



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

February 6, 2015

Mr. Brad Shaver  
U.S. Army Corps of Engineers  
Regulatory Field Office  
69 Darlington Ave.  
Wilmington, NC 28402-1890

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

Subject: **Revised Modification Request for the Individual Section 404 and Section 10 Permits, Section 401 Water Quality Certification and CAMA Major Development Permit** for the Wilmington Bypass from north of US 74/76 in Brunswick County to US 421 in New Hanover County. Federal Aid Project Nos. NHF-0017 (96) and STM-0017 (97), Division 3, TIP No. R-2633B.

References: Section 404 Individual Permit, issued January 13, 2011 and modified July 9 and August 23, 2013, August 28, 2014, USACE Action ID SAW-1994-03352.  
Section 401 Water Quality Certification No. 003842, issued January 13, 2011 and modified May 31, August 19, 2013, March 26, 2014 and August 15, 2014.  
CAMA Consistency Concurrence – CD11-003, issued January 14, 2011 and CAMA Major Development Permit, 76-13, issued June 28, 2013 and modified August 22, 2013 and October 3, 2014.  
Permit modification application dated January 7, 2015 to Section 10, 404, 401 and CAMA Major Development Permit.  
Permit modification application dated January 23, 2015 to Section 10, 404, 401 and CAMA Major Development Permit.

Dear Sirs:

As you are aware, the North Carolina Department of Transportation (NCDOT) is currently constructing a fully controlled access freeway on new alignment from north of US 74/76 in Brunswick County to US 421 in New Hanover County approximately 7.6 miles. The purpose of this letter is to request modifications of the Section 404 Individual Permit, Section 10 Permit, Section 401 Water Quality Certification and CAMA Major Development Permit. Unless provided with this revised modification application, all other information included in our previous modification application (January 23, 2015) remain valid.

## Revised Site 19

This letter is a revision to the January 23, 2015 letter. Mechanized clearing was incorrectly added to Site 19 which only had temporary wetland impacts. The mechanized clearing impacts have been eliminated. There will be no riparian wetland impacts from this modification. Permit Drawing Sheets 62 to 65 and 73 of 73 have been revised and included in this application.

## Mitigation

Riparian wetland impacts (0.01 ac) previously mitigated for in the January 23, 2015 submittal have been eliminated. See the attached revised EEP acceptance letter.

New total wetland impacts requiring mitigation for the entire R-2633 A&B project are 7.28 acres of riparian wetlands and 58.33 acres of non-riparian wetlands.

## REGULATORY APPROVALS

### Section 404

Application is hereby made for a modification to the USACE Individual 404 Permit as required for the above-described activities.

### Section 401

Application is hereby made for a modification to the Section 401 Water Quality Certification from the N. C. Division of Water Quality.

CAMA: Application is hereby made for a modification to the Coastal Area Management Act Major Development Permit.

This project was let in September 2013 and is currently under construction. We respectfully request that this modification be processed as soon as possible.

A copy of this permit modification request will be posted on the DOT website at: <https://connect.ncdot.gov/resources/Environmental/Pages>. If you have any questions or need additional information, please contact Rachelle Beauregard at [rbeauregard@ncdot.gov](mailto:rbeauregard@ncdot.gov) or (919) 707-6105.

Sincerely,



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

Ecosystem Enhancement Program

Donald R. van der Vaart  
Secretary

February 5, 2015

Mr. Richard W. Hancock, P.E.  
Manager, Project Development & 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:

**R-2633A and B**, US 17 (Wilmington Bypass) from NC 87 South of Bishop to West of US 421 North of Wilmington, Brunswick and New Hanover Counties

References: USACE 404 Individual Permit issued February 28, 2011 (USACE Action ID 1994-03552) and 404 Individual Permit Modifications issued on July 9, 2013 and August 28, 2014

NCDWR 401 Water Quality Certification issued January 13, 2011 (NCDWQ Project ID 2010-0867) and 401 Water Quality Certification modification issued on May 31, 2013

NCDCM Permit issued on June 28, 2013 (NCDCM Project ID 76-13)

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the additional stream and wetland mitigation for the subject project. Based on the information supplied by you on October 8, 2014 and February 4, 2015, the additional stream and wetland impacts are located in CU 03030005 of the Cape Fear River Basin in the Southern Outer Coastal Plain (SOCP) Eco-Region, and are as follows:

**Table 1 – Additional Impacts (feet / acres)**

Cape Fear 03030005 SOCP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1 (3:1)	Zone 2 (1.5:1)
Impacts (feet/acres)	0	0	27.0	0.00	2.08	0	0	0

These impacts and associated mitigation needs were not projected by the NCDOT in the 2015 impact data. EEP is currently providing stream and wetland (riparian and non-riparian) mitigation for the impacts associated with this project located in cataloging unit 03030005 of the Cape Fear River basin as required by the 404 and 401 permits that were issued in 2011, 2013 and 2014 and NCDCM CAMA Major permit issued in 2013, as shown in the below table (in mitigation credits):

Mr. Hancock  
TIP R-2633A and B Additional  
February 5, 2015  
Page Two

**Table 2 – Current Permitted Impacts and Mitigation Requirements (based on 2011, 2013 and 2014 permits) and Revised Anticipated Impacts (based on mitigation request)**

<b>Impact Type</b>	<b>Total Permitted Impacts (feet / acre)</b>	<b>Mitigation Provided by EEP per Issued Permits (Credits)</b>	<b>Additional Impact (for approval)</b>	<b>Revised Total Impacts*</b>
Stream	509.0	1,018.0	27.0	536.0
Riparian Wetland	7.28	14.56	0.00	7.28
Non-Rip Wetland	56.25	112.50	2.08	58.33

\*Some of the stream and wetland impacts may be proposed to be mitigated at a 1:1 mitigation ratio. See permit application for details. EEP will provide the amount of mitigation as determined by the regulatory agencies.

**This mitigation acceptance letter replaces the mitigation acceptance letter issued on January 22, 2015.** EEP has previously made debits for the stream and wetland mitigation requirements to mitigation sites available in the cataloging unit based on the amounts required in the 404 and 401 permits issued in 2011, 2013 and 2014 and the CAMA Major permit issued in 2013. Upon issuance of the permit modifications for the project, EEP will make appropriate adjustments to the existing mitigation debits. .

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-707-8420.

Sincerely,



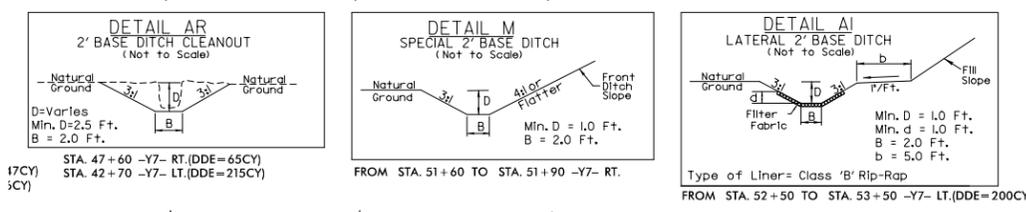
James B. Stanfill  
EEP Asset Management Supervisor

Cc: Mr. Brad Shaver, USACE – Wilmington Regulatory Field Office  
Mr. Mason Herndon, NC Division of Water Quality  
Mr. Steve Sollod, NC Division of Coastal Management  
File: R-2633A and B Revised 6

B.17/99

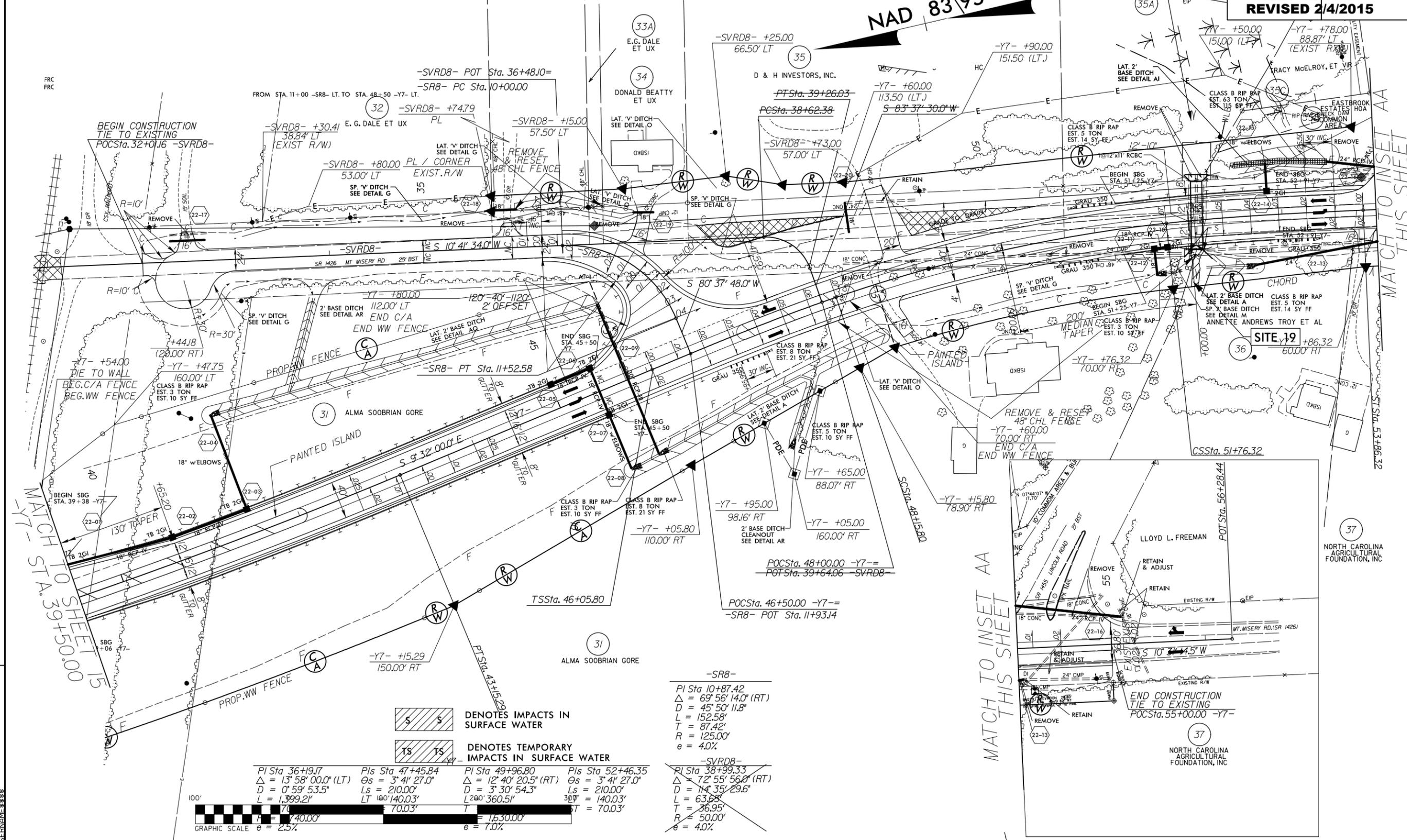
**LOCHNER**  
H. W. LOCHNER, INC.  
2840 PLAZA PLACE, SUITE 202  
RALEIGH, NC 27612

PROJECT REFERENCE NO. R-2633B	SHEET NO. 37
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION <b>PERMIT DRAWING</b> <b>SHEET 62 OF 73</b> <b>REVISED 2/4/2015</b>	



SEE SHEET 2-L FOR IMPACTS IN THIS AREA

NAD 83/95



REVISIONS

MATCH TO INSET AA  
STA. 39+50.00

MATCH TO INSET AA  
STA. 53+86.32

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

PI Sta 36+19.17 Δ = 13° 58' 00.0" (LT) D = 0' 59' 53.5" L = 1,399.21'	PIs Sta 47+45.84 Θs = 3° 41' 27.0" Ls = 210.00' LT 100' 140.03'	PI Sta 49+96.80 Δ = 12° 40' 20.5" (RT) D = 3' 30' 54.3" L 200' 360.51'	PIs Sta 52+46.35 Θs = 3° 41' 27.0" Ls = 210.00' 300' = 140.03' ST = 70.03'
GRAPHIC SCALE θ = 2.5%		e = 7.0%	

-SR8-  
PI Sta 10+87.42  
Δ = 69° 56' 14.0" (RT)  
D = 45' 50' 11.8"  
L = 152.58'  
T = 87.42'  
R = 125.00'  
e = 4.0%

-SVRD8-  
PI Sta 38+99.33  
Δ = 72° 55' 56.0" (RT)  
D = 114' 35' 29.6"  
L = 63.68'  
T = 36.95'  
R = 50.00'  
e = 4.0%

NOTE: ALL DRIVEWAY RADIALS TO BE 10', UNLESS OTHERWISE NOTED.

SEE SHEETS 67 & 68 FOR -SVRD8- PROFILE SEE SHEETS 63 & 64 FOR -Y7- PROFILE

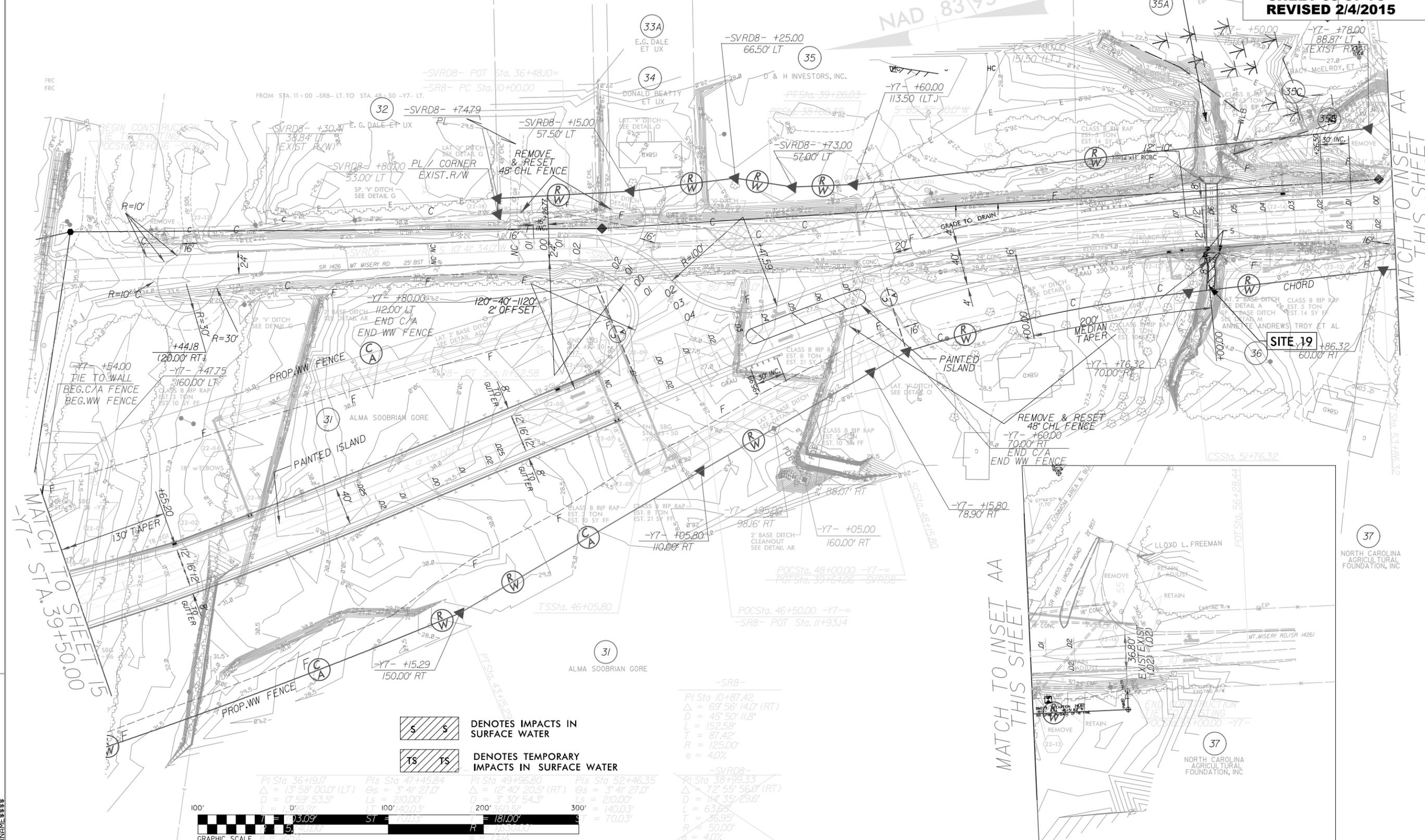
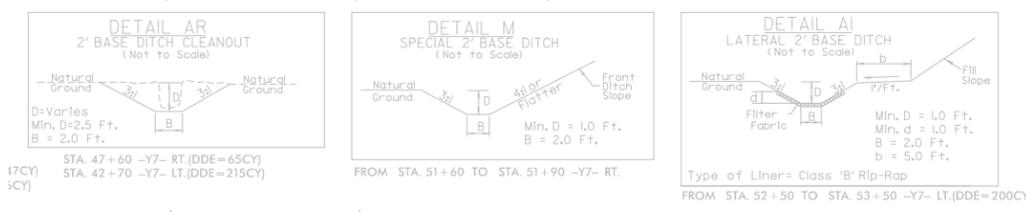
8/17/99

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PROJECT REFERENCE NO. R-2633B	SHEET NO. 37
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION  
**PERMIT DRAWING**  
**SHEET 63 OF 73**  
**REVISED 2/4/2015**

SEE SHEET 2-L FOR IMPACTS IN THIS AREA



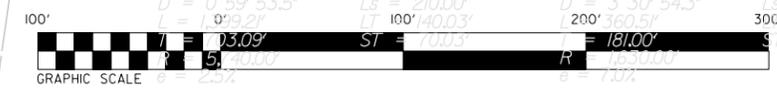
REVISIONS

MATCH TO SHEET 15  
STA. 39+50.00

MATCH TO INSET AA  
THIS SHEET

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER



PI Sta 36+19.17 Δ = 13° 58' 00.0" (LT) D = 0° 59' 53.5" L = 109.21' R = 181.00'	PI Sta 41+45.84 Δs = 3° 41' 27.0" Ds = 210.00' Ls = 100° 40.03' ST = 100.00'	PI Sta 49+96.80 Δ = 12° 40' 20.5" (RT) Ds = 3° 30' 54.3" Ls = 200° 360.51' L = 181.00'	PI Sta 52+46.35 Δs = 3° 41' 27.0" Ds = 210.00' Ls = 140.03' ST = 70.03'	PI Sta 38+99.33 Δ = 72° 55' 56.0" (RT) Ds = 114° 35' 29.6" Ls = 63.68' T = 36.95' R = 50.00' e = 4.0%
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NOTE: ALL DRIVEWAY RADII ARE TO BE 10', UNLESS OTHERWISE NOTED.

SEE SHEETS 67 & 68 FOR -SVRD8- PROFILE SEE SHEETS 63 & 64 FOR -Y7- PROFILE

VERTICAL CURVE DESIGN USE PERMANENT





**WETLAND PERMIT IMPACT SUMMARY**

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS					
			404 Permanent Fill In Wetlands (ac)	CAMA Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	404 Hand Clearing in Wetlands (ac)	CAMA 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-24+75 Lt.	Roadway Fill												
2***	-L-37+96 Rt.	Bridge												
3****	-LREV- 339+73 to 358+92	Roadway Fill	7.51			0.03	0.29	0.29						
4	-RP D1- 22+60	Deleted due to new JS delineation												
5*	-LREV- 372+74 to -L-85+08	Roadway Fill	1.04				0.05	0.05						
6*	-L- 109+28 to 134+54	Roadway Fill	9.72				0.57	0.57						
6A**	-L- 138+11 to 140+70	Roadway Fill	0.68											
6B**	-L- 141+20 to 144+29	Roadway Fill	0.41				0.02							
7*	-L- 146+78 to 165+66	Roadway Fill	10.61		0.92		0.48	0.28						
8	-L 166+60	Deleted due to new JS delineation												
9*	-L- 186+97 to 191+88	Roadway Fill	1.04				0.05	0.05						
10	-RP D2- 19+20 Lt.	Deleted due to new JS delineation												
11*	-L- 194+75 to 216+13	Roadway Fill; 3@42"	8.71				0.48	0.47		0.08	<0.01	242	20	
12	-L- 230+39 to 242+11	Deleted due to new JS delineation												
13	-L- 256+36 to 265+87	Deleted due to new JS delineation												
14*	-L- 264+32 to 266+94	Bridge				0.03	0.20			<0.01				
		Temp. Work Bridge					0.10							
15*	319+46 to 387+92	Bridge	0.05			*****0.93	10.48	7.79		0.13	0.03			
		Temp. Work Bridge					6.43	4.70						
16*	-L- 399+43 to 400+51	Roadway Fill	0.22											
17****	-Y5-16+25 Rt.	48" RCP												
18****	-Y5-16+25 Lt.	48" RCP												
19*	-Y7- 52+09	Culvert								<0.01	<0.01	5	39	
		Detour Culvert			0.06			0.03			0.61		90	
20*	-Y8- 47+74 to 49+88	Bridge	<0.01				0.04	0.17						
		Temp. Work Bridge						0.14						
21	-Y8E-	3@42" RCP-IV								0.02	0.02	27	59	
<b>TOTALS:</b>			<b>40.00</b>		<b>0.98</b>	<b>0.96</b>	<b>2.01</b>	<b>19.24</b>	<b>12.49</b>	<b>0.23</b>	<b>0.65</b>	<b>274</b>	<b>208</b>	<b>0.00</b>

Site 14 See Structures sheet for Bridge Impacts on Cartwheel Branch  
 Site 15 Impacts for Permanent Dual Bridges CAMA=0.07 Ac, 404=0.07 Ac, Surface Water=0.0 1Ac; Total=0.15 Ac.  
 Site 15 Impacts for Temporary Work Bridge CAMA=0.16 Ac, 404=0.21 Ac, Surface Water=0.0 1 Ac; Total=0.38 Ac.  
 \* Revised due to new JS Delineation  
 \*\* New Site due to new JS Delineation  
 \*\*\* Sites 1, 2, 17, and 18 are now permitted with R-2633AA & AB and the impacts are included with that project.  
 \*\*\*\* A portion of Site 3 is now permitted with R-2633AA & AB and the impacts are included with that project.  
 \*\*\*\*\* Temporary Excavation. CAMA=0.41Ac, 404 =0.52 Ac.; Total=0.91 Ac.  
 0.75 acres of Temp. Fill in 404 Wetlands in the Hand Clearing areas for Erosion Control Measures

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 BRUNSWICK AND NEW HANOVER COUNTIES  
 WBS - 34491.1.2 (R-2633B)  
 SHEET 73 of 73 Revised 2/4/15