

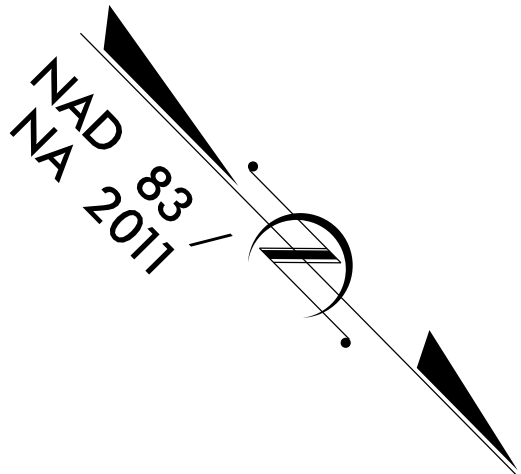
TIP PROJECT: U-4700CB

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4700CB	RW01	11

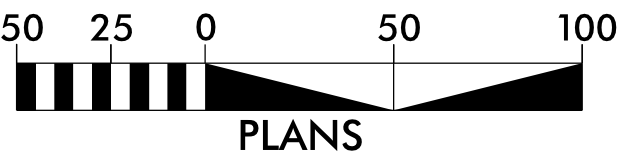
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

CALDWELL COUNTY



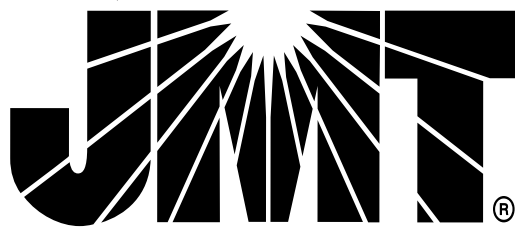
GRAPHIC SCALE



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U4700CB-103" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 772,383.024(ft) EASTING: 1,266,903.921(ft) ELEVATION: 1,194.860(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999873803 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U4700CB-103" TO -L- STATION 593+50.00 IS S 35-44'45.2" E 1449.52(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:



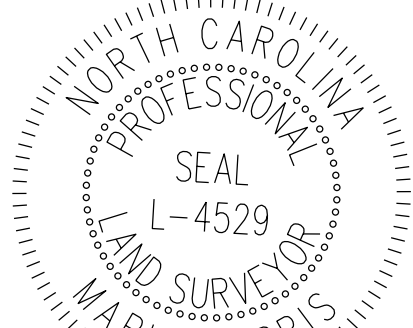
108 ASHEVILLE COMMERCE PARKWAY
CANDLER, NC 28715
FIRM LICENSE # C-3097

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
12/31/2018

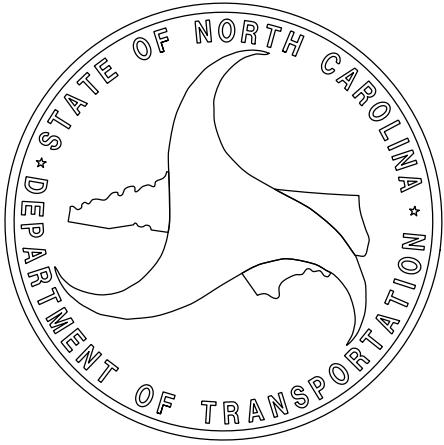
LETTING DATE:
08/18/2026

PROFESSIONAL LAND SURVEYOR



DocuSigned by:
Mark A. Parris
F1570CB85C7248A...

5/12/2026 11:38:39 AM PDT
Date:



6/2/2021

REVISIONS

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: Static
Dates of survey: Nov. 2017
Datum/Epoch: NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: U4700CB-103
Northing: 772383.0240
Easting: 1266903.9210
Combined grid factor: 0.999873803
Geoid model: 12A CONUS
Units: US Feet

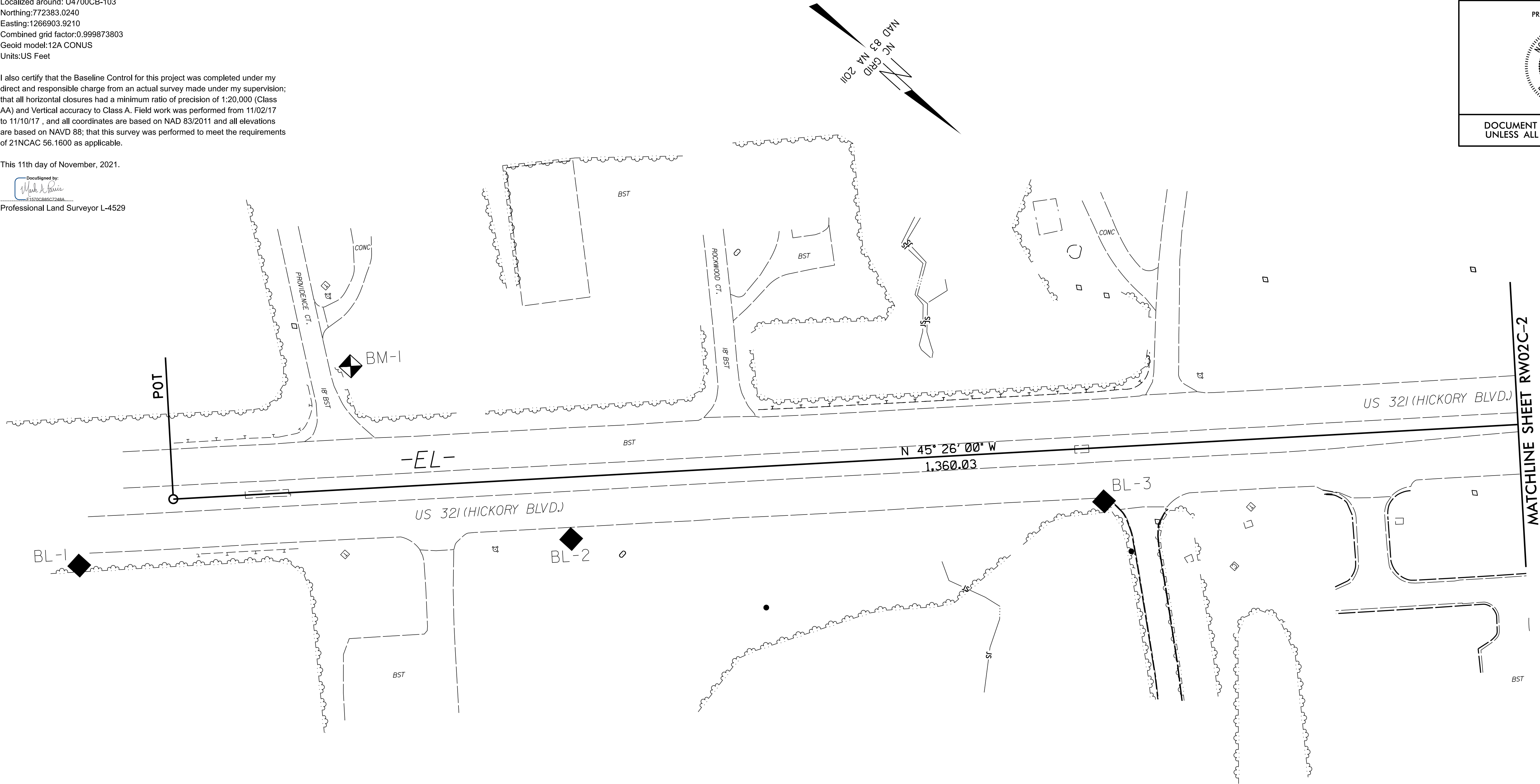
I also certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 11/02/17 to 11/10/17, 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 11th day of November, 2021.

DocuSigned by:
Mark A. Parris
Professional Land Surveyor L-4529

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



PROJECT REFERENCE NO.	SHEET NO.
U-4700CB	RW02C-1
Location and Surveys	
 108 ASHEVILLE COMMERCE PARKWAY CANDLER, NC 28715 FIRM LICENSE # C-3097	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS

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.

6/2/99

REVISIONS

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: Static
Dates of survey: Nov. 2017
Datum/Epoch: NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: U4700CB-103
Northing: 772383.0240
Easting: 1266903.9210
Combined grid factor: 0.999873803
Geoid model: 12A CONUS
Units: US 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 11/02/17 to 11/10/17, 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 11th day of November, 2021.

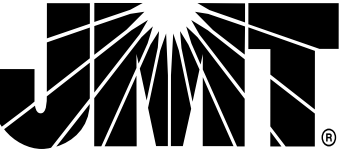
DocuSigned by:
Mark A. Parris
F1570C885C7248A

Professional Land Surveyor L-4529

SURVEY CONTROL SHEET
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

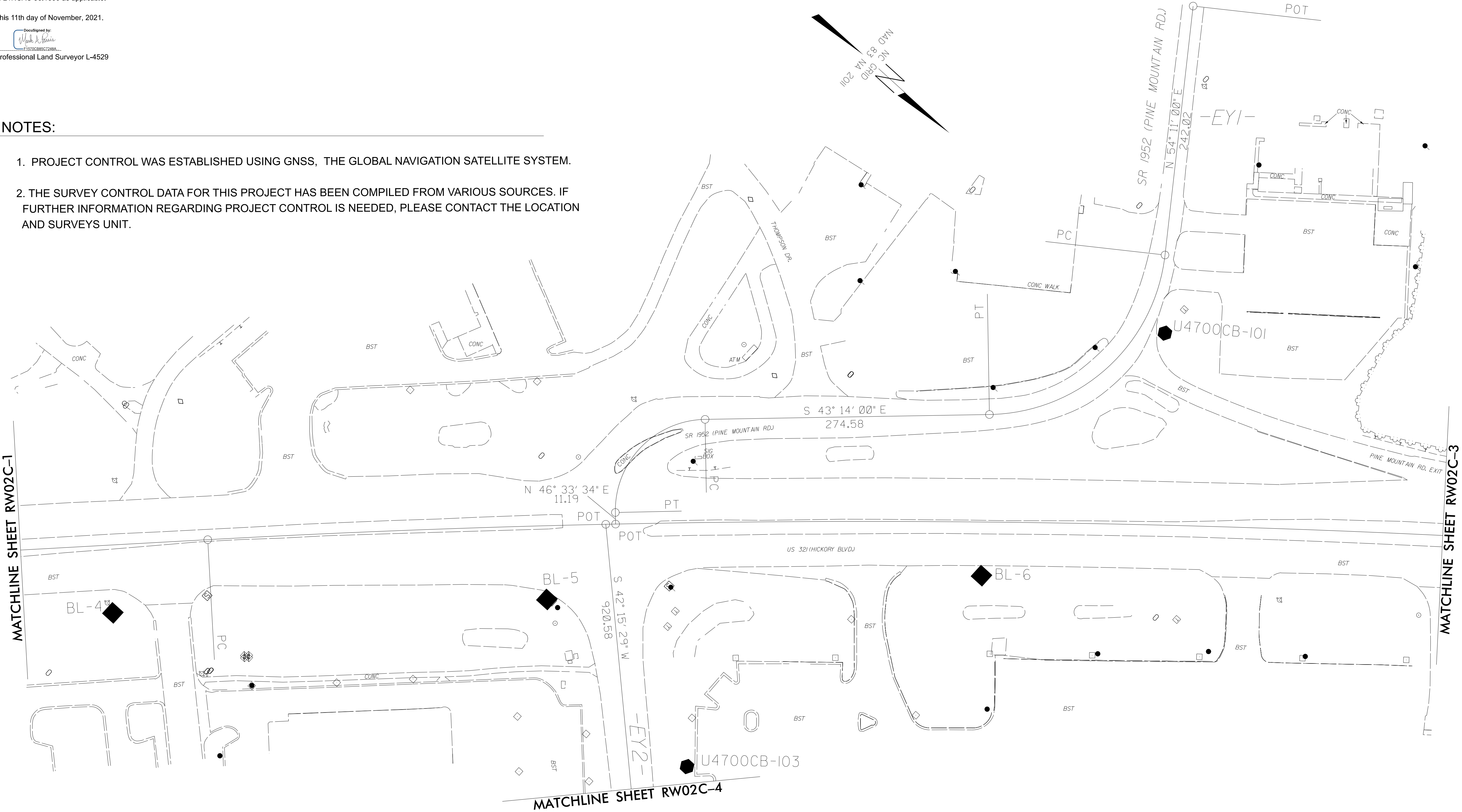
SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS

U4700CB-102
BM-2

PROJECT REFERENCE NO. U-4700CB	SHEET NO. RW02C-2
Location and Surveys	
 108 ASHEVILLE COMMERCE PARKWAY CANDLER, NC 28715 FIRM LICENSE # C-3097	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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.

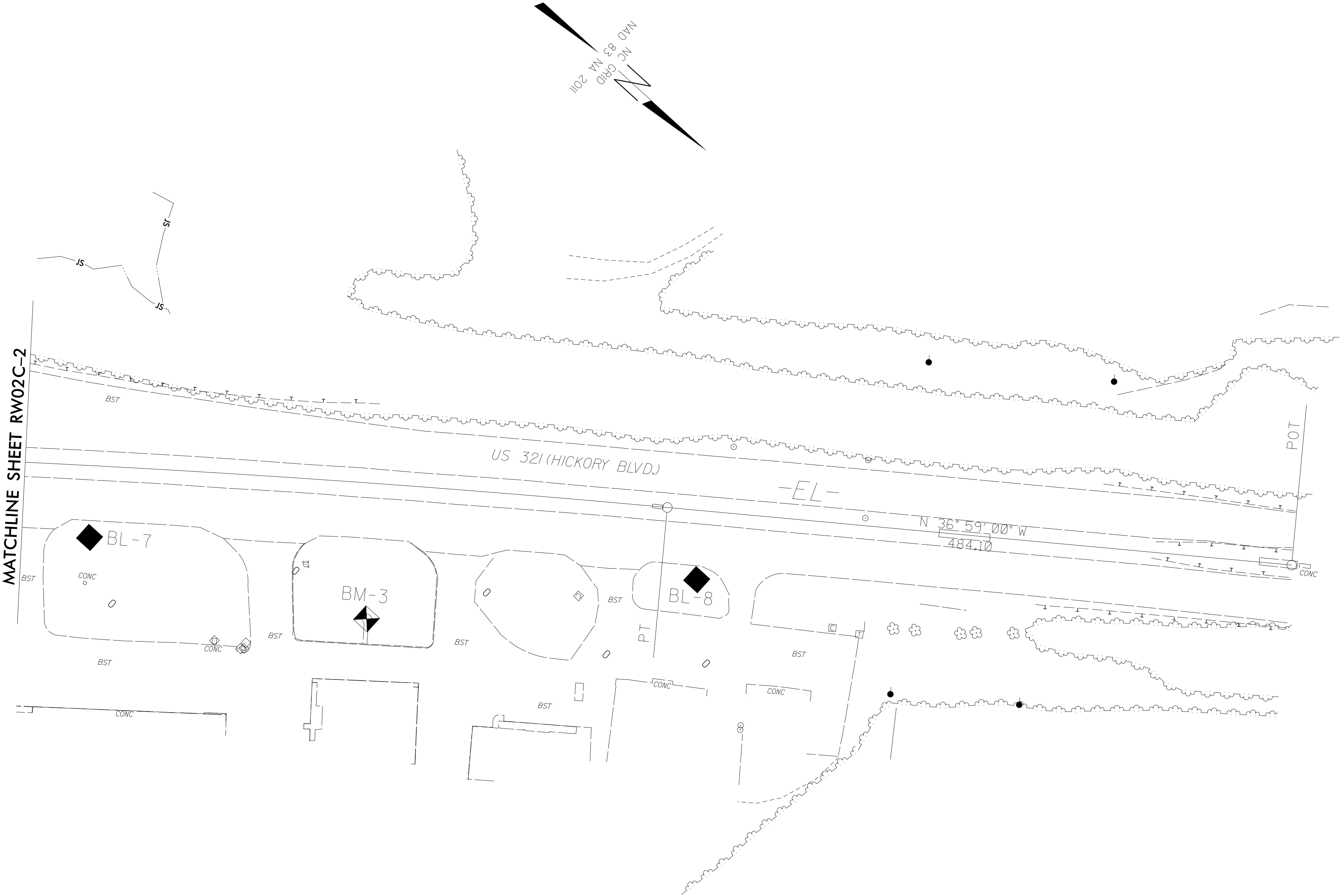


6/2/19

REVISIONS

SYTIME\$COUN\$US\$R\$K\$A\$M\$E\$

SURVEY CONTROL SHEET
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS

PROJECT REFERENCE NO.	SHEET NO.
U-4700CB	RW02C-3
Location and Surveys	
 108 ASHEVILLE COMMERCE PARKWAY CANDLER, NC 28715 FIRM LICENSE # C-3097	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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: Static
Dates of survey: Nov. 2017
Datum/Epoch: NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: U4700CB-103
Northing: 772383.0240
Easting: 1266903.9210
Combined grid factor: 0.999873803
Geoid model: 12A CONUS
Units: US 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 11/02/17 to 11/10/17 , 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 11th day of November, 2021.

DocuSigned by:

F157CDBAC728A4

Professional Land Surveyor L-4529

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.

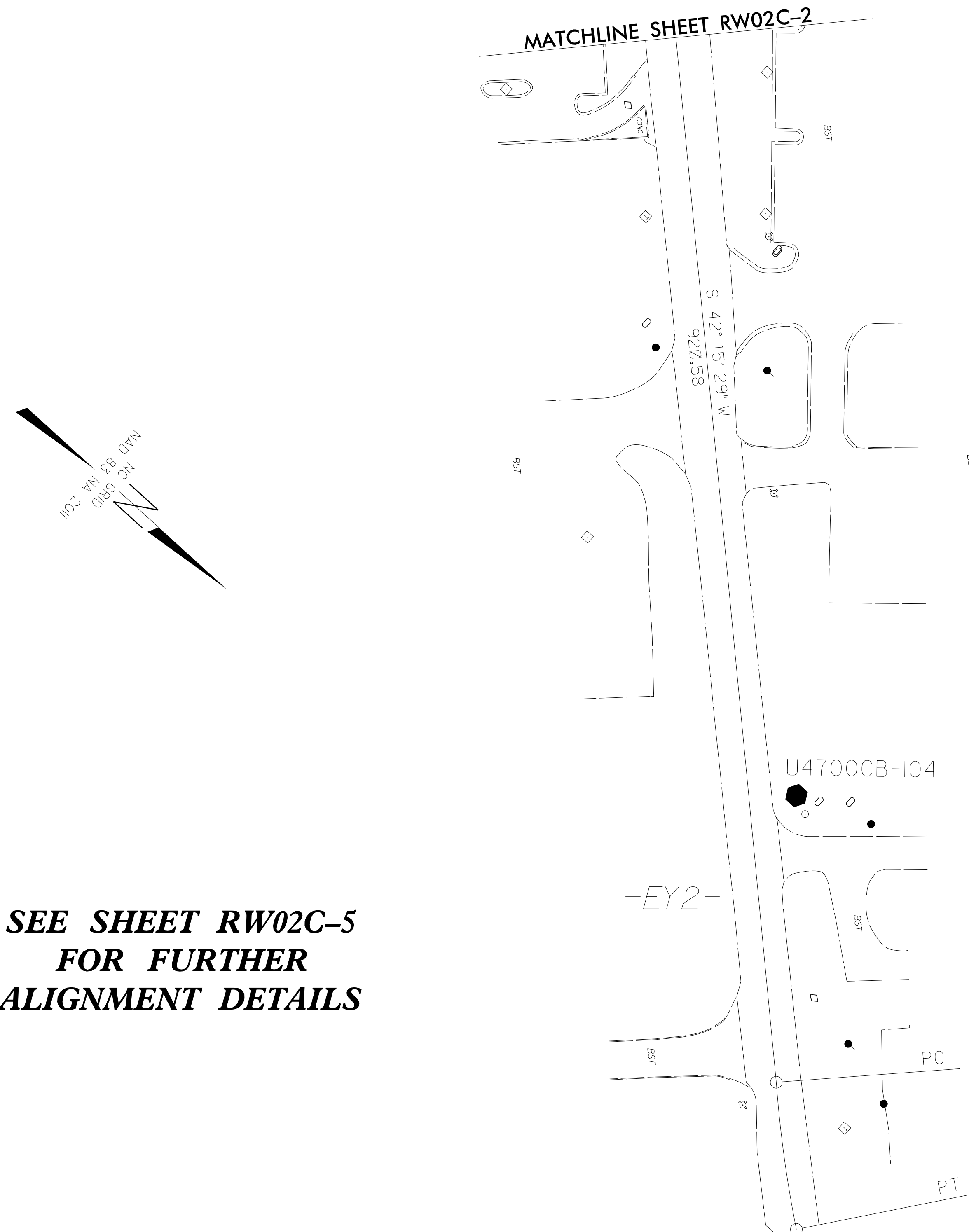
6/2/99

REVISIONS

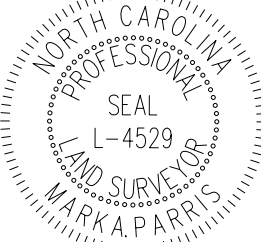
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 \$\$\$DGN\$\$\$
 \$\$\$USERNAME\$\$\$

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



**SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS**

PROJECT REFERENCE NO.	SHEET NO.
U-4700CB	RW02C-4
Location and Surveys	
	
108 ASHEVILLE COMMERCE PARKWAY CANDLER, NC 28715 FIRM LICENSE # C-3097	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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: Static
Dates of survey: Nov. 2017
Datum/Epoch: NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: U4700CB-103
Northing: 772383.0240
Easting: 1266903.9210
Combined grid factor: 0.999873803
Geoid model: 12A CONUS
Units: US 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 11/02/17 to 11/10/17 , 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 11th day of November, 2021.

DocuSigned by:
Mark A. Puccio

Professional Land Surveyor L-4529

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.

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: Static
Dates of survey: Nov. 2017
Datum/Epoch: NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: U4700CB-103
Northing: 772383.0240
Easting: 1266903.9210
Combined grid factor: 0.999873803
Geoid model: 12A CONUS
Units: US 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 11/02/11 to 11/10/17, 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 11th day of November, 2021.

DocuSigned by:
Mark A. Lewis
F1570CB85C7248A

Professional Land Surveyor L-4529

SURVEY CONTROL SHEET
W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

	POINT	DESC.	NORTH	EAST	ELEVATION
1		BL - 1	770916.8420	1268120.2370	1175.73
2		BL - 2	771219.9360	1267813.4290	1169.43
3		BL - 3	771542.9980	1267475.2910	1165.99
4		BL - 4	771872.7940	1267166.8130	1173.03
5		BL - 5	772174.2630	1266875.4230	1185.47
6		BL - 6	772469.4120	1266576.2410	1194.74
7		BL - 7	772848.7160	1266257.6140	1196.15
8		BL - 8	773217.5970	1265966.5130	1189.85

POINT	DESC.	NORTH	EAST	ELEVATION
GPS102	U4700CB-102	772168.4630	1265798.3310	1231.46
GPS101	U4700CB-101	772442.9550	1266283.7110	1207.25
BY5	BL-5	772174.2630	1266875.4230	1185.47

POINT	DESC.	NORTH	EAST	ELEVATION
Y5	BL - 5	772174.2630	1266875.4230	1185.47
GPS103	U4700CB-103	772383.0240	1266903.9210	1194.86
GPS104	U4700CB-104	772736.4690	1267259.7510	1207.28

```

BM1          ELEVATION = 1176.62
N 770975     E 1267831
NAIL IN BASE OF 24" OAK
.....
BM2          ELEVATION = 1240.91
N 772110     E 1265860
NAIL SET IN BASE OF 18" OAK
.....
BM3          ELEVATION = 1196.55
N 773049     E 1266160
TOP OF MTL SIGN BASE
.....

```

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	770938.708	1268021.822							
LINE			N 45°26'00.0" W	1360.03					
PC	771893.091	1267052.893							
CURVE			N 41°12'30.0" W	1688.47	08°27'00.0(RT)	00°30'00.0°	1690.00	846.53	11459.16
P	773163.358	1265940.532							
LINE			N 36°59'00.0" W	484.10					
POT	773550.060	1265649.308							

EY1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT LINE	772250.653	1266031.514	N 54°11'00.0" E	242.02					
PC	772392.284	1266227.770	S 84°31'30.0" E	229.15	82°35'00.0"(RT)	33°00'00.0"	250.25	152.49	173.62
CURVE PT	772370.421	1266455.870	S 43°14'00.0" E	274.58					
LINE PC	772170.367	1266643.953	S 88°20'13.2" E	124.88	90°12'26.4"(LT)	65°00'00.0"	138.78	88.47	88.15
CURVE PT	772166.743	1266768.785	N 46°33'33.6" E	11.19					
LINE POT	772174.440	1266776.913							

EY2									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	772167.555	1266783.444							
LINE			N 42°15'28.7" E	920.58					
PC	772848.901	1267402.509							
CURVE			N 39°57'36.9" E	93.89	07°05'31.9"(LT)	07°32'55.9"	93.95	47.04	759.00
PT	772920.868	1267462.811							

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

RIGHT OF WAY CONTROL SHEET

I, R. Landon Wagoner, 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 September 2023 and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of June, 2026.


Professional Land Surveyor L-4301

PROJECT REFERENCE NO.
U4700CB

SHEET NO.
RW03E-1

Location and Surveys

DIV.11 L&S

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
LPRO	592+62.82	604.68	771576.1095	1268237.2198
LPRO	592+80.00	367.99	771419.5651	1268058.8588
LPRO	594+20.12	552.81	771649.5565	1268088.7678
LPRO	594+51.83	369.18	771541.0092	1267937.2935
LPRO	595+30.00	129.38	771425.0614	1267713.3105
LPRO	595+30.00	155.00	771443.3101	1267731.2912
LPRO	597+56.97	225.83	771653.0634	1267619.3233

ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
RPA	8+50.00	27.17	772541.2757	1266272.5142

ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
Y38NE	20+26.87	40.00	772236.7274	1266897.0745
Y38NE	20+33.01	-40.00	772294.9770	1266841.8958
Y38NE	23+65.00	40.00	772487.3636	1267124.0371
Y38NE	24+50.00	-40.00	772604.0682	1267121.7922
Y38NE	25+50.00	33.29	772628.9986	1267243.2410
Y38NE	25+50.00	35.00	772627.8503	1267244.5090
Y38NE	25+50.00	-26.71	772669.2726	1267198.7661

ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
Y38SW	10+00.00	30.00	772282.4855	1266126.8889
Y38SW	10+00.00	20.00	772290.5944	1266121.0369
Y38SW	11+44.85	30.00	772367.2498	1266244.3456
Y38SW	11+80.00	-20.21	772427.5755	1266248.8418
Y38SW	13+97.08	30.00	772348.9911	1266434.8413
Y38SW	14+95.00	40.00	772270.8033	1266494.6246
Y38SW	15+41.78	40.00	772236.7187	1266526.6695
Y38SW	15+96.45	40.00	772196.8876	1266564.1169
Y38SW	16+79.46	40.00	772136.4121	1266620.9735
Y38SW	17+10.00	53.19	772099.2066	1266641.4404
Y38SW	17+41.84	55.00	772076.3134	1266690.8122

ROW MARKER PERMANENT EASEMENT-E				
ALIGN	STATION	OFFSET	NORTH	EAST
LPRO	604+65.00	129.34	772080.7529	1267048.7650
LPRO	612+04.50	140.00	772622.9463	1266558.8988
LPRO	612+06.35	131.00	772618.4120	1266550.9124
LPRO	612+10.00	141.12	772627.7767	1266556.1737
LPRO	612+12.37	129.72	772622.0568	1266546.0351

ROW MARKER PERMANENT EASEMENT-E				
ALIGN	STATION	OFFSET	NORTH	EAST
Y38NE	20+55.00	70.00	772237.4402	1266938.1923
Y38NE	20+60.00	-40.00	772314.9821	1266860.0113
Y38NE	23+55.00	70.00	772459.8141	1267139.5622
Y38NE	25+85.00	50.00	772643.7254	1267279.1209
Y38NE	25+85.00	33.35	772654.9030	1267266.7775

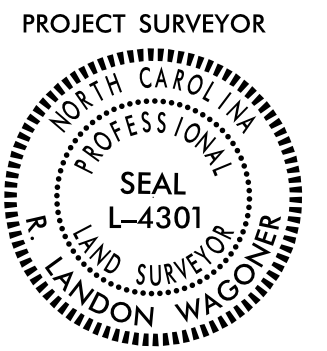
ROW MARKER PERMANENT EASEMENT-E				
ALIGN	STATION	OFFSET	NORTH	EAST
Y38SW	10+75.00	30.00	772326.3750	1266187.7059
Y38SW	10+75.00	45.00	772314.2116	1266196.4838
Y38SW	10+95.00	45.00	772325.9155	1266212.7017
Y38SW	10+95.00	30.00	772338.0789	1266203.9238

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

DIV.11 L&S



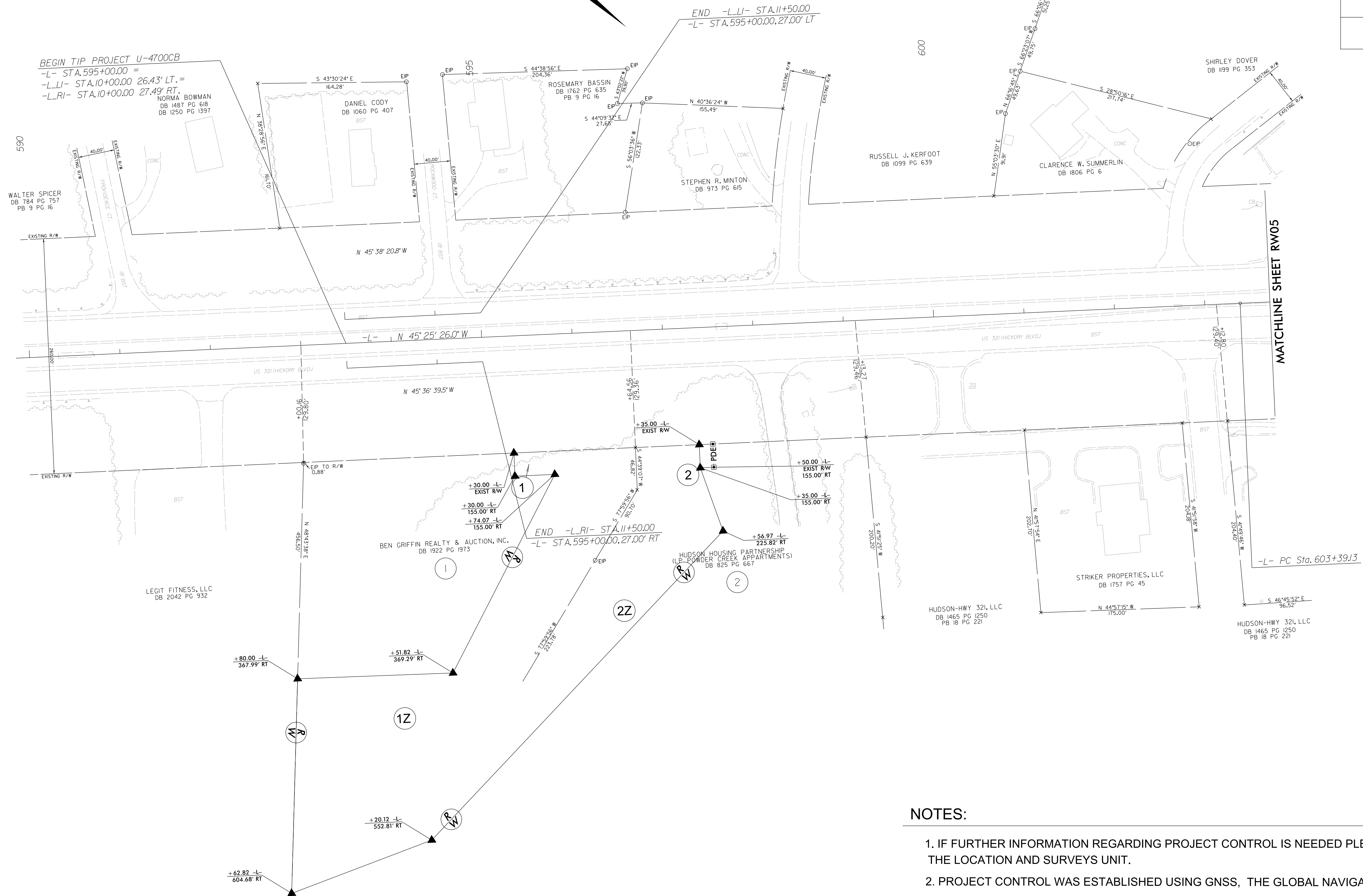
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, R. LANDON WAGONER, 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 SEPTEMBER 2023, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 2ND day of JUNE, 2026.

R. Landon Wagener
2468613770326420
Professional Land Surveyor L-4301

-L- CURVE DATA
 PI Sta 611+89.94
 $\Delta = 8^{\circ} 32' 11.4''$ (RT)
 $D = 0^{\circ} 30' 09.3''$
 $L = 1,698.49'$
 $T = 850.82'$
 $R = 11,400.00'$
 S.E.=NC

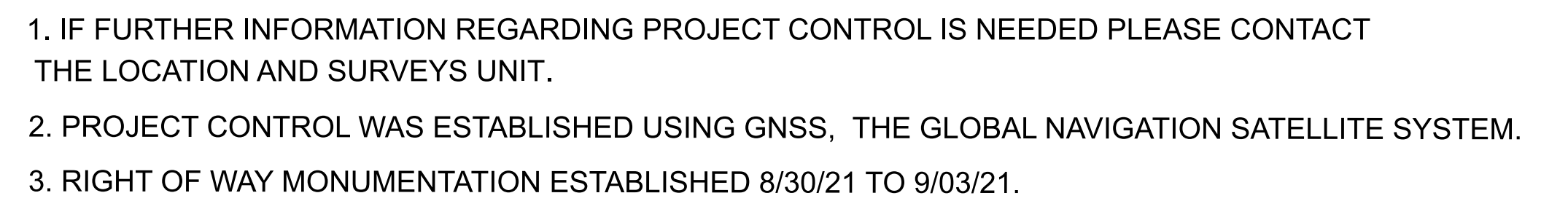


NOTES:

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 _____.

-RPA- CURVE DATA
PI Sta 7+70.90
 $\Delta = 20^\circ 25' 52.3''$ (RT)
 $D = 4^\circ 46' 28.7''$
 $L = 427.91'$
 $T = 216.25'$
 $R = 1,200.00'$

Professional Land Surveyor L-4529





+ 65.00 -Y38NE
40.00' RT.

+ 55.00 -Y38NE-
70.00' RT.

HUDSON-HWY 321, LLC
DB 1465 PG 1250
PB 18 PG 221

+ 50.00 -Y38NE-
33.29' RT.

+ 85.00 -Y38NE-
33.35' RT.
50.00' RT.

TODD E. BUMGARDNER
DB 1844 PG 1939

-1- POT Sta. 28+63.82

END PAVING
-Y38NE- STA.25+50.00
END CONSTRUCTION
-Y38NE- STA.25+85.00

CALDWELL COMMUNITY COLLEGE
AND TECHNICAL INSTITUTE
DB 1603 PG 1447
PB 21PG 134

$$\frac{+ 50.00 - Y38NE=}{40.00' LT.}$$
$$\frac{+60.00 - Y38NE-}{45.00' \text{ LT.}}$$
$$\frac{342153}{181.16'}$$

25

Professional Land Surveyor L-4529



108 ASHEVILLE COMMERCE PARKWAY
CANDLER, NC 28715
FIRM LICENSE # C-3097

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

_____, Mark A. Parris, 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 8/30/21 to 9/03/21, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 10th day of September, 2021.

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 8/30/21 TO 9/03/21.