

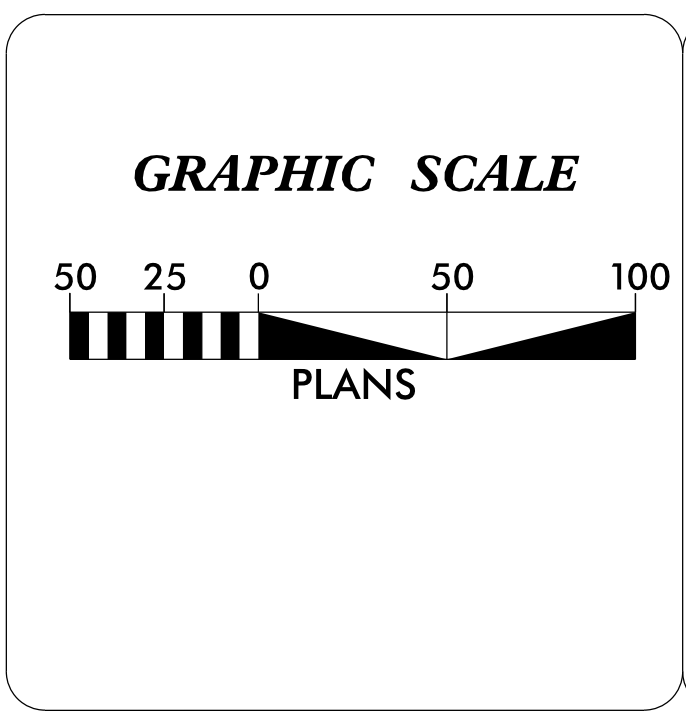
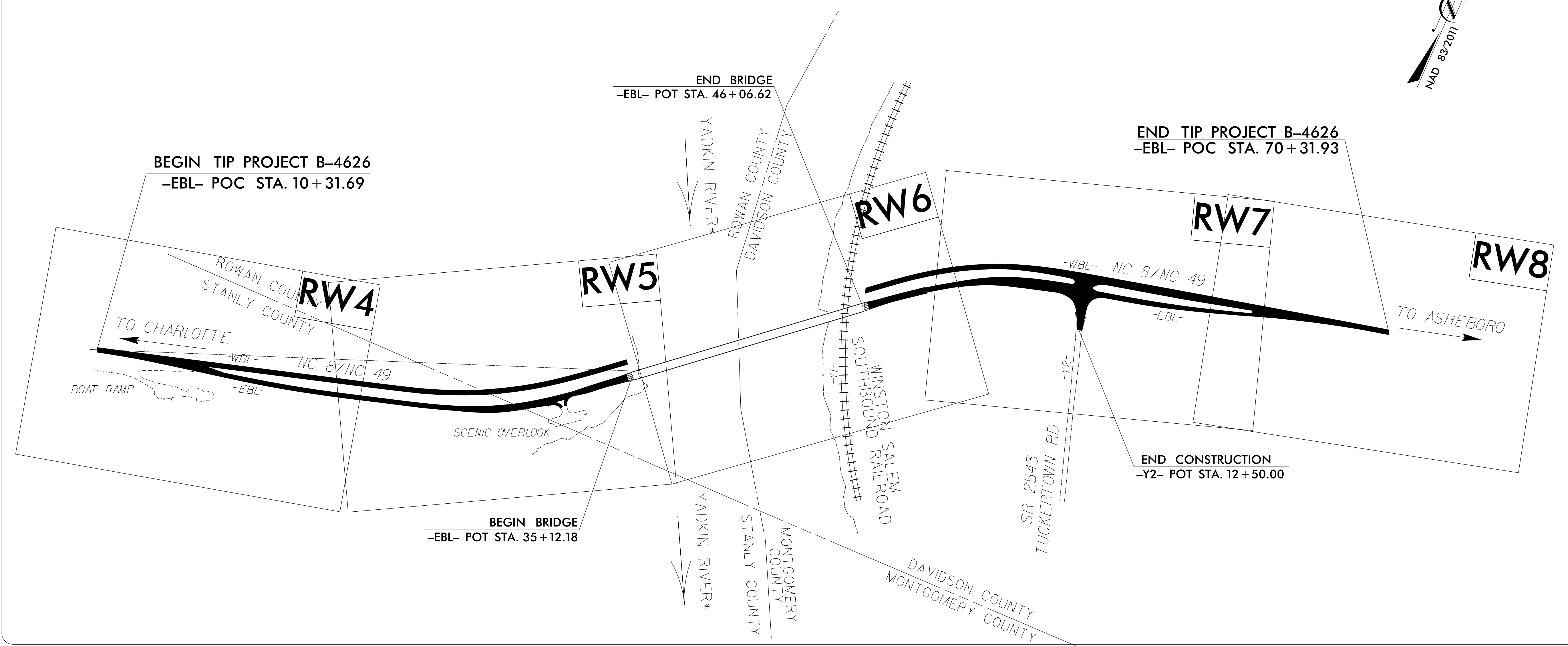
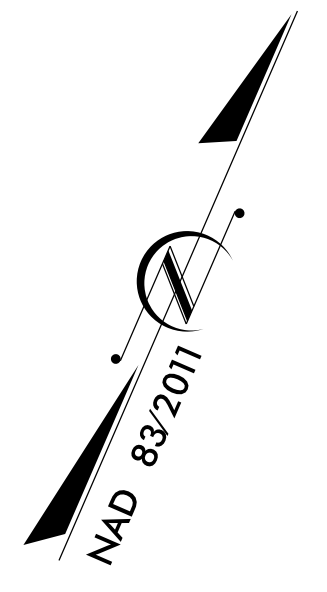
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4626	RW01	XX

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

STANLY, ROWAN, AND DAVIDSON COUNTIES

TIP PROJECT: B-4626



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B4626-GPS2" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 640,824.6882(ft) EASTING: 1,647,248.5700(ft) ELEVATION: 582.72(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99985926201

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B4626-GPS2" TO -L- STATION 10+00.00 IS S 68°49'08.23" W 2452.39(ft)

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

Prepared in the Office of:

2018 STANDARD SPECIFICATIONS

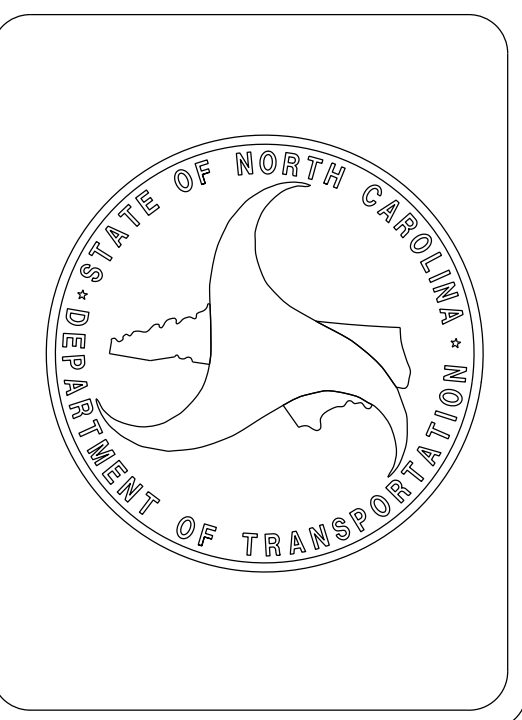
RIGHT OF WAY DATE:
XX/XX/XXXX

LETTING DATE:
XX/XX/XXXX

PROFESSIONAL LAND SURVEYOR

Seal of Michael L. Motsinger, Professional Land Surveyor, License L-3877, State of North Carolina.

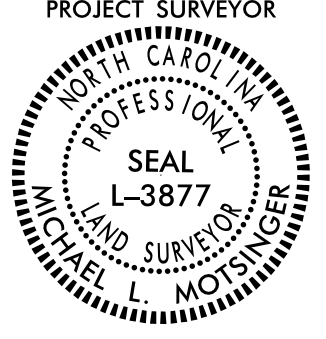
DocuSigned by:
Michael L. Motsinger
7/15/2021



15-JUL-2021 13:14 S:\Units\Div09\Winston\Ru\ths Computer\Bridge\B4XXX\B4626\Brod_CTL Sheets\B4626_Ls_rw01.DGN AT LS-312561

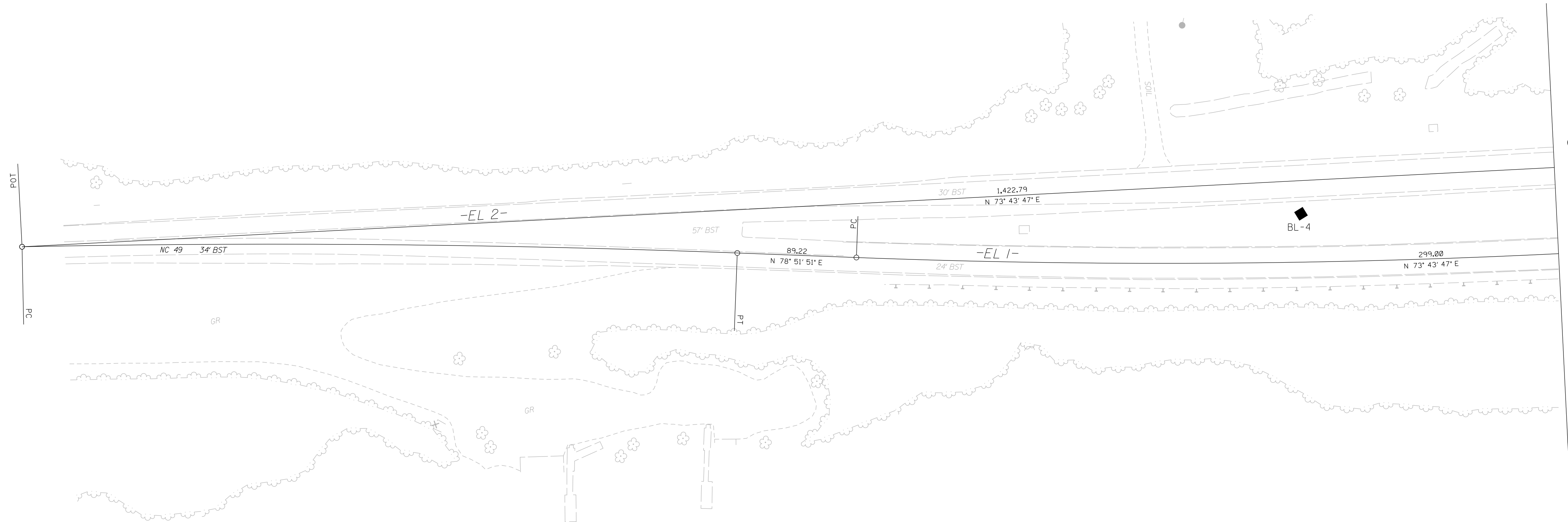
SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-4626	SHEET NO. RW02C-1
Location and Surveys	
INSERT CONSULTANT'S NAME	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



BM #1
 N. 639837 E. 1644953
 ELEV. - 572.02
 RR SPIKE IN BASE OF 10" GUM

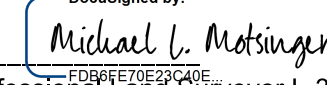


I, Michael L. Motsinger, PLS, certify that the Project Control was performed under my supervision from an actual survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
 Type of GPS field procedure: [Static, OPUS, RTN]
 Dates of survey: 03-02-2015
 Datum/Epoch: NAD 1983/2011
 Published/Fixed-control use: [Project Control if applicable, N/A for RTN]
 Localized around: B4626-2
 Northing: 640824.6882
 Easting: 1647248.5700
 Combined grid factor: 0.999859262
 Geoid model: G12NC
 Units: US Survey Feet

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 6/15/2016 to 8/15/2016, 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 12th day of April, 2021.

Signed by:

 Michael L. Motsinger
 Professional Land Surveyor L-3877




SEE SHEET RW02C-9
FOR FURTHER
ALIGNMENT DETAILS

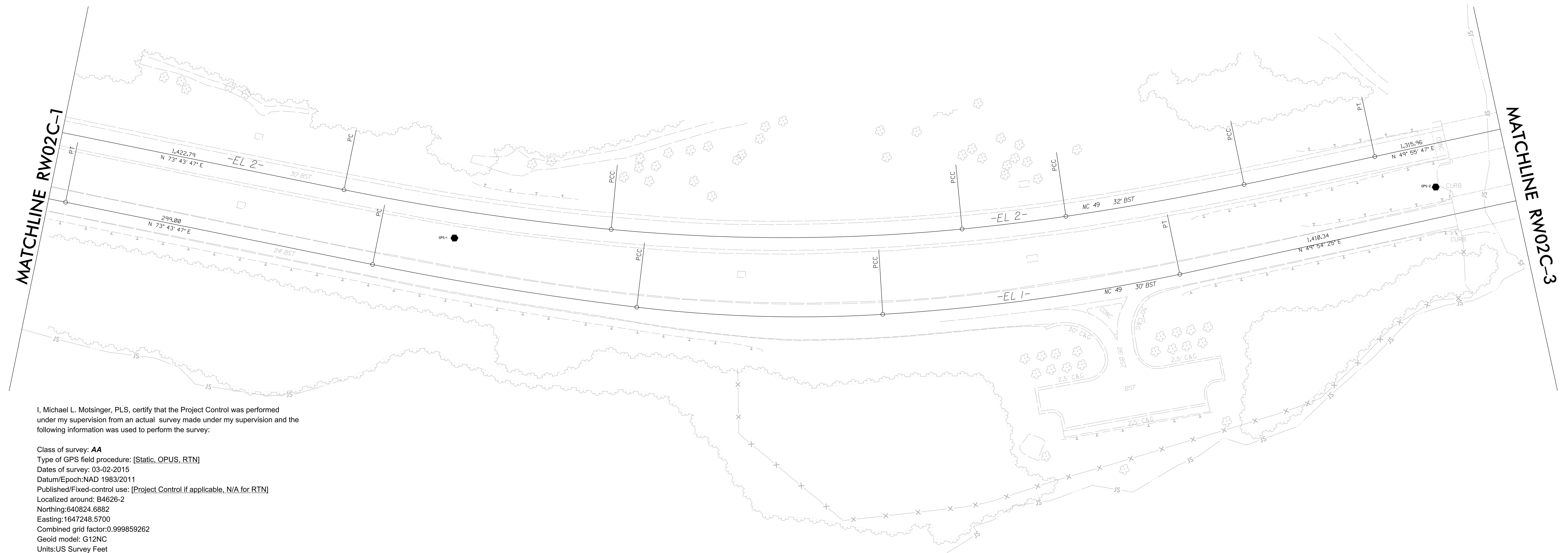
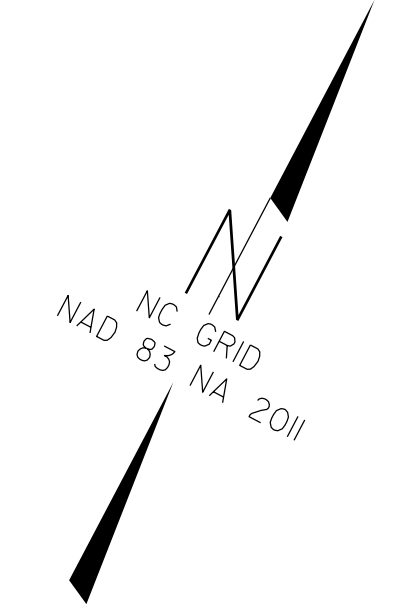
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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-4626	SHEET NO. RW02C-2
Location and Surveys	
	
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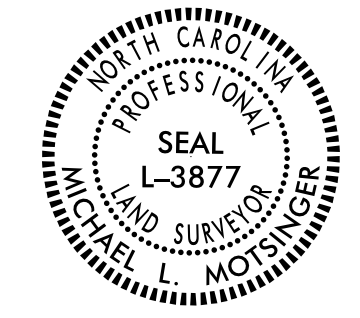
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SEE SHEET RW02C-8
 FOR FURTHER
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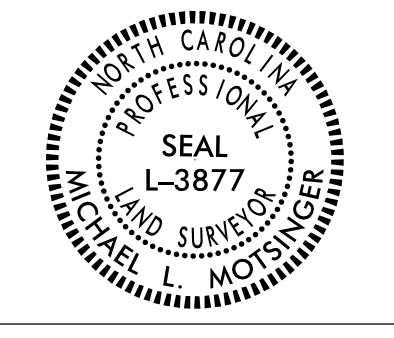
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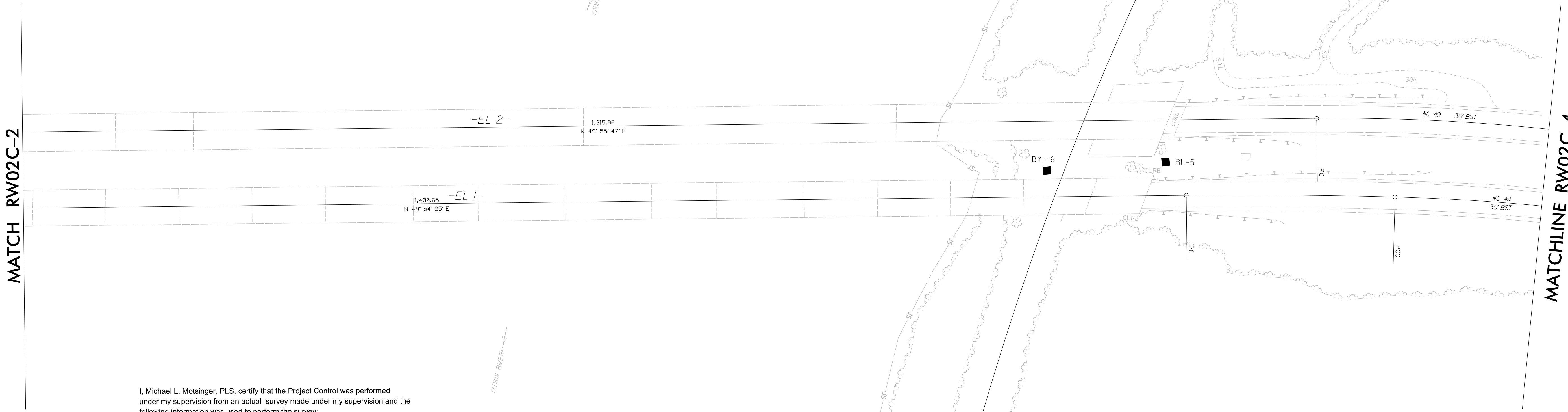
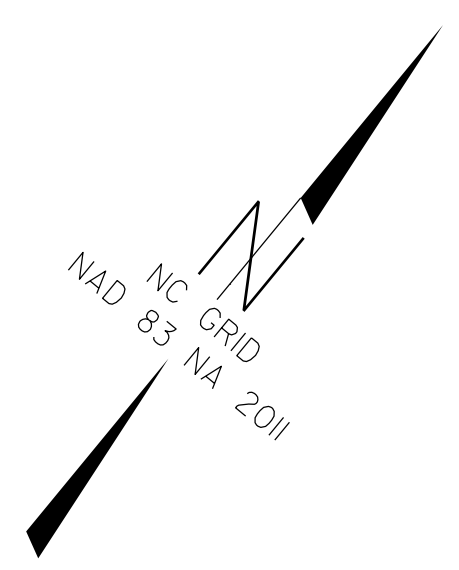
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 AT LS-312635
 mmotsinger

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-4626	SHEET NO. RW02C-3
Location and Surveys	
PROJECT SURVEYOR  SEAL L-3877 MICHAEL L. MOTSINGER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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 Geoid model: G12NC
 Units: US Survey Feet

SEE SHEET RW02C-9
FOR FURTHER
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This 12th day of April, 2021...

DocuSigned by:
Michael L. Motsinger
Professional Land Surveyor L-3877




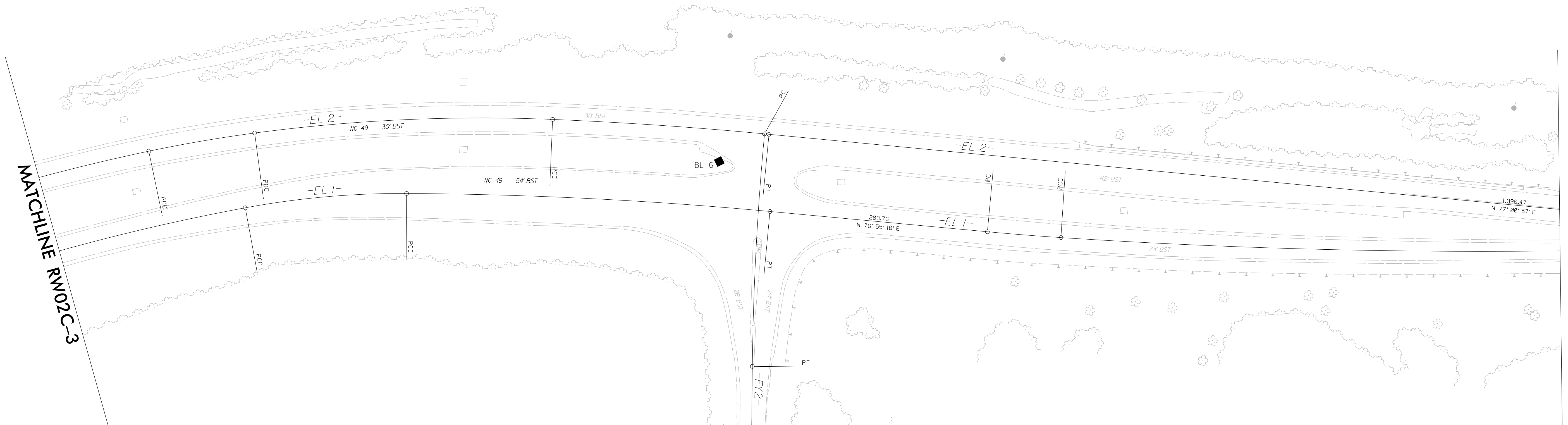
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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-4626	SHEET NO. RW02C-4
Location and Surveys	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

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 AT LS-312635
 molsinger

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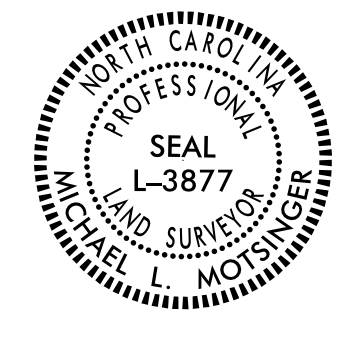
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 Dates of survey: 03-02-2015
 Datum/Epoch: NAD 1983/2011
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 Michael L. Molsinger
 Professional Land Surveyor L-3877




SEE SHEET RW02C-9
FOR FURTHER
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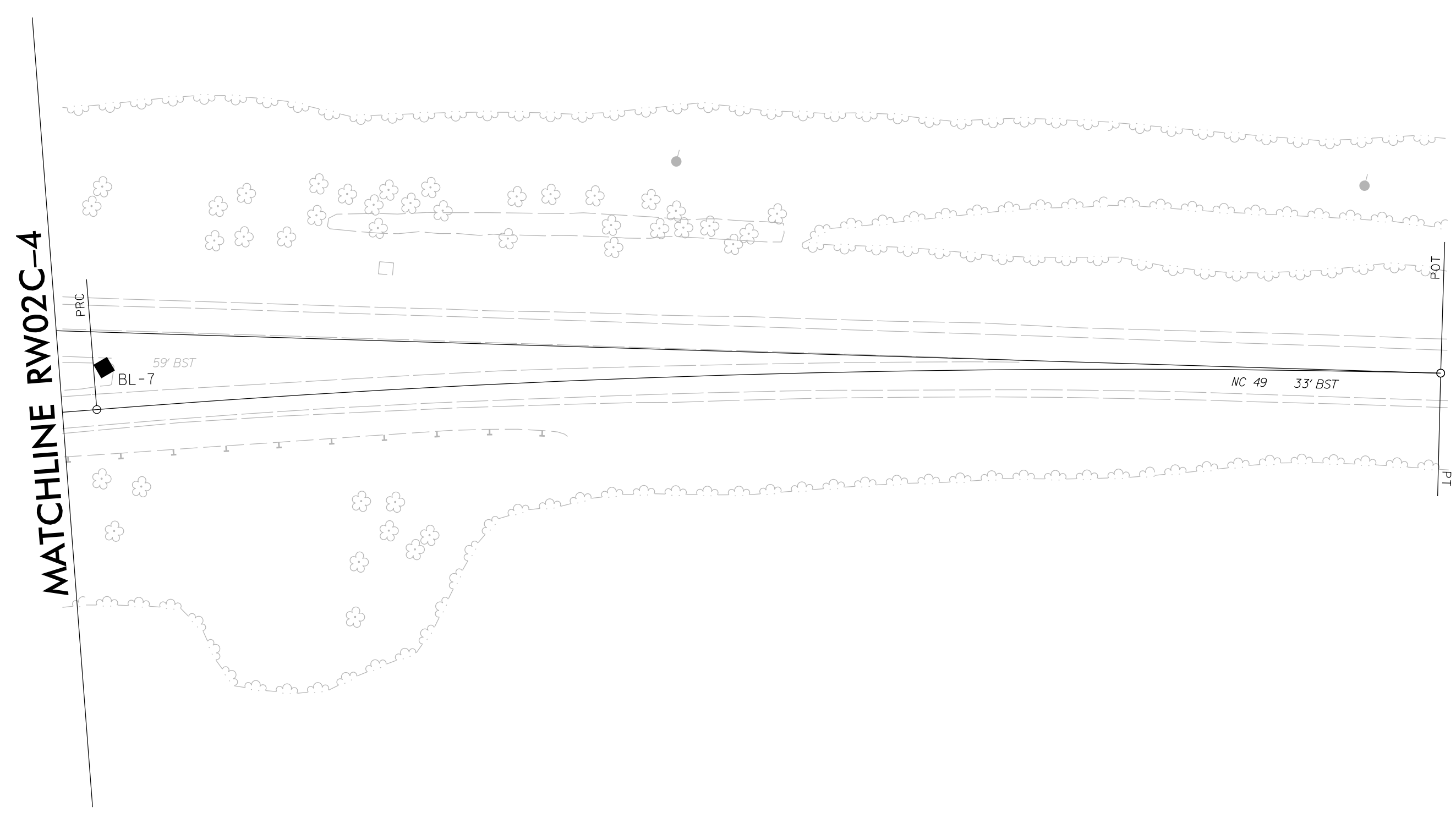
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SURVEY CONTROL SHEET

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PROJECT REFERENCE NO.	SHEET NO.
B-4626	RW02C-5
Location and Surveys	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



BL-8

SEE SHEET RW02C-9
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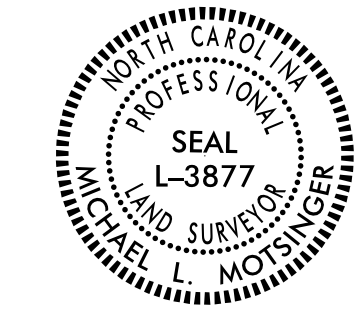
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DocuSigned by:

 Professional Land Surveyor L-3877



NOTES:

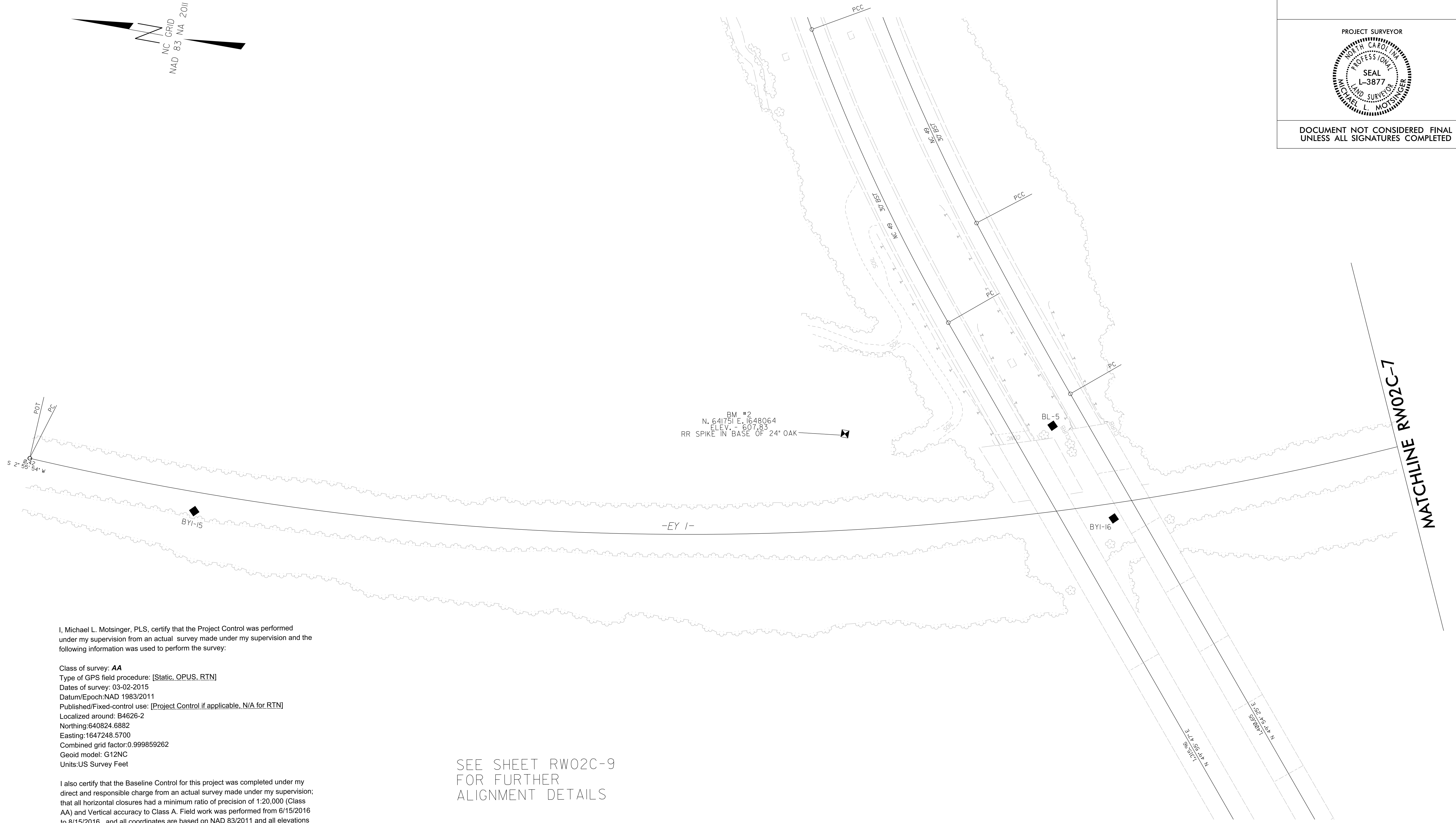
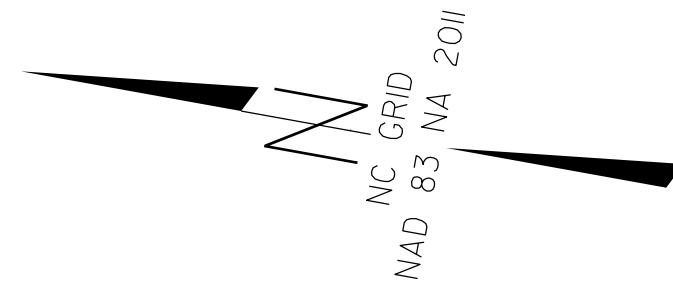
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REVISIONS

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M.Lotsinger AT LS-312635

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



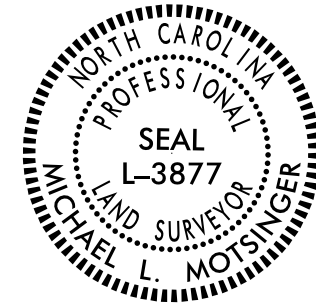
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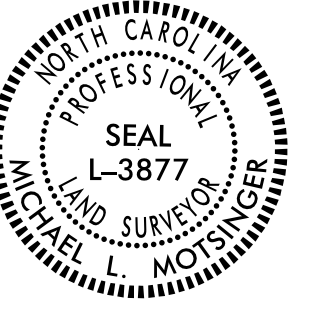
DocuSigned by:
Michael L. Motsinger
Professional Land Surveyor L-3877



SEE SHEET RW02C-9
FOR FURTHER
ALIGNMENT DETAILS

Location and Surveys

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
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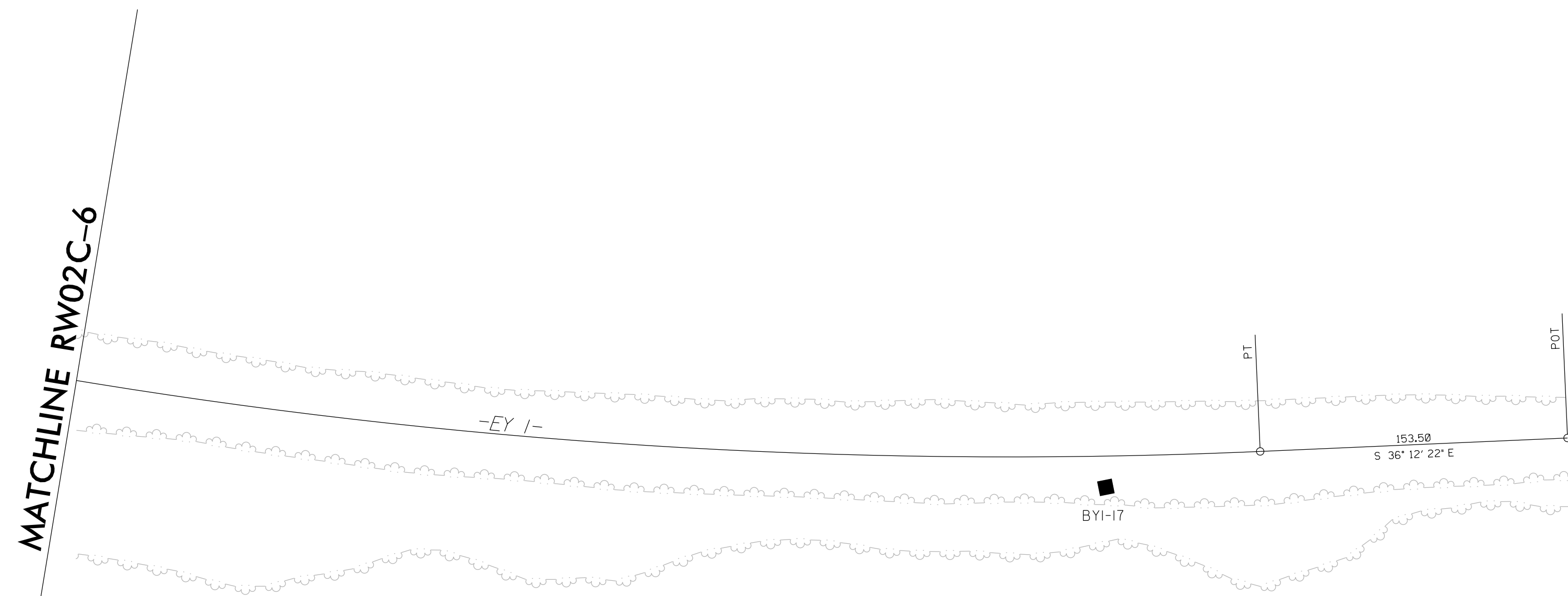
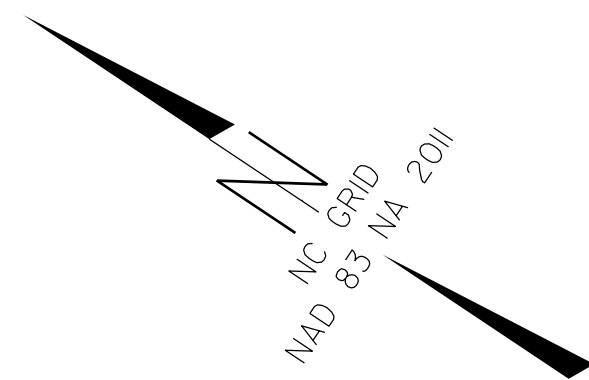
REVISIONS

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Motsinger

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
B-4626	RW02C-7
Location and Surveys	
	
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SEE SHEET RW02C-9
FOR FURTHER
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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

Location and Surveys

PROJECT SURVEYOR



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BL	POINT	DESC.	NORTH	EAST	ELEVATION	EBL STATION	OFFSET
3		BL-3	639921.3690	1644823.4720	577.17	OUTSIDE PROJECT LIMITS	
4		BL-4	640182.9960	1645887.7050	586.31	19+58.09	36.18 LT
1		GPS-1	640345.4770	1646442.4080	583.73	25+38.30	39.50 LT
2		GPS-2	640824.6880	1647248.5700	582.72	34+99.18	27.18 LT
5		BL-5	641550.9460	1648108.5780	606.26	46+24.82	28.89 LT
6		BL-6	642013.4740	1648959.8480	640.85	55+89.62	42.31 LT
7		BL-7	642207.5500	1649744.1320	668.85	64+00.29	19.52 LT
8		BL-8	642409.2582	1650662.8707	675.52	OUTSIDE PROJECT LIMITS	

BY1	POINT	DESC.	NORTH	EAST	ELEVATION	Y1 STATION	OFFSET
15		BY1-15	642370.5640	1647875.0170	573.17	11+69.27	18.93 RT
16		BY1-16	641475.2500	1648029.1400	573.38	20+76.20	14.90 RT
17		BY1-17	640755.1550	1648389.3180	573.90	28+79.71	15.61 RT

BY2	POINT	DESC.	NORTH	EAST	ELEVATION	Y2 STATION	OFFSET
A6		BL-6	642013.4740	1648959.8480	640.85	10+29.22	39.81 RT
20		BY2-20	641663.8830	1649123.4550	630.55	OUTSIDE PROJECT LIMITS	

```

*****
BM*1      ELEVATION = 572.02'
N 639837      E 1644953
EBL STATION 10+00.00 TO BM1
S 04° 58' 40.6" W 102'
RR SPIKE IN 10" GUM
*****
BM*2      ELEVATION = 607.83'
N 641751      E 1648064
Y1 STATION 18+17.00 95' LEFT
RR SPIKE IN 24" OAK
*****

```

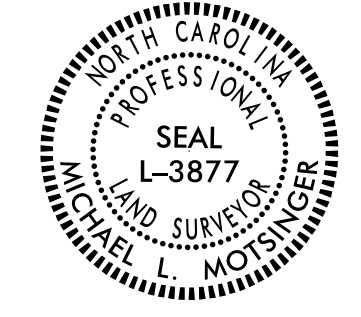
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REVISIONS

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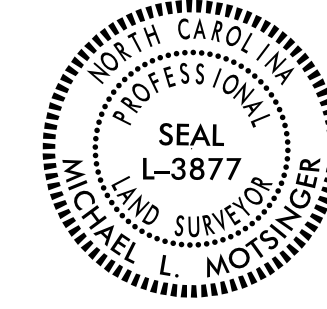
SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-4626 SHEET NO. RW02C-9

Location and Surveys

PROJECT SURVEYOR



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EL1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	639938.598	1644961.849							
CURVE	640057.330	1645483.883	N 77°11'11.6" E	535.37	03°21'18.4"(RT)	00°37'35.8"	535.44	267.80	9143.80
PT									
LINE	640074.561	1645571.420	N 78°51'50.9" E	89.22					
PC									
CURVE	640202.950	1646097.970	N 76°17'48.9" E	541.98	05°08'04.0"(LT)	00°56'49.3"	542.16	271.26	6050.00
PT									
LINE	640286.721	1646384.997	N 73°43'46.9" E	299.00					
PC									
CURVE	640368.132	1646627.129	N 71°24'58.0" E	255.45	04°37'37.7"(LT)	01°48'39.1"	255.52	127.83	3164.00
PCC									
CURVE	640471.396	1646838.097	N 63°55'09.7" E	234.89	10°21'59.0"(LT)	04°24'26.5"	235.21	117.92	1300.00
PCC									
CURVE	640637.268	1647071.255	N 54°34'17.1" E	286.14	08°19'46.1"(LT)	02°54'30.3"	286.39	143.45	1970.00
PT									
LINE	641539.332	1648142.752	N 49°54'24.8" E	1400.65					
PC									
CURVE	641660.502	1648292.440	N 51°00'37.3" E	192.58	02°12'25.2"(RT)	01°08'45.3"	192.60	96.31	5000.00
PCC									
CURVE	641832.896	1648553.938	N 56°36'17.6" E	313.21	08°58'55.3"(RT)	02°51'53.2"	313.53	157.09	2000.00
PCC									
CURVE	641893.103	1648692.495	N 66°30'49.9" E	151.07	10°50'09.3"(RT)	07°09'43.1"	151.30	75.88	800.00
PCC									
CURVE	641984.223	1649019.416	N 74°25'32.0" E	339.38	04°59'15.0"(RT)	01°28'08.8"	339.49	169.85	3900.00
PT									
LINE	642030.339	1649217.890	N 76°55'09.6" E	203.76					
PC									
CURVE	642046.830	1649284.679	N 76°07'51.5" E	68.79	01°34'36.2"(LT)	02°17'30.6"	68.80	34.40	2500.00
PCC									
CURVE	642187.473	1649745.851	N 73°02'23.8" E	482.14	04°36'19.3"(LT)	00°57'17.7"	482.27	241.27	6000.00
PCC									
CURVE	642365.997	1650356.636	N 73°42'25.3" E	636.34	05°56'22.4"(RT)	00°55'58.7"	636.63	318.60	6141.19
PT									

EL2 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	639938.598	1644961.849							
LINE	640337.220	1646327.658	N 73°43'46.9" E	1422.79					
PC									
CURVE	640422.417	1646570.963	N 70°42'05.7" E	257.79	06°03'22.4"(LT)	02°20'53.5"	257.91	129.08	2440.00
PCC									
CURVE	640578.731	1646867.211	N 62°10'54.2" E	334.96	10°59'00.6"(LT)	03°16'26.6"	335.47	168.25	1750.00
PCC									
CURVE	640635.597	1646949.214	N 55°15'37.6" E	99.79	02°51'32.7"(LT)	02°51'53.2"	99.80	49.91	2000.00
PCC									
CURVE	640741.675	1647085.594	N 52°07'25.8" E	172.78	03°24'50.7"(LT)	01°58'32.6"	172.80	86.43	2900.00
PCC									
CURVE	640823.366	1647183.549	N 50°10'23.5" E	127.55	00°29'13.9"(LT)	00°22'55.1"	127.55	63.77	15000.00
PT									
LINE	641670.489	1648190.596	N 49°55'46.5" E	1315.96					
PC									
CURVE	641854.563	1648451.843	N 54°49'53.4" E	319.58	09°48'13.6"(RT)	03°03'50.2"	319.97	160.38	1870.00
PCC									
CURVE	641901.835	1648540.230	N 61°51'39.3" E	100.23	04°15'18.2"(RT)	04°14'38.9"	100.26	50.15	1350.00
PCC									
CURVE	642001.652	1648799.943	N 68°58'35.4" E	278.23	09°58'34.1"(RT)	03°34'51.6"	278.59	139.65	1600.00
PCC									
CURVE	642052.237	1648995.866	N 75°31'22.6" E	202.35	03°07'00.2"(RT)	01°32'24.4"	202.37	101.21	3720.27
PT									
LINE	642365.997	1650356.636	N 77°00'57.4" E	1396.47					
POT									

EY1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	642539.920	1647897.627							
LINE	642539.505	1647897.606	S 02°55'53.6" W	0.42					
PC									
CURVE	640701.049	1648446.974	S 16°38'14.0" E	1918.78	39°08'15.2"(LT)	02°00'01.0"	1956.60	1018.20	2864.38
PT									
LINE	640577.190	1648537.645	S 36°12'21.6" E	153.50					
POT									

EY2 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	642051.301	1648991.795							
CURVE	641841.945	1649049.471	S 15°24'09.2" E	217.16	04°47'12.6"(LT)	02°12'13.3"	217.22	108.67	2600.00
PT									
LINE	641066.643	1649298.333	S 17°47'45.5" E	814.26					
POT									

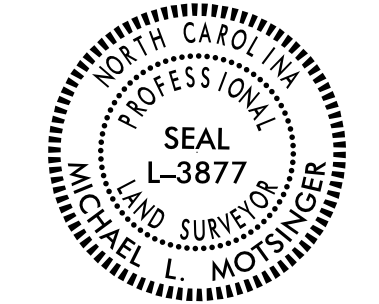
I, Michael L. Motsinger, PLS, certify that the Project Control was performed under my supervision from an actual survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
Type of GPS field procedure: [Static, OPUS, RTN]
Dates of survey: 03-02-2015
Datum/Epoch: NAD 1983/2011
Published/Fixed-control use: [Project Control if applicable, N/A for RTN]
Localized around: B4626-2
Northing: 640824.6882
Easting: 1647248.5700
Combined grid factor: 0.999859262
Geoid model: G12NC
Units: US Survey Feet

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 6/15/2016 to 8/15/2016, 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 12th day of April, 2021.

DocuSigned by:
Michael L. Motsinger
EDBEE70E23C4DE
Professional Land Surveyor L-3877




REVISIONS

I5-APR-2021 07:09
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AT LS-312635
mmotsinger

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.

PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO. B-4626	SHEET NO. RW02D-1
Location and Surveys	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

EBL			
TYPE	STATION	NORTH	EAST
PC	10+00.00	639938.5977	1644961.8493
PT	15+35.44	640057.3296	1645483.8828
PC	16+24.66	640074.5605	1645571.4195
PT	21+66.82	640202.9498	1646097.9697
PC	24+65.82	640286.7212	1646384.9974
PCC	27+21.34	640368.1316	1646627.1289
PCC	29+56.55	640471.3956	1646838.0973
PT	32+33.14	640632.5555	1647062.5528
PC	46+43.48	641540.8618	1648141.4641
PCC	49+05.34	641702.0386	1648347.7718
PCC	51+49.69	641832.8961	1648553.9382
PCC	53+00.98	641893.1027	1648692.4954
PT	56+40.47	641984.2233	1649019.4159
PC	58+44.23	642030.3391	1649217.8900
PRC	59+13.03	642046.8295	1649284.6793
PRC	63+95.30	642187.4726	1649745.8514
PT	70+31.93	642365.9971	1650356.6360

WBL			
TYPE	STATION	NORTH	EAST
POT	10+00.00	639938.5977	1644961.8493
PC	24+22.79	640337.2203	1646327.6584
PCC	26+80.70	640422.4169	1646570.9631
PCC	30+16.17	640578.7315	1646867.2110
PCC	31+15.97	640635.5970	1646949.2142
PCC	32+88.78	640741.6746	1647085.5940
PT	34+16.33	640823.3657	1647183.5494
PC	47+32.29	641670.4893	1648190.5963
PCC	50+52.26	641854.5634	1648451.8426
PCC	51+52.52	641901.8354	1648540.2300
PCC	54+31.11	642001.6522	1648799.9433
PT	56+33.48	642052.2375	1648995.8659
POT	70+29.95	642365.9971	1650356.6360

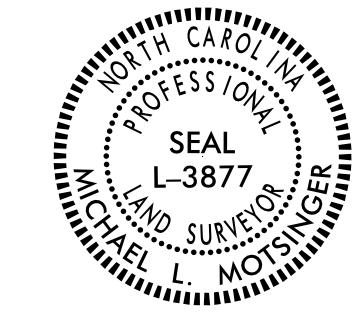
Y1			
TYPE	STATION	NORTH	EAST
POT	10+00.00	642539.9204	1647897.6271
PC	10+00.42	642539.5050	1647897.6058
PT	29+57.02	640701.0494	1648446.9739
POT	31+10.52	640577.1903	1648537.6450

Y2			
TYPE	STATION	NORTH	EAST
PC	10+00.00	642051.3012	1648991.7947
PT	12+17.22	641841.9445	1649049.4711
POT	20+31.48	641066.6429	1649298.3330

I, Michael L. Molsinger, certify that the right of way and permanent easement monumentation for this project shown herein 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 1:10,000 (Class A). Field work was performed from 6/15/2016 to 8/15/2016, and all coordinates are based on NAD83/2011; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 12th day of April, 2021.

DocuSigned by:
Michael L. Molsinger
Professional Land Surveyor L-3877



RIGHT OF WAY CONTROL SHEET

PERMANENT EASEMENT-E				
ALIGN	STATION	OFFSET	NORTH	EAST
WBL	46+56.28	-125.00	641717.2134	1648051.9598
WBL	46+90.00	-125.00	641738.9228	1648077.7676
WBL	47+25.00	EX R/W 89.16'	641734.0303	1648127.6196

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.
- RIGHT OF WAY MONUMENTATION ESTABLISHED _____ TO _____.

REVISIONS

I:\APR-2021\1518 - Winston_Ruths Computer - Bridge - B4626\Right of way staking\control sheets\1-11-2021\tobechecked\B-4626.L.S.-rw02d-1.dgn
AT:LS-312635
mmolsinger

Location and Surveys

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

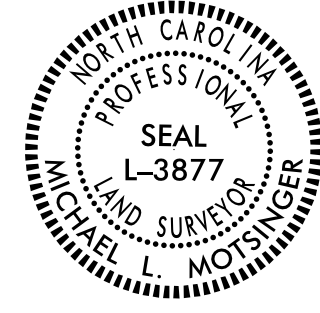
-EBL-

PI Sta 12+67.80	PI Sta 18+95.92
$\Delta = 3' 21'' 18.4'' (RT)$	$\Delta = 5' 08'' 04.0'' (LT)$
$D = 0' 37'' 35.8''$	$D = 0' 56'' 49.3''$
$L = 535.44'$	$L = 542.16'$
$T = 267.80'$	$T = 271.26'$
$R = 9,143.80'$	$R = 6,050.00'$

I, Michael L. Motsinger, certify that the right of way and permanent easement monumentation for this project shown herein 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 1:10,000 (Class A). Field work was performed from 6/15/2016 to 8/15/2016, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

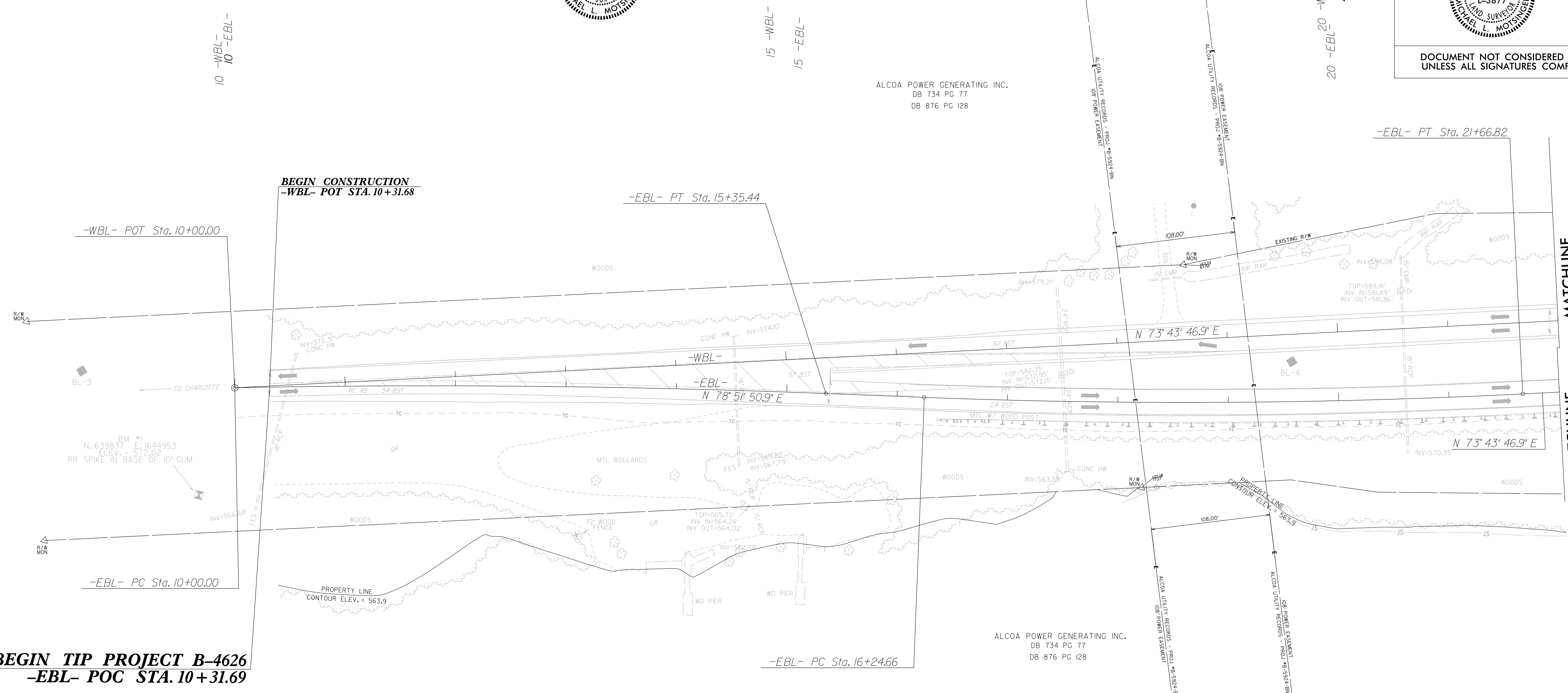
This 12 th day of April, 2021.

DeSigned by:
Michael L. Motsinger
 Professional Land Surveyor L-3877



REVISIONS

I5-APP-2010.07.55
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 AT LS-312635
 mmotsinger



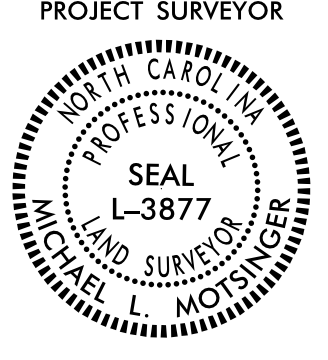
BEGIN TIP PROJECT B-4626
-EBL- POC STA. 10+31.69

NOTES:

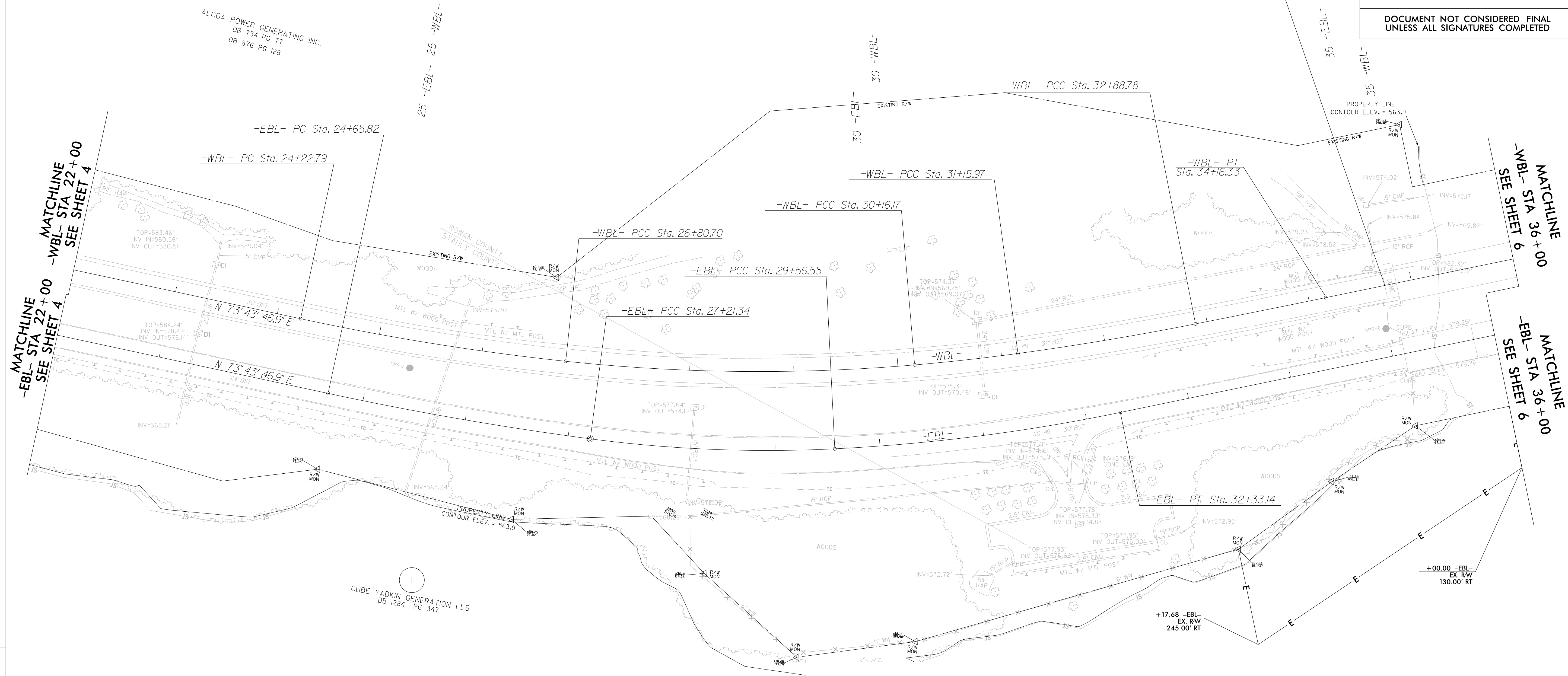
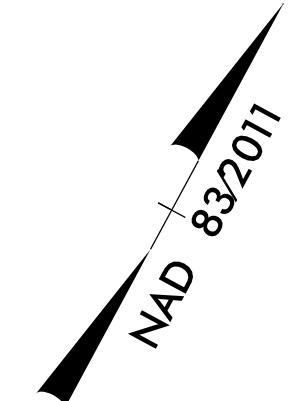
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED _____ TO _____.

MATCHLINE
 -EBL- STA 22 + 00
 SEE SHEET 5

MATCHLINE
 -WBL- STA 22 + 00
 SEE SHEET 5

PROJECT REFERENCE NO. B-4626	SHEET NO. RW05
Location and Surveys	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

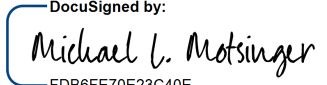
-WBL-				
PI Sta 25+51.87 Δ = 6° 03' 22.4" (LT) D = 2° 20' 53.5" L = 257.91' T = 129.08' R = 2,440.00'	PI Sta 28+48.95 Δ = 10° 59' 00.6" (LT) D = 3° 16' 26.6" L = 335.47' T = 168.25' R = 1,750.00'	PI Sta 30+66.08 Δ = 2° 51' 32.7" (LT) D = 2° 51' 53.2" L = 99.80' T = 49.91' R = 2,000.00'	PI Sta 32+02.40 Δ = 3° 24' 50.7" (LT) D = 1° 58' 32.6" L = 172.80' T = 86.43' R = 2,900.00'	PI Sta 33+52.55 Δ = 0° 22' 13.9" (LT) D = 0° 22' 55.1" L = 127.55' T = 63.77' R = 15,000.00'
-EBL-				
PI Sta 25+93.65 Δ = 4° 37' 37.7" (LT) D = 1° 48' 39.1" L = 255.52' T = 127.83' R = 3,164.00'	PI Sta 28+39.26 Δ = 10° 21' 59.0" (LT) D = 4° 24' 26.5" L = 235.21' T = 117.92' R = 1,300.00'	PI Sta 30+95.12 Δ = 8° 49' 45.4" (LT) D = 3° 11' 31.7" L = 276.59' T = 138.57' R = 1,794.90'		

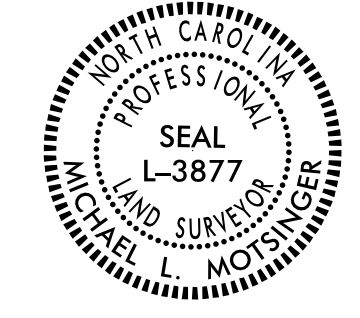


REVISIONS

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 AT LS-312635
 mmotsinger

I, Michael L. Motsinger, certify that the right of way and permanent easement monumentation for this project shown herein 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 1:10,000 (Class A). Field work was performed from 6/15/2016 to 8/15/2016, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 12 day of April, 2021.
 DocuSigned by:

 Professional Land Surveyor L-3877



NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED ____ TO ____.

Location and Surveys

PROJECT SURVEYOR

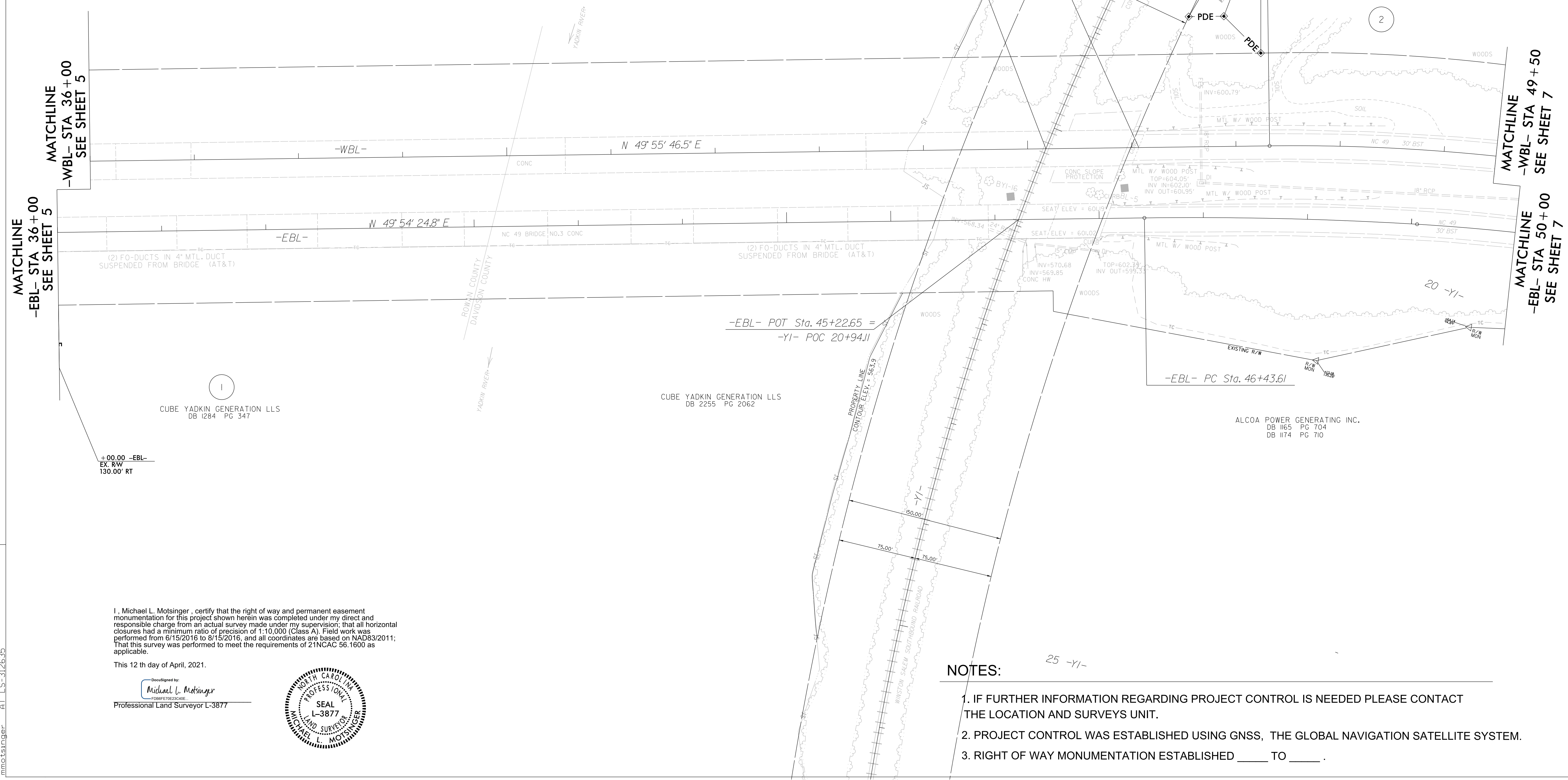


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-EBL-	-WBL-	-YI-
PI Sta 47+74.47	PI Sta 48+92.67	PI Sta 48+92.67
$\Delta = 4' 11' 21.0''$ (RT)	$\Delta = 9' 48' 13.6''$ (RT)	$\Delta = 9' 48' 13.6''$ (RT)
D = 1' 35' 59.1"	D = 3' 03' 50.2"	D = 3' 03' 50.2"
L = 261.86'	L = 319.97'	L = 319.97'
T = 130.99'	T = 160.38'	T = 160.38'
R = 3,581.52'	R = 1,870.00'	R = 1,870.00'

REVISIONS

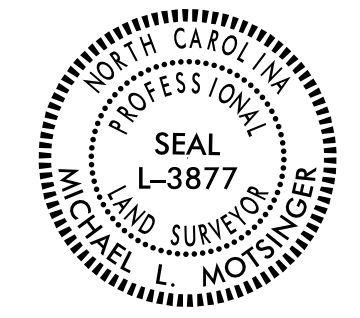
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I, Michael L. Motsinger, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 6/15/2016 to 8/15/2016, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 12 th day of April, 2021.

Designed by
 Michael L. Motsinger
 Professional Land Surveyor L-3877



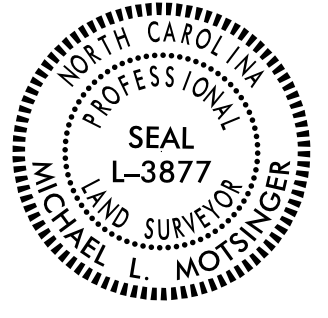
NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED ____ TO ____.

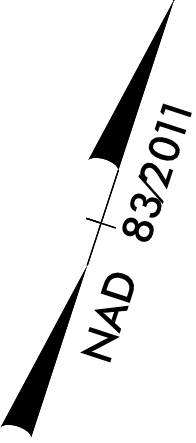
25 -YI-

Location and Surveys

PROJECT SURVEYOR

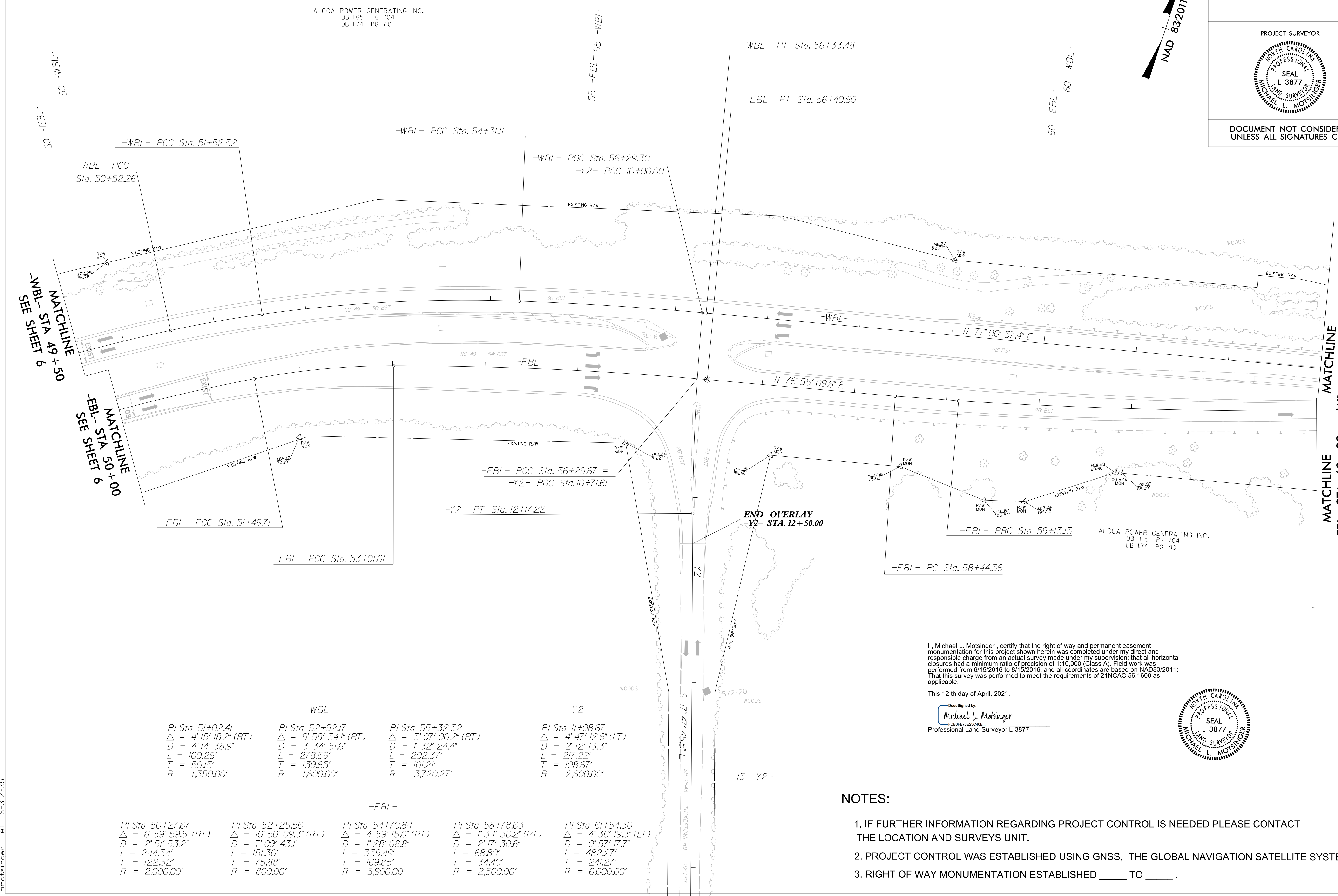


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



2

ALCOA POWER GENERATING INC.
DB 1165 PG 704
DB 1174 PG 710



MATCHLINE
-WBL- STA 49+50
SEE SHEET 6

MATCHLINE
-EBL- STA 50+00
SEE SHEET 6

MATCHLINE
-WBL- STA 63+00
SEE SHEET 8

MATCHLINE
-EBL- STA 63+00
SEE SHEET 8

REVISIONS

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motsinger AT LS-312635

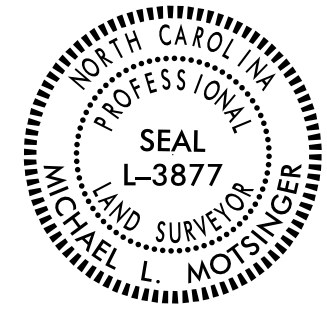
-WBL-			-Y2-		
PI Sta 51+02.41	PI Sta 52+92.17	PI Sta 55+32.32	PI Sta 11+08.67		
$\Delta = 6' 59' 59.5''$ (RT)	$\Delta = 10' 50' 09.3''$ (RT)	$\Delta = 4' 59' 15.0''$ (RT)	$\Delta = 4' 47' 12.6''$ (LT)		
D = 4' 14' 38.9"	D = 3' 34' 51.6"	D = 1' 32' 24.4"	D = 2' 12' 13.3"		
L = 100.26'	L = 278.59'	L = 202.37'	L = 217.22'		
T = 50.15'	T = 139.65'	T = 101.21'	T = 108.67'		
R = 1,350.00'	R = 1,600.00'	R = 3,720.27'	R = 2,600.00'		

-EBL-				
PI Sta 50+27.67	PI Sta 52+25.56	PI Sta 54+70.84	PI Sta 58+78.63	PI Sta 61+54.30
$\Delta = 6' 59' 59.5''$ (RT)	$\Delta = 10' 50' 09.3''$ (RT)	$\Delta = 4' 59' 15.0''$ (RT)	$\Delta = 1' 34' 36.2''$ (RT)	$\Delta = 4' 36' 19.3''$ (LT)
D = 2' 51' 53.2"	D = 7' 09' 43.1"	D = 1' 28' 08.8"	D = 2' 17' 30.6"	D = 0' 57' 17.7"
L = 244.34'	L = 151.30'	L = 339.49'	L = 68.80'	L = 482.27'
T = 122.32'	T = 75.88'	T = 169.85'	T = 34.40'	T = 241.27'
R = 2,000.00'	R = 800.00'	R = 3,900.00'	R = 2,500.00'	R = 6,000.00'

I, Michael L. Motsinger, certify that the right of way and permanent easement monumentation for this project shown herein 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 1:10,000 (Class A). Field work was performed from 6/15/2016 to 8/15/2016, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 12 th day of April, 2021.

Delegated by:
Michael L. Motsinger
Professional Land Surveyor L-3877



NOTES:

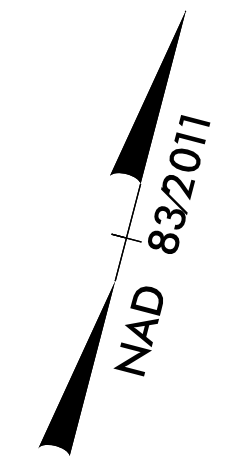
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED ____ TO ____.

Location and Surveys

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



2

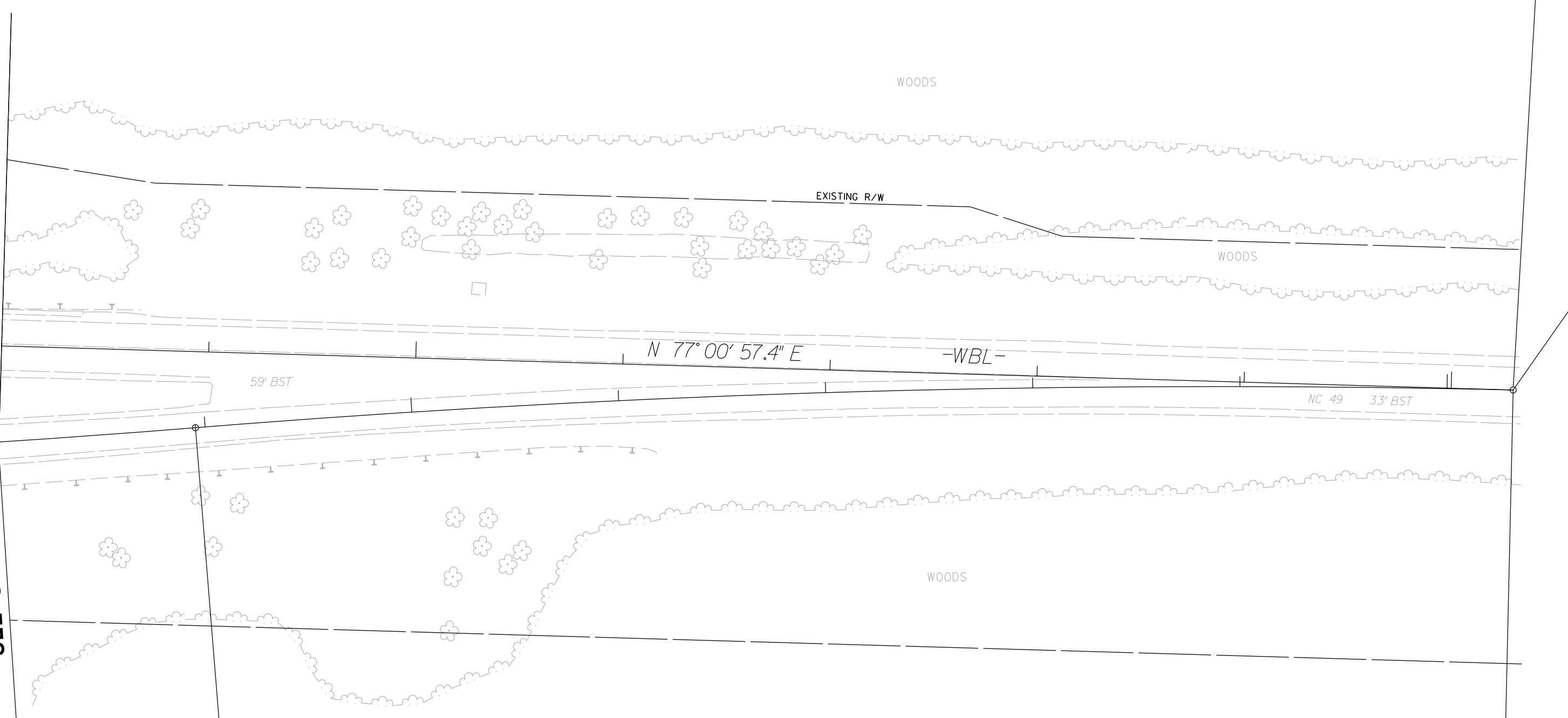
ALCOA POWER GENERATING INC.
DB 1165 PG 704
DB 1174 PG 710

65 -EBL-
65 -WBL-

70 -WBL- 70 -EBL-

MATCHLINE -WBL- STA 63+00 SEE SHEET 7

MATCHLINE -EBL- STA 63+00 SEE SHEET 7



-WBL- POT Sta. 70+29.95 =
-EBL- PT Sta. 70+31.93

**END CONSTRUCTION
END OVERLAY**
-WBL- POT STA. 70+29.95

END TIP PROJECT B-4626
-EBL- POC STA. 70+31.93

-EBL- PRC Sta. 63+95.33

PI Sta 61+54.30	PI Sta 67+13.90
$\Delta = 4' 36'' 19.3''$ (LT)	$\Delta = 5' 56'' 22.4''$ (RT)
$D = 0' 57'' 17.7''$	$D = 0' 55'' 58.7''$
$L = 482.27'$	$L = 636.63'$
$T = 241.27'$	$T = 318.60'$
$R = 6,000.00'$	$R = 6,141.19'$

I, Michael L. Mottsinger, certify that the right of way and permanent easement monumentation for this project shown herein 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 1:10,000 (Class A). Field work was performed from 6/15/2016 to 8/15/2016, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 12 th day of April, 2021.
DocuSigned by:
Michael L. Mottsinger
Professional Land Surveyor L-3877



REVISIONS

I:\APR-2021\0857-5\Prints\0857\Winston_Ruths Computer\Bridges\B4626\Right of way staking\control sheets\1-11-2021\tobechecked\B4626.ls.rw08.dgn
m.mottsinger AT LS-312635

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED _____ TO _____ .