



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

December 6, 2007

MEMORANDUM TO: Pat Ivey, PE
Division Nine Engineer

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

SUBJECT: Rowan County, I-85 Improvements from North of SR 1002
to North of SR 2120; T.I.P. Number I-2511C; Federal Aid
Project No. IR-IM-85-3 (132) 74; State Project No.
8.1631503

Attached are the modifications to the U. S. Army Corps of Engineers Individual 404 and the special conditions for the 401 Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of 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
Mr. Eric Midkiff, P.E., PDEA Central Region Unit Head
Ms. Diane K. Hampton, PE, Division Environmental Officer

PROJECT COMMITMENTS

ROWAN COUNTY
I-85 IMPROVEMENTS FROM NORTH OF SR 1002 TO NORTH OF SR 2120

WBS No. 34163.1.2
FEDERAL-AID PROJECT NO. IR-IM-85-3(132)74
STATE PROJECT NO. 8.1631503
TIP NO. I-2511CB

All conditions of the original Department of Army permit (October 7, 2004) and the original Division of Water Quality (DWQ), Water Quality Certification (April 20, 2004), including the expiration date (December 31, 2008), and of all subsequent modifications to each, remain applicable, with the exception of the revised permanent stream impact linear footage and the natural channel design technique requirement listed below.

All project commitments included on the original Permit Green Sheet (dated 10/4/04) are in effect, as well as the additional commitment from a previous Permit (modification) Green Sheet (dated 10/19/05) with the noted revision (below).

Project Development and Environmental Analysis (PDEA)

From DWQ Modification of Certification (dated December 16, 2005): DWQ Water Quality Certification Condition No. 13. *Summary of Compensatory Mitigation:* Compensatory mitigation shall be the same as that approved by the US Army Corp of Engineers, as long as the mitigation required equals a ratio of 1:1 restoration or creation of lost wetland acres as described in 15A NCAC 2H.0506 (h)(6), and consists of the following:

I-2511 Section CB

- 195 208 linear feet of stream impacts will be mitigated through NCDENR Ecosystem Enhancement Program (EEP).
- 0.47 acres of impacts to non-riverine wetlands will be mitigated through EEP.
- 1375 linear feet of on-site stream relocation using natural channel design technique (plans submitted with February 20, 2004 application and modification on August 9, 2005). The natural channel design technique shall include the relocation of as much riffle substrate from the existing Town Creek channel into the relocated channel as feasible. NCDOT shall investigate and determine the amount of riffle substrate suitable for relocation to the new channel. Construction practicality may be taken into account in this determination. Riffle substrate will be relocated at the time that the live stream is moved into the new channel. Additional riffle material may be provided from appropriate offsite sources and shall be similar to existing material as much as practical.

The change in linear feet of stream impact that will be mitigated through EEP is the result of the additional 13 linear feet of stream impact at Site 1 authorized by the Section 404 Permit Modification (dated November 29, 2007) and the Section 401 Water Quality Certification Modification (dated November 15, 2007).

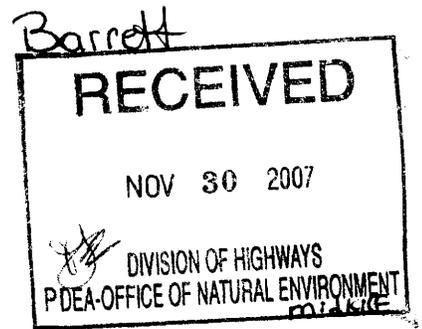


DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS

P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

IN REPLY REFER TO

November 29, 2007



Regulatory Division

Action ID. 200021534

Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA
N.C. Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

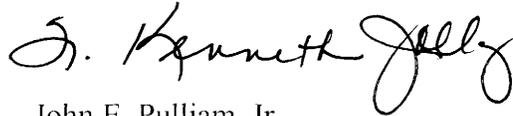
Dear Dr. Thorpe:

Reference the Department of the Army permit issued on October 7, 2004, to authorize the discharge of fill materials into waters of the United States, for construction of Section CB of the I-85 widening and improvements (T.I.P. NO. I-2511CB), impacting Town Creek and its unnamed tributaries, from north of SR 1002 (Bringle Ferry Road) to north of SR 2120 (Long Ferry Road), east of Spencer, in Rowan County, North Carolina. Reference also your written request of October 22, 2007, for a permit modification to authorize a change in construction at Permit Site 1 on the west side of I-85 where a headwall was previously permitted. Recent discovery of solid rock at the site would require substantial blasting of bedrock in the stream bed in order to provide a large enough footing for the headwall. Your referenced modification proposes to eliminate the headwall from the construction plans and extend the existing 30-inch reinforced concrete pipe (RCP) an additional 13 feet. The revised construction method as defined in the attached provided plans will add an additional 13 linear feet of permanent impact to the jurisdictional stream channel of Town Creek, but will minimize disturbance to the stream bed associated with blasting and also shorten the construction time.

We have determined that the proposed change in construction method would result in only minimal additional impacts to the jurisdictional waters of Town Creek, and therefore a supplemental public notice is not necessary. The permit is hereby modified to include the referenced changes as defined in the attached provided plans. It is understood that all other conditions of the original permit and previous modifications remain applicable, including the permit expiration date of December 31, 2008.

If you have questions, please contact John Thomas of the Raleigh Regulatory Field Office, at telephone (919) 876-8441, extension 25.

Sincerely,

A handwritten signature in black ink that reads "John E. Pulliam, Jr." The signature is written in a cursive style with a large, looped "J" and "P".

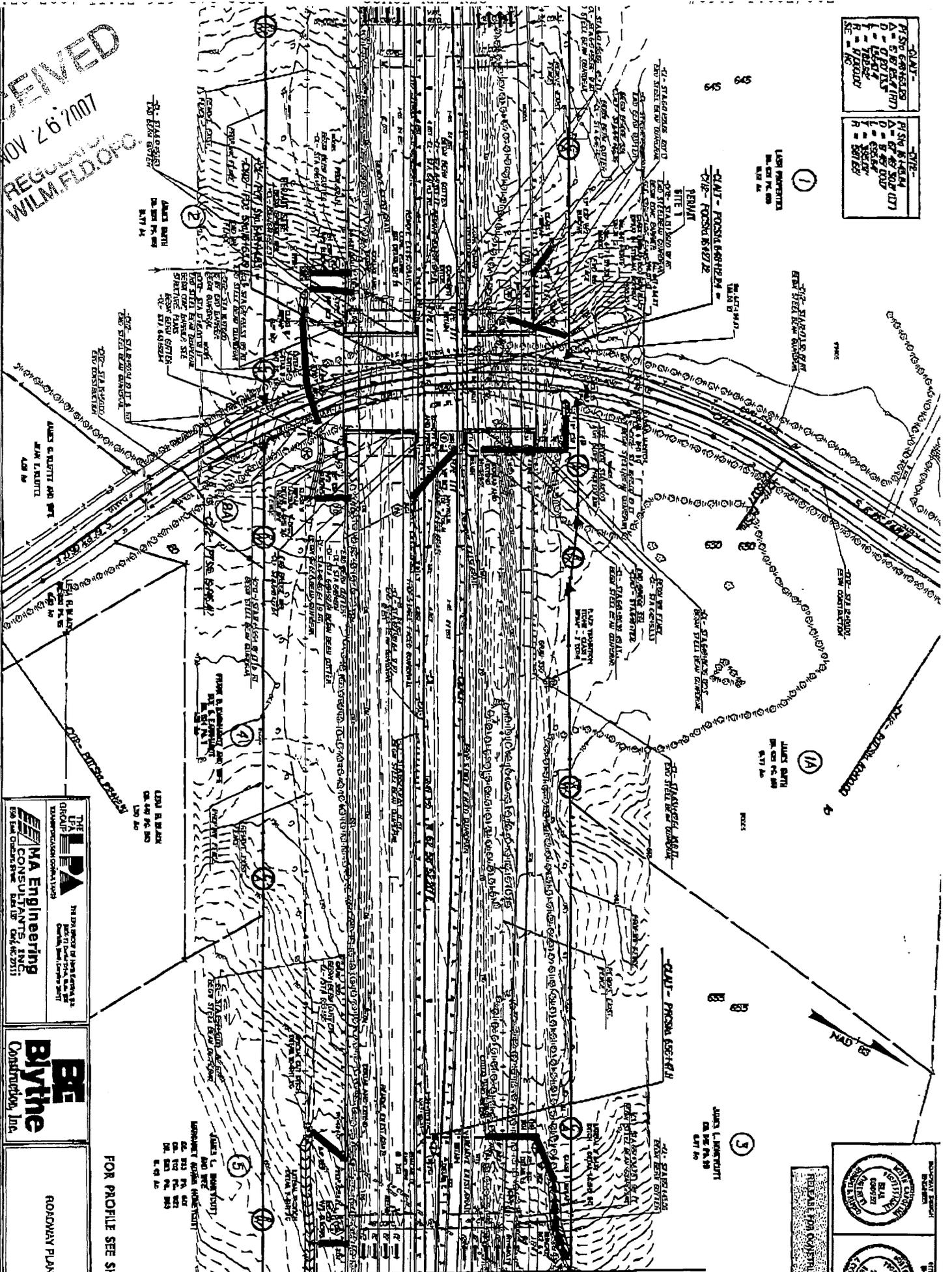
 John E. Pulliam, Jr.
Colonel, U.S. Army
District Commander

Copy Furnished:

Mr. Brian Wrenn
Division of Water Quality
North Carolina Department of
Environment and Natural Resources
1650 Mail Service Center
Raleigh, NC 27699-1650

RECEIVED
 NOV 26 7:007
 REGISTRY
 WILM.FLD.DOC

-PLAN- A - 5' SCALE (1/8" = 1'-0") B - 10' SCALE (1/4" = 1'-0") C - 20' SCALE (1/2" = 1'-0") D - 40' SCALE (1" = 1'-0") E - 80' SCALE (2" = 1'-0") F - 160' SCALE (4" = 1'-0") G - 320' SCALE (8" = 1'-0") H - 640' SCALE (16" = 1'-0") I - 1280' SCALE (32" = 1'-0") J - 2560' SCALE (64" = 1'-0") K - 5120' SCALE (128" = 1'-0") L - 10240' SCALE (256" = 1'-0") M - 20480' SCALE (512" = 1'-0") N - 40960' SCALE (1024" = 1'-0") O - 81920' SCALE (2048" = 1'-0") P - 163840' SCALE (4096" = 1'-0") Q - 327680' SCALE (8192" = 1'-0") R - 655360' SCALE (16384" = 1'-0") S - 1310720' SCALE (32768" = 1'-0") T - 2621440' SCALE (65536" = 1'-0") U - 5242880' SCALE (131072" = 1'-0") V - 10485760' SCALE (262144" = 1'-0") W - 20971520' SCALE (524288" = 1'-0") X - 41943040' SCALE (1048576" = 1'-0") Y - 83886080' SCALE (2097152" = 1'-0") Z - 167772160' SCALE (4194304" = 1'-0")	-SUR- A - 5' SCALE (1/8" = 1'-0") B - 10' SCALE (1/4" = 1'-0") C - 20' SCALE (1/2" = 1'-0") D - 40' SCALE (1" = 1'-0") E - 80' SCALE (2" = 1'-0") F - 160' SCALE (4" = 1'-0") G - 320' SCALE (8" = 1'-0") H - 640' SCALE (16" = 1'-0") I - 1280' SCALE (32" = 1'-0") J - 2560' SCALE (64" = 1'-0") K - 5120' SCALE (128" = 1'-0") L - 10240' SCALE (256" = 1'-0") M - 20480' SCALE (512" = 1'-0") N - 40960' SCALE (1024" = 1'-0") O - 81920' SCALE (2048" = 1'-0") P - 163840' SCALE (4096" = 1'-0") Q - 327680' SCALE (8192" = 1'-0") R - 655360' SCALE (16384" = 1'-0") S - 1310720' SCALE (32768" = 1'-0") T - 2621440' SCALE (65536" = 1'-0") U - 5242880' SCALE (131072" = 1'-0") V - 10485760' SCALE (262144" = 1'-0") W - 20971520' SCALE (524288" = 1'-0") X - 41943040' SCALE (1048576" = 1'-0") Y - 83886080' SCALE (2097152" = 1'-0") Z - 167772160' SCALE (4194304" = 1'-0")
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**MA Engineering
 CONSULTANTS, INC.**
 500 East Garden Street
 Suite 100
 Columbia, South Carolina 29201
 Phone: (803) 733-1111
 Fax: (803) 733-1112
 Email: info@maec.com


**BFE
 Construction, Inc.**


ROADWAY PLANS

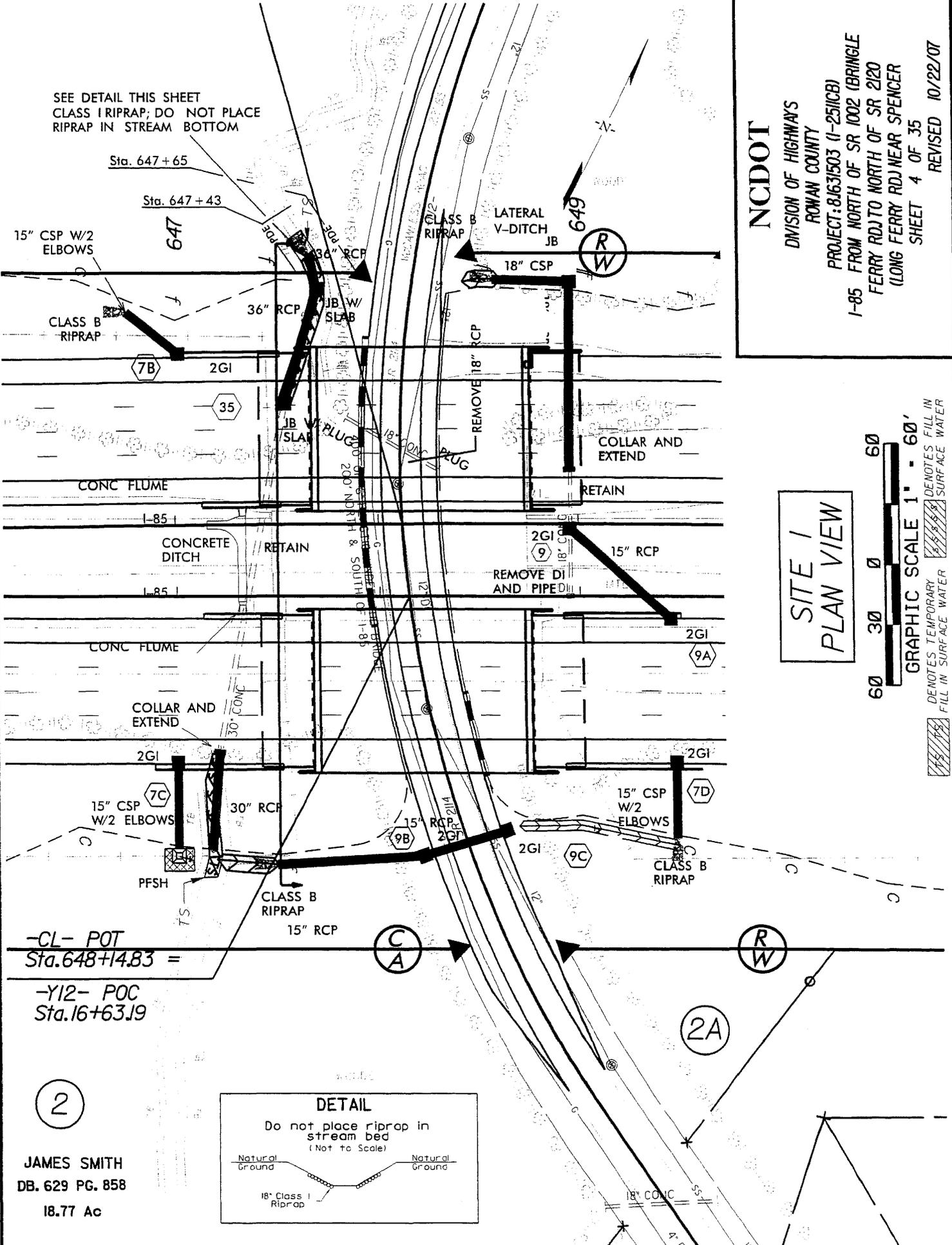
FOR PROFILE SEE SHEET 17

MATCH TO SHEET 6 STA 658+00 -L-

RECALCULATE FROM QUANTITY LIST

	
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SEE DETAIL THIS SHEET
CLASS I RIPRAP; DO NOT PLACE
RIPRAP IN STREAM BOTTOM



NCDOT

DIVISION OF HIGHWAYS
ROWAN COUNTY

PROJECT: 81631503 (1-25/ICB)
I-85 FROM NORTH OF SR 1002 (BRINGLE
FERRY RD) TO NORTH OF SR 2120
(LONG FERRY RD) NEAR SPENCER
SHEET 4 OF 35
REVISED 10/22/07

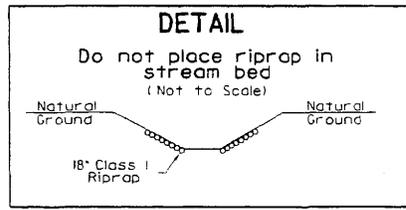
**SITE 1
PLAN VIEW**

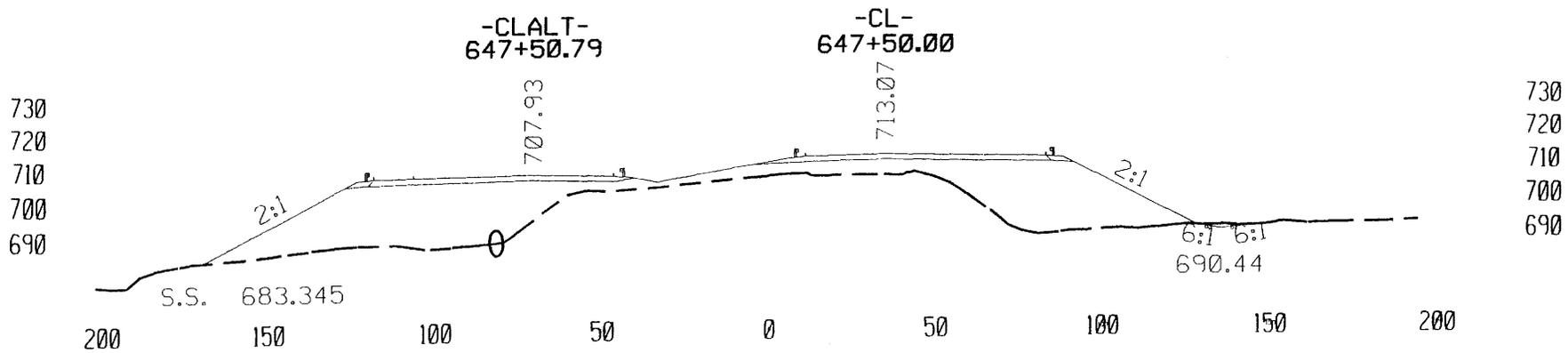


-CL- POT
Sta. 648+14.83 =
-Y12- POC
Sta. 16+63.19

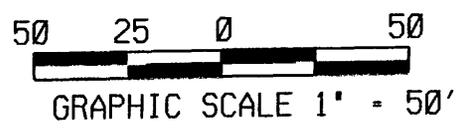
2

JAMES SMITH
DB. 629 PG. 858
18.77 Ac





**SITE 1
CROSS SECTION VIEW**



NCDOT
 DIVISION OF HIGHWAYS
 ROWAN COUNTY
 PROJECT: 8J631503 (I-25/ICB)
 I-85 FROM NORTH OF SR 1002 (BRINGLE
 FERRY RD.) TO NORTH OF SR 2120
 (LONG FERRY RD.) NEAR SPENCER
 SHEET 5 OF 35
 DATE 10/22/07

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS				
			Fill In Wetlands (ac)	Temp.Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Temp.Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)
1	647+50-L-(LT/RT)	30" RCP	0	0	0	0	0.010	0	< 0.01	115	0
2	680+100-L-(LT/RT)	30" RCP	0	0	0	0	0.020	0	< 0.01	163	0
3	49+127-CSRI-(LT)	18" RCP	0	0	0	0	0.007	0	< 0.01	80	0
4	CRPIC 16+00	18" RCP	0	0	0	0.002	0.020	0	< 0.01	90	0
5	CRPIB 18+00 to CRPIA 26+00	NONE	0	0	0	0	0.640	0	0	864	1375
6	31+40 -CSRC- (LT)	NONE	0.047	0	0	0	0.009	0	< 0.01	200	0
7A	807+50-L- (RT)	18"/30" RCP	0	0	0	0	0.020	0	< 0.01	162	0
7B	812+23 -L- (LT/RT)	6'x8' RCBC	0	0	0	0	0.030	0	0.01	200	0
8	73+00 -CSRI-	NONE	0.3	0	0	0.7	0.010	0	< 0.01	85	0
9	752+65.85-L-(LT/RT)	4.17'x3' RCBC	0	0	0	0	0.100	0	0.030	114	0
10	63+97.5 to 66+59.5 CSRI	3-span bridge	0	0	0	0	0.000	0		0	0
TOTALS:			0.347	0	0	0.72	0.866	0	0.05	2073	1375

SITE 3: 80ft. Does not require mitigation.

SITE 6: 163ft. Does not require mitigation.

37ft. Does require mitigation

SITE 7A: 162ft. Does not require mitigation.

SITE 8: 85ft. Does not require mitigation.

Temporary In-stream work areas = 200 linear feet (0.047 acres).

NCDOT

DIVISION OF HIGHWAYS
ROWAN COUNTY

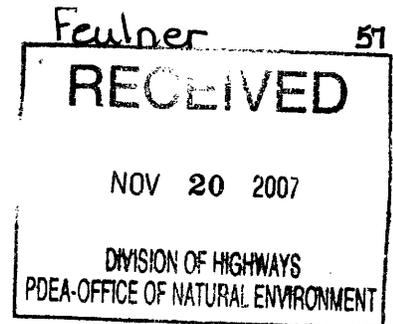
PROJECT: 8J631503 (I-25/ICB)
I-85 FROM NORTH OF SR 1002 (BRINGLE
FERRY RD) TO NORTH OF SR 2120
(LONG FERRY RD) NEAR SPENCER
SHEET 34 OF 35 10/22/07



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen Sullins, Director
Division of Water Quality

November 15, 2007



Dr. Greg Thorpe, PhD., Manager
Planning and Environmental Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed improvements to I-85 from North of SR 1002 to North of SR 2120 in Rowan County, State Project No. 8.1631503, TIP I-2511CB.
DWQ Project No. 20040271v. 5

Dear Dr. Thorpe:

Attached hereto is a modification of Certification No. 3456 issued to The North Carolina Department of Transportation dated April 20, 2004.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Coleen Sullins,
Director

Attachments

cc: John Thomas, US Army Corps of Engineers, Raleigh Field Office
Kent Boyer, Division 9 Environmental Officer
Kathy Matthews, Environmental Protection Agency
Marla Chambers, NC Wildlife Resources Commission
Marella Buncick, US Fish and Wildlife Service
Sue Homewood, DWQ Winston-Salem Regional Office
File Copy



Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (DWQ) Regulations in 15 NCAC 2H .0500. This certification authorized the NCDOT to impact an additional 13 linear feet of jurisdictional streams in Rowan County. The project shall be constructed pursuant to the modification dated received October 30, 2007. The authorized impacts are as described below:

Stream Impacts in the Yadkin-Pee Dee River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
Original approved impacts at Site 1	0	0	102	30	132	0
New additional impacts with this approval at Site 1	0	0	13	0	13	0
Total		0	115	30	145	0

Total Stream Impact for Site 1: 145 linear feet

The application provides adequate assurance that the discharge of fill material into the waters of the Yadkin-Pee Dee River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your modified application dated received October 30, 2007. All the authorized activities and conditions of certification associated with the original Water Quality Certification dated April 20, 2004 and the subsequent modifications dated January 7, 2005; February 9, 2005; October 6, 2005; and November 30, 2005 still apply except where superceded by this certification. Should your project change, you are required to notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all



the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

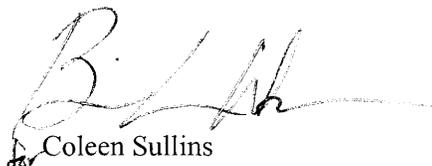
1. All other conditions written into original Water Quality Certification dated April 20, 2004 and the subsequent modifications dated January 7, 2005; February 9, 2005; October 6, 2005; and November 30, 2005 for this project still apply except where superseded by this certification.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If this Certification is unacceptable to you have the right to an adjudicatory hearing upon written request within sixty (60) days following receipt of this Certification. This request must be in the form of a written petition conforming to Chapter 150B of the North Carolina General Statutes and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. If modifications are made to an original Certification, you have the right to an adjudicatory hearing on the modifications upon written request within sixty (60) days following receipt of the Certification. Unless such demands are made, this Certification shall be final and binding.

This the 15th day of November 2007

DIVISION OF WATER QUALITY


for Coleen Sullins
Director

WQC No. 3456



DWQ Project No.: _____ County: _____
Applicant: _____
Project Name: _____
Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to DWQ by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

If this project was designed by a Certified Professional

I, _____, as a duly registered Professional _____ (i.e., Engineer, Landscape Architect, Surveyor, etc.) in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____

