# CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

TIP Project B-5303 WBS Element 46017.1.1 Federal-Aid Project BRZ-1162(7)

## A. Project Description:

The proposed project involves the replacement of Bridge No. 45 on SR 1162 (Bay Road) over Island Creek in Duplin County.

The proposed project is included in the federally-approved 2016-2025 North Carolina State Transportation Improvement Program (STIP). Right of way acquisition and construction are scheduled for state fiscal years 2017 and 2018, respectively, in the draft 2017-2027 STIP.

The estimated costs for the project are as follows:

Construction Cost	\$850,000
Utility Cost	\$77,946
Right of Way Cost	\$15,350
Total Cost	\$943,296

The total cost for the project included in both the approved 2016-2025 STIP and draft 2017-2027 STIP is \$1,313,000. This total includes \$15,000 for right of way acquisition, \$23,000 for utility relocation and \$1,275,000 for construction.

Existing Bridge No. 45 will be replaced with a new bridge at the same location. The proposed bridge will be approximately 125 feet long with a 27-foot 10-inch clear roadway width. Two 11-foot lanes and two-foot 11-inch offsets to the bridge rail will be provided on the proposed bridge. The proposed bridge will be approximately one-foot higher than the existing bridge.

Construction along SR 1162 will extend approximately 230 feet from either end of the new bridge. In this area, SR 1162 will be widened to 22 feet (two 11-foot lanes) with three-foot grassed shoulders (one-foot paved). Proposed shoulders will be six feet wide in areas with guardrail.

Traffic will be detoured off-site during construction. From the south, the proposed detour will include SR 1936 (Garland King Road), NC 11 and SR 1148 (Murphy Store Road).

#### B. Purpose and Need:

The purpose of the proposed project is to replace a deficient bridge.

Bridge No. 45 was built in 1971. The bridge is 86 feet long, with a clear roadway width of 28 feet. The bridge has a reinforced concrete floor on timber joists. The substructure consists of timber caps on timber piles.

Bridge No. 45 has a sufficiency rating of 30.57 out of a possible 100 points. According to Federal Highway Administration standards, the bridge is considered structurally deficient due to a substructure condition rating of 4 out of a possible 9 points and functionally obsolete due to a deck geometry rating of 5 out of a possible 9 points. The bridge has a posted weight limit of 21 tons for single vehicles and 31 tons for truck tractor semi-trailers.

# **C.** Proposed Improvements:

Circle one or more of the following Type II improvements which 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 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)
  - i. Slide stabilization
  - j. Structural BMP's for water quality improvement
- 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
- 1. 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 acquisition 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.

- 13. Acquisition and construction of wetland, stream and endangered species mitigation sites.
- 14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

#### D. Special Project Information

### Traffic Volumes

In the year 2013, 800 vehicles per day crossed Bridge No. 45 on SR 1162. By the year 2035, this volume is expected to increase to 1,000 vehicles per day.

## **Bicycle and Pedestrian Accommodations**

SR 1162 is not a designated bike route. SR 1162 in the vicinity of Bridge No. 45 is in a rural area, any use of Bridge No. 45 by bicycles and pedestrians is only occasional. No special bicycle or pedestrian accommodations are proposed for the replacement bridge. The proposed offsets between the travel lane and the bridge rail will provide an area for pedestrians and bicyclists to cross the bridge without having to walk or ride in the travel lane.

## Permits Required

It is expected a Section 404 Nationwide Permit 23 will likely be required from the US Army Corps of Engineers. The Corps of Engineers holds the final discretion as to what permit will be required for the project. If a Section 404 permit is required, then a Section 401 Water Quality Certification from the NC Division of Water Resources will also be required.

#### **Bridge Demolition**

The bridge is constructed of timber and it should be possible to remove with no resulting debris in the water based on standard demolition practices.

### **Floodplains**

Duplin County is a participant in the National Flood Insurance Program, administered by FEMA. The effective FEMA floodplain mapping indicates this crossing

of Island Creek is located within a flood hazard zone designated as Zone AE, for which 100-year base flood elevations have been established in a Limited Detailed Flood Study.

The Hydraulics Unit will coordinate with FEMA to determine if a Conditional Letter of Map Revision (CLOMR) and a subsequent final Letter of Map Revision (LOMR) are required for the project. If required, the Division shall submit sealed asbuilt construction plans to the Hydraulics Unit upon project completion certifying the project was built as shown on the construction plans.

## **Public Involvement**

A letter was sent to all property owners directly affected by the project. Property owners were invited to comment if they had questions about the project. No comments have been received. Based upon responses to the landowner letter, a public meeting was determined unnecessary.

# **Project Commitments**

See attached list of project commitments.

E.	<u>Threshold Criteria</u> The following evaluation of threshold criteria must be completed for Type II actions.		
ECO	LOGICAL	<u>YES</u>	<u>NO</u>
(1)	Will the project have a substantial impact on any unique or important natural resource?		X
(2)	Does the project involve any habitat where federally listed endangered or threatened species may occur?	$\boxtimes$	
(3)	Will the project affect anadromous fish?		X
(4)	If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) acre and have all practicable measures to avoid and minimize wetland takings been evaluated?		$\boxtimes$
(5)	Will the project require use of U. S. Forest Service lands?		X
(6)	Will the quality of adjacent water resources be adversely impacted by proposed construction activities?		X
(7)	Does the project involve waters classified as Outstanding Water Resources (OWR) and/or High Quality Waters (HQW)?		X
(8)	Will the project require fill in waters of the United States in any of the designated mountain trout counties?		X
(9)	Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?		X
<u>PERN</u>	MITS AND COORDINATION	<u>YES</u>	<u>NO</u>
(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)?		N/A
(11)	Does the project involve Coastal Barrier Resources Act resources?		X
(12)	Will a U. S. Coast Guard permit be required?		X

		<u>YES</u>	<u>NO</u>
(13)	Could the project result in the modification of any existing regulatory floodway?		X
(14)	Will the project require any stream relocations or channel changes?		X
SOCI	AL, ECONOMIC, AND CULTURAL RESOURCES	<u>YES</u>	<u>NO</u>
(15)	Will the project induce substantial impacts to planned growth or land use for the area?		X
(16)	Will the project require the relocation of any family or business?		X
(17)	Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population?		X
(18)	If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor?	X	
(19)	Will the project involve any changes in access control?		<u>X</u>
(20)	Will the project substantially alter the usefulness and/or land use of adjacent property?		X
(21)	Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness?		X
(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)?	X	
(23)	Is the project anticipated to cause an increase in traffic volumes?		X
(24)	Will traffic be maintained during construction using existing roads, staged construction, or on-site detours?	X	
(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?	X	

		<u>YES</u>	NO
(26)	Is there substantial controversy on social, economic or environmental grounds concerning the project?		X
(27)	Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project?	X	
(28)	Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places?		X
(29)	Will the project affect any archaeological remains which are important to history or pre-history?		X
(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 US Department of Transportation Act of 1966)?		X
(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?		X
(32)	Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers?		X

# F. Additional Documentation Required for Unfavorable Responses in Part E

#### **Response to Ouestion 2**

Habitat for the federally-listed American alligator exists in the project area. The American alligator is listed because it is similar in appearance to another federally-listed species, however, and no biological conclusion is required for this species.

Although not listed for Duplin County, the US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) (Myotis septentrionalis) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Duplin County.

## Response to Question 4

The proposed project may affect 0.23 acre of wetlands, based on an area 25 feet outside the proposed slope stakes. It is expected actual wetland impacts will be less. It is

expected a Section 404 Nationwide Permit 23 will likely be required from the US Army Corps of Engineers.

# G. <u>CE Approval</u>

TIP Project B-5303 WBS Element 46017.1.1 Federal-Aid Project BRZ-1162(7)

# **Project Description:**

The proposed project involves the replacement of Bridge No. 45 on SR 1162 (Bay Road) over Island Creek in Duplin County.

<u>Categorical Exclusion Action Classification</u>: (Check one)

TYPE II(A)
TYPE II(B)

Approved:

Date Project Engineer

Project Development and Environmental Analysis Unit

For Type II(B) projects only signed by:

2/3/2017 | 8:29 AM EST Konald G. Luas, Jr.

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Date FOR Division Administrator

Federal Highway Administration

# PROJECT COMMITMENTS

Bridge Number 45 On SR 1162 Over Island Creek Duplin County Federal-Aid Project BRZ-1162(7) WBS Element 46017.1.1 TIP Project B-5303

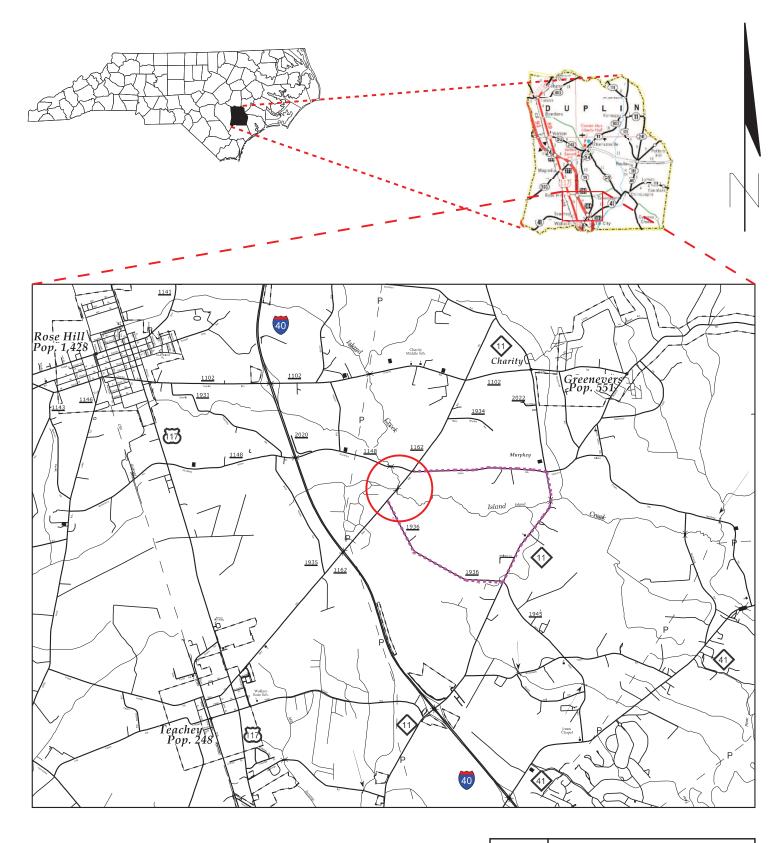
#### **Division Three Construction**

One month prior to road closure, Duplin County Schools and Duplin County Emergency Services will be contacted to reroute buses and make the necessary temporary reassignments to primary response units.

Duplin County Schools Transportation and Operations – (910) 296-0479 Duplin County Emergency Services - (910) 296-2160

# **Division Three Construction/Hydraulics Unit**

The Hydraulics Unit will coordinate with FEMA to determine if a Conditional Letter of Map Revision (CLOMR) and a subsequent final Letter of Map Revision (LOMR) are required for the project. If required, the Division shall submit sealed asbuilt construction plans to the Hydraulics Unit upon project completion certifying the project was built as shown on the construction plans.









NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANNING AND ENVIRONMENTAL UNIT

DUPLIN COUNTY
BRIDGE NO. 45
ON SR 1162 OVER ISLAND CREEK
TIP PROJECT B-5303

FIGURE I

