

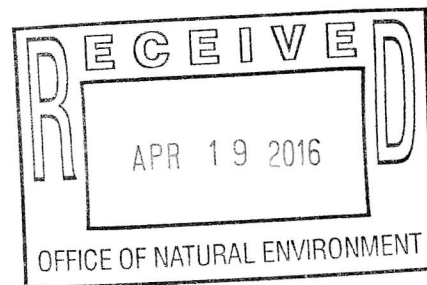


DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
151 PATTON AVENUE
ROOM 208
ASHEVILLE, NORTH CAROLINA 28801-5006

April 14, 2016

Regulatory Division

Action ID: SAW-2009-00876



Mr. Richard W. Hancock, P.E.
North Carolina Department of Transportation
Project Development and Environmental Analysis Unit
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Mr. Hancock:

Please reference the Department of the Army permit issued on May 8, 2015 for the US-74 Monroe Connector/Bypass Project (STIP R-3329 and STIP R-2559) which begins west of Monroe at the intersection of US Hwy 74 and I-485 in Mecklenburg County and continues along existing US 74 and then onto a new location alignment from east of Stallings Road (SR 1365) to the project terminus at existing US 74 between the towns of Wingate and Marshville in Union County. The May 8, 2015 permit authorized the permanent impact to 4.9 acres of wetlands, the mechanized clearing of 0.8 acres of wetlands, and the temporary impact to 1.57 acres of wetlands; the permanent impact to 15,495 linear feet of streams (13,273 linear feet of fill and 2,222 linear feet of bank stabilization), temporary impact to 0.14 acres of stream (1,034 linear feet) and permanent impact to 1.53 acres of open waters (ponds). Please additionally reference your February 18, 2016 letter requesting a permit modification for Permit Sites: 3, 5, 6, 29, 30, 37, 46, 47, 48, 54, 57, and 60. The total impacts requested for authorization include the following:

- Increased permanent impacts to include additional impact of 217 lf of stream channel (for stabilization), additional impact of 0.01 acre wetland fill, and increase of 0.2 acres of wetland hand clearing.
- Increased temporary impacts include additional impact to 115 lf of stream channel, and additional excavation of 0.02 acres of wetlands.
- The modification additionally requests authorization to the plans that reduces mechanized wetland clearing by 0.01 acres and decreases temporary wetland fill by 0.16 acre.

Specific modifications to each permit site are shown below:

Impact Summary

- Permit Site 3 : Increase of 19 lf (<0.01 acre) of temporary impacts due to utility relocation

- Permit Site 5: Increase of 0.01 acre of temporary wetland excavation due to utility relocation
- Permit Site 6: Decrease of 0.01 acre of mechanized clearing in wetland
- Permit Site 29: Increase of 55 lf (0.02 acre) of temporary impacts due to utility relocation
- Permit Site 30: Increase of 11 lf (<0.01 acre) of temporary stream impacts and 0.02 acre of wetland hand clearing due to utility relocation
- Permit Site 37: Increase of 0.03 acre of wetland hand clearing
- Permit Site 46: Increase of 217 lf of permanent impacts due to bank stabilization, increase of 0.04 acre of permanent surface water impacts due to bank stabilization, and increase of 0.04 acre of temporary surface water impacts due to stream crossing
- Permit Site 47: Increase of 30 lf (0.02 acre) of temporary bank stabilization
- Permit Site 48: Increase of 0.01 acre of permanent wetland fill, decrease of 0.01 acre of temporary fill in wetlands, increase of 0.01 acre of temporary excavation in wetlands to install a utility line
- Permit Site 54: Decrease of 0.15 acre of temporary wetland impacts, increase of 0.15 acre of hand clearing
- Permit Site 57: Increase of <0.01 acre of temporary wetland impacts
- Permit Site 60: 15 lf of temporary impacts to minimize stream/wetland impacts in already permitted area (no change in impacts)

After review of the file and the modification request we have determined that the proposed changes to the permit are minor, and that a supplemental public notice is not necessary. Accordingly your permit is hereby modified and a copy of the modified plans are enclosed.

The total impacts authorized by the original permit and this modification include the permanent impact to 4.91 acres of wetlands, the mechanized clearing of 0.79 acres of wetlands, and the temporary impact to 1.63 acres of wetlands; the permanent impact to 15,712 linear feet of streams (13,273 linear feet of fill and 2,439 linear feet of bank stabilization), temporary impact to 0.22 acres of stream (1,149 linear feet) and permanent impact to 1.53 acres of open waters (ponds).

It is understood that all other conditions of the original permit remain applicable.

If you have questions, please contact Crystal Amschler of the Asheville Regulatory Field Office, at telephone 828-271-7980, extension 231.

Sincerely,

A handwritten signature in dark ink, appearing to read "Scott Jones". The signature is fluid and cursive, with the first name "Scott" and last name "Jones" clearly distinguishable.

Scott Jones, PWS
Chief, Asheville Regulatory Field Office

Enclosures

cc with encls:

Mr. John Sullivan, III, PE
Division Administrator
FHWA – North Carolina Division
310 New Bern Avenue, Suite 410
Raleigh, North Carolina 27601

Mr. Todd Bowers
Permit Review Specialist
Wetlands Regulatory Section
USEPA – Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

Ms. Amy S. Chapman
Transportation Permitting Unit
NCDENR - Division of Water Resources
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

Ms. Marla Chambers
Western Region Highway Project Coordinator
NC Wildlife Resources Commission
12275 Swift Road
Oakboro, North Carolina 28129

Ms. Marella Buncick
US Fish and Wildlife Service
Asheville Ecological Services Field Office
160 Zillicoa Street
Asheville, North Carolina 28801-1082

Ms. Donna Hood
North Carolina Department of Environmental Quality
Division of Water Resources
Transportation Permitting Unit
610 East Center Avenue, Suite 301
Mooresville, North Carolina 28115

Mr. Michael Wood, LSS
Three Oaks Engineering
1000 Corporate Drive, Suite 101
Hillsborough, North Carolina 27278

Ms. Carla Dagnino
Western Region Environmental Program Supervisor II
Natural Environment Section
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699 -1598

cc without encls:

Mr. Roger Rochell
North Carolina Department of Transportation
1516 Mail Service Center
Raleigh, North Carolina 27699-1516

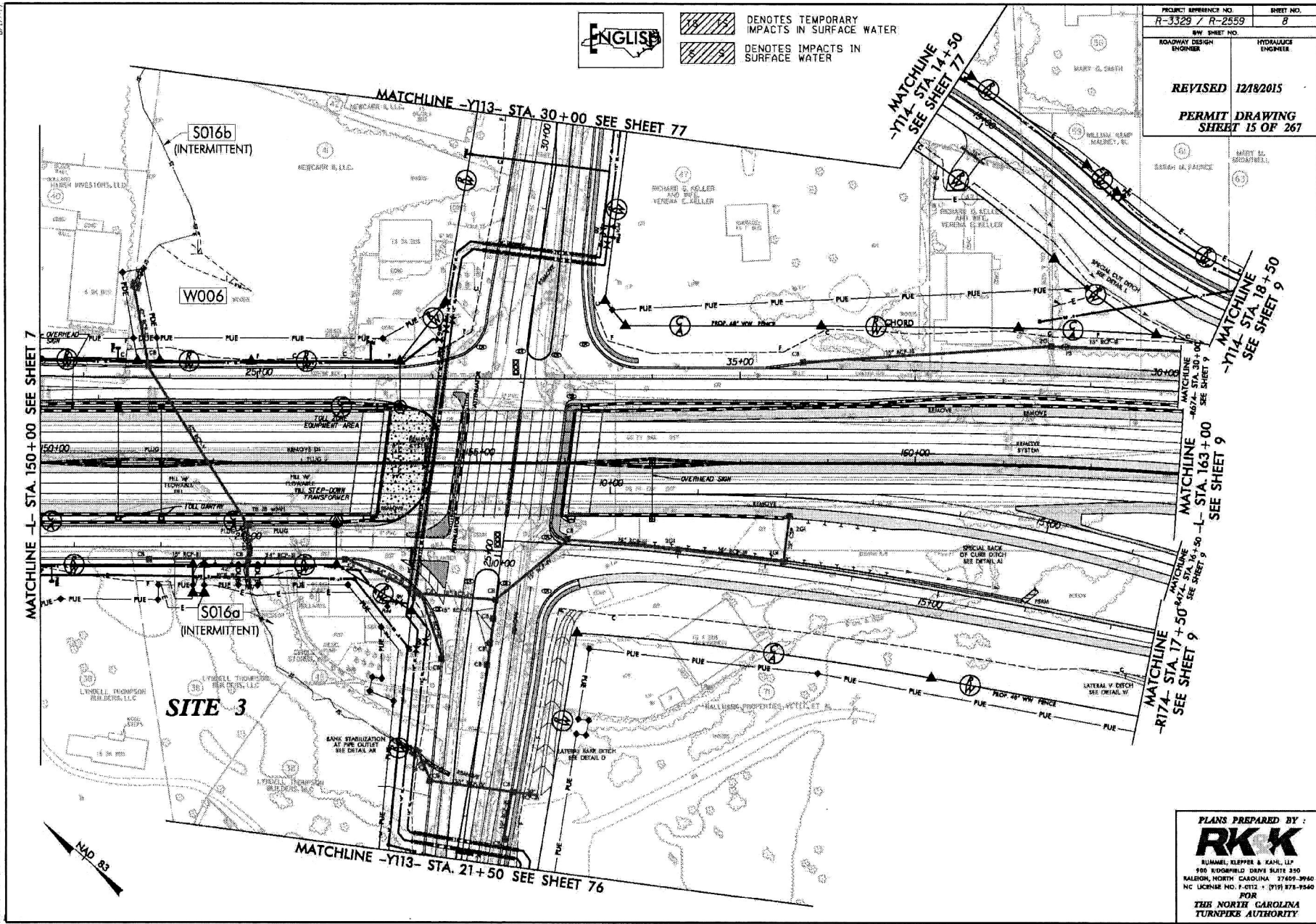
Permit Drawings

with

Changes to

Permitted Impacts

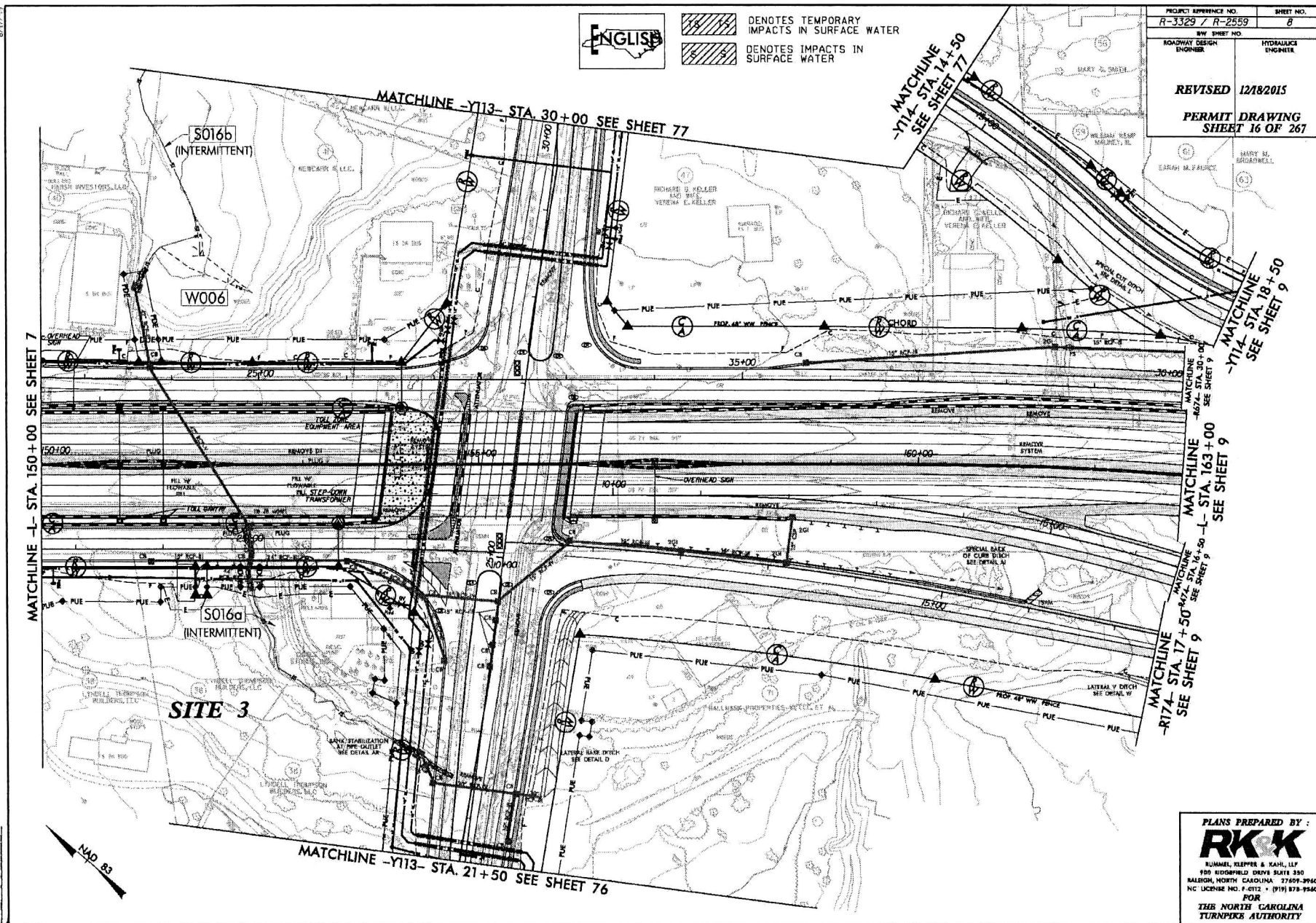
B-17-259



DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 DENOTES IMPACTS IN SURFACE WATER

PROJECT REFERENCE NO. R-3329 / R-2559	SHEET NO. 8
ROADWAY DESIGN ENGINEER	HYDRAULIC ENGINEER
REVISED 12/18/2015	PERMIT DRAWING SHEET 15 OF 267

PLANS PREPARED BY:
RK K
 RUMMEL, KLEPPER & KAHN, LLP
 900 RIDGEFIELD DRIVE SUITE 250
 RALEIGH, NORTH CAROLINA 27609-9940
 NC LICENSE NO. 1-0712 - (919) 878-9540
 FOR
 THE NORTH CAROLINA
 TURNPIKE AUTHORITY

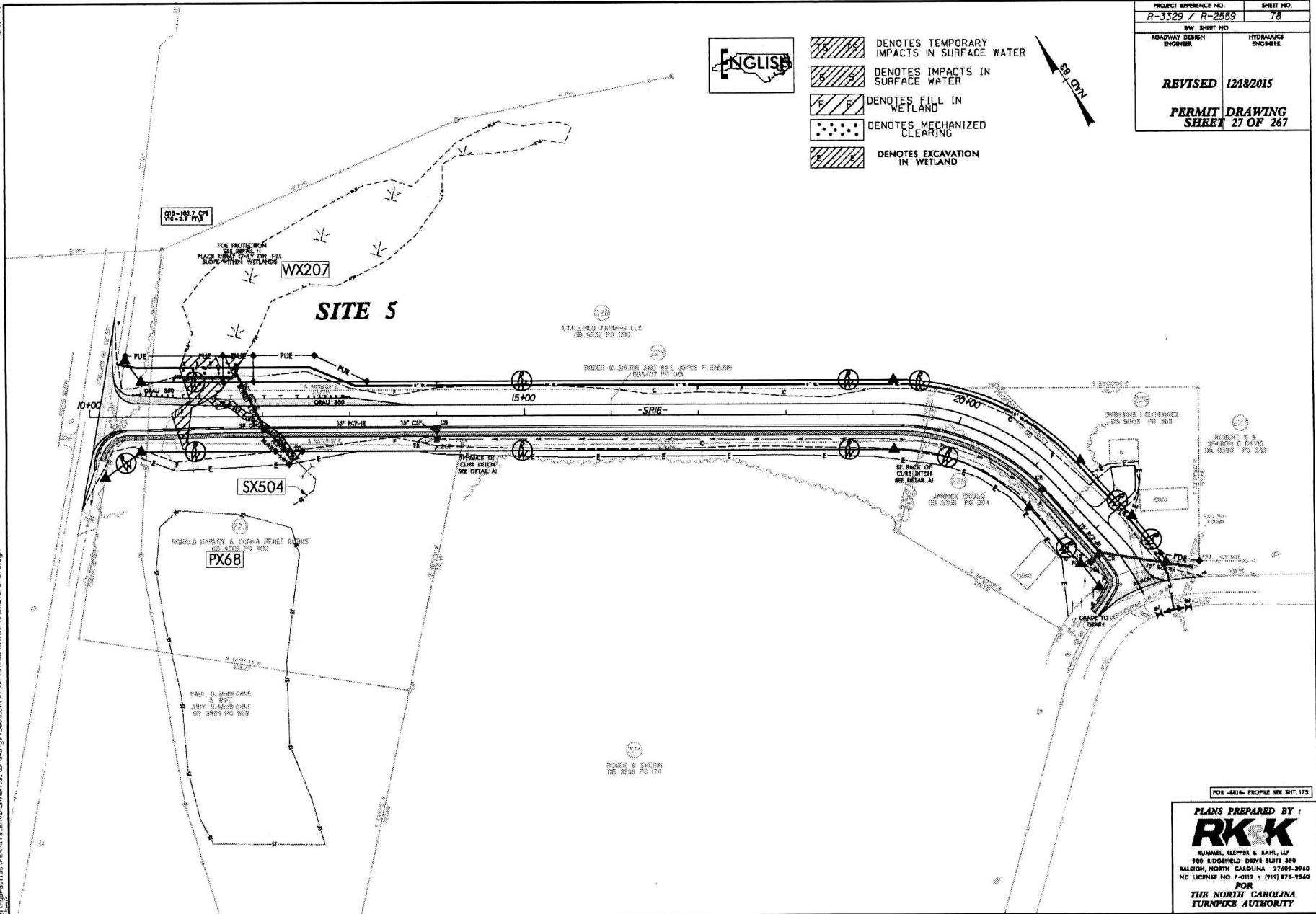


PROJECT REFERENCE NO.		SHEET NO.	
R-3329 / R-2559		8	
SW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
REVISED		12/18/2015	
PERMIT DRAWING SHEET 16 OF 267			

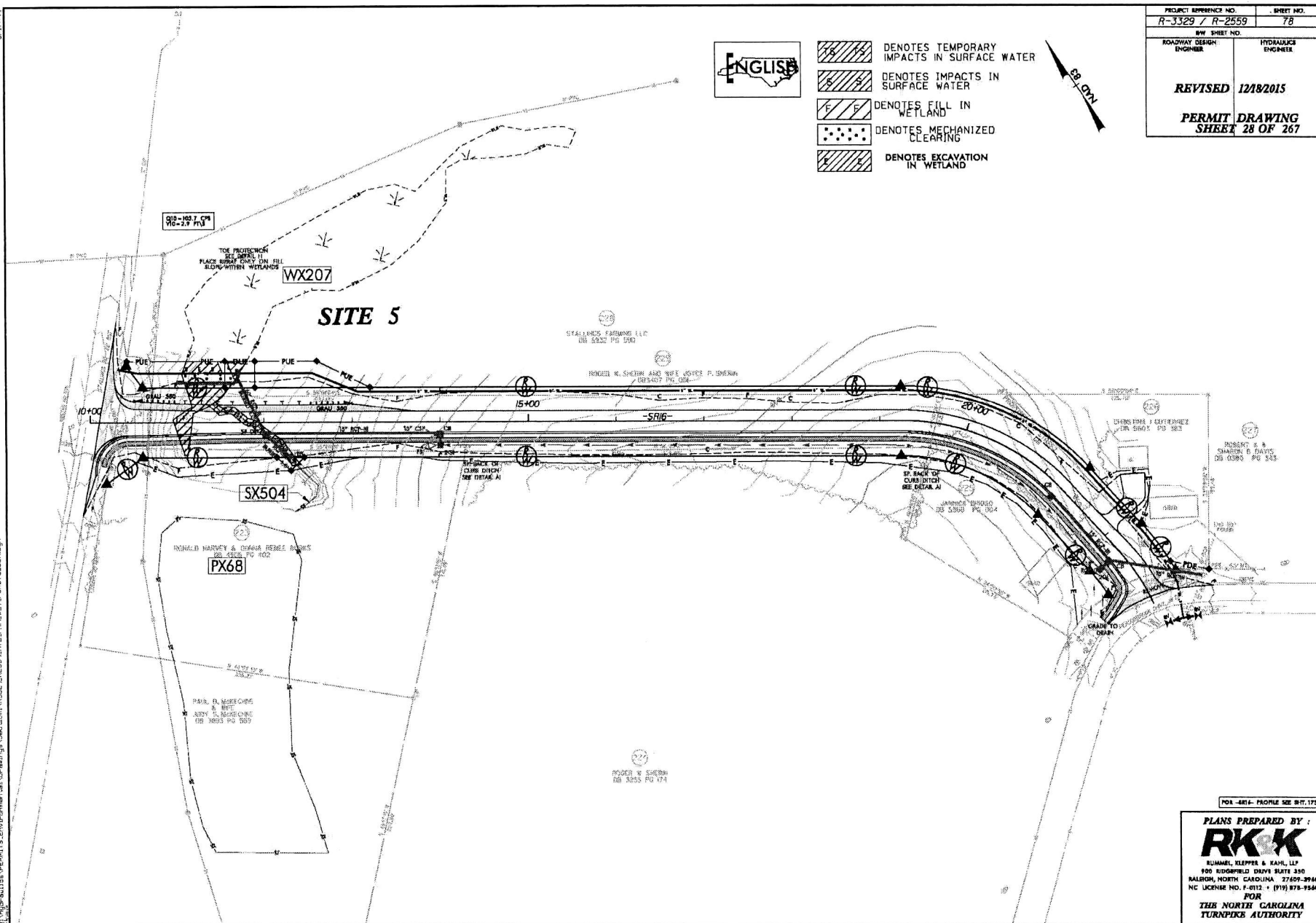
PLANS PREPARED BY :
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEWILDFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. P-0712 • (919) 878-9560
FOR
THE NORTH CAROLINA
TURNPIKE AUTHORITY

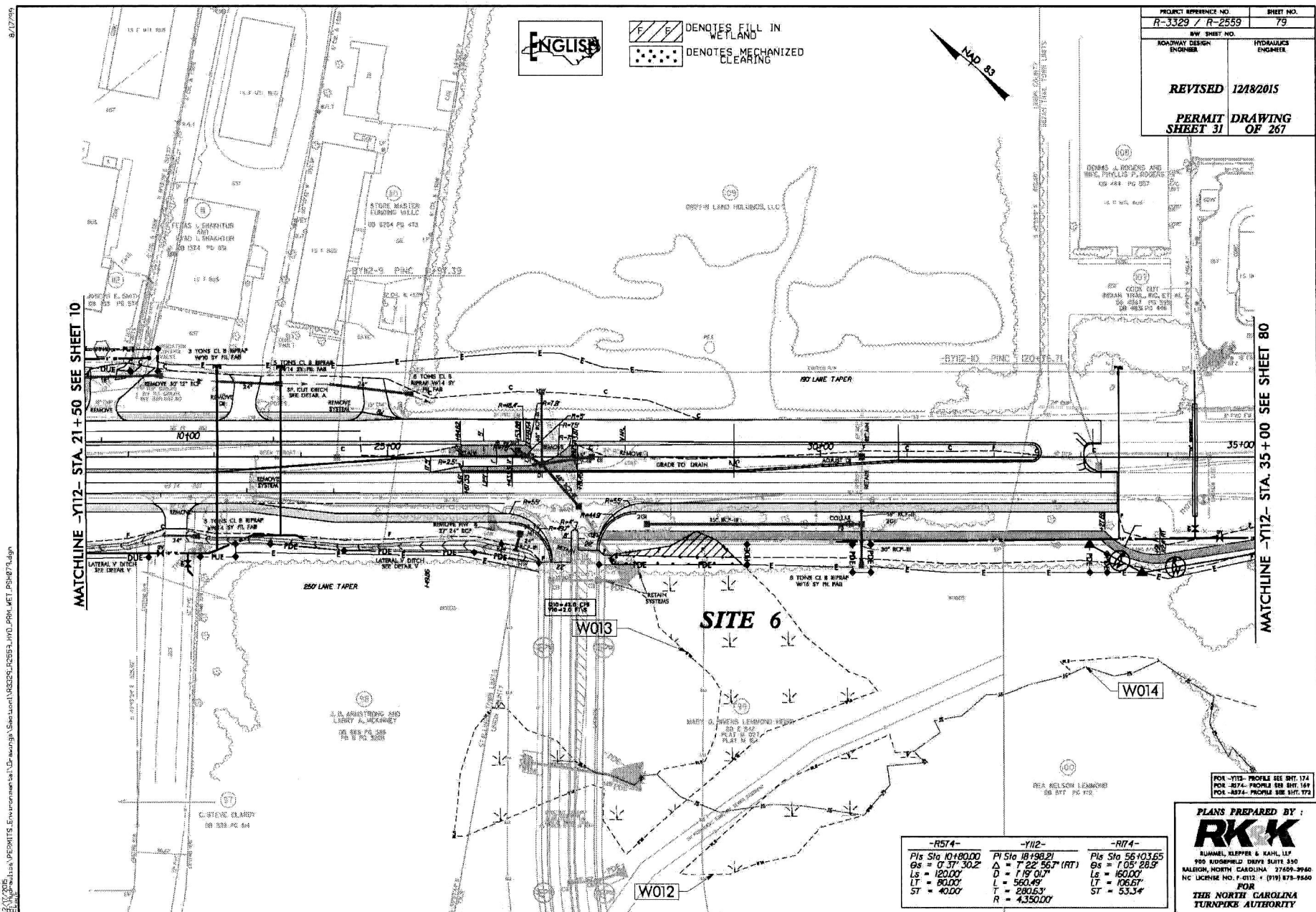
8/17/2015

\\p0151\apps\permits\environmental\132203-02553\WD_PRI_MKT_P314078.dgn

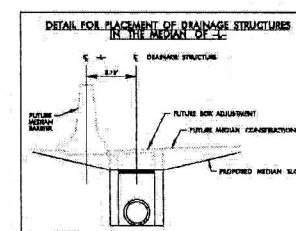
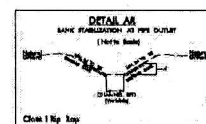
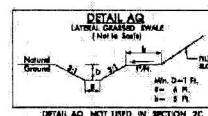
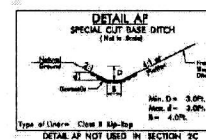
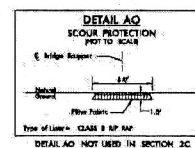
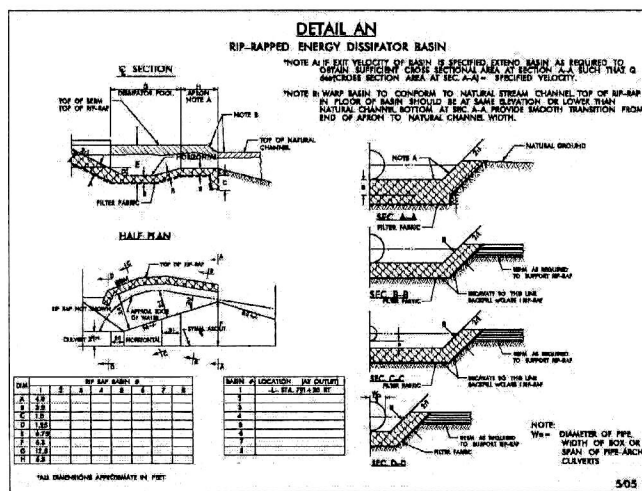


2/17/2015
Hutchinson\PERMITS_Environment\Inquiries\Section\93329_R2553_HVD_FRM_WET_PSH078_concuden

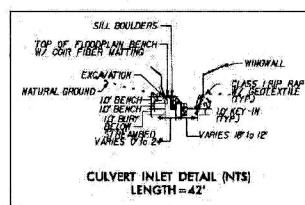




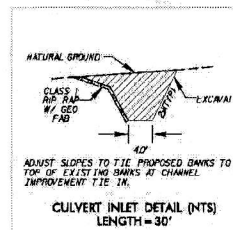
PROJECT REFERENCE NO. <i>R-3329 / R-2559</i>	SHEET NO. <i>DITCH DET</i>
BW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
REVISED <i>12/20/2015</i> PERMIT DRAWING SHEET 115 OF 267	



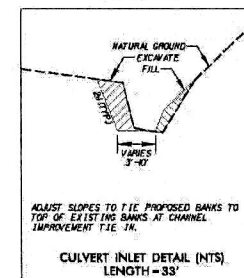
EAST FORK
STEWARTS CREEK
-L- STA. 669+18



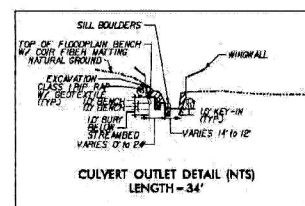
UT TO
STEWARTS CREEK
- STA 702+70



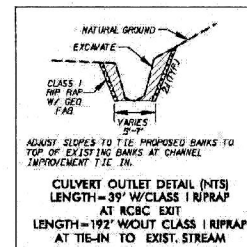
UT TO
STEWARTS CREEK
-1- STA 805+89



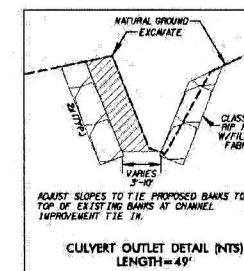
CULVERT OUTLET DETAIL (NTS)
LENGTH - 34'



CULVERT OUTLET DETAIL (NTS)
LENGTH=39' W/CLASS 1 RIPRAP
AT RCBC EXT
LENGTH=192' W/OUT CLASS 1 RIPRAP
AT TIE-IN TO EXIST. STREAM



CULVERT OUTLET DETAIL (NTS)
LENGTH=49'

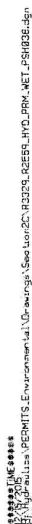


PLANS PREPARED BY :
RK K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 380
RALEIGH, NORTH CAROLINA 27607-3960
NC LICENSE NO. F-0112 • (719) 878-9540
FOR
THE NORTH CAROLINA
TURNPIKE AUTHORITY

6/17/99

DENOTES TEMPORARY
 IMPACTS IN SURFACE WATER
 DENOTES IMPACTS IN
 SURFACE WATER

REVISED 12/8/2015
PERMIT DRAWING
SHEET 118 OF 26



8-17-2015
C:\Users\jmc\Documents\Projects\2015\20150806\20150806.dwg
*****NOTES*****
1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
2. SEE SHEET 37 FOR MATCHLINE L- STA. 662+00
3. SEE SHEET 39 FOR MATCHLINE L- STA. 676+00

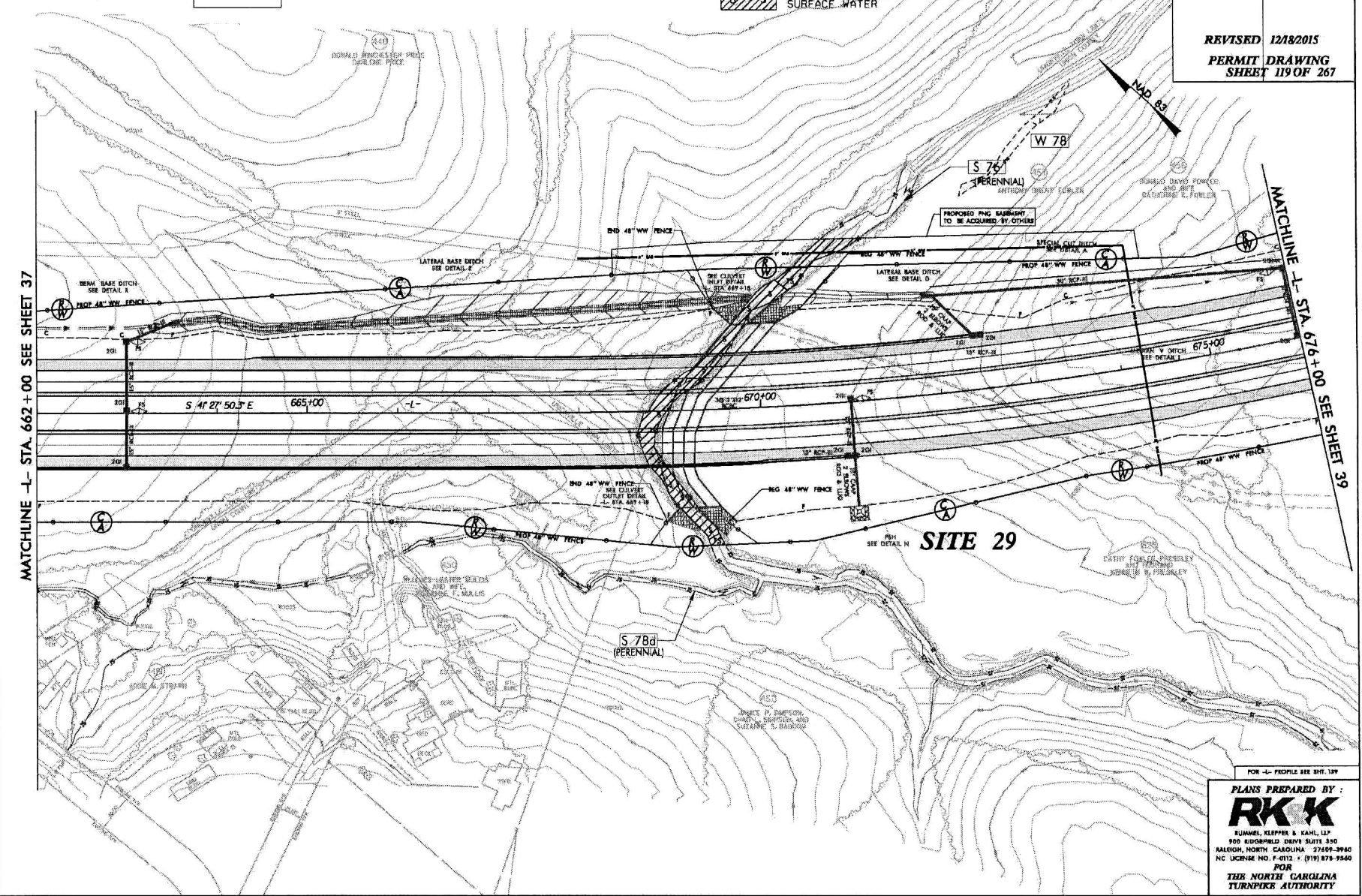
SOG & EXPRESSWAY GUTTER LOCATIONS				
DESCRIPTION	ALN	STATION	STATION	LOC
SOG	-LRC-	664+50	672+50	LT
SOG	-LRC-	670+00	671+05	RT



DENOTES TEMPORARY IMPACTS IN SURFACE WATER

DENOTES IMPACTS IN SURFACE WATER

PROJECT REFERENCE NO. R-3329 / R-2559		SHEET NO. 38
ROADWAY DESIGN ENGINEER		HYDRAULIC ENGINEER
REVISED 12/18/2015		
PERMIT DRAWING SHEET 119 OF 267		

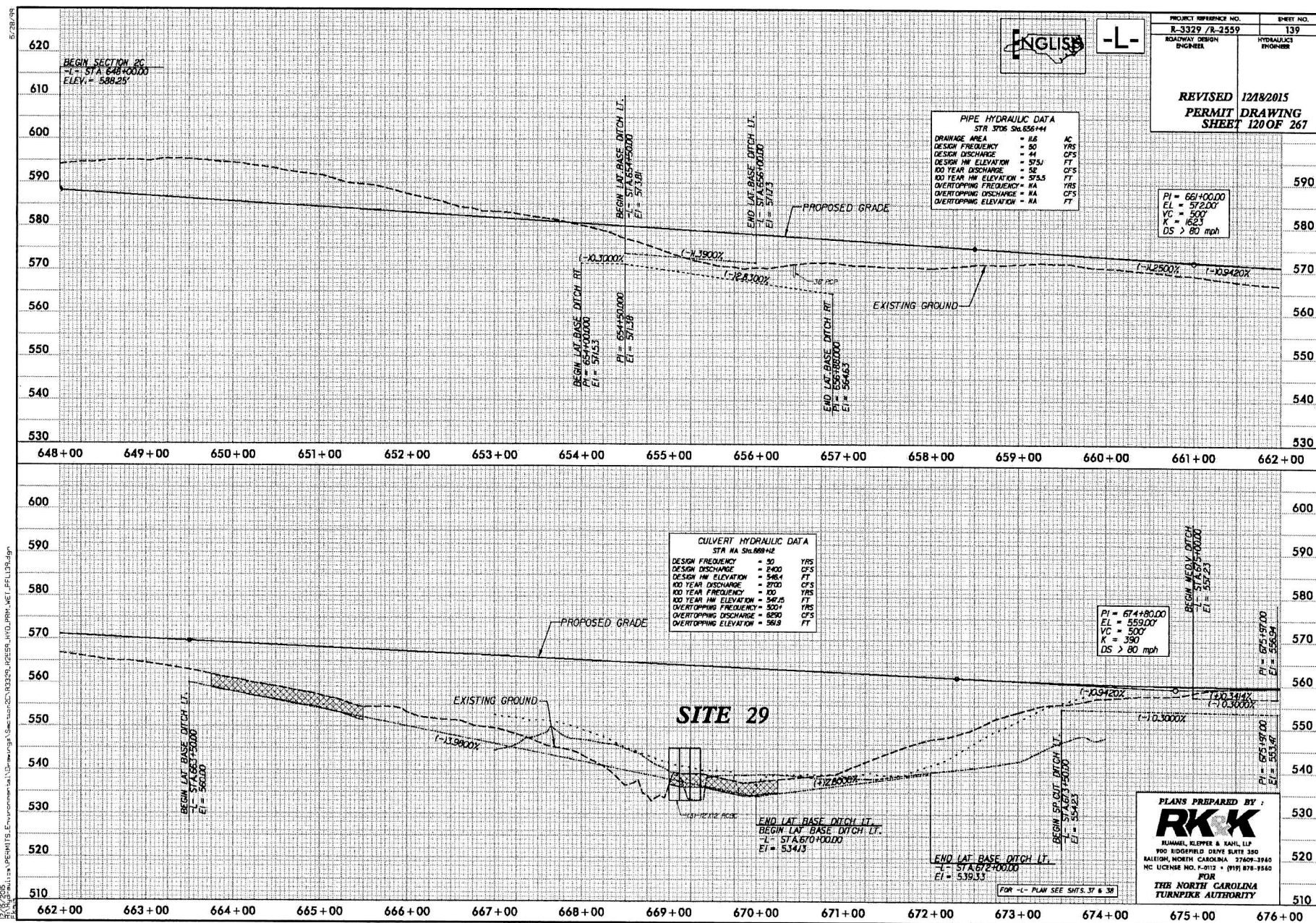


FOR - L- PROFILE SEE 807.129

PLANS PREPARED BY:

RK K

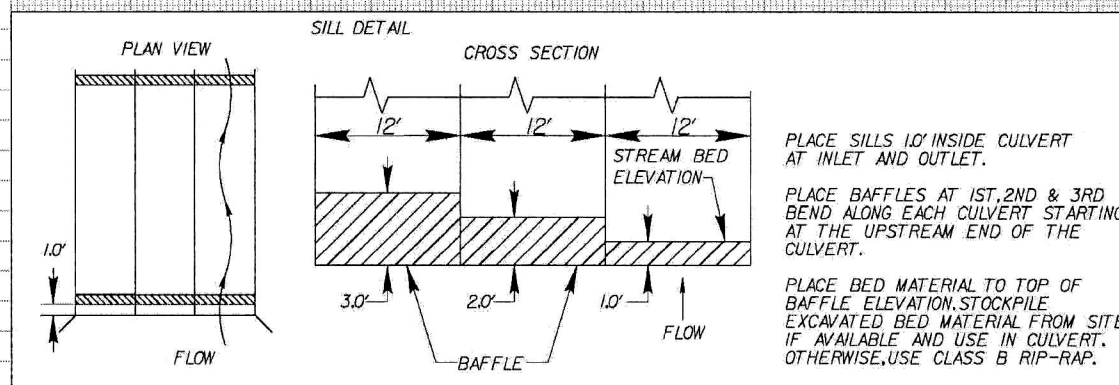
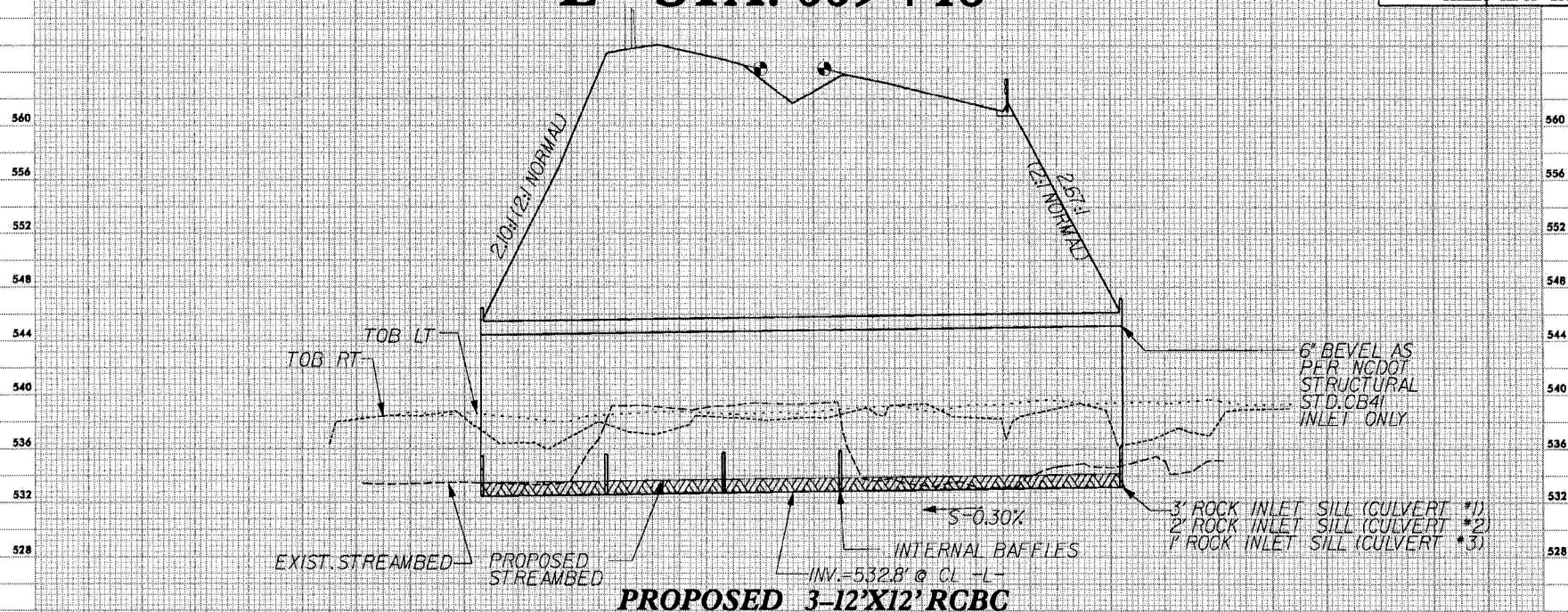
RUMMEL, KLEPPER & KAHL, LLP
900 BROADWAY DRIVE SUITE 300
RALEIGH, NORTH CAROLINA 27609-3940
NC LICENSE NO. F-0112 / (719) 878-9540
FOR
THE NORTH CAROLINA
TURNPIKE AUTHORITY



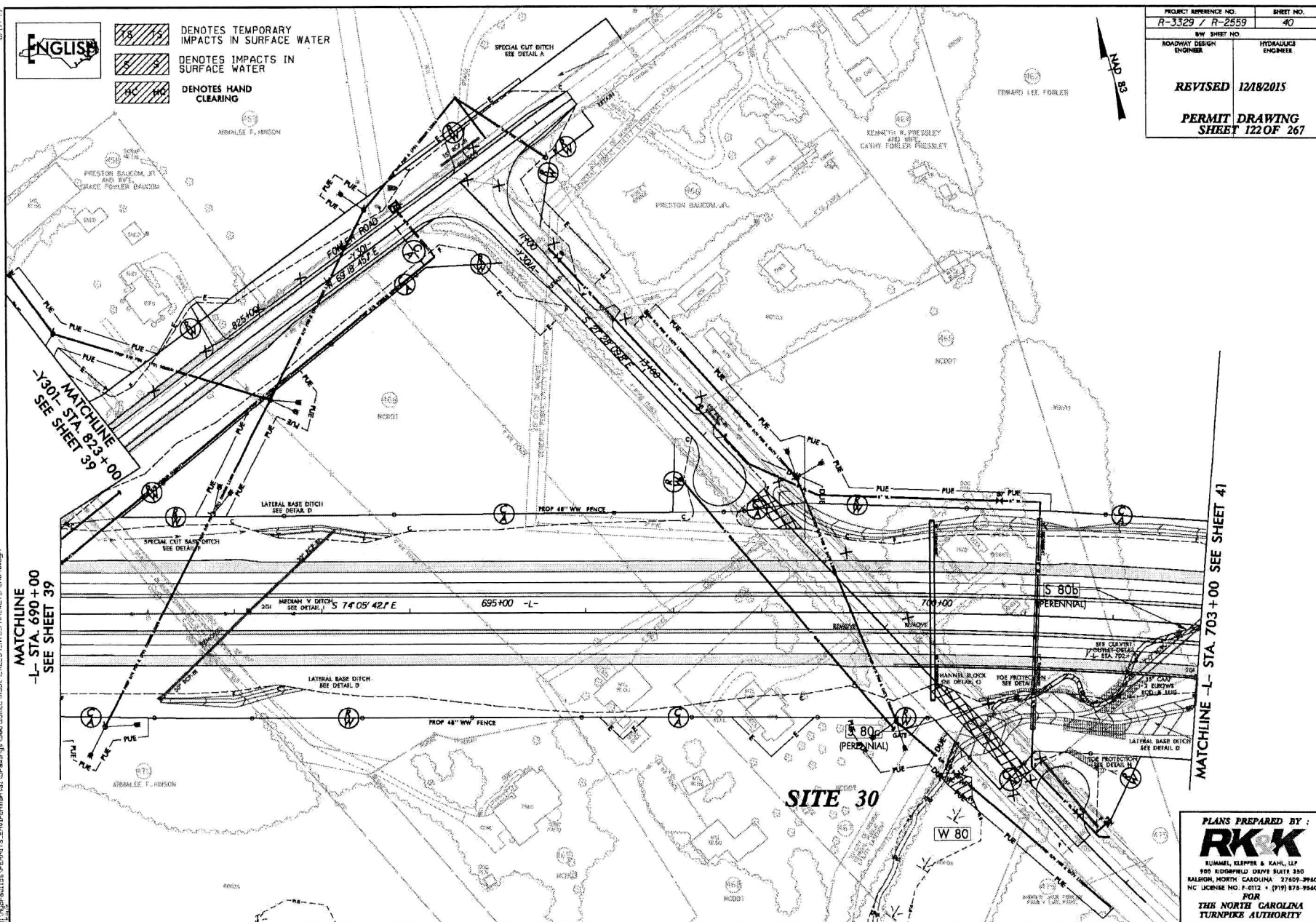
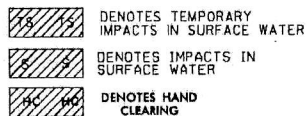


ENGLISH

PROJECT REFERENCE NO.	SHEET NO.
R-3329 /R-2559	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
REVISED 12/18/2015 PERMIT DRAWING SHEET 12 OF 267	



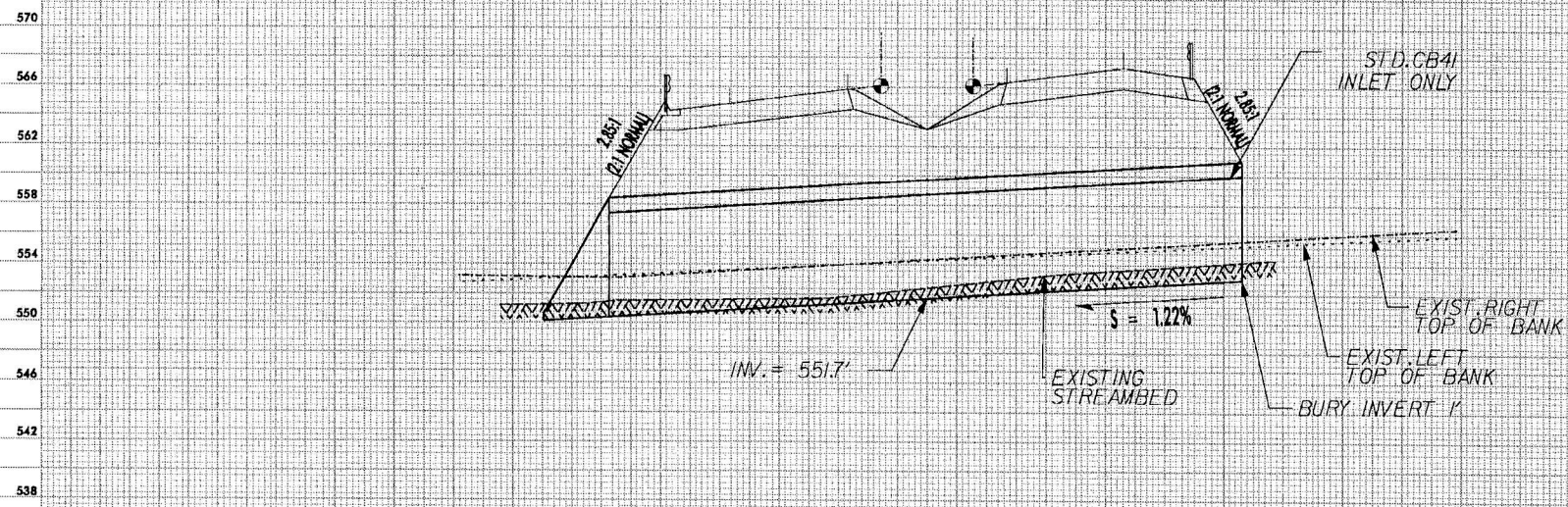
00000000000000000000000000000000



PROJECT REFERENCE NO. <i>R-3329 / R-2559</i>		SHEET NO. <i>40</i>	
BW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
REVISED		12/18/2015	
PERMIT		DRAWING	
SHEET		122 OF 267	

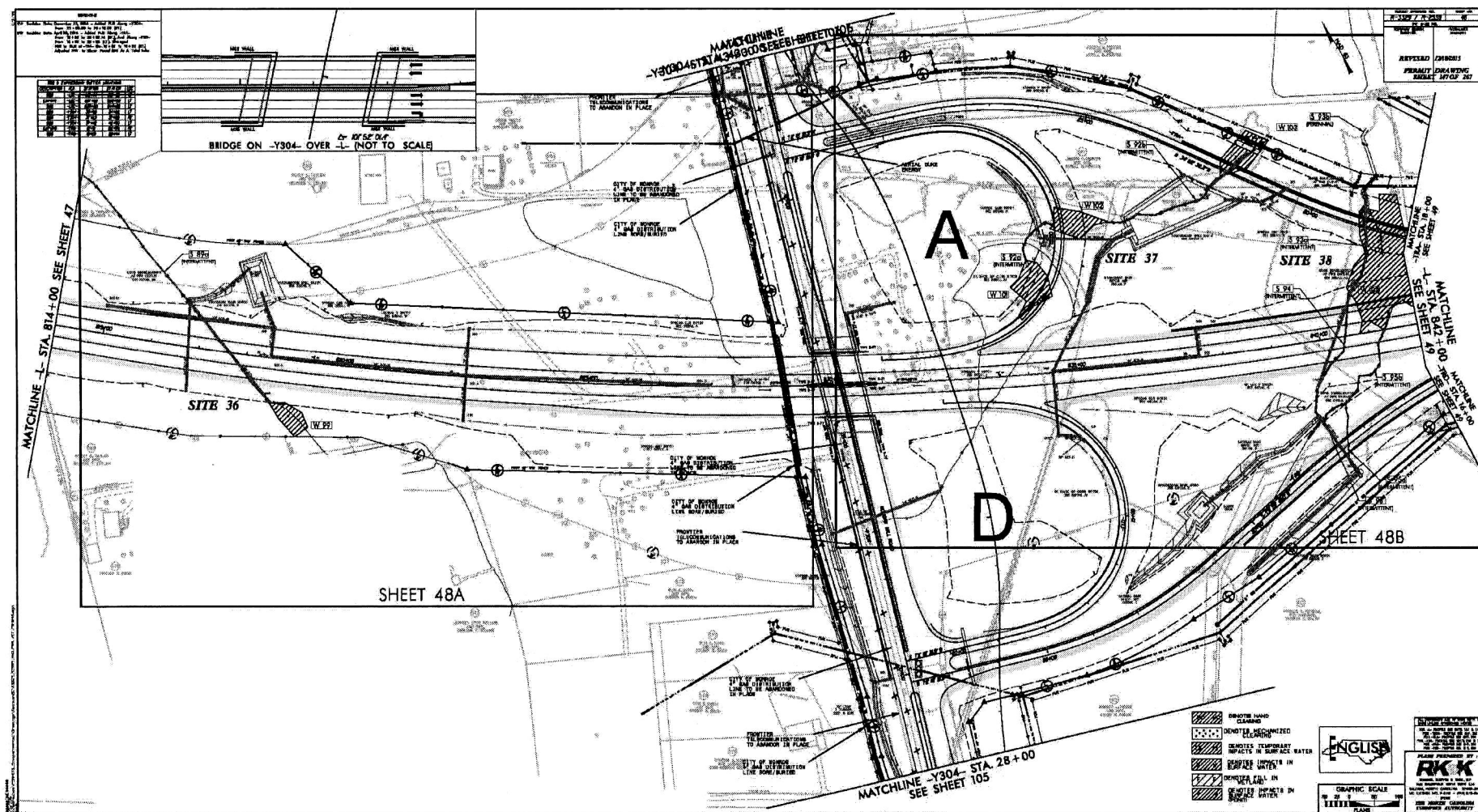
PLANS PREPARED BY :
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 330
RALEIGH, NORTH CAROLINA 27609-39
NC LICENSE NO. P-0112 • (919) 878-95
FOR
THE NORTH CAROLINA
TURNPIKE AUTHORITY

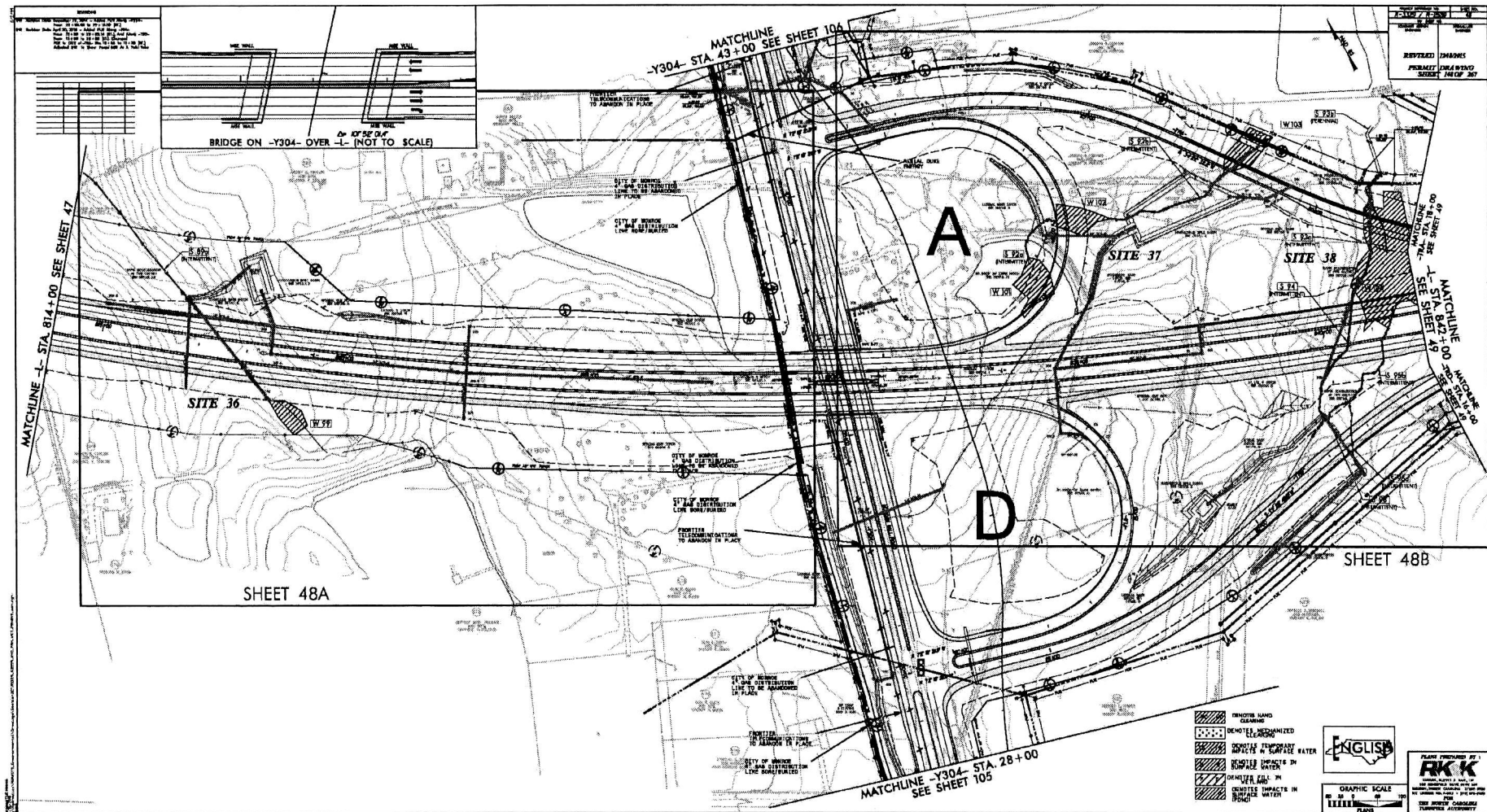
PROJECT REFERENCE NO.		SHEET NO.	
R-3329 /R-2559			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
REVISED		12/18/2015	
PERMIT		DRAWING	
SHEET		127 OF 267	

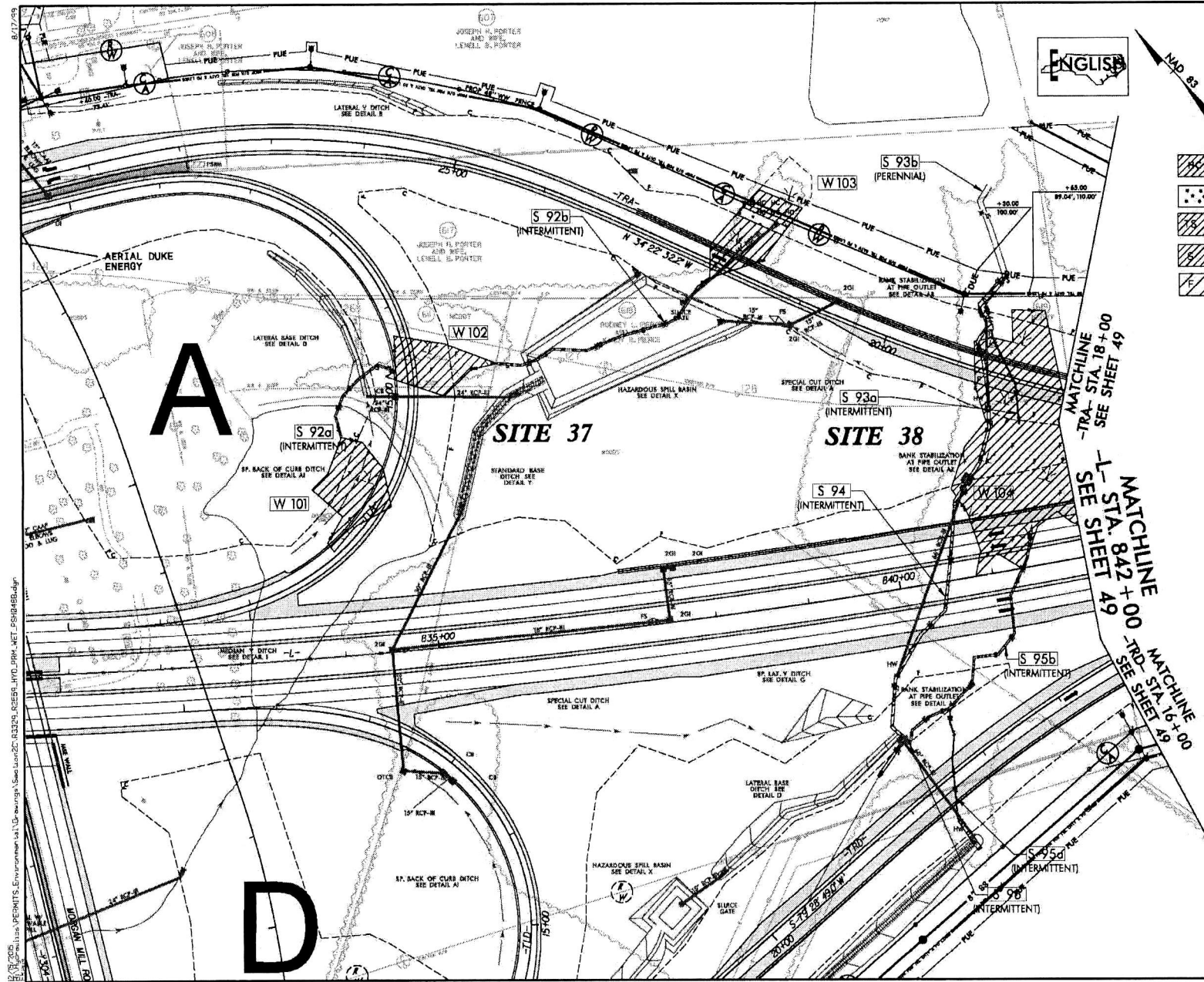


**PROPOSED 7'X7' RCBC
BURIED 1.0'**

2/15/2015
C:\Users\PERMITS\Environmental\Documents\Section2\A3319_03159_HYD_PPM_VEL_041212.doc



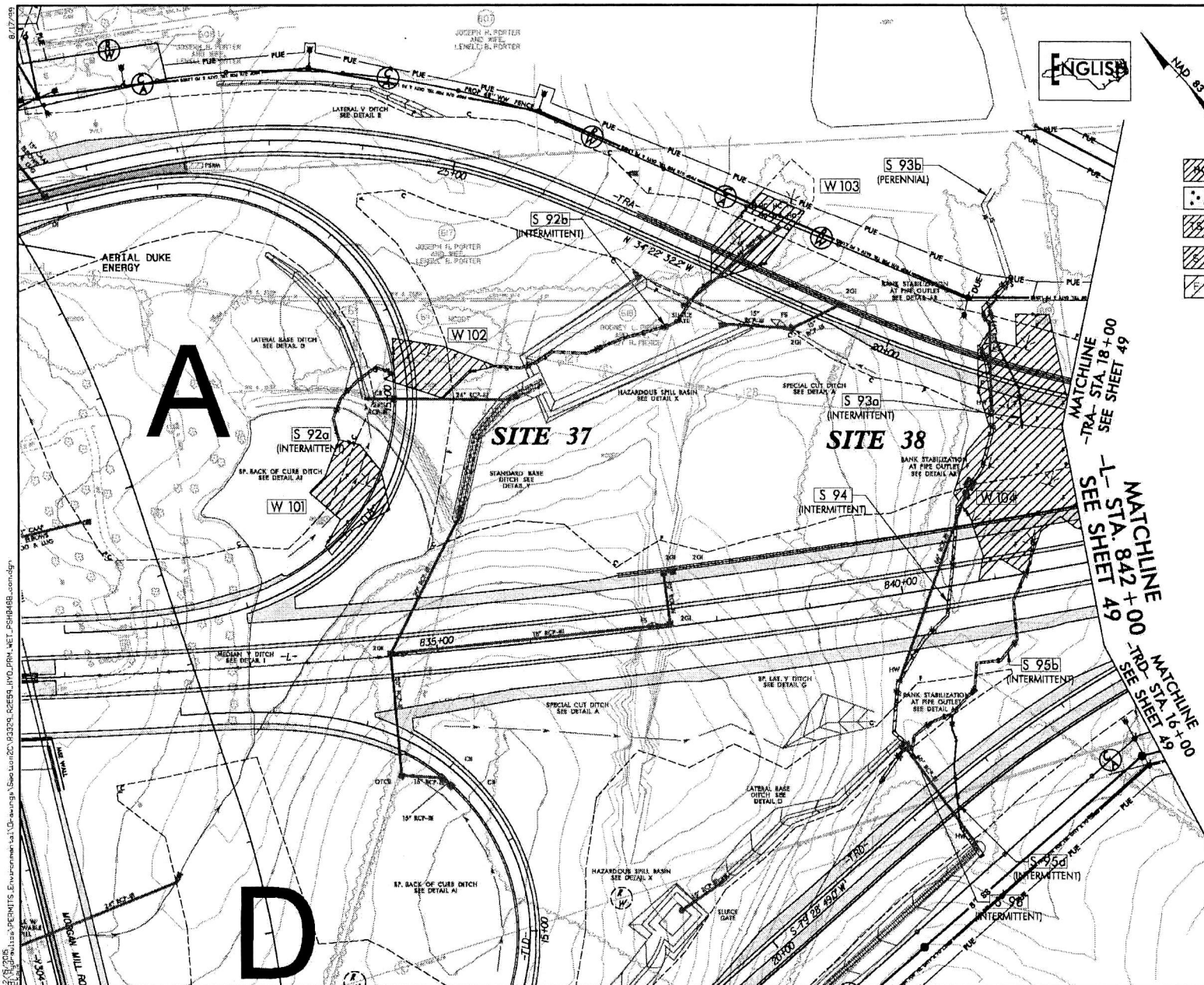




PROJECT REFERENCE NO. R-3329 / R-2559	SHEET NO. 488
RDW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
REVISED 12/18/2015	
PERMIT DRAWING SHEET 152 OF 267	

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

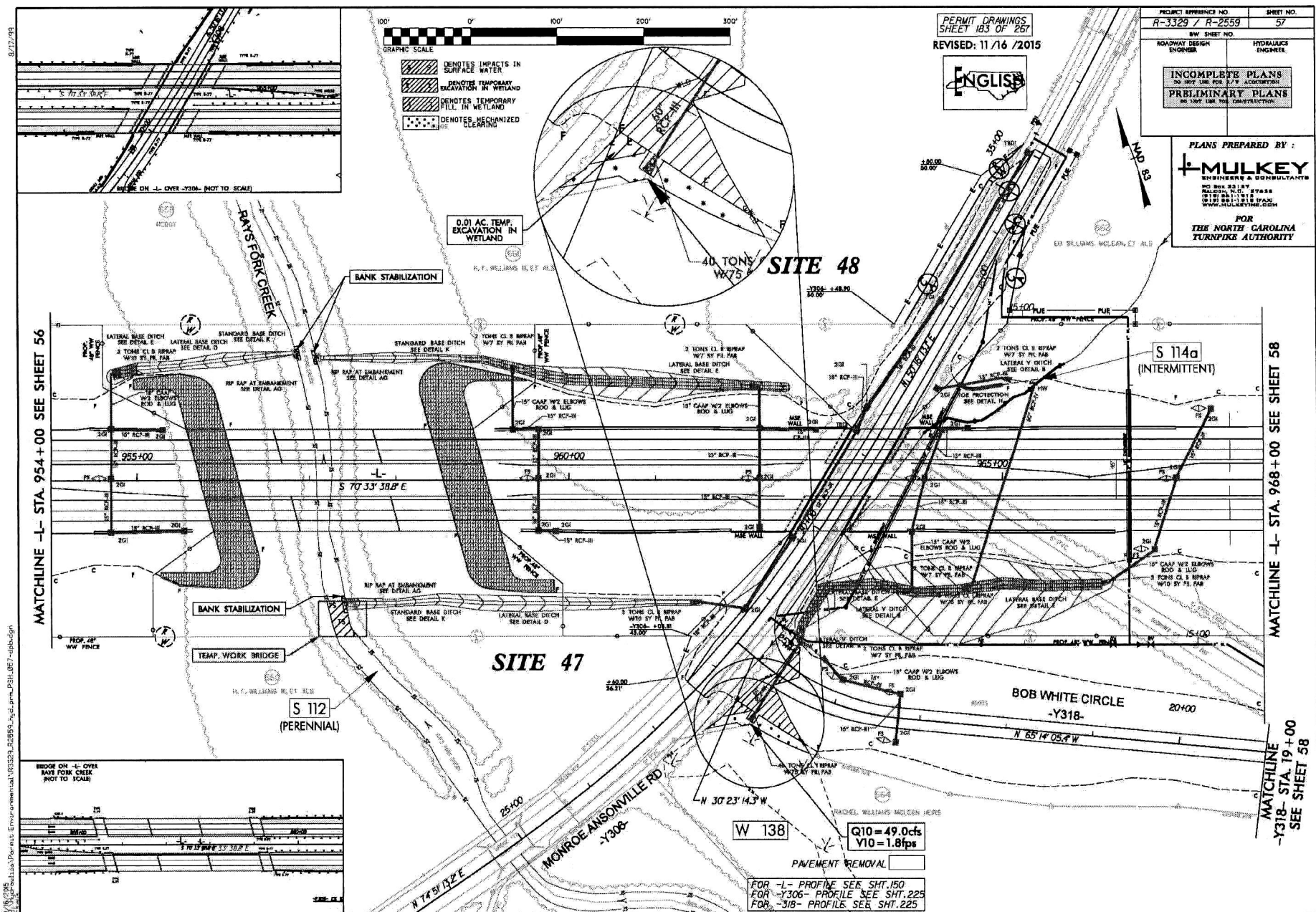
PLANS PREPARED BY:
RK&K
 KUMMER, KLEPPER & KAHN, LLP
 900 RIDGEFIELD DRIVE SUITE 230
 RALEIGH, NORTH CAROLINA 27609-3940
 NC LICENSE NO. F-0112 & (719) 878-9540
 FOR
 THE NORTH CAROLINA
 TURNPIKE AUTHORITY

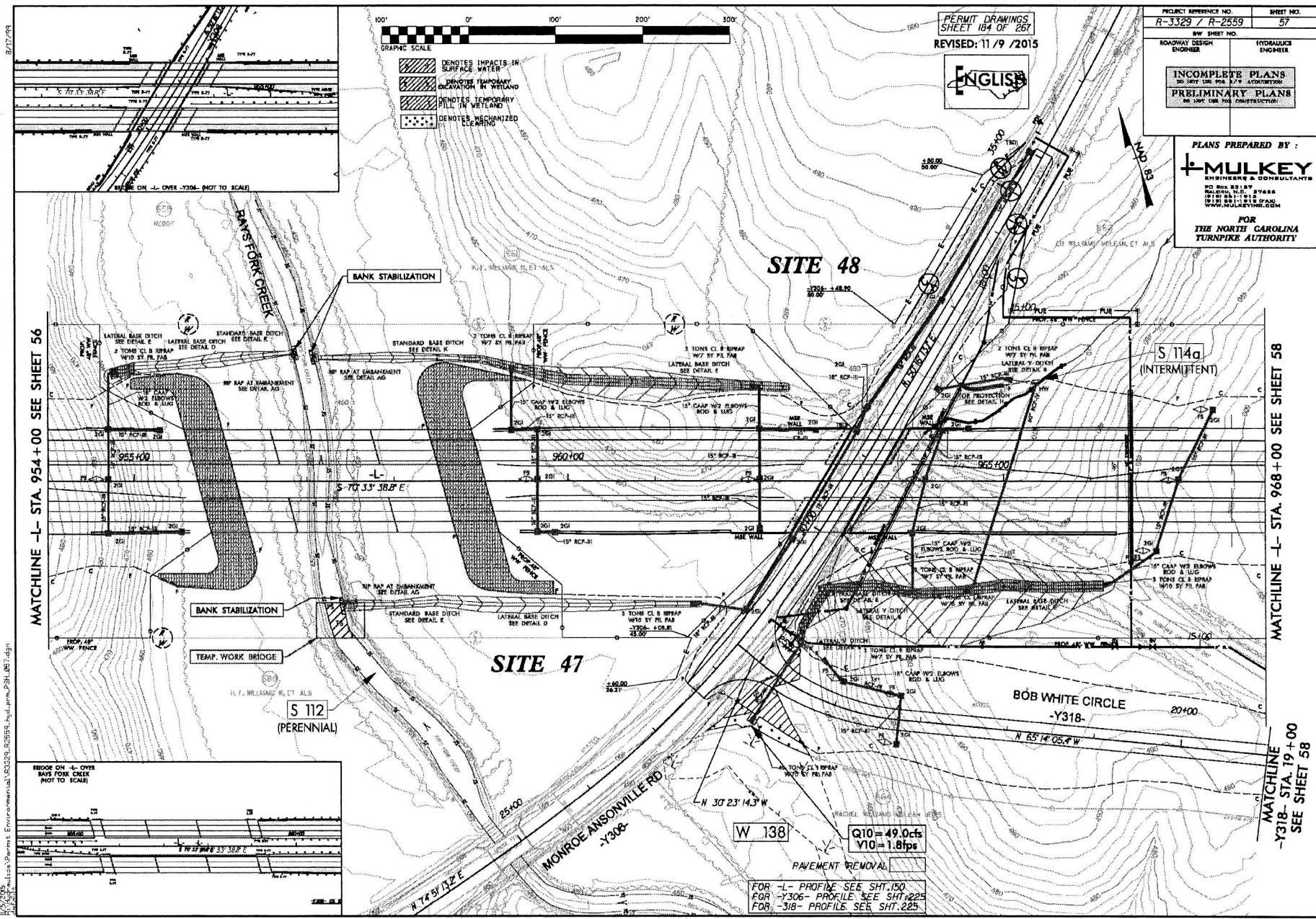


PROJECT REFERENCE NO. R-3329 / R-2559	SHEET NO. 48B
BYV SHEET NO. ENGINEER	HYDRAULICS ENGINEER
REVISED 12/18/2015	
PERMIT DRAWING SHEET 153 OF 267	

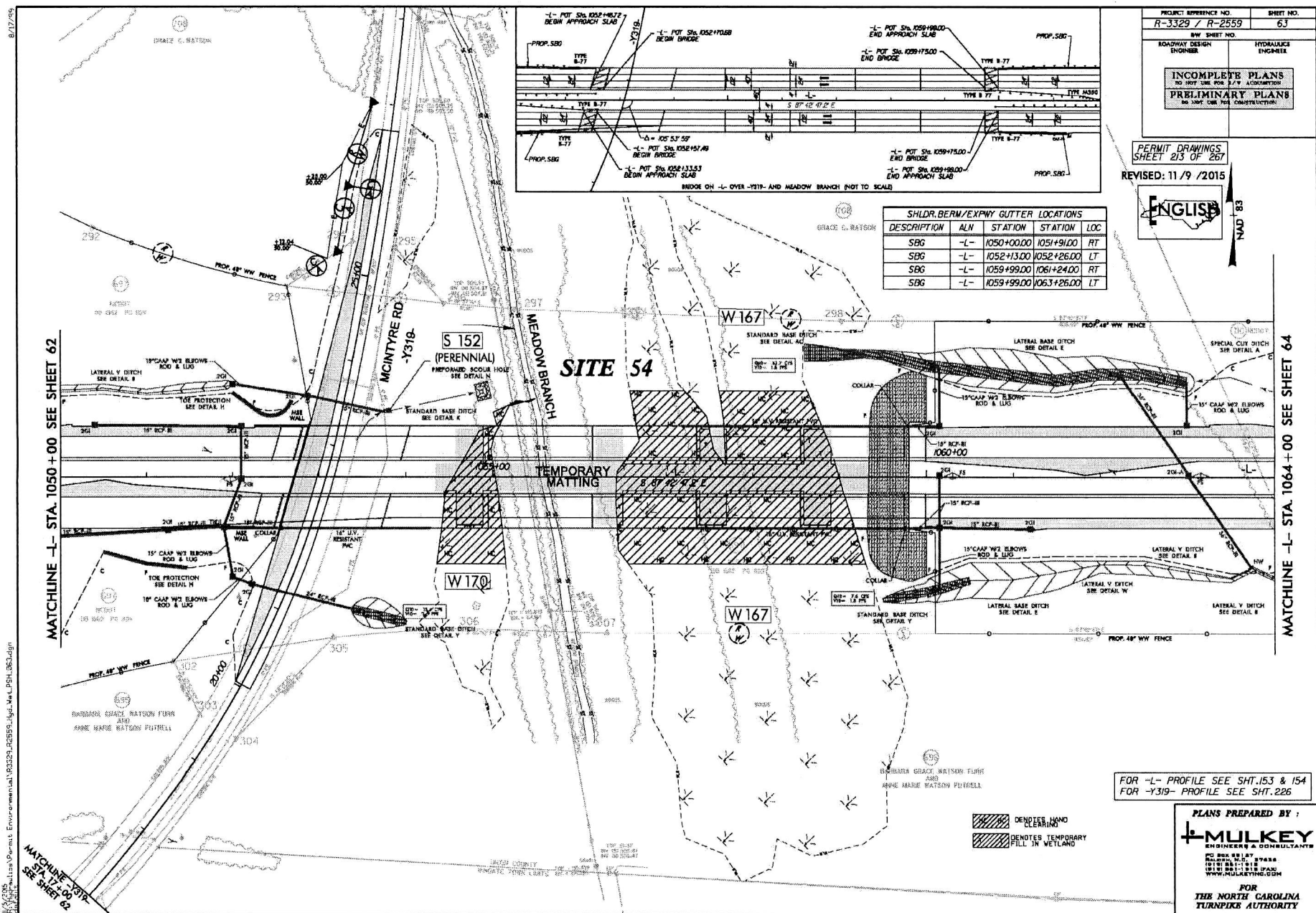
- DENOTES HAND CLEARING
- DENOTES MECHANIZED CLEARING
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES FILL IN WETLAND

PLANS PREPARED BY:
RK&K
 RUMMEL, KLEPPER & KAHN, LLP
 800 WINDSHIELD DRIVE SUITE 300
 RALPH, NORTH CAROLINA 27609-3940
 NC LICENSE NO. F-0112 • (719) 878-1860
 FOR
 THE NORTH CAROLINA
 TURNPIKE AUTHORITY



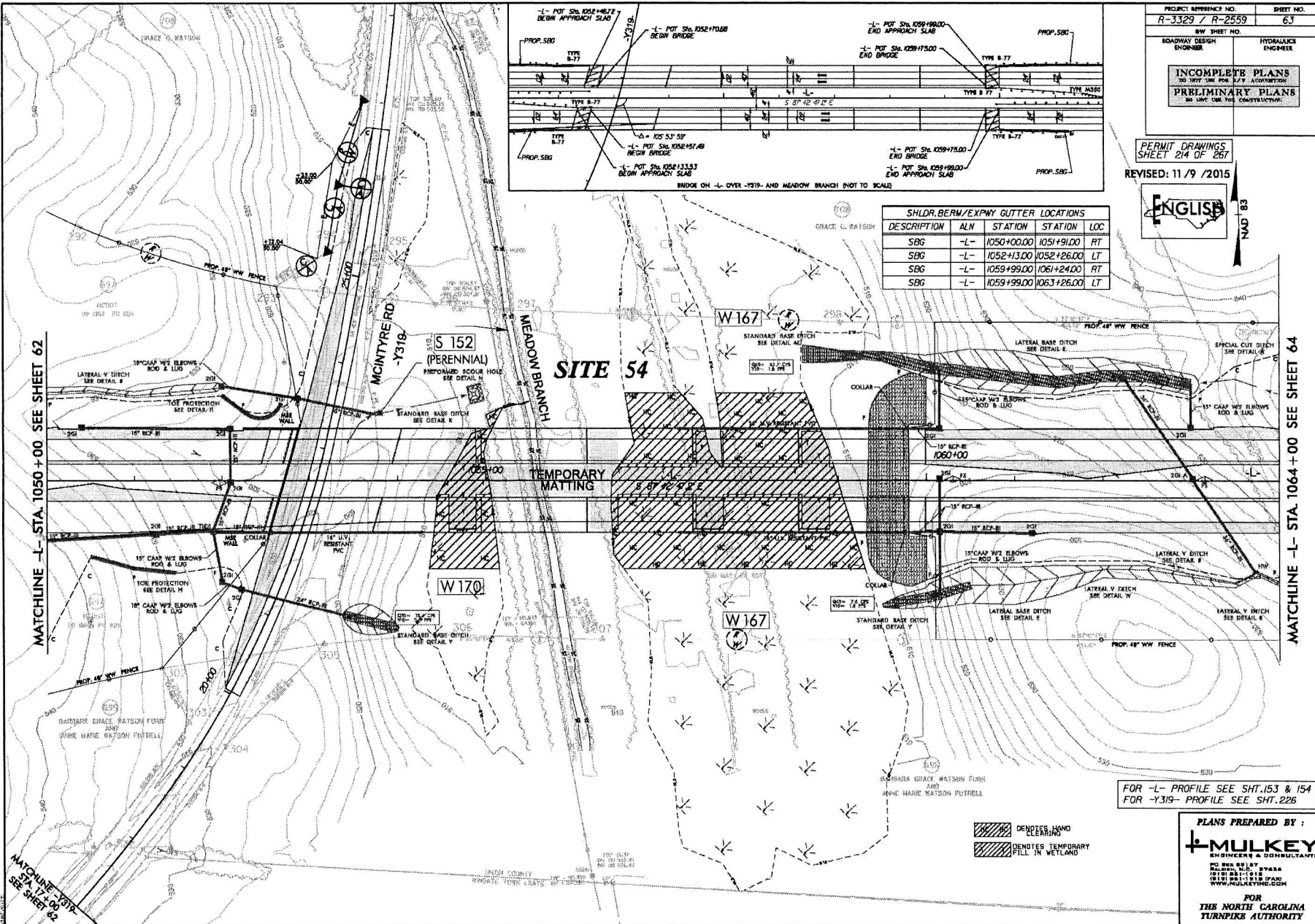


11/5/2015
C:\Users\jordan\Documents\Environmental\100229-202559\hyd\plan\261167.dgn



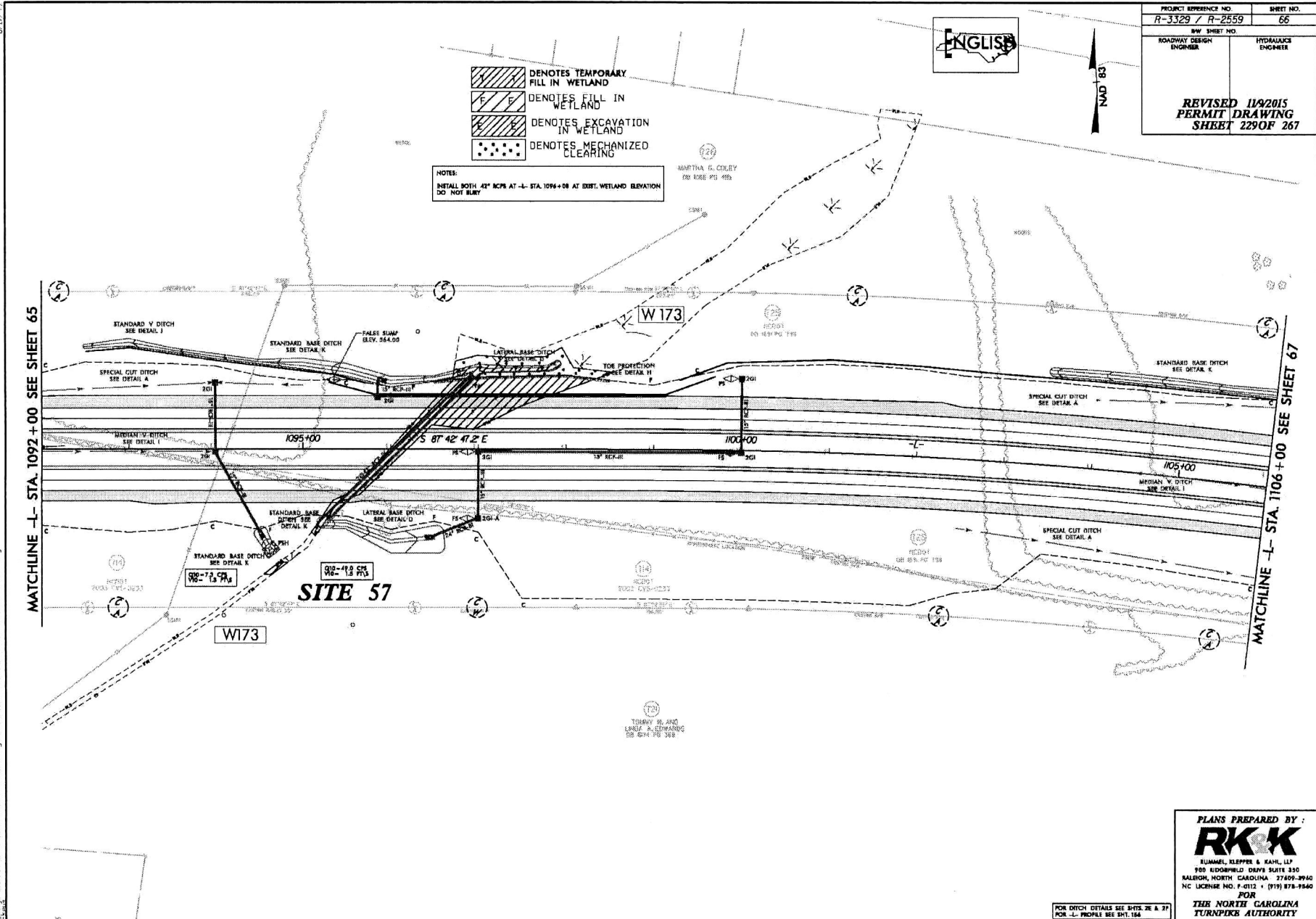
8-17-05

\\nas01\p\env\env\03229-26559-1.dwg, Vol. 1, 03/18/03.dwg



8/17/09

\\s01\apps\autodesk\permits\Environmental\Bourbon\Section38\33229_R2559.dwg PRM:JET JSH086.dgn

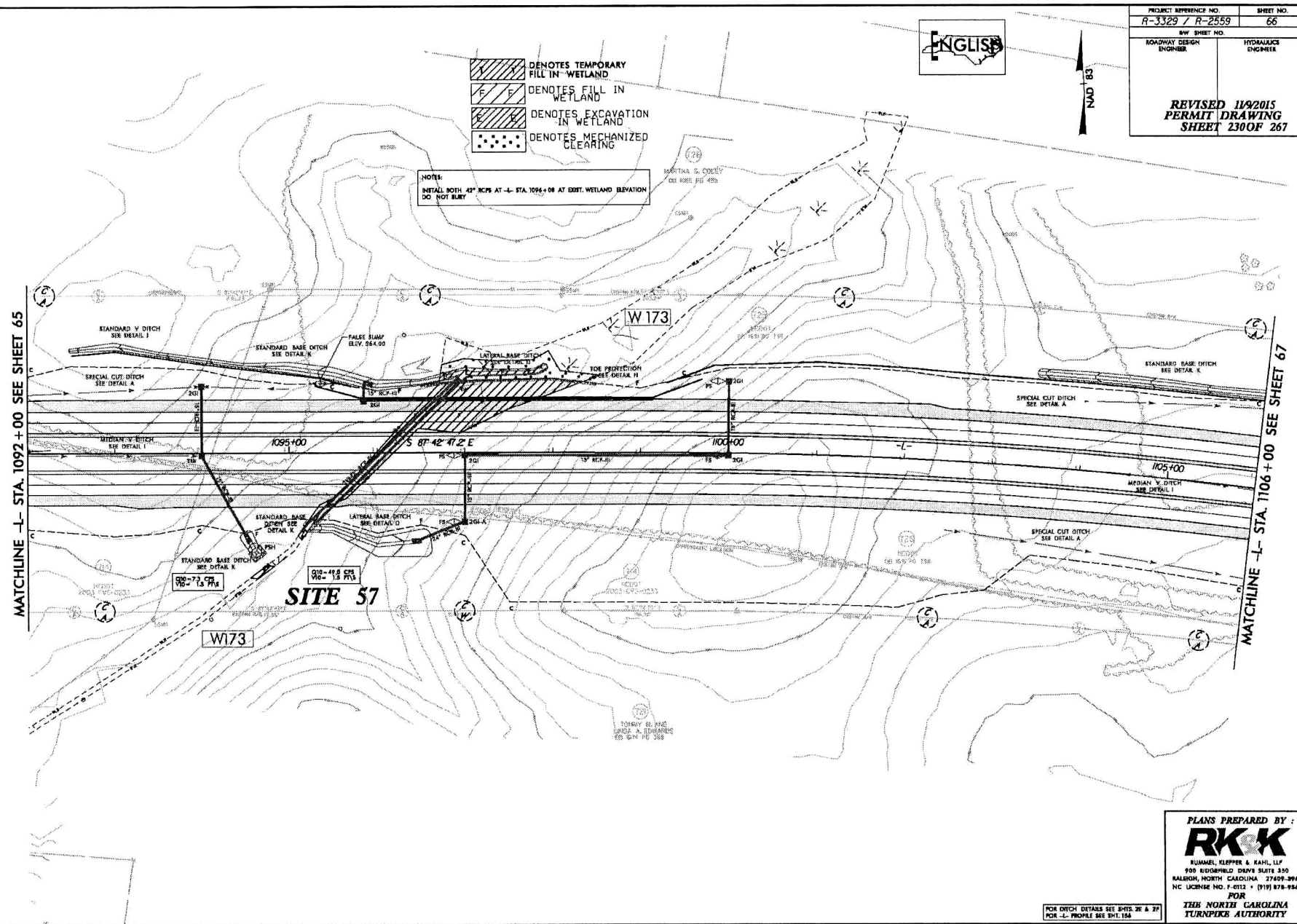


PROJECT REFERENCE NO. R-3329 / R-2559	SHEET NO. 66
RDW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
REVISED 11/9/2015 PERMIT DRAWING SHEET 229 OF 267	

PLANS PREPARED BY:
RK K
KUMMER, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3940
NC LICENSE NO. 1-0112 • (719) 878-1940
FOR
THE NORTH CAROLINA
TURNPIKE AUTHORITY

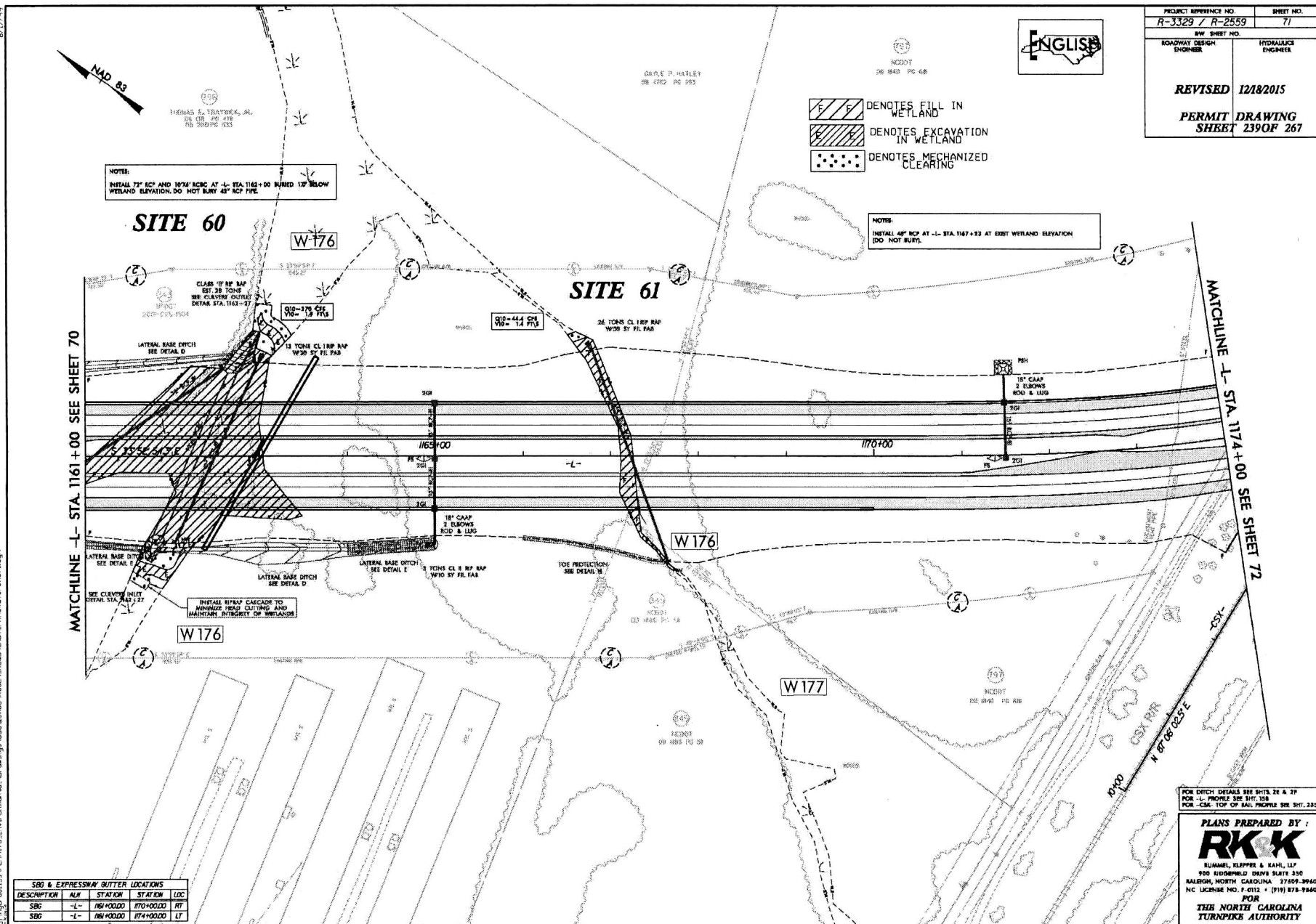
FOR DITCH DETAILS SEE SHEETS 26 & 27
FOR L- PROFILE SEE SHT. 184

\\6\205
Aud-a-1\5\PRMITS_Environmental\Drawings\Section38\P3329_RZES9_HQY_PPM_VET_PSH066-condgn



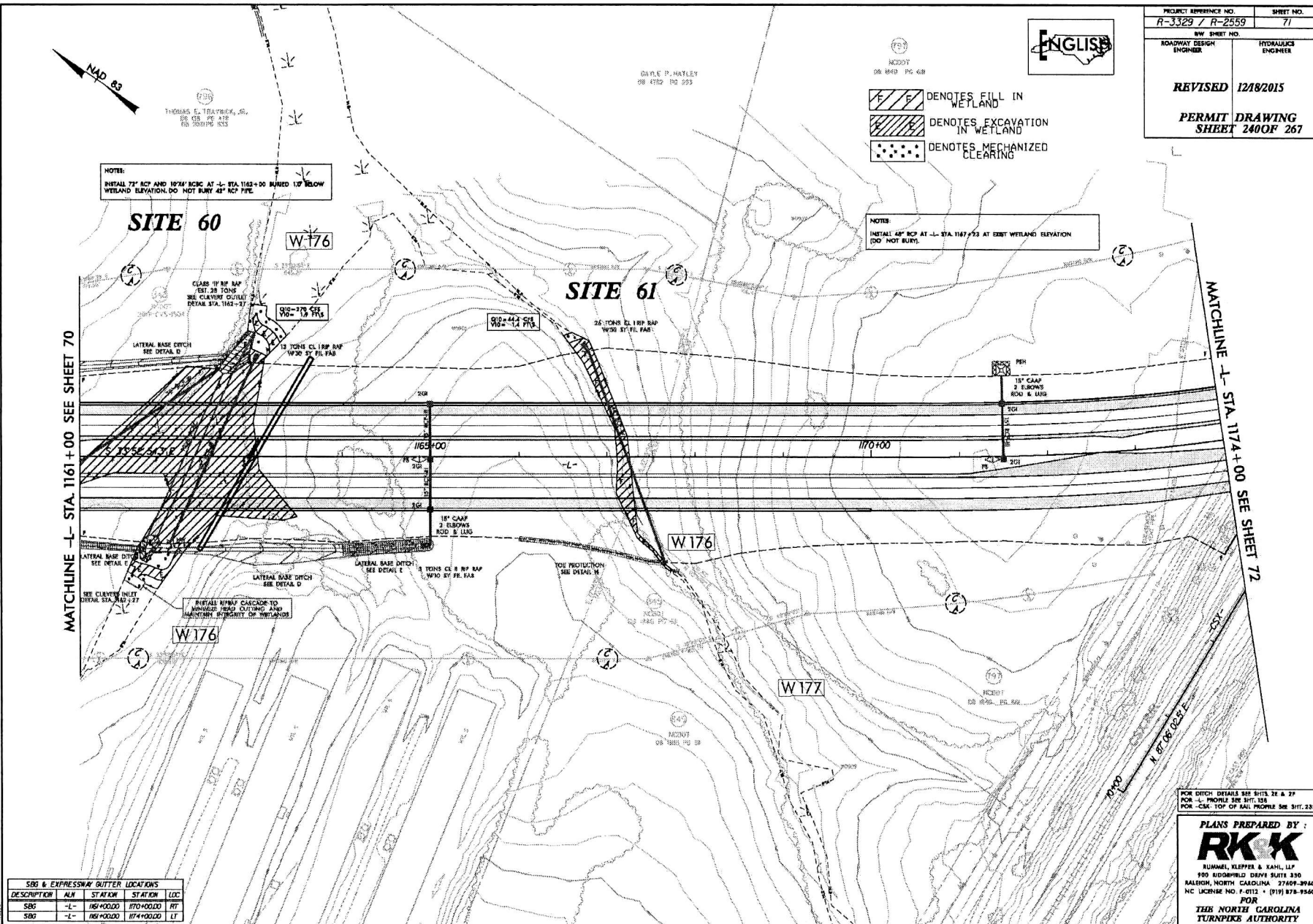
B-17-275

\\s01\apps\permits\Environmental\Suburbs\3329_R2559-40V_PRR_VET_P5M071.dgn



8-17-94

PROJECT: R-3329 / R-2559
 DRAWING: 2400F 267
 SHEET: 71



SRB & EXPRESSWAY CUTTER LOCATIONS			
DESCRIPTION	ALN	STATION	LOC
SRB	-L-	1164+00.00	RT
SRB	-L-	1164+00.00	LT

FOR DITCH DETAILS SEE SHTS 28 & 37
 FOR -L- PROFILE SEE SHT 138
 FOR -CS- TOP OF RAIL PROFILE SEE SHT 233

PLANS PREPARED BY:
RK&K
 RUMMEL, KLEPPER & KAHN, LLP
 800 KIDDERWOOD DRIVE SUITE 300
 RALEIGH, NORTH CAROLINA 27609-3940
 NC LICENSE NO. P-0113 • (919) 878-9540
 FOR
 THE NORTH CAROLINA
 TURNPIKE AUTHORITY

WETLAND PERMIT IMPACT SUMMARY - DESIGN SECTION 2C												
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)
28	-L- 656+17 TO - 657+71 RT	36" RCP BANK STABILIZATION						<0.01		72		
29	-L- 669+50	3@12'X12' RCBC						<0.01	<0.01	62	10	
		BANK STABILIZATION					0.09		241			
		UTILITY RELOCATION					0.04	0.01	123	38		
30	-L- 700+11 TO - 705+91	7'X7' RCBC							0.02	0.02	55	
		BANK STABILIZATION					0.04	<0.01	375	33		
		UTILITY RELOCATION					0.02	<0.01	206	10		
31	-L- 718+00	FILL IN WETLANDS	0.09				0.02		<0.01		11	
32	-L- 738+80 RT	72" RCP & PIPE REMOVAL	0.02					0.01	<0.01	59	20	
		BANK STABILIZATION					<0.01	<0.01	24	10		
33	-L- 752+51 TO - 769+15 LT	FILL IN WETLANDS 30" RCP	1.61			0.28						
34	-L- 805+06 LT	15" RCP						<0.01	<0.01	13	10	
35	-L- 805+89	10'X7' RCBC						0.01		185		
		BANK STABILIZATION					0.01	0.01	82	74		
36	-L- 817+63	48" RCP	0.07					0.01		260		
		BANK STABILIZATION					<0.01	<0.01	16	10		
37	-TLA- 13+07 - 15+68; -TRA- 22+00 LT	FILL IN WETLANDS 24" & 48" RCP	0.28			0.01	0.03	0.02		380		
38	-L- 841+00 LT & RT	60" RCP & 2 66" RCPs BANK STABILIZATION	0.57					0.06		1016		
39 ¹	-L- 849+00 RT	FILL IN POND						0.01	<0.01	95	24	
40 ¹	-L- 856+00 RT	FILL IN POND						0.22				
41 ²	-L- 866+50	42" RCP						0.90				
		BANK STABILIZATION						0.12		279		
42	-L- 890+87 TO -L- 893+14							<0.01	<0.01	34	10	
		FILL IN STREAM						0.03	<0.01	276	13	
43	-L- 893+00	84" RCP	0.01			<0.01		0.05		299	11	
		BANK STABILIZATION					0.01	<0.01	28	10		
44	-L- 903+70	54" RCP	0.13			0.02		0.02		179		
		BANK STABILIZATION					<0.01	<0.01	18	10		
45 ¹	-Y302- 152+00 RT	24" RCP						0.05				
SUBTOTAL DESIGN SECTION 2C:			2.78	0.00	0.00	0.31	0.05	1.73	0.06	4322	359	

*Rounded totals are the sum of actual impacts

¹ Fill in surface water due to draining pond

² 0.10ac of fill in surface water due to draining pond

Values in blue are the revised impacts.

Revised 12/18/2015

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

UNION COUNTY
WBS - 34533.S.TA1 (R-3329/2559)

ATN Revised 3/31/05

SHEET 264 of 267

9/29/214

WETLAND PERMIT IMPACT SUMMARY - DESIGN SECTION 3A												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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)
46	-L-942+33 to 944+18	Bridge							0.04			
		Bank Stabilization						0.05		255		
47	-L- 956+83 to 957+44	Temp. Bridge / Bank Stabilization							0.02		30	
		Bank Stabilization						<0.01		43		
48 ¹	-Y306- 27+69 to 28+79 Rt	Roadway Fill	0.07		0.01	0.03						
	-Y306- 31+58 to 33+11 Rt	60" RCP						0.01		193		
49	-Y318- 16+03 to 15+65	9'x7' RCBC							<0.01		20	
		Bank Stabilization						<0.01		52		
50	-L- 973+14 to 980+36	9'x7' RCBC	0.06					0.09	<0.01	905	18	
	-L- 981+50 to 986+25 Lt	Roadway Fill	0.04									
51	-L- 1001+08 to 1003+00	66" RCP-III						0.02	<0.01	115	20	
		Bank Stabilization						<0.01		11		
52	-Y308- 34+43 to 31+75 Lt	Roadway Fill						0.86	<0.01	545	10	
53	-L- 1038+42	2@10'x6' RCBC						0.10		985		
		Bank Stabilization						0.02	<0.01	165	19	
		Utility Relocation							<0.01		41	
54 ²	-L- 1055+58 to 1059+27	Bridge	0.01	0.37			0.93					
SUBTOTAL DESIGN SECTION 3A:			0.18	0.37	0.01	0.03	0.93	1.11	0.09	3269	158	0.00

¹ Excavation in wetlands is a temporary impact for installation of utility line.

Values in blue are the revised impacts.

UNION COUNTY

SHEET 265 of 267

9/29/2014

WETLAND PERMIT IMPACT SUMMARY - DESIGN SECTION 3B												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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)
55	-L- 1074+23	7' x 7' RCBC						0.02		157		
		BANK STABILIZATION						0.01	0.01	80	39	
56 ¹	-Y309- 19+71	2@48" RCP	0.03		<0.01	<0.01						
		UTILITY IMPACTS		<0.01								
57	-L- 1096+08	2@42" RCP	0.19	<0.01	0.02	0.06						
58	-L- 1122+50 Lt	FILL IN WETLANDS	0.02			0.01						
		BANK STABILIZATION FOR 36" RCP										
59	-Y310- 23+00 Rt	72" RCP, 10"x6" RCBC w/42" floodplain pipe						<0.01	<0.01	12	10	
60 ²	-L- 1162+27	48" RCP	0.64		0.06	0.05		<0.01	<0.01	3	10	
61	-L- 1167+23	Extend 2@7x7' RCBC w/ 2@8"x8" RCBC	0.01			0.01		<0.01		37		
62 ³	-L- 1201+62	BANK STABILIZATION						0.01	<0.01	102	20	
		UTILITY IMPACTS		0.03								
63	-Y314R- 25+85 Rt	30" RCP	0.04			0.02						
64 ⁴	-Y315- 16+53 -Y316- 11+76 -Y314R-15+50 RT	48" RCP 2@48" RCP 36" STEEL	0.14		0.02	0.08						
		UTILITY IMPACTS	0.03	<0.01								
SUBTOTAL DESIGN SECTION 3B:			1.17	0.04	0.11	0.23	0.00	0.04	0.01	391	79	

Values in blue are the revised impacts.

9/29/2014

WETLAND PERMIT IMPACT SUMMARY - PROJECT TOTALS												
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)
	SUBTOTAL DESIGN SECTION 1		1.12	0.00	0.01	0.15	0.00	0.22	0.01	1913	105	
	SUBTOTAL DESIGN SECTION 2A		0.24	0.03	0.02	0.05	0.00	0.47	0.02	2037	201	
	SUBTOTAL DESIGN SECTION 2B		0.19	0.04	0.00	0.02	0.00	0.39	0.02	3780	247	
	SUBTOTAL DESIGN SECTION 2C		2.78	0.00	0.00	0.31	0.05	1.73	0.06	4322	359	
	SUBTOTAL DESIGN SECTION 3A		0.18	0.37	0.01	0.03	0.93	1.11	0.09	3269	158	
	SUBTOTAL DESIGN SECTION 3B		1.17	0.04	0.11	0.23	0.00	0.04	0.01	391	79	
PROJECT TOTAL:			5.67	0.47	0.15	0.79	0.98	3.95	0.22	15712	1149	

*Rounded totals are the sum of actual impacts

Values in blue are the revised impacts.

Revised: 11/9/2015, 12/18/2015, 1/26/2016

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

UNION COUNTY
WBS - 34533.5.TA1 (R-3329/2559)

SHEET 267 of 267

9/30/2014