09/08/99

TIP PROJECT: R-2829B

CONTRACT: C204825

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

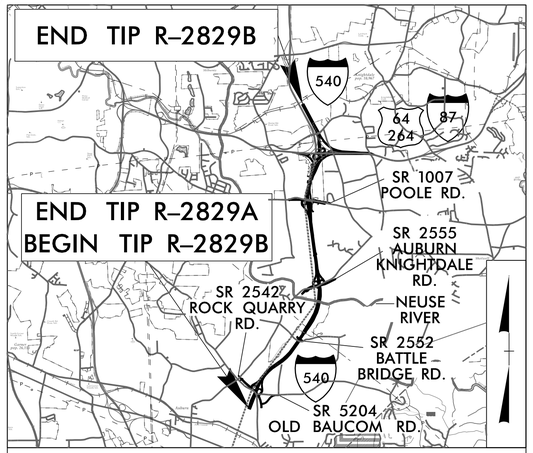
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2829B	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
35517.3.TA2	N/A	DESIGN-BUILD
35517.3.TAGV2	0540048	DESIGN-BUILD

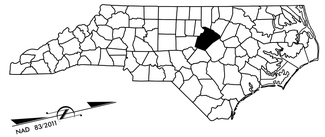
R-2829B
NON-MERGER INTERAGENCY
HYDRAULIC DESIGN REVIEW
DRAFT PLANS
REVIEW MEETING 4/11/2024

LOCATION: TRIANGLE EXPRESSWAY SOUTHEAST EXTENSION FROM SOUTH OF SR 2542 (ROCK QUARRY ROAD) TO I-87/US 64/US 264

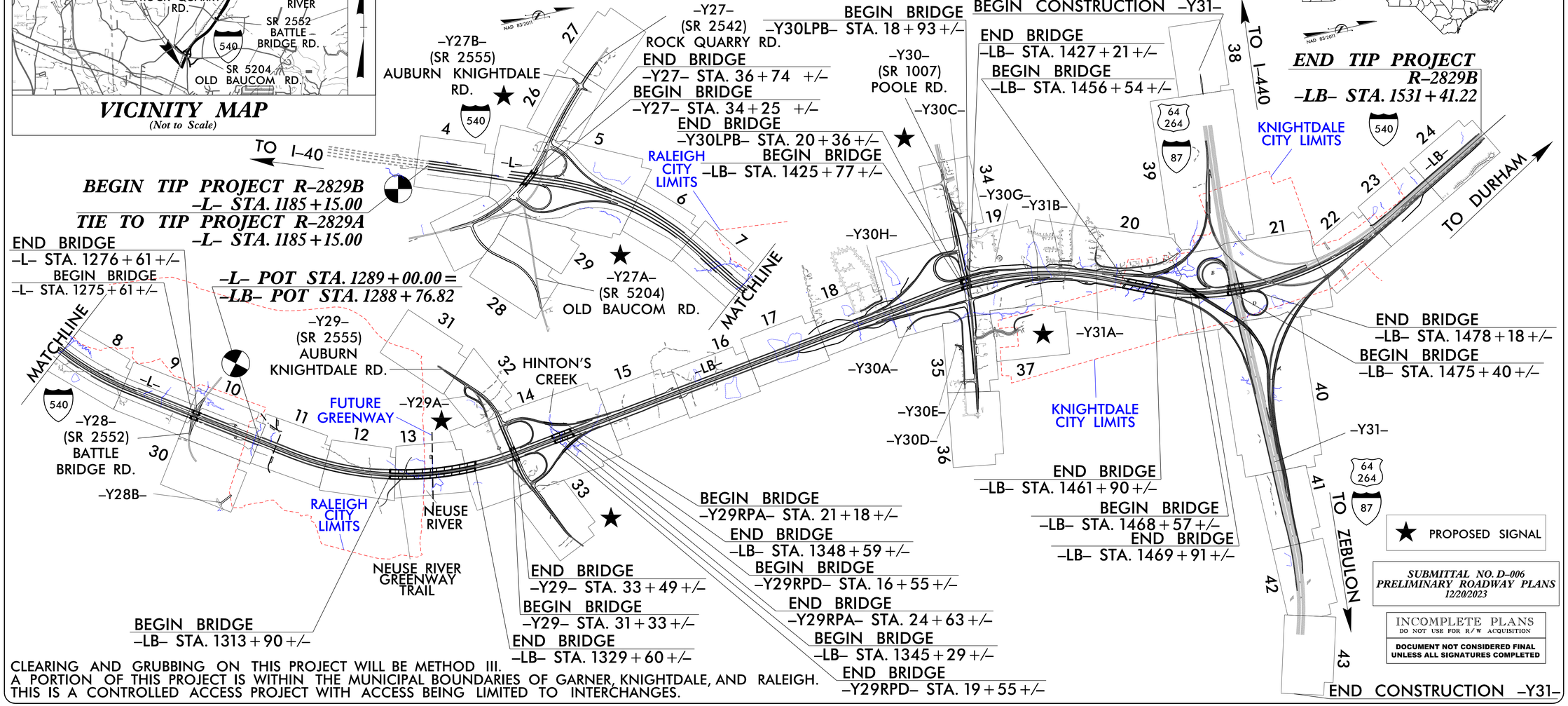
TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES, SIGNING, AND SIGNALS



VICINITY MAP
(Not to Scale)



END TIP PROJECT R-2829B
-LB- STA. 1531+41.22



CLEARING AND GRUBBING ON THIS PROJECT WILL BE METHOD III.
A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GARNER, KNIGHTDALE, AND RALEIGH.
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

SUBMITTAL NO. D-006
PRELIMINARY ROADWAY PLANS
12/20/2023

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

GRAPHIC SCALES

PLANS: 50 25 0 50 100
PROFILE (HORIZONTAL): 50 25 0 50 100
PROFILE (VERTICAL): 20 10 0 10 20

DESIGN DATA

ADT 2025 = 34,800
ADT 2045 = 66,600
K = 12%
D = 60/65%
T = 10% *
V = 75 MPH
* TTST = 4% DUAL = 6%
FUNC CLASS =
INTERSTATE
STATEWIDE TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2829B = 5.967 MILES
LENGTH STRUCTURE TIP PROJECT R-2829B = 0.595 MILES
TOTAL LENGTH TIP PROJECT R-2829B = 6.562 MILES

Prepared In the Office of:
ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-0999

Prepared for:
NORTH CAROLINA TURNPIKE AUTHORITY
1000 Birch Ridge Dr., Raleigh NC 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
8/29/2023

LETTING DATE:
8/29/2023

BRIAN LUSK, P.E.
PROJECT ENGINEER

RON McCOLLUM, P.E.
NCTA CONTACT
DEPUTY CHIEF ENGINEER FOR PRECONSTRUCTION, NCTA

HYDRAULICS ENGINEER

_____ P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

_____ P.E.
SIGNATURE:

PLANS PREPARED FOR:

NORTH CAROLINA
Turnpike Authority

2:41:42 PM
C:\bms\ice-eng-pw-01\dms57954\R-2829B_DRN_4B_TSH.dgn
Jeffrey.King

8/17/99

PROPOSAL FOR

NORTH CAROLINA Turnpike Authority

FLATIRON

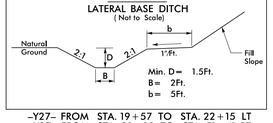
FRED SMITH COMPANY CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	2D-1
RW SHEET NO.	
HYDRAULICS ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

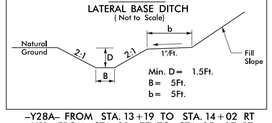
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DETAIL A
LATERAL BASE DITCH
(Not to Scale)



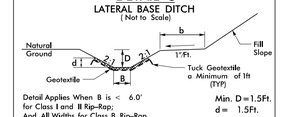
–Y27– FROM STA. 19+57 TO STA. 22+15 LT
–Y27– FROM STA. 50+00 TO STA. 51+41 RT
–Y27– FROM STA. 55+28 TO STA. 56+76 RT
–Y28– FROM STA. 19+92 TO STA. 21+93 RT
–L– FROM STA. 1423+30 TO STA. 1423+82 RT
–L– FROM STA. 1249+08 TO STA. 1250+25 LT
–Y30A– FROM STA. 19+03 TO STA. 21+69 LT
–Y30A– FROM STA. 22+02 TO STA. 23+54 LT
–Y30– FROM STA. 35+54 TO STA. 37+15 RT
–Y30– FROM STA. 37+71 TO STA. 40+26 RT
–Y30– FROM STA. 46+86 TO STA. 49+16 RT
–L– FROM STA. 1431+83 TO STA. 1434+61 RT
–L– FROM STA. 1439+60 TO STA. 1441+00 LT
–L– FROM STA. 1446+04 TO STA. 1448+22 RT
–L– FROM STA. 1448+22 TO STA. 1452+09 RT
–L– FROM STA. 1452+75 TO STA. 1455+04 RT
–L– FROM STA. 1455+04 TO STA. 1456+19 RT
–Y31A– FROM STA. 14+82 TO STA. 17+70 RT
–Y31RPB– FROM STA. 15+63 TO STA. 19+31 LT
–Y31LPB– FROM STA. 18+90 TO STA. 21+00 LT
–Y31RPC– FROM STA. 32+20 TO STA. 33+45 RT
–Y31RPD– FROM STA. 13+60 TO STA. 15+31 RT
–Y31– FROM STA. 67+60 TO STA. 69+90 RT
–Y31– FROM STA. 104+86 TO STA. 108+95 RT
–Y31– FROM STA. 106+01 TO STA. 109+0.7 LT
–Y31– FROM STA. 111+59 TO STA. 112+52 LT
–Y31RPD– FROM STA. 44+70 TO STA. 48+87 RT
–Y31RPD– FROM STA. 54+28 TO STA. 56+98 RT
–Y31FLYDB– FROM STA. 38+98 TO STA. 40+64 RT
–L– FROM STA. 1524+58 TO STA. 1527+06 RT
–L– FROM STA. 1527+06 TO STA. 1529+16 RT

DETAIL B
LATERAL BASE DITCH
(Not to Scale)



–Y28A– FROM STA. 13+19 TO STA. 14+02 RT
–Y31– FROM STA. 88+77 TO STA. 95+07 RT

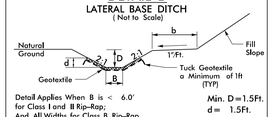
DETAIL C
LATERAL BASE DITCH
(Not to Scale)



Detail Applies When B is < 6.0' for Class I and II Rip-Rap; And All Widths for Class B Rip-Rap
Min. D = 1.5Ft.
d = 1.5Ft.
B = 2Ft.
b = 5Ft.
Type of Liner = CL I Rip-Rap, Keyed–In

–L– FROM STA. 1196+00 TO STA. 1199+00 LT
–Y27– FROM STA. 26+73 TO STA. 27+27 LT
–Y27A– FROM STA. 15+20 TO STA. 20+00 LT
–Y27A– FROM STA. 20+00 TO STA. 20+66 LT
–Y27A– FROM STA. 20+00 TO STA. 20+93 RT
–L– FROM STA. 1244+34 TO STA. 1245+00 LT
–L– FROM STA. 1242+25 TO STA. 1245+00 RT
–L– FROM STA. 1246+59 TO STA. 1248+28 RT
–L– FROM STA. 1269+70 TO STA. 1271+00 LT
–L– FROM STA. 1274+79 TO STA. 1275+55 LT
–Y28– FROM STA. 14+85 TO STA. 16+90 LT
–Y28– FROM STA. 20+20 TO STA. 22+47 LT
–L– FROM STA. 1276+78 TO STA. 1283+89 RT
–L– FROM STA. 1285+49 TO STA. 1288+07 LT
–L– FROM STA. 1288+16 TO STA. 1291+64 RT
–L– FROM STA. 1310+50 TO STA. 1312+00 LT
–Y29LPA– FROM STA. 14+54 TO STA. 16+33 LT
–Y29LPA– FROM STA. 16+33 TO STA. 18+03 LT
–L– FROM STA. 1370+50 TO STA. 1371+47 RT
–L– FROM STA. 1377+00 TO STA. 1378+47 RT
–L– FROM STA. 1380+00 TO STA. 1381+15 LT
–L– FROM STA. 1380+10 TO STA. 1382+00 RT
–L– FROM STA. 1387+50 TO STA. 1390+00 LT
–Y30– FROM STA. 21+48 TO STA. 22+83 RT
–Y30– FROM STA. 22+96 TO STA. 23+98 LT
–Y31LPD– FROM STA. 16+91 TO STA. 22+35 RT

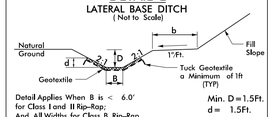
DETAIL D
LATERAL BASE DITCH
(Not to Scale)



Detail Applies When B is < 6.0' for Class I and II Rip-Rap; And All Widths for Class B Rip-Rap
Min. D = 1.5Ft.
d = 1.5Ft.
B = 3Ft.
b = 5Ft.
Type of Liner = CL I Rip-Rap, Keyed–In

–L– FROM STA. 1235+00 TO STA. 1244+12 LT
–L– FROM STA. 1264+29 TO STA. 1269+51 LT
–L– FROM STA. 1269+69 TO STA. 1271+03 LT
–Y28– FROM STA. 15+16 TO STA. 17+08 RT
–L– FROM STA. 1283+89 TO STA. 1288+00 RT
–L– FROM STA. 1291+00 TO STA. 1293+02 LT
–L– FROM STA. 1312+00 TO STA. 1314+74 LT
–L– FROM STA. 1313+72 TO STA. 1315+48 RT
–L– FROM STA. 1316+00 TO STA. 1319+90 RT
–L– FROM STA. 1327+63 TO STA. 1330+50 RT
–Y29RPA– FROM STA. 11+71 TO STA. 12+47 RT
–L– FROM STA. 1381+00 TO STA. 1383+00 LT
–L– FROM STA. 1402+65 TO STA. 1404+75 RT
–L– FROM STA. 1405+21 TO STA. 1407+63 RT
–L– FROM STA. 1405+28 TO STA. 1407+02 LT
–Y30RPB– FROM STA. 18+85 TO STA. 20+25 LT
–Y30RPB– FROM STA. 19+01 TO STA. 20+13 RT
–L– FROM STA. 1414+87 TO STA. 1416+49 LT
–Y30A– FROM STA. 11+01 TO STA. 11+97 LT
–Y30A– FROM STA. 16+27 TO STA. 17+87 LT
–L– FROM STA. 1427+12 TO STA. 1429+78 RT
–L– FROM STA. 1438+28 TO STA. 1439+35 LT

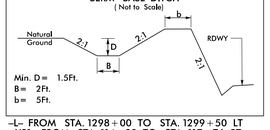
DETAIL E
LATERAL BASE DITCH
(Not to Scale)



Detail Applies When B is < 6.0' for Class I and II Rip-Rap; And All Widths for Class B Rip-Rap
Min. D = 1.5Ft.
d = 1.5Ft.
B = 5Ft.
b = 5Ft.
Type of Liner = CL I Rip-Rap, Keyed–In

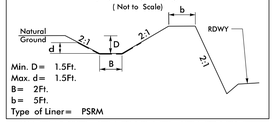
–L– FROM STA. 1232+62 TO STA. 1242+10 RT
–L– FROM STA. 1288+36 TO STA. 1291+00 LT
–Y29RPA– FROM STA. 12+47 TO STA. 13+23 RT
–L– FROM STA. 1390+00 TO STA. 1395+50 LT
–Y30– FROM STA. 26+26 TO STA. 27+79 LT
–Y30– FROM STA. 35+42 TO STA. 37+25 LT
–Y30– FROM STA. 37+79 TO STA. 41+41 LT
–Y30RPD– FROM STA. 15+25 TO STA. 17+85 LT
–Y31RPB– FROM STA. 18+32 TO STA. 21+20 RT
–Y31RPB– FROM STA. 29+39 TO STA. 31+14 RT
–Y31RPD– FROM STA. 34+33 TO STA. 36+72 RT
–Y31RPD– FROM STA. 40+85 TO STA. 44+70 RT
–Y31LPD– FROM STA. 16+47 TO STA. 22+13 LT

DETAIL F
BERM BASE DITCH
(Not to Scale)



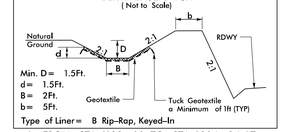
–L– FROM STA. 1298+00 TO STA. 1299+50 LT
–Y31– FROM STA. 114+00 TO STA. 117+76 RT

DETAIL G
BERM BASE DITCH
(Not to Scale)



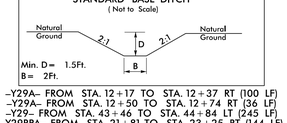
–Y27– FROM STA. 37+18 TO STA. 37+98 LT
–Y27RPA– FROM STA. 19+71 TO 23+06 LT
–Y27LPA– FROM STA. 16+51 TO STA. 21+57 LT
–Y27LPD– FROM STA. 10+00 TO STA. 15+35 RT
–L– FROM STA. 1250+52 TO STA. 1253+09 RT
–L– FROM STA. 1296+11 TO STA. 1297+95 LT
–L– FROM STA. 1305+00 TO STA. 1308+50 LT

DETAIL H
BERM BASE DITCH
(Not to Scale)



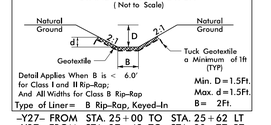
–L– FROM STA. 1199+00 TO STA. 1204+24 LT
–Y27RPD– FROM STA. 19+26 TO STA. 23+66 RT
–L– FROM STA. 1293+50 TO STA. 1296+11 LT
–L– FROM STA. 1308+50 TO STA. 1309+70 LT
–Y29LPD– FROM STA. 14+62 TO STA. 18+50 RT
–L– FROM STA. 1369+00 TO STA. 1371+47 LT
–Y31– FROM STA. 112+84 TO STA. 114+00 RT

DETAIL I
STANDARD BASE DITCH
(Not to Scale)



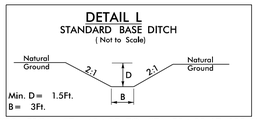
–Y29A– FROM STA. 12+17 TO STA. 12+37 RT (100 LF)
–Y29A– FROM STA. 12+50 TO STA. 12+74 RT (36 LF)
–Y29– FROM STA. 43+46 TO STA. 44+84 LT (245 LF)
–Y29RPA– FROM STA. 21+81 TO STA. 23+25 RT (144 LF)
–L– FROM STA. 1461+29 TO STA. 1462+12 RT
–Y31RPD– FROM STA. 37+89 TO STA. 39+28 RT
–Y31FLYDB– FROM STA. 27+85 TO STA. 27+89 LT (64 LF)

DETAIL K
STANDARD BASE DITCH
(Not to Scale)



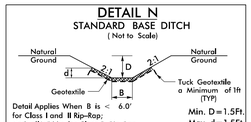
–Y27– FROM STA. 25+00 TO STA. 25+62 LT
–Y27– FROM STA. 27+49 TO STA. 30+77 RT
–Y28A– FROM STA. 14+13 TO STA. 14+55 RT
–Y29– FROM 39+46 STA. TO STA. 39+96 RT (63 LF)
–Y29– FROM 50+28 STA. TO STA. 50+28 RT (42 LF)
–Y30A– FROM 17+42 STA. TO STA. 17+69 RT (70 LF)
–Y30LPB– FROM STA. 19+74 TO STA. 20+17 RT
–Y30RPD– FROM STA. 27+55 TO STA. 27+85 LT (65 LF)
–Y31FLYDB– FROM STA. 46+64 TO STA. 48+08 RT
–Y31FLYDB– FROM STA. 51+65 TO STA. 52+85 LT

DETAIL L
STANDARD BASE DITCH
(Not to Scale)



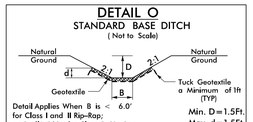
–Y29– FROM STA. 49+97 TO STA. 50+00 LT (195 LF)
–L– FROM STA. 1345+86 TO STA. 1346+24 RT

DETAIL N
STANDARD BASE DITCH
(Not to Scale)



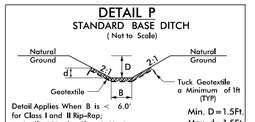
–Y29– FROM STA. ~9+00 TO STA. 12+00 LT (288 LF)

DETAIL O
STANDARD BASE DITCH
(Not to Scale)



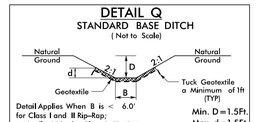
–Y27– FROM STA. 25+62 TO STA. 26+73 LT
–Y27RPA– FROM STA. 25+89 TO STA. 26+09 RT
–Y29RPA– FROM STA. 21+25 TO STA. 21+60 LT
–L– FROM STA. 1374+00 TO STA. 1374+18 LT (80 LF)
–L– FROM STA. 1327+64 TO STA. 1329+18 RT

DETAIL P
STANDARD BASE DITCH
(Not to Scale)



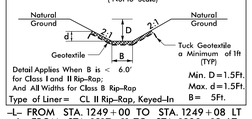
–L– FROM STA. 1253+40 TO STA. 1254+43 LT
–L– FROM STA. 1304+71 TO STA. 1304+88 RT (50 LF)

DETAIL Q
STANDARD BASE DITCH
(Not to Scale)



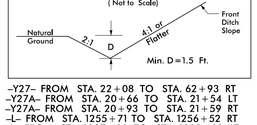
–L– FROM STA. 1269+51 TO STA. 1269+69 LT
–Y29RPA– FROM STA. 16+80 TO STA. 21+20 RT
–L– FROM STA. 1314+72 TO STA. 1316+48 LT
–L– FROM STA. 1404+93 TO STA. 1404+93 RT (50 LF)
–L– FROM STA. 1423+76 TO STA. 1423+85 RT (200 LF)
–Y30– FROM STA. 28+00 TO STA. 29+71 RT
–Y30LPB– FROM STA. 15+31 TO STA. 15+34 RT (40 LF)
–Y30RPC– FROM STA. 19+92 TO STA. 20+14 RT (100 LF)
–Y30RPD– FROM STA. 20+61 TO STA. 20+67 LT (115 LF)
–Y31A– FROM STA. 16+55 TO STA. 16+77 LT (100 LF)
–Y31LPB– FROM STA. 16+75 TO STA. 17+25 LT
–Y31RPC– FROM STA. 19+65 TO STA. 20+00 RT (50 LF)

DETAIL R
STANDARD BASE DITCH
(Not to Scale)



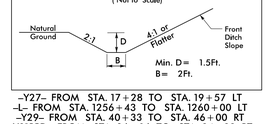
–L– FROM STA. 1249+00 TO STA. 1249+08 LT
–L– FROM STA. 1317+11 TO STA. 1320+18 LT
–L– FROM STA. 1378+33 TO STA. 1380+14 RT (375 LF)
–L– FROM STA. 1390+41 TO STA. 1390+45 RT (130 LF)
–L– FROM STA. 1516+93 TO STA. 1516+96 LT (50 LF)

DETAIL S
SPECIAL CUT DITCH
(Not to Scale)



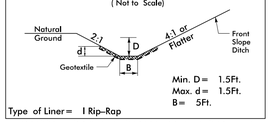
–Y27– FROM STA. 22+08 TO STA. 62+93 RT
–Y27A– FROM STA. 20+66 TO STA. 21+54 LT
–Y27A– FROM STA. 20+93 TO STA. 21+59 RT
–L– FROM STA. 1255+71 TO STA. 1256+52 RT
–L– FROM STA. 1297+00 TO STA. 1298+00 LT
–L– FROM STA. 1298+00 TO STA. 1299+00 LT
–L– FROM STA. 1297+00 TO STA. 1298+00 RT
–L– FROM STA. 1298+00 TO STA. 1299+00 RT
–L– FROM STA. 1300+00 TO STA. 1302+50 LT
–Y29– FROM STA. 40+07 TO STA. 41+00 LT
–Y29– FROM STA. 49+00 TO STA. 50+28 RT
–Y29– FROM STA. 50+28 TO STA. 50+53 RT
–Y29– FROM STA. 49+07 TO STA. 50+00 LT
–Y29– FROM STA. 50+00 TO STA. 51+00 LT
–L– FROM STA. 1354+00 TO STA. 1355+00 RT
–L– FROM STA. 1393+19 TO STA. 1394+04 RT
–L– FROM STA. 1399+80 TO STA. 1403+41 LT
–L– FROM STA. 1400+00 TO STA. 1402+65 RT
–L– FROM STA. 1407+63 TO STA. 1408+52 RT
–L– FROM STA. 1407+05 TO STA. 1409+32 LT
–L– FROM STA. 1409+32 TO STA. 1411+67 LT
–Y30RPB– FROM STA. 20+25 TO STA. 21+15 LT
–L– FROM STA. 1418+75 TO STA. 1420+88 LT
–L– FROM STA. 1420+88 TO STA. 1422+97 LT
–Y30A– FROM STA. 12+97 TO STA. 14+93 LT
–L– FROM STA. 1416+68 TO STA. 1420+56 RT
–L– FROM STA. 1420+80 TO STA. 1422+70 RT
–Y30A– FROM STA. 12+98 TO STA. 14+98 RT
–Y30A– FROM STA. 18+45 TO STA. 19+03 LT
–L– FROM STA. 1436+99 TO STA. 1438+00 LT
–L– FROM STA. 1441+90 TO STA. 1443+90 LT
–Y30RPC– FROM STA. 24+60 TO STA. 27+60 RT
–Y30RPD– FROM STA. 11+45 TO STA. 15+25 LT
–Y30RPD– FROM STA. 22+75 TO STA. 26+35 LT
–Y30RPD– FROM STA. 27+35 TO STA. 28+80 LT
–Y31– FROM STA. 109+07 TO STA. 110+82 LT

DETAIL T
SPECIAL CUT BASE DITCH
(Not to Scale)



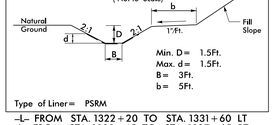
–Y27– FROM STA. 17+28 TO STA. 19+57 LT
–L– FROM STA. 1256+43 TO STA. 1260+00 LT
–Y29– FROM STA. 40+33 TO STA. 46+00 RT
–Y31RPD– FROM STA. 26+06 TO STA. 34+33 RT

DETAIL U
SPECIAL CUT BASE DITCH
(Not to Scale)



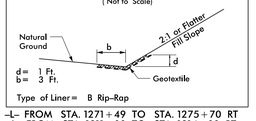
–Y29RPA– FROM STA. 13+23 TO STA. 18+00 RT

DETAIL V
LATERAL BASE DITCH
(Not to Scale)



–L– FROM STA. 1322+20 TO STA. 1331+60 LT
–L– FROM STA. 1323+45 TO STA. 1327+65 RT

DETAIL W
TOE PROTECTION
(Not to Scale)



–L– FROM STA. 1271+49 TO STA. 1275+70 RT
–L– FROM STA. 1311+00 TO STA. 1314+00 RT
–Y28A– FROM STA. 20+76 TO STA. 23+00 LT
–Y29RPA– FROM STA. 23+00 TO STA. 24+00 LT
–Y29RPA– FROM STA. 26+17 TO STA. 26+95 RT
–Y29RPD– FROM STA. 18+40 TO STA. 23+90 LT
–L– FROM STA. 1342+50 TO STA. 1344+50 RT
–L– FROM STA. 1371+50 TO STA. 1374+10 LT
–L– FROM STA. 1373+34 TO STA. 1374+00 RT
–L– FROM STA. 1404+10 TO STA. 1404+64 LT
–L– FROM STA. 1404+82 TO STA. 1405+50 LT
–Y30RPB– FROM STA. 17+01 TO STA. 18+33 LT
–Y30RPB– FROM STA. 18+39 TO STA. 18+80 LT
–Y30A– FROM STA. 12+19 TO STA. 12+91 LT
–Y30A– FROM STA. 11+00 TO STA. 11+70 RT
–Y30A– FROM STA. 11+84 TO STA. 12+97 RT
–L– FROM STA. 1414+66 TO STA. 1415+37 RT
–Y31RPB– FROM STA. 23+45 TO STA. 26+95 LT
–Y31FLYDB– FROM STA. 51+50 TO STA. 52+56 RT
–Y31RPC– FROM STA. 19+26 TO STA. 23+70 RT
–Y31RPC– FROM STA. 34+00 TO STA. 37+85 RT
–Y31RPD– FROM STA. 36+51 TO STA. 39+91 RT
–Y31RPD– FROM STA. 40+10 TO STA. 40+85 RT
–L– FROM STA. 1479+50 TO STA. 1480+50 LT

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c:\dms\ice-eng-pw-01\dms28467\R-2829B_Hyd_DitchDetails.dgn
eltrawking

8/17/99

PROPOSAL FOR

NORTH CAROLINA Turnpike Authority

FLATIRON

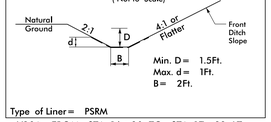
FRED SMITH COMPANY CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	2D-2
RW SHEET NO.	
HYDRAULICS ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DETAIL X
SPECIAL CUT BASE DITCH
(Not to Scale)

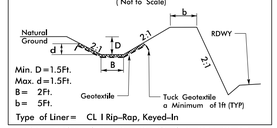


Min. D= 1.5Ft.
Max. d= 1Ft.
B= 2Ft.

Type of Liner= PSRM

–Y29A– FROM STA. 16+30 TO STA. 17+82 LT

DETAIL Y
BERM BASE DITCH
(Not to Scale)

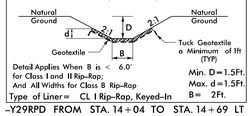


Min. D=1.5Ft.
Max. d=1.5Ft.
B= 2Ft.
b= 5Ft.

Type of Liner= CL I Rip–Rap, Keyed–In

–Y29– FROM STA. 23+08 TO STA. 25+48 LT
–Y29LPD– FROM STA. 12+00 TO STA. 13+18 RT
–Y29LPD– FROM STA. 13+18 TO STA. 14+62 RT

DETAIL Z
STANDARD BASE DITCH
(Not to Scale)



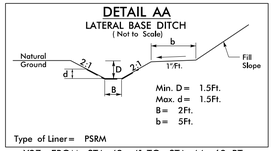
Detail Applies When B is < 6.0' for Class I and II Rip–Rap; And All Widths for Class B Rip–Rap

Min. D=1.5Ft.
Max. d=1.5Ft.
B= 2Ft.

Type of Liner= CL I Rip–Rap, Keyed–In

–Y29RPD FROM STA. 14+04 TO STA. 14+69 LT

DETAIL AA
LATERAL BASE DITCH
(Not to Scale)

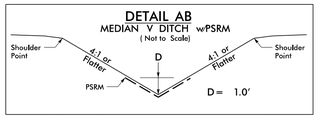


Min. D= 1.5Ft.
Max. d= 1.5Ft.
B= 2Ft.
b= 5Ft.

Type of Liner= PSRM

–Y27– FROM STA. 43+41 TO STA. 44+68 RT
–Y27RPA– FROM STA. 28+78 TO STA. 26+09 RT
–Y27A– FROM STA. 26+00 TO STA. 29+68 LT
–L– FROM STA. 1227+72 TO STA. 1235+00 LT
–L– FROM STA. 1245+00 TO STA. 1246+61 RT
–L– FROM STA. 1252+83 TO STA. 1254+35 RT
–L– FROM STA. 1254+55 TO STA. 1255+71 RT
–L– FROM STA. 1259+54 TO STA. 1271+49 RT
–L– FROM STA. 1276+72 TO STA. 1277+51 LT
–L– FROM STA. 1282+34 TO STA. 1285+49 LT
–Y29RPD– FROM STA. 10+50 TO STA. 14+04 LT

DETAIL AB
MEDIAN V DITCH w/PSRM
(Not to Scale)



D= 1.0'

–L– FROM STA. 1185+15 TO STA. 1190+00
–L– FROM STA. 1227+00 TO STA. 1252+00
–Y29RPA– FROM STA. 25+65 TO STA. 26+80 LT
–L– FROM STA. 1358+90 TO STA. 1375+00
–L– FROM STA. 1279+50 TO STA. 1295+40
–L– FROM STA. 1349+00 TO STA. 1350+50
–Y30RPC– FROM STA. 15+20 TO STA. 26+00 LT
–L– FROM STA. 1427+55 TO STA. 1429+00

DETAIL AC
LATERAL BASE DITCH
(Not to Scale)

Detail Applies When B is < 6.0' for Class I and II Rip–Rap; And All Widths for Class B Rip–Rap

Min. D=1.5Ft.
d= 1.5Ft.
B= 2Ft.
b= 5Ft.

Type of Liner= CL B Rip–Rap, Keyed–In

–Y27LPD– FROM STA. 20+54 TO STA. 22+07 RT
–L– FROM STA. 1248+37 TO STA. 1250+52 RT
–L– FROM STA. 1247+50 TO STA. 1249+00 LT
–L– FROM STA. 1302+50 TO STA. 1303+50 LT
–L– FROM STA. 1303+50 TO STA. 1304+50 LT
–Y28A– FROM STA. 23+93 TO STA. 26+50 RT
–L– FROM STA. 1375+50 TO STA. 1377+34 LT
–L– FROM STA. 1377+34 TO STA. 1380+00 LT
–L– FROM STA. 1382+00 TO STA. 1385+47 RT
–Y29– FROM STA. 18+00 TO STA. 20+00 LT
–Y29A– FROM STA. 11+19 TO STA. 12+22 LT
–Y29A– FROM STA. 12+22 TO STA. 14+54 LT

DETAIL AD
LATERAL BASE DITCH
(Not to Scale)

Min. D=1.5 Ft.
B=3 Ft.
b=5 Ft.

–L– FROM STA. 1291+64 TO STA. 1297+96 RT

DETAIL AE
TYPICAL CUT DITCH W/PSRM
(Not to Scale)

Max. d=1 Ft.

Type of Liner= PSRM

–Y27LPA– FROM STA. 15+00 TO STA. 17+57 RT
–Y27RPA– FROM STA. 21+00 TO STA. 25+00 RT
–Y27RPA– FROM STA. 21+00 TO STA. 24+60 LT
–Y29LPD– FROM STA. 14+00 TO STA. 17+35 LT
–Y29– FROM STA. 20+55 TO STA. 25+50 LT
–Y29– FROM STA. 19+08 TO STA. 25+78 RT
–Y29A– FROM STA. 14+54 TO STA. 16+30 LT
–Y30A– FROM STA. 23+54 TO STA. 24+00 LT
–Y30A– FROM STA. 27+20 TO STA. 28+30 LT
–Y30RPB– FROM STA. 21+15 TO STA. 26+20 LT
–Y30RPB– FROM STA. 20+13 TO STA. 24+30 RT
–Y30RPC– FROM STA. 22+00 TO STA. 24+60 RT
–L– FROM STA. 1185+15 TO STA. 1190+00 RT
–L– FROM STA. 1358+90 TO STA. 1367+60 LT
–L– FROM STA. 1358+90 TO STA. 1369+55 RT
–L– FROM STA. 1429+70 TO STA. 1430+50 RT
–L– FROM STA. 1468+05 TO STA. 1471+10 RT

DETAIL AF
SPECIAL BACK OF CURB CUT DITCH
(NOT TO SCALE)

–Y27RPA– FROM STA. 21+00 TO STA. 25+00 RT
–Y27RPA– FROM STA. 21+00 TO STA. 24+61 LT
–Y29– FROM STA. 34+28 TO STA. 37+50 LT

DETAIL AG
LATERAL BASE DITCH
(Not to Scale)

Detail Applies When B is < 6.0' for Class I and II Rip–Rap; And All Widths for Class B Rip–Rap

Min. D=1.5 Ft.
d=1.5 Ft.
B=3 Ft.
b=5 Ft.

Type of Liner= CL B Rip–Rap, Keyed–In

–L– FROM STA. 1254+43 TO STA. 1256+97 LT
–L– FROM STA. 1314+08 TO STA. 1318+87 RT
–Y29– FROM STA. 12+00 TO STA. 18+00 LT
–L– FROM STA. 1383+00 TO STA. 1387+50 LT
–L– FROM STA. 1390+44 TO STA. 1392+50 RT
–Y30– FROM STA. 33+25 TO STA. 34+00 LT
–L– FROM STA. 1446+60 TO STA. 1447+85 LT
–L– FROM STA. 1447+85 TO STA. 1450+41 LT
–Y31A– FROM STA. 11+31 TO STA. 16+77 LT
–Y31A– FROM STA. 16+77 TO STA. 17+94 LT
–Y31RPB– FROM STA. 13+04 TO STA. 18+32 RT
–Y31RPB– FROM STA. 19+31 TO STA. 21+72 LT
–Y31RPBD– FROM STA. 21+25 TO STA. 23+99 RT
–Y31LPB– FROM STA. 17+25 TO STA. 18+90 LT

DETAIL AH
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner= 65 TONS,CL II Rip–Rap, Keyed–In

–L– FROM STA. 1319+88 TO STA. 1320+16 RT
–L– FROM STA. 1320+18 TO STA. 1320+50 LT
–L– FROM STA. 1320+88 TO STA. 1320+266 CL
–L– FROM STA. 1321+94 TO STA. 1322+20 LT

DETAIL AI
STANDARD BASE DITCH
(Not to Scale)

Detail Applies When B is < 6.0' for Class I and II Rip–Rap; And All Widths for Class B Rip–Rap

Min. D=1.5Ft.
Max. d=1.5Ft.
B= 3Ft.

Type of Liner= CL I Rip–Rap, Keyed–In

–L– FROM STA. 1319+25 TO STA. 1319+85 RT

DETAIL AK
LATERAL 'V' DITCH
(Not to Scale)

Min. D=1.5Ft.
d=1.5 Ft.
b=5 Ft.

Type of Liner= CL B Rip–Rap, Keyed–In

–L– FROM STA. 1195+00 TO STA. 1199+00 RT
–Y28A– FROM STA. 10+98 TO STA. 13+50 LT
–Y28A– FROM STA. 11+55 TO STA. 13+00 RT

DETAIL AL
STANDARD 'V' DITCH
(Not to Scale)

Min. D=1 Ft.

Type of Liner= CL B Rip–Rap, Keyed–In d=1 Ft.

–L– FROM STA. 1314+40 TO STA. 1320+08
MEDIAN–UNDER BRIDGE

DETAIL AM
DECK DRAIN DISSIPATER PAD
(Not to Scale)

Type of Liner= CLASS B Rip–Rap
W=8 FT
L=Variable
d=1 FT
NOTE: PAD TO BE CENTERED UNDER DECK DRAIN

–L– FROM STA. 1314+41 TO 1315+23 LT
–L– FROM STA. 1314+40 TO 1315+22 RT

DETAIL AN
CONCRETE DITCH
BEHIND NOISE WALL
(Not to Scale)

D= 1.5'
B= 2.0'

–L– FROM STA. STA. 1443+90 TO STA. 1446+60 LT
–Y30LPB– FROM STA. 10+92 TO STA. 15+25 RT
–Y30LPB– FROM STA. 15+31 TO STA. 16+80 RT

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Brian Eking

8/17/99

ARCADIS
Arcadis CE, Inc.
5420 Wade Park Blvd, Suite 350
Raleigh, North Carolina 27607
Phone: 919-854-1282
License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

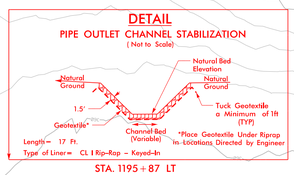
NAD 83

END TIP PROJECT R-2829A
BEGIN TIP PROJECT R-2829B
-L- STA.1185+15.00

a. 1182+53.04

26
EDGE OF AUBURN LLC
DB 10839 PG 2259

DETAIL
PIPE OUTLET CHANNEL STABILIZATION
(Not to Scale)



STA. 1195+87 LT

RW CA

PROP. WW FENCE

CL B RIP RAP

CL I RIP RAP

SEE OUTLET CHANNEL STABILIZATION DETAIL

300' TAPER

1510' ACCELERATION LANE

+00.00

18" RCP-III

15" RCP-III

FS 2GI

FS 2GI

PROP.CABLE GUIDERAIL

-L-

1185+00

1190+00

1195+00

N 20° 36' 59.9" E

12' PS

R-2829A BY OTHERS

R-2829A BY OTHERS

02 02

03

36"

77' MED

8'

LAT. 'V' DITCH SEE DETAIL 'AK'

+47.56

MATCHLINE -L- STA. 1197+00.00 SEE SHEET 05

26
EDGE OF AUBURN LLC
DB 10839 PG 2259

WHF

SGG

FOR -L- PROFILE SEE SHT.44

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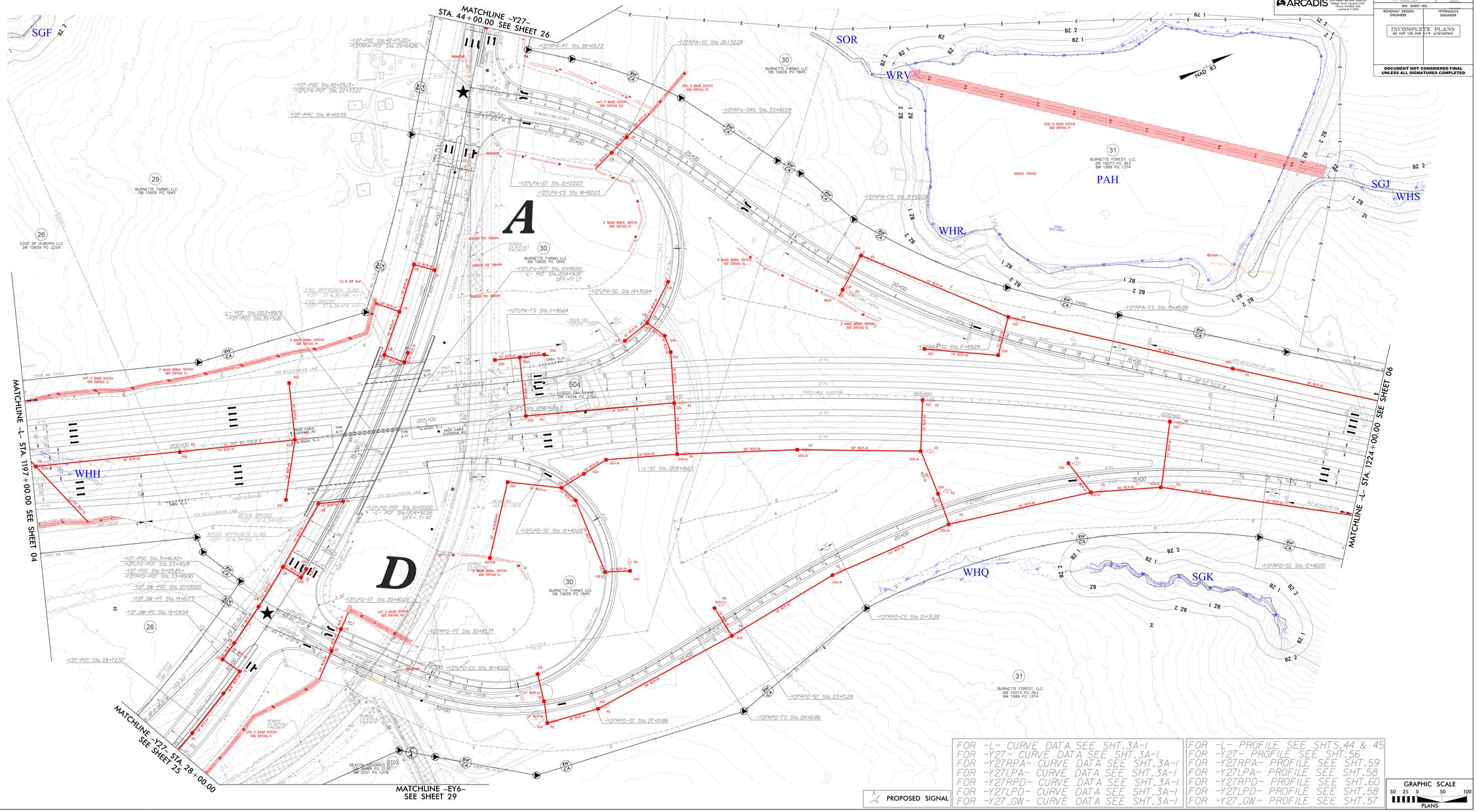
Brian King



ARCADIS
Arcadis US, Inc.
5420 Wade Park Boulevard, Suite 300
Raleigh, North Carolina 27607
Phone: 919.854.1282
License # P-0339

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	05

RW SHEET NO.

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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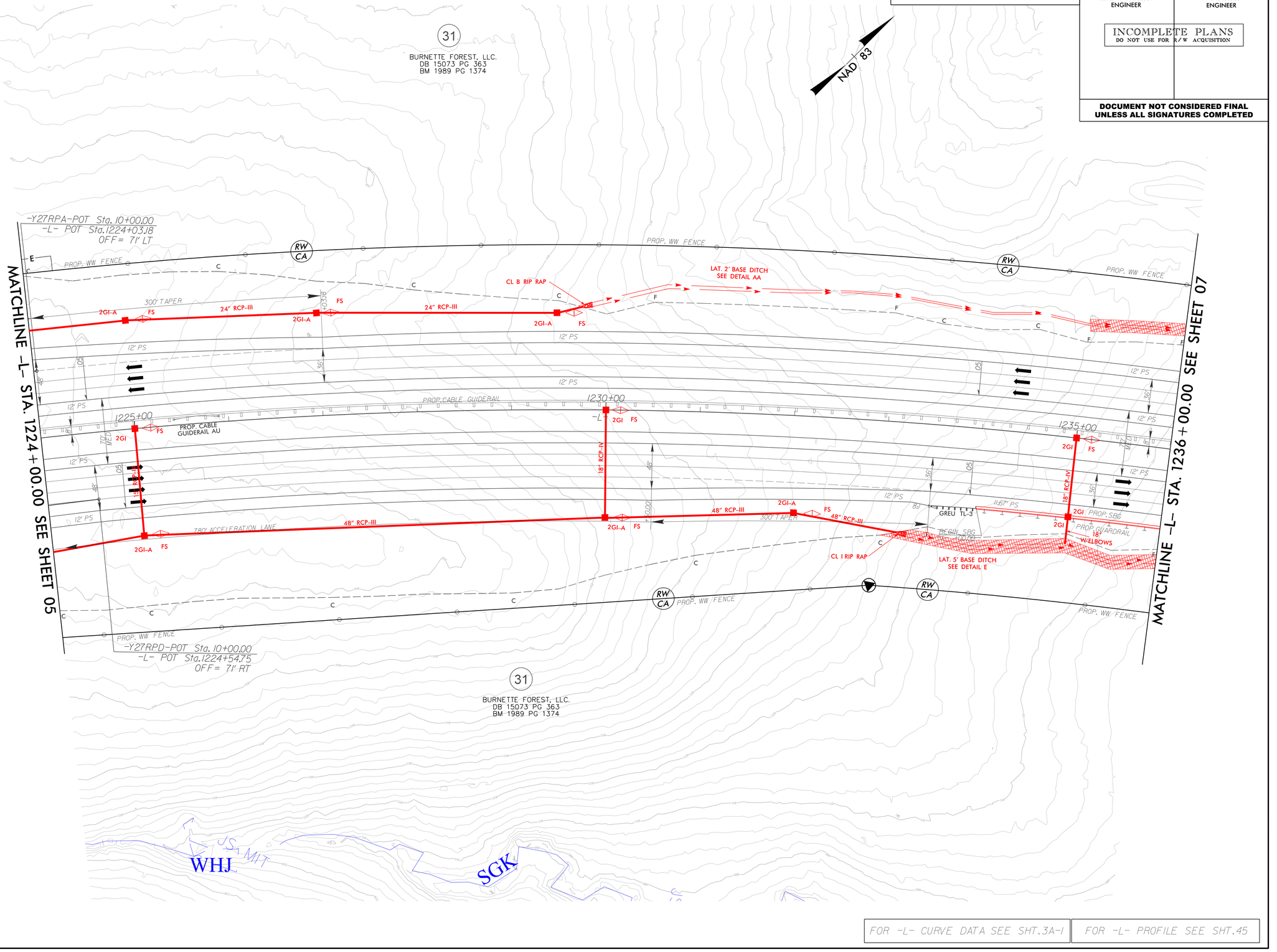
8/17/99

ARCADIS
Arcadis CE, Inc.
5420 Wade Park Blvd, Suite 350
Raleigh, North Carolina 27607
Phone: 919-854-1282
License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



FOR -L- CURVE DATA SEE SHT.3A-1 | FOR -L- PROFILE SEE SHT.45

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jeffreyking

8/17/99

ARCADIS
Arcadis CE, Inc.
5420 Wade Park Blvd, Suite 350
Raleigh, North Carolina 27607
Phone: 919-854-1282
License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

35
CITY OF RALEIGH, COUNTY OF WAKE
DB 11637 PG 2770
BM 2005 PG 1481
BM 2007 PG 1372

31
BURNETTE FOREST, LLC.
DB 15073 PG 363
BM 1989 PG 1374

32
LONG BRANCH FARM LLC
DB 14251 PG 1125
BM 1999 PG 579

33
JOHN R & CYNTHIA L. BAUCOM, III
DB 5556 PG 296
BM 2017 PG 1632

MATCHLINE -L- STA. 1236+00.00 SEE SHEET 06

MATCHLINE -L- STA. 1249+00.00 SEE SHEET 08

-L-CS Sta. 1237+23.41
-L-ST Sta. 1239+73.41
-L-TS Sta. 1243+74.57
-L-SC Sta. 1246+24.57
-L- POT Sta.1243+18 +/-

SGJ
WHU
WHP
SGK
WHO
WHM

SEE OUTLET CHANNEL STABILIZATION DETAIL
CLASS II RIP RAP
SEE INLET CHANNEL STABILIZATION DETAIL

DETAIL
PIPE OUTLET CHANNEL STABILIZATION
(Not to Scale)
Natural Ground
Natural Bed Elevation
2'
Geotextile*
Channel Bed (Variable)
Tuck Geotextile a Minimum of 1ft (TYP)
*Place Geotextile Under Riprap in Locations Directed by Engineer
Length= 90 Ft.
Type of Liner= CL II Rip-Rap - Keyed-In
STA. 1244+22 LT

DETAIL
PIPE INLET CHANNEL STABILIZATION
(Not to Scale)
Natural Ground
Natural Bed Elevation
2'
Geotextile*
Channel Bed (Variable)
Tuck Geotextile a Minimum of 1ft (TYP)
*Place Geotextile Under Riprap in Locations Directed by Engineer
Length= 40 Ft.
Type of Liner= CL II Rip-Rap - Keyed-In
STA. 1242+20 RT

LAT. 3' BASE DITCH SEE DETAIL D
LAT. 2' BASE DITCH SEE DETAIL C
LAT. 2' BASE DITCH SEE DETAIL AC
LAT. 5' BASE DITCH SEE DETAIL E
LAT. 2' BASE DITCH SEE DETAIL AA
LAT. 2' BASE DITCH SEE DETAIL C
LAT. 2' BASE DITCH SEE DETAIL C

15" W/ELBOWS
18" W/ELBOWS
15" RCP-III
18" RCP-IV
2 @ 6.48 RCBC WALLS AND BERGS

1240+00 PROP. CABLE GUIDERAIL
1245+00 PROP. CABLE GUIDERAIL AU

PROP. GUARDRAIL
PROP. SBG
PROP. WW FENCE
BEGIN SBG (-L- STA. 1240+00)
50' TYP.
CAT-1
12' PS
11.67' PS
CHORD
RW CA
PDE
2GI
FS
HW
EIP
N 55° 16' 30" E
N 50° 00' 30" E
S 19° 50' 54" W 124.04'
S 07° 10' 54" W 99.36'

FOR -L- CURVE DATA SEE SHT.3A-I

FOR -L- PROFILE SEE SHTS.45 & 46

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estrawking

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ARCADIS
Arcadis CE, Inc.
5420 Wade Park Blvd, Suite 350
Raleigh, North Carolina 27607
Phone: 919-854-1282
License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	08
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

35
CITY OF RALEIGH, COUNTY OF WAKE
DB 11637 PG 2770
BM 2005 PG 1481
BM 2007 PG 1372

32
LONG BRANCH FARM LLC
DB 14261 PG 1125
BM 1999 PG 579

36
LAURA S FRANCIS
DB 13008 PG 1140
BM 1999 PG 579

37

33
JOHN R & CYNTHIA L BAUCOM, III
DB 5556 PG 296
BM 2017 PG 1632

804
LARRY D & NACY W WAGNER
DB 2622 PG 772
BM 1974 PG 472

34
FOSTON CURTIS,III
DB 17157 PG 1213
BM 1971 PG 309
BM 1996 PG 183
BM 2006 PG 1711

LOANDEPOT.COM LLC
DB 17292 PG 2136
BM 1999 PG 579

GEORGE CHIPOURAS
DB 13713 PG 1383

MATCHLINE -L- STA. 1249+00.00 SEE SHEET 07

MATCHLINE -L- STA. 1262+00.00 SEE SHEET 09

-L-CS Sta. 1261+94.71

SGJ

BZ 1 BZ 2

PROP. WW FENCE

RW CA

STD. 5' BASE DITCH SEE DETAIL R

LAT. 2' BASE DITCH SEE DETAIL A

CLASS B RIP RAP

15" W/ELBOWS

2GI

FS

PROP. GUARDRAIL

PROP. SBG

11.67' PS

12' PS

14' PS

100' WELL EASEMENT SCALED FROM BM 2006 PG 1711

PROP. CABLE GUIDERAIL

1250+00

1255+00

1260+00

STD. 4' BASE DITCH SEE DETAIL P

48" RCP-IV

2GI-A

LAT. 3' BASE DITCH SEE DETAIL AG

SPEC. CUT 2' BASE DITCH SEE DETAIL T

BEGIN SBG -L- 1250.00

END SBG -L- 1256.00

BEGIN GUARDRAIL -L- 1000.00

15" RCP-III

2GI-D

18" RCP-III

42" RCP-III

15" RCP-III

CAT-1

END SBG -L- 1251.27

SPEC. CUT V DITCH SEE DETAIL S

LAT. 2' BASE DITCH SEE DETAIL AA

LAT. 2' BASE DITCH SEE DETAIL AC

LAT. 2' BASE BERM DITCH SEE DETAIL G

HW

R2829-7

R2829-6

POND WSE=261.5'

20' UTILITY/ACCESS EASEMENT BM 1976 PG 152

EXISTING 30' ACCESS EASEMENT

BROWN RD

S 29°52'18" W 224.28'

S 29°52'22" W 421.97'

N 10°04'49" E 388.97'

N 84°47'41" W 1005.97'

FOR -L- CURVE DATA SEE SHT.3A-1

FOR -L- PROFILE SEE SHT.46

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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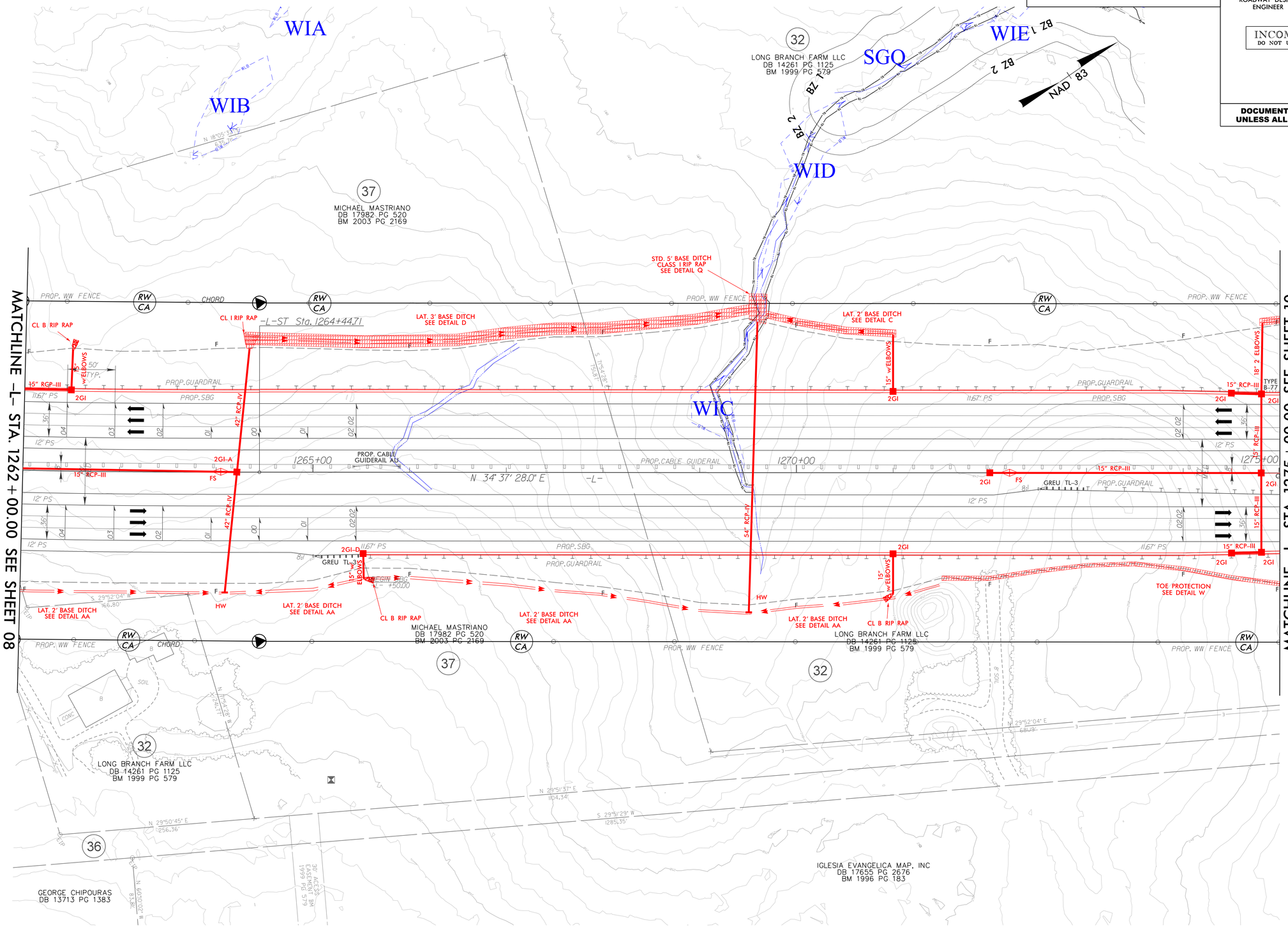

FOR -L- CURVE DATA SEE SHT.3A-I | FOR -L- PROFILE SEE SHTS.46 & 47

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE -L- STA. 1275+00.00 SEE SHEET 09

MATCHLINE -L- STA. 1289+00.00 SEE SHEET 11

MATCHLINE -EY7- SEE SHEET 30

32
LONG BRANCH FARM LLC
DB 14261 PG 1125
BM 1999 PG 579

38
LONG BRANCH FARM LLC
DB 14261 PG 1125
BM 1999 PG 579

39
CITY OF RALEIGH, COUNTY OF WAKE
DB 11637 PG 2770
BM 1972 PG 225
BM 2007 PG 1372
BM 2005 PG 1481

2801
IGLESIA EVANGELICA MAP, INC
DB 17655 PG 2676
BM 1996 PG 183

2803

-Y28- BEGIN CONSTRUCTION STA. 1500.00

RETAIN

RIP RAP AT EMBANKMENT SEE DETAIL AH

LAT. 2' BASE DITCH SEE DETAIL C

LAT. 3' BASE DITCH SEE DETAIL D

BEGIN APPROACH SLAB -L- STA.1275+37 +/-

BEGIN BRIDGE -L- STA.1275+61 +/-

CL B RIP RAP

LAT. 2' BASE DITCH W/PSRM SEE DETAIL AA

-L- POT Sta.1276+09.18

-Y28-PCC Sta.18+66.71

-Y28-PCC Sta. 18+23.86

END SBG -L- +106.07

BEGIN SBG -L- +13.77

END SBG -L- +41.08

BEGIN SBG -L- +64.26

END SBG -L- +30.00

BEGIN SBG -L- +85.00

BEGIN SBG -L- +64.54

END SBG -L- +64.06

END SBG -L- +25.22

BEGIN SBG -L- +49.88

END SBG -L- +63.75

BEGIN SBG -L- +07.66

END SBG -L- +63.47

-L- N 34° 37' 28.0" E

1275+00

1280+00

1285+00

TOE PROTECTION SEE DETAIL W

LAT. 2' BASE DITCH SEE DETAIL A

END APPROACH SLAB -L- STA.1276+85 +/-

END BRIDGE -L- STA.1276+61 +/-

END CONSTRUCTION -Y28- STA.22+40.00

-Y28-PT Sta. 23+29.38

SEE INLET CHANNEL STABILIZATION DETAIL

SEE OUTLET CHANNEL STABILIZATION DETAIL

-L- POT Sta.1288+18 +/-

-L- POT Sta.1288+76.82

STA.1288+30 LT.

STA.1288+08 RT.

DETAIL
PIPE INLET CHANNEL STABILIZATION
(Not to Scale)

Natural Ground
Natural Bed Elevation
2'
Geotextile*
Channel Bed (Variable)
Tuck Geotextile a Minimum of 1ft (TYP)
*Place Geotextile Under Riprap in Locations Directed by Engineer
Length= 42 Ft.
Type of Liner= CL II Rip-Rap - Keyed-In

DETAIL
PIPE OUTLET CHANNEL STABILIZATION
(Not to Scale)

Natural Ground
Natural Bed Elevation
2'
Geotextile*
Channel Bed (Variable)
Tuck Geotextile a Minimum of 1ft (TYP)
*Place Geotextile Under Riprap in Locations Directed by Engineer
Length= 27 Ft.
Type of Liner= CL II Rip-Rap - Keyed-In

FOR -Y28- CURVE DATA SEE SHT.3A-I

FOR -L- PROFILE SEE SHT.47
FOR -Y28- PROFILE SEE SHT.62

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

39
CITY OF RALEIGH, COUNTY OF WAKE
DB 11637 PG 2770
BM 1972 PG 225
BM 2007 PG 1372
BM 2005 PG 1481

MATCHLINE -L- STA. 1289+00.00 SEE SHEET 10

MATCHLINE -LB- STA. 1302+00.00 SEE SHEET 12

-Y28C-POT Sta. 10+00.00

-Y28C- S 55°28'01.5" E

-L- POT Sta.1289+00.00 =
-LB- POT Sta. 1288+76.82

-LB-POT Sta. 1291+76 +/-

BEGIN GRADING
-Y28C- STA.11+93.99

-LB-POT Sta. 1291+83.82=
-Y28C-POT Sta. 13+14.54

-LB-TS Sta. 1296+04.71

-LB-SC Sta. 1298+54.71

LAT. 5' BASE DITCH SEE DETAIL E

LAT. 3' BASE DITCH SEE DETAIL D

2' BASE BERM DITCH SEE DETAIL H

2' BASE BERM DITCH SEE DETAIL G

2' BASE BERM DITCH SEE DETAIL F

30" RCP-IV

24" RCP-III

15" 2 ELBOWS

BDO

18" RCP-III

15" RCP-III

18" 2 ELBOWS

4OTCB

SPEC. CUT V DITCH SEE DETAIL S

SPEC. CUT V DITCH SEE DETAIL S

SPEC. CUT V DITCH SEE DETAIL S

2GI-D

30" RCP-III

CL B RIP RAP

PROP. GUARDRAIL

PROP. SBG

PROP. CABLE GUIDERAIL

PROP. WW FENCE

END SBG -LB- +41.49

END SBG CAT-1 -LB- +26.81

END GRADING
-Y28C- STA.14+42.25

PROP. CULVERT 28+42.2

PROP. 2@14'x12' RCBC FOR GREENWAY TRAIL

-Y28C-POT Sta. 14+97.90

GREU TL-3

-LB- N 34° 37' 28.0" E

1290+00

1295+00

1300+00

2GI

FS

11.67' PS

14' PS

12' PS

CHORD

RW CA

FOR -L- CURVE DATA SEE SHT.3A-1

FOR -L- PROFILE SEE SHTS.47 & 48

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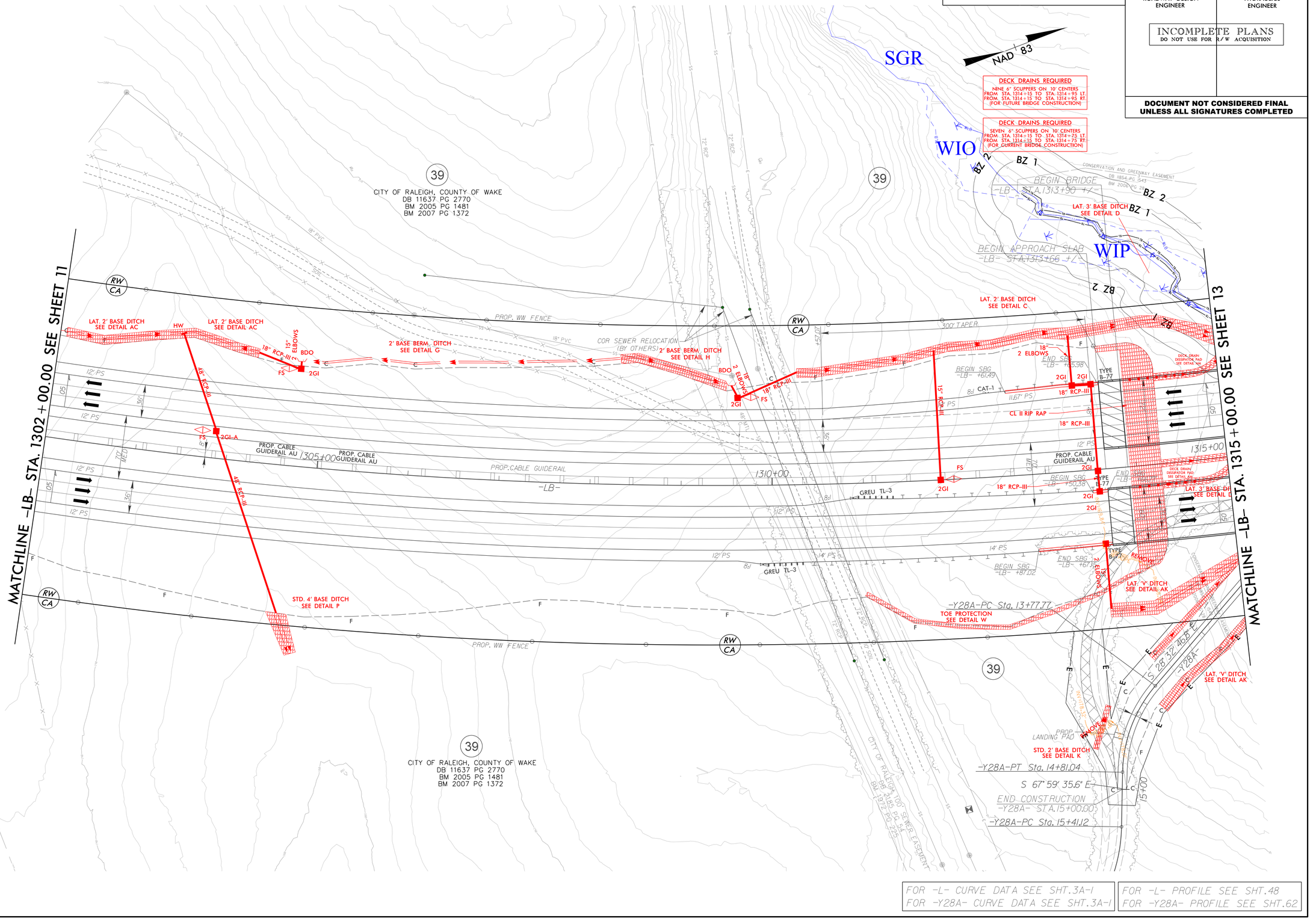
PROJECT REFERENCE NO.	SHEET NO.
R-2829B	12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



FOR -L- CURVE DATA SEE SHT.3A-1
FOR -Y28A- CURVE DATA SEE SHT.3A-1

FOR -L- PROFILE SEE SHT.48
FOR -Y28A- PROFILE SEE SHT.62

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

39
CITY OF RALEIGH, COUNTY OF WAKE
DB 11637 PG 2770
BM 2005 PG 1481
BM 2007 PG 1372

40
WILLIAM E ADAMS
DB 17762 PG 1820
DB 2395 PG 157

CITY OF RALEIGH
NEUSE RIVER EAST
PARRALLEL INTERCEPTOR
DB 17473 PG 1951

CONSERVATION AND GREENWAY EASEMENT
DB 18814 PG 1543
BM 2006 PG 28

MATCHLINE -LB- STA. 1315+00.00 SEE SHEET 12

MATCHLINE -LB- STA. 1328+00.00 SEE SHEET 14

BEGIN CONSTRUCTION
-Y28A- STA.8+00.00
-Y28A-PT Sta. 8+21.10

S 60° 59' 57.8" E

-Y28A-POT Sta. 6+30.00

-Y28A-PC Sta. 6+59.98

S 34° 37' 23.9" E

-Y28A-

SGS

SGR

WIQ

SGT

RW CA

BZ 1

BZ 2

REMOVE HW

5' BASE DITCH SEE DETAIL Q

60" RCP-IV (BURIED 1.0')

STD. 5' BASE DITCH SEE DETAIL R

RIP RAP AT EMBANKMENT SEE DETAIL AH

FILL EXISTING CHANNEL

REMOVE

GRADE TO DRAIN

18" RCP-IV

STD. 'V' DITCH SEE DETAIL AL

STD. 3' BASE DITCH SEE DETAIL D

-LB-POC Sta. 1316+23.78
-Y28A-POT Sta.10+40.41

-LB-POT Sta. 1316+42.71
-Y28A-PT Sta.11+08.61

S 28° 32' 40" E

LAT. 'V' DITCH SEE DETAIL AK

FLOODPLAIN EXCAVATION

STD. 3' BASE DITCH SEE DETAIL M

PROP. WW FENCE

30" RCP-IV

36" RCP-IV

-LB-

NEUSE RIVER

1315+00

1320+00

1325+00

FOR -L- CURVE DATA SEE SHT.3A-I	FOR -L- PROFILE SEE SHT.48 & 49
FOR -Y28A- CURVE DATA SEE SHT.3A-I	FOR -Y28A- PROFILE SEE SHT.62

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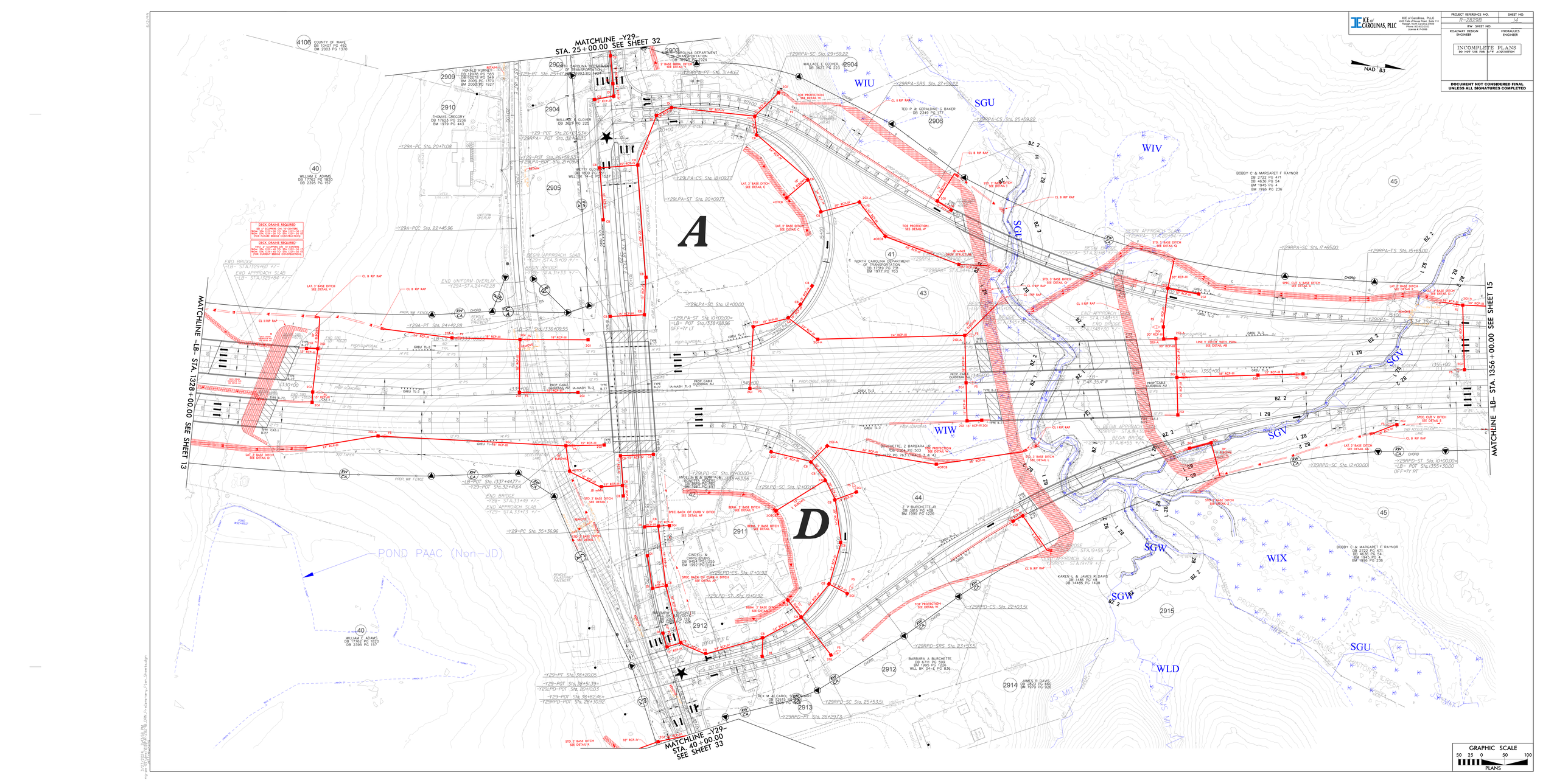
jeffreyking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PROJECT REFERENCE NO.
R-2829B
SHEET NO.
14
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
NAD 83
MATCHLINE –Y29– STA. 25+00.00 SEE SHEET 32
MATCHLINE –LB– STA. 1328+00.00 SEE SHEET 13
MATCHLINE –LB– STA. 1356+00.00 SEE SHEET 15
MATCHLINE –Y29– STA. 40+00.00 SEE SHEET 33
A
D
POND PAAC (Non-JD)
PROPERTY LINE IS CENTERLINE OF NEWTONS CREEK
DECK DRAINS REQUIRED
DECK DRAINS REQUIRED
GRAPHIC SCALE
50 25 0 50 100
PLANS

8/17/99

ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE –LB– STA. 1356+00.00 SEE SHEET 14

MATCHLINE –LB– STA. 1370+00.00 SEE SHEET 16

SGV

NAD 83

45
BOBBY C & MARGARET F RAYNOR
DB 2722 PG 471
DB 4636 PG 54
BM 1945 PG 4
BM 1996 PG 236

45
BOBBY C & MARGARET F RAYNOR
DB 6859 PG 73
BM 1996 PG 236

46
BILLY S MYRICK
DB 8915 PG 2731
BM 1995 PG 715
BM 2001 PG 837

–Y29RPA–POT Sta. 10+00.00=
–LB– POT Sta.1359+00.00
OFF=71' LT
△ = 04°07' 00"

–Y29RPA– S 3° 34' 35.4" E

N 7° 41' 35.4" W

–LB–

1360+00

1365+00

1370+00

30" RCP-III

24" RCP-III

18" RCP-III

15" RCP-III

2GI-A

2GI

FS

PROP. WW FENCE

PROP. GUARDRAIL

PROP. CABLE GUIDERAIL

PROP. SBG

BEGIN SBG –LB– +85.17

END SBG –LB– +85.29

BEGIN SBG –LB– +85.08

END SBG –LB– +84.60

DOUBLE POST GR

CAT-1

AT-1

GREU TL-3

780' ACCELERATION LANE

300' TAPER

12' PS

14' PS

11.67' PS

9.67' PS

FOR –L– PROFILE SEE SHT.50

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE –L– STA. 1370+00.00 SEE SHEET 15

MATCHLINE –L– STA. 1384+00.00 SEE SHEET 17

NAD 83

BILLY S MYRICK
DB 8915 PG 2731
BM 1995 PG 715
BM 2001 PG 837

DETAIL
PIPE INLET CHANNEL STABILIZATION
(Not to Scale)

Natural Ground
2'
Geotextile*
Natural Bed Elevation
Natural Ground
Tuck Geotextile a Minimum of 1ft (TYP)
Channel Bed (Variable)
*Place Geotextile Under Riprap in Locations Directed by Engineer
Length= 35 Ft.
Type of Liner= CL II Rip-Rap – Keyed-In

–LB– STA. 1381+10 LT

SEE INLET CHANNEL STABILIZATION DETAIL

BERM 2' BASE DITCH SEE DETAIL H
BDO
18" 2 ELBOWS
15" RCP–III
FS
2GI
GREU TL-3
PROP.GUARDRAIL
14' PS
12' PS
02 02
36"
24" RCP–III
1370+00
PROP.GUARDRAIL
2GI-A
24" RCP–III
I–A
30°
CL B RIP RAP
TOE PROTECTION SEE DETAIL W
STD. 3' BASE DITCH SEE DETAIL O
HW
OUTLET
SPIGOT
LOG CABIN
MTR
POND WSE=204.3'
DRAIN POND
INV=204.6'
REMOVE
INV=196.8'
48" RCP–V
1375+00
PROP. WW FENCE
LAT. 2' BASE DITCH SEE DETAIL C
LAT. 2' BASE DITCH SEE DETAIL AC
TOE PROTECTION SEE DETAIL W
CL II RIP RAP
BEGIN SBG –LB– +50.00
2 ELBOWS
PROP.SBG
11.67' PS
PROP.CABLE GUIDERAIL
1380+00
–LB–
N 35°14'14.4" W
S 00°37'09" W
230.03'
54" RCP–V BURIED 1.0'
15" RCP–III
2 ELBOWS
END SBG –LB– +50.00
BEGIN SBG –LB– +0.00
CAT–1
11.67' PS
PROP.GUARDRAIL
14' PS
12' PS
36"
02 02
WJA
WIZ
WIY
PAI
SGY
BZ 1
BZ 2
CL II RIP RAP
LAT. 3' BASE DITCH SEE DETAIL D
LAT. 2' BASE DITCH SEE DETAIL C
LAT. 2' BASE DITCH SEE DETAIL AC
STD. 5' BASE DITCH SEE DETAIL R
CL B RIP RAP
POND WSE=192.3'
DRAIN POND
REMOVE
RISER INV=173.02'
INV=173.51'
JACOB L & ANTHONY J POWELL
DB 9536 PG 838
DB 15474 PG 305
BM 1971 PG 419
JOHN C CRENSHAW III
DB 4358 PG 26
BM 1971 PG 419
PROP. WW FENCE
ISFD
EIP
WLB
SF
JS
RW CA
46
47
48
49

FOR –L– PROFILE SEE SHTS.50 & 51

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

MATCHLINE -L- STA. 1384+00.00 SEE SHEET 16

MATCHLINE -L- STA. 1398+00.00 SEE SHEET 18

49
HODGE ROAD LLC
DB 14379 PG 1784
BM 1998 PG 1420

DRAIN POND

CL II RIP RAP

PROP. WW FENCE

PROP. NOISE WALL

LAT. 3' BASE DITCH SEE DETAIL AG

LAT. 2' BASE DITCH SEE DETAIL C

LAT. 5' BASE DITCH SEE DETAIL E

SP. CUT DITCH SEE DETAIL S

LAT. 2' BASE DITCH SEE DETAIL AC

STD. 5' BASE DITCH SEE DETAIL R

BEGIN SBG -LB- +50.00

END SBG -LB- +50.00

END SBG -LB- +53.89

BEGIN NW*90 -LB- +81.57

BEGIN NW*91 -LB- +12.41

PROP. CABLE GUIDERAIL AU

PROP. CABLE GUIDERAIL

PROP. SBG

PROP. SFCB

PROP. GUARDRAIL

GREU TL-3

TYPE B-77

CAT-1

1385+00

1390+00

1395+00

N 7° 41' 35.4" W

15" RCP-III

18" RCP-III

24" RCP-III

60" RCP-IV (BURIED 1.0')

18" ELBOWS

15" ELBOWS

24" 2 ELBOWS

300' TAPER

2GI

2GI-A

2GI-D

FS

POND WSE=915.3'

14' PS

12' PS

11.67' PS

18' PS

PAK

WJB BZ 2

SGZ

BZ 1

BZ 2

BZ 3

FOR -L- PROFILE SEE SHT.5I

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

MATCHLINE -L- STA. 1398+00.00 SEE SHEET 17

MATCHLINE -L- STA. 1412+00.00 SEE SHEET 19

MATCHLINE -Y30RPC- STA. 17+00.00 SEE SHEET 19

JOSE CERVANTES-ISLAS
DB 14552 PG 2656
BM 1994 PG 996
BM 1988 PG 1374

TANYIA REINA
DB 15392 PG 2662
BM 1980 PG 612
BM 1988 PG 1374

CHARLES & GWENDOLYN CAPS
DB 2677 PG 559
BM 1978 PG 758
BM 1988 PG 1374

VALLEY WOODS MOBILE ESTATES
DB 3092 PG 926

HODGE ROAD LLC
DB 14379 PG 1784
BM 1988 PG 1420

WJE
PAJ
WJD
SHA
WJC

-Y30H-POT Sta. 10+00.00
BEGIN CONSTRUCTION

-Y30H-PC Sta. 10+76.98

-Y30H-PT Sta. 11+24.52

-Y30H-PC Sta. 12+82.67

-Y30H-PT Sta. 13+49.34

-Y30H-PC Sta. 14+11.09

-Y30H-PT Sta. 14+92.10

-Y30H-ST Sta. 15+05.00

-Y30H-PT Sta. 15+28.93
END CONSTRUCTION

-Y30RFB-FST Sta. 10+00.00=
-LB- POT Sta. 1400+77.34
OFF=71' LT

-Y30RPB-SC Sta. 12+03.00

-Y30RPC-POT Sta. 10+00.00=
-LB- POT Sta. 1404+77.34
OFF=71' RT
△=4°06' 00"

-Y30RPC-PC Sta. 15+00.00

N 9° 19' 50.0" W
N 20° 13' 35.5" W
N 4° 56' 50.4" W
N 7° 41' 35.4" W
N 3° 35' 35.9" W
S 82° 13' 35.1" W

GRADE TO DRAIN
PROP. WW FENCE
PROP. NOISE WALL
PROP. GUARDRAIL
PROP. CABLE GUIDERAIL
PROP. SECB
300' TAPER
780' ACCELERATION LANE
900' TAPER
SP. CUT DITCH SEE DETAIL S
TOE PROTECTION SEE DETAIL W
LAT. 3' BASE DITCH SEE DETAIL D
STD. 5' BASE DITCH SEE DETAIL Q
CL B RIP RAP
CL II RIP RAP
6' DIP RISER TOP=214.36
INV=206.20
INV=215.24
INV=225.05
INV=218.27
15" RCP-III
18" RCP-III
24" RCP-III
2 ELBOWS
JB w/MH
TYPE B-77
GREU TL-3
REMOVE EX. ASPHALT PAVEMENT
RETAIN
2GI
2GI-D
FS
RW CA
BZ 1
BZ 2
12' PS
14' PS
18' PS
4' PS
8' PS
1400+00
1405+00
1410+00
15+00

FOR -Y30RPC- CURVE DATA SEE SHT.3A-I
FOR -Y30RPB- CURVE DATA SEE SHT.3A-I

FOR -Y30H- CURVE DATA SEE SHT.3A-I

FOR -L- PROFILE SEE SHTS.51 & 52
FOR -Y30RPC- PROFILE SEE SHT.71

FOR -Y30RPB- PROFILE SEE SHT.70
FOR -Y30H- PROFILE SEE SHT.75

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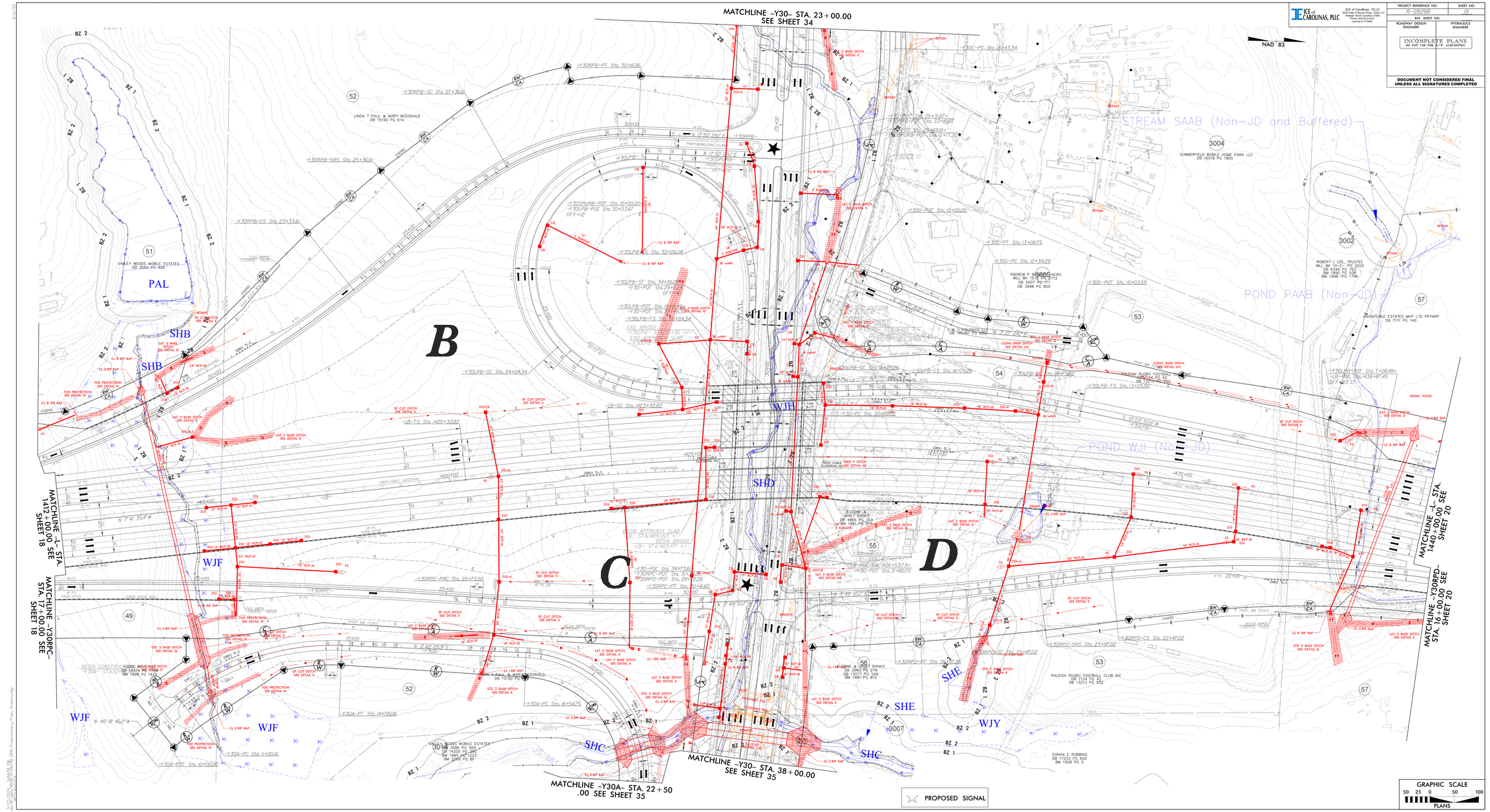
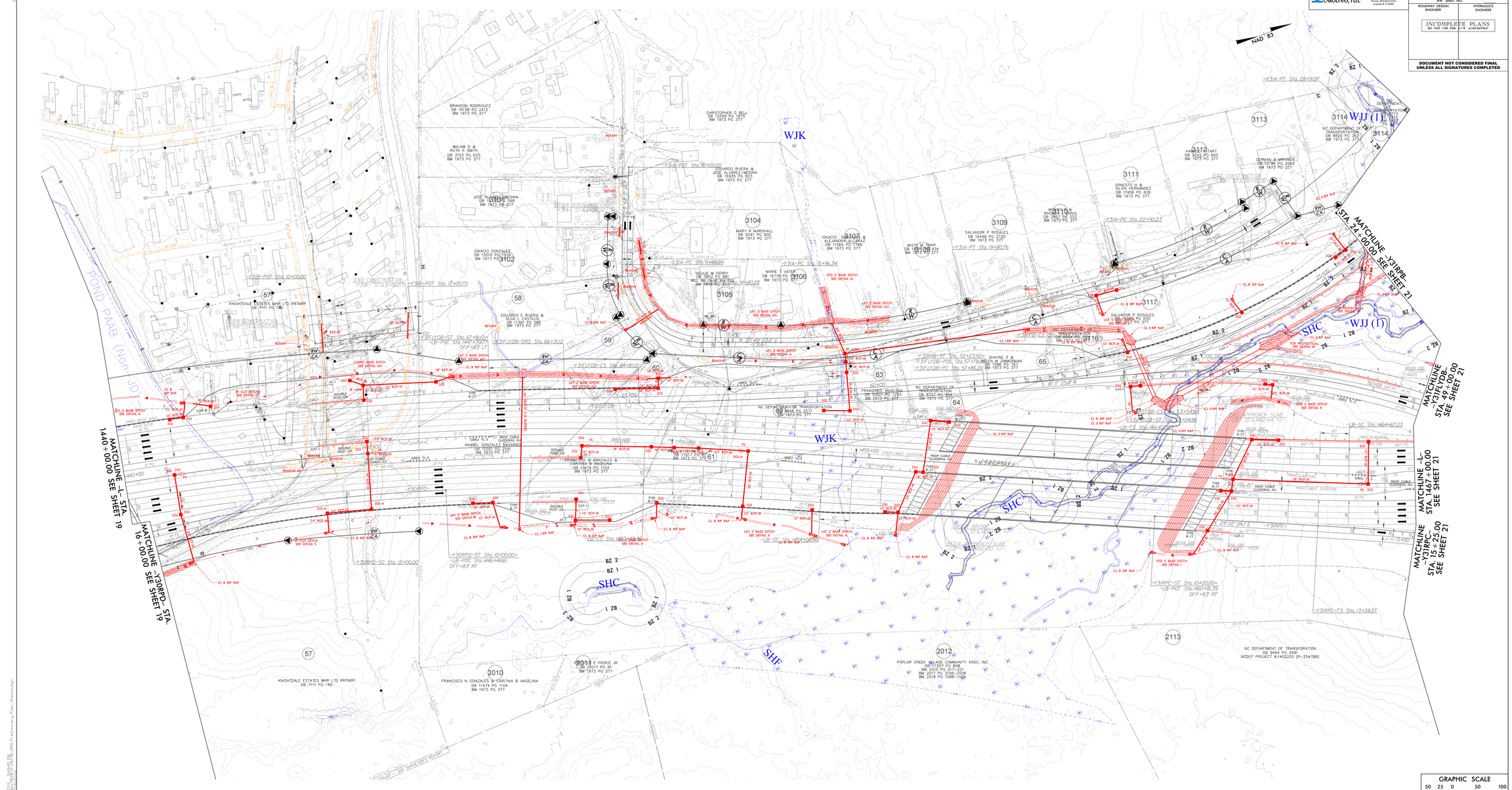
jeffreyking


MATCHLINE –Y30– STA. 23+00.00
SEE SHEET 34
MATCHLINE –Y30– STA. 38+00.00
SEE SHEET 35
MATCHLINE –Y30A– STA. 22+50
.00 SEE SHEET 35
MATCHLINE –Y30RPC– STA. 17+00.00 SEE SHEET 18
MATCHLINE –L– STA. 1412+00.00 SEE SHEET 18
MATCHLINE –L– STA. 1440+00.00 SEE SHEET 20
MATCHLINE –Y30RPD– STA. 16+60.00 SEE SHEET 20
B
C
D
PAL
SHB
SHB
WJF
WJF
WJF
SHC
SHC
SHD
WJI
SHE
SHE
WJY
STREAM SAAB (Non-JD and Buffered)
POND PAAB (Non-JD)
POND WJI (Non-JD)
NAD 83
PROPOSED SIGNAL
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
PROJECT REFERENCE NO. R-2829B
SHEET NO. 19
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
ICE of Carolinas, PLLC
GRAPHIC SCALE
50 25 0 50 100
PLANS


NAD 83
WJJ (1)
WJK
SHC
SHF
POND PAAB (Non-JD)
MATCHLINE –L– STA. 1440+00.00 SEE SHEET 19
MATCHLINE –Y30RPD– STA. 16+00.00 SEE SHEET 19
MATCHLINE –Y31YLYDB– STA. 64+00.00 SEE SHEET 21
MATCHLINE –Y31RPC– STA. 15+25.00 SEE SHEET 21
MATCHLINE –Y31RPB– STA. 24+00.00 SEE SHEET 21
MATCHLINE –L– STA. 1467+00.00 SEE SHEET 21
-Y31A-PT Sta. 28+91.97
-Y31A-PT Sta. 10+00.00
-Y31A-PC Sta. 11+95.99
-Y31A-PC Sta. 15+96.34
-Y31A-PC Sta. 22+90.23
-Y31A-PT Sta. 19+80.76
-Y31YLYDB-ST Sta. 67+81.02= -LB-POC Sta. 1447+37.77 OFF-83.7 LT
-Y31YLYDB-SRS Sta. 66+31.12
-Y31YLYDB-CS Sta. 64+81.02
-Y31YLYDB-ST Sta. 32+23.50
-Y31YLYDB-POC Sta. 57+78.80
-Y31YLYDB-PC Sta. 57+86.20
-Y31YLYDB-CS Sta. 53+45.00
-Y31YLYDB-ST Sta. 51+10.49
-LB-TS Sta. 1461+47.03
-LB-SC Sta. 1464+67.03
-Y31RPC-ST Sta. 10+00.00= -LB-POT Sta. 1460+86.39 OFF+83.7 RT
-Y31RPC-TS Sta. 13+28.57
-Y30RPD-ST Sta. 10+00.00= -LB-POC Sta. 1446+44.51 OFF+83.7 RT
-Y30RPD-SC Sta. 12+00.00
-Y30RPD-
-Y31RPC-
-L-
BRANDON RODRIGUEZ DB 16158 PG 2412 BM 1973 PG 377
CHRISTOPHER G BELL DB 12599 PG 1870 BM 1973 PG 377
WILLIAM D & RUTH K SMITH DB 3153 PG 625 BM 1973 PG 377
EDUARDO RIVERA & JOSE ALVAREZ-MEDINA DB 16935 PG 823 BM 1973 PG 377
JOSE ALVAREZ-MEDINA DB 13151 PG 598 BM 1973 PG 377
IGNACIO GONZALEZ DB 15010 PG 1933 BM 1973 PG 377
EDUARDO E RIVERA & OLGA L CASTILLO DB 11393 PG 599 BM 1973 PG 377
KNIGHTDALE ESTATES MHP LTD PRTNRP DB 7711 PG 140
JOELLE M PERRY DB 16718 PG 2001 BM 1973 PG 377
MARIE T VATEK DB 16718 PG 2001 BM 1973 PG 377
IGNACIO GONZALEZ & ALEJANDRA ALCARAZ DB 11565 PG 1768 BM 1973 PG 377
MARY R MARSHALL DB 5041 PG 900 BM 1973 PG 377
MISTY M TRIPP DB 16718 PG 934 BM 1973 PG 377
SALVADOR P ROSALES DB 16448 PG 2720 BM 1973 PG 377
MIRANDA & RHONDA TYNDALL DB 2902 PG 222 BM 1973 PG 377
ERNESTO H JR & ANA L HERNANDEZ DB 15856 PG 626 BM 1973 PG 377
HAROLD T JR & DEBRA T TART DB 3242 PG 660 BM 1975 PG 377
GERMAN, B MIRANDA DB 15786 PG 2062 BM 1973 PG 377
NC DEPARTMENT OF TRANSPORTATION DB 8820 PG 363 BM 1973 PG 377
NC DEPARTMENT OF TRANSPORTATION DB 15856 PG 626 BM 1973 PG 377
SALVADOR P ROSALES LAT 1 BM 1973 PG 600
NC DEPARTMENT OF TRANSPORTATION DB 15856 PG 626 BM 1973 PG 377
SHAYNE Z & MELTN M ZIMMERMAN DB 16718 PG 2001 BM 1973 PG 377
FRANCISCO ANGELINA DB 11053 PG 1253 BM 1973 PG 377
NC DEPARTMENT OF TRANSPORTATION DB 8820 PG 363 BM 1973 PG 377
ANABEL GONZALEZ NAVARRO DB 15301 PG 2201 BM 1973 PG 377
FRANCISCO N GONZALES & CARITINA B ANGELINA DB 11474 PG 1104 BM 1973 PG 377
FRANCISCO N GONZALES & CARITINA B ANGELINA DB 11474 PG 1104 BM 1973 PG 377
E F PIERCE JR DB 15037 PG 81 BM 1973 PG 377
POPLAR CREEK VILLAGE COMMUNITY ASSC, INC DB 18108 PG 1108 BM 2010 PG 217-221 BM 2017 PG 2106-2108 BM 2018 PG 1098-1104
NC DEPARTMENT OF TRANSPORATION DB 9494 PG 2491 NCDOT PROJECT B1402205 (R-2547BB)
END CONSTRUCTION -Y31B- STA.17+00.01
BEGIN CONSTRUCTION -Y31B- STA.17+00.01
END CONSTRUCTION -Y31A- STA.28+91.97
-Y31YLYDB- STA. 10+00.00
-Y31YLYDB- STA. 12+00.70
-Y31YLYDB-
-Y31RPB-
-Y31RPC-
-Y30RPD-
-Y31YLYDB-
-L-
-Y31A-
-Y31B

ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
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License #: P-0999

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	22
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

MATCHLINE -LB- STA. 1493+00.00 SEE SHEET 21

MATCHLINE -Y31RPBD- STA. 63+55.00 SEE SHEET 21

MATCHLINE -LB- STA. 1505+00.00 SEE SHEET 23

MATCHLINE -Y31RPBD- STA. 66+50.00 SEE SHEET 23

2302 CHAD WALL DB 14731 PG 873 BM 2006 PG 2577

2303 CHARLES C & LINDA R PARKER, SR DB 2150 PG 625 BM 1974 PG 312

2304 THEODORE A CUNNINGHAM DB 13282 PG 1026 BM 1974 PG 312

2305 SAMMY L & ELIZABETH M MATTHEWS DB 2292 PG 325 BM 1974 PG 312

2306 NC DEPARTMENT OF TRANSPORTATION DB 8919 PG 2307

2307 AQUA NORTH CAROLINA INC DB 11320 PG 2263 DB 13547 PG 76 BM 1974 PG 312

2308 KATHLEEN K COX DB 3443 PG 198 BM 1974 PG 312

3124 AMY H GROSS, TRUSTEE DB 16963 PG 1990 BM 2003 PG 506

2309 BETTY P WALL & DEBRA W POOLE DB 12300 PG 478

2310 BETTY P WALL & DEBRA W POOLE DB 12300 PG 474 BM 2003 PG 506

-Y31RPBD-CS Sta. 55+66.42

-Y31RPBD-ST Sta. 57+16.42

-Y31RPD-POT Sta. 66+62.47 = -Y31RPBD-POT Sta. 57+07.00 OFF +24' RT

BEGIN DIAMOND GRADING -LB- STA.1502+35.86 RT

BEGIN NW*GT -LB- +75.00

RIGHT OF WAY FOR PROPOSED SERVICE RD AS SHOWN ON NCDOT PLANS R-2547BB, PROJECT #8.1402205. SERVICE ROAD NOT BUILT SEE SURVEYOR'S REPORT

RETAIN EXISTING BASIN

REMOVE EX.GUIDERAIL

100' TAPER TO EXIST.

FOR -LB- CURVE DATA SEE SHT.3A-1

FOR -Y31RPBD- CURVE DATA SEE SHT.3A-2

FOR -LB- PROFILE SEE SHT.5

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE -LB- STA. 1505+00.00 SEE SHEET 22

MATCHLINE -LB- STA. 1515+00.00 SEE SHEET 24

MATCHLINE -Y31RPBD- STA. 66+50.00 SEE SHEET 22

2308 KATHLEEN K COX
DB 3443 PG 198
BM 1974 PG 312

2401 DAVID E. & MYRA S SNIDER
DB 8330 PG 267
BM 1974 PG 312

2402 RANDI R BYRD
DB 17387 PG 495
BM 1974 PG 312

2403 CDC DEVELOPMENT LLC
DB 12416 PG 2118
BM 1974 PG 312

2404 MINGO CREEK COMMUNITY ASSOCIATION INC
DB 16375 PG 125
BM 2007 PG 2906-2908

2405 JOYNER MINGO CREEK LLC
DB 16038 PG 1549
BM 2006 PG 2591-2594

2406 FRED SMITH COMPANY
DB 8750 PG 654
DB 16263 PG 247
BM 2000 PG 2142

2407 CHURCHILL COMMUNITY ASSN INC
DB 14759 PG 2694
BM 2012 PG 455-456

2408 CHURCHILL COMMUNITY ASSN INC
DB 14535 PG 274
BM 2011 PG 1130-1131

2310 BETTY P WALL & DEBRA W POOLE
DB 12300 PG 474
BM 2003 PG 506

NAD 83

WJV
WJW
SHN
WWG

STREAM SAAJ

-LB-CS Sta. 1507+30.20
-LB-ST Sta. 1510+30.20
-Y31RPBD-POT Sta. 71+63.48=
-LB-POT Sta.1510+30.20
OFF=64.21' RT

N 28°15'00.0" W

1505+00
1510+00
1515+00
70+00

CL I RIP RAP
CL II RIP RAP
STD. 5' BASE DITCH SEE DETAIL R
48" RCP-III
15" RCP-III
42" RCP-III
24" RCP
30" RCP
18" RCP
TRENCHLESS INSTALLATION 48" WELDED STEEL
TRENCHLESS INSTALLATION 42" WELDED STEEL
FLOWABLE FILL
REMOVE DI
REMOVE HW
REMOVE EX.GUARDRAIL
PLUG
RETAIN DI
RETAIN SYSTEM
RETAIN
COLLAR
TYPE B-77
JB w/MH
HW
FES
2GI
2GI-A
300' TAPER
1377' ACCELERATION LANE
PROP. NOISE WALL
PROP.SFCB
PROP.GUARDRAIL
3" MILLED PS
12" PS
18" PS
72 FO
12 FO
GREU TL-3
OVERHEAD POWERLINES
10' DRAINAGE EASEMENT
POND WSE=252.3'
EXISTING R/W
RIGHT OF WAY FOR PROPOSED SERVICE RD AS SHOWN ON NCDOT PLANS R-2547BB, PROJECT #8.1402205. SERVICE ROAD NOT BUILT SEE SURVEYOR'S REPORT

FOUR -LB- CURVE DATA SHEET SHT. 33A-1

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ICE of Carolinas, PLLC
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License #: P-0999

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE -L- STA. 1518+00.00 SEE SHEET 23

NAD 83

2406
FRED SMITH COMPANY
DB 8750 PG 654
DB 16263 PG 247
BM 2000 PG 2142

WETLAND WAA1

-LB-POT Sta. 1531+63.61

END CONSTRUCTION R-2829B
END TIP PROJECT R-2829B
-LB- STA.1531+41.23

END DIAMOND GRINDING
-LB- STA.1518+20.06 RT

1520+00 | 1525+00 | 1530+00

N 28°15'00.0"W

I-540 EB/NORTHERN WAKE EXPY 35' CONC

I-540 WB/NORTHERN WAKE EXPY 35' CONC

1377' ACCELERATION LANE

300' TAPER

SHOULDER BERM GUTTER

REMOVE EX.GUARDRAIL

REMOVE EX. SBG

REMOVE DI

RETAIN DI

RETAIN

RETAIN SYSTEM

15" RCP-III

24" RCP-III

2GI

2GI-A

COLLAR

REMOVE HW

CL B RIP RAP

LAT. 2' BASE DITCH SEE DETAIL A

PROP. NOISE WALL

PROP.SFCB

3' MILLED PS

12' MILLED PS

12' BST

18' PS

CHURCHILL COMMUNITY ASSN INC
DB 14535 PG 274
BM 2011 PG 1130-1131
2408

CHURCHILL COMMUNITY ASSN INC
DB 14370 PG 2275
BM 2011 PG 529-530
2501

CHURCHILL COMMUNITY ASSN INC
DB 13991 PG 526
BM 2010 PG 628-629
2502

KINGMON DR

FERNBANK DR

R2829-IB

R2829-IB

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License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	25
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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WHG

NAD 83

28
AUBURN ASSOCIATES
DB 4424 PG 265
BM 1989 PG 7

26
EDGE OF AUBURN LLC
DB 10839 PG 2259

2702
OCS-HS LOT OPTION POOL 01, L.P.
DB 18659 PG 725
BM 2021 PG 1078

TIE TO AUBURN SUBDIVISION DEVELOPMENT

BEGIN CONSTRUCTION -Y27- STA.17+80.00

-Y27-PT Sta. 18+38.88

-Y27-PC Sta. 19+95.06

-Y27-POC Sta.21+23.45=
-Y27_GW-POT Sta. 10+00.00

-Y27_GW-PC Sta. 10+28.46

-Y27_GW-PT Sta. 10+67.89

-Y27_GW-PC Sta. 11+13.40

-Y27_GW-PT Sta. 13+13.89

-Y27_GW-PC Sta. 14+17.36

-Y27_GW-PT Sta. 16+44.30

-Y27_GW-PT Sta. 15+17.13

-Y27_GW-PC Sta. 15+35.97

-Y27-POC Sta.21+77.56=
-Y27A-POT Sta. 10+00.00

-Y27- N 2° 55' 30.6" W

-Y27_GW N 7° 11' 10.8" W

-Y27_GW N 18° 40' 31.7" W

-Y27_GW N 124° 23' 31.4" W

N 18° 11' 06.5" W

SPEC. CUT BASE DITCH SEE DETAIL T

CLASS B RIP RAP

437.5' MEDIAN TAPER

LATERAL 2' BASE DITCH SEE DETAIL A

STD. 2' BASE DITCH SEE DETAIL K

STD. 3' BASE DITCH SEE DETAIL O

LAT. 2' BASE DITCH SEE DETAIL C

SPEC. CUT Y DITCH SEE DETAIL S

TIE TO SPECIAL LATERAL SY DITCH BY OTHERS -Y27A- STA.11+23.06

BY OTHERS

MATCHLINE -Y27- STA. 28+00.00
SEE SHEET 5

MATCHLINE -Y27A- STA. 16+00.00
SEE SHEET 28

FOR -Y27- CURVE DATA SEE SHT.3A-1	FOR -Y27- PROFILE SEE SHT.56
FOR -Y27A- CURVE DATA SEE SHT.3A-1	FOR -Y27A- PROFILE SEE SHT.61
FOR -Y27_GW- CURVE DATA SEE SHT.3A-1	FOR -Y27_GW- PROFILE SEE SHT.57

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	26
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PCI

NAD 83

BZ 2 · BZ 1 · BZ 2 · BZ 1 · BZ 2 · BZ 1 · BZ 2 · BZ

JS MH

29
BURNETTE FARMS LLC
DB 10605 PG 1845

2704

-Y27-PC Sta. 51+09.30
-Y27-PT Sta. 50+25.91
-Y27B-POT Sta. 10+00.00
BEGIN CONSTRUCTION
-Y27B- STA.10+15.00
-Y27-PC Sta. 56+75.62
-Y27-PT Sta. 54+88.20
-Y27B-PC Sta. 11+59.24

MATCHLINE -Y27- STA. 44+00.00
SEE SHEET 05

MATCHLINE -Y27- STA. 57+00.00 SEE SHEET 27

PROP. WW FENCE
PROP. MUP
PROP. 2' C&G
35' TYP.
100' TAPER
400' MEDIAN TAPER
45+00
50+00
55+00
CB
DI
15" RCP-IV
18" RCP-IV
5' MONO. CONC. ISLAND
4' PS
CL B RIP RAP
LAT. 2' BASE DITCH
SEE DETAIL AA
LAT. 2' BASE DITCH
SEE DETAIL A
RW CA
RW
-Y27- POT Sta. 55+11.00
-Y27B- POT Sta.12+15.62
-Y27B-PT Sta. 13+89.64
-Y27B-POT Sta. 15+00.00
N 46° 23' 51.1" W
N 44° 42' 47.9" W
N 38° 44' 52.4" E
BURNETTE FOREST LLC
DB 15073 PG 363
BM 1989 PG 1374
END CONSTRUCTION
-Y27B- STA.13+60.00
2705
30
BURNETTE FARMS LLC
DB 10605 PG 1845

☆ PROPOSED SIGNAL

FOR -Y27- CURVE DATA SEE SHT. 3A-1
FOR -Y27B- CURVE DATA SEE SHT. 3A-1

FOR -Y27- PROFILE SEE SHT. 56 & 57
FOR -Y27B- PROFILE SEE SHT. 61

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jeffreyking

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ARCADIS
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License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	27
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

2704
BURNETTE FARMS, LLC
DB 10605 PG 1845

-Y27-PT Sta. 59+61.94

-Y27-POT Sta. 60+99.96

MATCHLINE -Y27- STA. 57+00.00 SEE SHEET 26

400' MEDIAN TAPER

60'00

-Y27-

N 39°57'19.4" W

END CONSTRUCTION
-Y27- STA. 60+50.00

2705
BURNETTE FOREST LLC
DB 15073 PG 363
BM 1989 PG 1374

2706
MG&BK PROPERTIES LLC
DB 14943 PG 812

2706
MG&BK PROPERTIES LLC
DB 14943 PG 812

S 49°57'19" W 410.01'

N 49°57'19" E 89.40'

227.00'
S 40°01'52" E

154.86'
S 39°28'29" E

N 63°36'39" E 60.32'

N 63°36'39" E 234.09'

N 49°57'19" E 355.82'

FOR -Y27- CURVE DATA SEE SHT.3A-1 | FOR -Y27- PROFILE SEE SHT.57

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jeffrawkins

8/17/99

MATCHLINE –EY6–
SEE SHEET 29

ARCADIS
Arcadis CE, Inc.
5420 Wade Park Blvd. Suite 350
Raleigh, North Carolina 27607
Phone: 919-854-1282
License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	28
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

31
BURNETTE FOREST, LLC.
DB 15073 PG 363
BM 1989 PG 1374

2703
DEACON HOLDINGS LLC
DB 18899 PG 2136
BM 2021 PG 1078

2702
OCS-HS LOT OPTION POOL 01, L.P.
DB 18659 PG 725
BM 2021 PG 1078

2802
WILBUR P., JR. & CYNT
DB 5223 PG
BM 1989 PG

MATCHLINE –Y27A– STA. 16+00.00
SEE SHEET 25

–Y27A–PT Sta. 17+61.36

–Y27A–PC Sta. 20+94.87

–Y27A–PRC Sta. 29+71.51

–Y27A– STA. 31+50.00

END CONSTRUCTION
–Y27A– STA 31+50.00

REMOVE EXISTING ASPHALT PAVEMENT

LAT. 2' BASE DITCH SEE DETAIL C

SPEC. CUT V DITCH SEE DETAIL S

LATERAL 2' BASE DITCH SEE DETAIL AA

CLASS I RIP RAP

20+00

25+00

30+00

42" RCP

Hw

N 38°55'43.9" E
–Y27A–
490.11'

N 38°55'44" W
490.11'

N 64°13'32" E
156.49'

N 86°03'32" E
–Y27A–

300' MEDIAN

4' PS

6' PS

PROP. GUARDRAIL

PROP. MIP

AT-1

GREU
TL-3

RETAIN

WLF

FOR –Y27A– CURVE DATA SEE SHT. 3A-1

FOR –Y27A– PROFILE SEE SHT. 6I

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License #: F-0299

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	29
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83

MATCHLINE –EY6–
SEE SHEET 05

REMOVE EXISTING PAVEMENT AND GRADE TO DRAIN

OLD BAUCOM RD
–EY6–

REMOVE EX. ASPHALT PAVEMENT

31

SGL

WHI

2703
DEACON HOLDINGS LLC
DB 18899 PG 2136
BM 2021 PG 1078

MATCHLINE –EY6–
SEE SHEET 28

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efrawley

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MATCHLINE –EY7–
SEE SHEET 10

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83

LONG BRANCH FARM LLC
DB 14261 PG 1125
BM 1999 PG 579

MONS &
CEVEDO
PG 55
; 1789
; 1790

STEPHEN F &
JAMIE M GALLOWAY
DB 16984 PG 494
BM 2006 PG 1789
BM 2008 PG 556

CORTEZ R &
STEPHANINE S WILLIAMS
DB 16926 PG 441
BM 2006 PG 1789

CITY OF RALEIGH, COUNTY OF WAKE
DB 9885 PG 449
BM 1985 PG 155
BM 1991 PG 1105

50' SIGN EASEMENT
BM 2006 PG 1789

SEWAGE EASEMENT

SR 2552 BATTLE BRIDGE RD EXT BST

38

39

2804

END CONSTRUCTION
-Y28B- STA.12+70.00

-Y28B- POT Sta. 13+12.11

-Y28B- POT Sta. 10+00.00

FOR -Y28B- PROFILE SEE SHT.62

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83

PROPERTY LINE IS ALONG HINTON CREEK

GRADY B & THELMA M JEFFERYS
DB 2582 PG 280

2901

2907

NEUSE RIVER

BZ 1
BZ 2
L Z1
L Z2

-Y29-POT Sta. 10+00.00

CL II RIP RAP

STD. 3' BASE DITCH
SEE DETAIL N

LAT. 3' BASE DITCH
SEE DETAIL AG

PERMANENT DRAINAGE EASEMENT
DB 15649 PG 816

RETAIN

450' MEDIAN TAPER

PERMANENT UTILITY EASEMENT
DB 15649 PG 816

24 FO

4" PS

30" C&G

N 46°27'32.5" E
-Y29-

SR 2555 (HINTON CHURCH RD)

16" PVC

EXISTING R/W

RIGHT OF WAY
DB 10883 PG 42

BEGIN CONSTRUCTION
-Y29- STA 11+50.00

MATCHLINE -Y29- STA. 14+00.00 SEE SHEET 32

FOR -Y29- PROFILE SEE SHT.63

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

GRADY B & THELMA M JEFFERYS
DB 2582 PG 70

N 64°41'52" E
808.90'

2902
JACOB J & MARYLU SANOK
DB 6714 PG 685

N 83°15'23" E
194.95'

S 25°50'47" E
203.55'

S 25°49'45" E

2901

-Y29-POT Sta. 15+62.86

-Y29-PT Sta. 15+01.90

-Y29-PC Sta. 14+30.74

N 27°14'03.8" W

15+00

-Y29DR-

N 54°18'22.5" E

-Y29-PC Sta. 18+52.84

GRADY B & THELMA M JEFFERYS
DB 2582 PG 70
BM 2000 PG 523

2901

GRADY B & THELMA M JEFFERYS
DB 2582 PG 70
BM 2000 PG 523

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DB 16993 PG 1924
2903

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DB 16993 PG 1924

-Y29-PC Sta. 10+99.29

-Y29-POT Sta. 16+49.61=
-Y29A-POT Sta. 10+00.00

-Y29-POT Sta. 16+48.84=
-Y29A-POT Sta. 10+00.00

N 46°27'32.5" E
275.00'

20+00

15+00

-Y29-

-Y29A-

MATCHLINE -Y29- STA. 14+00.00 SEE SHEET 31

MATCHLINE -Y29- STA. 25+00.00 SEE SHEET 14

S 47°39'31.6" E

N 39°12'43.6" E

N 83°17'18.7" E

-Y29A-PC Sta. 10+45.43

-Y29A-PC Sta. 13+99.81

-Y29A-PT Sta. 12+40.48

-Y29A-PT Sta. 16+30.60

BEGIN UNIFORM OVERLAY
-Y29A- STA. 17+75.00

END GRADE

POND
WSE=1647'
DRAIN POND

2907
MICHAEL D SEALEY
DB 4414 PG 545

2908
MICHAEL D SEALY &
NANCY F HILDEBRAND
DB 6521 PG 764
BM 1994 PG 1720

2909
RONALD KURNEY
DB 12078 PG 583
DB 12078 PG 549
BM 2003 PG 1370
BM 2003 PG 1927

4106
COUNTY OF WAKE
DB 10407 PG 492
BM 2003 PG 1370

S 83°58'51" W
172.21'

N 05°00'38" W
115.83'

N 05°00'38" E
114.14'

N 05°00'38" E
102.60'

POND PAAD (Non-JD)

LAT. 3' BASE DITCH SEE DETAIL AG

LAT. 2' BASE DITCH SEE DETAIL AC

STD. 2' BASE DITCH SEE DETAIL I

STD. 2' BASE DITCH SEE DETAIL T

SP. 2' BASE DITCH SEE DETAIL X

2' BASE BERM DITCH SEE DETAIL Y

BERM 2' BASE DITCH SEE DETAIL Y

CL B RIP RAP

REMOVE

RETAIN

2 ELBOWS

FOR -Y29- CURVE DATA SEE SHT.3A-I
FOR -Y29A- CURVE DATA SEE SHT.3A-I

FOR -Y29- PROFILE SEE SHT.63
FOR -Y29A- PROFILE SEE SHT.67

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efrazier

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

WLC

SGW

BZ 1

BZ 2

2915
KAREN L & JAMES R DAVIS
DB 1486 PG 49
DB 14485 PG 1498

2914
JAMES R DAVIS
DB 2823 PG 660
BM 1979 PG 926

2913
REX M & CAROL S EVERHART
DB 12615 PG 949
BM 1995 PG 1226

2916
KIMBERLY P ATKINS & KELLY P GOULD
DB 15445 PG 2688

2917
STEVEN & JAYNE WALL
DB 3670 PG 475

40
WILLIAM E ADAMS
DB 17762 PG 1820
DB 2395 PG 157

STA. 40+00.00 SEE SHEET 14 MATCHLINE –Y29–

CL B RIP RAP

STD. 2' BASE DITCH SEE DETAIL I

STD. 3' BASE DITCH SEE DETAIL L

END CONSTRUCTION –Y29– STA. 51+00.00

SPEC. CUT V DITCH SEE DETAIL S

PROP. WW FENCE

100' TAPER

600' TAPER

450' MEDIAN TAPER

N 66°07'38.5"E –Y29–

875'R

SR 1155 (OLD NC 16) KNIGHTDALE BYPASS

18" RCP-IV

REMOVE

RETAIN

SPEC. CUT 2' BASE DITCH SEE DETAIL T

STD. 2' BASE DITCH SEE DETAIL K

–Y29–PC Sta. 49+16.89

–Y29–PCC Sta. 50+96.60

FOR –Y29– CURVE DATA SEE SHT.3A-I

FOR –Y29– PROFILE SEE SHT.64

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	34
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

3001
SUNLIGHT HOLDINGS, LLC
DB 17358 PG 1692
BM 2011 PG 332

3002
ROBERT L LEE, TRUSTEE
DB 12300 PG 916
BM 1990 PG 938
BM 1998 1PG 1709
BM 1998 1PG 1796
WILL BK 10-E- PG 3202

3003
CHRISTINE B & IRA G FLOYD
DB 6554 PG 814
BM 2014 PG 651

3003
CHRISTINE B & IRA G FLOYD
DB 15670 PG 1936
BM 2014 PG 651

3004
SUMMERFIELD MOBILE HOME PARK LLC
DB 16518 PG 1800

52
LINDA T PAUL & MARY MCDONALD
DB 15190 PG 614

52
LINDA T PAUL & MARY MCDONALD
DB 15190 PG 614

-Y30-POT Sta.10+00.00

BEGIN CONSTRUCTION
-Y30- STA.11+00.00

-Y30C-PT Sta.11+70.32

-Y30C-PC Sta.10+42.53

-Y30C-POT Sta.10+00.00=
-Y30-POT Sta.18+00.00

-Y30C-PC Sta.12+60.09

END GRADE
BEGIN UNIFORM OVERLAY
-Y30C- STA.12+75.80

N 74° 03' 39.5" E

S 89° 09' 30.9" E
-Y30-

N 0° 50' 29.1" E

15+00

20+00

450' TAPER

100' TAPER

350' MEDIAN TAPER

RETAIN SYSTEM

REMOVE EX.ASPHALT PAVEMENT

REMOVE

15" RCP-III

18" RCP-III

2GI

CB

RW CA

BZ 1

BZ 2

STREAM SHD

MATCHLINE -Y30- STA. 23+00.00 SEE SHEET 19

FOR -Y30- CURVE DATA SEE SHT.3A-1	FOR -Y30- PROFILE SEE SHT.67
FOR -Y30C- CURVE DATA SEE SHT.3A-2	FOR -Y30C- PROFILE SEE SHT.74

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eli.rawking

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE -Y30F- STA. 14+00.00
SEE SHEET 37

MATCHLINE -Y30- STA. 38+00.00 SEE SHEET 19

MATCHLINE -Y30A- STA. 22+50.00 SEE SHEET 19

MATCHLINE -Y30- STA. 52+00.00 SEE SHEET 36

3007 DONNA E ROBBINS
DB 17253 PG 600
BM 1928 PG 5

3008 VARIABLE R/W

3009

3010 ASA FOOD MART 3 LLC
DB 15548 PG 2258
BM 1986 PG 1526
BM 2006 PG 1524-1525

3011 POPLAR GUY LLC
DB 16773 PG 2578
BM 2006 PG 1524-1525

3012 CEMETERY
PIN 1742-79-2

3014

VALLEY WOODS MOBILE ESTATES
DB 3086 PG 569
DB 14200 PG 290
BM 1985 PG 1223
BM 2000 PG 88

-Y30F-PC Sta. 12+91.17
-Y30F-PT Sta. 11+87.48
-Y30F-PC Sta. 4I+32.37
-Y30F-PC Sta. 10+98.76
-Y30D-POT Sta. 13+02.00=
-Y30-POT Sta. 49+76.42
-Y30F-POT Sta. 10+00.00 =
-Y30-POT Sta. 41+81.37
-Y30E-POT Sta. 11+52.09=
-Y30A-POT Sta. 26+93.02
-Y30A-PT Sta. 22+90.18
-Y30E-POT Sta. 10+00.00
BEGIN CONSTRUCTION
END GRADE
BEGIN UNIFORM OVERLAY
-Y30A- STA. 29+50.00
-Y30A-POT Sta. 33+40.54=
-Y30D-POT Sta. 10+80.82
-Y30D-POT Sta. 10+00.00
END UNIFORM OVERLAY
STA. 34+02.50
-Y30A-POT Sta. 34+72.25

S 81° 11' 30.5" E
S 79° 30' 20.3" E
N 24° 35' 54" E
N 81° 17' 17" W 354.70'
N 79° 49' 07" W 132.06'
N 10° 29' 39.7" E

LAT. 5' BASE DITCH SEE DETAIL E
LAT. 2' BASE DITCH SEE DETAIL A
PROP. WW FENCE
PROP. NOISE WALL
PROP. MONO. CONC. ISLAND
PROP. 2'-6" C&G
PROP. 1'-6" C&G
4' CONC. SIDEWALK
432' STORAGE
600' TAPER
450' TAPER
CL B RIP RAP
REMOVE
REMOVE DI
24" RCP-III
18" RCP-III
15" RCP-III
30" RCP-III
18" RCP-IV
18" RCP-IV REMOVE
GREU TL-3
TL-2
CAT-1
UNIFORM OVERLAY
VALLEY GUTTER
EXIST. DRAINAGE EASEMENT DB 14200 PG 290
ORCHARD FARM LN 20' BST
COVERED WAGON LN 24' BST
OLD HICKORY LN 46' BST
CONC. CURB
8" PVC

FOR -Y30- CURVE DATA SEE SHT. 3A-1
FOR -Y30A- CURVE DATA SEE SHT. 3A-2
FOR -Y30D- CURVE DATA SEE SHT. 3A-2

FOR -Y30- PROFILE SEE SHTS. 68 & 69
FOR -Y30A- PROFILE SEE SHT. 74
FOR -Y30D- PROFILE SEE SHT. 74

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sfrazier

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	36
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83

MATCHLINE -Y30-
STA. 52+00.00 SEE SHEET 35

3402
WILLIE E & MARY A WALTERS
BM 1987 PG 1852
DB 8540 PG 1526

3013
ERNEST & JUDITH SCRIVANI
DB 15945 PG 280
BM 1987 PG 1852
2SFD

3012

3014
Y WOODS MOBILE ESTATES
DB 3086 PG 569
DB 14200 PG 290
BM 1985 PG 1223
BM 2000 PG 88

-Y30-PT Sta. 52+07.37

-Y30-POT Sta. 55+48.15

656

N 87°13'59" E
329.98'

N 87°14'00" E
318.27'

N 02°46'01" W
288.00'

N 02°46'01" W
288.00'

450' TAPER

SIGHT TRIANGLE

PROPOSED ROADWAY OUTLET

SR 1001 HOLLE RD 24 BST

S 78°37'00" E
-Y30-
85.00'

END CONSTRUCTION
-Y30- STA. 55+00.00

R2829-12

SOUTHBRIDGE RD 21' BST

CONC CURB

ORCHARD FARM LN 20' BST

FOXVALE CT 23' BST

EXISTING R/W

50.00'

FOR -Y30- PROFILE SEE SHT.69

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	37
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

MATCHLINE -Y30F-
STA. 14+00.00 SEE SHEET 35

SHC

WWH

WWI

WETLAND WJY
(KH)

-Y30B-PT Sta. 13+01.06

-Y30B-PT Sta. 15+44.40

-Y30B-PC Sta. 10+14.98

-Y30B-POT Sta. 10+00.00=
-Y30F-POT Sta.18+36.62

-Y30F-POT Sta. 18+92.79

-Y30F-PRC Sta. 16+12.65

-Y30F-PT Sta. 17+71.88

-Y30B-
N 2°32'29.1" W

APPARENT OVERLAP – SEE SURVEYOR'S REPORT

RETAIN SYSTEM

3007

POPLAR CREEK VILLAGE COMMUNITY ASSC, INC
DB 17307 PG 898
BM 2010 PG 221

3008

POPLAR CREEK VILLAGE COMMUNITY ASSC, INC
DB 17307 PG 898
BM 2010 PG 221

PALMETTO RESIDENTIAL RENTALS LLC
DB 16800
PG 2363

3015

CLAYTON PROPERTIES GROUP INC
DB 17307
PG 1416
BM 2010
PG 217–221

3303

AMY R SHARP VANARKEL
DB 17493
PG 693
BM 2010
PG 217–221

KENNETH & CONNIE THOMAS
DB 17399
PG 1283
BM 2010
PG 217–221

MELISSA W & MATTHEW L DIXON
DB 14872
PG 1431
BM 2010
PG 217–221

DEDRIC R & CHANDRA L MILLS
BM 2010
PG 217–221
DB 15697
PG 2194

KUBMA JAITEH
DB 16136 PG 889
BM 2010 PG 217–221

3304

3309

3310

AMBER WILKES & DERRICK SMITH
DB 17020
PG 2701
BM 2010
PG 217–221

ROGER C & KATHLEEN BEAUCHEMIN
DB 16192
PG 1624
BM 2010
PG 217–221

3308

SARAH & STEVE BRACERO
DB 16728 PG 1252
BM 2010 PG 217–221

3307

POPLAR CREEK VILLAGE COMMUNITY ASSC, INC
DB 16568 PG 1500
BM 2010 PG 217–221
BM 2017 PG 782–784
BM 2017 PG 2022–2024
BM 2017 PG 2106–2108
BM 2018 PG 1098–1104

NOTE: ROW AND EASEMENTS FOR Y30B MATCH NCTA PLANS. ROW ACQUISITIONS IN PROCESS SO SHOWN FOR INFORMATION ONLY.

FOR -Y30F- CURVE DATA SEE SHT. 3A-2

8/17/99

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83

WJN SHK

WJO

OLD FAISON RD
SR 2515

IA-MASH TL-3

PROP. CABLE GUIDERAIL AU

IA-MASH TL-3

I-87/US64/US264

LOOP

HODGE RD
SR 2516

MATCHLINE SEE SHEET 39

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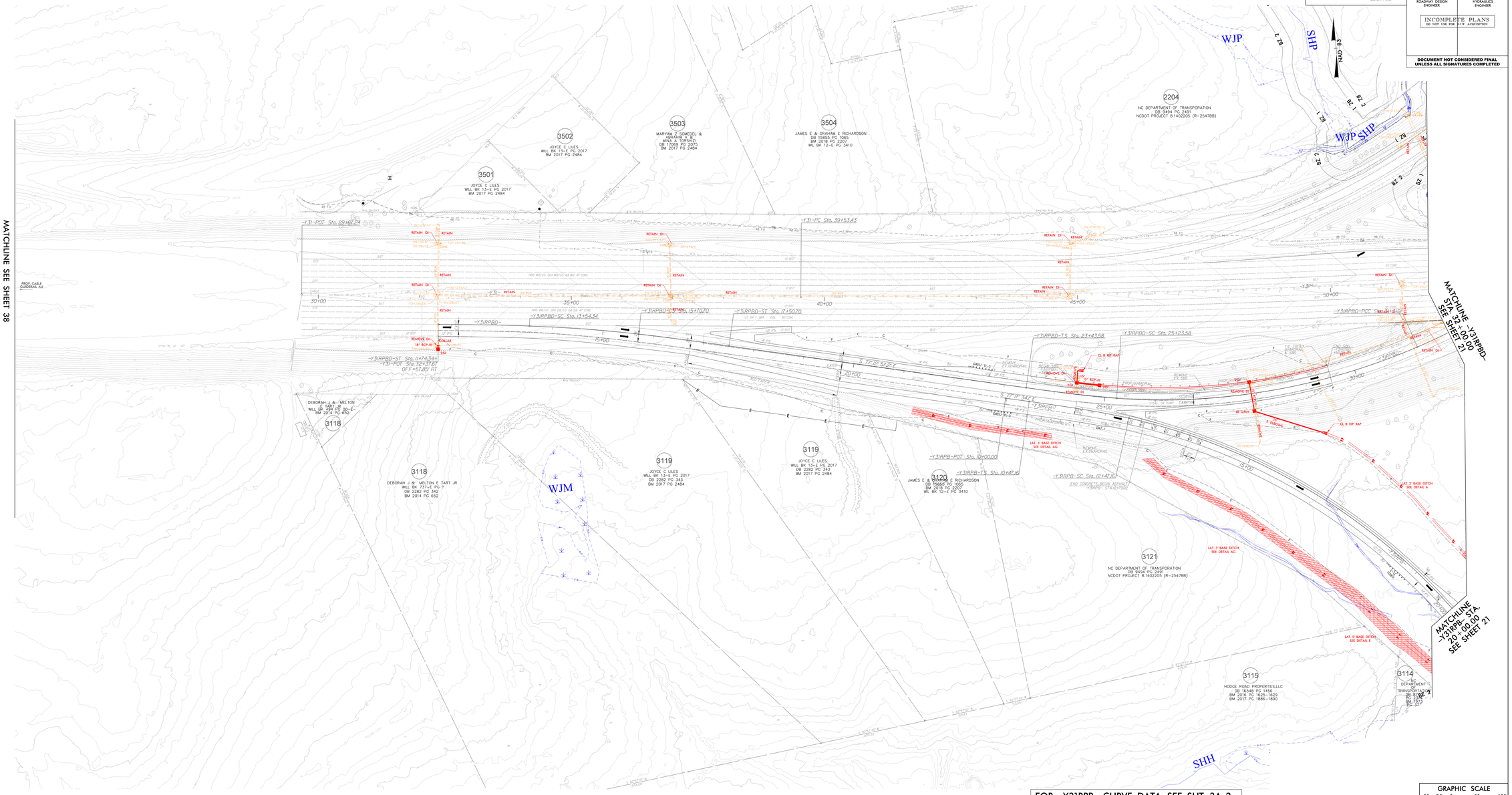
jeffreyking



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License # P-0369

PROJECT REFERENCE NO.	SHEET NO.
R-2829B	39
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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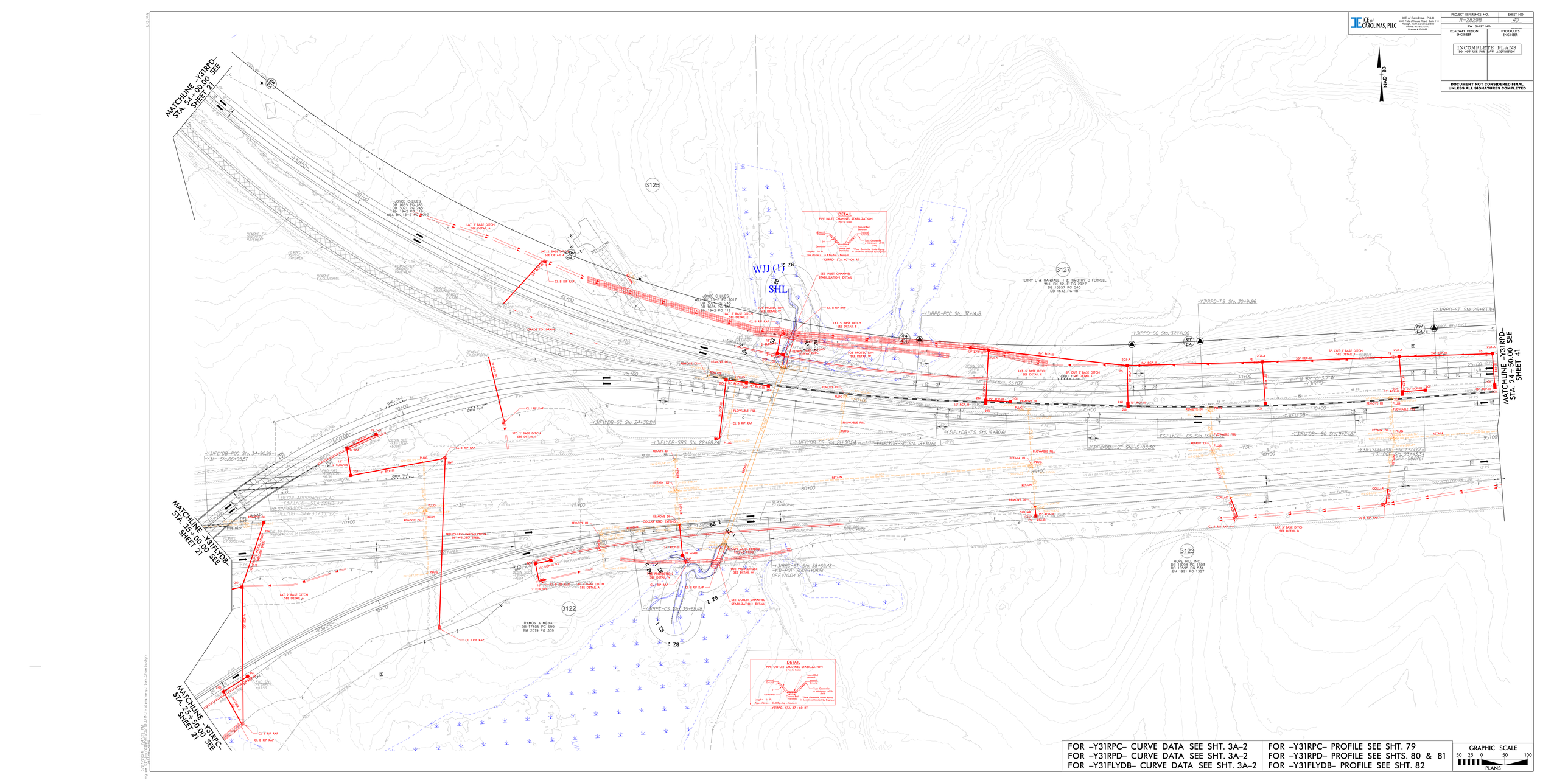
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PROJECT REFERENCE NO.
R-2829B
SHEET NO.
40
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
INCOMPLETE PLANS
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NAD 83
MATCHLINE -Y31RPD- STA. 24+50.00 SEE SHEET 41
MATCHLINE -Y31RPD- STA. 54+00.00 SEE SHEET 21
MATCHLINE -Y31FLYDB- STA. 35+00.00 SEE SHEET 21
MATCHLINE -Y31RPC- STA. 21+20.00 SEE SHEET 21
-Y31RPD-
-Y31FLYDB-
-Y31RPC-
3125
3127
3123
3122
JOYCE C LILES
DB 10551 PG 583
DB 10551 PG 585
BM 1992 PG 1196
WILL BK 13-E PG 2017
TERRY L & RANDALL H & TIMOTHY C FERRELL
WILL BK 12-E PG 2927
DB 15657 PG 540
DB 1643 PG 18
HOPE HILL INC.
DB 11098 PG 1303
DB 10595 PG 634
BM 1991 PG 1327
RAMON A MEJIA
DB 17405 PG 699
BM 2019 PG 339
WJJ (1)
SHL
DETAIL
PIPE INLET CHANNEL STABILIZATION
PIPE OUTLET CHANNEL STABILIZATION
-Y31RPD- STA. 40+00 RT
-Y31RPC- STA. 37+66 RT
SEE INLET CHANNEL STABILIZATION DETAIL
SEE OUTLET CHANNEL STABILIZATION DETAIL
TOE PROTECTION SEE DETAIL W
LAT. 2' BASE DITCH SEE DETAIL A
LAT. 3' BASE DITCH SEE DETAIL E
SF CUT 3' BASE DITCH SEE DETAIL B
SF CUT 3' BASE DITCH GRU TUBE DETAIL T
STD. 2' BASE DITCH SEE DETAIL T
CL II RIP RAP
CL B RIP RAP
FLOWABLE FILL
REMOVE DI
RETAIN DI
PLUG
COLLAR
TRENCHLESS INSTALLATION 36" WELDED STEEL
REMOVE EX. CULVERT
REMOVE EX. PAVEMENT
GRADE TO DRAIN
-Y31RPD-PCC Sta. 37+14.18
-Y31RPD-TS Sta. 30+91.96
-Y31RPD-SC Sta. 32+41.96
-Y31RPD-ST Sta. 25+83.39
-Y31FLYDB-PCC Sta. 34+90.99
-Y31FLYDB-SC Sta. 24+38.24
-Y31FLYDB-SRS Sta. 22+88.24
-Y31FLYDB-CS Sta. 21+38.24
-Y31FLYDB-TS Sta. 18+80.61
-Y31FLYDB-ST Sta. 15+03.32
-Y31FLYDB-PCC Sta. 7+74.67
-Y31FLYDB-PT Sta. 7+74.67
-Y31RPC-CS Sta. 35+65.48
-Y31RPC-ST Sta. 38+69.48
-Y31RPC-SC Sta. 39+19.48
-Y31RPC-PT Sta. 40+19.48
BEGIN APPROACH SLAB -Y31FLYDB- STA. 33+95.67
-Y31FLYDB- STA. 33+95.67
-Y31- Sta. 66+95.87
-Y31- Sta. 10+00.00
-Y31- Sta. 95+43.43
OFF=58.01LT
N 88° 55' 57" W
FOR –Y31RPC– CURVE DATA SEE SHT. 3A–2
FOR –Y31RPD– CURVE DATA SEE SHT. 3A–2
FOR –Y31FLYDB– CURVE DATA SEE SHT. 3A–2
FOR –Y31RPC– PROFILE SEE SHT. 79
FOR –Y31RPD– PROFILE SEES SHTS. 80 & 81
FOR –Y31FLYDB– PROFILE SEE SHT. 82
GRAPHIC SCALE
50 25 0 50 100
PLANS

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	41
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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NAD 83

MATCHLINE -Y31RPD- STA. 24+50.00 SEE SHEET 40

3127
TERRY L & RANDALL H & TIMOTHY C FERRELL
WILL BK 12-E PG 2927
DB 15657 PG 540
DB 1643 PG 18

-Y31RPD-CS Sta. 24+33.39
-Y31RPD-SC Sta. 20+49.39
-Y31RPD-SRS Sta. 18+99.39
-Y31RPD-CS Sta. 17+49.39
-Y31RPD-SC Sta. 14+29.77
-Y31RPD-POT Sta. 12+79.77 = -Y31-POT Sta. 106+77.99 OFF=57.91' LT
-Y31RPD-PC Sta. 107+57.99
-Y31RPD-

PROP. WW FENCE
REMOVE EX. FENCE
SP. CUT DITCH SEE DETAIL S
LAT. 2' BASE DITCH SEE DETAIL A
WOODS
20+00
15+00
95+00
100+00
105+00
-Y31-
PROP. DFCB
IA-MASH TL-3
FLOWABLE FILL
300' TAPER
1500' ACCELERATION LANE
900' TAPER
RETAIN DI
PLUG
REMOVE DI
RETAIN
36" RCP-III
COLLAR
REMOVE HW
CL I RIP RAP
US 264 WB/US-64 WB/KNIGHTDALE BYPASS 35' CONC
US 264 EB/US-64 EB/KNIGHTDALE BYPASS 35' CONC
CABLE
EXISTING R/W
NOW

3123
HOPE HILL INC
DB 11098 PG 1303
DB 10595 PG 534
BM 1991 PG 1327

MATCHLINE -Y31- STA. 109+00.00 SEE SHEET 42

FOR -Y31RPD- CURVE DATA SEE SHT.3A-2 | FOR -Y31RPD- PROFILE SEE SHT.8I

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eltrawking

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	42
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83

MATCHLINE –Y31– STA. 109+00.00 SEE SHEET 41

MATCHLINE –Y31– STA. 122+00.00 SEE SHEET 43

3127
TERRY L & RANDALL H & TIMOTHY C FERRELL
WILL BK 12-E PG 2927
DB 15657 PG 540
DB 1643 PG 18

4101
CAROLYN MARTINSON
DB 5467 PG 131
BM 1991 PG 1303

3123
HOPE HILL INC
DB 11098 PG 1303
DB 10595 PG 534
BM 1991 PG 1327

4102
CAROLYN N MARTINSON
DB 5467 PG 131
BM 1991 PG 1303

4103
PATRICK BOBO
DB 8153 PG 353

SP. CUT DITCH SEE DETAIL S
LAT. 2' BASE DITCH SEE DETAIL A
REMOVE 24" RCP
REMOVE 20' COLLAR
REMOVE DI
RETAIN
RETAIN DI
RETAIN SYSTEM
BERM 5' BASE DITCH SEE DETAIL H
BERM 5' BASE DITCH SEE DETAIL F
POND WSE=289'
POND PAAA (Non-JD)
300' TAPER
PROP. GUARDRAIL
GREU TL-3
CAT-1
CONC MEDIAN BARRIER
CONC BYPASS DITCH
SUPER ELEVATION OUTLET
US 264 WB/US 64 WB/KNIGHTDALE BYPASS 35' CONC
US 264 EB/US 64 EB/KNIGHTDALE BYPASS 35' CONC
SR 2049 BETHLEHEM RD
110+00
115+00
120+00

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	43
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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NAD 83

MATCHLINE -Y31- STA. 122+00.00 SEE SHEET 42

-Y31-PT Sta. 125+42.51

-Y31-
125+00

OLD FERREL RD

I-87/US64/US264

PROP. CABLE GUIDERAIL AU

IA-MASH TL-3

IA-MASH TL-3

PROP. CA GUIDERAIL

4105

4104

MAYLON & AGNES BAKER
DB 2064 PG 673

BM 1978 PG 394
DB 15539 PG 2428
GERALD & ANN AKLAND

48 FO

24" RCP

CABLE

GRASS

TOP=288.79'
INV=279.39'

TOP=286.54'
INV=281.78'

INV=281.93'

30" CMP

30" RCP

TOP=286.20'
INV=280.61'

INV=284.33'

CONC DI

CONC

EXISTING R/W

BST

EOT

MOW

EIP

N 1824355.53
E 1615539.59

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	44

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

PI = 1194+15.00
EL = 380.75'
VC = 1,500'
K = 317
DS = 75mph

BM#12 ELEVATION = 381.70'
L STA 1198+38.21 301.38' RIGHT

BEGIN GRADE
-L- STA.1185+15.00
EL.350.44'

(+)3.3674%

PROP.GRADE

EXIST.GROUND

(+)3.3674%

(-)11.3621%

(-)11.3621%

FOR -L- PLAN SEE SHTS.4 & 5

410 400 390 380 370 360 350 340 330

1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199

-L-

BM#12 ELEVATION = 381.70'
L STA 1198+38.21 301.38' RIGHT

-L- Sta.1203+89.76 =
Y27 - Sta.35+51.81

PI = 1194+15.00
EL = 380.75'
VC = 1,500'
K = 317
DS = 75mph

EXIST.GROUND

PI = 1206+10.00
EL = 364.47'
VC = 400'
K = 377
DS = 80mph

(-)11.3621%

(-)11.3621%

(-)10.3020%

PROP.GRADE

PI = 1214+00.00
EL = 362.09'
VC = 320'
K = 332
DS = 75mph

(-)10.3020%

FOR -L- PLAN SEE SHT.5

410 400 390 380 370 360 350 340 330

1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	45
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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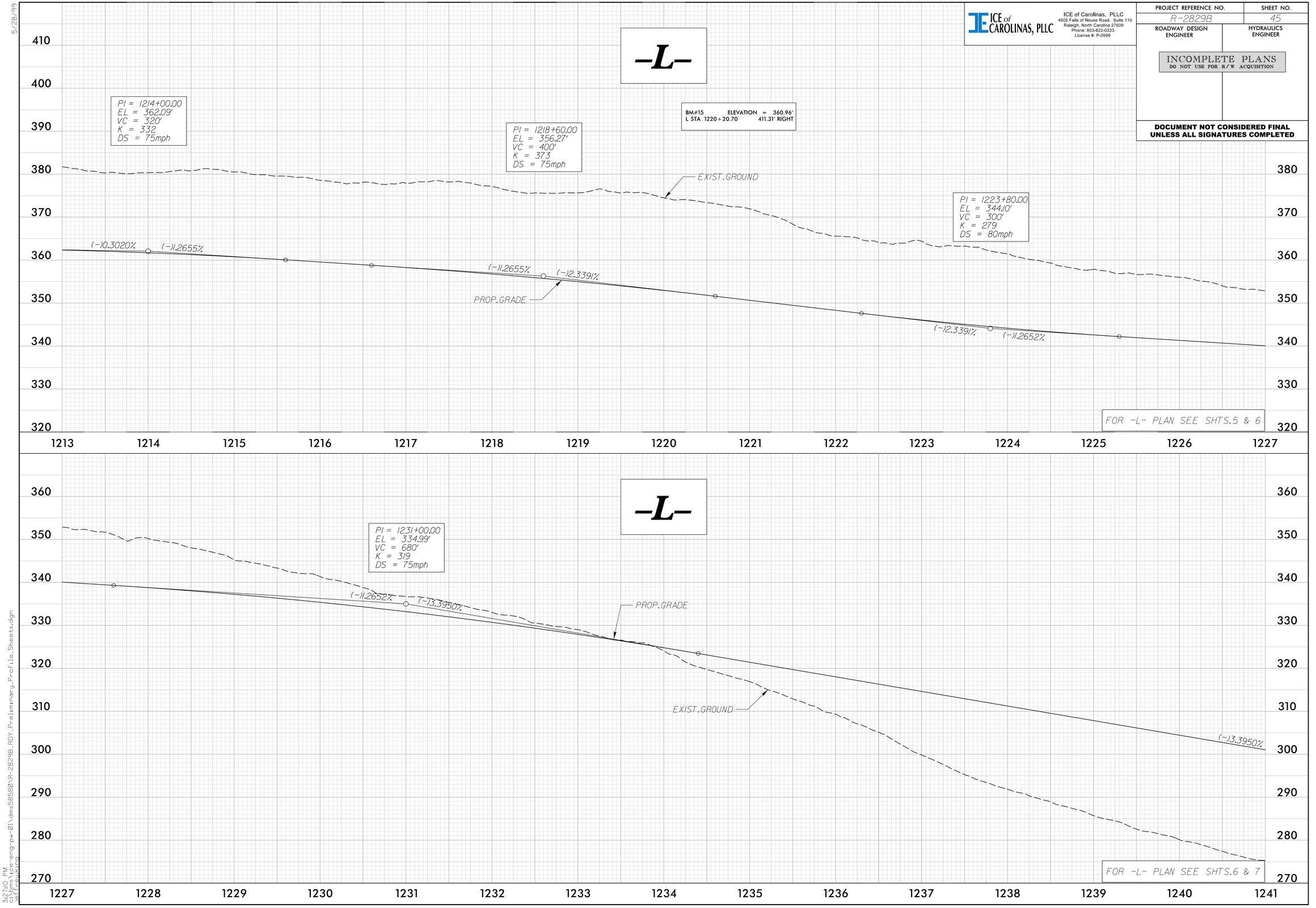

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	46
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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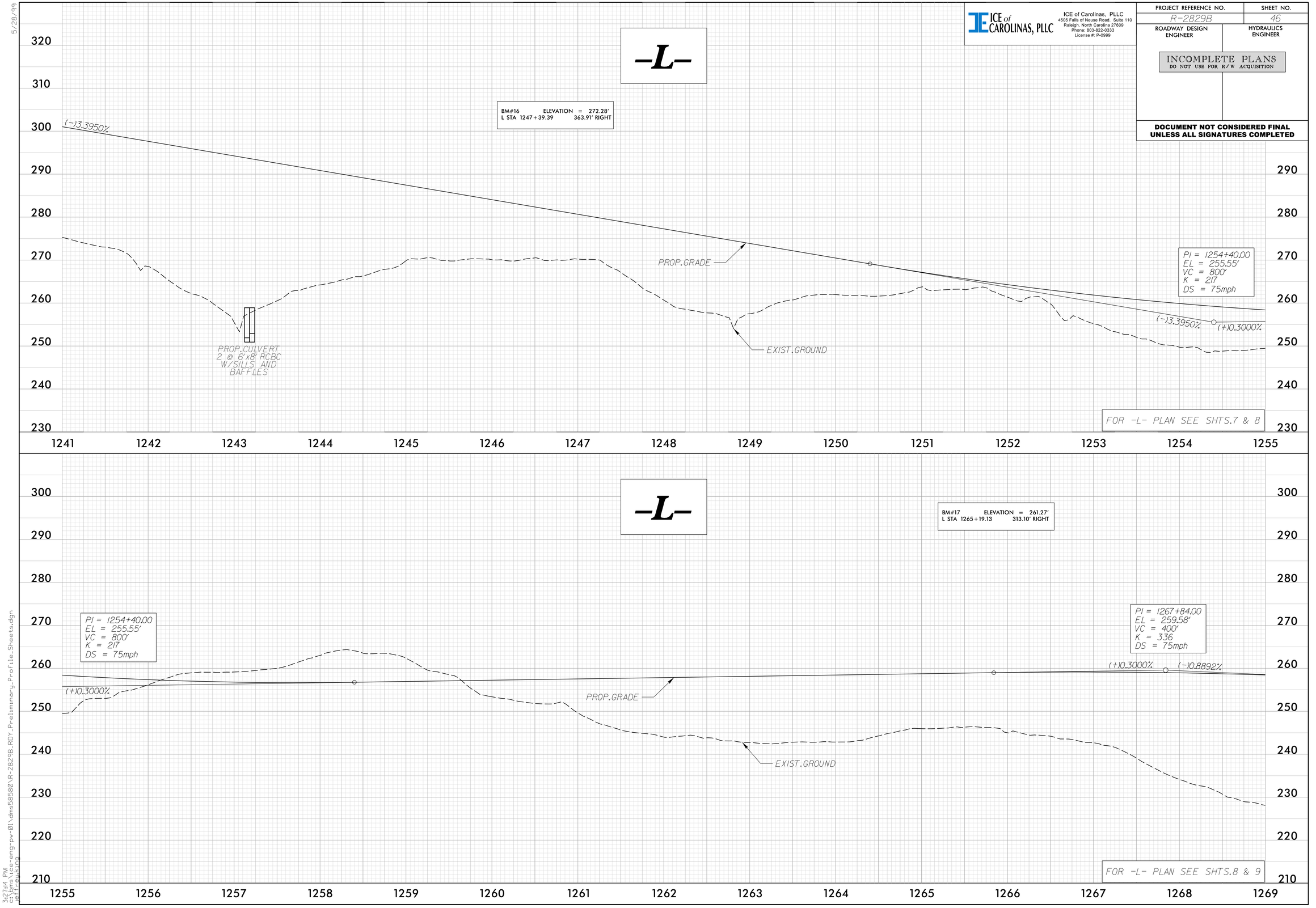

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	47

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

PI = 1267+84.00
EL = 259.58'
VC = 400'
K = 336
DS = 75mph

(-)10.8892%

BEGIN BRIDGE
-L- STA.1275+61 +/-

PROP.GRADE

15'-6" MIN. VERT.CL.

-L- Sta.1276+09.17 =
-Y28- Sta.18+66.11

END BRIDGE
-L- STA.1276+61 +/-

EXIST.GROUND

PI = 1279+40.00
EL = 249.30'
VC = 700'
K = 382
DS = 75mph

(-)10.8892%

(-)12.7201%

FOR -L- PLAN SEE SHTS.9 & 10

-L-

BM#18 ELEVATION = 176.21'
L STA 1287+68.10 368.51' RIGHT

PROFILE EQUALITY
-L- STA.1289+00 =
-LB- STA.1288+76.82
EL.223.19

(-)12.7201%

(-)12.7201%

PROP. CULVERT 3 @ 7'x8' RCBC

FOR -L- PLAN SEE SHT.10

-LB-

PROFILE EQUALITY
-L- STA.1289+00 =
-LB- STA.1288+76.82
EL.223.19

(-)12.7201%

-LB- Sta.1291+83.82=
-Y28C- Sta.13+14.54

PROP. CULVERT 2@14'x12'

PROP.GRADE

EXIST.GROUND

PI = 1297+70.00
EL = 198.90'
VC = 700'
K = 224
DS = 75mph

(-)12.7201%

FOR -LB- PLAN SEE SHT.11

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	48
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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-LB-

PI = 1297+70.00
EL = 198.90'
VC = 700'
K = 224
DS = 75mph

(−)12.7201%

(+)0.4042%

PROP.GRADE

EXIST.GROUND

PI = 1308+20.00
EL = 203.14'
VC = 460'
K = 317
DS = 75mph

(+)0.4042%

(−)1.0455%

FOR -LB- PLAN SEE SHTS.11 & 12

250 240 230 220 210 200 190 180 170 160

1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310

-LB-

PI = 1308+20.00
EL = 203.14'
VC = 460'
K = 317
DS = 75mph

(−)1.0455%

PI = 1313+10.00
EL = 198.02'
VC = 320'
K = 212
DS = 75mph

(−)1.0455%

(+)0.4654%

BEGIN BRIDGE
-LB- STA.1313+90 +/-

LOW POINT @ -LB- STA.1313+71.43
EL.198.53

-LB- STA.1316+23.78=
-PI28A- STA.10+40.41

PROP.GRADE

EXIST.GROUND

CITY OF RALEIGH
SEWER LINES

PI = 1320+56.00
EL = 201.49'
VC = 800'
K = 381
DS = 75mph

(+)0.4654%

(−)1.6364%

(−)1.6364%

NEUSE RIVER

FOR -LB- PLAN SEE SHTS.12 & 13

220 210 200 190 180 170 160 150 140 130

1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	49
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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-LB-

BM#20 ELEVATION = 167.79'
LB STA 1327+46.26 362.03' RIGHT

PI = 1320+56.00
EL = 201.49'
VC = 800'
K = 381
DS = 75mph

(-)1.6364%

PROP.GRADE

END BRIDGE
-LB- STA.1329+60 +/-

PI = 1330+35.00
EL = 185.47'
VC = 300'
K = 225
DS = 75mph

(-)1.6364%

(-)0.3025%

EXIST.GROUND

-LB- Sta.1337+44.77=
-Y29- Sta.32+41.64

(-)0.3025%

FOR -LB- PLAN SEE SHTS.13 & 14

240 230 220 210 200 190 180 170 160 150

1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338

-LB-

BM#23 ELEVATION = 159.76'
LB STA 1346+35.49 486.41' LEFT

(-)0.3025%

PROP.GRADE

BEGIN BRIDGE
-LB- STA.1345+30 +/-

END BRIDGE
-LB- STA.1348+30 +/-

PI = 1352+10.00
EL = 178.89'
VC = 345'
K = 208
DS = 75mph

(+)0.3025%

HINTON'S CREEK

EXIST.GROUND

FOR -LB- PLAN SEE SHT.14

230 220 210 200 190 180 170 160 150 140

1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	50

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-LB-

PI = 1352+10.00
EL = 178.89'
VC = 345'
K = 208
DS = 75mph

(+)11.3526%

(-)10.3025%

PROP.GRADE

EXIST.GROUND

(+)11.3526%

FOR -LB- PLAN SEE SHTS.14 & 15

250 240 230 220 210 200 190 180 170 160

1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366

-LB-

BM#24 ELEVATION = 201.96'
LB STA 1372+09.41 327.05' RIGHT

PI = 1370+00.00
EL = 203.10'
VC = 420'
K = 213
DS = 75mph

(+)11.3526%

(+)11.3526%

(+)3.3250%

PROP.GRADE

EXIST.GROUND

PI = 1381+80.00
EL = 242.34'
VC = 1,600'
K = 314
DS = 75mph

(+)3.3250%

FOR -LB- PLAN SEE SHTS.15 & 16

260 250 240 230 220 210 200 190 180 170

1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	51

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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BM#25 ELEVATION = 216.01'
LB STA 1392+75.11 355.81' RIGHT

-LB-

PI = 1381+80.00
EL = 242.34'
VC = 1,600'
K = 314
DS = 75mph

(+)3.3250%

(−)11.7625%

PROP.GRADE

EXIST.GROUND

PI = 1396+50.00
EL = 216.43'
VC = 620'
K = 221
DS = 75mph

(−)11.7625%

FOR -LB- PLAN SEE SHTS.16 & 17

270 260 250 240 230 220 210 200 190 180

1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394

-LB-

EXIST.GROUND

PI = 1396+50.00
EL = 216.43'
VC = 620'
K = 221
DS = 75mph

PROP.GRADE

(−)11.7625%

(+)11.0483%

PI = 1407+50.00
EL = 227.96'
VC = 800'
K = 316
DS = 75mph

(+)11.0483%

(−)11.4861%

PROP.CULVERT
1@6'x8'
(BURIED 1.0')

FOR -LB- PLAN SEE SHTS.17 & 18

270 260 250 240 230 220 210 200 190 180

1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408

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erfrewking

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BM#26 ELEVATION = 234.80'
LB STA 1410+68.05 330.00' LEFT

-LB-

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

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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PI = 1407+50.00
EL = 227.96'
VC = 800'
K = 316
DS = 75mph

PI = 1415+00.00
EL = 216.81'
VC = 600'
K = 236
DS = 80mph

PI = 1420+80.00
EL = 222.95'
VC = 240'
K = 866
DS = 80mph

(-)1.4861%
(+)1.0574%
(+)1.3347%
PROP.GRADE
PROP.CULVERT
106'x8'
(BURIED 1.0')
EXIST.GROUND

FOR -LB- PLAN SEE SHTS.18 & 19

-LB-

-LB- Sta.1426+53.73 =
-Y30- Sta.31+80.70

PI = 1425+70.00
EL = 229.49'
VC = 560'
K = 313
DS = 75mph

BEGIN BRIDGE
-LB- STA.1425+77 +/-

END BRIDGE
-LB- STA.1427+21 +/-

(+)1.3347%
(-)0.4523%
PROP.GRADE
EXIST.GROUND
17' MIN. VERT. CL.

FOR -LB- PLAN SEE SHT.19

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	5.3

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-LB-

BM#29 ELEVATION = 228.40'
LB STA 1446+48.47 274.04' LEFT

PI = 1455+60.00
EL = 215.96'
VC = 1,200'
K = 328
DS = 80mph

(-)0.4523%

PROP.GRADE

PROP.CULVERT
1@6'x8'
(BURIED 1.0')

EXIST.GROUND

(-)0.4523%

FOR -LB- PLAN SEE SHTS.19 & 20

270 260 250 240 230 220 210 200 190 180

1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450

-LB-

BEGIN BRIDGE
-LB- STA.1456+54 +/-

END BRIDGE
-LB- STA.1461+90 +/-

PI = 1455+60.00
EL = 215.96'
VC = 1,200'
K = 328
DS = 80mph

(-)0.4523%

(-)0.4523%

(+)3.2089%

PROP.GRADE

(+)3.2089%

EXIST.GROUND

FOR -LB- PLAN SEE SHT.20

270 260 250 240 230 220 210 200 190 180

1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	54
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-LB-

PI = 1468+90.00
EL = 258.64'
VC = 640'
K = 585
DS = 80mph

-LB- Sta.1469+26.98=
-Y31FLYDB- Sta.45+57.92

BEGIN BRIDGE
-LB- STA.1468+57 +/-

END BRIDGE
-LB- STA.1469+91 +/-

(+)3.2089%
(+)2.1154%
PROP.GRADE
EXIST.GROUND
17' MIN. VERT.CL.

END GRADE @ EXISTING BRIDGE
-LB- LT STA.1475+46.11 +/-
EL.271.67'

BEGIN BRIDGE
-LB- RT STA.1475+40 +/-

PI = 1479+05.00
EL = 280.11'
VC = 1,300'
K = 495
DS = 80mph

-LB- Sta.1476+80.61=
-Y31- Sta.60+41.16

FOR -LB- PLAN SEE SHTS.20 & 21

-LB-

BM#35 ELEVATION = 271.10'
LB STA 1489+87.68 333.94' LEFT

-LB- Sta.1483+11.51=
-Y31RPBD- Sta.43+05.64

PI = 1479+05.00
EL = 280.11'
VC = 1,300'
K = 495
DS = 80mph

END BRIDGE
-LB- RT STA.1478+18 +/-

(+)2.1154%
(-)0.5087%
PROP.GRADE
EXIST.GROUND

FOR -LB- PLAN SEE SHTS.21

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	55
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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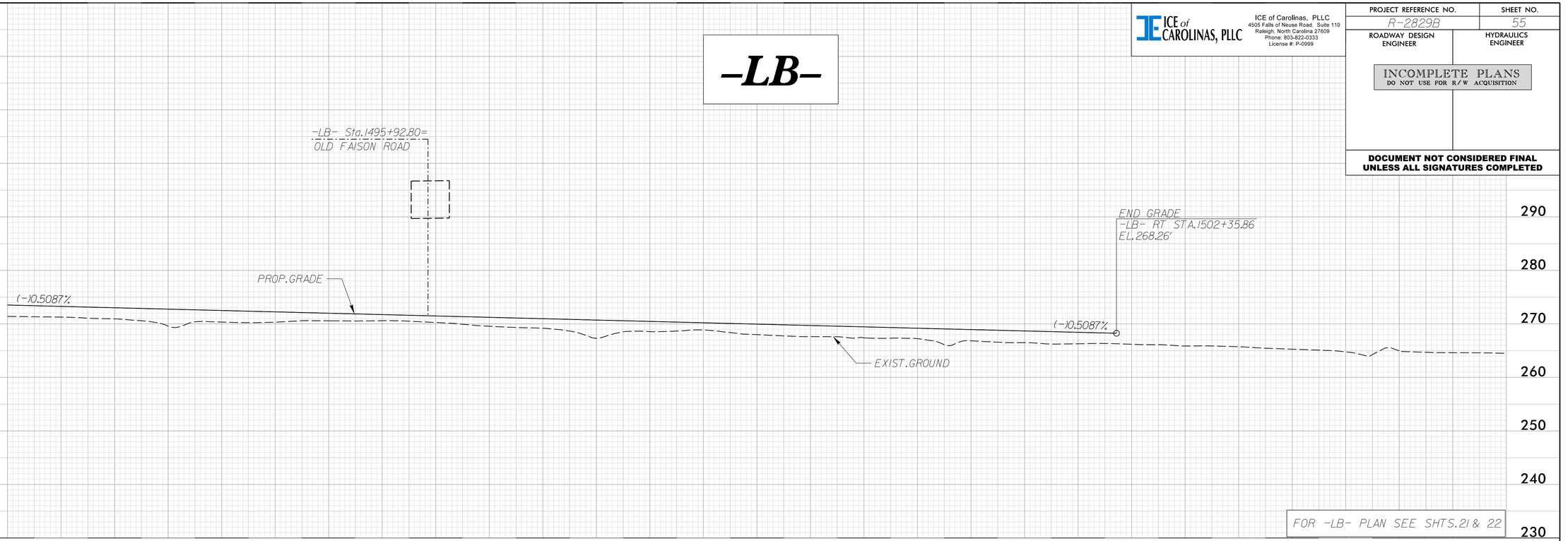
-LB-



FOR -LB- PLAN SEE SHTS.21 & 22

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	56
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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-Y27-

BM#12 ELEVATION = 381.70'
Y27 STA 29+50.65 269.30' LEFT

BEGIN GRADE
-Y27- STA.17+80.00
EL. 373.69'

PI = 18+55.00
EL = 374.81'
VC = 150'
K = 217.3
DS = 80mph

(+)1.4972%

(+)1.5663%

-Y27- STA.21+77.56
-Y27A- STA.10+00.00

EXIST.GROUND

PI = 24+81.85
EL = 384.63'
VC = 180'
K = 418
DS = 80mph

(+)1.5663%

(+)1.1356%

PROP.GRADE

(+)1.1356%

FOR -Y27- PLAN SEE SHTS.5 & 25

-Y27-

-Y27- STA.31+05.85
-Y27RPD- STA.33+89.90

-Y27- STA.31+46.42
-Y27LPD- STA.23+40.18

BEGIN BRIDGE
-Y27- STA.34+25 +/-

-L- STA.203+89.76
-Y27- STA.35+51.81

17'-0" MIN. VERT. CL.

END BRIDGE
-Y27- STA.36+74 +/-

EXIST.GROUND

PROP.GRADE

PI = 40+73.68
EL = 402.70'
VC = 450'
K = 235
DS = 65mph

(+)1.1356%

(-)0.7765%

-Y27- STA.42+25.13
-Y27LPA- STA.22+33.27

-Y27- STA.42+75.20
-Y27RPA- STA.29+64.26

(-)0.7765%

FOR -Y27- PLAN SEE SHTS.5 & 26

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R-2829B	57
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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–Y27–

PI = 49+50.00
EL = 395.90'
VC = 180'
K = 167
DS = 65mph

BM#13 ELEVATION = 392.44'
Y27 STA 50+93.49 258.42' LEFT

PI = 53+00.00
EL = 396.95'
VC = 150'
K = 111
DS = 50mph

PI = 53+00.00
EL = 396.95'
VC = 150'
K = 111
DS = 50mph

PROP.GRADE

-Y27- STA 55+11.00
-Y27B- STA 12+15.82

(−)0.7765%
(−)0.7765%
(+)0.3000%
(+)0.3000%
(+)1.6502%
(−)0.6062%

EXIST.GROUND

PI = 58+70.00
EL = 406.36'
VC = 200'
K = 89
DS = 50mph

FOR -Y27- PLAN SEE SHTS.26 & 27

–Y27–

END GRADE
-Y27- STA 60+50.00
EL 405.27'

PROP.GRADE

(−)0.6062%

EXIST.GROUND

PI = 58+70.00
EL = 406.36'
VC = 200'
K = 89
DS = 50mph

FOR -Y27- PLAN SEE SHT.27

–Y27_GW–

BEGIN GRADE
Y27_GW- STA 10+24.56
-Y27- STA 21+22.83
OFF = 24.55' LT
EL 378.28'

PI = 11+00.00
EL = 376.77'
K = 26
VC = 100'
DS = 25mph

PI = 14+00.00
EL = 382.18'
K = 13
VC = 75'
DS = 25mph

PI = 15+75.00
EL = 374.97'
K = 28
VC = 250'
DS = 25mph

PROP.GRADE

END GRADE
-Y27_GW- STA 20+00.00
EL 391.43'

PI = 19+00.00
EL = 390.29'
K = 42
VC = 150'
DS = 35mph

(−)2.0000%
(+)1.8047%
(+)1.8047%
(−)4.1198%
(−)4.1198%
(+)4.7126%
(+)4.7126%
(+)1.1356%

EXIST.GROUND

FOR -Y27_GW- PLAN SEE SHTS.5 & 25

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	58
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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-Y27LPA-

END GRADE
-Y27LPA- STA.21+97.21=
-Y27- STA.42+26.20
OFF.= 36.05' RT
EL.400.73'

PI = 20+25.00
EL = 397.48'
VC = 300'
K = 66
DS = 45mph

EXIST. GROUND

BEGIN GRADE
-Y27LPA- STA.10+00.00=
-L- STA.1204+91.97
OFF.= 71'LT
EL.365.93'

PI = 11+65.00
EL = 364.25'
VC = 300'
K = 218
DS = 75mph

PROP. GRADE

PI = 15+30.00
EL = 365.57'
VC = 300'
K = 49
DS = 35mph

(-)1.0182%
(+)0.3606%
(+)0.3606%
(+)6.4474%
(+)6.4474%
(+)1.8882%

FOR -Y27LPA- PLAN SEE SHT.5

-Y27LPD-

END GRADE
-Y27LPD- STA.23+07.18
-Y27- STA.31+51.64
OFF.= 32.46' RT
EL.393.21'

PI = 19+65.00
EL = 391.01'
VC = 250'
K = 65
DS = 45mph

PI = 22+00.00
EL = 396.56'
VC = 200'
K = 36
DS = 35mph

EXIST. GROUND

BEGIN GRADE
-Y27LPD- STA.10+00.00=
-L- STA.1204+92.56
OFF.= 71'RT
EL.365.93'

PI = 11+15.00
EL = 364.58'
VC = 110'
K = 116
DS = 55mph

PI = 12+75.00
EL = 361.20'
VC = 150'
K = 86
DS = 45mph

PI = 14+75.00
EL = 360.46'
VC = 250'
K = 38
DS = 30mph

PROP. GRADE

(-)1.1700%
(-)2.1157%
(-)2.1157%
(-)0.3688%
(-)0.3688%
(+)6.2339%
(+)6.2339%
(+)2.3639%
(+)2.3639%
(-)3.1306%

FOR -Y27LPD- PLAN SEE SHT.5

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	59
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-Y27RPA-

BEGIN GRADE
-Y27RPA- STA10+00.00=
-L- STA1224+03.18
OFF= 71' LT
EL.345.90

PI = 11+50.00
EL = 348.71'
VC = 250'
K = 311
DS = 80mph

PI = 14+25.00
EL = 356.09'
VC = 200'
K = 238
DS = 65mph

PI = 18+00.00
EL = 363.00'
VC = 200'
K = 177
DS = 65mph

PI = 21+65.00
EL = 373.86'
VC = 245'
K = 250
DS = 80mph

EXIST.GROUND

PROP.GRADE

(+)1.8774%
(+)2.6825%
(+)2.6825%
(+)1.8427%
(+)1.8427%
(+)2.9745%
(+)2.9745%
(+)3.9526%
(+)3.9526%

FOR -Y27RPA- PLAN SEE SHTS.5 & 6

-Y27RPA-

END GRADE
-Y27RPA- STA29+29.00
-Y27- STA42+76.49
OFF.= 35.26' RT
EL.400.41'

PI = 27+40.00
EL = 396.58'
VC = 200'
K = 104
DS = 50mph

(+)3.9526%
(+)3.9526%
(+)2.0260%

PROP.GRADE

EXIST.GROUND

FOR -Y27RPA- PLAN SEE SHT.5

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R-2829B	60
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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–Y27RPD–

BEGIN GRADE
-Y27RPD- STA.10+00.00=
-L- STA.1224+54.75
OFF= 71'RT
EL.341.46'

PI = 14+00.00
EL = 348.61'
VC = 200'
K = 215
DS = 65mph

BM#15 ELEVATION = 360.96'
Y27RDP STA. 14+86.23 310.95' LEFT

(+)1.7877%

(+)0.8594%

PROP.GRADE

EXIST.GROUND

PI = 23+00.00
EL = 356.34'
VC = 500'
K = 124
DS = 55mph

(+)0.8594%

(+)4.8764%

FOR -Y27RPD- PLAN SEE SHTS.5 & 6

410 400 390 380 370 360 350 340 330

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

–Y27RPD–

PI = 31+70.00
EL = 398.77'
VC = 360'
K = 45
DS = 40mph

END GRADE
-Y27RPD- STA.33+57.36
-Y27- STA.31+11.49
OFF.= 32.02' RT
EL.392.74'

(+)4.8764%

(–)3.2081%

EXIST.GROUND

PROP.GRADE

PI = 23+00.00
EL = 356.34'
VC = 500'
K = 124
DS = 55mph

(+)4.8764%

FOR -Y27RPD- PLAN SEE SHT.5

410 400 390 380 370 360 350 340

24 25 26 27 28 29 30 31 32 33

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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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–Y27A–

PI = 14+10.00
EL = 397.67'
VC = 710'
K = 84
DS = 50mph

BEGIN GRADE
–Y27A– STA.10+42.97
EL.381.16'

(+)4.5000%

(+)4.5000%

(–)3.9106%

PROP.GRADE

EXIST.GROUND

PI = 19+85.00
EL = 375.19'
VC = 440'
K = 97
DS = 50mph

(–)3.9106%

(+)0.6208%

(+)0.6208%

FOR –Y27A– PLAN SEE SHTS.25 & 28

–Y27A–

PI = 25+40.00
EL = 378.63'
VC = 260'
K = 86
DS = 50mph

(+)0.6208%

(–)2.3980%

PROP.GRADE

EXIST.GROUND

END GRADE
–Y27A– STA.31+50.00
EL.364.10'

(–)2.3980%

(–)2.2784%

PI = 30+71.51
EL = 365.89'
VC = 150'
K = 1254
DS = 80mph

FOR –Y27A– PLAN SEE SHT.28

–Y27B–

PI = 12+15.62
EL = 402.67'

BEGIN GRADE
–Y27B– STA.10+15.00
EL.402.01'

PI = 12+98.00
EL = 398.78'
VC = 100'
K = 82
DS = 45mph

PROP.GRADE

END GRADE
–Y27B– STA.13+60.00
EL.398.30'

(–)0.7800%

(–)2.0000%

EXIST.GROUND

FOR –Y27B– PLAN SEE SHT.26

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	62

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
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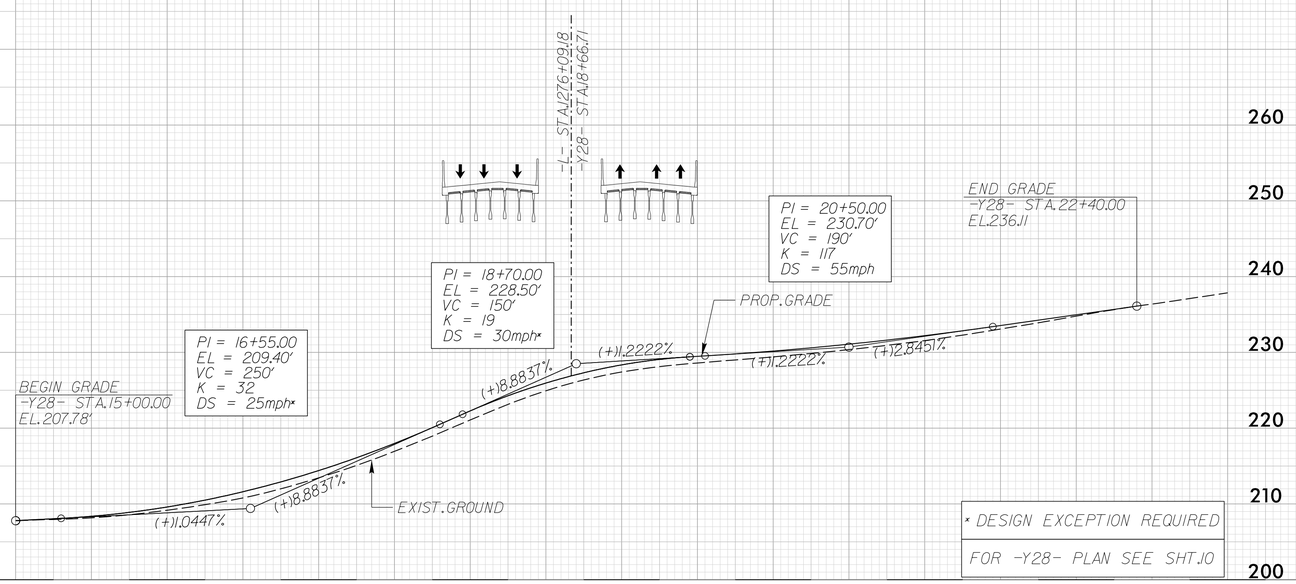
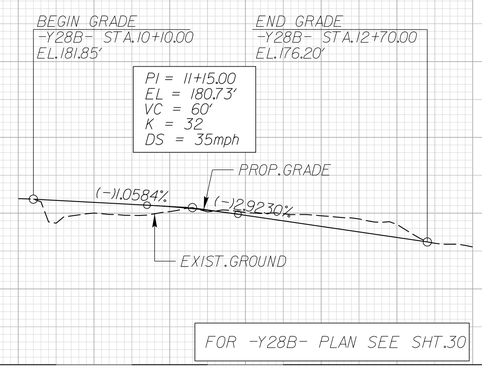
–Y28–



–Y28B–



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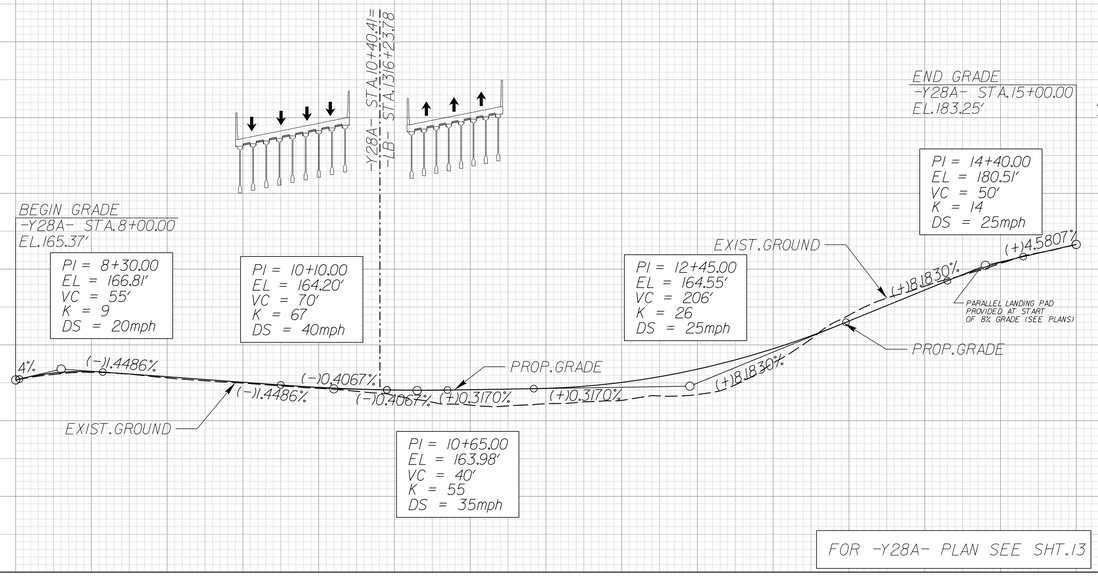

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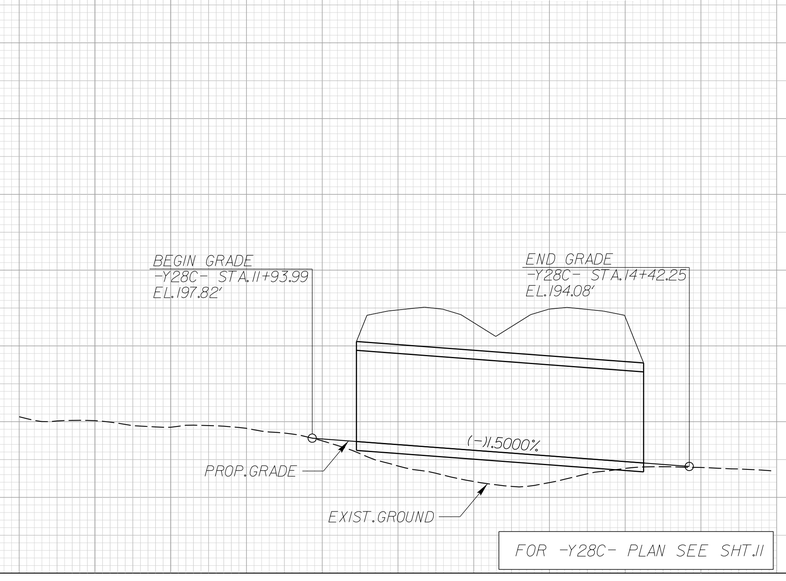

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R-2829B	6.3

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
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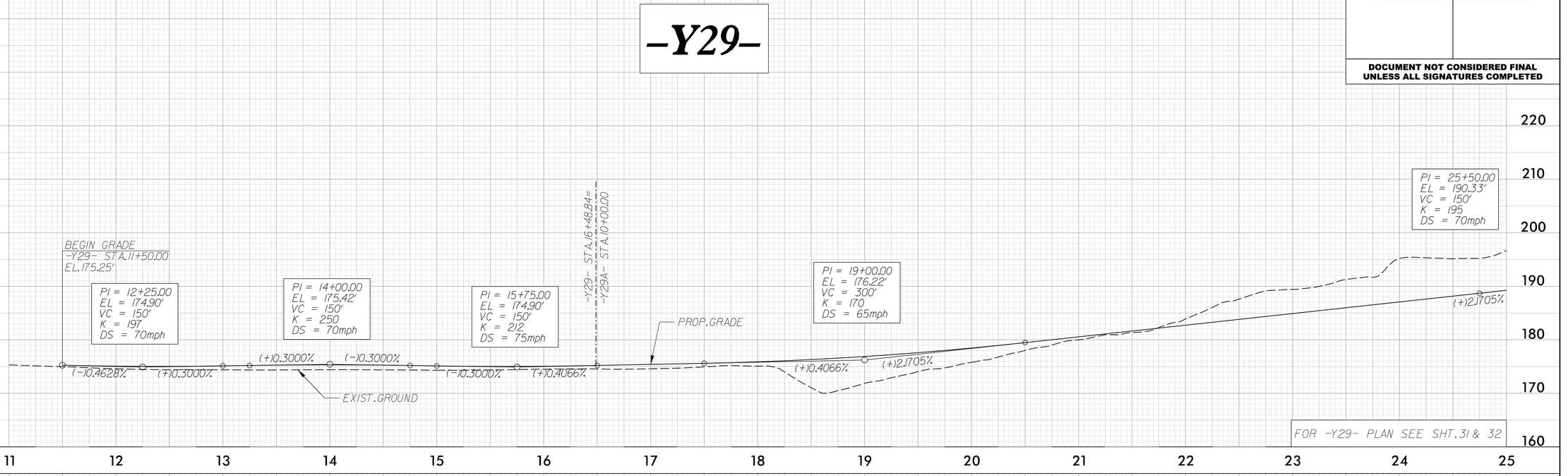
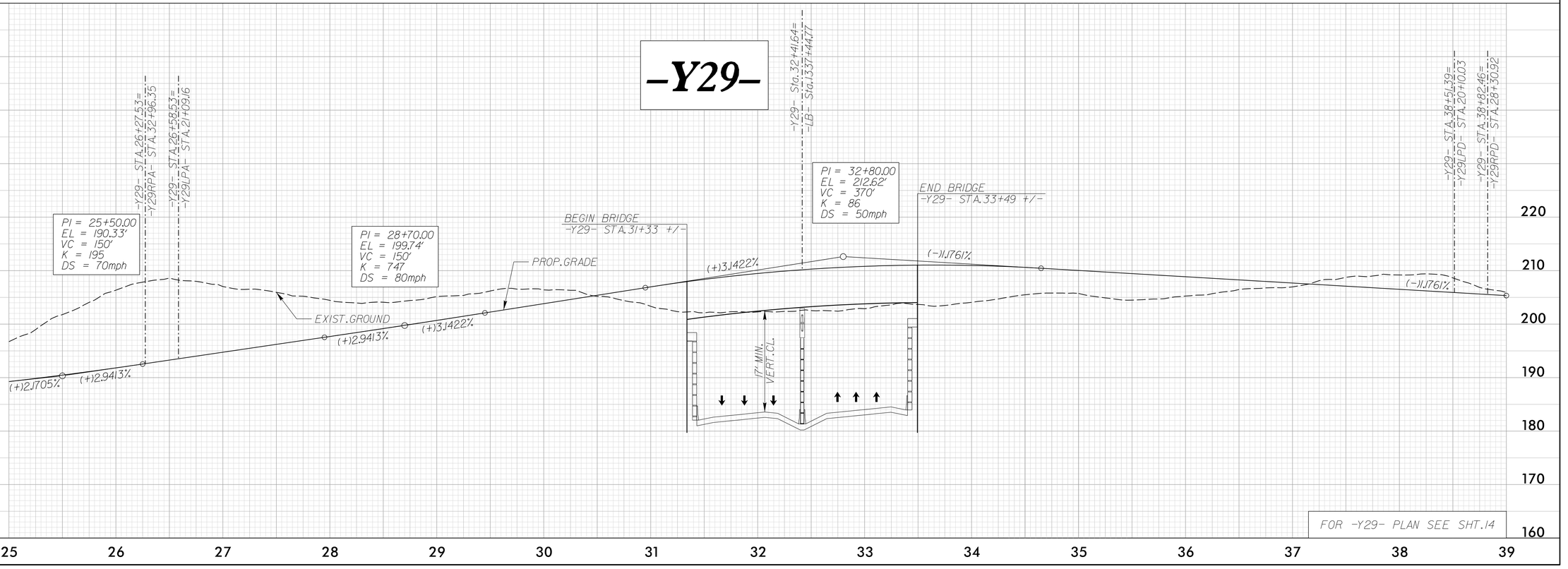
–Y29–





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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	64
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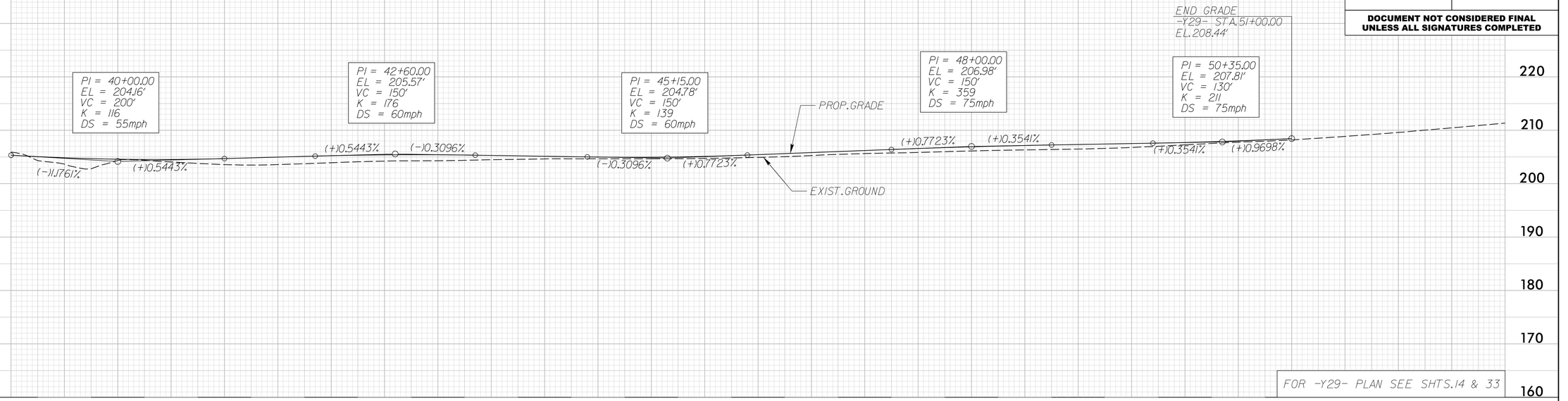
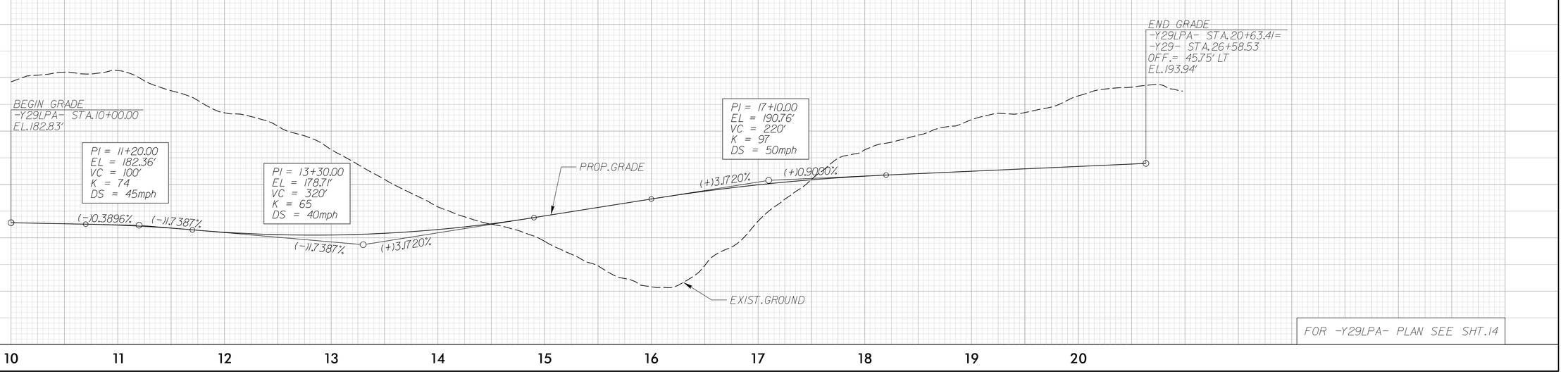
–Y29–



FOR -Y29- PLAN SEE SHTS.14 & 33

–Y29LPA–



FOR -Y29LPA- PLAN SEE SHT.14

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	65
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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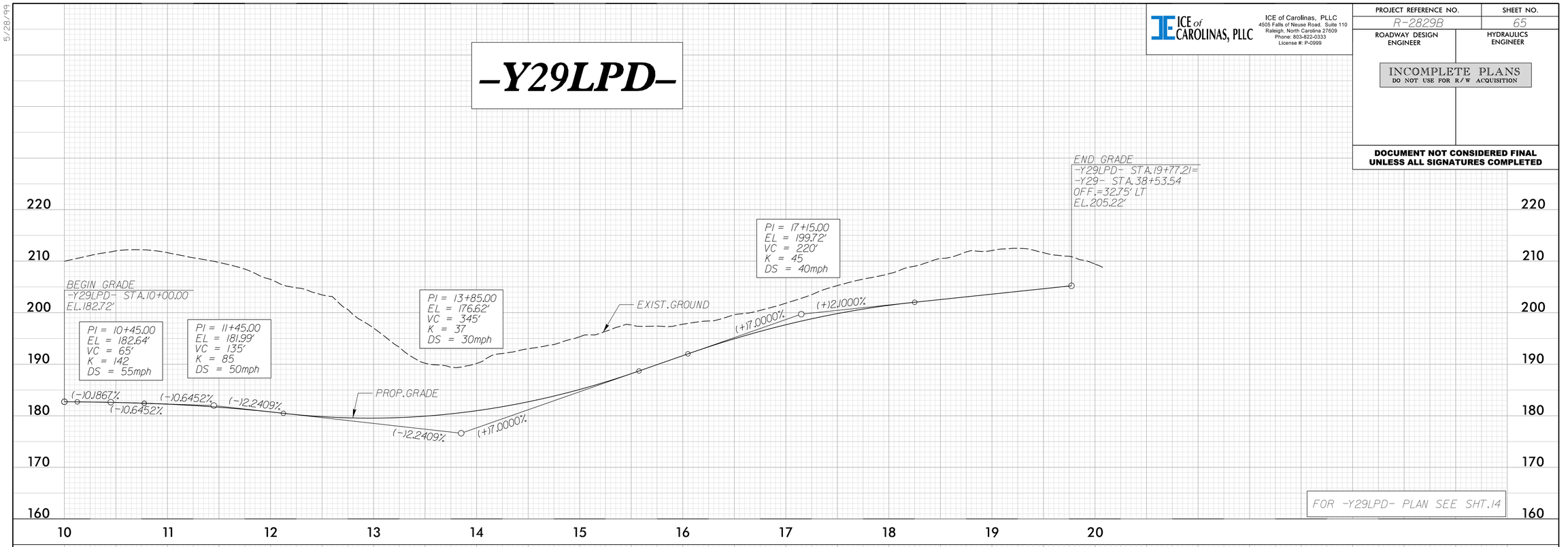
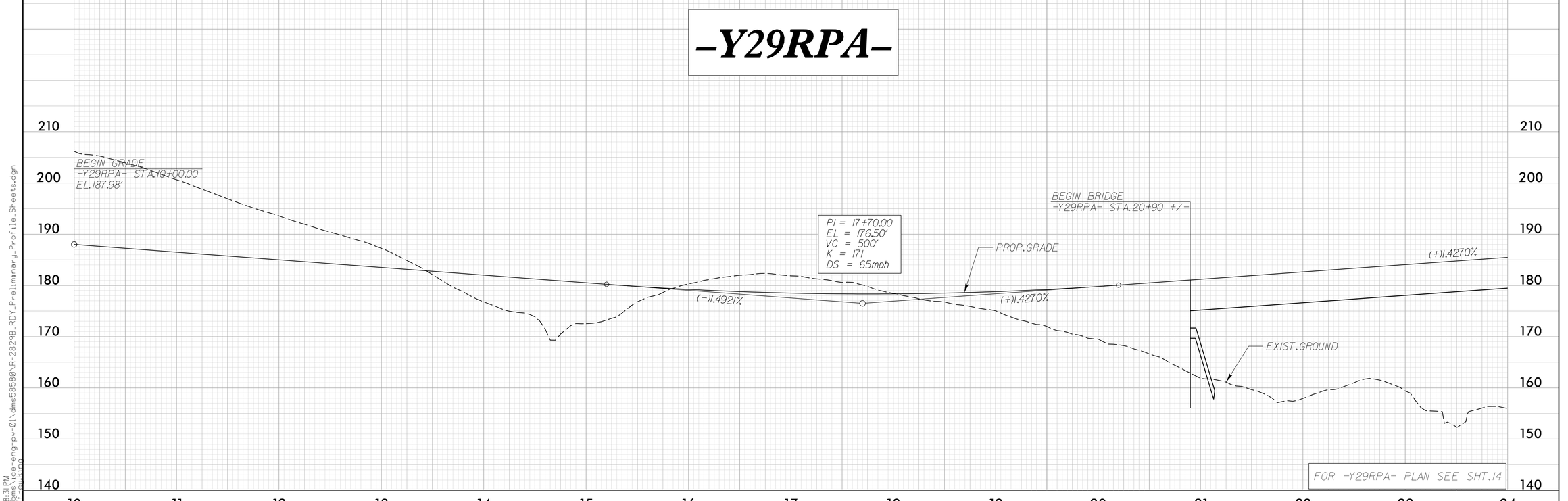
–Y29LPD–



–Y29RPA–



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–Y29RPA–

END BRIDGE
-Y29RPA- STA.24+59 +/-

(+)1.4270%

PROP.GRADE

EXIST.GROUND

(+)1.4270%

(−)1.7873%

PI = 31+20.00
EL = 195.76'
VC = 180'
K = 56
DS = 40mph

END GRADE
-Y29RPA- STA.32+50.60=
-Y29- STA.26+27.53
OFF.= 45.75' LT
EL.193.43'

FOR -Y29RPA- PLAN SEE SHT.14

–Y29RPD–

BEGIN GRADE
-Y29RPD- STA.10+00.00
EL.182.98'

PROP.GRADE

PI = 14+75.00
EL = 176.30'
VC = 360'
K = 98*
DS = 65mph

(−)1.4062%

*MEETS DRIVER COMFORT FOR
65 MPH (AASHTO EQ.3-52)

EXIST.GROUND

FOR -Y29RPD- PLAN SEE SHT.14

–Y29RPD–

BEGIN BRIDGE
-Y29RPD- STA.16+35 +/-

PI = 14+75.00
EL = 176.30'
VC = 360'
K = 98*
DS = 65mph

(−)1.4062%

(+)2.2839%

*MEETS DRIVER COMFORT FOR
65 MPH (AASHTO EQ.3-52)

END BRIDGE
-Y29RPD- STA.19+54 +/-

PI = 20+45.00
EL = 189.32'
VC = 150'
K = 680
DS = 80mph

(+)2.2839%

(+)2.0634%

PROP.GRADE

EXIST.GROUND

END GRADE
-Y29RPD- STA.27+97.30=
-Y29- STA.38+84.66
OFF.= 33.55' LT
EL.204.84'

FOR -Y29RPD- PLAN SEE SHT.14

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	66
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	67
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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–Y29A–

BEGIN GRADE
-Y29A- STA.10+20.80=
-Y29- STA.16+50.33
OFF.= 20.75' RT
EL.174.79'

PI = 13+00.00
EL = 169.21'
VC = 305'
K = 52
DS = 35mph

PI = 15+35.00
EL = 178.37'
VC = 105'
K = 95
DS = 50mph

END GRADE
-Y29A- STA.17+75.00
EL.185.08'

PROP.GRADE
EXIST.GROUND
(–)12.0000%
(+)3.9016%
(+)3.9016%
(+)2.7920%

FOR -Y29A- PLAN SEE SHT.32

–29DR1–

BEGIN GRADE
-29DRI- STA.10+24.75
EL.174.55'

PI = 12+20.00
EL = 165.60'
VC = 250'
K = 26

END GRADE
-29DRI- STA.15+05.00
EL.177.79'

PI = 14+50.00
EL = 177.10'
VC = 75'
K = 20

(–)4.5849%
(+)5.0000%
(+)5.0000%
(+)11.2656%

FOR -29DRI- PLAN SEE SHT.32

–Y30–

PI = 14+35.00
EL = 286.45'
VC = 670'
K = 70
DS = 45mph*

*RESURFACING MEETS POSTED SPEED

BM#27 ELEVATION = 248.86'
Y30 STA 20+58.00 201.84' RIGHT

BEGIN GRADE
-Y30- STA.11+00.00
EL.270.70'

-Y30- STA.18+00.00=
-Y30C- STA.10+00.00

(+)4.7000%
(–)4.9125%
(–)4.9125%

EXIST.GROUND
PROP.GRADE

FOR -30- PLAN SEE SHTS.19 & 34

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–Y30–

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	68
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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-Y30- STA.25+31.67=
-Y30RPB- STA.33+10.87

-Y30- STA.25+69.91=
-Y30SPURB- STA.12+77.20

-Y30- STA.29+11.28=
-Y30LPB- STA.34+26.08

-Y30- STA.30+49.30=
-Y30LPB- STA.19+61.49

-Y30- STA.31+80.70=
-LB- STA.1426+53.73

-Y30- STA.34+73.61=
-Y30RPC- STA.31+36.00
-Y30RPD- STA.29+72.26

(-)14.9125%

PROP.GRADE

EXIST.GROUND

PI = 31+60.00
EL = 201.71'
VC = 400'
K = 101
DS = 50mph

PI = 38+05.00
EL = 195.60'
VC = 600'
K = 103
DS = 50mph

(-)10.9474%

PROP.CULVERT
2@12'x11'
(BURIED 1.0')

FOR -Y30- PLAN SEE SHT.19

260 250 240 230 220 210 200 190 180 170

24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

-Y30-

BM#28 ELEVATION = 202.68'
Y30 STA 43+17.29 576.26' LEFT

-Y30- STA.41+81.37=
-Y30F- STA.10+00.00

PI = 42+10.00
EL = 215.29'
VC = 200'
K = 100
DS = 50mph

PI = 38+05.00
EL = 195.60'
VC = 600'
K = 103
DS = 50mph

(+)4.8625%

(+)2.8629%

PROP.GRADE

EXIST.GROUND

(-)10.9474%

FOR -Y30- PLAN SEE SHT.35

250 240 230 220 210 200 190 180

38 39 40 41 42 43 44 45 46 47

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R-2829B	69
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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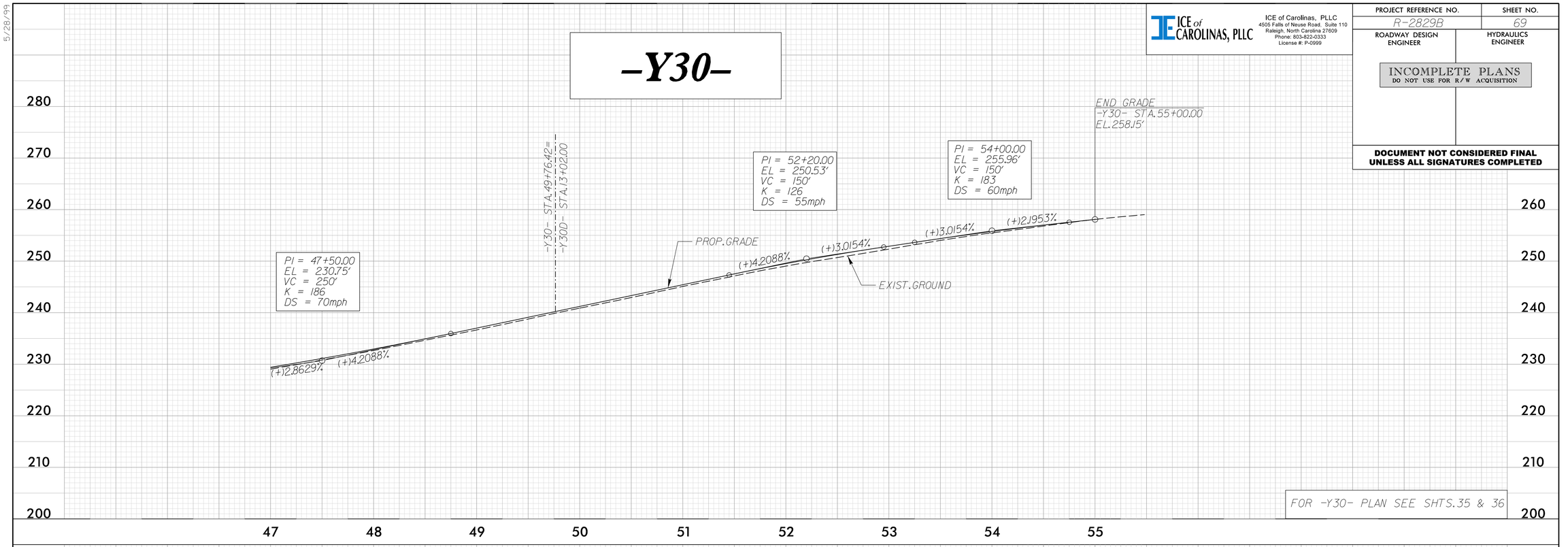
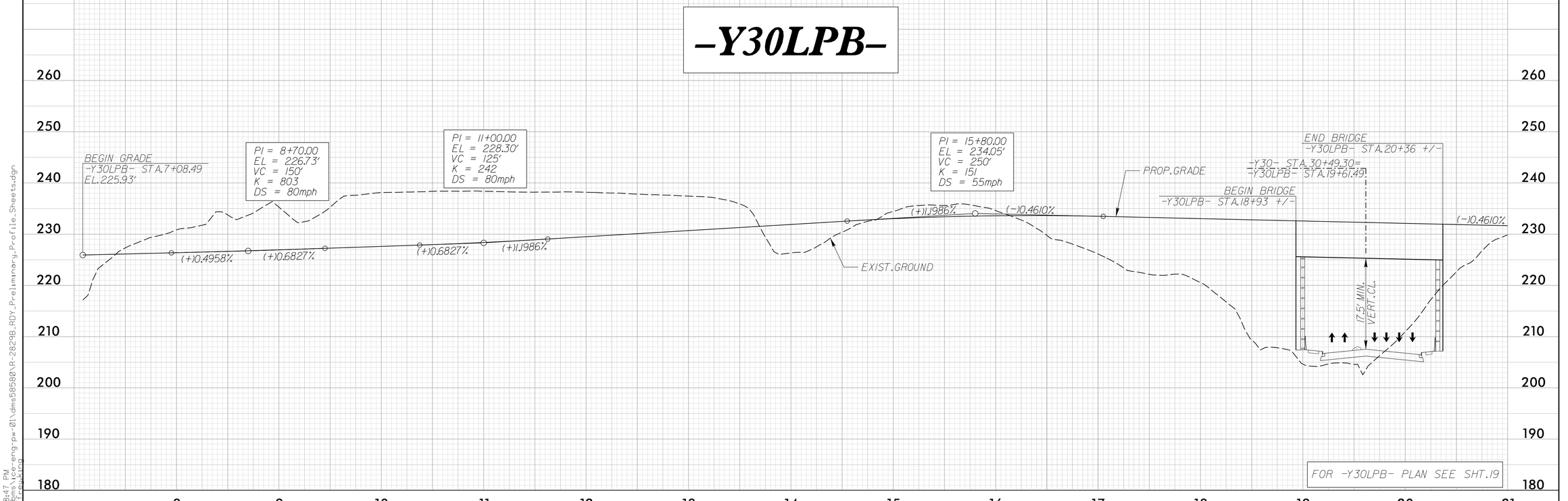
–Y30–



FOR -Y30- PLAN SEE SHTS.35 & 36

–Y30LPB–



FOR -Y30LPB- PLAN SEE SHT.19

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	70
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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–Y30LPB–

PI = 24+00.00
EL = 230.27'
VC = 150'
K = 90
DS = 50mph

PI = 26+50.00
EL = 224.95'
VC = 315'
K = 97
DS = 50mph

PI = 30+40.00
EL = 229.32'
VC = 430'
K = 84
DS = 50mph

PI = 33+30.00
EL = 217.77'
VC = 65'
K = 76
DS = 45mph

EXIST.GROUND
PROP.GRADE
(–)0.4610%
(–)2.1285%
(–)2.1285%
(+)1.1195%
(+)1.1195%
(–)3.9805%
(–)3.9805%
(–)4.8382%

END GRADE
–Y30LPB– STA. 34+26.08=
–Y30– STA. 29+11.28
OFF.= 40'RT
EL. 213.13'

FOR –Y30LPB– PLAN SEE SHT. 19

–Y30RPB–

BEGIN GRADE
–Y30RPB– STA. 10+00.00
EL. 225.09'

PI = 11+90.00
EL = 225.56'
VC = 310'
K = 198
DS = 65mph

PI = 20+40.00
EL = 214.37'
VC = 550'
K = 210
DS = 75mph

EXIST.GROUND
PROP.GRADE
(+)0.2469%
(–)1.3170%
(–)1.3170%
(+)1.2966%

PROP. CULVERT
1Ø6'x8'
(BURIED 1.0')

FOR –Y30RPB– PLAN SEE SHTS. 18 & 19

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	7I

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

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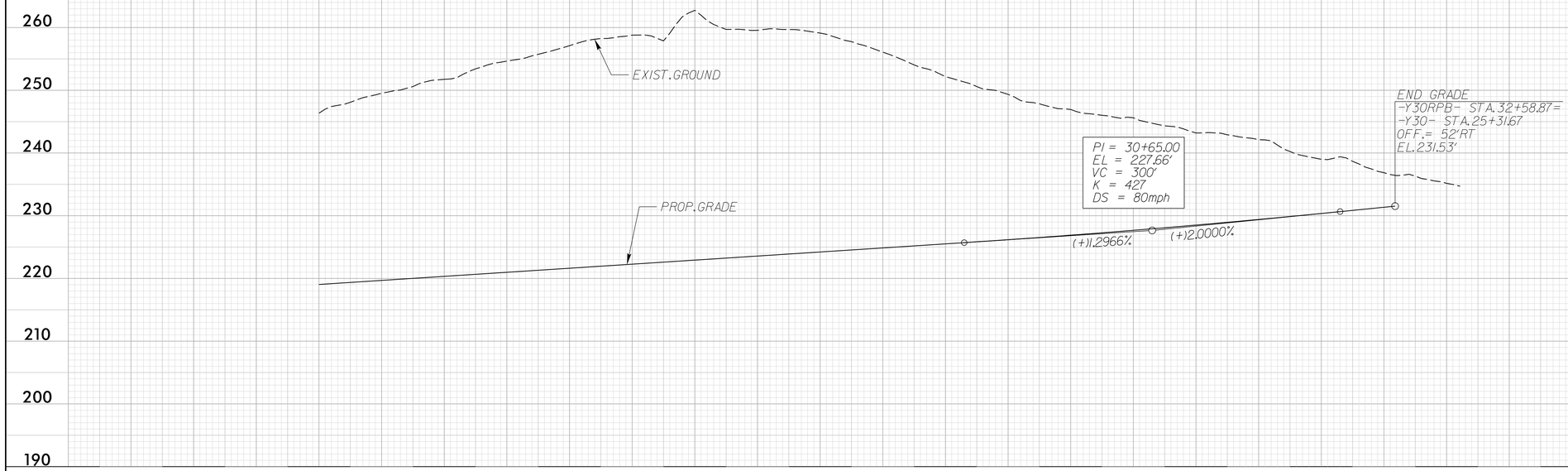
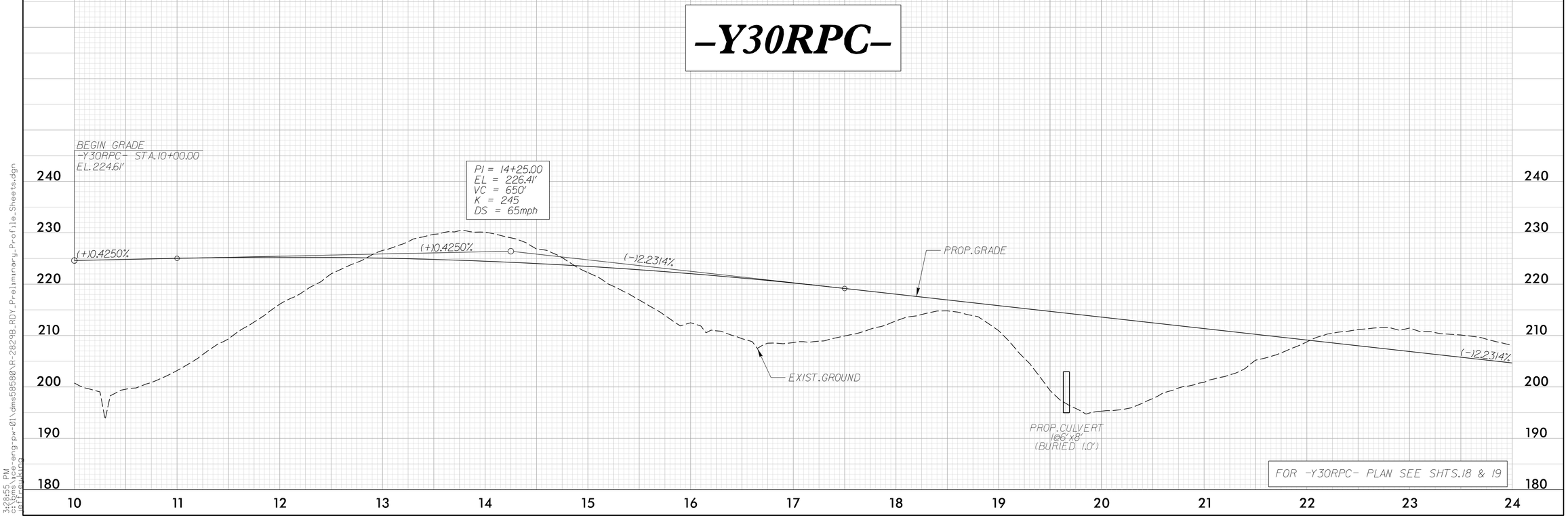
-Y30RPB-



FOR -Y30RPB- PLAN SEE SHT.19

-Y30RPC-



FOR -Y30RPC- PLAN SEE SHTS.18 & 19

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	72
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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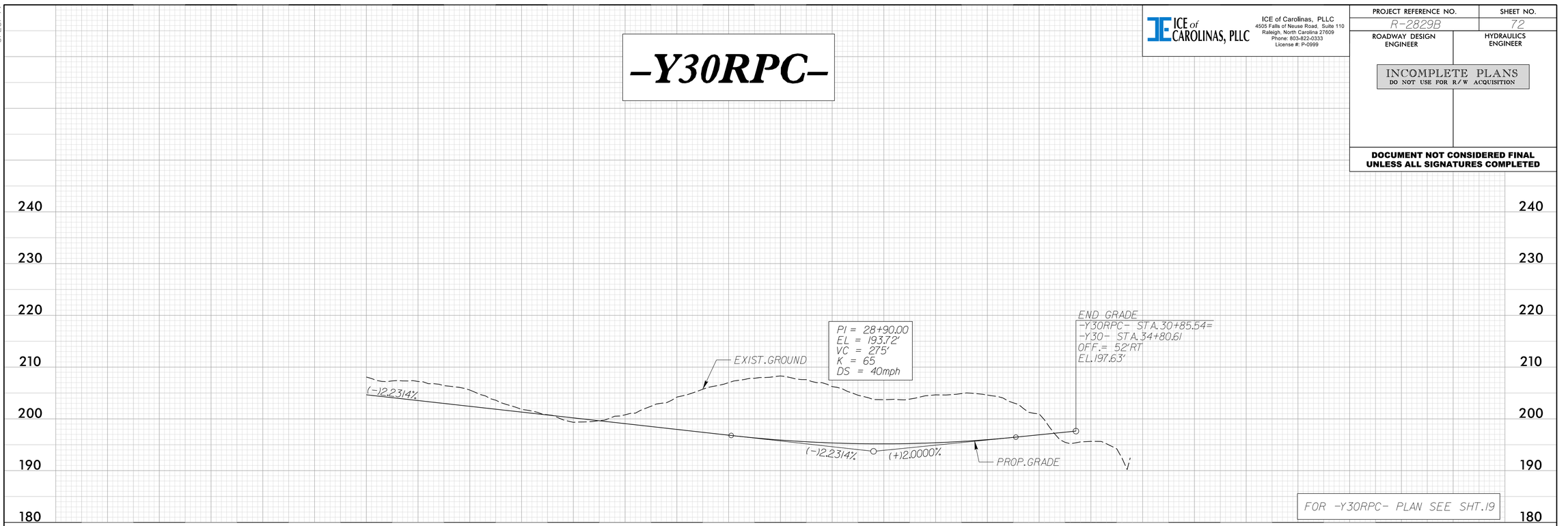
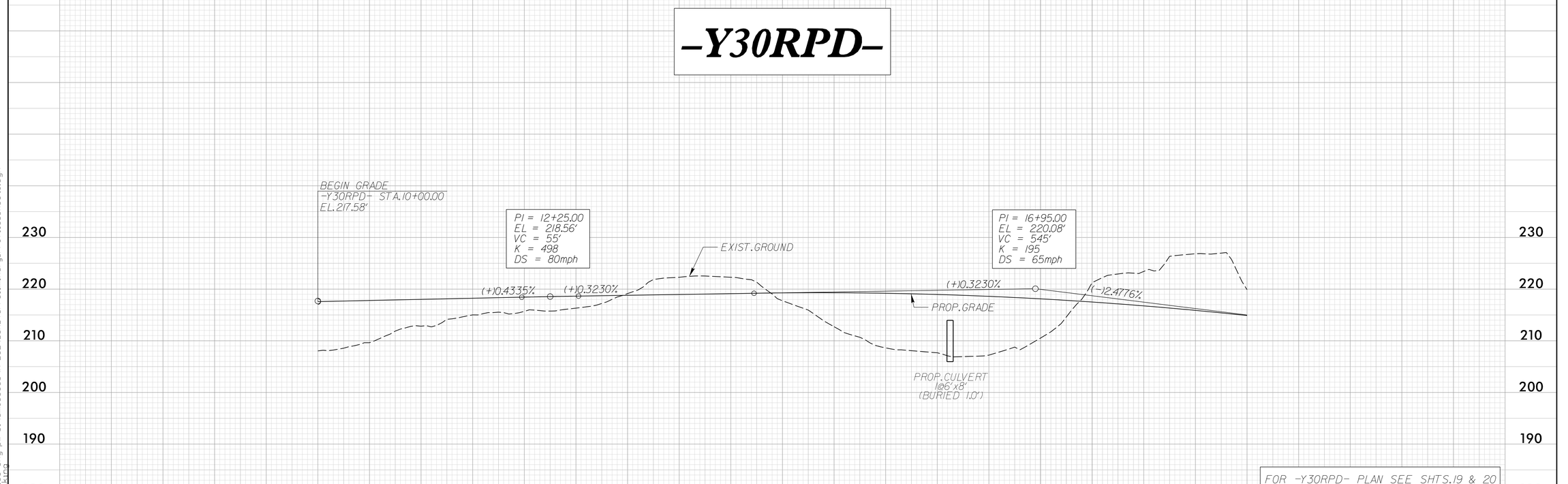
-Y30RPC-



FOR -Y30RPC- PLAN SEE SHT. 19

-Y30RPD-



FOR -Y30RPD- PLAN SEE SHTS. 19 & 20

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R-2829B	73
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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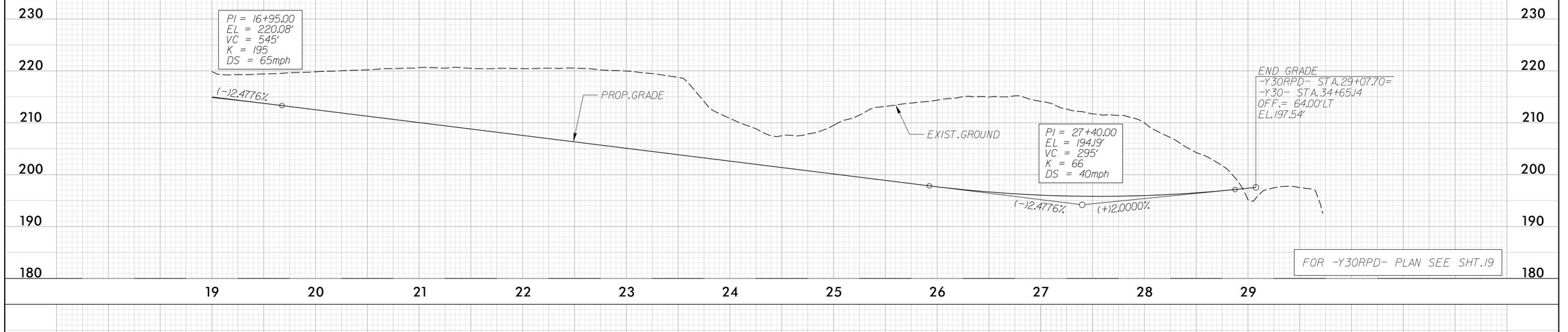
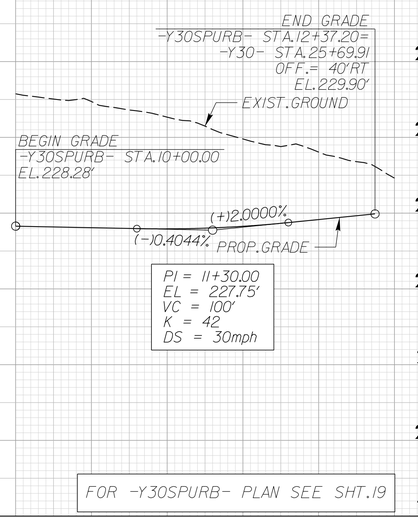
–Y30RPD–



–Y30SPURB–



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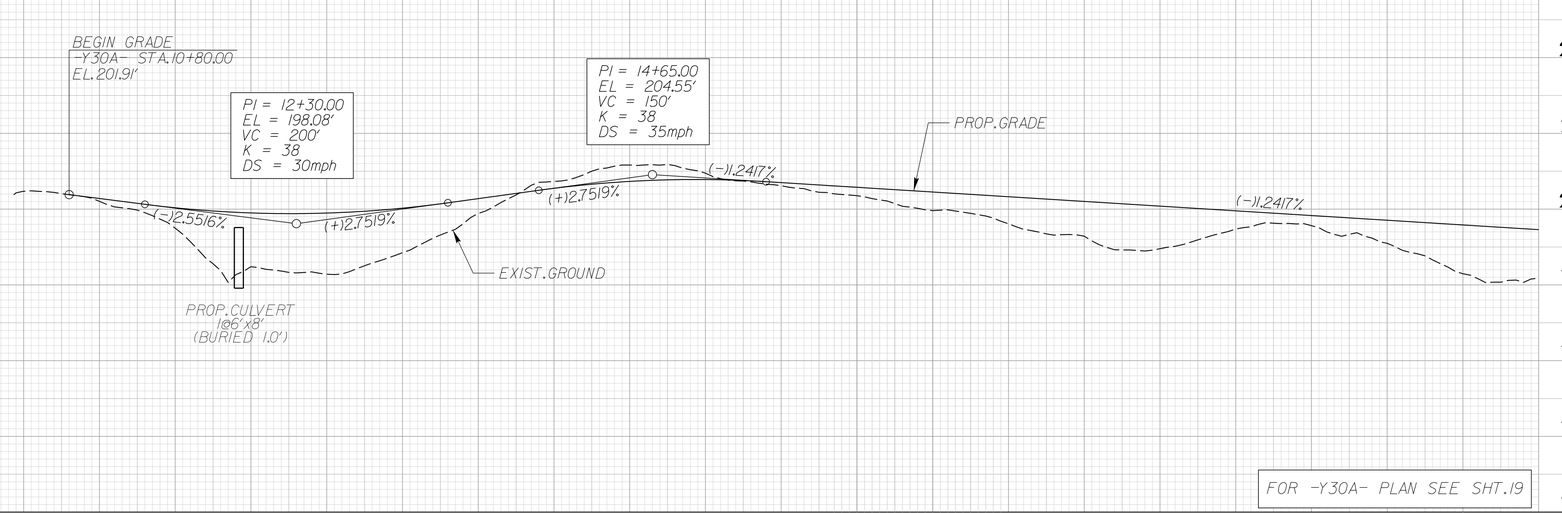

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	74
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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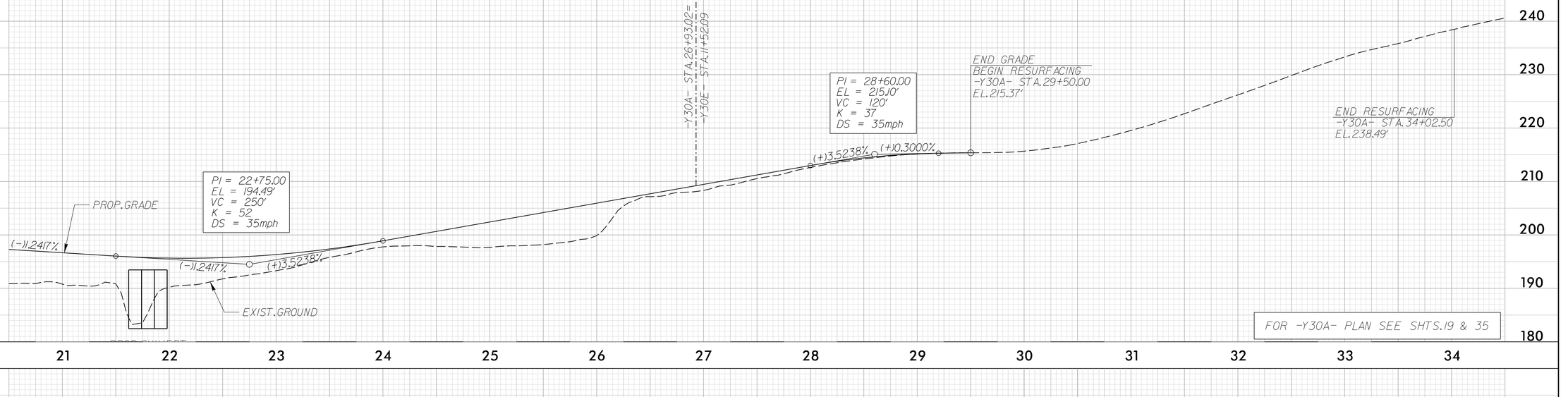
–Y30A–



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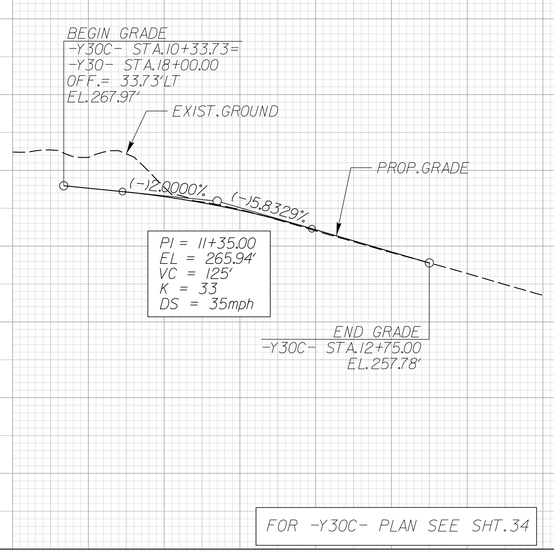
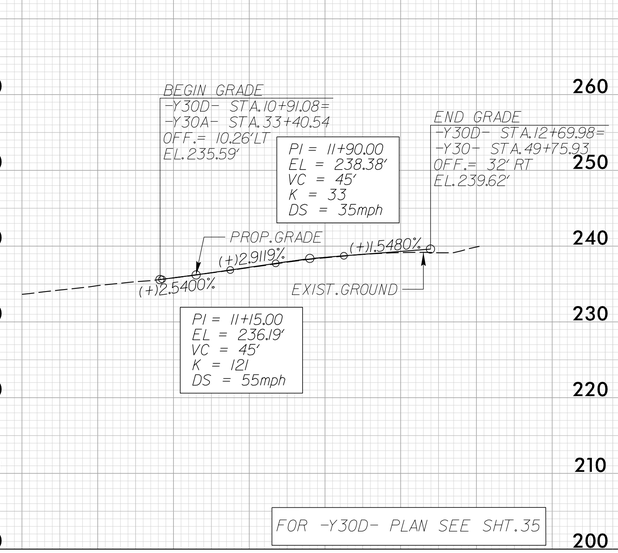
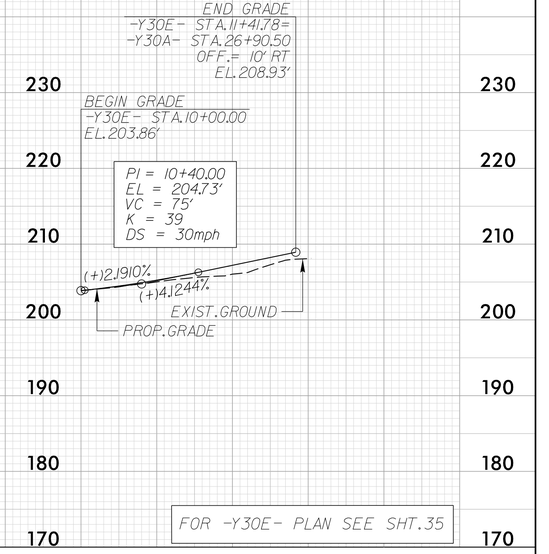


–Y30D–



–Y30E–



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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	75
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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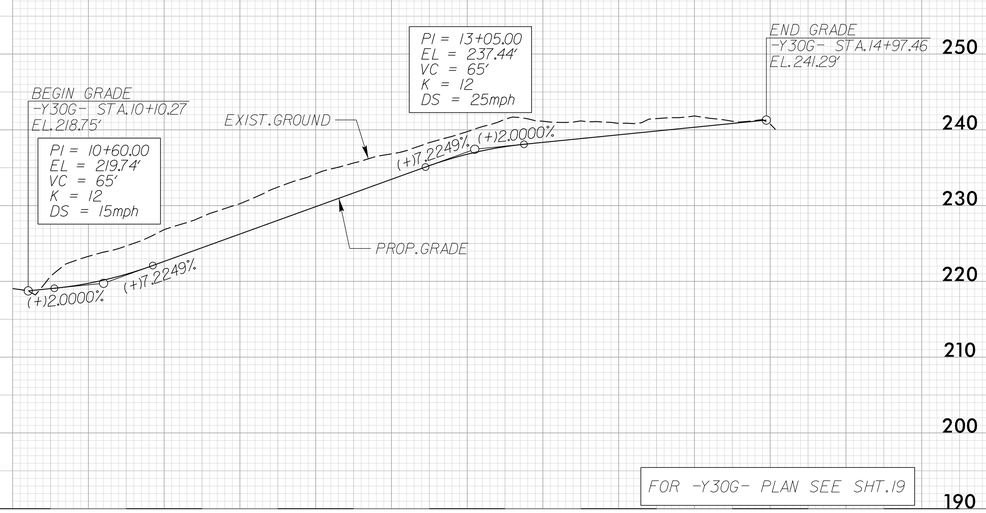
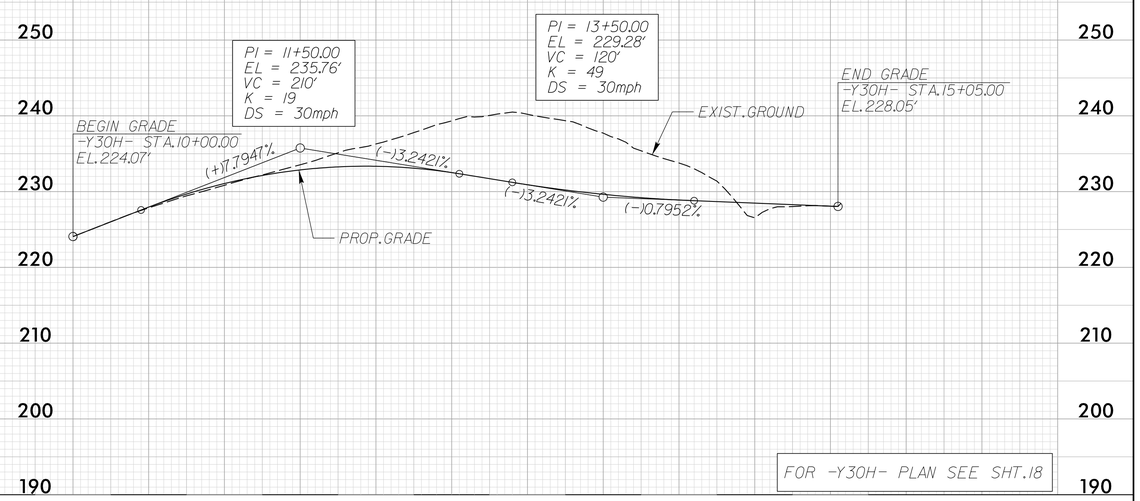
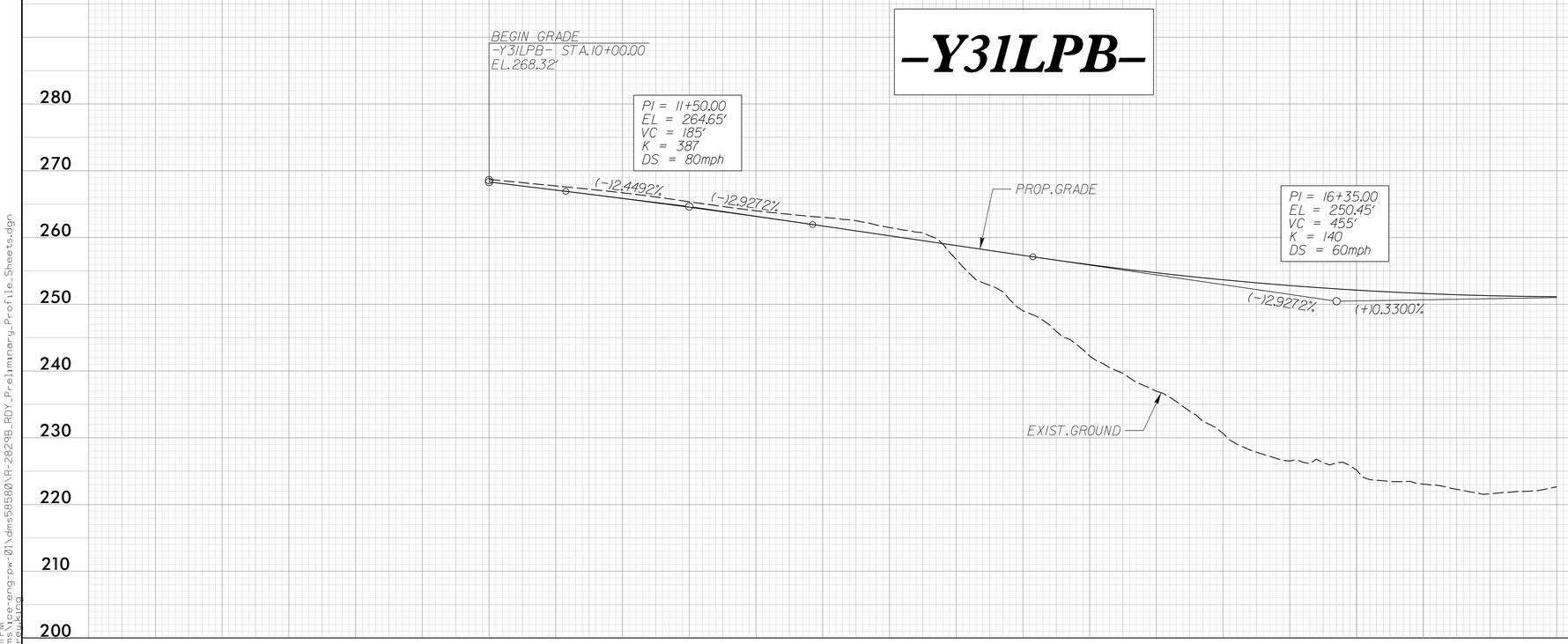
–Y30G–



–Y30H–



–Y31LPB–



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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	76
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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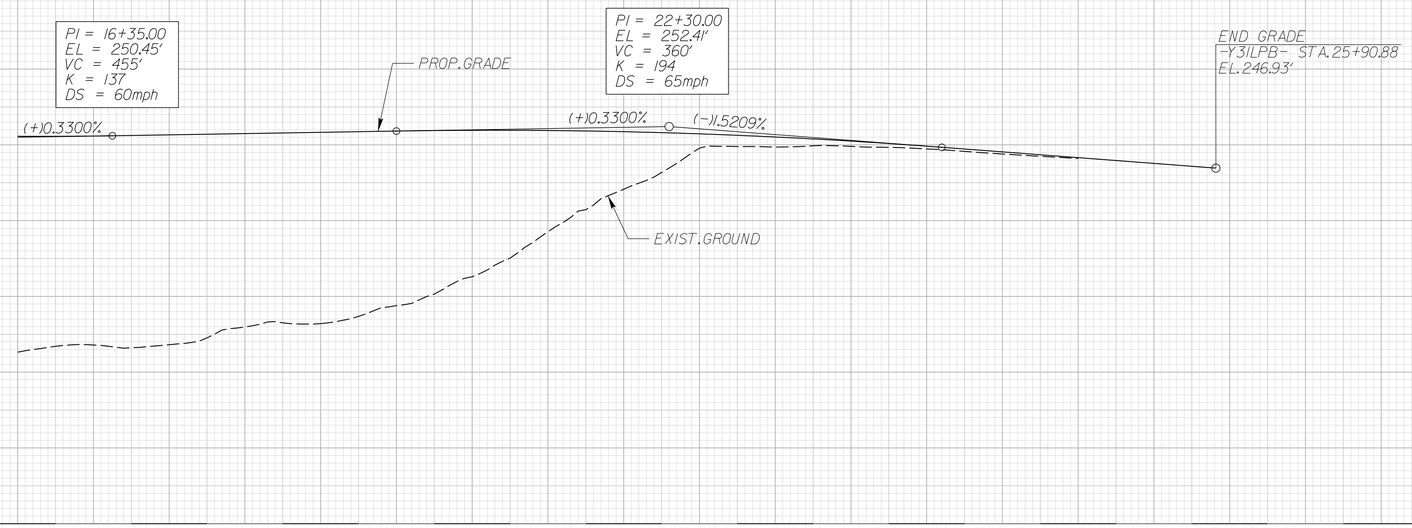
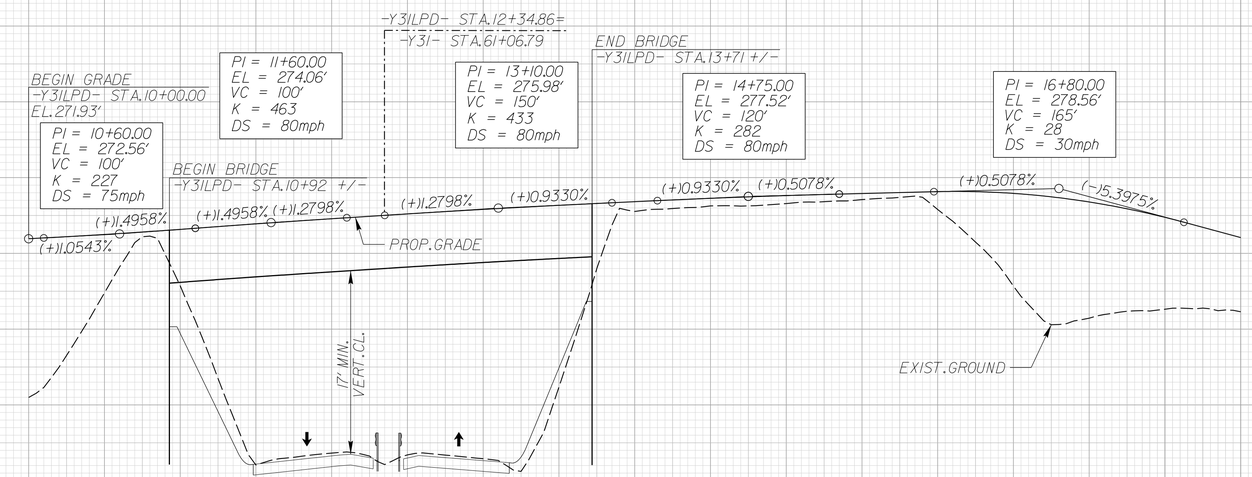
-Y31LPB-



FOR -Y31LPB- PLAN SEE SHT. 21

-Y31LPD-



FOR -Y31LPD- PLAN SEE SHT. 21

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Jeff Perkins

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	77
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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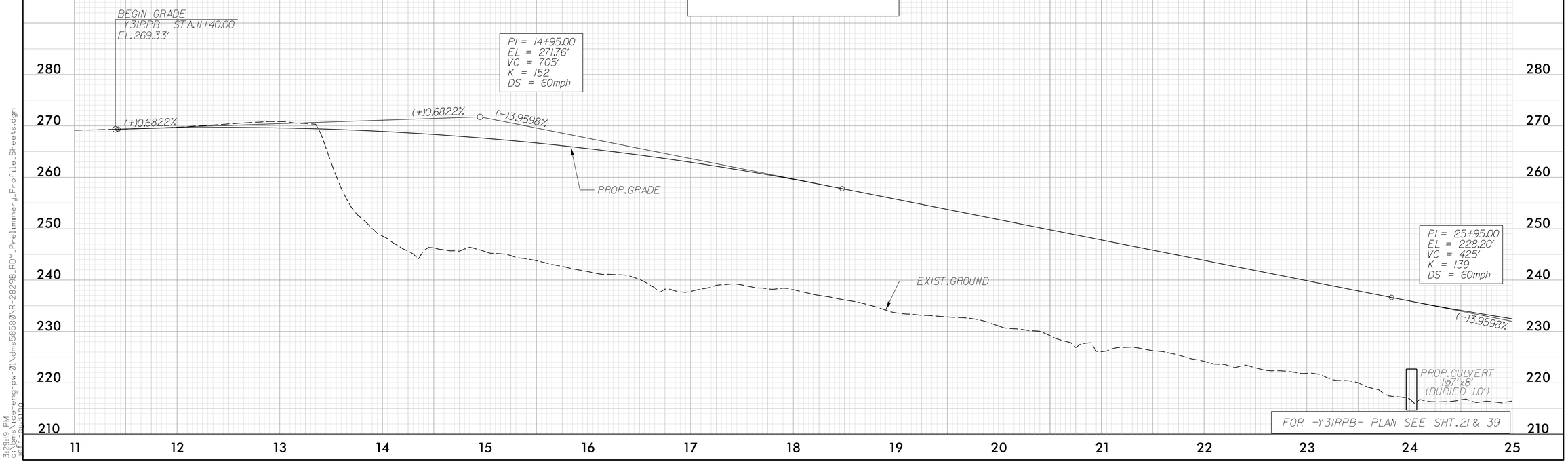
–Y31LPD–

–Y31RPB–



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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	78
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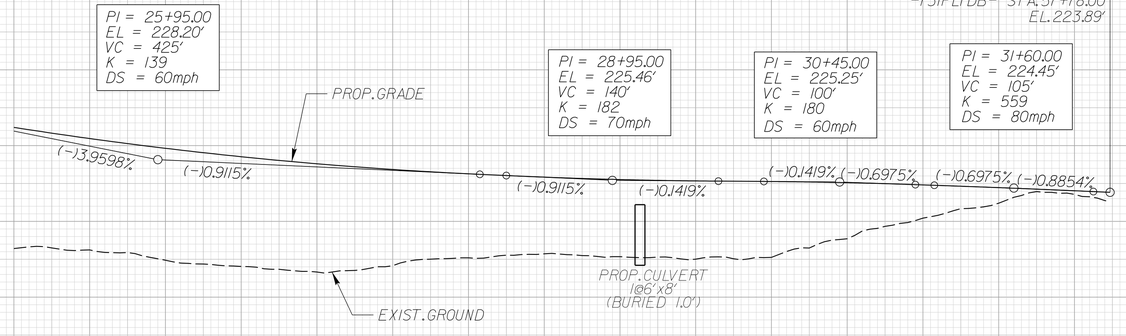
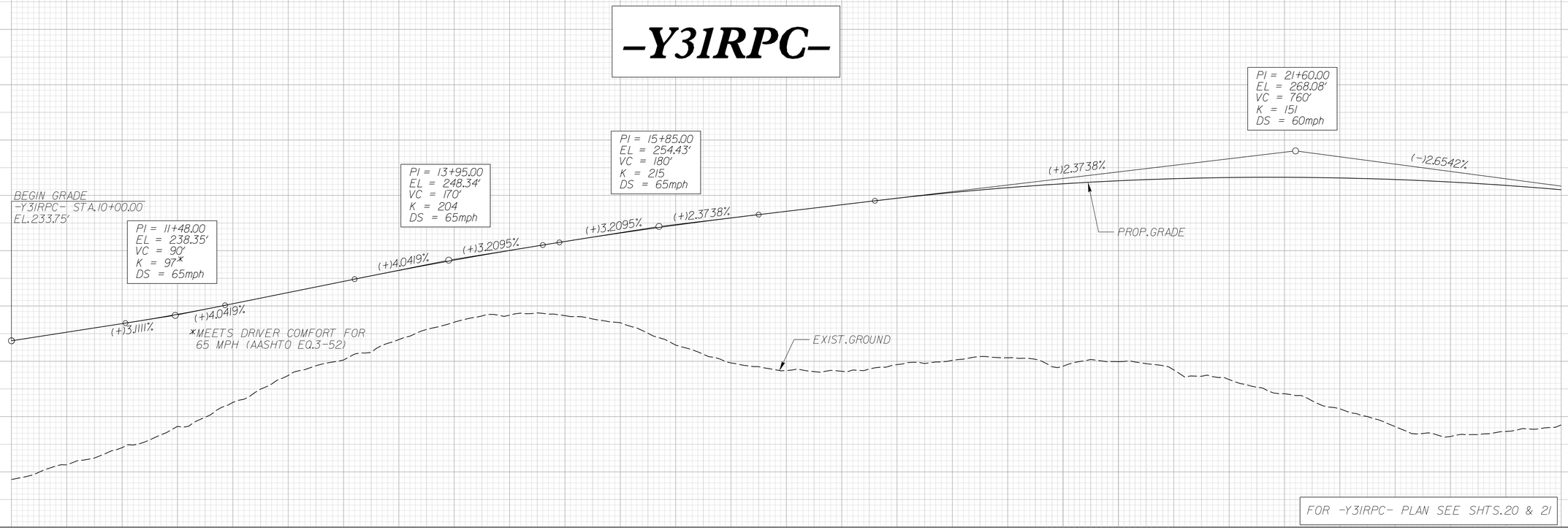
-Y31RPB-



FOR -Y31RPB- PLAN SEE SHT.20

-Y31RPC-



FOR -Y31RPC- PLAN SEE SHTS.20 & 21

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-Y31RPC-

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	79
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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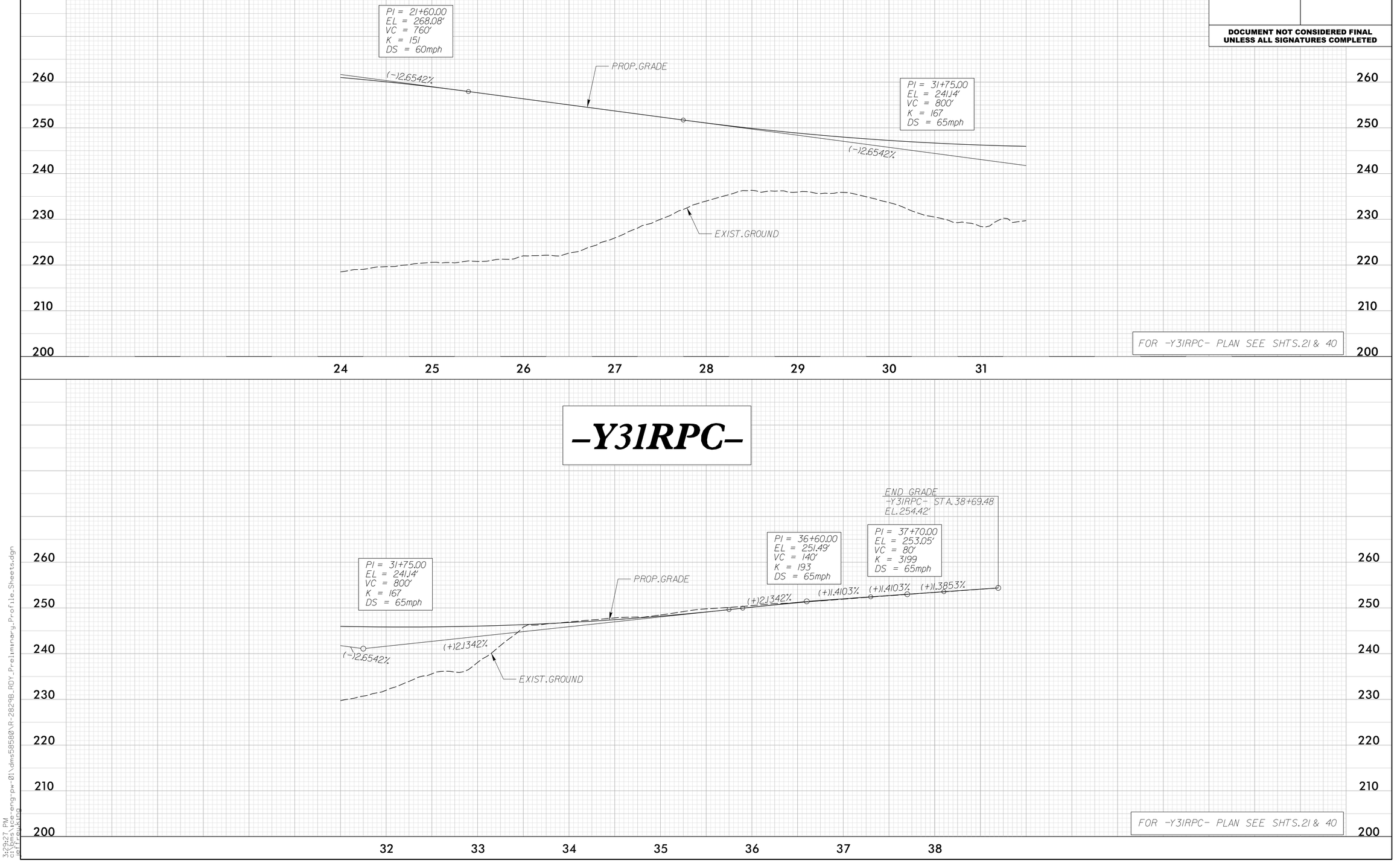

FOR -Y31RPC- PLAN SEE SHTS.21 & 40

-Y31RPC-

FOR -Y31RPC- PLAN SEE SHTS.21 & 40

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	80
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-Y31RPD-

PI = 14+40.00
EL = 290.50'
VC = 120'
K = 299
DS = 80mph

PI = 15+85.00
EL = 288.37'
VC = 120'
K = 665
DS = 80mph

PI = 18+25.00
EL = 284.43'
VC = 110'
K = 158
DS = 65mph

PI = 24+20.00
EL = 278.80'
VC = 200'
K = 374
DS = 75mph

BEGIN GRADE
-Y31RPD- STA.12+79.77
EL.293.48'

(-)1.8649%
(-)1.4636%
(-)1.4636%
(-)1.6440%
(-)1.6440%
(-)0.9458%
(-)0.9458%
(-)1.4801%
PROP.GRADE
EXIST.GROUND

FOR -Y31RPD- PLAN SEE SHTS.40 & 41

300 290 280 270 260 250 240
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

-Y31RPD-

PI = 31+00.00
EL = 268.74'
VC = 200'
K = 315
DS = 75mph

PI = 42+75.00
EL = 243.90'
VC = 625'
K = 138
DS = 60mph

(-)1.4801%
(-)1.4801%
(-)2.1140%
EXIST.GROUND
PROP.GRADE
(-)2.1140%

FOR -Y31RPD- PLAN SEE SHT.40

290 280 270 260 250 240 230 220 210 200
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	8I
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-Y31RPD-

PI = 42+75.00
EL = 243.90'
VC = 625'
K = 138
DS = 60mph

(-)2.1140%

(+)2.4233%

PROP.GRADE

EXIST.GROUND

(+)2.4233%

(+)3.3628%

PI = 51+60.00
EL = 265.34'
VC = 180'
K = 192
DS = 70mph

FOR -Y31RPD- PLAN SEE SHT.40

300 290 280 270 260 250 240 230 220 210

40 41 42 43 44 45 46 47 48 49 50 51 52 53 54

-Y31RPD-

PI = 59+40.00
EL = 291.57'
VC = 750'
K = 151
DS = 60mph

PROP.GRADE

(+)3.3628%

(-)1.6000%

END GRADE
-Y31RPD- STA.63+37.35
EL.285.22'

EXIST.GROUND

FOR -Y31RPD- PLAN SEE SHT 2I

310 300 290 280 270 260 250 240

54 55 56 57 58 59 60 61 62 63 64 65 66

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	82
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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-Y31FLYDB-

BEGIN GRADE
-Y31FLYDB- STA.7+74.67
EL.274.47'

PI = 10+25.00
EL = 270.99'
VC = 150'
K = 1809
DS = 80mph

(-)1.3892%

(-)1.4721%

PROP.GRADE

PI = 13+25.00
EL = 266.57'
VC = 350'
K = 970
DS = 80mph

(-)1.4721%

(-)1.8327%

EXIST.GROUND

PI = 23+40.00
EL = 247.97'
VC = 730'
K = 185
DS = 70mph

(-)1.8327%

FOR -Y31FLYDB- PLAN SEE SHT.40

280 270 260 250 240 230 220

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

-Y31FLYDB-

-Y31FLYDB- STA.34+90.99=
-Y31- STA.66+95.87

PI = 35+80.00
EL = 274.23'
VC = 1,060'
K = 163
DS = 60mph

BEGIN BRIDGE
-Y31FLYDB- STA.33+35 +/-

(+)2.1178%

PI = 23+40.00
EL = 247.97'
VC = 730'
K = 185
DS = 70mph

PROP.GRADE

(-)1.8327%

(+)2.1178%

EXIST.GROUND

17.0' MIN. VERT.CL.

FOR -Y31FLYDB- PLAN SEE SHT.40

280 270 260 250 240 230 220 210 200

21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	83
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y31FLYDB–

PI = 35+80.00
EL = 274.23'
VC = 1,060'
K = 163
DS = 60mph

END BRIDGE
-Y31FLYDB- STA.36+59 +/-

(+)2.1178%
(-)4.3990%

17.0' MIN. VERT.CL.

PROP.GRADE

-Y31FLYDB- STA.45+57.92=
-LB- STA.1469+26.98

EXIST.GROUND

PI = 47+00.00
EL = 224.96'
VC = 650'
K = 138
DS = 60mph

(-)4.3990%
(+)0.3150%

FOR -Y31FLYDB- PLAN SEE SHT.21

–Y31FLYDB–

PI = 47+00.00
EL = 224.96'
VC = 650'
K = 138
DS = 60mph

PI = 54+00.00
EL = 227.17'
VC = 455'
K = 385
DS = 80mph

(+)0.3150%
(-)0.8681%
(+)0.3150%

PROP.CULVERT
1@10'x8'
(BURIED 1.0')

PROP.CULVERT
1@6'x8'
(BURIED 1.0')

PROP.GRADE

EXIST.GROUND

PI = 61+00.00
EL = 221.09'
VC = 225'
K = 485
DS = 80mph

(-)0.8681%
(-)0.4038%

FOR -Y31FLYDB- PLAN SEE SHT.20

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PROJECT REFERENCE NO.	SHEET NO.
R-2829B	84

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

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–Y31FLYDB–

PI = 64+00.00
EL = 219.88'
VC = 375'
K = 390
DS = 80mph

PROP.GRADE

END GRADE
–Y31FLYDB– STA.67+81.12
EL.222.07'

PI = 67+00.00
EL = 221.55'
VC = 160'
K = 1968
DS = 80mph

(–)0.4038%
(+)0.5581%
(+)0.5581%
(+)0.6394%

EXIST.GROUND

FOR –Y31FLYDB– PLAN SEE SHT.20

–Y31A–

BEGIN GRADE
–Y31A– STA.11+00.00
EL.233.34'

PI = 12+20.00
EL = 226.79'
VC = 230'
K = 37
DS = 25mph

PI = 14+90.00
EL = 229.00'
VC = 140'
K = 32
DS = 35mph

PI = 17+20.00
EL = 220.87'
VC = 290'
K = 48
DS = 30mph

PROP.GRADE

(–)5.4611%
(+)0.8198%
(+)0.8198%
(–)3.5339%
(–)3.5339%
(+)2.5611%

EXIST.GROUND

FOR –Y31A– PLAN SEE SHT.20

–Y31A–

PI = 17+20.00
EL = 220.87'
VC = 290'
K = 48
DS = 30mph

PI = 19+75.00
EL = 227.40'
VC = 130'
K = 29
DS = 35mph

PI = 22+10.00
EL = 222.93'
VC = 190'
K = 58
DS = 35mph

END GRADE
–Y31A– STA.26+50.06
EL.227.25'

PI = 26+00.00
EL = 228.22'
VC = 100'
K = 30
DS = 35mph

(+)2.5611%
(+)2.5611%
(–)1.9017%
(–)1.9017%
(+)1.3558%
(+)1.3558%
(–)1.9396%

PROP.GRADE

EXIST.GROUND

FOR –Y31A– PLAN SEE SHT.20

–Y31B–

BEGIN GRADE
–Y31B– STA.10+03.40
EL.230.69'

PI = 11+45.00
EL = 226.13'
VC = 110'
K = 18
DS = 20mph

END GRADE
–Y31B– STA.12+00.70
EL.226.69'

(+)2.1174%
(–)5.0759%
(–)5.0759%
(+)1.0000%

EXIST.GROUND

PROP.GRADE

PI = 10+40.00
EL = 231.46'
VC = 70'
K = 10
DS = 20mph

FOR –Y31B– PLAN SEE SHT.20

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