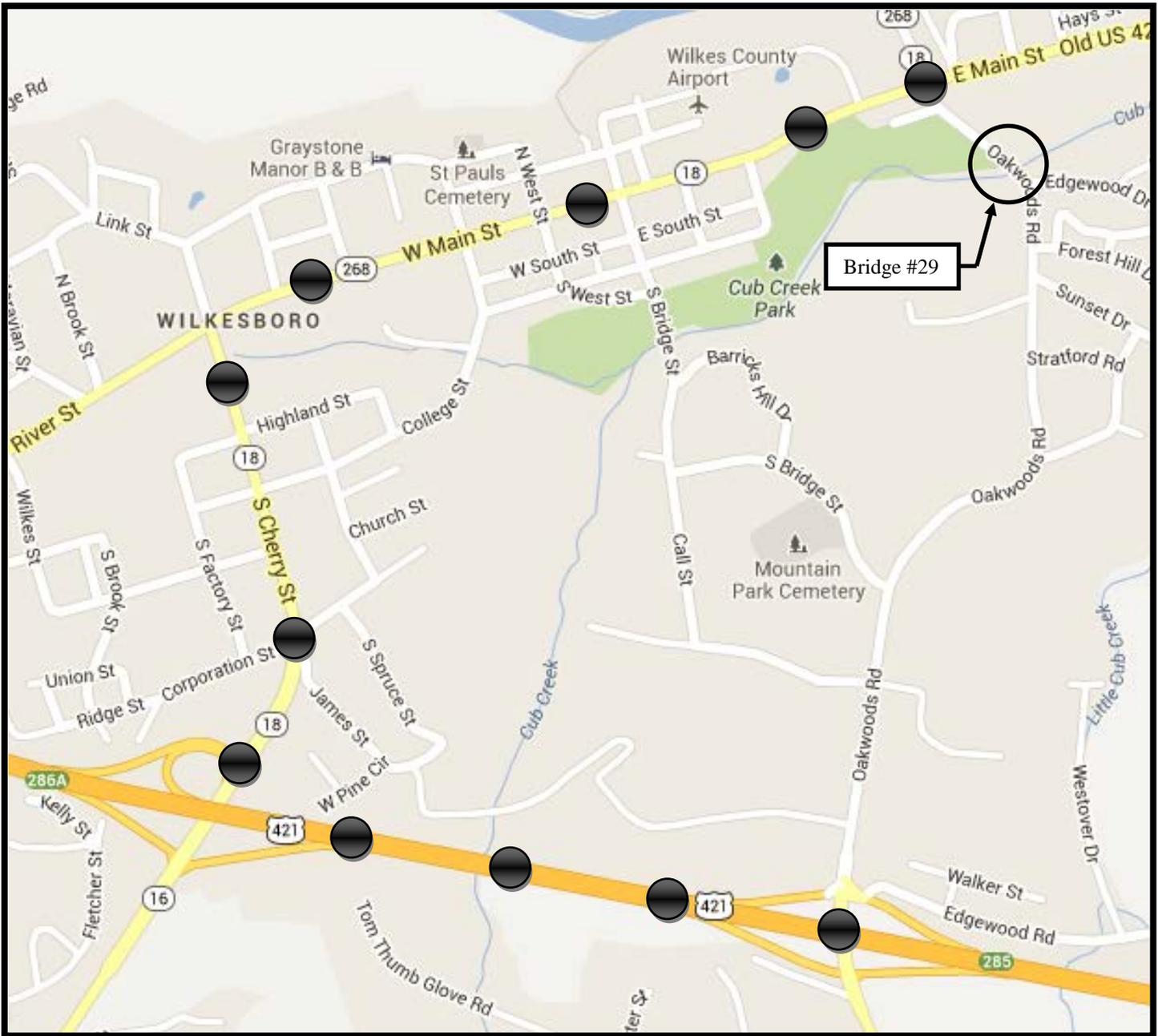
A postcard was sent in 2012 to businesses and residents living along SR 1001 in the area of the project to notify residents of impacts to property protected by Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended, as well as intent to request *de minimus* for impacted property protected by Section 4(f) of the Department of Transportation Act of 1966, as amended. Subject postcard provided information stating the existing road would not be closed to traffic during construction; however, this method of construction has since changed and the road will now be closed for construction. No comments were received due to this mailer.

A postcard was sent in January 2014 to businesses and residents living along SR1001 as well as the proposed detour route to notify residents of the proposed road closure as part of the project as well as impacts to property protected by Section 6(f) and Section 4(f). One resident returned comment stating his concern that our current proposal for the existing bridge replacement would create a greater hazard with any future widening of SR 1001 when a second bridge is constructed across Cub Creek.

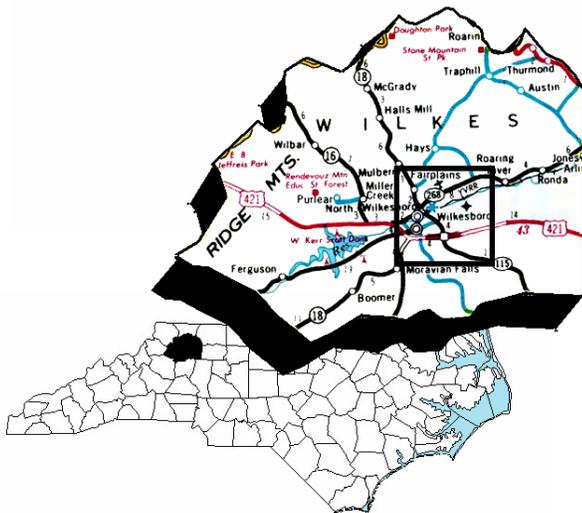
There is not substantial controversy on social, economic, or environmental grounds concerning the project.

X. CONCLUSION

On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project. The project is therefore considered to be a federal “Categorical Exclusion” due to its limited scope and lack of substantial environmental consequences.

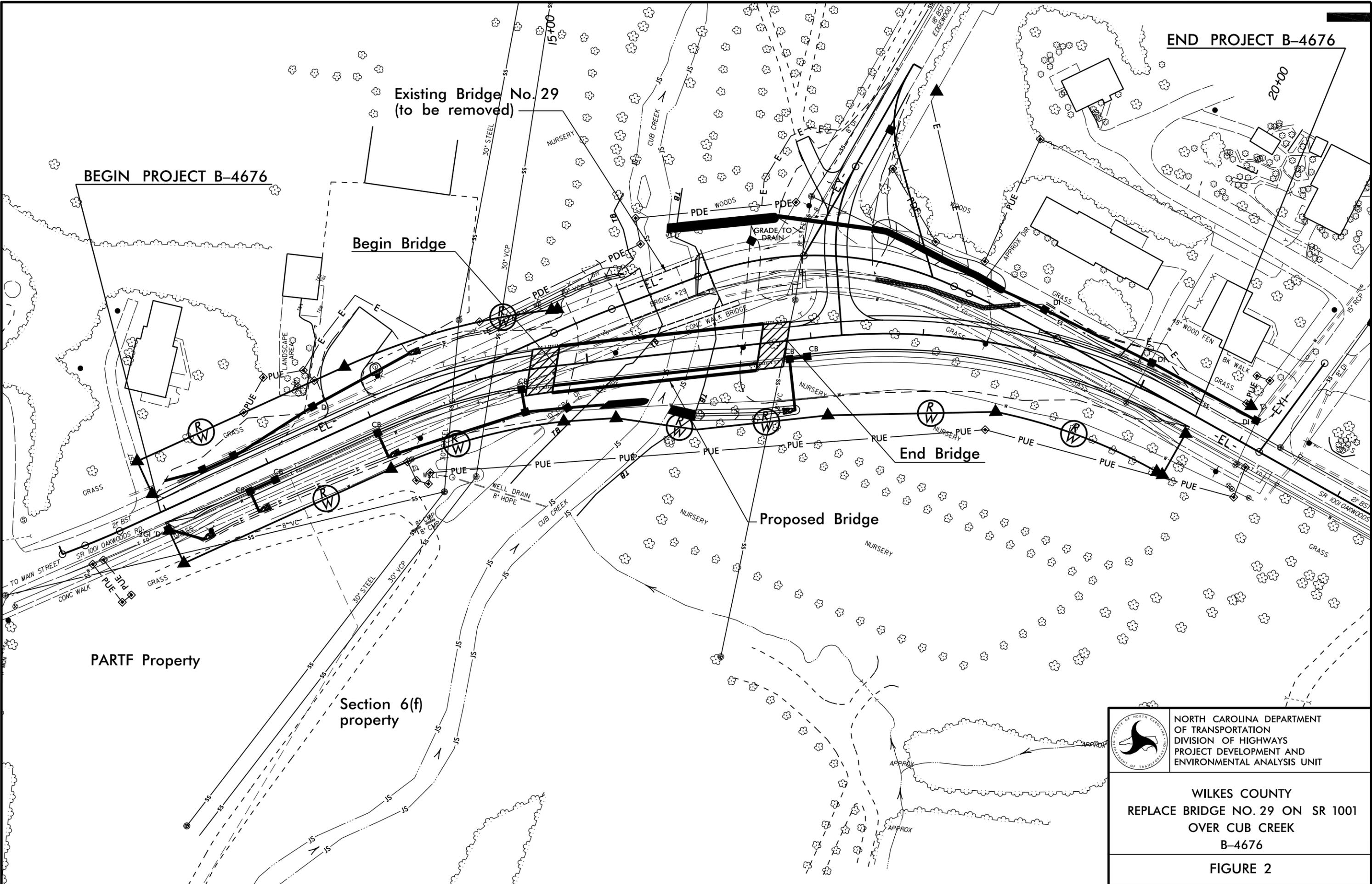


Studied detour Route



	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
	<p align="center"> WILKES COUNTY REPLACE BRIDGE NO. 29 ON SR 1001 OVER CUB CREEK B-4676 </p>

Figure 1



END PROJECT B-4676

BEGIN PROJECT B-4676

Existing Bridge No. 29
(to be removed)

Begin Bridge

End Bridge

Proposed Bridge

PARTF Property

Section 6(f)
property



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

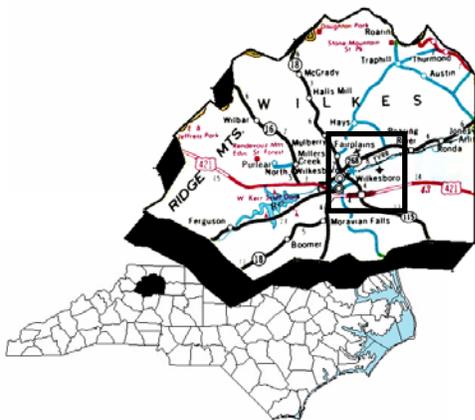
WILKES COUNTY
REPLACE BRIDGE NO. 29 ON SR 1001
OVER CUB CREEK
B-4676

FIGURE 2

**Bridge No. 29
looking west**



**Bridge No. 29
looking south**



	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
	WILKES COUNTY REPLACE BRIDGE NO. 29 ON SR 1001 OVER CUB CREEK B-4676

Figure 3

U.S. Department of
Homeland Security

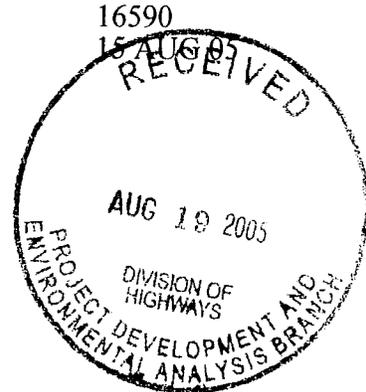
United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, Va. 23704-5004
Staff Symbol: obr
Phone: (757) 398-6422
Fax: (757) 398-6334
Email: Bill.H.Brazier@uscg.mil

Mr. Gregory J. Thorpe, PhD.
Environmental Management Director
Project Development and Environmental
Analysis Branch
North Carolina Department of Transportation (NCDOT)
Raleigh, North Carolina 27699-1548



Dear Mr. Thorpe:

This is in response to your letter of May 10, 2005, requesting comments for the NCDOT Bridge Replacement Projects over Asheworth Creek, Meat Camp Creek, US 221 over A Creek, US 1317 over A Creek, Reedy Creek, Twelve Mile Creek, Lane Creek and Cub Creek.

Since the above-mentioned waterways are subject to tidal influence, they are considered legally navigable for Bridge Administration purposes. These waterways also meet the criteria for advanced approval waterways outlined in Title 33, Code of Federal Regulations, Section 115.70. Advance approval waterways are those that are navigable in law, but not actually navigated by other than small boats. The Commandant of the Coast Guard has given his advance approval to the construction of bridges across such waterways. Recent visits of the waterways by our staff member confirmed such conditions for these bridge sites. Therefore, Coast Guard Bridge permits will not be required for these proposed projects.

If you have any questions regarding this matter, please contact Mr. Bill H. Brazier, at the phone number or address shown above.

Sincerely,

A handwritten signature in cursive script that reads "Waverly W. Gregory, Jr.".

WAVERLY W. GREGORY, JR.
Chief, Bridge Administration Branch
By direction of the Commander
Fifth Coast Guard District



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

August 5, 2005

MEMORANDUM

TO: Gregory J. Thorpe
Division of Highways
Department of Transportation

FROM: Peter Sandbeck *ES for Peter Sandbeck*

SUBJECT: Bridge 29 on SR 1001 over Cub Creek, B-4676, Wilkes County, ER 05-1044

Thank you for your letter of May 10, 2005 concerning the above project.

There are no recorded archaeological sites within the proposed project area. If the replacement is to be located along the existing alignment and there is no onsite detour, it is unlikely that significant archaeological resources will be affected and no investigation is recommended. However, if the replacement is to be in a new location, or an onsite detour is proposed, an archaeological survey is recommended.

We have determined that the project as proposed will not affect any historic structures.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT
Matt Wilkerson, NCDOT

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-4763/733-8653
RESTORATION	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6547/715-4801
SURVEY & PLANNING	515 N. Blount Street, Raleigh, NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6545/715-4801

NO HISTORIC PROPERTIES PRESENT/AFFECTED FORM

PROJECT INFORMATION

Project No: B-4676 *County:* Wilkes
WBS No: 33831.1.1 *Document:*
F.A. No: *Funding:* State Federal

Federal (USACE) Permit Required? Yes No *Permit Type:*

Project Description:

Replace Bridge No 29 over Cub Creek on SR 1001 (Oakwoods Rd) in Wilkesboro.

SUMMARY OF FINDINGS

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

- There are no properties over fifty years old 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 National Register-listed or Study Listed properties within the project's area of potential effects.
- All properties greater than 50 years of age located in the APE have been considered and all compliance for historic architecture with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.
- There are no historic properties present or affected by this project. (*Attach any notes or documents as needed*)

SUMMARY OF CULTURAL RESOURCES REVIEW

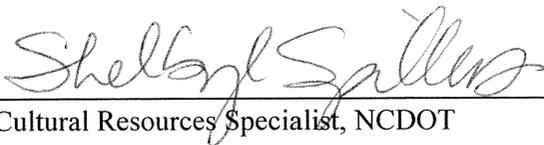
Brief description of review activities, results of review, and conclusions:

Review of HPO quad maps, historic designations roster, and indexes was undertaken on January 3, 2011. Based on this review, there were no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects. The bridge is located near the Wilkesboro Historic District but not within or adjacent to the district boundaries. There are two properties at the intersection of Oakwood Road (SR 1001) and Main Street; a commercial block c. 1910 and a house c. 1940. Neither of these properties meet the criteria for National Register Eligibility. No historic properties will be affected by the construction of this bridge.

SUPPORT DOCUMENTATION

See attached: Map and photos.

Signed:



1-3-2011

Cultural Resources Specialist, NCDOT

Date

Representative, HPO

Date

HPO/OSA Comments:

10-12-0004

NO PREHISTORIC OR HISTORIC PROPERTIES PRESENT/AFFECTED FORM

PROJECT INFORMATION

Project No: B-4676 *County:* Wilkes
WBS No: 33831.1.1 *Document:* Minimum Criteria Sheet
F.A. No: BRZ-1001(29) *Funding:* State Federal
Federal (USACE) Permit Required? Yes No *Permit Type:* USACE

Project Description:

The project calls for the replacement of Bridge No. 29 over Cub Creek on SR 1001 (Oakwoods Road). The archaeological Area of Potential Effects (APE) for the project is defined as a 300-foot (91.44 m) wide corridor that extends 150 feet (45.72 m) east and 150 feet (45.72 m) west from the present center of SR 1001. The APE begins at the intersection of SR 1001 with NC 18/SR 2510 (Old US 421/East Main Street) and runs south for a distance of 0.27 miles (0.43 km) to the intersection of SR 1001 with Forest Hill Drive.

SUMMARY OF FINDINGS

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

Archaeology

- There are no National Register-listed or Study Listed properties 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 historic properties present or affected by this project. (*Attach any notes or documents as needed*)

SUMMARY OF CULTURAL RESOURCES REVIEW

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

The project area is situated in the town of Wilkesboro, North Carolina, and south of the Yadkin River in Wilkes County. The project area is located on the Wilkesboro quad (Figure 1).

A map review and site file search was conducted at the Office of State Archaeology (OSA) on December 21, 2010. No previously recorded archaeological sites have been identified within the presently defined APE or adjacent to the APE, but eight sites (31WK14, 31WK15, 31WK71, 31WK184–31WK186, 31WK197, and 31WK198) have been recorded within a mile radius of the project area. In addition, there are no existing National Register (NR), State Study List (SL), Locally Designated (LD), Determined Eligible (DE), or Surveyed Site (SS) properties within or adjacent to the APE. Topographic maps, USDA soil survey maps, aerial photographs (Google and NCDOT), historic maps (North Carolina maps website) and Google street view application were utilized/inspected to gauge environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, residential, hydrological, and other erosive type disturbances within the surrounding archaeological APE. An archaeological reconnaissance and field survey of the project area was conducted on January 4–5, 2010, to help assess the project area.

SR 1001 and Bridge No. 29 run roughly north to south and are situated in the Cub Creek/Yadkin River floodplain (Figures 2 and 3). Cub Creek is a tributary for the Yadkin River, which is part of the Yadkin-Pee Dee drainage basin (Figure 4). Development is generally light toward the northern and southern ends of the APE with residential houses and businesses. The majority of the undeveloped project area to the south of Cub Creek is used for a plant nursery to grow evergreen shrubs known as arborvitae (Figures 5 and 6). To the north of Cub Creek and west of SR 1001, the project area primarily consists of Cub Creek park (Figures 7 and 8). The area to the east of SR 1001 and north of Cub Creek consist of houses situated on graded hillslope and a gravel parking lot for the nursery (Figure 9). Disturbance from the nursery is greater than originally expected. The nursery property is pot marked from the removal of shrubs. The excavated shrubs leave holes that measure about 50 to 60 cm (20 to 24 in) in diameter and extend 30 to 50 cm (12 to 20 in) in depth (Figure 10). The removal of this much soil would impact possible subsurface archaeological features considering the top layer of soil extends on average 25 cm (10 in) below the surface before subsoil is encountered. Other disturbances include a sewer corridor that runs parallel to Cub Creek on its north side (Figures 11 and 12). The sewer corridor also extends south of Cub Creek. It appears from recent ground disturbance that the sewer corridor was improved.

A review of the USDA soil survey maps indicates the soil series within the APE is primarily Toccoa sandy loam (ToA) (see Figure 2). This series consists of deep, well-drained, and very permeable soils with a slope of 0 to 3 percent. A total of ten shovel test pits (STPs) were excavated on this soil within the APE. From these excavations, the upper layer or A horizon is 25 cm (10 in) thick and is dark yellowish brown (10YR 4/4) sandy loam. Any cultural material would have been found within this horizon. It is followed by a sterile C horizon, which is strong brown (7.5YR 4/6) or dark yellowish brown (10YR 4/6) sandy clay loam that extends at least 50 cm (20 in) below the surface. Other potential soil series within the APE that could have yield cultural material are Masada sandy clay loam (MaC2) and Rion fine sandy loam (RnE). These two soil series are located at the southern end of the APE. Four STPs were excavated on the Masada sandy clay loam. This soil series consists of well-drained but eroded soils with moderate permeability on 8 to 15 percent slope. The A horizon is approximately 25 to 30 cm (10 to 12 in) thick and is dark yellowish brown (10YR 4/4) sandy clay loam. The second layer is a sterile B horizon that is strong brown (7.5YR 5/6) clay that extends at least 50 cm (20 in) below the surface. The Rion soil series also consists of well-drained soils, but this particular Rion soil type is located on 25 to 60 percent slope. No

STPs were excavated on this soil series due to the steep slope. The remaining three soil series are Masada-Urban land complex (MuC), Pacolet-Urban land complex (PrC), and Udorthents-Urban land complex (UfB). They are plotted at the northern and southern ends of the APE. These soils are associated with urban development and are unlikely to yield intact prehistoric archaeological deposits. No STPs were excavated on these soils due to disturbance from development and steep hillslope.

The site file search revealed eight sites within a mile of the APE. Five of these sites (31WK14, 31WK15, 31WK71, 31WK197, and 31WK198) are situated north of the Yadkin River. Sites 31WK184–31WK186 are located to the southwest along Cub Creek. Six of the sites (31WK14, 31WK15, 31WK185, 31WK186, 31WK197, and 31WK198) yielded only prehistoric artifacts. Site 31WK14 contains Late Archaic and Late Woodland period components. The site's eligibility for the National Register of Historic Places (NRHP) is unassessed, and it appears to have been impacted by urban development according to aerial photographs. Site 31WK15 is a large prehistoric site that dates to the Early Archaic, Late Archaic, and Woodland periods. Its eligibility has not been assessed as well; however it appears to be currently located under a shopping center and parking lot. Site 31WK185 is a small Late Woodland period site that is considered ineligible for the NRHP. Site 31WK186 dates to an unidentified prehistoric period, and it too is recommended ineligible for the NRHP. Site 31WK197 yielded artifacts from an undefined Woodland period, and its eligibility is unassessed. Likewise, site 31WK198 dates from undefined Archaic and Woodland periods and is unassessed. One site, 31WK184, yielded both prehistoric and historic artifacts. The prehistoric component dates to the Middle Archaic period, while the historic component dates from the mid 19th through mid 20th centuries. The site is not eligible for the NRHP. The final site, 31WK71, has no available information other than its location. The site form is missing at OSA. In addition, four of the sites (31WK15, 31WK71, 31WK185, and 31WK186) are situated upon Toccoa sandy loam. A review of previous archaeological surveys in the area revealed only one recent study near the project area. In 1986, DOT archaeologist investigated the replace of Bridge No. 53 over the Yadkin River along NC-18 (TIP B-1432). Due to nearby disturbances, only three STPs could be excavated and no archaeological sites were identified during the study.

During the current investigation, an archaeological survey consisting of 14 STPs was conducted along either side of SR 1001 within the APE (see Figure 2). Seven STPs were excavated north of Cub Creek with all seven being located on the west side of SR 1001. No STPs were excavated on the east side due to disturbance, slope, and a gravel parking lot. To the south of Cub Creek, another seven STPs were excavated with five to the east and two to the west. Slope and houses limited the number of STP on the west side. All STPs were initially excavated at 30-m intervals. A possible quartz flake was recovered from STP 3. Three additional STPs were excavated at 15-m intervals in relation to the angle of SR 1001 in order to delineate the possible prehistoric site. All three were negative. Upon further analysis of the possible flake in the office, it was determined that the artifact was a small piece of broken quartz and non-cultural. None of the other STPs excavated at 30-m intervals yielded cultural material.

A review of historic maps of the region show only general features concerning the surrounding countryside. It is not until 1918 with the Hearn, Journey, and Perkins' soil map for Wilkes County that the project area is depicted in any great detail (Figure 13). According to an overlay of this map with a modern map provided by the North Carolina maps website, a bridge has been at this location since at least the early 20th century. However, the road layout south of Cub Creek is altered with the main route heading east instead of south. The current alignment does not appear on maps until the 1960s. The 1918 map along with other early 20th century maps show no structures along Cub Creek except for the old bridge. The other structures that appear within the APE on the early maps are situated to the north along Old US 421/East Main Street. These structures would be located within the developed portion of the APE, and it appears unlikely any historic archaeological remains are still present.

The archaeological investigations along the SR 1001 for the replacement of Bridge 29 consisted of 11

STPs excavated at 30-m intervals with additional three STPs excavated at 15-intervals within the APE. No cultural material was recovered from any of the STPs. A review of the previously identified sites in the area show no known archaeological sites within or adjacent to the APE. Historic maps for the region also suggest no remains are present for significant historic structures within the APE. In addition, disturbance from the removal of shrubs from the nursery property has hindered the likelihood of encountering a significant and intact archaeological site. Therefore, it is unlikely any archaeological sites that are potentially eligible for the NRHP are present within the project area. No further archaeological work is recommended within the APE for the replacement of Bridge No. 29 and subsequent improvement to SR 1001. If the project expands and impacts subsurface areas beyond the defined APE, further archaeological consultations might be necessary.

SUPPORT DOCUMENTATION

See attached: Map(s), Previous Survey Info, Photos, Correspondence, Photocopy of notes from survey.

Signed:



Cultural Resources Specialist, NCDOT

11/07/11

Date



TOWN OF WILKESBORO

"Where the Mountains Begin"

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Phone (336) 838-3951 • Fax (336) 838-7616

September 24th, 2012

Tracy A. Walter
Project Planning Engineer
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, NC 27699 – 1548

Re: Bridge No. 29 – Pedestrian Access Comments

Mr. Walter,

This letter is to inform the North Carolina Department of Transportation that the Town of Wilkesboro will not require alternative pedestrian access along Oakwoods Road during Bridge no. 29 construction. We understand, and agree with, the importance of providing safe options for bicyclist and pedestrian traffic. However, we also understand the difficulty and potential cost in providing alternative access at this particular location.

Although the pedestrian bridge in question, which is constructed directly to the east of Bridge no. 29, provides an access point into Cub Creek Park, there are many other options within close proximity. Moreover, the new design for Bridge no. 29 will provide pedestrian access for walkers, bikers, and users of future greenway segments. The Town of Wilkesboro believes that the brief disruption for pedestrians during construction is substantially outweighed by the end results and additional pedestrian accommodations provided by the new bridge design.

At current, the pedestrian route along Oakwoods Road is not considered to be a major pedestrian route in the Town of Wilkesboro, but with proposed expansion plans for Oakwoods Road, which will include additional sidewalk as well as bike lanes, the town anticipates that the route will experience higher pedestrian traffic during future years.

The main access point to Cub Creek Park is located at a trailhead and parking area located at the intersection of Cub Creek and South Bridge Street - a short distance from the bridge construction site. Again, we feel that the temporary closure of pedestrian traffic near Bridge no. 29 will only affect a small group of citizens and does not establish the need for alternative access during construction. If you have any questions or concerns, please do not hesitate in contacting my office.

Sincerely,

Kenneth Noland, ICMA-CM

Town Manager

Town of Wilkesboro

(336) 838-3951

townmanager@wilkesboronorthcarolina.com

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Mayor

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Town Clerk

COUNCIL MEMBERS
NELLIE ARCHIBALD
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September 24th, 2012

Tracy A. Walter
Project Planning Engineer
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, NC 27699 – 1548

Re: Bridge No. 29 – Pedestrian Access Comments

Mr. Walter,

On behalf of the Town of Wilkesboro's Parks and Recreation Department, this letter is to inform the North Carolina Division of Transportation that it is acceptable to not have pedestrian access at Bridge no. 29 during construction. While allowing the use of pedestrian and non-motorized transportation, especially their safety, is of the utmost importance to the Town of Wilkesboro, we feel that there are more than sufficient alternate routes within a reasonable distance from Bridge no. 29. At current, this route is not considered a major pedestrian route in and around the Town of Wilkesboro.

We feel that the temporary closure for pedestrian traffic during Bridge no. 29 construction is necessary to facilitate the much needed improvements to the bridge, which will in turn greatly increase the pedestrian access and safety into and around Cub Creek Park.

Sincerely,

Cliff Gardner
Director of Parks and Recreation
Town of Wilkesboro
(336) 667.8804
cgardner8804@yahoo.com

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March 21, 2013

Tracy Walter
NCDOT - Project Planning Engineer
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, NC 27699-1548

REF: NCDOT STIP Project B-4676

Dear Mr. Walter:

This letter shall serve as the Town of Wilkesboro's response to the NCDOT "no adverse effect" evaluation for the above referenced project.

The Wilkesboro Park and Recreation Department has reviewed the proposed Acquisition Plan of approximately .5 acre adjoining SR 1001 at Cub Creek. Based on the review we concur with NCDOT in finding that there will be no adverse effect to our park facilities and operations.

If you need further clarification please do not hesitate in contacting me.

Sincerely,

Cliff Gardner
Director of Parks and Recreation

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Mayor

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townmanager@wilkesboronc.org

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