

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

FORSYTH COUNTY

LOCATION: WINSTON SALEM - SR 2643 (UNION CROSS RD.) FROM
SR 2691 (WALLBURG RD) TO SR 2632 (SEDE GARDEN RD.)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES,
AND SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4909	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40278.1.1	STP-2643(2)	PE	
40278.2.1	STPHPP-2643(3)	R/W/UTIL	
40278.3.1	STP-2643(5)	CONST	



2012001494 0

FORSYTH CO, NC FEE \$156.00

PRESENTED & RECORDED:

01-12-2012 01:03:24 PM

C. NORMAN HOLLEMAN

REGISTER OF DEEDS

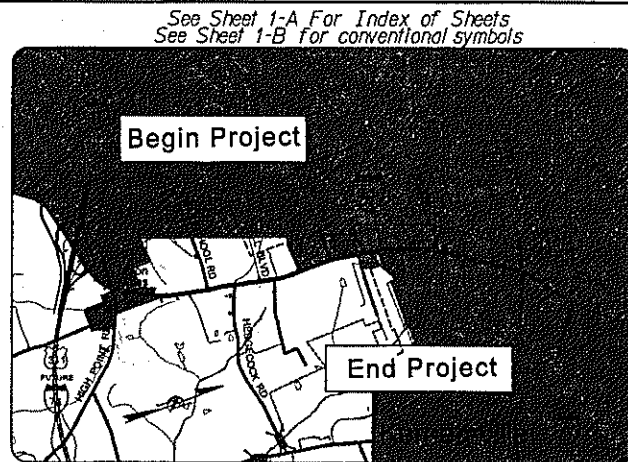
BY: PATSY RUTH DAVIS

DPT

BK: H 2

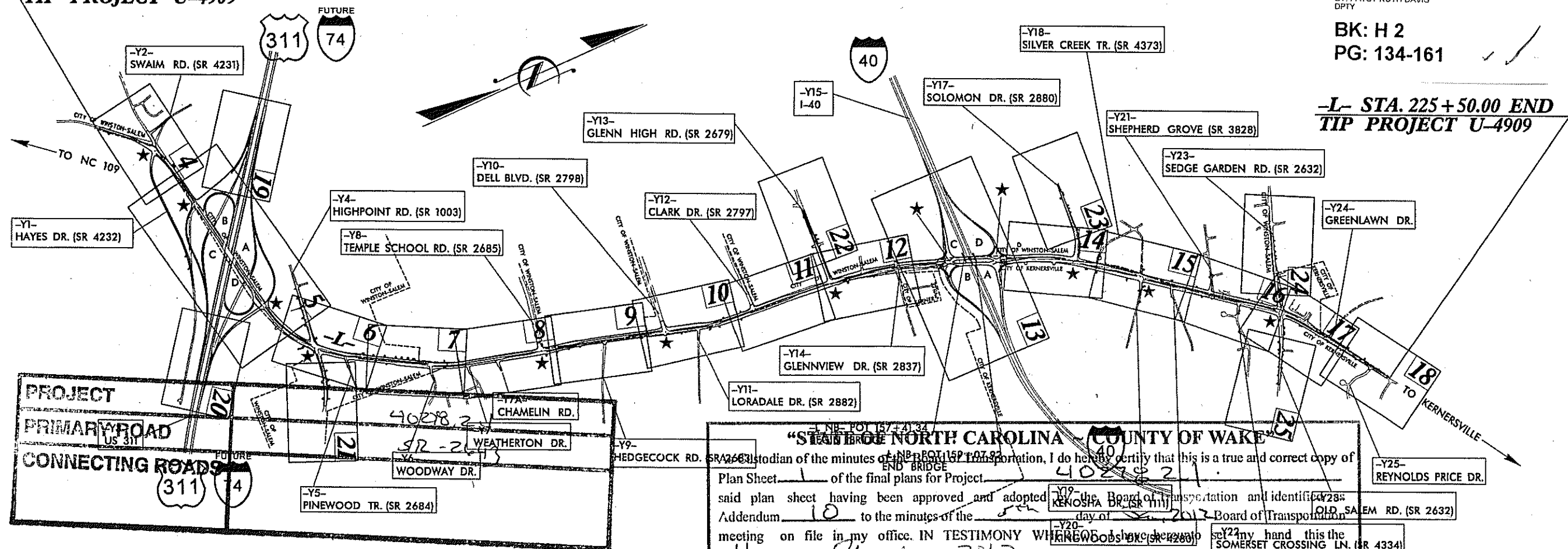
PG: 134-161

-L- STA. 225+50.00 END
TIP PROJECT U-4909



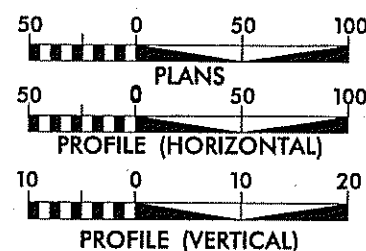
VICINITY MAP

-L- STA. 7+40.00 BEGIN
TIP PROJECT U-4909



NOTES:
1. THIS IS A PARTIAL CONTROLLED ACCESS PROJECT WITH
ACCESS BEING LIMITED TO POINTS AS SHOWN ON PLANS.

GRAPHIC SCALES



DESIGN DATA

ADT 2011 = 25,120
ADT 2031 = 41,520
DHV = 10%
D = 60%
T = 9% *
V = 50 MPH
CLASS = URBAN
COLLECTOR
* DUAL = 6%
DRAINAGE TIER: REGIONAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-4909 4.131 mi
LENGTH STRUCTURE TIP PROJECT U-4909 0.032 mi
TOTAL LENGTH TIP PROJECT U-4909 4.099 mi

PLANS PREPARED BY :

RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112

FOR
DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
AUGUST 15, 2008

LETTING DATE:
DECEMBER 20, 2011

J.T. PEACOCK, JR., P.E.

PROJECT ENGINEER

MICHAEL T. MERRITT, P.E.

PROJECT DESIGN ENGINEER

NC DOT CONTACT:
K. ZAK HAMIDI, PE

PROJECT ENGINEER - PROJECT SERVICES

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL
027434
ENGINEER
MATTHEW L. COON

ROADWAY DESIGN
ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL
21122
ENGINEER
MICHAEL T. MERRITT

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA



Art McMiller P.E.
STATE HIGHWAY DESIGN ENGINEER

Note: Not to Scale***S.U.E. = Subsurface Utility Engineering**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYSPROJECT REFERENCE NO.
U-4909SHEET NO.
1-B

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	_____
County Line	_____
Township Line	_____
City Line	_____
Reservation Line	_____
Property Line	_____
Existing Iron Pin	_____
Property Corner	_____
Property Monument	_____
Parcel/Sequence Number	_____
Existing Fence Line	_____
Proposed Woven Wire Fence	_____
Proposed Chain Link Fence	_____
Proposed Barbed Wire Fence	_____
Existing Wetland Boundary	_____
Proposed Wetland Boundary	_____
Existing Endangered Animal Boundary	_____
Existing Endangered Plant Boundary	_____
Historic Boundary	_____

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	_____
Sign	_____
Well	_____
Small Mine	_____
Foundation	_____
Area Outline	_____
Cemetery	_____
Building	_____
School	_____
Church	_____
Dam	_____

HYDROLOGY:

Stream or Body of Water	_____
Hydro, Pool or Reservoir	_____
Jurisdictional Stream	_____
Buffer Zone 1	_____
Buffer Zone 2	_____
Flow Arrow	_____
Disappearing Stream	_____
Spring	_____
Wetland	_____
Proposed Lateral, Tail, Head Ditch	_____
False Sump	_____

RAILROADS:

Standard Gauge	_____
RR Signal Milepost	_____
Switch	_____
RR Abandoned	_____
RR Dismantled	_____

RIGHT OF WAY:

Baseline Control Point	_____
Existing Right of Way Marker	_____
Existing Right of Way Line	_____
Proposed Right of Way Line	_____
Proposed Right of Way Line with Iron Pin and Cap Marker	_____
Proposed Right of Way Line with Concrete or Granite Marker	_____
Existing Control of Access	_____
Proposed Control of Access	_____
Existing Easement Line	_____
Proposed Temporary Construction Easement	_____
Proposed Temporary Drainage Easement	_____
Proposed Permanent Drainage Easement	_____
Proposed Permanent Utility Easement	_____
Prop. Permanent Drainage Utility Easement	_____
Prop. Permanent Aerial Utility Easement	_____

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	_____
Existing Curb	_____
Proposed Slope Stakes Cut	_____
Proposed Slope Stakes Fill	_____
Proposed Wheel Chair Ramp	_____
Proposed Wheel Chair Ramp Curb Cut	_____
Curb Cut for Future Wheel Chair Ramp	_____
Existing Metal Guardrail	_____
Proposed Guardrail	_____
Existing Cable Guiderail	_____
Proposed Cable Guiderail	_____
Equality Symbol	_____
Pavement Removal	_____

VEGETATION:

Single Tree	_____
Single Shrub	_____
Hedge	_____
Woods Line	_____
Orchard	_____
Vineyard	_____

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	_____
Bridge Wing Wall, Head Wall and End Wall	_____
MINOR:	
Head and End Wall	_____
Pipe Culvert	_____
Footbridge	_____
Drainage Box: Catch Basin, DI or JB	_____
Paved Ditch Gutter	_____
Storm Sewer Manhole	_____
Storm Sewer	_____

UTILITIES:

POWER:	
Existing Power Pole	_____
Proposed Power Pole	_____
Existing Joint Use Pole	_____
Proposed Joint Use Pole	_____
Power Manhole	_____
Power Line Tower	_____
Power Transformer	_____
U/G Power Cable Hand	_____
H-Frame Pole	_____
Recorded U/G Power Line	_____
Designated U/G Power Line (S.U.E.*)	_____

TELEPHONE:

Existing Telephone Pole	_____
Proposed Telephone Pole	_____
Telephone Manhole	_____
Telephone Booth	_____
Telephone Pedestal	_____
Telephone Cell Tower	_____
U/G Telephone Cable Hand	_____
Recorded U/G Telephone Cable	_____
Designated U/G Telephone Cable (S.U.E.*)	_____
Recorded U/G Telephone Conduit	_____
Designated U/G Telephone Conduit (S.U.E.*)	_____
Recorded U/G Fiber Optics Cable	_____
Designated U/G Fiber Optics Cable (S.U.E.*)	_____

WATER:

Water Manhole	_____
Water Meter	_____
Water Valve	_____
Water Hydrant	_____
Recorded U/G Water Line	_____
Designated U/G Water Line (S.U.E.*)	_____
Above Ground Water Line	_____
TV:	
TV Satellite Dish	_____
TV Pedestal	_____
TV Tower	_____
U/G TV Cable Hand Hole	_____
Recorded U/G TV Cable	_____
Designated U/G TV Cable (S.U.E.*)	_____
Recorded U/G Fiber Optic Cable	_____
Designated U/G Fiber Optic Cable (S.U.E.*)	_____

GAS:

Gas Valve	_____
Gas Meter	_____
Recorded U/G Gas Line	_____
Designated U/G Gas Line (S.U.E.*)	_____
Above Ground Gas Line	_____

SANITARY SEWER:

Sanitary Sewer Manhole	_____
Sanitary Sewer Cleanout	_____
U/G Sanitary Sewer Line	_____
Above Ground Sanitary Sewer	_____
Recorded SS Forced Main Line	_____
Designated SS Forced Main Line (S.U.E.*)	_____

MISCELLANEOUS:

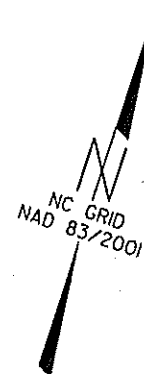
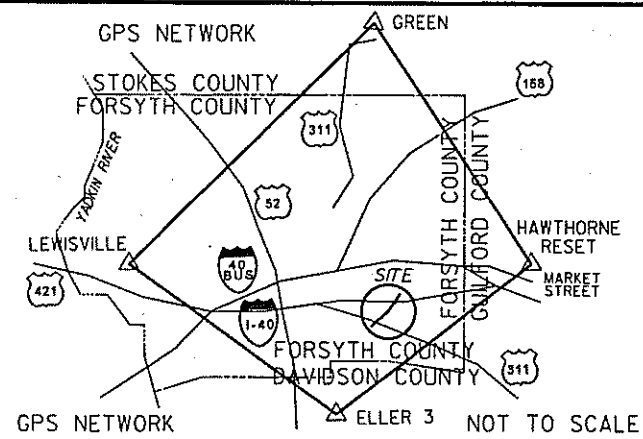
Proposed Traffic Signal	_____
Utility Pole	_____
Utility Pole with Base	_____
Utility Located Object	_____
Utility Traffic Signal Box	_____
Utility Unknown U/G Line	_____
U/G Tank; Water, Gas, Oil	_____
A/G Tank; Water, Gas, Oil	_____
U/G Test Hole (S.U.E.*)	_____
Abandoned According to Utility Records	_____
End of Information	_____

STATE OF NORTH CAROLINA - COUNTY OF WAKE
 I, _____, do hereby certify that this is a true and correct copy of the final plans for Project _____, as approved and adopted by the Board of Transportation and identified as _____, on the _____ day of _____, 2017. I have hereto set my hand this the _____ day of _____, 2017, in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand and the seal of the Board of Transportation.

 Secretary to Board of Transportation

SURVEY CONTROL SHEET U-4909

PROJECT REFERENCE NO.	SHEET NO.
U-4909	1C
Location and Surveys	



"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 1C of the final plans for Project 410278.2.1 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 5th day of Jan, 2012 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January, 2012

James Ashby
Secretary to Board of Transportation

NOTES:

1. THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN HIGH ACCURACY REFERENCE NETWORK NAD 83/2001. THIS CALIBRATION WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN USING RTK ORAL TIME KINEMATIC GPS AND A LOCAL BASE STATION. IF ANOTHER SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS OR BIASES.

2. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCTION/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/doh/preconstruction/highway/location/project/)

THE FILES TO BE FOUND ARE AS FOLLOWS:
U4909_LS_OPSCALIB.DAT/HTML
U4909_LS_WGS84.DAT/HTML
U4909_LS_LOCAL.DAT/HTML
U4909_LS_CONTROL.DAT/HTML

THE WGS84 AND LOCAL FILES ARE COMMA DELIMITED AND CAN BE USED TO REPRODUCE THE SITE CALIBRATION FOR THE END USER'S GPS EQUIPMENT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

- INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION
SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

NOTE: DRAWING NOT TO SCALE

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U2579C-1"

WITH NAD 83/2001 STATE PLANE GRID COORDINATES OF
NORTHING: 876419.285(±) EASTING: 1651591.602(±)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99995453
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U2579C-1" TO -L- STATION 7+00.00 IS
S 18°20'17.75" 41820.769
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

SURVEY CONTROL SHEET U-4909

PROJECT REFERENCE NO.	SHEET NO.
U-4909	1D
Location and Surveys	

GPS Calibration Report

Project : U4909_Calibration

TIP Number
 User name tbovender Date & Time 7:29:02
 AM 3/25/2008
 Coordinate System US State Plane 1983
 Zone North Carolina 3200
 Horizontal Datum NAD 1983 (Conus)
 Vertical Datum Geoid Model Geoid03
 (Conus) NC Sub Grid
 Coordinate Units US survey feet
 Distance Units US survey feet
 Height Units US survey feet

LOCAL SITE INFORMATION

Localized around U2579C-1
 Latitude 36°09'08.35562"N
 Longitude 80°10'48.38377"W
 Site Scale Factor 1.000045472
 Height 870.594

The North Carolina Department of Transportation uses a Localized Coordinate System which is very similar to North Carolina Zone 3200 from which it is derived. Please take care in utilizing these coordinates to eliminate confusion of the two systems. This file is to aid in the use of Real Time Kinematic (RTK) GPS during construction layout.

Datum Transformation Parameters

Datum Transformation computation not requested

Updated Default Projection (Transverse Mercator) Definition

Updated default projection not requested

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U2579C-1"
 WITH NAD 83/2001 STATE PLANE GRID COORDINATES OF
 NORTHING: 876419.2851(±) EASTING: 1651591.6021(±)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99995453
 THE N.C. LAMBERT GRID BEARING AND
 LOCALIZED HORIZONTAL GROUND DISTANCE FROM
 "U2579C-1" TO "L- STATION 7+00.00 IS
 S 18°20'17.75" 41820.769
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

Horizontal Adjustment Parameters

Northing coordinate of rotation center
 845575.353sft
 Easting coordinate of rotation center
 1670624.663sft
 Rotation about the center point 0°00'00"
 Translation north -1.361sft
 Translation east 0.792sft
 Scale factor 1.00003929

Vertical Adjustment Parameters

Northing coordinate of origin point
 839184.285sft
 Easting coordinate of origin point
 1665574.048sft
 Vertical separation at origin 0.076sft
 Slope north 7.562ppm
 Slope east -4.979ppm

Geoid Model Definition

Geoid03 (Conus) NC Sub Grid

Residual Differences Between GPS (WGS84) And Local Coordinates

Summary

Maximum error	Root Mean Square error	Point
Horizontal 0.106sft	0.023	BL-13_GPS
Vertical 0.035sft	0.008	U4909-4_GPS
Three-dimensional 0.108sft	0.024	BL-13_GPS

Point Residuals
WGS84 Coordinates Calculated point
FOR DISPLAY ONLY Local Coordinates

Point U4909-1_GPS
 Latitude 36°03'01.78617"N
 Longitude 80°04'07.52.74428"W
 Height 810.808sft

Northing 839184.285sft
 Easting 1665574.048sft
 Elevation 916.303sft
 Horz error 0.097sft
 Vert error 0.013sft
 3D error 0.098sft

Point U4909-1_Local
 Northing 839184.347sft
 Easting 1665574.122sft
 Elevation 916.290sft
 Utilized Horz and Vert
 Quality Survey quality

Point U4909-2_GPS
 Latitude 36°02'54.20800"N
 Longitude 80°07'42.19245"W
 Height 825.730sft

Northing 838408.145sft
 Easting 1666431.782sft
 Elevation 931.151sft
 Horz error 0.078sft
 Vert error 0.029sft
 3D error 0.083sft

Point U4909-2_Local
 Northing 838408.073sft
 Easting 1666431.753sft
 Elevation 931.180sft
 Utilized Horz and Vert
 Quality Survey quality

Point U2579AB-4_GPS
 Latitude 36°04'30.37318"N
 Longitude 80°07'01.43466"W
 Height 808.314sft

Northing 848094.283sft
 Easting 1669888.014sft
 Elevation 914.051sft
 Horz error 0.053sft
 Vert error 0.019sft
 3D error 0.056sft

Point U2579AB-4_Local
 Northing 848094.232sft
 Easting 1669888.026sft
 Elevation 914.070sft
 Utilized Horz and Vert
 Quality Survey quality

Point U2579AB-3_GPS
 Latitude 36°04'30.34647"N
 Longitude 80°06'46.85906"W
 Height 827.706sft

Northing 848078.146sft
 Easting 1671084.467sft
 Elevation 933.390sft
 Horz error 0.063sft
 Vert error 0.020sft
 3D error 0.067sft

Point U2579AB-3_Local
 Northing 848078.084sft
 Easting 1671084.478sft
 Elevation 933.370sft
 Utilized Horz and Vert
 Quality Survey quality

Point U4909-3_GPS
 Latitude 36°05'10.29921"N
 Longitude 80°06'02.53000"W
 Height 867.721sft

Northing 852077.542sft
 Easting 1674768.142sft
 Elevation 973.435sft
 Horz error 0.078sft
 Vert error 0.025sft
 3D error 0.082sft

Point U4909-3_Local
 Northing 852077.619sft
 Easting 1674768.155sft
 Elevation 973.410sft
 Utilized Horz and Vert
 Quality Survey quality

Point U4909-4_GPS
 Latitude 36°05'03.72551"N
 Longitude 80°05'47.98458"W
 Height 835.776sft

Northing 851399.608sft
 Easting 1675954.644sft
 Elevation 941.405sft
 Horz error 0.013sft
 Vert error 0.035sft
 3D error 0.037sft

Point U4909-4_Local
 Northing 851399.607sft
 Easting 1675954.657sft
 Elevation 941.440sft
 Utilized Horz and Vert
 Quality Survey quality

Point BL-13_GPS
 Latitude 36°03'27.98360"N
 Longitude 80°06'50.95985"W
 Height 858.384sft

Northing 841775.930sft
 Easting 1670677.082sft
 Elevation 963.784sft
 Horz error 0.106sft
 Vert error 0.024sft
 3D error 0.108sft

Point BL-13
 Northing 841775.979sft
 Easting 1670676.988sft
 Elevation 963.760sft
 Utilized Horz and Vert
 Quality Survey quality

"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
 Plan Sheet 1D of the final plans for Project 40278.2.1
 said plan sheet having been approved and adopted by the Board of Transportation and identified as
 Addendum 10 to the minutes of the 5th day of Jan, 2012 Board of Transportation
 meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the
11 day of January, 2012
Charmy Kohler
 Secretary to Board of Transportation

NOTES:

1. THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN HIGH ACCURACY REFERENCE NETWORK NAD 83/2001 ADJUSTMENT. THIS CALIBRATION WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN USING RTK (REAL TIME KINEMATIC) GPS AND A LOCAL BASE STATION. IF ANOTHER SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS OR BIASES.
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 THE FILES TO BE FOUND ARE AS FOLLOWS:
 U4909_LS_GPS_CALIB_DATA.HTML
 U4909_LS_WGS84_DATA.TXT
 U4909_LS_LOCAL_DATA.TXT
 U4909_LS_CONTROL_DATA.TXT
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 NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

NOTE: DRAWING NOT TO SCALE

SURVEY CONTROL SHEET U-4909

PROJECT REFERENCE NO.	SHEET NO.
U-4909	1E
Location and Surveys	

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
5		BL-5	837427.2890	1665317.5730	955.57	15+85.33	90.39 LT
6		BL-6	837780.4260	1666809.3300	954.23	30+96.38	54.29 LT
7		BL-7	837865.7140	1667819.8720	962.90	41+06.78	32.65 RT
8		BL-8	838011.3660	1668588.4730	966.38	48+83.59	41.69 RT
9		BL-9	838395.1971	1669206.0728	961.39	56+03.01	19.76 RT
10		BL-10	838836.3850	1669468.9530	969.49	61+17.88	64.99 LT
11		BL-11	839820.9560	1670135.7570	968.10	73+06.09	25.50 RT
12		BL-12	840880.8730	1670507.4040	970.01	84+29.27	8.92 RT
13		BL-13	841775.9790	1670676.9880	963.76	93+41.42	48.69 LT
14		BL-14	842474.5780	1670896.5210	960.07	100+70.99	13.51 RT
15		BL-15	843508.5300	1671247.5580	961.79	111+61.87	61.19 RT
16		BL-16	844556.7080	1671412.4080	961.90	122+19.59	8.28 RT
17		BL-17	846027.9450	1671456.7440	965.78	136+89.65	65.30 LT
18		BL-18	847007.7330	1671730.2030	961.09	147+00.87	31.47 RT
19		BL-19	847752.2460	1671959.0610	958.38	154+01.29	2.42 LT
20		BL-20	848411.8940	1672293.9910	962.20	162+17.15	73.86 RT
21		BL-21	849012.8070	1672515.0500	967.95	168+58.71	64.47 RT
22		BL-22	849777.2900	1672866.5750	967.35	177+02.10	55.97 LT
23		BL-23	850347.1980	1673362.5100	964.92	184+56.52	16.04 LT
24		BL-24	850768.1530	1673754.0810	965.34	190+29.31	33.36 RT
25		BL-25	851382.2380	1674187.2640	974.81	197+79.91	3.36 LT
3		U4909-3	852077.6190	1674768.1550	973.41	206+87.12	4.35 RT
26		BL-26	852535.3930	1675348.3570	985.37	214+26.40	23.81 LT
27		BL-27	852934.7570	1676080.4150	969.83	222+58.35	31.45 RT

BY1	POINT	DESC.	NORTH	EAST	ELEVATION	Y2 STATION	OFFSET
28		BY1-28	838074.6310	1665098.3600	951.03	OUTSIDE PROJECT LIMITS	
5		BL-5	837427.2890	1665317.5730	955.72	OUTSIDE PROJECT LIMITS	

BY2	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
5		BL-5	837427.2890	1665317.5730	955.72	15+85.33	90.39 LT
29		BY2-29	838786.7760	1664834.9120	947.38	8+04.48	22.91 RT

BY3	POINT	DESC.	NORTH	EAST	ELEVATION	Y3 STATION	OFFSET
6		BL-6	837780.4260	1666809.3300	954.23	35+67.87	368.12 RT
30		BY3-30	837577.4860	1666527.2150	951.14	34+63.24	699.52 RT
31		BY3-31	837290.8870	1667062.1000	955.63	40+63.30	609.14 RT
32		BY3-32	837108.6800	1667567.5080	937.77	45+77.28	452.74 RT
33		BY3-33	836923.2590	1668141.9480	911.93	51+48.50	257.63 RT
34		BY3-34	836567.9320	1668653.8030	912.90	57+71.23	236.10 RT

BY4	POINT	DESC.	NORTH	EAST	ELEVATION	Y3 STATION	OFFSET
35		BY4-35	839725.3820	1664835.8390	904.53	OUTSIDE PROJECT LIMITS	
1		U4909-1	839184.3470	1665574.1220	916.29	17+38.16	17.77 LT
2		U4909-2	838408.0730	1666431.7530	931.18	28+89.81	91.11 RT
6		BL-6	837780.4260	1666809.3300	954.23	35+67.87	368.12 RT
36		BY4-36	837884.8800	1667240.5220	938.44	38+57.29	21.65 RT
37		BY4-37	837276.8680	1668059.9800	931.66	48+71.26	23.33 RT
38		BY4-38	836666.4670	1668907.1030	914.06	59+15.24	5.59 RT
39		BY4-39	836038.3070	1669854.5690	915.34	70+53.12	23.69 LT

NOTES:

- THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN (HIGH ACCURACY REFERENCE NETWORK) AND ADJUSTMENT. THIS CALIBRATION WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN USING RTK (REAL TIME KINEMATIC) GPS AND A LOCAL BASE STATION. IF ANOTHER SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS OR BIASES.

- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/ODOT/PRECONSTRUCTION/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/odot/preconstruction/highway/location/project/)

THE FILES TO BE FOUND ARE AS FOLLOWS:
 U4909.LS GPSCALIB.DAT/HTML
 U4909.LS WGS84.DAT/TEXT
 U4909.LS LOCAL.DAT/TEXT
 U4909.LS CONTROL.DAT/TEXT

THE WGS84 AND LOCAL FILES ARE COMMA DELIMITED AND CAN BE USED TO REPRODUCE THE SITE CALIBRATION FOR THE END USER'S GPS EQUIPMENT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

- INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
 NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION
 SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

BY5	POINT	DESC.	NORTH	EAST	ELEVATION	Y4 STATION	OFFSET
40		BY5-40	838569.5833	1668268.6777	948.45	13+39.59	21.70 LT
9		BL-9	838395.1971	1669206.0728	961.39	22+91.35	35.51 RT
41		BY5-41	838392.0260	1669657.2050	961.61	27+37.06	25.79 LT
42		BY5-42	838142.1060	1670122.2800	945.44	32+63.39	27.12 RT

BY6	POINT	DESC.	NORTH	EAST	ELEVATION	Y5 STATION	OFFSET
10		BL-10	838836.3850	1669468.9530	969.49	OUTSIDE PROJECT LIMITS	
43		BY6-43	838749.5360	1669790.6040	973.41	12+83.64	11.62 RT

BY7	POINT	DESC.	NORTH	EAST	ELEVATION	Y7A STATION	OFFSET
12		BL-12	840880.8730	1670507.4040	970.01	10+15.79	17.53 LT
44		BY7-44	840938.3320	1671115.2400	972.63	OUTSIDE PROJECT LIMITS	

BY8	POINT	DESC.	NORTH	EAST	ELEVATION	Y8 STATION	OFFSET
45		BY8-45	841623.2020	1670380.7190	964.50	13+44.49	32.19 LT
13		BL-13	841775.9790	1670676.9880	963.76	16+06.38	238.42 LT

BY9	POINT	DESC.	NORTH	EAST	ELEVATION	Y9 STATION	OFFSET
14		BL-14	842474.5780	1670896.5210	960.07	10+19.14	26.76 RT
46		BY9-46	842229.4750	1671394.5250	961.31	15+74.03	13.35 RT

BY10	POINT	DESC.	NORTH	EAST	ELEVATION	Y10 STATION	OFFSET
47		BY10-47	843440.0210	1670311.2080	929.31	OUTSIDE PROJECT LIMITS	
15		BL-15	843508.5300	1671247.5580	961.79	OUTSIDE PROJECT LIMITS	

BY11	POINT	DESC.	NORTH	EAST	ELEVATION	Y11 STATION	OFFSET
15		BL-15	843508.5300	1671247.5580	961.79	11+11.31	357.23 RT
48		BY11-48	843828.2390	1671372.4970	957.57	10+94.54	14.38 RT
49		BY11-49	843642.1410	1671865.3500	964.21	OUTSIDE PROJECT LIMITS	

BY12	POINT	DESC.	NORTH	EAST	ELEVATION	Y13 STATION	OFFSET
50		BY12-50	846889.4920	1670706.0540	959.12	16+04.75	27.90 RT
16		BL-16	843508.5300	1671247.5580	961.79	23+22.75	38.02 LT

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 1E of the final plans for Project 40278.21 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 1C to the minutes of the 5th 847007 day of June 2012 meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January 2012

James Ashlee
Secretary to Board of Transportation

BY14	POINT	DESC.	NORTH	EAST	ELEVATION	Y15 STATION	OFFSET
104		U2579AB-4	848094.2320	1669888.0260	914.10	18+82.11	12.58 RT
103		U2579AB-3	848078.0840	1671084.4780	933.37	30+78.67	8.52 RT
52		BY14-52	848077.7880	1672001.9610	937.05	39+96.02	6.69 LT
100			876419.2850	1651591.6020		POINT NOT SET	
53		BY14-53	848137.2920	1673046.1200	926.69	50+39.03	83.83 LT
54		BY14-54	848068.9362	1674103.8636	901.52	60+98.86	4.76 RT
55		BY14-55	848335.5169	1675107.5135	910.80	71+39.40	3.32 RT

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U2579C-1" WITH NAD 83/2001 STATE PLANE GRID COORDINATES OF NORTHING: 876419.285 (ft) EASTING: 1651591.602 (ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99995453 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U2579C-1" TO -L- STATION 7+00.00 IS S 18°20'17.75" 41820.769 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE

SURVEY CONTROL SHEET U-4909

PROJECT REFERENCE NO.	SHEET NO.
U-4909	1F
Location and Surveys	

BY15 POINT	DESC.	NORTH	EAST	ELEVATION	Y16 STATION	OFFSET
56	BY15-56	848827.0620	1671454.5830	954.91	OUTSIDE PROJECT LIMITS	
21	BL-21	849012.8070	1672515.0500	967.95	OUTSIDE PROJECT LIMITS	
BY16 POINT	DESC.	NORTH	EAST	ELEVATION	Y17 STATION	OFFSET
58	BY16-58	849753.4860	1671734.1370	962.60	11+72.83	13.61 LT
57	BY16-57	849677.5190	1672495.4100	976.56	19+31.20	34.94 LT
21	BL-21	849012.8070	1672515.0500	967.95	OUTSIDE PROJECT LIMITS	
BY17 POINT	DESC.	NORTH	EAST	ELEVATION	Y18 STATION	OFFSET
60	BY17-60	850611.2030	1672651.1490	942.10	OUTSIDE PROJECT LIMITS	
59	BY17-59	850141.9370	1672658.6390	959.54	11+90.91	12.20 RT
22	BL-22	849777.2900	1672866.5750	967.35	16+07.07	30.00 RT
BY18 POINT	DESC.	NORTH	EAST	ELEVATION	Y19 STATION	OFFSET
61	BY18-61	850515.9010	1672960.1700	959.46	OUTSIDE PROJECT LIMITS	
23	BL-23	850347.1980	1673362.5100	964.92	14+25.08	20.57 LT
BY19 POINT	DESC.	NORTH	EAST	ELEVATION	Y19 STATION	OFFSET
23	BL-23	850347.1980	1673362.5100	964.92	14+25.08	20.57 LT
62	BY19-63	849881.2980	1674023.8160	951.68	OUTSIDE PROJECT LIMITS	
BY20 POINT	DESC.	NORTH	EAST	ELEVATION	Y20 STATION	OFFSET
24	BL-24	850768.1530	1673754.0810	965.34	10+52.32	105.36 LT
63	BY20-63	850624.3590	1673937.5190	967.09	12+91.73	12.40 RT
64	BY20-64	850634.8670	1674338.4500	969.32	OUTSIDE PROJECT LIMITS	
BY21 POINT	DESC.	NORTH	EAST	ELEVATION	Y21 STATION	OFFSET
66	BY21-66	851500.5710	1673203.4380	952.79	OUTSIDE PROJECT LIMITS	
65	BY21-65	851284.0390	1673801.9020	974.12	11+76.95	10.75 RT
25	BL-25	851382.2380	1674187.2640	974.81	14+26.07	279.91 LT
BY22 POINT	DESC.	NORTH	EAST	ELEVATION	Y22 STATION	OFFSET
25	BL-25	851382.2380	1674187.2640	974.81	OUTSIDE PROJECT LIMITS	
67	BY22-67	851474.1430	1674349.4570	976.25	10+65.52	26.19 RT
68	BY22-68	851374.8000	1674542.2390	969.87	12+78.68	15.03 RT
69	BY22-69	851396.2720	1675001.7240	959.36	OUTSIDE PROJECT LIMITS	

BY23 POINT	DESC.	NORTH	EAST	ELEVATION	Y23 STATION	OFFSET
70	BY23-70	852360.4180	1673766.1400	973.98	12+70.40	18.94 LT
71	BY23-71	852097.7400	1674378.7220	976.19	19+33.99	51.63 RT
3	U4909-3	852077.6190	1674768.1550	973.43	23+07.96	61.28 LT
72	BY23-72	851781.4790	1675260.6950	960.71	28+77.55	17.00 RT
4	U4909-4	851399.6070	1675954.6570	941.44	OUTSIDE PROJECT LIMITS	
BY24 POINT	DESC.	NORTH	EAST	ELEVATION	Y24 STATION	OFFSET
73	BY24-73	853112.6780	1675107.4590	981.23	OUTSIDE PROJECT LIMITS	
26	BL-26	852535.3930	1675348.3570	985.41	14+90.29	24.87 RT
BY25 POINT	DESC.	NORTH	EAST	ELEVATION	Y25 STATION	OFFSET
27	BL-27	852934.7570	1676080.4150	969.79	10+29.56	32.68 LT
74	BY25-74	852497.0180	1676137.6010	963.90	14+55.15	33.13 RT

BM*4 ELEVATION - 952.06
N 841641 E 1669458
L STATION 88+56 1295' LEFT
RR SPIKE IN SE ROOT OF 14' GUM ON THE
WEST SIDE OF TEMPLE SCHOOL RD. 50' SW
OF A 30' RCP

BM*5 ELEVATION - 951.68
N 846095 E 1670335
Y13 STATION 11+99 35' LEFT
EASTERN MOST BOLT ON THE BOTTOM OF A
FIRE PLUG. 16' NORTH OF GLENN HIGH RD.
BOLT IS 6' W OF POWER POLE *51 AND 7.6'
W OF POWER POLE 65T

BM*6 ELEVATION - 962.52
N 848973 E 1672785
L STATION 10+13 2907' LEFT
RR SPIKE IN SEAM OF CONCRETE CURB AND
GUTTER @ SHOPPING CENTER IN FRONT OF
AUTO CREDIT AND BURGER KING AND A
CLEANER WORLD

BM*7 ELEVATION - 953.98
N 851505 E 1673087
Y21 STATION 10+00
N 73+ 50' 50.9' W DIST 371.96
CHISLED SQUARE @ THE STATE OF NORTH CAROLINA
CONCRETE CURB ON SHEPARD'S GROVE RD
SQUARE @ THE SOUTH BOUND LANE

BM*10 ELEVATION - 878.52
N 836093 E 1668960
Y3 STATION 62+97 434' RIGHT
RR SPIKE IN NORTHERN MOST ROOT OF A 36'
MAPLE. 449' SOUTH OF BY4 ON THE EAST
SIDE OF BRANCH

BM*11 ELEVATION - 929.23
N 849182 E 1674886
Y15 STATION 72+94 861' LEFT
CHISLED CROSS IN WEST END OF A 15' RCP
TO THE CONCRETE DRIVEWAY OF 1156
KENOSHA DR

BM*12 ELEVATION - 956.00
N 837770 E 1668318
L STATION 45+82 211' RIGHT
RR SPIKE IN THE NE ROOT OF A TWIN
CHERRY TREE RT. OF -L-

BM*13 ELEVATION - 959.56
N 839905 E 1670304
Y6 STATION 11+45 26' LEFT
NE BOLT OF FIRE HYDRANT EAST OF WOODWAY
DR

BM*15 ELEVATION - 959.81
N 848826 E 1671319
Y16 STATION 10+00
S 88+ 15' 50.4' W DIST 583.16'
RR SPIKE IN EASTERN BASE OF POWER POLE
W/ A LIGHT OWNED BY DUKE POWER ON PECAN
RD

BM*16 ELEVATION - 983.67
N 852261 E 1674626
Y23 STATION 21+15 180' LEFT
RR SPIKE IN WESTERN ROOT OF A 24' MAPLE
IN THE NE QUADRANT OF THE INTERSECTION
OF SEDGE GARDEN, UNION CROSS AND OLD
SALEM ROADS

NOTES:

1. THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN
HIGH ACCURACY REFERENCE NETWORK HAD 8385 ADJUSTMENT. THIS CALIBRATION
WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN
USING RTK (REAL TIME KINEMATIC) GPS AND A LOCAL BASE STATION. IF ANOTHER
SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES
MAY BE NEEDED TO REDUCE POSSIBLE ERRORS OR BIASES.

2. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING
PROJECT CONTROL DATA AT:
HTTP://WWW.NCDOT.ORG/DOH/PRCONSTRUCT/HIGHWAY/LOCATION/PROJECT/

THE FILES TO BE FOUND ARE AS FOLLOWS:
U4909_LS_GPSALIB.DAT/HTML
U4909_LS_WGS84.DAT/TEXT
U4909_LS_LOCAL.DAT/TEXT
U4909_LS_CONTROL.DAT/TEXT

THE WGS84 AND LOCAL FILES ARE COMMA DELIMITED AND CAN BE USED TO REPRODUCE
THE SITE CALIBRATION FOR THE END USER'S GPS EQUIPMENT. IF FURTHER INFORMATION
IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL
BY THE NCDOT LOCATION AND SURVEYS UNIT.

PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

NETWORK ESTABLISHED FROM EXISTING HARN MONUMENTATION

SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

BM*1 ELEVATION - 956.57
N 837132 E 1665025
L STATION 11+09 58' LEFT
CHISLED SQUARE ON SE CORNER OF CONCRETE
SLAB FOR A GREEN POWER TRANSFORMER @
FIELD *2 @ THE OLD RADAR BASE

BM*2 ELEVATION - 955.42
N 837846 E 1666552
L STATION 28+54 162' LEFT
RR SPIKE SET IN SW ROOT OF 30' RED OAK
50' FROM END OF C/A FENCE

BM*3 ELEVATION - 960.96
N 838255 E 1669365
Y4 STATION 24+66 155' RIGHT
RR SPIKE IN SOUTH ROOT OF A 36' OAK WEST
OF OLD 311 ACROSS FROM OLD 311 CURB
MARKET IN SCHOOL PROPERTY. 100' NW OF
DANIEL BOONE ARROWHEAD HISTORIC MARKER

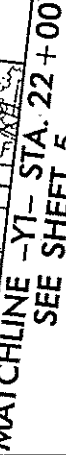
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
Plan Sheet 115 of the final plans for Project 104-65.06 216.92' RIGHT
said plan sheet having been approved and adopted by the Board of Transportation and identified as
Addendum 102.62 to the minutes of the 5th day of Jan 2012 Board of Transportation
Meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the
22nd day of January 2012
NCGS MOD. "SNOW". 13.5' RIGHT OF
CENTERLINE OF UNION CROSS RD
Secretary to Board of Transportation

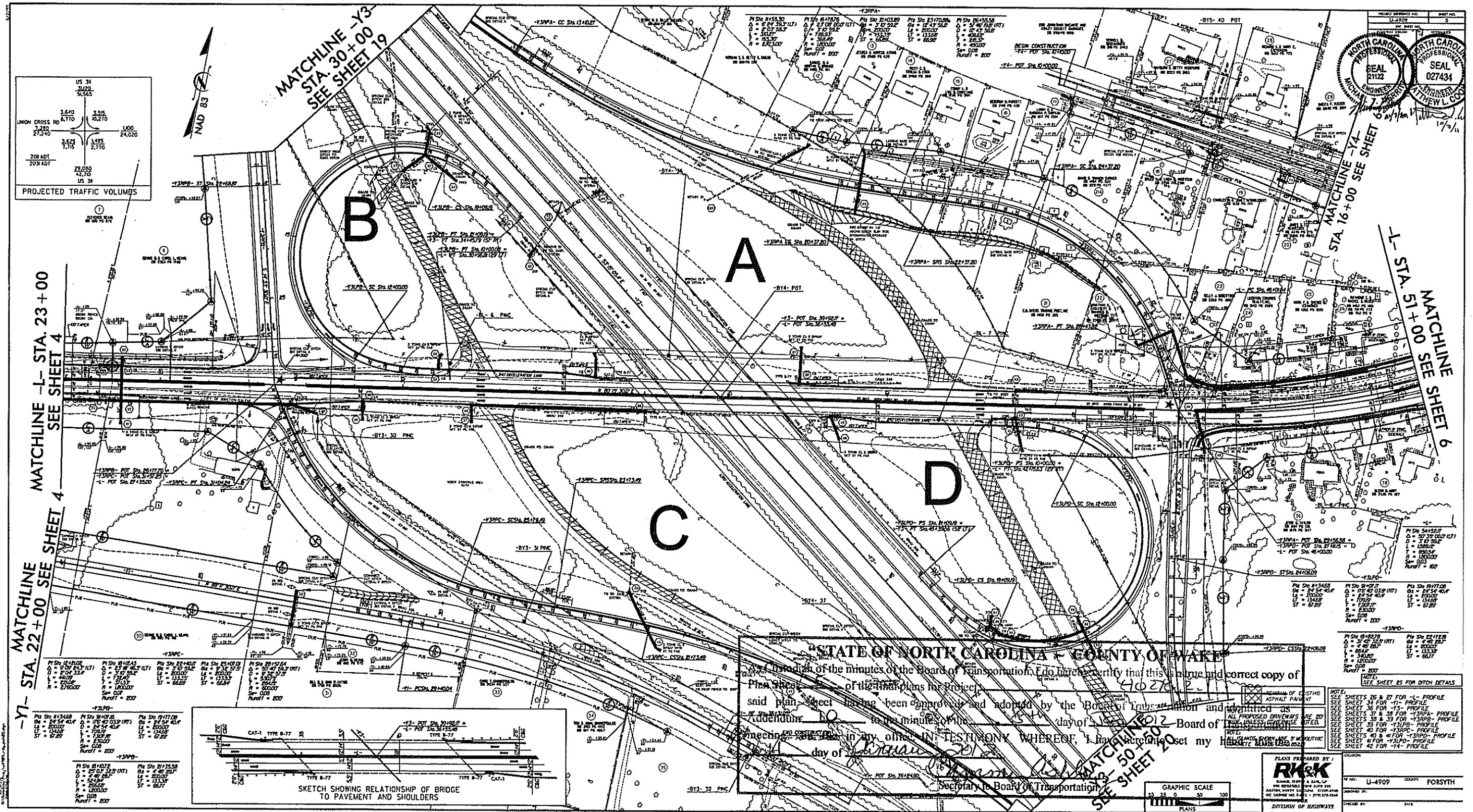
BM*9 ELEVATION - 895.70
N 839961 E 1664265
Y3 STATION 10+00
N 63+ 42' 42.9' W DIST 788.57'
RR SPIKE IN SEAM OF CONCRETE DITCH 24'
FROM EDGE OF PAVEMENT OF HIGHWAY 311
SOUTH BOUND LANE

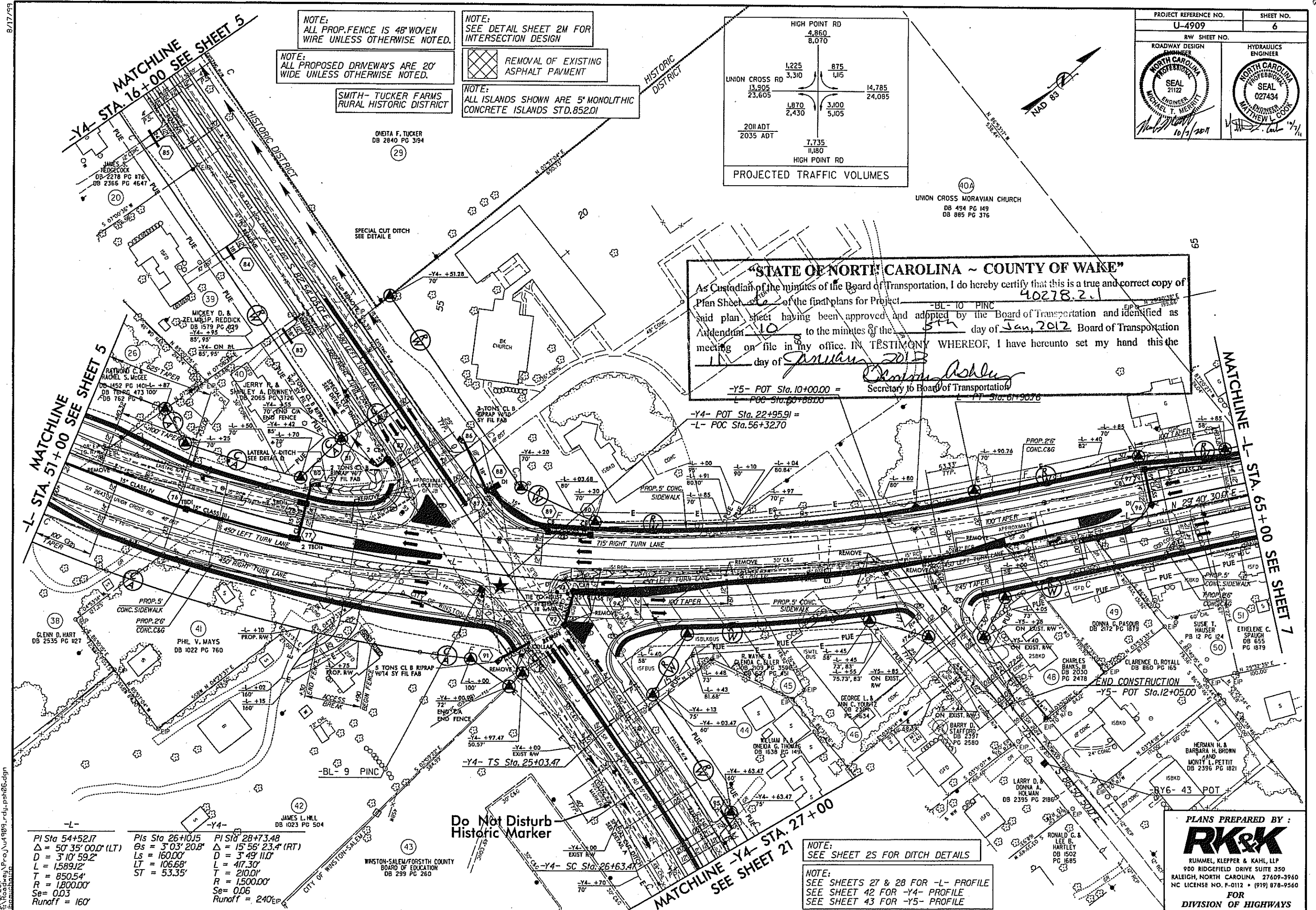
DATUM DESCRIPTION

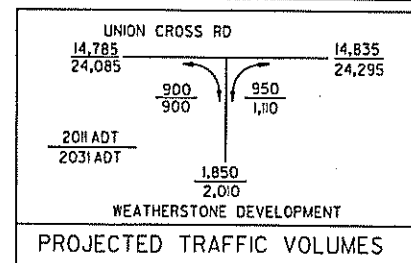
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT
IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY
NCDOT FOR MONUMENT "U2579C-1"
WITH NAD 83/2001 STATE PLANE GRID COORDINATES OF
NORTHING: 876419.285(±) EASTING: 1651591.602(±)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT
(GROUND TO GRID) IS: 0.99995453
THE N.C. LAMBERT GRID BEARING AND
LOCALIZED HORIZONTAL GROUND DISTANCE FROM
"U2579C-1" TO -L- STATION 7+00.00 IS
S 18°20'17.75" 41820.769
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE

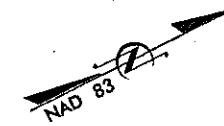








PROJECT REFERENCE NO. U-4909		SHEET NO. 7
RW SHEET NO.		
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21122 MICHAEL H. WILSON 1/1/21	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 027434 MATTHEW J. WILSON 1/1/21	



MATCHLINE -L- STA. 65+00 SEE SHEET 6

MATCHLINE -L- STA. 79+00 SEE SHEET 8

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 7 of the final plans for Project 340278.2.

said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum No. 10 to the minutes of the Board of Transportation meeting held on 10/10/2012 in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand and the seal of my office this 10th day of November, 2012.

Secretary to Board of Transportation

NOTE:
SEE SHEET 25 FOR
DITCH DETAILS

NOTE:
ALL PROPOSED DRIVEWAYS ARE 20'
WIDE UNLESS OTHERWISE NOTED

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLANDS STD. 852.01

NOTE:
SEE SHEET 28 FOR -L- PROFILE
SEE SHEET 43 FOR -Y6- PROFILE

PLANS PREPARED BY:

RK&K

RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

FOR
DIVISION OF HIGHWAYS

PI Sta 11+26.92 Δ = 27° 22' 47.2" (LT) D = 20' 06" 13.6" L = 136.19' T = 69.42' R = 285.00' Se = 0.02 Runoff = See Plans	PI Sta 13+05.42 Δ = 42° 48' 47.2" (RT) D = 20' 06" 13.6" L = 212.96' T = 111.73' R = 285.00' Se = 0.02 Runoff = See Plans	PI Sta 76+76.40 Δ = 14° 10' 30.0" (LT) D = 2' 51' 53.2" L = 494.80' T = 248.67' R = 2,000.00' Se = 0.03 Runoff = 160'
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JADE ASSOCIATES II, LLC
DB 2478 PG 2603
TRACT 1

END CONSTRUCTION
-Y6- POT Sta. 12+40.00

MCAN G. MOORE
AND WIFE
JESSICA A. MOORE
DB 2737 PG 2736
PB 50 PG 66

RYAN P. DOOLEY
AND WIFE
LAURA K. WARD-DOOLEY
DB 2737 PG 2736
PB 50 PG 66

WILLIAM P. HUFFMAN
AND WIFE
LORISE B. HUFFMAN
DB 2780 PG 3372
PB 50 PG 66

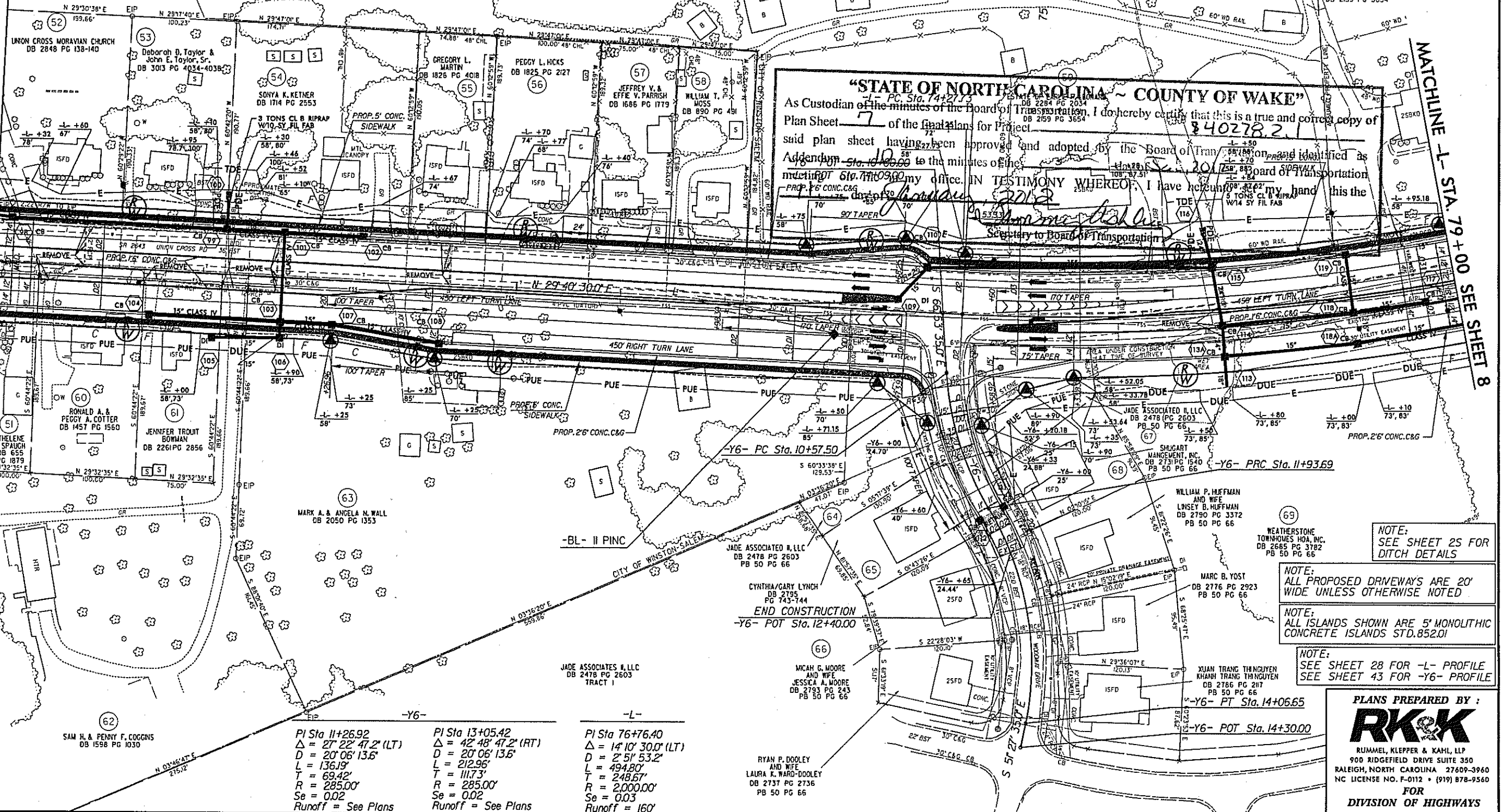
WEATHERSTONE
TOWNHOMES HOA, INC.
DB 2685 PG 3182
PB 50 PG 66

MARC B. YOST
DB 2776 PG 2923
PB 50 PG 66

XUAN TRANG THINGUYEN
KHANH TRANG THINGUYEN
DB 2786 PG 2817
PB 50 PG 66

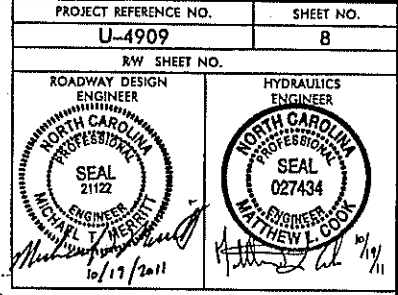
-Y6- PT Sta. 14+06.65

-Y6- POT Sta. 14+30.00



0/17/99

1/7/2011
R:\Roadway\p-e\N41999-rdy.psd\07.dgn
R:\Roadway\p-e\N41999-rdy.psd\07.dgn



NOTE: SEE SHEET	25 FOR DITCH DETAILS
NOTE: ALL PROPOSED DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.	
NOTE: ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD.852.01	

NOTE:
SEE SHEET 28 & 29 FOR -L- PROFILE
SEE SHEET 43 FOR -Y7-, -Y7A-, & -Y8- PROFILE

PLANS PREPARED BY :
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of POPISMSU 95.00 8 of the final plans for Project 40278.2.1

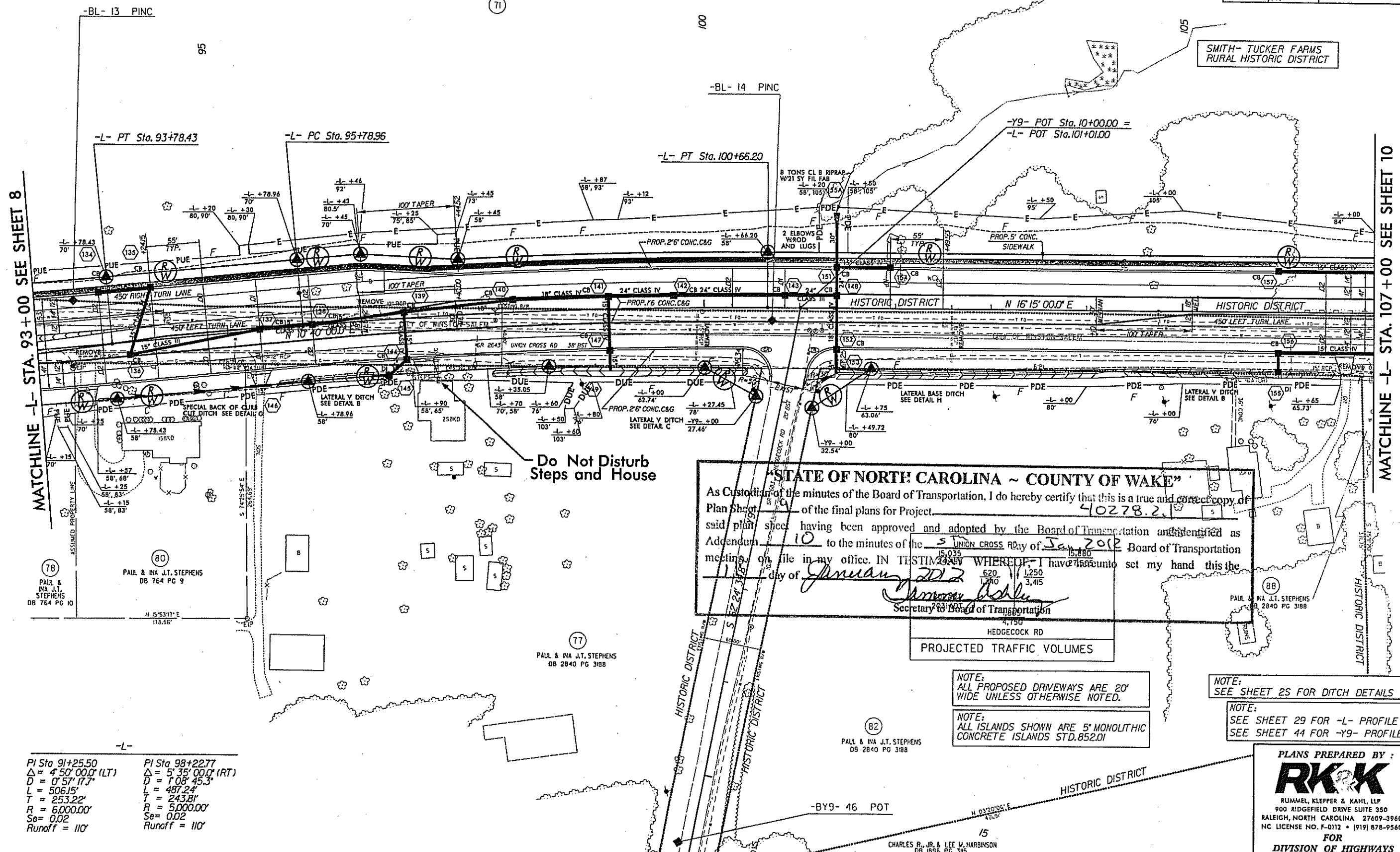
Sta. 12+22.90 sheet having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 5th day of July 2017 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January 2012

Annunzio Ashler
Secretary to Board of Transportation

NOTE:
SEE SHEET

NOTE:
ALL PROPOSED
WIDE, 100' CO

PROJECT REFERENCE NO. U-4909	SHEET NO. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 2112 MICHAEL J. DEBART 1/11/2011	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 027434 MATTHEW L. COOK 1/11/2011



-L-	
PI Sta 91+25.50	PI Sta 98+22.77
$\Delta = 450' 00.0''$ (LT)	$\Delta = 535' 00.0''$ (RT)
$D = 0' 57' 17.7''$	$D = 1' 08' 45.3''$
$L = 506.15'$	$L = 487.24'$
$T = 253.22'$	$T = 243.81'$
$R = 6,000.00'$	$R = 5,000.00'$
$Se = 0.02$	$Se = 0.02$
$Runoff = 110'$	$Runoff = 110'$

STATE OF NORTH CAROLINA - COUNTY OF WAKE

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of the final plans for Project 40278.2.1, having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 15,035 meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January 2012.

Paul & Ina J.T. Stephens
Secretary to Board of Transportation

PROJECTED TRAFFIC VOLUMES

NOTE:
ALL PROPOSED DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD.852.01

NOTE:
SEE SHEET 25 FOR DITCH DETAILS

NOTE:
SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 44 FOR -Y9- PROFILE

PLANS PREPARED BY:

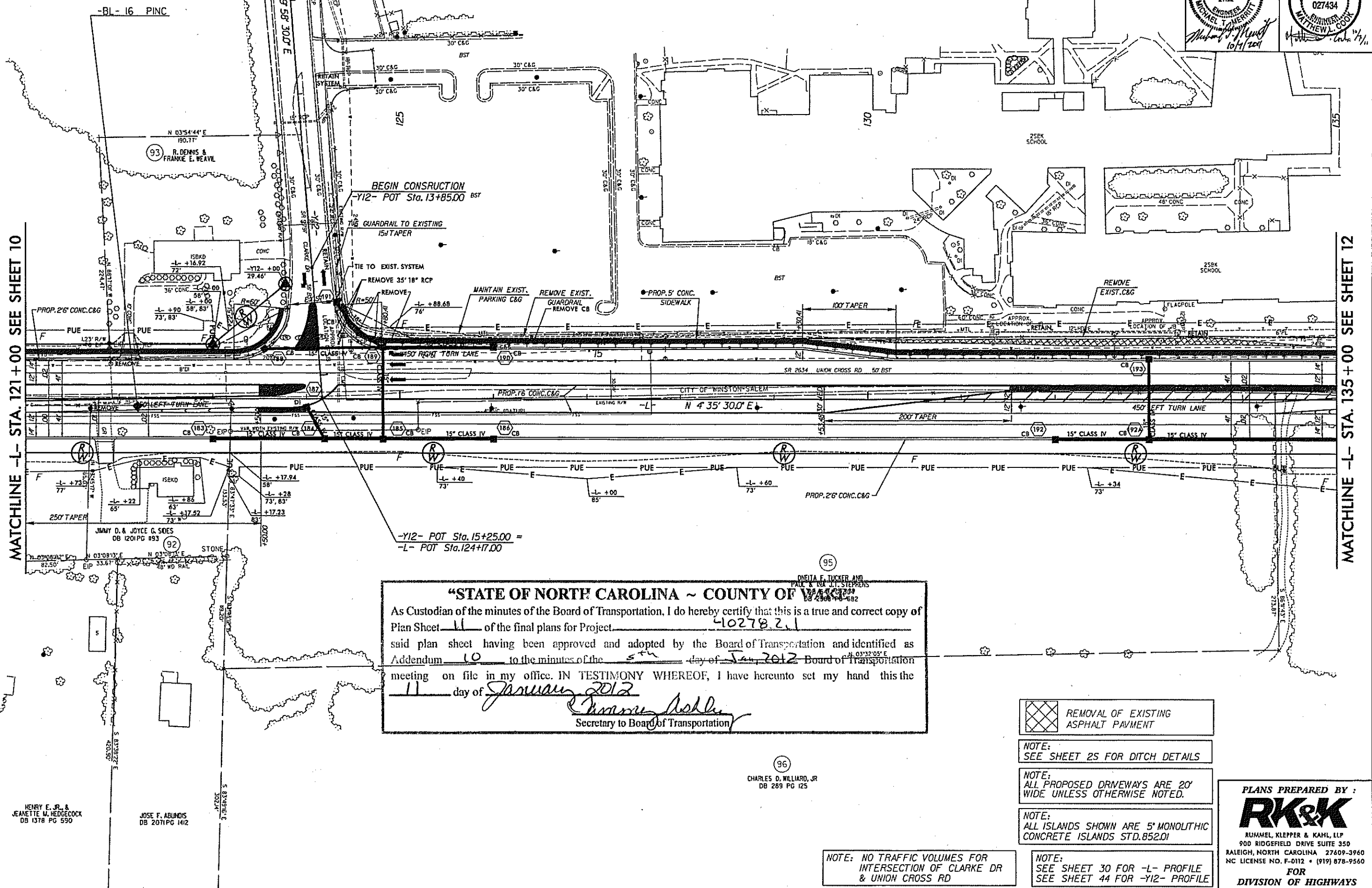
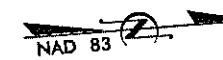
RK&K

RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS



PROJECT REFERENCE NO. U-4909	SHEET NO. 11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21122 MICHAEL T. HERBERT 10/1/2011	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 027434 MATTHEW J. COON 10/1/2011

WINSTON-SALEM/FORSYTH COUNTY
BOARD OF EDUCATION
DB 1536 PG 1627
DB 618 PG 39
DB 617 PG 32
DB 2597 PG 1961
DB 2581 PG 4451



MATCHLINE -L- STA. 121+00 SEE SHEET 10

MATCHLINE -L- STA. 135+00 SEE SHEET 12

MATCHLINE -Y13- STA.20+00 SEE SHEET 22

$-Y14-$
 $PI\ Sta\ 17+64.64$
 $\Delta = 6^\circ 33' 58.0" (LT)$
 $D = 2^\circ 51' 53.2"$
 $L = 229.20'$
 $T = 114.73'$
 $R = 2,000.00'$
 $Se=0.03$
 $Runoff = 110'$

PROJECT REFERENCE NO.	SHEET NO.
U-4909	12
RWY SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Professional Engineer Seal for North Carolina, Michael J. Herritt, Seal 21122, dated 10/19/2011.

Professional Engineer Seal for North Carolina, Matthew J. Cook, Seal 027434, dated 11/1.

MATCHLINE -L- STA. 149+00 SEE SHEET 13

NOTE:
ALL PROP.FENCE IS 48" WOVEN WIRE
UNLESS OTHERWISE NOTED.

GLENN HIGH RD

2011 ADT 8,440
2031 ADT 13,250

2,165 3,050
6,085 10,205

16,030 27,815
18,650 34,975

UNION CROSS RD

PROJECTED TRAFFIC VOLUMES

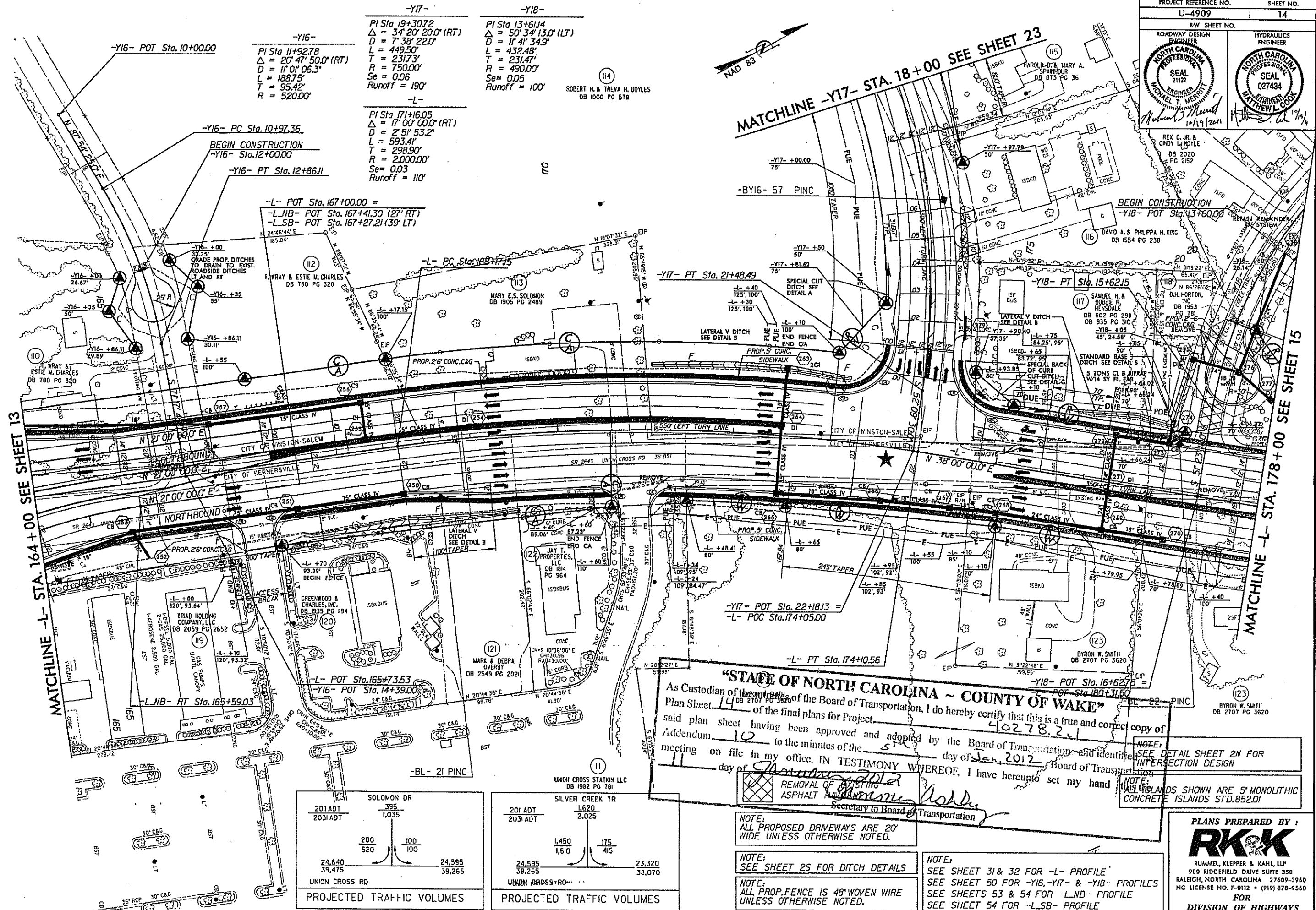
NOTE:
SEE SHEET 30 & 31 FOR -L- PROFILE
SEE SHEET 45 FOR -Y13- & -Y14- PROFILE

"STATE OF NORTH CAROLINA" COUNTY OF WAKE
 As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
 Plan Sheet 12 of the final plans for Project UNION CROSS, L...
 said plan sheet having been approved and adopted by the Board of Transportation and identified as
 Addendum 10 to the minutes of the 5 day of SEPTEMBER 1972 Board of Transportation
 meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the
11 day of JANUARY 2012 -Y14 PC, Sta. 16+49.91
James Ashbe
 Secretary to Board of Transportation

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLANDS STD.852.01

PLANS PREPARED BY :
RKK
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 LEIGH, NORTH CAROLINA 27609-3960
 C. LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS

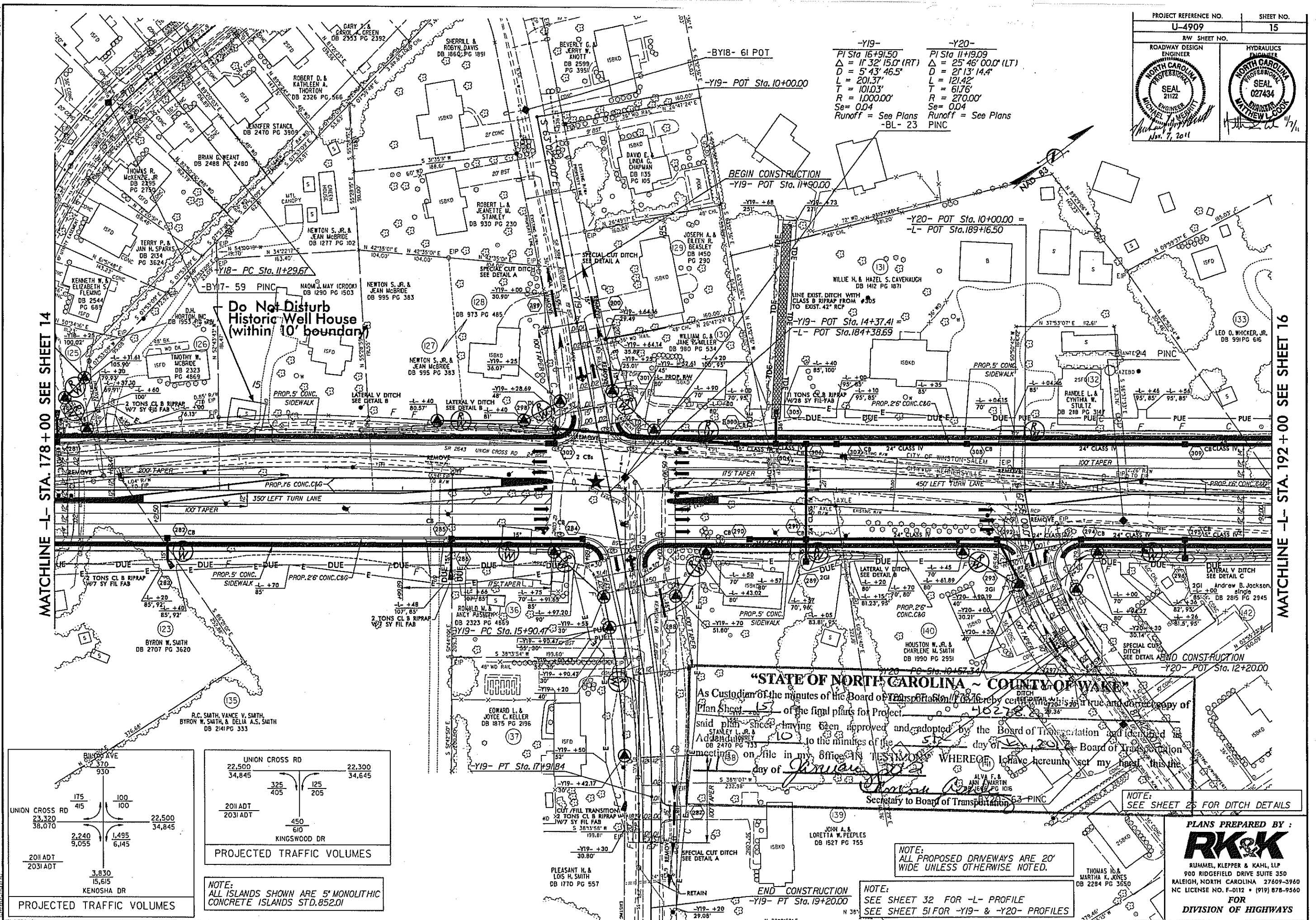
8/17/99

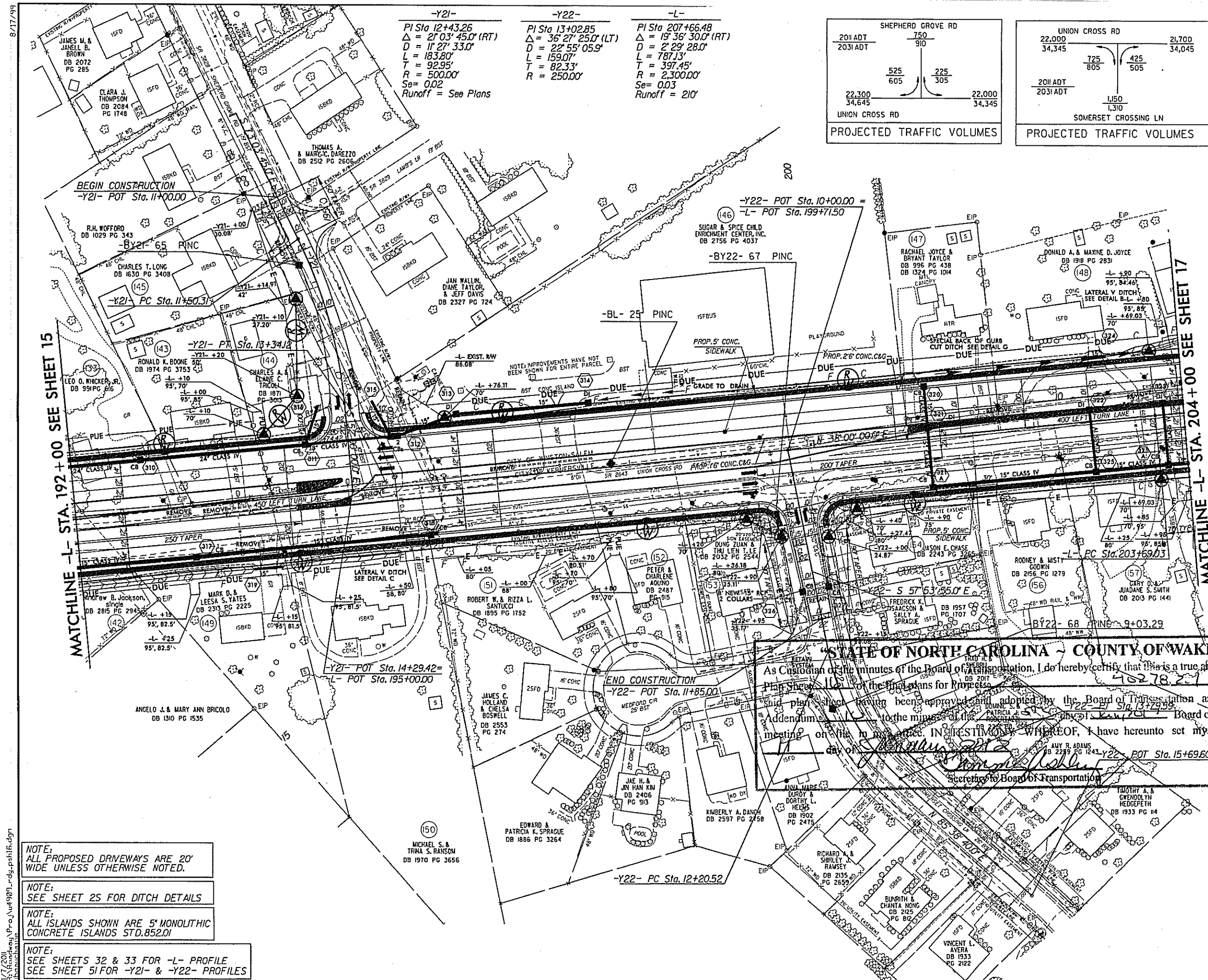


PROJECT REFERENCE NO.		SHEET NO.	
U-4909		15	
RW SHEET NO.		HYDRAULICS	
ROADWAY DESIGN		ENGINEER	
NORTH CAROLINA		NORTH CAROLINA	
SEAL		SEAL	
MICHAEL J. WESSLEY		MATTHEW L. COOK	
JAN 7, 2011		JAN 7, 2011	

MATCHLINE -L- STA. 178+00 SEE SHEET 14

MATCHLINE -L- STA. 192+00 SEE SHEET 16

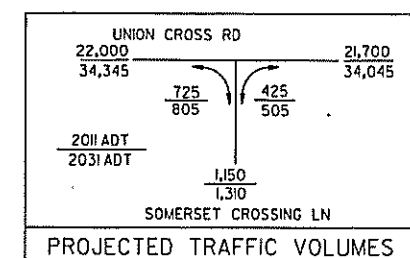
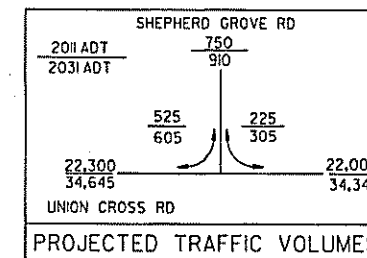




-Y21-
PI Sta 12+43.26
 $\Delta = 21' 03' 45.0''$ (RT)
D = 11' 27' 33.0"
L = 183.80'
T = 92.95'
R = 500.00'
Se = 0.02
Runoff = See Plans

-Y22-
PI Sta 13+02.85
 $\Delta = 36' 27' 25.0''$ (LT)
D = 22' 55' 05.9"
L = 159.07'
T = 82.33'
R = 250.00'

-L-
PI Sta 207+66.48
 $\Delta = 19' 36' 30.0''$ (RT)
D = 2' 29' 28.0"
L = 787.13'
T = 397.45'
R = 2,300.00'
Se = 0.03
Runoff = 210'



PROJECT REFERENCE NO. U-4909	SHEET NO. 16
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21122 MICHAEL J. VERNITZ Nov. 7, 2011	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 027434 MATTHEW L. BOON 11/3/11

STATE OF NORTH CAROLINA - COUNTY OF WAKE

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 1161 for the final plans for Improvements to Union Cross Road and Somerset Crossing Lane, identified as Addendum 1 to the minutes of the Board of Transportation meeting on the 10th day of November, 2011, WHEREOF, I have hereunto set my hand this the 10th day of November, 2011.

[Signature]
Secretary to Board of Transportation

PLANS PREPARED BY:

RK&K

RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-9980
NC LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS

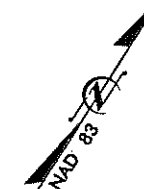


JOHN & SUSAN L. MARRA
DB 2144 PG 1047

-L-
 PI Sta. 224+12.82
 $\Delta = 1'13''56.5''$ (LT)
 $D = 0'12''58.4''$
 $L = 569.98'$
 $T = 285.00'$
 $R = 26,500.00'$
 $Se = 0.02$

ROGER L. HASTINGS
DB 517 PG 279
DB 1205 PG 357

PROJECT REFERENCE NO. U-4909	SHEET NO. 18
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 21122 MICHAEL T. VERNITZ 10/7/2012	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 027434 MATTHEW L. COOK 10/7/2012



MATCHLINE -L- STA. 217+00 SEE SHEET 17

-L- Sta. 225+50.00
END TIP PROJECT U-4909

BM#8
 BEARING FROM BL 27
 N 54°03'57" E HD 551.86'
 N 853258.6
 E 1676527.3
 ELEV. = 972.62'

STATE OF NORTH CAROLINA - COUNTY OF WAKE

I, the undersigned, as a member of the Board of Transportation, I do hereby certify that this is a true and correct copy of the final plans for Project 4027 B.2.1. The plans have been approved and adopted by the Board of Transportation and identified as to the minutes of the 5th day of Jan, 2012 Board of Transportation meeting. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 10th day of Jan, 2012.

Sharon Kohn
 Secretary to Board of Transportation

NOTE:
 SEE SHEET 25 FOR DITCH DETAILS

NOTE:
 ALL PROPOSED DRAINWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

NOTE:
 ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD.852.01

NOTE:
 SEE SHEET 33 FOR -L- PROFILE
 SEE SHEET 53 FOR -Y25- PROFILE

PLANS PREPARED BY:

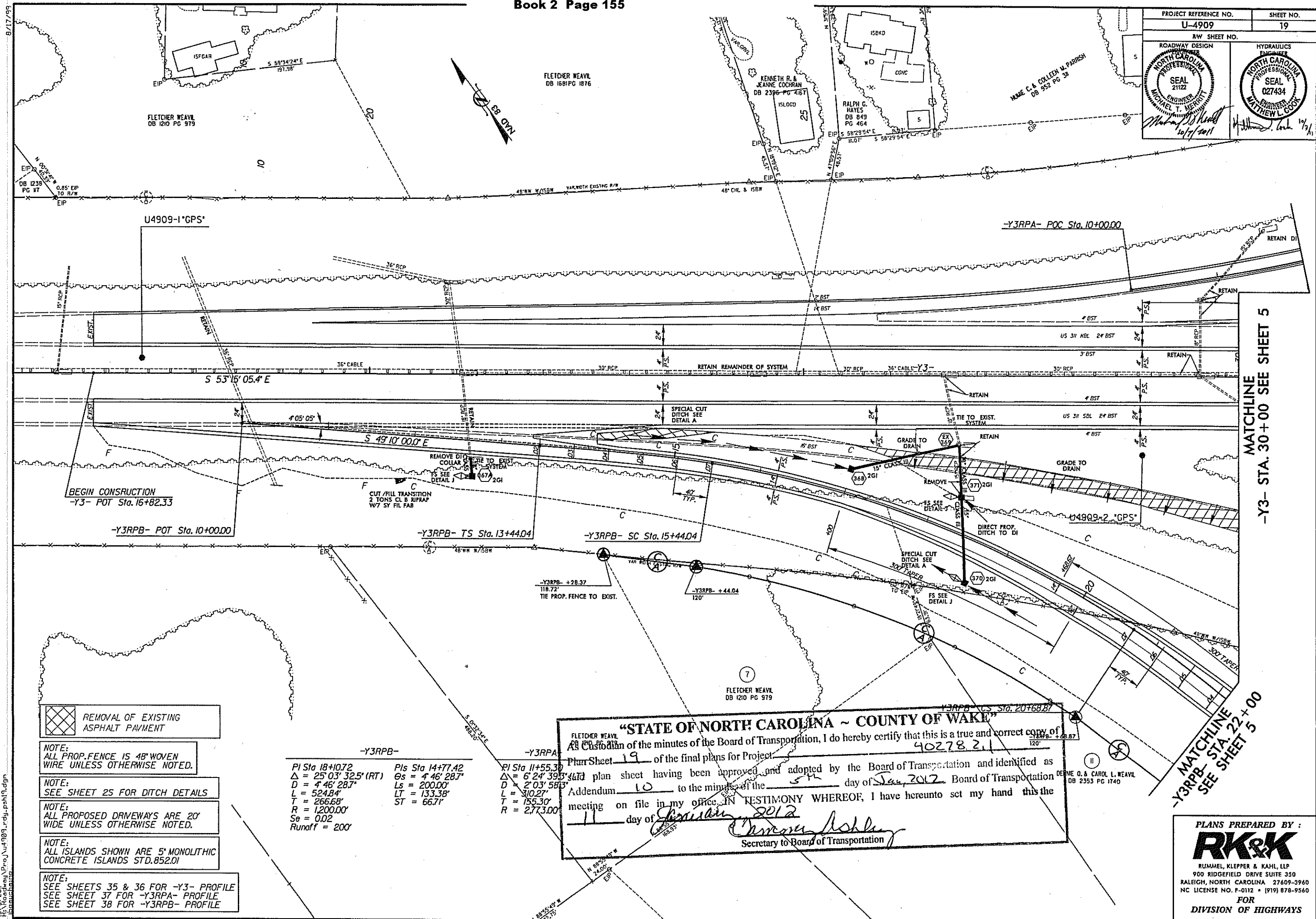
RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. F-0112 • (919) 878-9560

FOR
 DIVISION OF HIGHWAYS

-Y25-
 PI Sta 11+23.77 $\Delta = 32'19''00.0''$ (RT) $D = 22'55''05.9''$ $L = 141.0'$ $T = 72.43'$ $R = 250.00'$
 PI Sta 14+80.63 $\Delta = 84'29''09.3''$ (LT) $D = 22'02''12.6''$ $L = 383.38'$ $T = 236.1'$ $R = 260.00'$

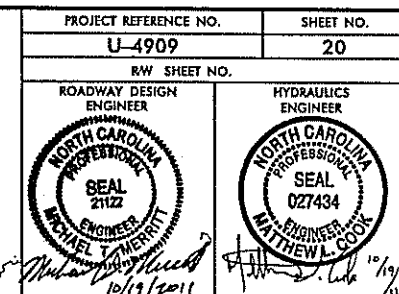
Do Not Disturb
Brick WallDo Not Disturb
Brick Wall

PROJECT REFERENCE NO. U-4909	SHEET NO. 19
RW SHEET NO.	
ROADWAY DESIGN SEAL 21122 MICHAEL T. MERRITT 10/7/2011	HYDRAULICS SEAL 027434 MATTHEW L. COOK 10/7/2011



MATCHLINE
-Y3- STA. 30+00 SEE SHEET 5

MATCHLINE
-Y3RPB- STA. 22+00
SEE SHEET 5



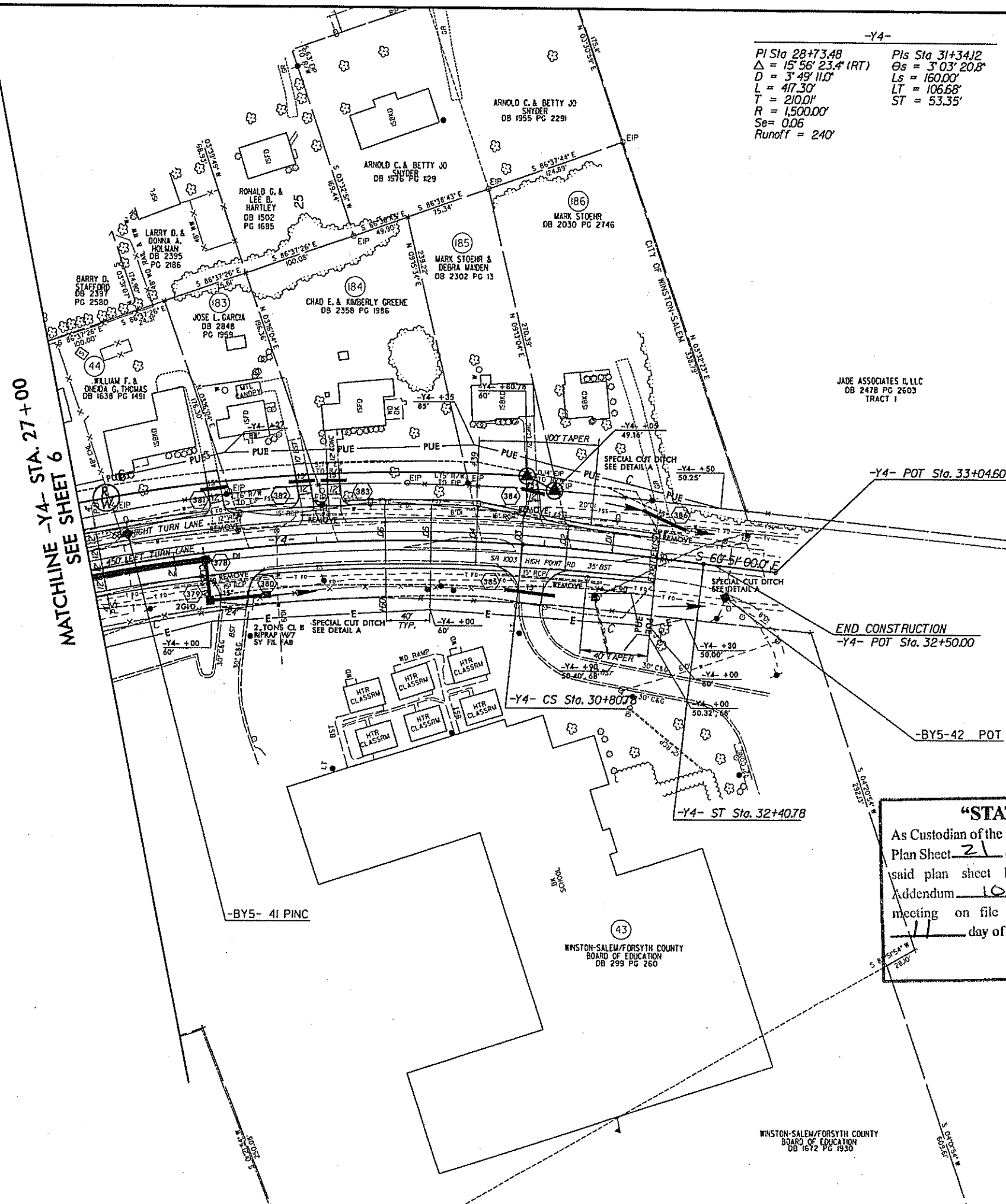
-Y4-

PI Sta 28+73.48
 $\Delta = 15' 56'' 23.4''$ (RT)
 $D = 3' 49'' 11.0''$
 $L = 417.30'$
 $T = 210.01'$
 $R = 1,500.00'$
 $Se = 0.06$
 $Runoff = 240'$

Pls Sta 31+34.12
 $\Theta s = 3' 03'' 20.8''$
 $Ls = 160.00'$
 $LT = 106.68'$
 $ST = 53.35'$

PROJECT REFERENCE NO. U-4909	SHEET NO. 21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL SEAL 21122 MICHAEL J. WEHRT 10/17/2011	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL SEAL 027434 MATTHEW L. COOK 10/17/2011

MATCHLINE -Y4- STA. 27+00
 SEE SHEET 6



"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 21 of the final plans for Project 40278.2.1 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 5th day of Jan, 2012 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January, 2012

Thomas Rohde
Secretary to Board of Transportation

NOTE:
SEE SHEET 42 FOR -Y4- PROFILE

NOTE:
SEE SHEET 25 FOR DITCH DETAILS

NOTE:
ALL PROPOSED DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD. 852.01

PLANS PREPARED BY:
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS

-Y13-

PI Sta 15+05.83
 $\Delta = 2' 16' 33.3''$ (LT)
 $D = 1' 09' 27.0''$
 $L = 196.63'$
 $T = 98.33'$
 $R = 4,950.00'$
 $Se = 0.02$
 $Runoff = 80'$

PI Sta 17+26.70
 $\Delta = 2' 50' 13.3''$ (RT)
 $D = 1' 09' 27.0''$
 $L = 245.10'$
 $T = 122.58'$
 $R = 4,950.00'$
 $Se = 0.02$
 $Runoff = 80'$

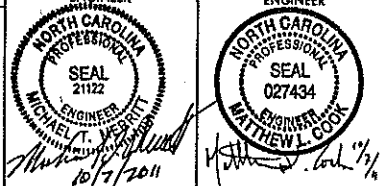
CHARLES O. WILLIARD, JR.
 DB 124 PG 1524
 DB 1037 PG 1008

PROJECT REFERENCE NO. SHEET NO.

U-4909 22

RW SHEET NO.

ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER



WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 264.81'
 CHORD = 293.77'
 CHORD BEARING = N 37°58'58" E

RADIUS = 275.00'
 CHORD = 65.35'
 CHORD BEARING = S 64°25'00" W

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

RADIUS = 214.81'
 CHORD = 238.25'
 CHORD BEARING = N 37°59'00" E

WEST POINT VILLAGE ASSOCIATES
 DB 2770 PG 1479
 PB 52 PG 85

"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 22 of the final plans for Project 40278.2.1

said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 5th day of Jan, 2012 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the

11 day of January, 2012

Cherry Ashley
 Secretary to Board of Transportation

NOTE:
 SEE SHEET 2S FOR DITCH DETAILS

NOTE:
 ALL PROPOSED DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

NOTE:
 ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD. 852.01

NOTE:
 SEE SHEET 45 FOR -Y13- PROFILE

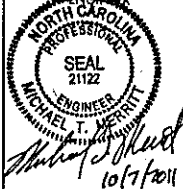
PLANS PREPARED BY:

RK&K

RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. P-0112 • (919) 878-9560

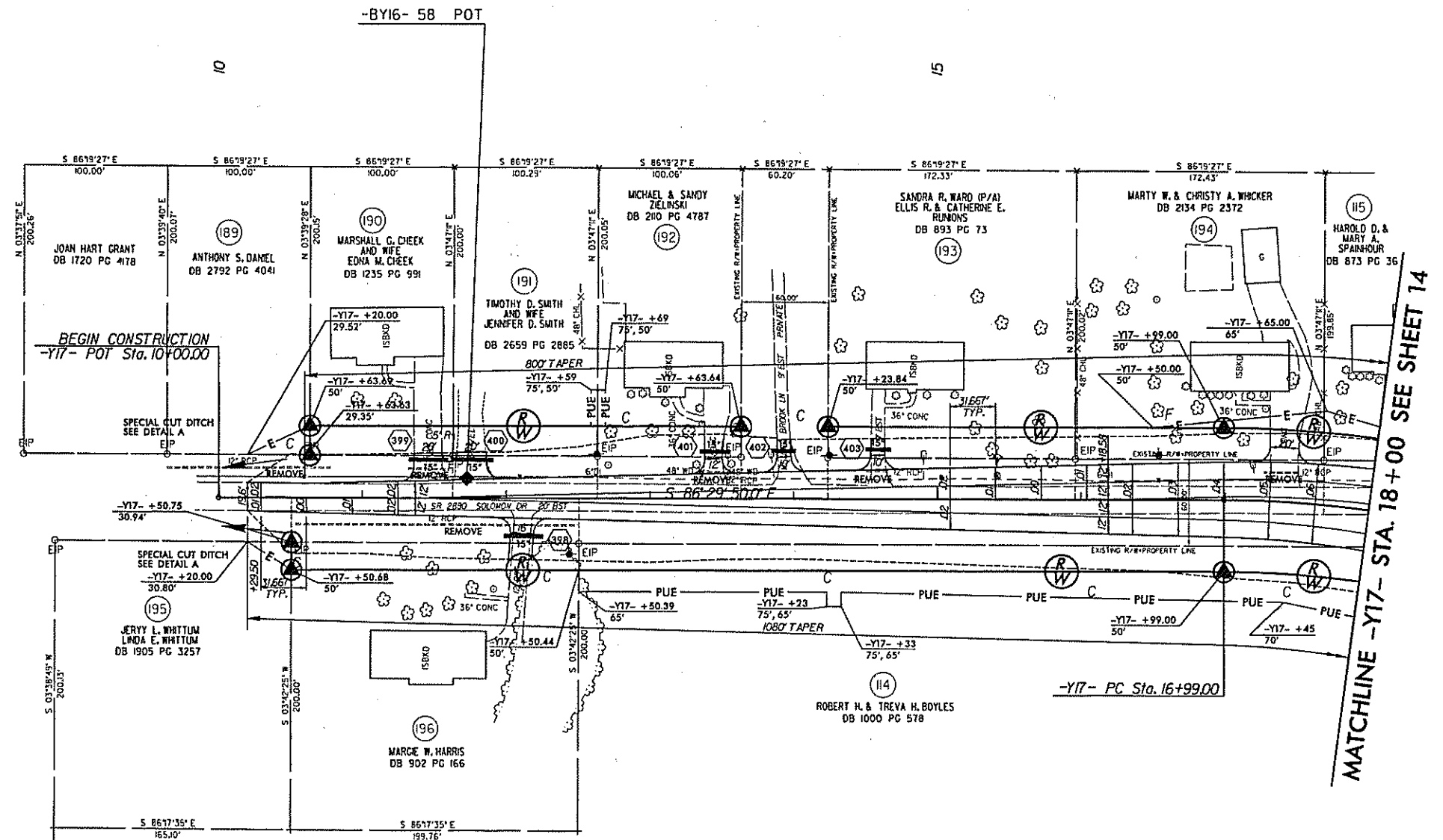
FOR
 DIVISION OF HIGHWAYS

MATCHLINE -Y13- STA.20+00 SEE SHEET 12

PROJECT REFERENCE NO.	SHEET NO.
U-4909	23
RW SHEET NO.	
ROADWAY DESIGN	HYDRAULICS ENGINEER
	
10/7/2011	

-Y17-

PI Sta 19+30.72
 $\Delta = 34' 20'' 20.0''$ (RT)
 $D = 7' 38'' 22.0''$
 $L = 449.50'$
 $T = 231.73'$
 $R = 750.00'$
 $S_e = 0.06$
 Runoff = 190'



"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 23 of the final plans for Project 40278.2.1 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 5th day of Jan, 2012 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January, 2012

Thomas Ashby
 Secretary to Board of Transportation

NOTE:
SEE SHEET 50 FOR -Y17- PROFILE

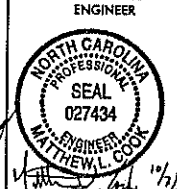
NOTE:
SEE SHEET 25 FOR DITCH DETAILS

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD. 852.01

NOTE:
ALL PROPOSED DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

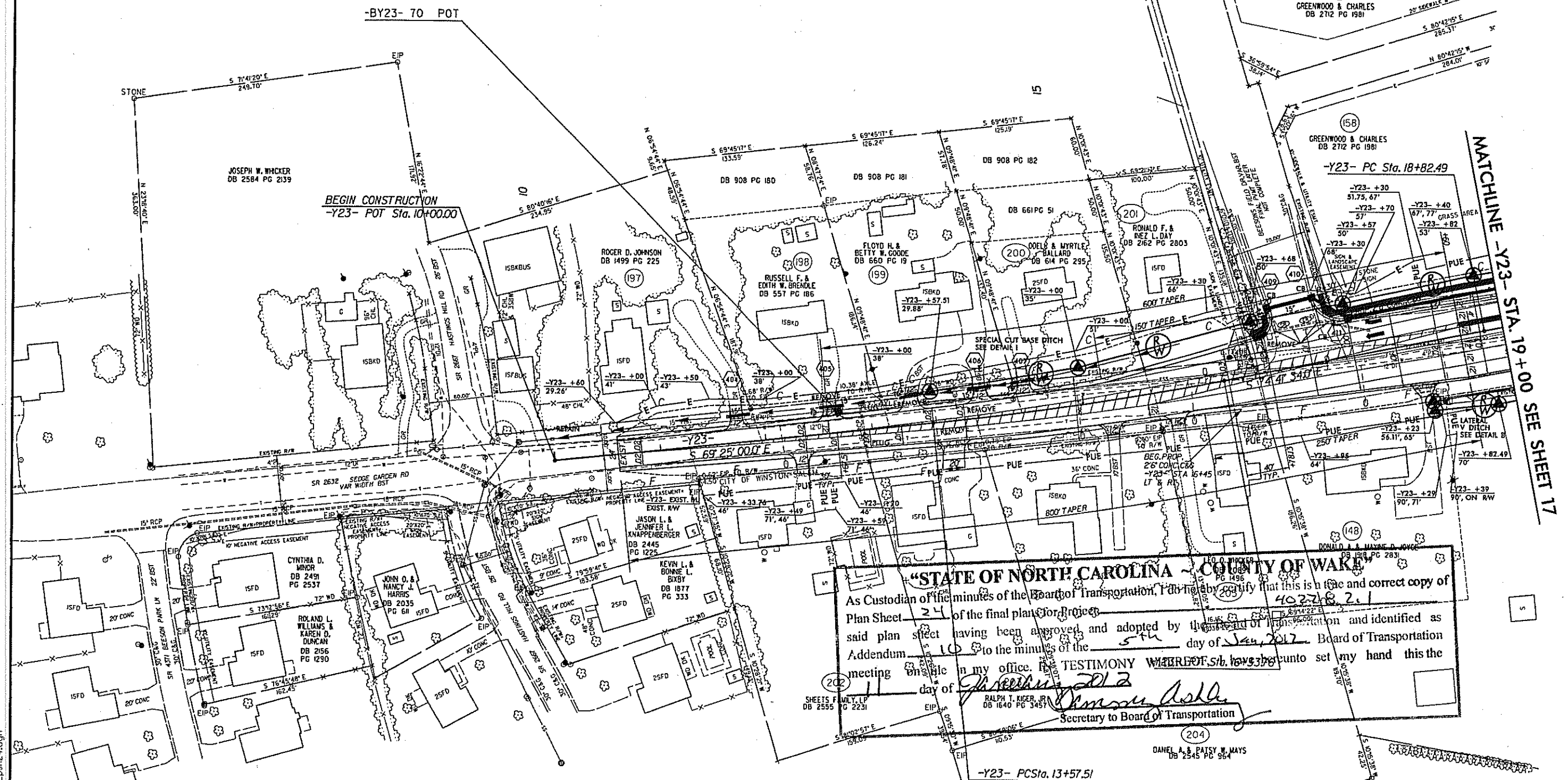
PLANS PREPARED BY:

RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. F-0112 • (919) 878-9560
 FOR
 DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
U-4909	24
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

-Y23-

PI Sta 14+95.73	PI Sta 20+64.65
$\Delta = 5'16''34.0''$ (LT)	$\Delta = 6'56''58.0''$ (RT)
D = 154'35.5'	D = 154'35.5'
L = 267.26'	L = 363.87'
T = 138.23'	T = 182.16'
R = 3,000.00'	R = 3,000.00'
Se = 0.02	Se = 0.02
Runoff = See Plans	Runoff = See Plans



NOTE:
SEE SHEET 25 FOR DITCH DETAILS

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLANDS STD. 852.01

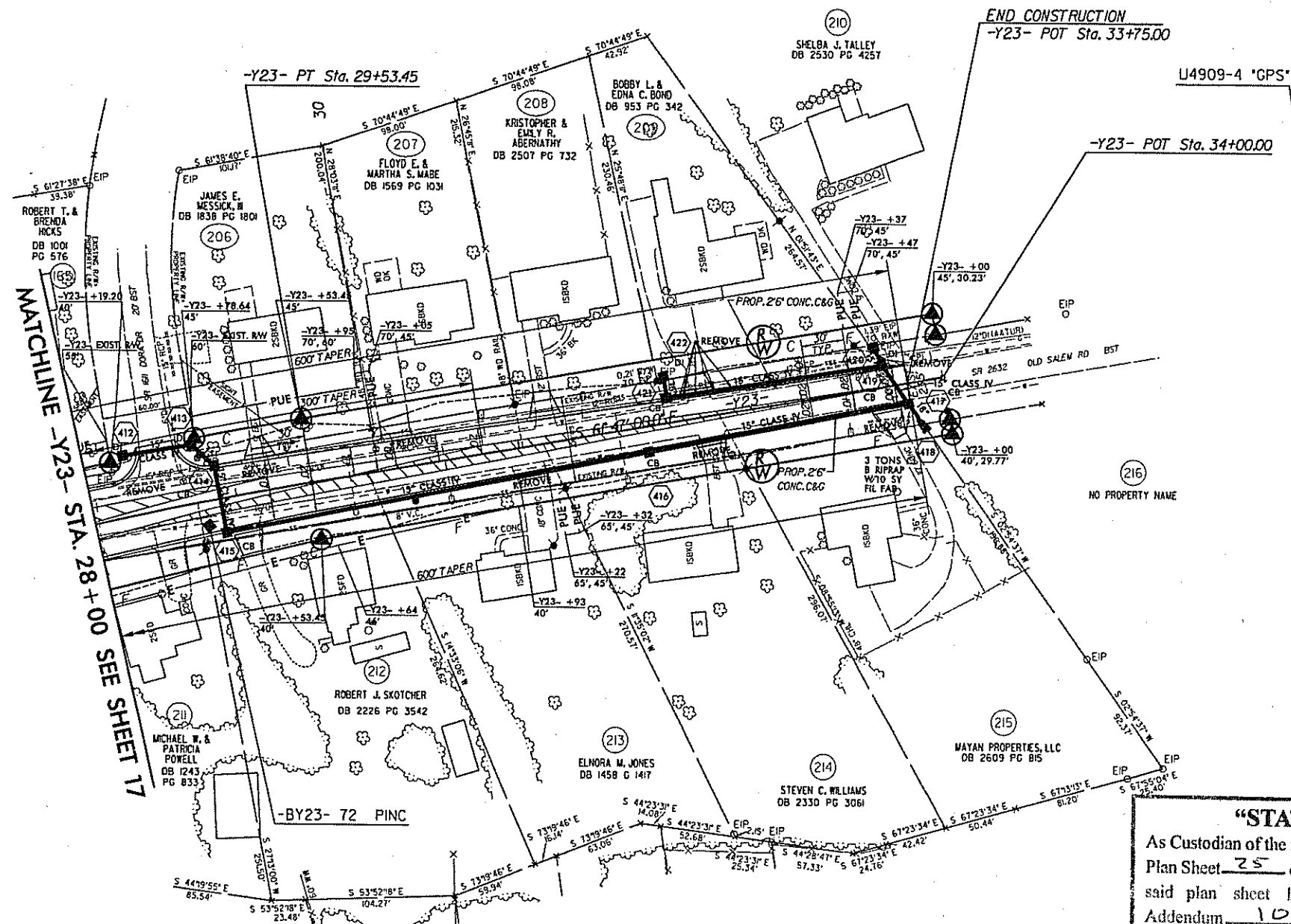
NOTE:
SEE SHEET 52 FOR -Y23- PROFILE

NOTE:
ALL PROPOSED DRIVEWAYS ARE 20'
WIDE UNLESS OTHERWISE NOTED.

PLANS PREPARED BY:
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS

-Y23-

PI Sta 27+97.56
 $\Delta = 5' 57' 36.0''$ (RT)
 $D = 1' 54' 35.5''$
 $L = 312.06'$
 $T = 156.17'$
 $R = 3,000.00'$
 $Se = 0.02$
 Runoff = See Plans



PROJECT REFERENCE NO. U-4909	SHEET NO. 25
ROADWAY DESIGN NORTH CAROLINA PROFESSIONAL SEAL 21122 MICHAEL T. MERRITT 10/7/2011	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 027434 MATTHEW L. COOK 10/7/2011

"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 25 of the final plans for Project 40278.2.1 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 10 to the minutes of the 5th day of Jan, 2012 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of January, 2012

Thomas Ashby
 Secretary to Board of Transportation

NOTE:
SEE SHEET 52 FOR -Y23- PROFILE

NOTE:
SEE SHEET 25 FOR DITCH DETAILS

NOTE:
ALL PROPOSED DRIVEWAYS ARE 20' WIDE UNLESS OTHERWISE NOTED.

NOTE:
ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLANDS STD. B52.01

PLANS PREPARED BY:

RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. F-0112 • (919) 878-9560

FOR
 DIVISION OF HIGHWAYS