



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

November 21, 2014

U. S. Army Corps of Engineers
Regulatory Field Office
3331 Heritage Trade Drive, Suite 105
Wake Forest, NC 27587

ATTN: Mr. Dave Bailey
NCDOT Coordinator

SUBJECT: **Request for Modification to the Section 404 Individual Permit and Section 401 Water Quality Certification** for the proposed Greensboro Eastern Loop from US 70 Relocation to SR 2303 (Lawndale Drive), Guilford County, Division 7. WBS Element No. 34821.1.1, TIP Nos. U-2525B and U-2525C.

REFERENCE: USACE Individual Permit Action ID SAW-2005-21386, dated April 15, 2014.
USACE Individual Permit Modification Action ID SAW-2005-21386, dated October 31, 2014.
NCDWR Project No. 20130918, Certification No. 3978, dated February 6, 2014.
NCDWR Project No. 20130918_v2, Modification to Certification No. 3978, dated June 24, 2014.

Dear Sir:

The purpose of this letter is to request a modification to the United States Army Corps of Engineers (USACE) Individual Permit and North Carolina Division of Water Resources Certification for the above referenced project. The requested modification is to account for additional permanent wetland impacts associated with bridge bent protection near Camp Burton Road. Also please find attached the revised permit drawing sheets and revised NCEEP acceptance letter.

The area of new impacts (Permit Site 11A) was overlooked prior to the original permit application submittal. The wetland impacts for Permit Site 11A include <0.01 acre of permanent fill of Class II rip-rap for the proposed bridge bent protection (Table 1). Please replace the current permit drawings with the new revised drawings (Revised Permit Drawing Sheets 1, 36, 37, 89, and 93 of 93), all attached with this letter.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

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

WEBSITE: NCDOT.GOV

LOCATION:
CENTURY CENTER BUILDING B
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Table 1. Revised U-2525B Wetland Impacts (Final)

Permit Site No.	JD Package ID	Permanent Fill (ac)	Excavation (ac)	Mechanized Clearing (ac)	Total Impacts (ac)
1	WAP	0.57	0.04		0.61
1A	WAO	0.03			0.03
1B	WAN	0.01			0.01
2	WAQ	0.05		<0.01	0.06
3	WAM	0.12			0.12
3A	WAX	0.03			0.03
3B	WAL	0.02			0.02
3C	WAK	0.25	0.02	0.02	0.29
4	WAI	0.02			0.02
5A	WAH	0.08			0.08
5B	WAG	0.02			0.02
6	WAE	0.03			0.03
6A	WAD	0.05		<0.01	0.05
7	WAC	1.29	0.05	0.03	1.37
8	WZ	0.83		0.09	0.92
8A	WAA		<0.01		<0.01
9	WX/WY	2.01		0.15	2.16
10	WV		<0.01		<0.01
10A	WU	0.02		0.02	0.04
10B	WT	0.03	<0.01	<0.01	0.04
10C	WS	0.25	0.04		0.29
11	WR	0.33			0.33
11A	WQ	<0.01			<0.01
13	WO	0.02		0.01	0.03
16	WAY	<0.01			<0.01
18	WK	0.03		0.01	0.04
19	WJ		0.14		0.14
20B	WI	0.02			0.02
21	WE	0.34		0.04	0.38
22	WH	0.03			0.03
22A	WF	0.02			0.02
22B	WG	0.01			0.01
23	WAB	0.02			0.02
24	WAB	0.19			0.19
27	WAR	0.10			0.10
30	WA	0.03	<0.01		0.04
34	WAT	<0.01			<0.01
36	n/a	<0.01			<0.01
TOTALS (ac)		6.86	0.31	0.38	7.55

Notes: Totals are rounded based upon sum of actual impacts. Most permanent impacts require 2:1 USACE mitigation except for Permit Sites 20B and 34 which USACE determined as 1:1 mitigation. Permit Site 8A is an isolated wetland and therefore not under USACE jurisdiction.

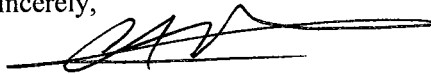
Revised compensatory mitigation requirements for U-2525B are summarized below in Table 2. The new 2:1 ratio for permanent stream impacts (<0.01 acre) at Permit Site 11A will be mitigated at a 2:1 ratio. Compensatory mitigation requirements for U-2525C remains unchanged (see original permit application dated August 26, 2013).

Table 2. Revised U-2525B Required Compensatory Mitigation Summary (Final)

	Stream Impacts in Length (ft)	Riparian Wetland Impacts (ac)
Impacts Requiring Mitigation	9,879	7.55
Onsite Mitigation Credits	2,055	
Total Mitigable Impacts Less Onsite Mitigation	7,824	7.55
Required EEP Mitigation	4,847 @ 2:1	7.53 @ 2:1
	2,977 @ 1:1	0.02 @ 1:1
Total EEP Mitigation	12,671	15.08

A copy of this permit modification application and its distribution list will be posted on the NCDOT website at <https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>. Thank you for your time and assistance with this project. Please contact Greg Price at either gwprice@ncdot.gov or (919) 707-6148 if you have any questions or need additional information.

Sincerely,



for

Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

Cc: NCDOT Permit Application Standard Distribution List



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Michael Ellison, Director
Ecosystem Enhancement Program

John E. Skvarla, III
Secretary

November 21, 2014

Mr. Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Mr. Hancock:

Subject: EEP Mitigation Acceptance Letter:

U-2525B / C, Greensboro Eastern Loop from US 70 Relocation to SR 2303 (Lawndale Drive), Guilford County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream and riparian wetland mitigation for the subject project. Based on the information supplied by you on November 21, 2014, the impacts are located in CU 03030002 of the Cape Fear River basin in the Central Piedmont (CP) Eco-Region, and are as follows:

Cape Fear 03030002 CP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	20,470.0	9.95	0	0	0	0

*Some of the stream and wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details.

This mitigation acceptance letter replaces the mitigation acceptance letter issued on September 3 and October 7, 2013. This impact and associated mitigation need were under projected by the NCDOT in the 2014 impact data. EEP will commit to implement sufficient compensatory stream and riparian wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies using the delivery timeline listed in Section F.3.c.iii of 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 919-707-8420.

Sincerely,

James B. Stanfill
EEP Asset Management Supervisor

cc: Mr. David Bailey, USACE – Raleigh Regulatory Field Office
Mr. Dave Wanucha, Division of Water Resources
Ms. Amy Chapman, Division of Water Resources
File: U-2525B/C Revised 3

09/28/14

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Plan Sheet Symbols
See Sheet 1-C and 1-D For Survey Control Sheets

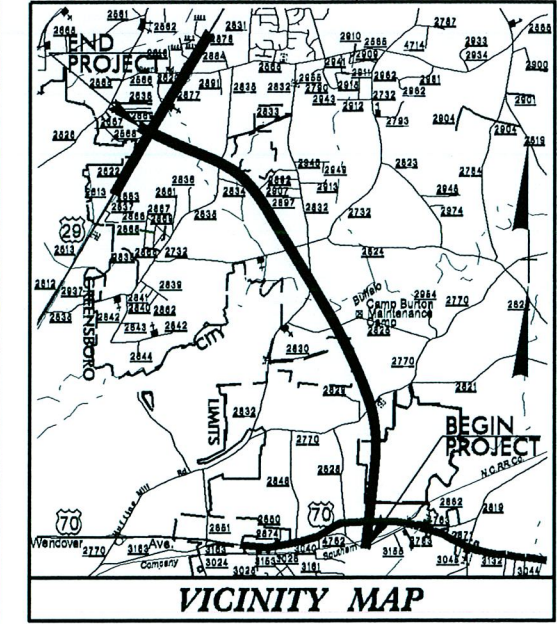
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GUILFORD COUNTY

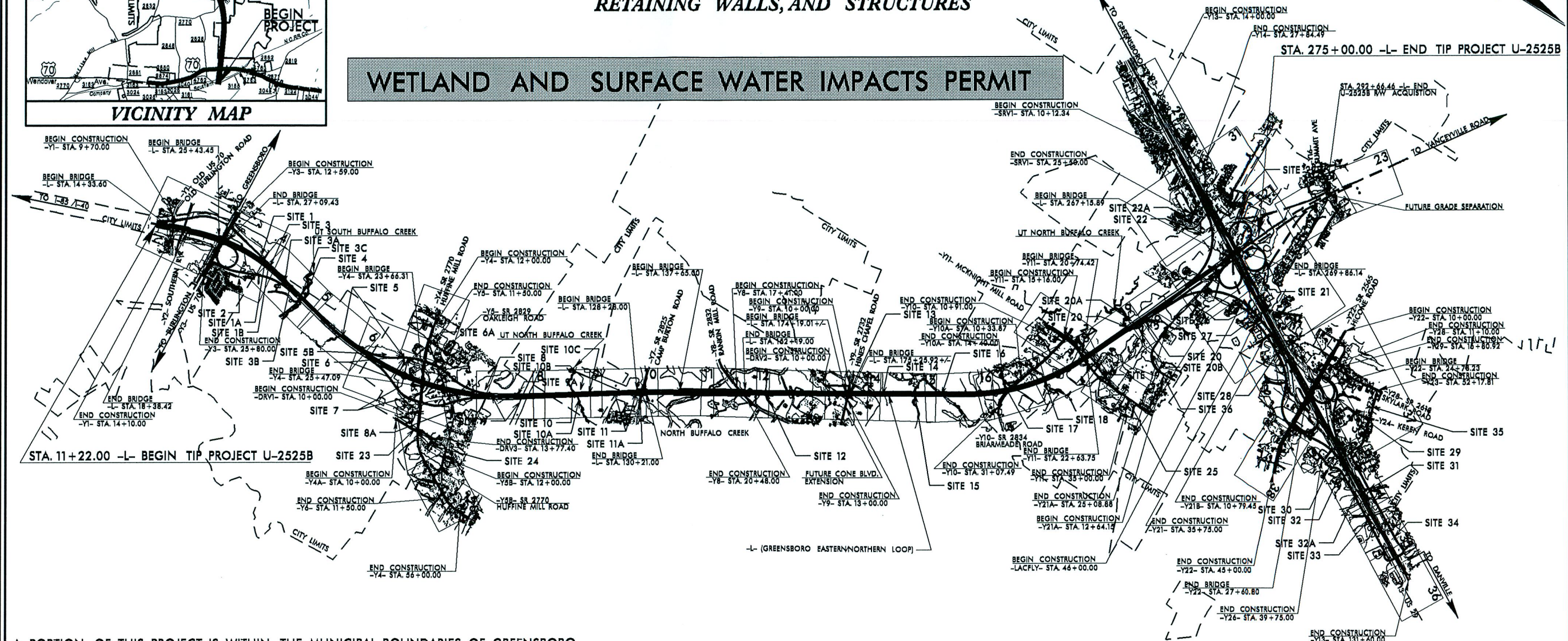
**LOCATION: GREENSBORO EASTERN LOOP FROM NORTH OF US 70
RELOCATION TO US 29 NORTH OF GREENSBORO**
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, CULVERTS,
RETAINING WALLS, AND STRUCTURES**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2525B	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
34821.1.3		PE	
34821.2.3		RAW & UTILITIES	

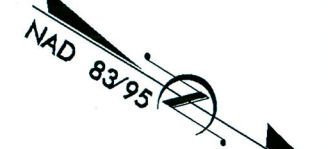
TIP PROJECT: U-2525B



WETLAND AND SURFACE WATER IMPACTS PERMIT



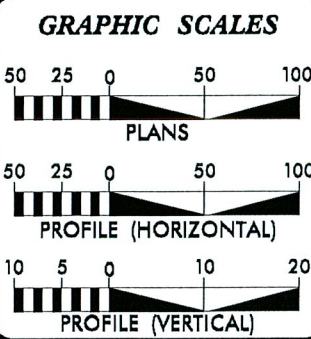
PERMIT DRAWING
SHEET 1 OF 93
Revised 10/01/2014
Revised 11/20/2014



A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GREENSBORO.
THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2014 =	NA
ADT 2030 =	20000
DHV =	10 %
D =	60 %
T =	16 % *
V =	70 MPH

* TTST 5% DUAL 11%
FUNC CLASS = INTERSTATE
"STATEWIDE TIER"

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-2525B =	4.504 Miles
LENGTH STRUCTURE TIP PROJECT U-2525B =	0.492 Miles
TOTAL LENGTH OF TIP PROJECT U-2525B =	4.996 Miles

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 22, 2012

LETTING DATE:
MAY 20, 2014

JAMES A. SPEER, PE
PROJECT ENGINEER

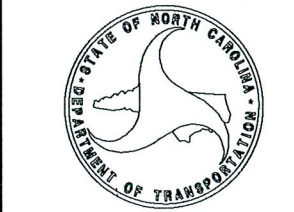
DANIEL W. GARDNER JR., PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

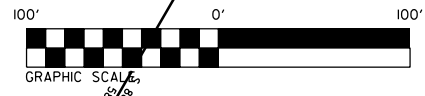
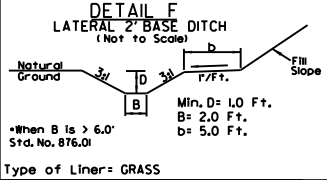
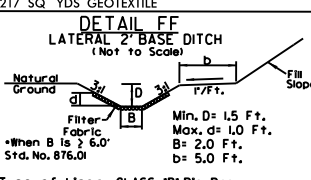
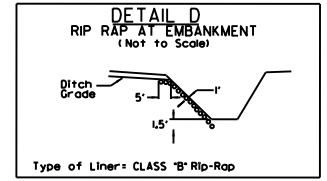
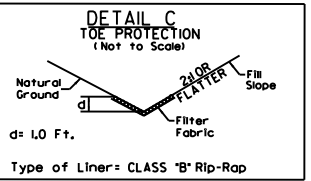


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\$\$\$\$\$DCN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

5/14/95

PROJECT REFERENCE NO. U-2525B	SHEET NO. 10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-
 PI Sta 130+34.85
 $\Delta = 2' 24" 09.0" (RT)$
 $D = 0' 14" 56.8"$
 $L = 964.43'$
 $T = 482.29'$
 $R = 23,000.00'$
 $SE = NC$



F F DENOTES FILL IN WETLAND
S S DENOTES IMPACTS IN SURFACE WATER

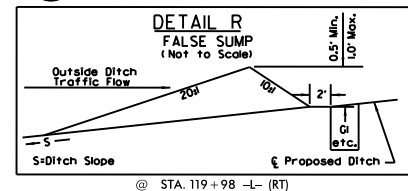
-Y7- POT Sta. 10+00.00
PERMIT DRAWINGS
SHEET 36 OF 93

29 MICHAEL A. FOWLER
 Revised 11/20/2014

SITE 11

MATCHLINE -L- STA. 119+00.00 SEE SHEET 9

MATCHLINE -L- STA. 132+00.00 SEE SHEET 11



DETAIL P
FALSE SUMP
(Not to Scale)

Median Ditch
9'
2'
1' (See Chart Below)
20'
S=Ditch Slope
Proposed Ditch

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

@ STA. 119+98 -L- (MED)
 @ STA. 130+48 -L- (MED)

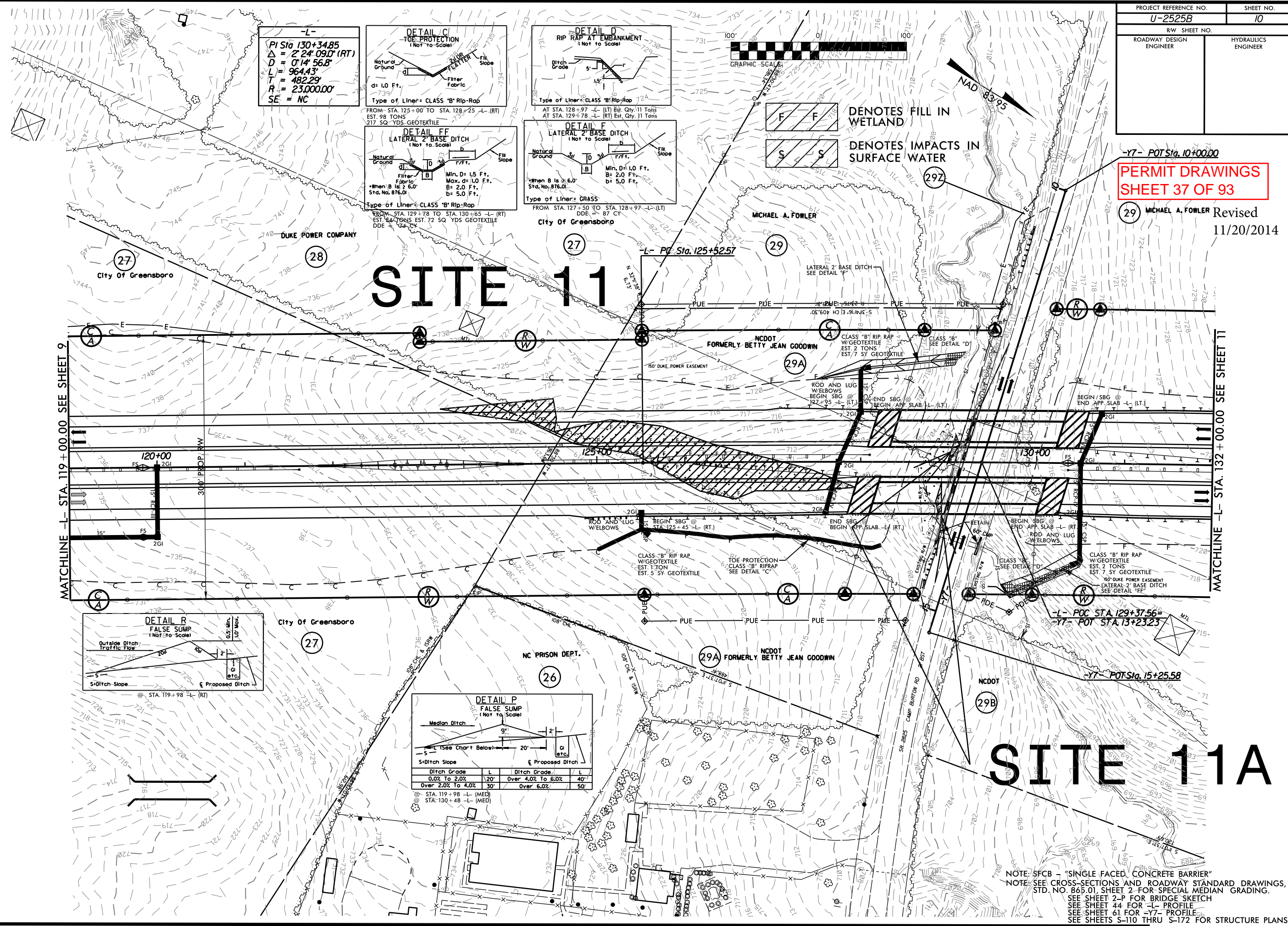
SITE 11A

NOTE: SFCB - "SINGLE FACED CONCRETE BARRIER"
 NOTE: SEE CROSS-SECTIONS AND ROADWAY STANDARD DRAWINGS, STD. NO. 865.01, SHEET 2 FOR SPECIAL MEDIAN GRADING.
 SEE SHEET 2-P FOR BRIDGE SKETCH
 SEE SHEET 44 FOR -L- PROFILE
 SEE SHEET 61 FOR -Y7- PROFILE
 SEE SHEETS S-110 THRU S-172 FOR STRUCTURE PLANS

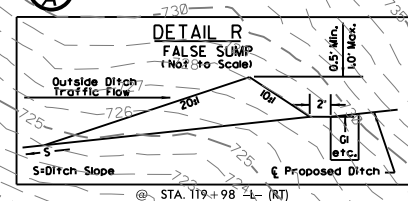
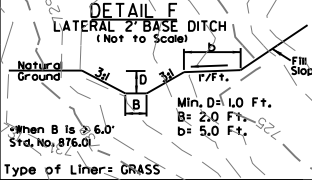
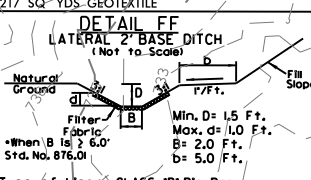
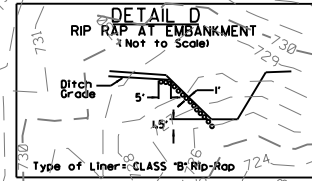
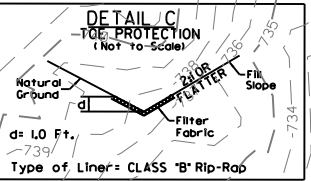
5/14/95

PROJECT REFERENCE NO. U-2525B	SHEET NO. 10
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

-Y7- POT Sta. 10+00.00
PERMIT DRAWINGS
SHEET 37 OF 93
 29 MICHAEL A. FOWLER Revised
 11/20/2014



-L-
 PI Sta 130+34.85
 $\Delta = 2' 24" 09.0" (RT)$
 $D = 0' 14" 56.8"$
 $L = 964.43'$
 $T = 482.29'$
 $R = 23,000.00'$
 SE = NC



DETAIL P
 FALSE SUMP
 (Not to Scale)

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

@ STA. 119+98 -L- (MED)
 @ STA. 130+48 -L- (MED)

SITE 11A

NOTE: SFCB - "SINGLE FACED CONCRETE BARRIER"
 NOTE: SEE CROSS-SECTIONS AND ROADWAY STANDARD DRAWINGS,
 STD. NO. 865.01, SHEET 2 FOR SPECIAL MEDIAN GRADING.
 SEE SHEET 2-P FOR BRIDGE SKETCH
 SEE SHEET 44 FOR -L- PROFILE
 SEE SHEET 61 FOR -Y7- PROFILE
 SEE SHEETS S-110 THRU S-172 FOR STRUCTURE PLANS

REVISIONS

MATCHLINE -L- STA. 119+00.00 SEE SHEET 9

MATCHLINE -L- STA. 132+00.00 SEE SHEET 11

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
8A	33+23 -EY4-				<0.01							
9	95+78 -L- (LT) TO 102+77 -L-(RT)	15" RCP	2.01			0.15		0.03	<0.01	462	10	
9A	101+78 -L- (LT) TO 102+19 -L-(LT)	42" RCP						<0.01		84		
10	113+64 -L- (LT) TO 117+08 -L-(RT) Bank Stabilization	2 @ 7' X 8' RCBC			<0.01			0.03	<0.01	212	29	
10A	114+23 -L- (RT) TO 115+15 -L-(RT)		0.02			0.02						
10B	115+19 -L- (LT) TO 116+17 -L-(RT)		0.03		<0.01	<0.01						
10C	116+15 -L- (LT) TO 117+08 -L-(RT)		0.25		0.04							
11	123+22 -L- (LT) TO 127+94 -L-(RT) Bank Stabilization		0.33					1.70		18		
11A	13+02 -Y7- (RT) TO 13+93 -Y7- (RT)	CL II BENT PROTECTION	<0.01									
SUBTOTALS:			2.65		0.05	0.17		1.76	<0.01	18	0	

**PERMIT DRAWINGS
SHEET 89 OF 93**

NOTE: Rounded totals are based upon sum of actual impacts.

REVISED 11/20/2014 SITE 11A CL II BENT PROTECTION

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GUILFORD COUNTY
WBS - 34821.1.1 (U-2525B)

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS					
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)	
35	48+53 -Y23-	36" RCP							<0.01	<0.01	120	17	
	Bank Stabilization										10		
36	18+48 -Y21A-	54" RCP	<0.01						<0.01	<0.01	101	21	
	Bank Stabilization										10		
	THIS SHEET	SUBTOTALS:	<0.01						<0.01	<0.01	241	38	
SUBTOTALS OF ALL OTHER:			6.86	0.00	0.31	0.38	0.03	1.70	0.09	10125	590	2055	
TOTALS:			6.86	0.00	0.31	0.38	0.03	1.72	0.10	10366	628	2055	

**PERMIT DRAWINGS
SHEET 93 OF 93**

Revised 10/01/2014
Revised 11/20/2014 - CL II BENT PROTECTION

NOTE: Rounded totals are based upon sum of actual impacts.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GUILFORD COUNTY
WBS - 34821.1.1 (U-2525B)

SHEET 4/8/2013