



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY  
GOVERNOR

July 3, 2013

ANTHONY J. TATA  
SECRETARY

U. S. Army Corps of Engineers  
Regulatory Field Office  
151 Patton Avenue, Room 208  
Asheville, NC 28801-5006

ATTN: Ms. Sarah Hair  
NCDOT Coordinator

Dear Madam:

**Subject:** Post Field Meeting Addendum to March 22, 2013 Request for Modifications to the Section 404 Individual Permit and Section 401 Water Quality Certification for I-485. Division 10, TIP's R-2248 E and R-2123 CE, Debit \$570 from WBS 34410.3.GV2

**Reference:** Request for Modification to the Section 404 IP and 401 WQC for I-485 dated March 22, 2013.

USACE Individual Permit Action ID SAW-2011-01237, dated Nov.22, 2011.  
NCDWQ Water Quality Certification No. 003868, dated October 14, 2011.  
NCDOT Modification Application dated June 4,2012  
NCDWQ Water Quality Certification Modification dated Jun 21, 2012

During a site visit with the US Army Corps of Engineers, Division of Water Quality, and Division 10 Construction staff on April 15, 2013, the following changes were noted which amend the modification request dated March 22, 2013. These changes occur to wetland impacts on the R-2248 E, Yadkin River Basin section of the Charlotte Outer Loop Project in Mecklenburg County. Revised Permit Drawings Sheets are attached to this letter.

Site 12 – Sewer Line Impact Changes

The sewer line utility impacts depicted on the March 22, 2013 modification request are not required, as the new sewer line was able to tie back into the existing line at an earlier junction. Impacts will not change at this site. The previous drawing (dated March 2012), submitted with the June 2012 modification request, is accurate for this site (see attached Permit Drawing Sheet 53 of 108).).

**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](http://WEBSITE.NCDOT.GOV)

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

Site 13 – Water Line Impact Changes (non-riparian wetlands)

The newly described 16-inch water line from the March 22, 2013 modification request is being placed closer to the roadway in an area designated as "mechanized clearing" rather than a new impact of "excavation". Therefore, the request from the March 22, 2013 for additional mitigation of 0.09 acre of mechanized clearing (from 0.03 to 0.12 acre), and 0.03 acre of excavation (0.0 to 0.03 acre), will no longer be required. The impact will revert back to the previous amounts accounted for in the November 2011 permit, of 0.03 acre of mechanized clearing and no excavation. The drawing has been revised to depict the permanent fill, and included in this modification request (see attached Permit Drawings Sheet 45 of 108).

**See below the impacts and mitigation summary for the R-2248E section from the November 2011 Permit:**

R-2248E – Yadkin and Catawba River Basins (no requested changes to the Catawba permit sites):

Catawba River Basin Impacts

0.655 acre wetland – 0.48 (previous mitigation on project) = 0.17 acre wetland

899 linear feet stream – 348 (previous mitigation on project) = 551

Mitigation proposed = 0.34 acre wetland and 1102 linear feet stream

Permit Mitigation required = 0.34 acre wetland and 1102 linear feet stream

Yadkin River Basin Impacts

6.22 acre riparian wetland and 0.42 acre non-riparian wetland

7257 – 407 feet (bank stabilization) – 50 feet (day-lighting stream) = 6800 linear feet

Wetland mitigation proposed = 12.44 acre riparian wetland and 0.84 acre non-riparian wetland

Stream mitigation proposed = 13,600 linear feet stream

Permit Mitigation required = 13.28 acre riparian wetland and 0.84 acre non-riparian wetland and 13,600 linear feet stream

*Mitigation requirement is 0.84 acre riparian wetland over the normal requirement – this was due to incorrectly adding the riparian wetland amount to the non-riparian wetland amount and also having a separate non-riparian requirement (see the April 21, 2011 EEP letter). Mitigation requirement for these wetland impacts should have been 12.44 acre riparian and 0.84 non-riparian (for 6.22 acre and 0.42 acre impacts @ 2:1)*

**R-2248E Yadkin River Basin Impact Changes:**

	<b>Wetlands</b>	<b>Streams</b>	
	Riparian Wetland Fill (acre)	Permanent (linear feet)	BS (linear feet)
Site 5		+36	-12
Site 6		-276	-36
Site 8		-100	
Site 9		-32	
Site 14	-0.021*		-35
<b>Totals</b>	-0.021*	-372	-83

\*This is the only change for wetlands in the March 2013 modification.

According to the current USACE mitigation requirements, the EEP has provided the following:

- 0.34 acres riparian wetland mitigation and 1,102 linear feet of stream mitigation in the Catawba River Basin
- 16.44 acres riparian wetland and 0.84 acres non-riparian wetland mitigation and 24,878 linear feet of stream channel mitigation in the Yadkin River Basin

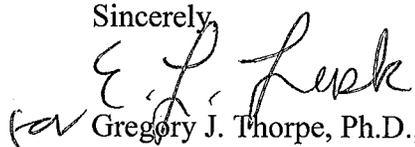
**R-2248E – Summary of Impact Changes and Proposed Mitigation**

	Riparian Wetland (acre)	Non-riparian Wetland (acre)	Stream (linear feet)
2011 Original Impacts	6.22	0.42	6800 <sup>a</sup>
2013 Impacts Changes	-0.02	0	-372 <sup>b</sup>
Total Impacts	6.20	0.42	6,428
<b><sup>c</sup>Total Mitigation Credits Needed @2:1</b>	<b>12.40</b>	<b>0.84</b>	<b>12,856</b>
Mitigation Credits Provided per 2011 404 Permit	14.86*	0.84	13,600
<b>Mitigation Credits Surplus</b>	<b>-2.46</b>	<b>0</b>	<b>-744</b>
*This number includes the overage of mitigation credits from both R-2248 and R-2123 in the Yadkin River Basin			
<sup>a</sup> Does not include 407 feet BS and 50 feet day-lighted stream			
<sup>b</sup> Does not include 83 feet reduction in BS			
<sup>c</sup> Mitigation is calculated for USACE requirements at 2:1 ratio; DWQ requirement is covered by USACE ratio			

Please note that EEP has additional concerns about the non-riparian wetlands requirements in the November 2011 permit. In EEP’s April, 21, 2011 letter, the EEP indicated that “...non-riparian wetland impacts located in the mountains and piedmont areas of North Carolina will be accepted as requested but mitigated utilizing riparian wetland mitigation credits.” This requirement is due to the difficulty of finding non-riparian wetlands in the piedmont.

Condition W of the existing 404 specifically states that “.... EEP will provide...0.84 acres equivalent non-riparian wetlands...”. The Ecosystem Enhancement Program is requesting that this wording be changed to reflect the non-riparian issue resolved at the February, 2011 IRT meeting. Please direct any questions regarding this mitigation concern to Beth Harmon at 919 715-1929 or [beth.harmon@ncdenr.gov](mailto:beth.harmon@ncdenr.gov).

We hereby request modifications to the Section 404 and 401 Permits. Thank you for your assistance with this project. If you have any questions or need additional information regarding the permit modification request, please contact Michael Turchy at [maturchy@ncdot.gov](mailto:maturchy@ncdot.gov). A copy of this modification application will also be posted at <http://www.ncdot.org/planning/pe/naturalunit/Permit.html>.

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

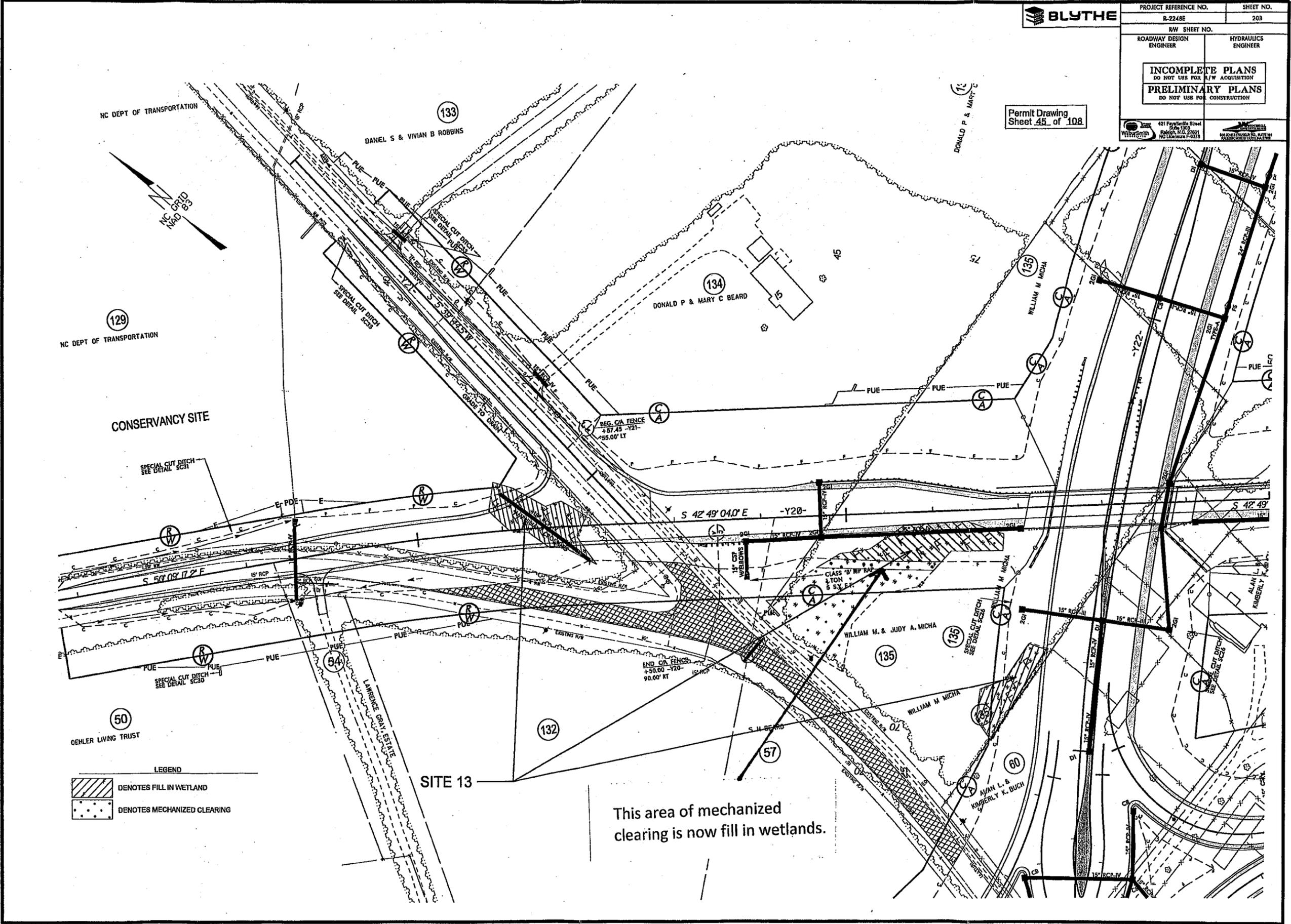
cc: NCDOT Permit Application Standard Distribution List

PROJECT REFERENCE NO. R-2248E	SHEET NO. 20B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	
411 Fayetteville Street Raleigh, N.C. 27601 NC License # F-5378	411 Fayetteville Street Raleigh, N.C. 27601 NC License # F-5378

Permit Drawing  
Sheet 45 of 108

REVISIONS

FILE: E:\projects\2002\0211\Blythe\Blythe\Drawings\2002\0211\0211\_0108\_SITE\_2002A.DWG  
 DATE: 04/01/02



**LEGEND**

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

This area of mechanized clearing is now fill in wetlands.

RWY SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

421 Fayetteville Street  
Suite 1200  
Raleigh, NC 27601  
NO LICENSES F-0378

Permit Drawing  
Sheet 53 of 108

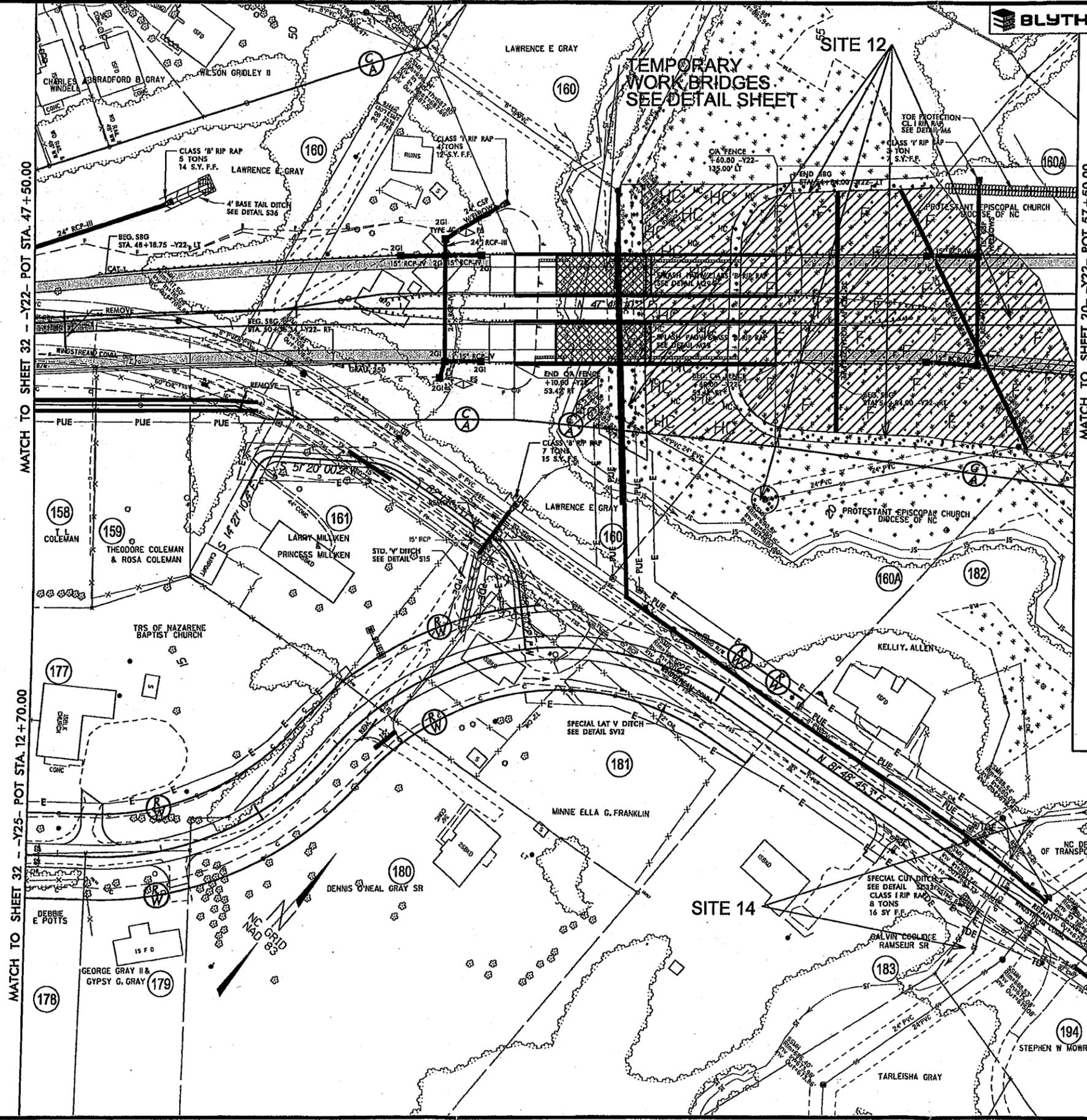
**REVISED**  
**MARCH 2012**

REVISIONS

**LEGEND**

	DENOTES FILL IN WETLAND
	DENOTES MECHANIZED CLEARING
	DENOTES HAND CLEAR IN WETLAND

FILE: B:\vtd\12248E\12248E\12248E\12248E.dwg DATE: 2/22/02



SEE SHEET 73 FOR -Y22- PROFILE  
SEE SHEET 75 FOR -Y25- PROFILE  
SEE SHEETS 2- THRU 2- FOR DRAINAGE DETAILS

**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)
1	-L- (1259+00/1260+50)	Roadway Fill	0.385			0.020		0.02		297		
2	-L- (1266+00/1266+50)	Roadway Fill	0.222			0.028		0.05		602		
3	-Y10- (65+50)	54" Pipe	0.015			0.011		<0.01	<0.01	48	38	
3		Bank Stabilization								24		
4	-L- (1297+00/1299+50)	84" Pipe	0.507		0.042	0.079		0.08	<0.01	428	8	
4		Bank Stabilization								69		
5	-L- (1342+00/1343+00)	8'x7' RCBC	0.116					0.04	0.01	525	175	
5		Bank Stabilization								44		
6	-L- (1345+00)	9'X7' RCBC						0.00	0.00	0	0	
6		Bank Stabilization								0		
7	-L- (1355+00/1367+00)	Roadway Fill	1.723			0.061		0.09	0.01	1561	127	
7		Bank Stabilization								21		
8	-L- (1390+00/1415+00)	Roadway Fill	1.060					0.21	0.01	2397	56	
8		Bank Stabilization								28		
9	-L- (1421+00)	42" Pipe						<0.01	<0.01	49	8	
9		Bank Stabilization								37		
10	-L- (1441+00)	60" Pipe						<0.01	<0.01	44	18	
10		Bank Stabilization								51		
11	-L- (1465+00/1476+00)	Roadway Fill	0.144					<0.01	<0.01	138	48	
12	-Y22- (54+00/60+00)	Roadway Fill	1.609			0.164						
12		Temp. Wrk. Br.		0.051								
12		Bridge/Int. Bents	0.010				0.497					
12		Bridge/Splash Pads	0.017									
12		Sewer line/Manholes			0.000	0.164						
13	-Y20- (41+00/48+00)	Roadway Fill	0.311			0.030						
13		Water line			0.000	0.000						
13		Utility Pole Anchors			0.000	0.000						
14	-L- (1486+00/1495+00)	Roadway Fill	0.596					0.40	<0.01	803	34	
14	-Y25- (23+23)	2 @ 7' x 8' RCBC	0.000					0.00	0.00		0	
14		Bank Stabilization								0		
15	-Y22- (86+00/90+00)	72" Pipe	0.080			0.012		0.03	<0.01	295	21	
15		Bank Stabilization								50		
16	-L- (1526+20/1526+45)	48" Pipe	0.031					0.01		190		
<b>TOTALS:</b>			6.83	0.05	0.04	0.57	0.50	0.96	0.07	7701	533	0

Revised June 2013  
Permit Drawing Sheet  
2 of 108

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

MECKLENBURG COUNTY  
WBS - 34410.3.GV2 (R-2248E)