



Transportation

PAT McCRORY  
Governor

NICHOLAS J. TENNYSON  
Secretary

October 12, 2016

Mr. David Bailey  
NCDOT Coordinator  
U.S. Army Corps of Engineers  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, NC 27587

**SUBJECT: Design Changes Update for Section 404 Individual Permit and Section 401 Individual Water Quality Certification** for the new location facility from SR 2011 to the Haw River at US 220, Greensboro, Guilford County; Division 7; TIP No. R-2413A/B

Reference: US Army Corps of Engineers (USACE) 404 Permit issued January 28, 2014; Action ID: SAW2013-00557, Modified October 14, 2014, May 13, 2015, and May 17, 2016.

NC Division of Water Resources (NCDWR) 401 Water Quality Certification Permit issued October 28, 2013, NCDWR Project No. 20130517, Modified February 3, 2014; NCDWR Project No. 20130517 v.2, Modified October 17, 2014; NCDWR Project No. 20130517 v3, Modified June 2, 2015; NCDWR Project No. 20130517 v4, and Modified May 12, 2016; NCDWR Project No. 20130517v.5.

Dear Mr. Bailey:

The North Carolina Department of Transportation (NCDOT) awarded the design-build team this project on April 8, 2014 to construct projects R-2413A, R-2413B, and I-5110. Sections R-2413A and B were authorized by the USACE and NCDWR as referenced above. We are writing to inform you of changes in impacts for Section R-2413A at Site 22 due to a design change for a development group.

The development group Greenlea recently purchased and designed a large development along - Y1C- (road yet to be named). The development design included a traffic study that necessitated a slight change in the interchange configuration with main line. This change results in the following impacts to Site 22:

- elimination of the 16 lf of permanent bank stabilization
- increase of 16 lf of temporary channel impacts

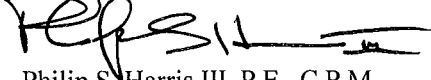
The updated permit drawings and impact table are attached.

We are switching from a permanent impact, bank stabilization, to a temporary impact. Previous mitigation for this site remains the same. There will be no permanent loss to waters of the state due to the temporary impact at Site 22. Therefore, we are not requesting a permit modification.

 Nothing Compares<sup>SM</sup>

We are sending this letter and permit drawings to serve to inform you of the changes. Thank you for your time and assistance with this project. Please contact Deanna Riffey at either [driffey@ncdot.gov](mailto:driffey@ncdot.gov) or (919) 707-6151 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'PHILIP S. HARRIS III', written over a horizontal line.

Philip S. Harris III, P.E., C.P.M.  
Natural Environment Section Head

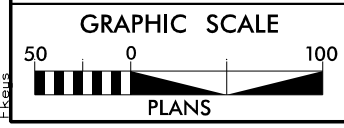
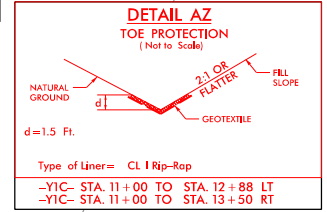
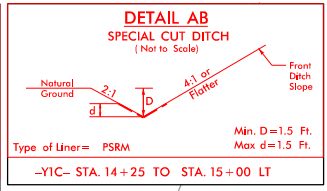
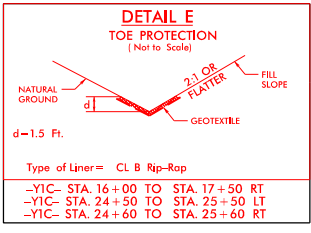
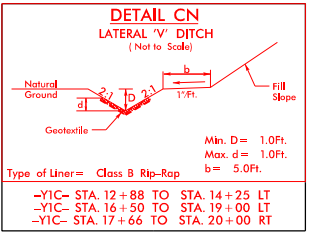
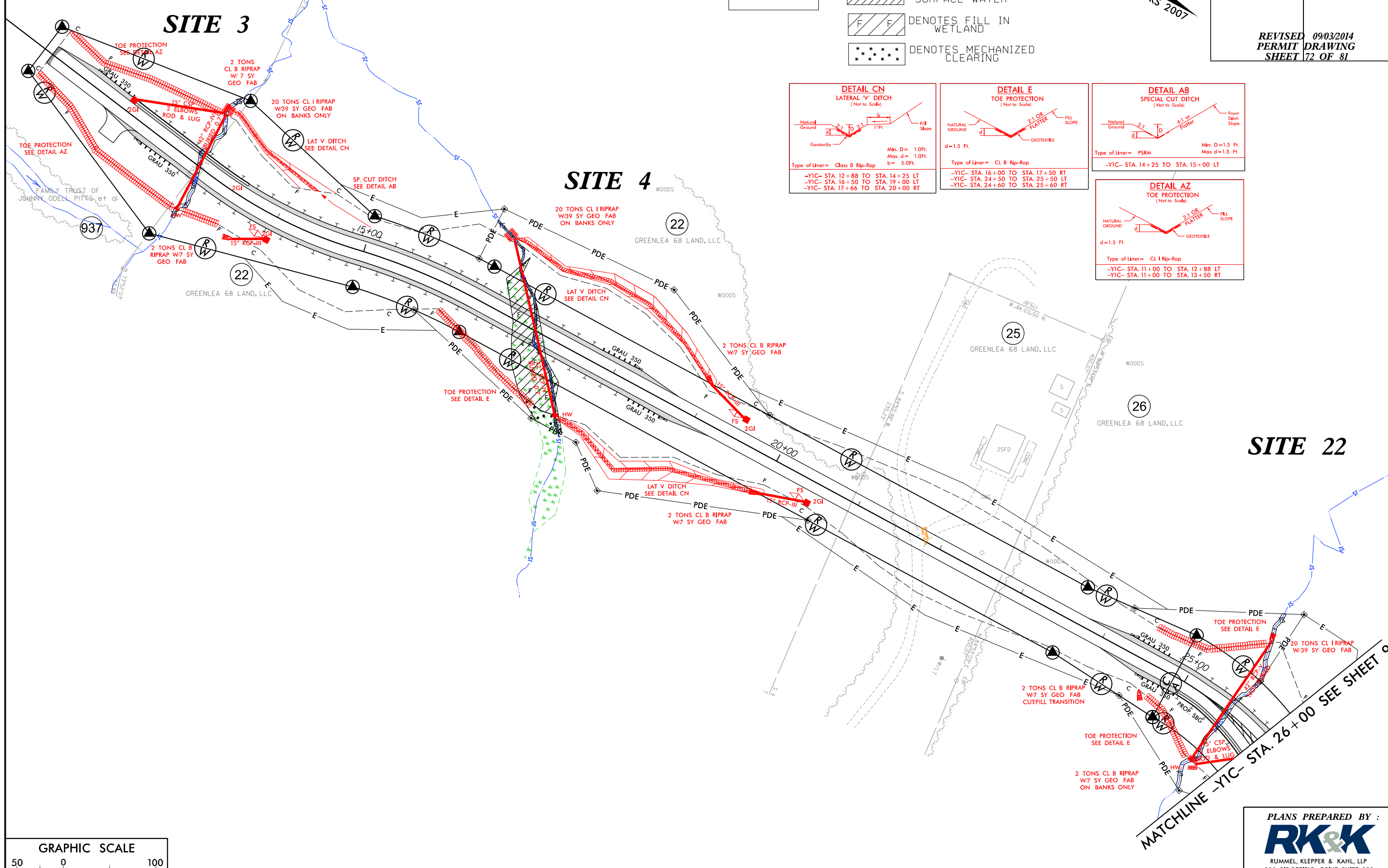
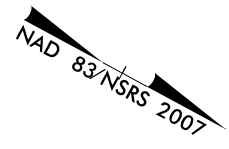
cc: NCDOT Permit Application Standard Distribution List

8/17/99  
B:\5\2016\Hydro\PERMITS\Environmental\Drawings\NR-2413A\PERMIT MODIFICATION\NR2413a\_Hyd\_PRM\_WET\_psh37.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2413A	37
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
REVISED 09/03/2014 PERMIT DRAWING SHEET 72 OF 81	



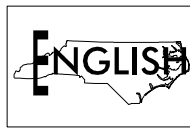
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING



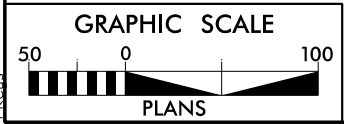
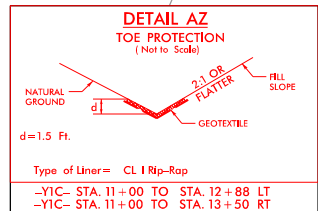
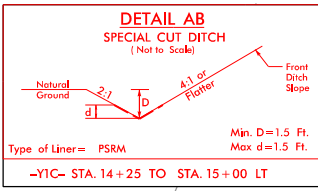
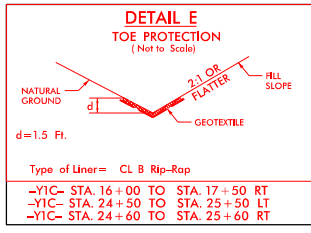
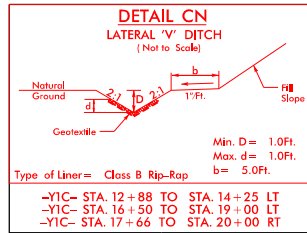
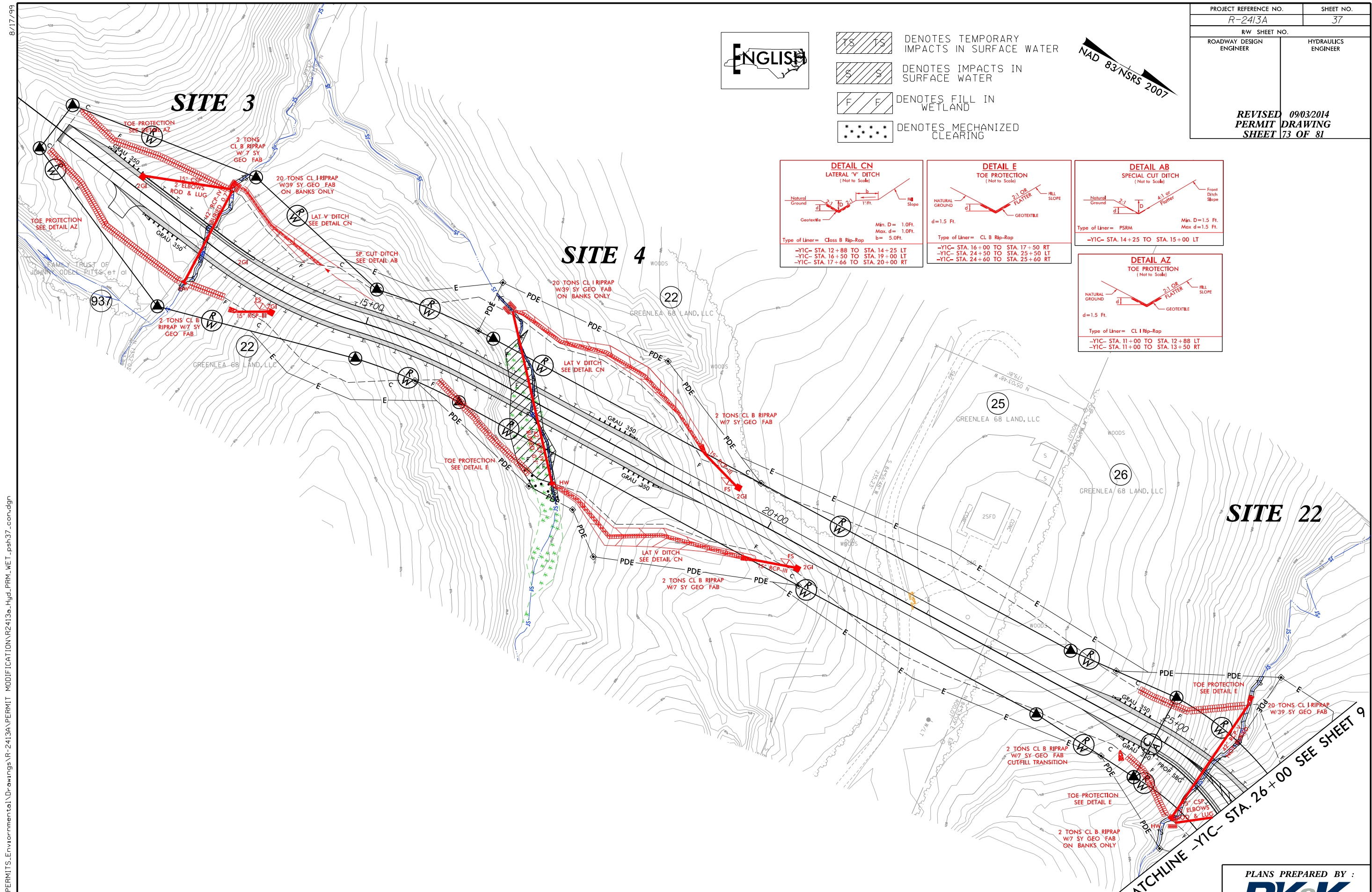
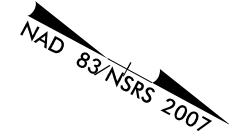
PLANS PREPARED BY :  
**RK&K**  
RUMMEL, KLEPPER & KAHL, LLP  
900 RIDGEFIELD DRIVE SUITE 350  
RALEIGH, NORTH CAROLINA 27609-3960  
NC LICENSE NO. F-0112 • (919) 878-9560



PROJECT REFERENCE NO. R-2413A	SHEET NO. 37
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>REVISED 09/03/2014</b> <b>PERMIT DRAWING</b> <b>SHEET 73 OF 81</b>	



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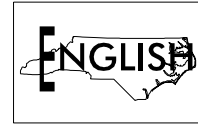
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PROJECT REFERENCE NO. R-2413A	SHEET NO. 37C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
REVISED 09/03/2014 PERMIT DRAWING SHEET 76 OF 81	

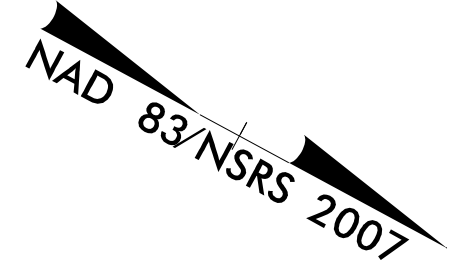
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GREENLEA 68 LAND, LLC

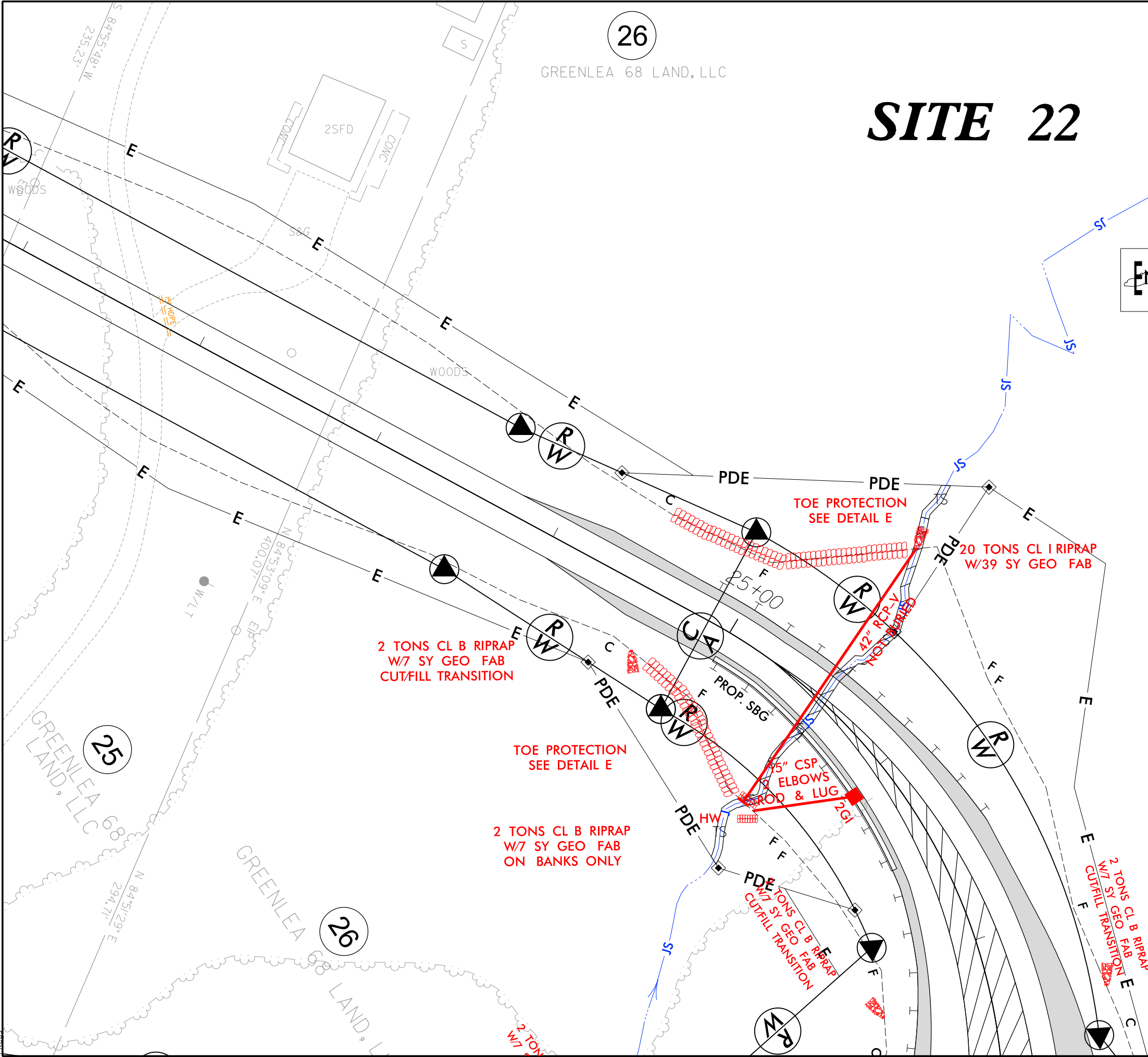
# SITE 22



DENOTES TEMPORARY IMPACTS IN SURFACE WATER  
 DENOTES IMPACTS IN SURFACE WATER



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2 TONS CL B RIPRAP  
W/7 SY GEO FAB  
CUTFILL TRANSITION

TOE PROTECTION  
SEE DETAIL E

2 TONS CL B RIPRAP  
W/7 SY GEO FAB  
ON BANKS ONLY

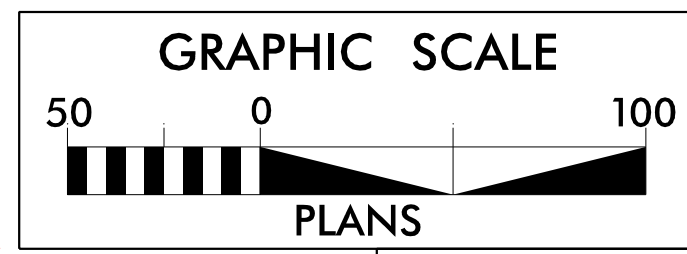
TOE PROTECTION  
SEE DETAIL E

20 TONS CL I RIPRAP  
W/39 SY GEO FAB

35" CSP  
ELBOWS  
ROD & LUG

2 TONS CL B RIPRAP  
W/7 SY GEO FAB  
CUTFILL TRANSITION

2 TONS CL B RIPRAP  
W/7 SY GEO FAB  
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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)
17	-L- 334+00-336+50	36" CSP	0.35			0.03						
18****	-L- 338+00-340+50	Bridge		0.04			0.13		0.03		172	
19	-L- 348+00-353+00	60" RCP						0.03	<0.01	507	34	
20	-Y4- 17+50-19+00	36" CSP	0.11					0.02		240		
21	-Y5- 29+00-36+00	1@12'x12' RCBC										
21A			2.11			0.13		0.06	0.09	288	262	250*
21B		Road Fill						0.01		149		
22	Y1C- 25+50	42" RCP-V						0.02	<0.01	177	56	
23	-Y5- 16+50	30" CSP/PDE							<0.01		12	
24	-Y1- 23+81 RT	2 @ 72" RCPs						<0.01	<0.01	15	10	
		Bank Stabilization						<0.01		31		
SUBTOTALS:			2.57	0.04		0.16	0.13	0.16	0.16	1407	546	250
TOTALS:			3.11 **	0.04	<0.01	0.19	0.13	1.44	0.31	8993	977 ***	2390

\* SEE PLAN FOR ON-SITE MITIGATION  
\*\* PERMANENT FILL IN WETLAND IN ORIGINAL PERMIT WAS SUMMED WRONG. IT WAS LISTED AS 3.13ac; IT SHOULD HAVE BEEN 3.14ac  
\*\*\* TEMP CHANNEL IMPACT IN ORIGINAL PERMIT WAS SUMMED WRONG. IT WAS LISTED AS 922'; IT SHOULD HAVE BEEN 952'  
\*\*\*\* PERMANENT PIER WETLAND IMPACTS= 40sqft

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GUILFORD COUNTY  
WBS - 34429.3.58 (R-2413A)  
REVISED  
SHEET 81 OF 81 5/6/15, 3/18/16, 8/15/16

ATN Revised 3/31/05