



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

Revised July 10, 2012

July 3, 2012

Wilmington Regulatory Field Office  
US Army Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403

ATTN: Mr. Brad Shaver  
NCDOT Coordinator

Dear Sir:

**Subject: Revised Application for Individual Section 404 and Section 401 Water Quality Certification** for the proposed improvements to NC 24 from 2.8 miles east of I-95 to I-40 in Cumberland, Sampson, and Duplin Counties. Federal Aid Project No. STPNHF-F-8-2(17), TIP No. R-2303. WBS 34416.

Reference: NCDOT application dated March 8, 2012

The purpose of this letter is to revise the previously submitted individual permit application. Permit Site 8 of R-2303A has been revised due to constructability issues and to allow for additional natural stream design (NSD). There will be a total of 294 feet of NSD with this new proposal, an increase of 227 feet. Due to the increase in natural stream design footage, NCDOT is now proposing compensatory mitigation for 278 feet of stream impacts from EEP and 294 feet from onsite NSD. Revised permit drawings 2, 27, 28, 30, 32, and 43 as well as a revised EEP Acceptance Letter are included with this request.

A copy of this revised permit application and its distribution list will be posted on the NCDOT website at: <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>

If you have any questions or need additional information, please contact Chris Manley at 919-707-6135 or [cdmanley@ncdot.gov](mailto:cdmanley@ncdot.gov).

Sincerely,

*E. J. Lusk*

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

cc:  
NCDOT Permit Application Standard Distribution List.

**MAILING ADDRESS:**  
NC DEPARTMENT OF TRANSPORTATION  
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS  
1598 MAIL SERVICE CENTER  
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6100  
FAX: 919-212-5785  
WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

**LOCATION:**  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610-4328



June 26, 2012

Mr. Gregory J. Thorpe, Ph.D.  
Manager, Project Development and Environmental Analysis Unit  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

**R-2303A**, NC 24 from West of SR 1006 (Maxwell Road / Clinton Road) to SR 1853 (John Nunnery Road), Cumberland County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream, riparian and non-riparian wetland mitigation for the subject project. Based on the information supplied by you on June 21, 2012, the impacts are located in CU 03030006 of the Cape Fear River basin in the Southern Inner Coastal Plain (SICP) Eco-Region, and are as follows:

Cape Fear 03030006 SICP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	278	2.46	5.22	0	0	0

**This mitigation acceptance letter replaces the mitigation acceptance letters issued on February 28 and April 12, 2012.** EEP commits to implementing sufficient compensatory stream, riparian and non-riparian wetland mitigation credits to offset the impacts associated with this project as determined by the regulatory agencies in accordance with 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 919-715-1929.

Sincerely,

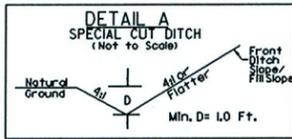
Suzanne Klimek  
EEP Acting Director

cc: Mr. Ronnie Smith, USACE – Wilmington Regulatory Field Office  
Mr. David Wainwright, Division of Water Quality, Wetlands/401 Unit  
File: R-2303A Revised 2

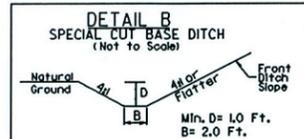
*Restoring... Enhancing... Protecting Our State*



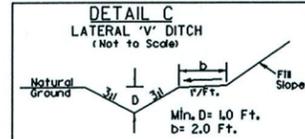
# DITCH DETAILS



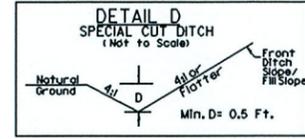
FROM STA. 21+50 TO STA. 28+40 -L- LT.  
 FROM STA. 53+70 TO STA. 60+00 -L- LT.  
 FROM STA. 64+50 TO STA. 70+76 -L- LT.  
 FROM STA. 107+00 TO STA. 114+00 -L- LT.  
 FROM STA. 112+33 TO STA. 112+33 -L- LT.  
 FROM STA. 115+00 TO STA. 117+90 -L- LT.  
 FROM STA. 117+90 TO STA. 120+50 -L- LT.  
 FROM STA. 121+00 TO STA. 124+50 -L- LT.  
 FROM STA. 125+50 TO STA. 130+00 -L- LT.  
 FROM STA. 131+50 TO STA. 133+70 -L- LT.  
 FROM STA. 134+50 TO STA. 148+00 -L- LT.  
 FROM STA. 148+00 TO STA. 152+00 -L- LT.  
 FROM STA. 175+00 TO STA. 178+00 -L- LT.  
 FROM STA. 179+00 TO STA. 181+00 -L- LT.  
 FROM STA. 182+50 TO STA. 194+00 -L- LT.  
 FROM STA. 210+00 TO STA. 215+00 -L- LT.  
 FROM STA. 223+00 TO STA. 224+05 -L- LT.  
 FROM STA. 241+50 TO STA. 248+50 -L- LT.  
 FROM STA. 305+50 TO STA. 307+50 -L- LT.  
 FROM STA. 309+50 TO STA. 310+00 -L- LT.  
 FROM STA. 311+00 TO STA. 316+00 -L- LT.  
 FROM STA. 316+50 TO STA. 322+00 -L- LT.  
 FROM STA. 323+50 TO STA. 330+00 -L- LT.  
 FROM STA. 330+00 TO STA. 332+50 -L- LT.  
 FROM STA. 333+50 TO STA. 335+50 -L- LT.  
 FROM STA. 336+50 TO STA. 340+00 -L- LT.  
 FROM STA. 331+00 TO STA. 360+50 -L- LT.



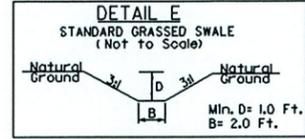
FROM STA. 195+50 TO STA. 209+00 -L- LT.  
 FROM STA. 203+50 TO STA. 214+50 -L- RT.



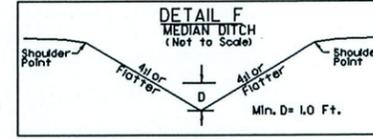
FROM STA. 167+50 TO STA. 174+00 -L- LT.  
 FROM STA. 236+00 TO STA. 240+50 -L- RT.  
 FROM STA. 252+00 TO STA. 258+00 -L- RT.  
 FROM STA. 276+50 TO STA. 284+00 -L- RT.



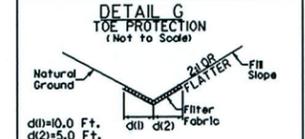
FROM STA. 365+50 TO STA. 367+00 -L- RT.



STA. 124+46 -L- LT.  
 STA. 147+98 -L- LT.  
 STA. 190+39 -L- LT.  
 STA. 215+02 -L- LT.  
 STA. 96+70 -L- RT  
 STA. 304+93 -L- RT

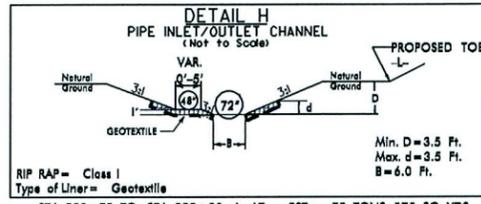


FROM STA. 161+00 TO STA. 162+00 -L- MED.  
 FROM STA. 196+00 TO STA. 199+00 -L- MED.  
 FROM STA. 211+00 TO STA. 214+00 -L- MED.

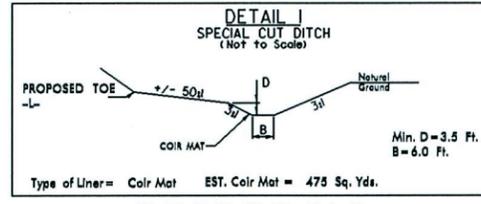


FROM STA. 300+38 TO STA. 305+00 -L- LT.  
 FROM STA. 322+68 TO STA. 323+10 -L- RT.  
 Type of Liner = Class B Rip-Rap

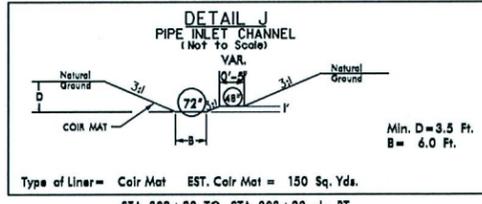
FROM STA. 30+00 TO STA. 33+80 -L- RT  
 FROM STA. 49+00 TO STA. 50+50 -L- RT.  
 FROM STA. 52+30 TO STA. 55+00 -L- RT.  
 FROM STA. 90+00 TO STA. 96+80 -L- RT.  
 FROM STA. 96+92 TO STA. 99+50 -L- RT.  
 FROM STA. 107+00 TO STA. 112+80 -L- RT.  
 FROM STA. 112+80 TO STA. 115+00 -L- RT.  
 FROM STA. 115+80 TO STA. 124+50 -L- RT.  
 FROM STA. 129+00 TO STA. 131+00 -L- RT.  
 FROM STA. 138+00 TO STA. 148+00 -L- RT.  
 FROM STA. 148+00 TO STA. 154+50 -L- RT.  
 FROM STA. 155+50 TO STA. 162+00 -L- RT.  
 FROM STA. 162+50 TO STA. 165+50 -L- RT.  
 FROM STA. 175+00 TO STA. 186+00 -L- RT.  
 FROM STA. 187+00 TO STA. 195+00 -L- RT.  
 FROM STA. 200+00 TO STA. 203+50 -L- RT.  
 FROM STA. 215+00 TO STA. 224+00 -L- RT.  
 FROM STA. 225+50 TO STA. 231+00 -L- RT.  
 FROM STA. 232+00 TO STA. 236+00 -L- RT.  
 FROM STA. 242+00 TO STA. 248+00 -L- RT.  
 FROM STA. 250+50 TO STA. 252+00 -L- RT.  
 FROM STA. 259+00 TO STA. 266+76 -L- RT.  
 FROM STA. 266+76 TO STA. 276+50 -L- RT.  
 FROM STA. 289+00 TO STA. 300+00 -L- RT.  
 FROM STA. 316+00 TO STA. 322+00 -L- RT.  
 FROM STA. 323+00 TO STA. 326+50 -L- RT.  
 FROM STA. 327+00 TO STA. 331+00 -L- RT.  
 FROM STA. 332+22 TO STA. 335+90 -L- RT.  
 FROM STA. 336+21 TO STA. 337+00 -L- RT.  
 FROM STA. 343+50 TO STA. 344+27 -L- RT.  
 FROM STA. 358+00 TO STA. 361+00 -L- RT.  
 FROM STA. 24+50 TO STA. 25+50 -Y- RT.  
 FROM STA. 24+22 TO STA. 30+41 -Y- LT.  
 FROM STA. 33+11 TO STA. 34+50 -Y- LT.  
 FROM STA. 14+85 TO STA. 18+00 -Y4- RT.  
 FROM STA. 12+00 TO STA. 13+00 -Y7- RT.  
 FROM STA. 12+70 TO STA. 13+25 -Y6B- LT.  
 FROM STA. 12+80 TO STA. 14+40 -Y6B- RT.  
 FROM STA. 14+86 TO STA. 16+00 -Y7- RT.  
 FROM STA. 10+00 TO STA. 12+00 -Y8- LT.  
 FROM STA. 14+00 TO STA. 11+80 -Y8- RT.  
 FROM STA. 14+00 TO STA. 14+50 -Y8- LT.  
 FROM STA. 14+00 TO STA. 14+50 -Y8- RT.  
 FROM STA. 12+00 TO STA. 13+00 -Y10- RT.



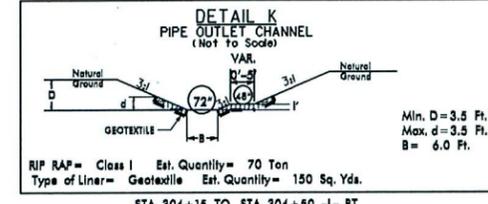
STA. 299+70 TO STA. 300+05 -L- LT EST = 70 TONS /175 SQ. YDS.  
 STA. 301+24 TO STA. 301+52 -L- RT EST = 90 TONS /150 SQ. YDS.  
 RIP RAP = Class I  
 Type of Liner = Geotextile



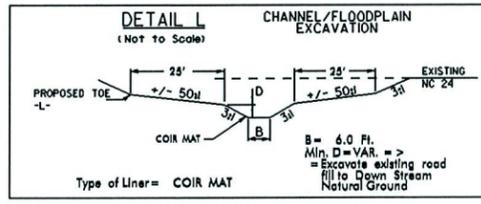
STA. 301+52 TO STA. 302+88 -L- RT  
 Type of Liner = Coir Mat EST. Coir Mat = 478 Sq. Yds.



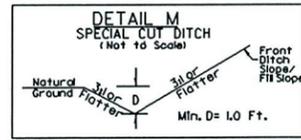
STA. 302+88 TO STA. 303+23 -L- RT  
 Type of Liner = Coir Mat EST. Coir Mat = 150 Sq. Yds.



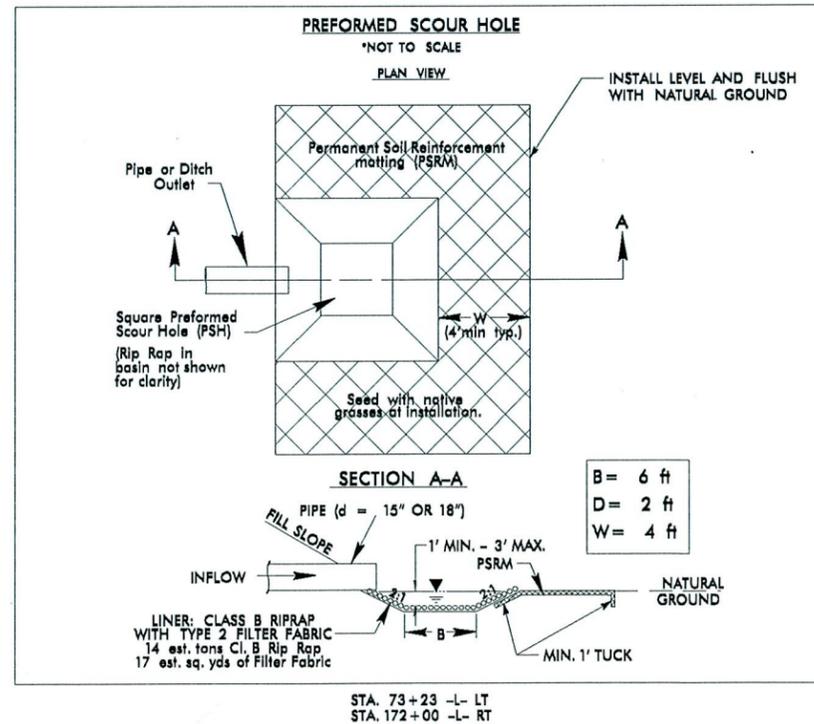
STA. 304+15 TO STA. 304+50 -L- RT  
 RIP RAP = Class I Est. Quantity = 70 Ton  
 Type of Liner = Geotextile Est. Quantity = 150 Sq. Yds.

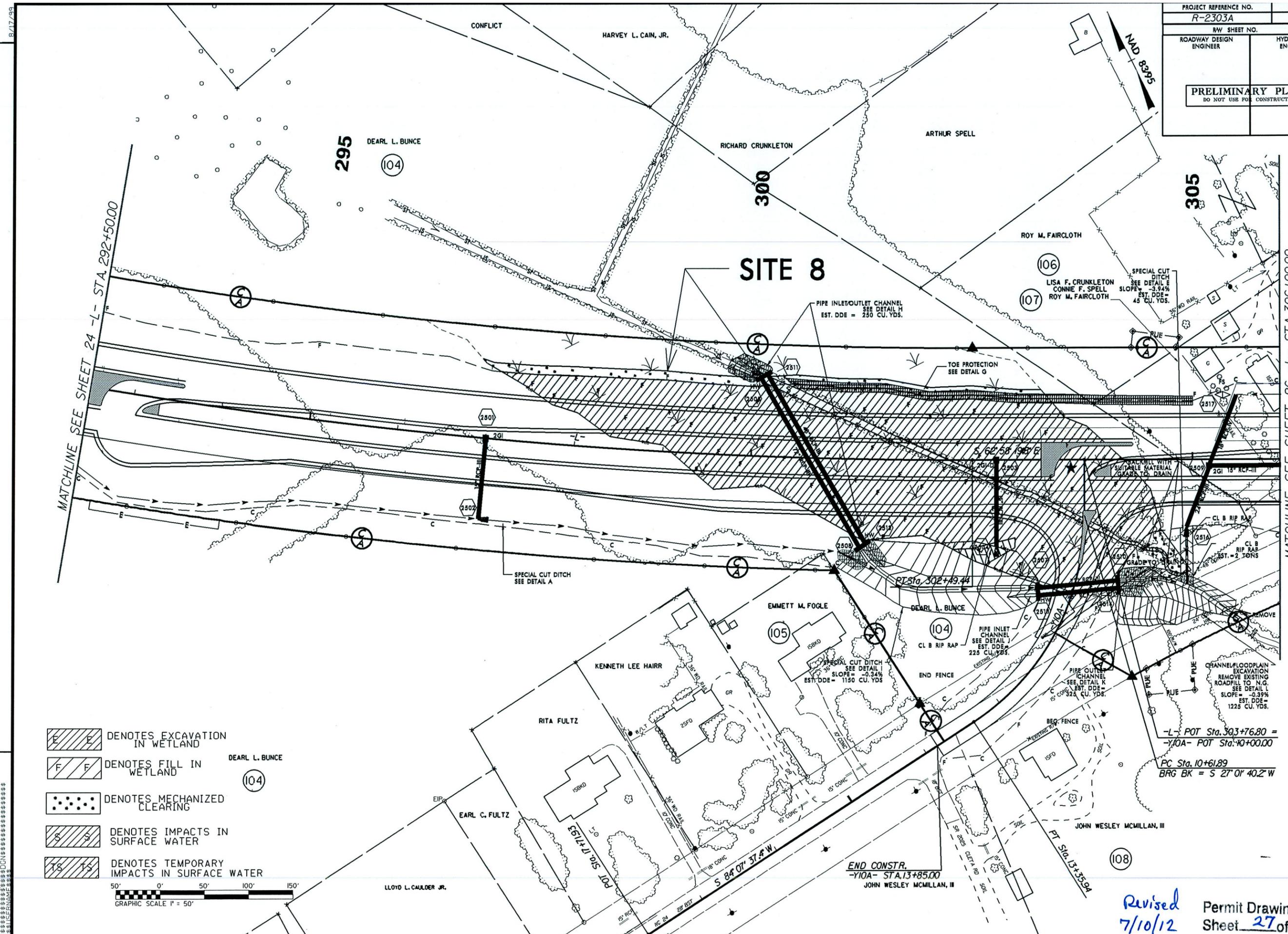


FROM STA. 304+50 TO STA. 305+41 -L- RT  
 Type of Liner = COIR MAT  
 EST. COIR MAT = 350 SQ YDS

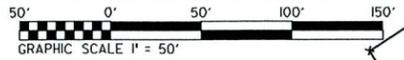


FROM STA. 300+00 TO STA. 301+33 -L- RT





- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER



REVISIONS

MATCHLINE SEE SHEET 24 -L- STA. 292+50.00

MATCHLINE SEE SHEET 26 -L- STA. 306+00.00

7/10/2012  
C:\Users\rdalica\PERMITS\_Envr\comment\Drawings\2303a\_hyd\_PRL\_wet\_psh25.dgn

Revised  
7/10/12  
Permit Drawing  
Sheet 27 of 44



8/23/99

300

200

100

0

100

200

300

Revised  
6/20/12

Permit Drawing  
Sheet 30 of 44

130

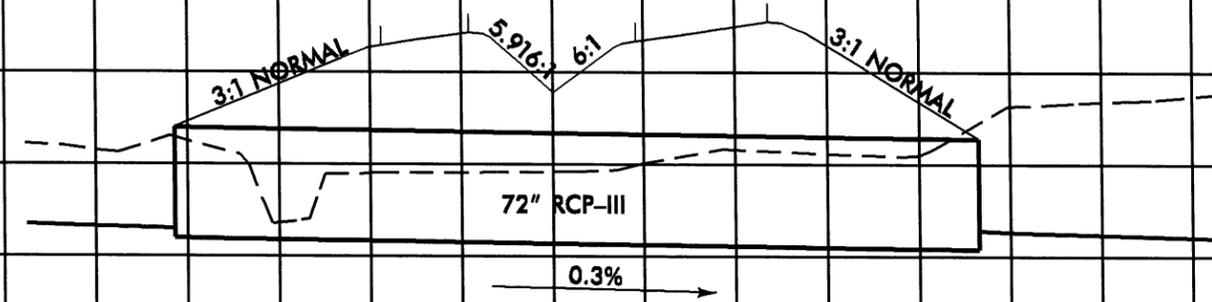
← Q STA. 300+64 -L-

ELEV. = 118.9'

SKEW = 60°

1 @ 72" RCP

120



110

130

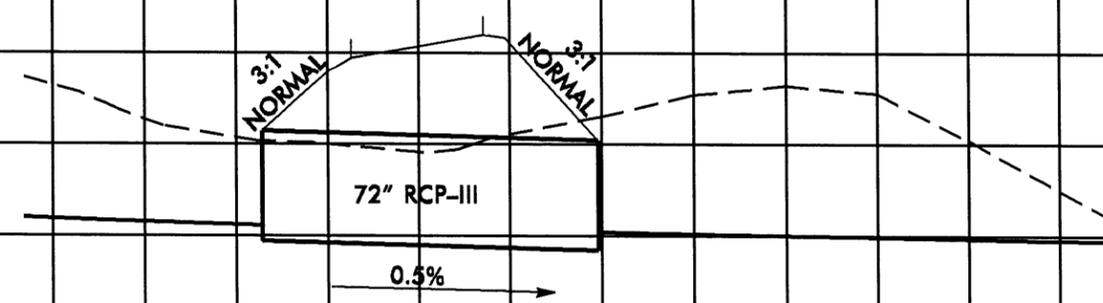
← Q STA. 11+40 -Y10A-

ELEV. = 120.3'

SKEW = 65°

1 @ 72" RCP

120

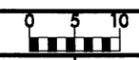


110

**SITE 8**

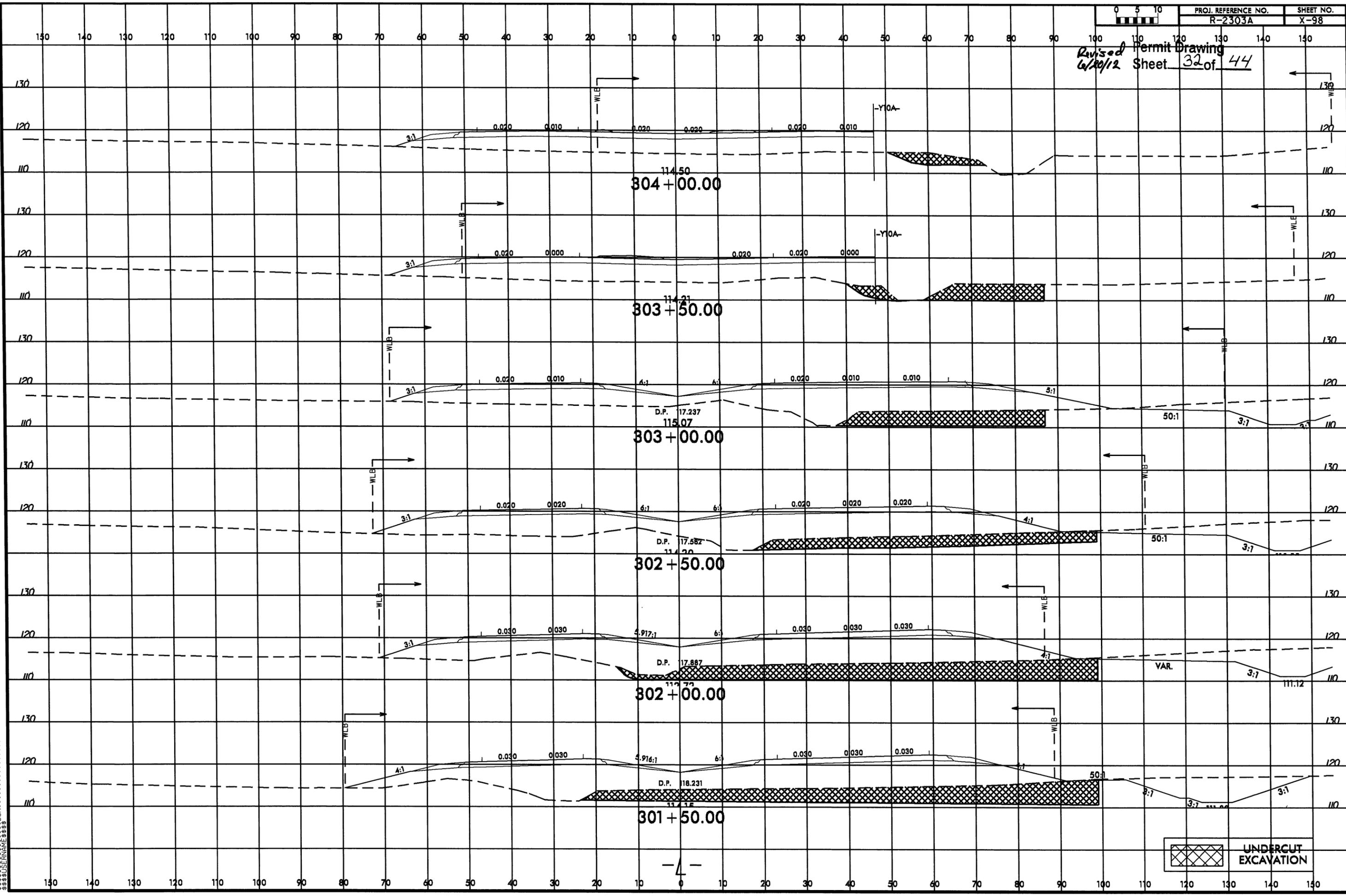
5/30/2012  
 R:\HydroQual\PERMITS\_Environmental\Drawings\R2303A\_Hyd\_perm\_wet\_PSH25\_PRL.dgn  
 \$\$\$\$SYTIME\$\$\$\$  
 \$\$\$\$USERNAME\$\$\$\$

8/23/99



PROJ. REFERENCE NO. R-2303A SHEET NO. X-98

Revised Permit Drawing  
6/20/12 Sheet 32 of 44



UNDERCUT EXCAVATION

5/20/2012  
R:\Hydro\calcs\PERMITS\_Environmental\Drawings\2303a\_hyd.prm\_wet\_xpl.dgn  
\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DNDN\$\$\$\$\$  
\$\$\$\$\$SUBSERNAME\$\$\$\$\$

-4-

**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	69+45 to 70+63-L-RT.	Fill								0.16					
	70+93 to 72+81-L-RT	Fill								0.11					
2	73+00 to 85+00-L-	Fill	4.44			0.53									
3	96+93 -L- RT	Fill								<0.01					
4	131+57 to 133+50-L- RT	Fill								0.18					
5	167+09 to 168+51-L- RT	Fill	0.04			0.03									
6	178+97 to 179+07-L- RT	Fill								0.02					
7	200+65 to 202+44-L-	Fill								0.24					
8	* 296+63 to 304+66-L-	Fill													
	300+06 to 305+40-L-	2*(1@72" & 1@48")	2.03	0.02	0.02	0.20				0.08		531.00			294.00
	304+40 to 304+51-L- LT	Bank Stabilization								<0.01	<0.01	41.00	27.00		
<b>TOTALS:</b>			6.51		0.02	0.76				0.79	<0.01	572	27		294

Site 1, 4 and 7 are Pond surface water impacts.

\*Site 8 Wetland sta. 296+63 -L- impact shown as a total take due to ditch. Additional impact outside of ditch is 0.02acres.

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

CUMBERLAND COUNTY  
WBS - 34416.1.1 (R-2303A)