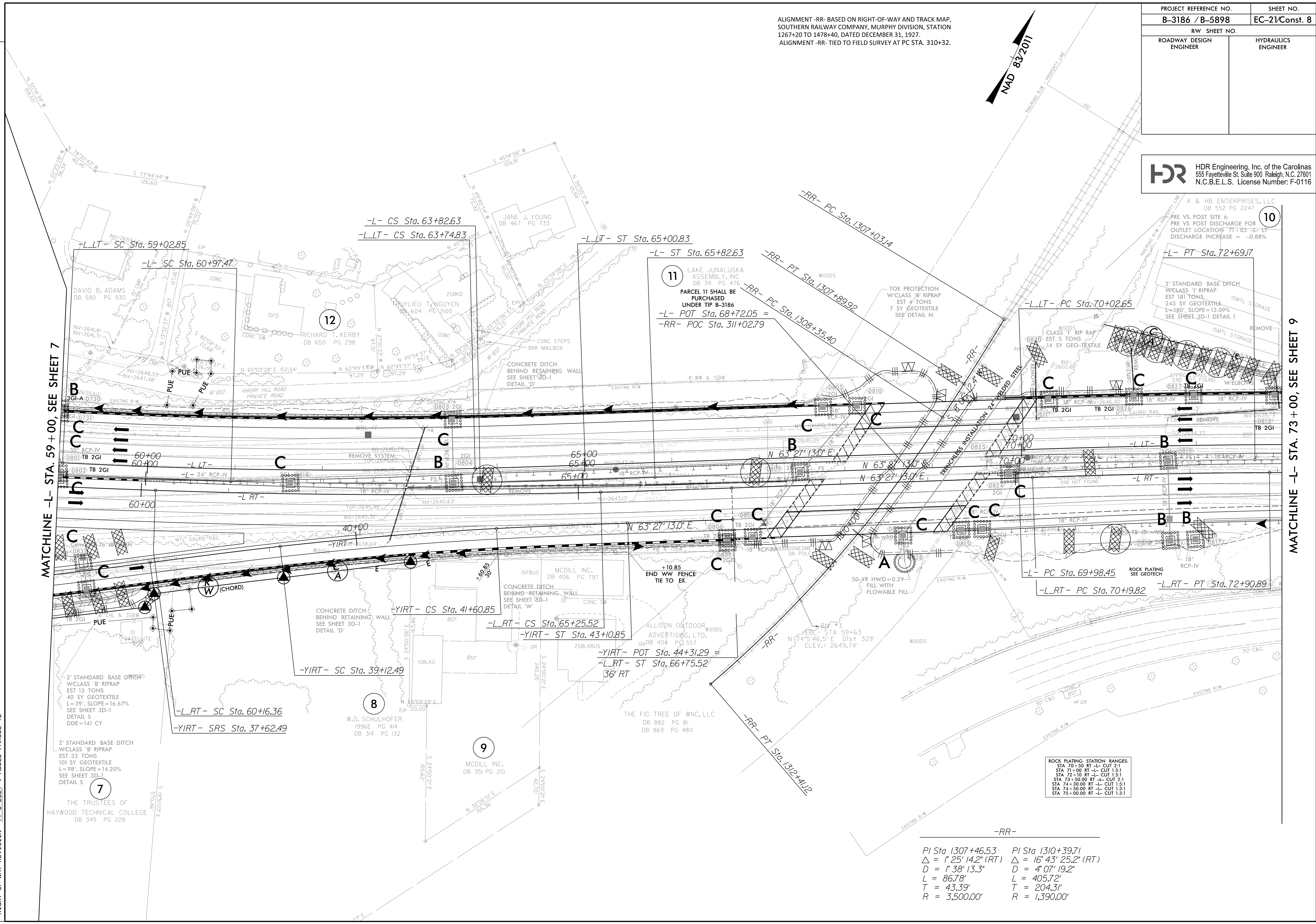
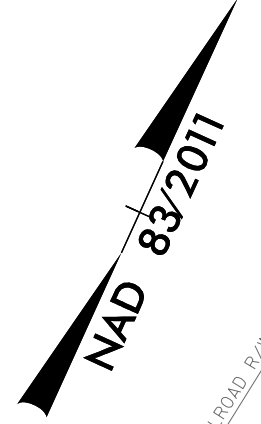


ALIGNMENT -RR- BASED ON RIGHT-OF-WAY AND TRACK MAP, SOUTHERN RAILWAY COMPANY, MURPHY DIVISION, STATION 1267+20 TO 1478+40, DATED DECEMBER 31, 1927.  
ALIGNMENT -RR- TIED TO FIELD SURVEY AT PC STA. 310+32.

PROJECT REFERENCE NO.	SHEET NO.
B-3186 / B-5898	EC-21/Const. 8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**HDR** HDR Engineering, Inc. of the Carolinas  
555 Fayetteville St. Suite 900 Raleigh, N.C. 27601  
N.C.B.E.L.S. License Number: F-0116



MATCHLINE -L- STA. 59+00, SEE SHEET 7

MATCHLINE -L- STA. 73+00, SEE SHEET 9

**11** LAKE JUNALUSKA ASSEMBLY, INC  
DB 34 PG 476  
PARCEL 11 SHALL BE PURCHASED UNDER TIP B-3186  
-L- POT Sta. 68+72.05 =  
-RR- POC Sta. 311+02.79

-L- CS Sta. 63+82.63  
-L-LT- CS Sta. 63+74.83  
-L-LT- ST Sta. 65+00.83

-L-LT- SC Sta. 59+02.85  
-L- SC Sta. 60+97.47

-L- PT Sta. 72+69.17  
-L-LT- PC Sta. 70+02.65

-RR- PT Sta. 1307+89.92  
-RR- PC Sta. 1308+35.40

-L- RT- PC Sta. 69+98.45  
-L- RT- PC Sta. 70+19.82  
-L- RT- PT Sta. 72+90.89

-YIRT- CS Sta. 41+60.85  
-L- RT- CS Sta. 65+25.52  
-YIRT- ST Sta. 43+10.85  
-YIRT- POT Sta. 44+31.29 =  
-L- RT- ST Sta. 66+75.52  
36' RT

-L- RT- SC Sta. 60+16.36  
-YIRT- SRS Sta. 37+62.49

ROCK PLATING STATION RANGES:

STA 70+50 RT -L- CUT 2:1
STA 71+00 RT -L- CUT 1.5:1
STA 72+10 RT -L- CUT 1.5:1
STA 73+50.00 RT -L- CUT 2:1
STA 74+30.00 RT -L- CUT 1.5:1
STA 74+50.00 RT -L- CUT 1.5:1
STA 75+00.00 RT -L- CUT 1.5:1

PI Sta 1307+46.53      PI Sta 1310+39.71  
 $\Delta = 1' 25' 14.2''$  (RT)       $\Delta = 16' 43' 25.2''$  (RT)  
 $D = 1' 38' 13.3''$        $D = 4' 07' 19.2''$   
 $L = 86.78'$        $L = 405.72'$   
 $T = 43.39'$        $T = 204.31'$   
 $R = 3,500.00'$        $R = 1,390.00'$

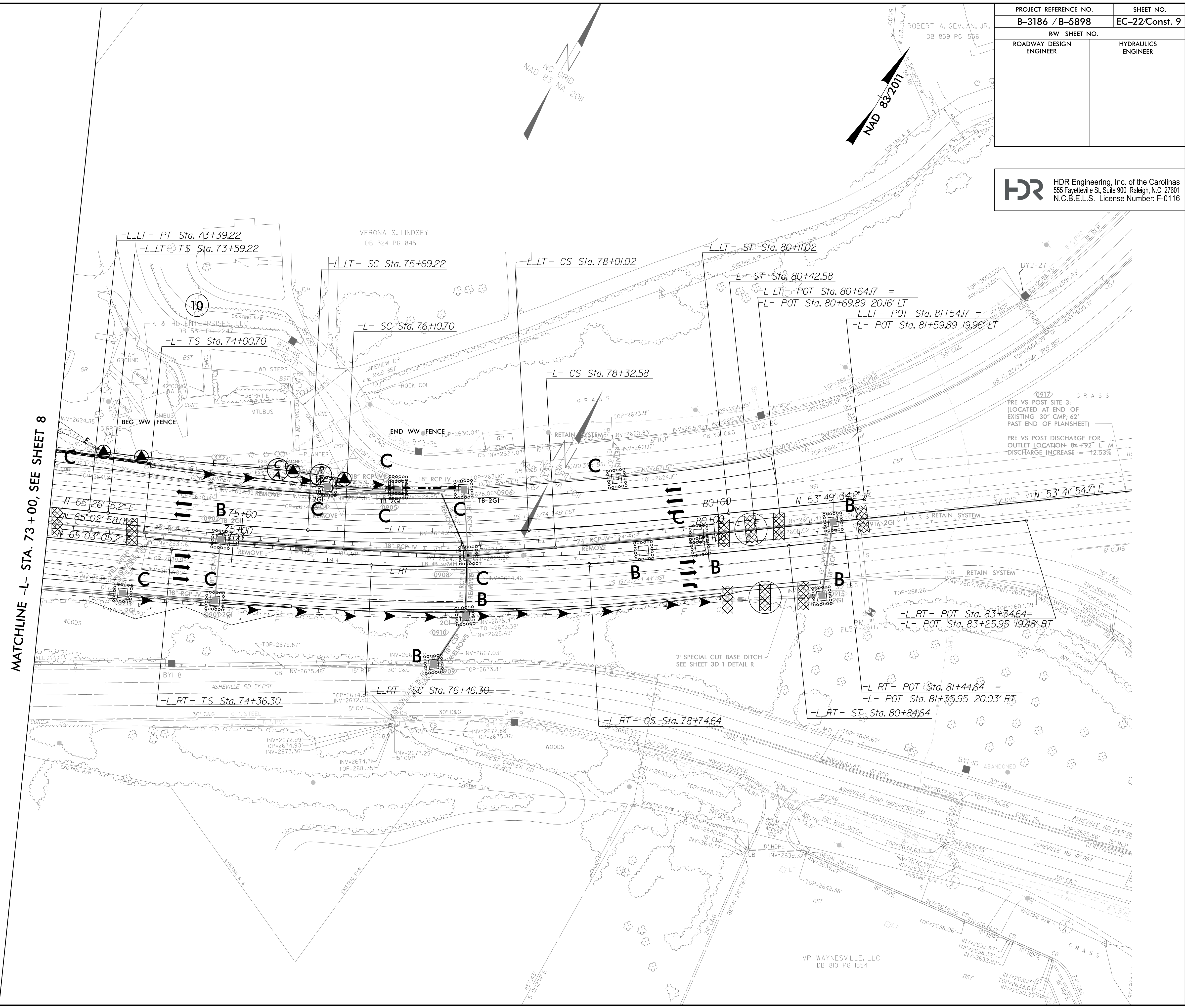
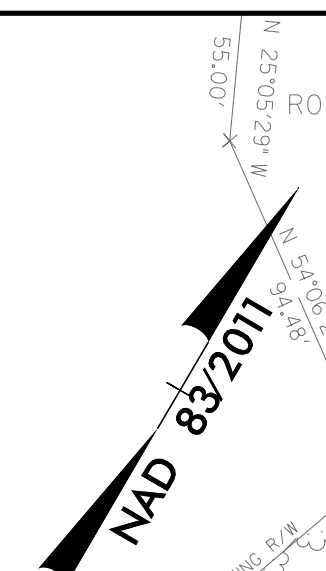
**REVISIONS**

RIGHT-OF-WAY REVISION 11-8-2021 : PARCEL 11 REVISED TEMPORARY CONSTRUCTION EASEMENT  
 RIGHT-OF-WAY REVISION 11-9-2021 : ADDED PARCEL 11 FOR LAKE JUNALUSKA ASSEMBLY  
 RIGHT-OF-WAY REVISION 11-8-2021 : ADDED NOTE FOR TIP ACQUISITION

PLOT DRIVER: NCDOT\_pdf\_color\_eng\_100.plt      PENTABLE: NCDOT\_EC\_FINAL\_BW.tbl  
 USER: WYELVERT      DATE: 11/30/2021      TIME: 10:19:57 AM  
 FILE: NCDOT\NCDOT-B3186\_T02.c. \6.0.CAD.BTM.6.2.Work.In.Progress\B-3186-B-5898\Errorion Contron\B3186-B5898-HYD-EC.PSH.FINAL.dgn

PROJECT REFERENCE NO.	SHEET NO.
B-3186 / B-5898	EC-22/Const. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**HDR** HDR Engineering, Inc. of the Carolinas  
 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601  
 N.C.B.E.L.S. License Number: F-0116



MATCHLINE -L- STA. 73+00, SEE SHEET 8

REVISIONS

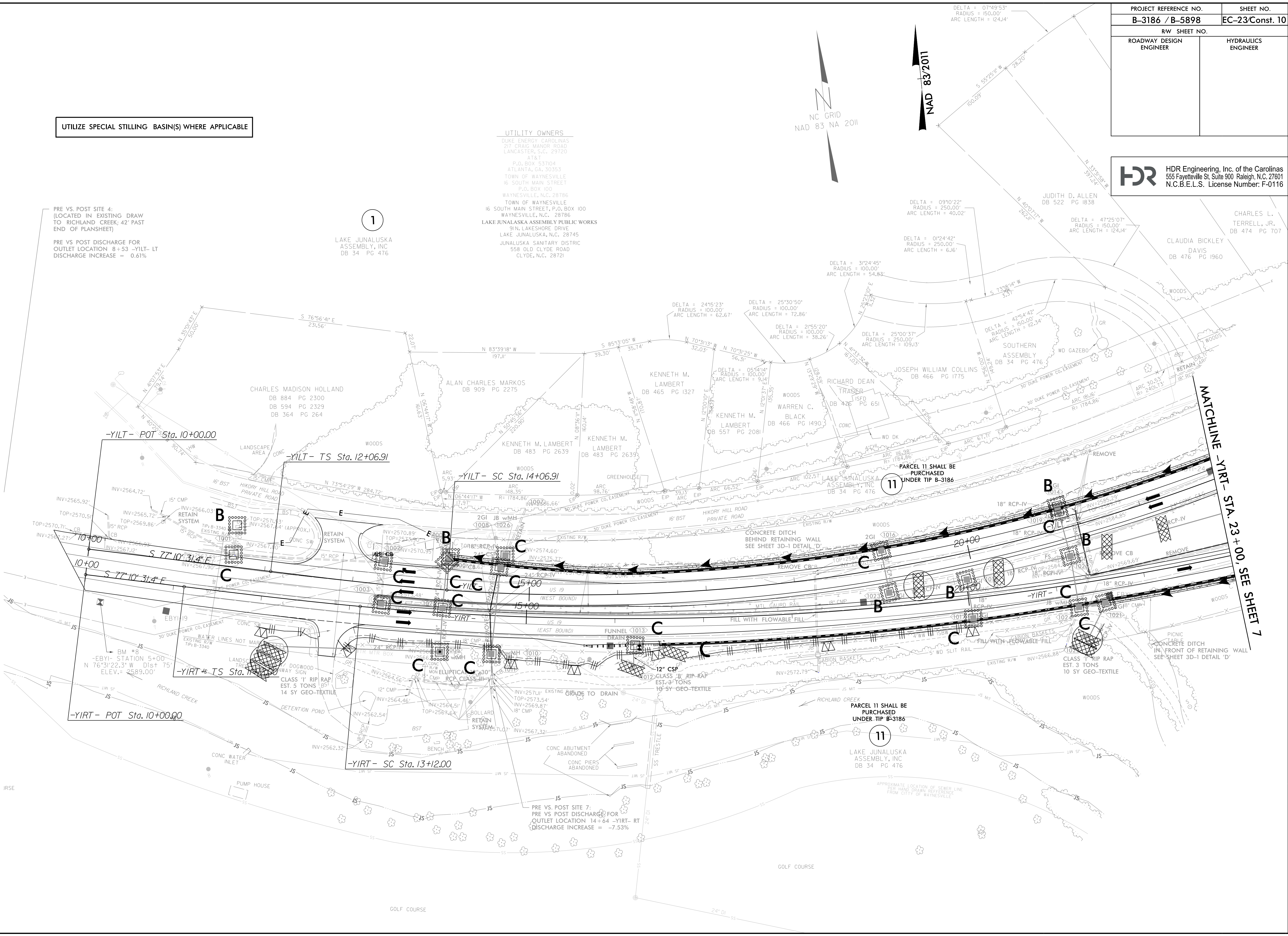
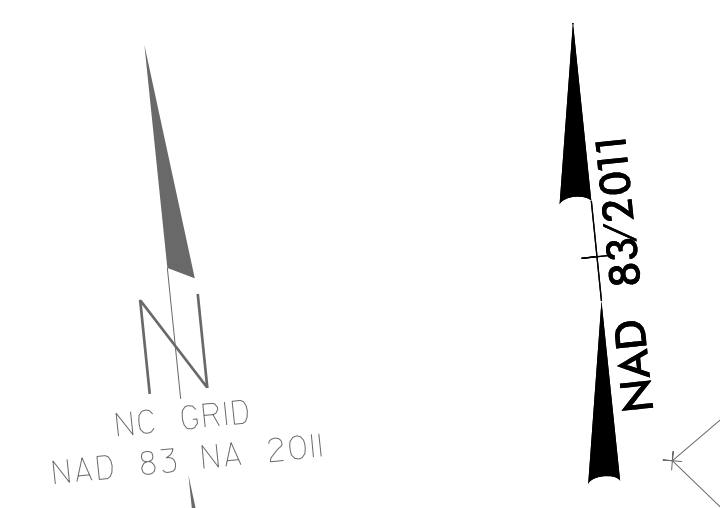
RIGHT-OF-WAY REVISION 11-8-2021 : PARCEL TO REVISED TEMPORARY CONSTRUCTION EASEMENT, PROPOSED C/A & ROW AND PROPOSED FENCE

PLOT DRIVER: NCDOT\_color\_eng\_100.plt  
 USER: MYELVERT  
 FILE: NCDOT\NCDOT-B3186\_T02.c.6.0.CAD.BTM.6.2.Work.In.Progress\B-5898\Erosion Control\B3186-B5898-HYD-EC.PSH.FINAL.dgn  
 PENTABLE: NCDOT\_EC\_FINAL\_BW.tbl  
 DATE: 11/30/2021  
 TIME: 10:20:36 AM

PROJECT REFERENCE NO.	SHEET NO.
B-3186 / B-5898	EC-23/Const. 10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**HDR** HDR Engineering, Inc. of the Carolinas  
555 Fayetteville St. Suite 900 Raleigh, N.C. 27601  
N.C.B.E.L.S. License Number: F-0116

UTILIZE SPECIAL STILLING BASIN(S) WHERE APPLICABLE



PRE VS. POST SITE 4:  
(LOCATED IN EXISTING DRAW  
TO RICHLAND CREEK; 42' PAST  
END OF PLANSHEET)

PRE VS POST DISCHARGE FOR  
OUTLET LOCATION 8+53 -YILT- LT  
DISCHARGE INCREASE = 0.61%

LAKE JUNALUSKA  
ASSEMBLY, INC  
DB 34 PG 476

UTILITY OWNERS  
DUKE ENERGY CAROLINAS  
217 CRAIG MANOR ROAD  
LANCASTER, S.C. 29720

P.O. BOX 53704  
ATLANTA, GA. 30353  
TOWN OF WAYNESVILLE  
16 SOUTH MAIN STREET  
P.O. BOX 100  
WAYNESVILLE, N.C. 28786  
TOWN OF WAYNESVILLE  
16 SOUTH MAIN STREET, P.O. BOX 100  
WAYNESVILLE, N.C. 28786  
LAKE JUNALUSKA ASSEMBLY PUBLIC WORKS  
919 LAKESHORE DRIVE  
LAKE JUNALUSKA, N.C. 28745  
JUNALUSKA SANITARY DISTRICT  
558 OLD CLYDE ROAD  
CLYDE, N.C. 28721

DELTA = 07°49'53"  
RADIUS = 150.00'  
ARC LENGTH = 124.14'

DELTA = 09°10'22"  
RADIUS = 250.00'  
ARC LENGTH = 40.02'

DELTA = 01°24'42"  
RADIUS = 250.00'  
ARC LENGTH = 6.16'

DELTA = 31°24'45"  
RADIUS = 100.00'  
ARC LENGTH = 54.83'

DELTA = 24°45'23"  
RADIUS = 100.00'  
ARC LENGTH = 62.67'

DELTA = 25°30'50"  
RADIUS = 100.00'  
ARC LENGTH = 72.86'

DELTA = 21°55'20"  
RADIUS = 100.00'  
ARC LENGTH = 38.26'

DELTA = 05°44'14"  
RADIUS = 100.00'  
ARC LENGTH = 9.14'

DELTA = 25°00'37"  
RADIUS = 250.00'  
ARC LENGTH = 103.13'

DELTA = 42°54'42"  
RADIUS = 150.00'  
ARC LENGTH = 112.34'

DELTA = 47°25'07"  
RADIUS = 150.00'  
ARC LENGTH = 124.14'

JUDITH D. ALLEN  
DB 522 PG 1838

CHARLES L.  
TERRELL, JR.  
DB 474 PG 707

CLAUDIA BICKLEY  
DAVIS  
DB 476 PG 1960

SOUTHERN  
ASSEMBLY  
DB 34 PG 476

JOSEPH WILLIAM COLLINS  
DB 466 PG 1775

RICHARD DEAN  
TRADER  
DB 426 PG 651

WARREN C.  
BLACK  
DB 466 PG 1490

KENNETH M.  
LAMBERT  
DB 557 PG 2081

KENNETH M.  
LAMBERT  
DB 465 PG 1327

KENNETH M.  
LAMBERT  
DB 483 PG 2639

KENNETH M.  
LAMBERT  
DB 483 PG 2639

ALAN CHARLES MARKOS  
DB 909 PG 2275

CHARLES MADISON HOLLAND  
DB 884 PG 2300  
DB 594 PG 2329  
DB 364 PG 264

PARCEL 11 SHALL BE  
PURCHASED  
UNDER TIP B-3186

PARCEL 11 SHALL BE  
PURCHASED  
UNDER TIP B-3186

LAKE JUNALUSKA  
ASSEMBLY, INC  
DB 34 PG 476

PRE VS POST SITE 7:  
PRE VS POST DISCHARGE FOR  
OUTLET LOCATION 14+64 -YIRT- RT  
DISCHARGE INCREASE = -7.53%

REVISIONS

11-9-2021 : ADDED PARCEL 11 FOR LAKE JUNALUSKA ASSEMBLY  
ADDED NOTE FOR TIP ACQUISITION

PLOT DRIVER: NCDOT\_color\_eng\_100.plt  
USER: WYELVERT  
FILE: NCDOT\NCDOT\B3186\_T02.cad

PENTABLE: NCDOT\_EC\_FINAL\_BW.tbl  
TIME: 10:21:35 AM  
DATE: 11/30/2021

CONTR: B-5898\Errorion Contr\B3186-B5898-HYD-EC.PSH\_FINAL.dgn

RIGHT-OF-WAY REVISION 11-9-2021 : ADDED PARCEL 11 FOR LAKE JUNALUSKA ASSEMBLY  
ADDED NOTE FOR TIP ACQUISITION

MATCHLINE  
-YIRT- STA. 23+00, SEE SHEET 7