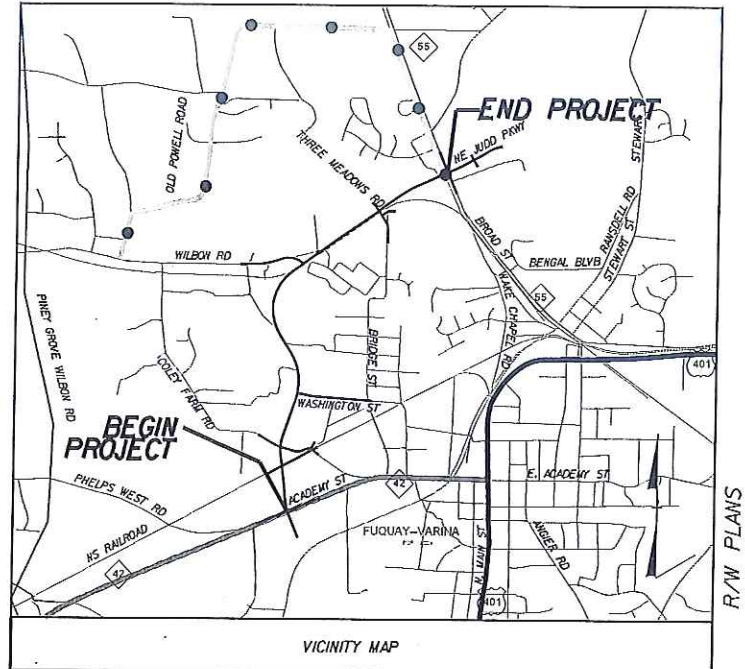


TIP PROJECT: U-5317

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Plan Sheet Symbols



OFF SITE DETOUR ROUTE

TOWN OF FUQUAY - VARINA

CULVERT 2 @ 10' X 6' RCBC

SITE 1

BEGIN CONSTRUCTION
-Y2- STA 12+80.00

BEGIN TIP PROJECT U-5317
BEGIN CONSTRUCTION
-L- STA 10+18.28

BEGIN CONSTRUCTION
-Y1- STA 10+00.00

TO DUNCAN

TO US 401 (S. MAIN ST)

END CONSTRUCTION
-Y1- STA 19+11.37

BEGIN CONSTRUCTION
-Y2- STA 21+61.84
END CONSTRUCTION
-Y2- STA 23+71.87
END CONSTRUCTION
-Y2- STA 18+70.00

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-5317 = 1.79 MILES

TOTAL LENGTH TIP PROJECT U-5317 = 1.79 MILES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
WAKE COUNTY

LOCATION: SR 5056 NW JUDD PARKWAY FROM NC 42 (ACADEMY STREET) TO NC 55 (BROAD STREET), NC 42 (ACADEMY STREET), SR 1105 (COLEY FARM ROAD), WASHINGTON STREET, SR 1110 (WILSON ROAD), THREE MEADOWS RD, SR 1179 (S. BRIDGE STREET), AND NC 55 (BROAD STREET)
TYPE OF WORK: GRADING, DRAINAGE, PAVING, CURB & GUTTER, CULVERTS, SIGNALS, SIGNING AND PAVEMENT MARKINGS

BEGIN CONSTRUCTION
-Y4- STA 12+50.00

BEGIN CONSTRUCTION
-Y6- STA 13+75.10

BEGIN CONSTRUCTION
-Y5- STA 11+40.82

SITE 5
SITE 4
SITE 3

SITE 2

END CONSTRUCTION
-Y5- STA 17+67.59

END CONSTRUCTION
-DWI- STA 12+00.00

END CONSTRUCTION
-Y3- STA 24+83.06

END TIP PROJECT U-5317
-L- STA 104+72.04

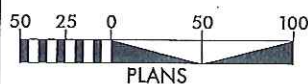
END CONSTRUCTION
-Y7- STA 113+35.00

WETLAND AND STREAMS
PERMIT PACKAGE

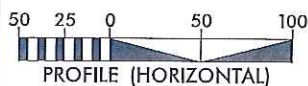
PERMIT DRAWING
SHEET 1 OF 14

CLEARING ON THIS PROJECT SHALL BE PERFORMED
TO THE LIMITS ESTABLISHED BY METHOD II

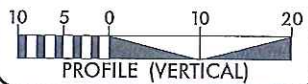
GRAPHIC SCALES



PLANS



PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

DESIGN DATA

ADT 2017 = 5900 VPD
ADT 2040 = 16700 VPD
DHV = 9%
D = 60%
T = 3% *
V = 50 mph

DESIGN EXCEPTION:
N/A

FUNCTIONAL CLASSIFICATION:
URBAN COLLECTOR

* (TTST 1% + DUAL 2%)

PLANS PREPARED FOR
THE NCDOT BY:

Kimley»Horn

© 2016
Post Office Box 31018
Raleigh, North Carolina 27616
FE NO. P-4102

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JULY 2016

LETTING DATE:
AUGUST 2017

MATTHEW WEST, P.E.
PROJECT ENGINEER

ERIN THOMPSON, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____
ROADWAY DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SIGNATURE: _____

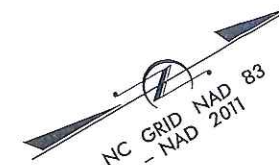
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



STATE HIGHWAY DESIGN ENGINEER

RECEIVED
JUL 14 2017
RALEIGH REGULATORY FIELD OFFICE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5317	1	
STATE PROJ.NO.	P.A. PROJ.NO.	DESCRIPTION	
WIS 410611	STPDA-007 ID		
Action ID: SAW-2013-00905 Applicant: Town of Fuquay Varina Project Name: Judd Parkway Extension TIP No. U-5317 Page 1 of 14			

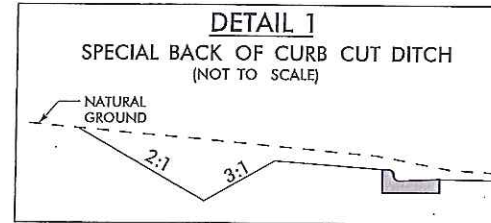


12/22/2016 \$FILEL\$

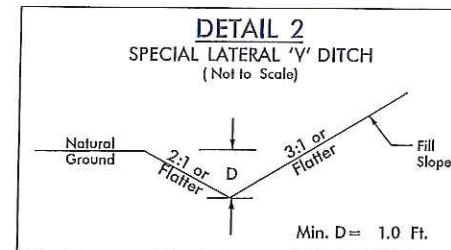
PROJECT REFERENCE NO.	SHEET NO.
U-5317	2K
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

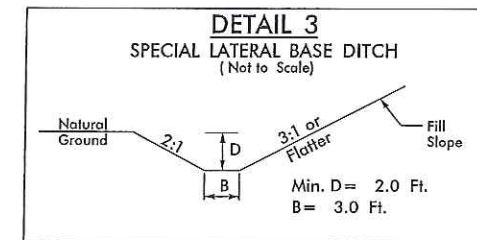
PERMIT DRAWING
SHEET 2 OF 14



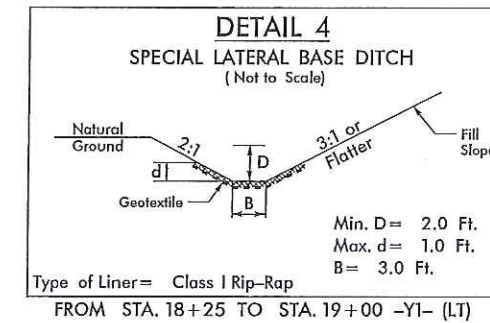
FROM STA. 13+50 TO STA. 15+50 -L- (LT)
FROM STA. 20+05 TO STA. 20+50 -L- (LT)
FROM STA. 62+00 TO STA. 63+50 -L- (LT)
FROM STA. 74+50 TO STA. 76+00 -L- (LT)



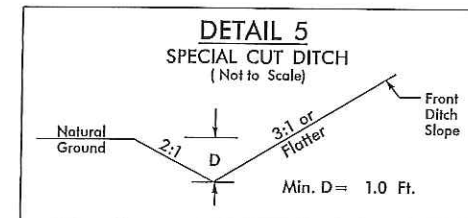
FROM STA. 10+40 TO STA. 13+50 -Y1- (RT)
FROM STA. 15+50 TO STA. 18+00 -L- (LT)
FROM STA. 16+50 TO STA. 19+15 -L- (RT)
FROM STA. 20+50 TO STA. 23+00 -L- (LT)
FROM STA. 23+00 TO STA. 23+80 -L- (LT)
FROM STA. 13+00 TO STA. 13+50 -Y2- (LT)
FROM STA. 13+80 TO STA. 14+65 -Y2- (LT)
FROM STA. 17+00 TO STA. 17+50 -Y2- (LT)
FROM STA. 16+75 TO STA. 18+70 -Y2- (RT)
FROM STA. 25+00 TO STA. 26+00 -L- (LT)
FROM STA. 35+00 TO STA. 35+68 -L- (RT)
FROM STA. 10+90 TO STA. 18+00 -Y3- (LT)
FROM STA. 10+90 TO STA. 15+50 -Y3- (RT)
FROM STA. 65+00 TO STA. 66+77 -L- (LT)
FROM STA. 13+00 TO STA. 17+50 -Y4- (LT)
FROM STA. 13+00 TO STA. 17+00 -Y4- (RT)
FROM STA. 21+00 TO STA. 23+00 -Y4- (RT)
FROM STA. 68+50 TO STA. 74+50 -L- (LT)
FROM STA. 76+00 TO STA. 77+30 -L- (LT)
FROM STA. 77+30 TO STA. 86+00 -L- (RT)
FROM STA. 15+00 TO STA. 16+50 -Y5- (RT)
FROM STA. 16+08 TO STA. 17+15 -Y5- (LT)



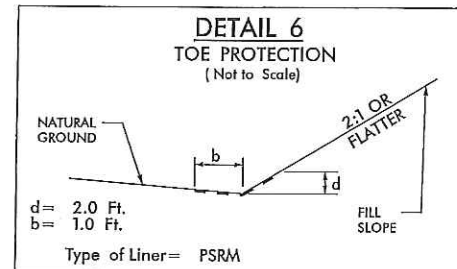
FROM STA. 17+50 TO STA. 18+25 -Y1- (LT)
FROM STA. 10+76 TO STA. 12+57 -L- (RT)



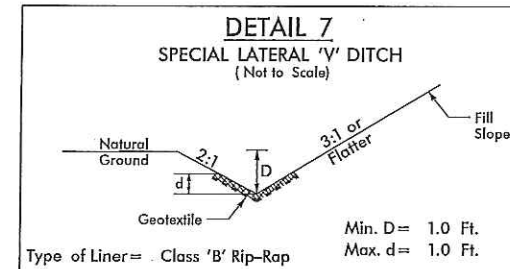
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FROM STA. 18+25 TO STA. 19+00 -Y1- (LT)



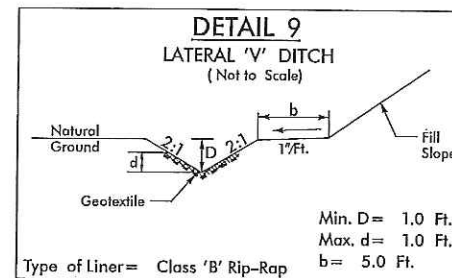
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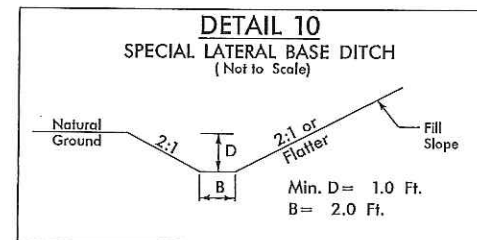
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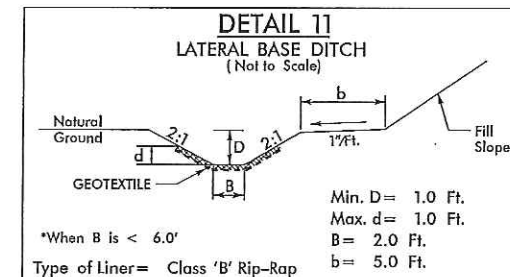
FROM STA. 10+10 TO STA. 10+40 -Y1- (RT)
FROM STA. 13+50 TO STA. 14+00 -Y1- (RT)
FROM STA. 12+50 TO STA. 15+00 -Y2- (RT)
FROM STA. 16+50 TO STA. 17+00 -Y2- (LT)
FROM STA. 36+45 TO STA. 37+50 -L- (RT)
FROM STA. 61+00 TO STA. 62+00 -L- (LT)
FROM STA. 17+50 TO STA. 19+50 -Y4- (LT)
FROM STA. 17+00 TO STA. 21+00 -Y4- (LT)



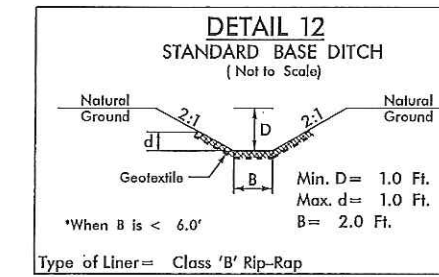
FROM STA. 26+00 TO STA. 27+00 -L- (LT)
FROM STA. 55+15 TO STA. 57+50 -L- (LT)



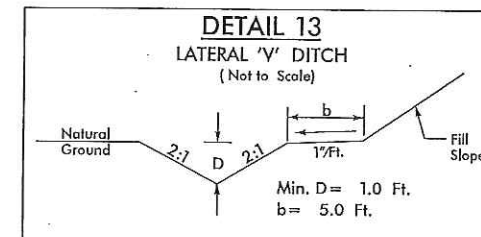
FROM STA. 27+00 TO STA. 28+40 -L- (LT)



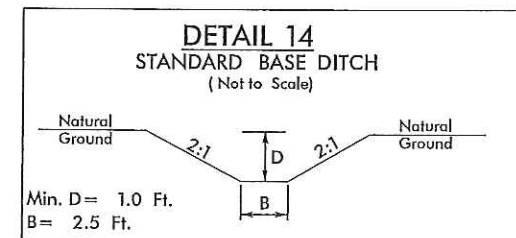
FROM STA. 37+50 TO STA. 37+70 -L- (RT)



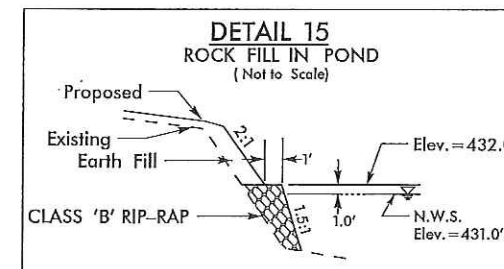
STA. 49+35 -L- (RT)
STA. 56+00 -L- (RT)
STA. 65+00 -L- (RT)



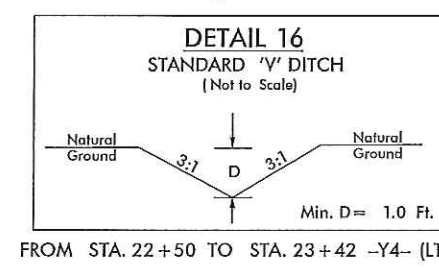
FROM STA. 53+30 TO STA. 55+15 -L- (LT)
FROM STA. 57+50 TO STA. 59+00 -L- (LT)
FROM STA. 60+00 TO STA. 61+00 -L- (LT)



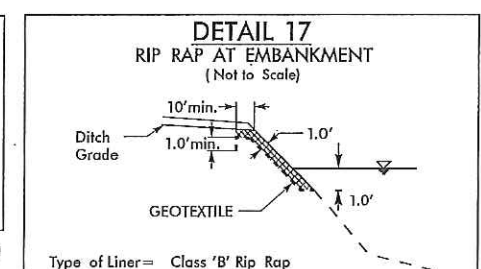
STA. 21+00 -Y4- (LT)



FROM STA. 58+82 TO STA. 60+50 -L- (RT)



FROM STA. 22+50 TO STA. 23+42 -Y4- (LT)



STA. 56+75 -L- (RT)
STA. 60+00 -L- (RT)

REVISIONS

K:\RAL_Roadway\012622005 - (NW Judd Parkway Extension) - Stream\012622005.dwg

12/22/2016

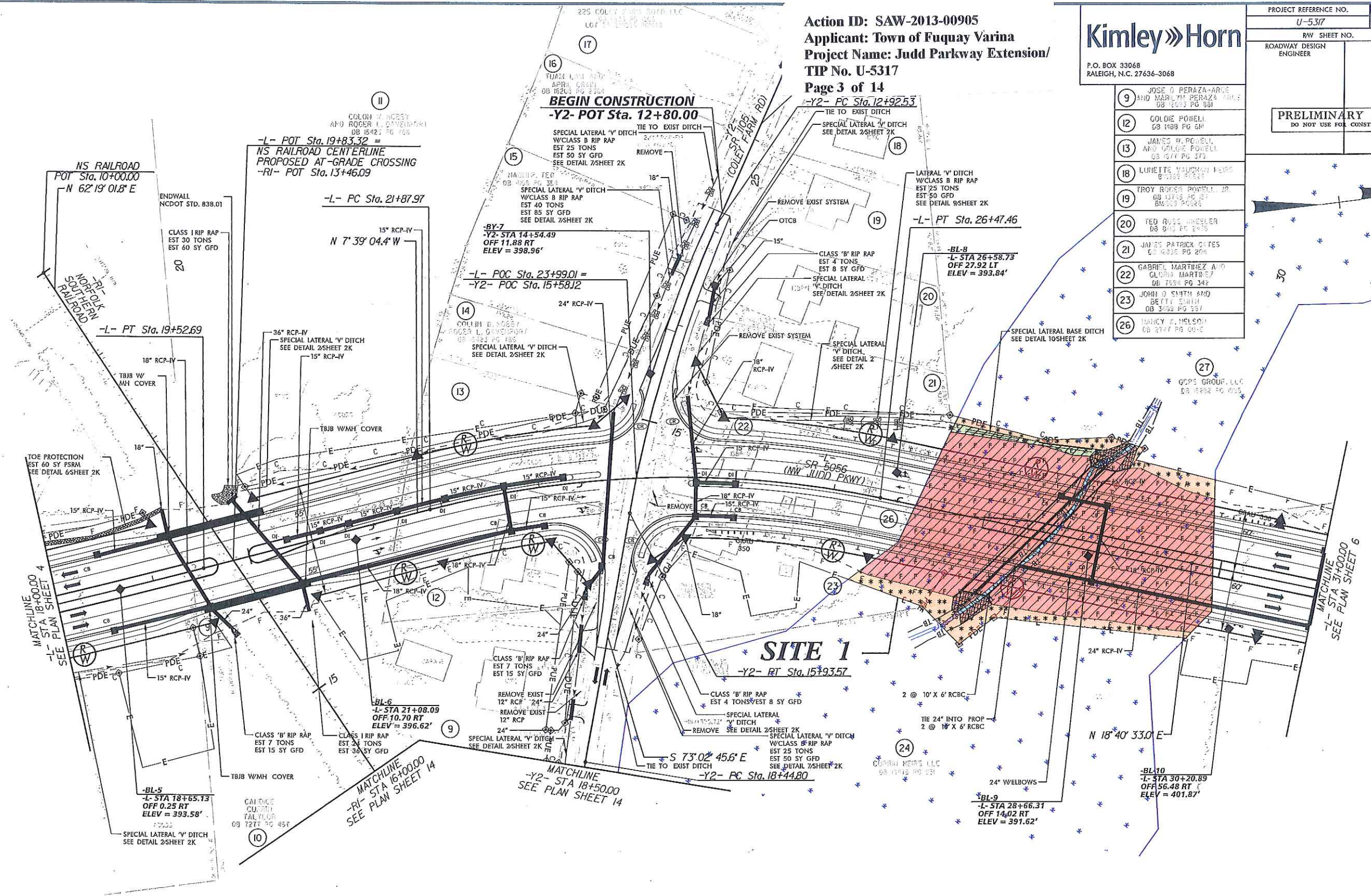
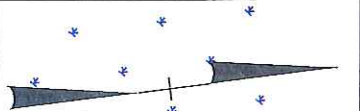
Action ID: SAW-2013-00905
Applicant: Town of Fuquay Varina
Project Name: Judd Parkway Extension/
TIP No. U-5317
Page 3 of 14

Kimley»Horn

P.O. BOX 33068
RALEIGH, N.C. 27636-3068

PROJECT REFERENCE NO.	SHEET NO.
U-5317	5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

9	JOSE O. PERAZA-ARCE DB 1603 PG 681
12	GOLDIE POWELL DB 1609 PG 681
13	JAMES W. POWELL AND GOLDIE POWELL DB 1677 PG 373
18	LURETTE VAUGHAN PERS DB 1388 PG 681
19	TROY BAKER POWELL, JR. DB 1075 PG 681 BM 205 PG 686
20	FED RUSSELL WHEELER DB 840 PG 686
21	JAMES PATRICK GATES DB 1236 PG 676
22	GABRIEL MARTINEZ AND GLORIA MARTINEZ DB 1584 PG 342
23	JOHN D. SMITH AND BETTY SMITH DB 3068 PG 681
26	NANCY K. NELSON DB 2747 PG 686



PERMIT DRAWING
SHEET 3 OF 14

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

REVISIONS

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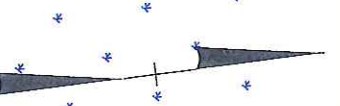
12/22/2016

Kimley»Horn

P.O. BOX 33068
RALEIGH, N.C. 27636-3068

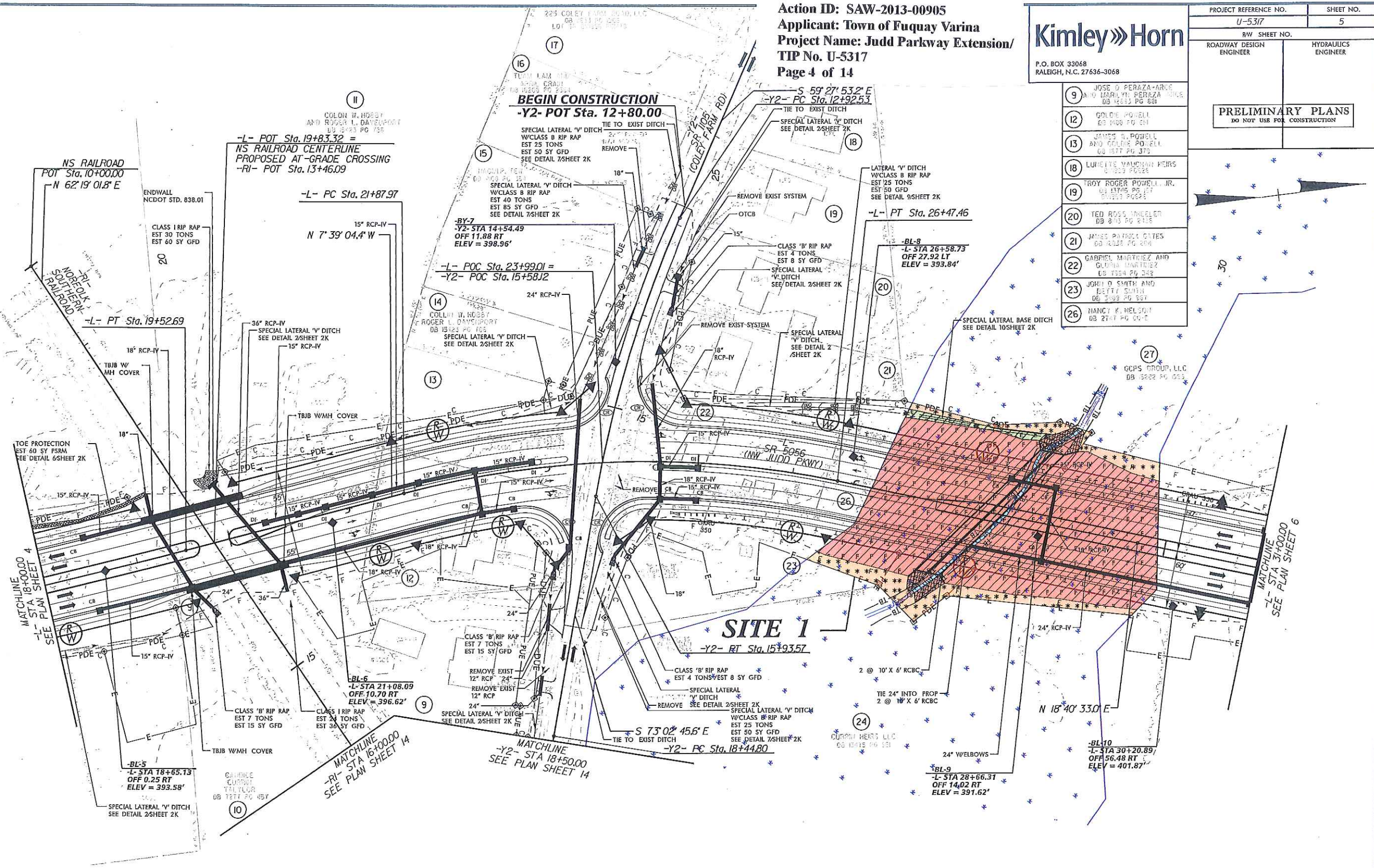
PROJECT REFERENCE NO.	SHEET NO.
U-5317	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

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12	GOLDIE POWELL DB 1520 PG 234
13	JAMES S. POWELL DB 1520 PG 234
18	LURETTE VANDERHEER DB 1520 PG 234
19	TROY ROGER POWELL, JR. DB 1520 PG 234
20	TED ROSS WHEELER DB 1520 PG 234
21	JAMES PATRICK GATES DB 1520 PG 234
22	GABRIEL MARTINEZ AND GLORIA MARTINEZ DB 1520 PG 234
23	JOHN D. SMITH AND BETTY SMITH DB 1520 PG 234
26	NANCY K. NELSON DB 1520 PG 234



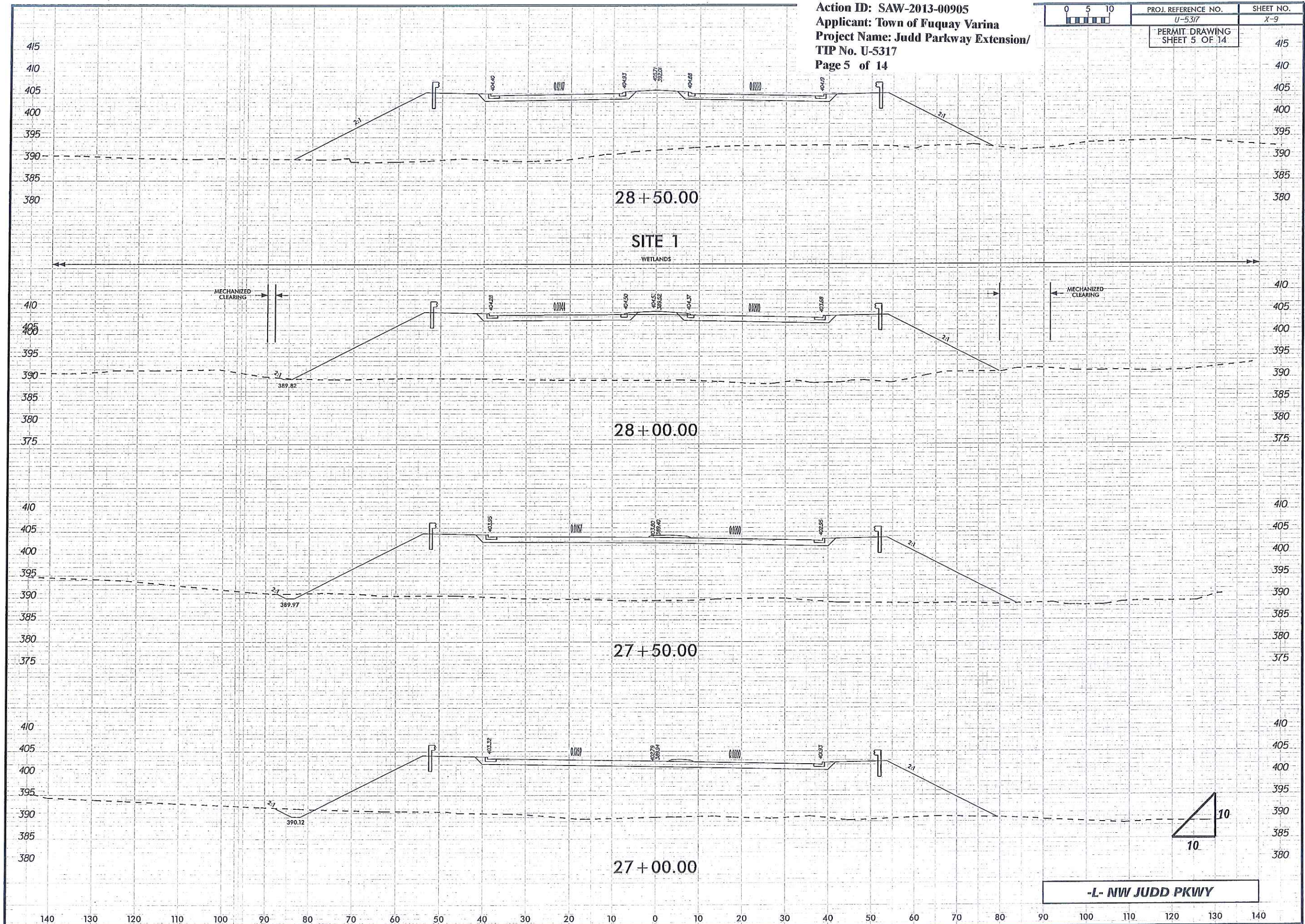
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12/22/2016



PERMIT DRAWING
SHEET 4 OF 14

- Denotes permanent impacts in surface water
- Denotes temporary impacts in surface water
- Denotes permanent fill in wetland
- Denotes permanent excavation in wetland
- Denotes mechanized clearing (temporary)



Action ID: SAW-2013-00905
Applicant: Town of Fuquay Varina
Project Name: Judd Parkway Extension/
TIP No. U-5317
Page 6 of 14

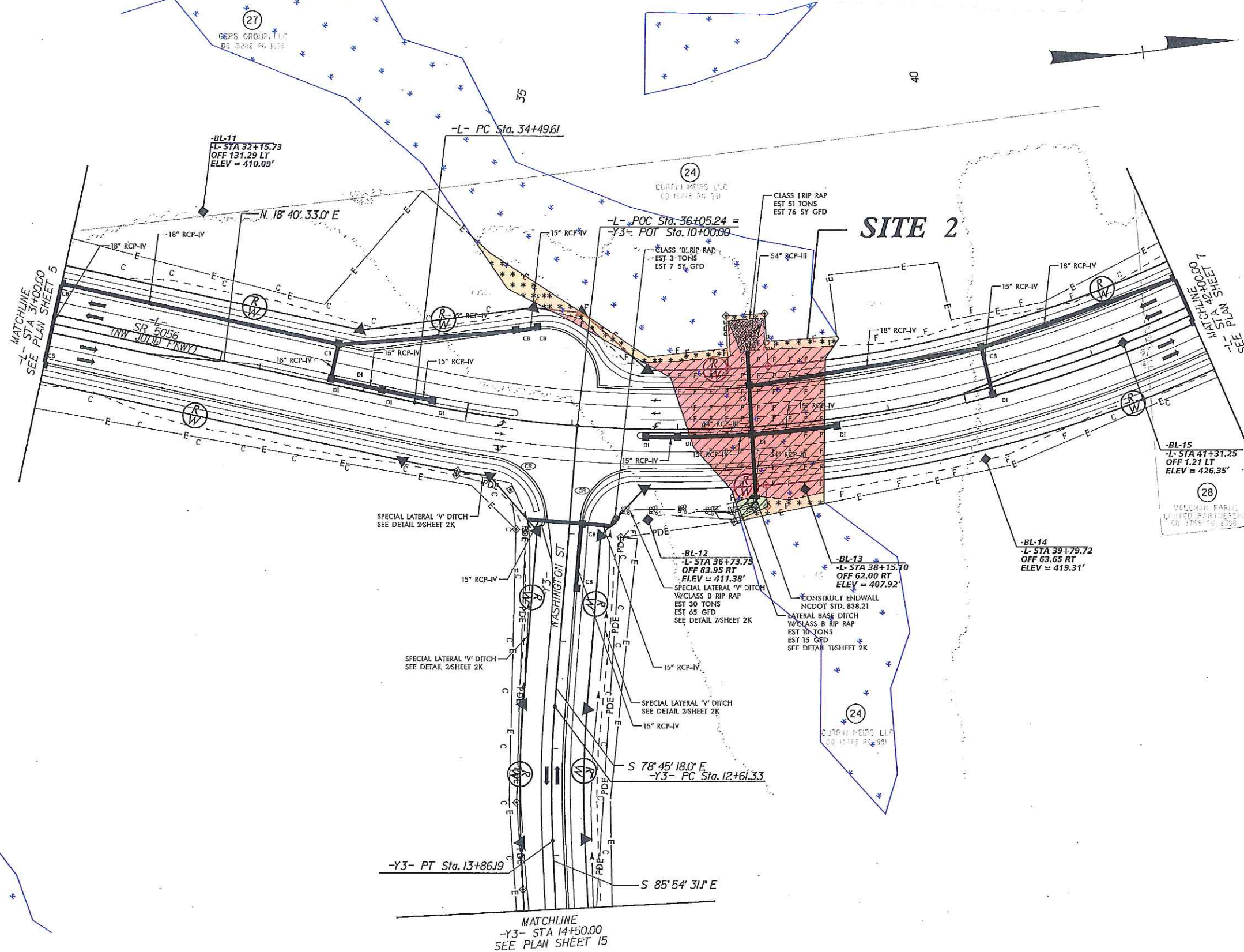
Kimley»Horn

P.O. BOX 33068
RALEIGH, N.C. 27636-3068

PROJECT REFERENCE NO.	SHEET NO.
U-5317	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING
SHEET 6 OF 14

-  DENOTES PERMANENT FILL IN WETLAND
-  DENOTES PERMANENT EXCAVATION IN WETLAND
-  DENOTES MECHANIZED CLEARING (TEMPORARY)



REVISIONS

K:\RAL_Roadway\012622006 - (NW) Judd Parkway Hydraulics Permit Drawings\Wetland-Stream\012622006_NW_Plan_Wet_Pst_6.dgn

12/22/2016

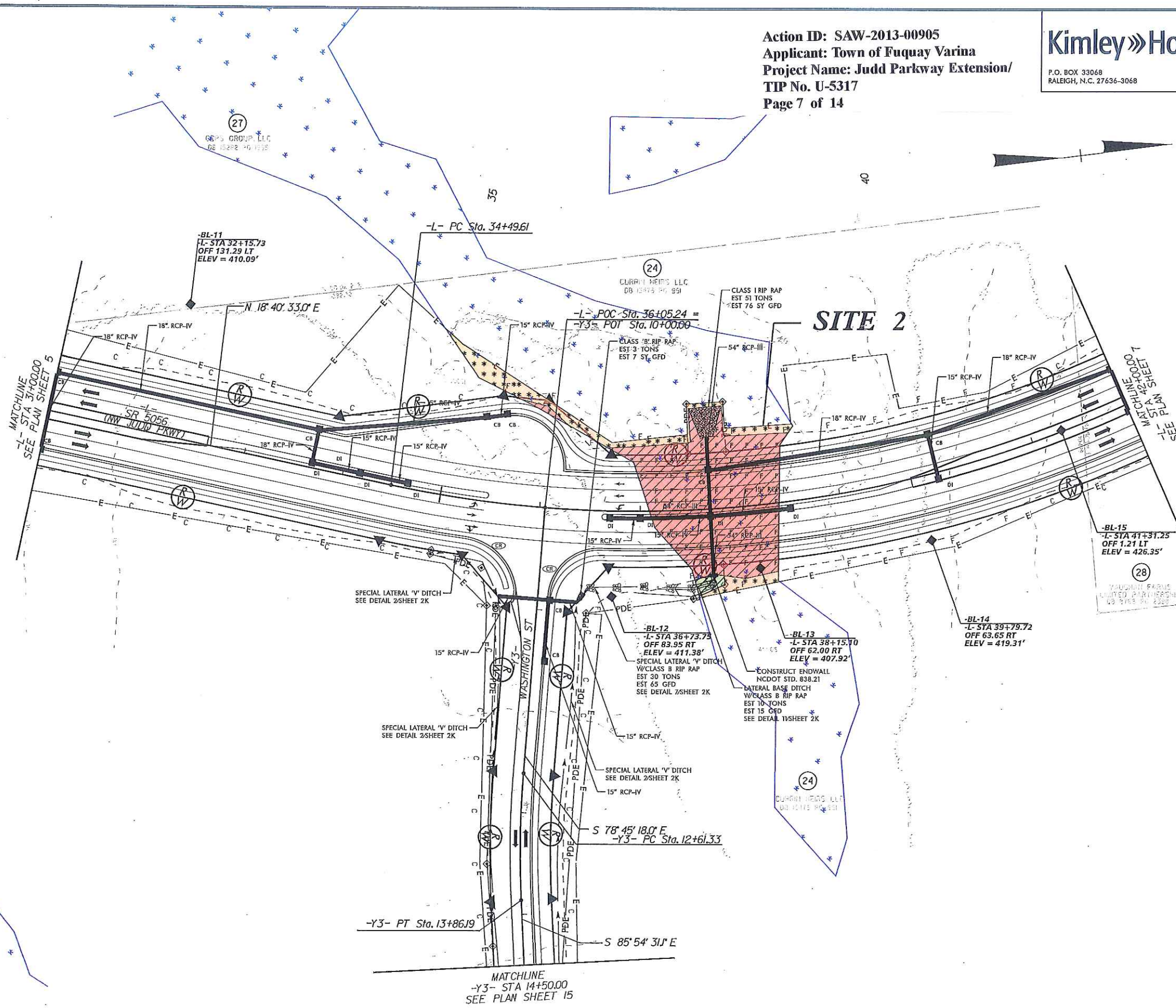
Action ID: SAW-2013-00905
Applicant: Town of Fuquay Varina
Project Name: Judd Parkway Extension/
TIP No. U-5317
Page 7 of 14

Kimley»Horn
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

PROJECT REFERENCE NO. U-5317	SHEET NO. 6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING
SHEET 7 OF 14

-  DENOTES PERMANENT FILL IN WETLAND
-  DENOTES PERMANENT EXCAVATION IN WETLAND
-  DENOTES MECHANIZED CLEARING (TEMPORARY)



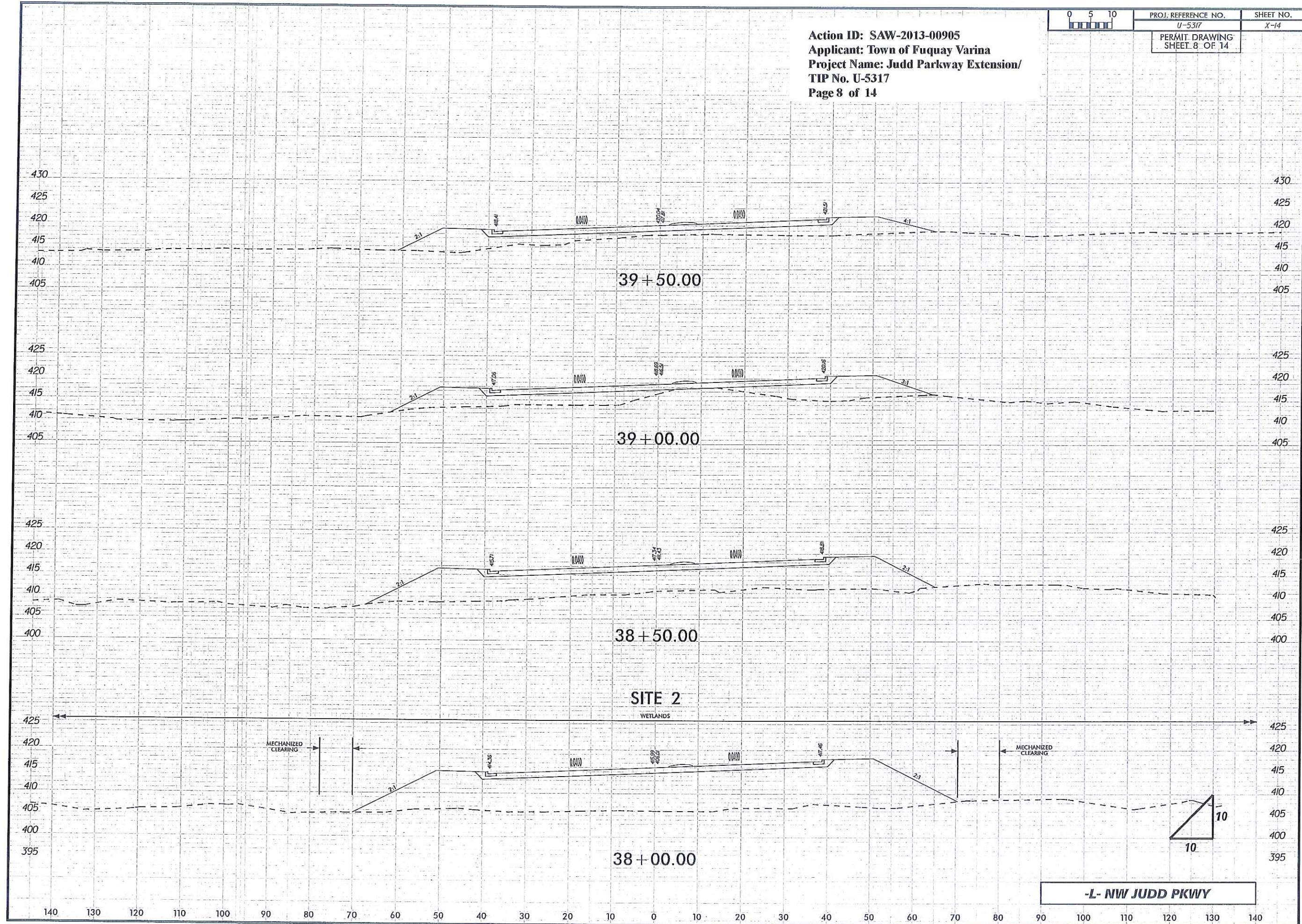
REVISIONS

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12/22/2016

Action ID: SAW-2013-00905
Applicant: Town of Fuquay Varina
Project Name: Judd Parkway Extension/
TIP No. U-5317
Page 8 of 14

0 5 10	PROJ. REFERENCE NO. U-5317	SHEET NO. X-14
	PERMIT DRAWING SHEET 8 OF 14	



 DENOTES PERMANENT IMPACTS IN SURFACE WATER (POND)

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER (POND)



12/22/2016

Action ID: SAW-2013-00905
Applicant: Town of Fuquay Varina
Project Name: Judd Parkway Extension/
TIP No. U-5317
Page 10 of 14

Kimley»Horn

P.O. BOX 33068
RALEIGH, N.C. 27636-3068

PROJECT REFERENCE NO.	SHEET NO.
U-5317	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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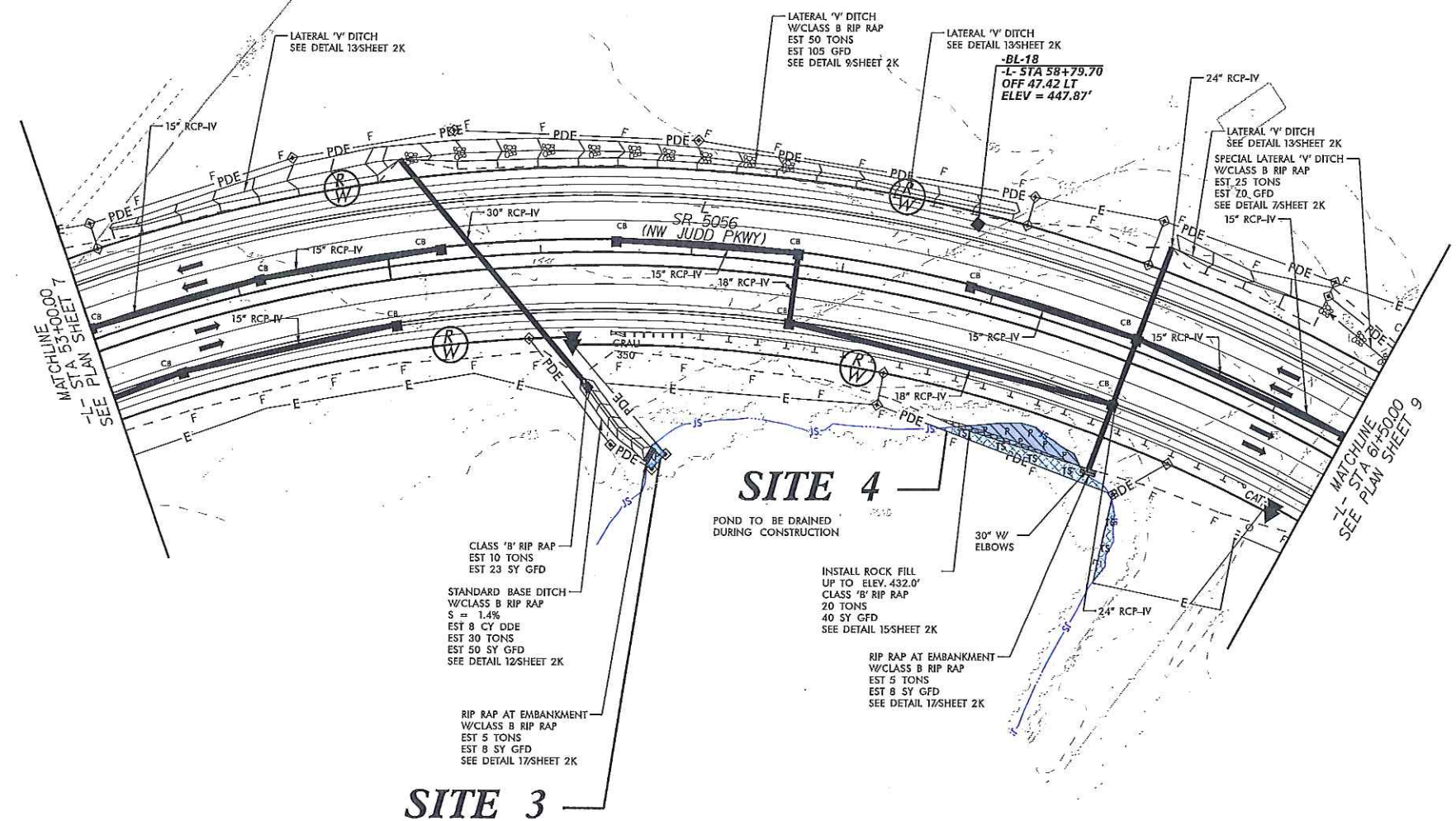
PERMIT DRAWING
SHEET 10 OF 14

■ DENOTES PERMANENT IMPACTS
IN SURFACE WATER (POND)
■ DENOTES TEMPORARY IMPACTS
IN SURFACE WATER (POND)

REVISIONS

K:\RAL_Roadway\012622006 - (NW Judd)\Plan\Hydraulics\Permit_Drawings\Wetland-Stream\012622006_hyd_prm_wet_psl_B_candgn

12/22/2016



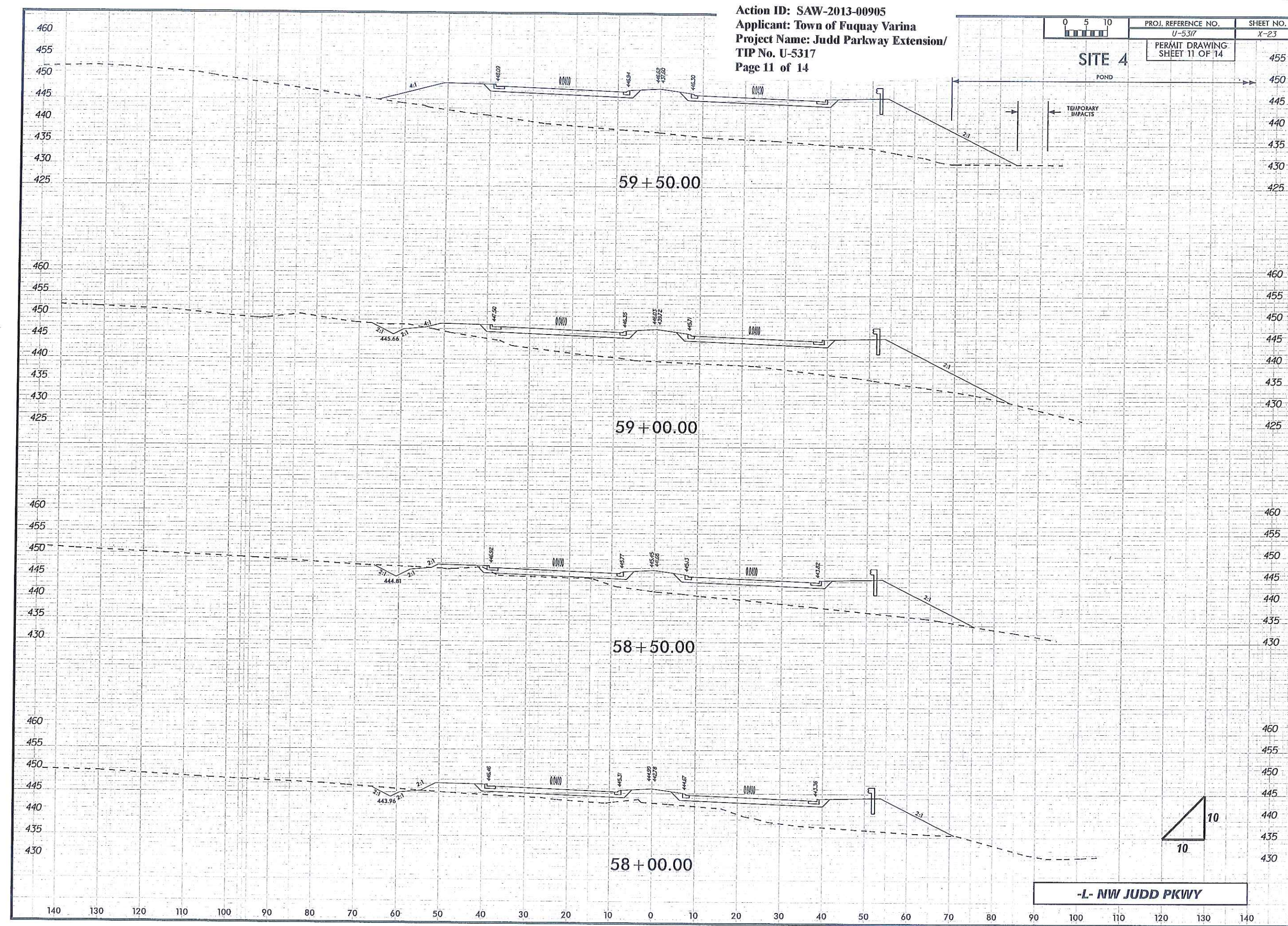


PROJ. REFERENCE NO.	SHEET NO.
U-5317	X-23
PERMIT DRAWING SHEET 11 OF 14	

SITE 4

POND

TEMPORARY
IMPACTS



-L- NW JUDD PKWY

Kimley»Horn

P.O. BOX 33068
RALEIGH, N.C. 27636-3068

PROJECT REFERENCE NO.		SHEET NO.	
U-5317		9	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

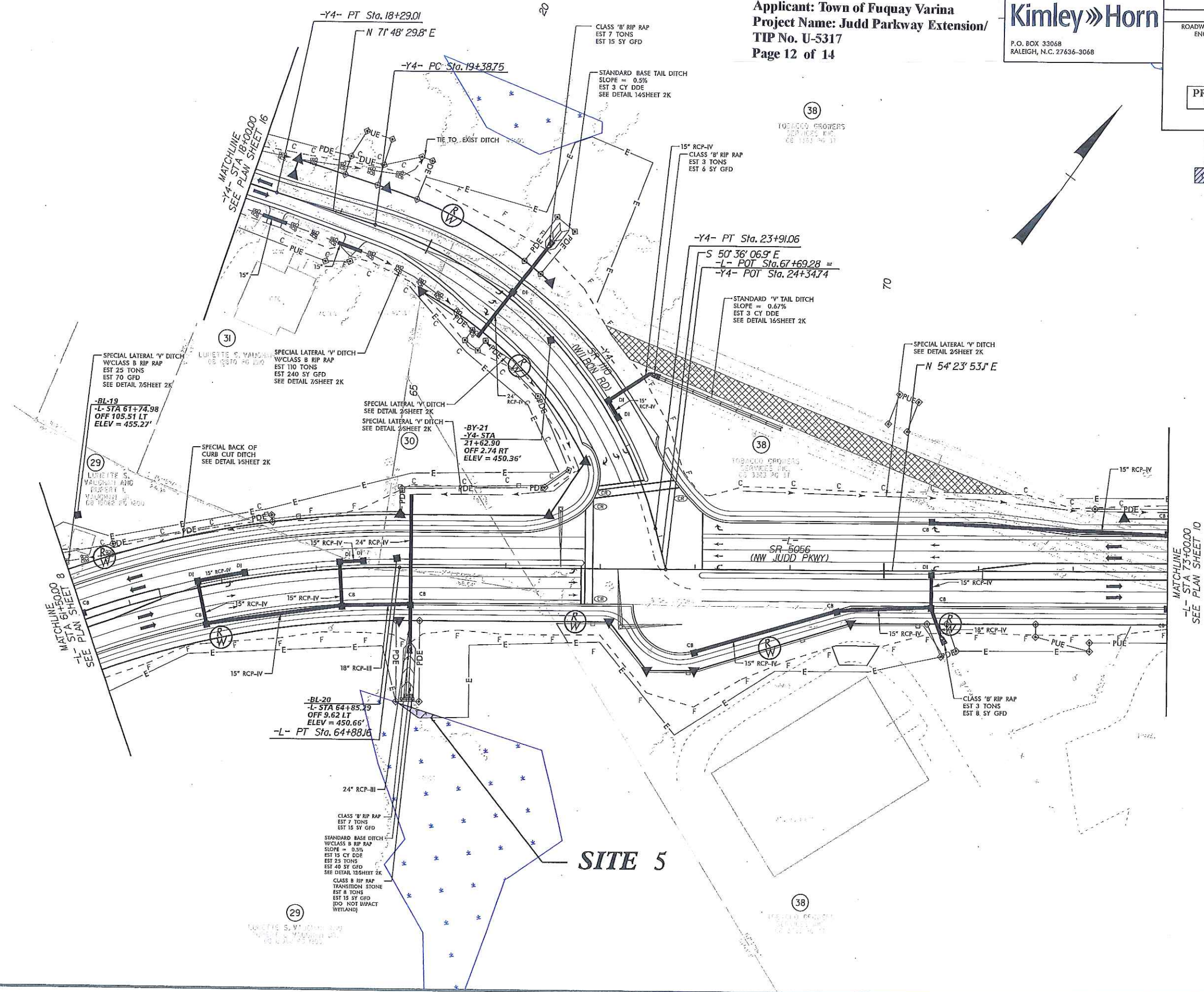
PERMIT DRAWING
SHEET 12 OF 14

 DENOTES TEMPORARY FILL IN WETLAND

REVISIONS

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12/22/2016



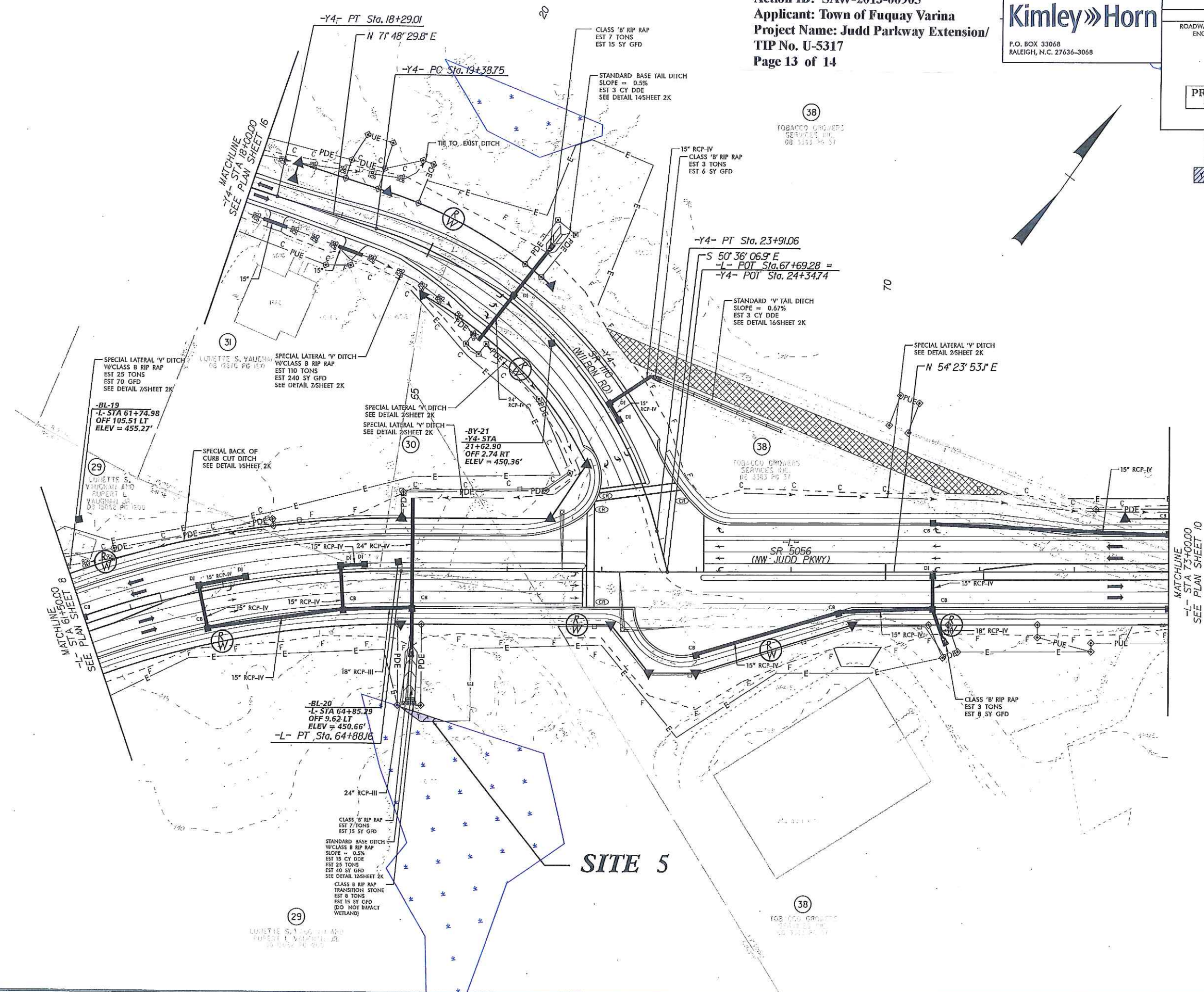
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U-5317		9	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			

PERMIT DRAWING
SHEET 13 OF 14

DENOTES TEMPORARY
FILL IN WETLAND

REVISIONS

12/22/2016 K:\RAL_Roadway\012622006 - (NW Judd Parkway Hydraulics Permit Drawings)\Wetland-Stream\012622006_jyd_perm_wet_dsh_9.dgn



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)	Non-404 Existing Channel Impacts Permanent (ft)
1	26+32/30+00 -L-	Fill	1.110		0.021	0.154				250.0	23.0		
2	34+73/38+63 -L-	Fill	0.419		0.009	0.094							
3	56+75/56+90 -L-	Fill						0.003					
4	58+87/60+37 -L-	Fill						0.019	0.023				
5	64+88/65+35 -L-	Fill		0.005									
TOTALS*:			1.529	0.005	0.030	0.248		0.022	0.023	250.0	23.0		

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
12/19/2016
WAKE COUNTY
012622006_NW Judd