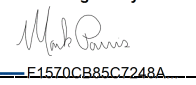


I, Mark A. Parris, PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
Type of GPS field procedure: RTN
Dates of survey: 1/15/18 to 1/23/18
Datum/Epoch: NAD83/NA2011
Published/Fixed-control use: N/A
Localized around: I-40-G108
Northing: 679682.775
Easting: 856703.539
Combined grid factor: 0.999764259
Geoid model: G12BUS
Units: US SURVEY FT.

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 1/05/22 to 1/12/22, 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 28th day of March, 2022.

DocuSigned by:

Professional Land Surveyor L-4529

SURVEY CONTROL SHEET

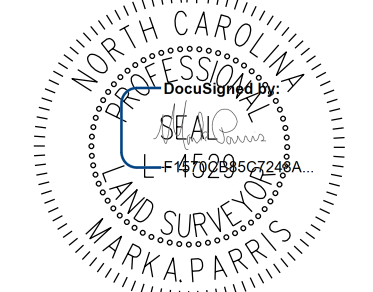
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. SHEET NO.
HB-0002 RW02C-1

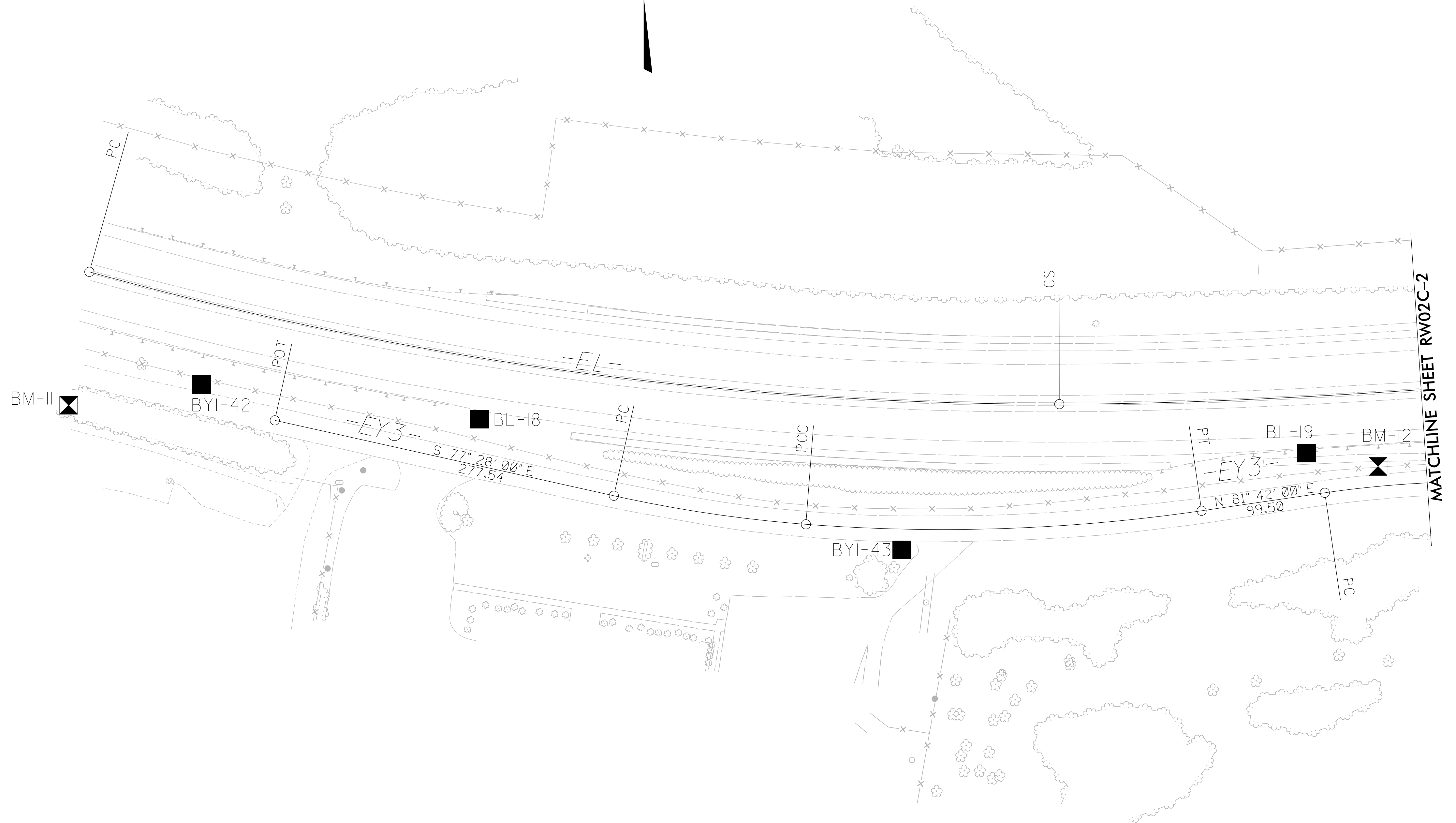
Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



■ BL-17

■ BYI-42

■ BL-18

■ BYI-43

■ BL-19

■ BM-12

REVISIONS

MATCHLINE SHEET RW02C-2

**SEE SHEETS RW02C-6 THRU RW02C-7
FOR FURTHER
ALIGNMENT DETAILS**

NOTES:

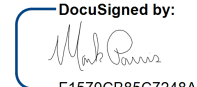
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

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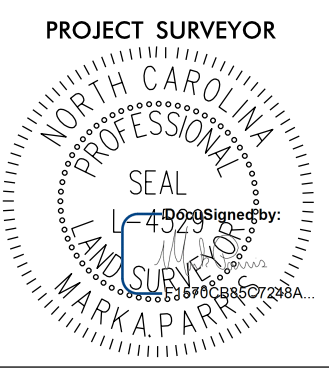
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This 28th day of March, 2022.

DocuSigned by:

Professional Land Surveyor L-4529

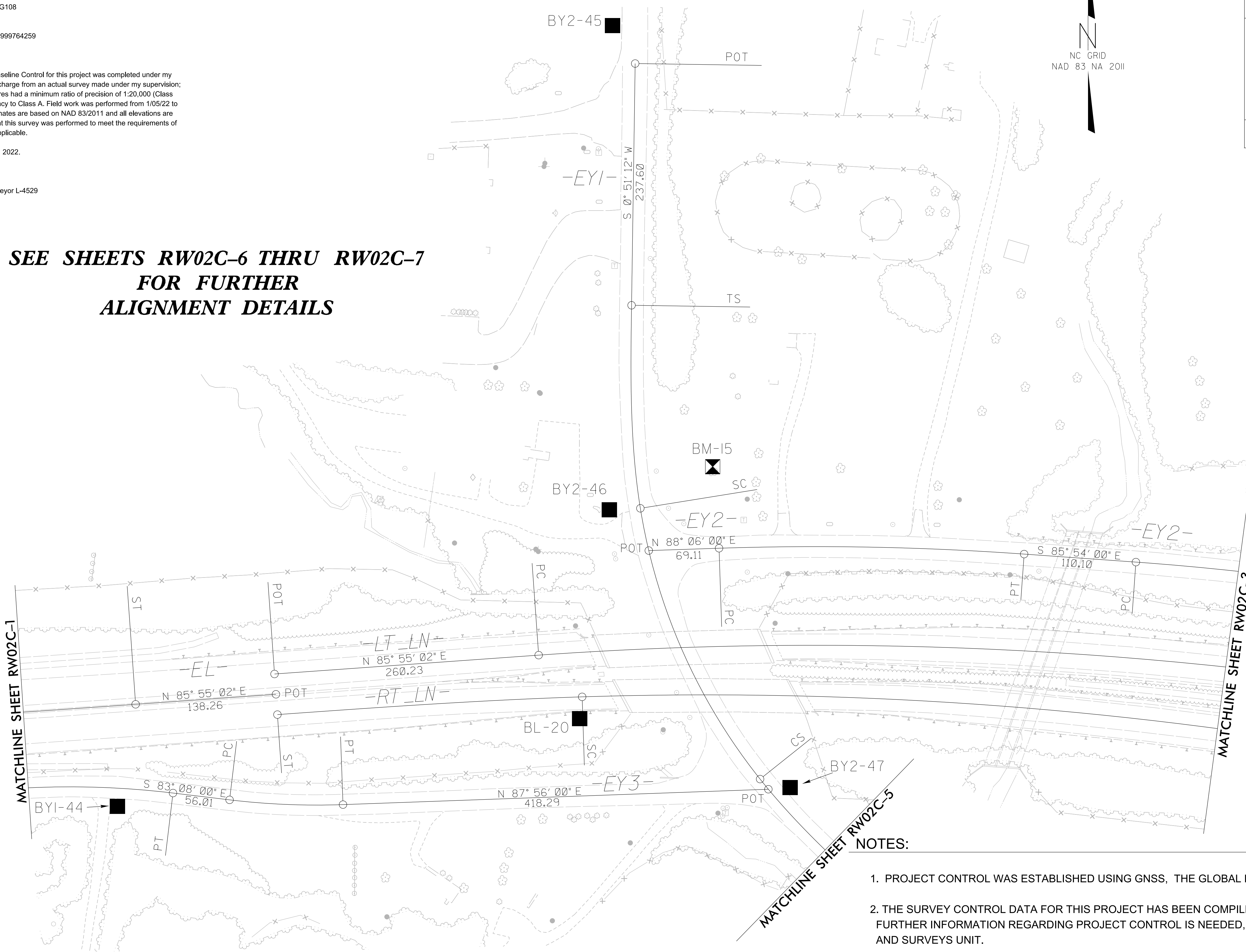
SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. HB-0002	SHEET NO. RW02C-2
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**SEE SHEETS RW02C-6 THRU RW02C-7
FOR FURTHER
ALIGNMENT DETAILS**



REVISIONS

22-MAR-2022 09:38
V:\NC\Survey\12-34_D14hb_CON-SUE\Survey\To_Send\HB-0002\HB-0002_1s_RW02C-2.dgn
jcgordon

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6/2/19

I, Mark A. Parris, 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:

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Published/Fixed-control use: N/A
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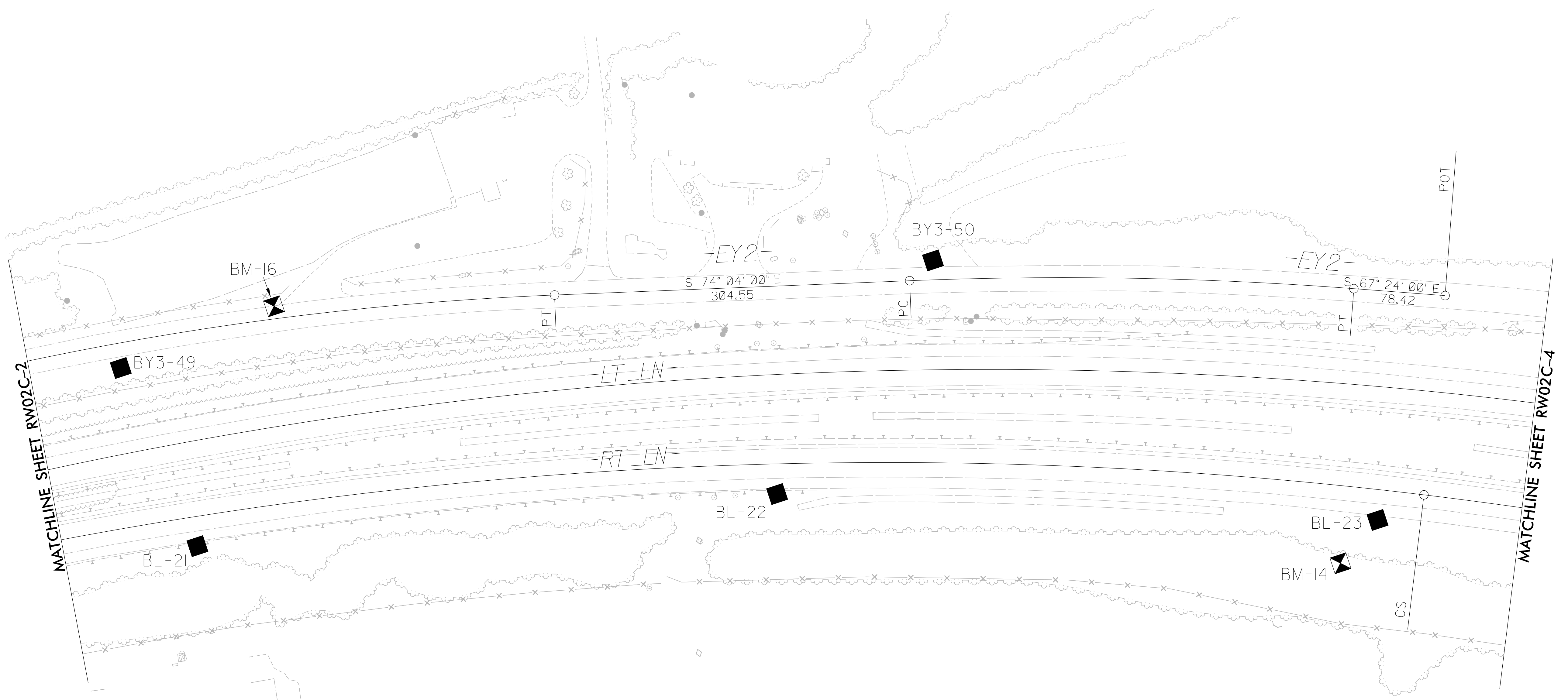
This 28th day of March, 2022.

DocuSigned by:
Professional Land Surveyor L-4529

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. HB-0002	SHEET NO. RW02C-3
Location and Surveys	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



MATCHLINE SHEET RW02C-2

MATCHLINE SHEET RW02C-4

**SEE SHEETS RW02C-6 THRU RW02C-7
FOR FURTHER
ALIGNMENT DETAILS**

NOTES:


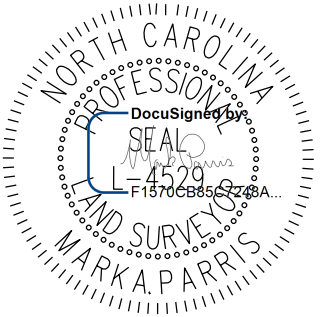
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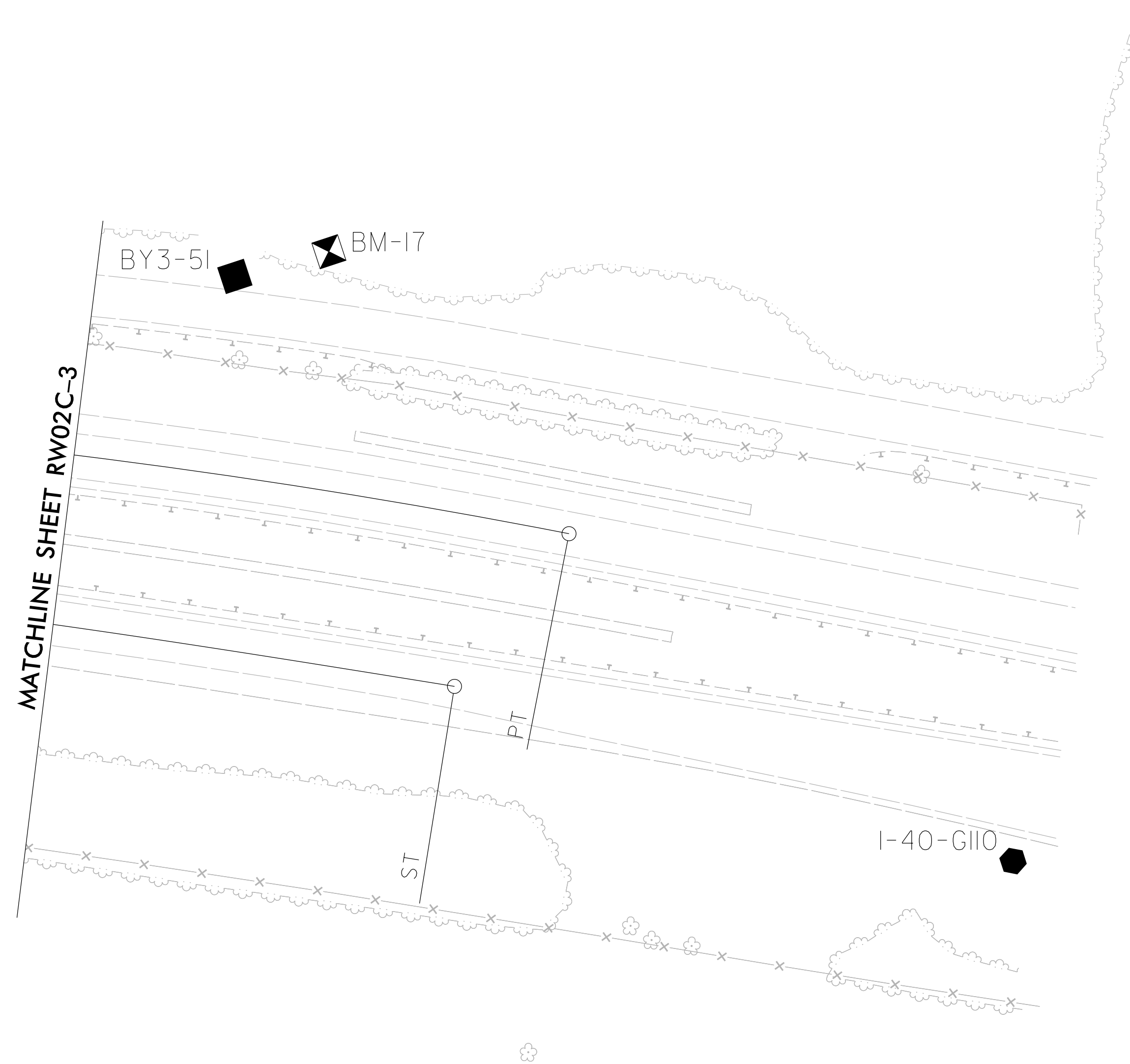
REVISIONS

22-MAR-2022 09:38
V:\NC\Survey\4022112-34_D14hb_CON-SUE\Survey\To_Send\HB-0002\HB-0002_1s_RW02C-3.dgn
jcjordan

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. HB-0002	SHEET NO. RW02C-4
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

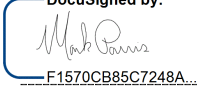


I, Mark A. Paris, PLS, certify that the Project Control was performed under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

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 Type of GPS field procedure: RTN
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 Datum/Epoch: NAD83/NA2011
 Published/Fixed-control use: N/A
 Localized around: I-40-G108
 Northing: 879682.775
 Easting: 856703.539
 Combined grid factor: 0.999764259
 Geoid model: G12BUS
 Units: US SURVEY FT.

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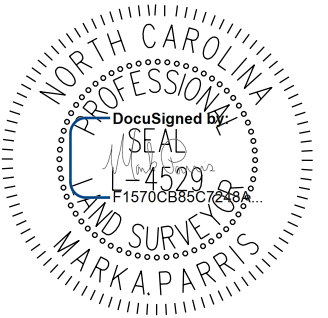

 F1579C85C7248A
 Professional Land Surveyor L-4529

I-40-G110

**SEE SHEETS RW02C-6 THRU RW02C-7
FOR FURTHER
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PROJECT REFERENCE NO.	SHEET NO.
HB-0002	RW02C-5
Location and Surveys	
	
PROJECT SURVEYOR	
	
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SURVEY CONTROL SHEET

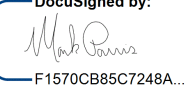
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

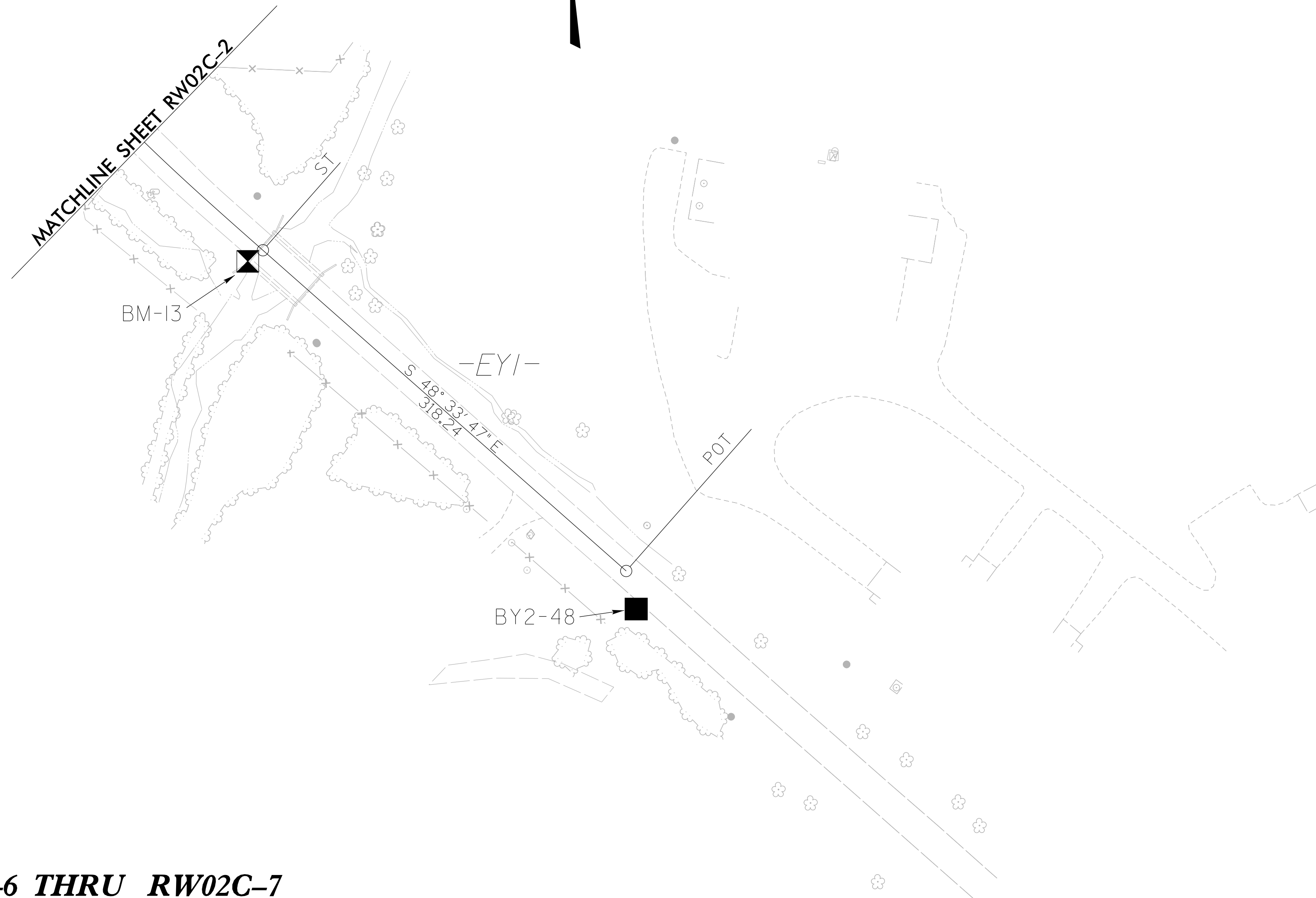
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This 28th day of March, 2022.

DocuSigned by:

 F15702845C72484
 Professional Land Surveyor L-4529



**SEE SHEETS RW02C-6 THRU RW02C-7
 FOR FURTHER
 ALIGNMENT DETAILS**


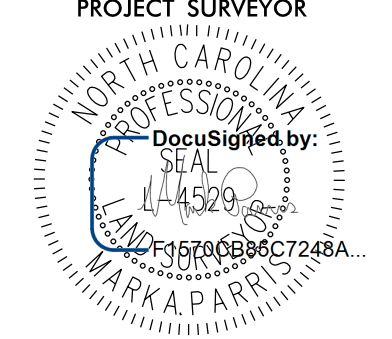
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REVISIONS

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. HB-0002	SHEET NO. RW02C-6
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

BL	POINT	DESC.	NORTH	EAST	ELEVATION
17	BL-17		679293.3350	858833.3930	2703.35
18	BL-18		679117.1730	859461.5710	2688.85
19	BL-19		679090.1400	860122.5880	2672.43
20	BL-20		679134.3380	860760.6470	2655.19
21	BL-21		679082.8850	861496.5730	2653.15
22	BL-22		678969.7960	861982.3660	2666.80
23	BL-23		678787.6200	862464.1150	2683.44
G110	I-40-G110		678480.6160	863028.9230	2705.00
G111	I-40-G111		678130.1910	863736.6420	2726.73

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
Y17	BL-17		679293.3350	858833.3930	2703.35
42	BY1-42		679144.8080	859239.3440	2691.82
43	BY1-43		679012.9630	859799.0930	2697.72
44	BY1-44		679048.3100	860306.3520	2659.99
Y47	BY2-47		679066.6920	860967.3880	2630.62

BY2	POINT	DESC.	NORTH	EAST	ELEVATION
45	BY2-45		679815.4420	860792.9010	2661.65
46	BY2-46		679339.5240	860789.8810	2638.43
47	BY2-47		679066.6920	860967.3880	2630.62
48	BY2-48		678698.6450	861324.7620	2631.40

BY3	POINT	DESC.	NORTH	EAST	ELEVATION
Y46	BY2-46		679339.5240	860789.8810	2638.43
49	BY3-49		679248.4710	861482.0290	2642.02
50	BY3-50		679118.2150	862171.9390	2670.40
51	BY3-51		678903.7790	862734.1850	2700.78

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.....
BM11  ELEVATION = 2691.47
N 679128  E 859133
SPIKE NAIL SET IN 14" PINE
.....
BM12  ELEVATION = 2670.66
N 679080  E 860180
PK NAIL SET IN R/W FENCE
.....
BM13  ELEVATION = 2632.73
N 678927  E 861070
PK NAIL SET IN BRIDGE WW
.....
BM14  ELEVATION = 2676.39
N 678762  E 862422
SPIKE NAIL SET IN 12" HICKORY
.....
BM15  ELEVATION = 2636.87
N 679382  E 860891
SPIKE NAIL SET IN 30" MAPLE CLUMP
.....
BM16  ELEVATION = 2646.54
N 679258  E 861623
IRON ROD SET AT EP
.....
BM17  ELEVATION = 2707.11
N 678901  E 862786
SPIKE NAIL SET IN 10" POPLAR
.....

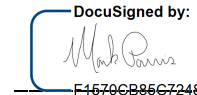
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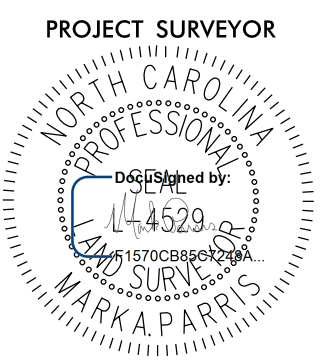

 Professional Land Surveyor L-4529

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
HB-0002	RW02C-7
Location and Surveys	
	
	
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EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
PC	679235.037	859149.787											
CURVE			S 82°14'08.5" E	782.25	15°41'38.4"(LT)	02°00'00.0"	784.70	394.82	2864.79				
CS	679129.357	859924.865											
SPIRAL			N 87°15'02.1" E	399.91						04°00'00.0"(LT)	400.00	266.73	133.40
ST	679148.540	860324.318											
LINE			N 85°55'02.3" E	138.26									
POT	679158.383	860462.227											

EY1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
POT	679778.261	860815.207											
LINE			S 00°51'12.4" W	237.60									
TS	679540.689	860811.668											
SPIRAL			S 02°28'44.5" E	199.73						10°00'00.0"(LT)	200.00	133.55	66.86
SC	679341.147	860820.307											
CURVE			S 23°51'17.3" E	290.95	29°24'59.5"(LT)	10°00'00.0"	294.17	150.40	572.96				
CS	679075.056	860937.971											
SPIRAL			S 45°13'50.2" E	199.73						10°00'00.0"(LT)	200.00	133.55	66.86
ST	678934.396	861079.768											
LINE			S 48°33'47.1" E	318.24									
POT	678723.788	861318.346											

EY2 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	679299.633	860828.575	N 88°06'00.0" E	69.11					
LINE									
PC	679301.924	860897.651							
CURVE			S 88°54'00.0" E	299.86	06°00'00.0"(RT)	02°00'00.0"	300.00	150.14	2864.79
PT	679296.168	861197.459							
LINE			S 85°54'00.0" E	110.10					
PC	679280.296	861307.275							
CURVE			S 79°59'00.0" E	555.87	11°50'00.0"(RT)	02°07'30.0"	556.86	279.43	2696.27
PT	679191.610	861854.675							
LINE			S 74°04'00.0" E	304.55					
PC	679108.005	862147.527							
CURVE			S 70°44'00.0" E	380.74	06°40'00.0"(RT)	01°45'00.0"	380.95	190.69	3274.04
PT	678982.375	862506.941							
LINE			S 67°24'00.0" E	78.42					
POT	678952.239	862579.337							

EY3 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	679116.407	859297.981							
LINE			S 77°28'00.0" E	277.54					
PC	679056.178	859568.912							
CURVE			S 81°32'34.3" E	155.15	08°09'00.5"(LT)	05°15'00.0"	155.28	77.77	1091.35
PCC	679033.359	859722.377							
CURVE			N 88°02'25.7" E	316.38	12°40'51.5"(LT)	04°00'00.0"	317.02	159.16	1432.39
PT	679044.177	860038.570							
LINE			N 81°42'00.0" E	99.50					
PC	679058.541	860137.026							
CURVE			N 89°17'00.0" E	224.04	15°10'00.0"(RT)	06°45'00.0"	224.69	113.01	848.83
PT	679061.343	860361.045							
LINE			S 83°08'00.0" E	56.01					
PC	679054.647	860416.652							
CURVE			S 87°36'00.0" E	111.55	08°56'00.0"(LT)	08°00'00.0"	111.67	55.95	716.20
PT	679049.975	860528.108							
LINE			N 87°56'00.0" E	418.29					
POT	679065.060	860946.122							

LT_LN POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	679178.333	860460.803							
LINE			N 85°55'02.3" E	260.23					
PC	679196.860	860720.373							
CURVE			S 77°24'27.8" E	2192.08	33°20'59.8"(RT)	01°30'00.0"	2223.33	1144.15	3819.72
PT	678718.962	862859.721							

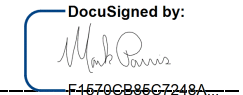
RT_LN POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
TS	0.000	0.000											
SPIRAL			N 86°40'02.2" E	299.98						02°15'00.0"(RT)	300.00	200.02	100.01
SC	679155.873	860763.123											
CURVE			S 78°20'27.7" E	1782.31	26°59'00.0"(RT)	01°30'00.0"	1798.89	916.45	3819.72				
CS	678795.693	862508.661											
SPIRAL			S 63°20'57.7" E	299.98						02°15'00.0"(RT)	300.00	200.02	100.01
ST	678795.693	862508.661											

I, Mark A. Parris, 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:

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This 28th day of March, 2022.

DocuSigned by:

 Professional Land Surveyor L-4529

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REVISIONS