North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Beverly Eaves Perdue
Governor

Braxton C. Davis
Director

Dee Freeman
Secretary

May 3, 2011

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

Dear Dr. Thorpe:

The enclosed permit constitutes authorization under the Coastal Area Management Act, and where applicable, the State Dredge and Fill Law, for you to proceed with your project proposal. The original (buff-colored form) is retained by you and it must be available on site when the project is inspected for compliance. Please sign both the original and the copy and return the copy to this office in the enclosed envelope. Signing the permit and proceeding means you have waived your right of appeal described below.

If you object to the permit or any of the conditions, you may request a hearing pursuant to NCGS 113A-121.1 or 113-229. Your petition for a hearing must be filed in accordance with NCGS Chapter 150B with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27611-6714, (919) 733-2698 within twenty (20) days of this decision on your permit. You should also be aware that if another qualified party submits a valid objection to the issuance of this permit within twenty (20) days, the matter must be resolved prior to work initiation. The Coastal Resources Commission makes the final decision on any appeal.

The project plan is subject to those conditions appearing on the permit form. Otherwise, all work must be carried out in accordance with your application. Modifications, time extensions, and future maintenance require additional approval. Please read your permit carefully prior to starting work and review all project plans, as approved. If you are having the work done by a contractor, it would be to your benefit to be sure that he fully understands all permit requirements.

From time to time, Department personnel will visit the project site. To facilitate this review, we request that you complete and mail the enclosed Notice Card just prior to work initiation. However, if questions arise concerning permit conditions, environmental safeguards, or problem areas, you may contact Department personnel at any time for assistance. By working in accordance with the permit, you will be helping to protect our vitally important coastal resources.

Sincerely,

Douglas V. Huggett
Major Permits and Consistency Manager

Enclosure

400 Commerce Ave., Morehead City, NC 28557
Phone: 252-808-2808 \ FAX: 252-247-3330 Internet: www.nccoastalmanagement.net

Permit Class
NEW

Permit Number
37-12

STATE OF NORTH CAROLINA
Department of Environment and Natural Resources
and
Coastal Resources Commission

Permit

for

X Major Development in an Area of Environmental Concern pursuant to NCGS 113A-118

X Excavation and/or filling pursuant to NCGS 113-229

Issued to **N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1548**

Authorizing development in Carteret County at a new crossing of Gallants Channel and the US 70 bypass of the town of Beaufort as requested in the permittee's application dated 11/9/11, and revisions dated 1/24/12, 3/7/12, and 2/15/12, including the attached drawings as referenced in Condition No. 1 of this permit.

This permit, issued on **5/3/12**, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

US 70 Bypass of Beaufort (TIP No. R-3307)

1) Unless specifically altered herein, all work authorized by this permit shall be carried out in accordance with the following sixty five (65) workplan drawings:

½ size drawings: Thirty one (31) drawings dated 6/30/11, fifteen (15) drawings dated 11/14/11, seven (7) drawings dated 7/29/10, four (4) drawings dated 4/18/11, two (2) drawings dated 10/18/10, two (2) drawings dated 6/1/11, two (2) drawings dated 8/1/11, and two (2) drawings dated 2/15/12.

(See attached sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

No Expiration Date, pursuant to GS 136-44.7B

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.

Douglas V Huggett
for

Braxton C. Davis, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

Signature of Permittee

ADDITIONAL CONDITIONS

2) The West Indian Manatee, *Trichecus manatus*, which is listed as a federally endangered species, has been reported in North Carolina waters. In order to protect the West Indian manatee and in accordance with project commitments made within the CAMA permit application, all in-water work should be done during the period from November 1 to May 31. If work must be done during the period from June through October the enclosed guidelines prepared by the U.S. Fish and Wildlife Service (USFWS) (rev. 06/2003), entitled "Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters" shall be followed.

3) In accordance with project commitments made within the CAMA permit application and the Finding of No Significant Impact (FONSI), dated August 2006, the NCDOT document "Best Management Practices for Bridge Demolition and Removal" (final 9/20/99) shall be followed during demolition activities.

4) Any debris resulting from the demolition of the existing Grayden Paul Bridge over Gallants Channel or construction of the new bridge over Gallants Channel shall not enter wetlands or waters of the State, even temporarily.

5) The permittee and/or his contractor shall exercise all available precautions in day-to-day operations to prevent waste from entering the adjacent waters.

6) Any waste materials and debris associated with the demolition of the existing bridge, construction of the new bridge or the other activities shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations are obtained from any relevant state, federal, or local authorities.

7) The permittee and/or his contractor shall provide for proper storage and handling of all oils, chemicals, etc., necessary to carry out the project.

8) Construction staging areas shall be located only in upland areas, and not in wetlands or waters of the State.

9) The installation of bridge piles shall be performed by pile driving and/or the use of vibratory hammer. Should the permittee and/or its contractor desire to utilize another type of pile installation, such as drilled shaft or jetting, additional DCM authorization shall be required.

10) Live concrete shall not be allowed to contact waters of the State or water that will enter waters of the State or adjacent wetlands.

11) Placement of riprap shall be limited to the areas as depicted on the attached workplan drawings. The riprap material shall be free from loose dirt or any pollutant. The riprap material shall consist of clean rock or masonry materials, such as but not limited to, granite, marl, or broken concrete.

ADDITIONAL CONDITIONS

12) All portions of the existing bridge within Public Trust Waters shall be removed immediately upon completion of the new bridge. Pilings from the existing bridge, as well as remnant pilings from previous bridges, shall be removed in their entirety, except that in the event that a piling breaks during removal and cannot be removed in its entirety, the piling may be cut off flush with the bed of the water body, and DCM shall be notified of each occurrence within one working day.

13) The temporary work bridges shall be removed in their entirety within 90 days after they are no longer needed.

14) The permittee shall minimize the need to cross wetlands in transporting equipment to the maximum extent practicable.

15) Construction mats shall be utilized to support equipment within wetland areas to minimize temporary wetland impacts. These mats shall be removed immediately following project completion.

16) There shall be no clearing or grubbing of wetlands outside of the areas indicated on the attached workplan drawings without prior approval from DCM.

Excavation and Fill

17) No excavation shall take place at any time in any vegetated wetlands or surrounding waters outside of the alignment of the areas indicated on the attached workplan drawings, without permit modification.

18) Material excavated may be used in fill areas associated with the project or shall be removed from the site and taken to an approved high ground location.

19) All excavated materials shall be confined above normal high water level and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.

20) No excavated or fill material shall be placed at any time in any vegetated wetlands or surrounding waters outside of the alignment of the areas as indicated on the attached workplan drawings, without permit modification.

21) The temporary placement and double handling of any excavated or fill material within waters or vegetated wetlands is not authorized.

22) All fill material shall be clean and free of any pollutants except in trace quantities.

Barges

23) Barges shall be removed promptly when they are no longer needed.

ADDITIONAL CONDITIONS

24) Barges shall be utilized only in areas of sufficient depth such that the barges do not rest on the bottom during periods of low tide.

25) Caution shall be exercised with placement and removal of any barges to ensure that impacts to shallow water habitat are avoided and minimized to the maximum extent practicable.

Sedimentation and Erosion Control

26) This project shall conform to all requirements of the NC Sedimentation Pollution Control Act and NC DOT's Memorandum of Agreement with the Division of Land Resources.

27) In accordance with project commitments made within the CAMA permit application and the FONSI, dated August 2006, Design Standards in Sensitive Watersheds, 15A NCAC 4B .0124, shall be implemented.

28) Unless specifically altered herein, the permittee shall follow "Best Management Practices for the Protection of Surface Waters (3/97)" and shall also implement sedimentation and erosion control measures sufficient to protect aquatic resources. At a minimum, appropriate sedimentation and erosion control devices, measures or structures shall be implemented to ensure that eroded materials do not enter adjacent wetlands, watercourses, and property (e.g. silt fence, diversion swales or berms, etc.).

Coastal Wetland Mitigation

NOTE: The proposed project will permanently impact a total of 0.66 acre or 28,750 sq. ft. of CAMA Coastal Wetlands. These impacts are due to 0.50 acre of fill and 0.16 acre of excavation.

29) In accordance with commitments made by the permittee, and in order to mitigate for the loss of approximately 0.66 acre of Coastal Wetlands associated with the project, the permittee shall restore approximately 1.4 acres of Coastal Wetlands by the removal of existing culvert pipes and approximately 560 linear feet of the existing causeway on Taylor Street.

30) Unless specifically altered herein, on-site mitigation shall be carried out as described in the document titled "Turner Street Marsh Restoration Plan (Revised), R-3307, Highway 70 Improvements, Beaufort, Carteret County", dated 2/3/2010.

31) An as-built survey report for the mitigation site shall be submitted to DCM within 90 days after the mitigation site has been constructed.

32) Any subsequent changes to the mitigation plan authorized by this CAMA permit shall require additional DCM authorization.

ADDITIONAL CONDITIONS

33) The wetland restoration areas shall be fully contained by silt fence until all of the unsuitable fill material has been removed and the restoration areas have been restored to the approximate natural elevation of the adjacent, similar, and undisturbed wetlands and stabilized with appropriate coastal wetland vegetation.

34) Annual monitoring reports for the mitigation site shall be provided to DCM for a minimum of five years in accordance with the approved mitigation plan. Annual monitoring reports shall include photographs and an assessment of whether the site is achieving success based on the success criteria stated in the mitigation plan. Progress reports shall also be provided upon request. Monitoring may cease if the permittee can demonstrate that the site has been successfully restored by achieving success criteria and written concurrence is received from DCM.

NOTE: The exact amount of wetland mitigation credits will not be determined until the permittee receives confirmation from DCM that the coastal wetland restoration has been successful.

NOTE: This permit does not convey or imply approval of the suitability of any excess mitigation generated by this project as compensatory wetland mitigation for any particular future projects. The use of any portion of the excess mitigation generated by this project as compensatory mitigation for future projects will be approved on a case-by-case basis during the CAMA permit review and/or consistency process.

35) Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent any temporary Coastal Wetland impact area from re-attaining pre-project wetland functions, the permittee shall monitor temporary wetland impacts for three years after project completion. The permittee shall schedule a meeting with DCM to verify the extent and location of temporary impacts upon project completion. The permittee shall then provide an annual update on any wetland areas temporarily impacted by this project. This annual update shall consist of photographs and written report on the progress of these temporarily impacted areas in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with DCM to determine if the wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of 3 years the wetland areas temporarily impacted by this project have not re-attained pre-project wetland functions, DCM shall determine whether compensatory wetland mitigation shall be required.

Non-Coastal Wetland Mitigation

NOTE: The proposed project will permanently impact 1.59 acres of riparian wetlands, 4.51 acres of non-riparian wetlands, and 0.18 acre of isolated wetlands, for a total of 4.69 acres of non-riparian wetlands. Of the 851 linear feet of permanent stream impacts, DWQ and USACE require mitigation for 304 linear feet.

NOTE: The Ecosystem Enhancement Program (EEP) agreed to provide mitigation for 1.78 acres of riparian wetlands, 4.69 acres of non-riparian wetlands, and 304 linear feet of stream impacts, in accordance to the EEP Mitigation Acceptance Letter, dated 1/24/12.

ADDITIONAL CONDITIONS

Utilities Relocation

36) Any relocation of utility lines that has not been previously permitted by DCM or is not already depicted on the attached work plan drawings, or described within the attached permit application, shall require approval by DCM, either under the authority of this permit, or by the utility company obtaining separate authorization.

Historic Preservation

37) The permittee shall adhere to the provisions of the "Memorandum of Agreement (MOA) between the Federal Highway Administration and North Carolina State Historic Preservation Officer for US 70 Improvements from Four Lanes at Radio Island to North of Beaufort near Olga Road", signed by the Federal Highway Administration on 9/7/06. Any proposed alteration to the MOA shall be coordinated with the North Carolina State Historic Preservation Office. The permittee shall notify DCM of any approved alterations to the MOA.

General

38) DWQ authorized the proposed project (DWQ Project No. 20111003) on April 30, 2012 under Certification No. 3915. Any violation of the Certification approved by the DWQ shall be considered a violation of this CAMA permit.

NOTE: DWQ provided confirmation that the subject project is excluded from State Coastal Stormwater permitting requirements by way of the Stormwater Permit Exclusion letter, dated 5/26/11 (Project No. SW8101208).

39) The permittee and/or contractor shall contact the DCM Transportation Field Representative at (252) 808-2808 extension No. 208 to schedule a pre-construction conference prior to project initiation.

NOTE: The bridge demolition debris may be suitable for use as artificial reef material. The permittee is encouraged to contact the Artificial Reef Coordinator at the N.C. Division of Marine Fisheries Morehead City Office at (252) 726-7021 to coordinate review of the suitability of the material and arrangements for such use.

NOTE: If it is determined that additional permanent and/or temporary impacts are necessary that are not shown on the attached permit drawings or described in the authorized permit application, permit modification or additional authorization from DCM may be required.

NOTE: This permit does not eliminate the need to obtain any additional state, federal, or local permits, approvals, or authorizations that may be required, including, but not limited to, the US Army Corps of Engineers and/or the US Coast Guard.

RECEIVED

JAN 26 2012

DCM-MHD CITY

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

January 24, 2012

Mr. Tom Steffens
U.S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

Mr. Stephen Lane
N.C. Dept. of Environment and Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Dear Sirs:

Subject: **REVISED Application for Individual Section 404 and Section 10, Section 401 Water Quality Certification, Isolated Waters Permit and CAMA Major Development Permit** for the proposed improvements to US 70 from existing four lanes at Radio Island to north of Olga Road (SR 1426), Carteret County, State Project No. 8.1162501, Federal Aid Project STPNHF-70(43), TIP R-3307, WBS 34528.1.1

Reference: Permit Application dated November 9, 2011.

Please reference the previously submitted application for the above referenced project. Changes have been made to the attached Permit Drawing, Wetland Permit Impact Summary Table, and Tables 1 and 2 from the original cover letter. The tabulated wetland restoration total on the Wetland Permit Impact Summary Table has decreased to 1.46 acres. At Site 6, an area of 0.03 acre of hand clearing was erroneously listed as mechanized clearing in the original application. In addition, the 499 linear feet of channel relocation at Site 4 was listed in Table 2 of the original cover letter as requiring mitigation; however, it was determined at the 4C Hydraulic Review meeting, held October 20, 2010, that mitigation will not be required for this action. The revised EEP letter will be forwarded upon receipt.

A copy of this revised permit application and its distribution list will be posted on the NCDOT Website at: http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html. If you have any questions or need additional information, please contact Tyler Stanton at tstanton@ncdot.gov or (919) 707-6156.

Sincerely,

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

Enclosures

Cc: w/out attachment
NCDOT Permit Application Standard Distribution List

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610-4328

Table 1. R-3307 Wetlands Impacts

Permit Drawing Site Number (2011)	Map Label in FONSI (2001)	Type	Permanent Impacts (ac.)	Temporary Impacts* (ac.)	Mitigation Required**
1	A, D	Coastal	0.18	0.07	Yes
2	G, H	Riparian/Coastal	1.83	0	Yes
4	L	Isolated	0.18	0	Yes
5	O	Non-Riparian	4.51	0	Yes
6	J	Coastal	0.04	< 0.01	Yes
7	K	Coastal	0.20	0	Yes
		Total:	**6.94**	**0.07**	**Yes**

* There will be 0.04 acres of Temporary Fill in wetlands for erosion control measures
**For permanent impacts

Table 2. R-3307 Surface Water Impacts

Permit Drawing Site Number	Waterbody	Permanent (ft)	Temporary (ft)	Permanent (ac.)	Temporary (ac.)	Mitigation Required**
1	Gallants Channel	0	0	0.03	0.06	No
2	UT to Gallants Channel	155*	9	0.02	0.01	Yes
3	UT to Town Creek	189*	22	0.04	0.01	Yes
4	UT to Gallants Channel	499	10	0.16	< 0.01	No
6	Town Creek	0	0	< 0.01	< 0.01	No
7	Town Creek	8*	0	0	0	No
Total:		**851**	**41**	**0.25**	**0.09**	

* Bank Stabilization: Site 2 includes 16 linear feet, Site 3 includes 24 linear feet, and Site 7 includes 8 linear feet; mitigation required by the USACE exceeds the amount required by NCDWQ
** For permanent impacts

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	Wetland Restoration (ac)	WETLAND IMPACTS: CAMA Permanent Fill In Wetlands (ac)	404 Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	SURFACE WATER IMPACTS: Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- STA. 28+10 TO 29+47 LT	Roadway Fill		<0.01					0.02					
	-L- STA 28+99 TO 63+44	Bridge		0.02	<0.01	0.07	0.16*			0.03	0.06			
2	-L- STA. 62+82 TO 72+30 &	48" RCP &		0.24	1.38			0.21	0.06	0.02	0.01	139	9	
	-Y1REV- STA. 15+74 TO 20+64	Roadway Fill												
		Bank Stabilization										16		
3	-L- STA. 78+58 TO 79+06 &	72" RCP								0.04	0.01	165	22	
	-Y2- STA. 10+78 TO 11+18 LT	Roadway Fill												
		Bank Stabilization										24		
4	-L- STA. 87+50 TO 92+56	Roadway Fill			**					0.16	<0.01	499	10	***
5	-L- STA. 171+47 TO 183+92	Roadway Fill			3.98			0.53						
6	-Y2- STA. 13+13 TO 18+77 ****	Bridge	1.46	<0.01		<0.01				<0.01	<0.01			
	-Y2- STA. 12+33 TO 13+48 RT	Roadway Fill		0.04					0.03					
7	-Y2- STA. 18+66 TO 24+34	Roadway Fill		0.20					0.12					
		Bank Stabilzation										8		
TOTALS:			1.46	0.50	5.36	0.07	0.16	0.74	0.23	0.25	0.09	851	41	0.00

* 0.16 ACRES of EXCAVATION IN CAMA WETLANDS. REQUIRED TO PROVIDE ACCESS FOR BRIDGE CONSTRUCTION AND MAINTENANCE / INSPECTION

** 0.18 ACRES of ISOLATED WETLANDS

*** NEW BASE DITCH TO BE EXCAVATED PARALLEL TO EXISTING BASE DITCH. PROVIDES DRAINAGE FOR AIRPORT PROPERTY. MITIGATION NOT REQUIRED PER 4C MEETING ON 20 OCT 2010.

**** CAUSEWAY REMOVAL: SITE 6

SEDIMENT & EROSION CONTROL MEASURES:
0.04 acres of Temporary Fill in CAMA Wetlands in the Hand Clearing areas for erosion control measures.

BRIDGE IMPACTS: Impacts for permanent and temporary bents are included in table above. Break-out for impacts are as follows:

Gallants Channel Bridge
Perm. Fill in CAMA wetlands: 0.02 Ac
Perm. Fill in 404 wetlands: <0.01 Ac
Perm. Fill in Surface Waters: 0.03 Ac

Temp. Fill in wetlands: 0.07 Ac
Temp. Fill in Surface Waters: 0.06 Ac.

Turner Street Bridge
Perm. Fill in CAMA wetlands: <0.01 Ac
Perm. Fill in 404 wetlands: 0 Ac
Perm. Fill in Surface Waters: <0.01 Ac

Temp. Fill in wetlands: <0.01 Ac
Temp. Fill in Surface Waters: <0.01 Ac.

Permit Drawing
Sheet 34 of 34
Revised 3/5/12

N.C.D.O.T.
DIVISION OF HIGHWAYS
CARTERET COUNTY
PROJECT: 34528.1.1 (R-3307)
US 70 FROM EXISTING FOUR LANES
AT RADIO ISLAND TO US 70 NORTH
OF SR 1429 (OLGA ROAD)

ATN Revised 3/31/05

SHEET [3/5/2012]

Ecosystem Enhancement PROGRAM

RECEIVED

JAN 25 2012

DCM-MHD CITY

January 24, 2012

Mr. Gregory J. Thorpe, Ph.D.
Manager, Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

R-3307, US 70 from Existing 4 Lanes at Radio Island to US 70 North of Beaufort near SR 1429 (Olga Road), Carteret County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream and wetland mitigation for the subject project. Based on the information supplied by you on January 24, 2012, the impacts are located in CU 03020106 of the White Oak River Basin in the Southern Outer Coastal Plain (SOCP) Eco-Region, and are as follows:

White Oak 03020106 SOCP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	304	1.78	4.69	0	0	0

This mitigation acceptance letter replaces the mitigation acceptance letters issued on July 27 and October 27, 2011. EEP commits to implementing sufficient compensatory stream, riparian and non-riparian wetland mitigation credits to offset the impacts associated with this project in accordance with the N.C. Department of Environment and Natural Resources' Ecosystem Enhancement Program In-Lieu Fee Instrument dated July 28, 2010. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

James B. Stanfill for

Michael Ellison
EEP Deputy Director

cc: Mr. Tom Steffens, USACE – Washington Regulatory Field Office
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: R-3307 Revised

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NOV 16 2011
DCM-MHD CITY

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 9, 2011

Mr. Tom Steffens
U.S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

Mr. Stephen Lane
N.C. Dept. of Environment and Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Dear Sirs:

Subject: **Application for Individual Section 404, Section 401 Water Quality Certification, Section 10 Permit, Isolated Waters Permit and CAMA Major Development Permit** for the proposed improvements to US 70 from existing four lanes at Radio Island to north of Olga Road (SR 1426), Carteret County, State Project No. 8.1162501, Federal Aid Project STPNHF-70(43), TIP R-3307. Debit $475.00 from WBS 34528.1.1.

The North Carolina Department of Transportation (NCDOT), Division of Highways, in consultation with the Federal Highway Administration (FHWA), proposes to replace the existing drawbridge over Gallants Channel and related approaches, with a longer high-rise fixed bridge and improve US 70 to a multilane facility.

The purpose of this letter is to request approval for a Section 404 Individual Permit, a Section 401 Water Quality Certification, and a CAMA Major Development Permit. In addition to the cover letter ENG Form 4345, and CAMA MP Forms, this application package includes the following for R-3307: permit drawings, half size roadway plans, Turner Street Marsh Restoration Plan, and EEP Acceptance Letter.

1.0 Purpose and Need

The purpose for this project, as identified in the Final Environmental Assessment (EA), is to eliminate travel delays occurring at the drawbridge and to increase the traffic carrying capacity of US 70 through the town of Beaufort.

2.0 Project Description

The improvements involve replacement of the existing drawbridge over Gallants Channel and related approaches, with a longer high-rise fixed bridge and improve US 70 to a multilane facility. The proposed 3,395-foot bridge will carry a 4-lane divided roadway with 12-foot travel lanes, 8-foot bridge offsets, a 4-foot raised island, and a 1-foot offset on each side. In addition,

MAILING ADDRESS:
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FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610-4328

improvements to Turner Street include a 40-foot, three-lane curb and gutter section with two 12-foot travel lanes, and a 12-foot center turn lane. A 585-foot bridge with 8-foot offsets is proposed to replace the 61-foot box culvert on Turner Street. Total project length is 3.6 miles.

3.0 Summary of Impacts

Waters of the U.S.: Proposed impacts to jurisdictional areas total 6.97 acres of permanent wetland impacts, 0.04 acre of temporary wetland impacts, 851 feet of permanent stream impacts, and 41 feet of temporary stream impacts.

4.0 Summary of Mitigation

The proposed construction of R-3307 will impact 6.97 acres of jurisdictional wetlands that will require mitigation. The unavoidable impacts to the 0.5 acre of CAMA jurisdictional wetlands will be offset by on-site mitigation (see attached Turner Street Marsh Restoration Plan). The remaining unavoidable impacts to 1.78 acres of jurisdictional riparian wetlands, 4.51 acres of non-riparian wetlands, and 0.18 acre of isolated wetland will be offset by compensatory mitigation provided by the NC Ecosystem Enhancement Program (EEP). In addition, the unavoidable impacts to 843 linear feet of jurisdictional stream will also be offset by compensatory mitigation provided by the NC Ecosystem Enhancement Program (EEP).

5.0 Project Schedule

Currently, R-3307 has a review date of May 29, 2012 and is scheduled to let July 17, 2012; it will be available for construction shortly thereafter. The let date, however, may advance as additional funds become available.

6.0 NEPA Document Status

The FHWA and NCDOT completed the EA in October 2004 in compliance with the NEPA guidelines. The EA explains the purpose and need for the project, provides a description of the alternatives considered, and characterizes the social, economic, and environmental effects. The EA was approved and circulated to federal, state, and local agencies. Then following the EA, a Finding of No Significant Impact (FONSI) Statement was completed September 2006 and a FHWA Right-of-Way Consultation was completed June 2008. Copies of the project documents have been provided to regulatory review agencies involved in the approval process. Additional copies will be provided upon request.

6.1 Independent Utility

R-3307 is in compliance with 23 CFR Part 771.111(f) which lists the FHWA characteristics of the independent utility of a project. The project meets the criteria for independent utility as discussed below:

- The project has logical termini and independent utility and is of sufficient length to address environmental matters on a broad scope;
- The project is usable and a reasonable expenditure of funds, even if no additional transportation improvements are made in the area; and
- The project does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

7.0 Resource Status

The project is located in the White Oak River Basin and lies within Hydrologic Unit 03020106 (Subbasin 03-05-03). This is within the Southern Outer Coastal Plain eco-region. The project crosses Gallants Channel and Town Creek.

7.1 Wetland Delineations

A wetland identification and preliminary assessment analysis for the study area was performed and summarized in the 2001 Natural Resources Technical Report (NRTR). The wetlands within the study area were delineated based on the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and a preliminary design was prepared to avoid and minimize wetlands to the maximum extent possible. Wetland delineations were completed between February 1999 and November 1999. Subsequently, wetland delineations were updated in June 2007. This delineation was later field verified by Mr. William Wescott of the USACE, Wilmington District, and Mr. Stephen Lane with the N.C. Division of Coastal Management (NCDCM) on June 27, 2007.

7.2 Stream Delineations

Data collected for streams were derived from USGS topographic maps, the Carteret County Soil Survey (USDA, 1987), and site reconnaissance. The data included stream classification, which was presented in the NRTR. The USACE concurred on stream classifications on June 27, 2007, when Mr. William Wescott with the USACE visited the site.

7.3 R-3307: Characterization of Jurisdictional Sites

7.3.1 Wetlands

There are three wetland communities found within the project study area: Salt Marsh, Scrub Shrub, and Pine Flat. More detailed information about these wetlands can be found in the EA and the NRTR which includes figures showing the wetlands within the project area.

7.3.2 Streams

Best Usage Classifications for jurisdictional streams are provided in the EA. There are waters within the project vicinity classified as High Quality Waters (HQW), including the Newport River (Beaufort, Gallants, and Morehead Channels), Bogue Sound, Taylors Creek, Town Creek,

and Turner Creek. As such, NCDOT's Design Standards in Sensitive Watersheds will be implemented for this project.

Neither Water Supplies (WS-I: undeveloped watersheds or WS-II: predominately undeveloped watersheds), nor Outstanding Resource Waters (ORW) occur within 1.0 mile of the project study area. Gallants Channel and Town Creek are not designated as North Carolina Natural or Scenic Rivers, or as National Wild and Scenic Rivers. Additionally, these waters are not listed on the Final 2010 303(d) list of impaired waters due to sedimentation or turbidity for the White Oak River Basin, nor do they drain into any Section 303(d) waters within 1.0 mile of the project study area.

7.4 Impacts to Jurisdictional Resources

Impacts to jurisdictional wetlands and surface waters for R-3307 are summarized below in Tables 1 & 2 respectively.

Table 1. R-3307 Wetlands Impacts

Permit Drawing Site Number (2011)	Map Label in FONSI (2001)	Type	Permanent Impacts (ac.)	Temporary Impacts* (ac.)	Mitigation Required**
1	A, D	Coastal	0.18	0.07	Yes
2	G, H	Riparian/Coastal	1.83	0	Yes
4	L	Isolated	0.18	0	Yes
5	O	Non-Riparian	4.51	0	Yes
6	J	Coastal	0.07	< 0.01	Yes
7	K	Coastal	0.20	0	Yes
		Total:	**6.97**	**0.07**	**Yes**

* There will be 0.04 acres of Temporary Fill in wetlands for erosion control measures
**For permanent impacts

Table 2. R-3307 Surface Water Impacts

Permit Drawing Site Number	Waterbody	Permanent (ft)	Temporary (ft)	Permanent (ac.)	Temporary (ac.)	Mitigation Required***
1	Gallants Channel	0	0	0.03	0.06	No
2	UT to Gallants Channel	155*	9	0.02	0.01	Yes
3	UT to Town Creek	189**	22	0.04	0.01	Yes
4	UT to Gallants Channel	499	10	0.16	< 0.01	Yes
6	Town Creek	0	0	< 0.01	< 0.01	No
7	Town Creek	8	0	0	0	No
	Total:	**851**	**41**	**0.25**	**0.09**	

* Includes 16 linear feet of impacts from bank stabilization; mitigation required by the USACE exceeds the amount required by NCDWQ
** Includes 24 linear feet of impacts from bank stabilization; mitigation required by the USACE exceeds the amount required by NCDWQ
*** For permanent impacts

Permanent Impacts: Proposed permanent impacts for R-3307 include fill, excavation, and mechanized clearing in wetlands. This includes impacts to 0.5 acre of CAMA jurisdictional coastal wetlands, 1.78 acres of riparian wetlands, 4.51 acres of non-riparian wetlands, and 0.18 acre of a NCDWQ jurisdictional isolated wetland. Proposed permanent impacts to surface waters are 851 linear feet (0.25 acre), which includes two pipes proposed to be extended and replaced at unnamed tributaries (UT) to Gallants Channel and a UT to Town Creek (sites 2 & 3), bridge construction over Gallants Channel and Town Creek, and the resulting fill and bank stabilization. Stream impacts were not addressed in the EA or FONSI, but were shown on the draft permit drawings provided at the 4C Permit Drawing Review meeting held October 20, 2010.

Temporary Impacts: There will be 41 linear feet of temporary impacts to surface water due to bridge construction and pipe installations. In addition, there will be 0.04 acre of temporary fill in CAMA wetlands for erosion control measures.

Hand-Clearing: There will be 0.20 acre of hand-clearing in jurisdictional wetlands due to project construction.

Utility Impacts: There will be < 0.01 acre of impacts due to fill associated with utilities. In addition, there will be 0.41 acre of hand-clearing due to utility relocations. As written approval is not required we will proceed with these activities under a Nationwide 12. A CAMA General Permit application has been submitted under separate cover.

8.0 Protected Species

The United States Fish and Wildlife Service (USFWS) list 13 federally protected species for Carteret County as of the March 21, 2011 listing (Table 3).

Table 3. Federally Protected Species in Carteret County

Scientific Name	Common Name	Federal Status	Habitat	Biological Conclusion
Alligator mississippiensis	American alligator	T(S/A)	Yes	N/A
Chelonia mydas	Green sea turtle	T	No	No Effect
Lepidochelys kempii	Kemp's ridley sea turtle	E	No	No Effect
Eretmochelys imbricata	Hawksbill sea turtle	E	No	No Effect
Dermochelys coriacea	Leatherback sea turtle	E	No	No Effect
Caretta caretta	Loggerhead sea turtle	T	No	No Effect
Charadrius melodus	Piping plover	T	No	No Effect
Picoides borealis	Red-cockaded woodpecker	E	No	No Effect
Sterna dougallii dougallii	Roseate tern	E	No	No Effect
Acipenser brevirostrum	Shortnose sturgeon	E	No	No Effect
Trichechus manatus	West Indian manatee	E	Yes	MANLAA
Lysimachia asperulaefolia	Rough-leaved loosestrife	E	No	No Effect
Amaranthus pumilus	Seabeach amaranth	T	No	No Effect

Key: E= Endangered, T= Threatened, T(S/A)= Threatened(Similarity of Appearance), MANLAA= May Affect, Not Likely to Adversely Affect

A Concurrence Request providing Biological Conclusions for each species was submitted to the USFWS in November 30, 2007. The USFWS responded with concurrence on December 26, 2007. A copy of the USFWS concurrence letter is included with this application.

A review of the North Carolina Natural Heritage Program (NCNHP) database, updated August 2011, indicated two occurrences of protected species within one mile of the project study area: West Indian manatee (last observed 2007) and seabeach amaranth (last observed 1991). As a result, the NCDOT will utilize *The Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters* to the maximum extent practicable.

8.1 Bald and Golden Eagle Protection Act (BGPA)

In the July 9, 2007 Federal Register (72:37346-37372), the bald eagle was declared recovered, and removed (de-listed) from the Federal List of Threatened and Endangered wildlife. This delisting took effect August 8, 2007. After delisting, the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668d) became the primary law protecting bald eagles. A survey was conducted on November 21, 2007 found no nests within 660 feet of the project limits; however, nesting and foraging habitat was present.

8.2 Moratoria

No moratoria have been recommended for R-3307.

9.0 Cultural Resources

NCDOT coordinated with the NC Department of Cultural Resources to develop a Memorandum of Agreement (MOA) between NCDOT, FHWA, SHPO and the Town of Beaufort. The MOA addresses the concerns and incorporates the recommendations made by NC Department of Cultural Resources (see FONSI Appendix D).

No archaeological sites were found within the project's area of potential effects. Therefore, no additional archaeological investigation is recommended for this project. The SHPO concurred with these findings in a letter dated December 2, 1999, which can be found in the EA.

10.0 FEMA Compliance

The project has been coordinated with appropriate state and local officials and the Federal Emergency Management Agency (FEMA) to assure compliance with FEMA, state, and local floodway regulations.

11.0 Mitigation Options

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional impacts, and to provide full compensatory mitigation of all remaining, unavoidable jurisdictional impacts. Avoidance measures were taken during the

planning and NEPA compliance stages; minimization measures were incorporated as part of the project design.

11.1 Avoidance and Minimization

All jurisdictional features were delineated, field verified and surveyed within the corridor for R-3307. Using these surveyed features, preliminary designs were adjusted to avoid and/or minimize impacts to jurisdictional areas. NCDOT employs many strategies to avoid and minimize impacts to jurisdictional areas in all of its designs. Many of these strategies have been incorporated into BMP documents that have been reviewed and approved by the resource agencies and which will be followed throughout construction. All wetland areas not affected by the project will be protected from unnecessary encroachment. Individual avoidance and minimization items are as follows:

- No staging of construction equipment or storage of construction supplies will be allowed in wetlands or near surface waters.
- The project was designed to avoid or minimize disturbance to aquatic life movements.
- NCDOT and its contractors will not excavate, fill, or perform land clearing activities within Waters of the U.S. or any areas under the jurisdiction of the USACE, except as authorized by the USACE. To ensure that all borrow and waste activities occur on high ground, except as authorized by permit, the NCDOT shall require its contractors to identify all areas to be used to borrow material, or to dispose of dredged, fill or waste material. Documentation of the location and characteristics of all borrow and disposal sites associated with the project will be available to the USACE on request.
- As part of the proposed design, part of the existing roadway along Turner Street and the metal pipe culverts at Town Creek shall be removed and replaced with a 585-foot long bridge.
- Preformed Scour Holes will be used where practicable.
- Storm water will be treated using grass swales and an infiltration basin.
- The use of 1.5:1 fill slopes between Sta. 28+00 to Sta. 29+50 and 3:1 fill slopes in jurisdictional areas when practicable elsewhere.
- NCDOT will implement Best Management Practices for Bridge Demolition and Removal.
- Sediment and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds during construction of the project.
- Special Sediment Control Fence will be used were applicable
- Deck drains for the proposed bridge carrying US 70 over Gallants Channel will be designed so that runoff is not discharged directly into Gallants Channel.
- NCDOT will implement the "Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for North Carolina Waters."
- The use of hand clearing rather than mechanized clearing where possible.

11.3 Compensation

The NCDOT has avoided and minimized impacts to jurisdictional resources to the greatest extent possible as described above. The unavoidable impacts to CAMA jurisdictional wetlands will be offset by on-site mitigation resulting 1.56 acres of restoration from causeway removal on Turner

Street (see permit drawings and Turner Street Marsh Restoration Plan). The unavoidable impacts to jurisdictional riparian and non-riparian wetlands, the NCDWQ jurisdictional isolated wetland, and surface waters will be offset by compensatory mitigation provided by the EEP.

Of the 851 linear feet of stream impacts, 48 linear feet are impacts from bank stabilization. The NCDWQ requires that any bank stabilization impact be mitigated for a 1:1 ratio if the total permanent impact to the stream is over 150 linear feet. However, the 2:1 mitigation ratio will exceed the amount of 1:1 mitigation NCDWQ requires for this impact. Therefore, 2:1 mitigation will be calculated based on 803 linear feet of impacts. A copy of the revised EEP acceptance letter, dated October 27, 2011, is attached.

12.0 Indirect and Cumulative Effects

The proposed project is expected to impart minimal indirect and cumulative effects. The project is only one of many factors affecting growth potential or potential for land use change in the Future Land Use Study Area (other factors include infrastructure, population growth and job growth, proximity to employment centers, etc.). This project is not the determining factor in how much, how fast, or how intense development is occurring or will occur in the study area. Taken in the context of other past, present and future actions, R-3307 should not incrementally result in substantial cumulative effects.

The Indirect Screening Report & Land Use Scenario Assessment, dated May 20, 2011, suggests that given the minimal indirect effects of R-3307, the contribution of the project to cumulative effects resulting from current and planned development patterns should be minimal. For these reasons, potential indirect and cumulative effects to downstream water quality should also be minimal. No additional ICE study is recommended.

13.0 Regulatory Approvals

Section 404: Application is hereby made for a USACE Individual 404 Permit as required for the above-described activities. As previously mentioned, utility relocation activities are to proceed under the general conditions of the Nationwide 12.

Section 401: We are also requesting a Section 401 Water Quality Certification from the NCDWQ. We are providing five (5) copies of this application to the NCDWQ, for their approval. Utility relocation activities are to proceed under the conditions of General Certification # 3699.

Isolated Waters: Application is hereby made for a NCDWQ Isolated Waters Permit as required for the above-described activities.

Section 10: Application is hereby made for a USACE Section 10 Permit as required for the above-described activities.

CAMA: NCDOT requests that the proposed work be authorized under a Coastal Area Management Act Major Development Permit. The landowner receipts are provided with this

permit application. The return receipts will be forwarded once they have been received. A CAMA General Permit application has been submitted under separate cover for utility relocations. Authorization to debit the $475 Permit Application Fee from WBS Element 34528.1.1 is hereby given.

USCG: Under separate cover, NCDOT submitted a request for a United States Coast Guard (USCG) permit for R-3307 on August 17, 2010.

A copy of this permit application and its distribution list will be posted on the NCDOT website at: http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html

If you have any questions or need additional information, please contact Tyler Stanton at 919-707-6156 or tstanton@ncdot.gov.

Sincerely,

E. L. Lusk

fv Gregory J. Thorpe, Ph.D., Manager
Project Development and Environmental Analysis

cc:

NCDOT Permit Application Standard Distribution List.

DCM MP-1

APPLICATION for Major Development Permit

(last revised 12/27/06)

North Carolina DIVISION OF COASTAL MANAGEMENT

1. Primary Applicant/ Landowner Information

Business Name: North Carolina Department of Transportation		Project Name (if applicable): R-3307, Carteret County		
Applicant 1: First Name: Gregory	MI:	Last Name: Thorpe		
Applicant 2: First Name:	MI:	Last Name:		
If additional applicants, please attach an additional page(s) with names listed.				
Mailing Address: 1598 Mail Service Center		PO Box:	City: Raleigh	State: NC
ZIP: 27699 1598	Country: USA	Phone No.: 919 - 707 - 6000 ext.		FAX No.: 919 - 250 - 4224
Street Address *(if different from above)*: 1000 Birch Ridge Drve		City: Raelgih	State: NC	ZIP: 27610-
Email: tstanton@ncdot.gov				

2. Agent/Contractor Information

Business Name:				
Agent/ Contractor 1: First Name:	MI:	Last Name:		
Agent/ Contractor 2: First Name:	MI:	Last Name:		
Mailing Address:		PO Box:	City:	State:
ZIP:		Phone No. 1: - - ext.		Phone No. 2: - - ext.
FAX No.:		Contractor #:		
Street Address *(if different from above)*:		City:	State:	ZIP: -
Email:				

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3. Project Location

County (can be multiple)	Street Address	State Rd. #
Carteret	US 70 from four lanes at Radio Island to near Olga Road (SR 1426)	US 70

Subdivision Name	City	State	Zip
N/A	Beaufort	NC	28516 -

Phone No.	Lot No.(s) *(if many, attach additional page with list)*
- - ext.	, , , ,
a. In which NC river basin is the project located? White Oak	b. Name of body of water nearest to proposed project Gallants Channel & Town Creek
c. Is the water body identified in (b) above, natural or manmade? ☒Natural ☐Manmade ☐Unknown	d. Name the closest major water body to the proposed project site. Newport River
e. Is proposed work within city limits or planning jurisdiction? ☒Yes ☐No	f. If applicable, list the planning jurisdiction or city limit the proposed work falls within. Beaufort

4. Site Description

a. Total length of shoreline on the tract (ft.)	b. Size of entire tract (sq.ft.)
800 ft. (approximately 400 ft. on each shore)	Approximate Project Area = 3802000 sq. ft
c. Size of individual lot(s) N/A, , , *(If many lot sizes, please attach additional page with a list)*	d. Approximate elevation of tract above NHW *(normal high water)* or NWL *(normal water level)* 5.3' to 65' ☒NHW or ☐NWL

e. Vegetation on tract
maintained/disturbed vegetation, salt marsh, loblolly pine forest

f. Man-made features and uses now on tract
roadway, sidewalks, buildings, bridges, and culverts

g. Identify and describe the existing land uses adjacent to the proposed project site.
commercial, residential, forested

h. How does local government zone the tract?	i. Is the proposed project consistent with the applicable zoning? (Attach zoning compliance certificate, if applicable)
Port-Industrial, General Business, Commercial, Residential	☒Yes ☐No ☐NA

j. Is the proposed activity part of an urban waterfront redevelopment proposal? ☐Yes ☒No

k. Has a professional archaeological assessment been done for the tract? If yes, attach a copy. ☒Yes ☐No ☐NA

If yes, by whom? NCDOT Archaeology Group

l. Is the proposed project located in a National Registered Historic District or does it involve a National Register listed or eligible property? ☒Yes ☐No ☐NA

<Form continues on next page>

m. (i) Are there wetlands on the site?	☒Yes ☐No
(ii) Are there coastal wetlands on the site?	☒Yes ☐No
(iii) If yes to either (i) or (ii) above, has a delineation been conducted? *(Attach documentation, if available)*	☒Yes ☐No

n. Describe existing wastewater treatment facilities.

A sanitary sewer pumping station is located near the intersection of West Beaufort Rd and Turner St. This station will be relocated.

o. Describe existing drinking water supply source.

N/A

p. Describe existing storm water management or treatment systems.

N/A

5. Activities and Impacts

a. Will the project be for commercial, public, or private use? ☐Commercial ☒Public/Government ☐Private/Community

b. Give a brief description of purpose, use, and daily operations of the project when complete.

Roadway and bridge for transportation use

c. Describe the proposed construction methodology, types of construction equipment to be used during construction, the number of each type of equipment and where it is to be stored.

Proposed construction utilizing temporary work bridges and potentially barges; however, no temporary causeway(s) will be used. Typical construction equipment includes crane, bulldozer, dump trucks, motor grader, etc.

d. List all development activities you propose.

Replace a movable span bridge with a high-rise fixed span bridge on new location and improve US 70 from four lanes at Radio Island to near Olga Road (SR 1426)

e. Are the proposed activities maintenance of an existing project, new work, or both?	Both
f. What is the approximate total disturbed land area resulting from the proposed project?	64 ☐Sq.Ft or ☒Acres
g. Will the proposed project encroach on any public easement, public accessway or other area that the public has established use of?	☒Yes ☐No ☐NA

h. Describe location and type of existing and proposed discharges to waters of the state.

Existing Grayden Paul bridge has open steel deck that allows deck water to discharge directly to channel. New bridge will have closed drainage system. Treatment provided by infiltration basin for western end of bridge and by grass swale for eastern end of bridge. Existing causeway for Turner Street over Town Creek will be excavated and replaced with a bridge. Deck water will be routed to a grass swale for treatment.

i. Will wastewater or stormwater be discharged into a wetland?	☐Yes ☒No ☐NA
If yes, will this discharged water be of the same salinity as the receiving water?	☐Yes ☐No ☐NA
j. Is there any mitigation proposed?	☒Yes ☐No ☐NA

If yes, attach a mitigation proposal.

<Form continues on back>

6. Additional Information

In addition to this completed application form, (MP-1) the following items below, if applicable, must be submitted in order for the application package to be complete. Items (a) – (f) are always applicable to any major development application. Please consult the application instruction booklet on how to properly prepare the required items below.

a. A project narrative.

b. An accurate, dated work plat (including plan view and cross-sectional drawings) drawn to scale. Please give the present status of the proposed project. Is any portion already complete? If previously authorized work, clearly indicate on maps, plats, drawings to distinguish between work completed and proposed.

c. A site or location map that is sufficiently detailed to guide agency personnel unfamiliar with the area to the site.

d. A copy of the deed (with state application only) or other instrument under which the applicant claims title to the affected properties.

e. The appropriate application fee. Check or money order made payable to DENR.

f. A list of the names and complete addresses of the adjacent waterfront (riparian) landowners and signed return receipts as proof that such owners have received a copy of the application and plats by certified mail. Such landowners must be advised that they have 30 days in which to submit comments on the proposed project to the Division of Coastal Management.

Name	Phone No.
Address	
Name	Phone No.
Address	
Name	Phone No.
Address	

g. A list of previous state or federal permits issued for work on the project tract. Include permit numbers, permittee, and issuing dates.

h. Signed consultant or agent authorization form, if applicable.

i. Wetland delineation, if necessary.

j. A signed AEC hazard notice for projects in oceanfront and inlet areas. *(Must be signed by property owner)*

k. A statement of compliance with the N.C. Environmental Policy Act (N.C.G.S. 113A 1-10), if necessary. If the project involves expenditure of public funds or use of public lands, attach a statement documenting compliance with the North Carolina Environmental Policy Act.

7. Certification and Permission to Enter on Land

I understand that any permit issued in response to this application will allow only the development described in the application. The project will be subject to the conditions and restrictions contained in the permit.

I certify that I am authorized to grant, and do in fact grant permission to representatives of state and federal review agencies to enter on the aforementioned lands in connection with evaluating information related to this permit application and follow-up monitoring of the project.

I further certify that the information provided in this application is truthful to the best of my knowledge.

Date Nov 9, 2011 Print Name Gregory J. Thorpe, PhD

Signature E.L. Luck for

Please indicate application attachments pertaining to your proposed project.

☒DCM MP-2 Excavation and Fill Information ☒DCM MP-5 Bridges and Culverts

☐DCM MP-3 Upland Development

☐DCM MP-4 Structures Information

Form DCM MP-2

EXCAVATION and FILL

(Except for bridges and culverts)

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

Describe below the purpose of proposed excavation and/or fill activities. **All values should be given in feet.**

	Access Channel (NLW or NWL)	Canal	Boat Basin	Boat Ramp	Rock Groin	Rock Breakwater	Other (excluding shoreline stabilization)
Length							
Width							
Avg. Existing Depth					NA	NA	
Final Project Depth					NA	NA	

1. EXCAVATION

☐ *This section not applicable*

a. Amount of material to be excavated from below NHW or NWL in cubic yards.
50

b. Type of material to be excavated.
soil

c. (i) Does the area to be excavated include coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.
☐CW ____ ☐SAV ____ ☐SB ____
☐WL ____ ☒None

(ii) Describe the purpose of the excavation in these areas:
Bridge construction and to allow access for future maintenance and inspection

d. High-ground excavation in cubic yards.
675

2. DISPOSAL OF EXCAVATED MATERIAL

☐ *This section not applicable*

a. Location of disposal area.
To be determined by the contractor

b. Dimensions of disposal area.
To be determined by the contractor

c. (i) Do you claim title to disposal area?
☐Yes ☒No ☐NA

(ii) If no, attach a letter granting permission from the owner.

d. (i) Will a disposal area be available for future maintenance?
☐Yes ☐No ☐NA

(ii) If yes, where?
To be determined by the contractor

e. (i) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.
☐CW ____ ☐SAV ____ ☐SB ____
☐WL ____ ☒None

(ii) Describe the purpose of disposal in these areas:

f. (i) Does the disposal include any area in the water?
☐Yes ☐No ☐NA

(ii) If yes, how much water area is affected?
To be determined by the contractor

3. SHORELINE STABILIZATION

☒ *This section not applicable*

(If development is a wood groin, use MP-4 – Structures)

a. Type of shoreline stabilization:
☐Bulkhead ☐Riprap ☐Breakwater/Sill ☐Other: ____

b. Length: ____
Width: ____

c. Average distance waterward of NHW or NWL:

d. Maximum distance waterward of NHW or NWL:

e. Type of stabilization material:

f. (i) Has there been shoreline erosion during preceding 12 months?
☐Yes ☒No ☐NA
(ii) If yes, state amount of erosion and source of erosion amount information.

g. Number of square feet of fill to be placed below water level.
Bulkhead backfill ____ Riprap ____
Breakwater/Sill ____ Other ____

h. Type of fill material.

i. Source of fill material.

4. OTHER FILL ACTIVITIES

☐ *This section not applicable*

(Excluding Shoreline Stabilization)

a. (i) Will fill material be brought to the site? ☒Yes ☐No ☐NA
If yes,
(ii) Amount of material to be placed in the water 0 *JK 11-22-11*
(iii) Dimensions of fill area See plans *JK 11-22-11*
(iv) Purpose of fill
Fill (not for bridge) will be brought to the site, but not placed in the water. Purpose will be to support the roadway.

b. (i) Will fill material be placed in coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.
☐CW ____ ☐SAV ____ ☐SB ____
☒WL 173,460 ☐None
(ii) Describe the purpose of the fill in these areas:
To support the roadway

5. GENERAL

a. How will excavated or fill material be kept on site and erosion controlled?
Use of standard NCDOT Best Management Practices and erosion control measures.

b. What type of construction equipment will be used (e.g., dragline, backhoe, or hydraulic dredge)?
Heavy highway construction equipment

c. (i) Will navigational aids be required as a result of the project?
☐Yes ☒No ☐NA
(ii) If yes, explain what type and how they will be implemented.

d. (i) Will wetlands be crossed in transporting equipment to project site? ☒Yes ☐No ☐NA
(ii) If yes, explain steps that will be taken to avoid or minimize environmental impacts.
Use of standard NCDOT Best Management Practices and erosion control measures.

Nov 9, 2011

Date

R-3307

Project Name

Gregory J. Thapa, PhD

Applicant Name

E. L. Lush for

Applicant Signature

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R-3307 GALLANTS CHANNEL BRIDGE

Form DCM MP-5

BRIDGES and CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. BRIDGES

☐ *This section not applicable*

a. Is the proposed bridge:
☐Commercial ☒Public/Government ☐Private/Community

b. Water body to be crossed by bridge:
Gallants Channel

c. Type of bridge (construction material):
Concrete

d. Water depth at the proposed crossing at NLW or NWL:
37.7 feet

e. (i) Will proposed bridge replace an existing bridge? ☒Yes ☐No
If yes,
(ii) Length of existing bridge: 673 feet
(iii) Width of existing bridge: 36.3 feet
(iv) Navigation clearance underneath existing bridge:
unlimited when open
(v) Will all, or a part of, the existing bridge be removed?
(Explain) all

f. (i) Will proposed bridge replace an existing culvert? ☐Yes ☒No
If yes,
(ii) Length of existing culvert: _____
(iii) Width of existing culvert: _____
(iv) Height of the top of the existing culvert above the NHW or NWL: _____
(v) Will all, or a part of, the existing culvert be removed?
(Explain)

g. Length of proposed bridge: 3,395 feet

h. Width of proposed bridge: 80 feet

i. Will the proposed bridge affect existing water flow? ☐Yes ☒No
If yes, explain:

j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? ☒Yes ☐No
If yes, explain: Increases the width of the opening, but restricts the height to 65 feet from bridge low chord to Mean High Water.

k. Navigation clearance underneath proposed bridge: 65 feet from low chord to Mean High Water

l. Have you contacted the U.S. Coast Guard concerning their approval? ☒Yes ☐No
If yes, explain: NCDOT submitted the application to USCG on 6/17/2010

m. Will the proposed bridge cross wetlands containing no navigable waters? ☒Yes ☐No
If yes, explain: See plans

n. Height of proposed bridge above wetlands: Varies from 4 feet to 69 feet

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2. CULVERTS

☒ *This section not applicable*

a. Number of culverts proposed: _____

b. Water body in which the culvert is to be placed:

R-3307 GALLANTS CHANNEL BRIDGE

< Form continues on back>

c. Type of culvert (construction material):

d. (i) Will proposed culvert replace an existing bridge? ☐Yes ☐No

If yes,

(ii) Length of existing bridge: _____

(iii) Width of existing bridge: _____

(iv) Navigation clearance underneath existing bridge: _____

(v) Will all, or a part of, the existing bridge be removed? (Explain)

e. (i) Will proposed culvert replace an existing culvert? ☐Yes ☐No

If yes,

(ii) Length of existing culvert(s): _____

(iii) Width of existing culvert(s): _____

(iv) Height of the top of the existing culvert above the NHW or NWL: _____

(v) Will all, or a part of, the existing culvert be removed? (Explain)

f. Length of proposed culvert: _____

g. Width of proposed culvert: _____

h. Height of the top of the proposed culvert above the NHW or NWL.

_____

i. Depth of culvert to be buried below existing bottom contour.

_____

j. Will the proposed culvert affect navigation by reducing or increasing the existing navigable opening? ☐Yes ☐No

If yes, explain:

k. Will the proposed culvert affect existing water flow? ☐Yes ☐No

If yes, explain:

3. EXCAVATION and FILL

☐*This section not applicable*

a. (i) Will the placement of the proposed bridge or culvert require any excavation below the NHW or NWL? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be excavated: 100 ft

(iii) Avg. width of area to be excavated: 50 ft

(iv) Avg. depth of area to be excavated: 3.5 ft

(v) Amount of material to be excavated in cubic yards: 880

b. (i) Will the placement of the proposed bridge or culvert require any excavation within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

☒CW 7116 ☐SAV _____ ☐SB _____

☐WL _____ ☐None

(ii) Describe the purpose of the excavation in these areas:

To provide clearance to construct and inspect the Gallants Channel Bridge.

c. (i) Will the placement of the proposed bridge or culvert require any high-ground excavation? ☒Yes ☐No

If yes, SEE PERMIT DRAWINGS

(ii) Avg. length of area to be excavated: Varies with location

(iii) Avg. width of area to be excavated: Varies with location

(iv) Avg. depth of area to be excavated: Varies with location

(v) Amount of material to be excavated in cubic yards: Varies

R-3307 GALLANTS CHANNEL BRIDGE

d. If the placement of the bridge or culvert involves any excavation, please complete the following:

(i) Location of the spoil disposal area: To be determined by the contractor

(ii) Dimensions of the spoil disposal area: Unknown

(iii) Do you claim title to the disposal area? ☐Yes ☒No *(If no, attach a letter granting permission from the owner.)*

(iv) Will the disposal area be available for future maintenance? ☐Yes ☒No

(v) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAVs), other wetlands (WL), or shell bottom (SB)?

☐CW ☐SAV ☐WL ☐SB ☒None

If any boxes are checked, give dimensions if different from (ii) above.

(vi) Does the disposal area include any area below the NHW or NWL? ? ☐Yes ☒No

If yes, give dimensions if different from (ii) above.

e. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed below NHW or NWL? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be filled: Varies

(iii) Avg. width of area to be filled: Varies

(iv) Purpose of fill: To support the bridge (SEE PERMIT DRAWINGS)

f. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

☒CW 1,226 sq.ft. ☐SAV ____ ☐SB ____

☒WL 26,246 sq.ft. ☐None

(ii) Describe the purpose of the excavation in these areas:

Earth Fill: 106 sq. ft. at Begin Bridge, CW
Earth Fill: 26,224 sq. ft. at End Bridge, WL
Piles and Drilled Piers: 1,120 sq.ft. in CW 22 sq.ft. in WL

g. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed on high-ground? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be filled: Varies

(iii) Avg. width of area to be filled: Varies

(iv) Purpose of fill: To support the bridge (SEE PERMIT DRAWINGS)

4. GENERAL

a. Will the proposed project require the relocation of any existing utility lines? ☒Yes ☐No

If yes, explain: A CAMA General Permit for utility relocations was applied for under separate cover.

If this portion of the proposed project has already received approval from local authorities, please attach a copy of the approval or certification.

b. Will the proposed project require the construction of any temporary detour structures? ☐Yes ☒No

If yes, explain:

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 R-3307 GALLANTS CHANNEL BRIDGE

< Form continues on back>

c. Will the proposed project require any work channels? ☐Yes ☒No

If yes, complete Form DCM-MP-2.

d. How will excavated or fill material be kept on site and erosion controlled?

Use of Standard NCDOT Best Management Practices and Erosion Control Measures

e. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)?

Heavy highway construction equipment

f. Will wetlands be crossed in transporting equipment to project site? ☒Yes ☐No

If yes, explain steps that will be taken to avoid or minimize ~~environmental impacts~~.

Only wetlands to be crossed are those depicted in the Roadway plans and permits.

g. Will the placement of the proposed bridge or culvert require any shoreline stabilization? ☒Yes ☐No

If yes, complete form MP-2, Section 3 for Shoreline Stabilization only.

NOV 9, 2011

Date

R-3307

Project Name

Gregory J. Thorpe, PhD

Applicant Name

E.L. Lusk for

Applicant Signature

R-3307 CARTERET CO.
MP-5 FOR TURNER ST. BRIDGE

Form DCM MP-5

BRIDGES and CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. BRIDGES

☐ *This section not applicable*

a. Is the proposed bridge:
☐Commercial ☒Public/Government ☐Private/Community

b. Water body to be crossed by bridge:
Town Creek

c. Type of bridge (construction material):
Concrete

d. Water depth at the proposed crossing at NLW or NWL:
5.2 feet

e. (i) Will proposed bridge replace an existing bridge? ☐Yes ☒No
If yes,
(ii) Length of existing bridge: _____
(iii) Width of existing bridge: _____
(iv) Navigation clearance underneath existing bridge: _____
(v) Will all, or a part of, the existing bridge be removed? (Explain)

f. (i) Will proposed bridge replace an existing culvert? ☒Yes ☐No
If yes,
(ii) Length of existing culvert: 61 ft.
(iii) Width of existing culvert: 4 @ 95" x 67" CMPA
(iv) Height of the top of the existing culvert above the NHW or NWL: 0.8 ft.
(v) Will all, or a part of, the existing culvert be removed? (Explain) All

g. Length of proposed bridge: 585 ft

h. Width of proposed bridge: 75 feet

i. Will the proposed bridge affect existing water flow? ☒Yes ☐No
If yes, explain: The causeway that currently carries Turner Street over Town Creek will be removed. Average flows will increase slightly per hydraulic report by Moffatt & Nichol. They found the following average increase in flows:
Spring Tide: 0.9%
Neap Tide: 2.0%
Mid Tide: 1.6%

j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? ☐Yes ☒No
If yes, explain:

k. Navigation clearance underneath proposed bridge: N/A

l. Have you contacted the U.S. Coast Guard concerning their approval? ☐Yes ☒No
If yes, explain:

m. Will the proposed bridge cross wetlands containing no navigable waters? ☒Yes ☐No
If yes, explain: See plans

n. Height of proposed bridge above wetlands: Varies from 7.2 feet to 8.9 feet

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2. CULVERTS

☒ *This section not applicable*

R-3307 CARTERET CO.
MP-5 FOR TURNER ST. BRIDGE

a. Number of culverts proposed: _____

b. Water body in which the culvert is to be placed:

< Form continues on back>

c. Type of culvert (construction material):

d. (i) Will proposed culvert replace an existing bridge? ☐Yes ☐No

If yes,

(ii) Length of existing bridge: _____

(iii) Width of existing bridge: _____

(iv) Navigation clearance underneath existing bridge: _____

(v) Will all, or a part of, the existing bridge be removed? (Explain)

e. (i) Will proposed culvert replace an existing culvert? ☐Yes ☐No

If yes,

(ii) Length of existing culvert(s): _____

(iii) Width of existing culvert(s): _____

(iv) Height of the top of the existing culvert above the NHW or NWL: _____

(v) Will all, or a part of, the existing culvert be removed? (Explain)

f. Length of proposed culvert: _____

g. Width of proposed culvert: _____

h. Height of the top of the proposed culvert above the NHW or NWL.

_____

i. Depth of culvert to be buried below existing bottom contour.

_____

j. Will the proposed culvert affect navigation by reducing or increasing the existing navigable opening? ☐Yes ☐No

If yes, explain:

k. Will the proposed culvert affect existing water flow? ☐Yes ☐No

If yes, explain:

3. EXCAVATION and FILL

☐*This section not applicable*

a. (i) Will the placement of the proposed bridge or culvert require any excavation below the NHW or NWL? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be excavated: 540 ft

(iii) Avg. width of area to be excavated: 120 ft

(iv) Avg. depth of area to be excavated: 1.4 ft

(v) Amount of material to be excavated in cubic yards: 3360

b. (i) Will the placement of the proposed bridge or culvert require any excavation within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

☒CW 67,760 ☐SAV _____ ☐SB _____

☐WL _____ ☐None

(ii) Describe the purpose of the excavation in these areas:

The Turner Street causeway will be removed and excavated down to an elevation of -0.2 ft.

R-3307 CARTERET Co.
MP-5 FOR TURNER ST. BRIDGE

c. (i) Will the placement of the proposed bridge or culvert require any high-ground excavation? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be excavated: 540 ft.

(iii) Avg. width of area to be excavated: 120 ft.

(iv) Avg. depth of area to be excavated: 1.3 ft.

(v) Amount of material to be excavated in cubic yards: 3,100

d. If the placement of the bridge or culvert involves any excavation, please complete the following:

(i) Location of the spoil disposal area: To be determined by the contractor

(ii) Dimensions of the spoil disposal area: Unknown

(iii) Do you claim title to the disposal area? ☐Yes ☒No *(If no, attach a letter granting permission from the owner.)*

(iv) Will the disposal area be available for future maintenance? ☐Yes ☒No

(v) Does the disposal area include any coastal wetlands/marsh (CW), submerged aquatic vegetation (SAVs), other wetlands (WL), or shell bottom (SB)?

☐CW ☐SAV ☐WL ☐SB ☒None

If any boxes are checked, give dimensions if different from (ii) above.

(vi) Does the disposal area include any area below the NHW or NWL? ? ☐Yes ☒No

If yes, give dimensions if different from (ii) above.

e. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed below NHW or NWL? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be filled: Varies

(iii) Avg. width of area to be filled: Varies

(iv) Purpose of fill: To support the bridge and roadway approach.

f. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed within coastal wetlands/marsh (CW), submerged aquatic vegetation (SAV), shell bottom (SB), or other wetlands (WL)? If any boxes are checked, provide the number of square feet affected.

☒CW ____ ☐SAV ____ ☐SB ____
☒WL ____ ☐None

(ii) Describe the purpose of the excavation in these areas:

Earth Fill: 1,570 sq. ft. at Begin Bridge, CW
Earth Fill: 8,710 sq. ft. at End Bridge, CW
Piles:
178 sq.ft. in CW

g. (i) Will the placement of the proposed bridge or culvert result in any fill (other than excavated material described in Item d above) to be placed on high-ground? ☒Yes ☐No

If yes,

(ii) Avg. length of area to be filled: Varies

(iii) Avg. width of area to be filled: Varies

(iv) Purpose of fill: To support the bridge and roadway approach

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4. GENERAL

a. Will the proposed project require the relocation of any existing utility lines? ☒Yes ☐No

If yes, explain: Sewer line along Turner Street will require

b. Will the proposed project require the construction of any temporary detour structures? ☐Yes ☒No

If yes, explain:

R-3307 CARTERET Co.
MP-5 FOR TURNER ST. BRIDGE

relocation.

If this portion of the proposed project has already received approval from local authorities, please attach a copy of the approval or certification.

< Form continues on back>

c. Will the proposed project require any work channels? ☐Yes ☒No

If yes, complete Form DCM-MP-2.

d. How will excavated or fill material be kept on site and erosion controlled?

Use of Standard NCDOT Best Management Practices and Erosion Control Measures

e. What type of construction equipment will be used (for example, dragline, backhoe, or hydraulic dredge)?

Heavy highway construction equipment

f. Will wetlands be crossed in transporting equipment to project site? ☒Yes ☐No

If yes, explain steps that will be taken to avoid or minimize environmental impacts.

Only wetlands to be crossed are those depicted in the Roadway plans and permits.

g. Will the placement of the proposed bridge or culvert require any shoreline stabilization? ☒Yes ☐No

If yes, complete form MP-2, Section 3 for Shoreline Stabilization only.

Nov 9, 2011
Date

R-3307
Project Name

Gregory J. Thorpe, PhD
Applicant Name

E.P. Luck for
Applicant Signature

Turner Street Marsh Restoration Plan (REVISED)
R-3307, Highway 70 Improvements
Beaufort, Carteret County
Federal Aid Project No. STPNHF-70(43)
State Project No. 8.1162501
WBS No. 34528.1.1

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February 3, 2012

The North Carolina Department of Transportation (NCDOT) will perform on-site mitigation for impacts associated with R-3307, Improvements to US 70 from existing four lanes at Radio Island to US 70 North of SR 1429 (Olga Road).

The mitigation site is located just north of the town of Beaufort along Turner Street adjacent to Town Creek. The mitigation is proposed to restore 1.4 acres of salt marsh by causeway removal along Turner Street. This mitigation will be used to offset the 0.66 acres of impacts to salt marsh, at a 1:1 ratio, associated with TIP R-3307. The residual restoration will be retained by the NCDOT as on-site assets for future projects in the area.

Existing Conditions

Turner Street is currently a two lane secondary road that crosses Town Creek approximately 300 feet south of West Beaufort Road. Town Creek flows to the west under Turner Street through four 60 ft. long, 95"x 67" corrugated aluminum pipes. To the south of the crossing, a salt marsh wetland dominated by smooth cordgrass (*Spartina alterniflora*) runs along the both sides of the causeway and extends outward along Town Creek.

The Environmental Assessment (EA) dated October 2004 and the Finding of No Significant Impact (FONSI) dated August, 2006, for TIP R-3307, provide further details concerning natural resource and roadway conditions.

Proposed Conditions

The mitigation site will consist of 1.4 acres of salt marsh restoration at the proposed Turner Street Bridge. The total restoration acreage will be confirmed with the as-built survey after site construction is completed.

The NCDOT will remove the existing culverts and approximately 560 ft. of causeway. The causeway and any higher knolls within the right-of-way will be graded to a target elevation of -0.2 ft msl. This elevation is slightly higher than the mean tide level and is within the range of elevations taken in the adjacent marsh. The restoration area will be planted on three foot centers with smooth cordgrass.

The Natural Environment Unit shall be contacted to provide construction oversight to ensure that the wetland mitigation area is constructed appropriately.

Monitoring

Target elevations will be verified during construction to ensure the restoration area achieves the same hydrologic regime as the adjacent salt marsh wetland.

The quantitative marsh vegetation monitoring will be accomplished in accordance with the draft guidelines for "Site Monitoring Surveys for Emergent Marsh Mitigation", established by the National Marine Fisheries Service, through the evaluation of randomly distributed 1 square meter plots located by GPS within the site.

The vegetation component of the wetland site will be deemed successful if the following criteria are met:
1. At year five, the average of all plots should have a scale value of 5 (>75% vegetative cover) consisting of wetland herbaceous species, not including any invasive species;
2. A minimum of 70% of the plots shall contain the target (planted) species.

NCDOT will perform the monitoring described above for 5 years or until the site is deemed successful.

Long term Stewardship
The site is designated on the plan sheets as a mitigation area and will placed on the Natural Environment Section's Mitigation GeoDatabase. This database is provided to all NCDOT personnel as a record of mitigation sites and their attributes, including location and prohibited activities.

After monitoring close-out, the site will be managed according to NCDOT's Stewardship process with annual reviews and reporting.

NCDOT is held by virtue of the permit associated with this mitigation site and the associated roadway impacts to protect the site in perpetuity.

MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
US 70 IMPROVEMENTS FROM FOUR LANES AT RADIO ISLAND TO
NORTH OF BEAUFORT NEAR OLGA ROAD (SR 1429)
TIP # R-3307
BEAUFORT, CARTERET COUNTY, NC

WHEREAS, the Federal Highway Administration (FHWA) has determined that the US 70 Improvements from four lanes at Radio Island to north of Beaufort near Olga Road in Carteret County, R-3307, (the Undertaking) will have an adverse effect upon the Carteret County Home, a property listed in the National Register of Historic Places, and Bridge # 29, a property determined eligible for listing in the National Register; and

WHEREAS, FHWA has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the North Carolina Department of Transportation (NCDOT), the Town of Beaufort's Historic Preservation Commission (Commission), North Carolina Maritime Museum (Museum), and Owners of the Carteret County Home (Owners) participated in the consultation and have been invited to concur in this Memorandum of Agreement (Agreement),

NOW, THEREFORE, FHWA and the North Carolina SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on the historic properties.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

I. Carteret County Home

Prior to the initiation of construction, NCDOT shall record the existing condition of the Carteret County Home and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A) and submit the results to the North Carolina SHPO so there is a permanent record of the property.

If, prior to the completion of the project, the Owners of the Carteret County Home donate the building for relocation to a qualified preservation organization, such as Preservation North Carolina, NCDOT will provide funding up to $75,000 to the preservation organization to assist in the move of the building to a new site within Carteret County. In

consideration of such assistance, the preservation organization shall ensure that covenants are placed on the building to require its rehabilitation and preservation in perpetuity.

II. Bridge # 29 (US 70) at Gallants Channel

Prior to the initiation of construction, NCDOT shall record the existing condition of Bridge # 29 and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix B) and submit the results to the North Carolina SHPO so there is a permanent record of the bridge.

NCDOT, in accordance with its Bridge Reuse and Relocation program, shall transfer Bridge # 29 to the Museum.

Upon transfer of title, the Museum will accept legal and financial responsibility for the bridge, including title, liability, and maintenance. The Museum will hold harmless NCDOT and FHWA in any liability action. The Museum will keep intact the historic fabric of the bridge.

The NCDOT, SHPO, and Museum will explore opportunities and other means, such as Transportation Enhancement funds, to further ensure the preservation of the bridge and its use as an educational element within the Museum's Gallants Channel campus.

III. Use of Bridge # 29 Site Following Removal of the Bridge

NCDOT will consult with the SHPO, Town of Beaufort, and North Carolina Wildlife Resources Commission (WRC) to develop and implement a plan for the future public use of the Bridge # 29 site, including approaches in the Town of Beaufort that constitute the US 70 right-of-way. Thereafter, a Memorandum of Understanding (MOU) may be developed between NCDOT, Town of Beaufort, SHPO, and WRC, if it agrees to participate, to provide a detailed plan for future public use.

NCDOT shall ensure that an interpretative display, about the presence and history of Bridge # 29 on its original site and directions to its new site, is installed within the public use area.

IV. Turner Street Improvements

As part of the subject project, improvements along Turner Street within the Beaufort Historic District will be completed within the existing right-of-way. No additional right-of-way will be obtained.

No more than three lanes will result from any lane reconfigurations on Turner Street within the Beaufort Historic District.

Any section of existing sidewalk on Turner Street within the Beaufort Historic District affected by construction will be replaced.

NCDOT will consult with the SHPO to address the design options for the proposed new bridge on Turner Street over Town Creek.

V. New Bridge over Gallants Channel

NCDOT will consult with SHPO to address the design options for the proposed new bridge over Gallants Channel to limit visual and audible impacts on the National Register-listed Beaufort Historic District.

VI. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), and prior to initiation of construction activities, NCDOT shall ensure preparation of a plan of action should archaeological or architectural resources be inadvertently or accidentally discovered during the construction phase of the project. The plan shall provide for an assessment of the significance of the discovery in consultation amongst NCDOT, FHWA, and the SHPO. Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

VII. Dispute Resolution

Should the North Carolina SHPO object within (30) days to any plans or documentation provided for review pursuant to this Agreement, FWHA shall consult with the North Carolina SHPO to resolve the objection. If FHWA or the North Carolina SHPO determines that the objection cannot be resolved, FHWA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

A. Provide FHWA with recommendations, which FHWA will take into account in reaching a final decision regarding the dispute, or

B. Notify FHWA that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by FHWA in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; FHWA's responsibility to carry out all the actions under this Agreement that are not the subject of the dispute will remain unchanged.

Execution of this Memorandum of Agreement by FHWA and the North Carolina SHPO, its subsequent filing with the Advisory Council on Historic Preservation, and implementation of its terms evidence that FHWA has afforded the Council an opportunity to comment on the Undertaking and its effects on the Carteret County Home, Bridge # 29, and the Beaufort Historic District, and that FHWA has taken into account the effects of the Undertaking on the historic properties.

AGREE:

Clarence W. Coleman Jr. 9/7/06

FEDERAL HIGHWAY ADMINISTRATION DATE

Jeffrey J. Crow 7/7/06

NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER DATE

APPENDIX A

Historic Structures and Landscape Recordation Plan for
CARTERET COUNTY HOME
US 70 Improvements from Four Lanes at Radio Island to
North of Beaufort near Olga Road (SR 1429)
Beaufort, Carteret County, North Carolina
TIP # R-3307

Photographic Requirements

- Overall views of the Carteret County Home complex, showing the relationship of the buildings to setting
- Overall views of the buildings (elevations and oblique views)
- Selected photographic views of the buildings, including architectural details
- Views from the edge of roadway

Photographic Format

- Color slides (all views)
- 35 mm or larger black and white negatives (all views)
- Two (2) sets of black and white contact sheets (all views)
- All processing to be done to archival standards
- All photographs and negatives to be labeled according to Division of Archives and History standards

Copies and Curation

- One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One contact sheet shall be deposited in the files of the Historic Architecture Section of NCDOT.

APPENDIX B

Historic Structures and Landscape Recordation Plan for
BRIDGE # 29 OVER GALLANTS CHANNEL
US 70 Improvements from Four Lanes at Radio Island to
North of Beaufort near Olga Road (SR 1429)
Beaufort, Carteret County, North Carolina
TIP # R-3307

Photographic Requirements

- Overall views of the project area, showing the relationship of the bridge to setting
- Overall views of the bridge (elevations and oblique views)
- Selected photographic views of the bridge, including details of the connections and bridge plate (if present)
- Views under the bridge – as accessible
- Views of the bridge approaches in Morehead City and Town of Beaufort

Photographic Format

- Color slides (all views)
- 35 mm or larger black and white negatives (all views)
- Two (2) sets of black and white contact sheets (all views)
- All processing to be done to archival standards
- All photographs and negatives to be labeled according to Division of Archives and History standards

Copies and Curation

- One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One contact sheet shall be deposited in the files of the Historic Architecture Section of NCDOT.