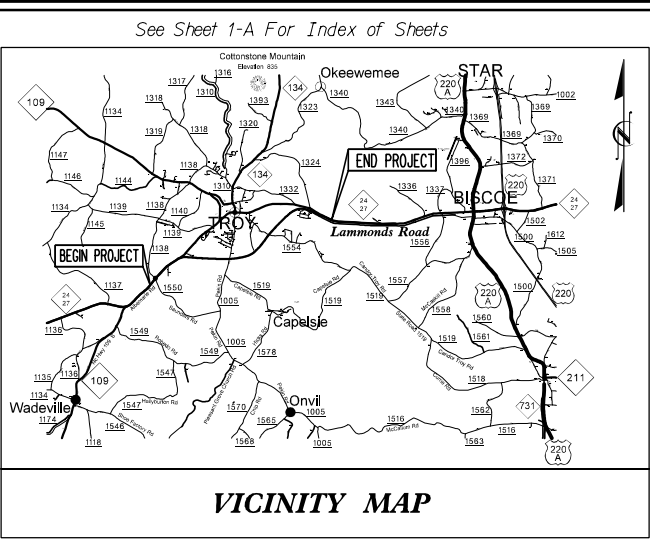


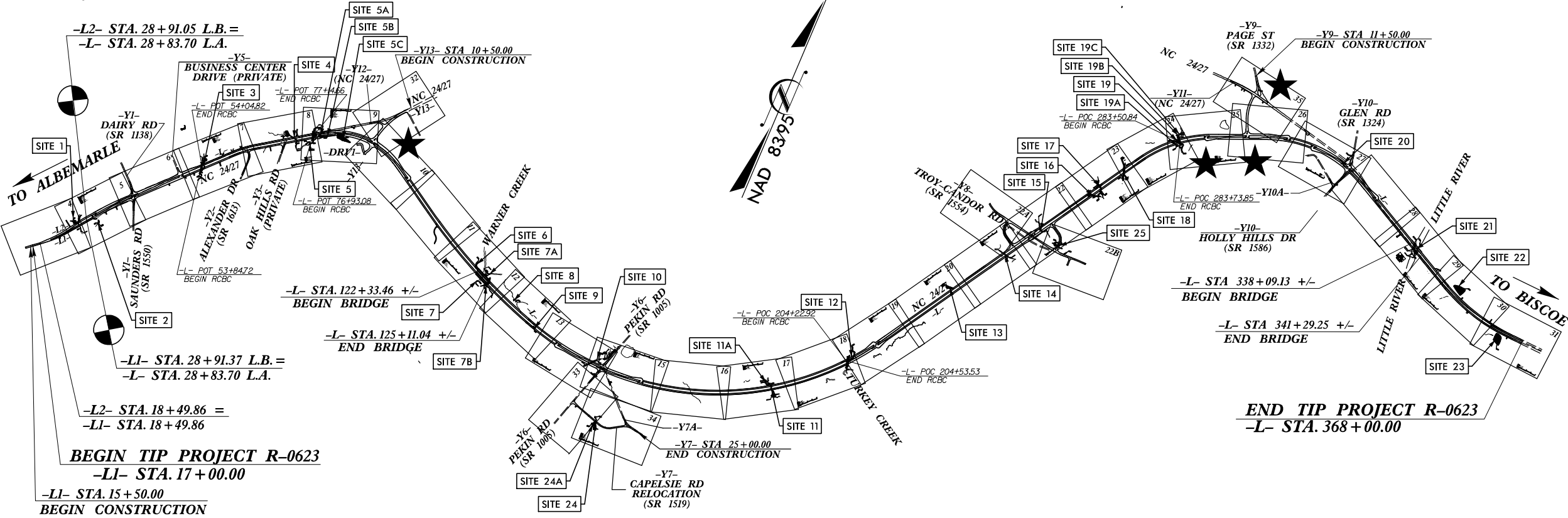
09/08/19

CONTRACT: **TIP PROJECT: R-0623**

SYSTEMS DOWN FOR MAINTENANCE

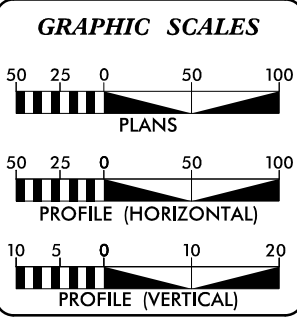


THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARY OF TROY



★ TRAFFIC SIGNAL

NOTE: THIS PROJECT IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS AS SHOWN ON THE PLANS
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III



DESIGN DATA	
ADT 2014	= 6610 - 12,641
ADT 2040	= 9300 - 18,200
DHV	= 10 %
D	= 55 %
T	= 17 % *
V	= 60 MPH
* TTST	= 12% DUAL 5%
FUNCTIONAL CLASSIFICATION	
RURAL ARTERIAL	
REGIONAL TIER PROJECT	

PROJECT LENGTH	
LENGTH ROADWAY TIP PROJECT R-0623	= 6.518 MILES
LENGTH STRUCTURES TIP PROJECT R-0623	= 0.131 MILES
TOTAL LENGTH OF TIP PROJECT R-0623	= 6.649 MILES

Prepared In the Office of: DIVISION OF HIGHWAYS 1000 Birch Ridge Dr., Raleigh NC, 27610	
2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: JANUARY 30, 2013	G. E. BREW, P.E. PROJECT ENGINEER
LETTING DATE: NOVEMBER 18, 2014	I.T. YOUNIS PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER	
SIGNATURE:	P.E.
ROADWAY DESIGN ENGINEER	
SIGNATURE:	P.E.

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MONTGOMERY COUNTY

**LOCATION: NC 24/27 TROY BYPASS FROM WEST OF SR 1138
(DAIRY ROAD) TO JUST EAST OF LITTLE RIVER**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES
SIGNALS AND SIGNING**

WETLAND AND SURFACE WATER IMPACTS PERMIT

STATE	STATE PROJECT REFERENCE NO.	SUBSET NO.	TOTAL SHEETS
N.C.	R-0623	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34352.1.1	STP-24(6)	PE	

Permit Drawing
Sheet 1 of 91
Revised 5/13/2016

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DETAIL C

**FALSE SUMP
(Not to Scale)**

S = Ditch Slope 9' 2' 20'

⤴ Median Ditch ⤵

GL etc.

⤴ Proposed Ditch ⤵

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

FROM STA. 752 + 75 CL.
FROM -YRBE- STA. 30 + 60 RT

FOR PROFILE OF LINE -L- SEE SHEETS 45 AND 46
FOR PROFILE OF LINE -Y8REV- SEE SHEET 57
FOR PROFILE OF LINE -RBD- SEE SHEET 58

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

Action ID: SAW-2004-01203 Applicant: NCDOT
Project Name: NC 24/27 Troy Bypass Mod. TIP R-0623
Page 2 of 9

MATCH LINE -L- STA 245+00 SEE SHEET 21

**MATCH LINE -L- STA 259+00
SEE SHEET 23**

5" MONOLITHIC CONC. ISLAND

-Y8REV-

PI Sta 32+77.24
 $\Delta = 12^{\circ} 38' 05.9''$ (LT)
 $D = 3^{\circ} 49' 11.0''$
 $L = 330.78'$
 $T = 166.07'$
 $R = 1,500.00'$
 $e =$ SEE PLANS

-RPD-

PI Sta 12+76.78
 $\Delta = 68^{\circ} 15' 52.2''$ (LT)
 $D = 28^{\circ} 38' 52.4''$
 $L = 238.29'$
 $T = 135.57'$
 $R = 200.00'$

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

100' 0' 100' 200' 300'

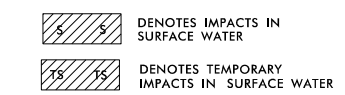
GRAPHIC SCALE

DETAIL C
FALSE SUMP
(Not to Scale)

The diagram shows a cross-section of a ditch. The ditch is 9' wide at the top and 2' deep. The bottom width is 20'. The side slopes are 1:1. The ditch is labeled "Median Ditch" and "S" (See Chart Below). The ground level is labeled "GI etc." and the ditch bottom is labeled "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'

FROM STA. 252 + 75 CL
FROM -Y8REV- STA. 30 + 60 RT

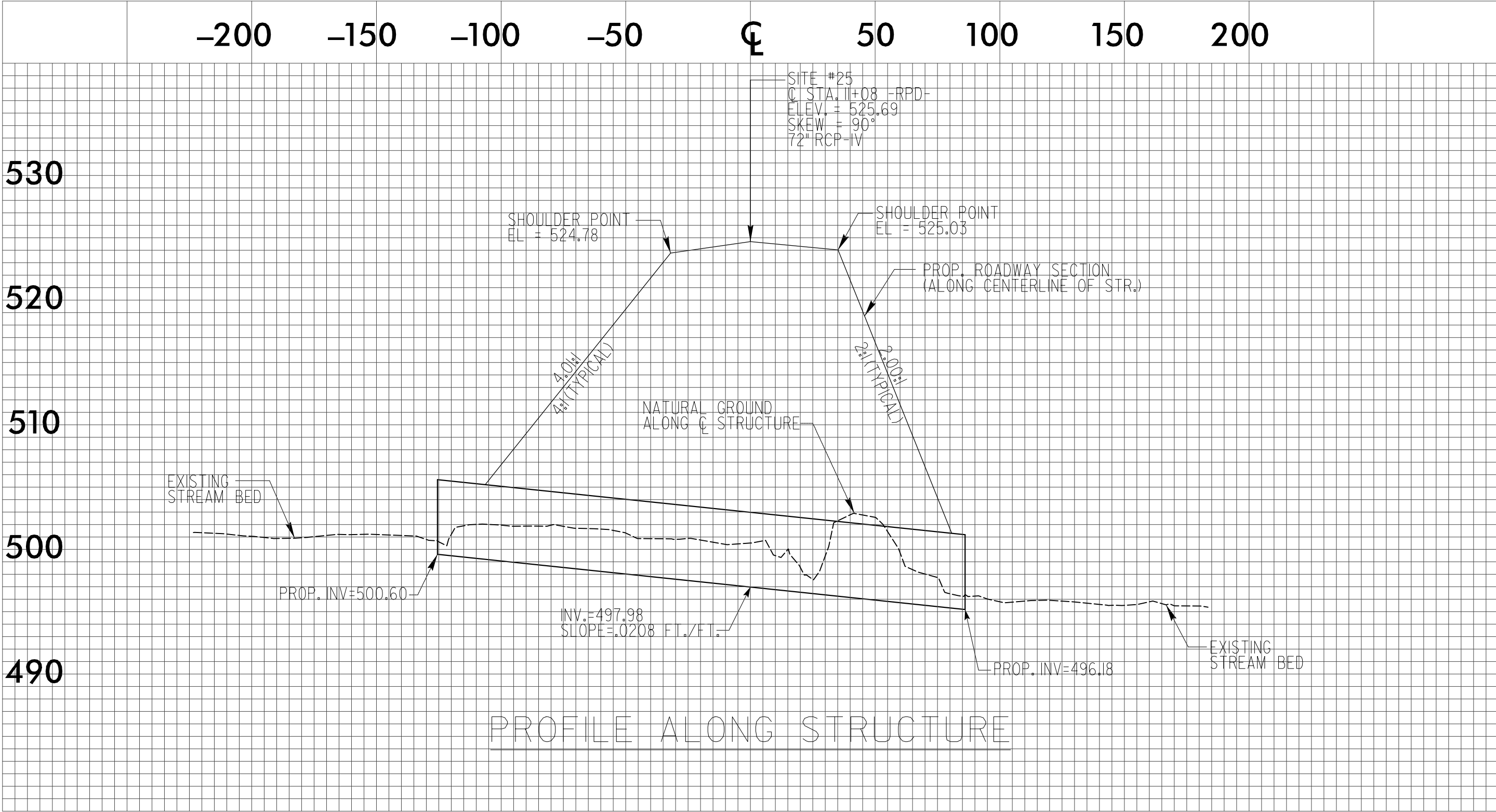


Action ID: SAW-2004-01203 Applicant: NCDOT
Project Name: NC 24/27 Troy Bypass Mod. TIP R-0623
Page 3 of 9

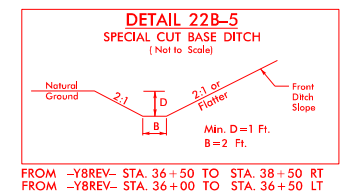
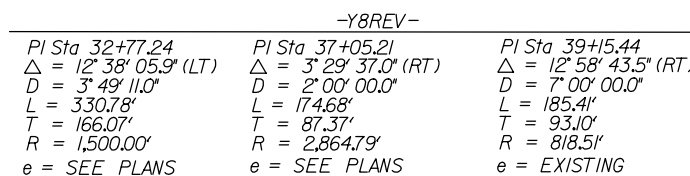
5" MONOLITHIC CONC. ISLAND

SITE 25

Permit Drawing
Sheet 1 of 4
Added 5/13/2016

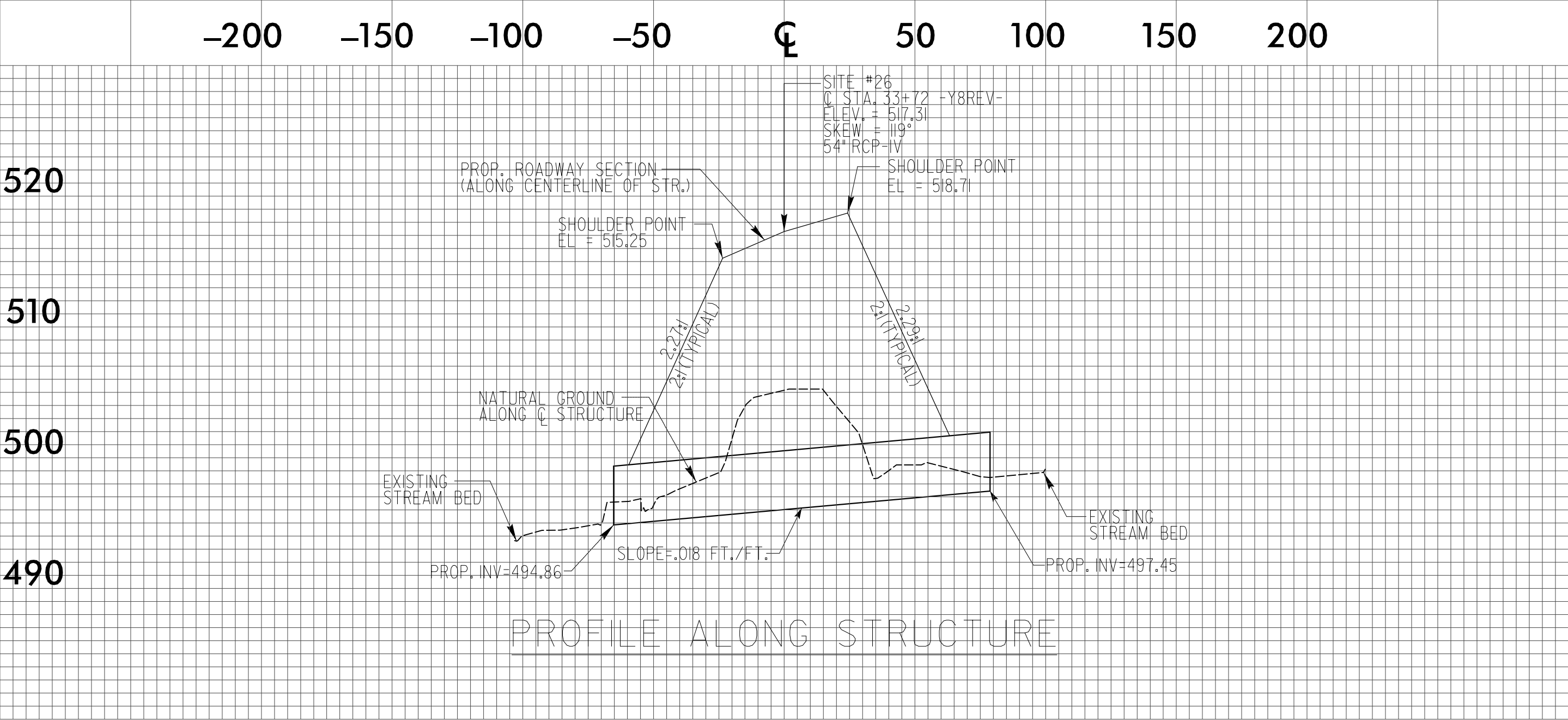


Action ID: SAW-2004-01203 Applicant: NCDOT
Project Name: NC 24/27 Troy Bypass Mod. TIP R-0623
Page 5 of 9



SITE 26

Permit Drawing
Sheet 4 of 4
Added 5/13/2016



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	L2 26+14 to 28+48	Roadway Fill	0.13				0.02	0.01	<0.01	136	16	
		Bank Stabilization							<0.01	11		
2	L 30+39 to 30+81 Rt	15"			<0.01		<0.01	<0.01	<0.01	39	34	
3	L 53+20 to 55+42	2@8'x6' RCBC			0.02		0.02	0.03	<0.01	294	24	
4	L 70+83 to 73+70	60" RCP IV	0.02				0.06	0.02	<0.01	271	73	
5	L 75+30 to 84+50	2@10'x7' RCBC						0.05	<0.01	295	17	
		Bank Stabilization							0.01	62		
5A		Roadway Fill	0.04					0.02		500		
5B		Roadway Fill	0.01									
5C		Pond	0.02		0.02			0.34				
6	L 120+95 to 121+90 Lt	Roadway Fill	0.08									
7	L 122+87 to 123+78	Bank Stabilization							<0.01	43		
7A	L 124+42 Lt	Bank Stabilization							<0.01	16		
7B	L 124+91 to 128+04	Roadway Fill	0.16					0.02	<0.01	355	72	
8	L 131+38 to 132+10 Lt	Roadway Fill	<0.01				<0.01		<0.01		10	
9	L 137+97 to 138+55	Roadway Fill	0.03									
10	L 150+48 to Y6 11+00 Rt	Roadway Fill	0.14		<0.01		0.13					
11	L 187+35 to 188+66	1@10'x6' RCBC						0.03	0.01	319	56	
		Bank Stabilization							<0.01	47		
11A	L 187+80 to 187+98	Roadway Fill						0.01	0.01	105	21	
		Bank Stabilization							<0.01	6		
12	L 203+49 to 206+55	2@12'x8' RCBC						0.10	0.01	499	38	
13	L 228+85 to 229+98	Roadway Fill	0.05				0.04					
14	L 241+68 to 242+88	54" RCP IV						0.02	0.01	229	60	
		Bank Stabilization						<0.01		12		
15	L 250+61 to 251+71	66" RCP-IV						0.02	<0.01	370	31	
		Bank Stabilization							<0.01	51		
TOTALS:			0.68		0.04		0.27	0.68	0.08	3660	452	

Stream Bank Stabilization Sites 1-15 = 248 feet

Permit Drawing
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NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MONTGOMERY COUNTY
WBS - 34352.1.1 (R-0623)

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)
16	L 262+36 to 264+32	30" RCP-III	0.14				0.01					
17	L 264+70 to 265+86	54" RCP-III	0.10		0.01		0.03	0.01	<0.01	280	57	
		Bank Stabilization							<0.01	21		
18	L269+62 to 272+04	42" RCP-III	0.11		<0.01		0.02	0.01	<0.01	297	44	
		Bank Stabilization							<0.01	22		
19	L 282+75 to 283+36	Roadway Fill	0.04									
19A	L 282+68 to 283+49	Roadway Fill	0.01				0.02					
19B	L 283+33 to 283+47	2@11'x7' RCBC							<0.01		17	
19C	L 283+47 to 284+20	2@11'x7' RCBC						0.05		340		
		Bank Stabilization							<0.01	9		
20	L 316+99 to 317+88	Roadway Fill	0.05									
21	L 338+46 to 340+55	Bank Stabilization							0.01	75		
		Causeways							0.08		112	
22	L 350+09 to 352+49 Lt	Pond						0.55				
23	L 362+75 to 364+14 Rt	Pond						0.48				
24	Y7 15+26 to 15+49 Lt	Roadway Fill	<0.01				<0.01					
24A	Y7 15+63 to 16+31	48" RCP	0.04				0.02	0.01	<0.01	240	18	
		Bank Stabilization							<0.01	10		
25	RPD 11+14 to 11+73	72" RCP-IV						0.02	<0.01	270	28	
26	Y8REV 33+36 to 34+13	54" RCP-IV						0.01	<0.01	66	7	
		Bank Stabilization						<0.01		8		
SHEET TOTALS (SITES 16-24A):			0.49		0.02		0.11	1.14	0.10	1638	283	
SHEET TOTALS (SITES 1-15):			0.68		0.04		0.27	0.68	0.08	3660	452	
TOTALS:			1.17		0.06		0.39	1.82	0.17	5298	735	

Stream Bank Stablization Sites 16-26 = 145 feet

Permit Drawing
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NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MONTGOMERY COUNTY
WBS - 34352.1.1 (R-0623)