

09/06/19

TIP PROJECT: U-2581BA

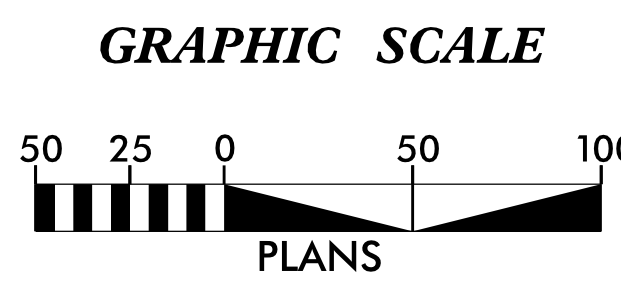
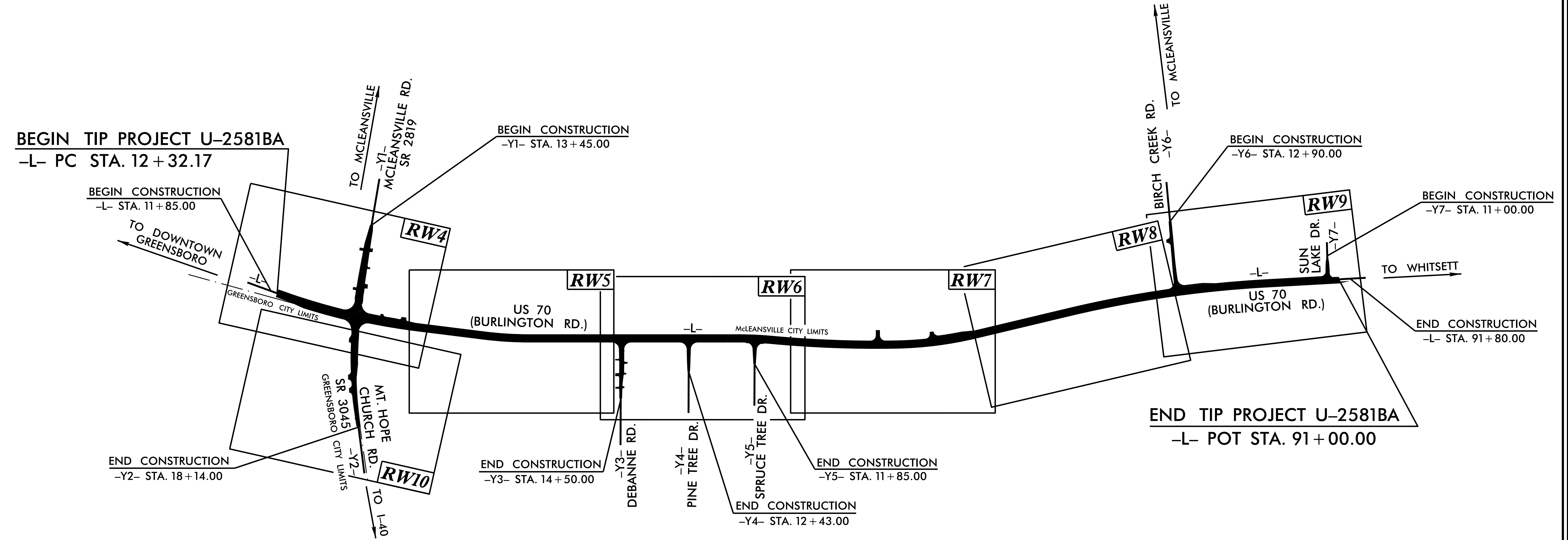
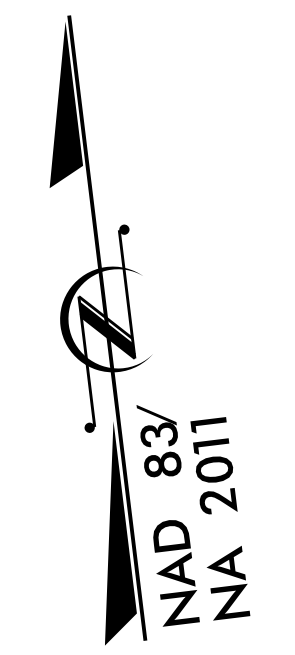
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2581BA	RW01	16

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

SURVEY CONTROL, EXISTING CENTERLINES,
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

GUILFORD COUNTY

US 70 (BURLINGTON ROAD) FROM WEST OF
 SR 3045 (MT. HOPE CHURCH ROAD)/
 SR 2819 (MCLEANSVILLE ROAD) TO JUST EAST OF
 SR 3175 (BIRCH CREEK ROAD)
 GRADING, PAVING, DRAINAGE, SIGNALS AND CULVERT



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-9" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 842,283.813(ft) EASTING: 1,820,612.267(ft) ELEVATION: 646.810(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999465352

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-9" TO -L- STATION 10+00 IS N 67°41'22" W 24,167.51'(ft)

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88/GEOID G12NC

Prepared in the Office of:



2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 30, 2018

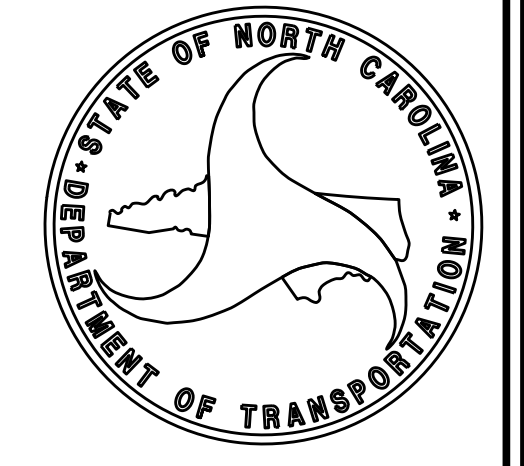
LETTING DATE:
JANUARY 21, 2020

PROFESSIONAL LAND SURVEYOR



Rudolf A. Vanderveide Jr.
SIGNATURE

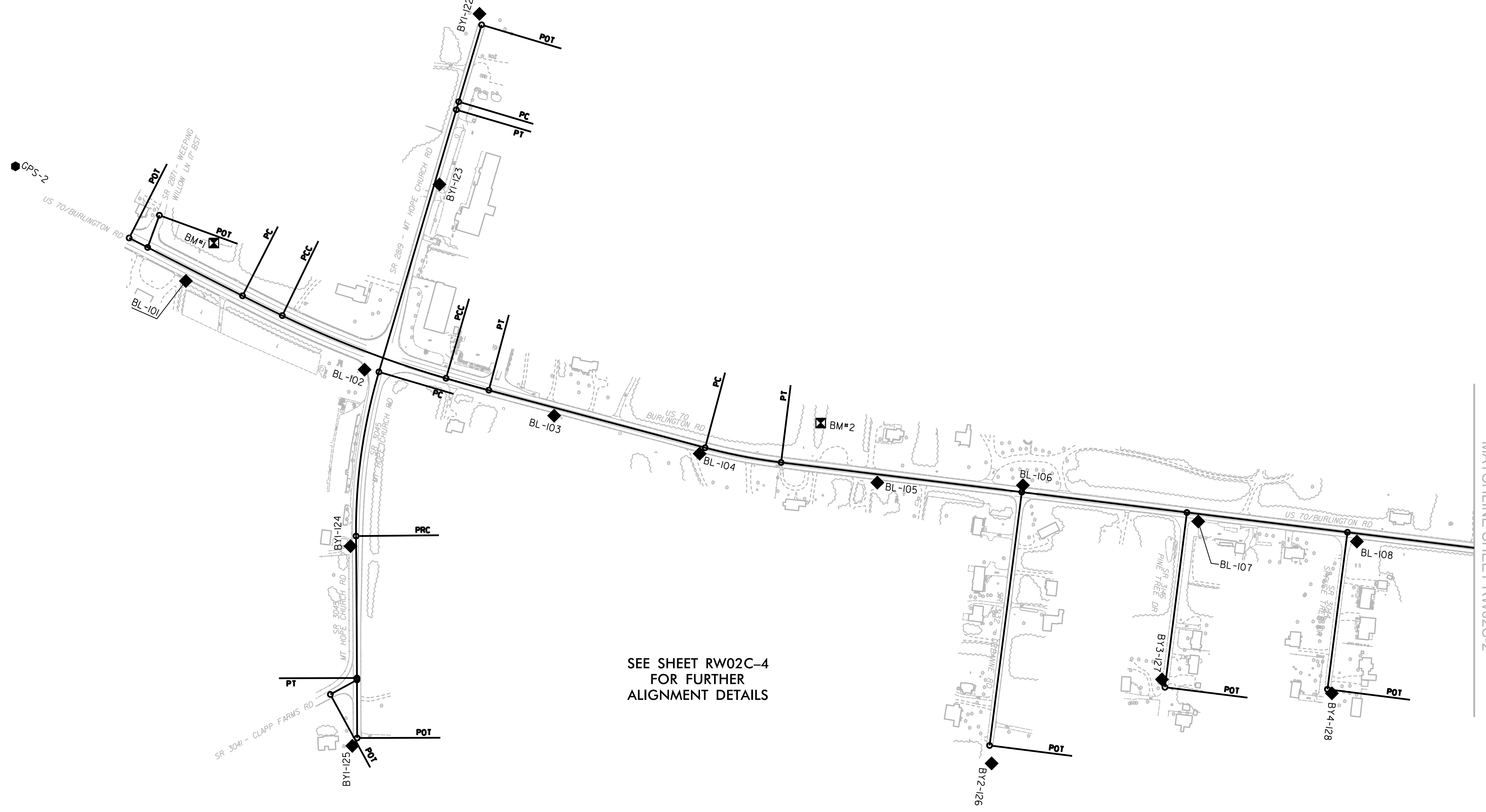
11/18/2019
Date



\$\$\$\$\$ SYSTEM \$\$\$\$\$\$
 \$\$\$ DDN \$\$\$
 \$\$\$ USERNAME \$\$\$

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-4
FOR FURTHER
ALIGNMENT DETAILS

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

6/2/99

REVISIONS

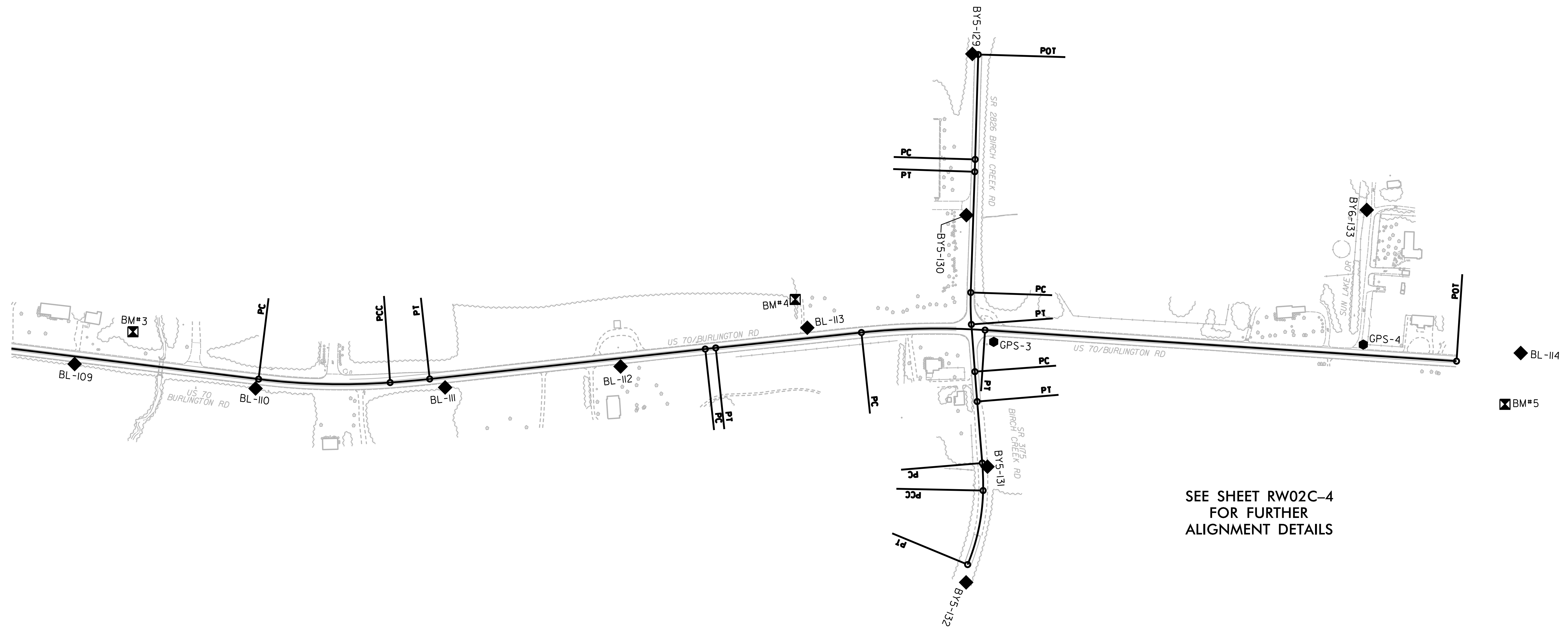
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MATCHLINE SHEET RW02C-2

PROJECT REFERENCE NO.	SHEET NO.
U-2581BA	RW02C-2
Location and Surveys	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-4
FOR FURTHER
ALIGNMENT DETAILS

NOTES:

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REVISIONS

6/2/99

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	851458.482	1798253.954							
LINE			S 62°56'59.4" E	380.33					
PC	851285.520	1798592.678							
CURVE			S 63°34'48.8" E	132.67	01°15'38.8"(LT)	00°57'01.2"	132.67	66.34	6029.08
PCC	851226.491	1798711.489							
CURVE			S 69°01'50.4" E	523.79	09°38'24.4"(LT)	01°50'17.9"	524.41	262.82	3116.79
PCC	851039.044	1799200.587							
CURVE			S 74°28'15.3" E	132.61	01°14'25.2"(LT)	00°56'07.1"	132.61	66.31	6125.86
PT	851003.540	1799328.357							
LINE			S 75°05'27.9" E	668.62					
PC	850831.515	1799974.472							
CURVE			S 79°01'42.8" E	231.20	07°52'29.8"(LT)	03°24'12.1"	231.39	115.88	1683.50
PT	850787.512	1800201.451							
LINE			S 82°57'57.7" E	2796.95					
PC	850445.003	1802977.347							
CURVE			S 88°31'13.0" E	375.51	11°06'30.7"(LT)	02°57'13.2"	376.09	188.64	1939.83
PCC	850435.307	1803352.727							
CURVE			N 84°51'46.6" E	113.40	02°07'30.0"(LT)	01°52'25.6"	113.41	56.71	3057.77
PT	850445.460	1803465.672							
LINE			N 83°48'01.7" E	791.03					
PC	850530.885	1804252.076							
CURVE			N 83°53'11.5" E	30.05	00°10'19.7"(RT)	00°34'22.6"	30.05	15.02	10000.00
PT	850534.085	1804281.951							
LINE			N 83°58'21.4" E	418.15					
PC	850577.992	1804697.789							
CURVE			N 88°52'15.8" E	352.91	09°47'48.7"(RT)	02°46'21.6"	353.34	177.10	2066.45
PT	850584.945	1805050.628							
LINE			S 86°13'49.9" E	1348.50					
POT	850496.291	1806396.213							

EY1 POINT	N	E	BEARING	DIST
POT	851526.346	1798344.345		
LINE			S 20°04'22.8" W	102.31
POT	851430.256	1798309.232		

EY3 POINT	N	E	BEARING	DIST
POT	850137.575	1798934.464		
LINE			S 61°23'20.3" W	90.54
POT	850094.219	1798854.980		

EY4 POINT	N	E	BEARING	DIST
POT	850698.794	1800920.476		
LINE			S 07°14'28.7" W	763.21
POT	849941.672	1800824.275		

EY5 POINT	N	E	BEARING	DIST
POT	850637.938	1801413.685		
LINE			S 07°09'46.6" W	526.48
POT	850115.566	1801348.037		

EY6 POINT	N	E	BEARING	DIST
POT	850578.762	1801893.287		
LINE			S 07°14'33.6" W	472.99
POT	850109.548	1801833.657		

EY2 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	852095.518	1799306.892							
LINE			S 16°35'05.5" W	239.76					
PC	851865.732	1799238.456							
CURVE			S 16°30'46.6" W	25.10	00°08'37.7"(LT)	00°34'22.6"	25.10	12.55	10000.00
PT	851841.668	1799231.322							
LINE			S 16°26'27.7" W	816.97					
PC	851058.104	1799000.097							
CURVE			S 07°56'20.7" W	495.32	17°00'14.0"(LT)	03°25'13.2"	497.14	250.41	1675.15
PCC	850567.533	1798931.683							
CURVE			S 00°22'23.1" E	424.25	00°22'46.3"(RT)	00°05'22.1"	424.25	212.12	64046.66
PT	850143.295	1798934.446							
LINE			S 00°10'59.9" E	179.36					
POT	849963.934	1798935.020							

EY7 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	851371.167	1805031.203							
LINE			S 01°41'55.3" W	299.38					
PC	851071.914	1805022.328							
CURVE			S 01°47'58.9" W	35.26	00°12'07.3"(RT)	00°34'22.6"	35.26	17.63	10000.00
PT	851036.671	1805021.221							
LINE			S 01°54'02.6" W	344.61					
PC	850692.247	1805009.791							
CURVE			S 01°09'22.6" E	91.17	06°06'50.3"(LT)	06°42'11.2"	91.21	45.65	854.76
PT	850601.098	1805011.630							
LINE			S 04°12'47.7" E	135.12					
PC	850466.347	1805021.557							
CURVE			S 04°27'29.7" E	85.51	00°29'23.9"(LT)	00°34'22.6"	85.51	42.76	10000.00
PT	850381.092	1805028.204							
LINE			S 04°42'11.6" E	176.03					
PC	850205.653	1805042.638							
CURVE			S 01°46'16.7" E	78.51	05°51'49.8"(RT)	07°27'56.6"	78.54	39.31	767.45
PCC	850127.182	1805045.065							
CURVE			S 11°49'00.3" W	215.76	21°18'44.2"(RT)	09°49'14.6"	217.01	109.78	583.42
PT	850127.182	1805045.065							

NOTES:

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REVISIONS

6/2/09

0:\01\609_0000\1\000516-2581ba RW stakeout revisions (3rd set)\Geometrics\NCDDT\Submit\ALL RW SHEETS\2581ba_ls-rw02c-4.dgn

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. U-2581BA	SHEET NO. RW03E-1
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I, Rudolf A. VanderVelde Jr., a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 1st day of October, 2019.

Rudolf A. VanderVelde Jr. 10/1/2019
Professional Land Surveyor

L-5146
PLS #

Seal

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	17+25.00	-41.20	851190.6258	1798925.3740
L	19+42.00	-54.00	851130.2015	1799131.8796
L	22+45.00	-54.00	851044.8973	1799418.9398
L	22+45.00	-45.73	851036.8979	1799416.8407
L	25+22.43	-42.00	850965.6409	1799684.4765
L	27+84.53	-42.00	850901.8767	1799938.7000
L	31+21.70	-42.00	850841.2527	1800264.8698
L	37+15.00	49.68	850678.1707	1800842.6355
L	38+43.00	49.81	850662.4961	1800969.6721
L	42+27.00	50.18	850615.4722	1801350.7822
L	43+40.00	50.29	850601.6345	1801462.9318
L	46+50.11	-42.00	850655.5705	1801781.9536
L	47+25.00	49.66	850554.6567	1801843.6682
L	48+26.00	45.18	850542.4923	1801942.2553
L	48+70.79	42.00	850537.0819	1801986.1050
L	49+01.12	-42.00	850612.9834	1802033.1651
L	49+01.12	42.00	850530.9008	1802015.3201
L	49+71.60	-42.00	850598.3820	1802101.7465
L	53+00.00	42.00	850455.2883	1802409.0118
L	53+00.00	46.00	850451.3429	1802408.3531
L	56+89.00	46.00	850396.0999	1802795.5779
L	57+88.00	54.00	850377.0227	1802893.6637
L	58+07.03	54.00	850375.0201	1802912.7099
L	59+85.00	54.00	850362.1681	1803093.7293
L	60+20.00	109.00	850306.0533	1803128.0148
L	60+54.00	-92.99	850507.3505	1803165.9551
L	60+54.00	-66.68	850481.0462	1803165.6185
L	61+03.18	-66.22	850480.4041	1803213.5945
L	61+04.27	-89.06	850503.2547	1803214.5252
L	61+11.00	109.00	850305.2425	1803222.6536
L	61+48.00	54.00	850360.8052	1803259.9348
L	62+15.00	54.00	850363.1333	1803328.2236
L	62+15.00	42.00	850375.1204	1803327.6670
L	63+94.85	42.00	850389.6135	1803509.6862
L	71+03.36	42.00	850469.1655	1804213.7190
L	72+55.00	42.00	850484.7080	1804363.7681
L	72+55.00	54.00	850472.7609	1804364.8934
L	77+85.00	54.00	850505.0594	1804890.2972
L	78+15.00	-59.59	850619.4142	1804917.2254
L	78+50.00	86.00	850474.6736	1804955.5153
L	79+74.00	-54.00	850616.3028	1805077.3980
L	80+05.00	86.00	850476.4213	1805108.8674
L	80+50.00	54.00	850508.3822	1805153.5088
L	80+50.00	42.00	850520.3821	1805153.5524
L	81+01.00	-54.00	850616.0343	1805205.2379
L	82+01.00	-42.00	850602.4240	1805305.6210
L	85+56.57	42.00	850502.8951	1805657.1257
L	85+56.57	-42.00	850586.7133	1805662.6481
L	89+75.00	-42.00	850559.2047	1806080.1743
L	91+80.00	30.00	850473.8832	1806279.9974
L	91+80.00	42.00	850461.9092	1806279.2085

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	13+85.00	50.00	851740.5911	1799149.3636
Y1	14+85.00	70.00	851650.3406	1799101.8785
Y1	17+55.00	70.00	851391.3805	1799025.4608
Y1	17+55.00	50.00	851385.7199	1799044.6431
Y1	19+22.85	50.00	851224.7372	1798997.1380
Y1	19+35.00	-58.61	851182.3391	1799097.8704

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	10+73.00	62.38	851055.6676	1798938.4408
Y2	11+01.09	-75.00	850998.8122	1799066.6001
Y2	11+15.89	35.00	851007.1985	1798955.9408
Y2	16+00.00	-75.00	850517.7890	1799008.8723
Y2	16+70.00	-57.59	850449.7633	1798990.4550
Y2	16+96.04	35.00	850423.5766	1798897.9347
Y2	19+62.55	35.00	850157.2169	1798899.3995

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y3	10+78.00	29.21	850644.6959	1800884.1589
Y3	10+79.00	-28.00	850636.4929	1800940.7853
Y3	13+25.00	-21.36	850393.2921	1800903.1883

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y4	10+80.00	-23.77	850575.6825	1801429.8179
Y4	10+80.00	26.23	850581.9171	1801380.2081

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y5	10+85.00	24.80	850515.4921	1801860.2441
Y5	10+90.00	-25.20	850504.2284	1801909.2148

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y6	13+90.00	30.00	850982.3415	1804989.4011
Y6	14+00.00	-30.00	850970.3570	1805049.0364
Y6	14+00.00	-40.00	850970.0253	1805059.0309
Y6	14+50.00	55.00	850923.2037	1804962.4248
Y6	15+87.60	-40.00	850782.5242	1805052.8085
Y6	17+25.00	36.00	850646.0889	1804975.2904
Y6	17+30.00	-40.00	850641.9680	1805051.3429

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y7	12+06.00	29.65	850587.8936	1806095.8997

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6/2/09
REVISIONS
0:\01-2019-15-0000\01-2581ba RW stakeout revisions (3rd set)\Geometrics\NCDOT\Submittal\ALL RW SHEETS\U2581ba.ls.rw03e-1.dgn
Rudolf A. VanderVelde

PERMANENT EASEMENT CONTROL SHEET



ROW MARKER PERMANENT EASEMENT - E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	11-85.00	-49.17	851418.1367	1798441.0759
L	11-85.00	-75.00	851441.1452	1798452.8247
L	12-32.17	-49.17	851396.6836	1798483.0890
L	12-32.17	-75.00	851419.6921	1798494.8378
L	15-57.00	-72.00	851281.5173	1798783.1328
L	15-57.00	-47.86	851259.3152	1798773.6673
L	17-31.00	-80.00	851224.7256	1798944.8119
L	17-31.00	-87.00	851231.2620	1798947.3169
L	17-41.00	-90.00	851230.5629	1798957.5532
L	17-41.00	-80.00	851221.2176	1798953.9944
L	17-53.00	87.30	851060.5351	1798905.8842
L	17-53.00	64.68	851081.6972	1798913.8811
L	17-63.00	-80.70	851214.2233	1798974.4678
L	19-49.00	101.00	850980.8715	1799089.7484
L	19-49.00	91.20	850990.1753	1799092.8274
L	19-58.00	101.00	850977.9915	1799098.4790
L	19-58.00	91.00	850987.4911	1799101.6027
L	20-50.00	80.00	850969.5855	1799194.2032
L	20-50.00	92.00	850958.1148	1799190.6786
L	20-57.00	80.00	850967.4996	1799201.0099
L	20-57.00	92.00	850956.0236	1799197.5024
L	20-86.00	80.50	850958.4870	1799229.0987
L	23-17.00	81.00	850896.3138	1799455.2962
L	23-26.92	-44.83	851015.9463	1799495.5333
L	23-27.00	-54.00	851024.8249	1799497.8391
L	23-45.00	-44.57	851011.2950	1799513.0031
L	23-45.00	-54.00	851020.4458	1799515.2983
L	24-54.00	88.00	850856.1942	1799586.4771
L	24-54.00	82.00	850862.0140	1799587.9368
L	24-64.00	88.00	850853.7614	1799596.1767
L	24-64.00	82.00	850859.5811	1799597.6364
L	25-35.00	-42.00	850962.5824	1799696.6704
L	25-35.00	-55.00	850975.1919	1799699.8330
L	25-52.00	-55.00	850971.0560	1799716.3223
L	25-52.00	-42.00	850958.4466	1799713.1596
L	26-37.00	83.00	850816.5231	1799765.1953
L	26-94.00	105.00	850781.3169	1799815.1305
L	27-05.00	91.00	850792.2202	1799829.2060
L	27-05.00	62.90	850819.4787	1799836.0430
L	27-05.00	83.00	850799.9798	1799831.1523
L	28-87.00	-42.00	850879.1805	1800036.9990
L	28-87.00	-52.00	850888.9648	1800039.0647
L	29-05.00	86.00	850750.1656	1800028.7382
L	29-05.00	76.00	850759.9634	1800030.7392
L	29-10.00	-78.00	850909.8814	1800066.3136
L	29-12.00	76.00	850758.5326	1800037.7911
L	29-12.00	86.00	850748.7297	1800035.8153
L	29-25.00	76.00	850755.9237	1800050.8971
L	29-25.00	65.00	850766.7171	1800053.0189
L	29-34.00	52.22	850777.5061	1800064.4881
L	29-34.00	65.00	850764.9546	1800062.0639
L	29-45.00	-66.00	850891.5633	1800097.4492
L	29-45.00	-42.00	850867.9806	1800092.9932
L	29-45.00	-78.00	850903.3546	1800099.6773
L	32-70.00	-66.00	850847.0585	1800414.9856
L	32-73.00	-73.00	850853.6422	1800418.8138
L	32-80.00	-69.00	850848.8214	1800425.2760
L	32-80.00	-66.00	850845.8437	1800424.9115
L	34-36.00	-70.50	850831.3583	1800580.3027
L	34-36.00	-66.00	850826.8916	1800579.7560
L	34-43.00	-70.50	850830.5078	1800587.2509
L	34-43.00	-65.01	850825.0552	1800586.5835
L	35-55.00	-62.00	850808.4642	1800697.3886
L	36-62.00	-42.00	850775.6132	1800801.1663
L	36-62.00	-63.93	850797.3787	1800803.8303
L	36-82.00	-62.89	850793.9205	1800823.5563
L	36-82.00	-42.00	850773.1834	1800821.0182
L	37-97.00	-66.00	850783.0346	1800938.0821
L	38-36.00	-66.00	850778.2965	1800976.7932
L	39-40.00	49.90	850650.6177	1801065.9421
L	39-40.00	55.00	850645.5581	1801065.3229
L	39-60.00	49.92	850648.1685	1801085.7916
L	39-60.00	55.00	850643.1283	1801085.1747
L	41-32.00	-72.00	850748.2918	1801271.3296
L	41-32.00	-62.00	850738.3658	1801270.1148
L	41-40.00	-62.00	850737.3939	1801278.0555
L	41-40.00	-71.00	850746.3273	1801279.1489
L	42-93.00	-71.00	850727.7397	1801431.0156
L	42-93.00	-61.00	850717.8137	1801429.8007
L	43-00.00	-71.00	850726.8892	1801437.9638
L	43-00.00	-61.00	850716.9633	1801436.7489
L	43-05.00	-42.00	850697.4966	1801439.4036
L	43-05.00	-61.00	850716.3559	1801441.7119
L	43-25.00	-42.00	850695.0669	1801459.2555
L	43-25.00	-61.00	850713.9261	1801461.5637
L	44-34.00	-61.00	850700.6840	1801569.7564
L	44-34.00	-42.00	850681.8247	1801567.4481
L	44-52.00	-61.03	850698.5306	1801587.6271
L	44-52.00	-42.00	850679.6379	1801585.3148
L	46-95.00	58.00	850550.6138	1801813.3699
L	46-95.00	50.28	850558.2637	1801814.4346
L	47-11.00	49.99	850556.3402	1801830.0241

ROW MARKER PERMANENT EASEMENT - E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	47-11.50	58.00	850548.3392	1801829.3569
L	47-36.00	-69.00	850670.2923	1801872.4707
L	47-36.00	-61.46	850662.8393	1801871.3186
L	47-46.00	-60.89	850660.6997	1801881.3331
L	47-46.00	-69.00	850668.7073	1801882.6011
L	48-55.00	-63.00	850643.1367	1801991.4360
L	49-25.41	42.00	850525.7498	1802039.1836
L	49-31.00	65.00	850502.0810	1802039.8767
L	49-55.00	62.00	850499.9981	1802064.1605
L	49-55.00	42.00	850519.5691	1802068.2808
L	49-68.00	-66.00	850622.6058	1802103.1512
L	49-88.00	-66.00	850618.5731	1802122.5760
L	49-88.00	-43.34	850596.3770	1802117.9963
L	50-24.00	-66.00	850611.4338	1802157.5653
L	50-24.00	-76.00	850621.2362	1802159.5430
L	50-31.00	-76.00	850619.8675	1802166.3418
L	50-31.00	-66.00	850610.0634	1802164.3724
L	52-37.70	42.00	850465.8352	1802347.2841
L	53-23.00	-84.00	850575.8510	1802452.2196
L	53-66.00	95.00	850392.2826	1802466.1808
L	54-80.00	93.00	850376.9842	1802580.4849
L	54-80.00	46.00	850423.4973	1802587.2045
L	55-28.00	136.00	850327.5863	1802622.6508
L	55-35.00	-54.09	850514.9280	1802655.6175
L	55-35.00	-91.00	850551.4933	1802660.6499
L	55-36.00	92.60	850369.4711	1802636.6193
L	55-40.00	-158.00	850617.2005	1802674.6429
L	55-73.00	173.00	850284.7574	1802663.1068
L	55-82.00	-158.00	850611.7139	1802715.4665
L	56-06.00	-54.77	850506.2908	1802725.6184
L	56-06.00	-92.00	850543.2134	1802730.3746
L	56-10.00	46.00	850405.8314	1802716.7333
L	56-10.00	92.67	850359.5437	1802710.7937
L	57-23.01	-96.00	850533.2247	1802845.6844
L	57-57.00	95.00	850339.6266	1802858.1522
L	59-57.00	-98.00	850515.2261	1803072.5629
L	61-35.00	-86.22	850500.7441	1803244.2980
L	61-35.00	-66.23	850480.7608	1803244.6374
L	61-64.00	54.00	850361.2083	1803276.2475
L	61-64.00	64.00	850351.2121	1803276.5239
L	61-64.00	-83.00	850498.1559	1803272.4605
L	61-67.00	92.00	850323.3102	1803280.3981
L	61-75.00	92.00	850323.5601	1803288.6649
L	61-81.00	64.00	850351.7474	1803293.9166
L	61-81.00	54.00	850361.7417	1803293.5767
L	63-90.00	62.00	850369.1873	1803507.0007
L	64-10.00	42.00	850391.3144	1803524.7390
L	64-10.00	62.00	850371.4409	1803526.9846
L	64-54.00	-80.00	850517.4833	1803554.7626
L	64-54.00	-89.00	850526.4264	1803553.7521
L	64-55.00	-58.00	850495.7347	1803558.2264
L	64-55.00	-48.01	850485.8125	1803559.3476
L	64-61.00	-89.00	850527.2123	1803560.7078
L	64-61.00	-80.00	850518.2693	1803561.7183
L	64-75.00	-58.00	850497.9803	1803578.1000
L	64-75.00	-47.93	850487.9723	1803579.2308
L	65-60.00	62.00	850388.2829	1803676.0361
L	65-60.00	42.00	850408.1564	1803673.7905
L	65-95.00	62.00	850392.2127	1803710.8148
L	65-95.00	42.00	850412.0863	1803708.5692
L	66-90.00	42.00	850422.7529	1803802.9684
L	66-90.00	-47.00	850511.1907	1803792.9754
L	66-90.00	-59.00	850523.1142	1803791.6282
L	66-90.00	62.00	850402.8793	1803805.2141
L	67-10.00	-46.91	850513.3506	1803812.8587
L	67-10.00	62.00	850405.1249	1803825.0876
L	67-10.00	42.00	850424.9985	1803822.8420
L	67-10.00	-59.00	850525.3598	1803811.5017
L	67-48.00	-80.00	850550.4937	1803846.9035
L	67-48.00	-89.00	850559.4367	1803845.8930
L	67-57.00	-80.00	850551.5042	1803855.8466
L	67-57.00	-89.00	850560.4473	1803854.8361
L	71-15.00	-59.00	850570.8344	1804214.0253
L	71-15.00	-45.17	850557.0944	1804215.5580
L	71-35.00	-45.14	850559.2662	1804235.5512
L	71-35.00	-59.00	850573.0431	1804234.0487
L	71-50.00	-45.15	850560.8949	1804250.5461
L	71-50.00	-77.00	850592.5649	1804247.1510
L	72-75.00	104.00	850424.8086	1804389.2422
L	72-75.00	54.00	850474.5996	1804384.6756
L	73-45.00	70.00	850464.7079	1804455.2720
L	73-45.00	54.00	850480.6530	1804453.9476
L	73-65.00	-78.00	850613.8466	1804463.1456
L	73-65.00	-88.00	850623.8143	1804462.3423
L	73-65.00	-47.70	850583.6403	1804465.5799
L	73-76.00	-88.00	850624.7000	1804473.4258
L</				


6/2/19

I, Rudolf A. VanderVelde Jr., a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 1st day of October, 2019.

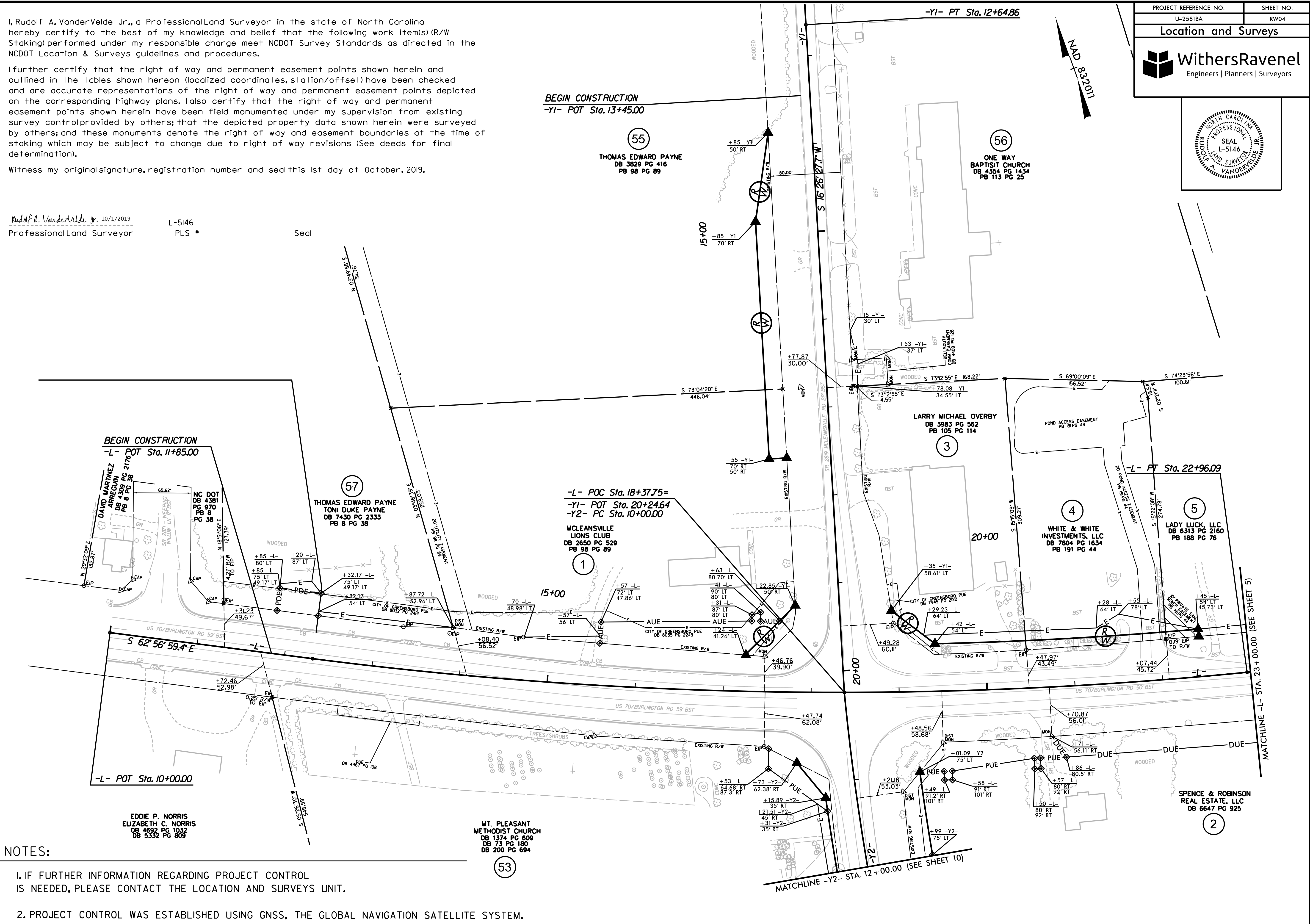
Rudolf A. VanderVelde Jr. 10/1/2019
Professional Land Surveyor L-5146
PLS # Seal

PROJECT REFERENCE NO.	SHEET NO.
U-2581BA	RW04
Location and Surveys	
 WithersRavenel Engineers Planners Surveyors	



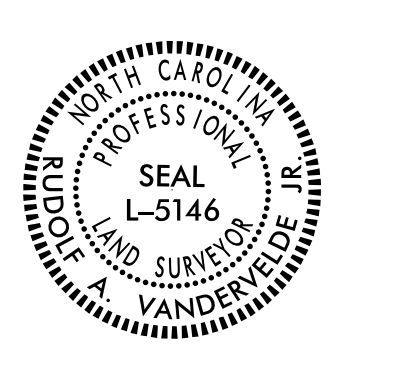
REVISIONS

6/2/19
U:\15-0000\15000516-U2581BA-RW-SHEETS\U2581BA-1s-rw04.dgn
R:\15-0000\15000516-U2581BA-RW-stakeout-revisions (3rd set)\Geometrics\NCDOT\Submittal\ALL_RW_SHEETS\U2581BA-1s-rw04.dgn
6/2/19
Rudolf A. VanderVelde



NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.



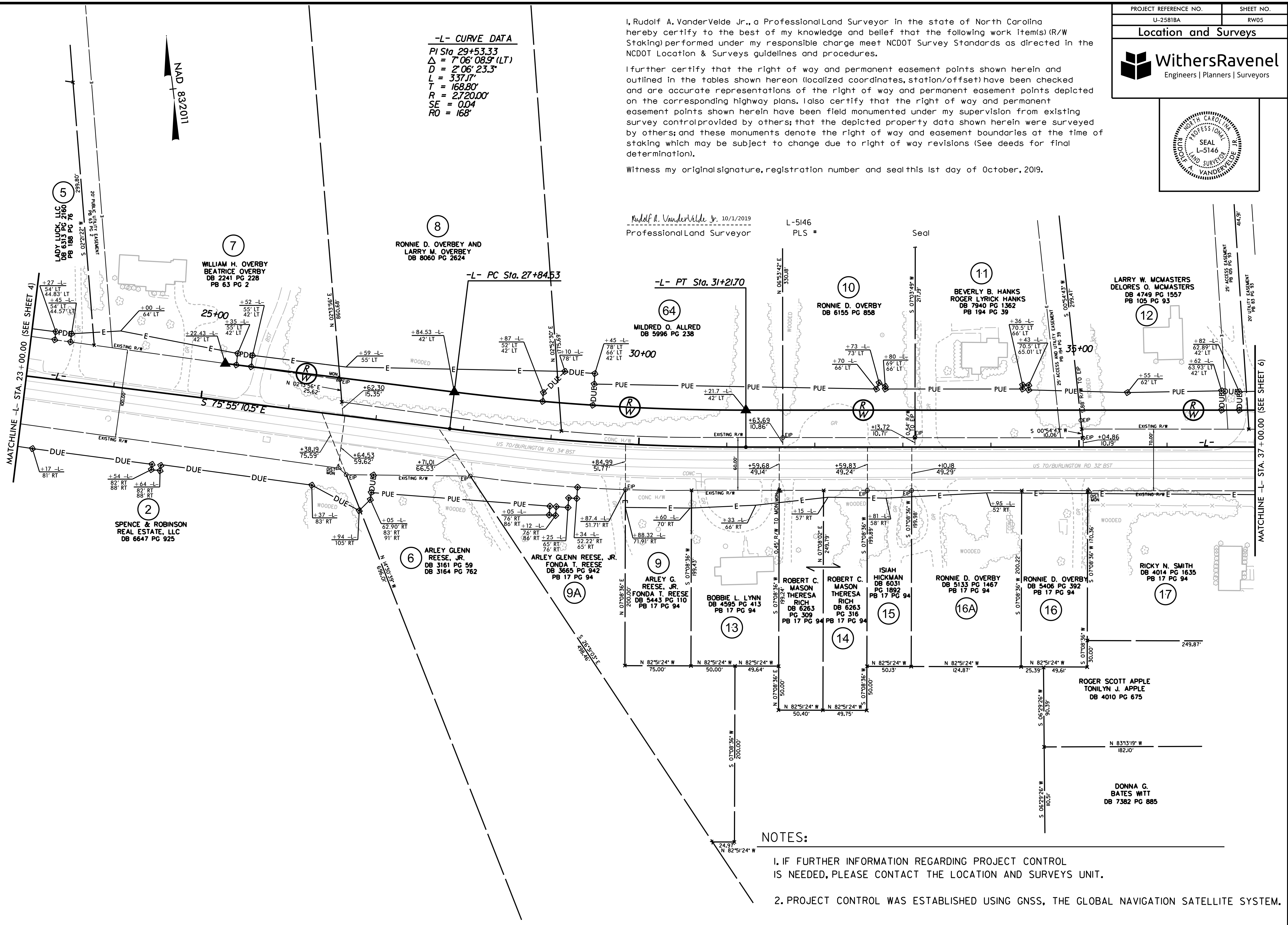
I, Rudolf A. VanderVelde Jr., a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

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Rudolf A. VanderVelde Jr. 10/1/2019
 Professional Land Surveyor L-5146 PLS # Seal

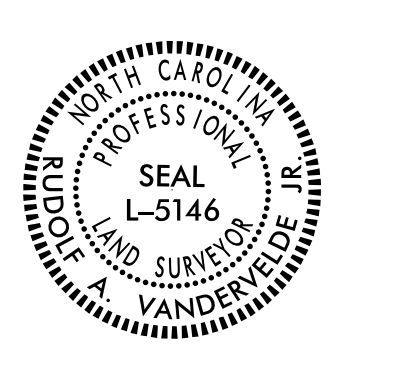
-L- CURVE DATA
 PI Sta 29+53.33
 $\Delta = 7^{\circ}06'08.9''$ (LT)
 $D = 2^{\circ}06'23.3''$
 $L = 337.17'$
 $T = 168.80'$
 $R = 2,720.00'$
 $SE = 0.04$
 $RO = 168'$



- NOTES:**
- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
 - PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

6/2/2019 15:45:25 K:\15-00000\150000516-U2581BA RW stakeout revisions (3rd set)\Geometrics\NCDOT\Submittal\ALL RW SHEETS\U2581BA.LS.rw05.dgn



-L- CURVE DATA

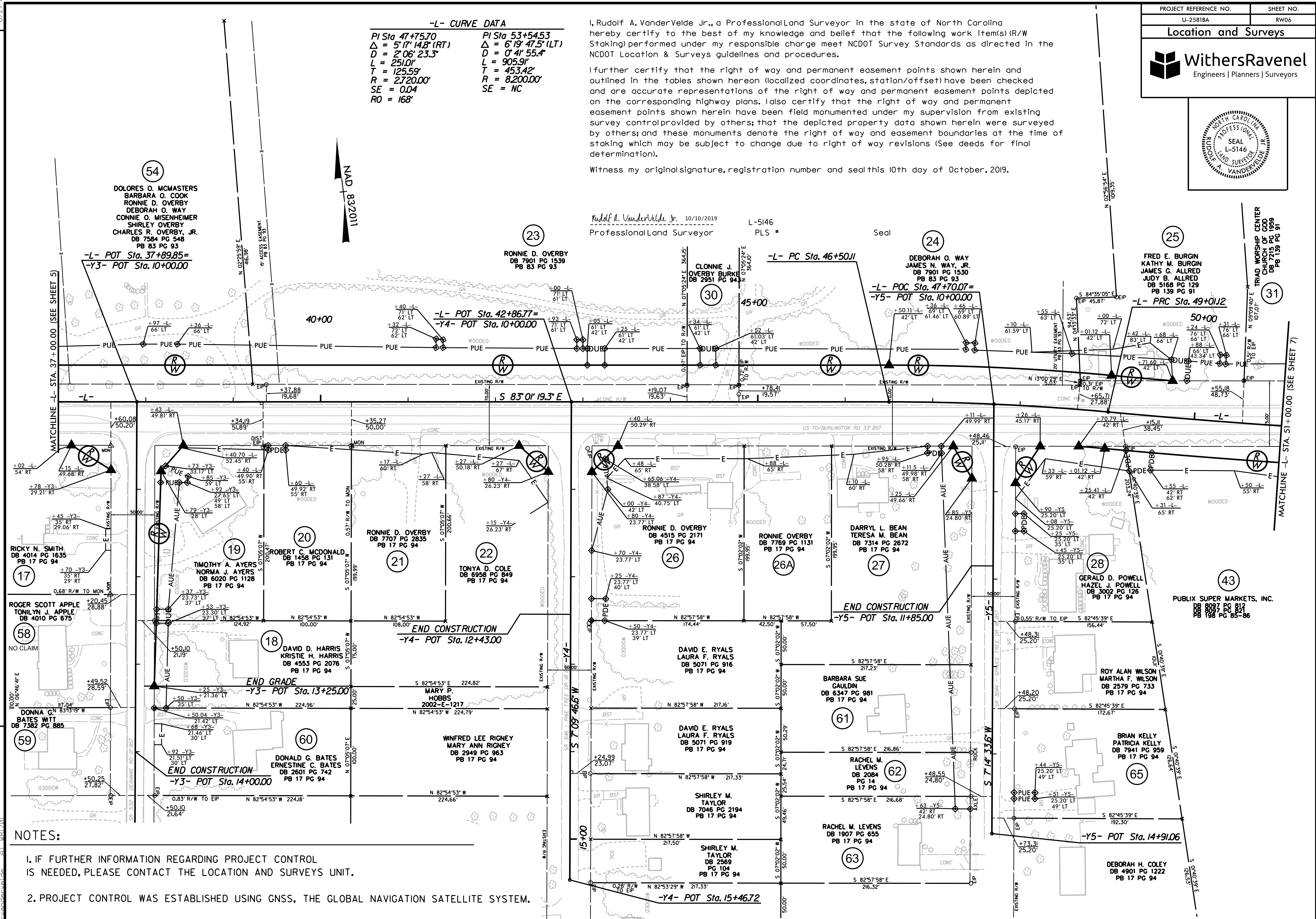
<i>PI Sta 47+75.70</i>	<i>PI Sta 53+54.53</i>
$\Delta = 5^{\circ}17'14.8''$ (RT)	$\Delta = 6^{\circ}19'47.5''$ (LT)
$D = 2^{\circ}06'23.3''$	$D = 0^{\circ}41'55.4''$
$L = 251.0'$	$L = 905.9'$
$T = 125.59'$	$T = 453.42'$
$R = 2,720.00'$	$R = 8,200.00'$
$SE = 0.04$	$SE = NC$
$RO = 168'$	

I, Rudolf A. VanderVelde Jr., a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 10th day of October, 2019.

Rudolf A. VanderVelde Jr. 10/10/2019
 Professional Land Surveyor L-5146 PLS # Seal



- NOTES:**
- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
 - PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

6/2/2019
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 10/10/2019 07:48



I, Rudolf A. VanderVelde Jr., a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

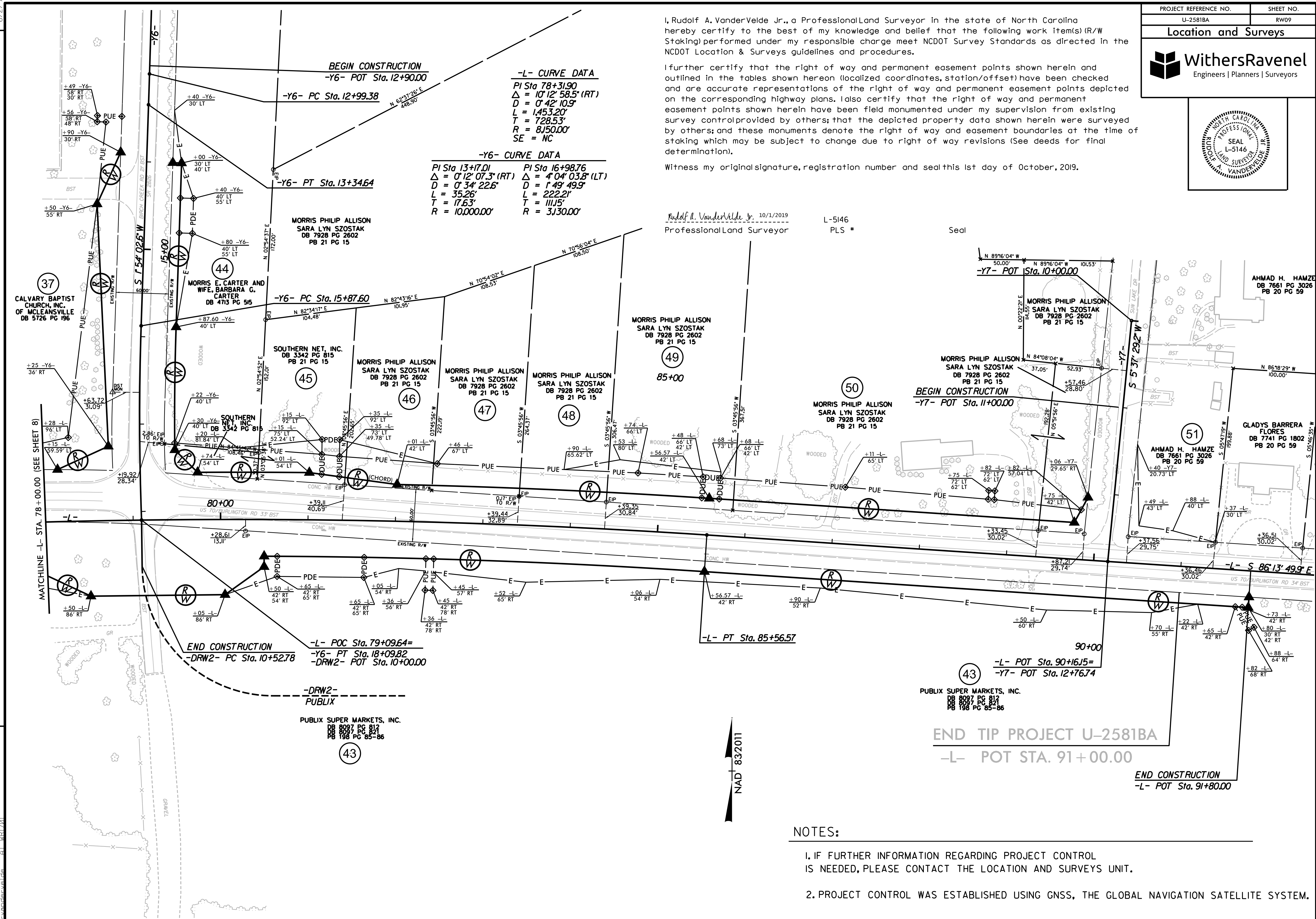
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Witness my original signature, registration number and seal this 1st day of October, 2019.

Rudolf A. VanderVelde Jr. 10/1/2019
 Professional Land Surveyor

L-5146
 PLS #

Seal



REVISIONS

6/2/19
 01:08:2019 15:35:25
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 RW stakeout revisions (3rd set)\Geometrics\NCDOT\Submittal\ALL RW SHEETS\U-2581BA.LS.rw09.dgn

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