

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY GOVERNOR LYNDO TIPPETT Secretary

October 16, 2008

Mr. C. E. Lassiter, Jr., PE

Division Two Engineer

MEMORANDUM TO:

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FROM:

Philip S. Harris, III, P.E., Unit Head Natural Environment Unit Project Development and Environmental Analysis Branch

SUBJECT:

Pitt County, Replace Bridge No. 129 over the Tar River and Bridge No. 127 over the Tar River Overflow on SR 1565 (Grimesland Bridge Road; T.I.P. Number B-3684; Federal Aid Project No. BRSTP-1565(4); State Project No. 8.2221101

Please add this U.S. Coast Guard permit to the previously received section 404 permits, section 401 certifications and Riparian Buffer Authorization. All permits have been received for this project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Jay Bennett, P.E., Roadway Design
Dr. David Chang, P.E., Hydraulics
Mr. Randy Garris, P.E. State Contract Officer
Mr. Art McMillan, P.E., Highway Design
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. John F. Sullivan, FHWA
Ms. Beth Harmon, EEP
Mr. Rob Hanson, P.E., PDEA Eastern Region Unit Head
Mr. Jay B. Johnson, Division Environmental Officer

PROJECT COMMITMENTS

Pitt County Bridge No. 129 over the Tar River and Bridge No. 127 over the Tar River Overflow on SR 1565 (Grimesland Bridge Road) Federal Aid Project No. BRSTP-1565(4) State Project No. 8.2221101 WBS No. 33225.1.1 TIP Project No. B-3684

Commitments Developed Through Planning

Project Development and Environmental Analysis

A Memorandum of Agreement and data recovery plan will be prepared and implemented, as necessary for archaeology.

A Memorandum of Agreement (MOA) was signed by the Federal Highway Administration, the State Historic Preservation Office, and NCDOT, effective October 19, 2005.

Division Engineer

An in-water construction moratorium will be in effect from February 15 to September 30. The <u>Stream Crossing</u> <u>Guidelines for Anadromous Fish Passage</u> will be implemented, as applicable.

Temporary work bridges will be utilized in the construction of the new structure across wetlands. To the extent practicable, work bridges will be located between the new bridge and the existing roadway embankment to minimize disturbance of the adjacent wetlands. Construction in open water will be from work bridges or barges, as applicable.

Construction activities will adhere to the guidelines outlined in <u>Precautions for Construction in Areas Which May</u> Be Used By the West Indian Manatee in North Carolina (2003 USFWS).

The existing swing bridge will be disassembled and moved to a storage area as designated by NCDOT. The bridge will be stored for up to 2 years and made available for an alternative use.

SHPO agreed to allow the bridge contractor to dispose of the bridge as a part of the replacement project rather than fulfilling this commitment.

The existing portions of SR 1565 and SR 1566 that are to be removed will be restored to wetlands or buffer area as appropriate.

The project area will be surveyed just prior to construction for eagles in the area of potential impact.

Surveys were conducted on October 29, 2007 by NCDOT Biologists, no nests were found within 660 feet of the project limits

Hydraulic Design

The project will be designed and constructed in accordance with the Riparian Buffer Protection Rules for the Tar-Pamlico River Basin. The new bridge will completely span the riparian buffers [50 feet (15 meters)] on either side of the Tar River.

The bridge was designed and will be constructed in accordance with the Riparian Buffer Protection Rules for the Tar-Pamlico River Basin. The new bridge will completely span the riparian buffers on either side of the Tar River.

Due to design requirements there is 612 ft^2 of impact in zone 2 due to approach fill for temporary work bridges.

Bridge deck drains will not discharge directly into the Tar River or Zone 1.

Deck drains over Zone 1 were eliminated from bridge.

Commitments Developed Through Permitting

(This Green Sheet replaces all prior Green Sheets)

Division 4 Construction

All conditions of the attached USCG Permit are considered as special conditions.

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: (dpb) Phone: (757) 398-6587 Fax: (757) 398-6334 Email:Terrance.A.Knowles@uscg.mil

16591 10 OCT 08

Mr. Gregory J. Thorpe, Ph.D. Environmental Management Director Project Development and Environmental Analysis Branch North Carolina Department of Transportation 1598 Mail Service Center Raleigh, NC 27699



Dear Mr. Thorpe:

Enclosed is the Coast Guard Bridge Permit 6-08-5 dated October 8, 2008, approving the location and plans of a bridge across Tar River, in Grimesland, North Carolina. The following stipulations shall be adhered to:

a. The Contractor shall submit his plan and schedule of operation for approval at least 45 days prior to commencement of work in the waterway. On copy of such information shall be submitted concurrently to the Resident Engineer, the United States Coast Guard Commander (dpb); Federal Building, 1st Floor, 431 Crawford Street; Portsmouth, Virginia 23704-5004, and the U. S. Coast Guard Sector North Carolina at 2301 East Fort Macon Road, Atlantic Beach, NC 28512-5633. The information shall include a sketch of the waterway; the bridge; the location of any restrictions that will be placed in the waterway such as barges, anchors, and anchor lines; the location and height above mean high water and detailed description of any scaffolding, or netting; detailed description indicating the placement, type and dimension of any cofferdams if used. The schedule should also include the hours of operation and whether or not the equipment will be removed at night. The contractor shall comply with all provisions of the Navigation Rules International - Inland, available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. The Contractor shall submit to the Resident Engineer a copy of all correspondence between the Coast Guard and himself or herself. No deviation from the approved plan and schedule of operation may be made unless the modification has previously been submitted and approved by the Coast Guard.

b. All bridge closures for the existing-to-be-replaced bridge shall be requested in writing to be received at this office at least 15 days in advance. If any closures will exceed three consecutive days, we must be advised at least 30 days in advance so that we may make the appropriate marine notifications. Time restrictions for the navigational traffic shutdown shall be strictly adhered to. Any request for an extension of the closure dates stated above shall be forwarded at least 30 days in advance to the Coast Guard for approval. At no time during the work will the waterway be closed to navigation without prior approval from the Coast Guard. You are required to maintain close and regular contact with Coast Guard Sector North Carolina to keep them informed to activities in waterway at (252) 247-4570.

c. Barges that are used in the waterway during the project must be marked in accordance with Title 33 Code of Federal Regulations, Section 118.95 that outlines temporary marking and

16591 10 OCT 08

lighting requirements. Enclosure (2) outlines temporary marking and lighting requirements for barges and structures not part of the bridge that will be used during construction. If barge or float anchor lines are used, they must be marked by anchor buoys, which should be lighted. If you should have any questions, regarding lights on the barges or work floats, please contact Mr. John Walters, Chief, Planning and Waterways Management Section, at (757) 398-6230. Floating equipment shall have a radiotelephone capable of operation from its main control station in accordance with Part 26 of Title 33, Code of Federal Regulations and shall be monitored during all periods the floating equipment is on station.

d. During the progress of work, while the channel is in operation, should any material, machinery or equipment be lost, dumped, thrown overboard, sunk or misplaced which may be dangerous to or obstruct navigation, immediate notice shall be given to the Coast Guard and the object removed with the utmost dispatch. Until removal can be effected, the objects shall be properly marked in order to protect navigation. Notice to the Coast Guard shall give a description and location of any such object and the action taken or being taken to protect navigation.

e. Upon completion of the proposed project, an inspection of the waterway bottom shall be performed to insure that all construction waste materials have been completely removed. Certification will be required in writing by a licensed engineer or licensed surveyor that the waterway has not been impaired and all construction related debris has been cleared from it. The certification shall include the actual method used to conduct the inspection. The Contractor shall remove any bridge related debris, resulting from the current or prior work or occurrences, discovered during this survey.

f. Upon completion of the bridgework, a responsible official of the North Carolina Department of Transportation shall verify as-built clearances and a statement attesting to the correctness of the clearances shall be forwarded to this office for record purpose. In lieu of verification by the above listed official, certification by a licensed surveyor or registered professional engineer registered in the State of North Carolina will be accepted.

g. Except as shown on the plans, no dredging, excavation, filling, rip-rap, or other work affecting the bottom, shall be done in conjunction with this work.

h. If during the periods of construction, permanent lighting cannot be maintained operable, the fenders of each pier shall be marked with a battery or power operated quick flashing white light of not less than 60 flashes per minute and visible for a range of 2,000 yards on 90% of the nights of the year. Generally, a lamp of 20-candle power will meet these requirements. If necessary to obtain coverage required, a light or lights on the upstream and downstream sides shall be installed. The piers shall be so marked until the construction has been completed and permanent navigational lighting has been reinstalled and determined to be operating satisfactorily. Written approval from the Coast Guard of temporary lighting during periods of construction is required. No existing bridge navigation lights shall be impaired or blocked during darkness or periods of reduced visibility.

16591 10 OCT 08

i. Compliance with the requirements stated herein does not relieve the contractor of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the State of North Carolina, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge. It is advised that the Coast Guard can levy monetary civil penalties for violations of bridge regulations and statutes.

The office of the Bridge Administrator, Fifth Coast Guard District, shall be notified immediately upon completion of the project. If you should have any questions regarding this matter, please call Mr. Terrance Knowles at the above listed telephone number.

Sincerely,

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

- Encl: (1) Bridge Permit 6-08-5 dated October 8, 2008 (2) USCG Temporary Marking & Lighting
- Copy: John Walters, (dpw) w/encl USCG Sector North Carolina w/encl



BRIDGE PERMIT

OCT 8 2008

(6-08-5)

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

AND WHEREAS the Secretary of Homeland Security has delegated the authority of Section 502(b) of that act to the Commandant, U.S. Coast Guard by Department of Homeland Security Delegation Number: 0170.1;

AND WHEREAS before construction is commenced, the Commandant must approve the location and plans of any such bridge and may impose any specific conditions relating to the construction, maintenance and operation of the structure deemed necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the Commandant of the Coast Guard has further delegated to the District Commanders by Section 1.01-60(b) of Title 33 Code of Federal Regulations authority to issue permits for the construction, reconstruction, or alteration of bridges across waters of the United States;

AND WHEREAS the **STATE OF NORTH CAROLINA** - has submitted for approval the location and plans of a bridge to be constructed across Tar River, at mile 44.8, in the City of Grimesland, Pitt County, North Carolina;

NOW THEREFORE, This is to certify that the location and plan sheets 1 to 2 (of 2) dated June 2007 are hereby approved by the Commander, Fifth Coast Guard District, subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structures unless the modification of said plans has previously been submitted to and received the approval of the Commander, Fifth Coast Guard District.

2. The construction of falsework, cofferdams or other obstructions, if required, shall be in accordance with plans submitted to and approved by the Commander, Fifth Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel through the structure shall be promptly cleared of all obstructions

Bridge across Tar River at Grimesland, North Carolina

OCT 8 2008 (6-08-5)

placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the construction work has reached a point where such action should be taken, but in no case later than 90 days after the bridge has been opened to traffic.

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the State of North Carolina: Division of Water Quality, Wildlife Resources Commission and the State Historic Preservation Office, or any other federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. A bridge fendering system shall be installed and maintained in good condition by and at the expense of the owner of the bridge when so required by the District Commander. Said installation and maintenance shall be for the safety of navigation and be in accordance with plans submitted to and approved by the District Commander prior to its construction.

5. Clearance gauges shall be installed and maintained in a good and legible condition by and at the expense of the owner of the bridge. The type of gauges and the location in which they may be installed will be submitted to the District Commander for approval.

6. All parts of the existing to-be-replaced Boyds Ferry Bridge and fender system across Tar River, at mile 44.8, not utilized in the new bridge shall be removed down to or below the natural bottom of the waterway, and the waterway shall be cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed at such a time as the District Commander deems appropriate.

7. When the Boyds Ferry Bridge is no longer used for transportation purposes, it shall be removed down or below the natural bottom of the waterway or an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

8. The approval hereby granted shall cease and be null and void unless construction of the bridge project is commenced within three years and completed within five years after the date of this permit.

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FRED M. ROSA, JR. Rear Admiral, United States Coast Guard Commander, Fifth Coast Guard District





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LIGHTING REQUIREMENTS FOR BARGES AND STRUCTURES NOT PART OF A BRIDGE OR APPROACH STRUCTURE

88.13 Lights on barges at bank or dock.

(a) The following barges shall display at night and, if practicable, in periods of restricted visibility the lights described in paragraph (b) of this section:

- (1) Every barge projecting into a buoyed or restricted channel.
- (2) Every barge so moored that it reduces the available navigable width of any channel to less than 80 meters.
- (3) Barges moored in groups more than two barges wide or to a maximum width of over 25 meters.
- (4) Every barge not moored parallel to the bank or dock.

(b) Barges described in paragraph (a) in this section shall carry two unobstructed white lights of an intensity to be visible for a least one mile on a clear dark night, and arranged as follows:

- (1) On a single moored barge, lights shall be placed on the two corners farthest from the bank or dock.
- (2) On barges moored in group formation, a light shall be placed on each of the upstream and downstream ends of the group, on the corners farthest from the bank or dock.
- (3) Any barge in a group, projecting from the main body of the group toward the channel, shall be lighted as a single barge.

(c) Barges moored in any slip or slough which is used primarily for mooring purposes are exempt from the lighting requirements of this section.

33 CODE OF FEDERAL REGULATIONS, SECTION 118.95 LIGHTS ON STRUCTURES NOT PART OF A BRIDGE OR APPROACH STRUCTURE

Lights on sheer booms, isolated piers, obstructions, and other structures not part of a bridge or approach structure must meet the requirements for aids to navigation in Subpart 66.01 of Part 66 of this chapter

33 CODE OF FEDERAL REGULATIONS, SECTION 66.01-10

(a) The characteristics of a private aid to navigation shall conform to the United States Aids to Navigation System described in Subpart B of Part 62 of this subchapter, except that only tungsten-incandescent light sources will be approved for electric lights.

Therefore in accordance with 33 CFR 66.01-10(a), the above lights shall be marked with slow flashing yellow lights visible for two miles on a clear dark night. Lights similar to the Tideland ML-120 Barge Light may be used.