

SURVEY CONTROL SHEET NCGS MONUMENT "OLIN" -FINAL-

PROJECT REFERENCE NO.	SHEET NO.
R-5605	1C-1
LOCATIONS AND SURVEYS	

FINAL RIGHT-OF-WAY MARKERS TO BE SET

ALIGN	STATION	OFFSET	NORTH	EAST
L	10+37.32	RT EX RW	573418.93	892824.23
L	10+37.39	LT EX RW	573485.68	892922.20
L	11+63.58	80' RT	573314.58	892896.84
L	11+63.58	LT EX PL	573363.35	892996.05
L	12+40.18	LT EX PL	573331.58	893033.41
L	14+00.82	60' LT	573268.81	893150.54
L	14+78.20	60' LT	573257.23	893214.37
L	14+78.20	60' RT	573137.50	893206.30
L	22+40.00	60' LT	573205.96	893974.45
L	22+40.00	60' RT	573086.23	893968.37
L	23+17.00	114' RT	573027.17	894038.56
L	23+26.50	102' LT	573242.07	894053.08
L	24+77.00	102' RT	573028.37	894200.01
L	24+78.00	104' LT	573233.77	894215.87
L	25+49.80	60' LT	573185.10	894283.65
L	25+49.80	60' RT	573065.37	894275.57
L	28+08.26	60' LT	573219.20	894512.11
L	28+08.00	60' RT	573108.85	894504.53
L	37+70.39	60' LT	573561.50	895411.29
L	37+70.39	60' RT	573440.35	895403.38
L	49+65.86	60' LT	574333.38	896219.68
L	49+65.86	60' RT	574285.55	896329.73
L	51+14.86	LT EX RW	574470.48	896279.25
L	51+14.86	RT EX RW	574422.21	896389.12
Y2	10+50.00	LT EX RW	572856.31	894073.99
Y2	10+50.00	RT EX RW	572850.78	894131.15
Y2	11+62.00	42' RT	572960.82	894155.54
Y2	15+60.00	LT EX RW	573363.88	894123.06
Y2	15+60.00	40' RT	573327.25	894192.00
Y2	16+18.55	40' RT	573413.54	894197.46
Y2	16+18.55	22.83 RT	573415.20	894180.37

I, Phillip B. White, certify that this map was drawn under my supervision from an actual survey made under my supervision using GNSS (GPS) and traditional field procedures; that the ratio of precision as calculated [(21 NCAC 56.1603)] is 1:10,000 or better (Class A); that this survey is oriented to NC Grid, NAD '83 (CORS 96)(2002) based upon global navigation satellite system (GNSS) observations; that the vertical control was completed to meet the Class C standard [(21 NCAC 56.1605 (a))].

The following information was used to perform the GNSS portion of the survey.

Horizontal Positional Accuracy: 0.005 Meters
Vertical Positional Accuracy: 0.003 Meters
Type of GNSS Field Procedure: Static (Post-Processed using Online Positioning User Service, OPUS-RS)
Date of GNSS Survey: 8-16-2006
Horizontal Datum/Epoch: NAD '83 (CORS 96) Epoch 2002.00
Vertical Datum: NAVD '88, Geoid 03
Combined Grid Factor: 0.9997750
Base Point of Localization: NCGS MONUMENT "OLIN"
Units: U.S. Survey Feet

Witness my signature, License Number, and Seal this 23rd Day of December, A.D., 2015



12-23-2015

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED UPON THE NAD 83 (CORS 96)(2002) STATE PLANE COORDINATES ESTABLISHED BY GLOBAL NAVIGATION SATELLITE SYSTEM OBSERVATIONS ON SITE AND ON NCGS MONUMENT "OLIN". POSITIONS ARRIVED AT BY ONLINE POSITIONING USER SERVICE (OPUS-RS). MONUMENT "OLIN" HAVING NO GRID NAD 83 (CORS 96)(2002) COORDINATES OF N: 572877.403; E: 894079.146; ELEV: 2131.88'. THE AVERAGE COMBINED GRID FACTOR USED FOR THIS PROJECT IS 0.9997750. ALL COORDINATES SHOWN ARE GROUND COORDINATES LOCALIZED TO NCGS MONUMENT "OLIN". THE NC GRID BEARING AND HORIZONTAL GROUND DISTANCE FROM NCGS MONUMENT "OLIN" TO L-STATION 9+62.83 IS N62°57'21"W 1400.88'. VERTICAL DATUM IS REFERENCED TO NAVD 1988.

NOTES

- * Horizontal Datum is North Carolina Grid, North American Datum of 1983, based on multiple five to six hour sessions of GPS reception at monument OLIN. Position arrived at by OPUS solution provided by National Geodetic Survey. Combined Grid Factor is: 0.9997750
- * All bearings are North Carolina Grid Bearings (NAD '83) unless otherwise noted.
- * All distances shown hereon are horizontal ground distances unless otherwise noted.
- * Station and offset information shown hereon was obtained from road right-of-way construction plans and have not been calculated hereon. Curves shown on said plans and corresponding stations along centerline were calculated using chord definition curves. See said construction plans for more details.

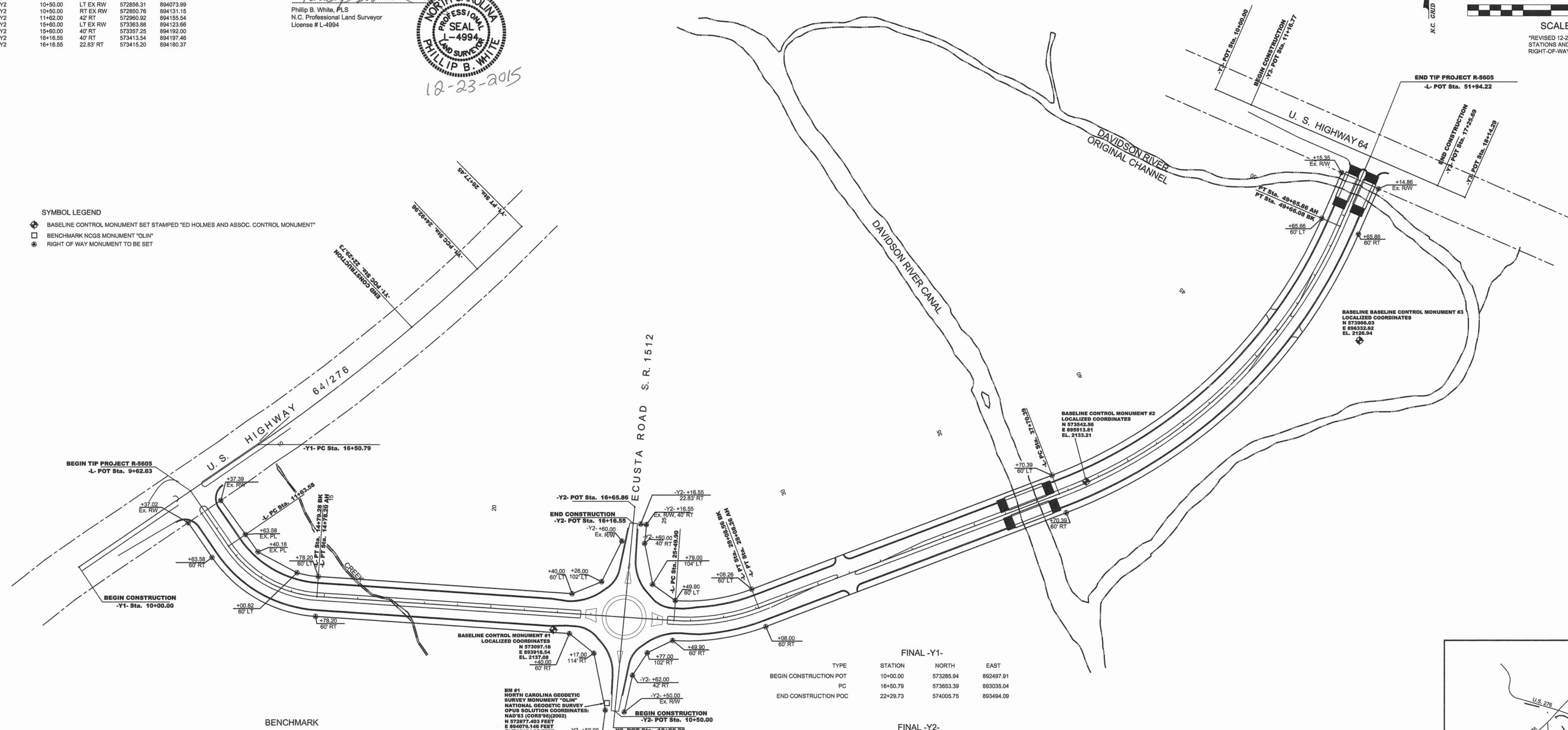


SCALE 1" = 150'

*REVISOR 12-23-15 TO ADD EQUALITY TO PT STATIONS AND REVIS STATIONS OF TWO RIGHT-OF-WAY MONUMENTS

SYMBOL LEGEND

- ◆ BASELINE CONTROL MONUMENT SET STAMPED "ED HOLMES AND ASSOC. CONTROL MONUMENT"
- BENCHMARK NCGS MONUMENT "OLIN"
- RIGHT OF WAY MONUMENT TO BE SET



BENCHMARK

BM #1: NCGS MONUMENT "OLIN"	N: 572877.403	E: 894079.146	ELEV: 2131.88
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BASELINE CONTROL MONUMENTS

BASELINE POINT	NORTH	EAST	ELEVATION
#1	573097.18	893918.54	2137.08
#2	573542.56	895513.81	2133.21
#3	573966.03	896332.62	2126.94

FINAL -L-

TYPE	STATION	NORTH	EAST
BEGIN TIP PROJECT POT	9+62.83	573514.22	892831.61
PC	11+63.58	573348.53	892945.31
PT	14+78.20	573197.37	893210.34
PC	25+49.80	573125.24	894279.61
PT	28+08.26	573163.13	894533.45
PC	37+70.39	573505.43	895432.84
PT	49+65.86	574309.47	896274.71
END TIP PROJECT POT	51+94.22	574309.47	896274.71

FINAL -Y1-

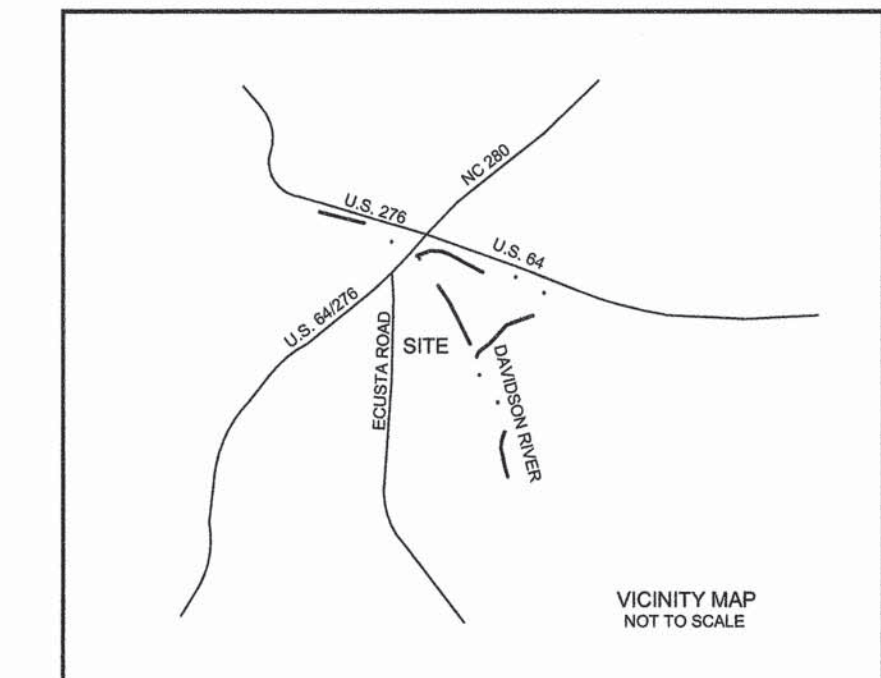
TYPE	STATION	NORTH	EAST
BEGIN CONSTRUCTION POT	10+00.00	573285.84	892497.91
PC	16+50.79	573853.39	893035.04
END CONSTRUCTION POC	22+28.73	574005.75	893494.09

FINAL -Y2-

TYPE	STATION	NORTH	EAST
POT	10+00.00	572803.73	894098.08
BEGIN CONSTRUCTION POT	10+50.00	572853.54	894102.92
END CONSTRUCTION POT	16+18.55	573417.40	894157.65
POT	16+65.86	573466.48	894162.41

FINAL -Y3-

TYPE	STATION	NORTH	EAST
POT	10+00.00	574720.74	896901.42
BEGIN CONSTRUCTION POT	11+16.77	574674.19	896808.51
END CONSTRUCTION POT	17+25.69	574431.42	896598.94
POT	18+14.29	574396.11	896648.20



VICINITY MAP NOT TO SCALE