
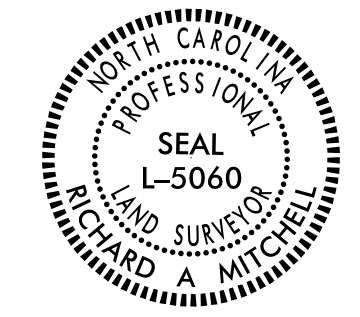
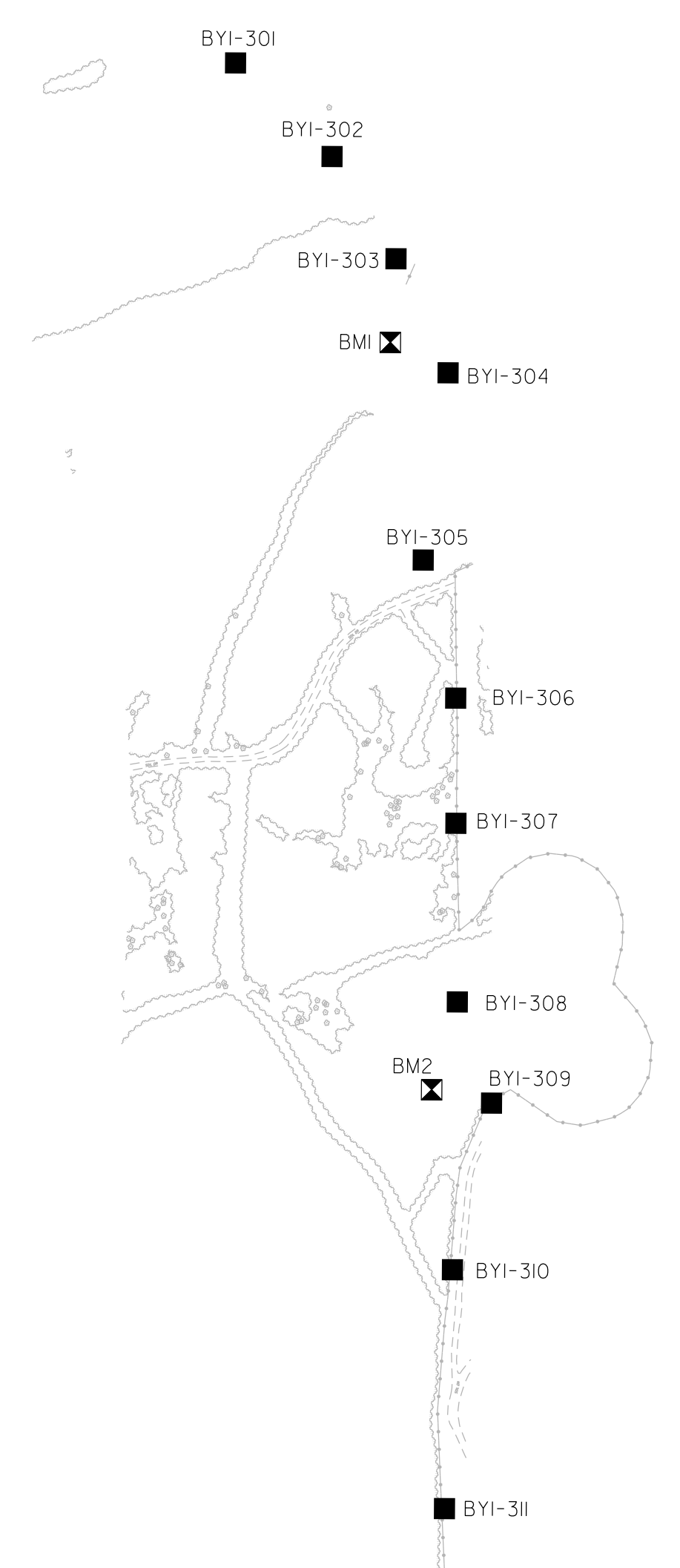


SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. HE-0011	SHEET NO. RW02C-1
Location and Surveys	
	
<small>1730 VARSITY DRIVE RALEIGH, NC 27606 (P) 919-233-8091</small>	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



I, Richard A. Mitchell, PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
 Type of GPS field procedure: RTN
 Dates of survey: 11/22-12/22
 Datum/Epoch: NAD 1983/NA 2011
 Published/Fixed-control use: N/A
 Localized around: CAM421-3
 Northing: 739883.8940
 Easting: 1848086.6530
 Combined grid factor: 0.99988768
 Geoid model: G18US
 Units: USFT

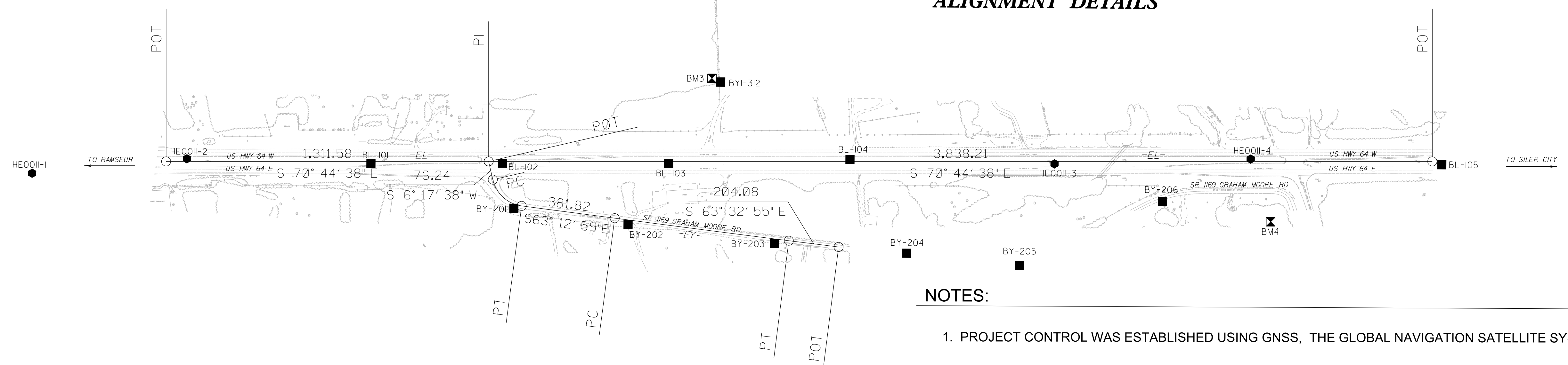
I also certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 11/22 to 12/22, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of January, 2023.

DocuSigned by:
 1/3/2023
5461700584E49F...

Richard A. Mitchell
 Professional Land Surveyor L-5060

**SEE SHEET RW02C-3
 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.

REVISIONS



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 MB Taylor AT MC06829

REVISIONS

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MBT/lor AT MCG829

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
HE-0011	RW02C-2
Location and Surveys	
 <small>1730 VARSITY DRIVE RALEIGH, NC 27606 (P) 919-233-6091</small>	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Richard A. Mitchell, PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
 Type of GPS field procedure: RTN
 Dates of survey: 11/22-12/22
 Datum/Epoch: NAD 1983/NA 2011
 Published/Fixed-control use: N/A
 Localized around: CAM421-3
 Northing: 739883.8940
 Easting: 1848086.6530
 Combined grid factor: 0.99988768
 Geoid model: G18US
 Units: USFT

I also certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 11/22 to 12/22, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of January, 2023.

DocuSigned by:

 1/3/2023

Richard A. Mitchell
Professional Land Surveyor L-5060

BL	POINT	DESC.	NORTH	EAST	ELEVATION
1		HE0011-1	725912.7690	1837125.0310	571.55
2		HE0011-2	725760.8320	1837738.3350	571.77
101		BL-101	725495.9360	1838438.6090	561.38
102		BL-102	725320.4670	1838943.8850	569.48
103		BL-103	725096.1720	1839581.5560	581.15
104		BL-104	724868.6750	1840283.2830	580.96
3		HE0011-3	724577.4500	1841062.8730	570.63
4		HE0011-4	724332.7930	1841822.5850	584.54
105		BL-105	724054.6140	1842548.6250	605.22

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
301		BY1-301	728458.7150	1840565.0890	603.82
302		BY1-302	728247.7960	1840670.8690	599.01
303		BY1-303	728041.4080	1840717.7290	585.37
304		BY1-304	727822.2690	1840738.0590	602.72
305		BY1-305	727526.4370	1840588.4920	615.47
306		BY1-306	727278.8570	1840562.4380	630.60
307		BY1-307	727071.3940	1840490.3200	628.34
308		BY1-308	726774.5970	1840389.2770	599.39
309		BY1-309	726587.1630	1840387.4350	597.14
310		BY1-310	726333.7510	1840226.1710	602.60
311		BY1-311	725942.6050	1840074.7320	605.41
312		BY1-312	725339.9030	1839890.9450	598.13
A103		BL-103	725096.1720	1839581.5560	581.15

***** BM1 ELEVATION = 602.01 N 727906 E 1840660 SET IN 11' PINE *****	***** BM2 ELEVATION = 591.96 N 726644 E 1840296 SET IN 14' OAK *****
---	--

***** BM3 ELEVATION = 599.79 N 725366 E 1839862 SET IN 6' PINE *****	***** BM4 ELEVATION = 601.64 N 724065 E 1841815 SET IN 19' OAK *****
--	--

NOTES:



- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- 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.

REVISIONS

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. HE-0011	SHEET NO. RW02C-3
Location and Surveys	
 1730 VARSITY DRIVE RALEIGH, NC 27605 (P) 919-233-8061	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Richard A. Mitchell, PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
 Type of GPS field procedure: RTN
 Dates of survey: 11/22-12/22
 Datum/Epoch: NAD 1983/NA 2011
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 Easting: 1848086.6530
 Combined grid factor: 0.99988768
 Geoid model: G18US
 Units: USFT

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This 3rd day of January, 2023.

DocuSigned by:
 1/3/2023
 54617600584E49F

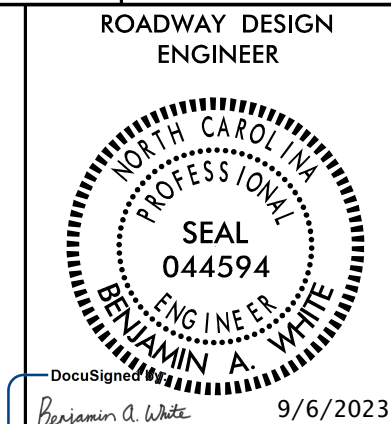
Richard A. Mitchell
 Professional Land Surveyor L-5060

EL				
POINT	N	E	BEARING	DIST
POT	725778.547	1837655.151		
LINE			S 70°44'38.5" E	1311.58
POT	725346.002	1838893.354		
LINE			S 70°44'38.3" E	3838.21
POT	724080.199	1842516.829		

EY									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	725346.002	1838893.354							
LINE			S 06°17'38.5" W	76.24					
PC	725270.223	1838884.996							
CURVE			S 28°27'40.2" E	158.68	69°30'37.4"(L.T)	41°10'06.8"	168.84	96.57	139.17
PT	725130.723	1838960.616							
LINE			S 63°12'58.9" E	381.82					
PC	724958.667	1839301.472							
CURVE			S 63°21'42.2" E	713.94	00°17'26.5"(L.T)	00°02'26.6"	713.94	356.97	140722.00
PT	724638.566	1839939.632							
LINE			S 63°32'55.0" E	204.08					
POT	724547.662	1840122.345							

NOTES:

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CENTERLINE COORDINATE LIST

Point #	Chain	Station	Northing (Y)	Easting (X)
1	Y1	10+00.00	725149.2310	1839456.5891
2	Y1	10+50.00	725196.4336	1839473.0789
3	Y1	11+00.00	725243.6362	1839489.5687
4	Y1	11+50.00	725290.8388	1839506.0585
5	Y1	12+00.00	725338.0414	1839522.5483
6	Y1	12+50.00	725385.2440	1839539.0381
7	Y1	13+00.00	725432.4466	1839555.5279
8	Y1	13+50.00	725479.6493	1839572.0177
9	Y1	14+00.00	725526.8519	1839588.5075
10	Y1	14+50.00	725574.0545	1839604.9973
11	Y1	15+00.00	725621.2571	1839621.4871
12	Y1	15+50.00	725668.4597	1839637.9769
13	Y1	16+00.00	725715.6623	1839654.4667
14	Y1	16+50.00	725762.8649	1839670.9565
15	Y1	17+00.00	725810.0619	1839687.4625
16	Y1	17+50.00	725857.1769	1839704.2006
17	Y1	18+00.00	725904.1846	1839721.2377
18	Y1	18+50.00	725951.0832	1839738.5732
19	Y1	19+00.00	725997.8707	1839756.2062
20	Y1	19+50.00	726044.5452	1839774.1361
21	Y1	20+00.00	726091.1048	1839792.3622
22	Y1	20+50.00	726137.5477	1839810.8838
23	Y1	21+00.00	726183.8720	1839829.7000
24	Y1	21+50.00	726230.0797	1839848.8008
25	Y1	22+00.00	726276.2535	1839867.9837
26	Y1	22+50.00	726322.4273	1839887.1667
27	Y1	23+00.00	726368.6010	1839906.3496
28	Y1	23+50.00	726414.7748	1839925.5325
29	Y1	24+00.00	726460.9485	1839944.7154
30	Y1	24+50.00	726507.1223	1839963.8983

Point #	Chain	Station	Northing (Y)	Easting (X)
31	Y1	25+00.00	726553.2961	1839983.0812
32	Y1	25+50.00	726599.4698	1840002.2641
33	Y1	26+00.00	726645.6436	1840021.4470
34	Y1	26+50.00	726691.8173	1840040.6300
35	Y1	27+00.00	726737.9911	1840059.8129
36	Y1	27+50.00	726784.1648	1840078.9958
37	Y1	28+00.00	726830.3386	1840098.1787
38	Y1	28+50.00	726876.5124	1840117.3616
39	Y1	29+00.00	726922.8808	1840136.0665
40	Y1	29+50.00	726969.6447	1840153.7593
41	Y1	30+00.00	727016.7822	1840170.4315
42	Y1	30+50.00	727064.2709	1840186.0751
43	Y1	31+00.00	727112.0885	1840200.6827
44	Y1	31+50.00	727160.2123	1840214.2474
45	Y1	32+00.00	727208.6196	1840226.7628
46	Y1	32+50.00	727257.2875	1840238.2230
47	Y1	33+00.00	727306.1930	1840248.6226
48	Y1	33+50.00	727355.3130	1840257.9566
49	Y1	34+00.00	727404.6243	1840266.2207
50	Y1	34+50.00	727454.1036	1840273.4110
51	Y1	35+00.00	727503.7275	1840279.5240
52	Y1	35+50.00	727553.4726	1840284.5568
53	Y1	36+00.00	727603.3153	1840288.5072
54	Y1	36+50.00	727653.2321	1840291.3731
55	Y1	37+00.00	727703.1873	1840293.4885
56	Y1	37+50.00	727753.1436	1840295.5788
57	Y1	38+00.00	727803.0999	1840297.6692
58	Y1	38+50.00	727853.0562	1840299.7596
59	Y1	39+00.00	727903.0125	1840301.8500
60	Y1	39+50.00	727952.9688	1840303.9403