

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project Number: **B-5018**
State Project Number: **41731.1.ST1**
Federal Aid Project Number: **STM-0013 (29)**

A. Project Description:

The purpose of this project is to replace Bridge #12 and Bridge #25 in Hertford County on US 13 over Ahoskie Creek. These two bridges are located approximately 560 feet apart and approximately 0.25 miles north of SR 1420 (Cemetery Road), between Powellsville and Ahoskie. Bridge #12 is approximately 120 feet in length and conveys the main flow channel of Ahoskie Creek. Bridge #25 is approximately 70 foot in length and is the floodplain overflow structure for Bridge #12. There is no active channel within this floodplain overflow structure. Both bridges are located in a FEMA regulated flood hazard zone (Zone AE) with a flood study and floodway established. As such, the two new structures will be designed to meet all applicable FEMA requirements, as well as provide proper hydraulic conveyance.

The project limits start approximately 850 feet south of Bridge #12 and extend to approximately 850 feet north of Bridge #25. US 13 has a Rural Minor Arterial functional classification and will be designed with a 60 mile per hour design speed. The proposed roadway typical section consists of two 12-foot lanes with six-foot minimum shoulders, four-foot of which shall be paved. The new structures will provide two 12 foot lanes and 4-foot bridge rail offsets. The existing concrete ditches located south of the bridges, along both sides of US 13, will be removed. It is anticipated that design exceptions will be required for several design parameters.

B. Purpose and Need:

NCDOT Bridge Management Unit records indicate that Bridge #12 has a sufficiency rating of 16.9 out of a possible 100. Due to a structural appraisal of two out of nine, the bridge is considered structurally deficient. In addition, the bridge is considered functionally obsolete due to a deck geometry appraisal of two out of nine. According to Federal Highway Administration (FHWA) standards, these ratings make the bridge eligible for FHWA's Highway Bridge Replacement and Rehabilitation Program.

NCDOT Bridge Management Unit records indicate that Bridge #25 has a sufficiency rating of 48 out of a possible 100. This bridge has a structural appraisal of five out of nine. Due to a deck geometry appraisal of two out of nine, this bridge is considered functionally obsolete. According to Federal Highway Administration (FHWA) standards, these ratings make the bridge eligible for FHWA's Highway Bridge Replacement and Rehabilitation Program.

As previously noted, Bridge #12 and Bridge #25 were constructed in 1934. Both bridges have timber piles which have a typical life expectancy between 40 to 50 years. Due to the natural deterioration rate of wood, numerous crutch bents have been added over the years to shore up both of the bridges.

Components of both the concrete superstructure and substructure (concrete caps) have experienced an increasing degree of deterioration. Both bridges were recently shored to maintain acceptable load limits along US 13. Based on these repairs, the load capacity on Bridge #12 was upgraded to a posted weight limit of 24 tons for single vehicles and 39 tons for truck-tractor semi-trailers. The repairs resulted in the load capacity of Bridge #25 being raised to the legal limit for cars and trucks. Both of these bridges are approaching the end of their useful life.

The estimated 2007 average daily traffic (ADT) volume for US 13 is approximately 6,800 vehicles per day (VPD). Traffic is expected to increase to 11,600 vpd by the 2035 design year. The posted speed limit in the vicinity of the bridge is 55 miles per hour (mph). The existing 28-foot bridge width does not meet current design standards for a road carrying this volume of traffic at this posted speed (this is applicable for both bridges). Thus, the replacement of these inadequate structures will result in safer and more efficient traffic operations.

- C. Proposed improvements include the replacement of Bridges # 12 and # 25 over Ahoskie Creek and associated floodplain. These two bridges are functionally obsolete and are in need of replacement. The bridge replacements and roadway improvements will increase safety and reduce maintenance issues. The improvements will also enhance floodplain functions along Ahoskie Creek.
- D. Check one or more of the following Type II improvements that apply to the project:
1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g. parking, weaving, turning, climbing)
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)
 - e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane)

2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - l. Installing bridge safety hardware including bridge rail retrofit
3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.
 - a. Rehabilitating, reconstructing, or replacing bridge approach slabs
 - b. Rehabilitating or replacing bridge decks
 - c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
 - d. Replacing a bridge (structure and/or fill)
4. Transportation corridor fringe parking facilities
5. Construction of new truck weigh stations or rest areas
6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts
7. Approvals for changes in access control
8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic
9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users
10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks, and related street

improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic

11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community
12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3 (b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisitions qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.

D. Special Project Information (Include Environmental Commitments and Permits Required)

- A moratorium on in-water work will be required from February 15 – June 15 by The Wildlife Resource Commission.
- The Division of Coastal Management will require a Major Permit.
- The Corp of Engineers will issue a Nationwide Permit or a GP 291.
- The Division of Water Quality will issue the corresponding Water Quality 401 Certification along with the COE.
- Ahoskie Creek is classified by DWQ as a class “C, Nutrient Sensitive Water”. NCDOT will adhere to and follow erosion control guidelines and Best Management Practices to minimize sedimentation from the project site into Ahoskie Creek.
- Hertford County has one species listed as Endangered by the USFWS, which is the Red-Cockaded Woodpecker. A preliminary survey was conducted using GIS data provided by the Natural Heritage Program, which resulted in no observations within 5 miles of the project area. An on-site survey was conducted on 3/11/09 for potential nesting and foraging habitat. The project area is located in a floodplain associated with Ahoskie Creek and is dominated by hardwood trees. This site does not provide suitable nesting or foraging habitat for the Red-Cockaded Woodpecker. This project will have No Effect on this species.
- The project corridor has been investigated for natural resources. This investigation resulted in no effect on archaeological remains or historic

features. It should be noted that although both bridges were constructed in 1934, neither is eligible for the National Register of Historic Places.

- Bridge demolition will include the superstructure and substructure, which will be removed without dropping them into Waters of the US. It is anticipated that there will be no resulting temporary fill associated with the bridge removal.
- Top Down Construction method will be used to replace both bridges. An off-site detour will be used to maintain traffic. NCDOT will utilize SR 1235 and SR 1238 during the construction time period. The detour is approximately 7 miles long.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions.

ECOLOGICAL		YES	NO
(1)	Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2)	Does the project involve any habitat where federally listed endangered or threatened species may occur?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3)	Will the project affect anadromous fish?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(4)	If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-third (1/3) acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(5)	Will the project require use of U.S. Forest Service lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(6)	Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(7)	Does the project involve waters classified as Outstanding Water Resources (OWR) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(8)	Will the project require fill in Waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(9)	Does the project involve any known underground storage tanks (USTs) or hazardous materials sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PERMITS AND COORDINATION		YES	NO

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| (10) | If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (11) | Does the project involve Coastal Barrier Resources Act resources? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (12) | Will a U.S. Coast Guard permit be required? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (13) | Will the project result in the modification of any existing regulatory floodway? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (14) | Will the project require any stream relocations or channel changes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SOCIAL, ECONOMIC, AND CULTURAL RESOURCES

- | | | YES | NO |
|------|--|-------------------------------------|-------------------------------------|
| (15) | Will the project induce substantial impacts to planned growth or land use for the area? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (16) | Will the project require the relocation of any family or business? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (17) | Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (18) | If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (19) | Will the project involve any changes in access control? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (20) | Will the project substantially alter the usefulness and/or land use of adjacent property? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (21) | Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (22) | Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (23) | Is the project anticipated to cause an increase in traffic volumes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (24) | Will traffic be maintained during construction using existing roads, staged construction, or on-site detours? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | | YES | NO |

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| (25) | If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (26) | Is there substantial controversy on social, economic, and environmental grounds concerning aspects of the action? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (27) | Is the project consistent with all Federal, State, and local laws, relating to the environmental aspects of the action? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (28) | Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (29) | Will the project affect any archaeological remains which are important to history or pre-history? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (30) | Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites or historic bridges, as defined in Section 4(f) of the U.S. Department of Transportation Act of 1966)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (31) | Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (32) | Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the natural Wild and Scenic Rivers? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

F. Additional Documentation Required for Unfavorable Responses in Part E (Discussion regarding all unfavorable responses in Part E should be provided below. Additional supporting documentation may be attached, as necessary.)

Question # 4: NCDOT will avoid and minimize wetland impacts to the maximum extent practicable. US 13 is classified as a Minor Rural Arterial with significant daily traffic counts. The standard minimum shoulder width for this type of facility is eight feet. However, to minimize environmental impacts, and still improve existing conditions, a minimum six-foot shoulder will be provided. The wetland impacts resulting from the proposed construction will be approximately 0.50 acres. However the proposed longer structure provided for Bridge # 12 will allow the restoration of approximately 0.20 acres of riparian wetlands. This will reduce overall wetland impacts. All wetland impacts will be mitigated for.

Question # 13: This project could result in a modification of the existing regulatory floodway in that it could possibly be categorized as a No-Rise/No-Impact or a Decrease deepening on the final design. In either case this work will be able to be performed under the Memorandum of Agreement between the North

Carolina Department of Transportation and the North Carolina Floodplain Mapping Program.

G. CE Approval

TIP Project Number: **B-5018**
State Project Number: **41730.1.ST1**
Federal Aid Project Number: **STM-0013 (29)**

Project Description: (Include project scope and location)

Project B-5018 includes the replacement of Bridges #12 and #25 on US 13 just south of Ahoskie in Hertford County. The new bridge lengths will be based on FEMA requirements and hydraulic conveyance. The new bridge structures will be built in their existing horizontal locations by top down construction methods and incorporation of an off-site detour.

Categorical Exclusion Action Classification: (Check one)

- Type II(A)
 Type II(B)

Approved:

8/19/09 Sterling Baker
Date Project Engineer
 NCDOT Division One

9/19/09 Ray Dillij
Date Environmental Supervisor
 NCDOT Division One

For Type II(B) projects only:

9/18/09 Rollins
Date for Division Administrator
 Federal Highway Administrator