STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2828	TS	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
6.401079	STP-540(20)	PE

PERMIT DRAWING
SHEET 1 OF 34

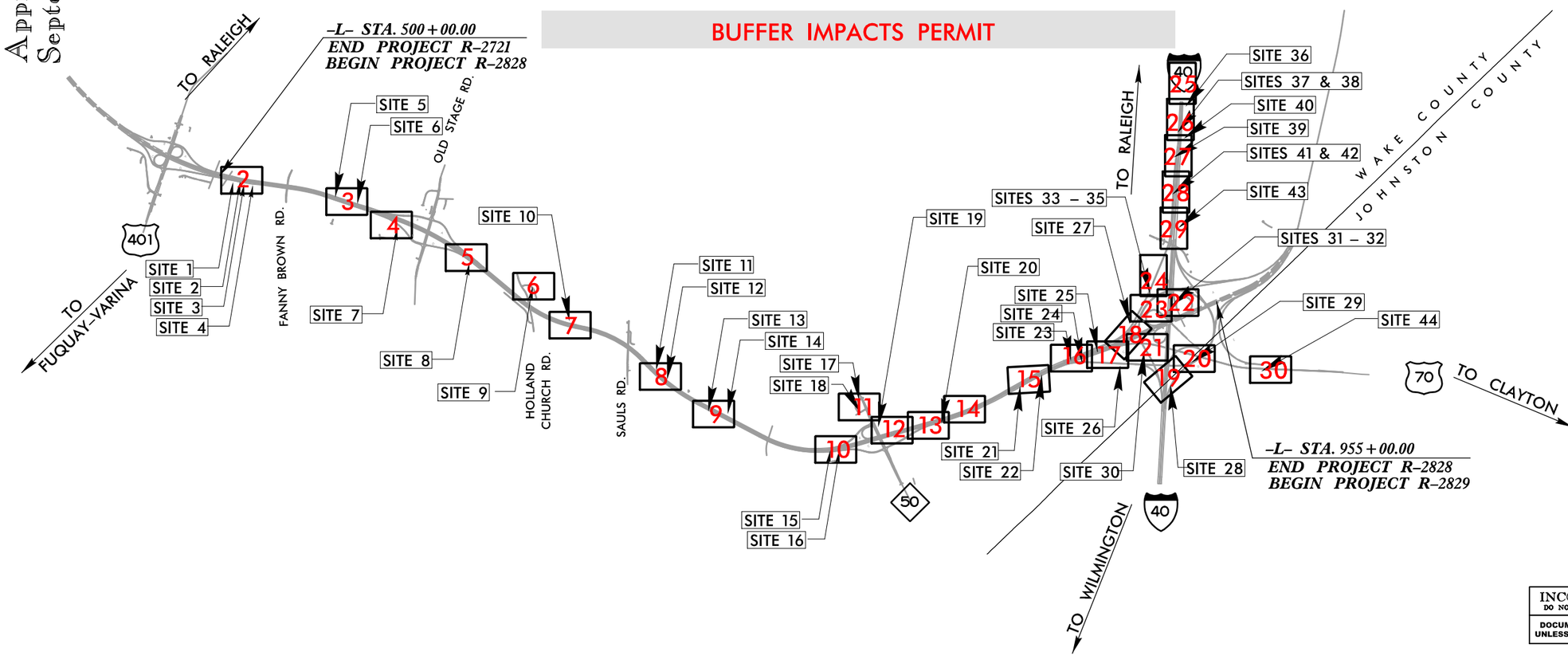
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE & JOHNSTON COUNTY

LOCATION: COMPLETE 540 – FROM EAST OF HWY 401 TO EAST OF I-40

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES

BUFFER IMPACTS PERMIT



INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Approved Preliminary Design
September 2017

TIP PROJECT: R-2828

CONTRACT:

09/08/99

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davidcooper

GRAPHIC SCALES

50 25 0 50 100
PLANS

15 7.5 0 15 30
PROFILE (HORIZONTAL)

15 7.5 0 15 30
PROFILE (VERTICAL)

DESIGN DATA

ADT 2016 = 28,400
ADT 2040 = 53,400
DHV = 12 %
D = 65 %
T = 11 % *
V = 75 MPH
* TTST 7% DUAL 4%
FUNC. CLASS. = INTERSTATE

PROJECT LENGTH

LENGTH ROADWAY STATE TIP PROJECT R-2828 = 8.617 Miles
TOTAL LENGTH STATE TIP PROJECT R-2828 = 8.617 Miles

Prepared In the Offices of:

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
(919)571-7111
NC License Number F-0159

NC FIRM LICENSE No F-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 557-0929
ECOLOGICAL ENGINEERING

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

BRIAN K. EASON, PE
PROJECT ENGINEER

PROJECT DESIGN ENGINEER

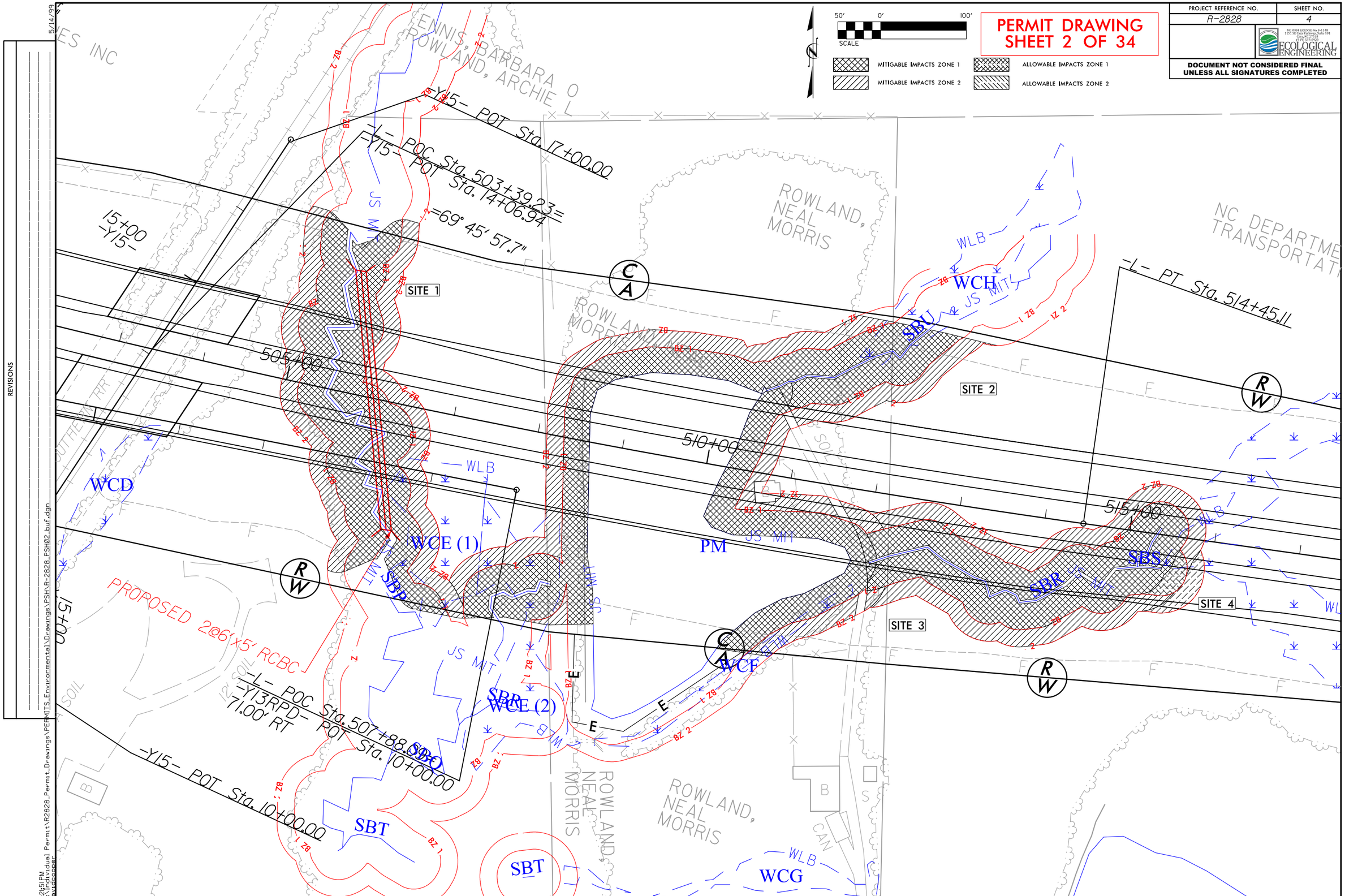
HYDRAULICS ENGINEER

SIGNATURE: P.E.

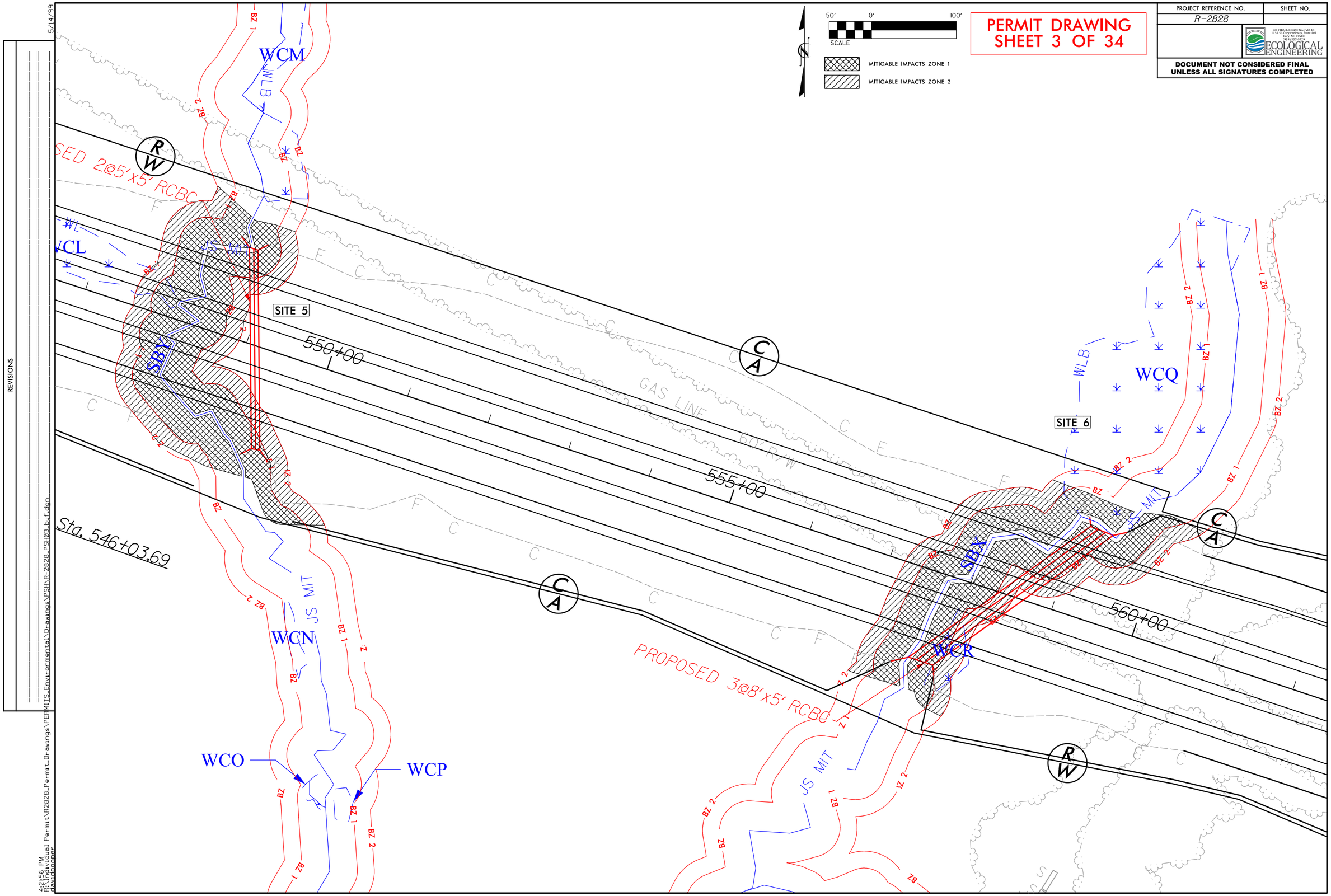
ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



PERMIT DRAWING
SHEET 2 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
4
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SCALE
50' 0' 100'
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
-Y15- POT Sta. 17+00.00
-L- POC Sta. 503+39.23=
-Y15- POT Sta. 14+06.94
=69° 45' 57.7"
-L- PT Sta. 514+45.11
-L- POC Sta. 507+88.59=
-Y13RPD- POT Sta. 10+00.00
71.00' RT
-Y15- POT Sta. 10+00.00
15+00
-Y15-
505+00
510+00
515+00
SITE 1
SITE 2
SITE 3
SITE 4
WCH
WCD
WCE (1)
WCE (2)
WCF
WCG
PM
SBU
SBR
SBS
SBP
SBO
SBT
PROPOSED 2@6'x5' RCBC
ROWLAND, NEAL MORRIS
NC DEPARTMENT TRANSPORTATION
ENNIS, BARBARA O
ROWLAND, ARCHIE L
WLB
JS MIT
REVISIONS
5/14/99



PERMIT DRAWING
SHEET 3 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
WCM
WCL
WCN
WCO
WCP
WCQ
WCR
SBX
SITE 5
SITE 6
550+00
555+00
560+00
Sta. 546+03.69
GAS LINE 60' R/W
PROPOSED 3@8'x5' RCBC
JS MIT
WLB
BZ 1
BZ 2
REVISIONS
5/14/99
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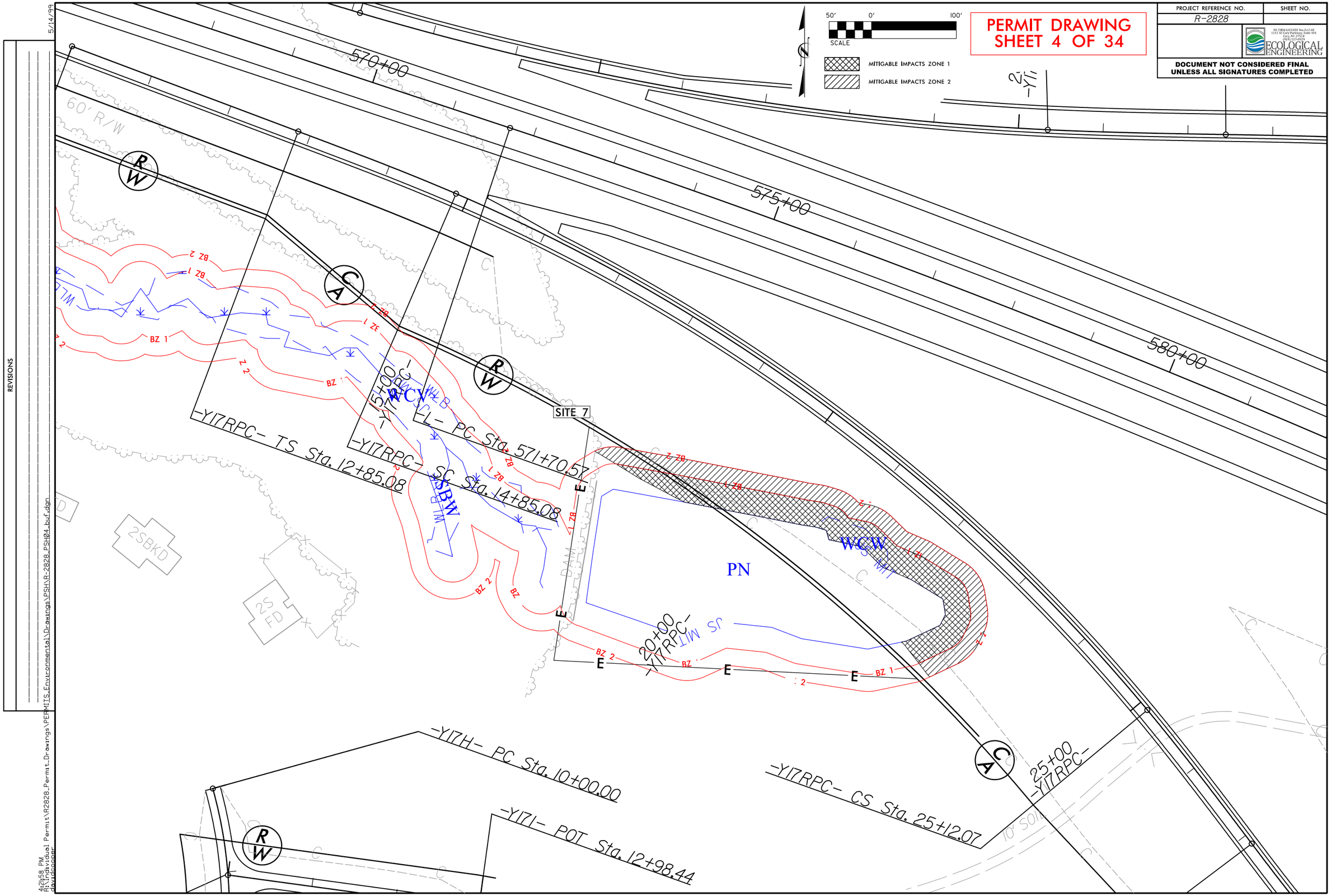
davidcooper



PERMIT DRAWING
SHEET 4 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
570+00
575+00
580+00
60' R/W
SITE 7
-Y17RPC- TS Sta. 12+85.08
-Y17RPC- SC Sta. 14+85.08
-L- PC Sta. 571+70.57
15+00 -Y17RPC-
20+00 -Y17RPC-
25+00 -Y17RPC-
-Y17H- PC Sta. 10+00.00
-Y17I- POT Sta. 12+98.44
-Y17RPC- CS Sta. 25+12.07
PN
WCW
SBW
BZ 1
BZ 2
2SBKD
2S FD
REVISIONS
5/14/99
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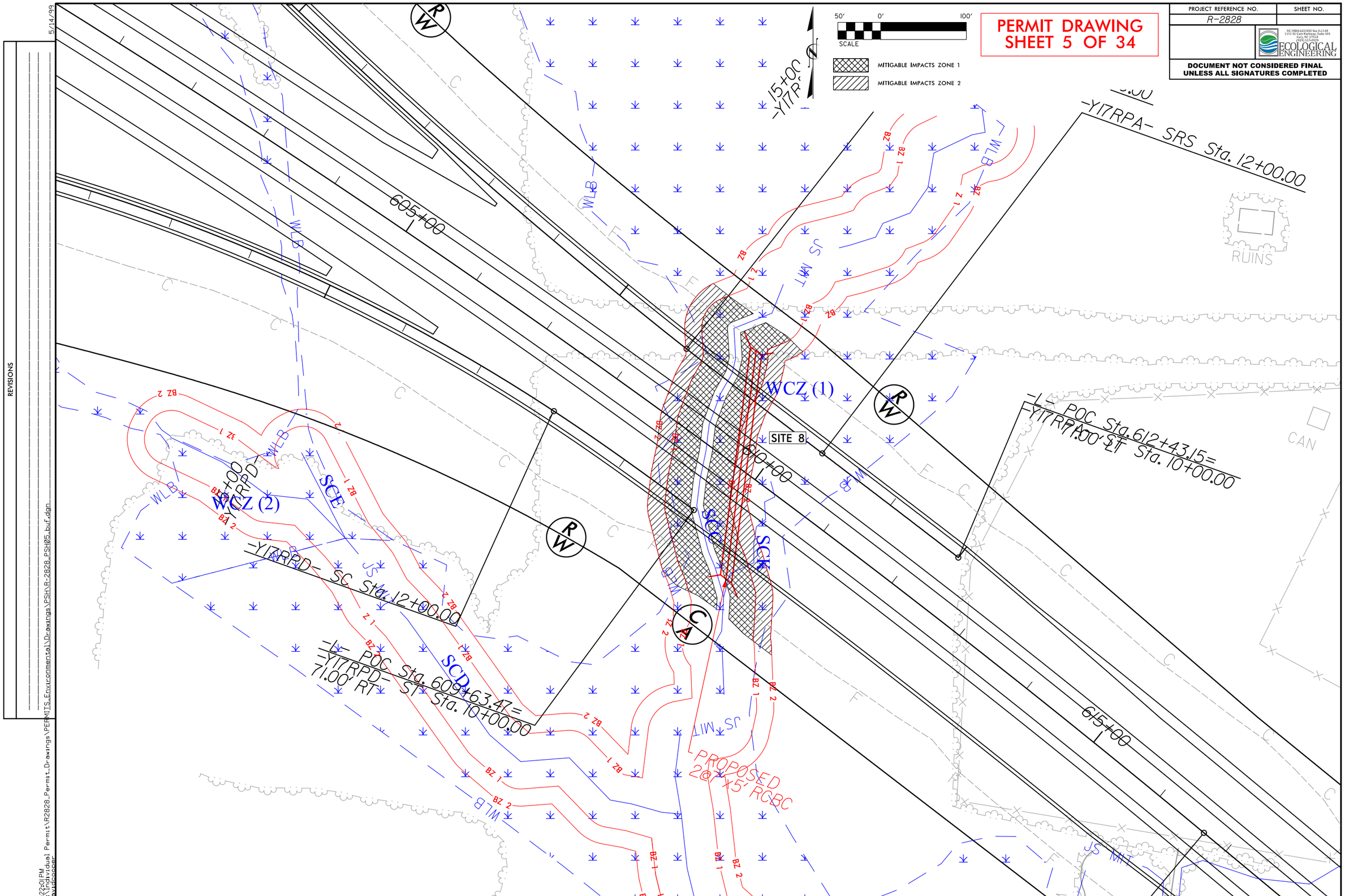
davidcooper



REVISIONS

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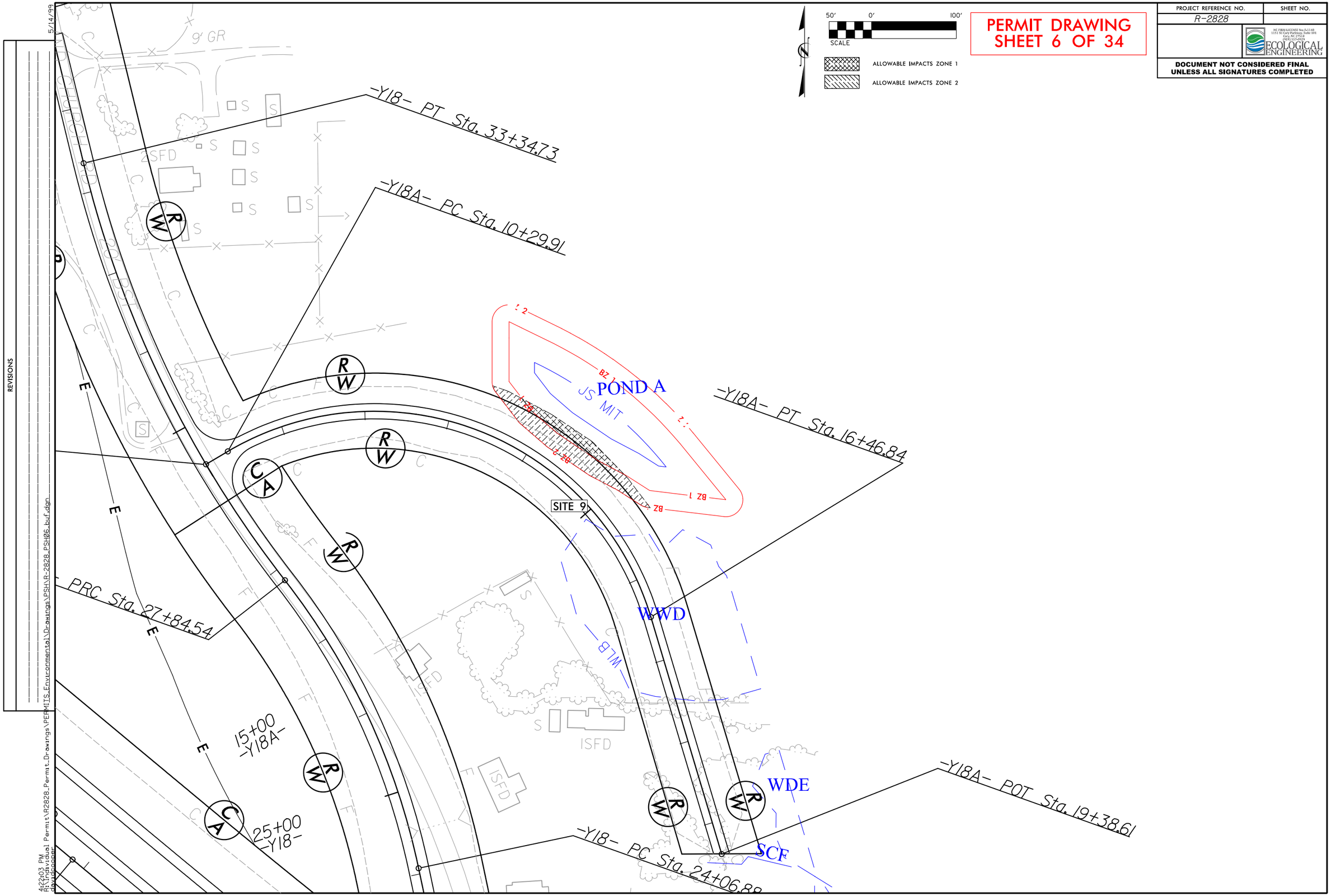

PERMIT DRAWING
SHEET 6 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
-Y18- PT Sta. 33+34.73
-Y18A- PC Sta. 10+29.91
-Y18A- PT Sta. 16+46.84
-Y18A- POT Sta. 19+38.61
-Y18- PC Sta. 24+06.88
PRC Sta. 27+84.54
15+00 -Y18A-
25+00 -Y18-
POND A
JS MIT
SITE 9
WWD
WDE
SCF
WLB
ISFD
9' GR
REVISIONS
5/14/99
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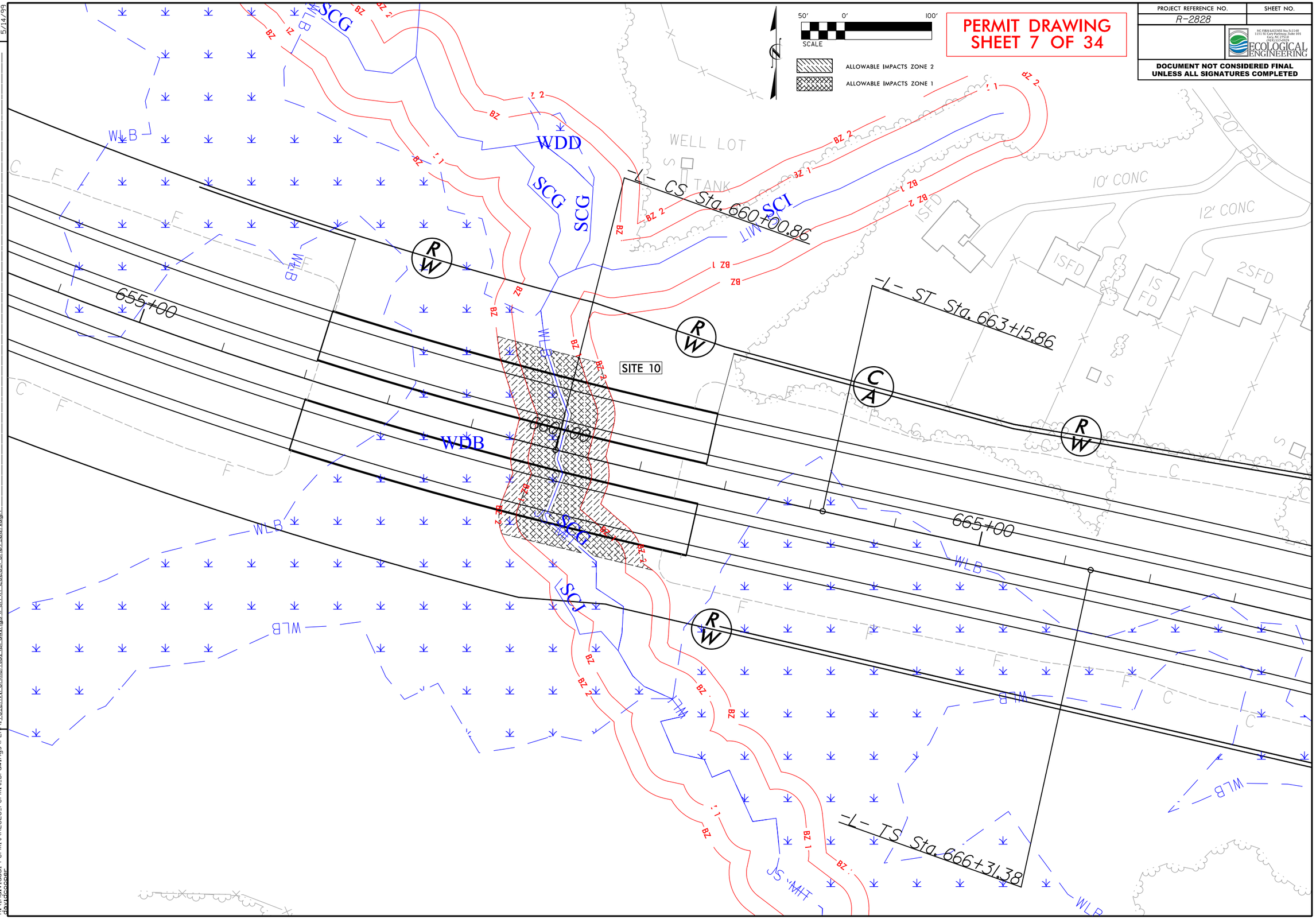

REVISIONS

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PERMIT DRAWING
SHEET 8 OF 34

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No: P-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 557-0929
ECOLOGICAL ENGINEERING

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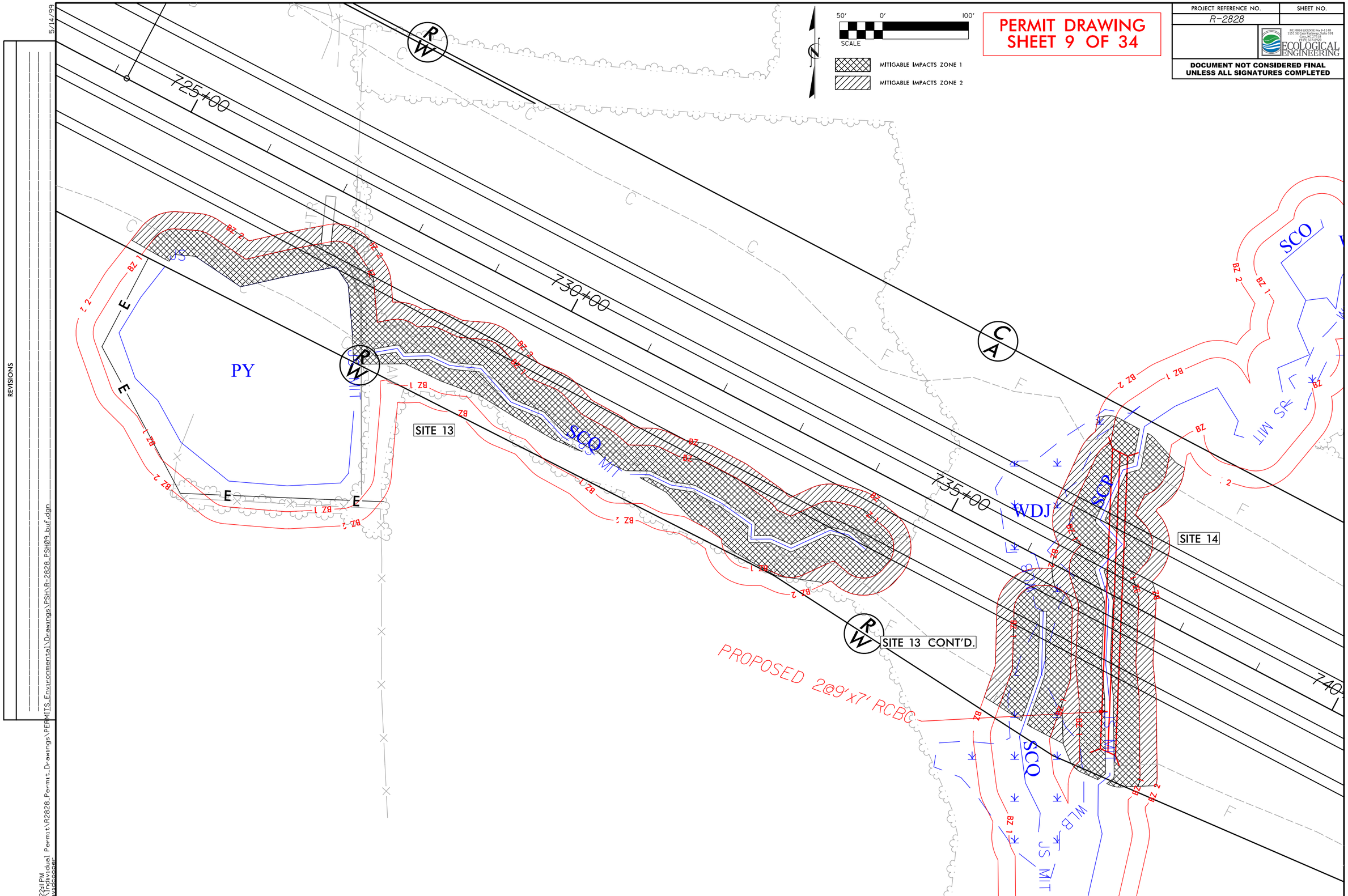
50' 0' 100'
SCALE

MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2

REVISIONS
5/14/99

SC Sta. 699+71.58
PW
WDG (1)
SCL
SITE 11
PV
705+00
SCM
WDH
SITE 12
PROPOSED 2@7'x5' RCBC
710+00
SCN
WLB
SS
WLB (1)
SCM (1)
WLB (2)
SCM (2)
WLB (3)
SCN (1)
WLB (4)
SCN (2)
WLB (5)
SCN (3)
WLB (6)
SCN (4)
WLB (7)
SCN (5)
WLB (8)
SCN (6)
WLB (9)
SCN (7)
WLB (10)
SCN (8)
WLB (11)
SCN (9)
WLB (12)
SCN (10)
WLB



PERMIT DRAWING
SHEET 9 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
725+00
730+00
735+00
740
PY
SCQ
WDJ
SCP
SITE 13
SITE 13 CONT'D.
SITE 14
PROPOSED 2@9'x7' RCBC
BZ 1
BZ 2
E
R/W
C/A
REVISIONS
5/14/99
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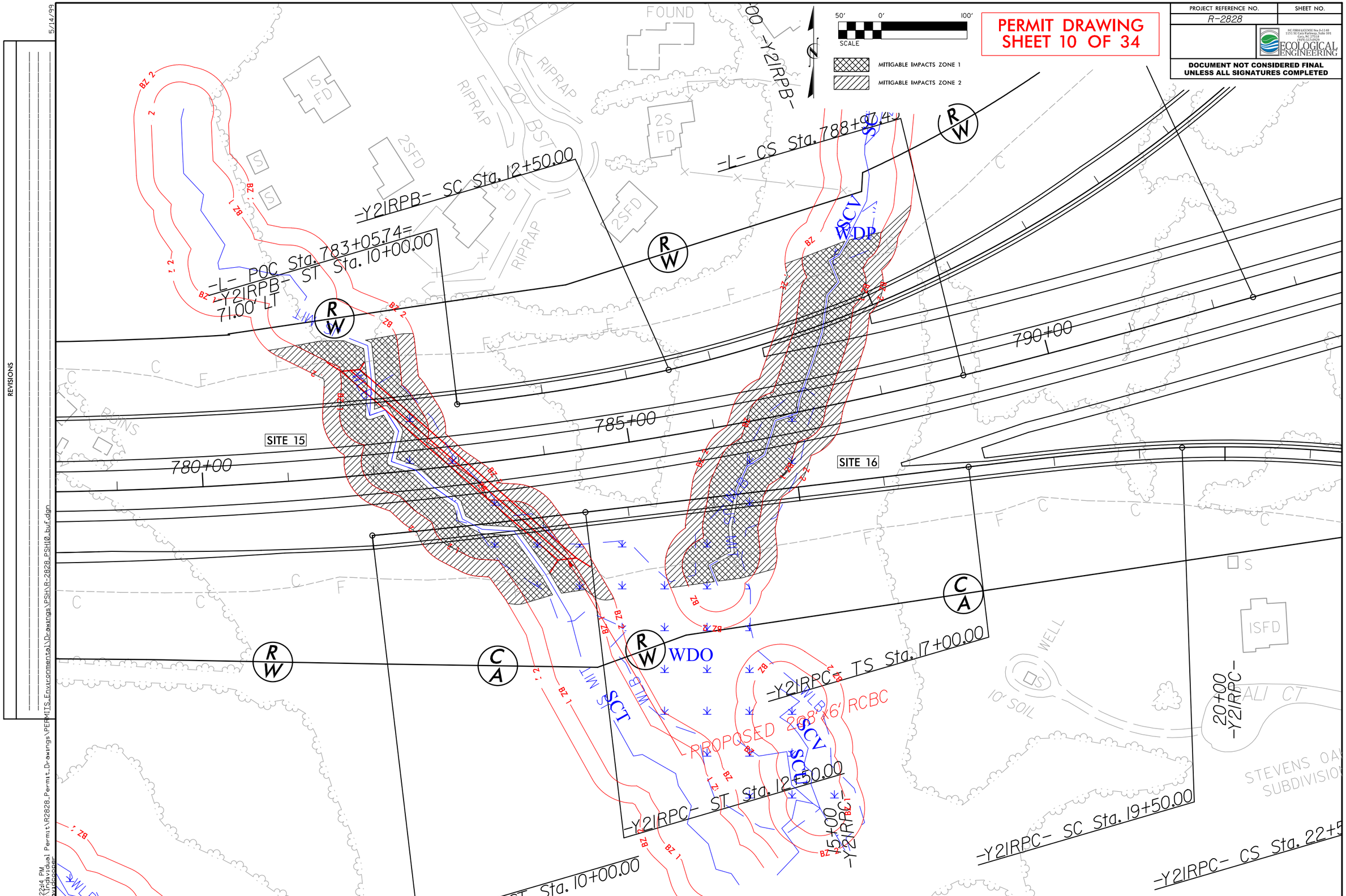
davidcooper


PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 10 OF 34
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
-Y21RPB- SC Sta. 12+50.00
-L- CS Sta. 788+97.4
-L- POC Sta. 783+05.74=
-Y21RPB- ST Sta. 10+00.00
71.00' LT
-Y21RPC- TS Sta. 17+00.00
-Y21RPC- ST Sta. 12+50.00
-Y21RPC- SC Sta. 19+50.00
-Y21RPC- CS Sta. 22+5
ST Sta. 10+00.00
780+00
785+00
790+00
SITE 15
SITE 16
WDO
WDP
SCT
SCV
PROPOSED 208' X 6' RCBC
20+00 -Y21RPC-
15+00 -Y21RPC-
STEVENS OAK SUBDIVISION
REVISIONS
5/14/99
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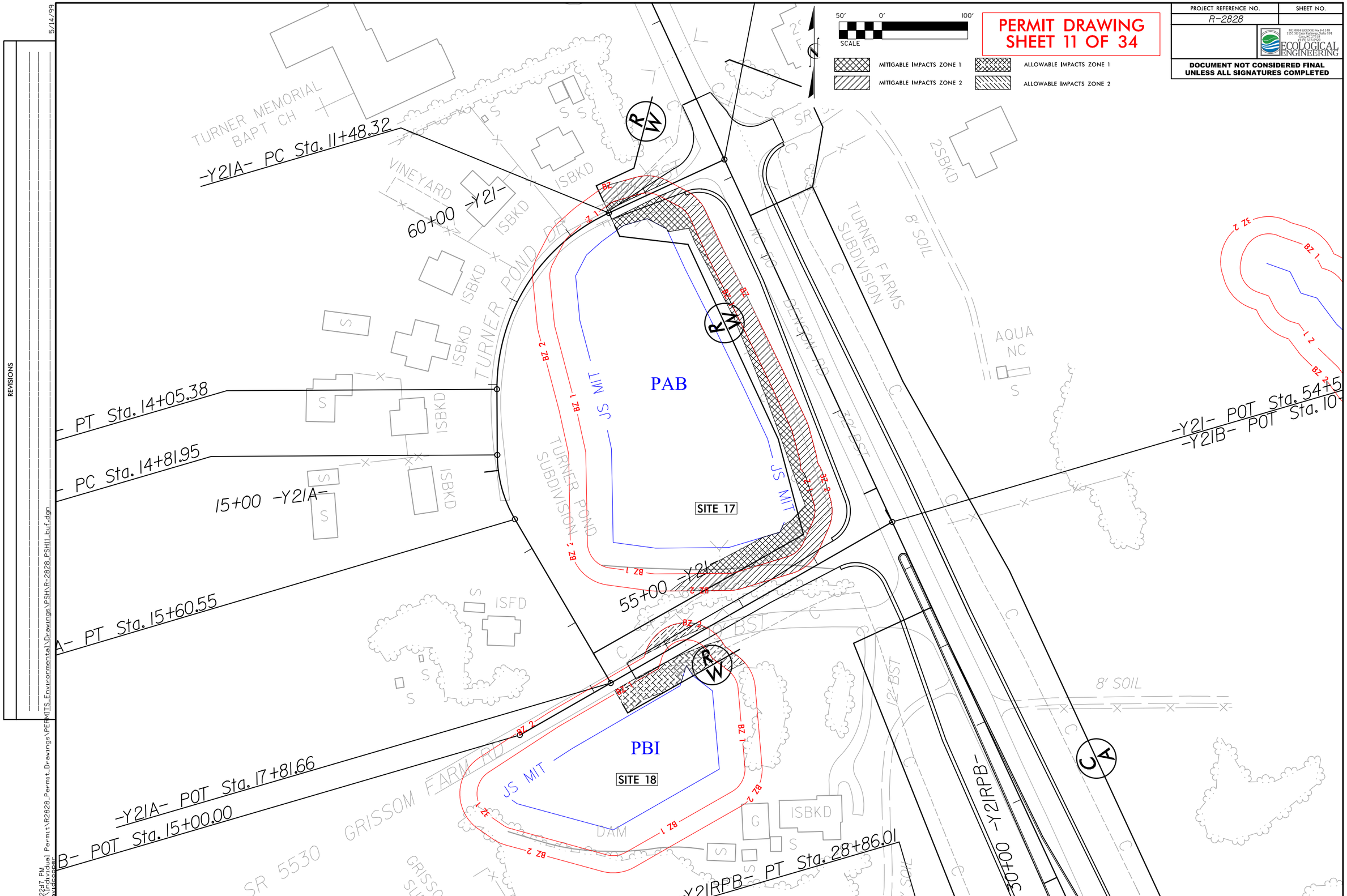

PERMIT DRAWING
SHEET 11 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SCALE
50' 0' 100'
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
TURNER MEMORIAL BAPT CH
-Y21A- PC Sta. 11+48.32
60+00 -Y21-
VINEYARD
ISBKD
TURNER POND DR
TURNER FARMS SUBDIVISION
8' SOIL
2SBKD
AQUA NC
PAB
JS MIT
SITE 17
PBI
SITE 18
-Y21- POT Sta. 54+5
-Y21B- POT Sta. 10
-Y21A- PT Sta. 14+05.38
-Y21A- PC Sta. 14+81.95
15+00 -Y21A-
55+00 -Y21-
-Y21A- PT Sta. 15+60.55
-Y21A- POT Sta. 17+81.66
-Y21B- POT Sta. 15+00.00
GRISSOM FARM RD
SR 5530
DAM
-Y21RPB- PT Sta. 28+86.01
30+00 -Y21RPB-
12' BST
8' SOIL
REVISIONS
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50′ 0′ 100′
SCALE

PERMIT DRAWING
SHEET 12 OF 34

MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No: P-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 557-0929
ECOLOGICAL ENGINEERING

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-Y2I- POT Sta. 47+62.15=
-Y2IRPB- POT Sta. 30+86.01

-Y2I- POT Sta. 47+30.00=
-Y2ILPB- POT Sta. 21+95.23

PETROLIUM LINE 50′ R/W

SITE 19

SITE 20

SCZ
SCX
JS MIT
JS MIT
JS MIT
WDS
SDS
WDR

-L- POT Sta. 803+91.48=
-Y2I- POT Sta. 41+47.50
=99° 03′ 40.4″

-Y2I- POT Sta. 36+58.00=
-Y2IRPC- POT Sta. 31+10.03
-Y2IRPD- POT Sta. 33+47.72

-Y2IRPD- PT Sta. 29+52.74

-Y2IRPD- CS Sta. 20+09

-Y2IRPD- SRS Sta. 22+19.04

-Y2IRPD- SC Sta. 24+1

805+00
810+00
815+00

MATCHLINE SHEET 13 STA. 817+81.00 -L-

BZ 1
BZ 2
BZ
Z 1
Z 2
Z

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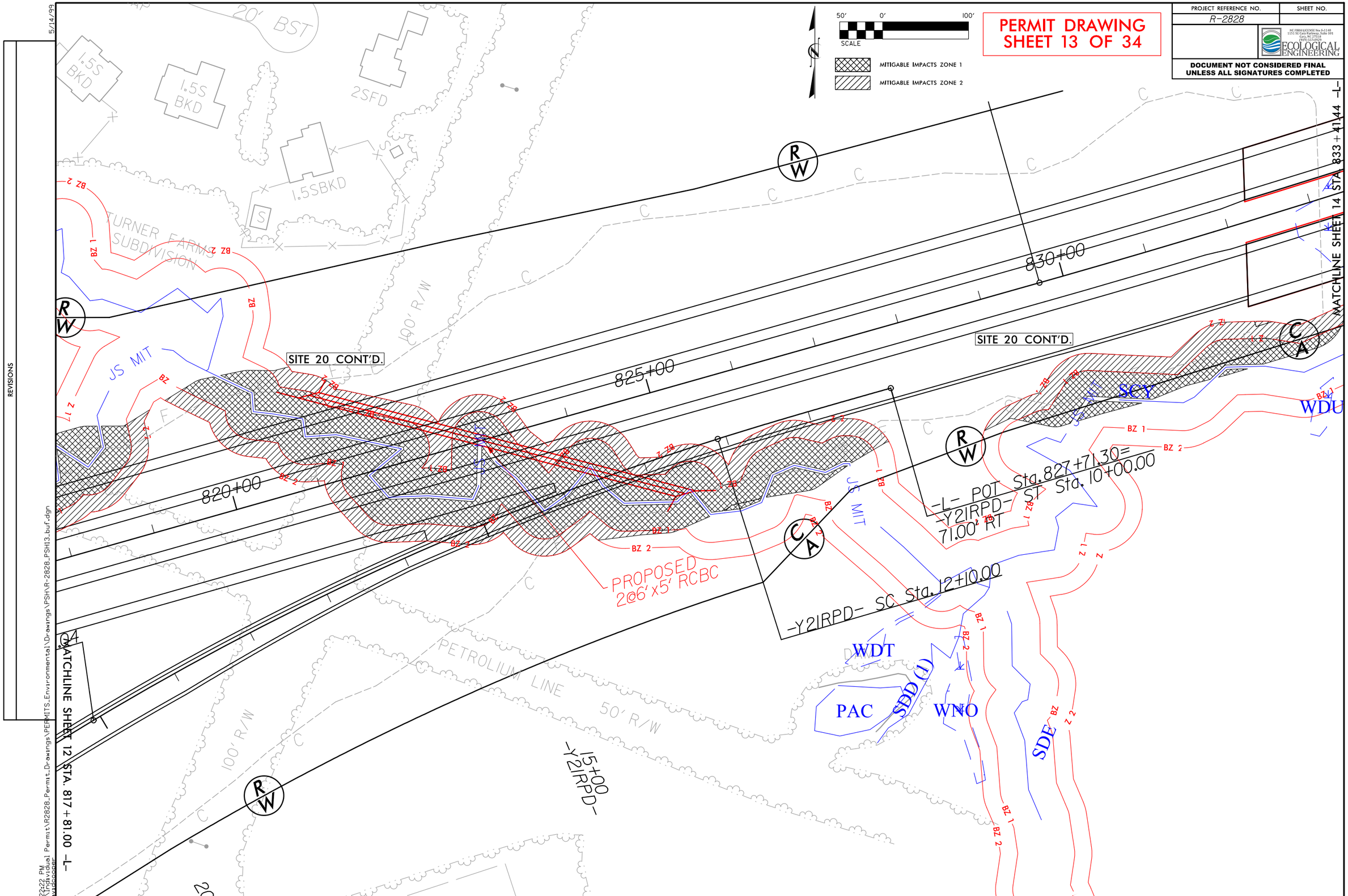
davidcooper



PERMIT DRAWING
SHEET 13 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
SITE 20 CONT'D.
SITE 20 CONT'D.
820+00
825+00
830+00
-L- POT Sta. 827+71.30=
-Y21RPD- ST Sta. 10+00.00
71.00' RT
-Y21RPD- SC Sta. 12+10.00
PROPOSED
2@6'x5' RCBC
TURNER FARMS SUBDIVISION
JS MIT
PETROLIUM LINE
50' R/W
100' R/W
15+00
-Y21RPD-
SCY
WDU
WDT
PAC
SDD (1)
WNO
SDE
MATCHLINE SHEET 14 STA. 833+41.44 -L-
MATCHLINE SHEET 12 STA. 817+81.00 -L-
REVISIONS
5/14/99
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davidcooper

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No F-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 557-0029

ECOLOGICAL ENGINEERING

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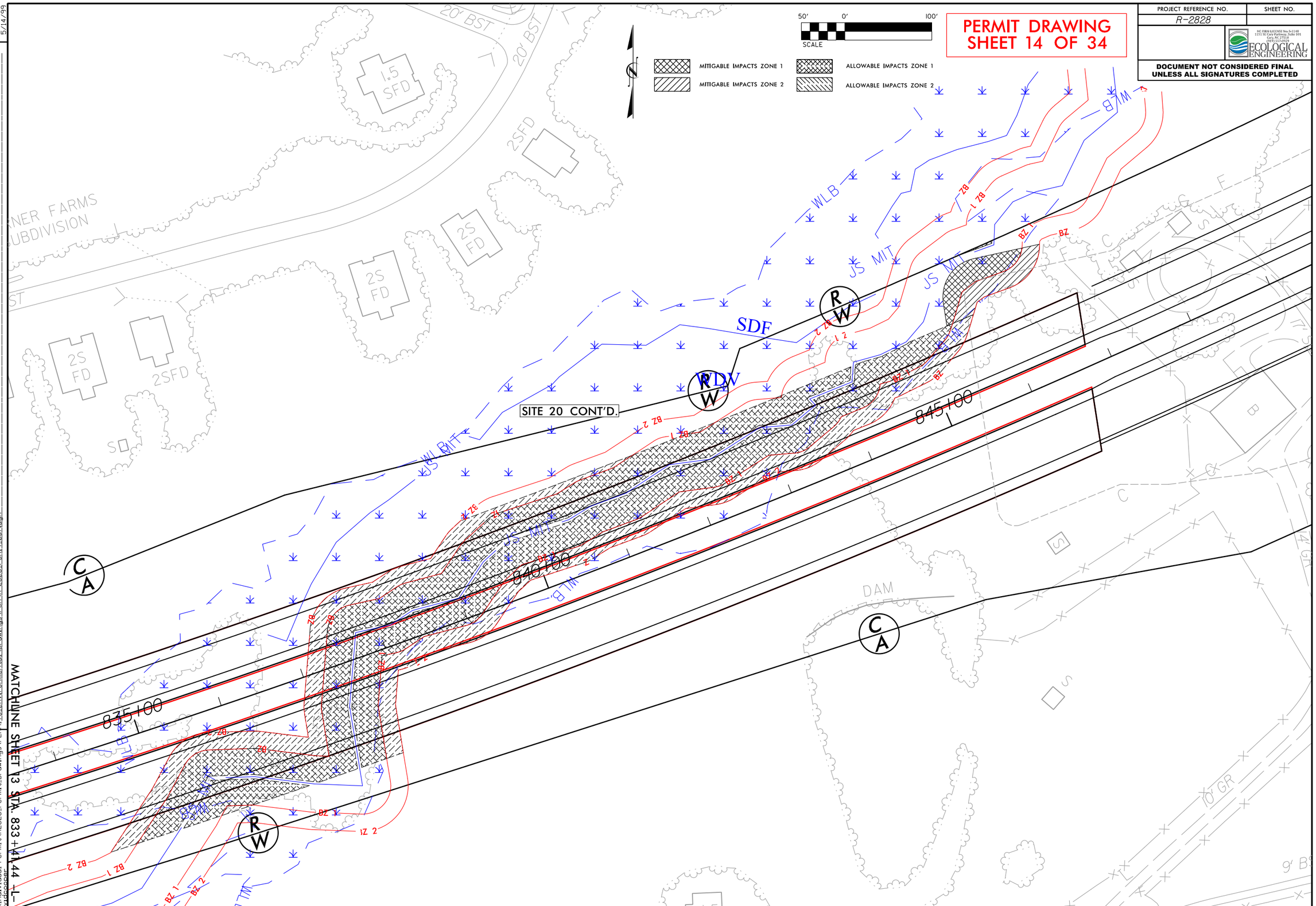
PERMIT DRAWING
SHEET 14 OF 34



REVISIONS

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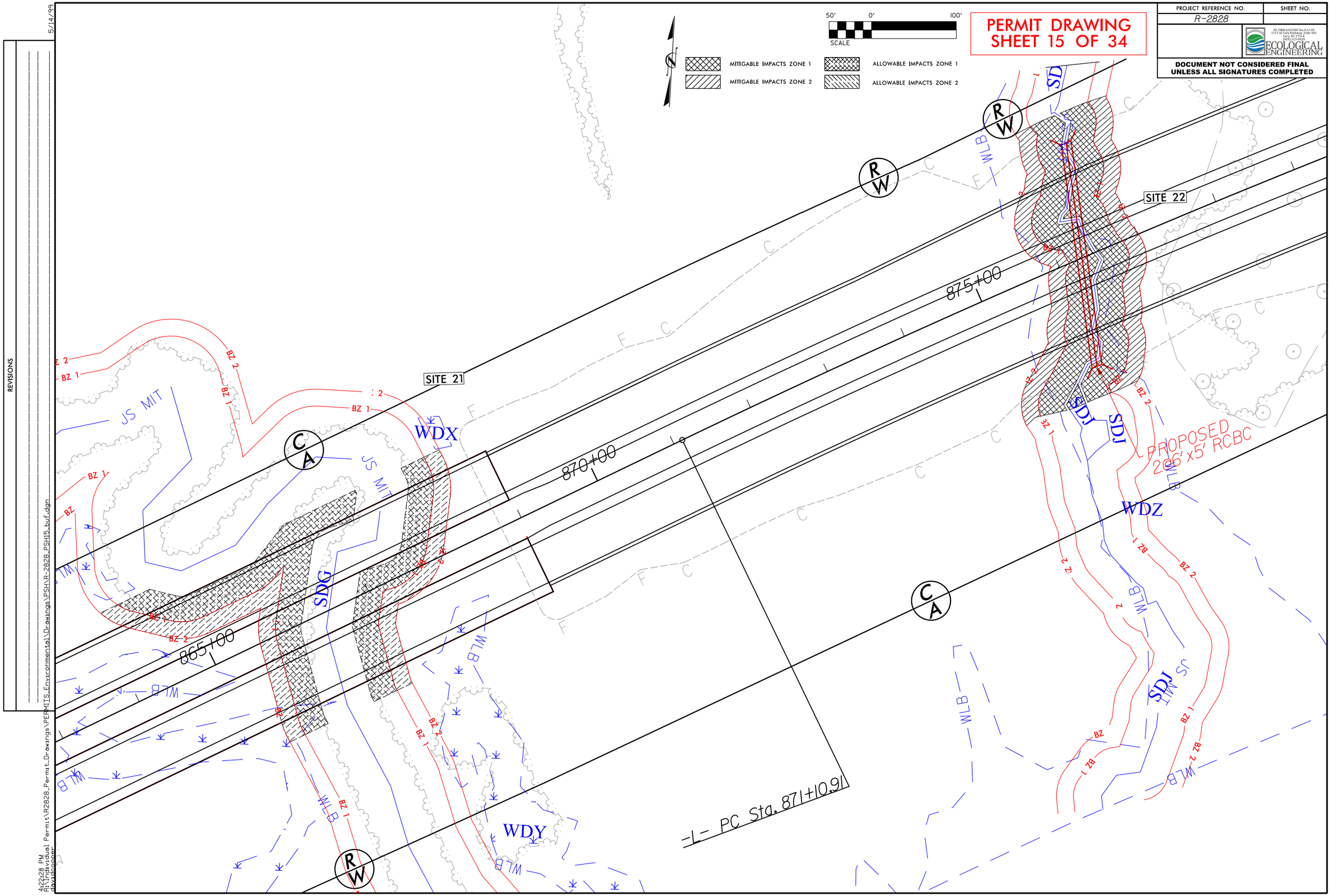

PERMIT DRAWING
SHEET 15 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
SITE 21
SITE 22
865+00
870+00
875+00
WDX
WDY
WDZ
SDG
SDJ
JS MIT
WLB
PROPOSED 206'x5' RCBC
-L- PC Sta. 871+10.91
REVISIONS
5/14/99
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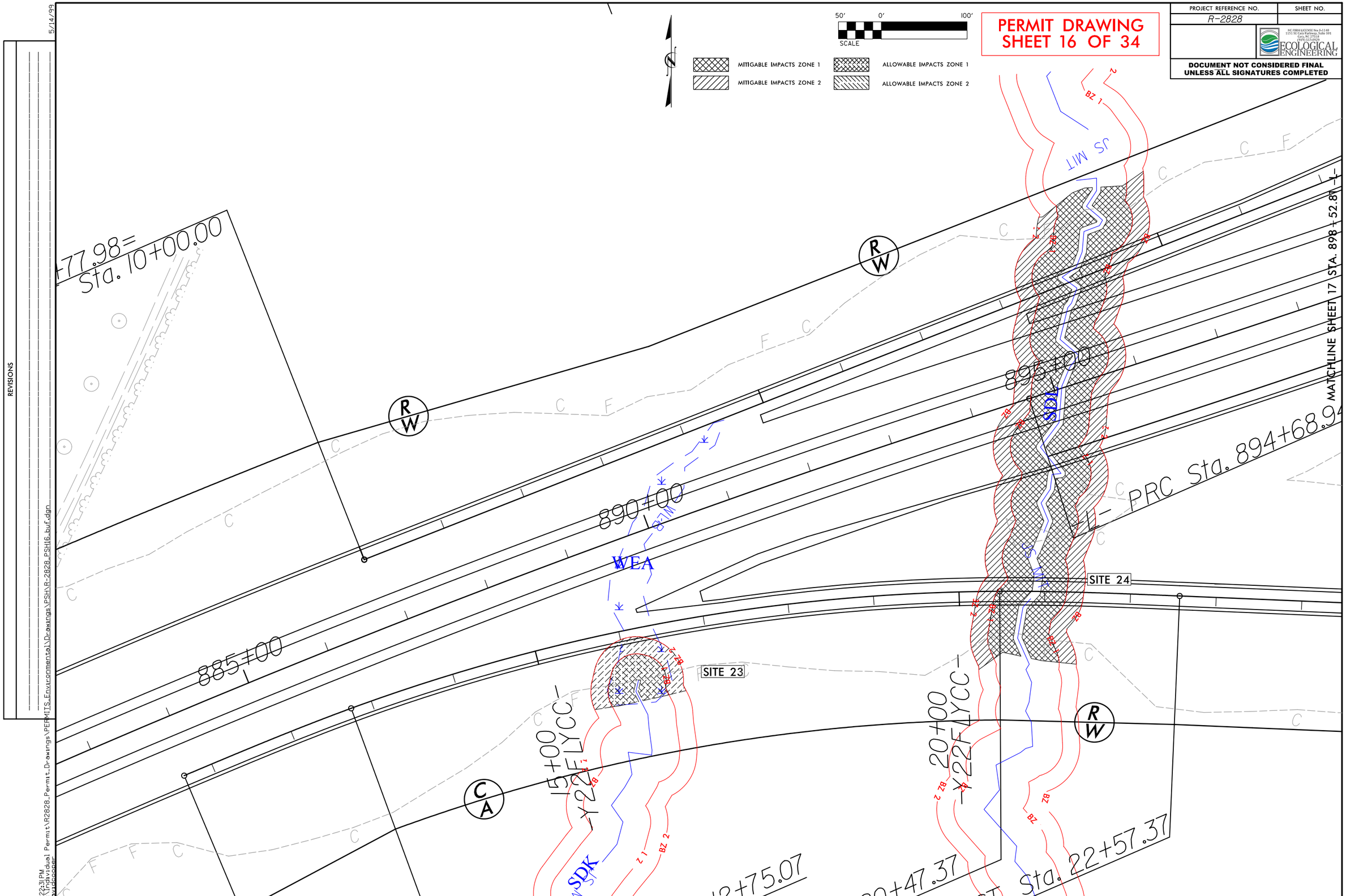
davidcooper



PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 16 OF 34
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
+77.98=
Sta. 10+00.00
885+00
890+00
895+00
WEA
SDK
SITE 23
SITE 24
15+00
-Y22FLYCC-
20+00
-Y22FLYCC-
12+75.07
20+47.37
Sta. 22+57.37
-L- PRC Sta. 894+68.94
MATCHLINE SHEET 17 STA. 898+52.81 -L-
JS MIT
BZ 1
BZ 2
R W
C A
REVISIONS
5/14/99
4:22:31 PM
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davidcooper

5/14/99

REVISIONS

50' 0' 100'

SCALE

PERMIT DRAWING
SHEET 17 OF 34

MITIGABLE IMPACTS ZONE 1

MITIGABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No P-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 557-0929
ECOLOGICAL ENGINEERING

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE SHEET 16 STA. 898+32.81 -L-

MATCHLINE SHEET 18 STA. 908+92.14 -L-

-L- POC Sta. 903+76.56=
-Y22RPCD- ST Sta. 10+00.00
71' RT

-Y22RPCD- SRS Sta. 12+00.00

10+00
-Y22RPCD-

15+00
-Y22RPCD-

-Y22RPCD- SC Sta. 14+00.00

SITE 25

SITE 26

905+00

900+00

SDM

WEB

WLB

JS

MIT

SDV

BZ 1

BZ 2

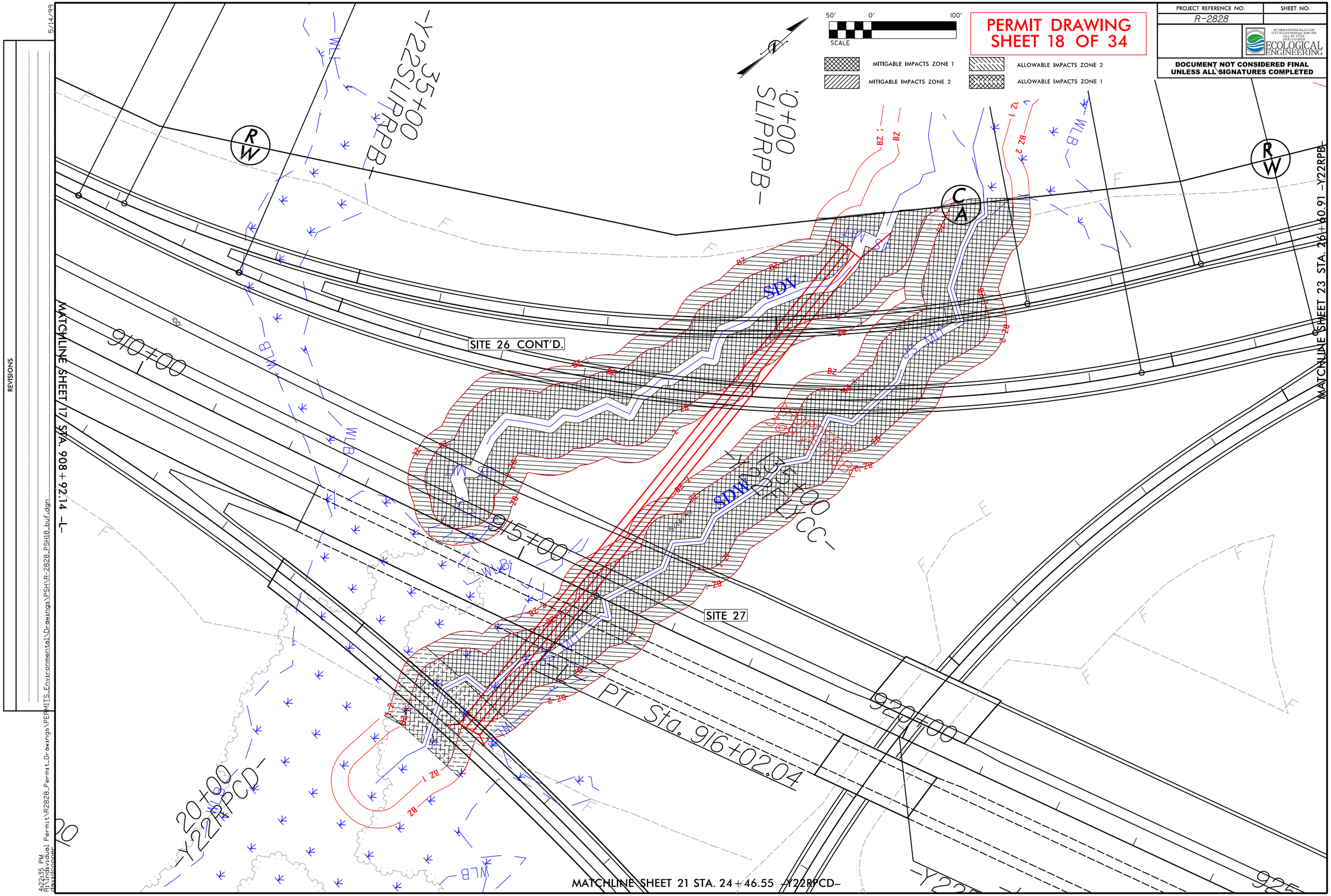
ZB

C F

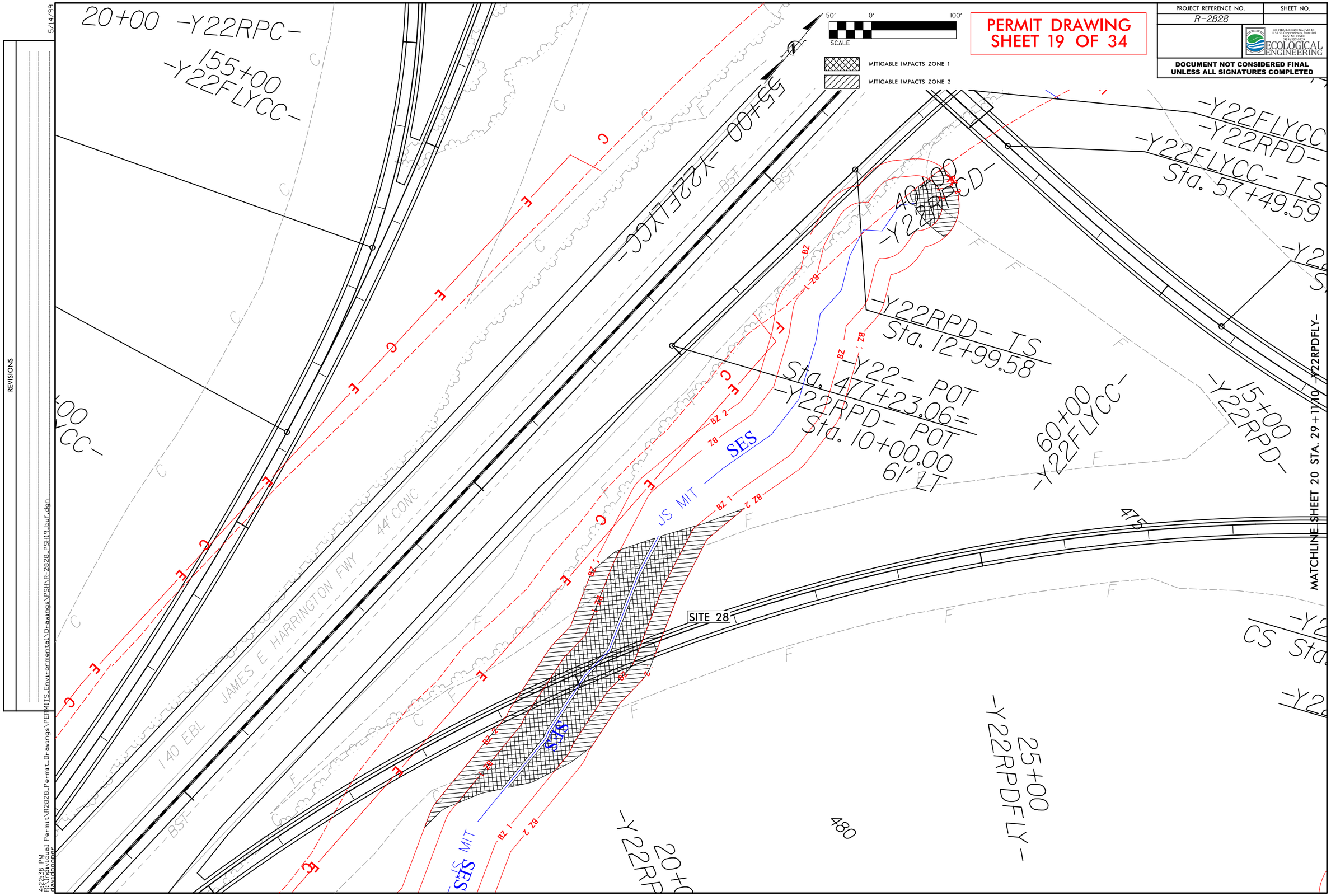
C A

R W

4:20:23 PM
dwinslow
dwinslow
dwinslow



PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 18 OF 34
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
SITE 26 CONT'D.
SITE 27
PT Sta. 916+02.04
MATCHLINE SHEET 17 STA. 908+92.14 -L-
MATCHLINE SHEET 23 STA. 26+60.91 -Y22RPB-
MATCHLINE SHEET 21 STA. 24+46.55 -Y22RPCD-
REVISIONS
5/14/99



PERMIT DRAWING
SHEET 19 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SCALE
50' 0' 100'
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
20+00 -Y22RPC-
155+00 -Y22FLYCC-
55+00 -Y22FLYCC-
40+00 -Y22RPCD-
-Y22FLYCC -Y22RPD-
-Y22FLYCC- TS Sta. 57+49.59
-Y22RPD- TS Sta. 12+99.58
-Y22- POT Sta. 477+23.06=
-Y22RPD- POT Sta. 10+00.00 61' LT
60+00 -Y22FLYCC-
15+00 -Y22RPD-
25+00 -Y22RPDFLY-
20+00 -Y22RP
I 40 EBL JAMES E HARRINGTON FWY 44' CONC
SES
JS MIT
SITE 28
475
480
MATCHLINE SHEET 20 STA. 29+11.10 -Y22RPDFLY-
REVISIONS
5/14/99
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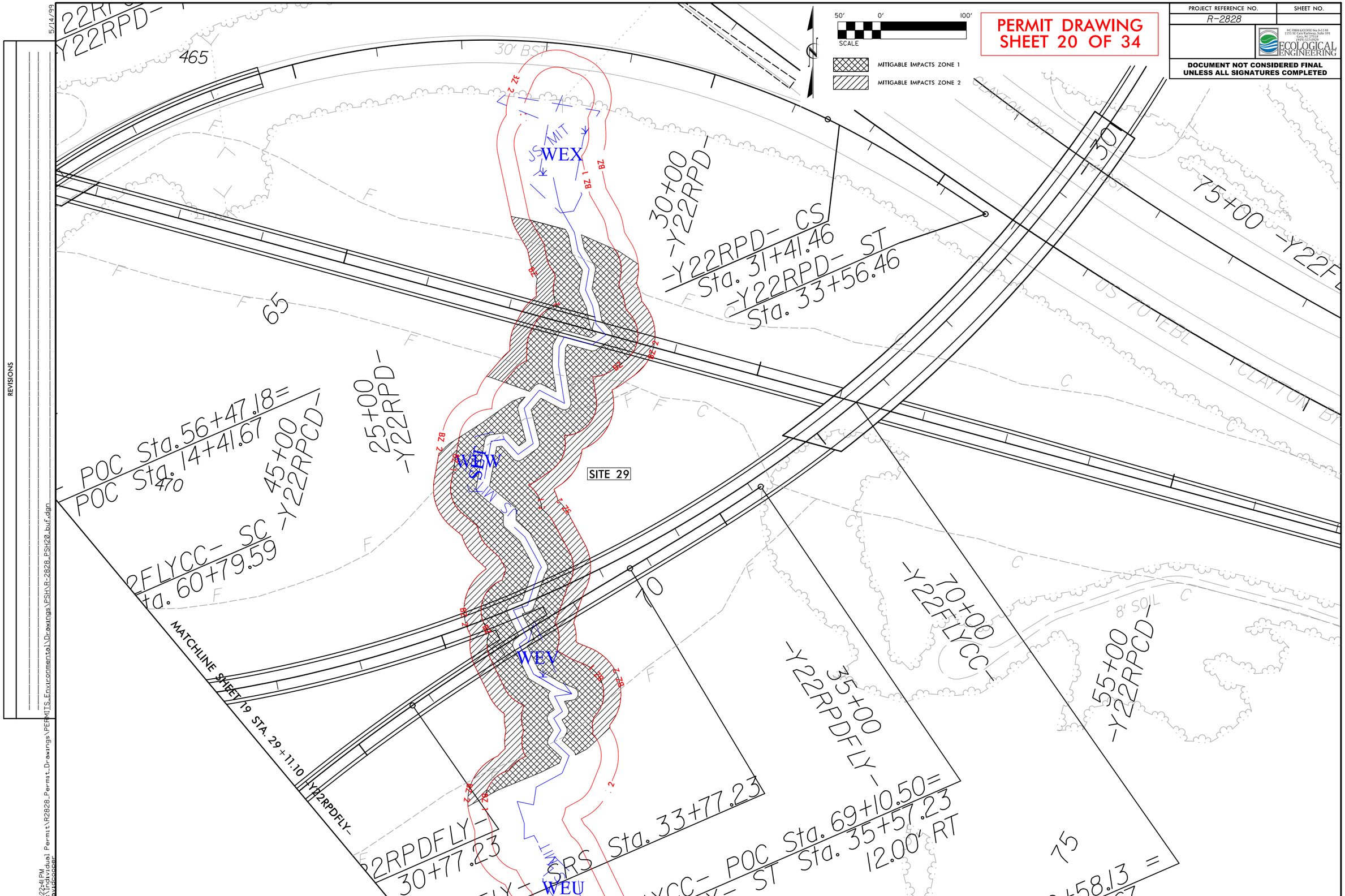
davidcooper



PERMIT DRAWING
SHEET 20 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
WEX
WEW
WEV
WEU
SITE 29
30+00 -Y22RPD-
-Y22RPD- CS Sta. 31+41.46
-Y22RPD- ST Sta. 33+56.46
75+00 -Y22F
25+00 -Y22RPD-
45+00 -Y22RPCD-
POC Sta. 56+47.18=
POC Sta. 14+41.67
2FLYCC- SC Sta. 60+79.59
70+00 -Y22FLYCC-
35+00 -Y22RPDFLY-
55+00 -Y22RPCD-
2RPDFLY- 30+77.23
SRS Sta. 33+77.23
FLYCC- POC Sta. 69+10.50=
ST Sta. 35+57.23
12.00' RT
MATCHLINE SHEET 19 STA. 29+11.10 -Y22RPDFLY-
30' BST
CLAYTON BYP
US 70 EBL
CLAYTON BY
465
470
65
70
75
REVISIONS
5/14/99
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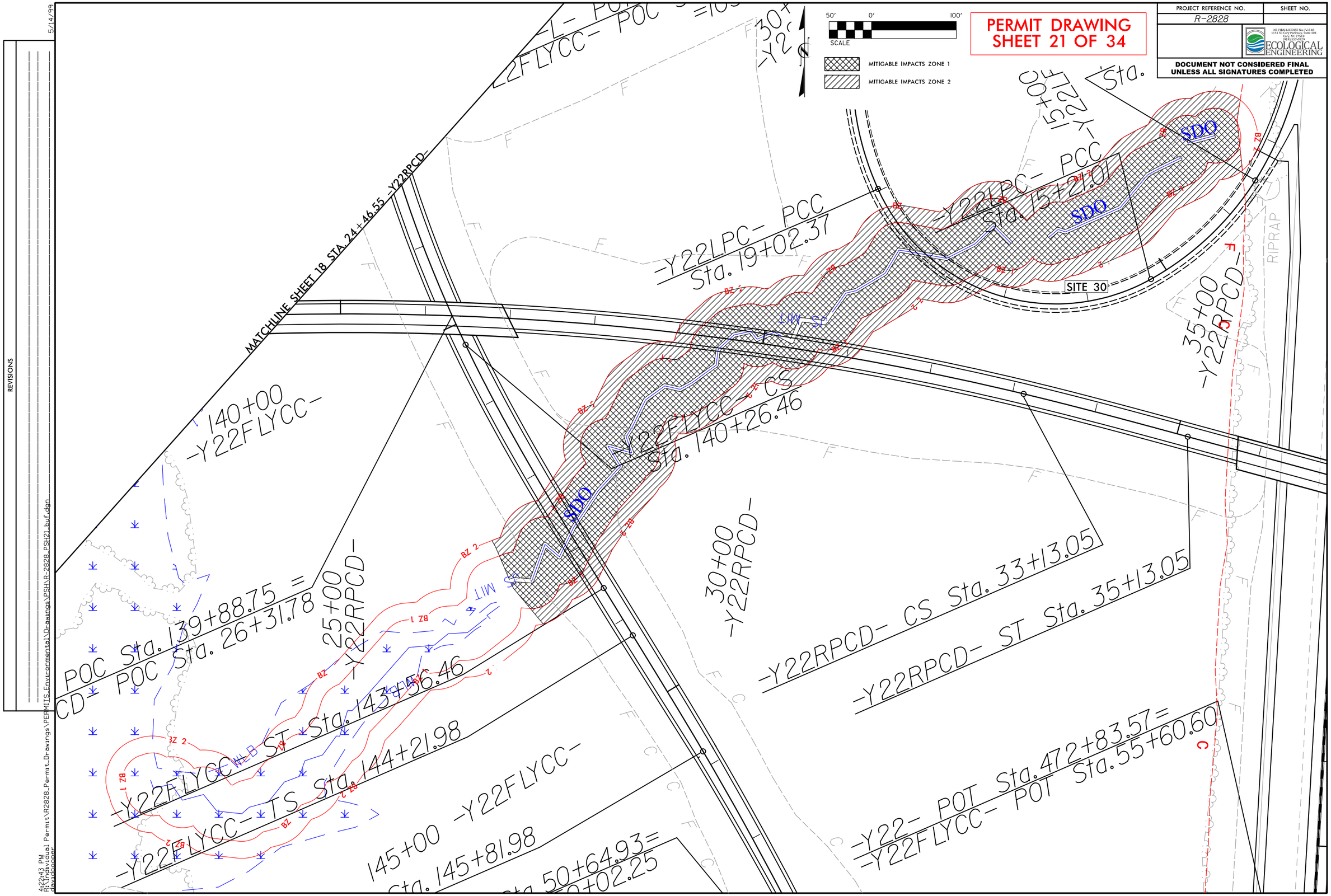
davidcooper



PERMIT DRAWING
SHEET 21 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
MATCHLINE SHEET 18 STA. 24+46.55 -Y22RPCD-
-Y22LPC- PCC
Sta. 19+02.37
-Y22LPC- PCC
Sta. 15+21.01
SITE 30
SDO
RIPRAP
35+00
-Y22RPCD-
140+00
-Y22FLYCC-
-Y22FLYCC- CS
Sta. 140+26.46
30+00
-Y22RPCD-
25+00
-Y22RPCD-
POC Sta. 139+88.75 =
CD- POC Sta. 26+31.78
-Y22RPCD- CS Sta. 33+13.05
-Y22RPCD- ST Sta. 35+13.05
-Y22FLYCC- ST Sta. 143+56.46
-Y22FLYCC- TS Sta. 144+21.98
145+00 -Y22FLYCC-
Sta. 145+81.98
-Y22- POT Sta. 472+83.57=
-Y22FLYCC- POT Sta. 55+60.60
REVISIONS
5/14/99
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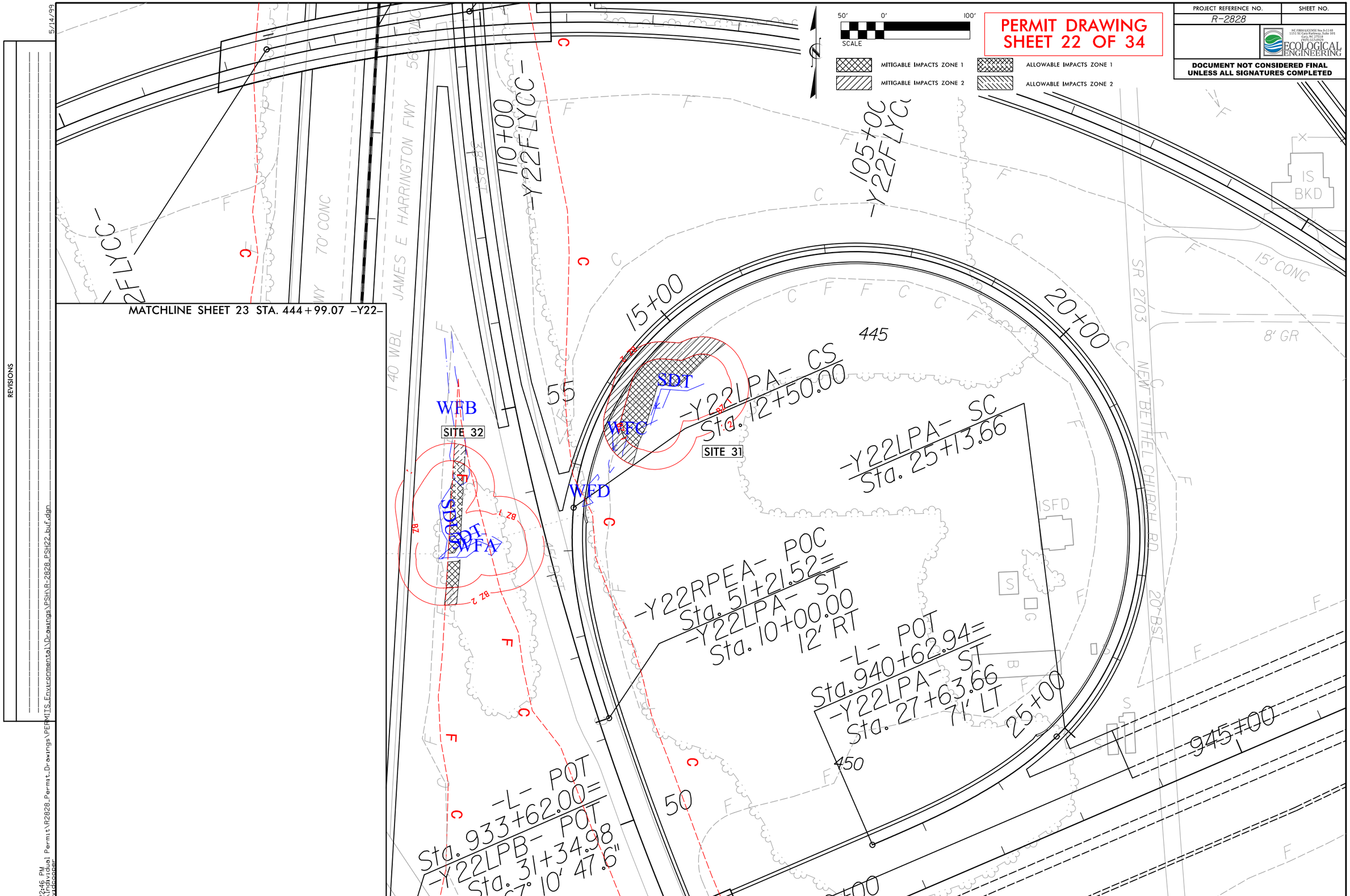
davidcooper



PERMIT DRAWING
SHEET 22 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SCALE
50' 0' 100'
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
MATCHLINE SHEET 23 STA. 444+99.07 -Y22-
JAMES E HARRINGTON FWY
I 40 WBL
70' CONC
56' CONC
38' BST
110+00
-Y22FLYCC-
105+00
-Y22FLYCC-
15+00
20+00
25+00
945+00
445
450
55
50
WFB
SITE 32
SITE 31
SDT
WFC
WFD
WFA
-Y22LPA- CS
Sta. 12+50.00
-Y22LPA- SC
Sta. 25+13.66
-Y22RPEA- POC
Sta. 51+21.52=
-Y22LPA- ST
Sta. 10+00.00
12' RT
-L- POT
Sta. 940+62.94=
-Y22LPA- ST
Sta. 27+63.66
71' LT
-L- POT
Sta. 933+62.00=
-Y22LPB- POT
Sta. 31+34.98
-67° 10' 47.6"
SR 2703
NEW BETHEL CHURCH RD
20' BST
15' CONC
8' GR
IS BKD
ISFD
REVISIONS
5/14/99
4:22:46 PM
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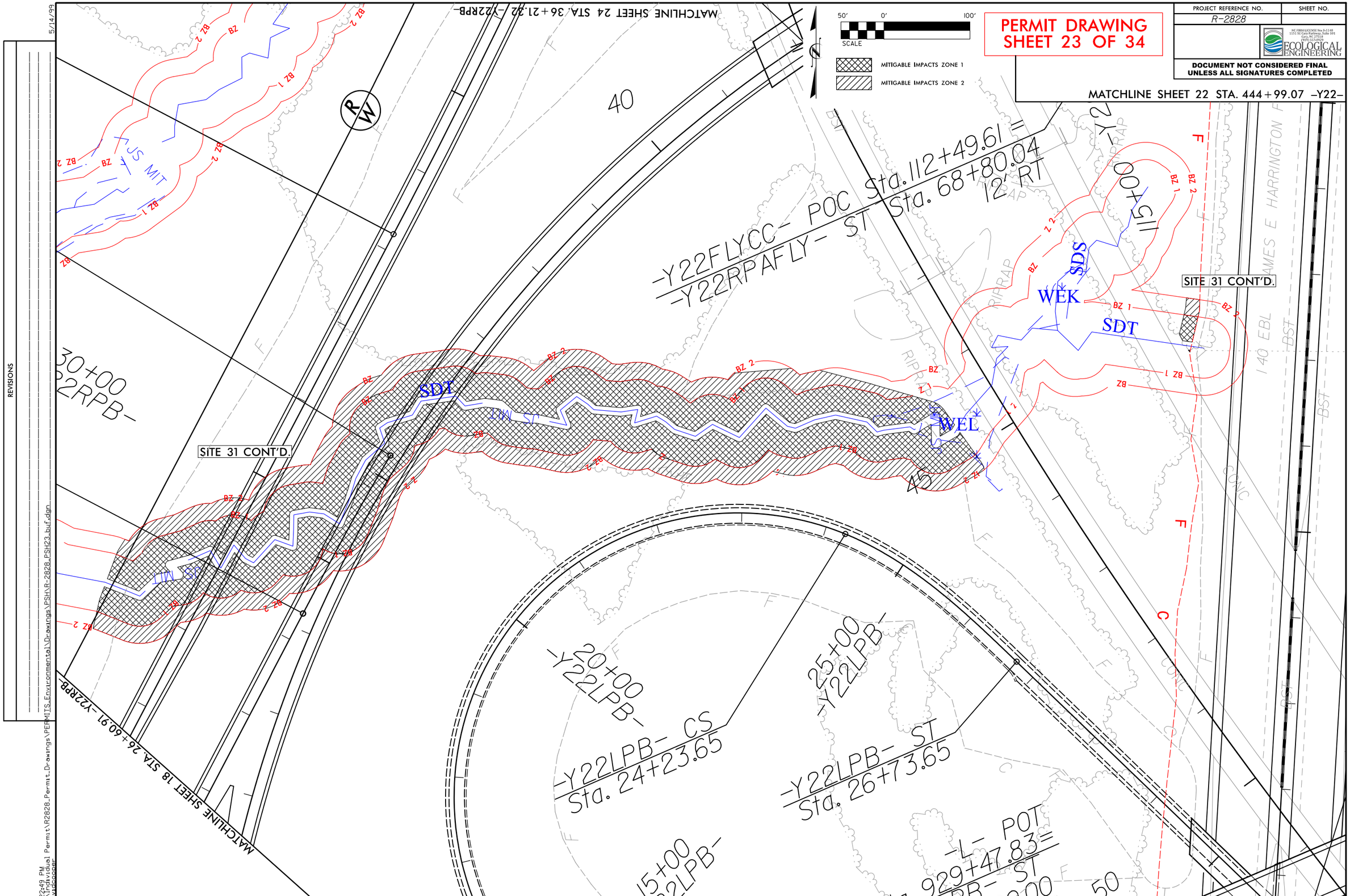
davidcooper



PERMIT DRAWING
SHEET 23 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
MATCHLINE SHEET 22 STA. 444+99.07 -Y22-
MATCHLINE SHEET 24 STA. 36+21.32 -Y22RPB-
MATCHLINE SHEET 18 STA. 26+60.91 -Y22RPB-
SCALE
50' 0' 100'
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
-Y22FLYCC- POC Sta. 112+49.61 =
-Y22RPAFLY- ST Sta. 68+80.04
12' RT
115+00 -Y22
30+00
-Y22RPB-
20+00
-Y22LPB-
25+00
-Y22LPB-
-Y22LPB- CS
Sta. 24+23.65
-Y22LPB- ST
Sta. 26+73.65
15+00
-L- POT
Sta. 929+47.83=
SITE 31 CONT'D.
SITE 31 CONT'D.
SDT
SDS
WEK
WEL
JS MIT
I 40 EBL
JAMES E HARRINGTON
40
45
50
REVISIONS
5/14/99
4:22:49 PM
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davidcooper

PERMIT DRAWING
SHEET 24 OF 34

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No: P-1148
1151 Sit Cary Parkway, Suite 101
Cary, NC 27513
(919) 557-0939
ECOLOGICAL ENGINEERING

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

50' 0' 100'
SCALE

MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2

REVISIONS
5/14/99

SITE 33 CONT'D.
SITE 35
SITE 34
SITE 33

Y22FLYEB – PT Sta. 16+09.90
Y22FLYEB – SC Sta. 13+22.00
Y22FLYEB – ST Sta. 10+00.00
Y22FLYBD
15+00
50+00 -Y22RPB-
45+00 -Y22RPB-
40+00 -Y22RPB-
Y22FLYEB – CS Sta. 40+90.84 = 41+00.67

SDP
SDR
SDQ
SDS
HEM
JS MIT
BZ 1
BZ 2
BZ
L Z1
L Z2
TZ 1
TZ 2
C
R
W

MATCHLINE SHEET 23 STA. 36+21.32 –Y22RPB–

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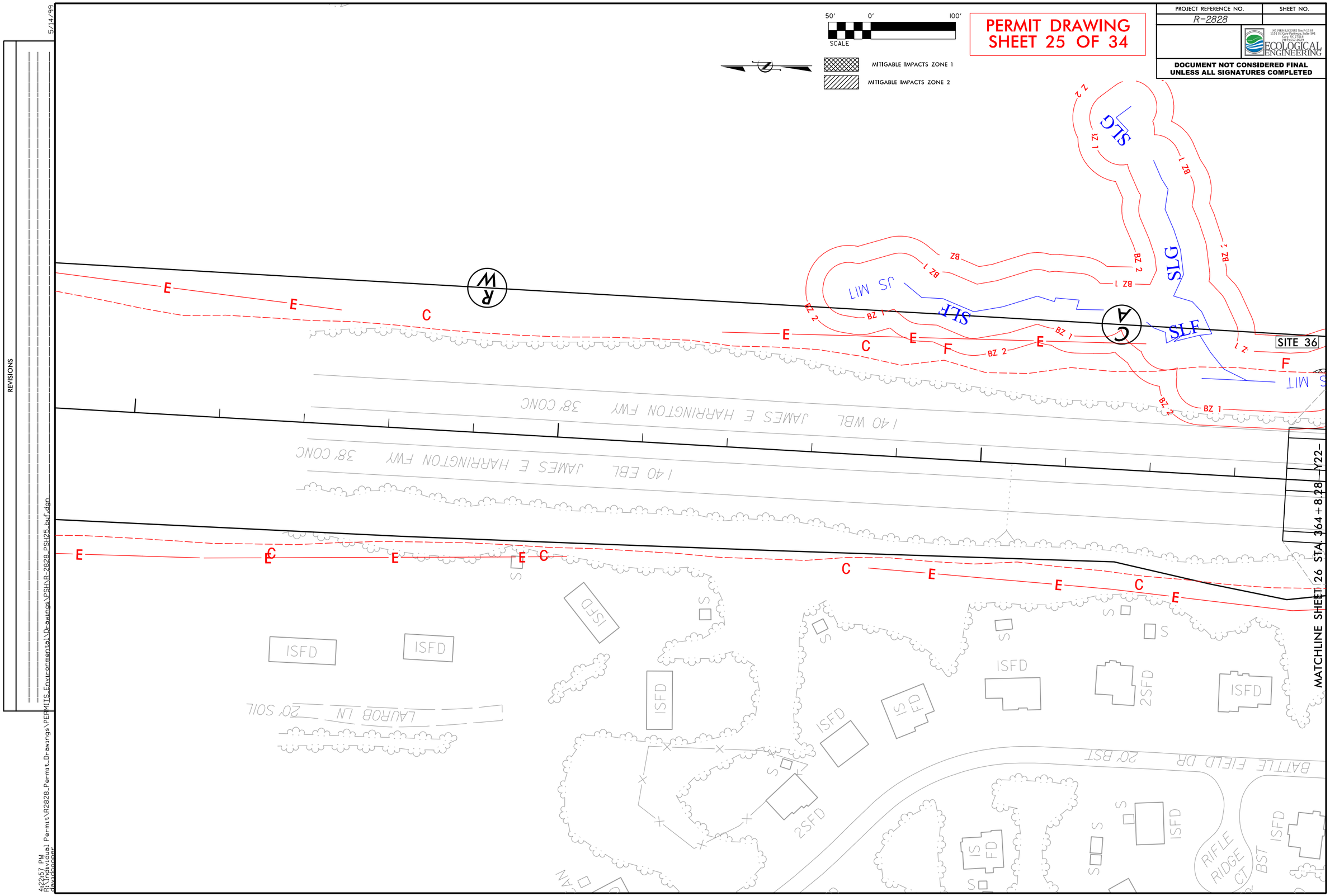

PERMIT DRAWING
SHEET 25 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
SITE 36
SLG
SLF
JS MIT
BZ 1
BZ 2
I 40 WBL JAMES E HARRINGTON FWY 38' CONC
I 40 EBL JAMES E HARRINGTON FWY 38' CONC
LAUROB LN 20' SOIL
BATTLE FIELD DR 20' BST
RIFLE RIDGE CT
ISFD
2SFD
MATCHLINE SHEET 26 STA. 364+8.28—Y22—
REVISIONS
5/14/99
4:22:57 PM
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PERMIT DRAWING
SHEET 26 OF 34

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No P-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 557-0939
ECOLOGICAL ENGINEERING

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

50' 0' 100'
SCALE

MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

REVISIONS
5/14/99

MATCHLINE SHEET 25 STA. 364+8.28 –Y22–

MATCHLINE SHEET 27 STA. 379+10.80 –Y22–

SITE 36
SITE 37
SITE 38
SITE 40

SEM
SLH
SLL
WLB
WNR
WPX
WPY
SNK
SNM
JS MIT
HTR
ISFD
2S FD
WALL
RIDGEVIEW SUBDIVISION
140 EBL JAMES E HARRINGTON FWY 38' CONC
HARRINGTON FWY 38' CONC
18' BST

BZ 1
BZ 2
E
F
C
S

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dwidgenor

PERMIT DRAWING
SHEET 27 OF 34

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No: P-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 551-0929
ECOLOGICAL ENGINEERING

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

50' 0' 100'
SCALE

MITIGABLE IMPACTS ZONE 1
MITIGABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

MATCHLINE SHEET 26 STA. 379+10.80 –Y22–

SITE 36 CONT'D.

SITE 38 CONT'D.

SITE 39

SMITH LANDING SUBDIVISION

SR 1202

8' SOIL

HTR

SEM

SEN

SNK

SNS

WOA

JS MIT

–Y22– POT Sta. 382+38.96 = –Y22RPB– POT Sta. 99+54.88 60' RT

–Y22RPB– SC Sta. 87+68.58

–Y22RPB– CS Sta. 92+46.26

–Y22RPB– ST Sta. 94+62.26

95+00 –Y22RPB–

90+00 –Y22RPB–

JAMES E HARRINGTON FWY 44' CONC

MATCHLINE SHEET 28 STA. 394+12.32 –Y22–

REVISIONS

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davidcooper

PERMIT DRAWING
SHEET 28 OF 34

PROJECT REFERENCE NO.	SHEET NO.
R-2828	

NC FIRM LICENSE No P-1148
1151 SE Cary Parkway, Suite 101
Cary, NC 27518
(919) 515-0929
ECOLOGICAL ENGINEERING

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

50' 0' 100'
SCALE

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

REVISIONS

MATCHLINE SHEET 27 STA. 394+12.32 -Y22-

MATCHLINE SHEET 29 STA. 409+15.83 -Y22-

SITE 41

SITE 42

-Y22RPB- TS Sta. 8

85+00 -Y22RPB-

80+00 -Y22RPB-

75+00 -Y22RPB-

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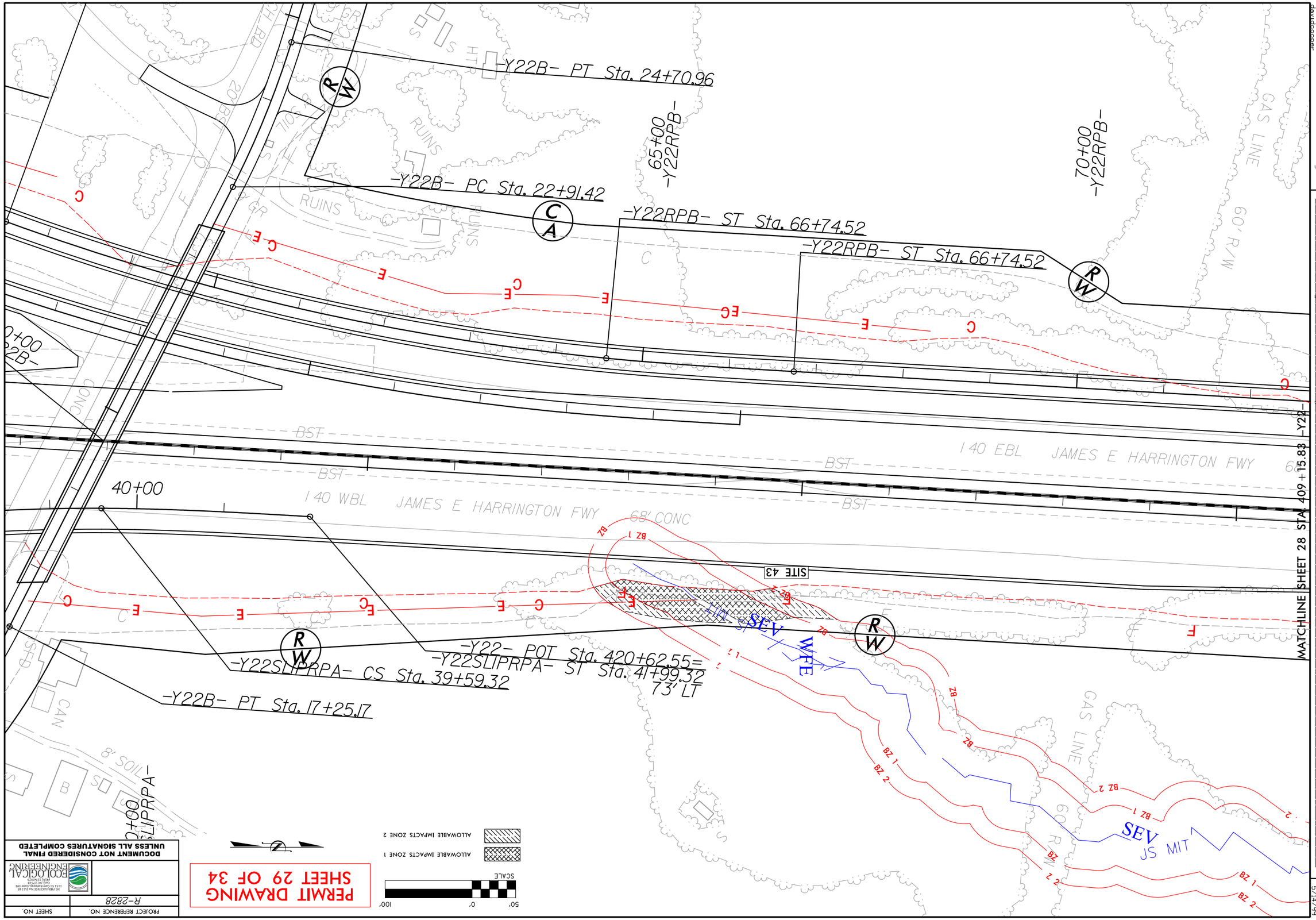
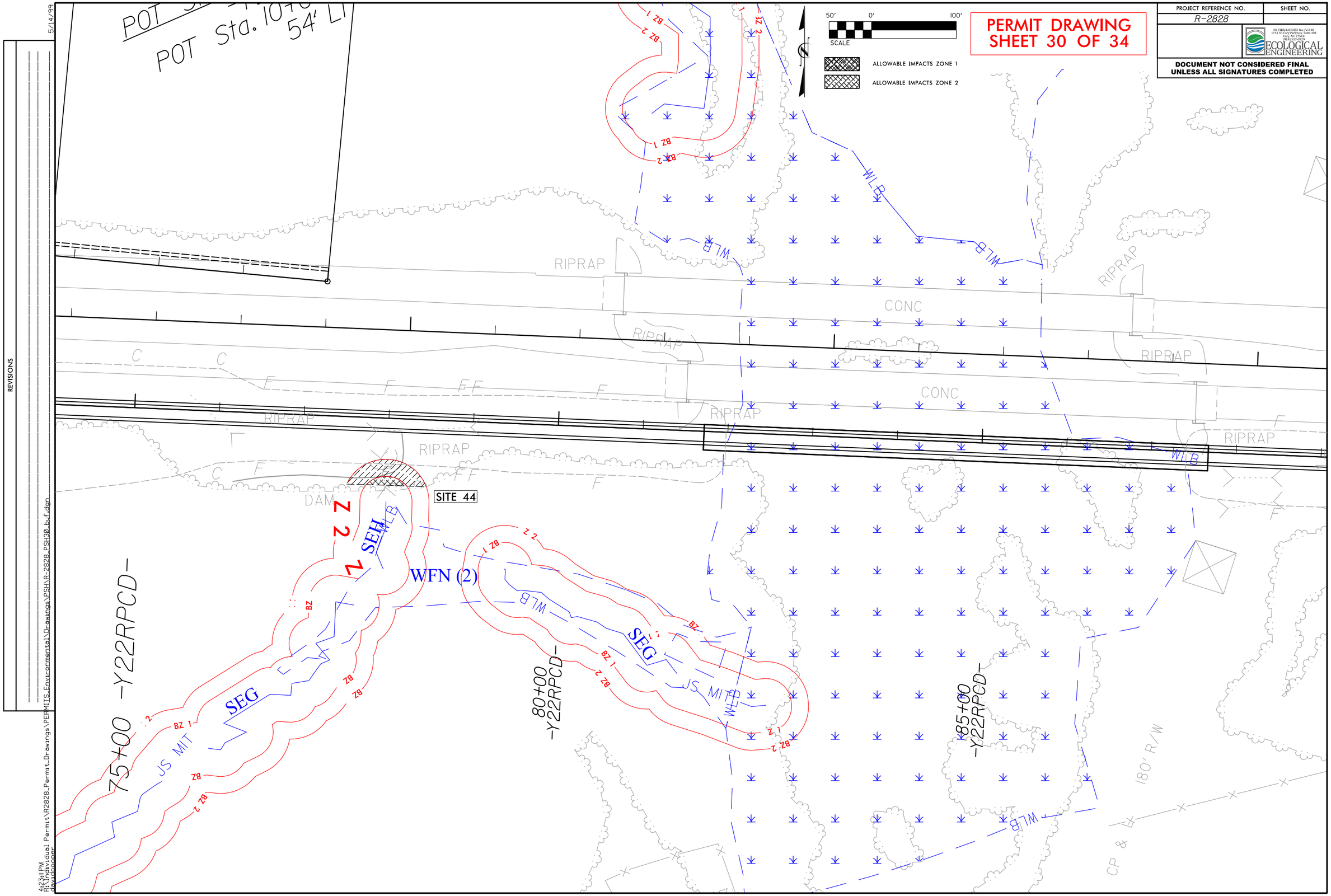
davidcooper



-Y22B- PT Sta. 24+70.96
-Y22B- PC Sta. 22+91.42
-Y22RPB- ST Sta. 66+74.52
-Y22RPB- ST Sta. 66+74.52
65+00 -Y22RPB-
70+00 -Y22RPB-
GAS LINE
60' R/W
RUINS
BST
I 40 EBL JAMES E HARRINGTON FWY
I 40 WBL JAMES E HARRINGTON FWY
68' CONC
40+00
SITE 43
SEV
WFE
-Y22- POT Sta. 420+62.55=
-Y22SLIPRPA- ST Sta. 41+99.32
73' LT
-Y22SLIPRPA- CS Sta. 39+59.32
-Y22B- PT Sta. 17+25.17
8' SOIL
SEV
JS MIT
MATCHLINE SHEET 28 STA. 409+15.83 -Y22-
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
SCALE
50' 0' 100'
PERMIT DRAWING
SHEET 29 OF 34
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
ECOLOGICAL ENGINEERING
PROJECT REFERENCE NO.
SHEET NO.
R-2828
REVISIONS
5/14/99



PERMIT DRAWING
SHEET 30 OF 34
PROJECT REFERENCE NO.
R-2828
SHEET NO.
ECOLOGICAL ENGINEERING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
50' 0' 100'
SCALE
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2
POT Sta. 1040
54' LT
RIPRAP
CONC
DAM
SITE 44
WFN (2)
SEH
SEG
JS MIT
WLB
75+00 -Y22RPCD-
80+00 -Y22RPCD-
85+00 -Y22RPCD-
180' R/W
CP &
REVISIONS
5/14/99
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davidcooper

RIPARIAN BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE				
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)
1	2@6'x5'RCBC	505+00-L-/507+00-L-	X					0	32279	20212	52491		
2	ROADWAY FILL	510+00-L-/513+00-L-	X					0	50072	27340	77412		
3	ROADWAY FILL	512+00-L-/516+00-L-			X			0	26091	17005	43096		
4	ROADWAY FILL	516+00-L-	X			1098	1505	2603			0		
5	2@5'X5'RCBC	547+00-L-/550+00-L-	X					0	28133	17551	45684		
6	3@8'X5'RCBC	557+00-L-/560+00-L-	X					0	26013	16392	42405		
7	ROADWAY FILL	570+00-L-/578+00-L-			X			0	14920	12189	27109		
8	2@7'X5'RCBC	608+00-L-/611+00-L-	X					0	22656	14999	37655		
9	ROADWAY FILL	13+00-Y18A-/15+00-Y18A-	X			1546	4018	5564			0		
10	BRIDGE	659+00-L-/661+00-L-		X		15727	10051	25778			0		
11	ROADWAY FILL	697+00-L-/710+00-L-			X			0	87892	42255	130147		
12	2@7'X5'RCBC	707+00-L-/708+50-L-	X					0	16455	10453	26908		
13	ROADWAY FILL	725+00-L-/737+00-L-			X			0	52758	28261	81019		
14	2@9'X7' RCBC	736+00-L-/738+00-L-	X					0	26417	14867	41284		
15	2@8'X6'RCBC	781+00-L-/785+00-L-	X					0	26144	17335	43479		
16	ROADWAY FILL	785+00-L-/789+00-L-	X					0	27451	17762	45213		
17	ROADWAY FILL	54+50-Y21-/59+50-Y21-	X					0	8883	13885	22768		
18	ROADWAY FILL	54+00-Y21-/54+50-Y21	X			2969	1938	4907			0		
19	ROADWAY FILL	45+00-Y21-/46+00-Y21-	X			4965	3562	8527			0		
20	ROADWAY FILL	804+00-L-/848+00-L-	X					0	6910	3909	10819		
	BRIDGE			X		61695	32849	94544			0		
	2@ 6'X5'RCBC & ROADWAY FILL				X			0	120844	71962	192806		
21	BRIDGE	864+00-L-/869+00-L-		X		24892	13887	38779			0		
22	2@6'X5'RCBC	875+00-L-/877+00-L-	X					0	23873	14941	38814		
23	ROADWAY FILL	888+00-L-/890+00-L-	X			3129	3607	6736			0		
24	ROADWAY FILL	894+00-L-/896+00-L-	X					0	36776	23594	60370		
25	ROADWAY FILL	900+00-L-/907+00-L-	X					0	29815	18991	48806		
	ROADWAY FILL				X			0	29375	15085	44460		
	BRIDGE			X		0	61	61	0	0	0		
SHEET 31 TOTAL:						116021	71478	187499	693757	418988	1112745	0	0
PROJECT TOTAL:						158938	97484	256422	1120360	655005	1775665		

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY
PROJECT: TIP R-2828

DATE 07/31/2018
SHEET 31 OF 34

Rev. SEP 2016
Rev. May 2006

RIPARIAN BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
			TYPE			ALLOWABLE			MITIGABLE				
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)	TOTAL (ft^2)	ZONE 1 (ft^2)	ZONE 2 (ft^2)
26	BRIDGE	33+00-Y22FLYCC-/42+00-Y22SLIPRPB-		X		10167	5662	15829			0		
	ROADWAY FILL		X					0	43388	27834	71222		
	ROADWAY FILL				X			0	2174	3169	5343		
27	3@9'X5'RCBC	915+00-L-/918+00-L-	X					0	55763	36205	91968		
	BRIDGE			X		6346	3986	10332			0		
28	ROADWAY FILL	18+00-Y22RPDFLY-/21+00-Y22RPDFLY-	X					0	22264	15570	37834		
29	ROADWAY FILL	47+00-Y22RPCD-/49+00-Y22RPCD-	X					0	47842	27438	75280		
30	ROADWAY FILL	29+00-Y22RPCD-/31+00-Y22RPCD-	X					0	69077	44626	113703		
31	ROADWAY FILL	15+00-Y22LPA-/29+00-Y22RPB-	X					0	78662	48896	127558		
32	ROADWAY FILL	13+00-Y22LPA-	X			882	267	1149			0		
33	ROADWAY FILL	15+00-Y22FLYCC-	X					0	40745	20599	61344		
34	ROADWAY FILL	37+00-Y22RPB-/48+50-Y22RPB-			X			0	5105	3408	8513		
35	ROADWAY FILL	14+00-Y22FLYEB-/16+00-Y22FLYEB-			X			0	183	3223	3406		
36	ROADWAY FILL	358+00-Y22-/362+00-Y22-			X			0	42611	2716	45327		
37	ROADWAY FILL	362+00-Y22-/392+00-Y22-	X			868	774	1642			0		
38	ROADWAY FILL	372+00-Y22-/373+50-Y22-			X			0	18789	2333	21122		
39	ROADWAY FILL	374+50-Y22-/386+00-Y22-	X			2287	1150	3437			0		
40	ROADWAY FILL	377+00-Y22-/379+00-Y22-	X			439	0	439			0		
41	ROADWAY FILL	395+00-Y22-/397+00-Y22-	X			7242	4745	11987			0		
42	ROADWAY FILL	404+00-Y22-/407+00-Y22-	X			9222	4751	13973			0		
43	ROADWAY FILL	414+00-Y22-/417+00-Y22-	X			5113	2933	8046			0		
44	ROADWAY FILL	77+50-Y22RPCD-/78+50-Y22RPCD-	X			351	1738	2089			0		
SHEET 32 TOTAL:						42917	26006	68923	426603	236017	662620	0	0
PROJECT TOTAL:						158938	97484	256422	1120360	655005	1775665		

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY
PROJECT: TIP R-2828

DATE 07/31/2018
SHEET 32 OF 34

Rev. SEP 2016
Rev. May 2006

WETLANDS IN BUFFER IMPACTS SUMMARY

SITE NO.	STATION (FROM/TO)		WETLANDS IN BUFFERS ZONE 1 (ft^2)	WETLANDS IN BUFFERS ZONE 2 (ft^2)
1	505+00-L-/507+00-L-		2545	3834
2	510+00-L-/513+00-L-		7138	4173
3	512+00-L-/516+00-L-		464	896
4	516+00-L-		251	194
5	547+00-L-/550+00-L-		485	645
6	557+00-L-/560+00-L-		2269	1471
7	570+00-L-/578+00-L-		1883	0
8	608+00-L-/611+00-L-		21562	10322
9	13+00-Y18A-/15+00-Y18A-		0	0
10	659+00-L-/661+00-L-		0	0
11	697+00-L-/710+00-L-		53816	25070
12	707+00-L-/708+50-L-		16259	8185
13	725+00-L-/737+00-L-		4740	768
14	736+00-L-/738+00-L-		212	3143
15	781+00-L-/785+00-L-		12009	2516
16	785+00-L-/789+00-L-		10851	1842
17	54+50-Y21-/59+50-Y21-		0	0
18	54+00-Y21-/54+50-Y21		0	0
19	45+00-Y21-/46+00-Y21-		0	0
20	804+00-L-/848+00-L-		2660	1802
21	864+00-L-/869+00-L-		0	0
22	875+00-L-/877+00-L-		15117	6599
23	888+00-L-/890+00-L-		3015	1311
24	894+00-L-/896+00-L-		0	0
25	900+00-L-/907+00-L-		0	0
SHEET 33 TOTAL			155276	72771
PROJECT TOTAL			177517	83313

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY
PROJECT: TIP R-2828

DATE 07/31/2018
SHEET 33 OF 34

Rev. Jan 2009

WETLANDS IN BUFFER IMPACTS SUMMARY

SITE NO.	STATION (FROM/TO)		WETLANDS IN BUFFERS ZONE 1 (ft^2)	WETLANDS IN BUFFERS ZONE 2 (ft^2)
26	33+00-Y22FLYCC-/42+00-Y22SLIPRPB-		959	966
27	915+00-L-/918+00-L-		12835	6970
28	18+00-Y22RPDFLY-/21+00-Y22RPDFLY-		0	0
29	47+00-Y22RPCD-/49+00-Y22RPCD-		1893	0
30	29+00-Y22RPCD-/31+00-Y22RPCD-		0	0
31	15+00-Y22LPA-/29+00-Y22RPB-		1716	522
32	13+00-Y22LPA-		0	0
33	15+00-Y22FLYCC-		737	1452
34	37+00-Y22RPB-/48+50-Y22RPB-		1075	322
35	14+00-Y22FLYEB-/16+00-Y22FLYEB-		0	0
36	358+00-Y22-/362+00-Y22-		152	0
37	362+00-Y22-/392+00-Y22-		0	0
38	372+00-Y22-/373+50-Y22-		96	310
39	374+50-Y22-/386+00-Y22-		0	0
40	377+00-Y22-/379+00-Y22-		0	0
41	395+00-Y22-/397+00-Y22-		778	0
42	404+00-Y22-/407+00-Y22-		0	0
43	414+00-Y22-/417+00-Y22-		0	0
44	77+50-Y22RPCD-/78+50-Y22RPCD-		0	0
SHEET 34 TOTAL:			20241	10542
PROJECT TOTAL			175517	83313

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE COUNTY
PROJECT: TIP R-2828

DATE 07/31/2018
SHEET 34 OF 34

Rev. Jan 2009

TIP PROJECT: R-2828

Approved Preliminary Design
September 2017

CONTRACT:

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE & JOHNSTON COUNTY

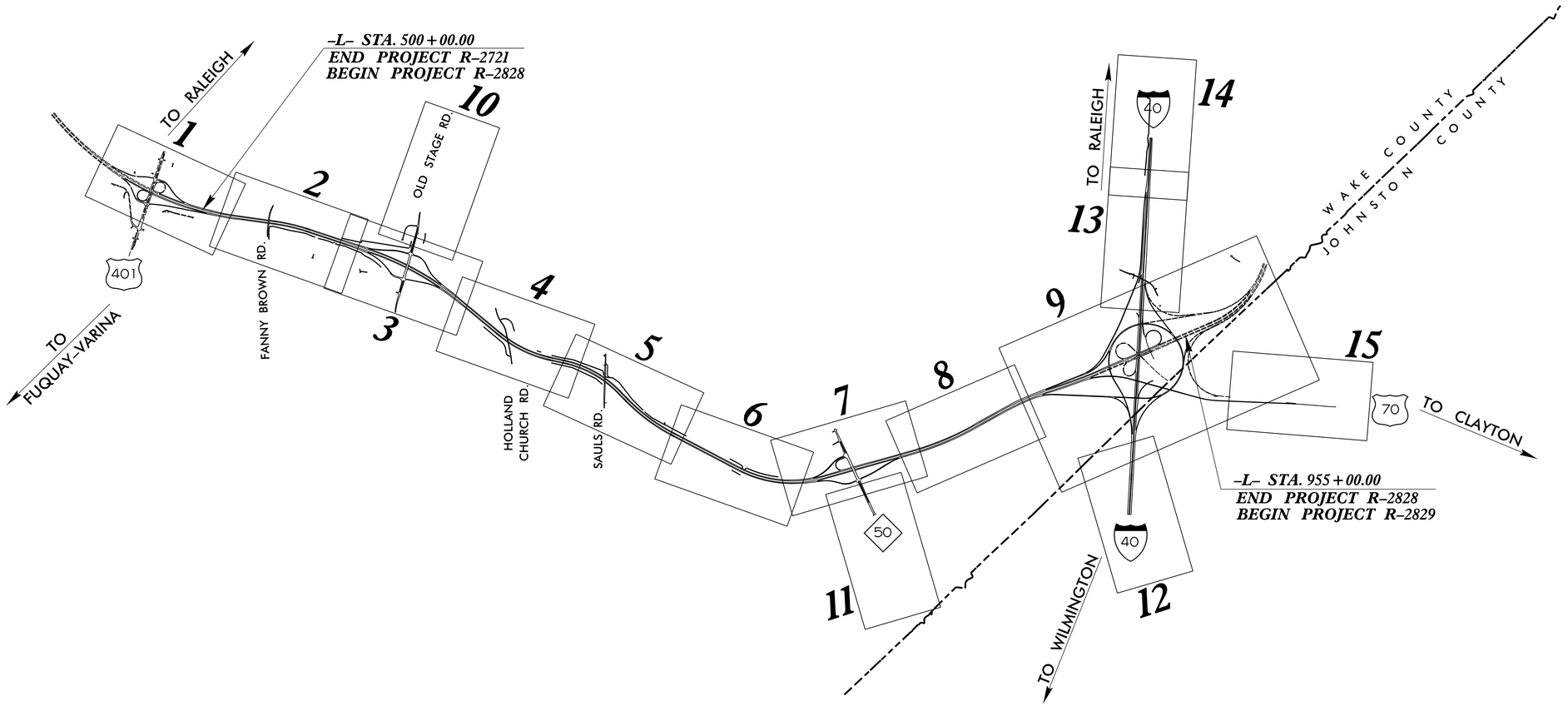
LOCATION: COMPLETE 540 – FROM EAST OF HWY 401 TO EAST OF I-40

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2828	TS	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
6.401079	STP-540(20)	PE	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

NAD 83 NC GRID



GRAPHIC SCALES

100′ 50′ 0 100′ 200′
PLANS

100′ 50′ 0 100′ 200′
PROFILE (HORIZONTAL)

10′ 5′ 0 10′ 20′
PROFILE (VERTICAL)

DESIGN DATA

ADT 2016 = 28,400
ADT 2040 = 53,400
DHV = 12 %
D = 65 %
T = 11 % *
V = 75 MPH

* TTST 7% DUAL 4%
FUNC. CLASS. = INTERSTATE

PROJECT LENGTH

LENGTH ROADWAY STATE TIP PROJECT R-2828 = 8.617 Miles

TOTAL LENGTH STATE TIP PROJECT R-2828 = 8.617 Miles

Prepared in the Office of:

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

BRIAN K. EASON, PE
PROJECT ENGINEER

PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: *P.E.*

ROADWAY DESIGN ENGINEER

SIGNATURE: *P.E.*

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

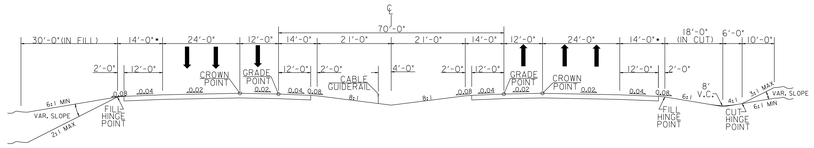
STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION

P.E.
STATE HIGHWAY DESIGN ENGINEER

ROLL TYP-1

ROLL TYP-1

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

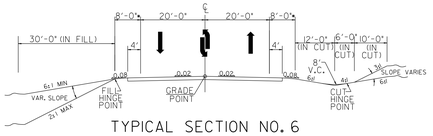


TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1 AS FOLLOWS:

TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION

•USE 17' IN GUARDRAIL LOCATIONS

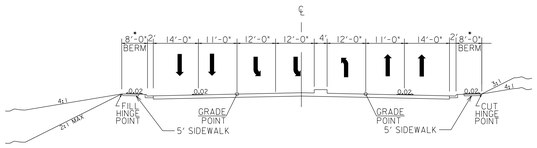


TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6 AS FOLLOWS:

-Y16- FANNY BROWN RD (SR 2723)
-Y19- SAULS RD (SR 2727)

•USE 11' IN GUARDRAIL LOCATIONS

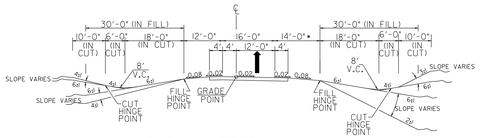


TYPICAL SECTION NO. 11

USE TYPICAL SECTION NO. 11 AS FOLLOWS:

-Y21- NC 50: INSIDE INTERCHANGE

•USE 11' IN GUARDRAIL LOCATIONS

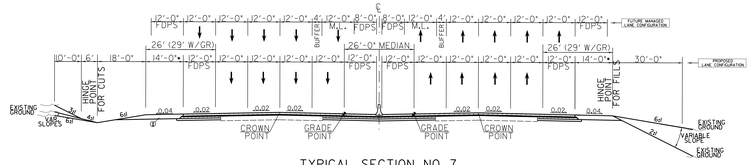


TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2 AS FOLLOWS:

RAMPS, FLYOVER - SINGLE LANE

•USE 17' IN GUARDRAIL LOCATIONS

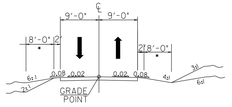


TYPICAL SECTION NO. 7

USE TYPICAL SECTION NO. 7 AS FOLLOWS:

-Y22- I-40

•USE 17' IN GUARDRAIL LOCATIONS

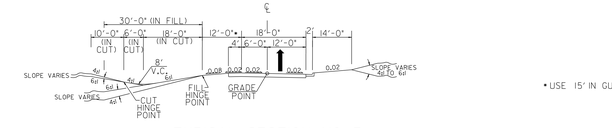


TYPICAL SECTION NO. 12

USE TYPICAL SECTION NO. 12 AS FOLLOWS:

SERVICE ROADS

•USE 11' IN GUARDRAIL LOCATIONS

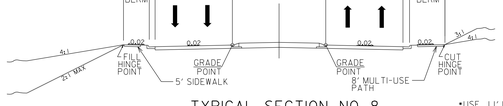


TYPICAL SECTION NO. 5

USE TYPICAL SECTION NO. 5 AS FOLLOWS:

-Y13- US 401

•USE 15' IN GUARDRAIL LOCATIONS
+USE 9' IN GUARDRAIL LOCATIONS

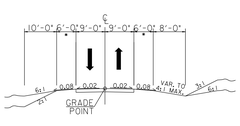


TYPICAL SECTION NO. 8

USE TYPICAL SECTION NO. 8 AS FOLLOWS:

-Y17- OLD STAGE RD (SR 1006): INSIDE INTERCHANGE

•USE 11' IN GUARDRAIL LOCATIONS
••USE 14' IN GUARDRAIL LOCATIONS

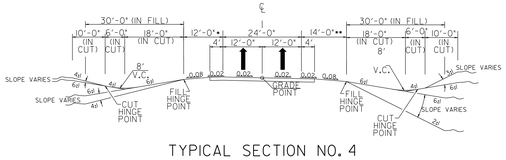


TYPICAL SECTION NO. 13

USE TYPICAL SECTION NO. 13 AS FOLLOWS:

SUBDIVISION ROADS

•USE 8' IN GUARDRAIL LOCATIONS

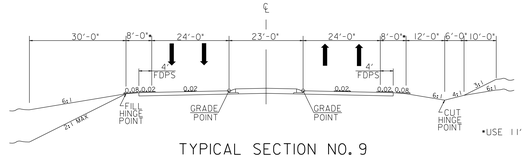


TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4 AS FOLLOWS:

FLYOVER - DUAL LANE

• USE 15' IN GUARDRAIL LOCATIONS
•• USE 17' IN GUARDRAIL LOCATIONS

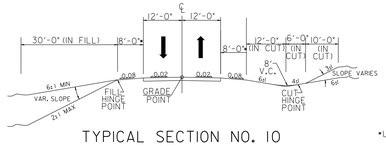


TYPICAL SECTION NO. 9

USE TYPICAL SECTION NO. 9 AS FOLLOWS:

-Y17- OLD STAGE RD (SR 1006): OUTSIDE INTERCHANGE
-Y21- NC 50: OUTSIDE INTERCHANGE

•USE 11' IN GUARDRAIL LOCATIONS



TYPICAL SECTION NO. 10

USE TYPICAL SECTION NO. 10 AS FOLLOWS:

-Y18- HOLLAND CHURCH RD (SR 2725)
-Y17DET- OLD STAGE RD DETOUR
-Y18DET- HOLLAND CHURCH RD DETOUR
-Y19DET- SAULS RD DETOUR
-Y21DET- NC 50 DETOUR

•USE 11' IN GUARDRAIL LOCATIONS

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540 Triangle Expressway Southeast Extension
PREPARED BY:
LOCHNER
LOCHNER
1616 CAPITAL MALL, SUITE 300
SACRAMENTO, CA 95814
(916) 576-1313
NC FIRM# P0339

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540 Triangle Expressway Southeast Extension
PREPARED BY:
LOCHNER
LOCHNER
1616 CAPITAL MALL, SUITE 300
SACRAMENTO, CA 95814
(916) 576-1313
NC FIRM# P0339

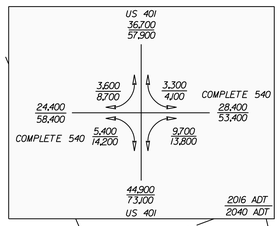
ROLL 1 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY



(777) CONREX RESIDENTIAL PROPERTY GROUP 2012-2 (B2R I) O
(778) NASH, ANNE MARIE
(779) HULL, ALIX E
(780) LUCAS, KENNETH A
(781) LUCAS, KENNETH A
(782) LUCAS, KENNETH A
(783) JOHNSON, CAROL TYRRELL, MATTHEW S
(784) BLAKE, FRANK ORES BLAKE, LINDA C
(785) WHITE, EDWIN W WHITE, NANCY K
(786) WHITE, EDWIN W WHITE, NANCY K
(787) BROADWELL, WALTER J HEIRS
(788) HANSFORD, KENNETH H HANSFORD, SHARON C
(789) HANSFORD, KENNETH H HANSFORD, SHARON C
(790) NOEL, MICHAEL L NOEL, CONNIE M
(791) GUIN, WILLIAM ARTHUR JR GUIN, VIRGINIA DIANE
(792) GOODMAN, MALCOLM E JR GOODMAN, PENNY B
(793) HAMRICK, GETTIS G HAMRICK, PHYLLIS J

(767) WEST, GEORGE DAVIS WEST, BARBARA S
(768) WEST, GEORGE DAVIS WEST, BARBARA S
(769) DEMENT, GREGORY MASON DEMENT, ANGELA H
(770) HAMRICK, GETTIS HAMRICK, PHYLLIS J
(771) SAVAGE, JAMES P SAVAGE, REBECCA
(772) BAKER, ROGER LEON
(773) MOON, WILLIE L MOON, DOLORES A
(774) RADLOFF, JILL R
(775) MITCHELL, WILBUR C MITCHELL, MARLENE F
(776) NASH, ANNIE M

-L-
PI Sta 41+74.025
Δ = 42° 49' 59.0" (LT)
D = 0° 28' 22.6"
L = 9,056.39'
T = 4,751.85'
R = 12,151.00'
V = 75mph
SE = 0.02

-Y14A-
PI Sta 18+25.36
Δ = 5° 37' 43.6" (RT)
D = 3° 52' 16.8"
L = 145.42'
T = 72.76'
R = 1,480.00'
V = 40mph
SE = 0.03

PI Sta 21+71.97
Δ = 39° 24' 59.4" (LT)
D = 38° 11' 49.5"
L = 103.19'
T = 53.73'
R = 150.00'
V = 25mph
SE = 0.04

-Y13-
PI Sta 69+64.74
Δ = 3° 57' 05.2"
Ls = 200.00'
LT = 133.37'
ST = 66.70'

PI Sta 72+91.41
Δ = 20° 20' 00.7" (RT)
D = 3° 57' 05.2"
L = 514.59'
T = 260.03'
R = 1,450.00'
V = 60mph
SE = 0.08

PI Sta 76+12.66
Ls = 200.00'
LT = 133.37'
ST = 66.70'

-Y13A-
PI Sta 13+59.91
Δ = 50° 51' 50.2" (RT)
D = 18° 11' 20.9"
L = 279.64'
T = 149.79'
R = 315.00'
V = 30mph
SE = 0.08

PI Sta 28+11.04
Δ = 65° 40' 33.2" (LT)
D = 12° 43' 56.6"
L = 515.82'
T = 290.43'
R = 450.00'
V = 40mph
SE = 0.08

-Y13RPA-
PI Sta 11+51.32
Gs = 0° 34' 11.5"
Gs = 4° 38' 45.2"
Ls = 240.00'
LT = 151.32'
ST = 88.82'

PI Sta 16+33.35
Δ = 29° 46' 04.0" (RT)
D = 3° 52' 16.8"
L = 768.53'
T = 393.35'
R = 1,480.00'
V = 65mph
SE = 0.07

PI Sta 20+88.98
Gs = 4° 38' 44.2"
Ls = 240.00'
LT = 160.06'
ST = 80.05'

PI Sta 24+16.05
Gs = 13° 01' 18.4"
Ls = 250.00'
LT = 167.12'
ST = 83.75'

PI Sta 26+21.35
Δ = 25° 05' 51.6" (LT)
D = 10° 25' 02.7"
L = 240.92'
T = 122.42'
R = 550.00'
V = 40mph
SE = 0.08

-Y13LPA-
PI Sta 11+33.51
Gs = 0° 27' 29.4"
Gs = 2° 45' 32.4"
Ls = 200.00'
LT = 133.51'
ST = 69.21'

PI Sta 17+36.89
Δ = 24° 54' 40.4" (LT)
D = 24° 54' 40.4"
L = 536.89'
R = 230.00'
V = 30mph
SE = 0.08

PI Sta 21+76.64
Δ = 24° 54' 40.4"
Ls = 200.00'
LT = 134.88'
ST = 67.89'

-Y13RPB-
PI Sta 10+82.21
Gs = 0° 17' 59.8"
Gs = 1° 03' 49.9"
Ls = 140.00'
LT = 82.21'
ST = 57.80'

PI Sta 14+76.15
Δ = 10° 11' 26.3" (LT)
D = 1° 3' 11.2"
L = 670.53'
T = 336.15'
R = 1,770.00'
V = 65mph
SE = 0.05

PI Sta 18+57.20
Gs = 1° 03' 49.9"
Ls = 140.00'
LT = 93.34'
ST = 46.67'

PI Sta 22+39.39
Gs = 4° 46' 28.7"
Ls = 205.00'
LT = 136.72'
ST = 68.38'

PI Sta 24+54.53
Δ = 13° 36' 59.5" (LT)
D = 4° 39' 29.5"
L = 292.31'
R = 1,230.00'
V = 55mph
SE = 0.08

PI Sta 26+68.37
Gs = 4° 46' 28.7"
Ls = 205.00'
LT = 136.72'
ST = 68.38'

-Y13RPB-
PI Sta 29+41.70
Gs = 4° 26' 56.8"
Ls = 200.00'
LT = 136.71'
ST = 68.37'

PI Sta 31+31.22
Δ = 10° 29' 41.7" (RT)
D = 4° 30' 26.4"
L = 241.79'
R = 1,320.00'
V = 40mph
SE = 0.05

-Y13RPC-
PI Sta 10+33.33
Gs = 0° 14' 06.3"
Ls = 140.00'
LT = 66.67'
ST = 33.33'

PI Sta 11+66.67
Gs = 0° 30' 03.0"
Ls = 200.00'
LT = 66.67'
ST = 33.33'

PI Sta 14+24.85
Δ = 4° 30' 08.1" (RT)
D = 1° 00' 06.2"
L = 449.47'
R = 5,720.00'
V = 65mph
SE = 0.03

PI Sta 17+29.94
Gs = 0° 39' 02.4"
Gs = 3° 52' 47.3"
Ls = 130.00'
LT = 80.47'
ST = 49.59'

-Y13LPC-
PI Sta 19+18.62
Δ = 22° 49' 59.0" (LT)
D = 24° 54' 40.4"
L = 914.58'
T = 518.65'
R = 230.00'
V = 30mph
SE = 0.08

PI Sta 23+82.47
Gs = 24° 54' 40.4"
Ls = 200.00'
LT = 134.68'
ST = 67.89'

-Y13RPD-
PI Sta 31+34.84
Gs = 0° 27' 56.9"
Ls = 100.00'
LT = 66.67'
ST = 33.33'

-Y13RPD-
PI Sta 35+39.63
Δ = 6° 54' 46.3" (LT)
D = 0° 55' 53.9"
L = 742.01'
T = 371.46'
R = 6,250.00'
V = 65mph
SE = 0.03

PI Sta 39+43.52
Gs = 0° 27' 56.9"
Ls = 100.00'
LT = 66.67'
ST = 33.33'

-Y14-
PI Sta 1+40.25
Δ = 42° 49' 59.0" (LT)
D = 0° 28' 22.6"
L = 9,056.39'
T = 4,751.85'
R = 12,151.00'
V = 75mph
SE = 0.02

-Y14A-
PI Sta 18+25.36
Δ = 5° 37' 43.6" (RT)
D = 3° 52' 16.8"
L = 145.42'
T = 72.76'
R = 1,480.00'
V = 40mph
SE = 0.03

PI Sta 21+71.97
Δ = 39° 24' 59.4" (LT)
D = 38° 11' 49.5"
L = 103.19'
T = 53.73'
R = 150.00'
V = 25mph
SE = 0.04

-Y13-
PI Sta 69+64.74
Δ = 3° 57' 05.2"
Ls = 200.00'
LT = 133.37'
ST = 66.70'

PI Sta 72+91.41
Δ = 20° 20' 00.7" (RT)
D = 3° 57' 05.2"
L = 514.59'
T = 260.03'
R = 1,450.00'
V = 60mph
SE = 0.08

PI Sta 76+12.66
Ls = 200.00'
LT = 133.37'
ST = 66.70'

-Y13A-
PI Sta 13+59.91
Δ = 50° 51' 50.2" (RT)
D = 18° 11' 20.9"
L = 279.64'
T = 149.79'
R = 315.00'
V = 30mph
SE = 0.08

PI Sta 28+11.04
Δ = 65° 40' 33.2" (LT)
D = 12° 43' 56.6"
L = 515.82'
T = 290.43'
R = 450.00'
V = 40mph
SE = 0.08

-Y13RPA-
PI Sta 11+51.32
Gs = 0° 34' 11.5"
Gs = 4° 38' 45.2"
Ls = 240.00'
LT = 151.32'
ST = 88.82'

PI Sta 16+33.35
Δ = 29° 46' 04.0" (RT)
D = 3° 52' 16.8"
L = 768.53'
T = 393.35'
R = 1,480.00'
V = 65mph
SE = 0.07

PI Sta 20+88.98
Gs = 4° 38' 44.2"
Ls = 240.00'
LT = 160.06'
ST = 80.05'

PI Sta 24+16.05
Gs = 13° 01' 18.4"
Ls = 250.00'
LT = 167.12'
ST = 83.75'

PI Sta 26+21.35
Δ = 25° 05' 51.6" (LT)
D = 10° 25' 02.7"
L = 240.92'
T = 122.42'
R = 550.00'
V = 40mph
SE = 0.08

-Y13LPA-
PI Sta 11+33.51
Gs = 0° 27' 29.4"
Gs = 2° 45' 32.4"
Ls = 200.00'
LT = 133.51'
ST = 69.21'

PI Sta 17+36.89
Δ = 24° 54' 40.4" (LT)
D = 24° 54' 40.4"
L = 536.89'
R = 230.00'
V = 30mph
SE = 0.08

PI Sta 21+76.64
Ls = 200.00'
LT = 134.88'
ST = 67.89'

-Y13RPB-
PI Sta 10+82.21
Gs = 0° 17' 59.8"
Gs = 1° 03' 49.9"
Ls = 140.00'
LT = 82.21'
ST = 57.80'

PI Sta 14+76.15
Δ = 10° 11' 26.3" (LT)
D = 1° 3' 11.2"
L = 670.53'
T = 336.15'
R = 1,770.00'
V = 65mph
SE = 0.05

PI Sta 18+57.20
Gs = 1° 03' 49.9"
Ls = 140.00'
LT = 93.34'
ST = 46.67'

PI Sta 22+39.39
Gs = 4° 46' 28.7"
Ls = 205.00'
LT = 136.72'
ST = 68.38'

PI Sta 24+54.53
Δ = 13° 36' 59.5" (LT)
D = 4° 39' 29.5"
L = 292.31'
R = 1,230.00'
V = 55mph
SE = 0.08

PI Sta 26+68.37
Gs = 4° 46' 28.7"
Ls = 205.00'
LT = 136.72'
ST = 68.38'

-Y13RPB-
PI Sta 29+41.70
Gs = 4° 26' 56.8"
Ls = 200.00'
LT = 136.71'
ST = 68.37'

PI Sta 31+31.22
Δ = 10° 29' 41.7" (RT)
D = 4° 30' 26.4"
L = 241.79'
R = 1,320.00'
V = 40mph
SE = 0.05

-Y13RPC-
PI Sta 10+33.33
Gs = 0° 14' 06.3"
Ls = 140.00'
LT = 66.67'
ST = 33.33'

PI Sta 11+66.67
Gs = 0° 30' 03.0"
Ls = 200.00'
LT = 134.68'
ST = 67.89'

PI Sta 14+24.85
Δ = 4° 30' 08.1" (RT)
D = 1° 00' 06.2"
L = 449.47'
R = 5,720.00'
V = 65mph
SE = 0.03

PI Sta 17+29.94
Gs = 0° 39' 02.4"
Gs = 3° 52' 47.3"
Ls = 130.00'
LT = 80.47'
ST = 49.59'

-Y13LPC-
PI Sta 19+18.62
Δ = 22° 49' 59.0" (LT)
D = 24° 54' 40.4"
L = 914.58'
T = 518.65'
R = 230.00'
V = 30mph
SE = 0.08

PI Sta 23+82.47
Gs = 24° 54' 40.4"
Ls = 200.00'
LT = 134.68'
ST = 67.89'

-Y13RPD-
PI Sta 31+34.84
Gs = 0° 27' 56.9"
Ls = 100.00'
LT = 66.67'
ST = 33.33'

-Y13RPD-
PI Sta 35+39.63
Δ = 6° 54' 46.3" (LT)
D = 0° 55' 53.9"
L = 742.01'
T = 371.46'
R = 6,250.00'
V = 65mph
SE = 0.03

PI Sta 39+43.52
Gs = 0° 27' 56.9"
Ls = 100.00'
LT = 66.67'
ST = 33.33'

-Y14-
PI Sta 1+40.25
Δ = 42° 49' 59.0" (LT)
D = 0° 28' 22.6"
L = 9,056.39'
T = 4,751.85'
R = 12,151.00'
V = 75mph
SE = 0.02

-Y14A-
PI Sta 18+25.36
Δ = 5° 37' 43.6" (RT)
D = 3° 52' 16.8"
L = 145.42'
T = 72.76'
R = 1,480.00'
V = 40mph
SE = 0.03

PI Sta 21+71.97
Δ = 39° 24' 59.4" (LT)
D = 38° 11' 49.5"
L = 103.19'
T = 53.73'
R = 150.00'
V = 25mph
SE = 0.04

-Y13-
PI Sta 69+64.74
Δ = 3° 57' 05.2"
Ls = 200.00'
LT = 133.37'
ST = 66.70'

PI Sta 72+91.41
Δ = 20° 20' 00.7" (RT)
D = 3° 57' 05.2"
L = 514.59'
T = 260.03'
R = 1,450.00'
V = 60mph
SE = 0.08

PI Sta 76+12.66
Ls = 200.00'
LT = 133.37'
ST = 66.70'

-Y13A-
PI Sta 13+59.91
Δ = 50° 51' 50.2" (RT)
D = 18° 11' 20.9"
L = 279.64'
T = 149.79'
R = 315.00'
V = 30mph
SE = 0.08

PI Sta 28+11.04
Δ = 65° 40' 33.2" (LT)
D = 12° 43' 56.6"
L = 515.82'
T = 290.43'
R = 450.00'
V = 40mph
SE = 0.08

-Y13RPA-
PI Sta 11+51.32
Gs = 0° 34' 11.5"
Gs = 4° 38' 45.2"
Ls = 240.00'
LT = 151.32'
ST = 88.82'

PI Sta 16+33.35
Δ = 29° 46' 04.0" (RT)
D = 3° 52' 16.8"
L = 768.53'
T = 393.35'
R = 1,480.00'
V = 65mph
SE = 0.07

PI Sta 20+88.98
Gs = 4° 38' 44.2"
Ls = 240.00'
LT = 160.06'
ST = 80.05'

PI Sta 24+16.05
Gs = 13° 01' 18.4"
Ls = 250.00'
LT = 167.12'
ST = 83.75'

PI Sta 26+21.35
Δ = 25° 05' 51.6" (LT)
D = 10° 25' 02.7"
L = 240.92'
T = 122.42'
R = 550.00'
V = 40mph
SE = 0.08

-Y13LPA-
PI Sta 11+33.51
Gs = 0° 27' 29.4"
Gs = 2° 45' 32.4"
Ls = 200.00'
LT = 133.51'
ST = 69.21'

PI Sta 17+36.89
Δ = 24° 54' 40.4" (LT)
D = 24° 54' 40.4"
L = 536.89'
R = 230.00'
V = 30mph
SE = 0.08

PI Sta 21+76.64
Ls = 200.00'
LT = 134.88'
ST = 67.89'

-Y13RPB-
PI Sta 10+82.21
Gs = 0° 17' 59.8"
Gs = 1° 03' 49.9"
Ls = 140.00'
LT = 82.21'
ST = 57.80'

PI Sta 14+76.15
Δ = 10° 11' 26.3" (LT)
D = 1° 3' 11.2"
L = 670.53'
T = 336.15'
R = 1,770.00'
V = 65mph
SE = 0.05

PI Sta 18+57.20
Gs = 1° 03' 49.9"
Ls = 140.00'
LT = 93.34'
ST = 46.67'

PI Sta 22+39.39
Gs = 4° 46' 28.7"
Ls = 205.00'
LT = 136.72'
ST = 68.38'

PI Sta 24+54.53
Δ = 13° 36' 59.5" (LT)
D = 4° 39' 29.5"
L = 292.31'
R = 1,230.00'
V = 55mph
SE = 0.08

PI Sta 26+68.37
Gs = 4° 46' 28.7"
Ls = 205.00'
LT = 136.72'
ST = 68.38'

-Y13RPB-
PI Sta 29+41.70
Gs = 4° 26' 56.8"
Ls = 200.00'
LT = 136.71'
ST = 68.37'

PI Sta 31+31.22
Δ = 10° 29' 41.7" (RT)
D = 4° 30' 26.4"
L = 241.79'
R = 1,320.00'
V = 40mph
SE = 0.05

-Y13RPC-
PI Sta 10+33.33
Gs = 0° 14' 06.3"
Ls = 140.00'
LT = 66.67'
ST = 33.33'

PI Sta 11+66.67
Gs = 0° 30' 03.0"
Ls = 200.00'
LT = 134.68'
ST = 67.89'

PI Sta 14+24.85
Δ = 4° 30' 08.1" (RT)
D = 1° 00' 06.2"
L = 449.47'
R = 5,720.00'
V = 65mph
SE = 0.03

PI Sta 17+29.94
Gs = 0° 39' 02.4"
Gs = 3° 52' 47.3"
Ls = 130.00'
LT = 80.47'
ST = 49.59'

-Y13LPC-
PI Sta 19+18.62
Δ = 22° 49' 59.0" (LT)
D = 24° 54' 40.4"
L = 914.58'
T = 518.65'
R = 230.00'
V = 30mph
SE = 0.08

PI Sta 23+82.47
Gs = 24° 54' 40.4"
Ls = 200.00'
LT = 134.68'
ST = 67.89'

-Y13RPD-
PI Sta 31+34.84
Gs = 0° 27' 56.9"
Ls = 100.00'
LT = 66.67'
ST = 33.33'

-Y13RPD-
PI Sta 35+39.63
Δ = 6° 54' 46.3" (LT)
D = 0° 55' 53.9"
L = 742.01'
T = 371.46'
R = 6,250.00'
V = 65mph
SE = 0.03

PI Sta 39+43.52
Gs = 0° 27' 56.9"
Ls = 100.00'
LT = 66.67'
ST = 33.33'

ROLL 1 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

MATCHLINE -L- STA 510+00
SEE ROLL 2

CORRIDOR LIMITS
UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W
-Y13RPB- CS Sta. 25+99.99
-Y13RPB- SRS Sta. 28+04.99
-Y13RPB- PT Sta. 32+15.28
-Y13RPB- SC Sta. 23+07.68
-Y13RPB- TS Sta. 21+02.68
-Y13RPB- ST Sta. 19+50.53
-Y13RPB- CS Sta. 18+10.53
-Y13RPB- SC Sta. 11+40.00
-L- POC Sta. 452+84.42= -Y13RPB- ST Sta. 10+00.00 7.00 LT
-L- POC Sta. 458+39.71= -Y13RPC- ST Sta. 10+00.00 7.00 RT
-Y13RPC- SRS Sta. 11+00.00
-Y13RPC- SC Sta. 12+00.00
-Y13RPC- CS Sta. 16+49.47
-Y13RPC- SC Sta. 17+79.47
-Y13RPC- CS Sta. 21+02.01
-Y13RPC- SRS Sta. 21+07.01
-Y13A- PT Sta. 30+36.43
-Y13A- PC Sta. 25+20.61
-Y13A- POT Sta. 35+13.99
-Y13- POT Sta. 48+70.00= -Y13RPA- POT Sta. 30+07.85 -Y13RPB- POT Sta. 33+76.78
-Y13RPA- PT Sta. 21+39.85
-Y13RPA- SC Sta. 24+98.93
-Y13RPA- SRS Sta. 22+48.93
-Y13RPA- CS Sta. 20+08.93
-Y13RPA- POC Sta. 495+94.46= -Y13RPA- ST Sta. 10+00.00 7.00 LT
-Y13RPA- SC Sta. 12+40.00
-Y13LPA- CS Sta. 21+08.75
-Y13- POT Sta. 44+94.97= -Y13LPA- ST Sta. 23+08.75 5.00 RT
-L- POC Sta. 477+06.32= -Y13- POT Sta. 43+16.54 Δ = 91° 25' 09.1"
-L- POC Sta. 418+63.06= -Y13LPA- ST Sta. 10+00.00 7.00 LT
-Y13LPA- SC Sta. 12+00.00
-Y22LPC- SC Sta. 14+00.00
-L- POC Sta. 477+55.78= -Y13LPC- ST Sta. 10+00.00 7.00 RT
-Y13LPC- SRS Sta. 12+00.00
-Y13LPC- SC Sta. 23+14.58
-Y13- POT Sta. 41+45.44= -Y13LPC- ST Sta. 25+14.58 5.00 LT
-Y13LPC- CS Sta. 23+14.58
-Y13- POT Sta. 37+74.00= -Y13RPC- POT Sta. 31+10.03 -Y13RPD- POT Sta. 41+20.59
-Y13RPD- SRS Sta. 30+68.12
-Y13RPD- SC Sta. 31+68.12
-Y13RPD- CS Sta. 30+68.12
-Y13RPD- ST Sta. 21+04.42
-Y13RPD- CS Sta. 39+10.18
-Y13RPD- ST Sta. 40+10.18
-Y14- POT Sta. 22+14.59
-Y14- POT Sta. 12+53.22= -Y14A- POT Sta. 10+00.00
-Y14- POT Sta. 10+00.00
-Y14A- PT Sta. 18+98.00
-Y14A- PC Sta. 21+18.24
-Y14A- PT Sta. 22+21.43
-Y14A- POT Sta. 23+38.59
-Y14A- PC Sta. 17+52.61
-Y15- POT Sta. 11+00.00
-Y15- POT Sta. 10+00.00
-L- POC Sta. 497+57.99= -Y14- POT Sta. 16+19.14 =69° 45' 57.7"
-L- POC Sta. 503+19.23= -Y15- POT Sta. 14+06.54 =69° 45' 57.7"
-L- POC Sta. 507+88.09= -Y13RPD- POT Sta. 10+00.00 7.00 RT
-L- STA. 500+00
-L- STA. 502+70.62
-L- STA. 504+14.39
-L- STA. 496+12.62
-L- STA. 491+90.27
-L- STA. 491+04.42
-L- STA. 491+96.67
-L- STA. 492+57.53
-L- STA. 493+19.23
-L- STA. 495+94.46
-L- STA. 497+57.99
-L- STA. 503+19.23
-L- STA. 507+88.09
-L- STA. 510+00.00

BEGIN PROJECT R-2828
STA. 500+00.00

SEE ROLL 16 FOR PROFILE

NOTE:
----- DASHED ITEMS TO BE CONSTRUCTED UNDER T.I.P. R-2721. GRADING TO BE COMPLETED UP TO -L- STA. 466+00.00

(715) WAKE TECHNICAL COLLEGE
(716) SMITH, MABLE BOBBITT HEIRS
(717) BASS, LAWRENCE HEIRS
(718) BARDEN, GENE BARDEN, VIRGINIA
(719) MERRILL, DEBROAH D MERRILL, FRANK T
(720) TINGEN BROADWELL FAMILY LLC
(721) LEWIS, LUBIE L HEIRS
(722) ALVARADO, WELNER ROBERTO NOLASCO
(723) CHESSON, DONALD N CHESSON, BILLIE M
(724) SPIVEY, JUDITH G
(725) SEVERT, ANN
(726) DUERS, JONATHAN G
(727) JONES, MARY ELLEN L
(728) GOODMAN, MALCOLM E GOODMAN, SHELBY W
(730) HENDRIKS, CORNELIS F HENDRIKS, ELIZABETH A
(731) HOLDER, DAVID F JR
(732) HASSAN, AHMED ABU DARWISH, FATIMAH
(733) BELL, RONALD C

BAGWELL, ANNETTE
BLACKBURN, WANDA B
BROADWELL, THOMAS M
CIRCLE M PROPERTIES INC
DONNY BROOK RD
ENNIS, BARBARA O ROWLAND, ARCHIE L
HARVEY, BILLY JAMES HARVEY, ANNIE S
HOLLOWAY, HOLLOWAY, RUBY
HOLLOWAY, RUBY
MCCULLERS RD
NC DEPARTMENT OF TRANSPORTATION
OLD McCULLERS RD
PROPOSED OVERHEAD FACILITIES
PROPOSED 288'x7' RCBC
PROPOSED 288'x5' RCBC
PROPOSED 288'x7' RCBC
PROPOSED 288'x5' RCBC
PROPOSED 288'x5' RCBC
PROPOSED 288'x5

ROLL 2 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

678 BARFIELD, THOMAS GOODSON, SHANNON
679 PFENNING, TIM L PFENNING, BETSY S
684 HOGAN, RICHARD CHRISTOPHER HOGAN, HRISTA CLAIRE
685 COLLINS, MARK COLLINS, LESLIE
686 TOMPKINS, TIMOTHY G TOMPKINS, SHONNA B
687 HAMMER, EDITH R HAMMER, MICHAEL R
688 LEONARD, ANTHONY JR LEONARD, RHONDA SABATINO
691 AQUA NORTH CAROLINA, INC.
700 HEINONKARI, SAMI J HEINONKARI, CHENGYING
701 SEVITS, GARY SEVITS, GRACE
702 SLENTZ, MARK A SLENTZ, ANGELA R
703 BOX, CHARLES F III BOX, KRISTY A
704 REHL, SCOTT E MAZER, RACHEL H
705 PACIOREK, GERALD L JR PACIOREK, WENDY LYNN
706 WILLARD, SARA S DIXON, RICHARD J
707 JONES, CHRISTOPHER S JONES, TRACY W
708 LANERIDGE HOMEOWNERS ASSN INC
709 NEAL, DAVID NEAL, LISA J
710 SNEED, MARC SNEED, TIFFANIE
711 DEANGELIS, LOUIS JOSEPH DEANGELIS, BEVERLY
712 BENNETT, BRIAN C BENNETT, AMY H
713 FOX, DANNY M FOX, JENNIFER
714 FUQUAY, HARRIET P

UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W

-Y16- POT Sta. 23+62.08

KING, ROYAL MARK DAVID

ENNIS, BARBARA O ROWLAND, ARCHIE L

COLONIAL PIPELINE

CORRIDOR LIMITS

FUQUAY, HARRIET P

-Y16- PT Sta. 22+17.44

-Y16- PC Sta. 16+70.92

20+00 -Y16-

HOLMES, JASON HOLMES, TRINITY

END BRIDGE -Y16- STA. 17+65.88

-L- POT Sta. 528+22.27 = -Y16- POT Sta. 16+31.04 Δ=92°54'32.6"

PROPOSED OVERHEAD FACILITIES

NC DEPARTMENT OF TRANSPORTATION

-L- PT Sta. 514+45.11

PROTECTED CORRIDOR

ROWLAND, NEAL MORRIS

S 8° 59' 59.9" E

NC DEPARTMENT OF TRANSPORTATION -Y16- 15+00

BEGIN BRIDGE -Y16- STA. 15+02.71

PROTECTED CORRIDOR

"SOD" TAPER

PROPOSED OVERHEAD FACILITIES

FULLER, MARGIE M

POND TO BE DRAINED

CORRIDOR LIMITS

ROWLAND, NEAL MORRIS

ROSS, MARSHALL B ROSS, LISA J

MOSS, TERRY MILTON

SR 2723 FANNY BROWN RD

CHALMERS, IAN

LANERIDGE CT

MATCHLINE -L- STA. 510+00 SEE ROLL 1

KING, ROYAL MARK DAVID KING, SANDRA LYNN

OLD STAGE PLACE HOMEOWNERS ASSC INC

CORRIDOR LIMITS

COLONIAL PIPELINE POSSIBLE RELOCATION ROUTE 13 LINES

PRIVATE UTILITY EASEMENT

PROP U/G GAS LINE

PROTECTED CORRIDOR

PROPOSED 2@5'x5' RCBC

-L- ST Sta. 546+03.69

-L- CS Sta. 543+93.69

-L- SC Sta. 532+00.59

-L- TS Sta. 529+90.59

-Y16- PT Sta. 13+41.07

-Y16- PC Sta. 11+81.41

-Y16- POT Sta. 10+00.00

-Y17G- POT Sta. 11+86.30

-Y17G- POT Sta. 10+00.00

LANERIDGE

MACEDONIA APOSTOLIC CHURCH

PANTHER CREEK

ARMSTRONG, LAKEISHA R

MATCHLINE -L- STA. 562+00 SEE ROLL 3

SEE ROLL 17 FOR PROFILE

-Y16-

PI Sta 12+61.33
Δ = 7° 41' 02.2" (RT)
D = 4° 48' 53.2"
L = 159.59'
T = 79.92'
R = 1,190.00'
V = 50mph
SE = 0.06

PI Sta 20+45.80
Δ = 15° 05' 26.8" (RT)
D = 5° 31' 33.2"
L = 346.52'
T = 174.88'
R = 1,040.00'
V = 50mph
SE = 0.06

-L-

PI Sta 471+40.05
Δ = 42° 49' 59.0" (LT)
D = 1° 08' 22.6"
L = 9,056.91'
T = 4,751.85'
R = 1,215.00'
V = 75mph
SE = 0.02

PI Sta 531+57.66
Θs = 0° 50' 37.3"
Ls = 225.00'
LT = 150.00'
ST = 75.00'

PI Sta 537+98.31
Δ = 8° 47' 11.8" (RT)
D = 0° 44' 11.2"
L = 1,193.01'
T = 597.72'
R = 7,780.00'
V = 75mph
SE = 0.03

PI Sta 544+60.51
Θs = 0° 50' 37.3"
Ls = 225.00'
LT = 150.00'
ST = 75.00'

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
ST T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35581.1.1.62
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER

ROLL 3 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

MATCHLINE -L- STA. 562+00 SEE ROLL 2

MATCHLINE -Y17B- STA. 20+00 SEE ROLL 10

MATCHLINE -Y17- STA. 51+00 SEE ROLL 10

MATCHLINE -L- STA. 615+00 SEE ROLL 4

- 661 CECIL, DAVID ALLAN
- 662 WEST, JOSEPH H WEST, DEBRA S
- 663 AGBODJAN, ARMEL AKOUETE
- 664 LAWHORNE, HARVEY W
- 665 CRAWLEY, RICHARD R JR CRAWLEY, MELANIE P
- 666 BLACKMAN, JERRY D BLACKMAN, BETTY JEAN
- 667 BRAATEN, DAVID BRAATEN, LENA A
- 668 OLD STAGE PLACE HOMEOWNERS ASSC INC
- 669 AKINBULI, AKIN LAURENCE
- 670 BROWN, DANNY R BROWN, TONYA M
- 671 DINEEN, MATTHEW DINEEN, ANGELA M
- 672 HOUSE, JOHN BARTON, MAGDALEN
- 673 PULLIAM, LARRY C PULLIAM, GLORIA ANN
- 674 BALL RENTALS LLC
- 675 GALLOWAY, JAMELA R GALLOWAY, MICHAEL K
- 676 GREENE, WONDUS L GREENE, TAMARA L
- 677 MORRISEY, GLORIA M
- 678 BARFIELD, THOMAS GOODSON, SHANNON
- 679 PFENNING, TIM L PFENNING, BETSY S
- 680 BARNES, GARY S BARNES, PATRICIA A
- 681 CUMMINGS, OMAR
- 682 MCGEE, ROY T III MCGEE, TAMMY B
- 683 BALL RENTALS LLC
- 642 FERRELL, MICHAEL LEE
- 643 STEINWRIGHT, BRIENNE TAI STEINWRIGHT, DAWN CELESTE
- 644 EDMONDSON, SIDNEY LEE EDMONDSON, PATRICIA B
- 645 ARNOLD, JERRY P ARNOLD, PENNIE T
- 646 HIGGINS, MICHAEL D HIGGINS, TAMMY B
- 647 BALL, JOHN DURWOOD
- 656 FAIRWEATHER, ROBERT THOMAS FAIRWEATHER, KATHRYN A
- 657 ROLLING MEADOWS HOMEOWNERS ASSOCIATION
- 658 BRICE, BRIAN D. BRICE, CARLEY S.
- 659 GOODWIN, WORTH L GOODWIN, WANDA R

-Y17RPA-

PI Sta 10+66.67	PI Sta 13+33.34	PI Sta 17+07.85	PI Sta 21+37.48	PI Sta 23+26.69	PI Sta 25+05.95	PI Sta 28+09.59	PI Sta 31+04.67
Gs = 0° 28' 28.8"	Gs = 0° 55' 59.4"	Δ = 5° 44' 26.6" (RT)	Gs = 0° 55' 57.1"	Δ = 10° 21' 32.1" (RT)	Gs = 4° 46' 28.7"	Δ = 11° 24' 15.9"	Δ = 37° 19' 25.9" (LT)
Ls = 200.00'	Ls = 200.00'	D = 0° 55' 59.4"	D = 4° 39' 31.9"	D = 4° 39' 29.5"	Ls = 205.00'	Ls = 250.00'	D = 9° 07' 24.7"
LT = 133.33'	LT = 133.34'	L = 615.19'	Ls = 200.00'	L = 222.38'	LT = 136.72'	LT = 167.01'	L = 409.09'
ST = 66.67'	ST = 66.67'	T = 307.85'	LT = 122.28'	T = 111.45'	ST = 68.38'	ST = 83.65'	T = 212.07'
		R = 6,140.00'	ST = 77.86'	R = 1,230.00'			R = 628.00'
		V = 65mph		V = 55mph			V = 35mph
		SE = 0.03		SE = 0.08			SE = 0.07

-Y17RPB-

PI Sta 11+40.01	PI Sta 16+24.36	PI Sta 21+04.69	PI Sta 24+04.72	PI Sta 26+77.09	PI Sta 11+25.57	PI Sta 12+37.13	PI Sta 13+58.29
Gs = 1° 45' 51.3"	Δ = 13° 51' 23.8" (LT)	Gs = 1° 45' 51.3"	Gs = 3° 34' 51.6"	Δ = 11° 26' 42.2" (RT)	Δ = 59° 18' 11.6" (RT)	Δ = 28° 25' 38.8" (LT)	Δ = 61° 51' 28.3" (LT)
Ls = 210.00'	D = 1° 40' 48.8"	D = 1° 40' 48.8"	Ls = 240.00'	D = 2° 59' 03.0"	D = 16° 35' 57.4"	D = 16° 23' 39.7"	D = 16° 23' 39.7"
L = 824.69'	L = 824.69'	LT = 140.01'	LT = 160.03'	L = 383.53'	T = 88.24'	T = 39.26'	T = 45.03'
LT = 140.01'	T = 414.36'	ST = 70.01'	ST = 80.03'	T = 192.40'	L = 160.43'	L = 76.90'	L = 81.10'
ST = 70.01'	R = 3,410.00'			R = 1,920.00'	R = 155.00'	R = 155.00'	R = 75.00'**
	V = 65mph			V = 55mph	V = 25mph		
	SE = 0.05			SE = 0.06	SE = 0.04		

-Y17A-

PI Sta 13+58.29
Δ = 61° 51' 28.3" (LT)
D = 16° 23' 39.7"
T = 45.03'
L = 81.10'
R = 75.00'**

-Y17RPC-

PI Sta 14+18.43	PI Sta 20+08.29	PI Sta 25+78.75	PI Sta 28+49.02	PI Sta 30+34.62	PI Sta 10+98.80
Gs = 2° 37' 41.7"	Δ = 26° 59' 31.3" (RT)	Gs = 2° 37' 41.7"	Gs = 11° 20' 14.9"	Δ = 25° 34' 12.3" (LT)	Δ = 20° 55' 36.0" (RT)
Ls = 200.00'	D = 2° 37' 41.7"	Ls = 200.00'	Ls = 205.00'	D = 11° 03' 39.5"	D = 10° 42' 34.2"
LT = 133.35'	L = 1,067.00'	LT = 133.35'	LT = 136.95'	L = 231.17'	L = 195.40'
ST = 66.68'	T = 543.21'	ST = 66.68'	ST = 68.59'	T = 117.54'	T = 98.80'
	R = 2,180.00'			R = 518.00'	R = 535.00'
	V = 65mph			V = 35mph	V = 30mph
	SE = 0.07			SE = 0.08	SE = NC

-Y17RPD-

PI Sta 11+23.06	PI Sta 15+79.14	PI Sta 20+17.45	PI Sta 20+29.08	PI Sta 22+69.90	PI Sta 25+10.07
Gs = 0° 28' 48.6"	Δ = 19° 43' 55.1" (LT)	Gs = 2° 37' 41.7"	Gs = 2° 37' 06.6"	Δ = 8° 45' 20.8" (RT)	Gs = 2° 37' 06.6"
Gs = 2° 37' 42.2"	D = 2° 37' 41.7"	Ls = 200.00'	Ls = 200.00'	D = 2° 37' 06.6"	Ls = 200.00'
Ls = 200.00'	L = 1,750.77'	LT = 133.35'	LT = 133.35'	L = 347.66'	LT = 133.35'
LT = 123.06'	T = 979.14'	ST = 66.68'	ST = 66.68'	T = 174.01'	ST = 66.68'
ST = 76.99'	R = 2,180.00'			R = 2,275.00'	
	V = 65mph			V = 50mph	
	SE = 0.07			SE = 0.05	

-L-

PI Sta 594+45.28
Δ = 21° 28' 01.8" (RT)
D = 0° 28' 38.9"
L = 4,496.07'
T = 2,274.71'
R = 12,000.00'
V = 75mph
SE = 0.02

** DESIGN EXCEPTION MAY BE REQUIRED.

SEE ROLL 3A FOR -Y17DET-
SEE ROLL 17 FOR PROFILE
SEE ROLL 18 FOR PROFILE
SEE ROLL 19 FOR PROFILE

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400179
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35586.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
1616 SOUTH MAIN, SUITE 200
WINSTON-SALEM, NC 27127
336.631.1040

★ PROPOSED SIGNAL

OLD STAGE RD
13,400
24,000
6,600 9,800 1,100 1,500
28,400 53,400
6,700 11,900 1,300 1,800
COMPLETE 540
17,500
35,000
13,700 26,400
2016 ADT
2040 ADT
OLD STAGE RD

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400179
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35586.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
1616 SOUTH MAIN, SUITE 200
WINSTON-SALEM, NC 27127
336.631.1040

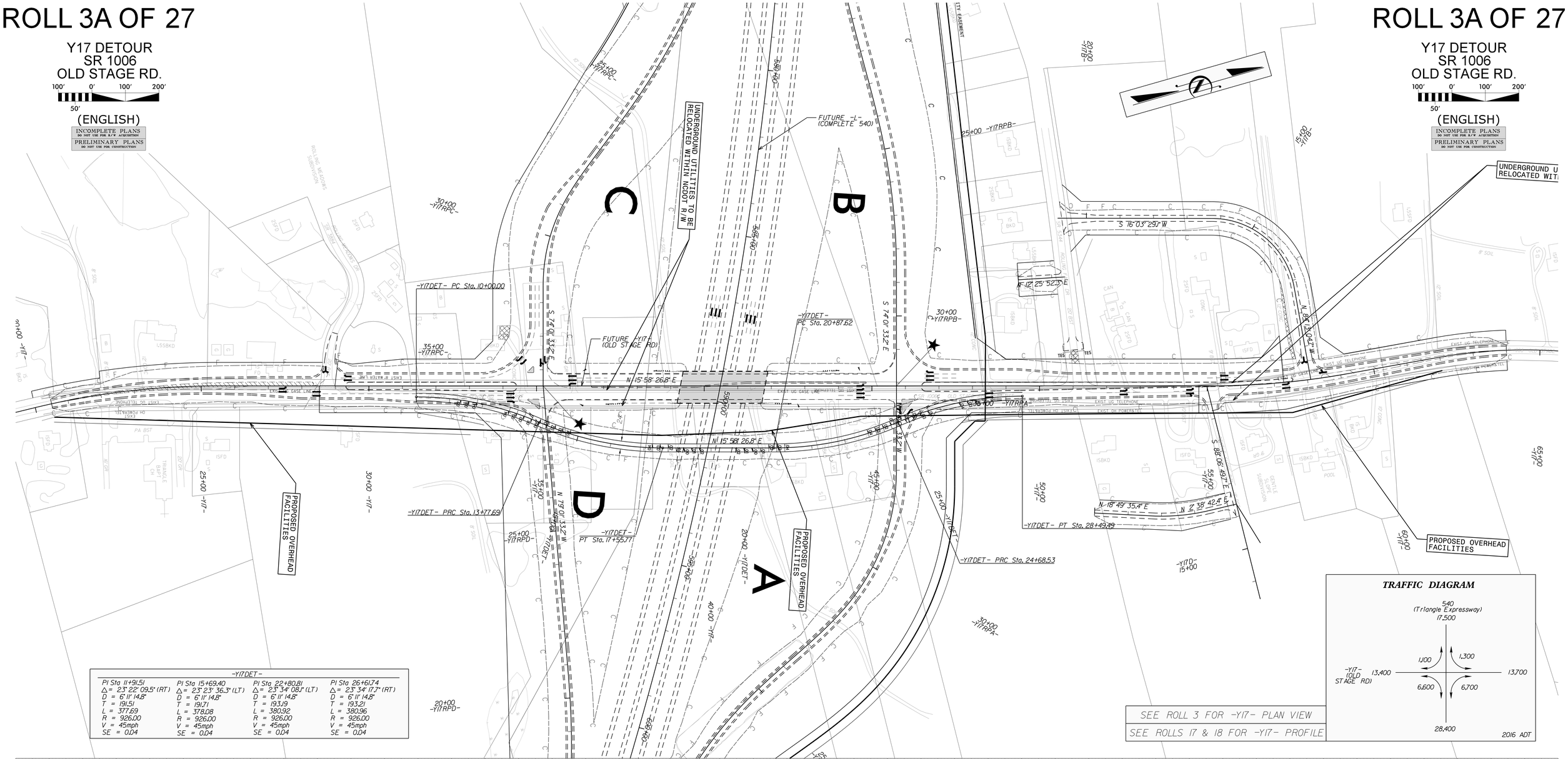
ROLL 3 OF 27

ROLL 3A OF 27

Y17 DETOUR
SR 1006
OLD STAGE RD.

100' 0' 100' 200'
50'
(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



-Y17DET-			
PI Sta 11+91.51	PI Sta 15+69.40	PI Sta 22+80.81	PI Sta 26+61.74
Δ = 23° 22' 09.5" (RT)	Δ = 23° 23' 36.3" (LT)	Δ = 23° 34' 08.1" (LT)	Δ = 23° 34' 17.7" (RT)
D = 6° 11' 14.8"	D = 6° 11' 14.8"	D = 6° 11' 14.8"	D = 6° 11' 14.8"
T = 191.51	T = 191.71	T = 193.19	T = 193.21
L = 377.69	L = 378.08	L = 380.92	L = 380.96
R = 926.00	R = 926.00	R = 926.00	R = 926.00
V = 45mph	V = 45mph	V = 45mph	V = 45mph
SE = 0.04	SE = 0.04	SE = 0.04	SE = 0.04

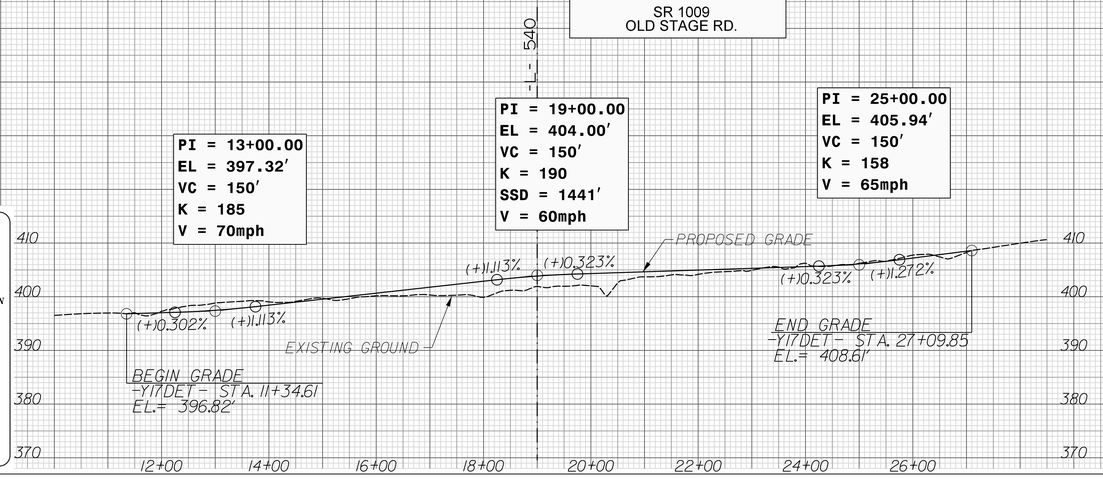
SEE ROLL 3 FOR -Y17- PLAN VIEW

SEE ROLLS 17 & 18 FOR -Y17- PROFILE

TRAFFIC DIAGRAM

-Y17DET-

SR 1009
OLD STAGE RD.



COMPLETE 540
WAKE COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540 Triangle Expressway Southwest Extension
PREPARED BY:
LOCHNER
In NC LOCHNER, INC.
3840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
(919) 571-7111
NC Engineering Firm Registration No. C-0187

COMPLETE 540
WAKE COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540 Triangle Expressway Southwest Extension
PREPARED BY:
LOCHNER
In NC LOCHNER, INC.
3840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
(919) 571-7111
NC Engineering Firm Registration No. C-0187

ROLL 4 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

ROLL 4 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

MATCHLINE -L- STA. 615+00 SEE ROLL 3

MATCHLINE -L- STA. 670+00 SEE ROLL 5

603 MCDOWELL, YVONNE P
604 GEISE, BRADFORD G GEISE, CONSTANCE M
605 CARWELL, KENNETH CHRISTOPHER
606 AQUA NORTH CAROLINA INC
607 ALLEN, TIFFANY FRANKS
608 GILL, MONIQUE B GILL, JOHNNY L
609 GALBREATH, WILLIAM H GALBREATH, CAROL A
610 BROWN, STEVEN L BROWN, ELISABETH A
611 SWEAT, JILL JOHNSON
612 STROUSE, JONATHAN E STROUSE, LEIGH ELLEN
613 CHILTON, THOMAS CHILTON, PAMELA
636 NEAL, SHERRY UPCHURCH BALL, DAVID W /TR
637 ZIMMERMAN, ALLAN L TRUSTEE GARNER, JO ANN Z TRUSTEE
638 ZIMMERMAN, LISA BETH
639 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
640 JORGENSON, KIRK JORGENSON, AMANDA
1777 CREST OF CAROLINA HOMEOWNERS ASSOC

CARTER-LINWOOD

SR 2725 HOLLAND CHURCH RD

UMBERGER, BETSY

LUMBER BRANCH

EXISTING CAROLINA (WILLIAMS) PIPELINE

CORRIDOR LIMITS

POND TO BE DRAINED

NEAL, SHERRY UPCHURCH BALL, DAVID W /TR

-Y1B- POT Sta. 35+21.50

-Y1B- PT Sta. 33+34.73

-Y1BA- PC Sta. 10+29.91

UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W

-Y1BA- PT Sta. 16+46.84

NEAL, SHERRY UPCHURCH

EASEMENT NEEDED FOR DETOUR

-Y1BB- POC Sta. 29+50.00=
-Y1BA- POT Sta. 10+00.00

PROPOSED OVERHEAD FACILITIES

-Y1B- PRC Sta. 27+84.54

PROTECTED CORRIDOR

MORIN, DEANE JOSEPH

-Y1BA- POT Sta. 19+38.61

-Y1B- PC Sta. 24+06.88

FUTURE PANTHER BRANCH GREENWAY

CREST OF CAROLINA HOMEOWNERS ASSOC

HOYLE, CAROLYN F
HOYLE, BRADLEY D

DURAN, ALMA NORA

KAPA, MICHELLE

-L- POC Sta. 641+97.57=
-Y1B- POT Sta. 20+32.67
Δ = 136° 31' 54.1"

MARY T BALL PROPERTIES LLC

-L- CS Sta. 661+00.86

-L- ST Sta. 663+15.86

-L- TS Sta. 635+83.01

-Y1BB- POT Sta. 28+24.40

-L- SC Sta. 638+98.01

-Y1BB- PT Sta. 17+80.78

-Y1B- PT Sta. 17+14.11

-Y1BB- PC Sta. 14+19.07

-Y1BB- PT Sta. 12+16.64

DUKE ENERGY TRANSMISSION LINE POSSIBLE RELOCATION ROUTE

CAROLINA (WILLIAMS) PIPELINE COMPANY POSSIBLE RELOCATION ROUTE TO LINE

-L- POT Sta. 13+60.00=
-Y1BB- POT Sta. 10+00.00

-Y1B- PC Sta. 12+56.25

-Y1BB- PC Sta. 10+28.48

-Y1B- POT Sta. 10+00.00

BALL, FORREST H
BALL, DOLORES G

BALL, DAVID W /TR

NEAL, SHERRY UPCHURCH BALL, DAVID W /TR

NEAL, SHERRY UPCHURCH BALL, DAVID W /TR

NEAL, SHERRY UPCHURCH

MARY T BALL PROPERTIES LLC

MARY T BALL PROPERTIES LLC

MARY T BALL PROPERTIES LLC

-L- PT Sta. 616+66.65

BEGIN BRIDGE -L- STA. 638+64.77

END BRIDGE -L- STA. 641+54.62

BEGIN BRIDGE -L- STA. 657+08

END BRIDGE -L- STA. 661+49.13

NC DEPARTMENT OF TRANSPORTATION

PROTECTED CORRIDOR

TAVERNIER SUBDIVISION PROPERTY OWNERS ASSN INC

DEVENOW, JOSEPH L IV
DEVENOW, LINSEY C

HUDSON, WENDELL A SR
HUDSON, ROBERT H

COLE, ROBERT KING

ANDERSON, ASHLEA C

SANDY RIDGE SUBDIVISION

ASHTON HOLLOW DR

SR 1809

CREST OF CAROLINA SUBDIVISION

CONTENDER DR

SEE ROLL 4A FOR -Y1BDET-

SEE ROLL 19 FOR PROFILE

-L-					
PI Sta 594+45.28	PIs Sta 637+93.08	PI Sta 649+64.92	PIs Sta 661+05.87	PIs Sta 668+64.73	PI Sta 681+26.47
Δ = 21° 28' 01.8" (RT)	Es = 1.47'-13.0'	Δ = 23° 51' 27.8" (LT)	Es = 1.47'-13.0'	Es = 2°14' 53.4"	Δ = 28° 47' 51.7" (RT)
D = 17° 28' 38.5"	Ls = 315.00'	D = 7° 08' 04.5"	Ls = 315.00'	Ls = 350.00'	D = 7° 17' 04.8"
L = 4,496.07'	LT = 210.01'	L = 2,102.80'	LT = 210.01'	LT = 233.35'	L = 2,241.78'
T = 2,274.47'	ST = 105.01'	T = 1,066.86'	ST = 105.01'	ST = 116.68'	T = 1,145.92'
R = 12,000.00'		R = 5,050.00'			R = 4,460.00'
V = 75mph		V = 75mph			V = 75mph
SE = 0.02		SE = 0.05			SE = 0.05

-Y1B-			-Y1BA-	-Y1BB-	
PI Sta 14+85.29	PI Sta 25+99.01	PI Sta 30+63.82	PI Sta 14+64.80	PI Sta 11+76.04	PI Sta 16+08.80
Δ = 4° 22' 46.2" (LT)	Δ = 25° 58' 35.3" (LT)	Δ = 24° 14' 55.7" (RT)	Δ = 103° 57' 45.3" (RT)	Δ = 89° 03' 34.0" (RT)	Δ = 42° 43' 47.8" (LT)
D = 0° 57' 23.5"	D = 6° 52' 41.7"	D = 4° 24' 26.5"	D = 16° 51' 06.7"	D = 38° 11' 49.5"	D = 11° 48' 48.8"
L = 457.86'	L = 377.66'	L = 550.19'	L = 616.93'	L = 233.16'	L = 361.70'
T = 229.04'	T = 192.13'	T = 279.98'	T = 434.89'	T = 147.56'	T = 189.72'
R = 5,990.00'	R = 833.00'	R = 1,300.00'	R = 340.00'	R = 150.00'	R = 485.00'
V = 50mph	V = 50mph	V = 50mph	V = 35mph	V = 40mph	V = 40mph
SE = 0.02	SE = 0.06	SE = 0.06	SE = 0.06	SE = 0.06	SE = 0.06

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400879
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35586.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER

ROLL 4A OF 27

Y18 DETOUR
SR 2725
HOLLAND CHURCH RD.

100′ 0′ 100′ 200′
50′

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

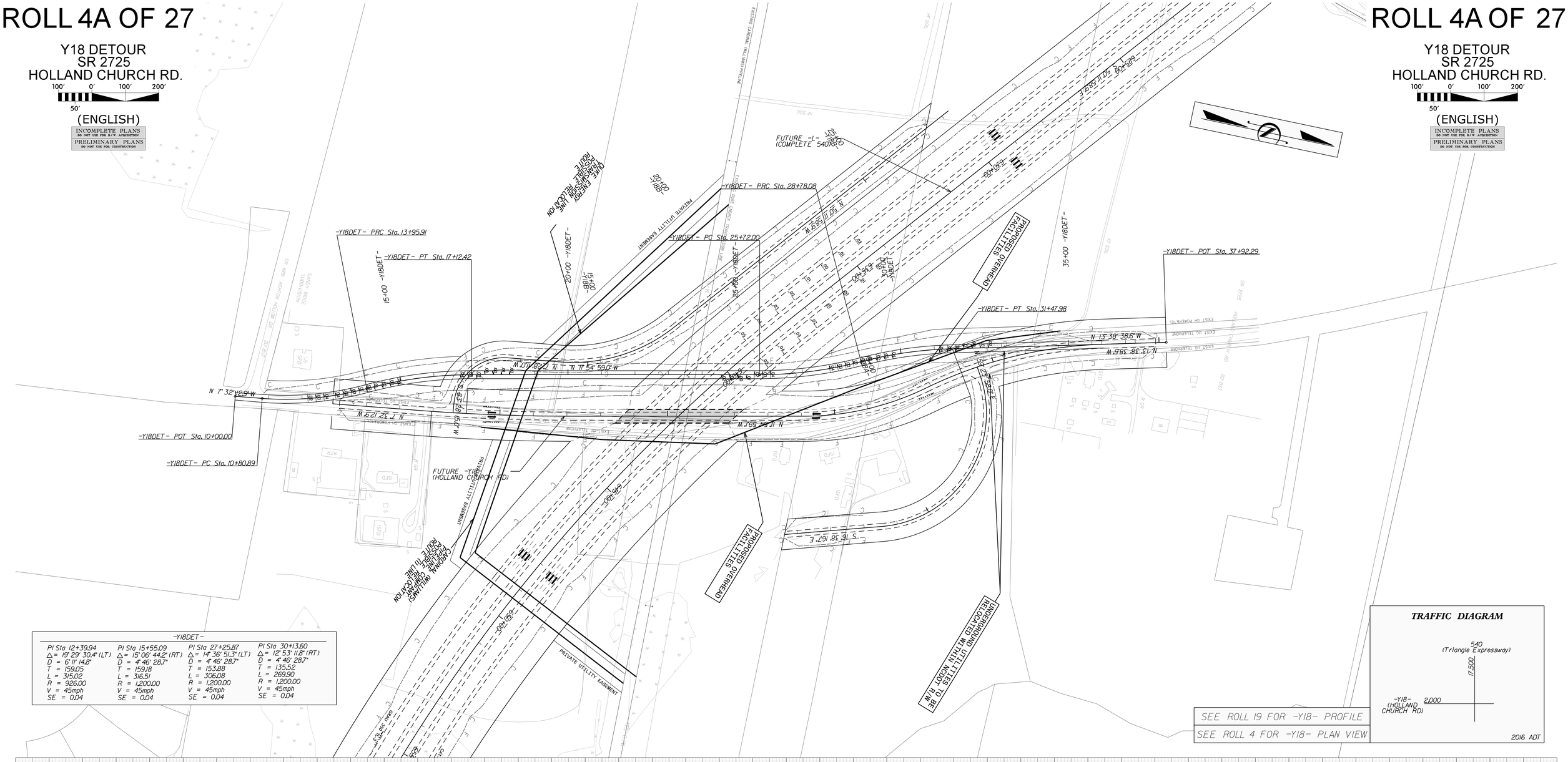
ROLL 4A OF 27

Y18 DETOUR
SR 2725
HOLLAND CHURCH RD.

100′ 0′ 100′ 200′
50′

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION


-Y18DET- PRC Sta. 13+95.91
-Y18DET- PT Sta. 17+12.42
-Y18DET- PRC Sta. 28+78.08
-Y18DET- PC Sta. 25+72.00
-Y18DET- POT Sta. 10+00.00
-Y18DET- PC Sta. 10+80.89
-Y18DET- POT Sta. 37+92.29
-Y18DET- PT Sta. 31+47.98
FUTURE -L- (COMPLETE 540)
FUTURE -Y- (HOLLAND CHURCH RD)
PROPOSED OVERHEAD FACILITIES
UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W
PRIVATE UTILITY EASEMENT
EXISTING CONDUCT, TELEPHONE, POWER, GAS, WATER, SEWER, TRAFFIC SIGNAL

ROLL 5 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

-L-
PI Sta 668+64.73 Gs = 2°14'53.4" Ls = 350.00' LT = 233.35' ST = 116.68'
PI Sta 681+26.41 Δ = 28°47'57.1" (RT) D = 1°01'04.8" L = 2,241.78' T = 1,145.10' R = 5,460.00' V = 75mph SE = 0.05
PI Sta 693+39.84 Gs = 2°14'53.4" Ls = 350.00' LT = 233.35' ST = 116.68'
PI Sta 699+01.58 Gs = 0°46'23.8" Ls = 210.00' LT = 140.00' ST = 70.00'

-Y19-
PI Sta 11+96.44 Δ = 2°13'57.3" (RT) D = 0°57'23.5" L = 233.41' T = 116.72' R = 5,990.00' V = 50mph SE = 0.02
PI Sta 17+64.56 Δ = 1°59'59.7" (RT) D = 0°32'55.1" L = 523.58' T = 261.80' R = 15,000.00' V = 50mph SE = NC

-Y19A-
PI Sta 10+95.00 Δ = 89°59'59.6" (RT) D = 76°23'39.7" L = 117.81' T = 75.00' R = 75.00'**
PI Sta 15+92.75 Δ = 88°50'41.6" (LT) D = 57°17'44.8" L = 155.06' T = 98.00' R = 100.00'**

**DESIGN EXCEPTION MAY BE REQUIRED.

MATCHLINE -L- STA. 670+00 SEE ROLL 4

DURAN, ALMA NORA
KAPA, MICHELLE
STEVENS, LAUREN E
CEMETERY
-Y19- POT Sta. 36+25.00
COLONIAL PIPELINE
CONTENDER DR
CORRIDOR LIMITS
-Y19A- PC Sta. 10+20.00
-Y19- 35+00
FUTURE PANTHER BRANCH GREENWAY
SORRELL, CLEO S
SORRELL, CARLA RENEE
-Y19A- PT Sta. 11+37.81
UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W
-Y19A- PC Sta. 14+94.75
-Y19A- PT Sta. 16+49.81
-Y19A- POT Sta. 17+07.94
WINGO, EARL R JR
WINGO, KELLEY LYNNE
PROPOSED OVERHEAD FACILITIES
EASEMENT NEEDED FOR DETOUR
-Y19- POT Sta. 32+00.00
-Y19A- POT Sta. 10+00.00
PROTECTED CORRIDOR
-Y19- 30+00
ALTON, JOHN
-L- POC Sta. 686+36.67 = -Y19- POT Sta. 29+76.58 Δ=123°51'38.5"
-L- BS Sta. 685+00
-L- ES Sta. 692+23.15
NC DEPARTMENT OF TRANSPORTATION
HORTON, MARLENA
-L- ST Sta. 695+73.15
-L- TS Sta. 697+01.58
-L- SC Sta. 699+71.58
EADDY, JASON
EADDY, TESSA
KING, RICHARD S
GNAGY, JUSTIN D
GNAGY, JESSICA L
FUTURE PANTHER BRANCH GREENWAY
CORRIDOR LIMITS
WAKE ACQUISITIONS LLC
HICKS, LINWOOD THOMAS
HICKS, CAROLYN
LASSITER, SUSAN S
DAVIS, ALFRED EARL
DAVIS, ELIZABETH B
-L- ST Sta. 724+15.43
-L- CS Sta. 722+05.43
PROPOSED 2@8'x5' RCBC
PENDERGRAFT, HILDA SIMPKINS
WALDO, BETTY H
HUMPHERSON, AMY H
LASSITER, SUSAN S
SIMPKINS, WALTER E JR
ANTHONY GARLAND AVENT RVCBLE TRUST
ADDAMS, SUSAN R
BROWN, CAROLYN D
DESANTIS, DON L
DESANTIS, LINDA L
ANTHONY GARLAND AVENT RVCBLE TRUST
AVERNER SUBDIVISION PROPERTY OWNERS ASSN INC
TAVERNER KNOLL LN
SR 2727 (POWELL RD)
SR 5306 (CREST OF CAROLINA SUBDIVISION)
SR 5309 (TAVERNER KNOLL LN)
SR 5310 (CAROLINA MARLIN CT)
SR 5305 (CONTENDER DR)
SR 5308 (TAVERNER KNOLL LN)
CAROLINA MARLIN CT
CREST OF CAROLINA SUBDIVISION
TAVERNER SUBDIVISION
TURKEY FARM SUBDIVISION
PANTHER BRANCH SCHOOL
JUNIPER LEVEL MISSIONARY BAPTIST CHURCH
JUNIPER LEVEL BAPTIST CHURCH
CEMETERY
GARNER VOLUNTEER FIRE DEPT INC
AQUA NORTH CAROLINA INC
COLE, ROBERT KING
JOHNSON, BARBARA
FRANKS, MARGARET J
DURAN, MIGUEL P
DURAN, AMANDA G
BEGIN BRIDGE -Y19- STA. 27+92.00
END C&G
END RETAINING WALL STA. 18+00.00
BEGIN RETAINING WALL STA. 16+90.00
BEGIN C&G
END RETAINING WALL STA. 18+65.00
BEGIN RETAINING WALL STA. 15+80.00
BEGIN C&G
-Y19- PC Sta. 15+02.75
-Y19- PT Sta. 13+31.13
-Y19- PC Sta. 10+79.72
-Y19- POT Sta. 10+00.00
N 2°25'41" W
S 62° 20' 00" E
670+00
675+00
680+00
685+00
690+00
695+00
700+00
705+00
710+00
715+00
720+00
725+00
726+00
PROP. 8'W PEDS
PROP. GUIDERAIL
PROP. MEDIAN WALL
PROP. NOISE WALL
PROP. 36" RCP
PROP. 48" RCP
PROP. 60" RCP
PROP. 72" RCP
PROP. 2@8'x5' RCBC
PROP. 3@8'x5' RCBC
PROP. 4@8'x5' RCBC
PROP. 5@8'x5' RCBC
PROP. 6@8'x5' RCBC
PROP. 7@8'x5' RCBC
PROP. 8@8'x5' RCBC
PROP. 9@8'x5' RCBC
PROP. 10@8'x5' RCBC
PROP. 11@8'x5' RCBC
PROP. 12@8'x5' RCBC
PROP. 13@8'x5' RCBC
PROP. 14@8'x5' RCBC
PROP.

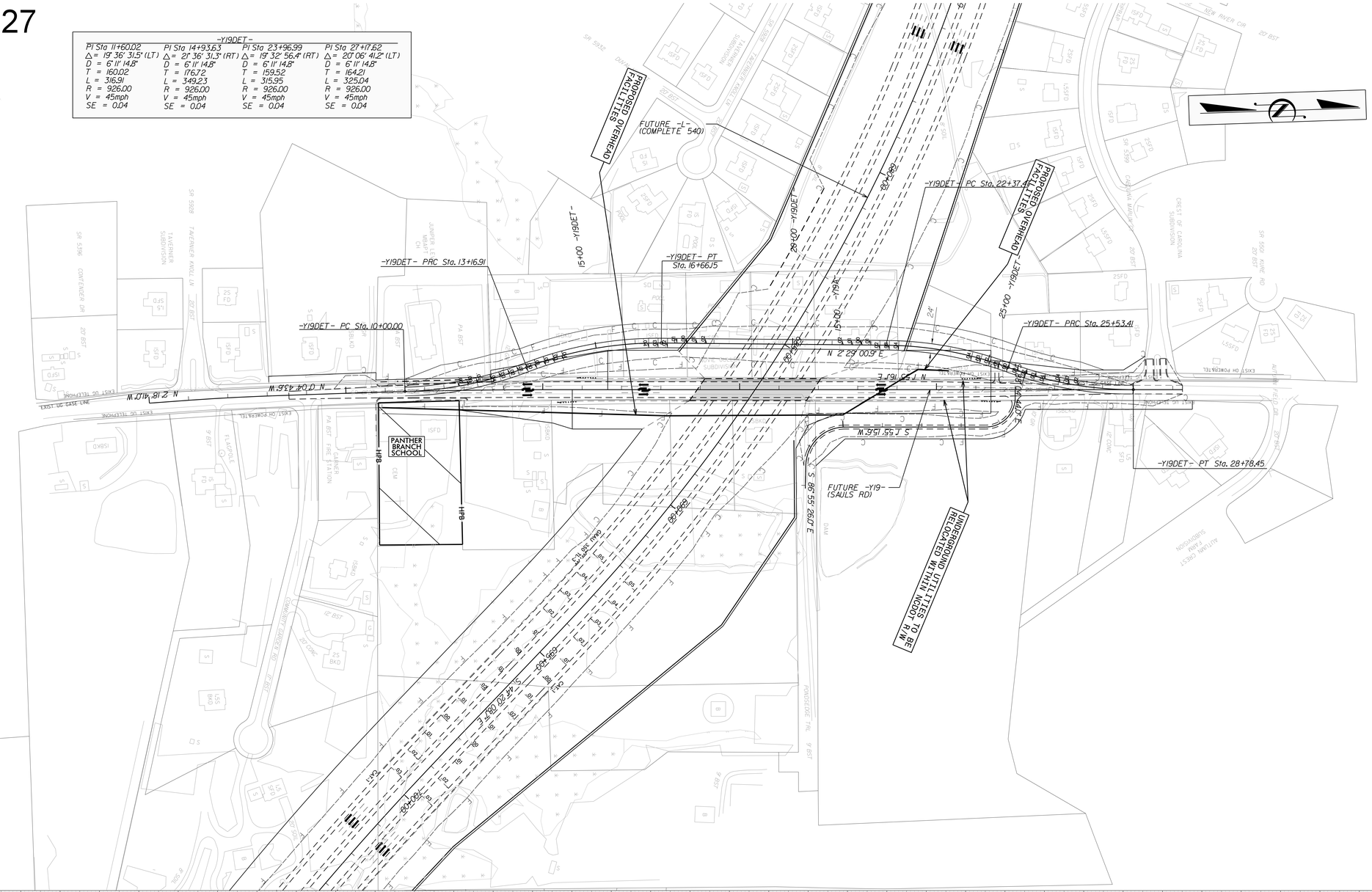
ROLL 5A OF 27

Y19 DETOUR
SR 2727
SAULS RD.

100' 0' 100' 200'
50'
(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y19DET-			
PI Sta 11+60.02	PI Sta 14+93.63	PI Sta 23+96.99	PI Sta 27+17.62
△= 19° 36' 31.5" (LT)	△= 21° 36' 31.3" (RT)	△= 19° 32' 56.4" (RT)	△= 20° 06' 41.2" (LT)
D = 6° 11' 14.8"	D = 6° 11' 14.8"	D = 6° 11' 14.8"	D = 6° 11' 14.8"
T = 160.02	T = 176.72	T = 159.52	T = 164.21
L = 316.91	L = 349.23	L = 315.95	L = 325.04
R = 926.00	R = 926.00	R = 926.00	R = 926.00
V = 45mph	V = 45mph	V = 45mph	V = 45mph
SE = 0.04	SE = 0.04	SE = 0.04	SE = 0.04



ROLL 5A OF 27

Y19 DETOUR
SR 2727
SAULS RD.

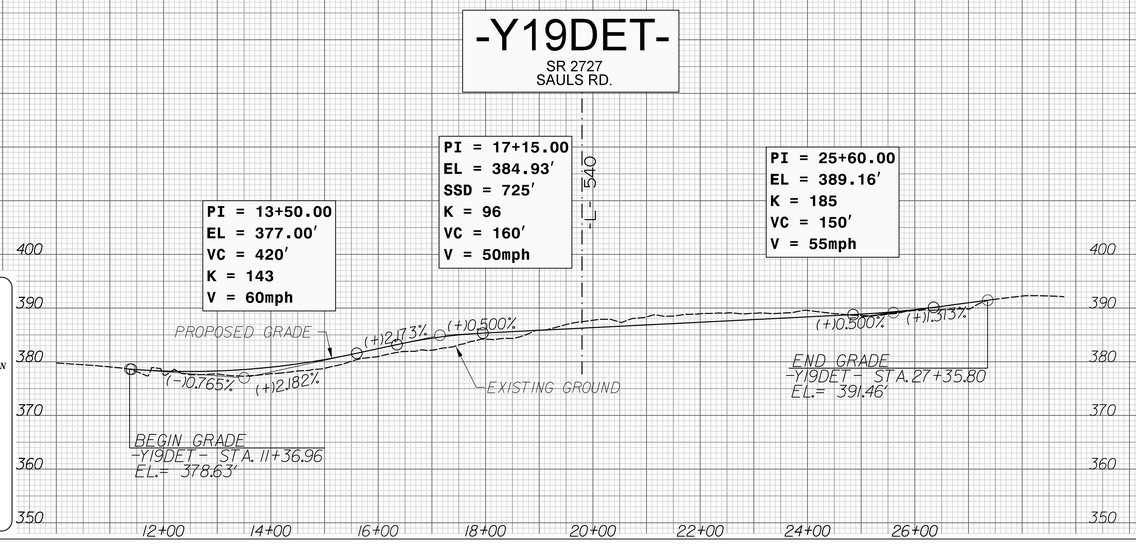
100' 0' 100' 200'
50'
(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

TRAFFIC DIAGRAM

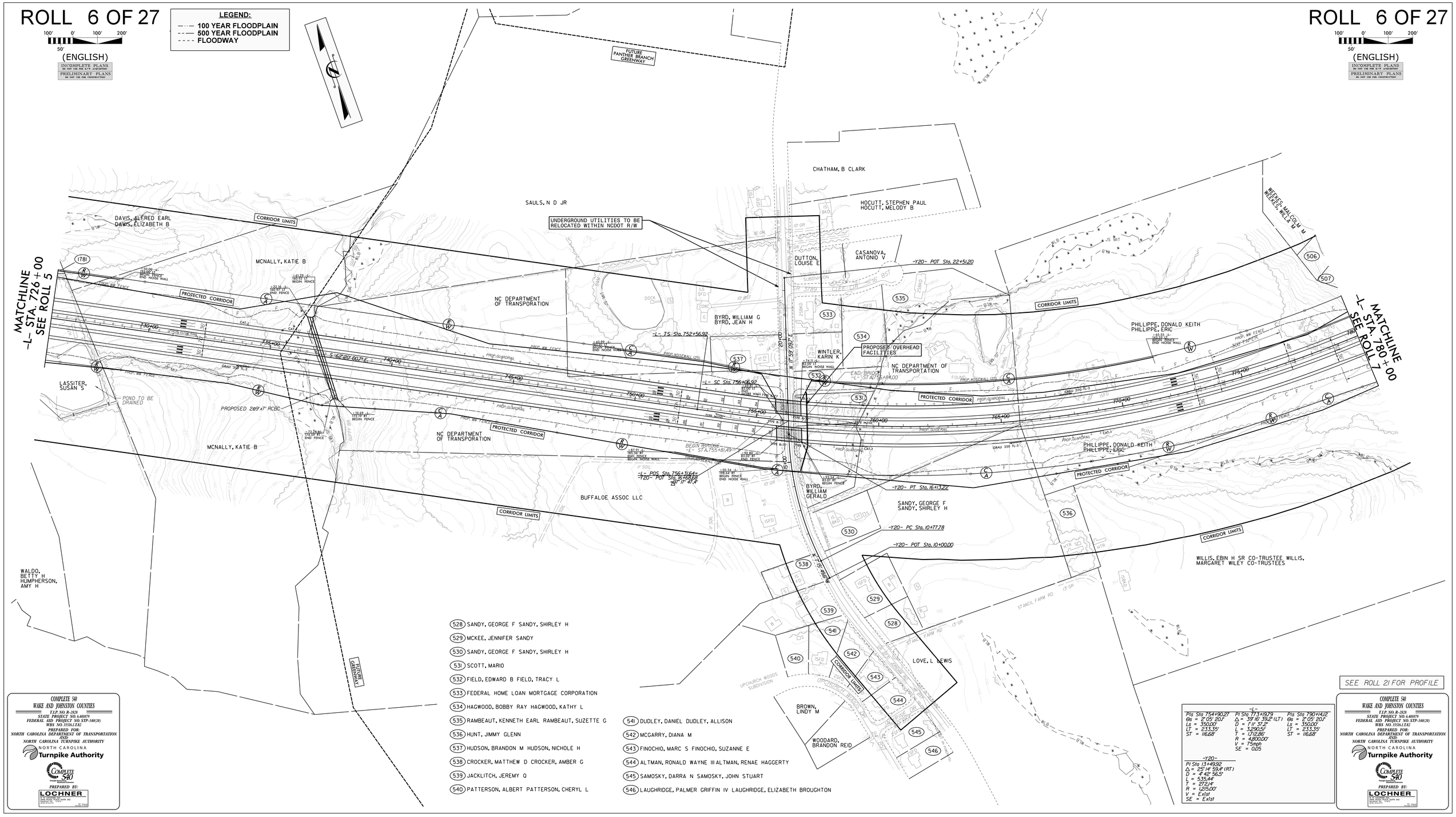
540 (Triangle Expressway)
17,500
-Y19- (SAULS RD) 3,300
2016 ADT

SEE ROLL 5 FOR -Y19- PLAN VIEW
SEE ROLL 20 FOR -Y19- PROFILE



COMPLETE 540
WAKE COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC Engineering Firm
Number F-0700

COMPLETE 540
WAKE COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC Engineering Firm
Number F-0700



528 SANDY, GEORGE F SANDY, SHIRLEY H
529 MCKEE, JENNIFER SANDY
530 SANDY, GEORGE F SANDY, SHIRLEY H
531 SCOTT, MARIO
532 FIELD, EDWARD B FIELD, TRACY L
533 FEDERAL HOME LOAN MORTGAGE CORPORATION
534 HAGWOOD, BOBBY RAY HAGWOOD, KATHY L
535 RAMBEAUT, KENNETH EARL RAMBEAUT, SUZETTE G
536 HUNT, JIMMY GLENN
537 HUDSON, BRANDON M HUDSON, NICHOLE H
538 CROCKER, MATTHEW D CROCKER, AMBER G
539 JACKLITCH, JEREMY O
540 PATTERSON, ALBERT PATTERSON, CHERYL L
541 DUDLEY, DANIEL DUDLEY, ALLISON
542 MCGARRY, DIANA M
543 FINOCHIO, MARC S FINOCHIO, SUZANNE E
544 ALTMAN, RONALD WAYNE III ALTMAN, RENAE HAGGERTY
545 SAMOSKY, DARRA N SAMOSKY, JOHN STUART
546 LAUGHRIDGE, PALMER GRIFFIN IV LAUGHRIDGE, ELIZABETH BROUGHTON

-L-

PI Sta 754+90.27	PI Sta 773+19.79	PI Sta 790+14.12
θs = 2° 05' 20.1"	Δ = 39° 16' 39.2" (LT)	θs = 2° 05' 20.1"
Ls = 350.00'	D = 1° 11' 37.2"	Ls = 350.00'
LT = 233.35'	L = 3,290.51'	LT = 233.35'
ST = 116.68'	T = 1,712.86'	ST = 116.68'
	R = 4,800.00'	
	V = 75mph	
	SE = 0.05	

-Y20-

PI Sta 13+49.92
Δ = 25° 14' 59.4" (RT)
D = 4° 42' 56.5"
L = 535.44'
T = 272.14'
R = 1,215.00'
V = Exist
SE = Exist

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER

ROLL 7 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

NC 50
16,100
21,700

700 / 1,500	5,000 / 9,500	COMPLETE 540
17,500 / 35,000		16,300 / 37,700
COMPLETE 540	7,800 / 12,800	2,300 / 7,600

20,500
31,000
NC 50

2016 ADT
2040 ADT

(455) GUY, CHARLES T SHAW, TERESA L
(456) ENNIS, STEVEN D ENNIS, CATHY B
(457) FOSTER, KEITH T FOSTER, VERNA J
(458) BABER, KIMBERLY J BABER, EDWARD L III
(459) BLACKWELL, TONY F BLACKWELL, PAMELA R
(460) CRAWFORD, FRANCES RACHEAL
(461) WEBSTER, STEPHANIE A
(462) SAULS, RODGER M JR SAULS, JANET S
(463) NC DEPARTMENT OF TRANSPORTATION
(464) AQUA NORTH CAROLINA, INC.
(465) HODGE, JOHN KENNETH HODGE, KYONG
(466) MARTIN, JAMES E JR MARTIN, DEBORAH S
(467) MATTHEWS, BILLIE ROSE MATTHEWS, CASEY

(489) NC DEPARTMENT OF TRANSPORATION
(490) BARNES, JEFFREY C BARNES, AUDREY D
(491) NEDRIGA, MICHAEL W
(492) STANLEY, DWIGHT D
(493) TOLBERT, RONALD TOLBERT, SHEILA
(494) O'CONNOR, PAUL L O'CONNOR, BARBARA B
(495) OBERHOLTZER, JACK A. OBERHOLTZER, MARY A.
(496) THOMASON, CHRISTINA L ALSHISHANI, OMAR W
(497) GRAY WOLF DEVELOPMENT LLC
(498) NELSON, POLLY M
(499) MARDENBOROUGH, DAVID
ALSTON-MARDENBOROUGH, MONTRELLA

-L-

PI Sta 754+90.27	PI Sta 773+19.79	PI Sta 790+14.12	PI Sta 843+56.03
Gs = 2° 05' 20"	Δ = 39° 16' 39.2" (LT)	Gs = 2° 05' 20"	Δ = 13° 09' 52.3" (LT)
Ls = 350.00'	D = 1° 11' 37.2"	Ls = 350.00'	D = 1° 29' 38.9"
LT = 233.35'	L = 1,290.51'	LT = 233.35'	L = 2,757.17'
ST = 116.68'	T = 670.86'	ST = 116.68'	T = 1,394.68'
	R = 4,800.00'		R = 12,000.00'
	V = 75mph		V = 75mph
	SE = 0.05		SE = 0.02

-Y2IRPC-

PI Sta 10+83.34	PI Sta 18+66.73	PI Sta 21+01.92	PI Sta 23+36.19	PI Sta 26+69.71	PI Sta 29+55.01
Gs = 1° 28' 13.2"	Gs = 4° 46' 28.7"	Δ = 1° 33' 58.4" (RT)	Gs = 4° 46' 28.7"	Gs = 9° 25' 25.1"	Δ = 29° 47' 55.0" (LT)
Ls = 250.00'	Ls = 250.00'	D = 3° 49' 11.0"	Ls = 250.00'	Ls = 250.00'	D = 7° 32' 20.1"
LT = 166.67'	LT = 166.73'	L = 302.80'	LT = 166.73'	LT = 166.90'	L = 395.26'
ST = 83.34'	ST = 83.39'	T = 151.52'	ST = 83.39'	ST = 83.55'	T = 202.27'
		R = 1,500.00'			R = 760.00'
		V = 65mph			V = 40mph
		SE = 0.08			SE = 0.07

-Y2IRPB-

PI Sta 11+69.32	PI Sta 16+05.38	PI Sta 19+94.09	PI Sta 23+52.38	PI Sta 26+86.9	PI Sta 29+70.0	PI Sta 25+08.72	PI Sta 27+48.72
Gs = 3° 08' 20.4"	= 11° 10' 44.2" (RT)	Gs = 3° 08' 20.4"	Gs = 1° 14' 44.0"	Δ = 30° 52' 30.0" (LT)	Gs = 4° 46' 28.7"	Gs = 11° 18' 30.2"	Δ = 20° 56' 08.4" (RT)
Ls = 250.00'	D = 9° 54' 40.4"	Ls = 250.00'	Ls = 200.00'	D = 5° 49' 11.0"	Ls = 250.00'	Ls = 300.00'	D = 7° 12' 20.1"
LT = 166.32'	L = 458.34'	LT = 166.32'	LT = 133.34'	L = 808.31'	LT = 166.73'	LT = 200.44'	L = 277.10'
ST = 85.75'	T = 355.38'	ST = 85.75'	ST = 66.67'	T = 414.23'	ST = 83.39'	ST = 100.37'	T = 140.42'
	R = 230.00'			R = 1,500.00'			R = 760.00'
	V = 30mph			V = 65mph			V = 40mph
	SE = 0.08			SE = 0.08			SE = 0.07

-Y2IRPD-

PI Sta 11+40.01	PI Sta 16+11.36	PI Sta 20+79.05	PI Sta 23+52.38	PI Sta 26+86.9	PI Sta 29+22.93	PI Sta 15+22.18
Gs = 1° 45' 51.3"	= 13° 25' 32.8" (LT)	Gs = 1° 45' 51.3"	Gs = 1° 14' 44.0"	Δ = 6° 38' 50.9" (RT)	Δ = 65° 27' 36.1" (LT)	Δ = 30° 01' 15.4" (LT)
Ls = 210.00'	D = 1° 40' 48.8"	Ls = 210.00'	Ls = 200.00'	D = 1° 14' 44.0"	D = 25° 27' 53.2"	D = 3° 11' 49.5"
LT = 140.01'	L = 799.04'	LT = 140.01'	LT = 133.34'	L = 533.69'	L = 257.06'	L = 178.59'
ST = 70.01'	T = 401.36'	ST = 70.01'	ST = 66.67'	T = 267.15'	T = 144.62'	T = 40.22'
	R = 3,410.00'			R = 4,600.00'	R = 225.00'	R = 150.00'
	V = 65mph			V = 55mph	V = 25mph	V = 25mph
	SE = 0.05			SE = 0.03	SE = 0.04	SE = 0.04

(510) GERMILLER, TAMMY ANN GERMILLER, JAMES W
(511) FLEMING HOMES LLC
(512) BROSCHINSKI, KARL A BROSCHINSKI, JIMMIE ANN
(513) MARTILIK, NICHOLAS M MARTILIK, STACEY L
(514) DERUSHA, DENNIS J DERUSHA, LINDA W

(515) RAGANO, SALVATORE A RAGANO, CHANDA LADA
(516) WILLIAMS, CELESTA M WILLIAMS, CHRISTOPHER A
(517) NORRIS, BETTY L
(518) NORRIS, S GREGG NORRIS, SHANNON B
(519) CORNERSTONE DEVELOPMENT CO INC
(520) GRISSOM, BILLY M SR TRUSTEE GRISSOM, LORENE W TRUSTEE
(521) GRISSOM, ANDREW PATRICK TRUSTEE FOR THE DOUGLAS LEE GRISSOM & ELLEN

(522) GRISSOM, ANDREW PATRICK TRUSTEE FOR THE DOUGLAS LEE GRISSOM & ELLEN
(523) WILLIAMS, STEVEN RAY
(524) JERRY BARBOUR REVOCABLE TRUST
(525) TURNER MEMORIAL BAPTIST CHURCH ETAL SAULS, MARSHALL A TRUSTEE
(526) SCHAEFER, ROBERT C SCHAEFER, JACQUELINE A
(527) PENNY, JERRY K
(1782) MOZINGO, JERRY MOZINGO, DEBRA

ROLL 7 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

TURNER MEMORIAL BAPTIST CHURCH
TURNER MEMORIAL BAPTIST CHURCH
TURNER MEMORIAL BAPT CH
-Y2IA- PC Sta. 11+48.32
FUTURE PANTHER BRANCH GREENWAY
NC 96 BEREAN WAY
-Y2IA- POT Sta. 59+22.01=
-Y2IA- POT Sta. 10+00.00
GOLDEN GRAIN RD
20' BST
-Y2I-
-Y2IA- PT Sta. 14+05.38
-Y2IA- PC Sta. 14+81.95
EXISTING CAROLINA - RICHMOND PIPELINE
15+00 -Y2IA-
-Y2IA- PT Sta. 15+60.55
T H TURNER FARMS INC
MCLAMB, KEVIN L
MCLAMB, KELSEY J
AQUA NC
-Y2I- POT Sta. 54+56.54=
-Y2IB- POT Sta. 10+00.00
-Y2IA- POT Sta. 17+81.66
-Y2IB- POT Sta. 15+00.00
SR 5530 GRISSOM FARM RD
GRISSOM FARMS SUBDIVISION
DICKENSON, DOUGLAS L DICKENSON, JOAN E L
HUGHES, GERALD P HUGHES, LINDA D
KREAGE, FRANK KREAGE, JILL H
PROVENCIO, PAUL O OLAMPO, PENELOPE
WEEKES, MALCOLM M WEEKES, WILLA M
-Y2IRPB- PT Sta. 28+86.0
-Y2IRPB- SC Sta. 26+08.31
-Y2IRPB- SBS Sta. 23+08.31
-Y2IRPB- CS Sta. 20+58.31
-Y2IRPB-
-Y2IRPB- SC Sta. 12+50.00
-L- POC Sta. 783+05.74=
-Y2IRPB- ST Sta. 10+00.00
240' LT
-L- POT Sta. 788+92.83=
-Y2IRPB- ST Sta. 10+00.00
71.00' RT
-L- CS Sta. 788+92.83
ENNIS, DAVID LAVON
ENNIS, LORI G
PHILLIPPE, DONALD KEITH
PHILLIPPE, ERIC
-L- POC Sta. 781+91.46=
-Y2IRPC- ST Sta. 10+00.00
71.00' RT
-Y2IRPC- TS Sta. 17+00.00
PROPOSED 108"ø RCBC
-Y2IRPC- ST Sta. 12+50.00
-Y2IRPC- SC Sta. 19+50.00
-Y2IRPC- CS Sta. 22+52.80
-Y2IRPC- SRS Sta. 25+02.80
-Y2IRPC- SC Sta. 27+52.80
WILLIS, EBIN H SR CO-TRUSTEE WILLIS, MARGARET WILEY CO-TRUSTEES
STEVENS OAKS SUBDIVISION
PENNY, HORACE DONALD
-L- ST Sta. 792+47.43
-Y2IRPB- ST Sta. 19+58.34
-Y2IRPB- CS Sta. 17+08.34
-Y2IRPB- SC Sta. 12+50.00
-L- POT Sta. 800+78.45=
-Y2IRPB- ST Sta. 10+00.00
71.00' LT
PROTECTED CORRIDOR
CORRIDOR LIMITS
UNKNOWN
B
C
D
NC DEPARTMENT OF TRANSPORTATION
UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W
PROPOSED OVERHEAD FACILITIES
UNKNOWN
COLONIAL PIPELINE POSSIBLE RELOCATION ROUTE (3) LINES
-Y2I- POT Sta. 47+62.15=
-Y2IRPB- POT Sta. 30+86.01
-Y2I- POT Sta. 47+30.00=
-Y2LPB- POT Sta. 21+95.23
-L- POT Sta. 803+19.48=
-Y2I- POT Sta. 47+47.50
CH=99° 03' 40.4"
-L- PC Sta. 829+71.14
-Y2IRPD- SRS Sta. 22+19.04
-Y2IRPD- CS Sta. 20+19.04
-Y2IRPD- SC Sta. 24+19.04
-Y2I- POT Sta. 36+58.00=
-Y2IRPC- POT Sta. 37+40.03
-Y2IRPD- POT Sta. 33+47.12
-Y2IRPD- PT Sta. 29+52.74
-Y2IRPC- PT Sta. 31+48.07
-Y2I- PC Sta. 40+10.07
BEGIN BRIDGE -Y2I- STA. 40+10.07
END BRIDGE -Y2I- STA. 42+80.33
-Y2I- PT Sta. 42+80.33
-Y2I- PC Sta. 45+00.00
-Y2I- PT Sta. 47+00.00
-Y2I- PC Sta. 49+00.00
-TB- STA. 49+00.00
-Y2I- PC Sta. 50+00.00
-Y2I- PT Sta. 52+00.00
-Y2I- PC Sta. 54+00.00
-Y2I- PT Sta. 55+00.00
-Y2I- PC Sta. 57+00.00
-Y2I- PT Sta. 59+00.00
-Y2I- PC Sta. 60+00.00
-Y2I- PT Sta. 62+00.00
-Y2I- PC Sta. 63+00.00
-Y2I- PT Sta. 65+00.00
-Y2I- PC Sta. 66+00.00
-Y2I- PT Sta. 68+00.00
-Y2I- PC Sta. 69+00.00
-Y2I- PT Sta. 71+00.00
-Y2I- PC Sta.

ROLL 7A OF 27

Y21 DETOUR
NC 50
BENSON RD.

100′ 0′ 100′ 200′
50′

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

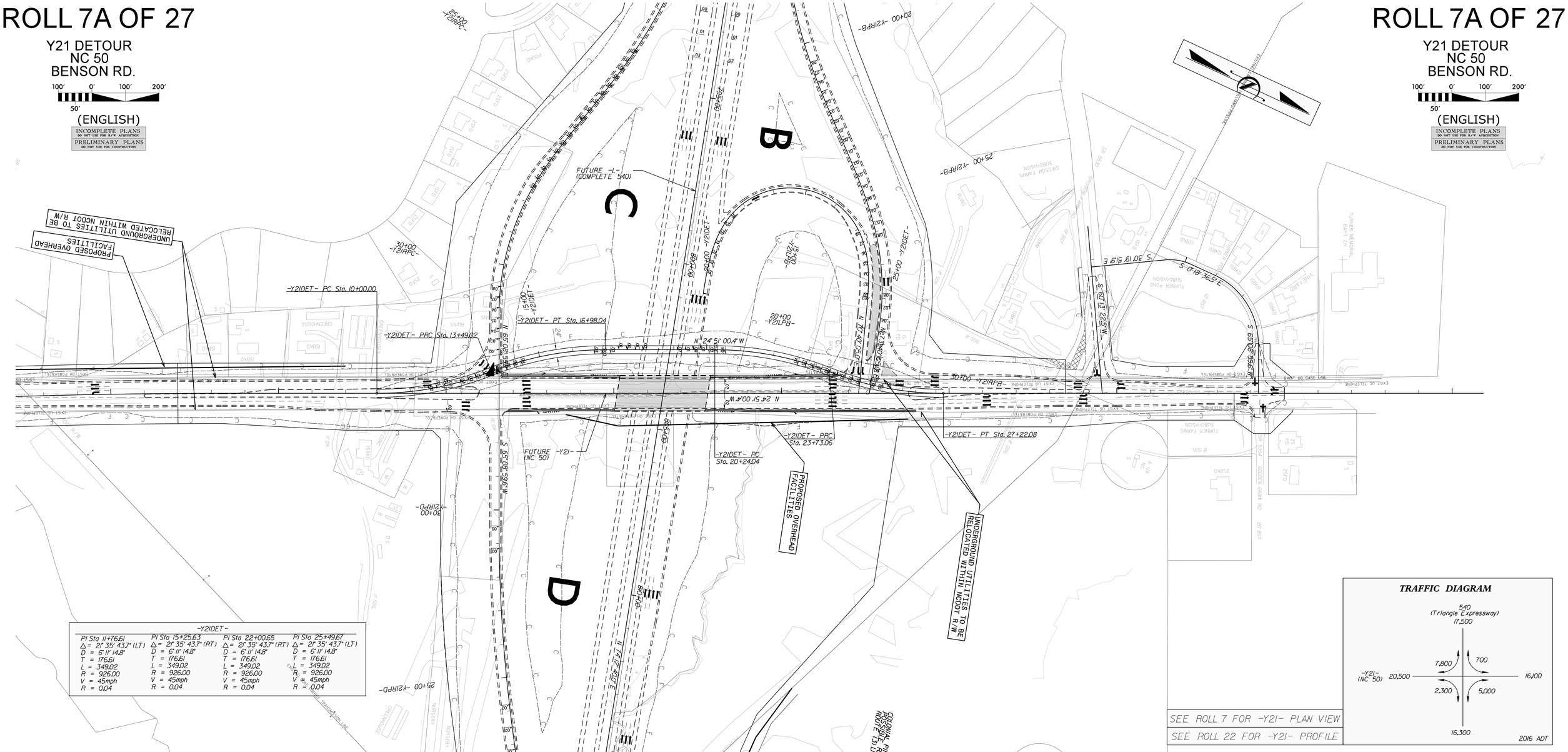
ROLL 7A OF 27

Y21 DETOUR
NC 50
BENSON RD.

100′ 0′ 100′ 200′
50′

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION


-Y21PC- 25+00
-Y21RPC- 30+00
-Y21RPD- 30+00
-Y21RPD- 25+00
-Y21RPB- 20+00
-Y21RPB- 25+00
-Y21DET- PC Sta. 10+00.00
-Y21DET- PRC Sta. 13+49.02
-Y21DET- PT Sta. 16+98.04
-Y21DET- PRC Sta. 23+73.06
-Y21DET- PC Sta. 20+24.04
-Y21DET- PT Sta. 27+22.08
-Y21LPB- 20+00
-Y21RPB- 30+00
FUTURE -L- (COMPLETE 540)
FUTURE -Y21- (NC 50)
PROPOSED OVERHEAD FACILITIES
UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W
PROPOSED OVERHEAD FACILITIES
UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W
COLONIAL PIPELINE CO. GASOLINE PIPELINE ROUTE 13
N 24° 51' 00.4" W
N 65° 08' 59.6" E
S 65° 08' 59.6" W
S 30° 19' 51.9" E
S 59° 40' 08.1" W
S 30° 19' 51.9" E
S 59° 40' 08.1" W
S 18° 36' 5.0" E
S 13° 22' 5.1" W
R = 947.39'
L = 349.02'
T = 176.61'
D = 6° 11' 14.8"
Δ = 21° 35' 43.7" (RT)
-L- 540
-Y21- (NC 50)
20,500
7,800
700
16,100
2,300
5,000
16,300
2016 ADT
TURNER MEMORIAL BAPT CH
TURNER FARMS SUBDIVISION
GRISSOM FARMS SUBDIVISION
GREENHOUSE
NURSERY
RUINS
POND
CEMETERY
EXIST OH POWERLINE
EXIST UG TELEPHONE
EXIST UG GAS LINE
EXIST UG POWERLINE
EXIST UG CABLE TV

ROLL 8 OF 27

100' 0' 100' 200'
50'
(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

-L-
PI Sta 843+56.03
Δ = 13°09'52.3" (LT)
D = 0°28'38.5"
L = 2,757.17'
T = 1,384.58'
R = 12,000.00'
V = 75mph
SE = 0.02

-L-
PI Sta 882+93.73
Δ = 11°15'31.6" (RT)
D = 0°28'38.5"
L = 2,358.03'
T = 1,182.82'
R = 12,000.00'
V = 75mph
SE = 0.02

(439) WARZON, KEITH WARZON, HEATHER
(440) PULLEY, LEE E PULLEY, DIANE H
(441) PADDYFOOTE, GARRICK A PADDYFOOTE, BEATRIZ MENDOZA
(442) MARTIN, LEVI M MARTIN, KATHLEEN B
(443) PARRISH, KERRY MAHONEY PARRISH, JOHNATHAN LOGAN
(444) COX, LEON COX, MARTHA
(445) WEIMER, JEFFREY MATTHEW WEIMER, SONYA JEAN
(446) DZIALOWY, NICOLE AMANDA ADAMS, ROBERT LEE
(447) HOME BUILDERS ASSOCIATION OF RALEIGH-WAKE COUNTY C
(448) STATEMENT CUSTOM HOMES LLC
(449) HUFFMAN, PAUL J KARSKO, RENE M
(450) TAYLOR, DAVID A TAYLOR, KATHRYN A
(451) L AND L OF RALEIGH INC
(452) WHITE, GUY E WHITE, SHANNON R
(453) ELLIS, MAJOR
(454) GILES, CAITLYN ABDURAKHMANOV, ZAMIR

ROLL 8 OF 27
100' 0' 100' 200'
50'
(ENGLISH)
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

MATCHLINE -L- STA. 831+00 SEE ROLL 7

MATCHLINE -L- STA. 882+00 SEE ROLL 9

-L- PT Sta. 857+28.52

-L- PC Sta. 871+10.91

N 61°02'47" E

CORRIDOR LIMITS

PROTECTED CORRIDOR

FUTURE GREENWAY

FUTURE SHARED USE PATH OVER GREENWAY

BEGIN BRIDGE -L- STA. 832+21.30

END BRIDGE -L- STA. 846+71.30

BEGIN BRIDGE -L- STA. 860+71.30

END BRIDGE -L- STA. 868+96.30

300' TAPER

PROP. WB FENCE

PROP. GUARDRAIL

PROPOSED 2@5'x5' RCBC

TURNER FARMS SUBDIVISION

BURCH, ALLEN W

T H TURNER FARMS INC

L AND L OF RALEIGH INC

ELLEN, JOSEPH L

BIGGERSTAFF, SUSAN ADAIR

RALEIGH CITY OF

PENNY, RANDY KENNETH
PENNY, BILLIE ROSE

MAYNARD, DONALD G
MAYNARD, PATRICIA J

ANDERSON, THOMAS P
ANDERSON, MELISSA T

N C DEPT OF TRANSPORTATION

BRYAN, JEAN BALL

NEWBOLD, MARGARET J
WATSON, ELIZABETH D

SEE ROLL 23 FOR PROFILE

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35356.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
1616 DOCKSIDE LANE, SUITE 200
RALEIGH, NC 27604
(919) 743-1700

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35356.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
1616 DOCKSIDE LANE, SUITE 200
RALEIGH, NC 27604
(919) 743-1700

SHEET 9 OF 27

200' 0' 200' 400'

100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITIONS
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SHEET 9 OF 27

200' 0' 200' 400'

100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITIONS
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y22RPA-

PI Sta 11+40.02	PI Sta 17+10.53	PI Sta 23+67.53	PI Sta 37+14.74	PI Sta 56+77.28
06 = 3°18'19.5"	Δ = 74°14'09.7" (LT)	06 = 3°18'19.5"	Δ = 5°29'10.8" (LT)	06 = 2°13'10.2"
Ls = 210.00'	D = 3°08'53.2"	D = 3°08'53.2"	D = 1°40'43.3"	Ls = 216.00'
LT = 140.02'	L = 1087.50'	LT = 140.02'	L = 788.52'	LT = 144.02'
ST = 70.02'	T = 560.53'	ST = 70.02'	R = 3945.00'	ST = 72.01'
	R = 1820.00'		V = 60mph	
	V = 60mph		SE = 0.02'	
	SE = 0.09'			

-I-

PI Sta 882+93.73	PI Sta 905+36.32	PI Sta 960+80.50	PI Sta 986+40.12	PI Sta 1003+20.54
Δ = 11°12'34.6" (RT)	Δ = 5°37'10.2" (LT)	06 = 1°52'36.2"	Δ = 49°28'45.2" (LT)	06 = 1°47'00.8"
D = 4°28'59.9"	D = 11°15'37.2"	Ls = 400.00'	D = 7°25'55.3"	Ls = 480.00'
L = 2,158.03'	L = 507.00'	LT = 280.04'	L = 1,294.03'	LT = 320.00'
T = 1,082.82'	T = 1,067.39'	ST = 140.04'	T = 678.55'	ST = 160.06'
R = 1,200.00'	R = 510.00'		R = 790.00'	
V = 75mph	V = 75mph		V = 75mph	
SE = 0.02'	SE = MC		SE = 0.06'	

-Y22EUVCC-

PI Sta 12+05.09	PI Sta 16+15.31	PI Sta 21+17.39	PI Sta 59+69.72	PI Sta 71+14.34	PI Sta 114+36.58	PI Sta 145+28.65	PI Sta 157+29.31	PI Sta 168+52.13
06 = 2°41'52.2"	Δ = 19°50'34.2" (RT)	06 = 2°41'52.2"	06 = 0°03'36.5"	06 = 0°39'52.3" (LT)	06 = 0°03'36.5"	06 = 1°07'12.4"	Δ = 32°34'03.8" (RT)	06 = 1°07'37"
Ls = 210.00'	D = 3°34'09.5"	Ls = 210.00'	Ls = 330.00'	D = 3°40'25.2"	Ls = 330.00'	Ls = 460.00'	D = 1°28'09.8"	Ls = 460.00'
LT = 140.02'	L = 1,112.50'	LT = 140.02'	LT = 220.01'	L = 1,044.01'	LT = 220.01'	LT = 320.01'	L = 1,276.85'	LT = 320.01'
ST = 70.02'	T = 561.06'	ST = 70.02'	ST = 110.02'	T = 526.07'	ST = 110.02'	ST = 160.02'	R = 3,900.00'	ST = 160.01'
	R = 3,220.00'			R = 1,650.00'		ST = 53.34'	V = 60mph	ST = 53.34'
	V = 65mph			V = 60mph			SE = 0.04'	
	SE = 0.07'			SE = 0.06'				

-Y22EUPB-

PI Sta 11+67.94	PI Sta 28+17.73	PI Sta 25+08.14	PI Sta 40+17.78	PI Sta 33+04.06	PI Sta 39+14.57	PI Sta 45+35.57	PI Sta 50+73.18
06 = 3°42'.10.6"	Δ = 20°46'.25.4" (RT)	06 = 3°42'.10.6"	06 = 1°54'.38.2"	06 = 3°18'.19.5"	Δ = 34°14'.01.2" (LT)	06 = 3°18'.19.5"	06 = 3°49'.37.2"
Ls = 250.00'	D = 11°21'.44.5"	Ls = 250.00'	Ls = 330.00'	Ls = 210.00'	D = 3°08'.53.2"	Ls = 210.00'	Ls = 210.00'
LT = 167.94'	L = 1,127.35'	LT = 167.94'	LT = 220.01'	LT = 140.02'	L = 1087.5'	LT = 140.02'	LT = 140.03'
ST = 84.49'	T = 569.73'	ST = 84.49'	ST = 110.02'	ST = 70.02'	T = 560.53'	ST = 70.02'	ST = 70.03'
	R = 330.00'				R = 1820.00'		
	V = 35mph				V = 60mph		
	SE = 0.08				SE = 0.07'		

-Y22EPC-

PI Sta 11+60.03	PI Sta 17+19.57	PI Sta 23+43.83	
06 = 7°09'.43.2"	Δ = 61°08'.58.2" (RT)	06 = 7°45'.34.2"	
Ls = 240.00'	D = 5°.56'.05.9"	06 = 7°09'.55.6"	
LT = 160.13'	L = 1,067.81'	Ls = 240.00'	
ST = 86.12'	R = 1,030.00'	LT = 144.43'	
	V = 60mph	ST = 96.02'	
	SE = 0.08		

-Y22EPCC-

PI Sta 10+46.67	PI Sta 13+13.34	PI Sta 23+82.43	PI Sta 33+79.73	PI Sta 56+44.23	PI Sta 69+84.52	PI Sta 71+44.58	PI Sta 83+45.29
06 = 9°.01'.34.8"	06 = 1°.40'.48.8"	Δ = 32°.08'.37.2" (RT)	06 = 1°.40'.48.8"	06 = 1°.37'.31.5"	Δ = 9°.33'.55.5" (LT)	06 = 1°.37'.31.5"	Δ = 8°.33'.30.4" (RT)
Ls = 200.00'	LT = 133.34'	D = 1°.40'.48.8"	Ls = 200.00'	Ls = 200.00'	D = 1°.37'.31.5"	Ls = 200.00'	D = 1°.28'.39.0"
LT = 133.33'	ST = 66.68'	L = 1,913.01'	LT = 133.34'	LT = 133.34'	L = 588.15'	LT = 133.34'	L = 5,163.01'
ST = 66.68'		R = 1,400.00'	ST = 66.68'	ST = 66.68'	T = 294.76'	ST = 66.68'	T = 2,886.06'
		V = 65mph			R = 3,525.00'		R = 12,900.00'
		SE = 0.05			V = 60mph		
					SE = 0.05		

-Y22RPCD-

PI Sta 10+46.67	PI Sta 13+13.34	PI Sta 23+82.43	PI Sta 33+79.73	PI Sta 56+44.23	PI Sta 69+84.52	PI Sta 71+44.58	PI Sta 83+45.29
06 = 9°.01'.34.8"	06 = 1°.40'.48.8"	Δ = 32°.08'.37.2" (RT)	06 = 1°.40'.48.8"	06 = 1°.37'.31.5"	Δ = 9°.33'.55.5" (LT)	06 = 1°.37'.31.5"	Δ = 8°.33'.30.4" (RT)
Ls = 200.00'	LT = 133.34'	D = 1°.40'.48.8"	Ls = 200.00'	Ls = 200.00'	D = 1°.37'.31.5"	Ls = 200.00'	D = 1°.28'.39.0"
LT = 133.33'	ST = 66.68'	L = 1,913.01'	LT = 133.34'	LT = 133.34'	L = 588.15'	LT = 133.34'	L = 5,163.01'
ST = 66.68'		R = 1,400.00'	ST = 66.68'	ST = 66.68'	T = 294.76'	ST = 66.68'	T = 2,886.06'
		V = 65mph			R = 3,525.00'		R = 12,900.00'
		SE = 0.05			V = 60mph		
					SE = 0.05		

-Y22RPCD-

PI Sta 10+46.67	PI Sta 13+13.34	PI Sta 23+82.43	PI Sta 33+79.73	PI Sta 56+44.23	PI Sta 69+84.52	PI Sta 71+44.58	PI Sta 83+45.29
06 = 9°.01'.34.8"	06 = 1°.40'.48.8"	Δ = 32°.08'.37.2" (RT)	06 = 1°.40'.48.8"	06 = 1°.37'.31.5"	Δ = 9°.33'.55.5" (LT)	06 = 1°.37'.31.5"	Δ = 8°.33'.30.4" (RT)
Ls = 200.00'	LT = 133.34'	D = 1°.40'.48.8"	Ls = 200.00'	Ls = 200.00'	D = 1°.37'.31.5"	Ls = 200.00'	D = 1°.28'.39.0"
LT = 133.33'	ST = 66.68'	L = 1,913.01'	LT = 133.34'	LT = 133.34'	L = 588.15'	LT = 133.34'	L = 5,163.01'
ST = 66.68'		R = 1,400.00'	ST = 66.68'	ST = 66.68'	T = 294.76'	ST = 66.68'	T = 2,886.06'
		V = 65mph			R = 3,525.00'		R = 12,900.00'
		SE = 0.05			V = 60mph		
					SE = 0.05		

-Y22RPA-

PI Sta 11+40.69	PI Sta 17+10.61	PI Sta 25+98.05	PI Sta 80+14.76	PI Sta 80+14.81	PI Sta 91+17.21	PI Sta 114+19.00	PI Sta 121+23.05
06 = 2°.08'.40.2"	Δ = 19°.59'.04.2" (RT)	06 = 3°.42'.10.6"	06 = 4°.52'.34.5"	Δ = 7°.01'.55.5"	Δ = 19°.59'.04.2" (RT)	06 = 3°.05'.55.5"	06 = 4°.21'.18.9"
Ls = 250.00'	D = 11°.44'.43.5"	Ls = 250.00'	Ls = 350.00'	D = 4°.52'.34.5"	D = 11°.44'.43.5"	Ls = 350.00'	Ls = 450.00'
LT = 167.94'	L = 1,263.66'	LT = 167.94'	LT = 180.06'	L = 1,246.46'	L = 1,263.66'	LT = 125.01'	LT = 150.01'
ST = 84.49'	T = 637.54'	ST = 84.49'	ST = 90.26'	T = 624.00'	T = 637.54'	ST = 62.64'	ST = 75.04'
	R = 330.00'			R = 1,400.00'	R = 330.00'	R = 1,400.00'	R = 1,400.00'
	V = 35mph			V = 60mph	V = 35mph	V = 55mph	V = 60mph
	SE = 0.08			SE = 0.08	SE = 0.08	SE = 0.08	SE = 0.08

-Y22RPAFLY-

PI Sta 11+67.78	PI Sta 25+12.69	PI Sta 79+28.08	PI Sta 168+00.29	PI Sta 171+72.03	PI Sta 251+17.84	PI Sta 32+88.61	PI Sta 40+39.34
06 = 2°.06'.51.6"	Δ = 19°.59'.04.2" (RT)	06 = 3°.42'.10.6"	06 = 4°.52'.34.5"	06 = 2°.58'.03.9"	06 = 2°.58'.03.9"	Δ = 36°.39'.48.7" (RT)	Δ = 7°.04'.59.5"
Ls = 200.00'	D = 11°.44'.43.5"	Ls = 200.00'	Ls = 240.00'	Ls = 240.00'	Ls = 240.00'	D = 2°.54'.09.5"	Ls = 240.00'
LT = 167.78'	L = 1,329.69'	LT = 133.34'	LT = 180.06'	LT = 160.05'	LT = 160.05'	L = 1,580.05'	LT = 160.02'
ST = 84.29'	T = 670.00'	ST = 66.68'	ST = 90.04'	ST = 80.04'	ST = 80.04'	T = 717.34'	ST = 80.02'
	R = 330.00'					R = 2,230.00'	
	V = 60mph					V = 60mph	
	SE = 0.08					SE = 0.06	

-Y22RPAFLY-

PI Sta 14+43.02	PI Sta 29+59.28	PI Sta 33+69.54	PI Sta 41+40.02	PI Sta 251+45.62	PI Sta 71+47.28	PI Sta 34+87.25
06 = 8°.48'.51.7"	06 = 10°.52'.52.7" (RT)	06 = 1°.00'.33.8"	06 = 2°.45'.34.8"	Δ = 49°.04'.31.8" (RT)	06 = 3°.56'.32.5"	06 = 1°.51'.49.2"
Ls = 250.00'	D = 10°.19'.50"	D = 1°.00'.33.8"	D = 4°.37'.42"	D = 4°.37'.42"	D = 1°.43'.54"	Ls = 180.00'
LT = 174.54'	R = 565.00'	LT = 134.22'	ST = 70.02'	R = 1,400.00'	R = 3,300.00'	ST = 90.04'
ST = 87.76'	R = 565.00'	ST = 134.22'		V = 60mph	V = 60mph	ST = 60.02'
	V = 60mph	ST = 86.68'		SE = 0.08	SE = 0.08	
	SE = 0.08					

-Y22RPAFLY-

PI Sta 13+83.34	PI Sta 16+43.38	PI Sta 251+01.86	PI Sta 31+39.70	PI Sta 41+39.70	PI Sta 51+30.71	PI Sta 57+49.20
06 = 2°.0'.13.3"	Δ = 11°.24'.03.9" (RT)	Δ = 16°.22'.52.2" (RT)	06 = 1°.08'.08.8"	06 = 4°.46'.09.7"	06 = 4°.46'.10.2" (LT)	06 = 4°.22'.25.4"
Ls = 200.00'	D = 2°.0'.13.3"	D = 7°.09'.08.8"	Ls = 200.00'	Ls = 240.00'	Ls = 240.00'	Ls = 240.00'
LT = 133.34'	T = 213.91'	L = 1,250.17'	LT = 133.34'	LT = 160.08'	LT = 160.08'	LT = 160.05'
ST = 66.68'	L = 426.86'	T = 631.00'	ST = 66.68'	ST = 80.08'	ST = 80.08'	ST = 80.04'
	R = 2,800.00'	R = 1,300.00'		R = 1,200.00'	R = 1,197.43'	
	V = 60mph	V = 60mph		V = 60mph	V = 60mph	
	SE = 0.06	SE = 0.04		SE = 0.08	SE = 0.08	

--DESIGN EXCEPTION MAY BE REQUIRED.

-Y22RPE-

PI Sta 10+46.67	PI Sta 13+13.34	PI Sta 23+82.43	PI Sta 33+79.73	PI Sta 56+44.23	PI Sta 69+84.52	PI Sta 71+44.58	PI Sta 83+45.29
06 = 9°.01'.34.8"	06 = 1°.40'.48.8"	Δ = 32°.08'.37.2" (RT)	06 = 1°.40'.48.8"	06 = 1°.37'.31.5"	Δ = 9°.33'.55.5" (LT)	06 = 1°.37'.31.5"	Δ = 8°.33'.30.4" (RT)
Ls = 200.00'	LT = 133.34'	D = 1°.40'.48.8"	Ls = 200.00'	Ls = 200.00'	D = 1°.37'.31.5"	Ls = 200.00'	D = 1°.28'.39.0"
LT = 133.33'	ST = 66.68'	L = 1,913.01'	LT = 133.34'	LT = 133.34'	L = 588.15'	LT = 133.34'	L = 5,163.01'
ST = 66.68'		R = 1,400.00'	ST = 66.68'	ST = 66.68'	T = 294.76'	ST = 66.68'	T = 2,886.06'
		V = 65mph			R = 3,525.00'		R = 12,900.00'
		SE = 0.05			V = 60mph		
					SE = 0.05		

ROLL 10 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

(648) CARWELL, RONALD G CARWELL, VICKIE R
(649) PARTIN, BRENDA A
(650) EATMON, JOLLIE F EATMON, SHARON W
(651) MCDANIEL, CARLTON S JR MCDANIEL, CYNTHIA W
(652) OLD STAGE PLACE HOMEOWNERS ASSC INC
(1775) BAKER, GLORIA SAULS

MATCHLINE -Y17B- STA. 20+00 SEE ROLL 3

MATCHLINE -Y17- STA. 51+00 SEE ROLL 3

REESE, CLINT M JR

EVANS, NANNIE S

-Y17B- PT Sta. 16+26.11

REECROME DEVELOPMENT LLC

UNDERGROUND UTILITIES TO BE RELOCATED WITHIN NCDOT R/W

CORRIDOR LIMITS

LEDBETTER TIMBER & PULPWOOD INC

-Y17B- PC Sta. 12+78.24

S 16° 03' 29.7" W

DICKERSON, PEGGY

-Y17- POC Sta. 58+02.52=
-Y17B- POT Sta. 10+00.00

-Y17- PC Sta. 55+10.98

-Y17- POS Sta. 54+98.52=
-Y17D- POT Sta. 10+00.00

N 19° 36' 08.1" E

-Y17-
SR 1006 OLD STAGE RD

N 5° 46' 55.3" E

PROP. RW

600' TAPER

PROP. DTH POW LINES

650' TAPER

PROP. RW

CORRIDOR LIMITS

GARNER

-Y17- PC Sta. 61+87.58

-Y17- PT Sta. 65+51.81

-Y17- POT Sta. 69+26.36

UPCHURCH, MARY B
BALL, DAVID W
/TR

BALL, DAVID W
/TR

-Y17- PT Sta. 59+20.12

-Y17D- POT Sta. 13+63.58=
-Y17E - POT Sta. 14+28.07

PROPOSED OVERHEAD FACILITIES

-Y17D- 15+00

-Y17E- PC Sta. 11+71.45

-Y17E- POT Sta. 10+00.00

-Y17D- POT Sta. 16+55.61

-Y17E- PT Sta. 13+40.90

ADDITIONAL SURVEYS REQUIRED

MARY T BALL PROPERTIES LLC

OLD STAGE RD
GREENWAY

-Y17-				-Y17B-	-Y17E-
PI's Sta. 55+46.37	PI's Sta. 57+15.43	PI's Sta. 58+84.39	PI Sta. 63+70.34	PI Sta 14+87.00	PI Sta 12+56.75
θs = 2° 31' 06.6"	Δ = 5° 09' 18.3" (LT)	θs = 2° 31' 06.6"	Δ = 13° 49' 12.8" (RT)	Δ = 79° 43' 26.2" (LT)	Δ = 16° 17' 53.2" (LT)
Ls = 200.00'	D = 2° 31' 06.6"	Ls = 200.00'	D = 4° 24' 26.5"	D = 22° 55' 05.9"	D = 9° 32' 57.5"
LT = 133.35'	L = 204.69'	LT = 133.35'	L = 313.57'	L = 347.86'	L = 169.45'
ST = 66.68'	T = 102.41'	ST = 66.68'	T = 157.55'	T = 208.75'	T = 85.29'
	R = 2,275.00'		R = 1,300.00'	R = 250.00'	R = 600.00'
	V = 50mph		V = 50mph	V = 25mph	V = 25mph
	SE = 0.05		SE = 0.06	SE = NC	SE = NC

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400179
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA
Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
4700 EDINBURGH RD, SUITE 202
GREENSBORO, NC 27406

SEE ROLL 18 FOR PROFILE

ROLL 10 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GARNER

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400179
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA
Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
4700 EDINBURGH RD, SUITE 202
GREENSBORO, NC 27406

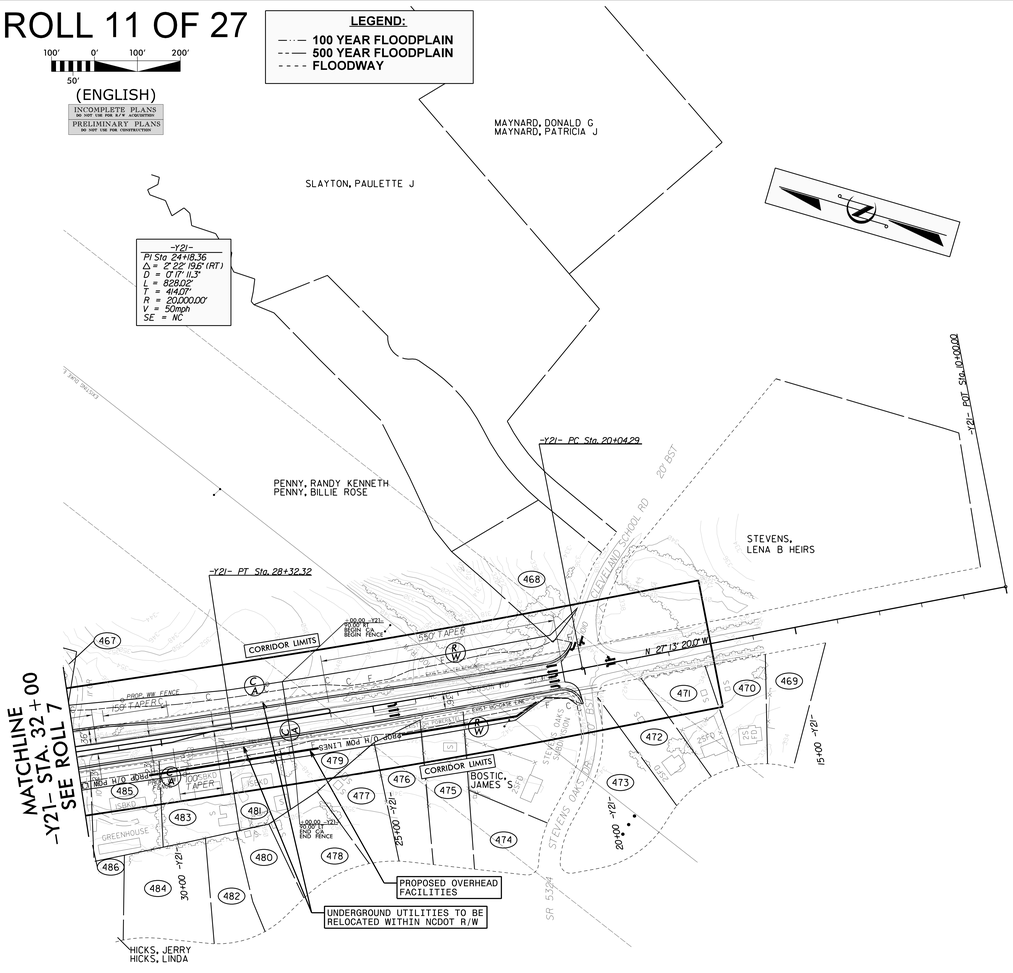
ROLL 11 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY


MAYNARD, DONALD G
MAYNARD, PATRICIA J
SLAYTON, PAULETTE J
-Y2I-
PI Sta 24+18.36
Δ = 2°22'19.6" (RT)
D = 0°17'11.3"
L = 828.02'
T = 414.07'
R = 20,000.00'
V = 50mph
SE = NC
-Y2I- PC Sta 20+04.29
-Y2I- POT Sta 0+00.00
PENNY, RANDY KENNETH
PENNY, BILLIE ROSE
STEVENS,
LENA B HEIRS
-Y2I- PT Sta 28+32.32
CLEVELAND SCHOOL RD
20' EST
CORRIDOR LIMITS
550' TAPER
PROP. RW FENCE
N 27°13' 20.0" W
EXIST. RIGHT RW
EXIST. LEFT RW
EXIST. RW FENCE

ROLL 12 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

-Y22RPB-
PI Sta 23+67.53
Gs = 1°18' 19.9"
Ls = 210.00'
LT = 140.02'
ST = 70.02'

PI Sta 37+14.74
Δ = 5°21' 10.8" (LT)
D = 0°40' 43.9"
L = 788.52'
T = 394.55'
R = 8,440.00'
V = 60mph
SE = 0.02

PI Sta 56+77.28
Gs = 2°13' 0.2"
Ls = 216.00'
LT = 144.01'
ST = 72.01'

PI Sta 61+05.82
Δ = 14° 34' 32.5" (LT)
D = 2°03' 18.3"
L = 709.25'
T = 356.55'
R = 2,788.00'
V = 60mph
SE = 0.06

PI Sta 65+30.53
Gs = 2°13' 0.2"
Ls = 216.00'
LT = 144.01'
ST = 72.01'

PI Sta 86+96.58
Gs = 1°37' 07.7"
Ls = 216.00'
LT = 144.00'
ST = 72.00'

PI Sta 90+07.41
Δ = 2° 44' 13.7" (RT)
D = 0° 34' 22.5"
L = 477.69'
T = 238.89'
R = 10,000.00'
V = 60mph
SE = 0.02

PI Sta 93+18.26
Gs = 0° 51' 07.7"
Ls = 216.00'
LT = 144.00'
ST = 72.00'

-Y22SUPRPA-
PI Sta 10+72.03
Gs = 3° 56' 10.9"
Ls = 216.00'
LT = 144.04'
ST = 72.03'

PI Sta 25+17.94
Gs = 2° 03' 19.6"
Ls = 160.00'
LT = 106.67'
ST = 53.34'

PI Sta 32+88.61
Δ = 35° 39' 48.7" (RT)
D = 2° 34' 09.5"
L = 1,388.05'
T = 717.34'
R = 2,230.00'
V = 60mph
SE = 0.06

PI Sta 40+39.34
Gs = 3° 04' 59.5"
Ls = 240.00'
LT = 160.02'
ST = 80.02'

PI Sta 20+34.76
Gs = 4° 52' 34.5"
Ls = 240.00'
LT = 160.06'
ST = 80.06'

PI Sta 32+78.71
Δ = 79° 04' 54.8" (RT)
D = 4° 03' 48.7"
L = 1,946.14'
T = 1,164.01'
R = 1,410.00'
V = 60mph
SE = 0.08

PI Sta 41+72.12
Gs = 3° 05' 55.6"
Gs = 4° 52' 38.4"
Ls = 240.00'
LT = 159.10'
ST = 111.28'

-Y22B-
PI Sta 15+30.99
Δ = 37° 51' 27.5" (LT)
D = 9° 22' 36.6"
L = 403.71'
T = 209.54'
R = 611.00'
V = 40mph
SE = 0.06

PI Sta 23+81.40
Δ = 9° 42' 16.7" (LT)
D = 5° 24' 18.9"
L = 179.54'
T = 89.96'
R = 1,060.00'
V = 50mph
SE = 0.06

PI Sta 27+70.33
Δ = 7° 39' 59.1" (RT)
D = 3° 49' 39.9"
L = 202.04'
T = 101.17'
R = 1,500.00'
V = 50mph
SE = 0.05

MATCHLINE -Y22RPB- STA. 50+00
SEE ROLL 9

MATCHLINE -Y22- STA. 432+00
SEE ROLL 9

MATCHLINE -Y22SUPRPA- STA. 31+00
SEE ROLL 9

MATCHLINE -Y22- STA. 385+00
SEE ROLL 13

WHITE, MARY POWELL WARD WARD, ISABEL L
PEARSALL, RAY NELL
PENNY, DAVID EARL
PENNY, JOHNNY LEE HEIRS
PENNY, THOMAS H HEIRS
NORRIS, REBECCA A
WALTERS, KENNETH REID
WALTERS, VICTORIA B
SAINT AUGUSTINES COLLEGE
NC DEPT OF TRANSPORTATION
BEASLEY, DOROTHY
WALL, L GLENN WALL, CONNIE P
PENNY, MOLLIE F
SMITH, ROY R
SMITH, ROY R DICKENS, TINA L
SMITH, ROY R SMITH, TINA D
MARLOW, BEATRICE M

CORRIDOR LIMITS

-Y22RPB- SC Sta. 57+49.27
-Y22RPB- TS Sta. 55+33.27
-Y22B- POT Sta. 30+22.41
-Y22B- PT Sta. 28+71.20
-Y22B- PC Sta. 26+69.16
-Y22B- PT Sta. 24+70.96
-Y22B- PC Sta. 22+91.42
-Y22RPB- ST Sta. 66+74.52
-Y22RPB- ST Sta. 66+74.52
-Y22- POT Sta. 423+04.29=
-Y22B- POT Sta. 19+64.00
-Y22RPB- CS Sta. 40+16.84
-Y22SUPRPA- POC Sta. 37+85.01
-Y22RPA- ST Sta. 43+40.83
-Y22- (1-40) TO BE CONSTRUCTED BY TIP I-5111
-Y22- POT Sta. 420+60.55=
-Y22SUPRPA- ST Sta. 41+99.32
73' LT
-Y22SUPRPA- CS Sta. 39+59.32
-Y22B- PT Sta. 17+25.17
-Y22B- PC Sta. 13+21.46
-Y22B- POT Sta. 10+00.00
-Y22RPB- TS Sta. 85+52.58
-Y22RPB- SC Sta. 87+68.58
-Y22RPB- CS Sta. 92+46.26
-Y22RPB- ST Sta. 94+62.26

END BRIDGE STA. 42+21.00
BEGIN BRIDGE STA. 17+82.09

CAROLINA WILLOW CREEK TRIBUTARY ROUTE RELOCATION
EXISTING CAROLINA WILLOW CREEK

EXISTING BRIDGE TO BE REMOVED

PROP. WW FENCE
300' TAPER
1000'
PROP. GUARDRAIL
PRIVATE UTILITY EASEMENT
EXISTING RIGHT OF WAY
LIMITED ACCESS R/W
LIN ST
S MT
BTW
WLS
RWB
140 EBL JAMES E HARRINGTON FWY 68 CONC
140 WBL JAMES E HARRINGTON FWY 68 CONC

N 22°19'44"E
N 12°46'10"W
N 3°18'51"E
S 5°13'00"W
N 25°12'23"W

SEE ROLL 25 FOR PROFILE
SEE ROLL 26 FOR PROFILE
SEE ROLL 27 FOR PROFILE

391 PENNY, JIMMY LEE
392 WHITE, MARY POWELL WARD WARD, ISABEL L
393 BECKER, RONALD C BECKER, WANDA T
394 YOUNG, JAMES E YOUNG, SHIRLEY M
395 GRAY, RALPH G GRAY, KAREN M
396 TRENT, DARRELL K TRENT, HOLLY M
397 KEIL, BRUCE L KEIL, KAREN H
398 KULIKOWSKI, JENNIFER A KULIKOWSKI, MICHAEL J
399 MORRISON, PETER TODD
400 WEISMAN, MELISSA WEISMAN, WADE
401 COLLINS, TIMOTHY COLLINS, KIMBERLY E
404 UNITED STATES OF AMERICA SECRETARY OF VETERANS AFF
405 BAILEY, KEVIN G

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400179
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA
Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
3638 DOMINION BLVD. SUITE 202
RALEIGH, NC 27613

ROLL 12 OF 27
100' 0' 100' 200'
50'
(ENGLISH)
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400179
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA
Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
3638 DOMINION BLVD. SUITE 202
RALEIGH, NC 27613

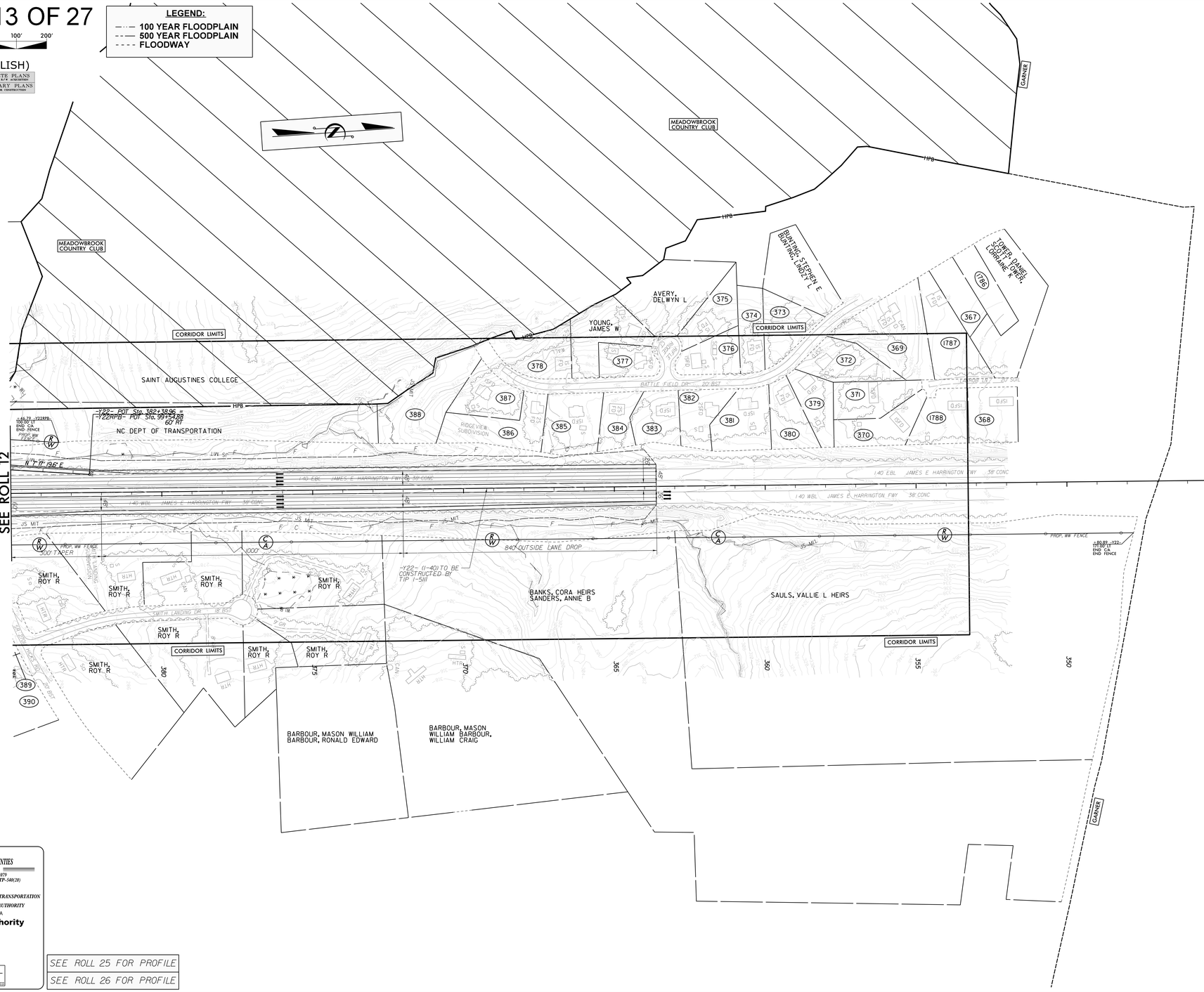
ROLL 13 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY



MATCHLINE -Y22- STA. 385+00 SEE ROLL 12

(367) COLE, LUTHER R JR COLE, TALITHA J
(368) WILLIAMS, LATONIA WILLIAMS, LATHAN JR
(369) MCMILLAN, VINCENT MCMILLAN, SABRINA R
(370) PITTMAN, WILLIAM JR
(371) ROGERS, DAVID B ROGERS, MARIE M
(372) MOORE, KRYSTAL
(373) SLYWKA, JUDY A
(374) KNIGHT, TERRENCE L KNIGHT, LAURA
(375) JACKSON, MICHAEL A JACKSON, ANNIE D
(376) BARNETT, EARL E BARNETT, MAUREEN D
(377) PENDLETON, TARA RENEE PENDLETON, WILLIAM NELSON JR
(378) FOSTER, JEANNETTE FOSTER, LAWRENCE
(379) FOBBS, CHARLIE L FOBBS, BRIDGETT L
(380) POWELL, DENNIS L POWELL, ADRIANNE M
(381) ROBINSON, WAUDDELL J JR
(382) FAULK, HARRIS D FAULK, JANICE W
(383) LEWIS, MARVA
(384) SCALLY, VICTORIA LYNN
(385) ROBINSON, WAUDDELL J JR OATES, TOSHIBA G
(386) MCLAMB, WILLIAM C MCLAMB, LELIA C
(387) MERRITT, RACQUEL NORWOOD, DONALD
(388) RIDGEVIEW SUBDIVISION HOMEOWNERS ASSOCIATION INC
(389) SMITH, PHILLIP R SMITH, PAMELA K
(390) NELSON, WALTER R JR NELSON, KAREN M
(1786) HODGES, SANDRA G HODGES, YOLONDA
(1787) EVANS, JEREMY MICHAEL

ROLL 13 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540 Triangle Expressway
PREPARED BY:
LOCHNER
525 JONES FRANKLIN RD. SUITE 300
RALEIGH, NC 27606
NC FIRM
LICENSE #C-2892

SEE ROLL 25 FOR PROFILE
SEE ROLL 26 FOR PROFILE

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540 Triangle Expressway
PREPARED BY:
LOCHNER
525 JONES FRANKLIN RD. SUITE 300
RALEIGH, NC 27606
NC FIRM
LICENSE #C-2892

ROLL 14 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEGEND:
- 100 YEAR FLOODPLAIN
- 500 YEAR FLOODPLAIN
- FLOODWAY

ROLL 14 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SCOTT, GENE A

JOHNSON, CHARLIE

BT & BETSY HENDERSON FAMILY LLC

MATCHLINE -Y22- STA. 497+00 SEE ROLL 9

CORRIDOR LIMITS

PROTECTED CORRIDOR

END BRIDGE -Y22- STA. 507+27.10

TIE FENCE TO EXISTING FENCE

BEGIN BRIDGE -Y22- STA. 504+67.38

FUTURE SWIFT CREEK GREENWAY

-Y22- (I-40) TO BE CONSTRUCTED BY TIP I-5111

GRAU 350 TL-3 MSE WALL

RIPRAP

SWIFT CR

TS Sta. 519+04.19

SC Sta. 522+54.19

BT & BETSY HENDERSON FAMILY LLC

UNKNOWN

MILLER, GLENN

JOHNSTON CO UTILITY DEPT TETRA WASTE WATER PUMP STA

SON-LAN CLASSIC DEVLMNT CO LLC

BTP PROPERTIES LLC

STATE EMPLOYEES CREDIT UNION

ST Sta. 545+37.84

CS Sta. 541+87.84

I-40 WBL JAMES E HARRINGTON FWY 38' CONC

I-40 EBL JAMES E HARRINGTON FWY 40' CONC

I-40 WBL JAMES E HARRINGTON FWY 44' CONC

I-40 EBL JAMES E HARRINGTON FWY 38' CONC

SR 1800 TECHNOLOGY DR

PETROLEUM PIPELINE

DRIVE

PA BST

CONC

ISBLKBUS

FLAGPOLE

DEBRIS

AMERICAN CONEC CORPORATION

ZIGGY VENTURES LLC

MOORE & MOORE LLC

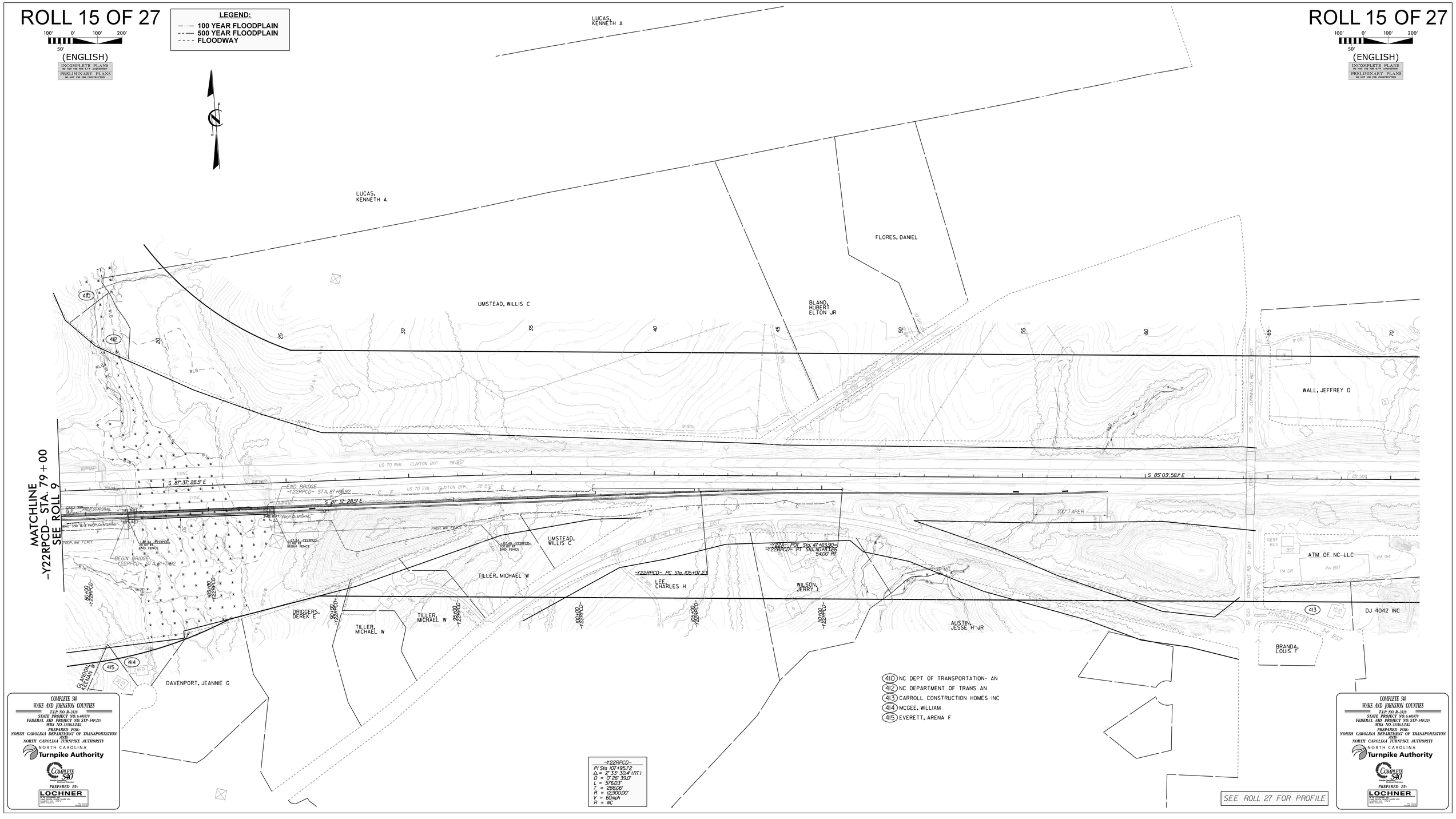
-Y22-		
PIs Sta 521+37.54	PI Sta 532+30.43	PIs Sta 543+04.51
θs = 1°45' 43.8"	Δ = 19° 28' 15.3" (LT)	θs = 1°45' 43.8"
Ls = 350.00'	D = 1°00' 25.0"	Ls = 350.00'
LT = 233.34'	L = 1,933.64'	LT = 233.34'
ST = 116.68'	T = 976.23'	ST = 116.68'
	R = 5,692.00'	
	V = 75mph	
	SE = 0.04	

(432) SHIV ENTERPRISES INC
(433) BTP PROPERTIES LLC
(434) JATEN, LLC
(435) AMERICAN SOCIETY OF CRIME LAB
(436) CHANDLER, JACK L JR
(437) J & M SMITH ENTERPRISES LLC
(438) CHANDLER, JACK L JR
(418) BAD PROPERTIES LLC
(419) CLEVELAND SCHOOL ANIMAL

SEE ROLL 25 FOR PROFILE

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35261.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC Firm No. P1000

COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35261.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC Firm No. P1000


ROLL 15 OF 27
LEGEND:
100 YEAR FLOODPLAIN
500 YEAR FLOODPLAIN
FLOODWAY
(ENGLISH)
INCOMPLETE PLANS
PRELIMINARY PLANS
LUCAS, KENNETH A
FLORES, DANIEL
UMSTEAD, WILLIS C
BLAND, HUBERT ELTON JR
WALL, JEFFREY D
MATCHLINE -Y22RPCD- STA. 79+00 SEE ROLL 9
S 87° 37' 28.5" E
S 85° 03' 58.1" E
END BRIDGE -Y22RPCD- STA. 87+66.92
BEGIN BRIDGE -Y22RPCD- STA. 81+71.92
US 70 WBL CLAYTON BYP
US 70 EBL CLAYTON BYP
300' TAPER
UMSTEAD, WILLIS C
TILLER, MICHAEL W
-Y22RPCD- PC Sta. 105+07.23
LEE, CHARLES H
WILSON, JERRY L
ATM OF NC LLC
DJ 4042 INC
DRIGGERS, DEREK E
TILLER, MICHAEL W
AUSTIN, JESSE H JR
BRANDA, LOUIS F
DAVENPORT, JEANNIE G
GLANDON, KEENAN W
410 NC DEPT OF TRANSPORTATION- AN
412 NC DEPARTMENT OF TRANS AN
413 CARROLL CONSTRUCTION HOMES INC
414 MCGEE, WILLIAM
415 EVERETT, ARENA F
-Y22RPCD-
PI Sta. 107+95.72
Δ = 2° 33' 30.4" (RT)
D = 0° 26' 39.0"
L = 576.03'
T = 288.06'
R = 12,900.00'
V = 60mph
R = NC
SEE ROLL 27 FOR PROFILE
COMPLETE 540
WAKE AND JOHNSTON COUNTIES
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
PREPARED BY:
LOCHNER

ROLL 16 OF 27

100' 0' 100' 200'
50'
(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ROLL 16 OF 27

100' 0' 100' 200'
50'
(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-

PI = 473+00.00
EL = 360.59'
VC = 300'
K = 1752
SSD = 6451'
V = 80 mph

PI = 484+25.00
EL = 341.34'
VC = 1,000'
K = 248
V = 80 mph

PI = 497+50.00
EL = 372.00'
VC = 500'
K = 337
SSD = 976'
V = 75 mph

END GRADE
TIP PROJECT 2721
BEGIN GRADE
TIP PROJECT 2828
-L- STA. 500+00.00
EL.= 374.07'

-Y13-
401
-Y14-
MCCULLERS RD
-Y15-
NORFOLK SOUTHERN RAILROAD

EXISTING GROUND
PROPOSED GRADE
(-)11.539%
(-)11.710%
(-)11.710%
(+)2.314%
(+)10.828%
PROPOSED 2@7'x5' RCBC
PROPOSED 2@6'x5' RCBC
WETLAND BOUNDARY
STREAM
POND

468+00 470+00 472+00 474+00 476+00 478+00 480+00 482+00 484+00 486+00 488+00 490+00 492+00 494+00 496+00 498+00 500+00 502+00 504+00 506+00 508+00 510+00
400 390 380 370 360 350 340 330 320 310 300

-Y13RPA-

BEGIN GRADE
-Y13RPA- STA. 10+00.00
EL.= 367.55'

PI = 11+50.00
EL = 364.38'
VC = 260'
K = 323
SSD = 1471'
V = 75 mph

PI = 20+30.00
EL = 338.68'
K = 127
VC = 1,000'
V = 55 mph

END GRADE
-Y13RPA- STA. 29+76.85
EL.= 385.85'

(-)12.116%
(-)12.920%
(-)12.920%
(+)4.982%
(+)4.982%
PROPOSED GRADE
EXISTING GROUND

10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00
390 380 370 360 350 340 330

-Y13RPD-

PI = 12+50.00
EL = 379.28'
VC = 300'
K = 4157
V = 80 mph

PI = 18+45.00
EL = 374.85'
VC = 240'
K = 200
SSD = 1021'
V = 65 mph

PI = 30+50.00
EL = 351.46'
VC = 500'
K = 102
V = 50 mph

PI = 38+00.00
EL = 373.67'
VC = 200'
K = 90
SSD = 588'
V = 50 mph

END GRADE
-Y13RPD- STA. 40+55.37
EL.= 375.58'

BEGIN GRADE
-Y13RPD- STA. 10+00.00
EL.= 381.32'

(-)10.816%
(-)10.744%
(-)10.744%
(-)11.941%
(-)11.941%
(+)2.962%
(+)2.962%
(+)10.750%
PROPOSED GRADE
EXISTING GROUND

10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00 30+00 32+00 34+00 36+00 38+00 40+00
390 380 370 360 350 340 330 320

-Y13LPC-

BEGIN GRADE
-Y13LPC- STA. 10+00.00
EL.= 353.51'

END GRADE
-Y13LPC- STA. 25+14.58
EL.= 379.89'

PI = 12+80.00
EL = 358.28'
VC = 150'
K = 246
SSD = 1841'
V = 65 mph

PI = 15+80.00
EL = 361.55'
VC = 150'
K = 172
V = 65 mph

PI = 19+10.00
EL = 368.04'
VC = 150'
K = 199
SSD = 1504'
V = 65 mph

PI = 24+00.00
EL = 378.55'
VC = 160'
K = 84
SSD = 647'
V = 50 mph

PI = 21+55.00
EL = 371.01'
VC = 230'
K = 123
V = 55 mph

(+)1.703%
(+)1.092%
(+)1.092%
(+)1.966%
(+)1.966%
(+)1.211%
(+)1.211%
(+)3.076%
(+)3.076%
(+)11.174%
EXISTING GROUND
PROPOSED GRADE

10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00
380 370 360 350 340

-Y17G-

PI = 10+80.00
EL = 328.26'
VC = 120'
K = 67
V = 40mph

END GRADE
-Y17G- STA. 11+86.30
EL.= 328.79'

BEGIN GRADE
-Y17G- STA. 10+11.00
EL.= 329.16'

(-)1.298%
(+)0.499%
EXISTING GROUND

320 310 300

SEE ROLL 1 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
1616 EASTCHESTER DRIVE, SUITE 300
HIGH POINT, NORTH CAROLINA 27265
(336) 812-7275
NC FIRM P-0102

COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
1616 EASTCHESTER DRIVE, SUITE 300
HIGH POINT, NORTH CAROLINA 27265
(336) 812-7275
NC FIRM P-0102

ROLL 17 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ROLL 17 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-

-Y16-
FANNY BROWN

PI = 522+50.00
EL = 392.70'
VC = 1,000'
K = 433
SSD = 967'
V = 80 mph

(+)0.828%
(-)1.480%

EXISTING GROUND

PROPOSED GRADE

WETLAND BOUNDARY
WETLAND BOUNDARY
WETLAND BOUNDARY
STREAM
WETLAND BOUNDARY
WETLAND BOUNDARY

PROPOSED
2@8'x5' RCBC

PROPOSED
3@8'x5' RCBC

PI = 557+60.00
EL = 340.75'
VC = 650'
K = 249
V = 80 mph

(-)1.480%
(+)1.130%

410 400 390 380 370 360 350 340 330 320 310 300

510+00 512+00 514+00 516+00 518+00 520+00 522+00 524+00 526+00 528+00 530+00 532+00 534+00 536+00 538+00 540+00 542+00 544+00 546+00 548+00 550+00 552+00 554+00 556+00 558+00 560+00 562+00

-Y16-

SR 2723
FANNY BROWN RD

-L- 540

PI = 12+40.00
EL = 415.00'
SSD = 678'
K = 177
VC = 400'
V = 55mph

(+)1.237%
(-)11.019%

PROPOSED GRADE

EXISTING GROUND

BEGIN GRADE
-Y16- STA. 10+00.00
EL.= 412.03'

PI = 20+25.00
EL = 407.00'
K = 123
VC = 400'
V = 50mph

(-)11.019%
(+)12.236%

END GRADE
-Y16- STA. 23+60.00
EL.= 414.49'

420 410 400 390 380 370

10+00 12+00 14+00 16+00 18+00 20+00 22+00

-Y17-

SR 1006
OLD STAGE RD

-L- 540

PI = 21+90.00
EL = 398.93'
VC = 200'
K = 90
SSD = 587'
V = 50mph

(+)1.500%
(-)0.715%

PROPOSED GRADE

PI = 27+75.00
EL = 394.75'
VC = 650'
K = 457
V = 80mph

(-)0.715%
(+)0.707%

EXISTING GROUND

(+)0.707%

BEGIN GRADE
-Y17- STA. 20+50.00
EL.= 396.83'

420 410 400 390 380 370 360 350

22+00 24+00 26+00 28+00 30+00 32+00 34+00 36+00 38+00 40+00 42+00 44+00

-Y17H-

TROTTER DR

(+)0.454%

END GRADE
-Y17H- STA. 11+75.00
EL.= 403.20'

BEGIN GRADE
-Y17H- STA. 10+00.00
EL.= 402.40'

410 400 390 380

10+00

BEGIN GRADE
-Y17H- STA. 10+09.20
EL.= 402.70'

-Y17I-

PI = 12+65.00
EL = 401.42'
VC = 60'
K = 47
SSD = 881'
V = 40mph

(-)0.500%
(-)11.767%

END GRADE
-Y17H- STA. 12+98.44
EL.= 400.83'

410 400 390

12+00

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35106.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540

PREPARED BY:

LOCHNER
1616 EASTCHESTER DRIVE, SUITE 350
HIGH POINT, NORTH CAROLINA 27265
(336) 276-3724

NC FIRM P-0102

SEE ROLL 2 FOR PLAN VIEW
SEE ROLL 3 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35106.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540

PREPARED BY:

LOCHNER
1616 EASTCHESTER DRIVE, SUITE 350
HIGH POINT, NORTH CAROLINA 27265
(336) 276-3724

NC FIRM P-0102

ROLL 18 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ROLL 18 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-

-Y17- OLD STAGE RD

PI = 598+00.00
EL = 386.42'
VC = 900'
K = 348
SSD = 867'
V = 75 mph

PI = 610+15.00
EL = 368.75'
VC = 600'
K = 245
V = 80 mph

EXISTING GROUND
PROPOSED GRADE
(+)1.30%
(-)1.454%
PROPOSED 2@7'X5'RCBC
(-)1.454%
(+)0.994%
WETLAND BOUNDARY
WETLAND BOUNDARY
WETLAND BOUNDARY
WETLAND BOUNDARY

410 400 390 380 370 360 350

562+00 564+00 566+00 568+00 570+00 572+00 574+00 576+00 578+00 580+00 582+00 584+00 586+00 588+00 590+00 592+00 594+00 596+00 598+00 600+00 602+00 604+00 606+00 608+00 610+00 612+00 614+00

-Y17C-

-Y17E-

-Y17-

SR 1006
OLD STAGE RD

PI = 50+75.00
EL = 411.00'
VC = 600'
K = 495
V = 80mph

PI = 56+35.00
EL = 421.75'
VC = 600'
K = 495
SSD = 442'
V = 50mph

PI = 62+87.00
EL = 405.17'
VC = 180'
K = 107
V = 50mph

PROPOSED GRADE
(+)10.707%
(+)1.920%
(+)1.920%
(-)12.542%
EXISTING GROUND
(-)12.542%
(-)10.862%
END GRADE
-Y17- STA. 64+00.00
EL.= 404.20'

420 410 400 390 380

44+00 46+00 48+00 50+00 52+00 54+00 56+00 58+00 60+00 62+00 64+00

-Y17B-

BEGIN GRADE
-Y17B- STA. 10+35.50
EL.= 417.21'

PI = 15+10.00
EL = 407.75'
VC = 250'
K = 100
V = 50mph

PI = 18+00.00
EL = 409.25'
VC = 150'
K = 46
SSD = 402'
V = 40mph

PI = 19+80.00
EL = 404.25'
VC = 150'
K = 84
V = 45mph

EXISTING GROUND
(-)11.993%
(+)0.517%
(-)12.278%
(-)10.986%
PROPOSED GRADE
END GRADE
-Y17B- STA. 20+77.15
EL.= 403.29'

420 410 400 390 380

12+00 14+00 16+00 18+00 20+00

BEGIN GRADE
-Y17C- STA. 10+00.00
EL.= 409.85'

409.85
407.3

PI = 10+25.00
EL = 406.95'
VC = 50'
K = 31
SSD = 697'
V = 35mph

PI = 13+90.00
EL = 411.41'
VC = 40'
K = 52
V = 40mph

(+)0.710%
(+)12.829%
(+)11.223%
(+)11.223%
(+)0.453%
BEGIN GRADE
-Y17E- STA. 10+00.00
EL.= 406.24'
END GRADE
-Y17C- STA. 12+65.06
EL.= 411.73'
END GRADE
-Y17E- STA. 14+17.77
EL.= 411.54'

420 410 400

10+00 12+00 14+00

-Y17RPA-

PI = 12+75.00
EL = 370.14'
VC = 505'
K = 253
V = 80mph

PI = 26+25.00
EL = 388.78'
VC = 200'
K = 316
V = 80mph

BEGIN GRADE
-Y17RPA- STA. 10+00.00
EL.= 371.84'
PROPOSED GRADE
(+)12.015%
(+)1.381%
(-)10.619%
(+)1.381%
EXISTING GROUND
END GRADE
-Y17RPA- STA. 35+16.17
EL.= 406.74'

410 400 390 380 370 360 350 340

10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00 30+00 32+00 34+00

-Y17RPB-

PI = 30+85.00
EL = 405.21'
VC = 150'
K = 79
SSD = 645'
V = 45mph

BEGIN GRADE
-Y17RPB- STA. 10+00.00
EL.= 351.70'
(+)12.000%
(+)3.893%
EXISTING GROUND
PROPOSED GRADE

PI = 11+55.00
EL = 353.45'
VC = 100'
K = 521
SSD = 5677'
V = 80mph

PI = 12+80.00
EL = 354.62'
VC = 100'
K = 164
V = 65mph

PI = 14+75.00
EL = 357.63'
VC = 150'
K = 224
SSD = 1683'
V = 65mph

PI = 19+75.00
EL = 362.00'
VC = 480'
K = 159
V = 65mph

(+)11.268%
(+)0.936%
(+)1.545%
(+)10.874%
(+)10.874%
(+)3.893%
END GRADE
-Y17RPB- STA. 31+73.24
EL.= 406.98'

410 400 390 380 370 360 350 340

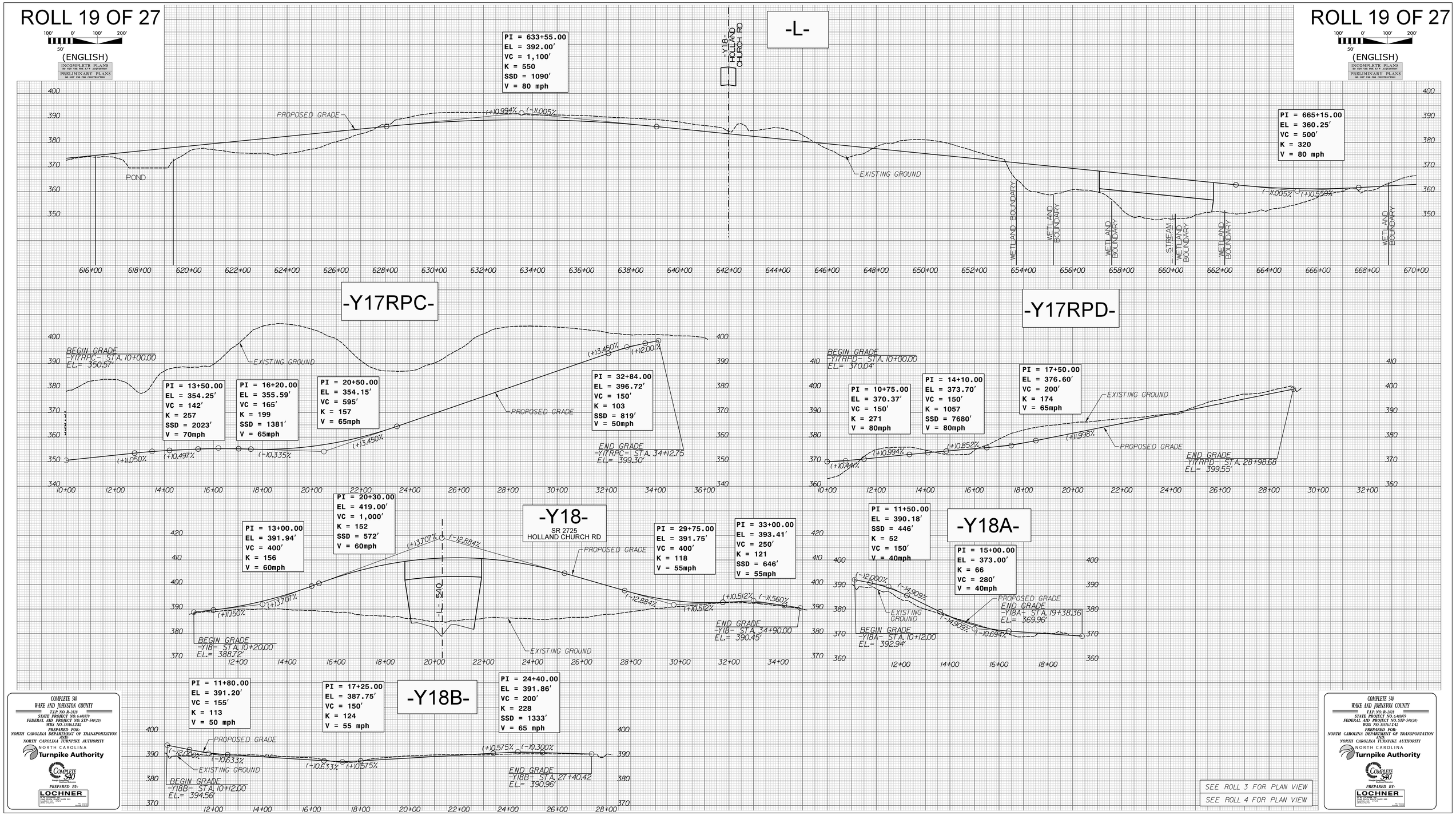
10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00 30+00

SEE ROLL 3 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35506.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC Firm Number P1055

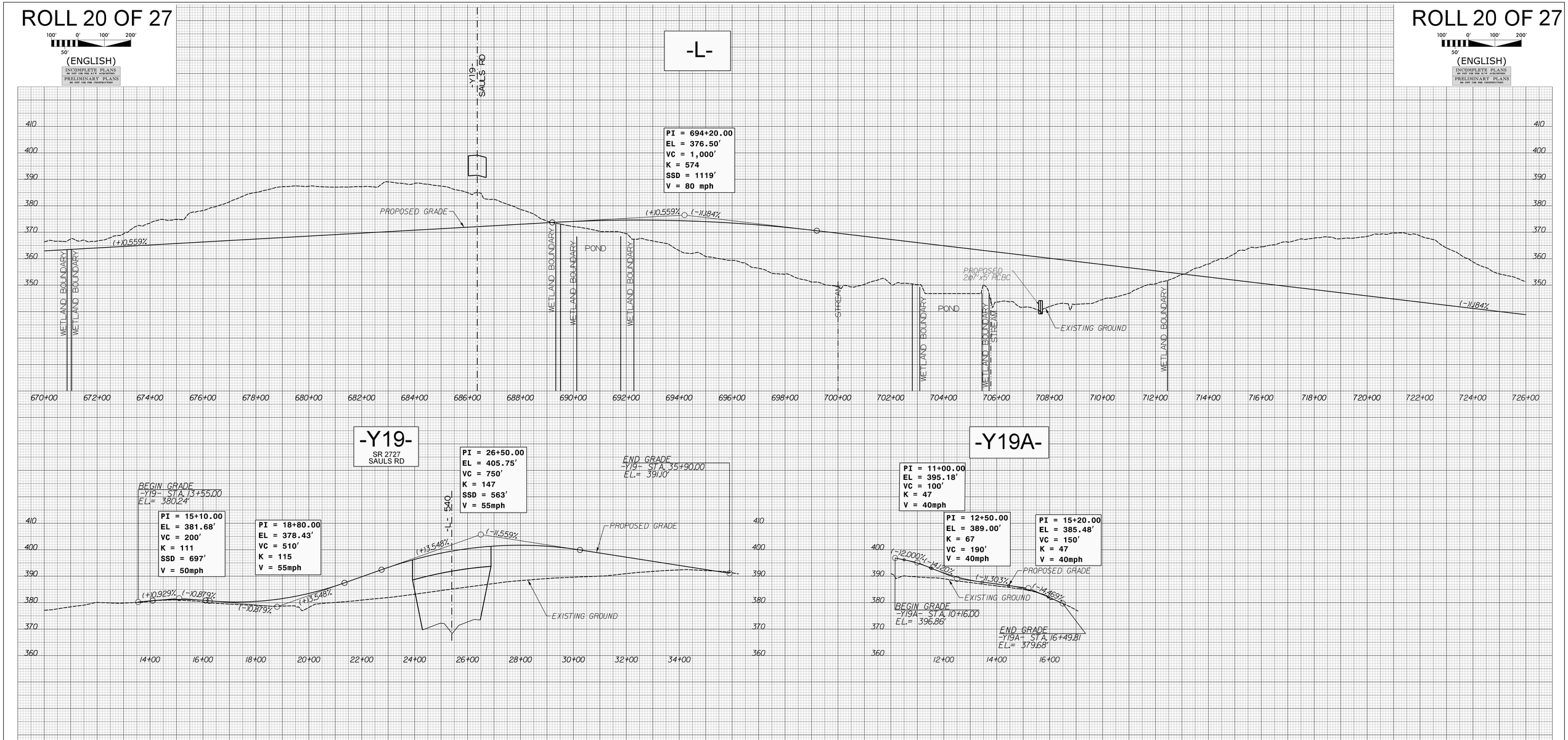
COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35506.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC Firm Number P1055

ROLL 19 OF 27



(ENGLISH)
INCOMPLETE PLANS
PRELIMINARY PLANS
-L-
-Y18-
HOLLAND CHURCH RD
PI = 633+55.00
EL = 392.00'
VC = 1,100'
K = 550
SSD = 1090'
V = 80 mph
PI = 665+15.00
EL = 360.25'
VC = 500'
K = 320
V = 80 mph
PROPOSED GRADE
EXISTING GROUND
POND
WETLAND BOUNDARY
STREAM
-Y17RPC-
BEGIN GRADE
-Y17RPC- STA. 10+00.00
EL.= 350.57'
PI = 13+50.00
EL = 354.25'
VC = 142'
K = 257
SSD = 2023'
V = 70mph
PI = 16+20.00
EL = 355.59'
VC = 165'
K = 199
SSD = 1381'
V = 65mph
PI = 20+50.00
EL = 354.15'
VC = 595'
K = 157
V = 65mph
PI = 32+84.00
EL = 396.72'
VC = 150'
K = 103
SSD = 819'
V = 50mph
END GRADE
-Y17RPC- STA. 34+12.75
EL.= 399.30'
-Y17RPD-
BEGIN GRADE
-Y17RPD- STA. 10+00.00
EL.= 370.04'
PI = 10+75.00
EL = 370.37'
VC = 150'
K = 271
V = 80mph
PI = 14+10.00
EL = 373.70'
VC = 150'
K = 1057
SSD = 7680'
V = 80mph
PI = 17+50.00
EL = 376.60'
VC = 200'
K = 174
V = 65mph
END GRADE
-Y17RPD- STA. 28+98.68
EL.= 399.55'
-Y18-
SR 2725
HOLLAND CHURCH RD
PI = 13+00.00
EL = 391.94'
VC = 400'
K = 156
V = 60mph
PI = 20+30.00
EL = 419.00'
VC = 1,000'
K = 152
SSD = 572'
V = 60mph
PI = 29+75.00
EL = 391.75'
VC = 400'
K = 118
V = 55mph
PI = 33+00.00
EL = 393.41'
VC = 250'
K = 121
SSD = 646'
V = 55mph
BEGIN GRADE
-Y18- STA. 10+20.00
EL.= 388.72'
END GRADE
-Y18- STA. 34+90.00
EL.= 390.45'
-Y18A-
PI = 11+50.00
EL = 390.18'
SSD = 446'
K = 52
VC = 150'
V = 40mph
PI = 15+00.00
EL = 373.00'
K = 66
VC = 280'
V = 40mph
BEGIN GRADE
-Y18A- STA. 10+12.00
EL.= 392.94'
END GRADE
-Y18A- STA. 19+38.36
EL.= 369.96'
-Y18B-
PI = 11+80.00
EL = 391.20'
VC = 155'
K = 113
V = 50 mph
PI = 17+25.00
EL = 387.75'
VC = 150'
K = 124
V = 55 mph
PI = 24+40.00
EL = 391.86'
VC = 200'
K = 228
SSD = 1333'
V = 65 mph
BEGIN GRADE
-Y18B- STA. 10+12.00
EL.= 394.56'
END GRADE
-Y18B- STA. 27+40.42
EL.= 390.96'
SEE ROLL 3 FOR PLAN VIEW
SEE ROLL 4 FOR PLAN VIEW
COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA
Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER

ROLL 20 OF 27



COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER

SEE ROLL 5 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER

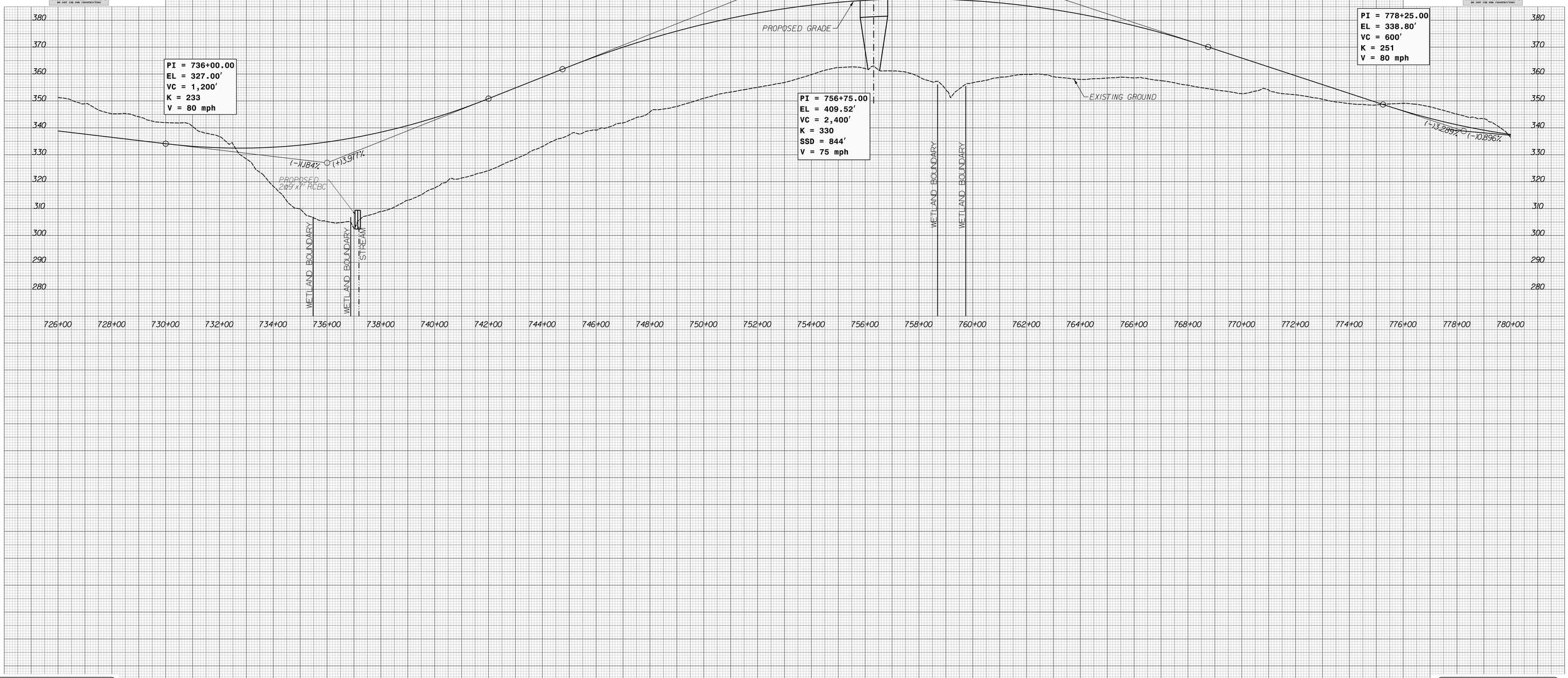
ROLL 21 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-



COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35504.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA
Turnpike Authority

COMPLETE 540
TRIANGLE EXPRESSWAY

PREPARED BY:

LOCHNER
1714 DOUBLEDAY DR.
DAVID PLAZA, PLAZA, SUITE 102
MORRISVILLE, NC 27560
NC FIRM P-0102

SEE ROLL 6 FOR PLAN VIEW

ROLL 21 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35504.1.TA2

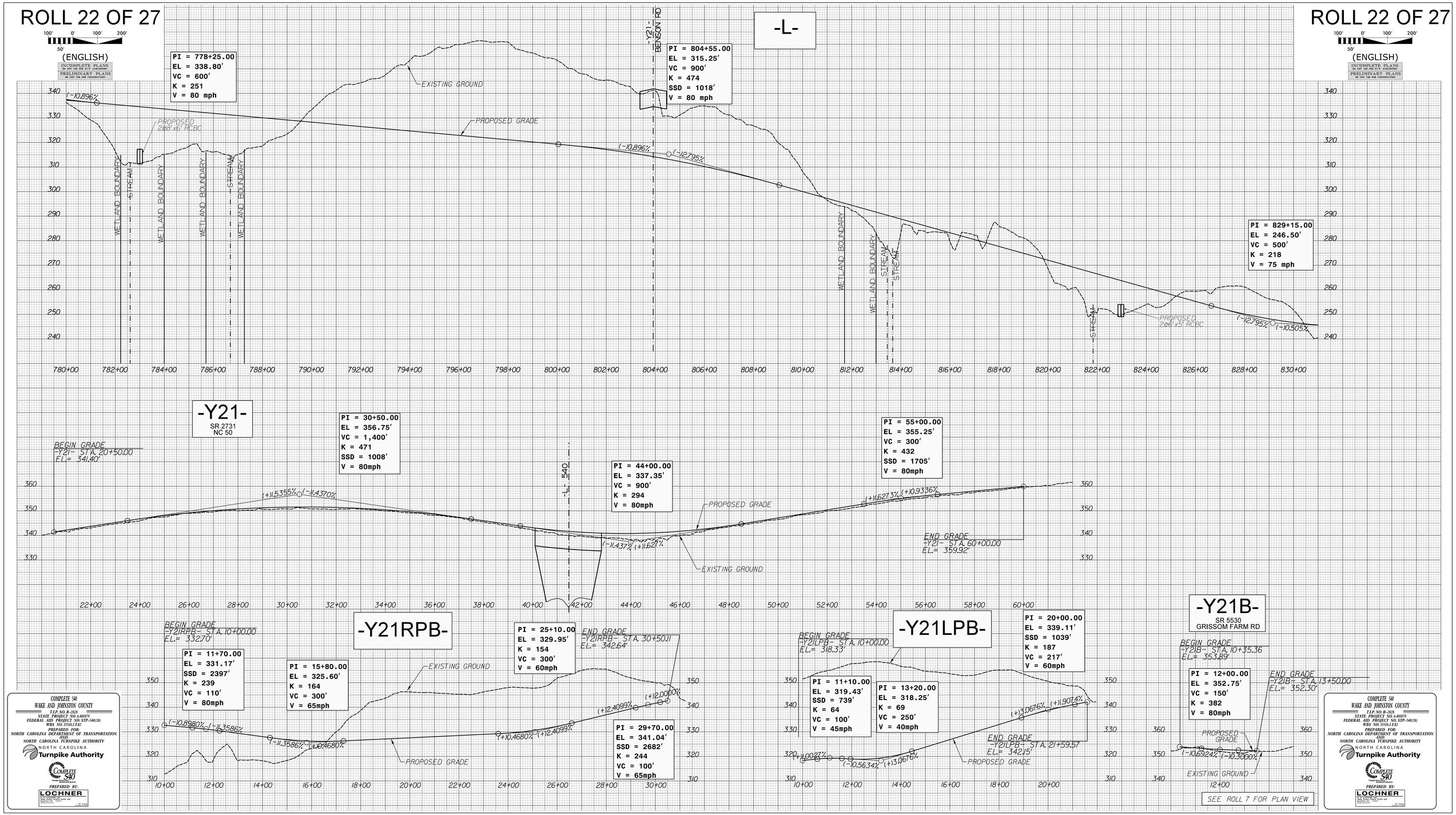
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA
Turnpike Authority

COMPLETE 540
TRIANGLE EXPRESSWAY

PREPARED BY:

LOCHNER
1714 DOUBLEDAY DR.
DAVID PLAZA, PLAZA, SUITE 102
MORRISVILLE, NC 27560
NC FIRM P-0102


ROLL 22 OF 27
(ENGLISH)
INCOMPLETE PLANS
PRELIMINARY PLANS
-L-
PI = 778+25.00
EL = 338.80'
VC = 600'
K = 251
V = 80 mph
PI = 804+55.00
EL = 315.25'
VC = 900'
K = 474
SSD = 1018'
V = 80 mph
PI = 829+15.00
EL = 246.50'
VC = 500'
K = 218
V = 75 mph
-Y21-
BENSON RD
EXISTING GROUND
PROPOSED GRADE
PROPOSED 2@8'x6' RCBC
PROPOSED 2@8'x5' RCBC
WETLAND BOUNDARY
STREAM
(-)0.896%
(-)2.795%
(-)0.505%
-Y21-
SR 2731
NC 50
BEGIN GRADE
-Y21- STA. 20+50.00
EL.= 341.40'
PI = 30+50.00
EL = 356.75'
VC = 1,400'
K = 471
SSD = 1008'
V = 80mph
PI = 44+00.00
EL = 337.35'
VC = 900'
K = 294
V = 80mph
PI = 55+00.00
EL = 355.25'
VC = 300'
K = 432
SSD = 1705'
V = 80mph
-L- 540
(+)1.5355%
(-)1.4370%
(-)1.437%
(+)1.627%
(+)1.6273%
(+)0.9336%
END GRADE
-Y21- STA. 60+00.00
EL.= 359.92'
-Y21RPB-
BEGIN GRADE
-Y21RPB- STA. 10+00.00
EL.= 332.70'
PI = 11+70.00
EL = 331.17'
SSD = 2397'
K = 239
VC = 110'
V = 80mph
PI = 15+80.00
EL = 325.60'
K = 164
VC = 300'
V = 65mph
PI = 25+10.00
EL = 329.95'
K = 154
VC = 300'
V = 60mph
END GRADE
-Y21RPB- STA. 30+50.11
EL.= 342.64'
PI = 29+70.00
EL = 341.04'
SSD = 2682'
K = 244
VC = 100'
V = 65mph
(-)0.8980%
(-)1.3586%
(-)1.3586%
(+)0.4680%
(+)0.4680%
(+)2.4099%
(+)2.4099%
(+)2.0000%
-Y21LPB-
BEGIN GRADE
-Y21LPB- STA. 10+00.00
EL.= 318.33'
PI = 11+10.00
EL = 319.43'
SSD = 739'
K = 64
VC = 100'
V = 45mph
PI = 13+20.00
EL = 318.25'
K = 69
VC = 250'
V = 40mph
PI = 20+00.00
EL = 339.11'
SSD = 1039'
K = 187
VC = 217'
V = 60mph
END GRADE
-Y21LPB- STA. 21+59.57
EL.= 342.15'
(+)1.0027%
(-)0.5634%
(+)3.0676%
(+)3.0676%
(+)1.9074%
-Y21B-
SR 5530
GRISSOM FARM RD
BEGIN GRADE
-Y21B- STA. 10+35.36
EL.= 353.89'
PI = 12+00.00
EL = 352.75'
VC = 150'
K = 382
V = 80mph
END GRADE
-Y21B- STA. 13+50.00
EL.= 352.30'
(-)0.6924%
(-)0.3000%
SEE ROLL 7 FOR PLAN VIEW
COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.400079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA
Turnpike Authority
PREPARED BY:
LOCHNER

ROLL 23 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

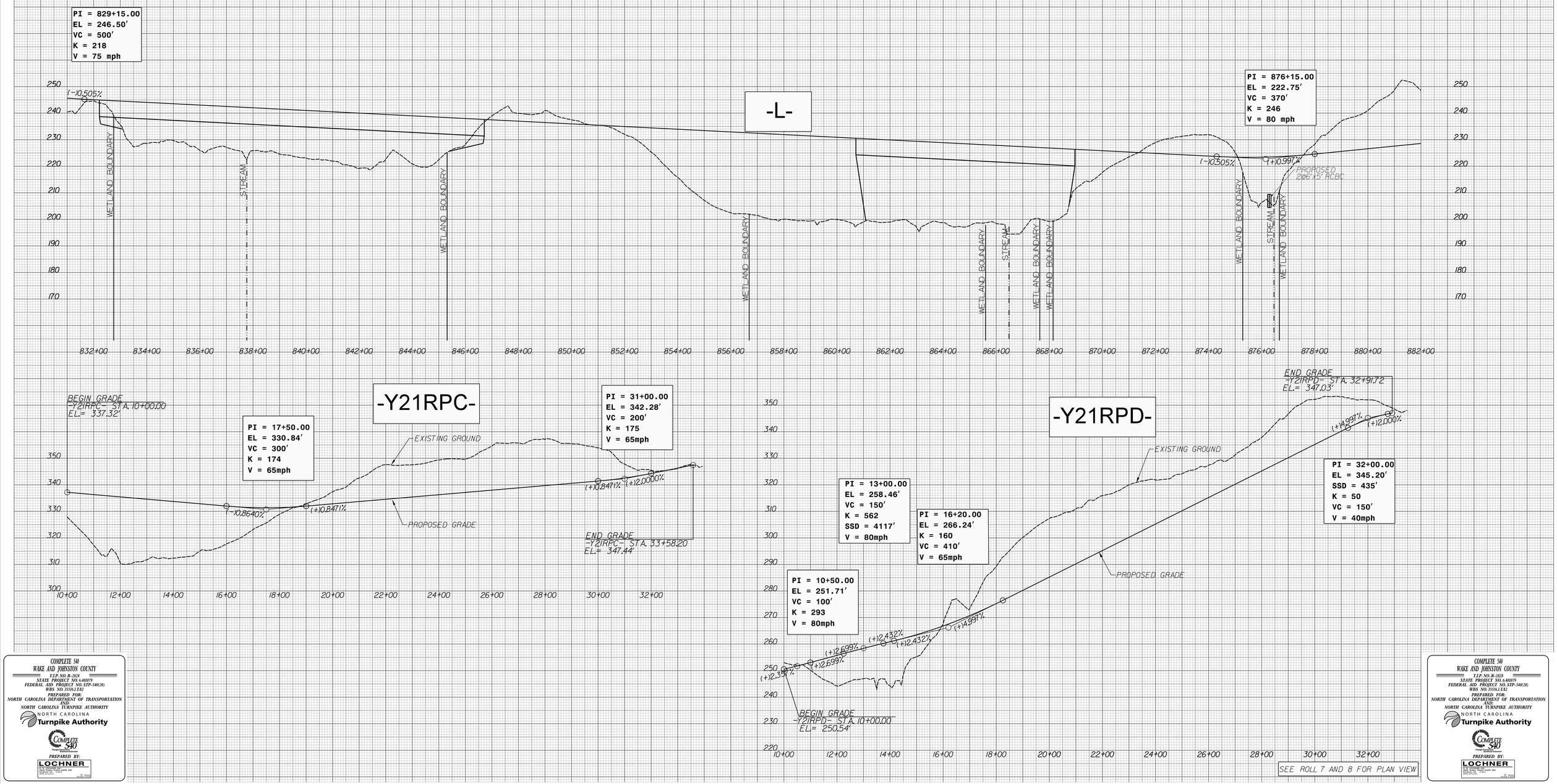
ROLL 23 OF 27

100' 0' 100' 200'
50'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



SEE ROLL 7 AND 8 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35336.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540 Triangle Expressway

PREPARED BY:

LOCHNER
1616 EASTCHESTER DRIVE, SUITE 350
HIGH POINT, NC 27265
(336) 812-2765

NC FIRM P-0102
NICHOLAS J. PEPE, PE

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35336.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540 Triangle Expressway

PREPARED BY:

LOCHNER
1616 EASTCHESTER DRIVE, SUITE 350
HIGH POINT, NC 27265
(336) 812-2765

NC FIRM P-0102
NICHOLAS J. PEPE, PE

ROLL 24 OF 27

200' 0' 200' 400'
100'

(ENGLISH)

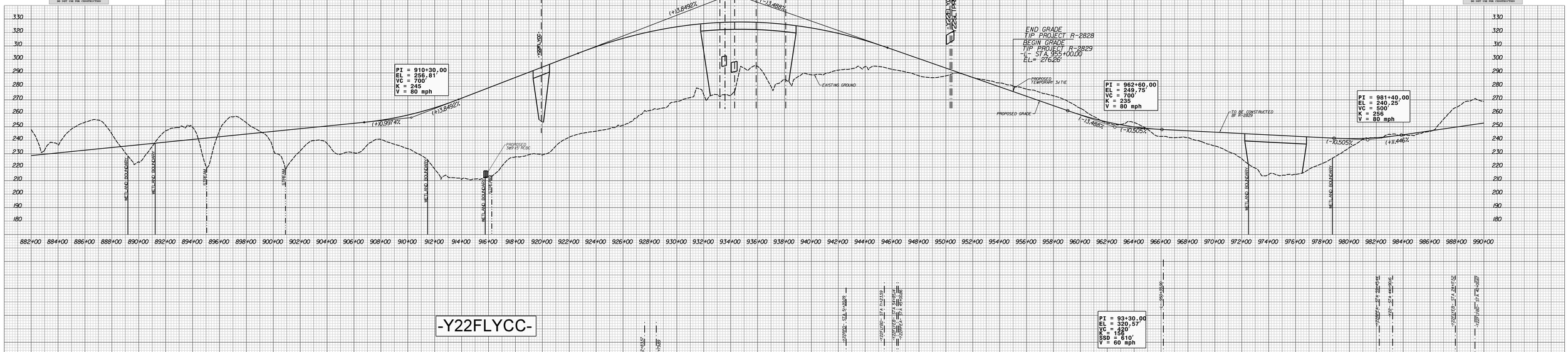
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ROLL 24 OF 27

200' 0' 200' 400'
100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION


-L-
PI = 934+20.00
EL = 348.81'
VC = 2,300'
K = 313
SSD = 822'
V = 75 mph
-Y22-
-Y22A PB-
-Y22A LYBD-
-Y22FLYBD-
-Y22BEA-
-Y22FLYBB-
-Y22BEB-
-Y22A LTBB-
-Y22A LTBD-
-Y22A LTBA-
-Y22A LTBC-
-Y22A LTBE-
-Y22A LTBF-
-Y22A LTBG-
-Y22A LTBH-
-Y22A LTBJ-
-Y22A LTBK-
-Y22A LTBL-
-Y22A LTBM-
-Y22A LTBN-
-Y22A LTBP-
-Y22A LTBQ-
-Y22A LTBR-
-Y22A LTBS-
-Y22A LTBT-
-Y22A LTBU-
-Y22A LTBV-
-Y22A LTBW-
-Y22A LTBX-
-Y22A LTBY-
-Y22A LTBZ-
-Y22A LTCA-
-Y22A LTCB-
-Y22A LTCC-
-Y22A LTCD-
-Y22A LTCE-
-Y22A LTCF-
-Y22A LTCG-
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-Y22A LTZW-
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-Y22A LTZY-
-Y22A LTZZ-
PI = 910+30.00
EL = 256.81'
VC = 700'
K = 245
V = 80 mph
(+)3.8492%
(+)0.9914%
(+)3.8492%
-Y22FLYBB-
-Y22FLYBD-
-Y22BEB-
-Y22A LTBB-
-Y22A LTBD-
-Y22A LTBA-
-Y22A LTBC-
-Y22A LTBE-
-Y22A LTBF-
-Y22A LTBG-
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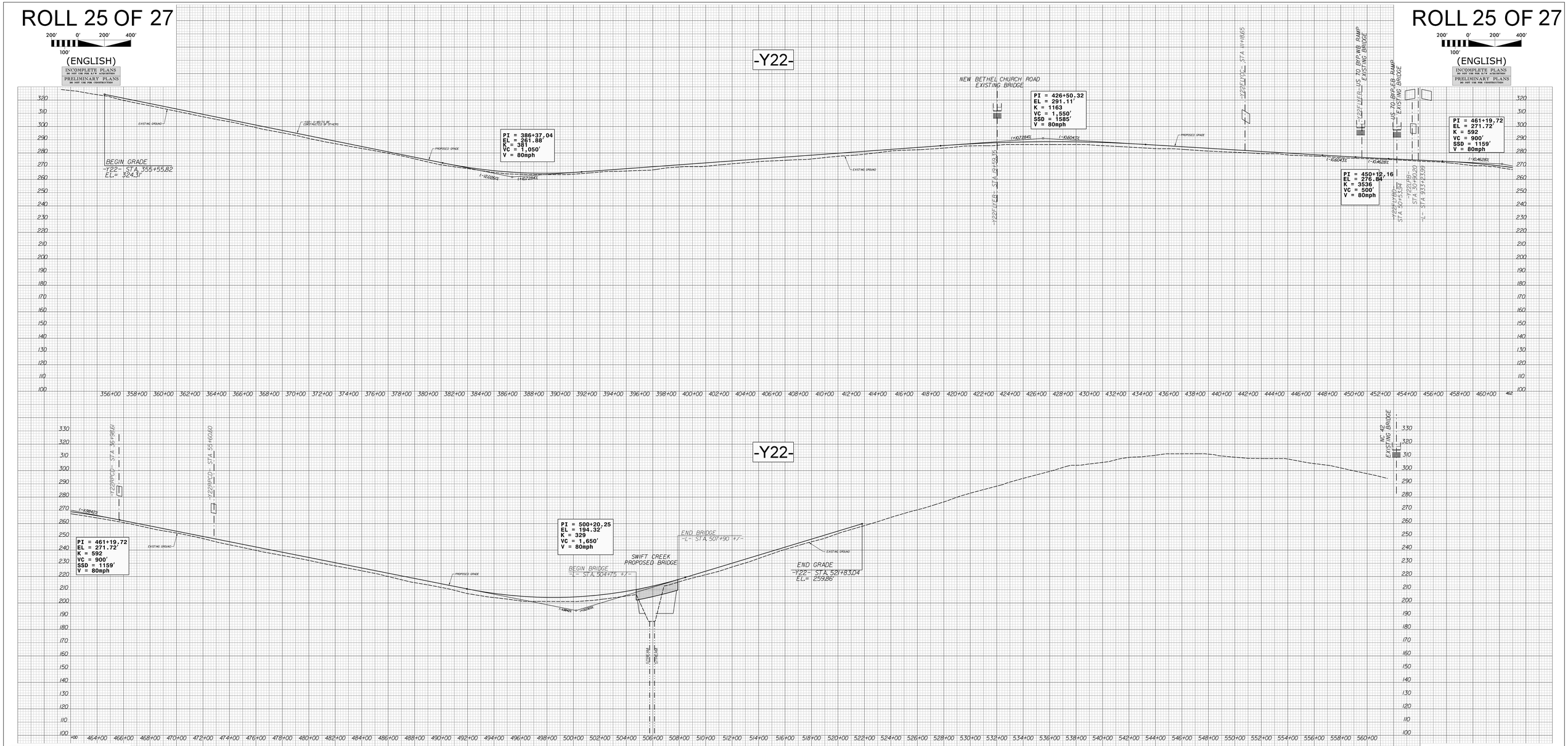

COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY
NORTH CAROLINA Turnpike Authority
COMPLETE 540
PREPARED BY:
LOCHNER
NC FIRM LICENSE NO. 1000
3840 ACAPULCO, SUITE 300
RALEIGH, NC 27612
(919) 571-1111
NC FIRM LICENSE NO. 1000

SEE ROLL 9 FOR PLAN VIEW
SEE ROLL 12 FOR PLAN VIEW
SEE ROLL 14 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY
T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(20)
WBS NO. 35516.1.TA2
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ROLL 26 OF 27

200' 0' 200' 400'

100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ROLL 26 OF 27

200' 0' 200' 400'

100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y22RPA-

BEGIN GRADE
-Y22RPA- STA. 10+00.00
EL.= 255.25'

END GRADING
-Y22RPA- STA. 10+00.00
-Y22RPA- STA. 43+00.83
EL= 294.28'

PI = 12+25.00
EL = 258.79'
VC = 100'
K = 167
V = 65 mph

PI = 11+00.00
EL = 256.31'
VC = 100'
K = 108 (GORE)
V = 50 mph

PI = 31+35.00
EL = 308.09'
VC = 700'
K = 159
SSD = 574'
V = 60 mph

PI = 42+16.00
EL = 288.46'
VC = 100'
K = 280
V = 80 mph

PI = 39+60.00
EL = 291.50'
VC = 120'
K = 146
V = 60 mph

EXISTING GROUND

PROPOSED GRADE

(+)2.581%

(-)11.056%

(+)1.382%

(-)2.010%

(-)1.880%

(-)10.833%

END GRADE
-Y22RPA- STA. 43+00.83
EL= 287.76'

-Y22RPAFLY-

BEGIN GRADE
-Y22RPAFLY- STA. 10+00.00
EL.= 260.49'

PI = 23+05.00
EL = 238.52'
VC = 380'
K = 138
V = 60mph

PI = 12+90.00
EL = 256.22'
VC = 400'
K = 148
SSD = 4197'
V = 80mph

PI = 41+30.00
EL = 256.77'
VC = 300'
K = 180
V = 65mph

PI = 63+25.00
EL = 315.49'
VC = 550'
K = 151
SSD = 570'
V = 60mph

PI = 67+00.00
EL = 311.80'
VC = 200'
K = 513
V = 80mph

(-)1.474%

(-)1.744%

(-)1.744%

(+)1.000%

(+)2.875%

(-)10.386%

(-)0.581%

(-)10.643%

PROPOSED GRADE

EXISTING GROUND

-Y22SLIPRPA- STA. 20+44.93

END GRADE
-Y22RPAFLY- STA. 68+18.04
EL= 307.3'

WETLAND BOUNDARY

WETLAND BOUNDARY

STREAM

STREAM

-Y22SLIPRPA-

BEGIN GRADE
-Y22SLIPRPA- STA. 10+00.42
EL.= 319.97'

-Y22RPAFLY- STA. 56+66.01

PI = 11+30.00
EL = 320.67'
VC = 210'
K = 213
SSD = 1198'
V = 55mph

PI = 15+20.00
EL = 318.93'
VC = 390'
K = 138
V = 60mph

PI = 21+40.00
EL = 333.63'
VC = 850'
K = 171
SSD = 671'
V = 60mph

PI = 33+50.00
EL = 294.24'
VC = 230'
K = 138
V = 60mph

PI = 40+50.00
EL = 287.26'
VC = 120'
K = 676
SSD = 6141'
V = 80mph

PI = 37+10.00
EL = 288.52'
VC = 400'
K = 328
V = 80mph

(+)0.540%

(-)0.447%

(-)0.469%

(+)2.708%

(+)2.708%

(-)3.255%

(-)3.255%

(-)1.593%

(-)0.370%

(-)0.541%

PROPOSED GRADE

EXISTING GROUND

END GRADE
-Y22SLIPRPA- STA. 41+99.32
EL= 286.44'

-Y22LPA-

BEGIN GRADE
-Y22LPA- STA. 10+00.00
EL.= 281.39'

END GRADE
-Y22LPA- STA. 27+63.66
EL= 322.04'

PI = 13+52.00
EL = 275.85'
VC = 260'
K = 52
V = 35 mph

PI = 26+25.00
EL = 319.10'
VC = 130'
K = 102
SSD = 910'
V = 50 mph

(-)1.575%

(+)3.391%

(+)3.391%

(+)1.206%

PROPOSED GRADE

EXISTING GROUND

-Y22SLIPRPB-

BEGIN GRADE
-Y22SLIPRPB- STA. 10+00.00
EL.= 234.31'

PI = 43+20.00
EL = 267.17'
VC = 300'
K = 183
V = 70mph

PI = 49+50.00
EL = 283.75'
VC = 250'
K = 785
V = 80mph

(+)0.989%

(+)0.989%

(+)2.950%

(+)2.631%

PROPOSED GRADE

EXISTING GROUND

END GRADE
-Y22SLIPRPB- STA. 51+43.78
EL.= 289.47'

WETLAND BOUNDARY

WETLAND BOUNDARY

STREAM

STREAM

STREAM

STREAM

WETLAND BOUNDARY

WETLAND BOUNDARY

-Y22RPB-

BEGIN GRADE
-Y22RPB- STA. 10+00.00
EL.= 254.43'

PI = 11+10.00
EL = 255.52'
VC = 110'
K = 161
SSD = 1629'
V = 60mph

PI = 25+00.00
EL = 259.69'
VC = 200'
K = 253
V = 80mph

PI = 33+00.00
EL = 268.42'
VC = 450'
K = 283
SSD = 903'
V = 70mph

PI = 40+90.00
EL = 264.47'
VC = 400'
K = 256
V = 80mph

PI = 61+75.00
EL = 286.58'
VC = 400'
K = 223
SSD = 803'
V = 65mph

PI = 94+25.00
EL = 262.85'
VC = 325'
K = 158
V = 65mph
(SAG IN CUT DUE TO GORE GRADE CONTROLS)

PI = 98+85.00
EL = 268.94'
VC = 325'
K = 158
V = 65mph

(+)0.986%

(+)0.300%

(+)0.300%

(+)1.091%

(+)1.091%

(-)0.500%

(+)0.500%

(+)1.060%

(+)1.060%

(-)0.730%

(-)3.324%

(+)3.324%

(-)0.730%

(-)0.417%

PROPOSED GRADE

EXISTING GROUND

END GRADE
-Y22RPB- STA. 99+54.88
EL= 270.06'

WETLAND BOUNDARY

WETLAND BOUNDARY

STREAM

STREAM

STREAM

WETLAND BOUNDARY

WETLAND BOUNDARY

STREAM

-Y22LPB-

BEGIN GRADE
-Y22LPB- STA. 10+00.00
EL.= 323.00'

PI = 11+65.00
EL = 320.00'
VC = 150'
K = 81
SSD = 656'
V = 45 mph

PI = 22+85.00
EL = 278.36'
VC = 900'
K = 128
V = 55 mph

PI = 34+75.00
EL = 289.02'
VC = 230'
K = 82
V = 45 mph

PI = 37+50.00
EL = 281.81'
VC = 210'
K = 226
V = 75 mph

PI = 40+85.00
EL = 275.95'
VC = 60'
K = 111
SSD = 2024'
V = 50 mph

PI = 31+45.00
EL = 306.92'
VC = 430'
K = 49
SSD = 326'
V = 40 mph

PI = 38+90.00
EL = 278.83'
VC = 110'
K = 167
V = 65 mph

(-)1.861%

(-)1.371%

(-)1.371%

(+)1.321%

(+)1.321%

(-)3.543%

(-)3.543%

(-)12.895%

(-)12.133%

(-)1.475%

(-)12.0

-Y22RPA-

-Y22RPB-

PROPOSED GRADE

EXISTING GROUND

END GRADE
-Y22LPB- STA. 41+17.77
EL= 275.29'

-Y22RPC-

BEGIN GRADE
-Y22RPC- STA. 10+00.00
EL.= 240.74'

PI = 12+50.00
EL = 243.92'
VC = 150'
K = 352
V = 80mph

PI = 15+75.00
EL = 246.83'
VC = 470'
K = 93
SSD = 448'
V = 50mph

PI = 20+30.00
EL = 227.93'
VC = 440'
K = 99
V = 50mph

PI = 23+00.00
EL = 228.74'
VC = 100'
K = 123
SSD = 1383'
V = 55mph

(+)0.891%

(+)0.891%

(-)0.414%

(-)1.415%

(-)1.415%

(+)0.300%

(-)0.509%

(+)0.300%

PROPOSED GRADE

EXISTING GROUND

END GRADE
-Y22RPC- STA. 24+87.81
EL= 227.78'

-Y22LPC-

BEGIN GRADE
-Y22LPC- STA. 10+00.00
EL.= 212.45'

PI = 11+50.00
EL = 271.12'
VC = 150'
K = 118
SSD = 927'
V = 55 mph

PI = 15+10.00
EL = 263.37'
VC = 450'
K = 51
V = 35 mph

PI = 22+10.00
EL = 310.37'
VC = 130'
K = 71
SSD = 658'
V = 45 mph

PI = 24+10.00
EL = 320.16'
VC = 270'
K = 85
SSD = 473'
V = 50 mph

(-)0.885%

(-)1.152%

(-)1.152%

(+)1.671%

(+)1.671%

(+)4.829%

(+)1.704%

PROPOSED GRADE

EXISTING GROUND

END GRADE
-Y22LPC- STA. 26+25.13
EL= 323.83'

SEE ROLL 9 FOR PLAN VIEW

SEE ROLL 12 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.440079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35504.1.TA1

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540

PREPARED BY:
LOCHNER

ROLL 27 OF 27

200' 0' 200' 400'

100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ROLL 27 OF 27

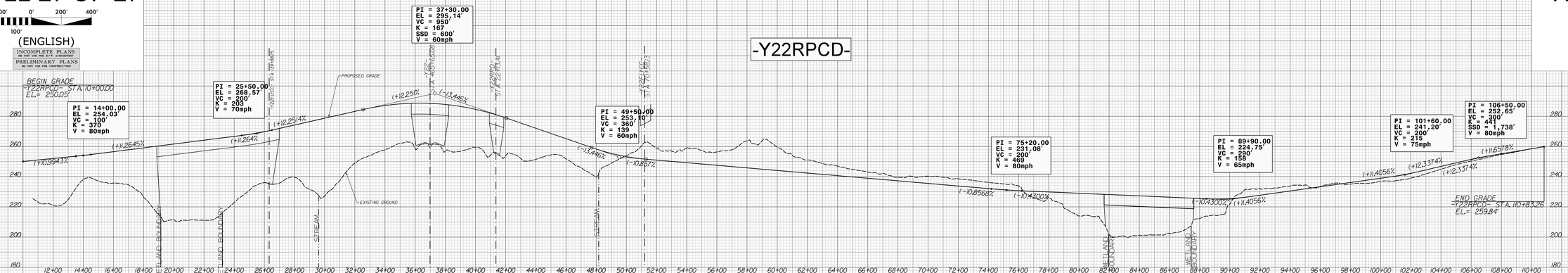
200' 0' 200' 400'

100'

(ENGLISH)

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y22RPCD-



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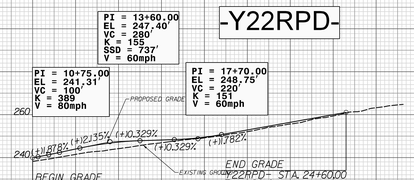

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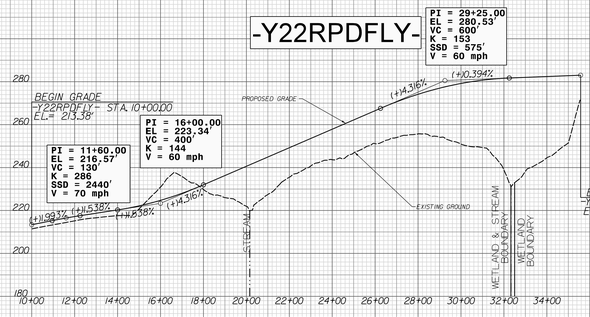

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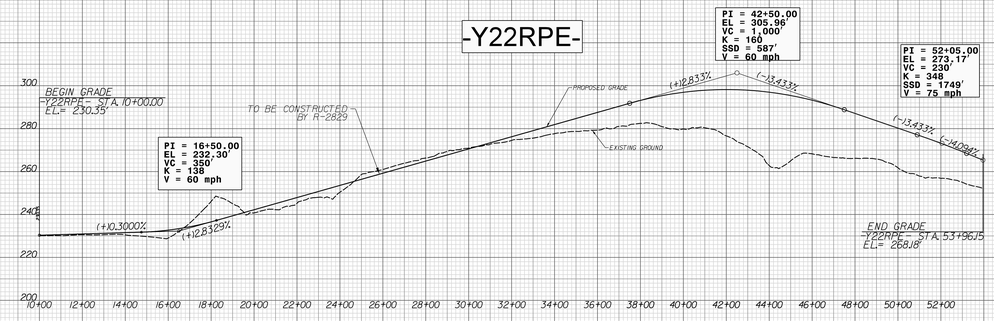

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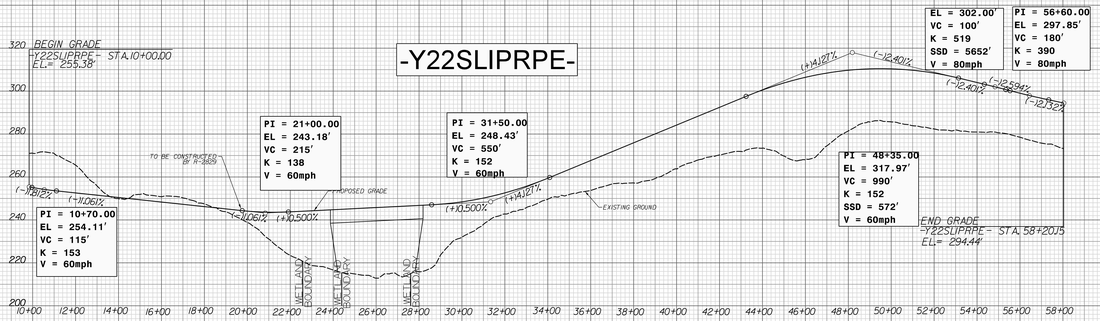
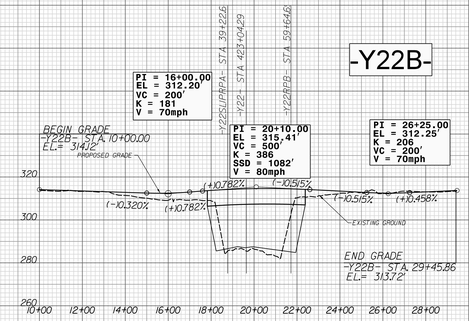


-Y22B-



SEE ROLL 9 FOR PLAN VIEW

SEE ROLL 12 FOR PLAN VIEW

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35506.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540 Triangle Expressway

PREPARED BY:

LOCHNER
A CH2M HILL COMPANY
3840 ROSS ROAD, SUITE 300
GARNER, NC 27529

NC FIRM# P0339

COMPLETE 540
WAKE AND JOHNSTON COUNTY

T.I.P. NO. R-2828
STATE PROJECT NO. 6.401079
FEDERAL AID PROJECT NO. STP-540(28)
WBS NO. 35506.1.TA2

PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND:
NORTH CAROLINA TURNPIKE AUTHORITY

NORTH CAROLINA Turnpike Authority

COMPLETE 540 Triangle Expressway

PREPARED BY:

LOCHNER
A CH2M HILL COMPANY
3840 ROSS ROAD, SUITE 300
GARNER, NC 27529

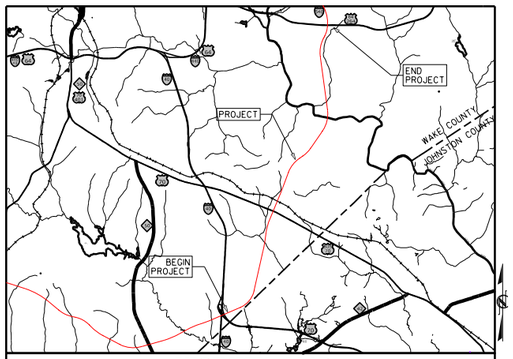
NC FIRM# P0339

09/08/99

TIP PROJECT: R-2829

CONTRACT:

See Sheet 1A For Index of Sheets



VICINITY MAP NTS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2829	1	

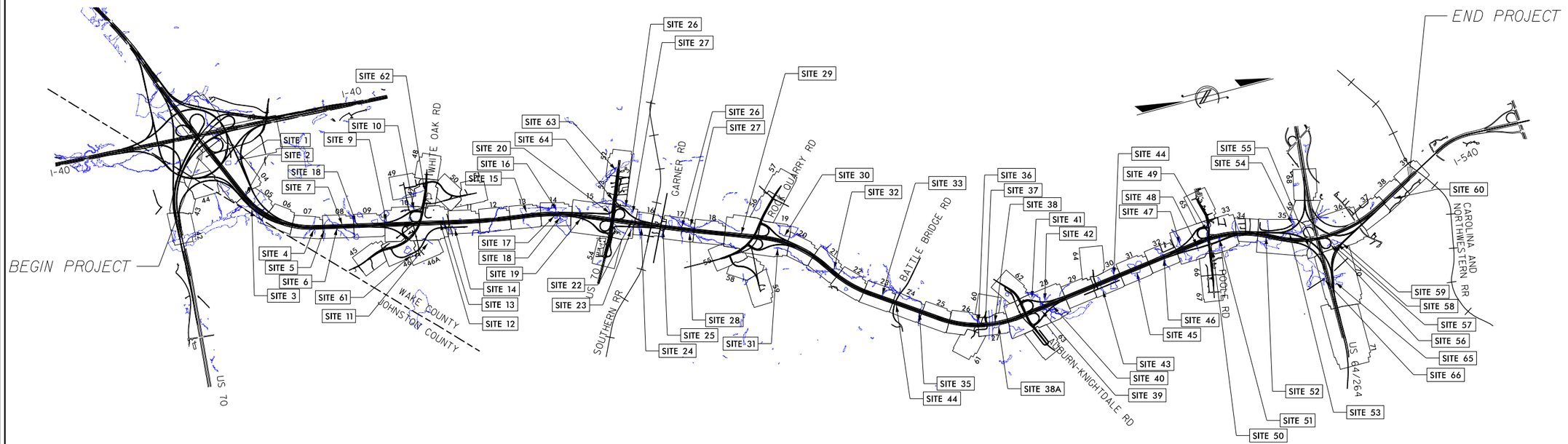
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

PERMIT DRAWING
SHEET 1 OF 108

LOCATION: COMPLETE 540 – EAST OF I-40 TO SOUTH OF US 64 /264

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STURCTURES

WETLAND AND SURFACE WATER IMPACTS PERMIT



INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

100 50 0 100 200
PLANS

PROJECT LENGTH

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

PROJECT ENGINEER

PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

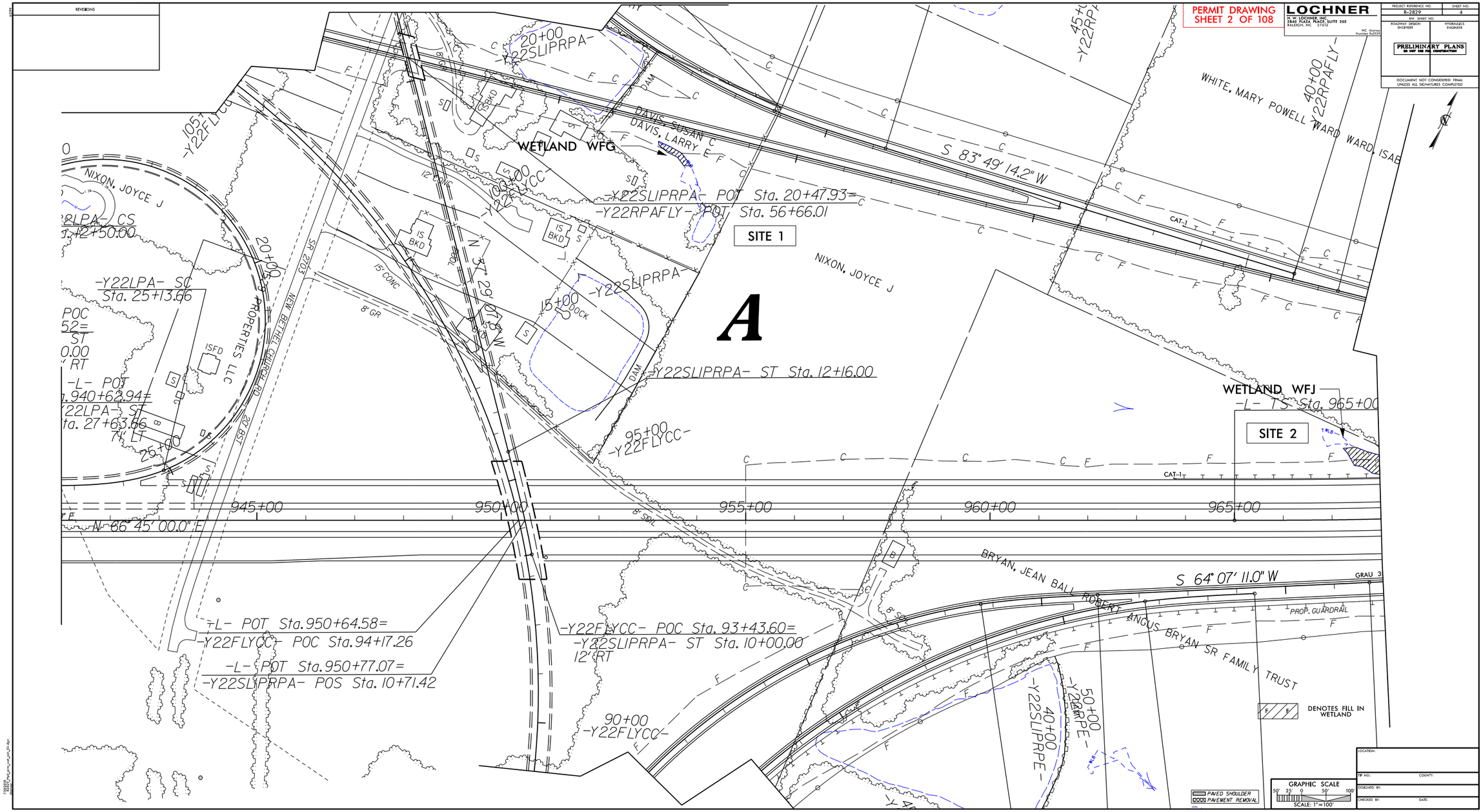
P.E.
SIGNATURE:

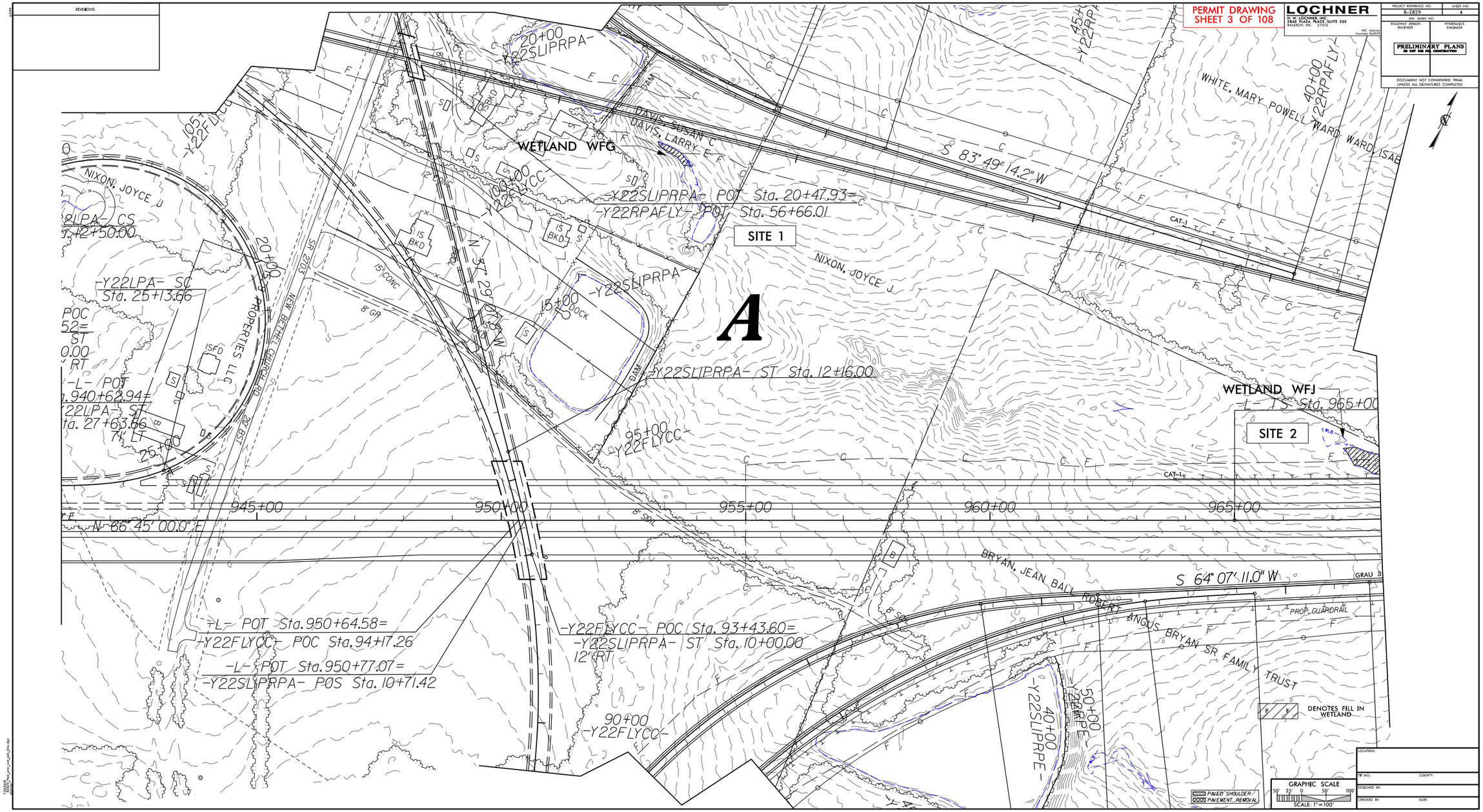
ROADWAY DESIGN ENGINEER

P.E.
SIGNATURE:

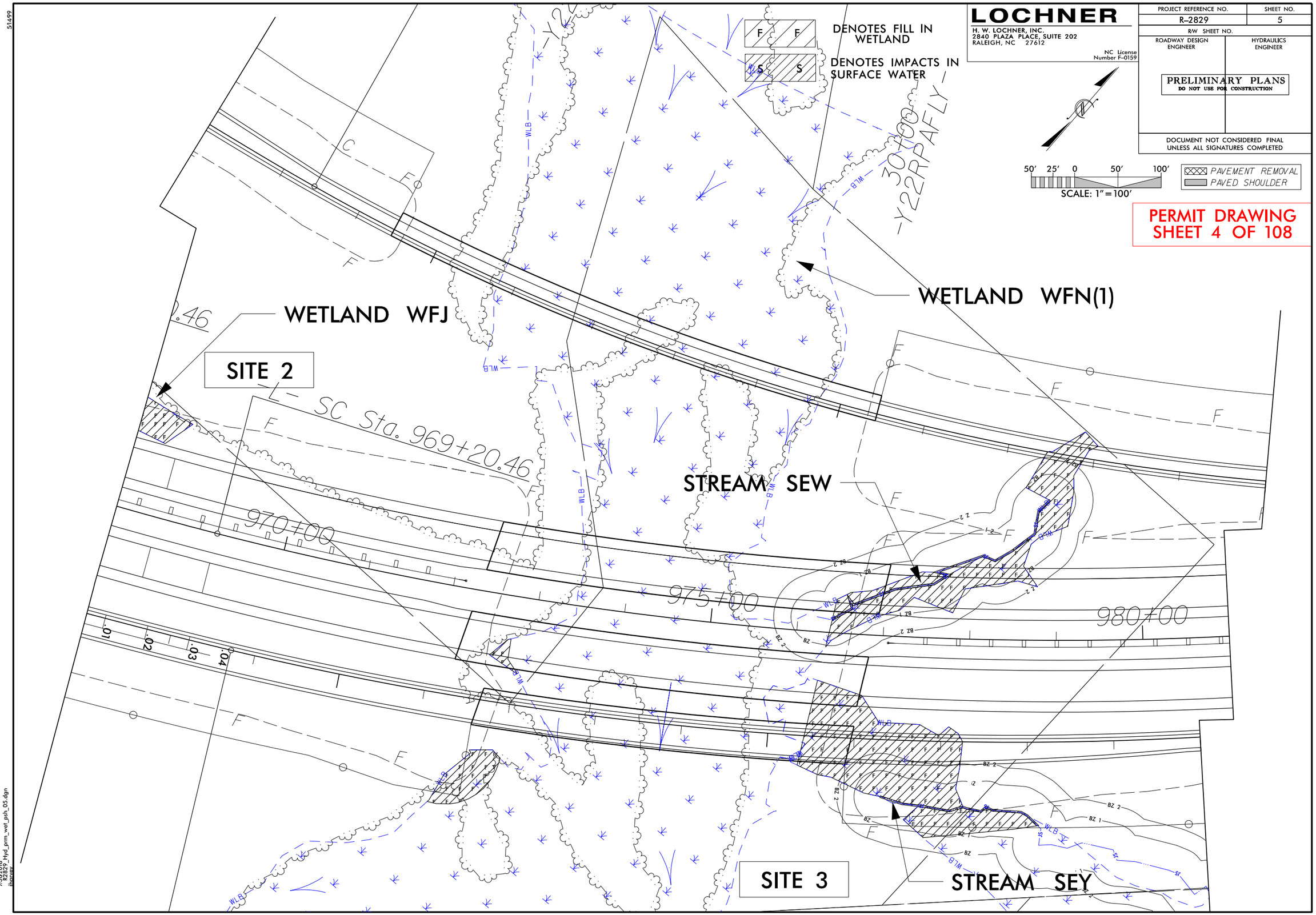
STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

7/30/2018
R2829_Hyd_prm_wet_psh_01.dgn
jharvey

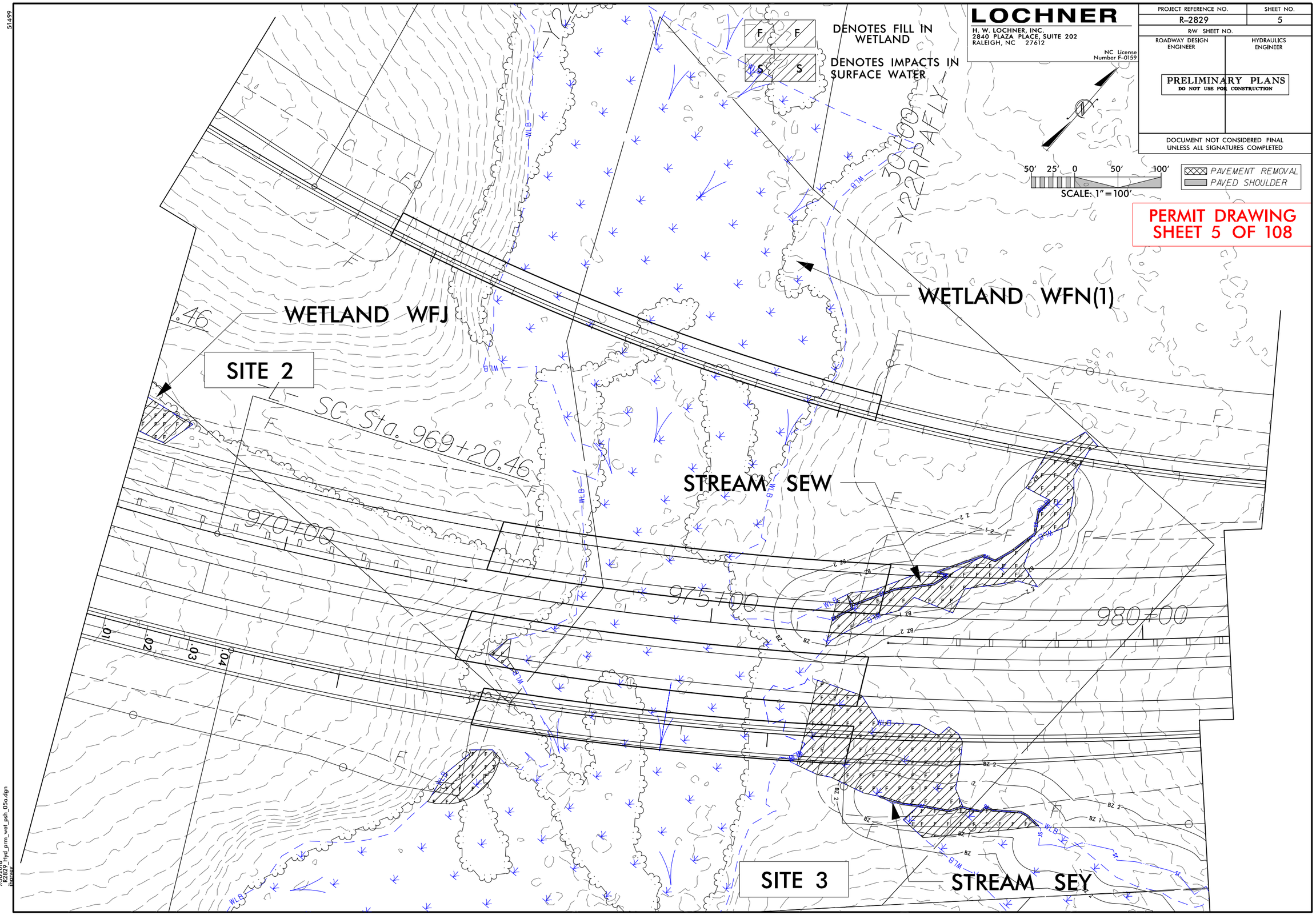

PERMIT DRAWING
SHEET 2 OF 108
LOCHNER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
REVISIONS
WETLAND WFG
WETLAND WFJ
SITE 1
SITE 2
A
DAVIS, SUSAN C
DAVIS, LARRY E
NIXON, JOYCE J
WHITE, MARY POWELL WARD WARD, ISAB
BRYAN, JEAN BALL ROBERT ANGUS BRYAN SR FAMILY TRUST
PROPERTIES LLC
NEW BETHEL CHURCH RD
SR 2703
S 83° 49' 14.2" W
S 64° 07' 11.0" W
N 37° 29' 07.8" W
N 66° 45' 00.0" E
-Y22SLIPRPA- POT Sta. 20+47.93=
-Y22RPAFLY- POT Sta. 56+66.01
-Y22SLIPRPA- ST Sta. 12+16.00
-Y22LPA- SC Sta. 25+13.66
-L- POT Sta. 950+64.58=
-Y22FLYCC- POC Sta. 94+17.26
-L- POT Sta. 950+77.07=
-Y22SLIPRPA- POS Sta. 10+71.42
-Y22FLYCC- POC Sta. 93+43.60=
-Y22SLIPRPA- ST Sta. 10+00.00
12' RT
-L- TS Sta. 965+00
945+00
950+00
955+00
960+00
965+00
20+00
-Y22SLIPRPA-
15+00
-Y22SLIPRPA-
95+00
-Y22FLYCC-
90+00
-Y22FLYCC-
40+00
-Y22SLIPRPE-
50+00
-Y22RPE-
40+00
-Y22RPAFLY-
25+00
-Y22LPA- CS
-L- POT
-Y22LPA- ST
-Y22FLYCC-
PROP. GUARDRAIL
DENOTES FILL IN WETLAND
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



PERMIT DRAWING
SHEET 3 OF 108
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number R-0559
PROJECT REFERENCE NO.
R-2829
SHEET NO.
4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
REVISIONS
WETLAND WFG
DAVIS, SUSAN C
DAVIS, LARRY E
S 83° 49' 14.2" W
WHITE, MARY POWELL WARD WARD, ISAB
-Y22SLIPRPA- POT Sta. 20+47.93=
-Y22RPAFLY- POT Sta. 56+66.01
SITE 1
NIXON, JOYCE J
-Y22LPA- SC
Sta. 25+13.66
PROPERTIES LLC
NEW BETHEL CHURCH RD
SR 2703
-Y22SLIPRPA- ST Sta. 12+16.00
A
WETLAND WFJ
-L- TS Sta. 965+00
SITE 2
945+00
950+00
955+00
960+00
965+00
N 66° 45' 00.0" E
BRYAN, JEAN BALL ROBERT ANGUS BRYAN SR FAMILY TRUST
S 64° 07' 11.0" W
PROP. GUARDRAIL
-L- POT Sta. 950+64.58=
-Y22FLYCC- POC Sta. 94+17.26
-L- POT Sta. 950+77.07=
-Y22SLIPRPA- POS Sta. 10+71.42
-Y22FLYCC- POC Sta. 93+43.60=
-Y22SLIPRPA- ST Sta. 10+00.00
12' RT
90+00
-Y22FLYCC-
DENOTES FILL IN WETLAND
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
5
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
50' 25' 0 50' 100'
SCALE: 1"=100'
PAVEMENT REMOVAL
PAVED SHOULDER
PERMIT DRAWING
SHEET 4 OF 108
WETLAND WFN(1)
WETLAND WFJ
SITE 2
SC Sta. 969+20.46
STREAM SEW
970+00
975+00
980+00
SITE 3
STREAM SEY



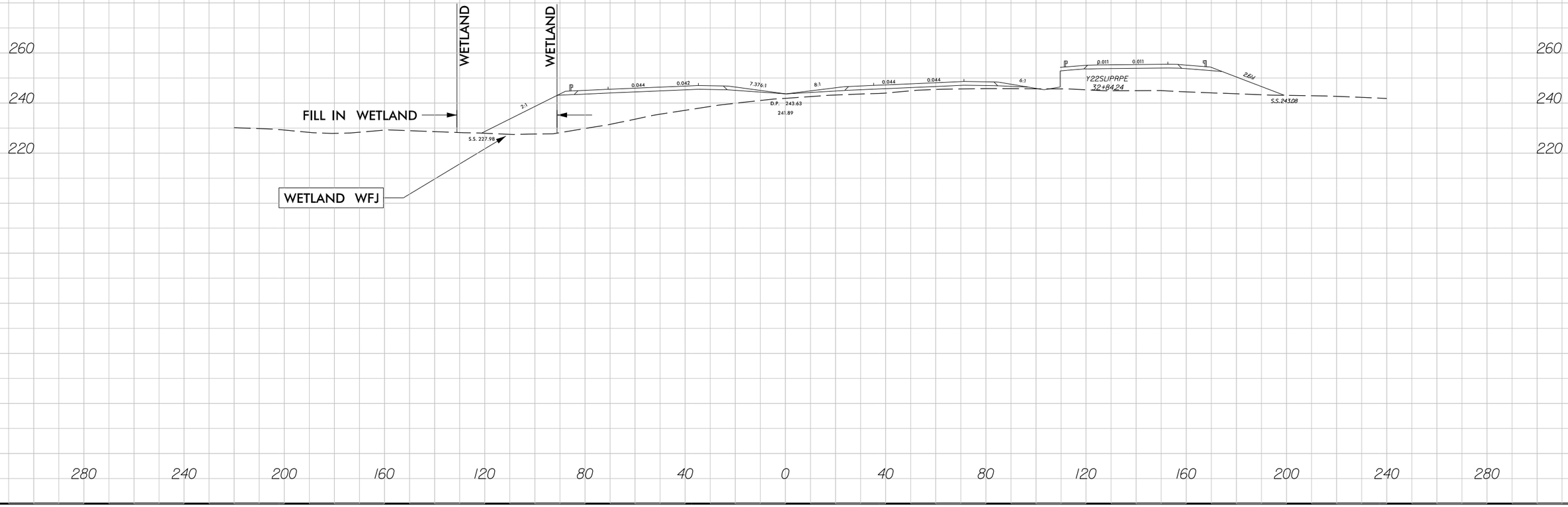
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
5
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
50' 25' 0 50' 100'
SCALE: 1" = 100'
PAVEMENT REMOVAL
PAVED SHOULDER
PERMIT DRAWING
SHEET 5 OF 108
WETLAND WFN(1)
WETLAND WFJ
SITE 2
SC Sta. 969+20.46
STREAM SEW
970+00
975+00
980+00
SITE 3
STREAM SEY

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 6 OF 108

CROSS SECTION
SITE 2, WETLAND WFJ
STATION 968+00 –L–



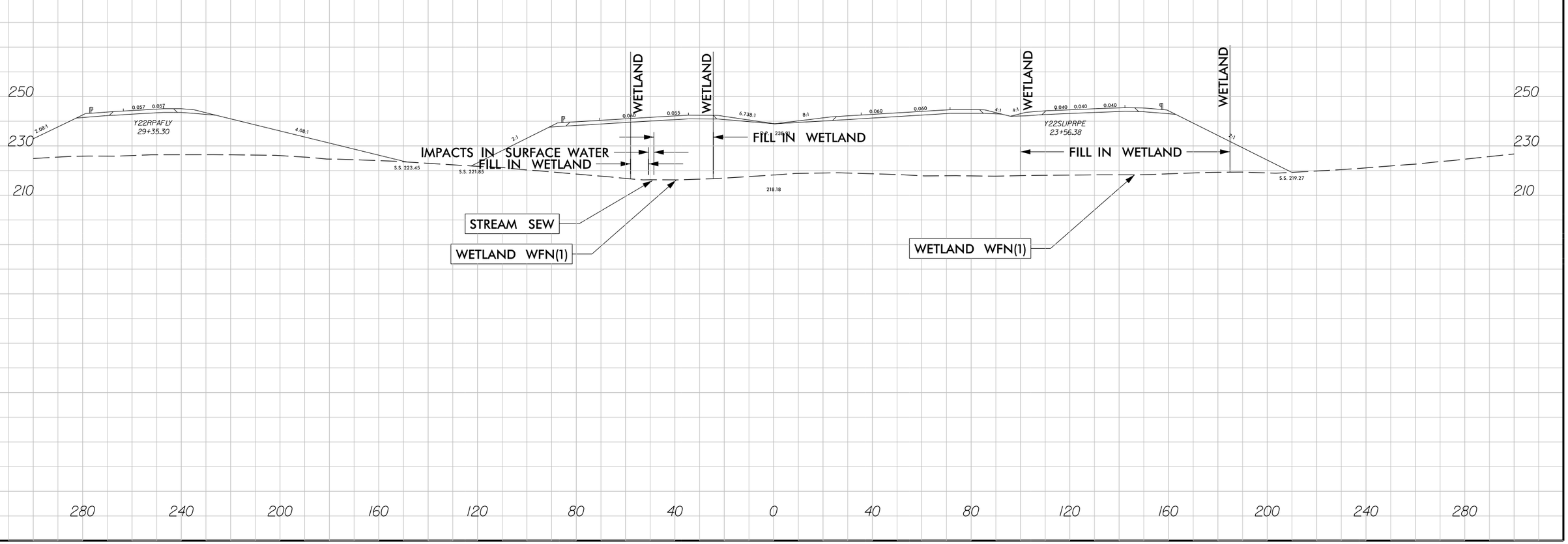
7/30/2018
R2829_Hyd_prm_wet_psh_05b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 7 OF 108

CROSS SECTION
SITE 3, WETLAND WFN(1)
STATION 977+00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_05c_xpl.dgn
jharvey

51499

50′ 25′ 0 50′ 100′

SCALE: 1″=100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License
Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 8 OF 108

F F DENOTES FILL IN WETLAND

WETLAND WFY

-L- CS Sta. 1001+60.48

SITE 4

995+00

1000+00

1005+00

AMAN, JOHN R

PAVEMENT REMOVAL

PAVED SHOULDER

7/30/2018
R-2829_Hyd_prm_wet_psh_07.dgn
jhorney

51499

50′ 25′ 0 50′ 100′

SCALE: 1″=100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License
Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 9 OF 108

F F DENOTES FILL IN WETLAND

WETLAND WFY

-L- CS Sta. 1001+60.48

SITE 4

995+00

1000+00

1005+00

AMAN, JOHN R

WLB

PAVEMENT REMOVAL

PAVED SHOULDER

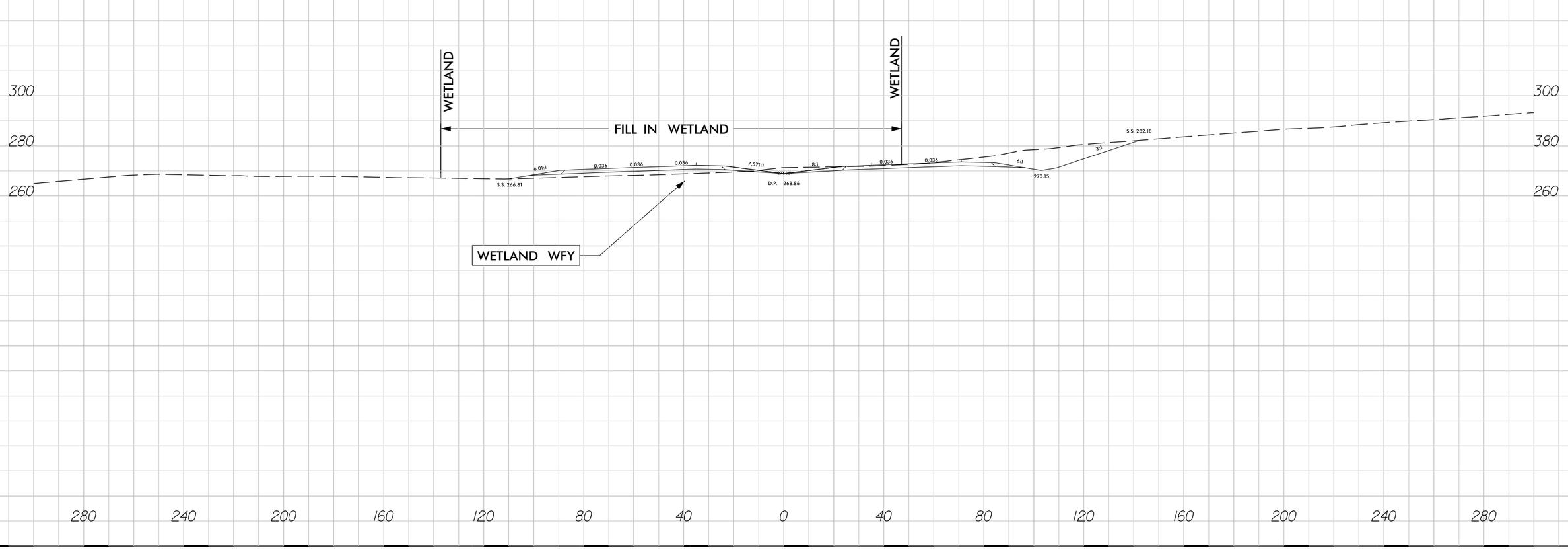
7/30/2018
R2829_hyd_prm_wet_psh_07a.dgn
jburvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 10 OF 108

CROSS SECTION
SITE 4, WETLAND WFY
STATION 1003+50 –L–



7/30/2018
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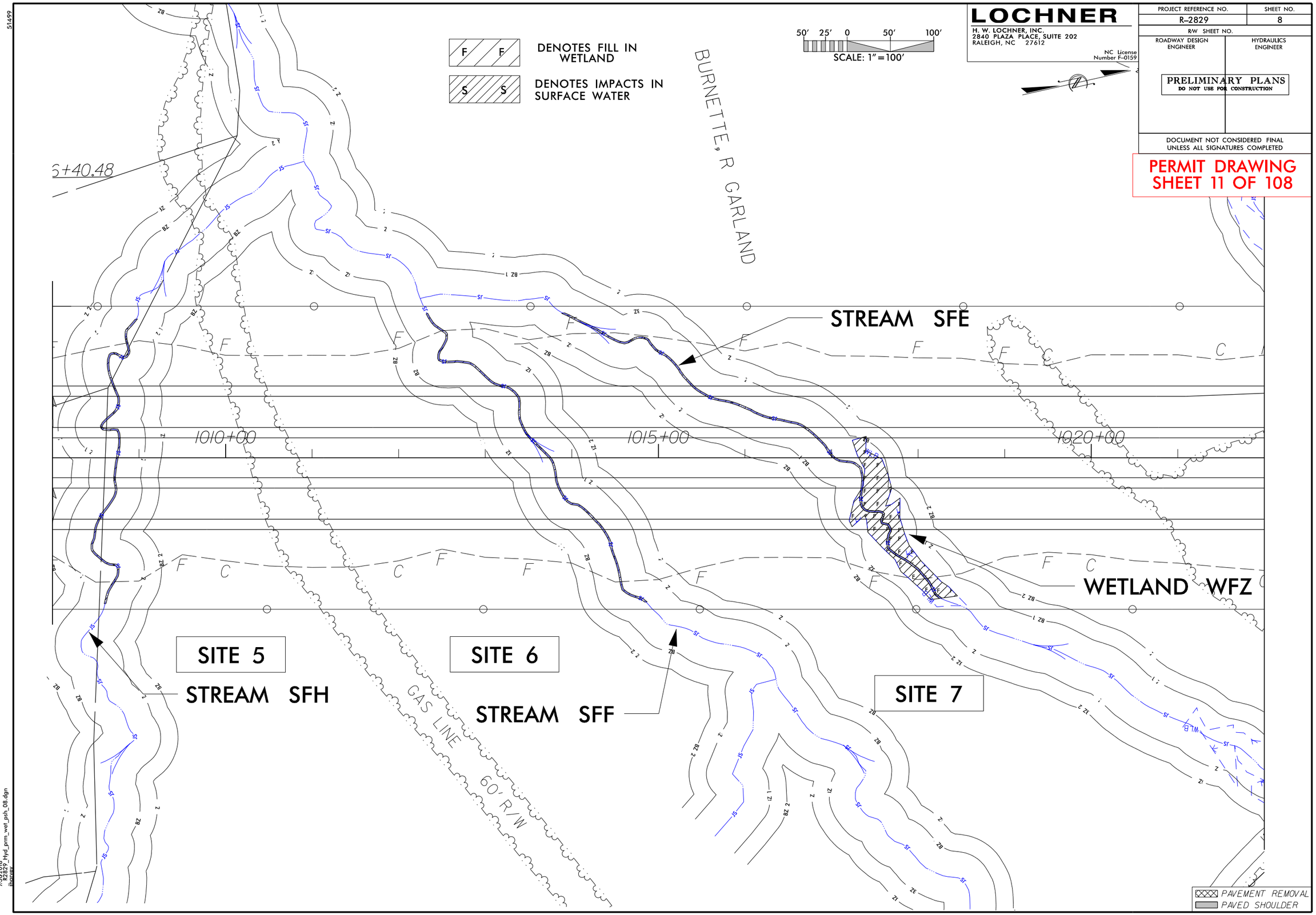
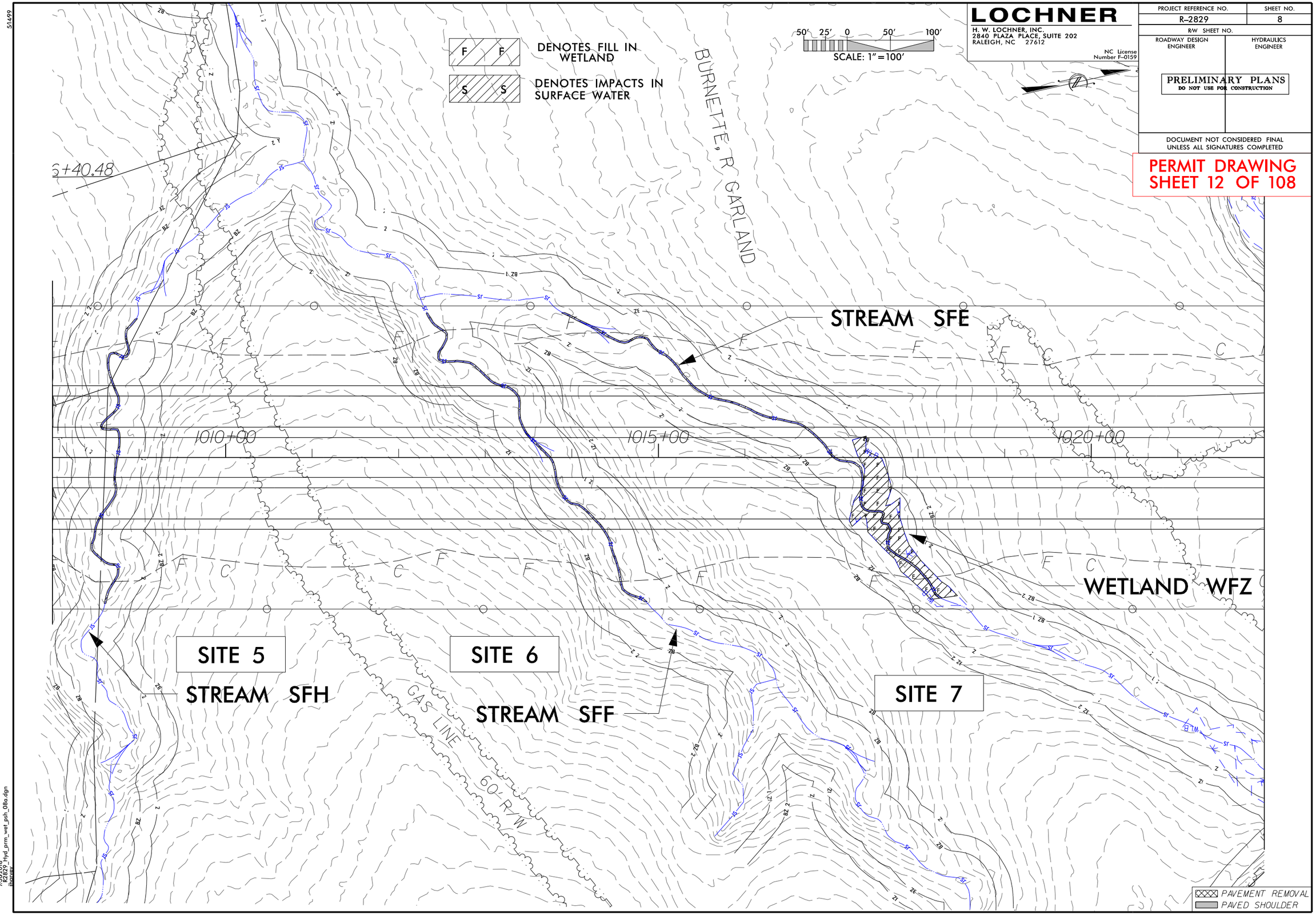
jharvey



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
8
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 11 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
50' 25' 0 50' 100'
SCALE: 1"=100'
BURNETTE, R GARLAND
STREAM SFE
WETLAND WFZ
SITE 5
SITE 6
SITE 7
STREAM SFH
STREAM SFF
GAS LINE 60' R/W
1010+00
1015+00
1020+00
PAVEMENT REMOVAL
PAVED SHOULDER



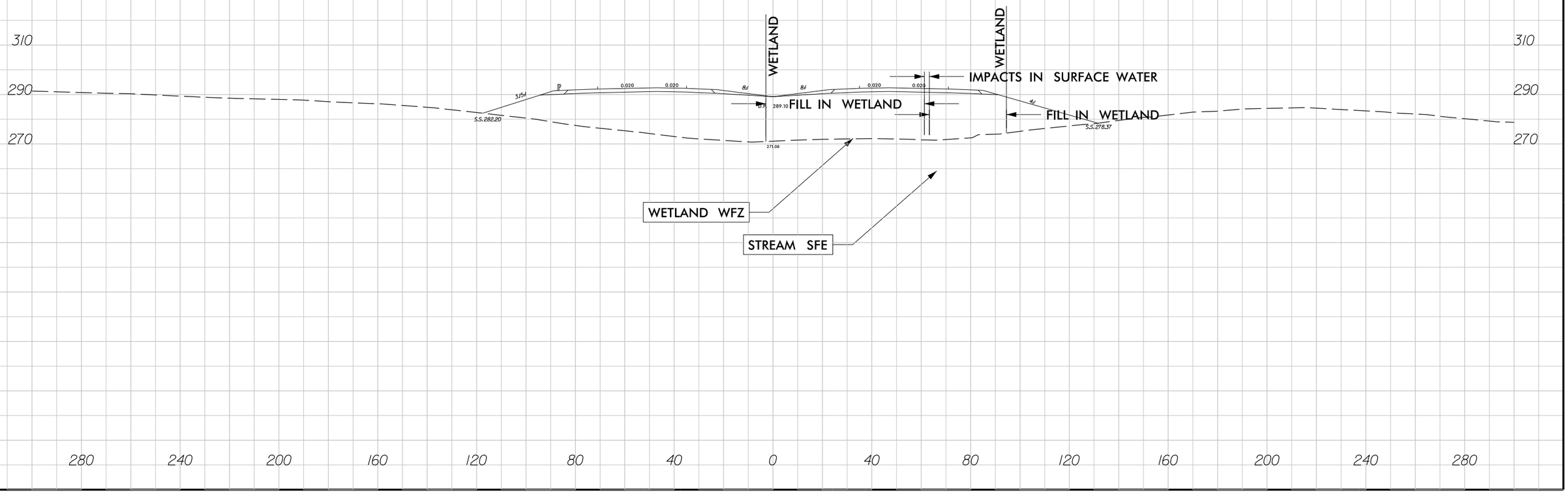
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
8
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 12 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
50' 25' 0 50' 100'
SCALE: 1"=100'
BURNETTE, R GARLAND
STREAM SFE
WETLAND WFZ
SITE 5
STREAM SFH
SITE 6
STREAM SFF
SITE 7
GAS LINE 60' R/W
1010+00
1015+00
1020+00
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 13 OF 108

CROSS SECTION
SITE 7, WETLAND WFZ
STATION 1017+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_08b_xpl.dgn
jharvey

PERMIT DRAWING
SHEET 14 OF 108

50' 25' 0 50' 100'
SCALE: 1"=100'

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

51499

POND PAD

-L- POT Sta. 1033+09.61=
-Y23RPB- ST Sta. 10+00.00
71.00' LT

WETLAND WGD

SITE 8

WETLAND WGC

STREAM SFB

SITE 9

1025+00

1030+00

1035+00

WETLAND WGB

N 16° 47' 39.6" E

-L- POT Sta. 1030+20.79=
-Y23RPC- ST Sta. 10+00.00
71.00' RT

-Y23RPC- TS Sta. 13+68.78

BURNEAVE. R GARLAND

15+00
-Y23RPC-

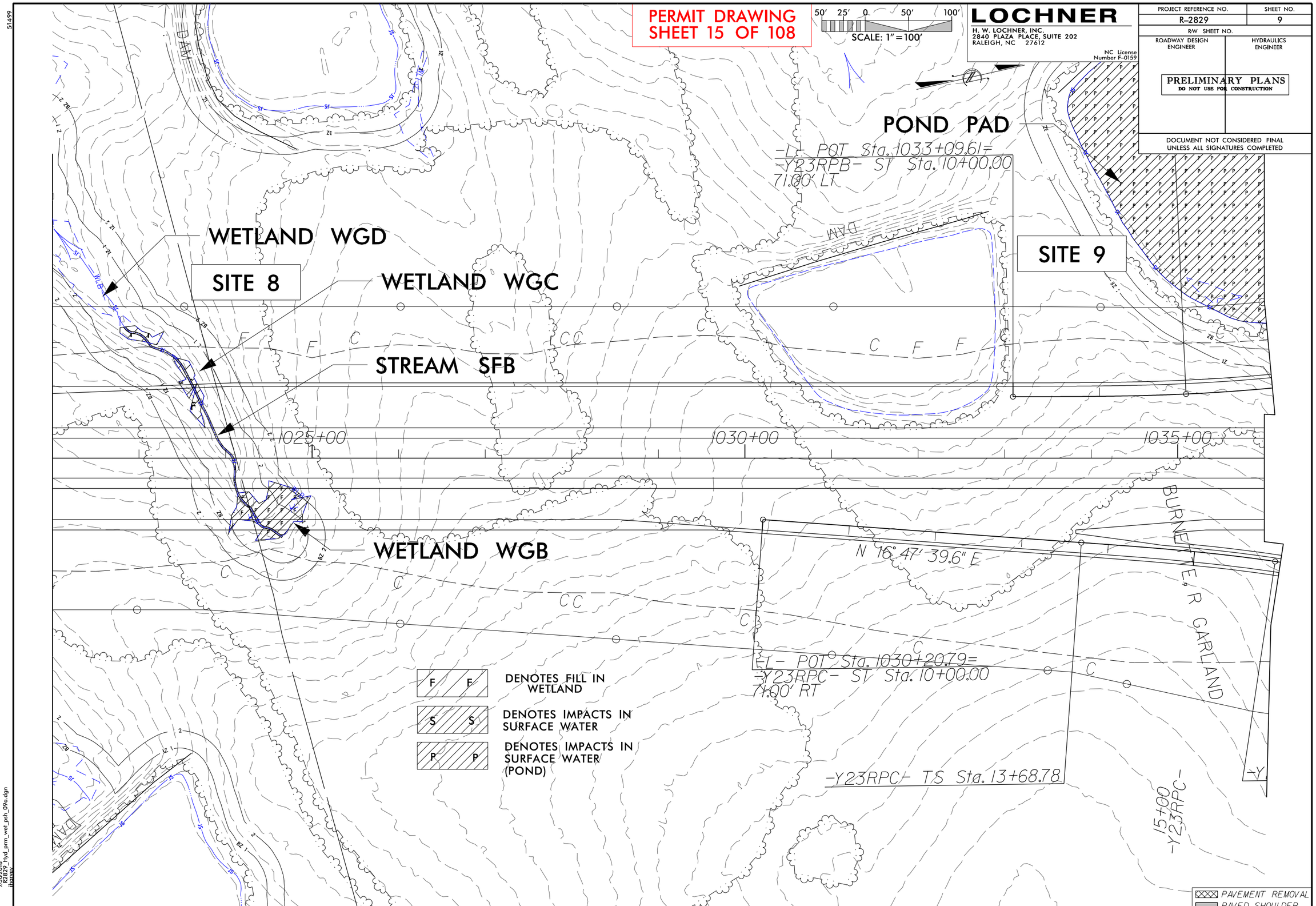
DENOTES FILL IN WETLAND

DENOTES IMPACTS IN SURFACE WATER

DENOTES IMPACTS IN SURFACE WATER (POND)

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_hyd_prm_wet_psh_09.dgn
jhorvez



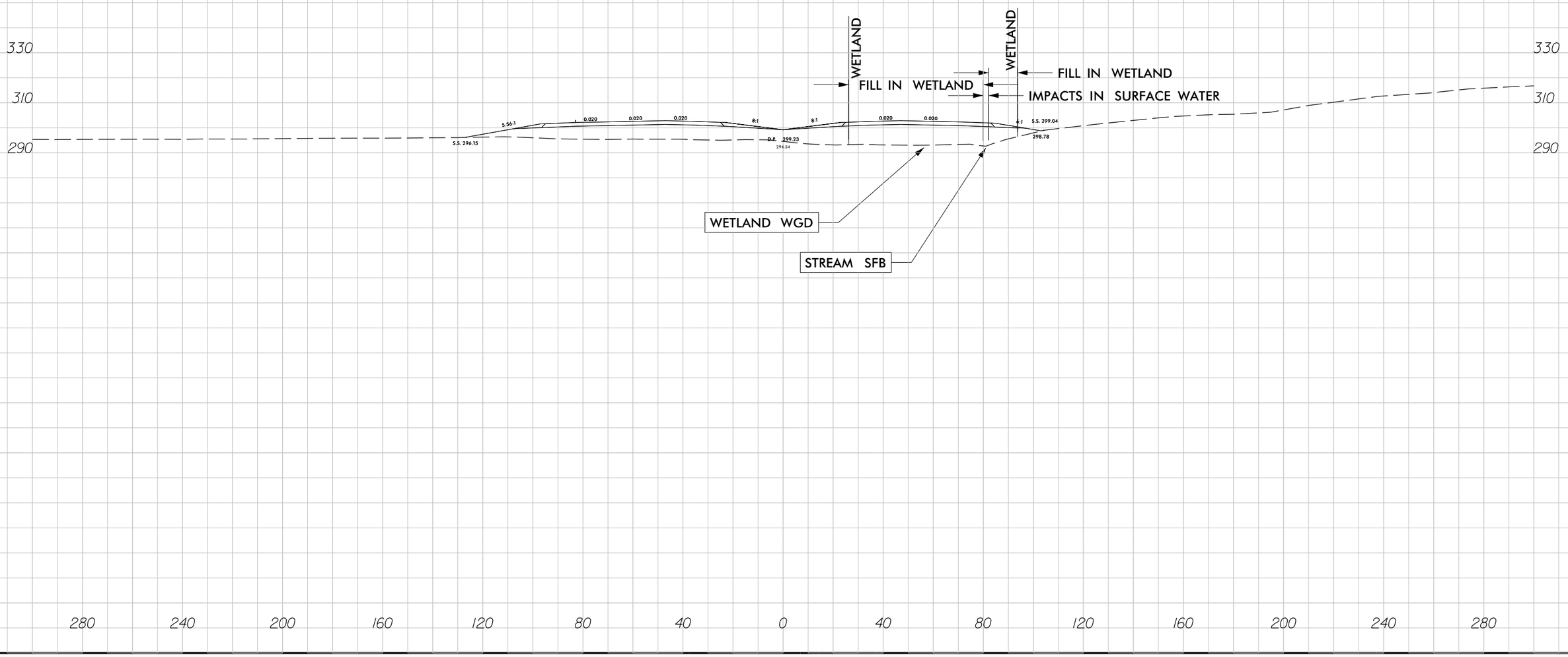
PERMIT DRAWING
SHEET 15 OF 108
50' 25' 0 50' 100'
SCALE: 1"=100'
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
9
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
POND PAD
-L- POT Sta. 1033+09.61=
-Y23RPB- ST Sta. 10+00.00
71.00' LT
SITE 9
WETLAND WGD
SITE 8
WETLAND WGC
STREAM SFB
1025+00
1030+00
1035+00
WETLAND WGB
N 16° 47' 39.6" E
BURNETTE, R GARLAND
-L- POT Sta. 1030+20.79=
-Y23RPC- ST Sta. 10+00.00
71.00' RT
-Y23RPC- TS Sta. 13+68.78
15+00
-Y23RPC-
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

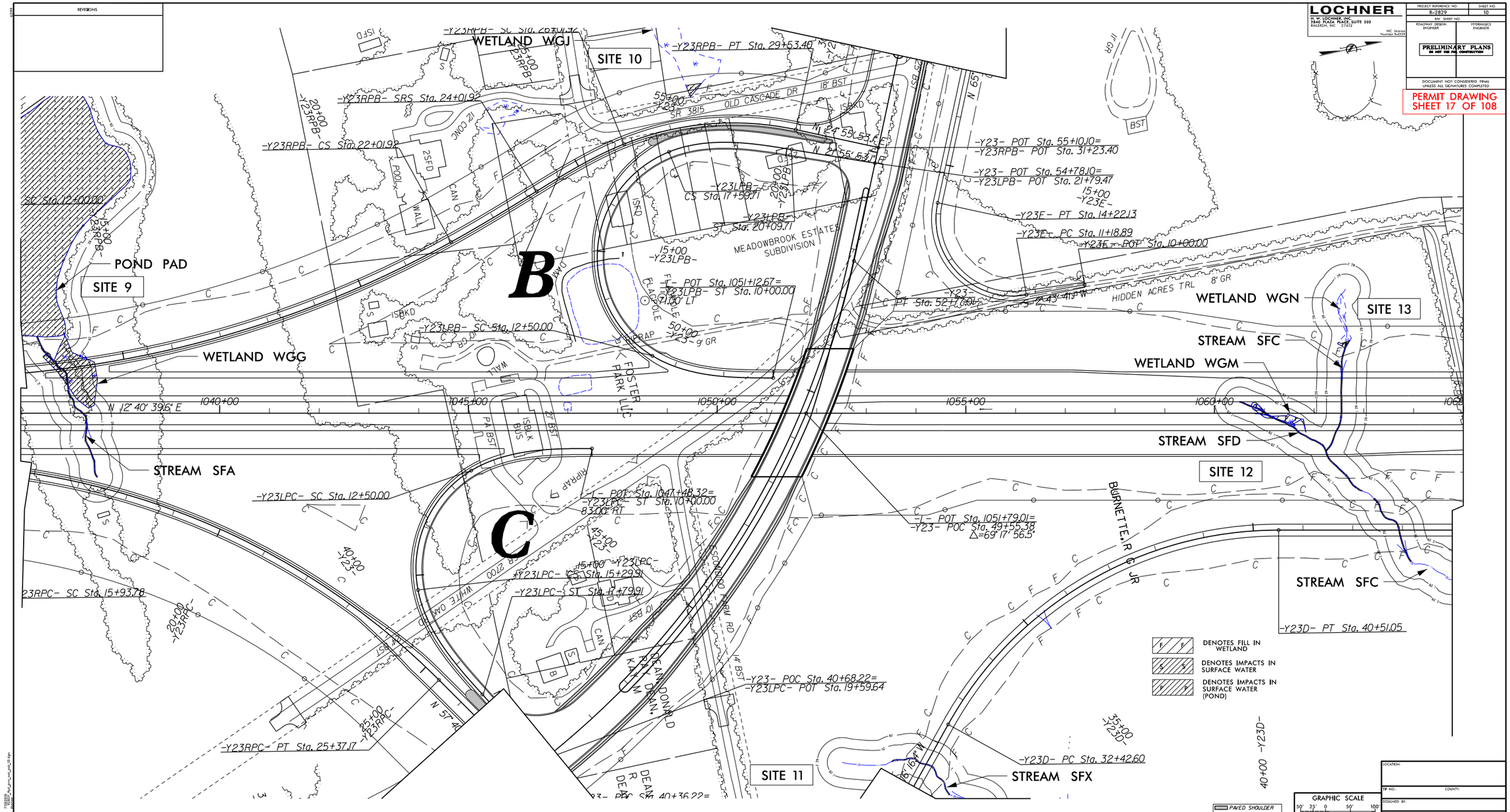
0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 16 OF 108

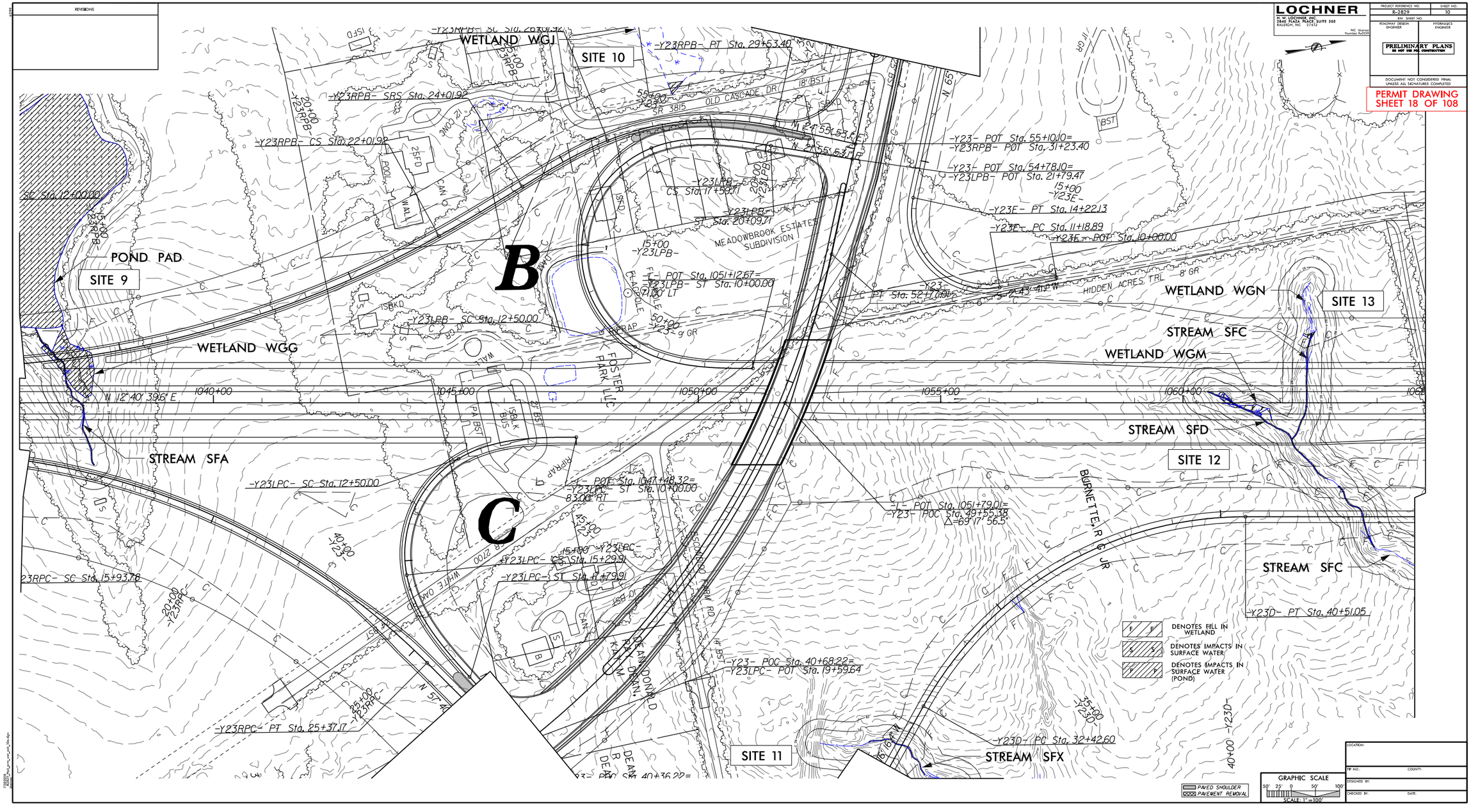
CROSS SECTION
SITE 8, WETLAND WGD
STATION 1024+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_09b_xpl.dgn
jharvey



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number Ru0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
10
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 17 OF 108
REVISIONS
WETLAND WGJ
SITE 10
-Y23RPB- PT Sta. 29+53.40
-Y23RPB- SRS Sta. 24+01.92
-Y23RPB- CS Sta. 22+01.92
OLD CASCADE DR
SR 3815
18' BST
-Y23- POT Sta. 55+10.10=
-Y23RPB- POT Sta. 31+23.40
-Y23- POT Sta. 54+78.10=
-Y23LPB- POT Sta. 21+79.47
-Y23F- PT Sta. 14+22.13
-Y23F- PC Sta. 11+18.89
-Y23F- POT Sta. 10+00.00
-Y23LPB- CS Sta. 17+59.71
-Y23LPB- ST Sta. 20+09.71
MEADOWBROOK ESTATES SUBDIVISION
-L- POT Sta. 1051+12.67=
-Y23LPB- ST Sta. 10+00.00
-Y23LPB- SC Sta. 12+50.00
POND PAD
SITE 9
WETLAND WGG
B
C
FOSTER PARK LLC
HIDDEN ACRES TRL
WETLAND WGN
SITE 13
STREAM SFC
WETLAND WGM
STREAM SFD
SITE 12
STREAM SFA
-Y23LPC- SC Sta. 12+50.00
-L- POT Sta. 1047+48.32=
-Y23LPC- ST Sta. 10+00.00
-L- POT Sta. 1051+79.01=
-Y23- POC Sta. 49+55.38
Δ=69° 17' 56.5"
BURNETTE, R G JR
STREAM SFC
-Y23D- PT Sta. 40+51.05
-Y23LPC- CS Sta. 15+29.91
-Y23LPC- ST Sta. 17+79.91
-Y23RPC- SC Sta. 15+93.78
-Y23- POC Sta. 40+68.22=
-Y23LPC- POT Sta. 19+59.64
-Y23RPC- PT Sta. 25+37.17
-Y23D- PC Sta. 32+42.60
STREAM SFX
SITE 11
DEAN DONALD RAY DEAN
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



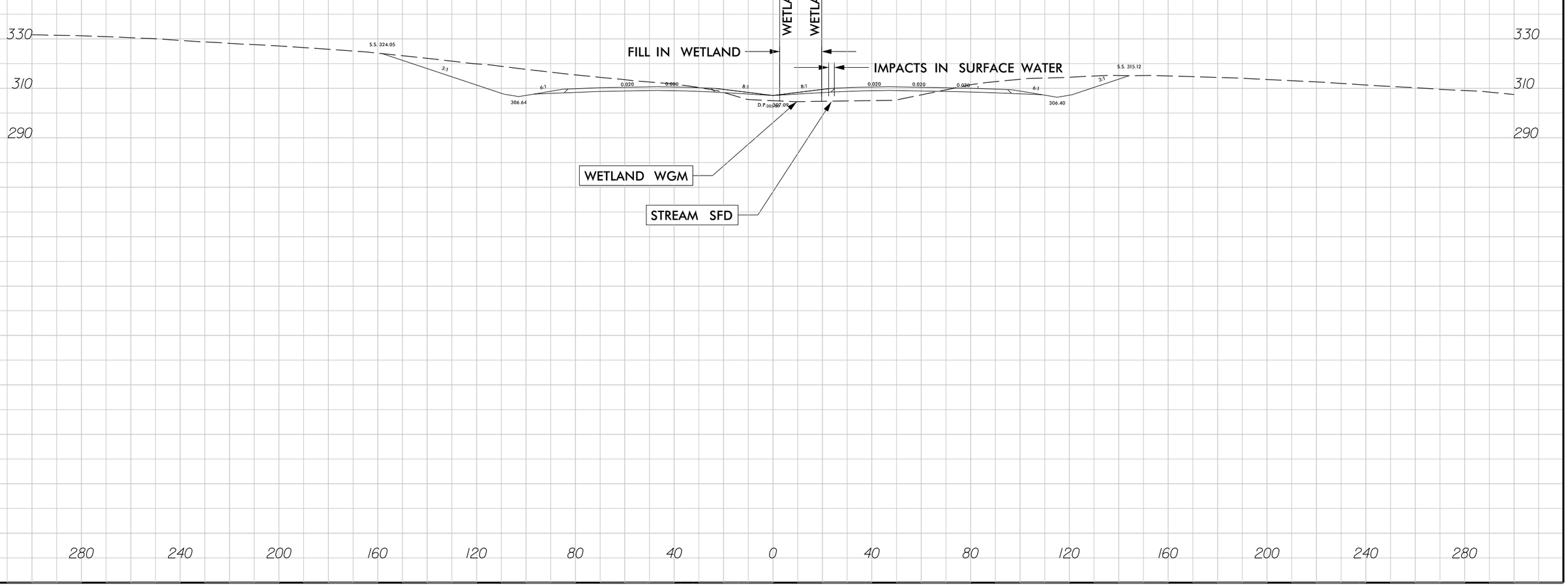
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number 8-0155
PROJECT REFERENCE NO.
R-2829
SHEET NO.
10
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 18 OF 108
REVISIONS
WETLAND WGJ
SITE 10
-Y23RPB- PT Sta. 29+53.40
-Y23RPB- SRS Sta. 24+01.92
-Y23RPB- CS Sta. 22+01.92
SR 3815
OLD CASCADE DR
-Y23- POT Sta. 55+10.10=
-Y23RPB- POT Sta. 31+23.40
-Y23- POT Sta. 54+78.10=
-Y23LPB- POT Sta. 21+79.47
-Y23F- PT Sta. 14+22.13
-Y23F- PC Sta. 11+18.89
-Y23F- POT Sta. 10+00.00
-Y23LPB- CS Sta. 17+59.71
-Y23LPB- ST Sta. 20+09.71
MEADOWBROOK ESTATES SUBDIVISION
-L- POT Sta. 1051+12.67=
-Y23LPB- ST Sta. 10+00.00
-Y23LPB- SC Sta. 12+50.00
POND PAD
SITE 9
B
WETLAND WGG
WETLAND WGN
SITE 13
STREAM SFC
WETLAND WGM
HIDDEN ACRES TRL
FOSTER PARK LLC
N 12° 40' 39.6" E
1040+00
1045+00
1050+00
1055+00
1060+00
STREAM SFD
SITE 12
STREAM SFA
-Y23LPC- SC Sta. 12+50.00
-L- POT Sta. 1047+48.32=
-Y23LPC- ST Sta. 10+00.00
83.00' RT
C
-L- POT Sta. 1051+79.01=
-Y23- POC Sta. 49+55.38
Δ=69° 17' 56.5"
BURNETTE, R G JR
STREAM SFC
-Y23LPC- CS Sta. 15+29.91
-Y23LPC- ST Sta. 17+79.91
23RPC- SC Sta. 15+93.78
-Y23D- PT Sta. 40+51.05
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
-Y23- POC Sta. 40+68.22=
-Y23LPC- POT Sta. 19+59.64
-Y23RPC- PT Sta. 25+37.17
-Y23D- PC Sta. 32+42.60
SITE 11
STREAM SFX
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING
SHEET 19 OF 108

CROSS SECTION
SITE 12, WETLAND WGM
STATION 1061+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_10b_xpl.dgn
jharvey

51499

F F DENOTES FILL IN WETLAND

50' 25' 0 50' 100'
SCALE: 1"=100'

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 20 OF 108

-L- PC Sta. 1071+35.79

HIDDEN ACRES TRL

8' SOIL

ISFD

ELMO T WILLIAMS TRUST

WILLIAMS, ALICE H

EARLY SARA RAY

1070+00

1075+00

DAM

9' SOIL

N 12° 40' 39.6" E

WLB

SITE 14

WETLAND WGO

8' BST

-Y23D- POT Sta. 52+87.60

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_11.dgn
lhorney

51499

F F DENOTES FILL IN WETLAND

50' 25' 0 50' 100'
SCALE: 1" = 100'

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 21 OF 108

PC Sta. 1071+35.79

HIDDEN ACRES TRL

8" SOIL

ISFD

ELMO T WILLIAMS TRUST

WILLIAMS ALICE H

1070+00

DAM

1075+00

EARLY SARA RAY

N 12° 40' 39.6" E

WLB

SITE 14

WETLAND WGO

8" BST

-Y23D- POT Sta. 52+87.60

PAVEMENT REMOVAL
PAVED SHOULDER

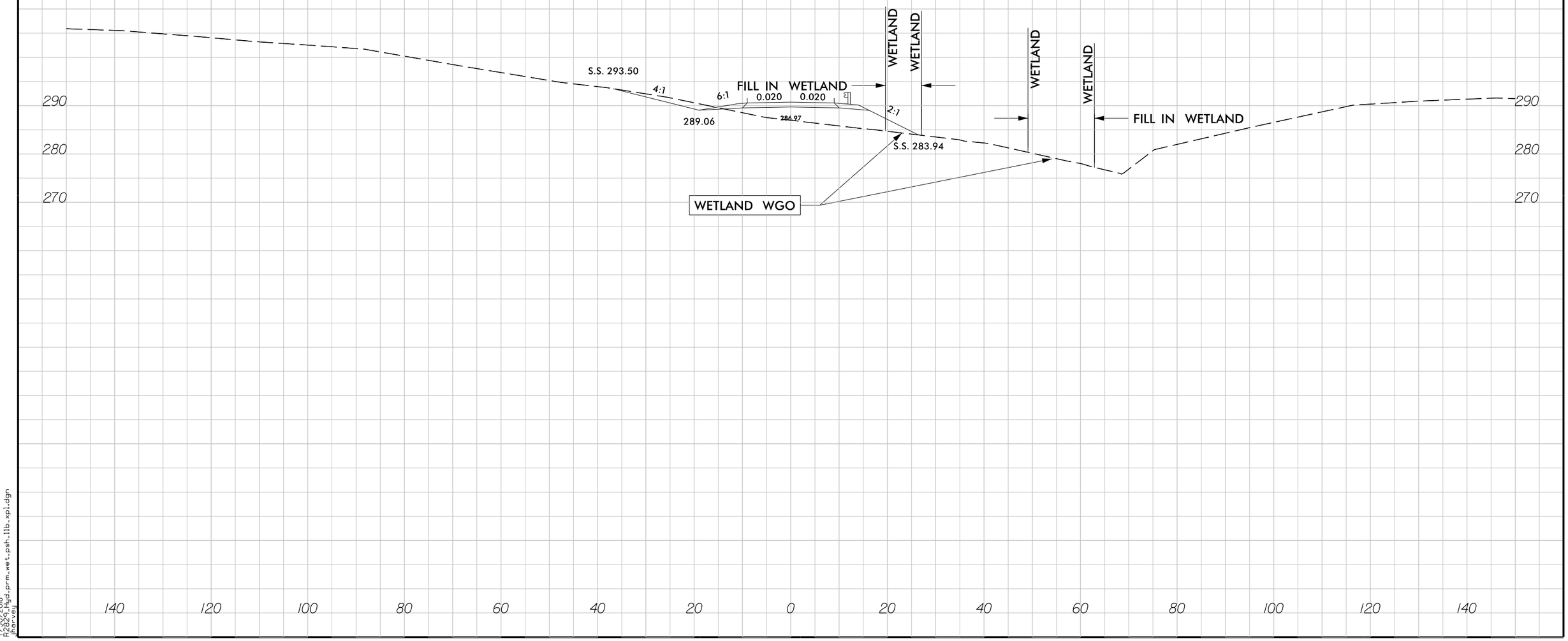
7302018
R2829_Hyd_prm_wet_psh_11a.dgn
jlgray

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 22 OF 108

CROSS SECTION
SITE 14, WETLAND WGO
STATION 46+50 –Y23D–



7/30/2018
R2829_Hyd_prm_wet_psh_11b_xpl.dgn
jharvey

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'

SCALE: 1" = 100'

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 23 OF 108

WETLAND WGR

SITE 15

STREAM SFR

-L- PC Sta. 1102+48.60

091+66.25

1095+00

1100+00

1105+00

N 8° 01' 27.1" E

NC DEPARTMENT OF TRANSPORTATION

CAPITOL BROADCASTING CO INC

WLB

F C

BZ 1

BZ 2

SF

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_13.dgn
lhancox

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50′ 25′ 0 50′ 100′

SCALE: 1" = 100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 24 OF 108

WETLAND WGR

SITE 15

STREAM SFR

-L- PC Sta. 1102+48.60

091+66.25

1095+00

1100+00

1105+00

N 8° 01' 27.1" E

NC DEPARTMENT OF TRANSPORTATION

CAPITOL BROADCASTING CO INC

WLB

BZ 1

BZ 2

SF

PAVEMENT REMOVAL
PAVED SHOULDER

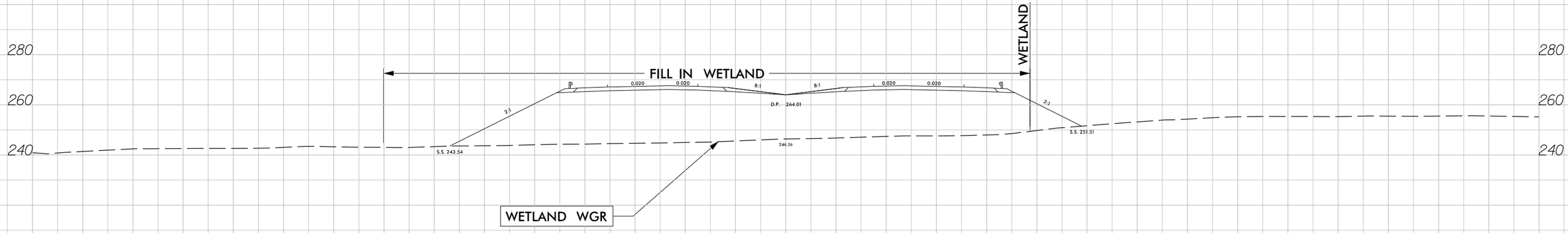
7302018
R2829_Hyd_prm_wet_psh_13a.dgn
lhoover

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 25 OF 108

CROSS SECTION
SITE 15, WETLAND WGR
STATION 1099+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh.13b.xpl.dgn
jharvey

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'

SCALE: 1" =100'

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 26 OF 108

WETLAND WGR

-L- POT Sta. 1115+20.79=
-Y24RPB- POT Sta. 10+00.00
71.00' LT

SITE 16

N 16° 07' 23

1110+00

1115+00

1120+00

STREAM SFN

Center of Anchor
30.970 ft. from EOP
39.158 ft. from EOT

Nearest Fence Corner
15.79 ft. from EOP
23.808 ft. from EOT

SITE 17

WETLAND WGS

SITE 18

STREAM SFQ

-L- POT Sta. 1119+77.61=
-Y24RPC- ST Sta. 10+00.00
71.00' RT

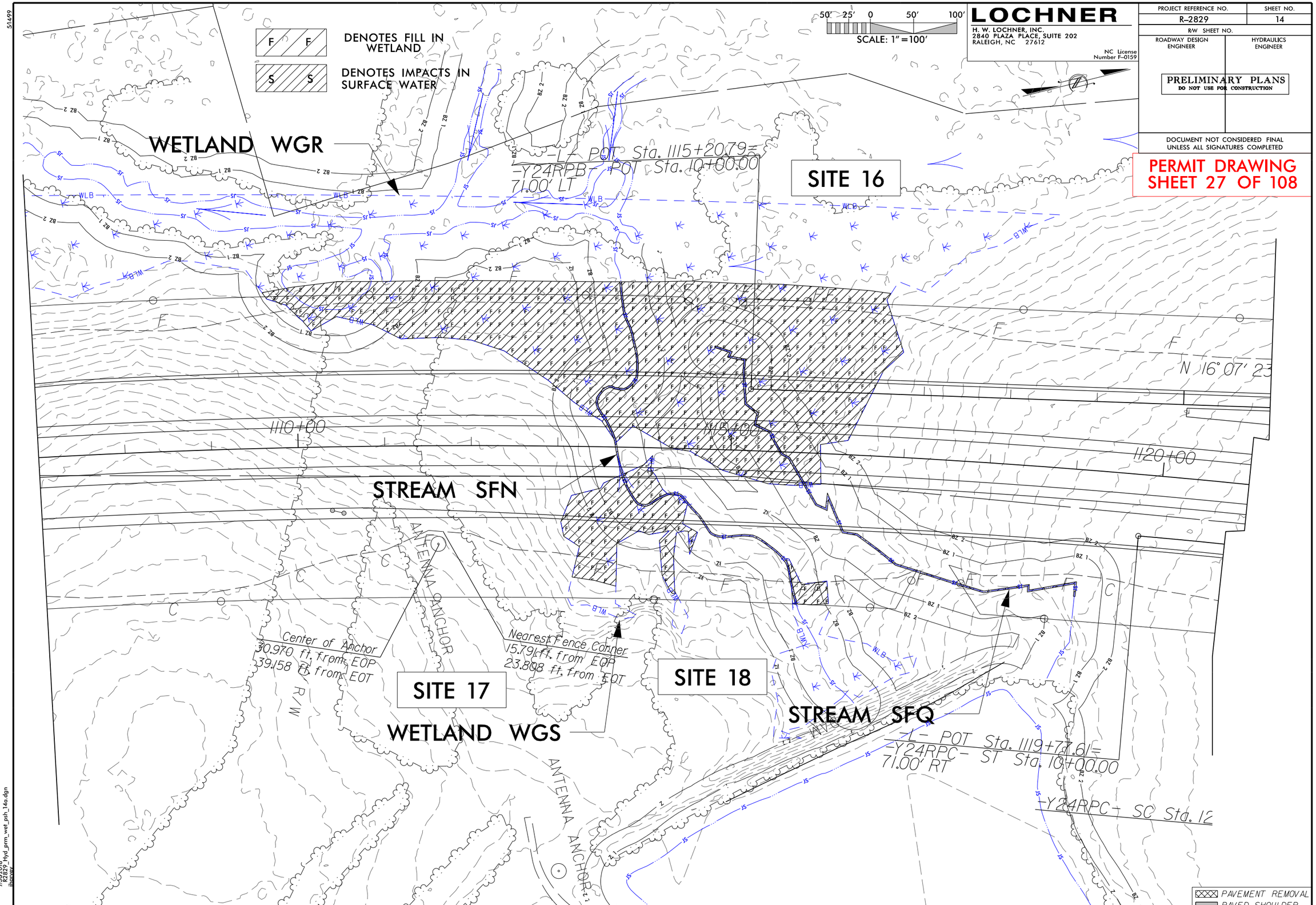
-Y24RPC- SC Sta. 12

ANTENNA ANCHOR

ANTENNA ANCHOR

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_14.dgn
lhussey



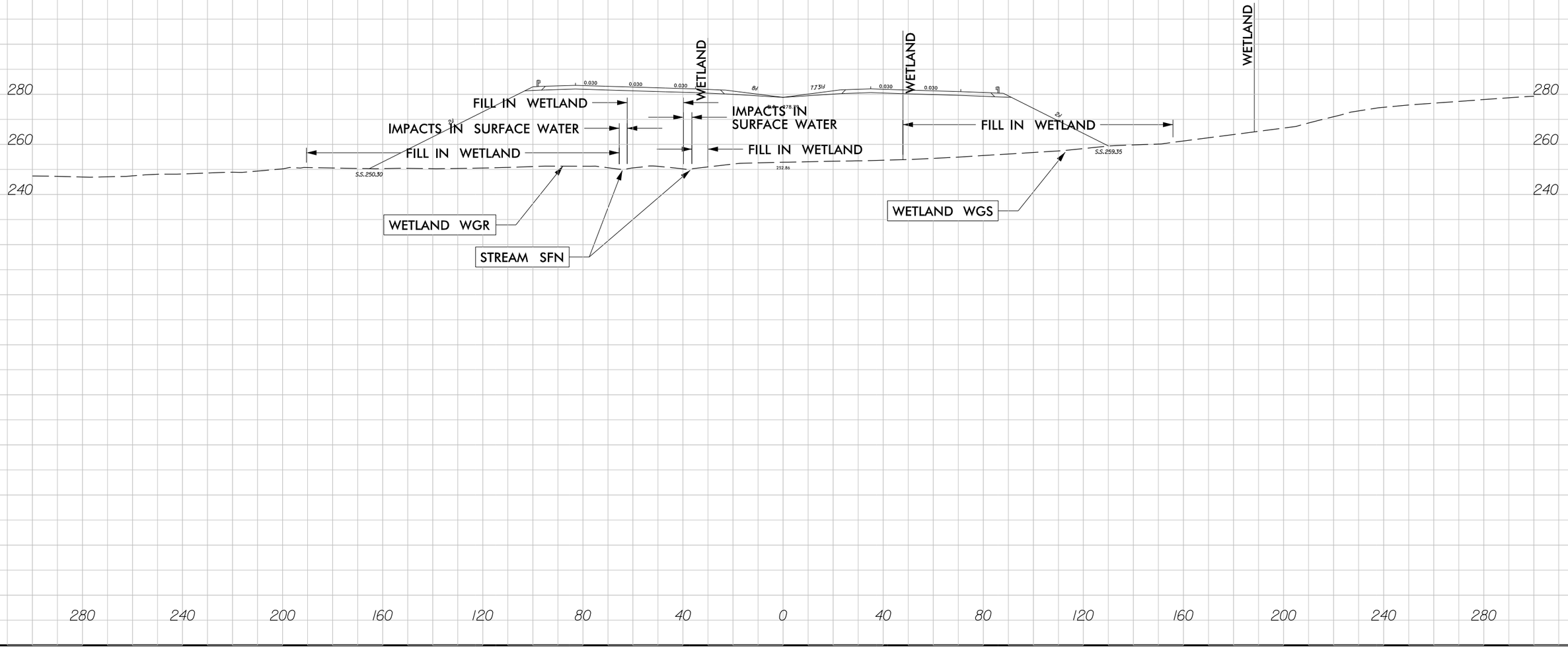
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
50' 25' 0 50' 100'
SCALE: 1" = 100'
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
14
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 27 OF 108
WETLAND WGR
-L- POT Sta. 1115+20.79=
-Y24RPB- POT Sta. 10+00.00
71.00' LT
SITE 16
N 16° 07' 23
1110+00
1115+00
1120+00
STREAM SFN
ANTENNA ANCHOR
Center of Anchor
30.970 ft. from EOP
39.158 ft. from EOT
Nearest Fence Corner
15.791 ft. from EOP
23.808 ft. from EOT
SITE 17
SITE 18
WETLAND WGS
STREAM SFQ
-L- POT Sta. 1119+77.61=
-Y24RPC- ST Sta. 10+00.00
71.00' RT
-Y24RPC- SC Sta. 12
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

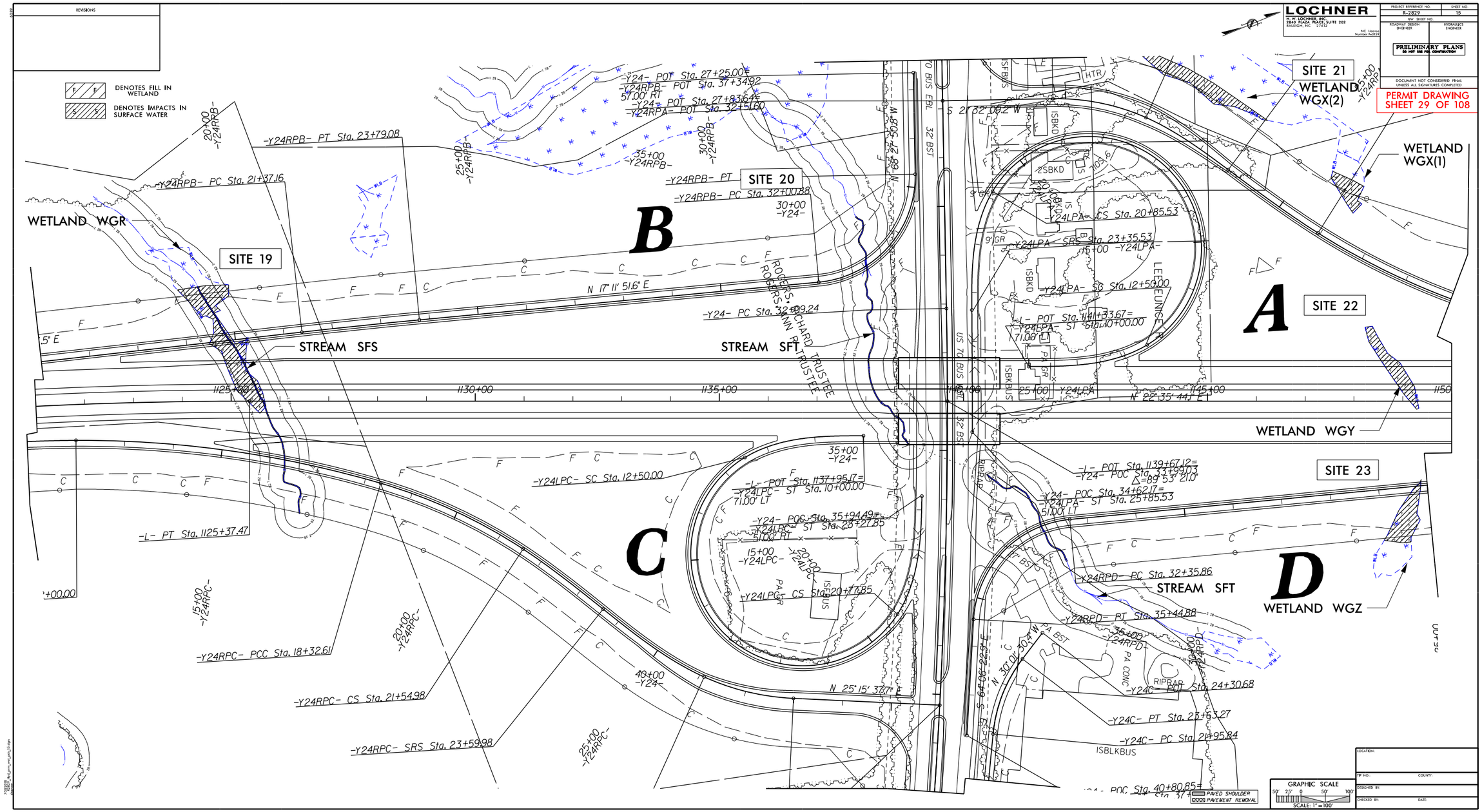
0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 28 OF 108

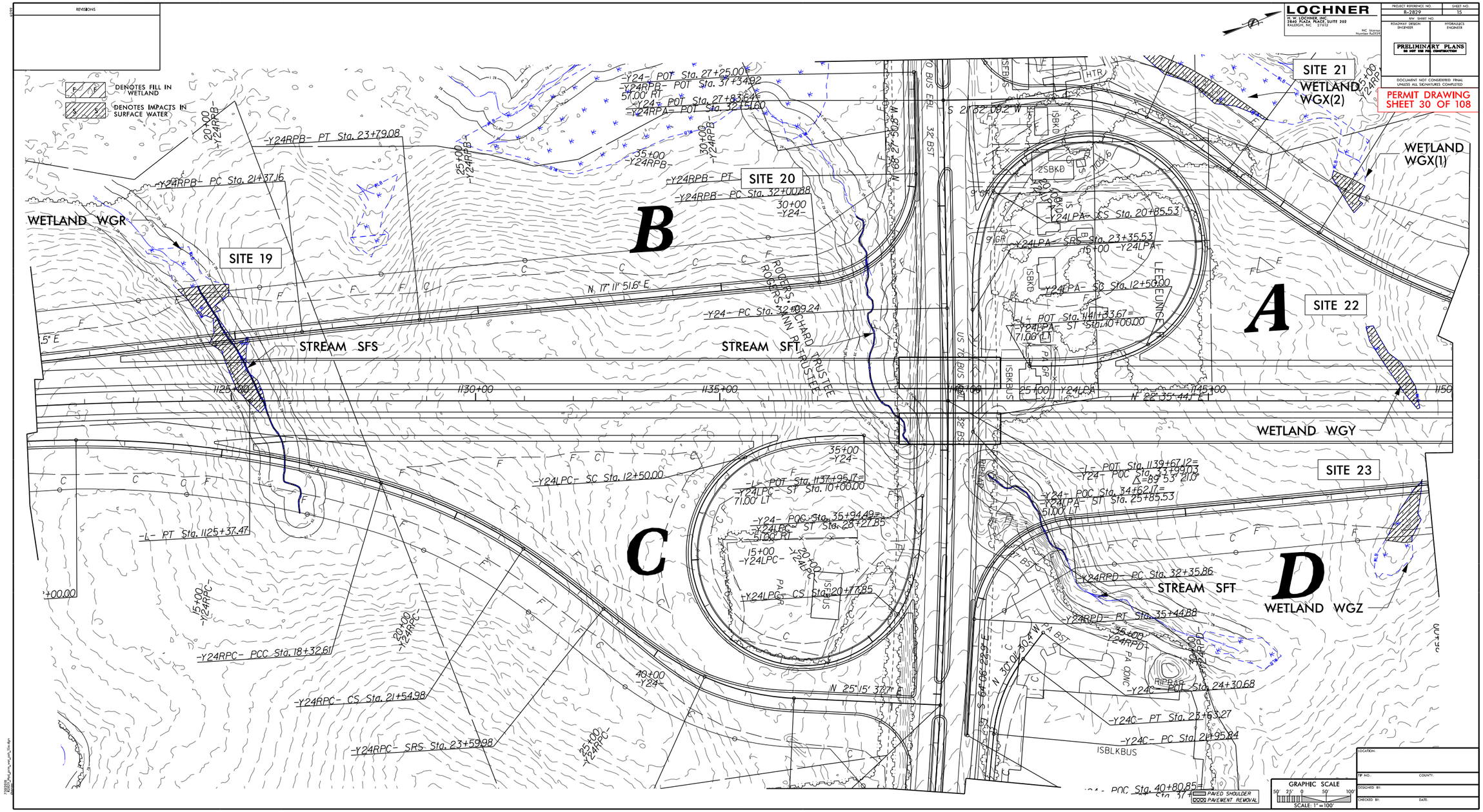
CROSS SECTION
SITE 16, WETLAND WGR
SITE 17, WETLAND WGS
STATION 1113+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_14b_xpl.dgn
jharvey



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number R-0155
PROJECT REFERENCE NO.
R-2829
SHEET NO.
15
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 29 OF 108
REVISIONS
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SITE 19
SITE 20
SITE 21
SITE 22
SITE 23
WETLAND WGR
WETLAND WGX(1)
WETLAND WGX(2)
WETLAND WGY
WETLAND WGZ
STREAM SFS
STREAM SFT
STREAM SFT
A
B
C
D
-Y24RPB- PT Sta. 23+79.08
-Y24RPB- PC Sta. 21+37.16
-Y24RPB- PC Sta. 32+00.88
-Y24- POT Sta. 27+25.00
-Y24RPB- POT Sta. 37+34.92
-Y24- POT Sta. 27+83.64
-Y24RPA- POT Sta. 32+51.60
-Y24- PC Sta. 32+09.24
-Y24LPA- CS Sta. 20+85.53
-Y24LPA- SRS Sta. 23+35.53
-Y24LPA- SC Sta. 12+50.00
-L- POT Sta. 1141+33.67=
-Y24LPA- ST Sta. 10+00.00
-Y24LPC- SC Sta. 12+50.00
-L- POT Sta. 1137+95.17=
-Y24LPC- ST Sta. 10+00.00
-Y24- POC Sta. 35+94.49=
-Y24LPC- ST Sta. 23+27.85
-Y24LPC- CS Sta. 20+77.85
-L- PT Sta. 1125+37.47
-Y24RPC- PCC Sta. 18+32.61
-Y24RPC- CS Sta. 21+54.98
-Y24RPC- SRS Sta. 23+59.98
-L- POT Sta. 1139+67.12=
-Y24- POC Sta. 33+99.03
-Y24- POC Sta. 34+62.17=
-Y24LPA- ST Sta. 25+85.53
-Y24RPD- PC Sta. 32+35.86
-Y24RPD- PT Sta. 35+44.88
-Y24C- POT Sta. 24+30.68
-Y24C- PT Sta. 23+63.27
-Y24C- PC Sta. 21+95.84
-Y24- POC Sta. 40+80.85=
N 17° 11' 51.6" E
N 22° 35' 44.1" E
N 25° 15' 37.7" E
N 68° 27' 50.8" W
S 21° 32' 09.2" W
S 64° 06' 22.9" E
N 30° 01' 30.4" W
ROGERS, RICHARD TRUSTEE
ROGERS, ANN R. TRUSTEE
LEE, EUNICE R.
US 70 BUS EBL
32' BST
PA BST
PA CONC
RIPRAP
ISBKBUS
ISBKD
2SBKD
HTR
1125+00
1130+00
1135+00
1140+00
1145+00
1150
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



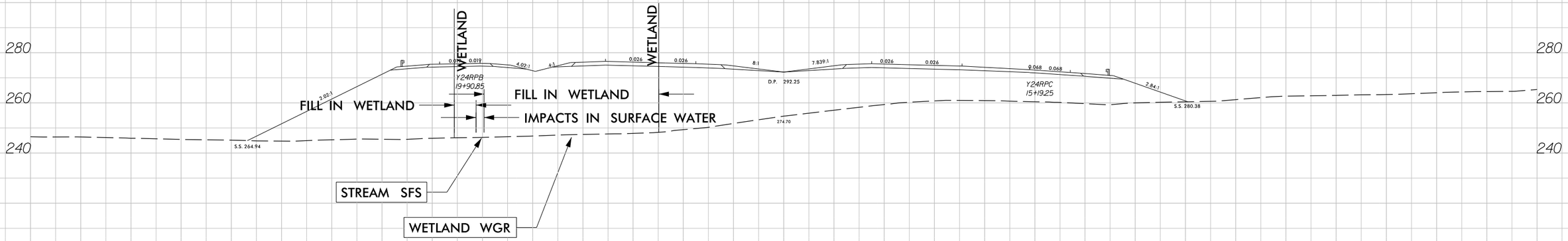
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number A-0155
PROJECT REFERENCE NO.
R-2829
SHEET NO.
15
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 30 OF 108
REVISIONS
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SITE 19
SITE 20
SITE 21
SITE 22
SITE 23
WETLAND WGR
WETLAND WGX(1)
WETLAND WGX(2)
WETLAND WGY
WETLAND WGZ
STREAM SFS
STREAM SFT
STREAM SFT
A
B
C
D
-Y24- POT Sta. 27+25.00=
-Y24RPB- POT Sta. 37+34.92
57.00' RT
-Y24- POT Sta. 27+83.64=
-Y24RPA- POT Sta. 32+51.60
-Y24RPB- PT Sta. 23+79.08
-Y24RPB- PC Sta. 21+37.16
-Y24RPB- PT
-Y24RPB- PC Sta. 32+00.88
-Y24- PC Sta. 32+09.24
-Y24LPA- CS Sta. 20+85.53
-Y24LPA- SRS Sta. 23+35.53
-Y24LPA- SC Sta. 12+50.00
-L- POT Sta. 1141+33.67=
-Y24LPA- ST Sta. 10+00.00
71.00' LT
-Y24LPC- SC Sta. 12+50.00
-L- POT Sta. 1137+95.17=
-Y24LPC- ST Sta. 10+00.00
71.00' LT
-Y24- POC Sta. 35+94.49=
-Y24LPC- ST Sta. 23+27.85
51.00' RT
-Y24LPC- CS Sta. 20+77.85
-L- PT Sta. 1125+37.47
-Y24RPC- PCC Sta. 18+32.61
-Y24RPC- CS Sta. 21+54.98
-Y24RPC- SRS Sta. 23+59.98
-L- POT Sta. 1139+67.12=
-Y24- POC Sta. 33+99.03
Δ=89° 53' 21.0"
-Y24- POC Sta. 34+62.17=
-Y24LPA- ST Sta. 25+85.53
51.00' LT
-Y24RPD- PC Sta. 32+35.86
-Y24RPD- PT Sta. 35+44.88
-Y24C- POT Sta. 24+30.68
-Y24C- PT Sta. 23+63.27
-Y24C- PC Sta. 21+95.84
-Y24- POC Sta. 40+80.85=
N 17° 11' 51.6" E
N 22° 35' 44.1" E
N 25° 15' 37.7" E
N 68° 27' 50.8" W
S 21° 32' 09.2" W
S 64° 06' 22.9" E
N 30° 01' 30.4" W
ROGERS, RICHARD TRUSTEE
ROGERS, ANN R. TRUSTEE
LEE EUNICE
ISBKBUS
ISBLKBUS
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 31 OF 108

CROSS SECTION
SITE 19, WETLAND WGR
STATION 1125+00 –L–



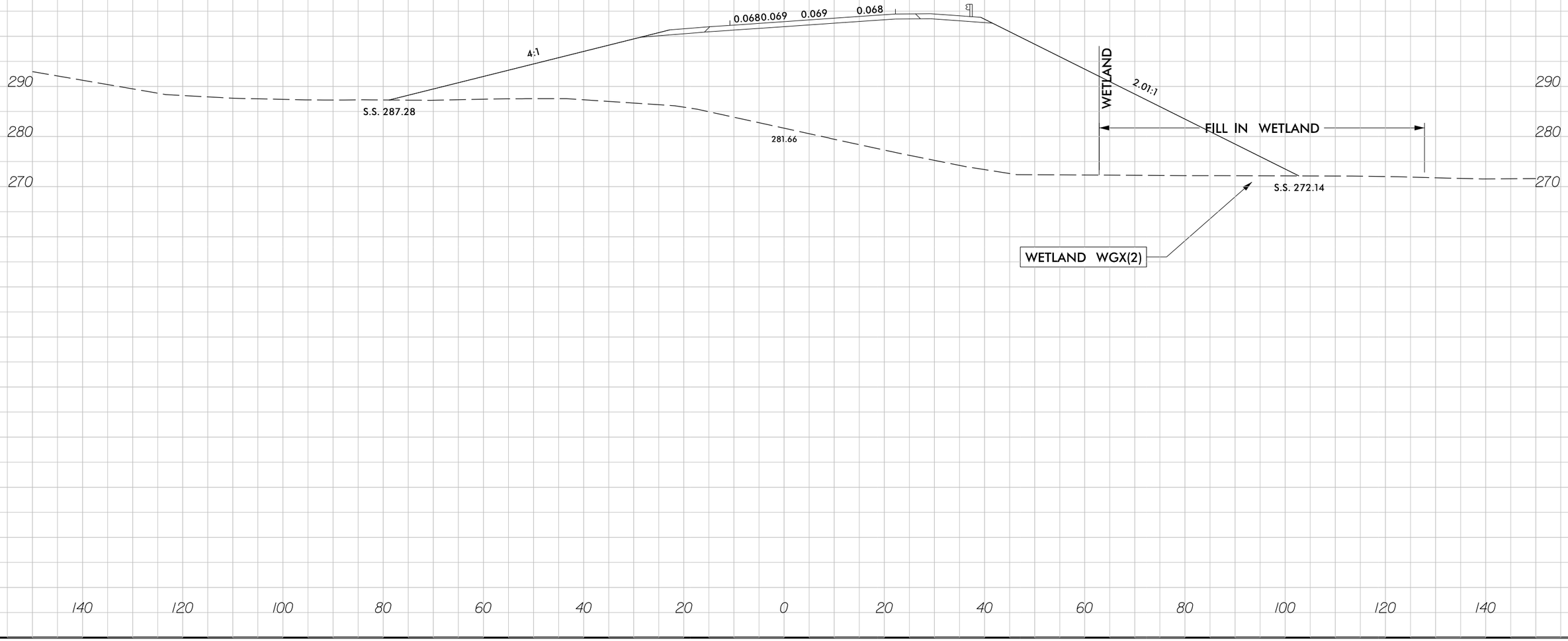
7/30/2018
R2829_Hyd_prm_wet_psh_15b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 32 OF 108

CROSS SECTION
SITE 21, WETLAND WGX(2)
STATION 28+00 –Y24RPA–



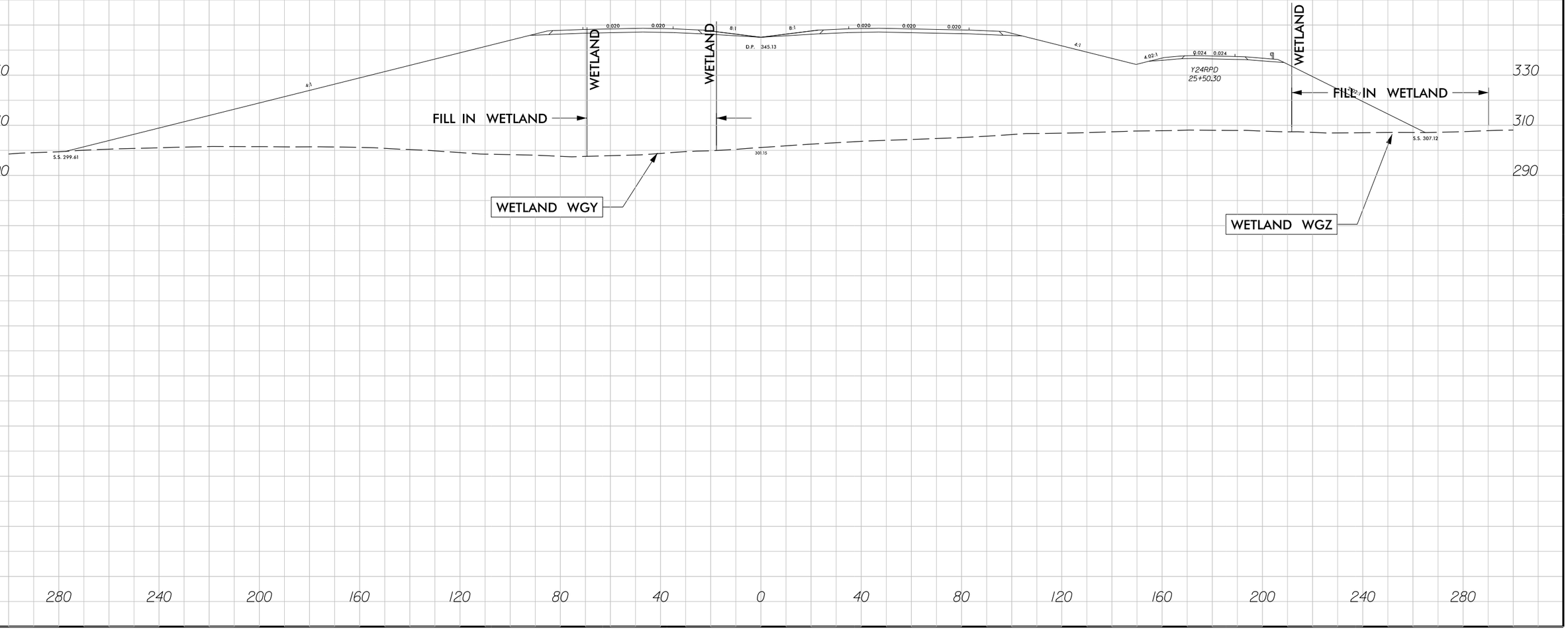
7/30/2018
R2829_Hyd_prm_wet_psh_15c_xpl.dgn
jharvey

6/23/16

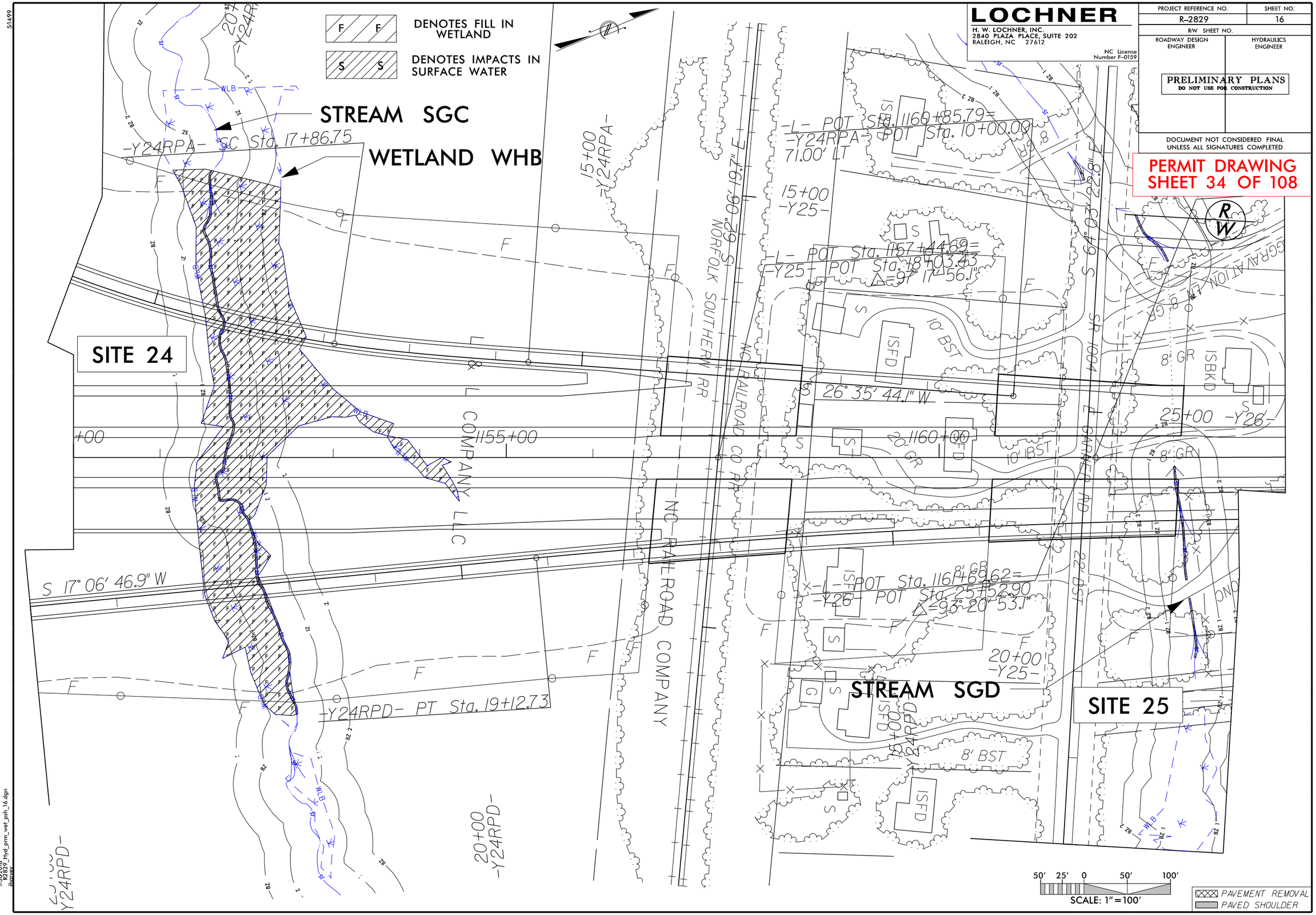
0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 33 OF 108

CROSS SECTION
SITE 24, WETLAND WGY
SITE 23, WETLAND WGZ
STATION 1149+00 –L–



7/30/2018
R2829_hyd_prm_wet_psh_15d_xpl.dgn
jharvey



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

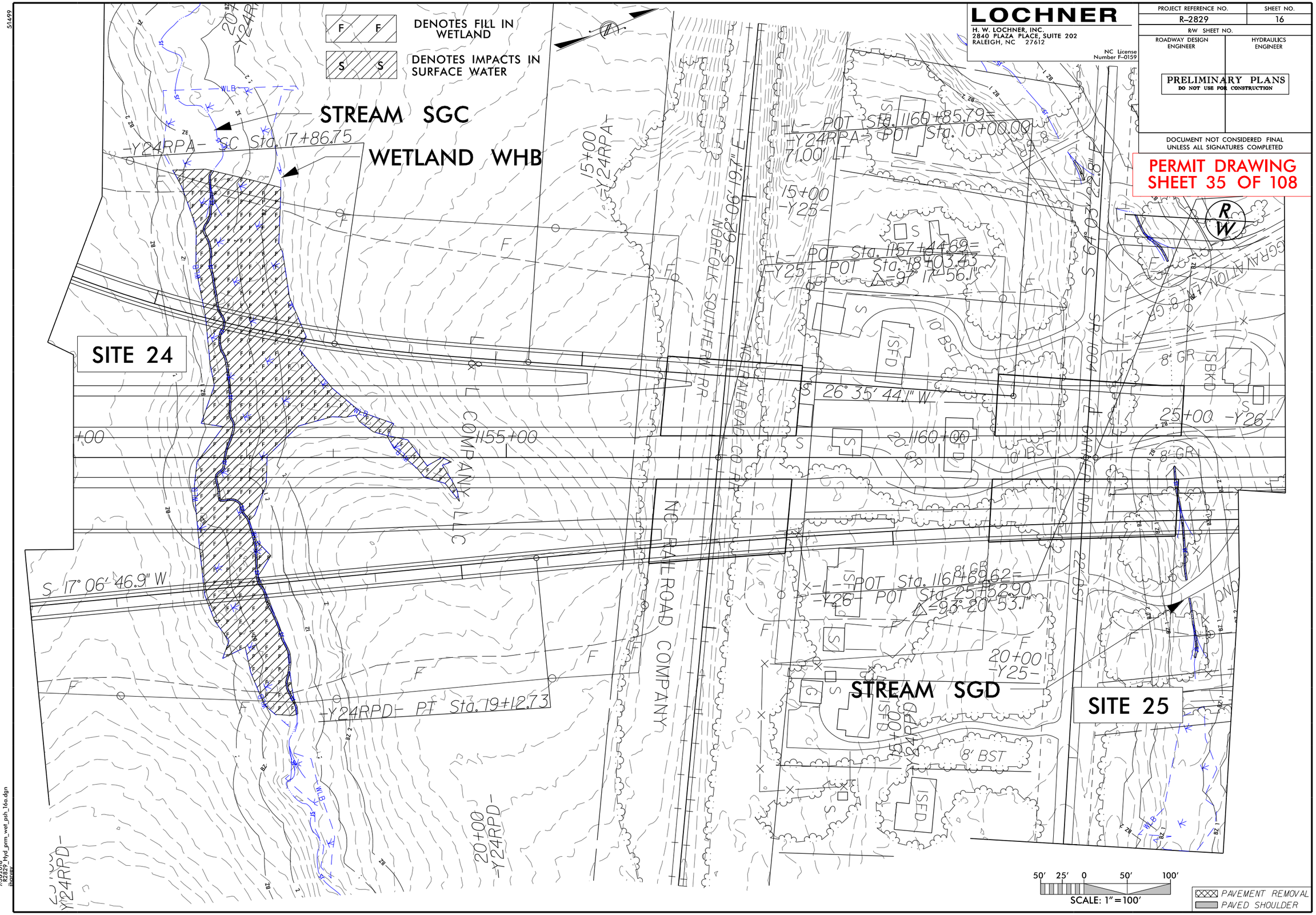
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 34 OF 108

SCALE: 1"=100'

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_16.dgn
jbarvey



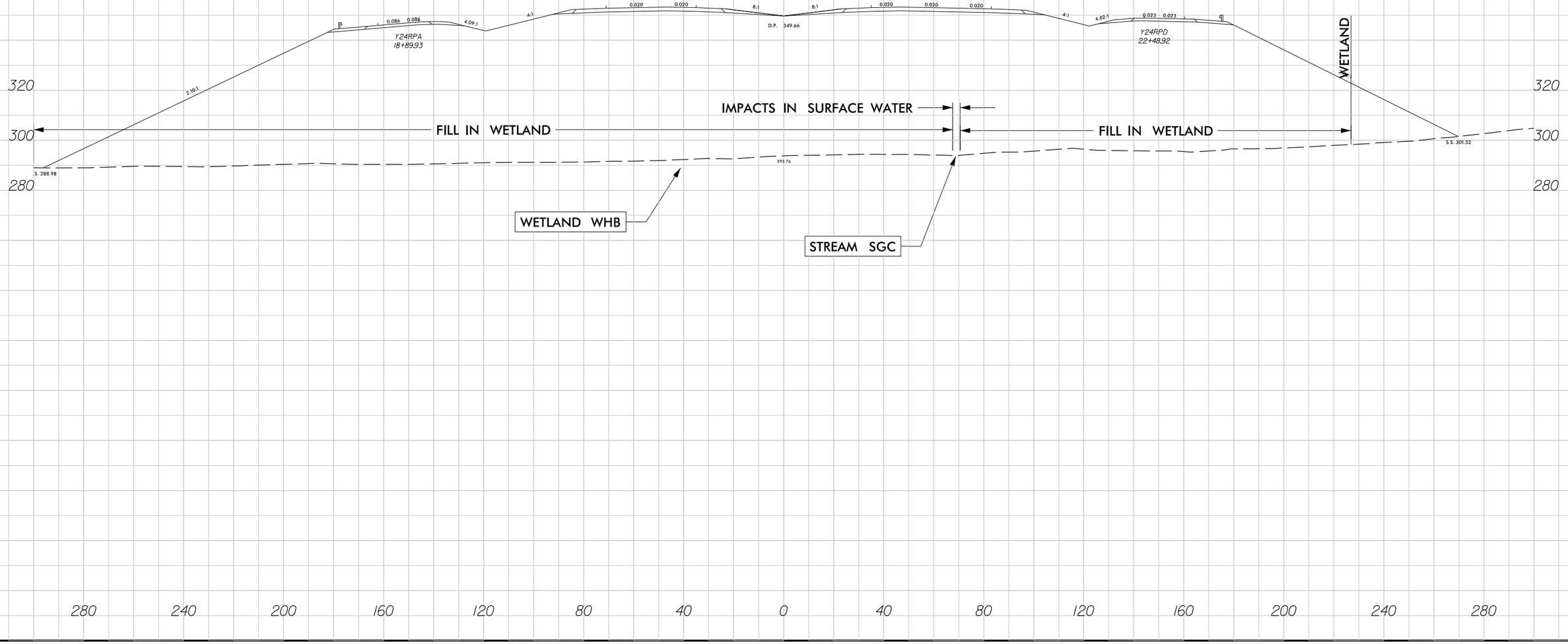
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
16
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 35 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
STREAM SGC
WETLAND WHB
SITE 24
STREAM SGD
SITE 25
-Y24RPA- SC Sta. 17+86.75
-Y24RPD- PT Sta. 19+12.73
-L- POT Sta. 1160+85.79=
-Y24RPA- POT Sta. 10+00.00
71.00' LT
-L- POT Sta. 1157+44.69=
-Y25- POT Sta. 18+03.43
Δ=97° 17' 56.1"
-L- POT Sta. 1161+69.62=
-Y26- POT Sta. 25+52.90
Δ=93° 20' 53.1"
S 17° 06' 46.9" W
S 62° 06' 19.7" E
S 64° 03' 22.8" E
26° 35' 44.1" W
NORFOLK SOUTHERN RR
NC RAILROAD CO RR
NC RAILROAD COMPANY
COMPANY LLC
SR 1004
GARNER RD
GRAVATION LN
15+00 -Y24RPA-
15+00 -Y25-
20+00 -Y25-
20+00 -Y24RPD-
25+00 -Y26-
1155+00
1160+00
10' BST
8' BST
8' GR
ISFD
ISBKD
50' 25' 0 50' 100'
SCALE: 1"=100'
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 36 OF 108

CROSS SECTION
SITE 24, WETLAND WHB
STATION 1152 + 00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_16b_xpl.dgn
jhorvey

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'

SCALE: 1" = 100'

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 37 OF 108

STREAM SGF

WETLAND WHD(2)

SITE 27

SITE 26

WETLAND WHD

STREAM SGE

STREAM SGG

SITE 28

Sta. 1164+80.68

1165+00

1170+00

1175+00

DAM

POOL

ISFD

8' GR

CAN

MCINTYRE, JOHN BAPTIST

WATTS, LAURA L

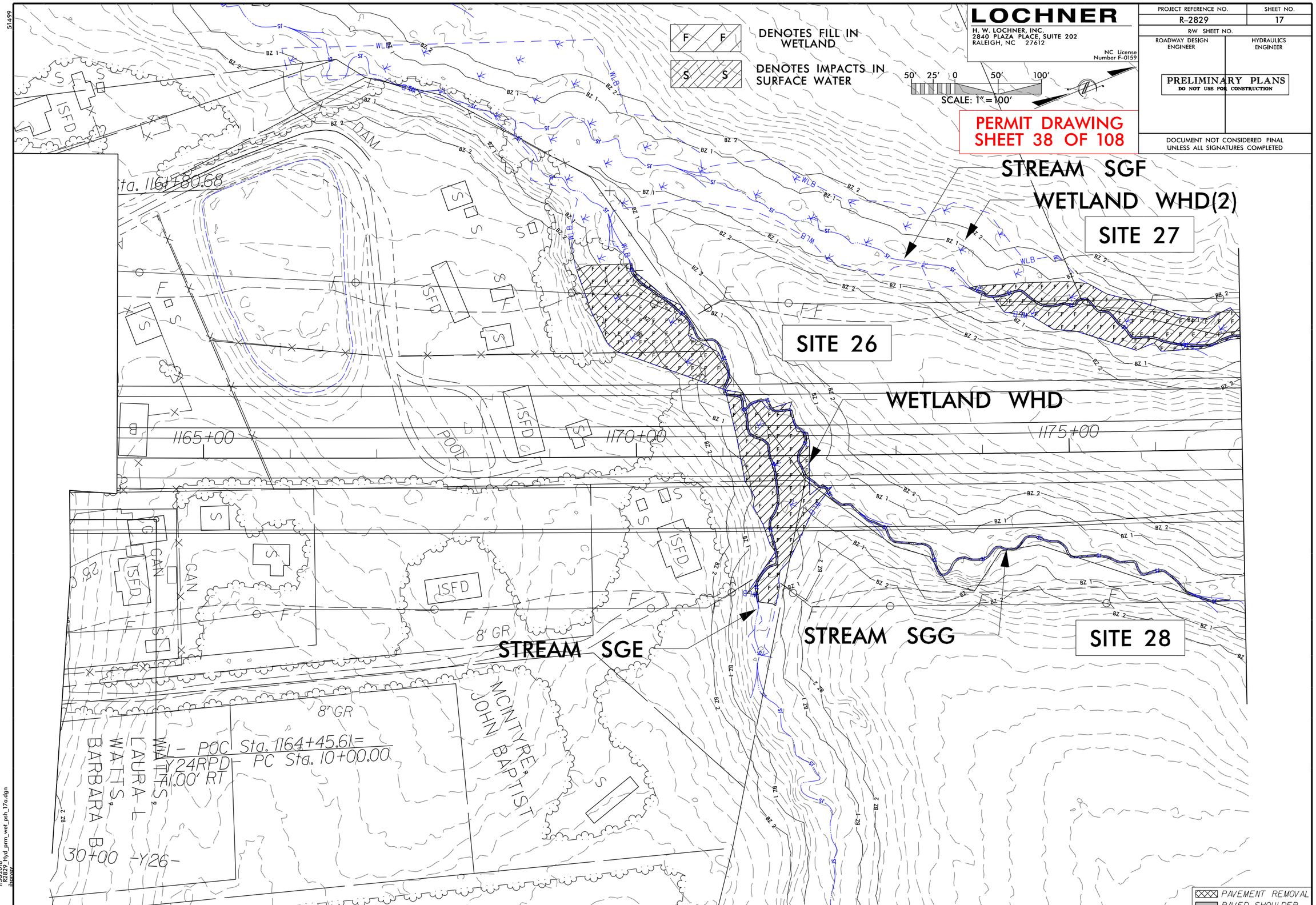
BARBARA B

WL - POC Sta. 1164+45.61= -Y24RPD- PC Sta. 10+00.00 -41.00' RT

30+00 -Y26-

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_hyd_prm_wet_psh_17.dgn
lhoover



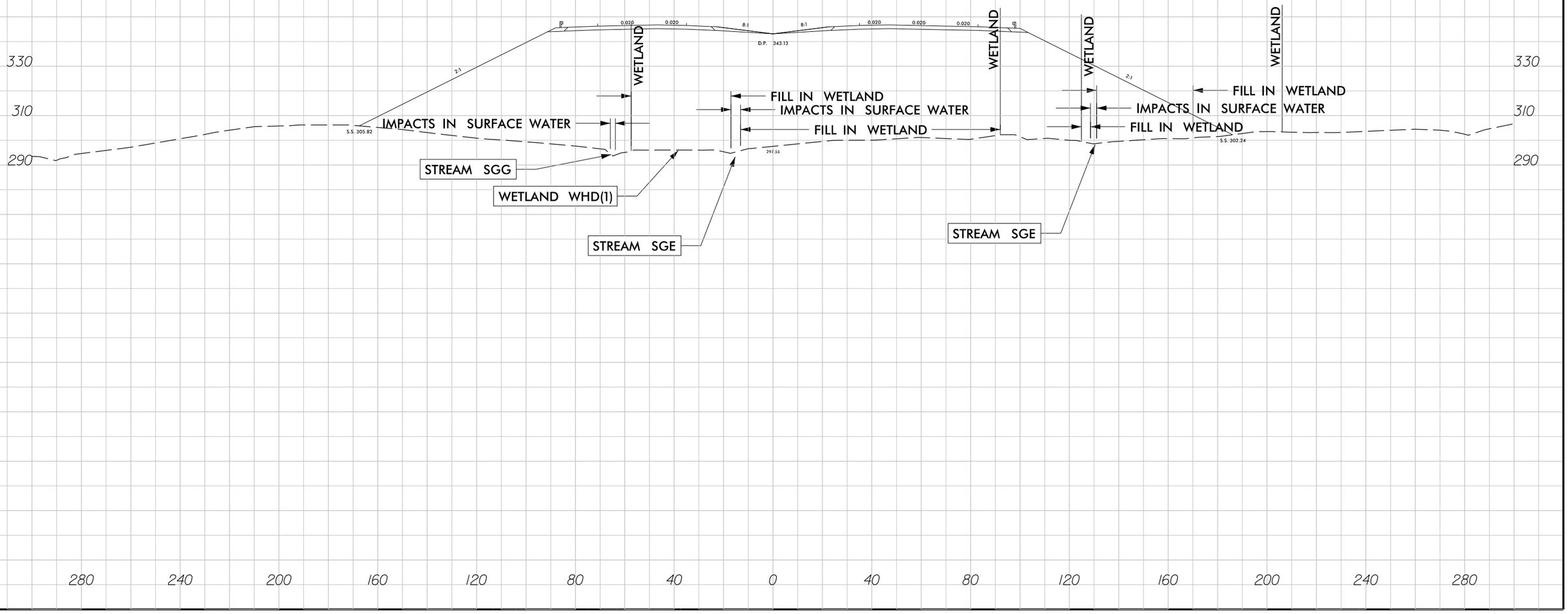
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
17
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SCALE: 1" = 100'
PERMIT DRAWING
SHEET 38 OF 108
STREAM SGF
WETLAND WHD(2)
SITE 27
SITE 26
WETLAND WHD
STREAM SGE
STREAM SGG
SITE 28
Sta. 1161+80.68
1165+00
1170+00
1175+00
DAM
POOL
ISFD
CAN
8' GR
MCINTYRE, JOHN BAPTIST
WATTS, LAURA L
WATTS, BARBARA B
L - POC Sta. 1164+45.61=
Y24RPD - PC Sta. 10+00.00
71.00' RT
30+00 -Y26-
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 39 OF 108

CROSS SECTION
SITE 26, WETLAND WHD(1)
STATION 1171+00 –L–



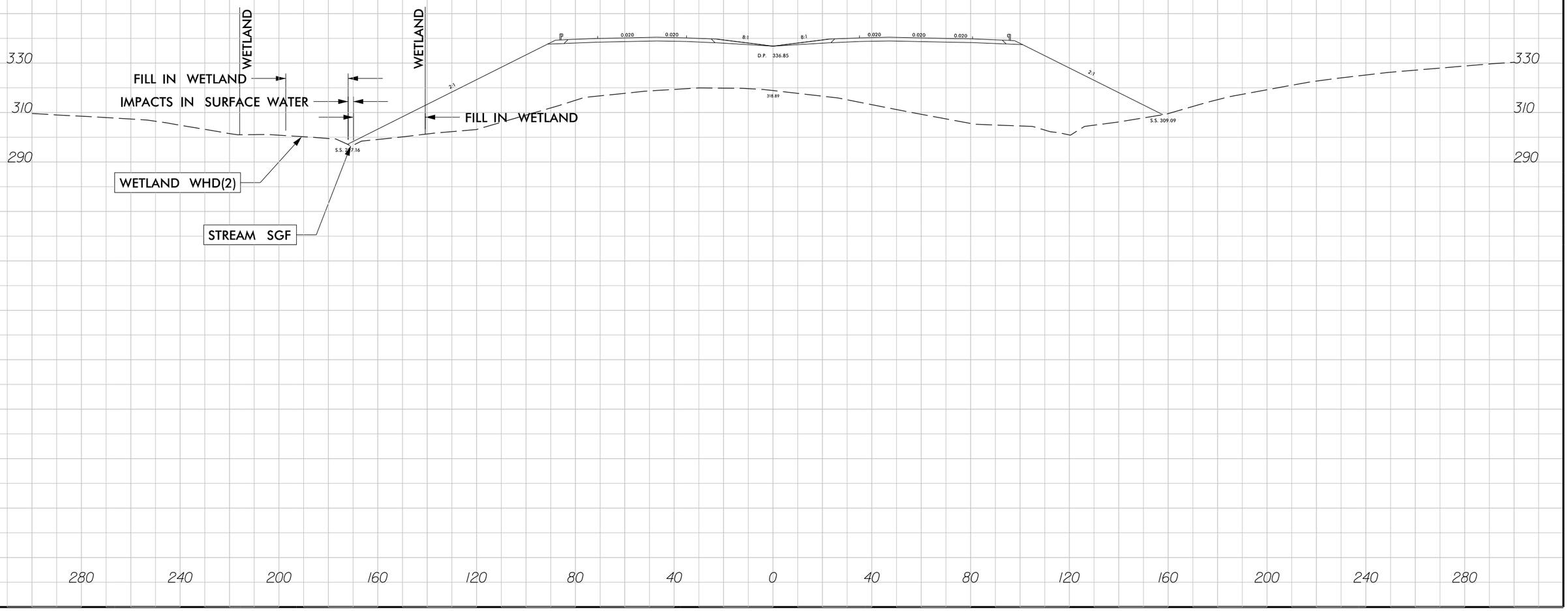
7/30/2018
R2829_Hyd_prm_wet_psh_17b_xpl.dgn
jharvey

6/23/16

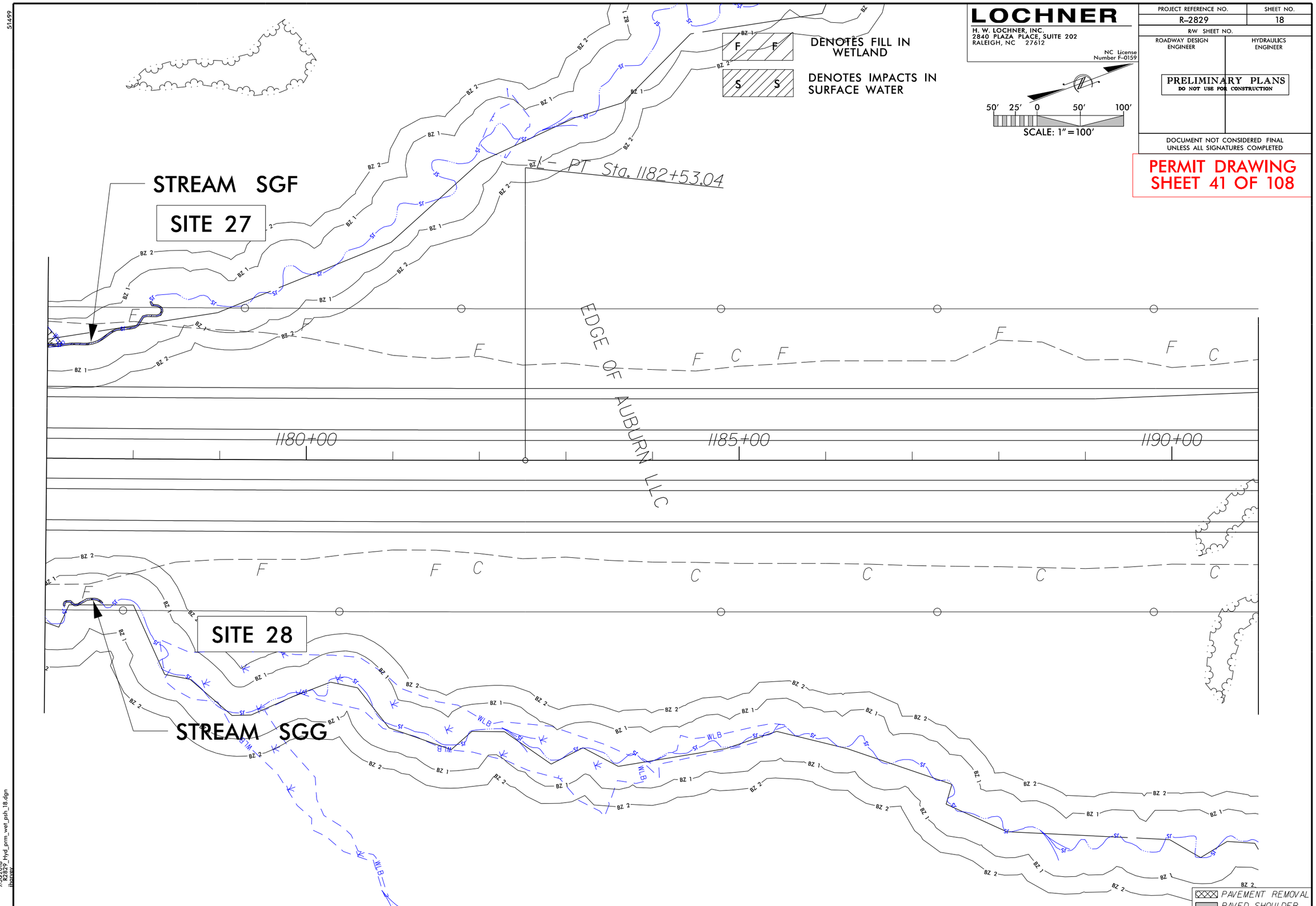
PROJ. REFERENCE NO.	SHEET NO.
R-2829	

PERMIT DRAWING
SHEET 40 OF 108

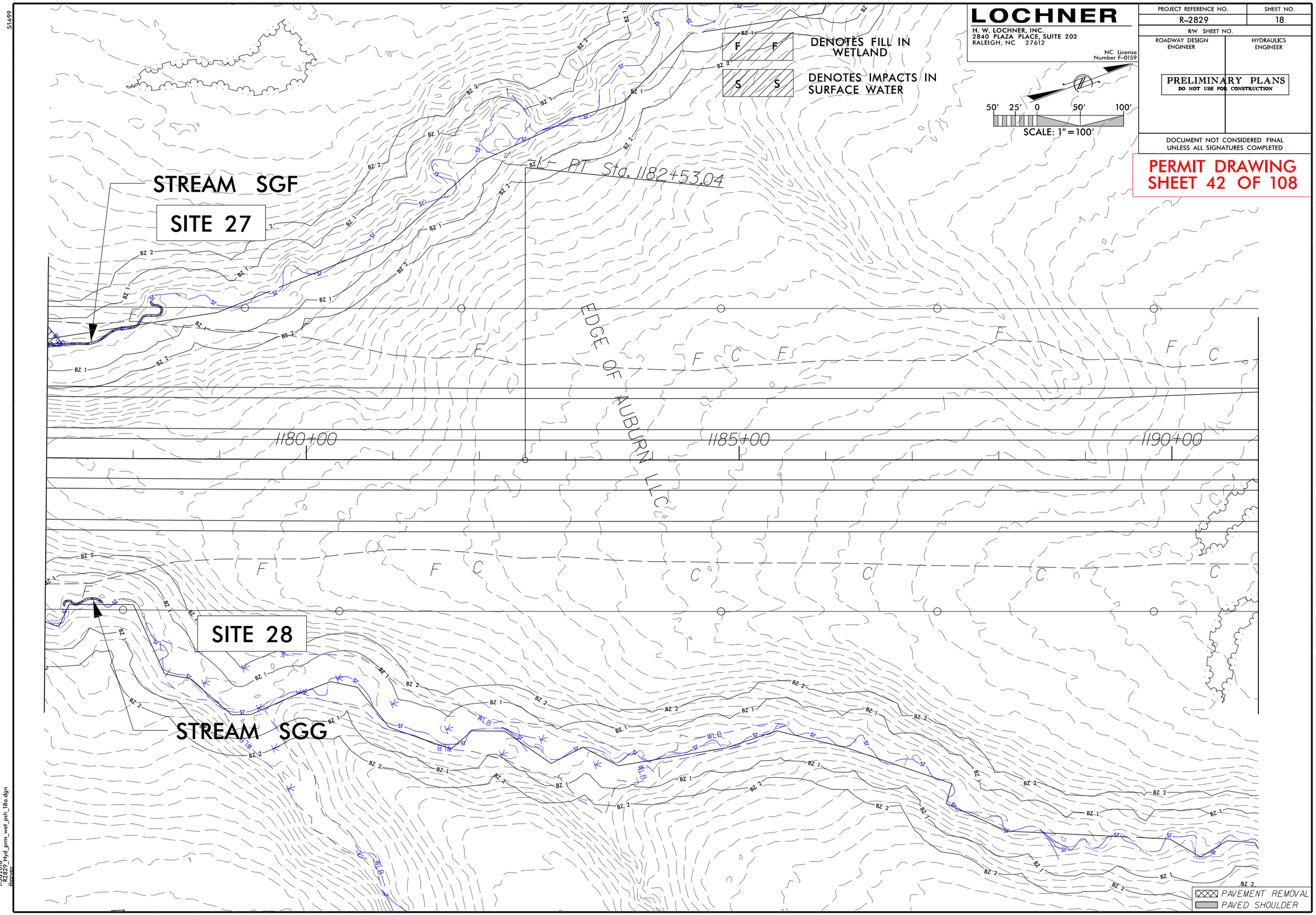
CROSS SECTION
SITE 27, WETLAND WHD(2)
STATION 1175+00 –L–



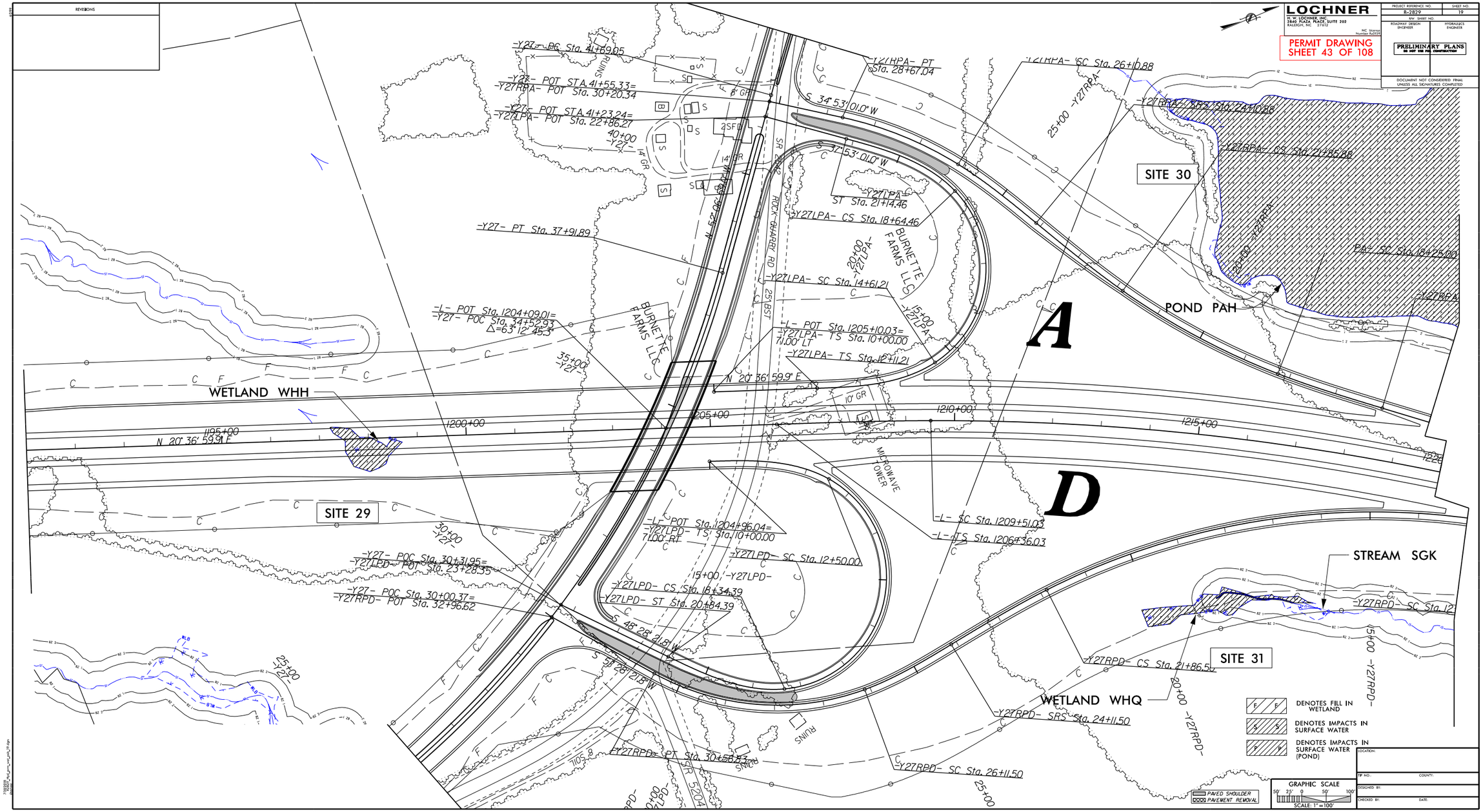
7/30/2018
R2829_hyd_prm_wet_psh_17c_xpl.dgn
jhorvej



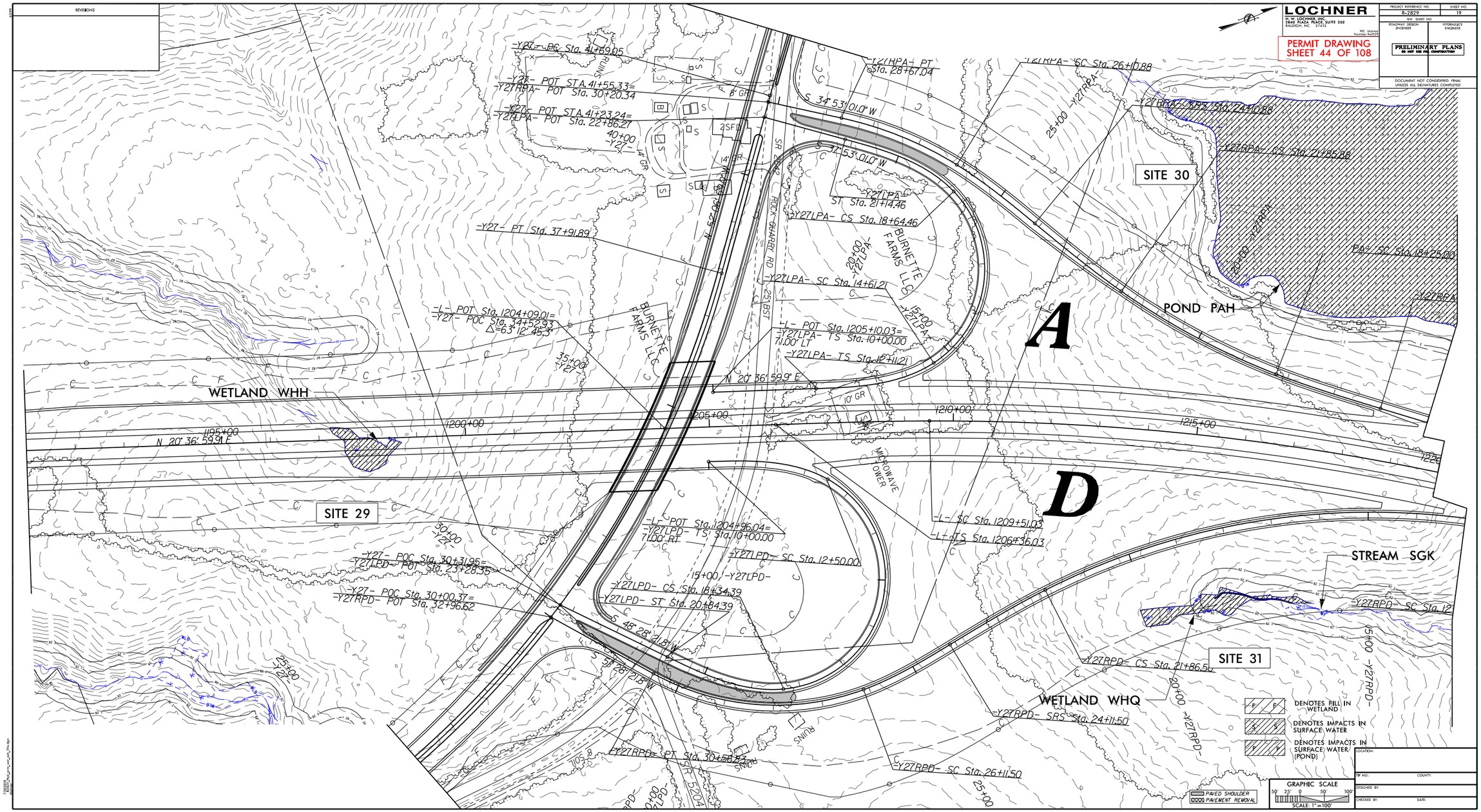
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
18
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 41 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
50' 25' 0 50' 100'
SCALE: 1" = 100'
STREAM SGF
SITE 27
PT Sta. 1182+53.04
EDGE OF AUBURN LLC
1180+00
1185+00
1190+00
SITE 28
STREAM SGG
PAVEMENT REMOVAL
PAVED SHOULDER



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
18
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 42 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SCALE: 1" = 100'
STREAM SGF
SITE 27
PT Sta. 1182+53.04
EDGE OF AUBURN LLC
1180+00
1185+00
1190+00
SITE 28
STREAM SGG
PAVEMENT REMOVAL
PAVED SHOULDER



LOCHNER
PERMIT DRAWING
SHEET 43 OF 108
PRELIMINARY PLANS
SITE 30
POND PAH
SITE 29
WETLAND WHH
SITE 31
WETLAND WHQ
STREAM SGK
A
D
BURNETTE FARMS LLC
ROCK QUARRY RD
MICROWAVE TOWER
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'



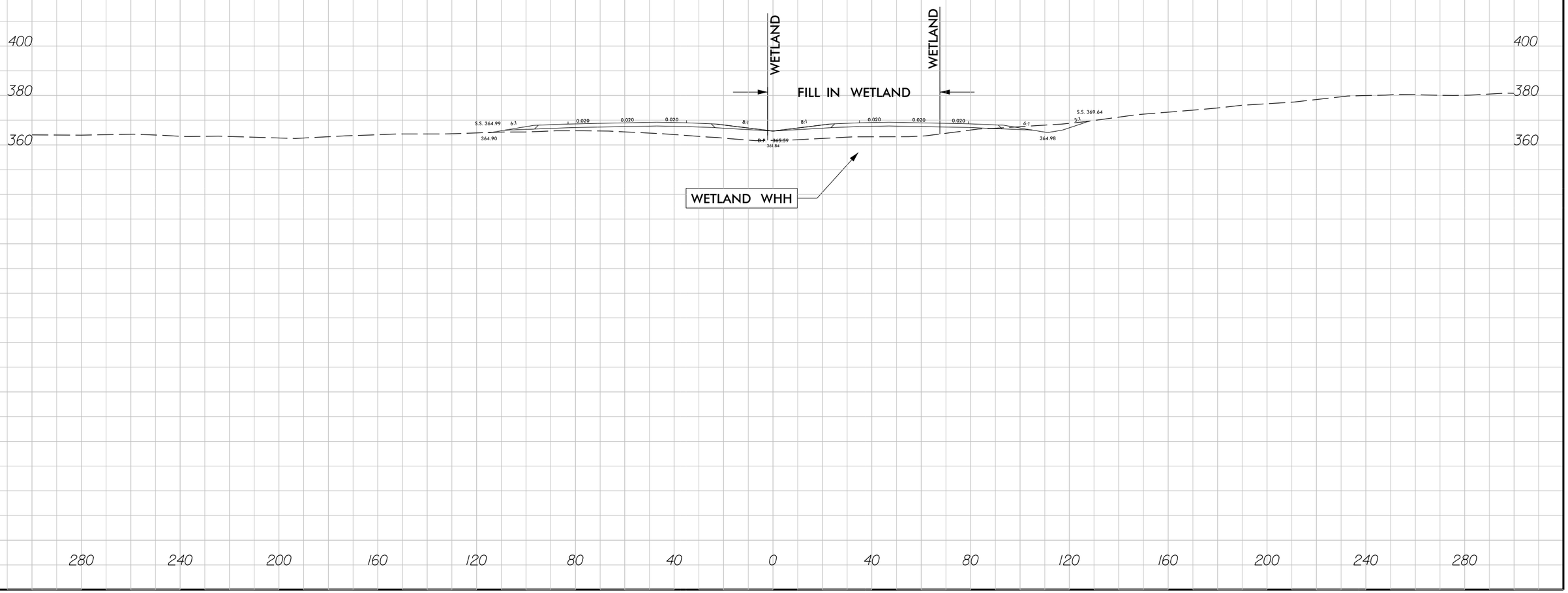
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number Ru0559
PERMIT DRAWING
SHEET 44 OF 108
PROJECT REFERENCE NO.
R-2829
SHEET NO.
19
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
REVISIONS
SITE 30
SITE 29
SITE 31
POND PAH
STREAM SGK
WETLAND WHH
WETLAND WHQ
A
D
BURNETTE FARMS LLC
ROCK QUARRY RD
MICROWAVE TOWER
-Y27- PC Sta. 41+69.05
-Y27- POT STA. 41+55.33=
-Y27RPA- POT Sta. 30+20.34
-Y27- POT STA. 41+23.24=
-Y27LPA- POT Sta. 22+86.27
-Y27- PT Sta. 37+91.89
-L- POT Sta. 1204+09.01=
-Y27- POC Sta. 34+52.93
Δ=63° 12' 45.3"
-Y27RPA- PT Sta. 28+67.04
-Y27RPA- SC Sta. 26+10.88
-Y27RPA- SRS Sta. 24+10.88
-Y27RPA- CS Sta. 21+85.88
-Y27RPA- SC Sta. 18+25.00
-Y27LPA- ST Sta. 21+14.46
-Y27LPA- CS Sta. 18+64.46
-Y27LPA- SC Sta. 14+61.21
-L- POT Sta. 1205+10.03=
-Y27LPA- TS Sta. 10+00.00
71.00' LT
-Y27LPA- TS Sta. 12+11.21
-L- POT Sta. 1204+96.04=
-Y27LPD- TS Sta. 10+00.00
71.00' RT
-Y27LPD- SC Sta. 12+50.00
-Y27LPD- CS Sta. 18+34.39
-Y27LPD- ST Sta. 20+84.39
-L- SC Sta. 1209+51.03
-L- TS Sta. 1206+36.03
-Y27- POC Sta. 30+31.95=
-Y27LPD- POT Sta. 23+28.35
-Y27- POC Sta. 30+00.37=
-Y27RPD- POT Sta. 32+96.62
-Y27RPD- CS Sta. 21+86.50
-Y27RPD- SRS Sta. 24+11.50
-Y27RPD- SC Sta. 26+11.50
-Y27RPD- PT Sta. 30+56.83
N 20° 36' 59.9" E
S 34° 53' 01.0" W
S 37° 53' 01.0" W
S 48° 28' 21.8" W
S 51° 28' 21.8" W
1195+00
1200+00
1205+00
1210+00
1215+00
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 45 OF 108

CROSS SECTION
SITE 29, WETLAND WHH
STATION 1198+00 –L–



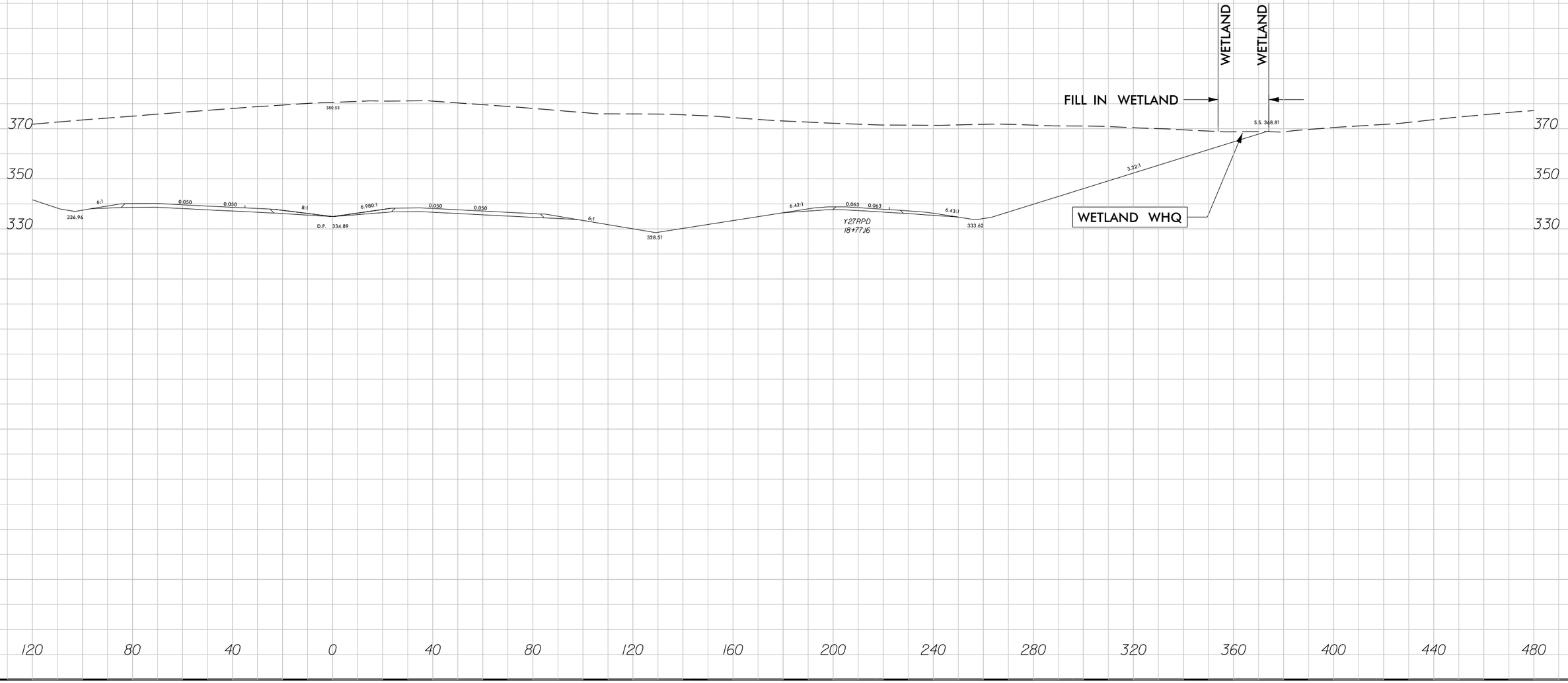
7/30/2018
R2829_hyd_prm_wet_psh_19b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 46 OF 108

CROSS SECTION
SITE 31, WETLAND WHQ
STATION 1215+00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_19c_xpl.dgn
jharvey

51499

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	21
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 47 OF 108

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'
SCALE: 1" = 100'

SITE 32

WETLAND WHP

STREAM SGK

-L- TS Sta. 1243+41.83

-L- CS Sta. 1236+90.81

-L- ST Sta. 1240+05.81

N 55° 16' 30.9" E

1235+00 1240+00 1245+00

RUINS

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_hyd_prm_wet_psh_21.dgn
jhunter

51499

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	21
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 48 OF 108

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'
SCALE: 1" = 100'

SITE 32

WETLAND WHP

STREAM SGK

-L- CS Sta. 1243+41.83

-L- CS Sta. 1236+90.81

-L- ST Sta. 1240+05.81

N 55° 16' 30.9" E

1235+00

1240+00

1245+00

PAVEMENT REMOVAL
PAVED SHOULDER

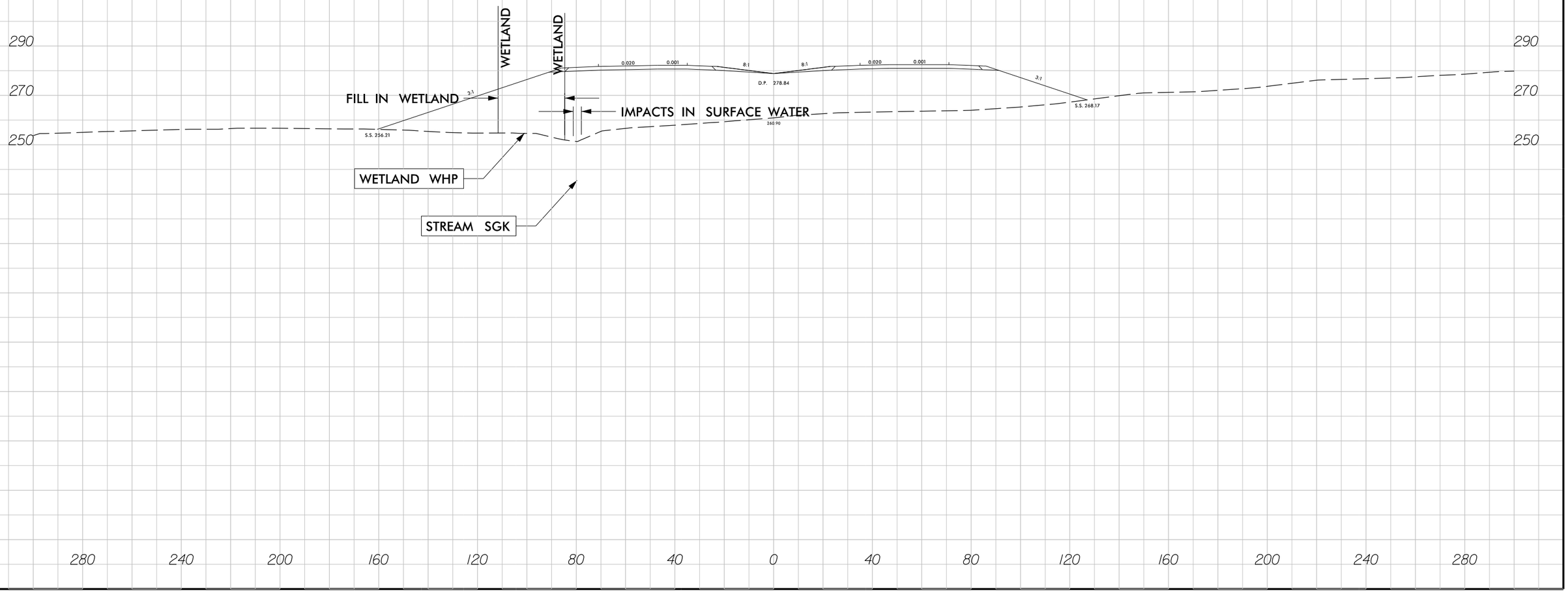
7/30/2018
R2829_hyd_prm_wet_psh_21a.dgn
jhorvey

6/23/16

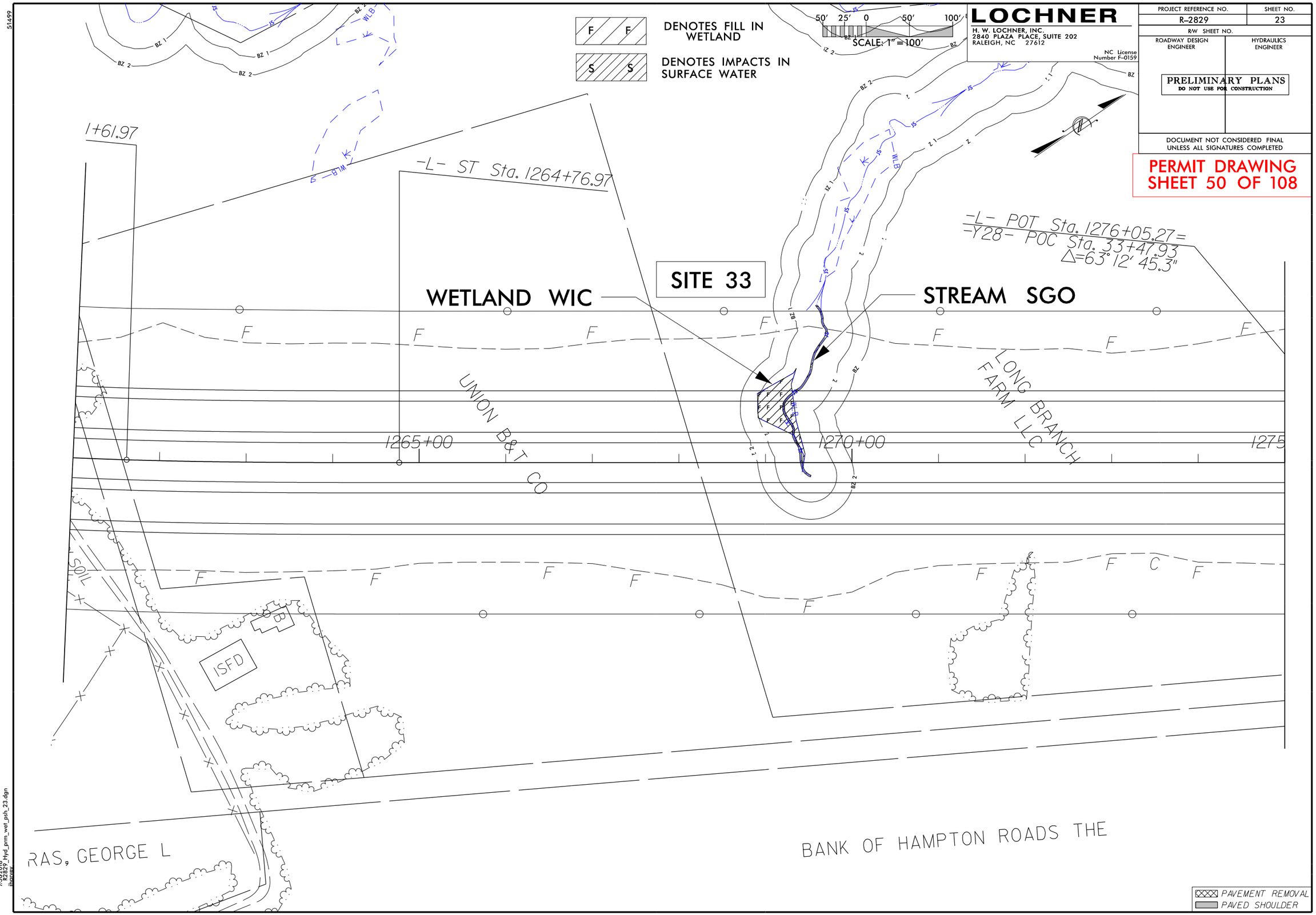
0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 49 OF 108

CROSS SECTION
SITE 23, WETLAND WHP
STATION 1243+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_21b_xpl.dgn
jharvey



DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SCALE: 1" = 100'
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
23
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 50 OF 108
1+61.97
-L- ST Sta. 1264+76.97
-L- POT Sta. 1276+05.27=
-Y28- POC Sta. 33+47.93
Δ=63° 12' 45.3"
SITE 33
WETLAND WIC
STREAM SGO
UNION B&T CO
LONG BRANCH FARM LLC
1265+00
1270+00
1275
SOIL
ISFD
RAS, GEORGE L
BANK OF HAMPTON ROADS THE
PAVEMENT REMOVAL
PAVED SHOULDER

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'
SCALE: 1" = 100'

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	23
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 51 OF 108

1+61.97

-L- ST Sta. 1264+76.97

-L- POT Sta. 1276+05.27=
-Y28- POC Sta. 33+47.93
Δ=63° 12' 45.3"

SITE 33

WETLAND WIC

STREAM SGO

UNION B&T CO

LONG BRANCH FARM LLC

1265+00

1270+00

1275

ISFD

RAS, GEORGE L

BANK OF HAMPTON ROADS THE

PAVEMENT REMOVAL
PAVED SHOULDER

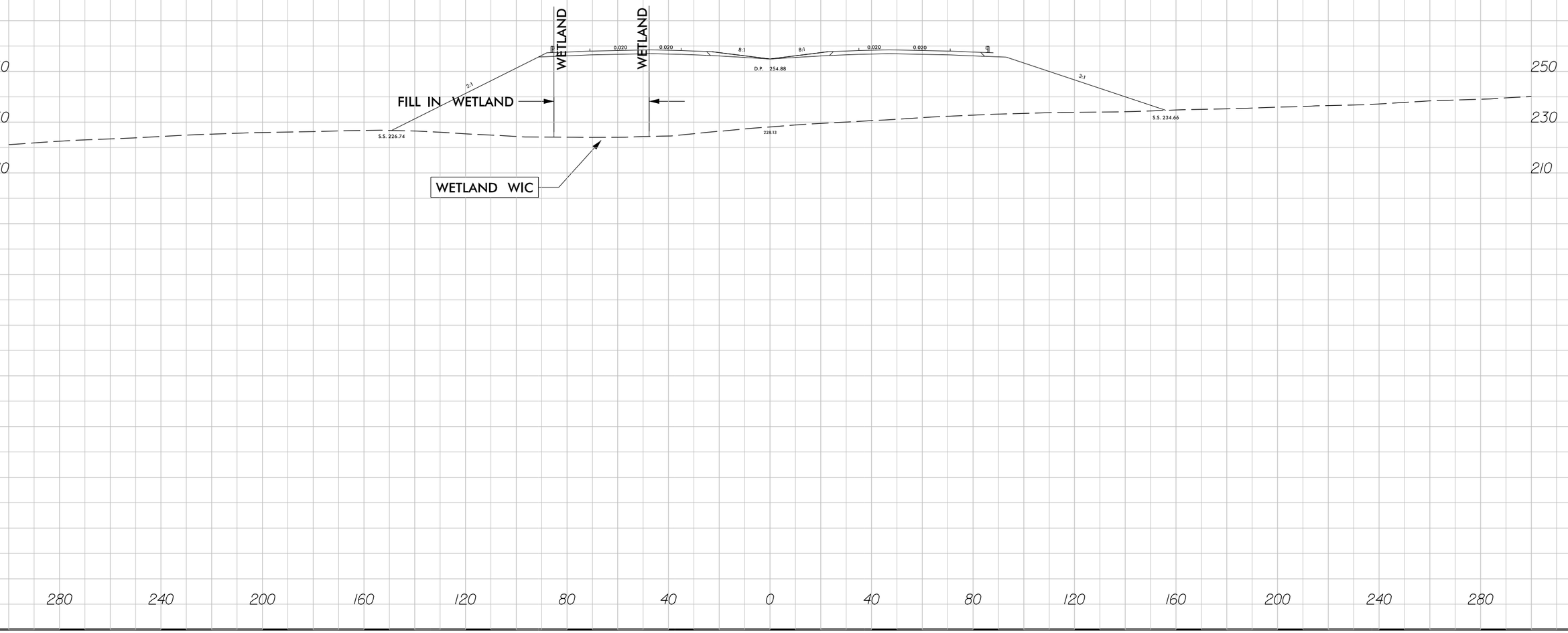
730208
R2829_hyd_prm_wet_psh_23a.dgn
lhoover

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 52 OF 108

CROSS SECTION
SITE 33, WETLAND WIC
STATION 1269+00 –L–



7/30/2018
R2829_hyd_prm_wet_psh_23b_xpl.dgn
jhorvej

51499

50' 25' 0 50' 100'

SCALE: 1" = 100'

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License
Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	24
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 53 OF 108

1-7'X10' OVAL CMP

-Y28- PC Sta. 28+81.75

30+00 -Y28-

+00

1280+00

N 34° 37' 28.0" E

1285+00

F 35+00 -Y28-

LONG BRANCH FARM LLC

WETLAND WIH

SITE 34

STREAM SGJ

SITE 35

SR 2552

-Y28- PCC Sta. 37+98.76

40+00 -Y28-

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

PAVEMENT REMOVAL

PAVED SHOULDER

7/30/2018
R2829_hyd_prm_wet_psh_24.dgn
jhorvez

51499

50′ 25′ 0 50′ 100′

SCALE: 1″ = 100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License
Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	24
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 54 OF 108

-Y28- PC Sta. 28+81.75

1-7'X3' OVAL CMP

30+00 -Y28-

1280+00

W 34° 37' 28.0" E

1285+00

LONG BRANCH FARM LLC

35+00 -Y28-

WETLAND WIH

SITE 34

STREAM SGJ

SITE 35

SR 2552

-Y28- PCC Sta. 37+98.76

40+00 -Y28-

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

PAVEMENT REMOVAL
PAVED SHOULDER

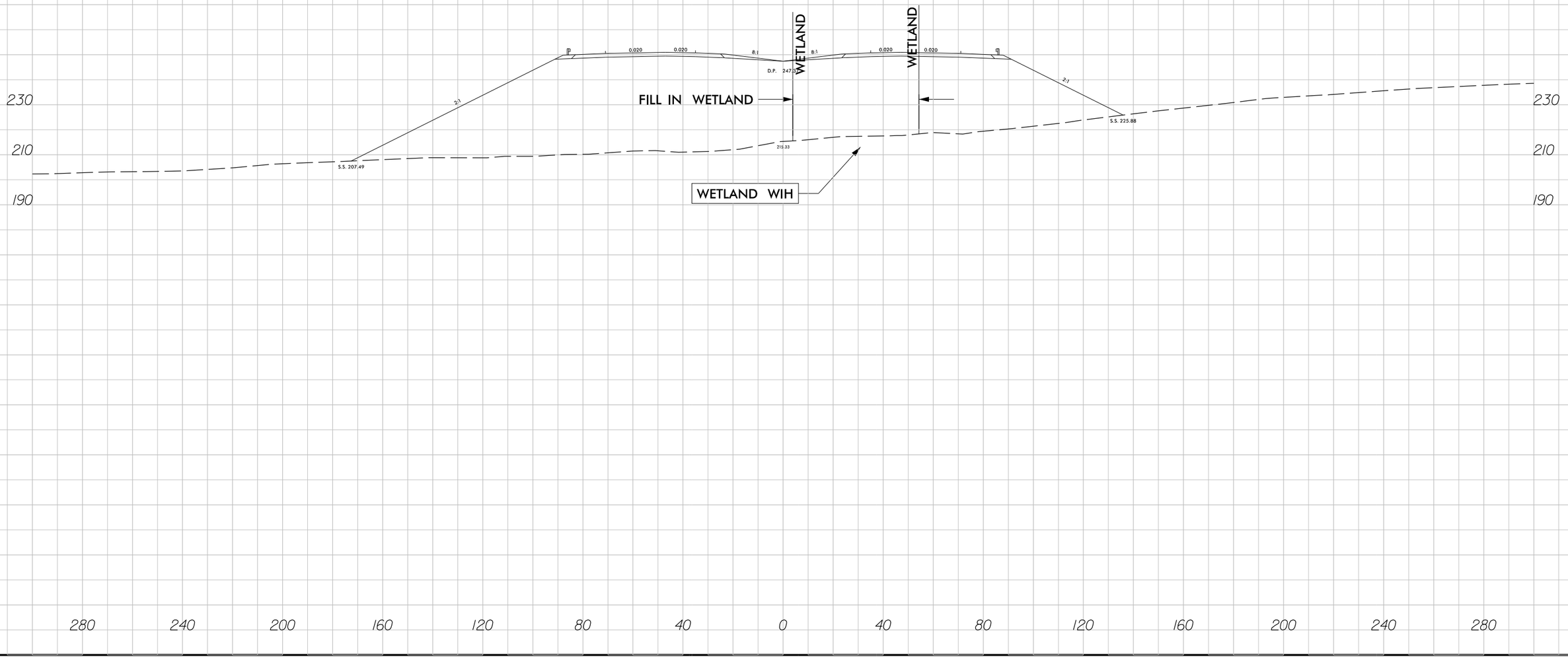
7/30/2018
R2829_hyd_prm_wet_psh_24a.dgn
lhorvay

6/23/16

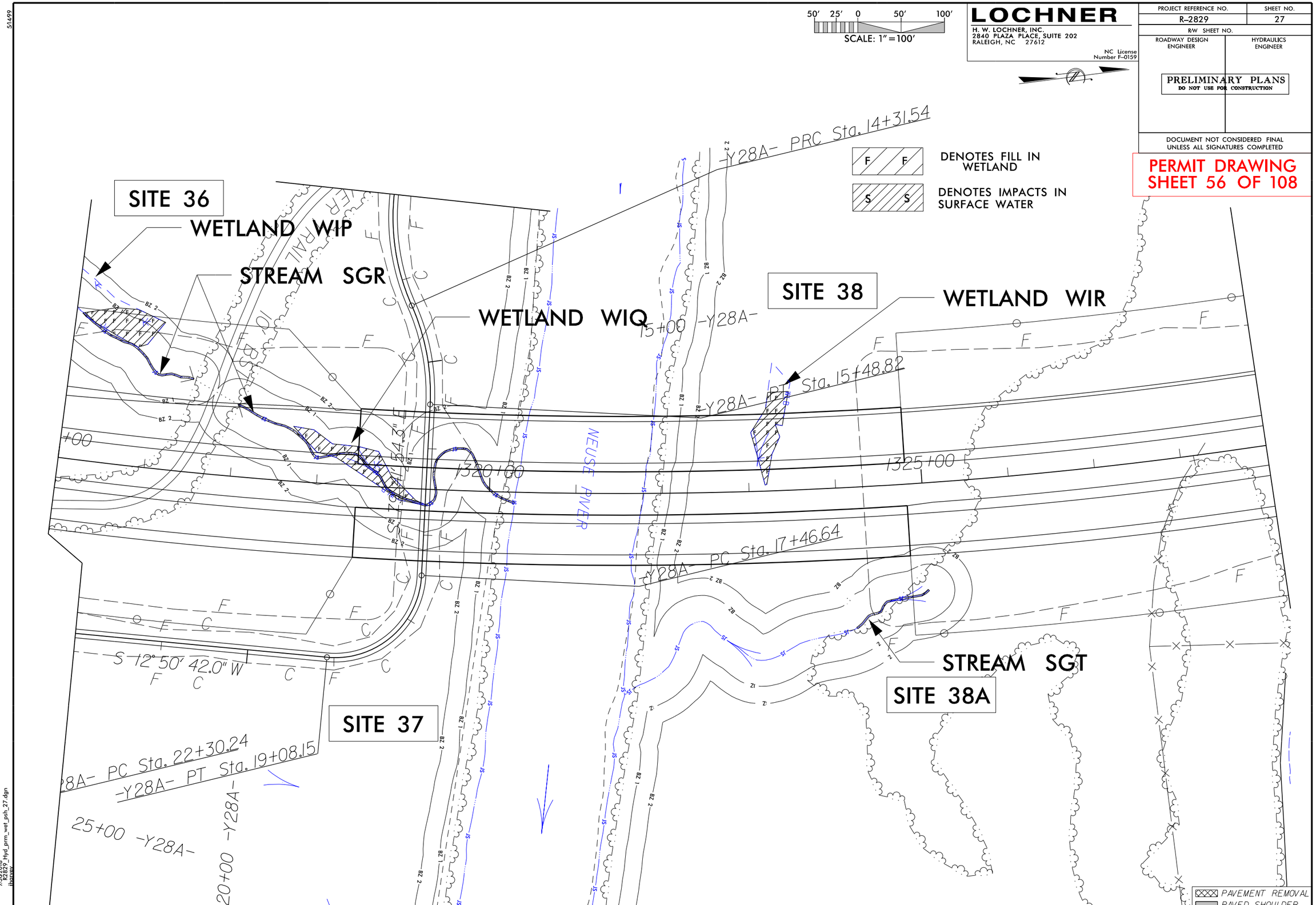
0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 55 OF 108

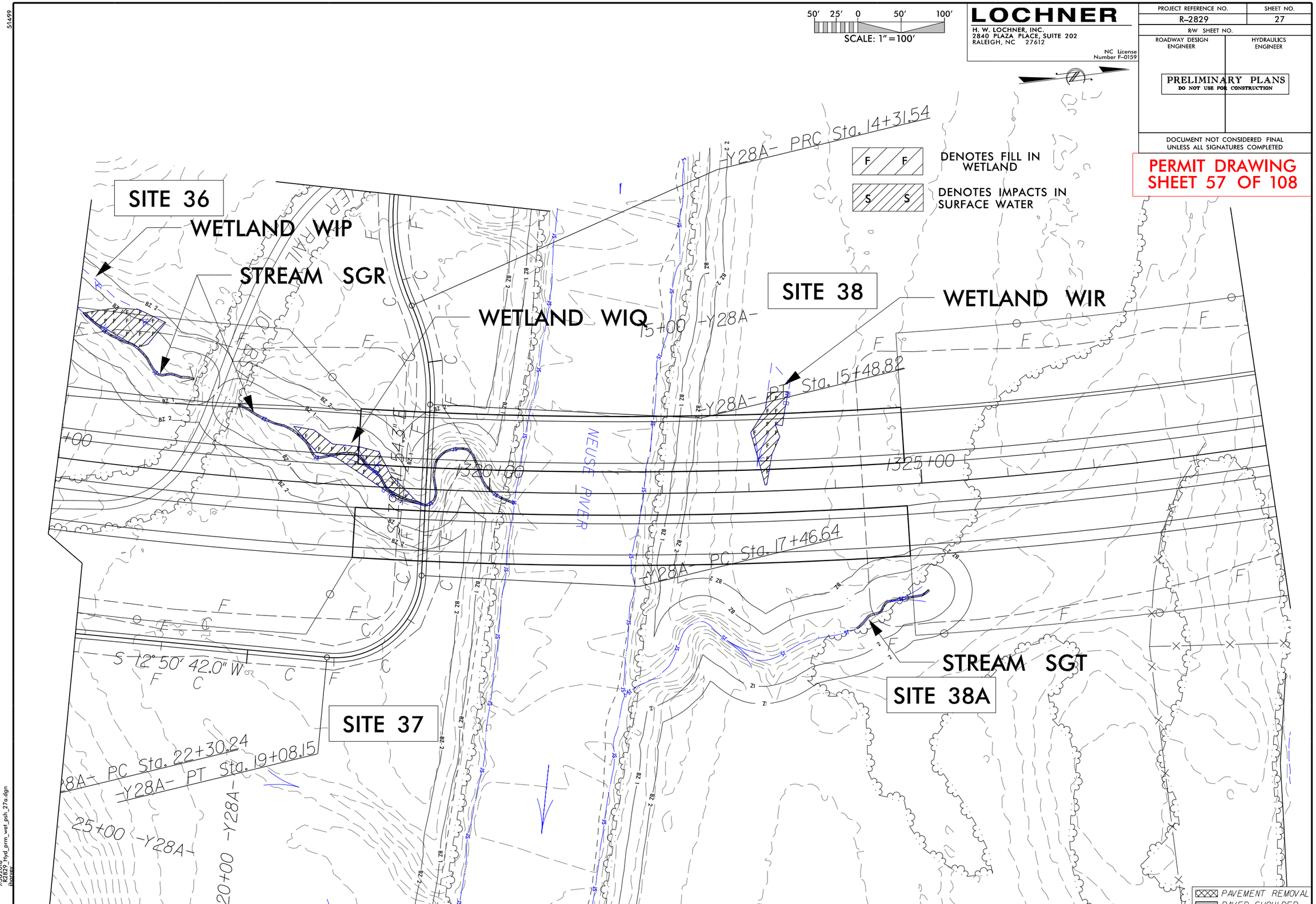
CROSS SECTION
SITE 34, WETLAND WIH
STATION 1277+00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_24b_xpl.dgn
jharvey



50' 25' 0 50' 100'
SCALE: 1"=100'
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
27
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 56 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SITE 36
WETLAND WIP
STREAM SGR
WETLAND WIQ
SITE 38
WETLAND WIR
STREAM SGT
SITE 38A
SITE 37
-Y28A- PRC Sta. 14+31.54
15+00 -Y28A-
-Y28A- PT Sta. 15+48.82
1320+00
1325+00
NEUSE RIVER
-Y28A- PC Sta. 17+46.64
S 12° 50' 42.0" W
-Y28A- PC Sta. 22+30.24
-Y28A- PT Sta. 19+08.15
25+00 -Y28A-
20+00 -Y28A-
PAVEMENT REMOVAL
PAVED SHOULDER



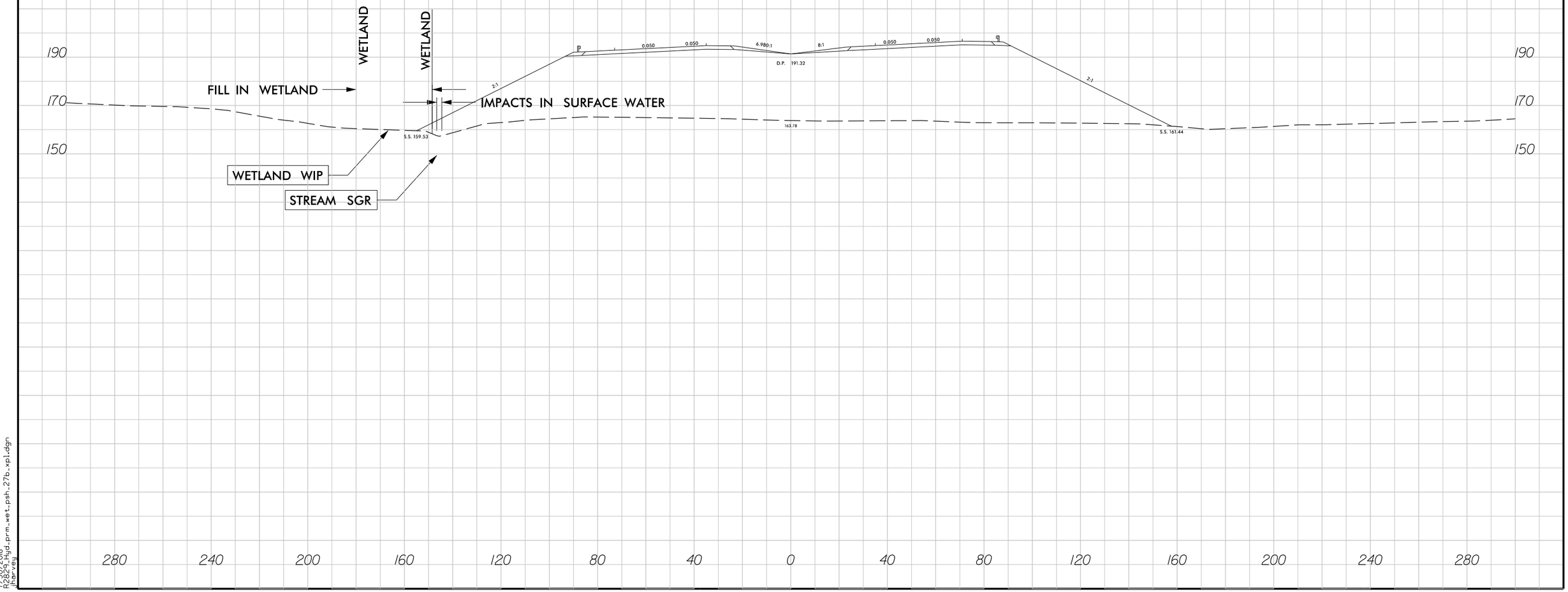
50' 25' 0 50' 100'
SCALE: 1"=100'
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
27
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 57 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SITE 36
WETLAND WIP
STREAM SGR
WETLAND WIQ
SITE 38
WETLAND WIR
STREAM SGT
SITE 38A
SITE 37
-Y28A- PRC Sta. 14+31.54
15+00 -Y28A-
-Y28A- PT Sta. 15+48.82
1320+00
1325+00
NEUSE RIVER
-Y28A- PC Sta. 17+46.64
S 12° 50' 42.0" W
-Y28A- PC Sta. 22+30.24
-Y28A- PT Sta. 19+08.15
25+00 -Y28A-
20+00 -Y28A-
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 58 OF 108

CROSS SECTION
SITE 36, WETLAND WIP
STATION 1315+50 –L–



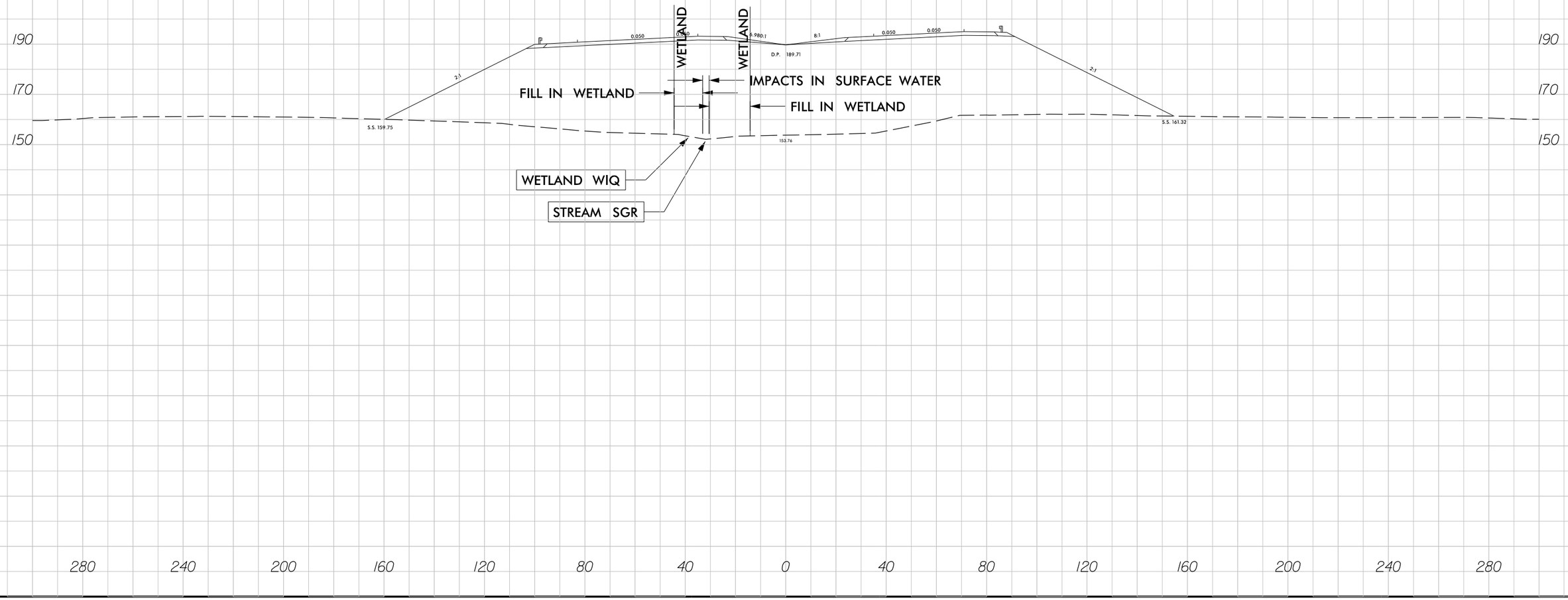
7/30/2018
R2829_Hyd_prm_wet_psh_27b_xpl.dgn
jharvey

6/23/16

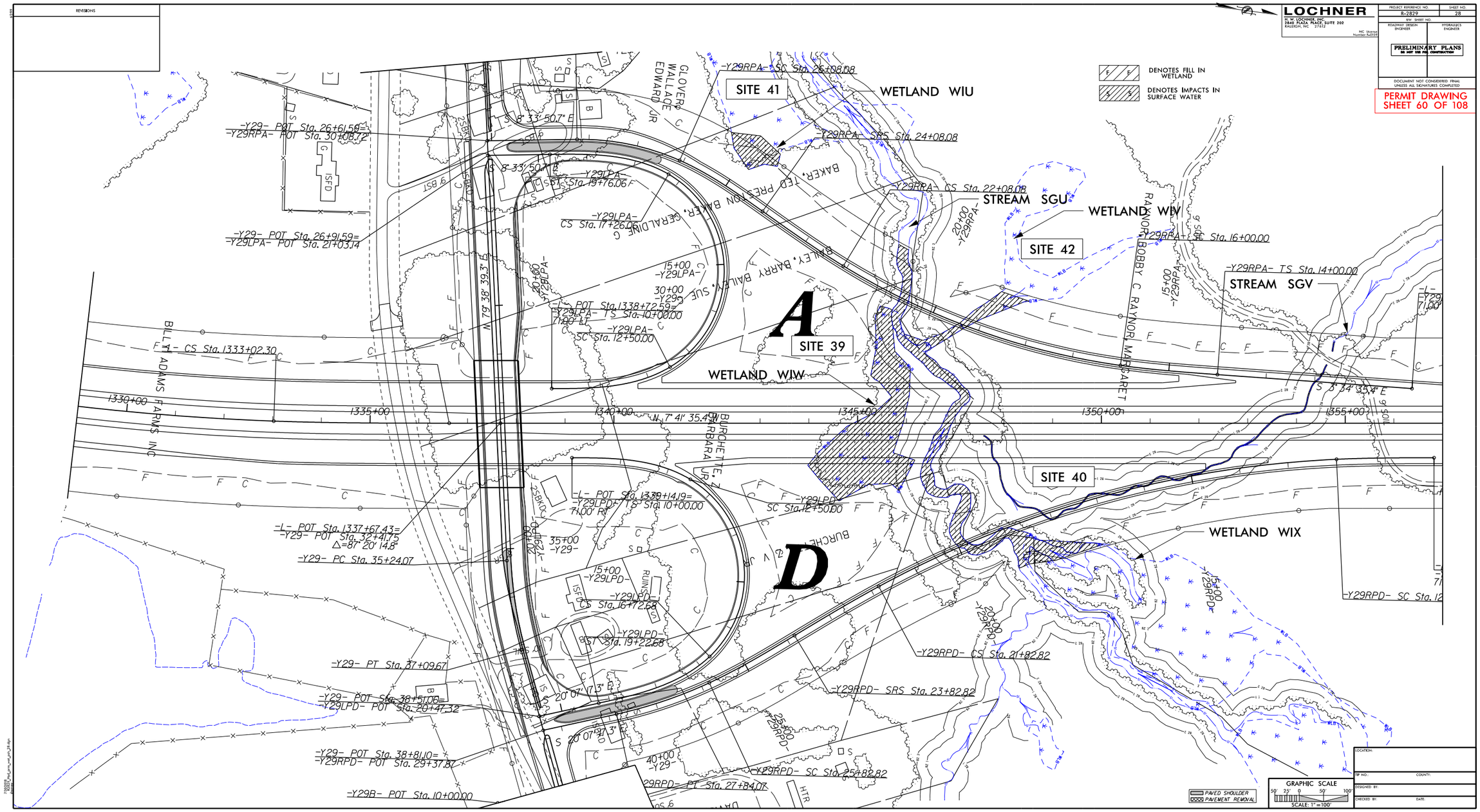
0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 59 OF 108

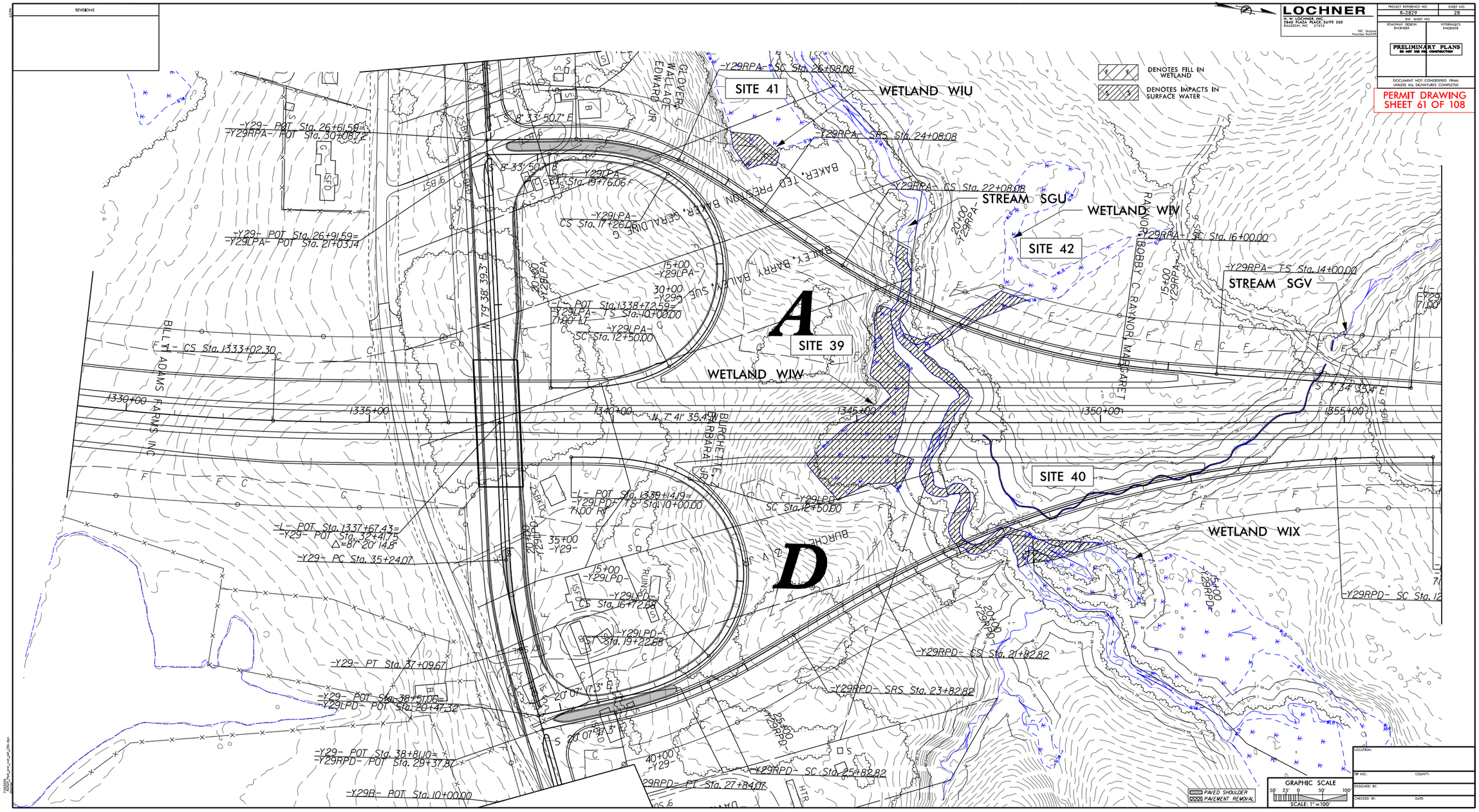
CROSS SECTION
SITE 37, WETLAND WIQ
STATION 1318+50 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_27c_xpl.dgn
jharvey



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number A-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
28
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 60 OF 108
REVISIONS
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SITE 41
WETLAND WIU
STREAM SGU
WETLAND WIV
SITE 42
STREAM SGV
SITE 39
WETLAND WIW
SITE 40
WETLAND WIX
A
D
-Y29RPA- SC Sta. 26+08.08
-Y29RPA- SRS Sta. 24+08.08
-Y29RPA- CS Sta. 22+08.08
-Y29RPA- SC Sta. 16+00.00
-Y29RPA- TS Sta. 14+00.00
-Y29- POT Sta. 26+61.59=
-Y29RPA- POT Sta. 30+08.72
-Y29- POT Sta. 26+91.59=
-Y29LPA- POT Sta. 21+03.14
-Y29LPA- CS Sta. 17+26.06
-Y29LPA- SC Sta. 12+50.00
-L- POT Sta. 1338+72.59=
-Y29LPA- TS Sta. 10+00.00
-L- CS Sta. 1333+02.30
-L- POT Sta. 1339+14.19=
-Y29LPD- TS Sta. 10+00.00
-L- POT Sta. 1337+67.43=
-Y29- POT Sta. 32+41.75
Δ=87° 20' 14.8"
-Y29- PC Sta. 35+24.07
-Y29LPD- CS Sta. 16+72.68
-Y29LPD- ST Sta. 19+22.68
-Y29- PT Sta. 37+09.67
-Y29- POT Sta. 38+51.06=
-Y29LPD- POT Sta. 20+47.32
-Y29- POT Sta. 38+81.10=
-Y29RPD- POT Sta. 29+37.87
-Y29B- POT Sta. 10+00.00
-Y29RPD- CS Sta. 21+82.82
-Y29RPD- SRS Sta. 23+82.82
-Y29RPD- SC Sta. 25+82.82
-Y29RPD- PT Sta. 27+84.07
-Y29RPD- SC Sta. 12
BILLY ADAMS FARMS INC
GLOVER WALLACE EDWARD JR
BAKER, TED PRESTON BAKER, GERALDINE G
BAILEY, BARRY BAILEY, SUE
BURCHETTE, BARBARA JR
RAYNOR, BOBBY C RAYNOR, MARGARET
N 79° 38' 39.3" E
N 7° 41' 35.4" W
S 3° 34' 35.4" E
S 20° 07' 17.3" E
1330+00
1335+00
1340+00
1345+00
1350+00
1355+00
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



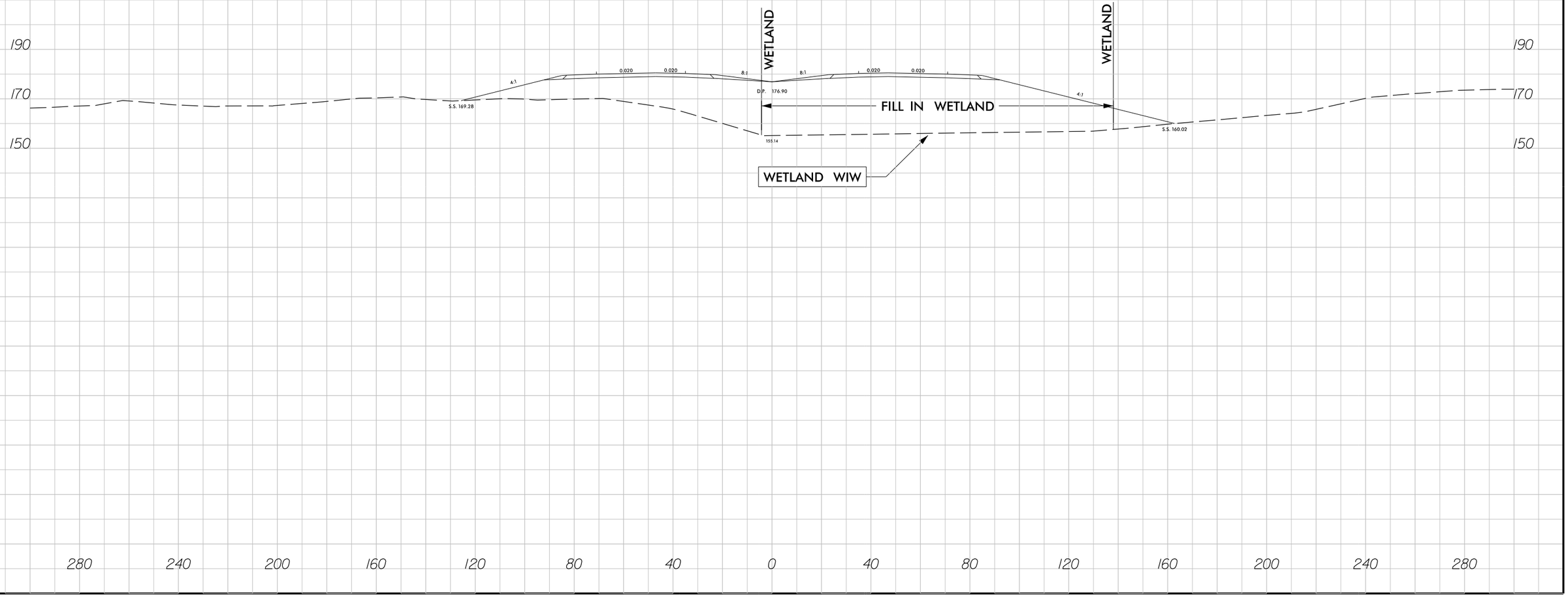
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0559
PROJECT REFERENCE NO.
R-2829
SHEET NO.
28
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 61 OF 108
REVISIONS
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SITE 41
WETLAND WIU
SITE 42
STREAM SGU
WETLAND WIV
STREAM SGV
SITE 39
WETLAND WIW
SITE 40
WETLAND WIX
A
D
-Y29RPA- SC Sta. 26+08.08
-Y29RPA- SRS Sta. 24+08.08
-Y29RPA- CS Sta. 22+08.08
-Y29RPA- SC Sta. 16+00.00
-Y29RPA- TS Sta. 14+00.00
-Y29- POT Sta. 26+61.59=
-Y29RPA- POT Sta. 30+08.72
-Y29- POT Sta. 26+91.59=
-Y29LPA- POT Sta. 21+03.14
-Y29LPA- SC Sta. 19+76.06
-Y29LPA- CS Sta. 17+26.06
-L- POT Sta. 1338+72.59=
-Y29LPA- TS Sta. 10+00.00
-Y29LPA- SC Sta. 12+50.00
-L- CS Sta. 1333+02.30
-L- POT Sta. 1339+14.19=
-Y29LPD- TS Sta. 10+00.00
-Y29LPD- SC Sta. 12+50.00
-L- POT Sta. 1337+67.43=
-Y29- POT Sta. 32+41.75
Δ=87° 20' 14.8"
-Y29- PC Sta. 35+24.07
-Y29LPD- CS Sta. 16+72.68
-Y29LPD- SC Sta. 19+22.68
-Y29- PT Sta. 37+09.67
-Y29- POT Sta. 38+51.06=
-Y29LPD- POT Sta. 20+47.32
-Y29- POT Sta. 38+81.10=
-Y29RPD- POT Sta. 29+37.87
-Y29B- POT Sta. 10+00.00
-Y29RPD- CS Sta. 21+82.82
-Y29RPD- SRS Sta. 23+82.82
-Y29RPD- SC Sta. 25+82.82
-Y29RPD- PT Sta. 27+84.07
-Y29RPD- SC Sta. 12
BAKER, TED PRESTON BAKER, GERALDINE G
BAILEY, BARRY BAILEY, SUE
GLOVER, WALLACE EDWARD JR
RAYNOR, BOBBY C RAYNOR, MARGARET
BILLY ADAMS FARMS INC
BURCHETTE, BARBARA JR
BURCHETTE
1330+00
1335+00
1340+00
1345+00
1350+00
1355+00
N 7° 41' 35.4" W
N 79° 38' 39.3" E
S 8° 33' 50.7" E
S 3° 34' 35.4" E
S 20° 07' 17.3" E
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 62 OF 108

CROSS SECTION
SITE 39, WETLAND WIW
STATION 1345+00 –L–



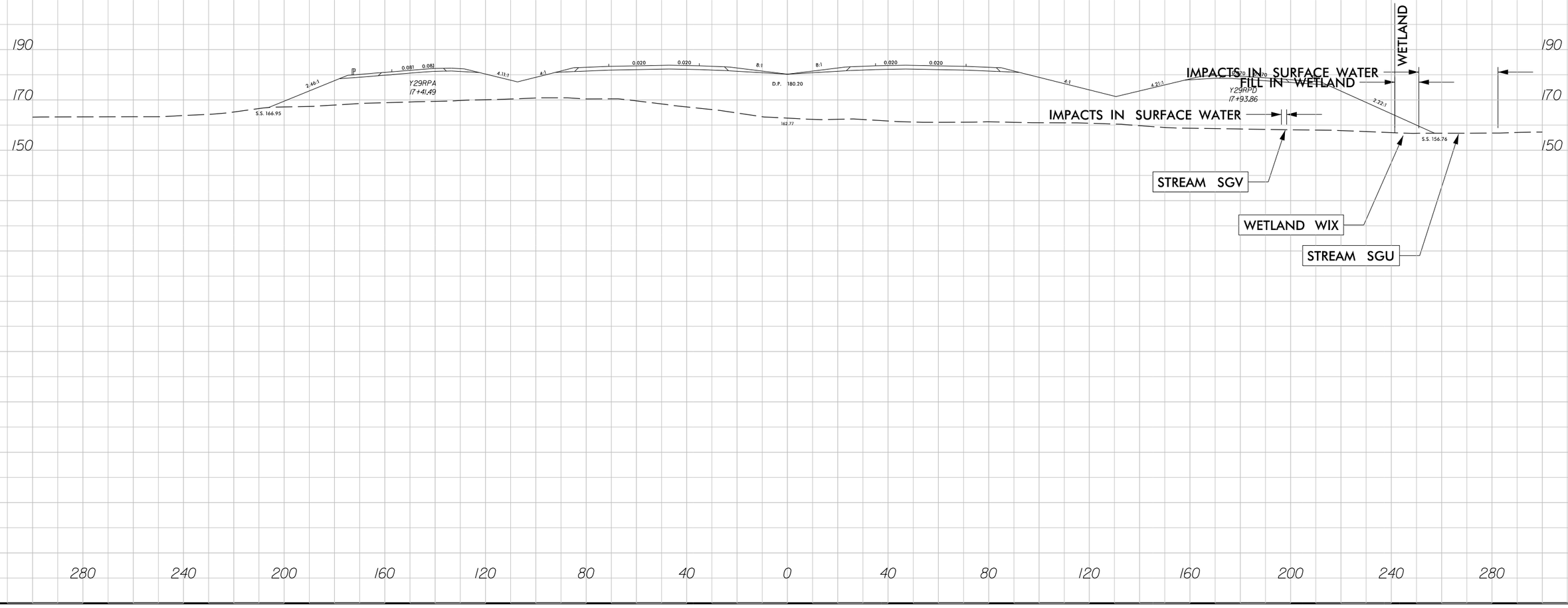
7/30/2018
R2829_hyd_prm_wet_psh_28b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 63 OF 108

CROSS SECTION
SITE 40, WETLAND WIX
STATION 1349+00 –L–



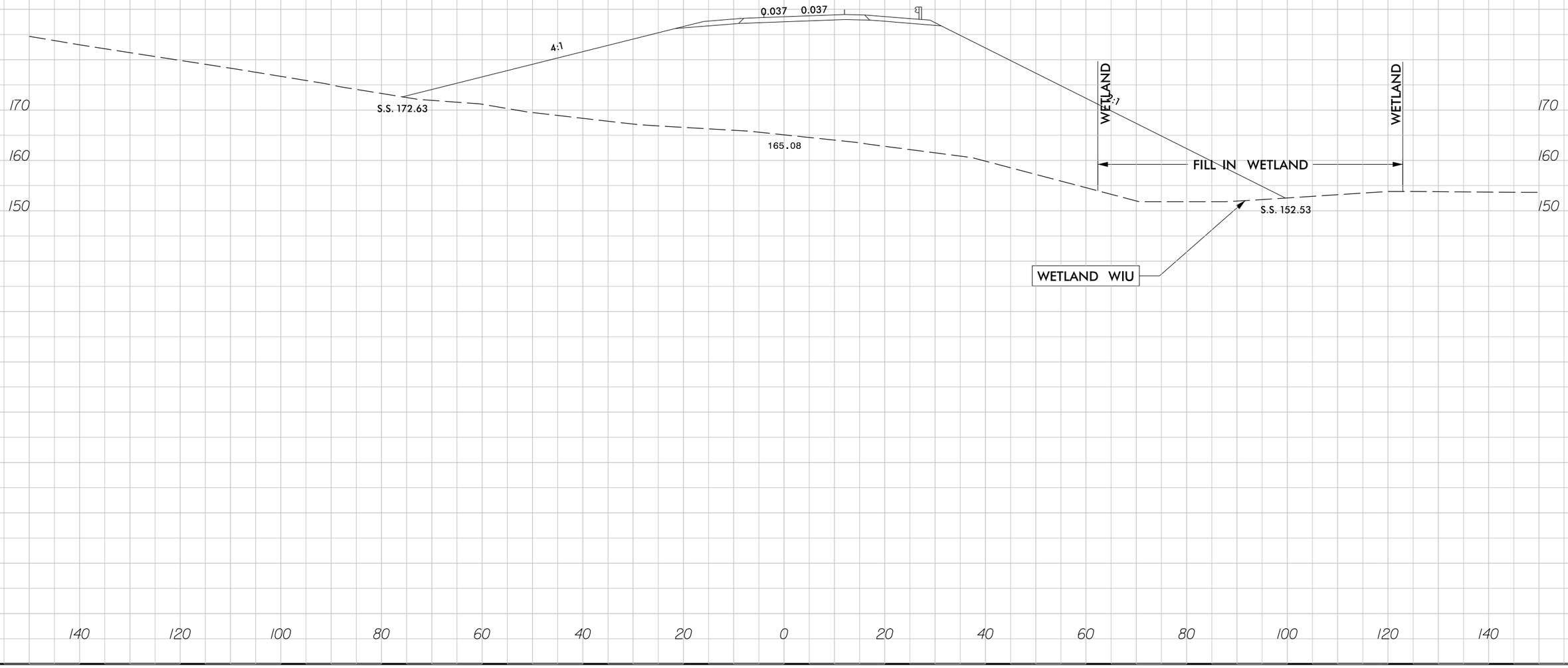
7/30/2018
R2829_hyd_prm_wet_psh_28c_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 64 OF 108

CROSS SECTION
SITE 41, WETLAND WIU
STATION 25+00 –Y29RPA–



7/30/2018
R2829_Hyd_prm_wet_psh_28d_xpl.dgn
jharvey

51499

50' 25' 0 50' 100'
SCALE: 1"=100'

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	30
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 65 OF 108

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

P P DENOTES IMPACTS IN SURFACE WATER (POND)

WETLAND WJA

SITE 44

STREAM SGY

WETLAND WIZ

POND PAI

WETLAND WIY

SITE 43

-Y29D- PC Sta. 13+17.88

-Y29D- PT Sta. 14+97.14

15+00 -Y29D-

1375+00

1380+00

N 82° 18' 24.6" E

N 7° 41' 35.4" W

710S.6

710S.8

-Y29E- POT Sta. 16+87.49=
-Y29D- POT Sta. 19+10.37

20+00 -Y29E-

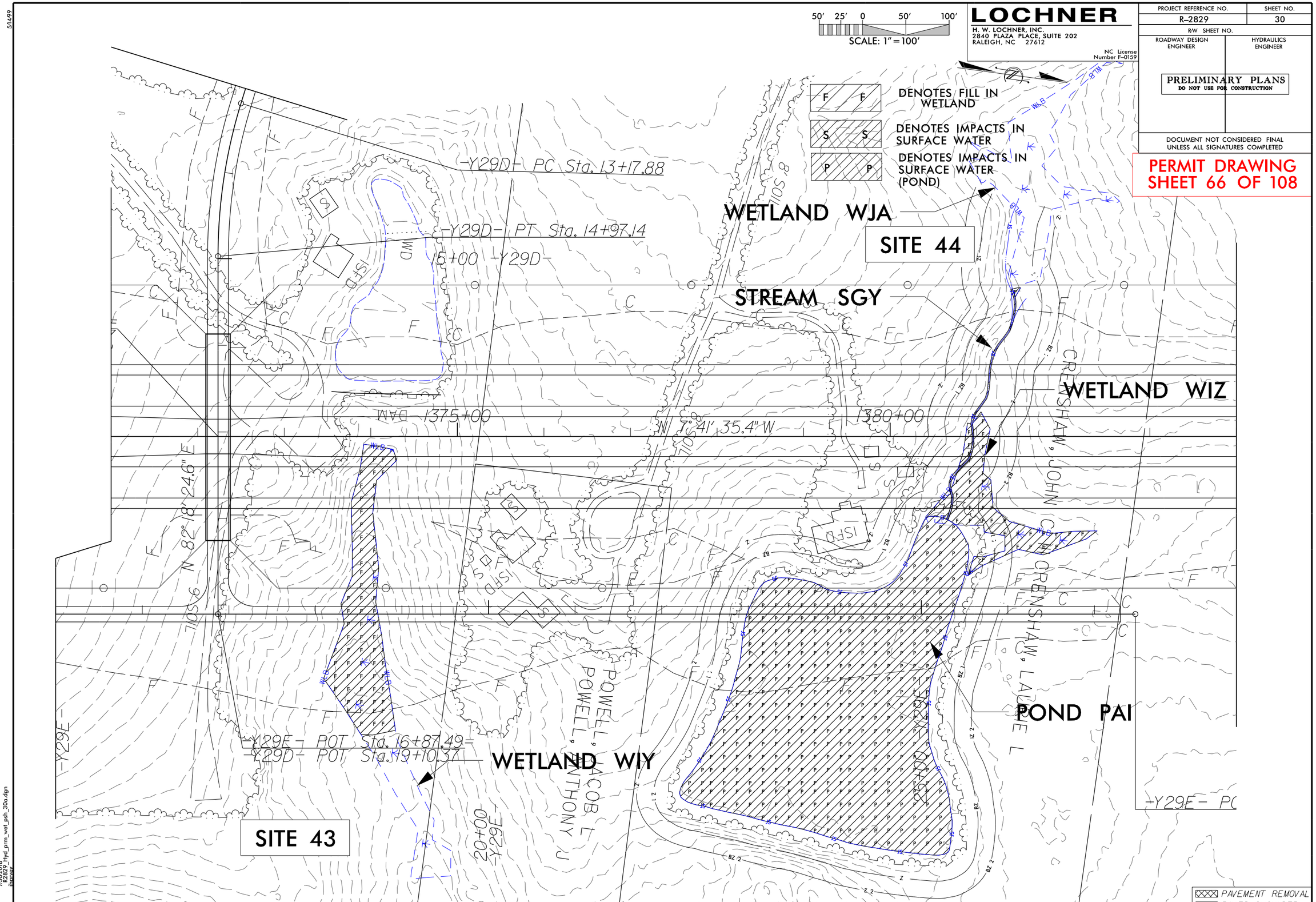
-Y29E- PC

POWELL, JACOB L
POWELL, ANTHONY C

CRENSHAW, JOHN C
CRENSHAW, LAURIE L

PAVEMENT REMOVAL
PAVED SHOULDER

7302018
R2829_Hyd_prm_wet_psh_30.dgn
lhopper



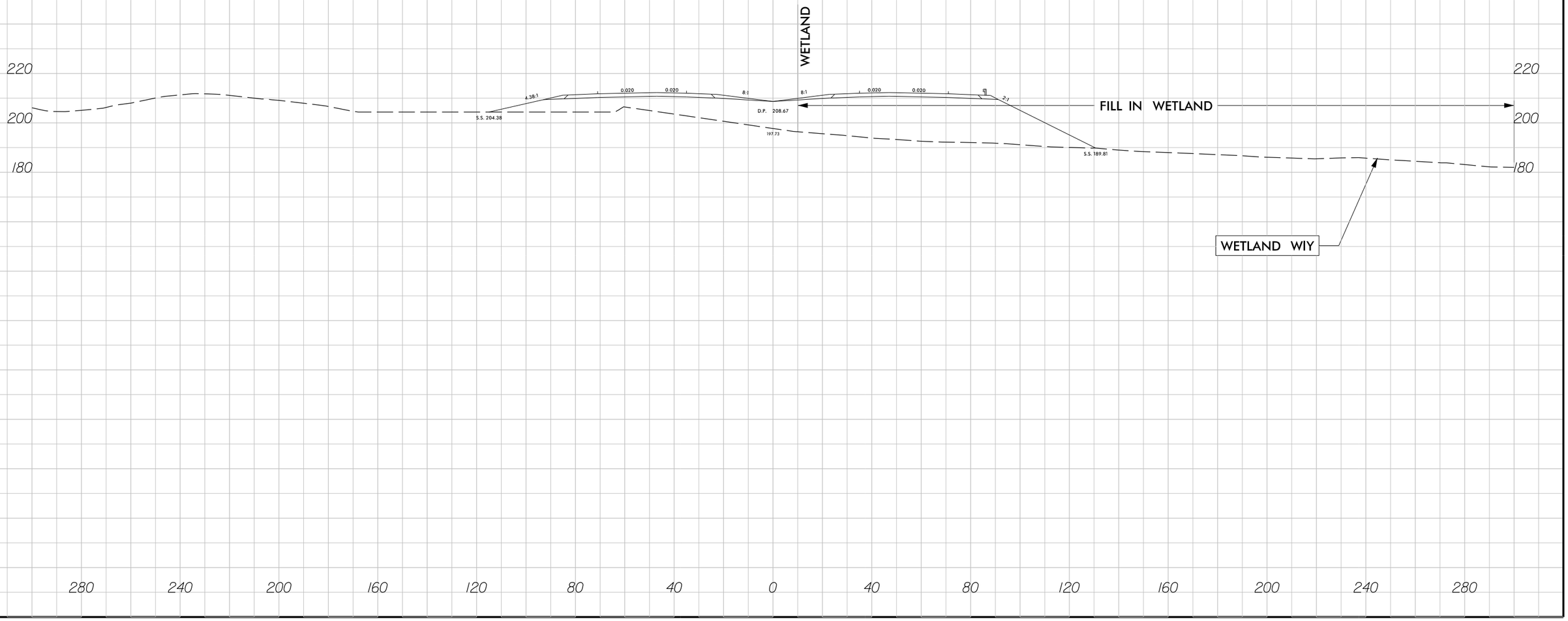
50' 25' 0 50' 100'
SCALE: 1"=100'
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
30
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 66 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
WETLAND WJA
SITE 44
STREAM SGY
WETLAND WIZ
POND PAI
WETLAND WIY
SITE 43
-Y29D- PC Sta. 13+17.88
-Y29D- PT Sta. 14+97.14
15+00 -Y29D-
1375+00
1380+00
N 7°41' 35.4" W
N 82°18' 24.6" E
-Y29E- POT Sta. 16+87.49=
-Y29D- POT Sta. 19+10.37
20+00 -Y29E-
POWELL, JACOB L
POWELL, ANTHONY J
CRENSHAW, JOHN C
CRENSHAW, LAURIE L
PAVEMENT REMOVAL
PAVED SHOULDER

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 67 OF 108

CROSS SECTION
SITE 43, WETLAND WIY
STATION 1374+00 -L-



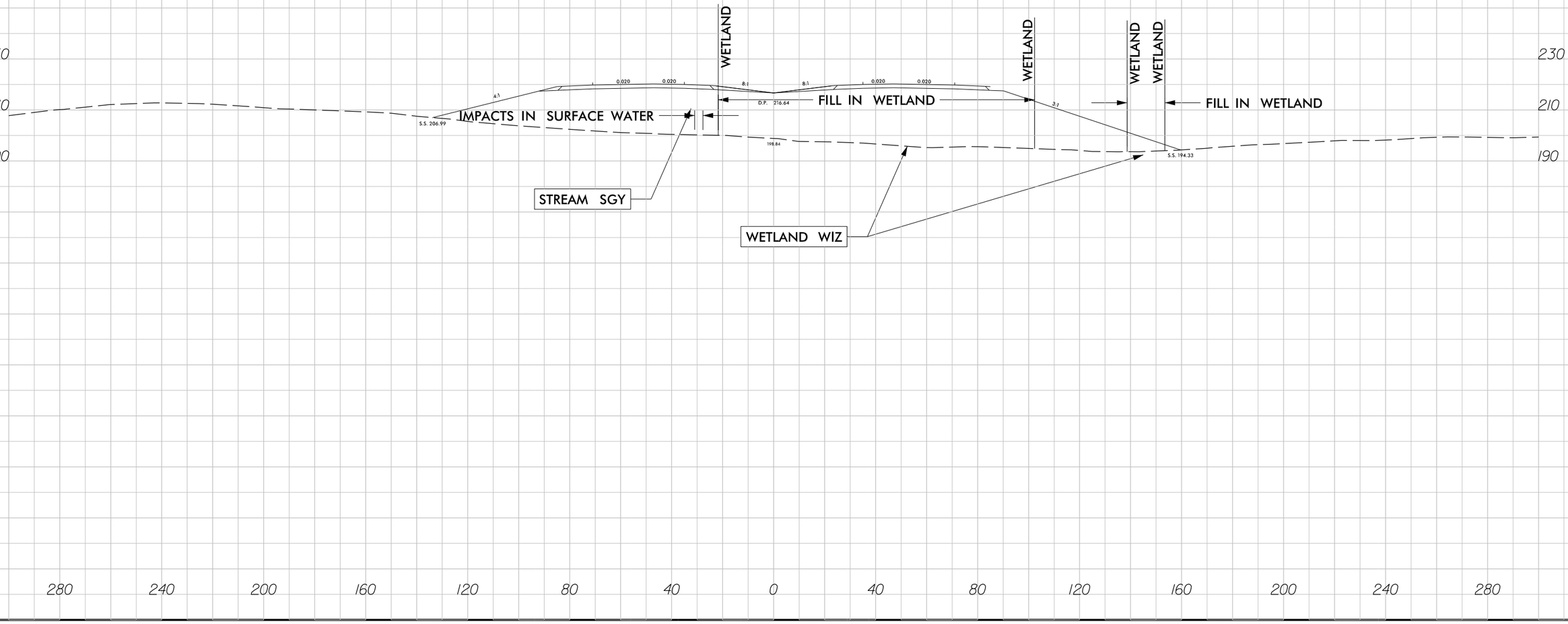
7/30/2018
R2829_hyd_prm_wet_psh_30b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 68 OF 108

CROSS SECTION
SITE 44, WETLAND WIZ
STATION 1381+00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_30c_xpl.dgn
jharvey

51499

P P DENOTES IMPACTS IN SURFACE WATER (POND)

50′ 25′ 0 50′ 100′

SCALE: 1" = 100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	31
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 69 OF 108

POND PAK

SITE 45

7105.8

1385+00

1390+00

1395+00

HODGE ROAD LLC

)T Sta. 27+47.22

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_31.dgn
lhorney

51499

P P DENOTES IMPACTS IN SURFACE WATER (POND)

50' 25' 0 50' 100'
SCALE: 1" = 100'

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	31
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 70 OF 108

POND PAK

SITE 45

710'8

1385+00 1390+00 1395+00

F C F C F C

HODGE ROAD LLC

WLB

BZ 1 BZ 2

)T Sta. 27+47.22

PAVEMENT REMOVAL
PAVED SHOULDER

730208
R2829_Hyd_prm_wet_psh_31o.dgn
jhorney

51499

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	32
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 71 OF 108

50' 25' 0 50' 100'
SCALE: 1" = 100'

WETLAND WJD

SITE 46

STREAM SHA

-L- POT Sta. 1408+80.00 =
-Y30RPB- TS Sta. 10+00.00
74.00' LT

-L- POT Sta. 1406+67.38 =
-Y30RPC- POT Sta. 10+00.00
71.00' RT

-Y30RPC- PC Sta. 15+03.50

N 3° 35' 35.9" W

1400+00 1405+00 1410+00

20' BST
19' BST
SHALLOW WATER DR
ALLEY WOODS MHP
10' GR
2SFD
ISFD

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_hyd_prm_wet_psh_32.dgn
jhorney

51499

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	32
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 72 OF 108

50' 25' 0 50' 100'
SCALE: 1" = 100'

WETLAND WJD

SITE 46

STREAM SHA

-L- POT Sta. 1408+80.00 ≈
-Y30RPB- TS Sta. 10+00.00
71.00' LT

-L- POT Sta. 1406+67.38 ≈
-Y30RPC- POT Sta. 10+00.00
71.00' RT

-Y30RPC- PC Sta. 15+03.50

1400+00 1405+00 1410+00

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

PAVEMENT REMOVAL
PAVED SHOULDER

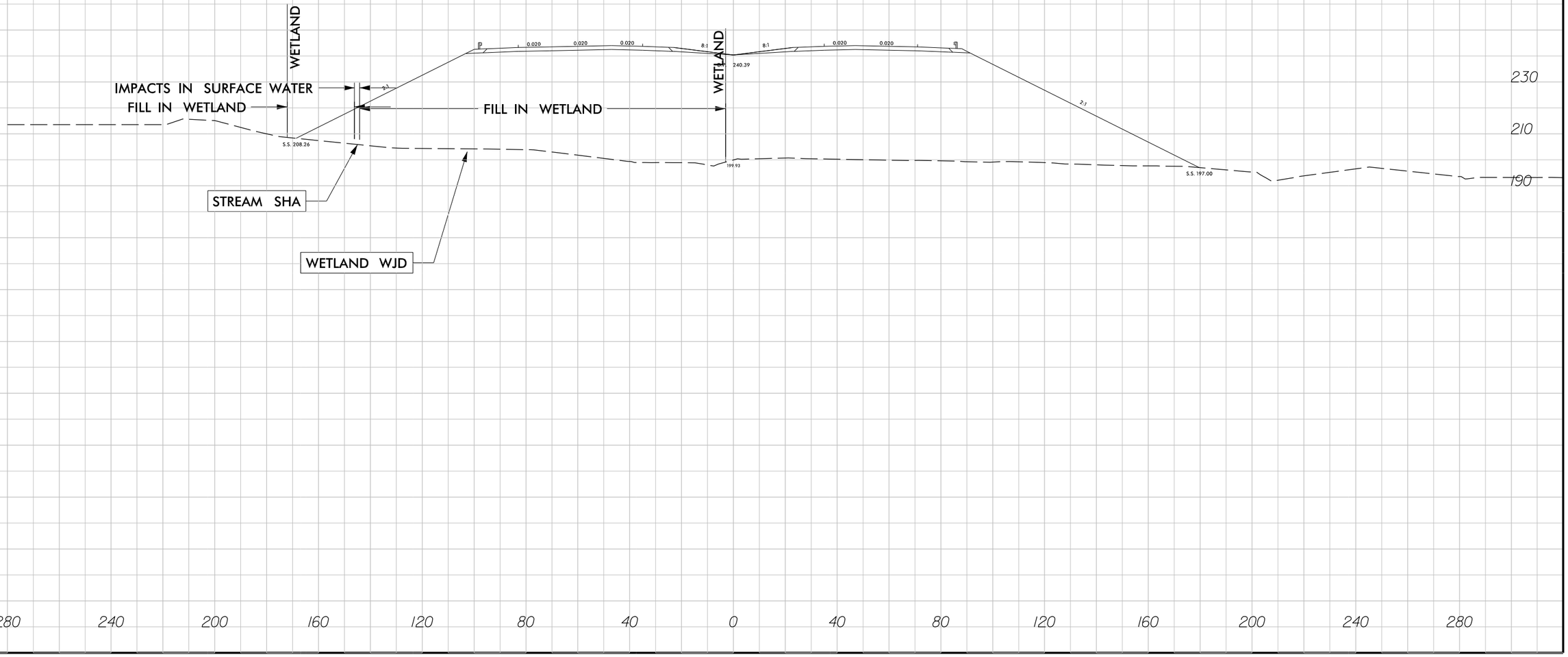
7302018
R2829_hyd_prm_wet_psh_32a.dgn
lhurley

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 73 OF 108

CROSS SECTION
SITE 46, WETLAND WJD
STATION 1405+00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_32b_xpl.dgn
jharvey

REVISIONS

PERMIT DRAWING
SHEET 74 OF 108

LOCHNER
H. W. LOCHNER, INC.
7649 RIDGE POINT PARK ROAD, SUITE 202
RALEIGH, NC 27612
NC License Number P-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	33
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)

STREAM SHD
-Y30RPB- PT Sta. 29+53.06
-Y30RPB- SC Sta. 26+23.45
-Y30RPB- SRS Sta. 24+23.45
-Y30RPB- CS Sta. 22+23.45
-Y30RPB- SC Sta. 12+00.00
-Y30LPB- CS Sta. 20+45.14
-Y30LPB- ST Sta. 22+95.14
-Y30LPB- SRS Sta. 12+50.00
-Y30LPB- SC Sta. 15+00.00
-Y30- PT Sta. 24+60.04
-Y30- POT Sta. 24+33.88= -Y30RPB- POT Sta. 31+42.32
-Y30- POT Sta. 24+69.88= -Y30LPB- POT Sta. 23+49.05
-Y30- PC Sta. 26+52.17
-L- POC Sta. 1429+06.51
-Y30LPB- Sta. 10+06.00
71.00' LT
-L- SC Sta. 1423+38.40=
-Y30- CS Sta. 29+41.63
Δ=101°40'18.0"
-Y30RPC- PRC Sta. 23+36.34
-Y30RPC- PT Sta. 28+32.52
-Y30- POT Sta. 32+06.60= -Y30RPC- POT Sta. 30+04.65= -Y30RPD- POT Sta. 27+34.92
-Y30RPD- PT Sta. 25+84.92
-Y30RPD- SC Sta. 20+73.83
-Y30RPD- CS Sta. 18+73.83
-Y30- PT Sta. 30+38.14
-L- SC Sta. 1424+92.95
-L- TS Sta. 1428+27.95
N 15° 21' 58.4" E
N 74° 40' 02.2" E
N 3° 49' 50.0" W
S 3° 49' 50.9" E

SITE 47
SITE 48
SITE 49
SITE 50
SITE 51

WETLAND WJF
WETLAND WJG
WETLAND WJH
WETLAND WJI

STREAM SHC
STREAM SHC
STREAM SHD

DONALD, MARY DWIGHT HEIRS
OLD STONES MILL RD
PARADISE VALLEY CT
PARADISE VALLEY DR
WINNANTS CREEK DR
SOUTHERN WINDS DR
BRODIE, ANDREW
RALEIGH RUGBY FOOTBALL CLUB INC
RUGBY FIELD
RUINS
DAM
RIPRAP
CELL TOWER
GROUND
SFD
HTR
CAN
BST
8' GR
10' GR

PAVED SHOULDER
PAVEMENT REMOVAL

GRAPHIC SCALE
50' 25' 0 50' 100'
SCALE: 1" = 100'

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY:
CHECKED BY: DATE:

REVISIONS

PERMIT DRAWING
SHEET 75 OF 108

LOCHNER
H. W. LOCHNER, INC.
3840 ROLES PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number P-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	33
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

F / F DENOTES FILL IN WETLAND
S / S DENOTES IMPACTS IN SURFACE WATER
P / P DENOTES IMPACTS IN SURFACE WATER (POND)

STREAM SHD
-Y30RPB- PT Sta. 29+53.06
-Y30RPB- SC Sta. 26+23.45
-Y30RPB- SRS Sta. 24+23.45
-Y30RPB- CS Sta. 22+23.45
-Y30LPB- CS Sta. 20+45.14
-Y30LPB- ST Sta. 22+95.14
-Y30LPB- SRS Sta. 12+50.00
-Y30LPB- SC Sta. 15+00.00
SC Sta. 12+00.00
DONALD MARY DWIGHT HENRY
SITE 49
SITE 48
SITE 47
SITE 50
SITE 51
WETLAND WJH
WETLAND WJI
WETLAND WJF
WETLAND WJG
STREAM SHD
STREAM SHC
STREAM SHC
-Y30- POT Sta. 32+06.60=
-Y30RPC- POT Sta. 30+04.65=
-Y30RPD- POT Sta. 27+34.92
-Y30RPC- PRC Sta. 23+36.34
-Y30RPC- PT Sta. 28+32.52
-Y30RPD- PT Sta. 25+84.92
-Y30RPD- SC Sta. 20+73.83
-Y30RPD- CS Sta. 18+73.83
-Y30- PT Sta. 24+68.04
-Y30- POT Sta. 24+33.88=
-Y30RPB- POT Sta. 31+12.32
-Y30- POT Sta. 24+69.88=
-Y30LPB- POT Sta. 24+49.05
-Y30- PC Sta. 26+52.17
-L- POC Sta. 1429+06.51=
-Y30LPB- SS Sta. 10+00.00
71.00' LT
-Y30- SC Sta. 1427+38.40=
-Y30- CS Sta. 29+41.63
△=10°40'18.0"
-Y30- PT Sta. 30+38.14
-L- SC Sta. 1424+92.95
-L- ST Sta. 1421+27.95
N 15° 27' 58.2" E
N 14° 10' 02.2" E
S 3° 49' 50.0" W
S 3° 49' 50.9" E
PARADISE VALLEY
GOLD STONES SMILE RD
MINNANTS CREEK DR
SOUTHERN LIVING DR
RALEIGH RUGBY FOOTBALL CLUB INC
RUGBY FIELD
BRØADIE ANDREW
RIPRAP
RUINS
CAN
HTR
SPD
OHP
UGP
8" DR
18" BST
21" BST
9" BST
12" BST
1425+00
1420+00
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PAVED SHOULDER
PAVEMENT REMOVAL

GRAPHIC SCALE
50' 25' 0 50' 100'
SCALE: 1" = 100'

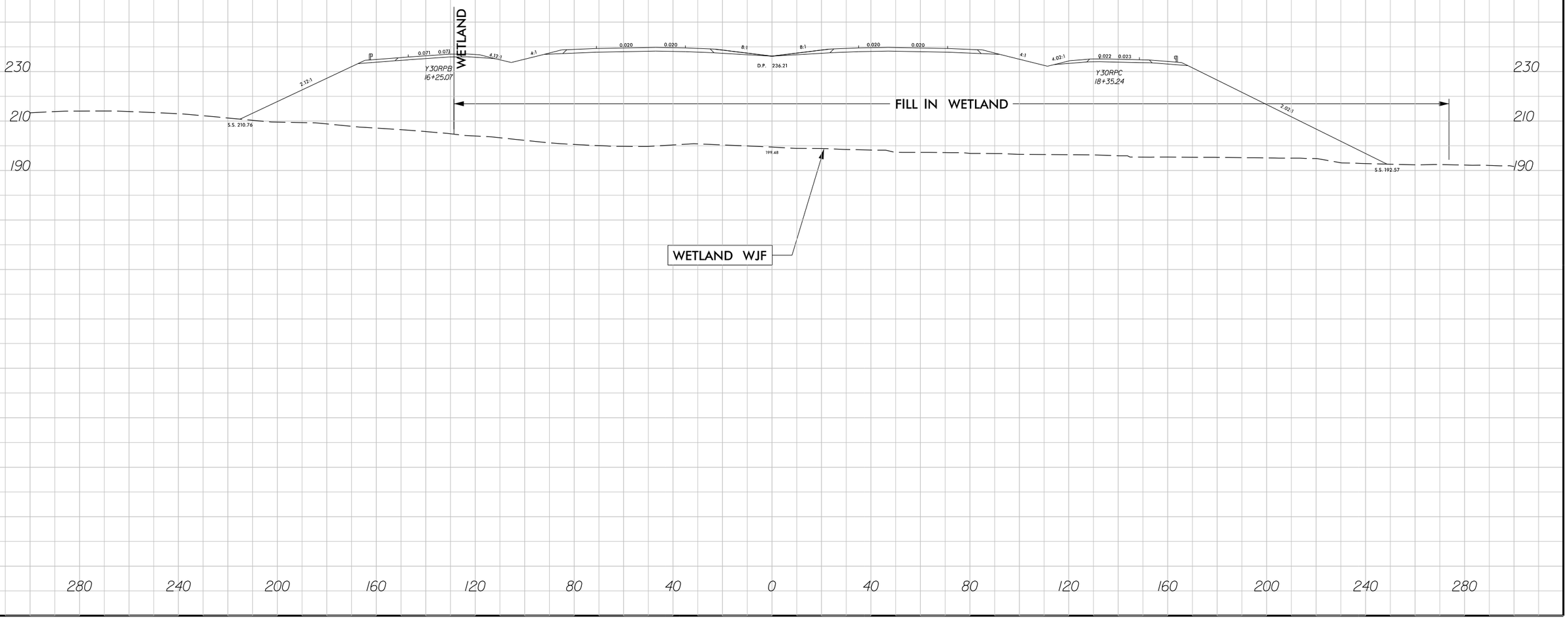
LOCATION:
TIP NO.: COUNTY:
DESIGNED BY:
CHECKED BY: DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 76 OF 108

CROSS SECTION
SITE 47, WETLAND WJF
STATION 1415+00 –L–



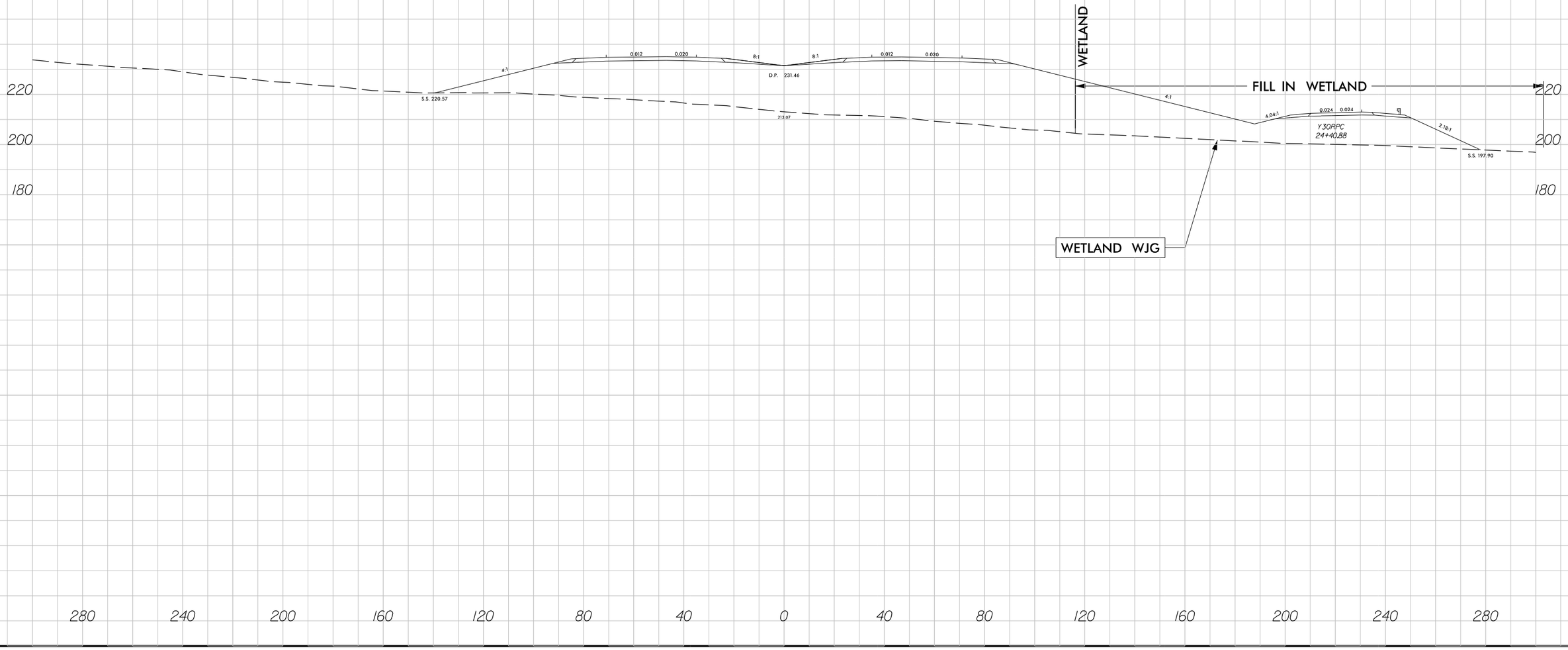
7/30/2018
R2829_hyd_prm_wet_psh_33b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 77 OF 108

CROSS SECTION
SITE 48, WETLAND WJG
STATION 1421+00 –L–



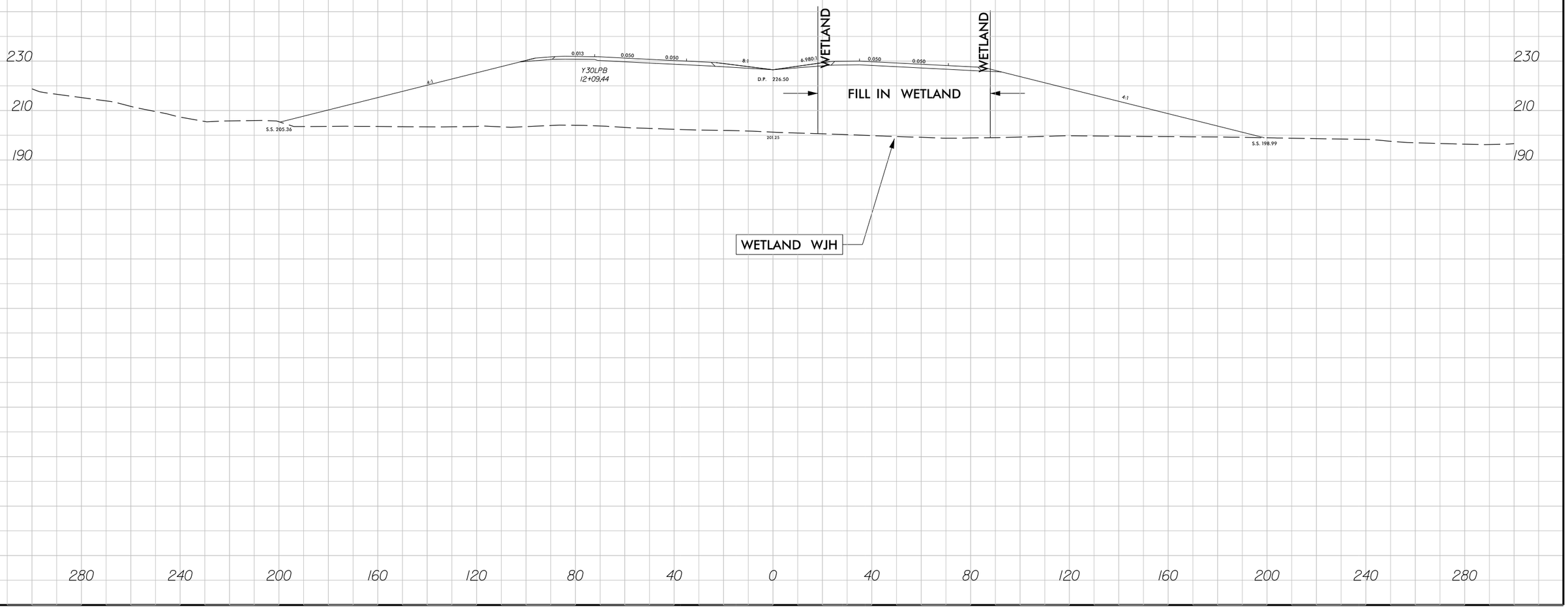
7/30/2018
R2829_Hyd_prm_wet_psh_33c_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 78 OF 108

CROSS SECTION
SITE 49, WETLAND WJH
STATION 1427+00 –L–



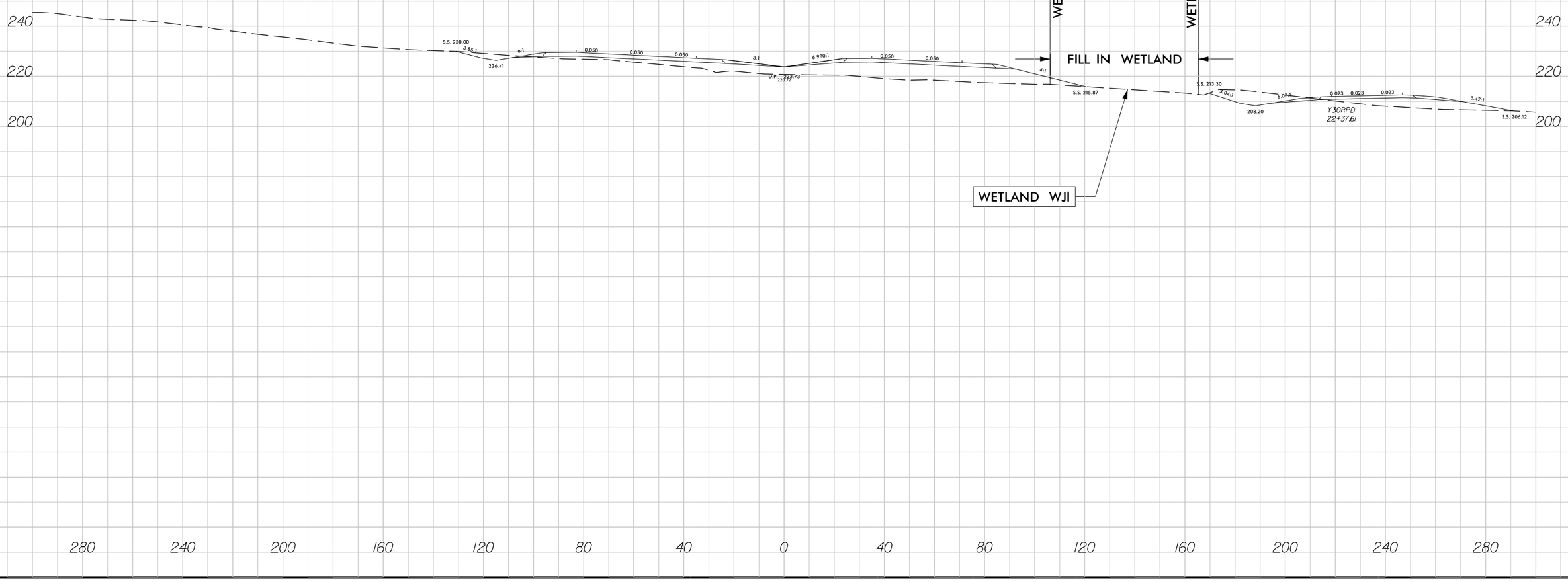
7/30/2018
R2829_Hyd_prm_wet_psh_33d_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 79 OF 108

CROSS SECTION
SITE 51, WETLAND WJI
STATION 1432+00 –L–



7/30/2018
R2829_Hyd_prm_wet_psh_33e_xpl.dgn
jharvey

REVISIONS

LOCHNER
H. W. LOCHNER, INC.
3840 ROZZ, PLACE, SUITE 202
RALEIGH, NC 27613
NC License Number P-0750

PROJECT REFERENCE NO.	SHEET NO.
R-2829	35
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 80 OF 108

SITE 54
STREAM SHH
WETLAND WJJ(1)
SITE 53
WETLAND WJK
SITE 52
WETLAND WJJ(1)
SITE 55
WETLAND WJJ(2)
STREAM SHH
WETLAND WJJ(1)
STREAM SHC
DOGWOOD OWNER LLC
B
C
-Y3IA- PC Sta. 11+95.99
-Y3IA- PT Sta. 14+40.28
-Y3IA- PC Sta. 15+96.74
-Y3IA- PT Sta. 19+80.76
-Y3IRPDB- POT Sta. 64+50.85
-Y3IRPDB- ST Sta. 65+13.26
-Y3IRPDB- 1200' RT
-Y3IRPDB- CS Sta. 32+93.06
-Y3IRPDB- SC Sta. 35+00.00
-Y3IRPDB- 2500' RT
-Y3IRPDB- 3000' RT
-Y3IRPDB- 3500' RT
-Y3IRPDB- 4000' RT
-Y3IRPDB- 4500' RT
-Y3IRPDB- 5000' RT
-Y3IRPDB- 5500' RT
-Y3IRPDB- 6000' RT
-Y3IRPDB- 6500' RT
-Y3IRPDB- 7000' RT
-Y3IRPDB- 7500' RT
-Y3IRPDB- 8000' RT
-Y3IRPDB- 8500' RT
-Y3IRPDB-

REVISIONS

LOCHNER
H. W. LOCHNER, INC.
3840 ROZZ, PLACE, SUITE 202
RALEIGH, NC 27613
NC License Number P-0755

PROJECT REFERENCE NO.	SHEET NO.
R-2829	35
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 81 OF 108

SITE 54
STREAM SHH
WETLAND WJJ(1)
B
WETLAND WJJ(1)
STREAM SHH
STREAM SHC
WETLAND WJK
SITE 53
SITE 52
WETLAND WJJ(1)
DOGWOOD OWNER LLC
SITE 55
WETLAND WJJ(2)
C
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
50' 25' 0 50' 100'
SCALE: 1" = 100'

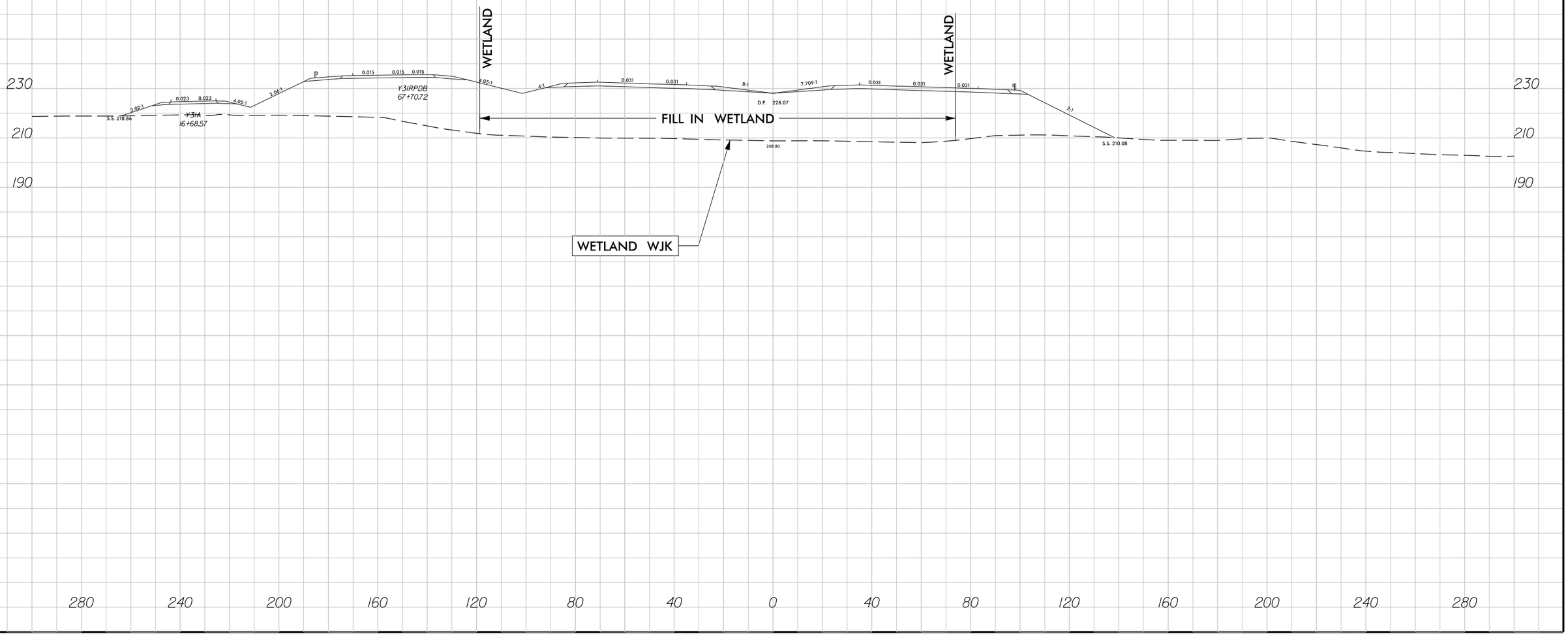
LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	
CHECKED BY:	DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 82 OF 108

CROSS SECTION
SITE 52, WETLAND WJK
STATION 1454+00 –L–



WETLAND WJK

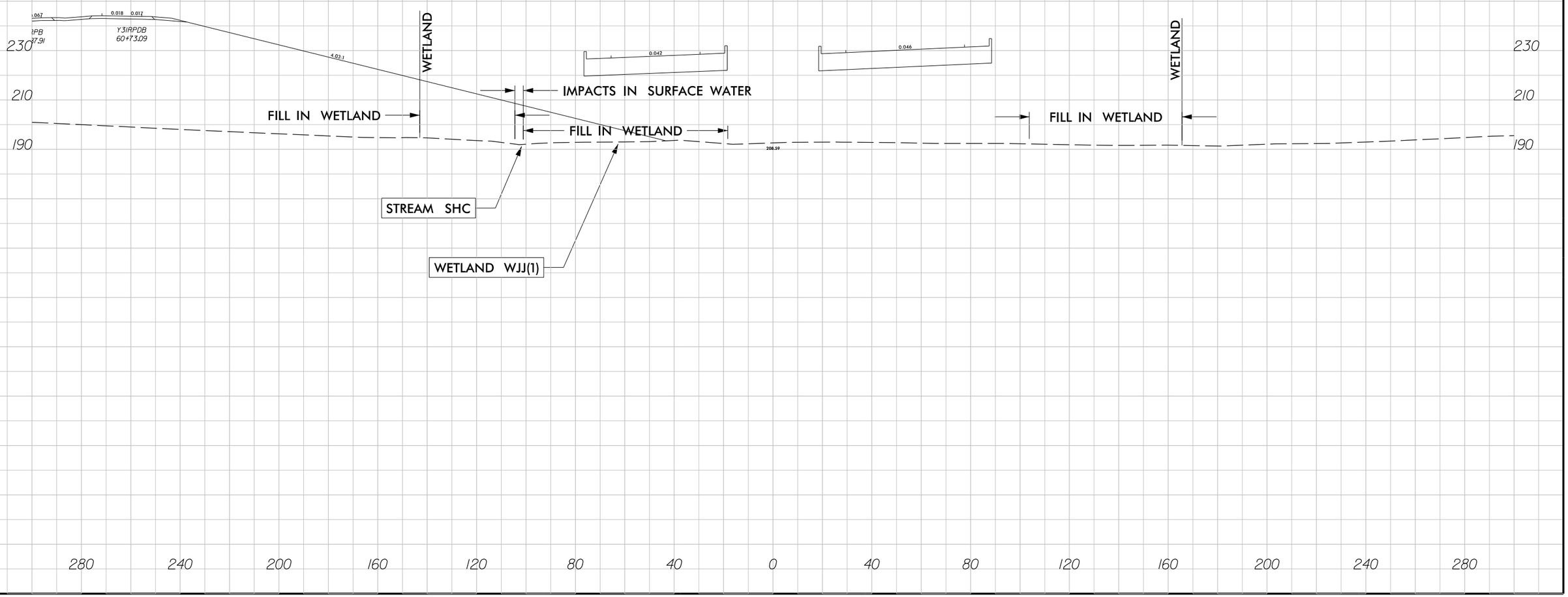
7/30/2018
R2829_Hyd_prm_wet_psh_35b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 83 OF 108

CROSS SECTION
SITE 53, WETLAND WJJ(1)
STATION 1461+00 –L–



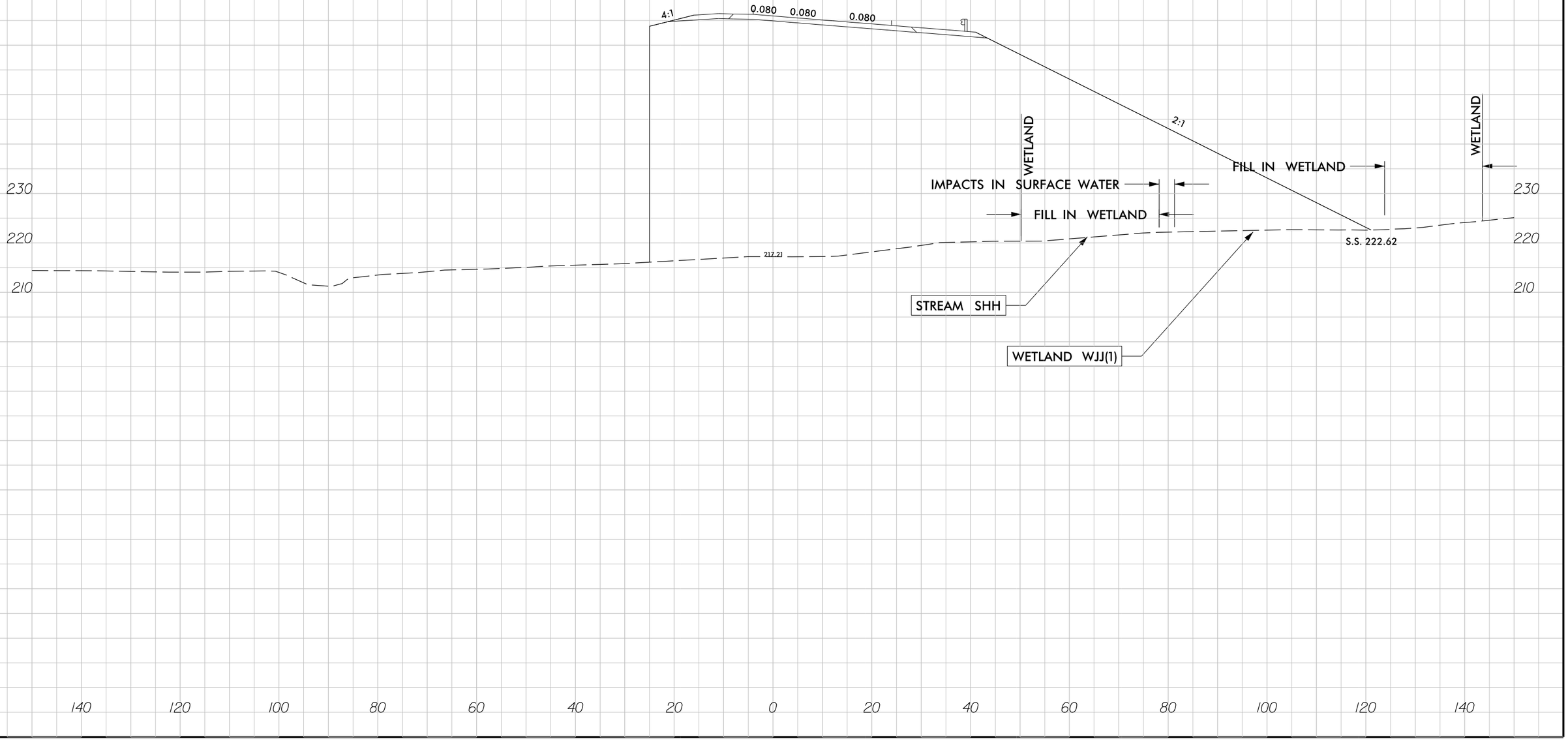
7/30/2018
R2829_hyd_prm_wet_psh_35c_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 84 OF 108

CROSS SECTION
SITE 54, WETLAND WJJ(1)
STATION 25+00 –Y31RPB–



7/30/2018
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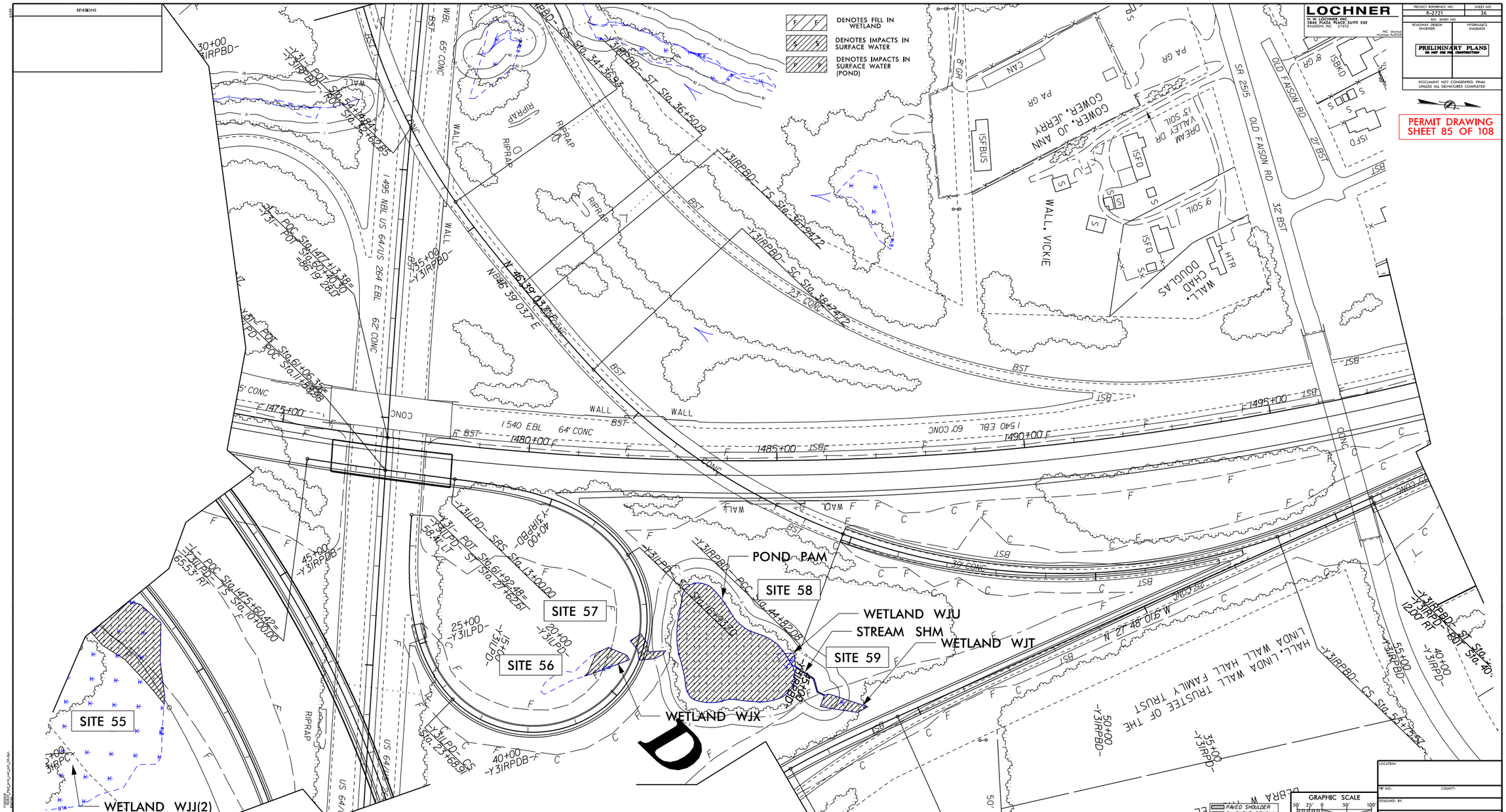
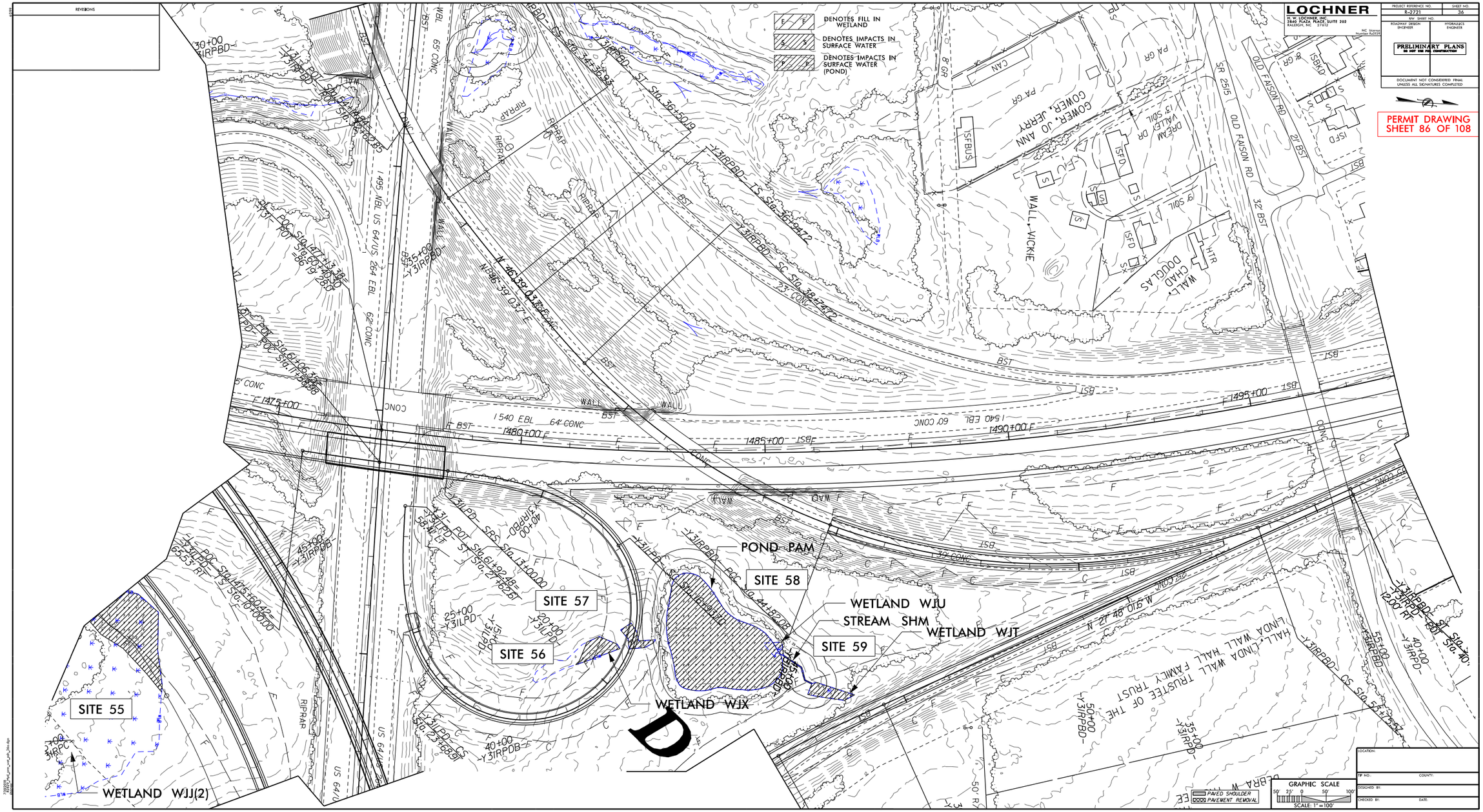


DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number R-0559
PROJECT REFERENCE NO.
R-2721
SHEET NO.
36
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 85 OF 108
REVISIONS
POND PAM
SITE 58
SITE 57
SITE 56
SITE 59
SITE 55
WETLAND WJU
STREAM SHM
WETLAND WJT
WETLAND WJX
WETLAND WJJ(2)
WALL, VICKIE
GOWER, JO ANN
GOWER, JERRY
WALL, CHAD
DOUGLAS
HALL, LINDA WALL TRUSTEE OF THE LINDA WALL HALL FAMILY TRUST
OLD FAISON RD
SR 2515
1495 NBL US 64/US 264 EBL
1540 EBL
1475+00
1480+00
1485+00
1490+00
1495+00
N 46°39'03.7" E
N 27°48'01.6" W
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



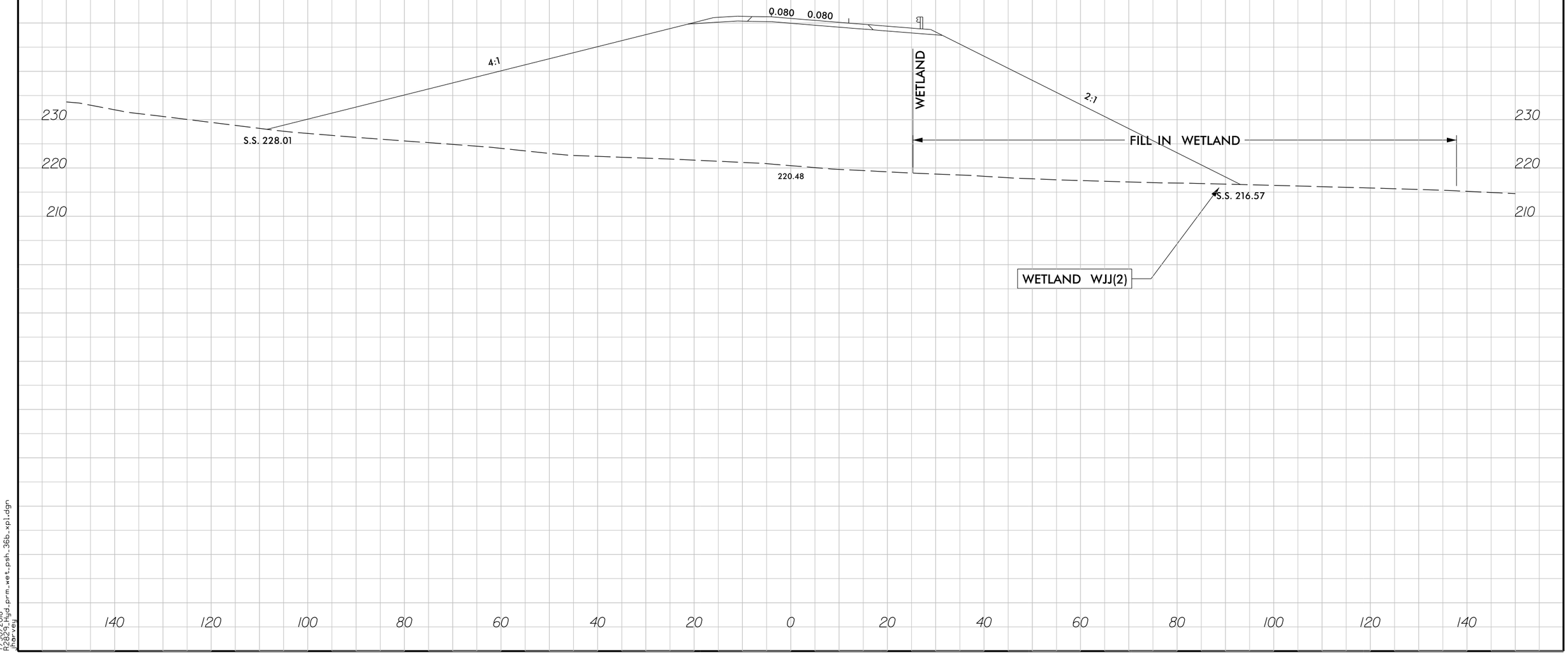
REVISIONS
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
DENOTES IMPACTS IN SURFACE WATER (POND)
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number K-0559
PROJECT REFERENCE NO.
R-2721
SHEET NO.
36
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 86 OF 108
POND PAM
SITE 58
SITE 57
SITE 56
SITE 59
SITE 55
WETLAND WJU
STREAM SHM
WETLAND WJT
WETLAND WJX
WETLAND WJJ(2)
GOWER, JO ANN
GOWER, JERRY
WALL, VICKIE
WALL, CHAD DOUGLAS
HALL, LINDA WALL TRUSTEE OF THE LINDA WALL HALL FAMILY TRUST
OLD FAISON RD
SR 2515
1495 NBL US 64/US 264 EBL
1540 EBL
1480+00
1485+00
1490+00
1495+00
1475+00
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
SCALE: 1"=100'
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 87 OF 108

CROSS SECTION
SITE 55, WETLAND WJJ(2)
STATION 25+00 –Y31RPC–



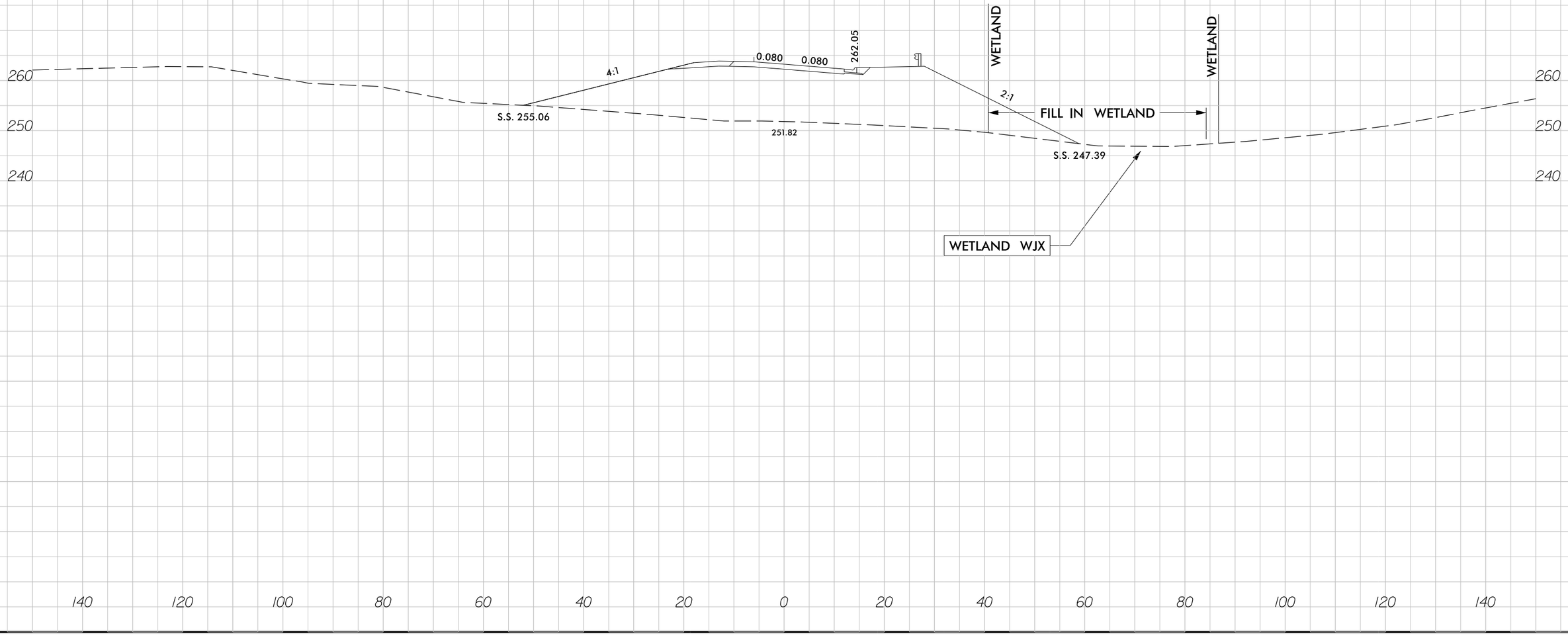
7/30/2018
R2829_hgd_prm_wet_psh_36b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 88 OF 108

CROSS SECTION
SITE 57, WETLAND WJX
STATION 19+50 –Y31LPD–



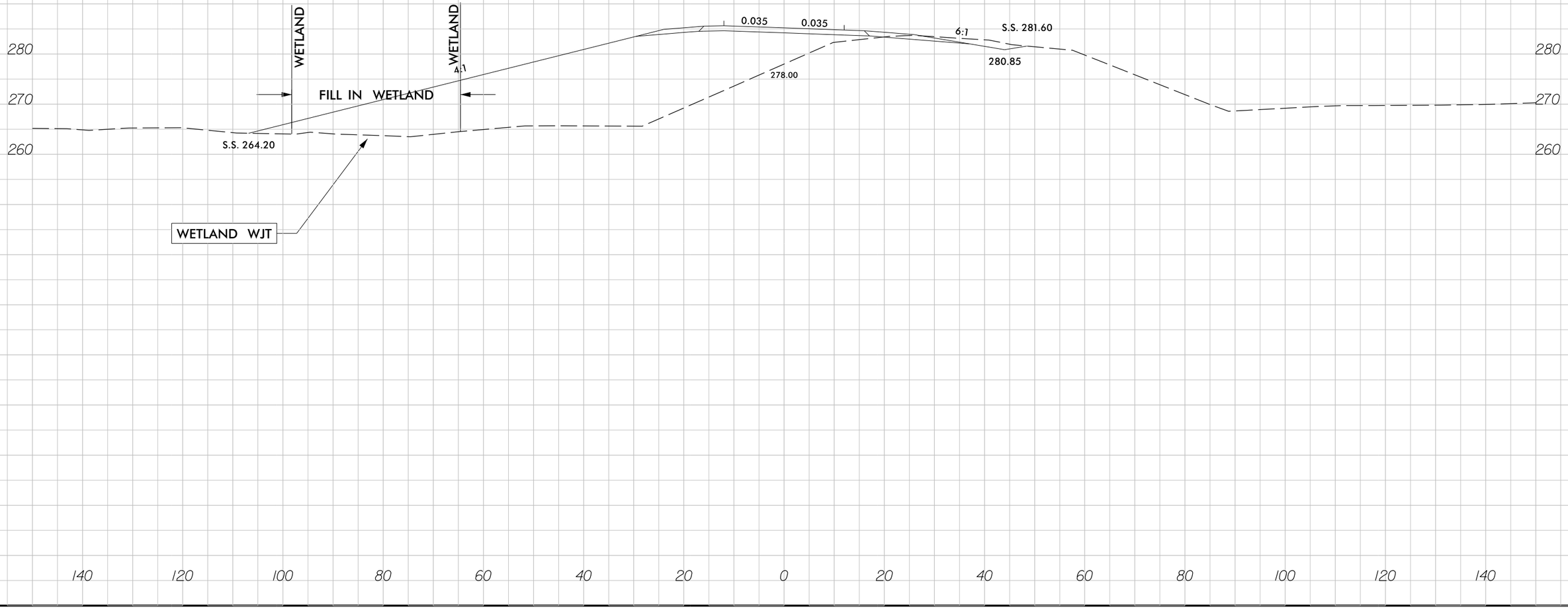
7/30/2018
R2829_hgd_prm_wet_psh_36c_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 89 OF 108

CROSS SECTION
SITE 59, WETLAND WJT
STATION 18+50 –Y31RPD–



7/30/2018
R2829_Hyd_prm_wet_psh_36d_xpl.dgn
jharvey

51499

F F DENOTES FILL IN WETLAND

50′ 25′ 0 50′ 100′

SCALE: 1″=100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	38
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 90 OF 108

-L- ST Sta. 1511+09.41

JOYNER MINGO CREEK LLC

BST

1540 EBL 59' CONC

1515+00

1520+00 BST

SITE 60

-L- POT Sta. 1512+55.03=
-Y31RPBD- PT Sta. 72+06.75
77.53 RT

WETLAND WWG

COMMUNITY ASSN INC

RIPRAP

CHURCHILL SUBDIVISON

SMARTY JONES DR 25' BST

KINGMAN DR

2SFD FD 2S ISFD

PAVEMENT REMOVAL
PAVED SHOULDER

7302018
R2829_Hyd_prm_wet_psh_38.dgn
jhorney

51499

F F DENOTES FILL IN WETLAND

50' 25' 0 50' 100'

SCALE: 1"=100'

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	38
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 91 OF 108

-L- ST Sta. 1511+09.41

JOYNER MINGO CREEK LLC

BST

1540 EBL 59' CONC

00+5151

00+1520 BST

ST

SITE 60

-L- POT Sta. 1512+55.03=
-Y3IRPBD- PT Sta. 22+06.75
77.53 RT

WETLAND WWG

RIPRAP

CHURCHILL SUBDIVISION

COMMUNITY ASSN INC

SMARTY JONES DR

KINGMAN DR

25' BSL

PAVEMENT REMOVAL
PAVED SHOULDER

7302018
R2829_Hyd_prm_wet_psh_38a.dgn
jhoover

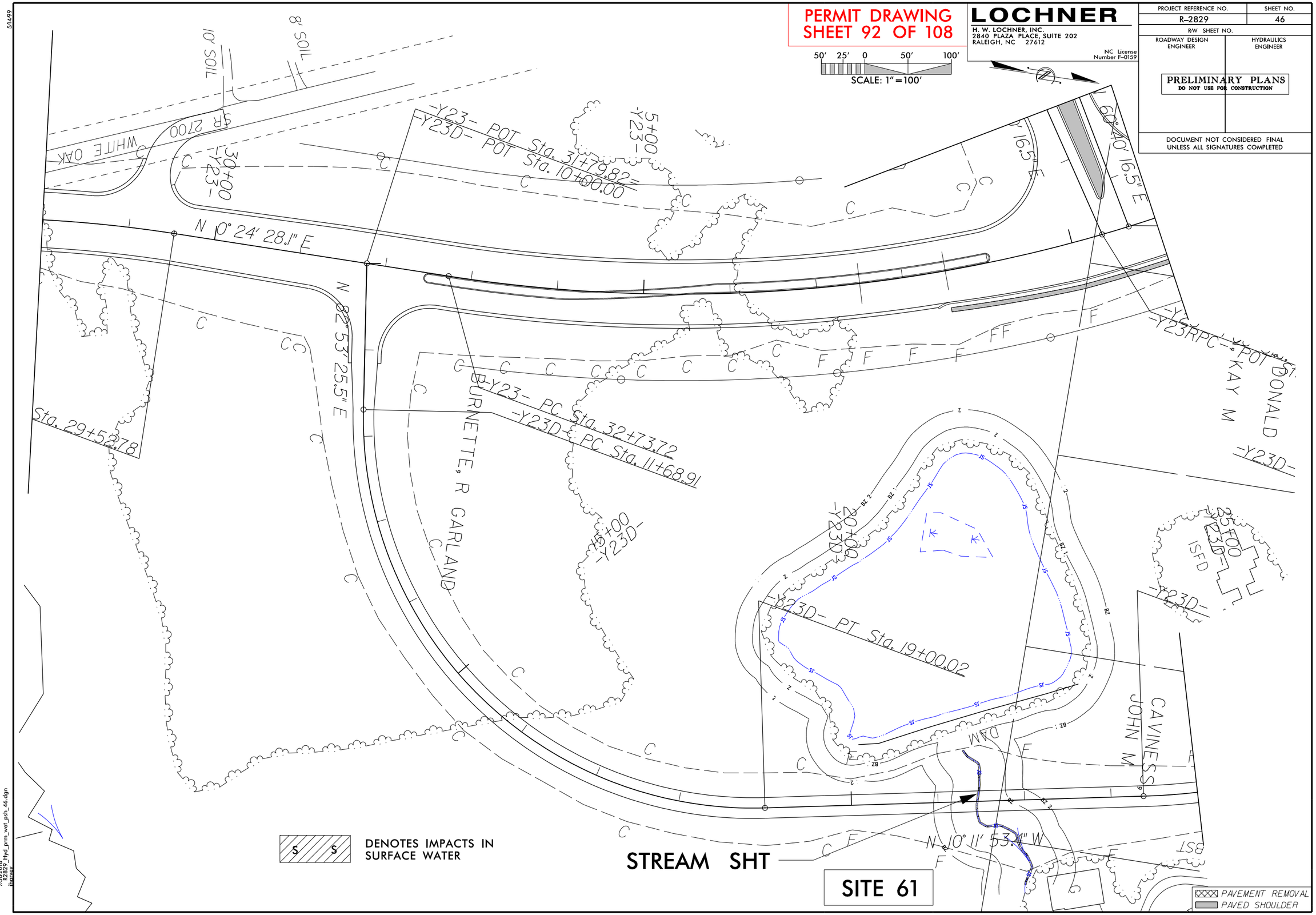
PERMIT DRAWING
SHEET 92 OF 108

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	46
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DENOTES IMPACTS IN SURFACE WATER

STREAM SHT

SITE 61

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_46.dgn
jharvey

51499

PERMIT DRAWING
SHEET 93 OF 108

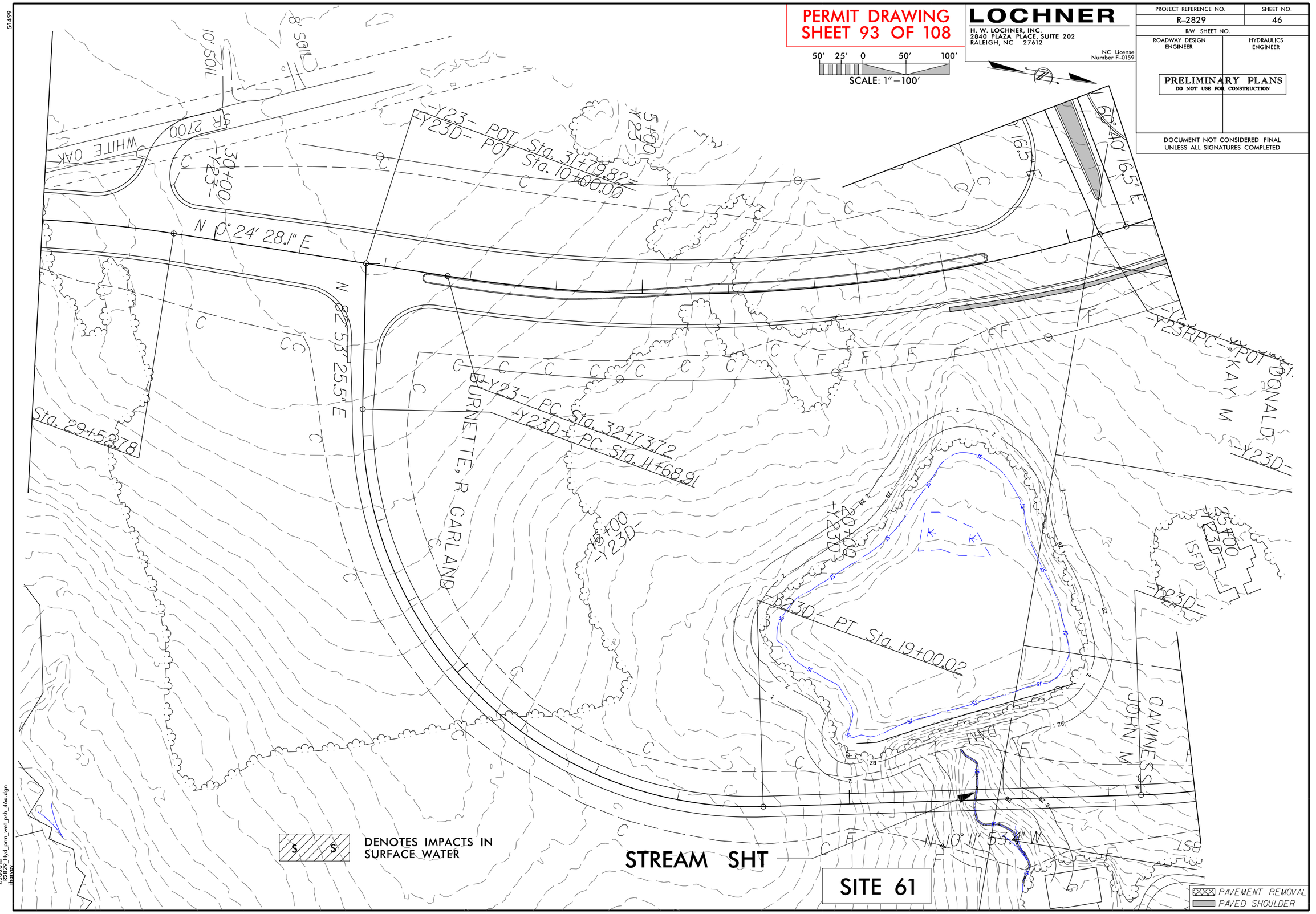
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	46
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

50' 25' 0 50' 100'
SCALE: 1"=100'



S S DENOTES IMPACTS IN SURFACE WATER

STREAM SHT

PAVEMENT REMOVAL
PAVED SHOULDER

730208
R2829_hyd_prm_vet_psh_46a.dgn
lhoover

51499

DENOTES IMPACTS IN SURFACE WATER

50′ 25′ 0 50′ 100′

SCALE: 1″=100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PERMIT DRAWING SHEET 94 OF 108

PROJECT REFERENCE NO.	SHEET NO.
R-2829	47
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SITE 62

STREAM SFJ

N 65° 10′ 50.9″ W

N 2° 39′ 52.8″ E

3° 08′ 37.3″ E

SR 2700 WHITE OAK RD

MT HERMAN CHRISTIAN CH

ISBKCH

CLEMENTS, RUBY CLEMENTS, ET AL

-Y23- POT Sta. 19+02.97

-Y23- PC Sta. 62+84.75

-Y23- POT Sta. 68+31.41

-Y23- POT Sta. 10+00.00

-Y23- PT Sta. 68+19.13

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
R2829_Hyd_prm_wet_psh_47.dgn
jhorney

51499

DENOTES IMPACTS IN SURFACE WATER

50′ 25′ 0 50′ 100′

SCALE: 1″=100′

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PERMIT DRAWING SHEET 95 OF 108

PROJECT REFERENCE NO.	SHEET NO.
R-2829	47
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SITE 62

STREAM SFJ

N 65° 10′ 50.9″ W

N 23° 39′ 52.8″ E

N 3° 08′ 37.3″ E

MT HERMAN CHRISTIAN CH

CLEMENTS, RUBY CLEMENTS, ET AL

-Y23- PC Sta. 62+84.75

-Y23- PT Sta. 68+19.13

-Y23- POT Sta. 10+00.00

-Y23- POT Sta. 19+02.97

-Y23B- POT Sta. 68+31.41

PAVEMENT REMOVAL
PAVED SHOULDER

7/30/2018
8:39:22 AM
jhardey

7302018_8392_hyd_prm_wet_psh_47a.dgn

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

STREAM SFZ(1)

WETLAND WGV(1)

STREAM SFY

-Y24- POT Sta. 10+00.00

SITE 63

-Y24A- PC Sta. 10+74.90

-Y24B- PC Sta. 10+58.05

-Y24B- RT Sta. 11+09.87

-Y24B- POT Sta. 12+00.33

US 70 BUS EBL 32' BST

PA BST

PA GR

ISBKBUS

HTR

DAM

BURNETTE, CARLAND

HAWLEY, DAVID M

50' 25' 0 50' 100'

SCALE: 1"=100'

LOCHNER

H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612

NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	52
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 96 OF 108

PAVEMENT REMOVAL
PAVED SHOULDER

7302018
R2829_Hyd_prm_wet_psh_52.dgn
jhopper

51499

F F DENOTES FILL IN WETLAND

S S DENOTES IMPACTS IN SURFACE WATER

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	52
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 97 OF 108

50' 25' 0 50' 100'
SCALE: 1" = 100'

STREAM SFZ(1)

WETLAND WGV(1)

STREAM SFY

-Y24- POT Sta. 10+00.00

SITE 63

-Y24A- PC Sta. 10+74.90

-Y24B- PC Sta. 10+58.05

-Y24B- PT Sta. 11+09.87

-Y24B- POT Sta. 12+00.33

US 70 BUS EBL 32' BST

PA BST

ISBKBUS

PA GR

HAWLEY, DAVID M

BURNETTE, CARLAND

PAVEMENT REMOVAL
PAVED SHOULDER

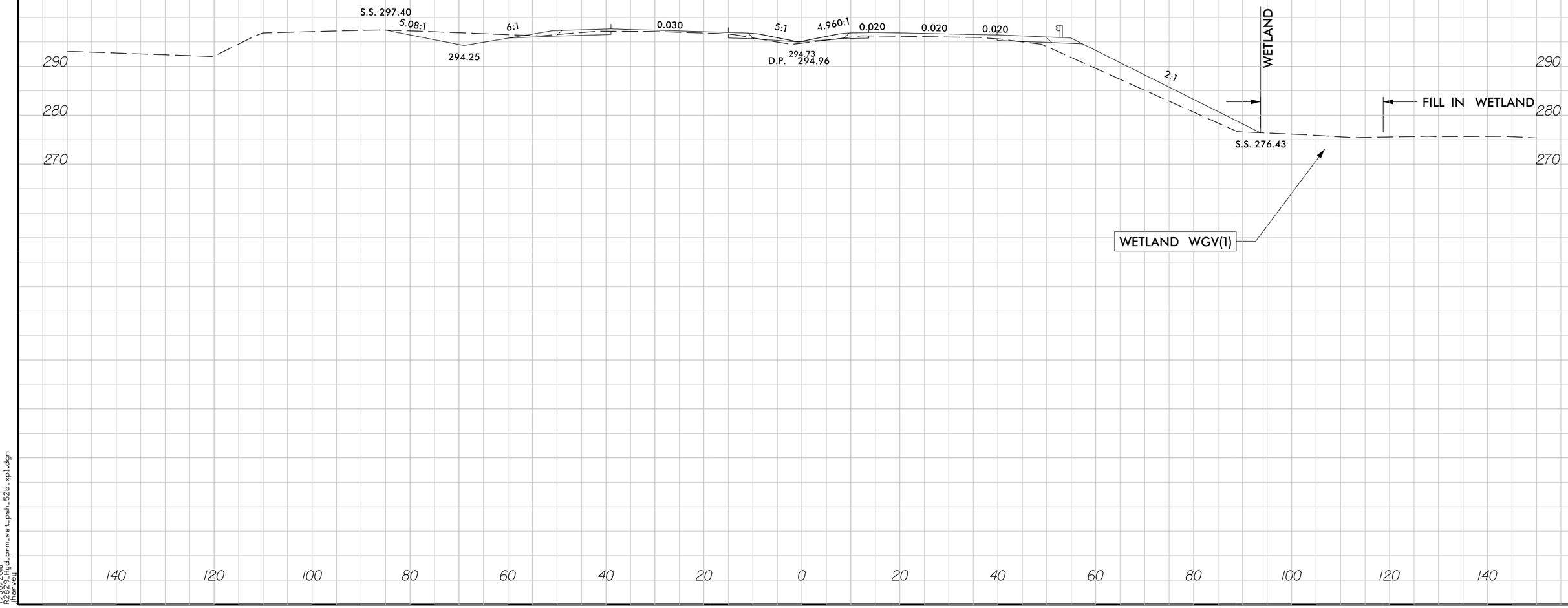
7/30/2018
R2829_hyd_prm_wet_psh_52a.dgn
jhervey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 98 OF 108

CROSS SECTION
SITE 63, WETLAND WGV(1)
STATION 11+00 –Y24–



7/30/2018
R2829_Hyd_prm_wet_psh_52b_xpl.dgn
jharvey

51499

LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159

PROJECT REFERENCE NO.	SHEET NO.
R-2829	53
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 99 OF 108

F F DENOTES FILL IN WETLAND

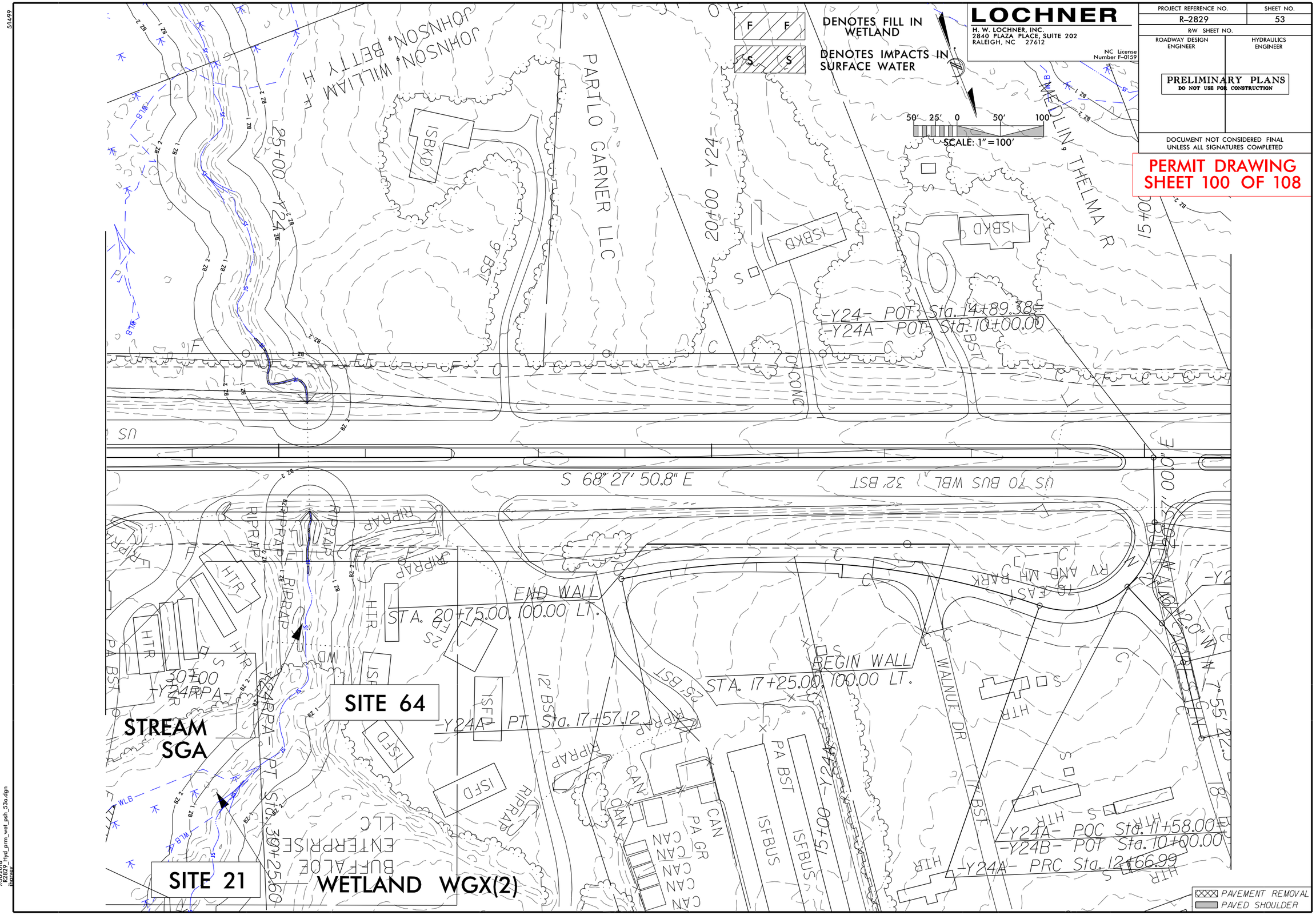
S S DENOTES IMPACTS IN SURFACE WATER

50' 25' 0 50' 100'
SCALE: 1" = 100'

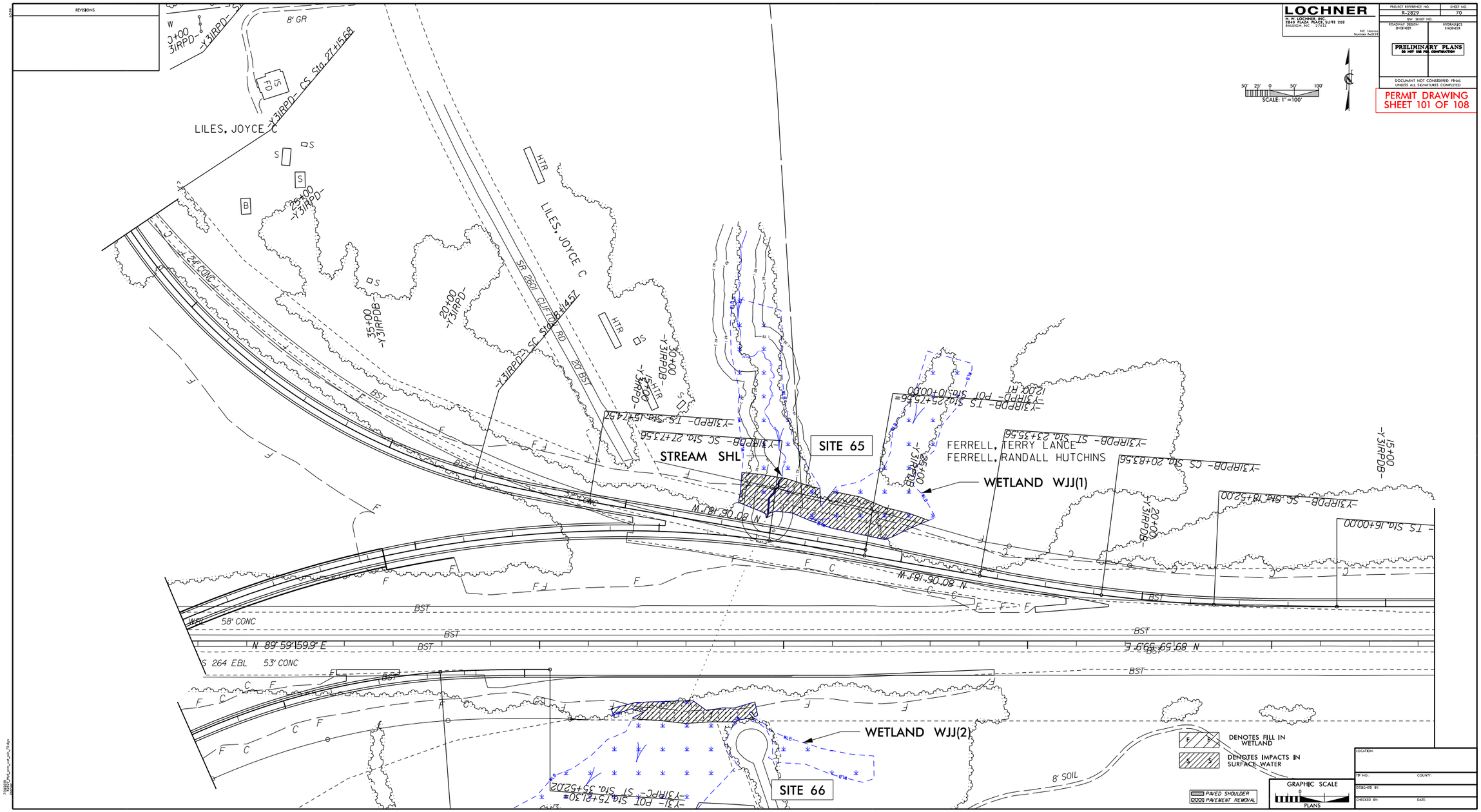
JOHNSON, WILLIAM F
JOHNSON, BETTY H
PARTLO GARNER LLC
BOWEDLIN THELMA R
WALNUT DR
ISBKD
ISFD
ISFBUS
PA BST
PA GR
CAN
HTR
RIPRAP
WLB
SI
BZ 1
BZ 2
ZB 1
ZB 2
25+00 -Y24-
20+00 -Y24-
15+00
-Y24- POT Sta. 14+89.38=
-Y24A- POT Sta. 10+00.00
-Y24A- POC Sta. 11+58.00=
-Y24B- POT Sta. 10+00.00
-Y24A- PRC Sta. 12+66.99
-Y24A- 00+51
END WALL
STA. 20+75.00, 100.00 LT.
BEGIN WALL
STA. 17+25.00, 100.00 LT.
-Y24RPA- PT Sta. 17+57.12
-Y24RPA- PT Sta. 30+25.60
-Y24RPA- 30+00
SITE 64
SITE 21
STREAM SGA
WETLAND WGX(2)
BUFFALOE ENTERPRISES LLC
S 68° 27' 50.8" E
US 70 BUS WBL 32' BST
70 EAST RV AND MH PARK
12' BST
25' BST
17' BST
F F
C C
S S
WM
OHP
UP
MD
S 7° 55' 42.0" W
N 27° 00' 00" E

PAVEMENT REMOVAL
PAVED SHOULDER

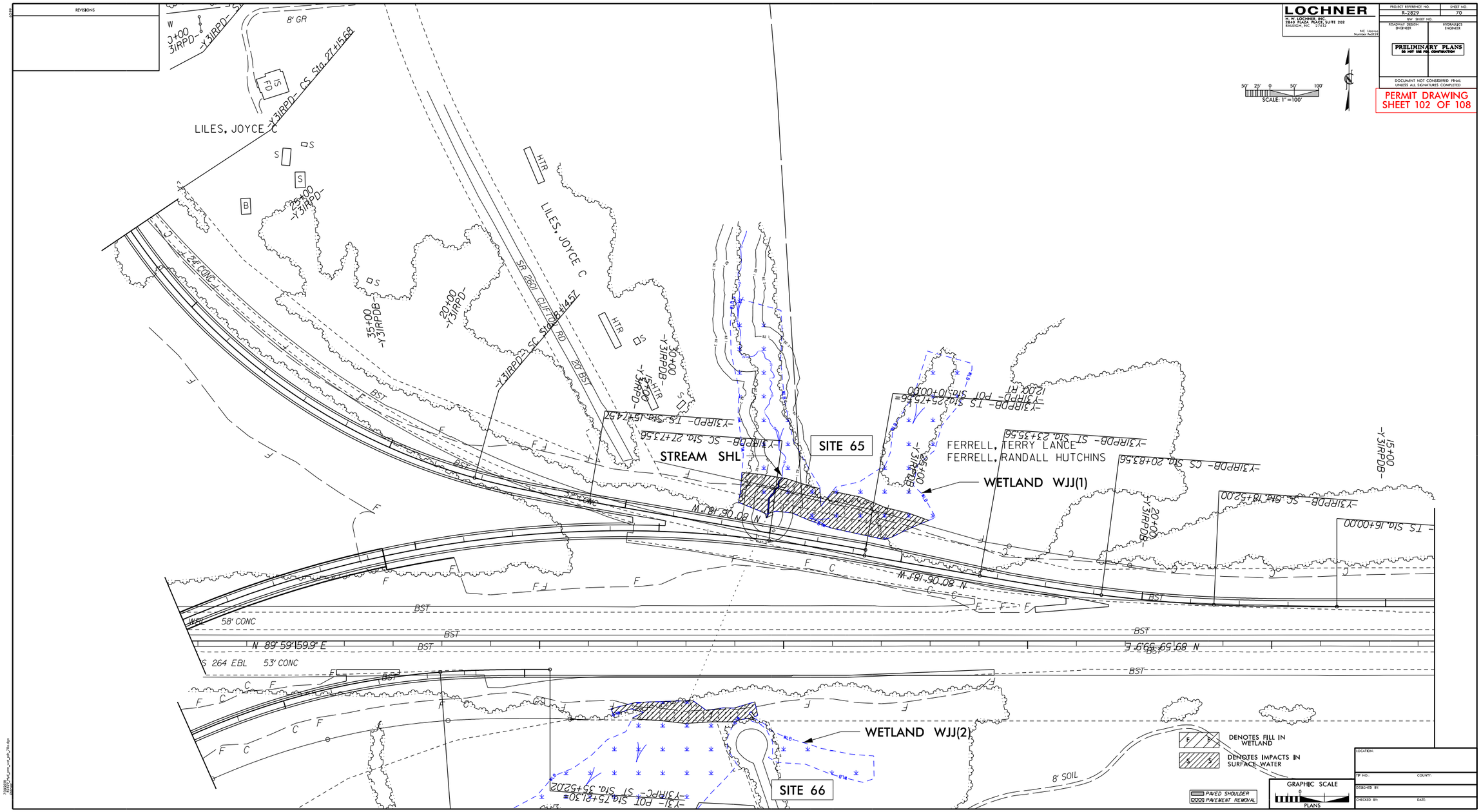
7/30/2018
R2829_Hyd_prm_wet_pth_53.dgn
jhoover



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
53
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 100 OF 108
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
SCALE: 1"=100'
JOHNSON, WILLIAM F
JOHNSON, BETTY H
PARTLO GARNER LLC
MEDLIN, THELMA R
25+00 -Y24-
20+00 -Y24-
15+00
-Y24- POT Sta. 14+89.38
-Y24A- POT Sta. 10+00.00
S 68° 27' 50.8" E
US 70 BUS WBL 32' BST
END WALL
STA. 20+75.00, 100.00 LT.
BEGIN WALL
STA. 17+25.00, 100.00 LT.
-Y24A- PT Sta. 17+57.12
-Y24A- POC Sta. 11+58.00
-Y24B- POT Sta. 10+00.00
-Y24A- PRC Sta. 12+66.99
WALNUT DR
RV AND MH PARK
SITE 64
STREAM SGA
SITE 21
WETLAND WGX(2)
BUFFALOE ENTERPRISE LLC
PAVEMENT REMOVAL
PAVED SHOULDER



LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
70
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 101 OF 108
SCALE: 1" = 100'
REVISIONS
LILES, JOYCE C
LILES, JOYCE C
SR 2601 CLIFTON RD
20' BST
STREAM SHL
SITE 65
FERRELL, TERRY LANCE
FERRELL, RANDALL HUTCHINS
WETLAND WJJ(1)
WETLAND WJJ(2)
SITE 66
58' CONC
53' CONC
N 89° 59' 59.9" E
N 80° 06' 18.1" W
8' SOIL
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
PLANS
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:



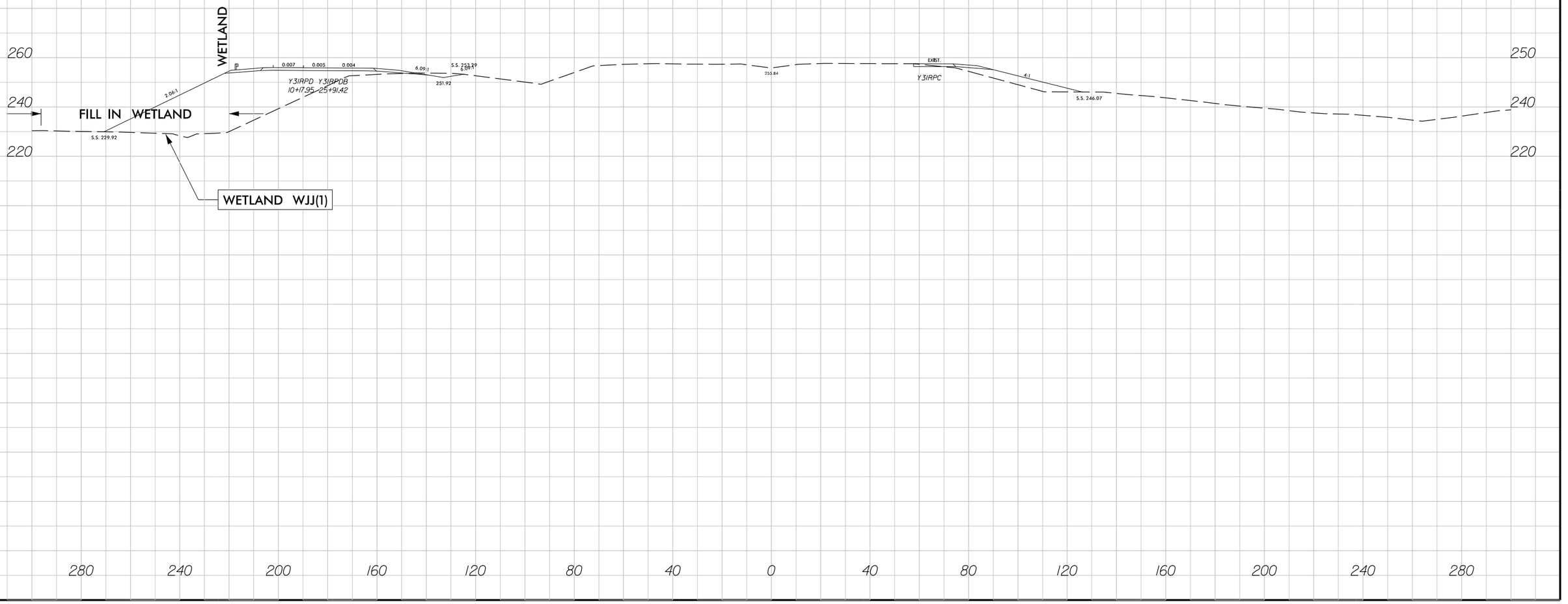
LOCHNER
H. W. LOCHNER, INC.
2840 PLAZA PLACE, SUITE 202
RALEIGH, NC 27612
NC License Number F-0159
PROJECT REFERENCE NO.
R-2829
SHEET NO.
70
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PERMIT DRAWING
SHEET 102 OF 108
SCALE: 1" = 100'
REVISIONS
LILES, JOYCE C
LILES, JOYCE C
SR 2601 CLIFTON RD
20' BST
STREAM SHL
SITE 65
FERRELL, TERRY LANCE
FERRELL, RANDALL HUTCHINS
WETLAND WJJ(1)
WETLAND WJJ(2)
SITE 66
58' CONC
53' CONC
N 89° 59' 59.9" E
S 264 EBL
8' SOIL
DENOTES FILL IN WETLAND
DENOTES IMPACTS IN SURFACE WATER
PAVED SHOULDER
PAVEMENT REMOVAL
GRAPHIC SCALE
PLANS
LOCATION:
TIP NO.:
COUNTY:
DESIGNED BY:
CHECKED BY:
DATE:

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 103 OF 108

CROSS SECTION
SITE 65, WETLAND WJJ(1)
STATION 81+50 –Y31–



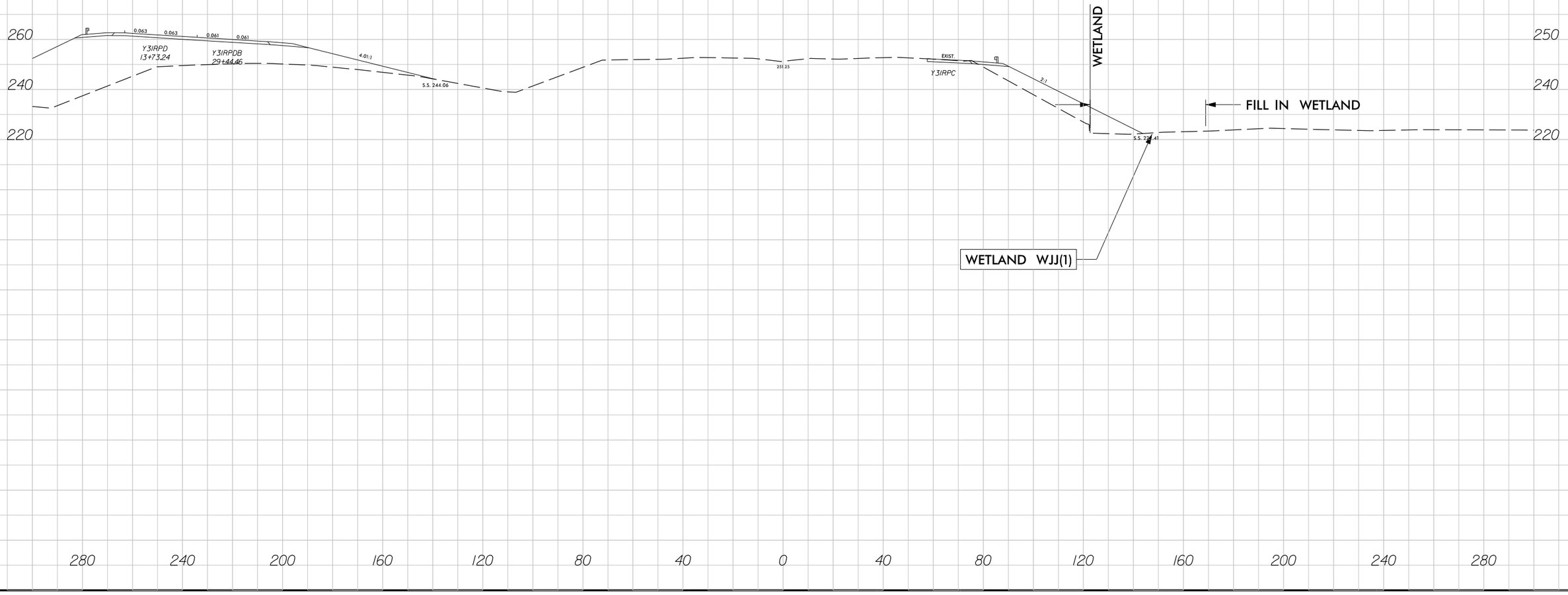
7/30/2018
R2829_Hyd_prm_wet_psh_70b_xpl.dgn
jharvey

6/23/16

0	PROJ. REFERENCE NO.	SHEET NO.
	R-2829	

PERMIT DRAWING
SHEET 104 OF 108

CROSS SECTION
SITE 66, WETLAND WJJ(2)
STATION 78+00 –Y31–



7/30/2018
R2829_Hyd_prm_wet_psh_70c_xpl.dgn
jharvey

WETLAND AND SURACE WATER IMPACTS SUMMARY

			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)
1	52+07 to 52+83-Y22RPAFLY-LT	ROADWAY FILL	0.02									
2	967+25 to 968+60-L-LT	ROADWAY FILL	0.09									
3	972+15 to 979+51-L-	ROADWAY FILL	0.84					0.03		542		
4	1001+22 to 1004+47-L-	ROADWAY FILL	0.47									
5	1008+45 to 1008+98-L-	ROADWAY FILL						0.02		413		
6	1012+45 to 1014+87-L-	ROADWAY FILL						0.02		469		
7	1013+88 to 1018+45	ROADWAY FILL	0.14					0.03		612		
8	1022+78 to 1024+65-L-	ROADWAY FILL	0.03					0.02		322		
9	1035+69 to 1037+54-L-	ROADWAY FILL	0.16					0.02		326		
		ROADWAY FILL (POND)						0.03				
10	27+43 to 27+71-Y23RPB-LT	ROADWAY FILL	< 0.01									
11	31+20 to 31+54-Y23D-	ROADWAY FILL						< 0.01		155		
12	1060+50 to 1063+96-L-	ROADWAY FILL	0.02					0.02		468		
13	1062+24 to 1062+74-L-	ROADWAY FILL	< 0.01					0.01		227		
14	45+51 to 47+42-Y23D-	ROADWAY FILL	0.05									
15	1098+65 to 1105+15 -L-	ROADWAY FILL	1.38					< 0.01		155		
16	1109+60 to 1116+95 -L-	ROADWAY FILL	2.10					0.06		1191		
17	1113+04 to 1114+64 -L-RT	ROADWAY FILL	0.27									
18	1115+69 to 1116+20 -L-RT	ROADWAY FILL	0.03									
19	1123+94 to 1126+50 -L-	ROADWAY FILL	0.26					0.03		534		
20	1137+79 to 1142+13-L-	ROADWAY FILL						0.04		794		
21	26+25 to 28+85-Y24RPA-RT	ROADWAY FILL	0.21									
TOTALS*:			6.08					0.32		6208	0	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
07/30/2018
WAKE COUNTY
R-2829

WETLAND AND SURACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND 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)	SURFACE WATER IMPACTS: Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
22	1148+23 to 1149+33-L-	ROADWAY FILL	0.21									
23	25+14 to 25+99-Y24RPD-	ROADWAY FILL	0.10									
24	1151+15 to 1154+48-L-	ROADWAY FILL	1.29					0.03		681		
25	11+51 to 11+73-Y24RPD-	ROADWAY FILL						0.01		293		
26	1169+32 to 1172+25-L-	ROADWAY FILL	0.56					0.02		492		
27	1173+86 to 1178+33-L-LT	ROADWAY FILL	0.29					0.03		513		
28	1171+26 to 1178+65-L-	ROADWAY FILL						0.04		798		
29	1197+22 to 1198+69-L-	ROADWAY FILL	0.14									
30	17+07 to 18+65-Y27RPA-LT	ROADWAY FILL (POND)						0.03				
31	16+34 to 20+18 -Y27RPD-LT	ROADWAY FILL	0.18					< 0.01		164		
32	1241+99 to 1244+54-L-	ROADWAY FILL	0.03					0.02		500		
33	1268+92 to 1269+72-L-	ROADWAY FILL	0.05					0.01		227		
34	1276+60 to 1277+19-L-RT	ROADWAY FILL	0.05									
35	1287+71 to 1288+33-L-	ROADWAY FILL						0.02		500		
36	1315+08 to 1316+47-L-LT	ROADWAY FILL	0.06					< 0.01		156		
37	1317+02 to 1320+29-L-	ROADWAY FILL	0.06					0.02		448		
38	1323+04 to 1323+50-L-LT	BRIDGE	0.05									
38A	1324+16 to 1325+00L-LRT	ROADWAY FILL						< 0.01		99		
39	1343+98 to 1346+17 -L-	ROADWAY FILL	0.78									
40	1347+59 to 1354+79-L-	ROADWAY FILL						0.04		970		
41	24+36 to 25+45-Y29RPA-RT	ROADWAY FILL	0.11									
42	1345+70 to 1350+04-L-	ROADWAY FILL	0.16					0.52		970		
TOTALS*:			4.12					0.82		6811	0	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
07/30/2018
WAKE COUNTY
R-2829

WETLAND AND SURACE WATER IMPACTS SUMMARY

			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)
43	18+10 to 18+94-Y29E-	ROADWAY FILL	0.31									
44	1377+57 to 1382+39-L-	ROADWAY FILL	0.18					0.01		289		
		ROADWAY FILL (POND)						1.79				
45	1388+72 to 1394+94-L-	ROADWAY FILL (POND)						4.85				
46	1404+33 to 1405+98-L-	ROADWAY FILL	0.43					0.02		428		
47	1412+68 to 1415+70-L-	ROADWAY FILL	1.29									
48	24+16 to 24+98-Y30RPC-	ROADWAY FILL	0.17									
49	21+94 to 34+46-Y30-RT	ROADWAY FILL	0.20					0.05		1096		
50	34+82 to 35+20-Y30-	ROADWAY FILL						0.01		212		
51	1431+44 to 1432+43-L-RT	ROADWAY FILL	0.11									
52	1453+37 to 1455+18-L-	ROADWAY FILL	0.61									
53	1454+97 to 1469+92-L-	ROADWAY FILL	3.12					0.07		1417		
54	23+91 to 26+31-Y31RPB-RT	ROADWAY FILL	0.33					< 0.01		202		
55	21+93 to 25+21-Y31RPC-RT	ROADWAY FILL	0.45									
56	19+77 to 20+82-Y31LPD-L5	ROADWAY FILL	0.05									
57	20+85 to 21+38-Y31LPD-LT	ROADWAY FILL	0.03									
58	26+28 to 28+11-Y31RPD-LT	ROADWAY FILL (POND)						0.87				
59	28+11 to 29+12-Y31RPD-LT	ROADWAY FILL	0.05					< 0.01		94		
60	1516+50 to 1516+78-L-RT	ROADWAY FILL	0.01									
61	21+30 to 22+07-Y23D-	ROADWAY FILL						0.01		214		
62	64+61 to 64+85-Y23-LT	ROADWAY FILL						< 0.01		94		
63	9+96 to 11+89-Y24-RT	ROADWAY FILL	0.10					< 0.01		31		
64	24+62 -Y24-LT	ROADWAY FILL						0.01		197		
TOTALS*:			7.45					7.70		4274	0	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
07/30/2018
WAKE COUNTY
R-2829

WETLAND AND SURACE WATER IMPACTS SUMMARY

			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)
65	24+58 to 28+44-Y31RPDB-RT	ROADWAY FILL	0.55					< 0.01		94		
66	27+46 to 31+02-Y31RPDB-LT	ROADWAY FILL	0.21									
	SHEET 77 TOTALS		0.75					< 0.01		94		
	SHEET 74 TOTALS		6.08					0.32		6208		
	SHEET 75 TOTALS		4.12					0.82		6811		
	SHEET 76 TOTALS		7.45					7.70		4274		
TOTALS*:			18.40					8.85		17387	0	0

*Rounded totals are sum of actual impacts

NOTES:

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DIVISION OF HIGHWAYS
07/30/2018
WAKE COUNTY
R-2829