



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

April 2, 2019

US Army Corps of Engineers
2407 West 5th Street
Washington, North Carolina 27889-1000

Attention: Mr. Tom Steffens
NCDOT Coordinator

Dear Sir:

Subject: Revised Application for Section 404 Individual Permit and Section 401 Water Quality Certification for the proposed Havelock Bypass in Craven County. TIP No. R-1015. WBS 34360.1.2

The North Carolina Department of Transportation (NCDOT) applied for Section 404 CWA authorization to construct a new US 70 bypass of Havelock, North Carolina in Craven County on November 20, 2018. The purpose of this letter is to provide modified permit drawings that better depict NCDOT's adherence with clearing requirements between Stations 338+00 to 393+00, in compliance with project commitments in the Havelock Bypass Final EIS (July 2016, Sheet 4 of 7).

Enclosed you will find revised permit drawings for the area between stations 338+00 to 393+00. This affects permit sites 26, 27, 28A, 28B, 29, 30, and 31. The mechanized clearing shown at those sites has been changed to hand clearing. This coincides with the clearing restrictions already indicated in the erosion control plans. Revised summary sheets are also enclosed, which show the shift of 0.6 acre of wetlands clearing impacts at the affected sites from the mechanized land clearing column to the hand clearing column. As a result, the Department will reduce the proposed compensatory mitigation to correspond with this reduction in permanent impacts. A copy of the latest NC Division of Mitigation Services acceptance letter forthcoming.

A copy of this revised application and its distribution list will be posted on the NCDOT website at: <https://xfer.services.ncdot.gov/pdea/PermApps/>

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Gordon Cashin at gcashin@ncdot.gov or (919) 707-6107.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip S. Harris III".

for Philip S. Harris III, P.E., C.P.M., Unit Head
Environmental Analysis Unit

cc: NCDOT Permit Application Standard Distribution List

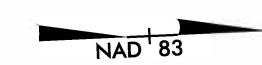
Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENT ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Fax: (919) 212-5785
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

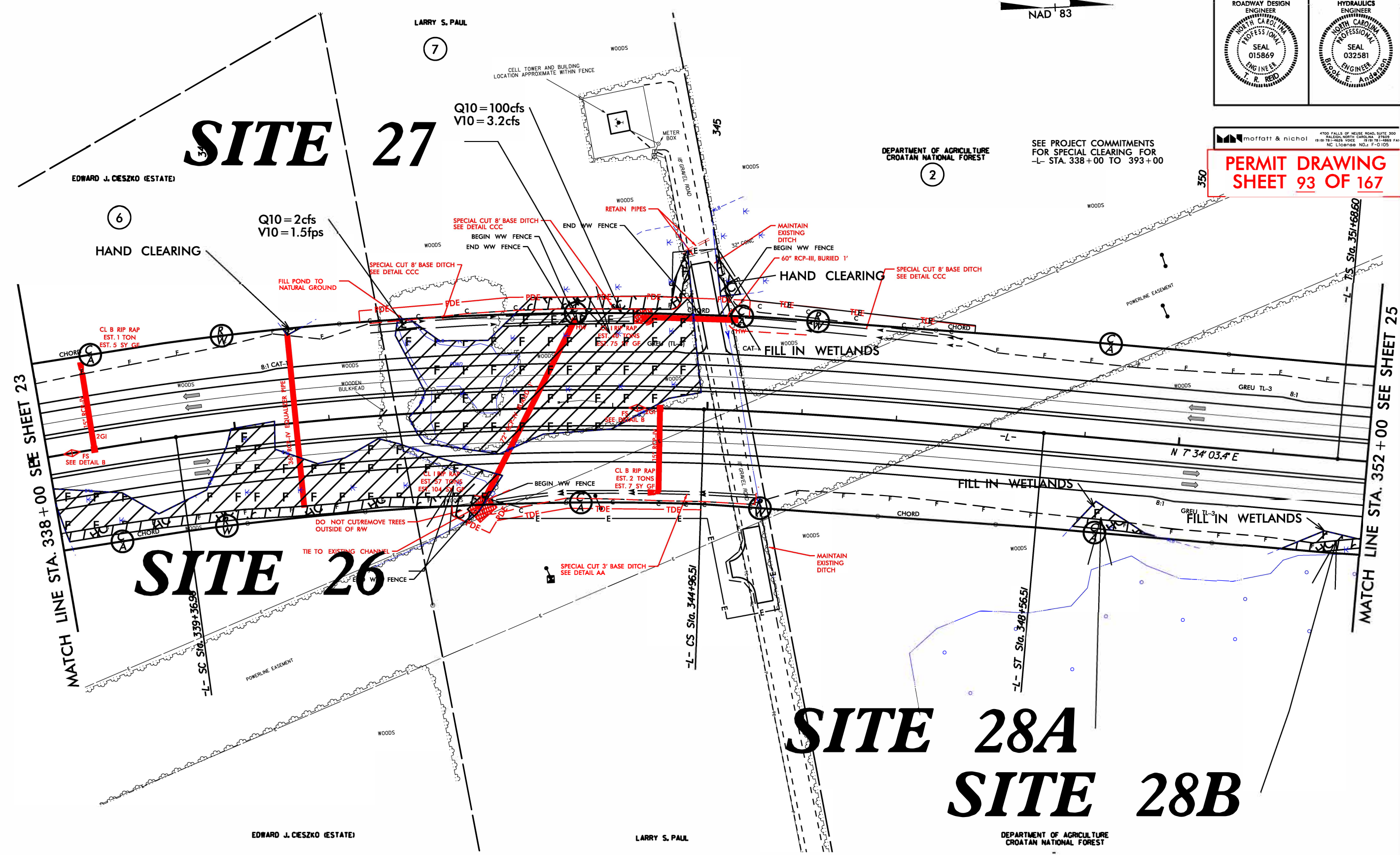
Revised 4/1/2019

PROJECT REFERENCE NO. R-1015	SHEET NO. 24
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 BOOK E AND B

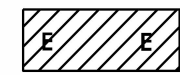


SEE PROJECT COMMITMENTS FOR SPECIAL CLEARING FOR -L- STA. 338+00 TO 393+00

PERMIT DRAWING SHEET 93 OF 167



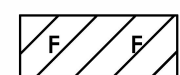
REVISIONS



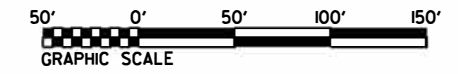
DENOTES EXCAVATION IN WETLAND



DENOTES HAND CLEARING



DENOTES FILL IN WETLAND



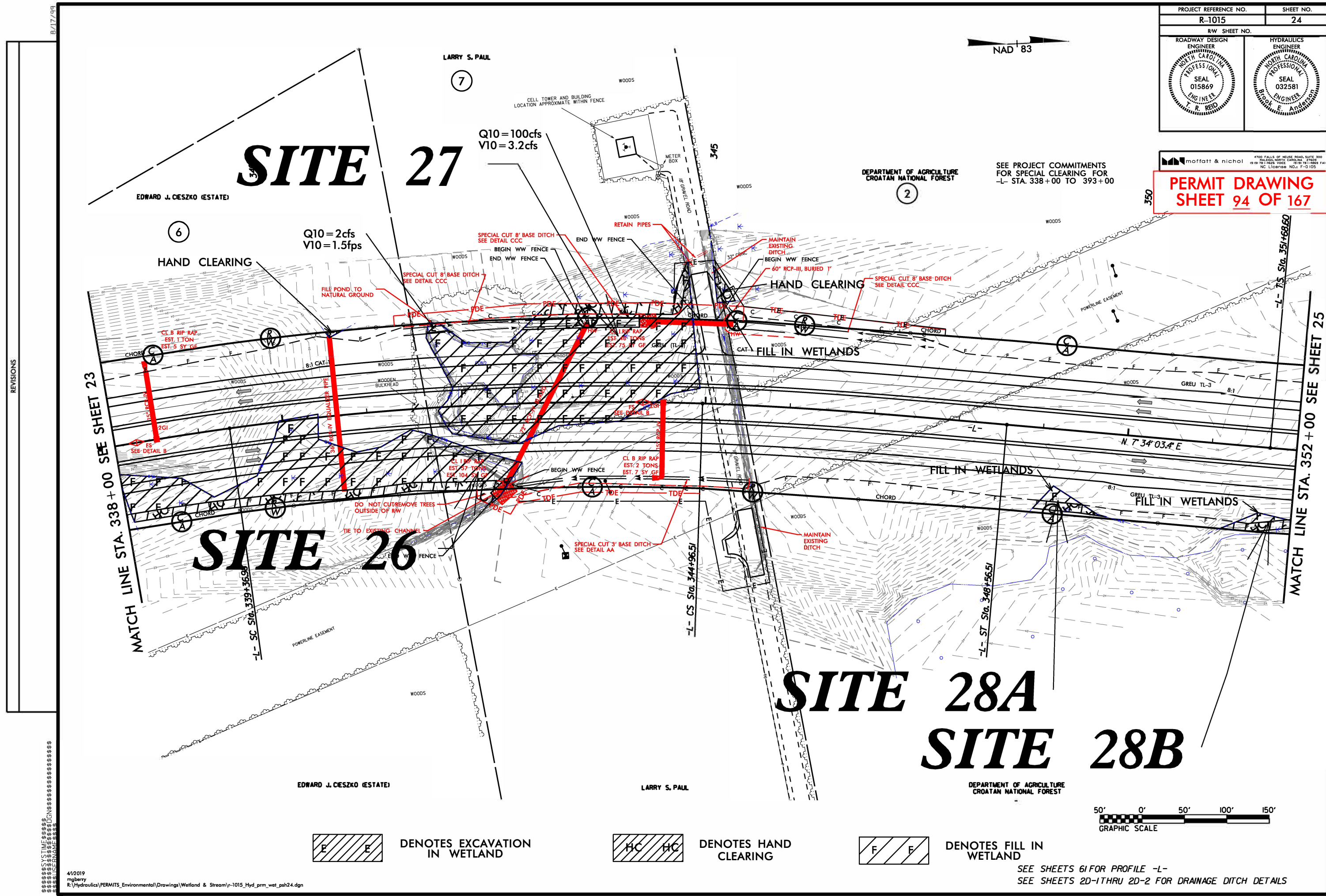
SEE SHEETS 61 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

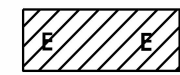
PROJECT REFERENCE NO. R-1015	SHEET NO. 24
ROADWAY DESIGN ENGINEER T. R. REID	HYDRAULICS ENGINEER T. R. REID

SEE PROJECT COMMITMENTS FOR SPECIAL CLEARING FOR -L- STA. 338+00 TO 393+00

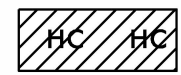
PERMIT DRAWING SHEET 94 OF 167



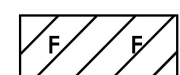
REVISIONS



DENOTES EXCAVATION IN WETLAND



DENOTES HAND CLEARING



DENOTES FILL IN WETLAND

4/2019
mgberry
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SEE SHEETS 61 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

7/13/2018

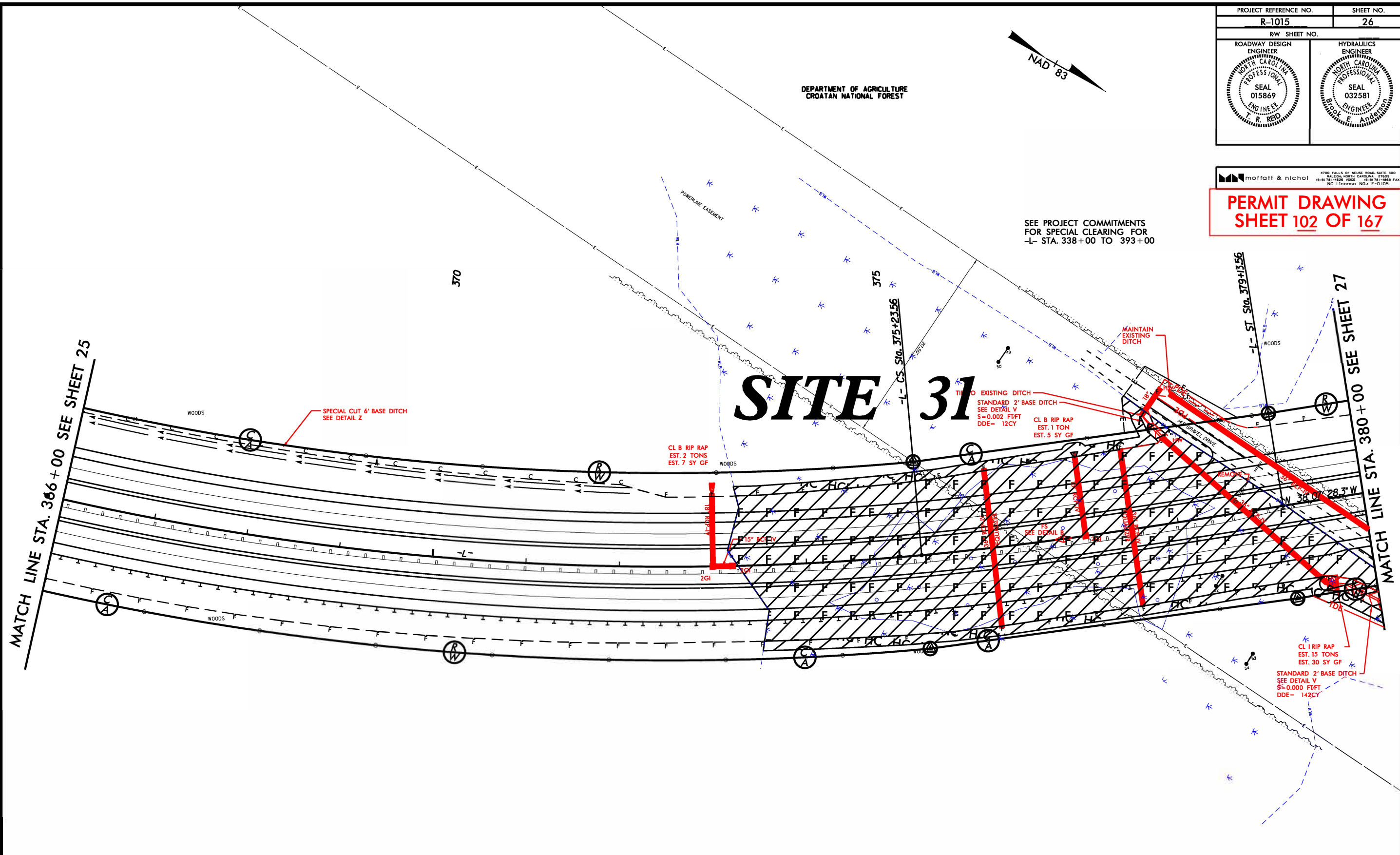
REVISIONS

PARCEL 3 - ELIMINATED PDE STATION -L- 369+50 TO 369+05 RT
PARCEL 3 - ELIMINATED PDE STATION -L- 370+05 TO 371+70 RT
PARCEL 2 - ADDED TIE STATION -L- 379+30 TO 380+00 RT
PARCEL 2 - CHANGED TIE TO PDE AND REVISED AREA STATION -L- 378+35 TO 378+66 LI
PARCEL 2 - REVISED TIE AREA STATION -L- 377+58 TO 378+80 LI

PROJECT REFERENCE NO. R-1015	SHEET NO. 26
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. A. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 B. A. ANDERSON

4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
919.781.4828 VOICE 919.781.1868 FAX
NC LICENSE NO. F-01025

PERMIT DRAWING
SHEET 102 OF 167



SEE PROJECT COMMITMENTS FOR SPECIAL CLEARING FOR -L- STA. 338+00 TO 393+00

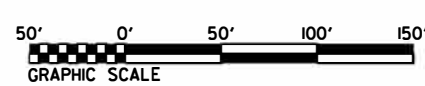
MATCH LINE STA. 366+00 SEE SHEET 25

MATCH LINE STA. 380+00 SEE SHEET 27

SITE 31

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

(2)



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DENOTES EXCAVATION IN WETLAND
- 

DENOTES HAND CLEARING
- 

DENOTES FILL IN WETLAND

SEE SHEETS 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

4/2019
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Revised 4/1/2019

7/13/2018 --
PARCEL 3 -- ELIMINATED POE STATION -L- 368+50 TO 369+05 RT
PARCEL 3 -- ELIMINATED POE STATION -L- 370+05 TO 371+70 RT
PARCEL 3 -- ADDED POE STATION -L- 379+30 TO 380+00 RT
PARCEL 2 -- CHANGED IDE TO POE AND REVISED AREA STATION -L- 378+35 TO 378+66 LT
PARCEL 2 -- REVISED TOE AREA STATION -L- 377+58 TO 378+80 LT

REVISIONS

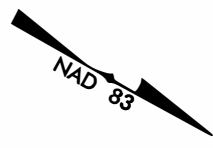
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PROJECT REFERENCE NO. R-1015	SHEET NO. 26
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 BOOK E. ANDERSON

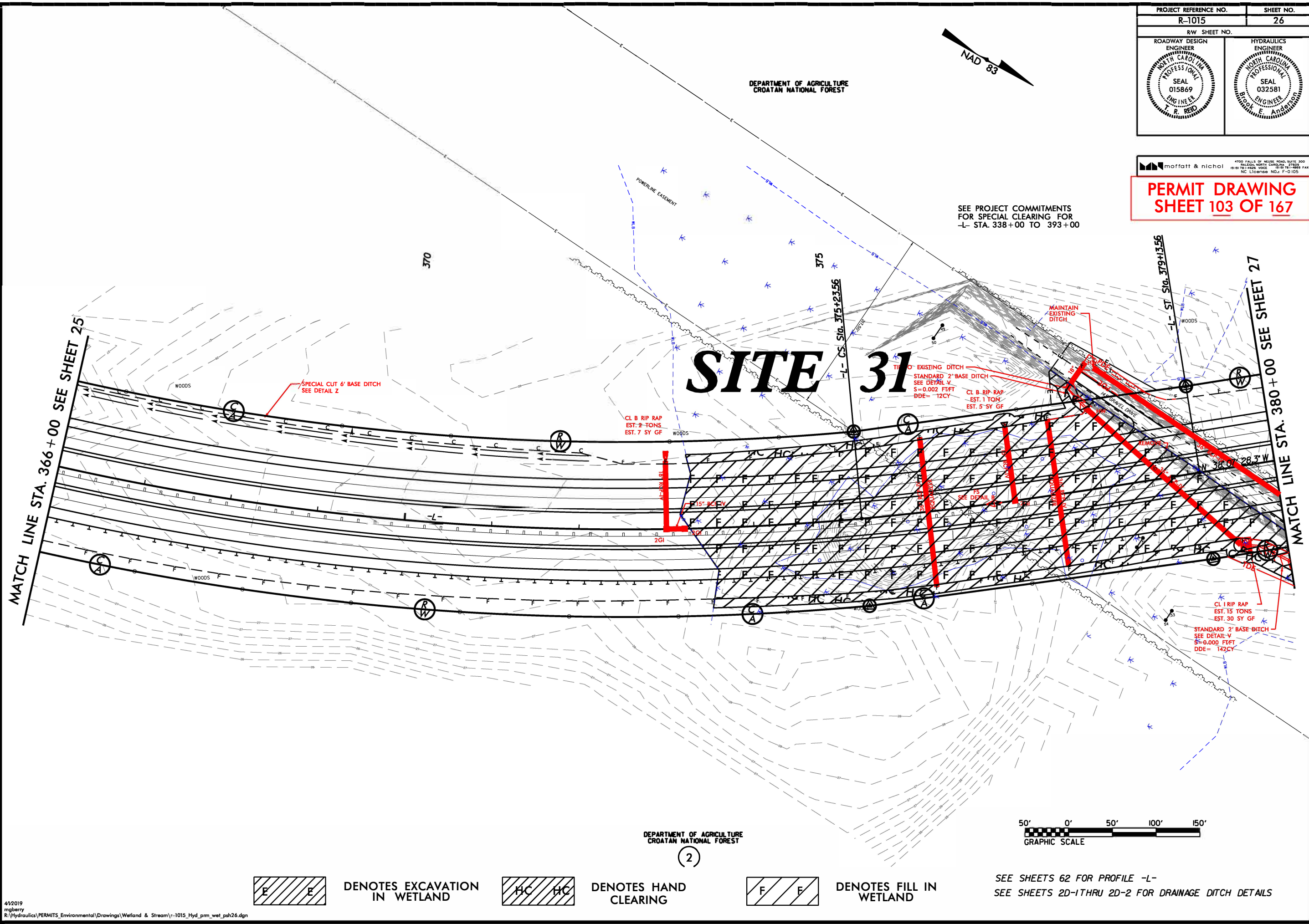
moffatt & nichol
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27607
919.781.4828 VOICE 919.781.2825 FAX
NC LICENSE NO. F-0105

PERMIT DRAWING
SHEET 103 OF 167



DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

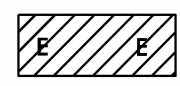
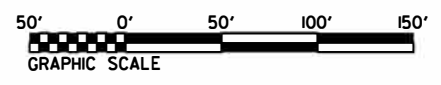
SEE PROJECT COMMITMENTS
FOR SPECIAL CLEARING FOR
-L- STA. 338+00 TO 393+00



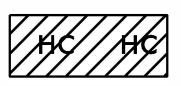
SITE 31

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

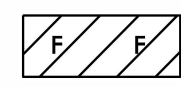
(2)



DENOTES EXCAVATION
IN WETLAND



DENOTES HAND
CLEARING



DENOTES FILL IN
WETLAND

SEE SHEETS 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

7/13/2018 -- PARCEL 2 -- ADDED TDE STATION -L- 380+00 TO 381+12 RT
PARCEL 2 -- REVISED PDE AREA STATION -L- 381+12 TO 381+40 RT

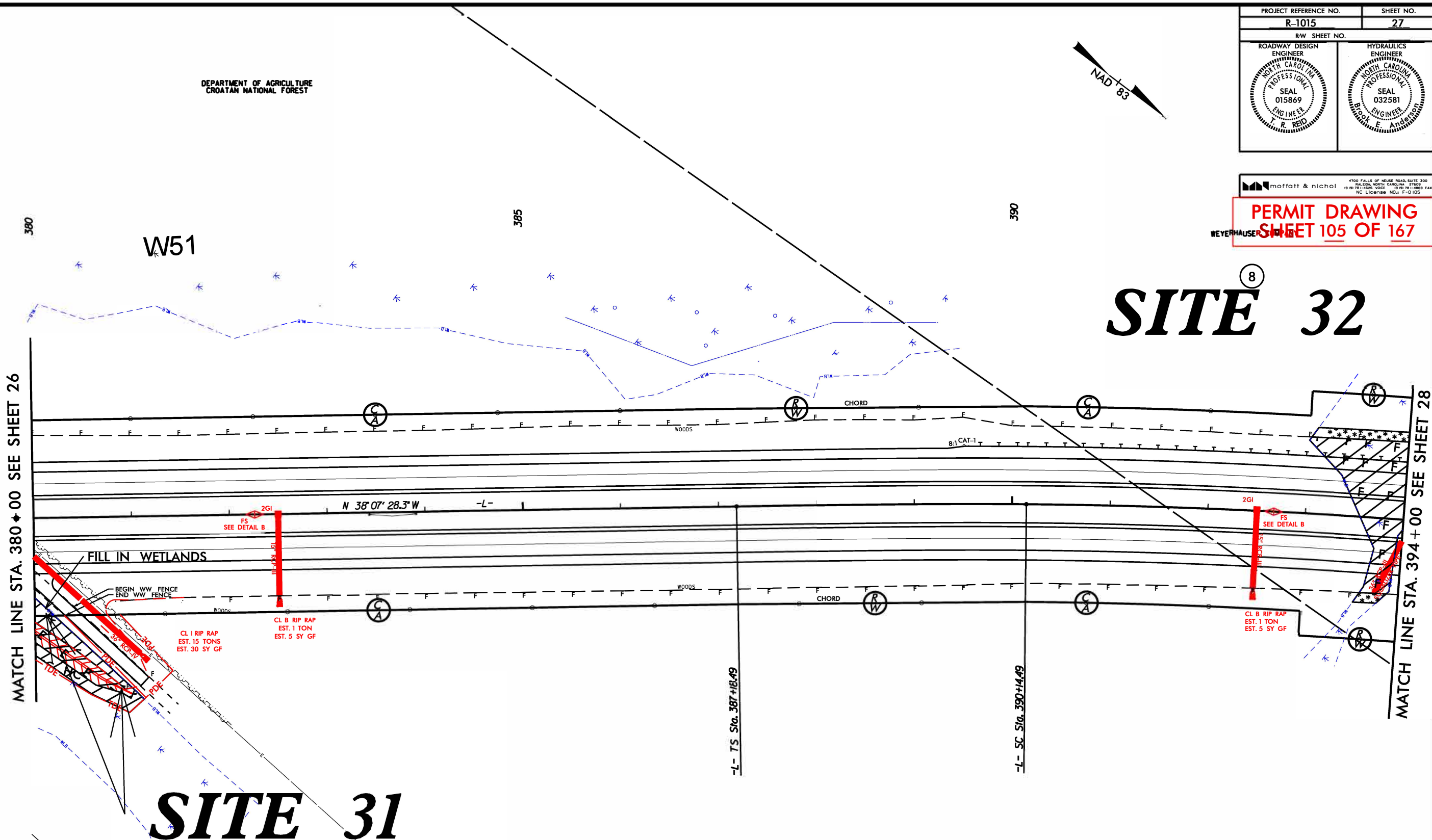
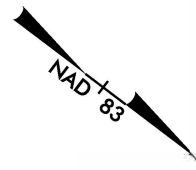
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DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

PROJECT REFERENCE NO. R-1015	SHEET NO. 27
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 015869 T. R. REID	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 032581 B. A. ANDERSON

moffatt & nichol
4100 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
919 781-4828 VOICE 919 781-1888 FAX
NC LICENSE NO. F-D-105

PERMIT DRAWING
SHEET 105 OF 167



MATCH LINE STA. 380 + 00 SEE SHEET 26

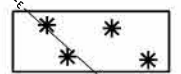
MATCH LINE STA. 394 + 00 SEE SHEET 28

SITE 31

SITE 32



DENOTES HAND CLEARING



DENOTES MECHANIZED CLEARING



DENOTES FILL IN WETLAND

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

2



SEE SHEET 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

REVISIONS

7/13/2018 - PARCEL 2 - ADDED TDE STATION -L- 380+00 TO 381+12 RT
PARCEL 2 - REVISED PDE AREA STATION -L- 381+12 TO 381+40 RT

B/17/99

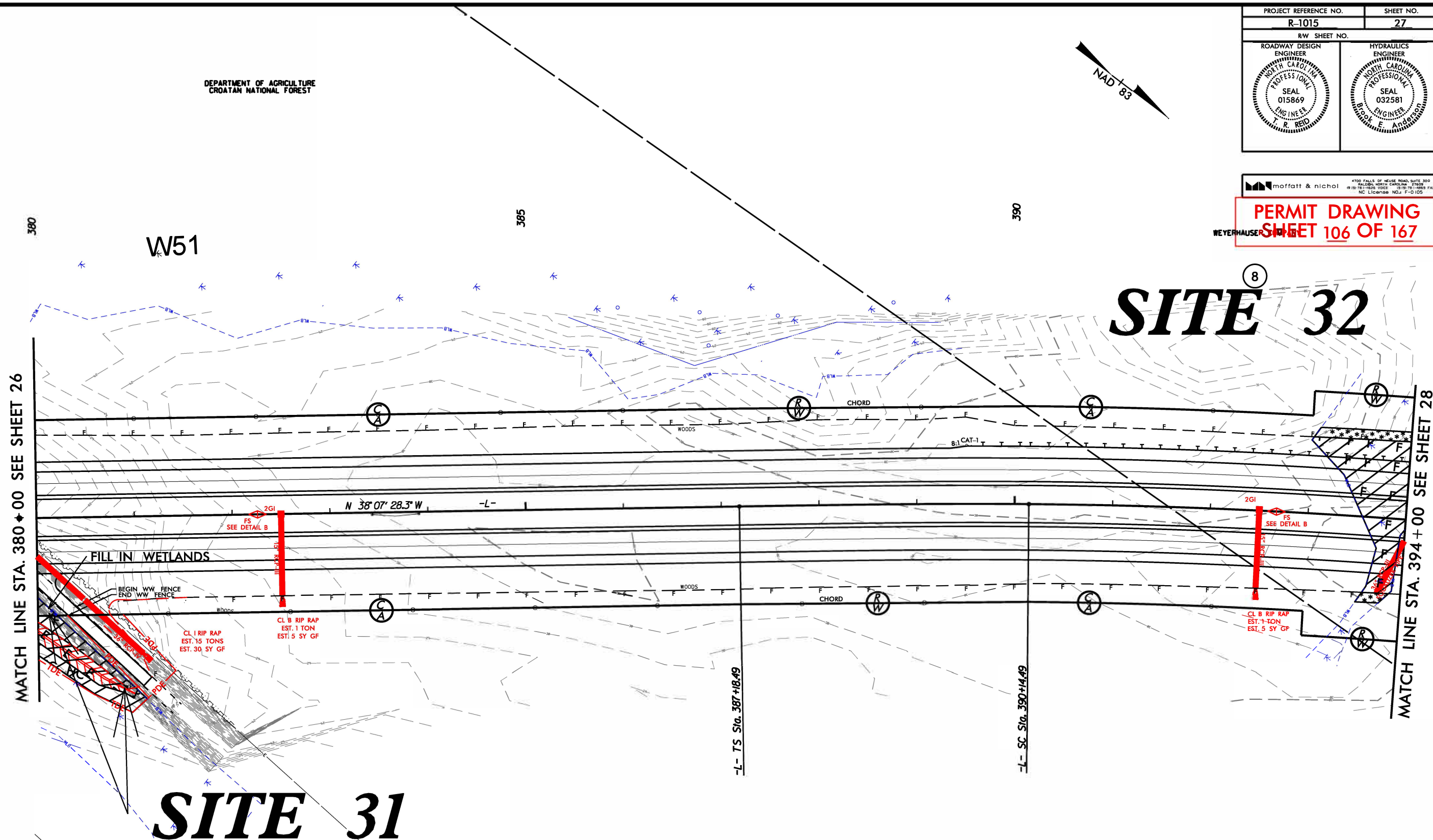
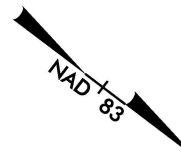
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DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

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NC LICENSE NO. F-0105

PERMIT DRAWING
SHEET 106 OF 167

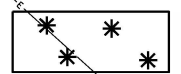


SITE 31

SITE 32



DENOTES HAND CLEARING



DENOTES MECHANIZED CLEARING



DENOTES FILL IN WETLAND

DEPARTMENT OF AGRICULTURE
CROATAN NATIONAL FOREST

2



SEE SHEET 62 FOR PROFILE -L-
SEE SHEETS 2D-1 THRU 2D-2 FOR DRAINAGE DITCH DETAILS

Revised 4/1/2019

WETLAND AND SURFACE WATER IMPACTS 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)
20	57+34 TO 62+48 -Y3- RT	ROADWAY FILL	1.46		0.10	0.18						
21	58+29 TO 63+51 -Y3- RT	ROADWAY FILL	0.55		0.22	0.08						
21A	58+89 TO 64+03Y3DET- LT/RT	TEMP DETOUR		0.25	0.11		0.12					
22	267+83 TO 273+90 -L- LT/RT	84" RCP, BURIED 1'	0.86			0.12		0.05	0.01	583.6	61.1099	
23	280+57 TO 293+27 -L- LT/RT	Dual Bridge; 7 @ 135', 72" MBT	1.03			0.15	3.05					
24	308+19 TO 314+60 -L- LT/RT	42" RCP	0.74		0.04	0.06						
25A	328+41 TO 336+80 -L- LT/RT	2 @ 72" RCP, BURIED 1'	1.80		0.10	0.12						
25B	325+13 TO 325+48 -L- RT	ROADWAY FILL	< 0.01			< 0.01						
26	337+97 TO 342+81 -L- RT	72" RCP, BURIED 1'	0.48		< 0.01		0.11					
27	340+63 TO 344+93 -L- LT	72" RCP, BURIED 1'	0.79		0.05		0.07					
28A	348+96 TO 349+65 -L- RT	ROADWAY FILL	0.01				0.02					
28B	351+33 TO 352+19 -L- RT	ROADWAY FILL	< 0.01				0.02					
29	355+33 TO 357+51 -L- LT	ROADWAY FILL	0.03		0.07		0.04					
30	355+83 TO 357+47 -L- RT	ROADWAY FILL	0.27				0.04					
31	373+16 TO 380+23 -L- LT/RT	ROADWAY FILL	2.23		0.07		0.31					
32	392+99 TO 399+33 -L- LT/RT	ROADWAY FILL	0.56			0.15						
33	408+22 TO 408+87 -L- LT	ROADWAY FILL	< 0.01			0.01						
34	409+25 TO 409+75 -L- RT	ROADWAY FILL	0.18			< 0.01						
35A	432+62 TO 449+72 -L- LT/RT	ROADWAY FILL	5.49			0.77						
35B	450+94 TO 454+47 -L- LT/RT	ROADWAY FILL	0.71			0.11						
36A	456+65 TO 461+70 -L- LT/RT	84" RCP, BURIED 1'	0.79			0.15						
36B	462+57 TO 464+60 -L- LT/RT	ROADWAY FILL	0.50		0.02	0.05						
37	468+85 TO 486+94 -L- LT/RT	ROADWAY FILL	3.43		0.01	0.50						
SUB TOTALS THIS SHEET*:			21.93	0.25	0.79	2.47	3.77	0.05	0.01	584	61	0

*Rounded totals are sum of actual impacts

NOTES:
Bridge Impacts at Site 23: 0.04 acres for Temporary Bents, <0.01 acres for all permanent bents.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
04/01/2019
CRAVEN COUNTY
R-1015
34360.1.2
SHEET 166 OF 167

Revised 2016 09 09

Revised 4/1/2019

WETLAND AND SURFACE WATER IMPACTS 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)
38A	489+64 TO 493+80 -L- LT/RT	ROADWAY FILL	0.49			0.03						
38B	496+92 TO 498+23 -L- LT/RT	ROADWAY FILL	0.30			0.06						
39	507+39 TO 518+70 -L- LT/RT	2 @ 10'X8' RCBC	2.99		0.07	0.20		0.22	0.03	984.87	116.37	
40	RP2AC/RP2A/LP2A	ROADWAY FILL	5.38		0.12	0.78						
41	41+40 TO 47+97 -RP2AC- LT/RT	EXTEND 3@ 9'X7' RCBC	0.03			0.12		0.05	0.08	48.71	56.79	
42	34+08 TO 37+91 -Y4- LT	72" RCP, BURIED 1'	0.01		0.04	0.06		< 0.01	< 0.01	20.43	11.6	
43	33+80 TO 35+02 -Y4- RT	72" RCP, BURIED 1'	< 0.01		0.01	0.04		< 0.01	< 0.01	41.75	10.35	
44	51+17 TO 53+70 -Y4- LT	2 @ 84" RCP, BURIED1'	0.24		0.02	0.09		0.02	< 0.01	121.5	10.7	
45	50+49 TO 57+08 -Y4DET- LT/RT	2 @ 84" RCP, BURIED1'	0.35			0.12		0.04	0.02	116.4	98.9	
45A	50+47 TO 57+03 -Y4DET-	TEMP DETOUR		0.51			0.19					
46	533+11 -L- RT	30" RCP						< 0.01	< 0.01	10.0	16.0	
47	563+36 -L- RT	36" RCP						< 0.01	< 0.01	12.0	10.0	
SUB TOTAL THIS SHEET:			9.79	0.51	0.27	1.50	0.19	0.34	0.14	1356	331	
SUB TOTAL SHEET 1:			66.94	0.20	2.39	7.46	4.07	0.16	0.04	930	248	
SUB TOTAL SHEET 2:			21.93	0.25	0.79	2.47	3.77	0.05	0.01	584	61	
TOTALS*:			98.66	0.96	3.45	11.43	8.03	0.55	0.19	2869	640	0

*Rounded totals are sum of actual impacts

NOTES:
At Site 45/45A, 0.03 acre of Temporary Fill in Wetlands in the Hand Clearing area for erosion control measures.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
04/01/2019
CRAVEN COUNTY
R-1015
34360.1.2
SHEET 167 OF 167