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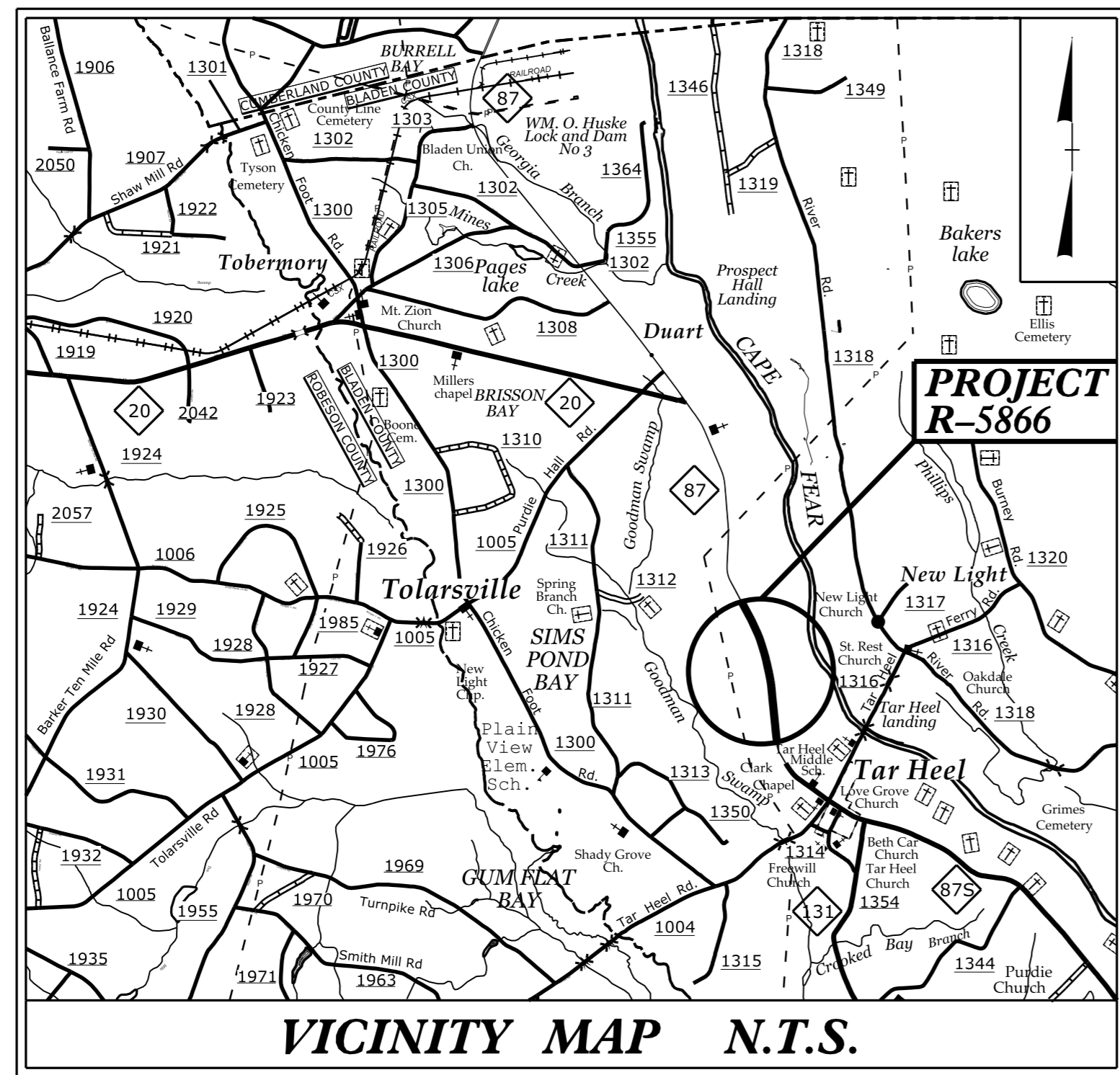
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09/08/99

24-APR-2018 08:33  
H:\DDC\Projects\N-5866 NC 87 @ Smithfield\Roadway\Proj\N-5866-Rdy-fsh.dgn  
\$\$\$\$\$USERNAME\$\$\$\$\$

**TIP PROJECT: R-5866**

**CONTRACT: DF00216**



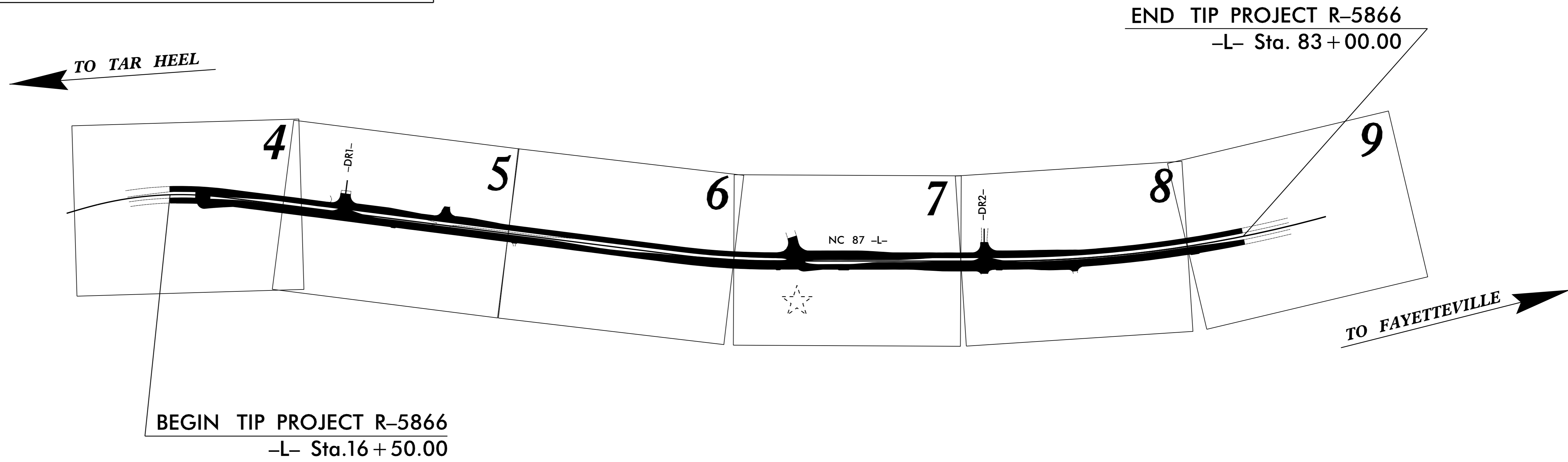
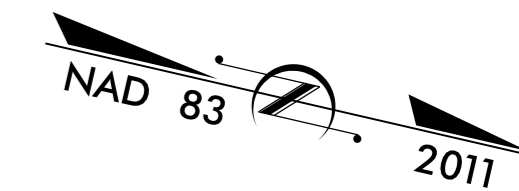
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**BLADEN COUNTY**

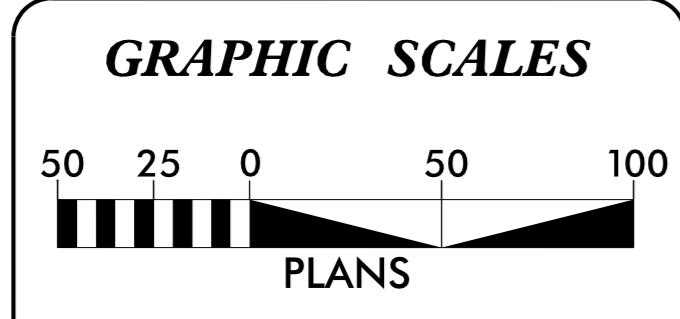
**LOCATION: NC 87 APPROXIMATELY 3 MILES SOUTH OF NC 20  
AT SMITHFIELD FOOD'S PROCESSING CENTER**

**TYPE OF WORK: WIDENING, GRADING, PAVING, CONCRETE ISLANDS,  
SIGNING AND PAVEMENT MARKINGS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5866	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
47745.1.1		P.E.	
47745.3.1		CONSTRUCTION	



☆ EXISTING TRAFFIC SIGNAL



**DESIGN DATA**

ADT 2018 =	1049
ADT 2023 =	1050
D =	50 %
T =	100 % *
V =	60 MPH
* TTST =	98%DUAL 2%
FUNC CLASS =	MAJOR ARTERIAL

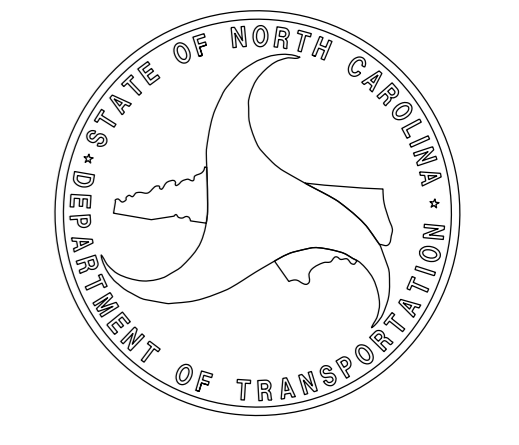
**PROJECT LENGTH**

TOTAL LENGTH OF TIP PROJECT R-5866 = 1.259 MILES

Prepared in the Office of:

**DIVISION OF HIGHWAYS**  
431 Transportation Dr., Fayetteville, NC 28301

2018 STANDARD SPECIFICATIONS	
<b>RIGHT OF WAY DATE:</b> NA	<b>SCOTT PRIDGEN</b> PROJECT ENGINEER
<b>LETTING DATE:</b> MAY 16, 2018	<b>ALEX HENDERSON</b> PROJECT DESIGN ENGINEER



# STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

## BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○
Computed Property Corner	→
Property Monument	EDM
Parcel/Sequence Number	(123)
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	MLB
Proposed Wetland Boundary	MLB
Existing Endangered Animal Boundary	EAB
Existing Endangered Plant Boundary	EPB
Existing Historic Property Boundary	HPB
Known Contamination Area: Soil	☒ - S - ☒ - S -
Potential Contamination Area: Soil	☒ - S - ☒ - S -
Known Contamination Area: Water	☒ - W - ☒ - W -
Potential Contamination Area: Water	☒ - W - ☒ - W -
Contaminated Site: Known or Potential	☠ ?

## 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	JS
Buffer Zone 1	BZ 1
Buffer Zone 2	BZ 2
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	↓
Proposed Lateral, Tail, Head Ditch	← FLOW
False Sump	▽

## RAILROADS:

Standard Gauge	-----
RR Signal Milepost	CSX TRANSPORTATION MILEPOST 35
Switch	SWITCH
RR Abandoned	-----
RR Dismantled	-----

## RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	●
Exist Permanent Easement Pin and Cap	◇
New Permanent Easement Pin and Cap	◆
Vertical Benchmark	⊠
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	-----
New Right of Way Line with Pin and Cap	-----
New Right of Way Line with Concrete or Granite RW Marker	-----
New Control of Access Line with Concrete C/A Marker	-----
Existing Control of Access	-----
New Control of Access	-----
Existing Easement Line	-----
New Temporary Construction Easement	-----
New Temporary Drainage Easement	-----
New Permanent Drainage Easement	-----
New Permanent Drainage / Utility Easement	-----
New Permanent Utility Easement	-----
New Temporary Utility Easement	-----
New Aerial Utility Easement	-----

## ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	C
Proposed Slope Stakes Fill	F
Proposed Curb Ramp	CR
Existing Metal Guardrail	T T T
Proposed Guardrail	T T T
Existing Cable Guiderail	□ □ □
Proposed Cable Guiderail	□ □ □
Equality Symbol	⊕
Pavement Removal	⊗

## VEGETATION:

Single Tree	☼
Single Shrub	☼

Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

Hedge	-----
Woods Line	-----
Orchard	☼ ☼ ☼ ☼
Vineyard	Vineyard

## EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall	CONC WW
MINOR:	
Head and End Wall	CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	S

## 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 Hole	-----
H-Frame Pole	● ●
U/G Power Line LOS B (S.U.E.*)	-----
U/G Power Line LOS C (S.U.E.*)	-----
U/G Power Line LOS D (S.U.E.*)	-----

## TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊠
Telephone Cell Tower	⊠
U/G Telephone Cable Hand Hole	-----
U/G Telephone Cable LOS B (S.U.E.*)	-----
U/G Telephone Cable LOS C (S.U.E.*)	-----
U/G Telephone Cable LOS D (S.U.E.*)	-----
U/G Telephone Conduit LOS B (S.U.E.*)	-----
U/G Telephone Conduit LOS C (S.U.E.*)	-----
U/G Telephone Conduit LOS D (S.U.E.*)	-----
U/G Fiber Optics Cable LOS B (S.U.E.*)	-----
U/G Fiber Optics Cable LOS C (S.U.E.*)	-----
U/G Fiber Optics Cable LOS D (S.U.E.*)	-----

## WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	-----
U/G Water Line LOS C (S.U.E.*)	-----
U/G Water Line LOS D (S.U.E.*)	-----
Above Ground Water Line	A/G Water

## TV:

TV Pedestal	⊠
TV Tower	⊗
U/G TV Cable Hand Hole	-----
U/G TV Cable LOS B (S.U.E.*)	-----
U/G TV Cable LOS C (S.U.E.*)	-----
U/G TV Cable LOS D (S.U.E.*)	-----
U/G Fiber Optic Cable LOS B (S.U.E.*)	-----
U/G Fiber Optic Cable LOS C (S.U.E.*)	-----
U/G Fiber Optic Cable LOS D (S.U.E.*)	-----

## GAS:

Gas Valve	◇
Gas Meter	◇
U/G Gas Line LOS B (S.U.E.*)	-----
U/G Gas Line LOS C (S.U.E.*)	-----
U/G Gas Line LOS D (S.U.E.*)	-----
Above Ground Gas Line	A/G Gas

## SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	SS
Above Ground Sanitary Sewer	A/G Sanitary Sewer
SS Forced Main Line LOS B (S.U.E.*)	-----
SS Forced Main Line LOS C (S.U.E.*)	-----
SS Forced Main Line LOS D (S.U.E.*)	-----

## MISCELLANEOUS:

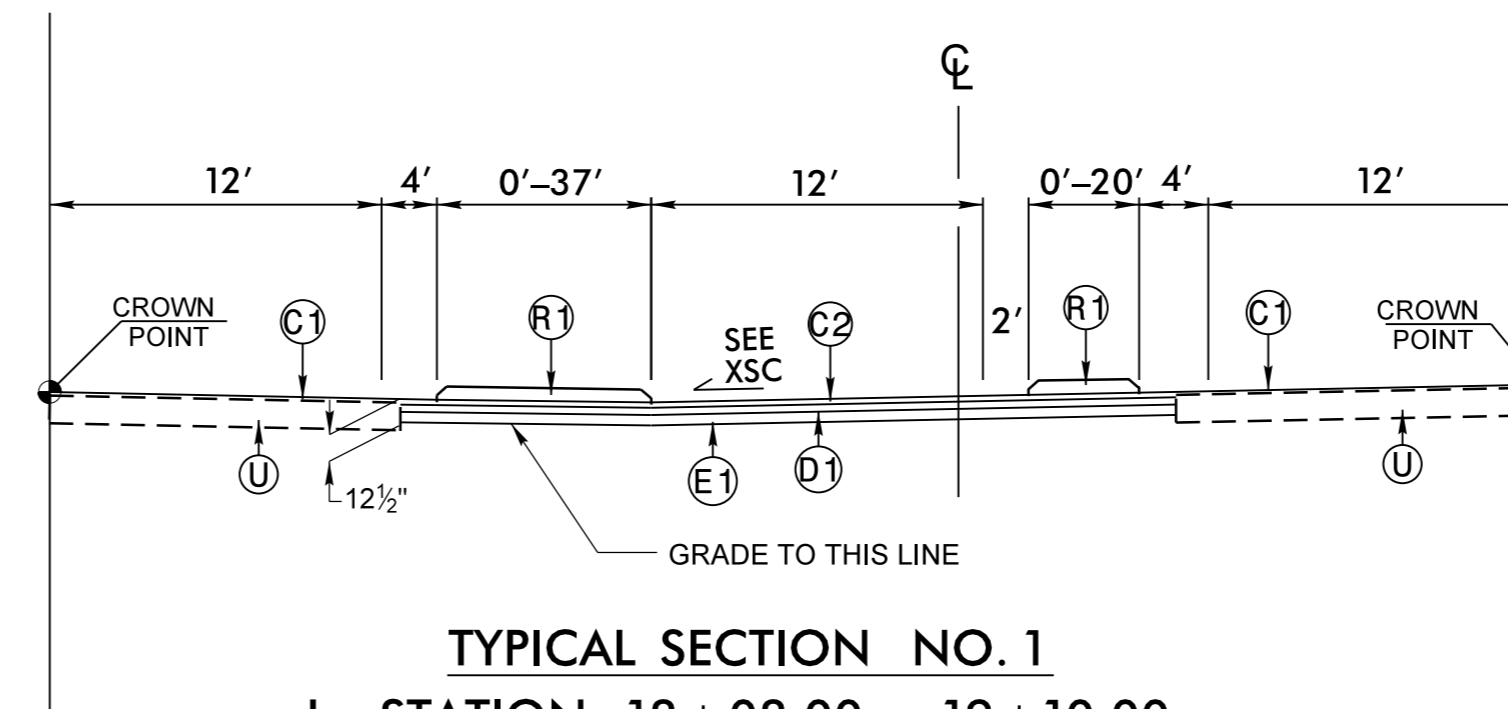
Utility Pole	●
Utility Pole with Base	⊠
Utility Located Object	○
Utility Traffic Signal Box	⊠
Utility Unknown U/G Line LOS B (S.U.E.*)	-----
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	UST
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole LOS A (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	5" KEYED IN MONOLITHIC CONCRETE ISLAND. (STD 852.01)
T1	EARTH MATERIAL
U	EXISTING PAVEMENT

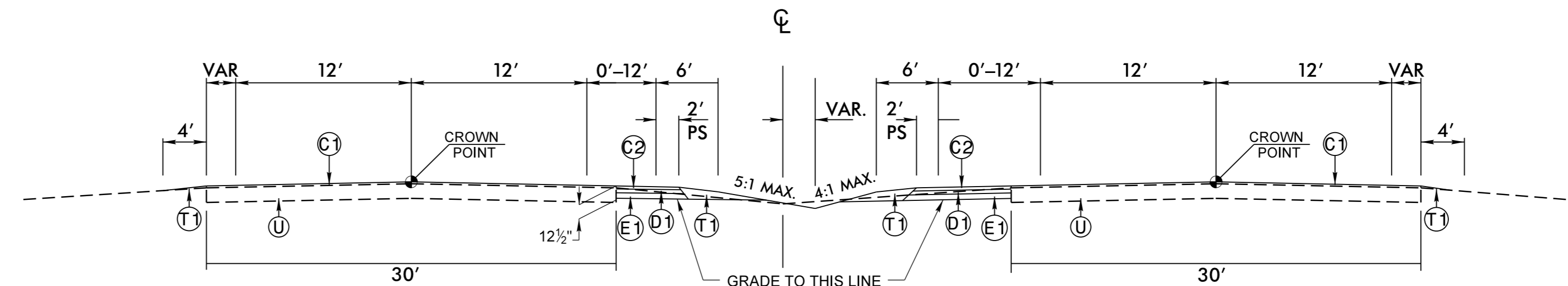
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

### RESURFACE

- L- STATION 16 + 50.00 - 18 + 08.00
- L- STATION 43 + 24.50 - 65 + 94.00
- L- STATION 67 + 94.00 - 83 + 00.00



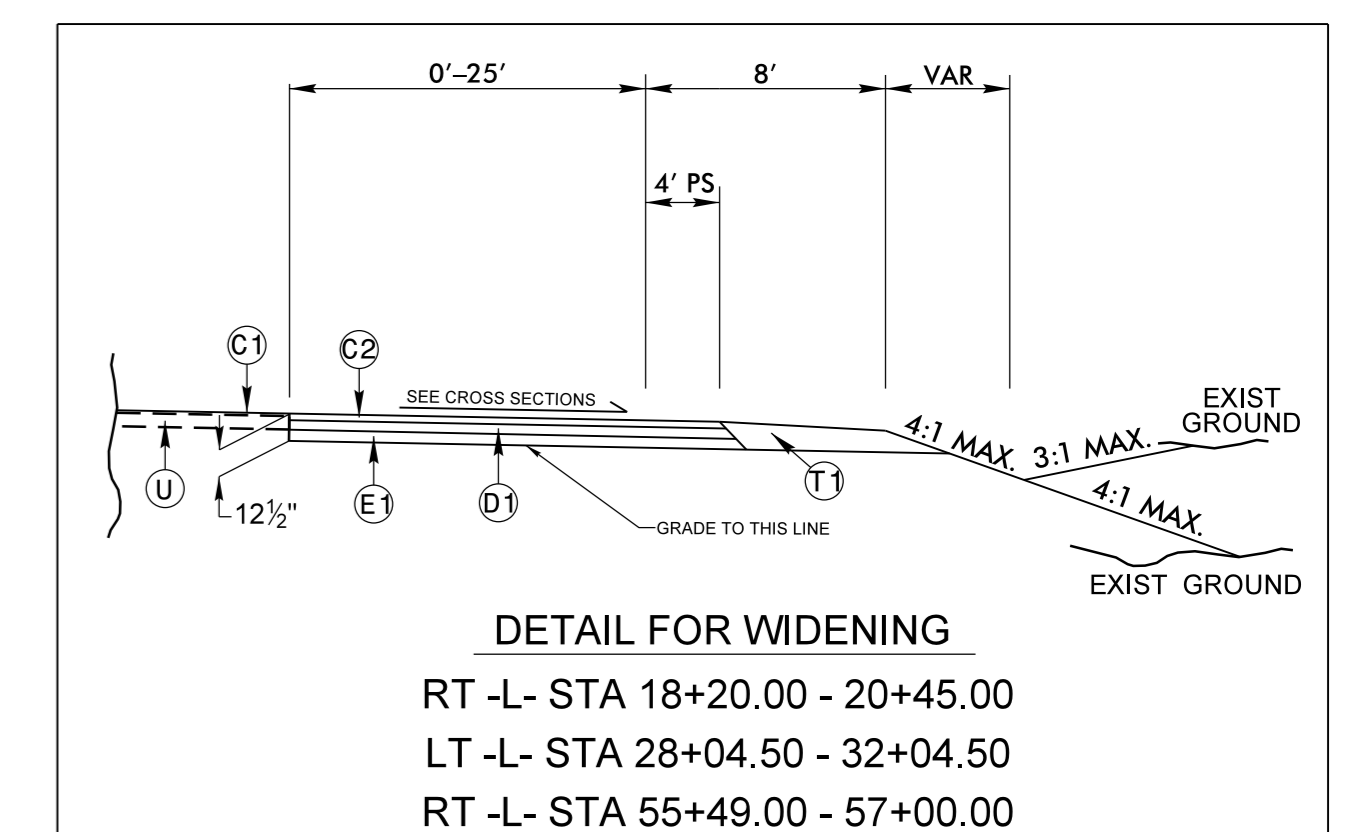
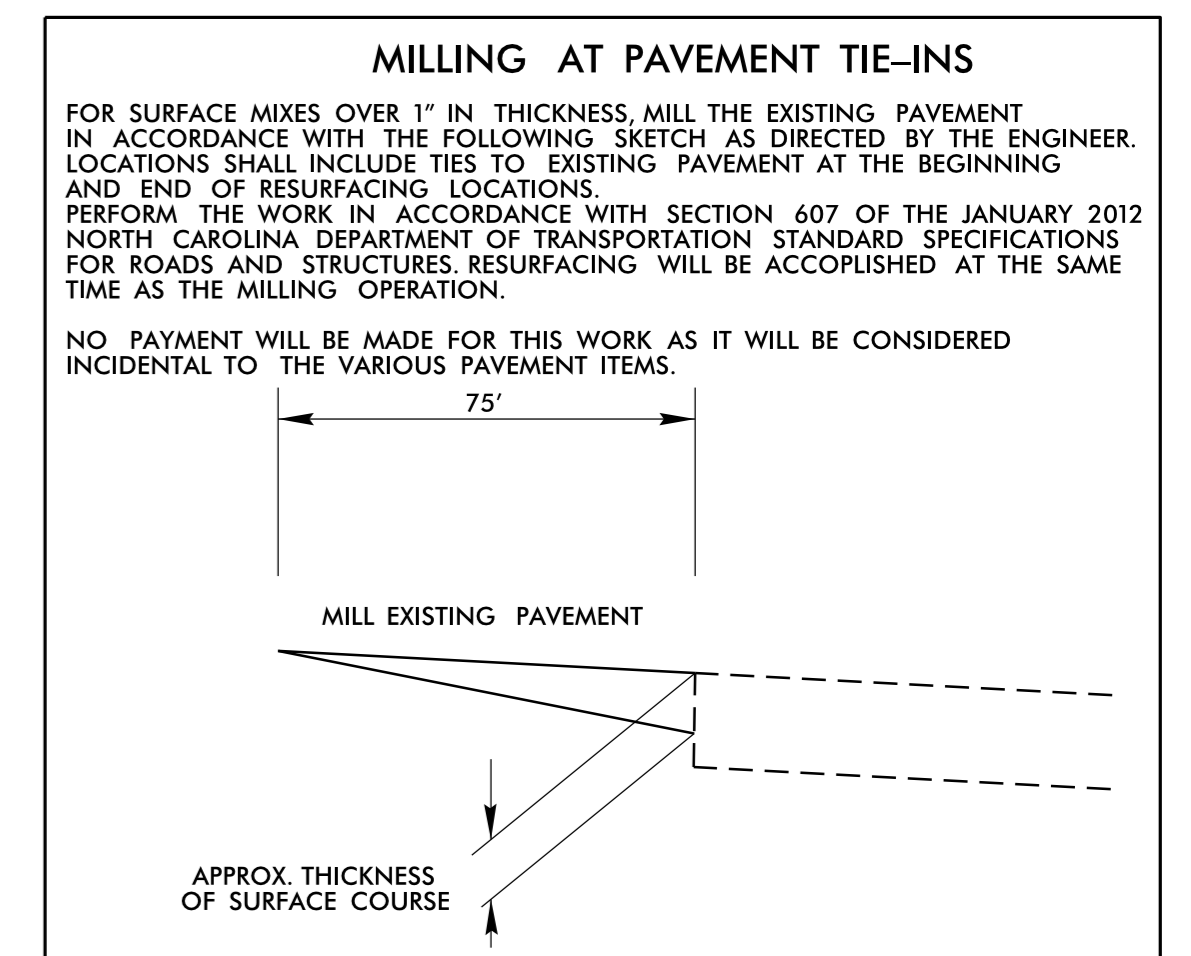
- L- STATION 18 + 08.00 - 19 + 10.00
- L- STATION 26 + 24.50 - 28 + 24.50
- L- STATION 65 + 94.00 - 67 + 94.00



- L- STATION 19 + 10.00 - 26 + 24.50
- L- STATION 28 + 24.50 - 43 + 24.50

### PROJECT NOTES

1. The contractor shall not work on both sides of the road simultaneously within the same area.
2. Ingress and egress shall be maintained to all businesses and dwellings on the project.
3. At the end of each workday, the contractor shall be required to backfill any area adjacent to existing travelway that has been graded, leaving no more than a 1" drop-off.
4. A minimum of two-way, two-lane traffic (plus all existing left and right turn lanes) shall be maintained during periods of construction inactivity.
5. The Contractor shall not be allowed to stop traffic for more than 5 minutes at a time in any one direction.
6. During periods of construction inactivity, the difference in elevation between lanes shall not exceed 1-1/2 inch.
7. Access to police and fire stations, fire hydrants and hospitals shall be maintained at all times.
8. During periods of construction inactivity, place cones/drums 3' from existing edge of pavement (travelway) as directed by the Engineer.
9. Channelizing devices in work areas shall be spaced not greater than 50' on center in tangent areas, 45' on center in tapers, and 10' on center in radii, and shall be set 3' off the edge of travelway, unless otherwise indicated on plans.
10. Contractor to install Erosion Control devices as directed by the Engineer.
11. Contractor shall coordinate with the Division Six Traffic Services Unit (910-364-0606) for placement of all pavement markings, signs, and signal loops.
12. Provide blockouts in concrete islands as well as coring asphalt for sign installation. Core asphalt at a minimum of 42" or per 904.50 sht 2 of 2. Coordinate with Division Six Traffic Services Unit (910-364-0606) for locations.
13. Contractor shall provide driveway turnouts at all soil or gravel drives as directed by the Engineer.





DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

**SUMMARY OF EARTHWORK**  
 IN CUBIC YARDS

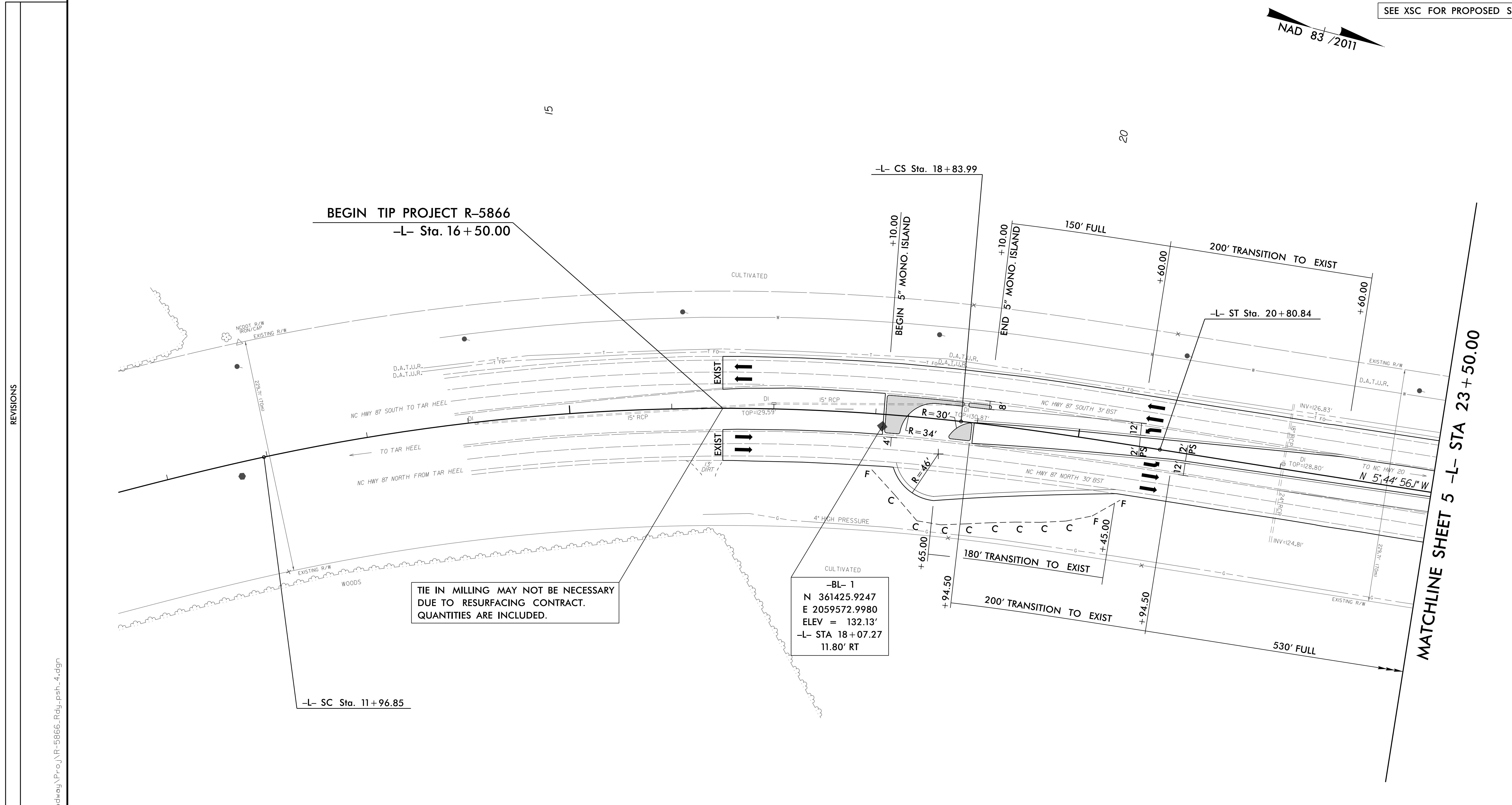
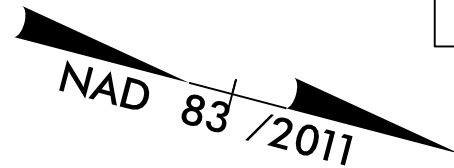
LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + %	BORROW	WASTE
17 + 00.00 - 57 + 00.00	1277		1665	388	
MATERIAL FOR SHOULDER CONSTRUCTION			938	938	
5% TO REPLACE TOP SOIL ON BORROW PIT			66	66	
PROJECT TOTAL	1277		2669	1392	
SAY				1450	

**SUMMARY OF PAVEMENT REMOVAL**  
 IN SQUARE YARDS

SURVEY LINE	STATION	STATION	YD <sup>2</sup>
-L-	32 + 30	41 + 85	1235
TOTAL:			1235

APPROXIMATE QUANTITIES ONLY. GRADING WILL BE PAID AS LUMP SUM. SHOULDER RECONSTRUCTION FOR RESURFACING IS INCIDENTAL TO LUMP SUM GRADING. SEE SPECIAL PROVISION.

SEE XSC FOR PROPOSED SUPER ELEVATION



TIE IN MILLING MAY NOT BE NECESSARY  
DUE TO RESURFACING CONTRACT.  
QUANTITIES ARE INCLUDED.

-BL- 1  
N 361425.9247  
E 2059572.9980  
ELEV = 132.13'  
-L- STA 18+07.27  
11.80' RT

<i>PIs Sta 11+31.25</i>	<i>PI Sta 15+43.42</i>	<i>PIs Sta 19+49.62</i>
<i>Os = 2° 38' 39.9"</i>	<i>Δ = 18° 27' 41.5" (RT)</i>	<i>Os = 2° 38' 39.9"</i>
<i>LS = 196.85'</i>	<i>D = 2° 41' 12.3"</i>	<i>LS = 196.85'</i>
<i>LT = 131.25'</i>	<i>L = 687.14'</i>	<i>LT = 131.25'</i>
<i>ST = 65.63'</i>	<i>T = 346.57'</i>	<i>ST = 65.63'</i>
	<i>R = 2,132.54'</i>	

ALL DRAINAGE ADJUSTMENTS WILL BE  
COMPLETED BY NCDOT MAINTENANCE  
PLEASE COORDINATE WITH DISTRICT  
ENGINEER KEN CLARK, PE AT 910-642-3760

REVISIONS

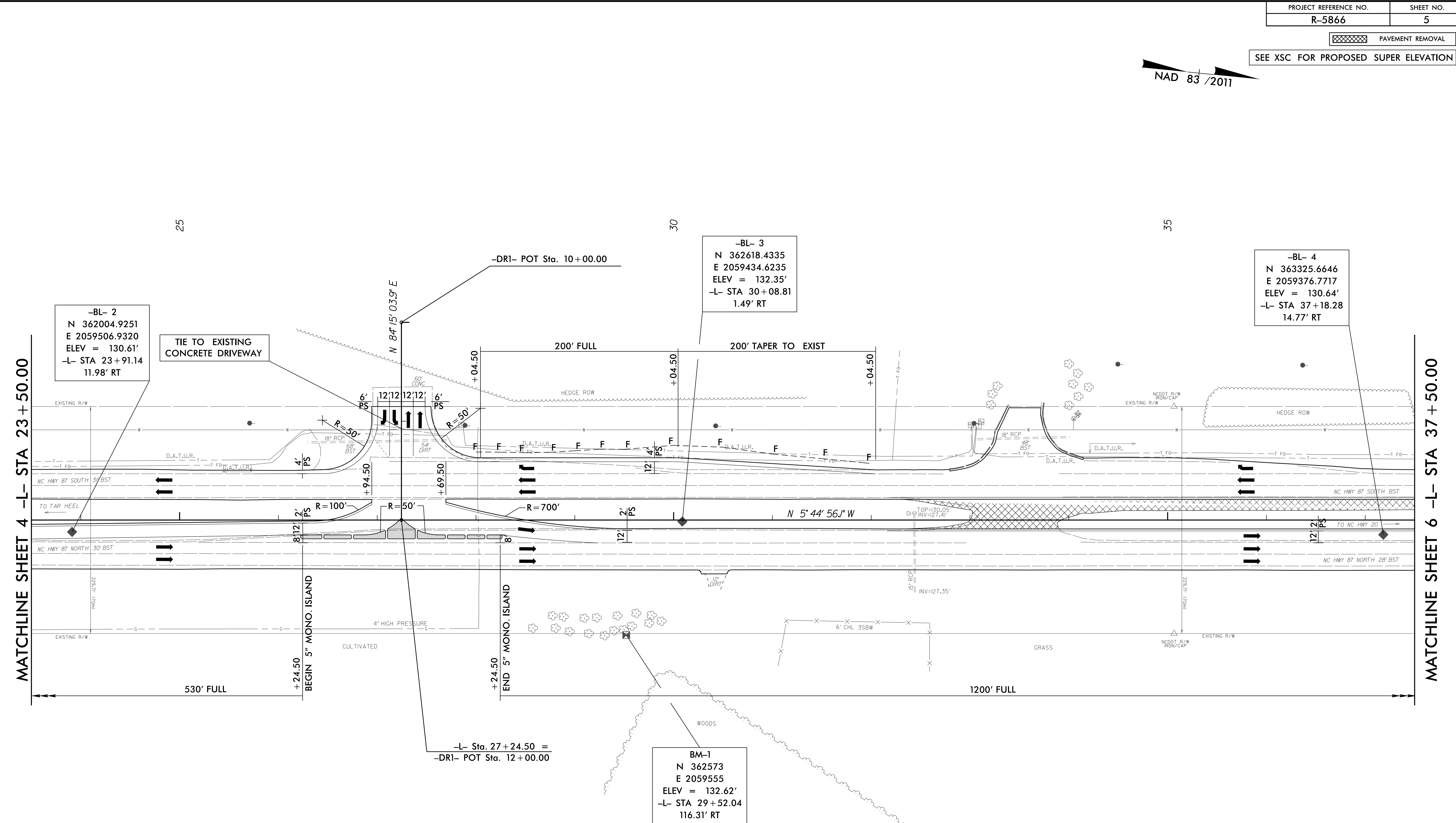
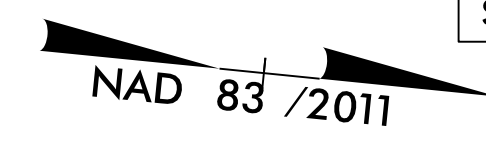
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MATCHLINE SHEET 5 -L- STA 23+50.00

PAVEMENT REMOVAL

SEE XSC FOR PROPOSED SUPER ELEVATION



-BL- 2  
N 362004.9251  
E 2059506.9320  
ELEV = 130.61'  
-L- STA 23+91.14  
11.98' RT

-BL- 3  
N 362618.4335  
E 2059434.6235  
ELEV = 132.35'  
-L- STA 30+08.81  
1.49' RT

-BL- 4  
N 363325.6646  
E 2059376.7717  
ELEV = 130.64'  
-L- STA 37+18.28  
14.77' RT

BM-1  
N 362573  
E 2059555  
ELEV = 132.62'  
-L- STA 29+52.04  
116.31' RT

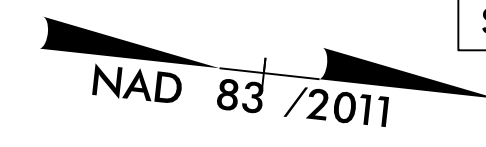
-L- Sta. 27+24.50 =  
-DRI- POT Sta. 12+00.00

ALL DRAINAGE ADJUSTMENTS WILL BE COMPLETED BY NCDOT MAINTENANCE PLEASE COORDINATE WITH DISTRICT ENGINEER KEN CLARK, PE AT 910-642-3760

REVISIONS

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SEE XSC FOR PROPOSED SUPER ELEVATION

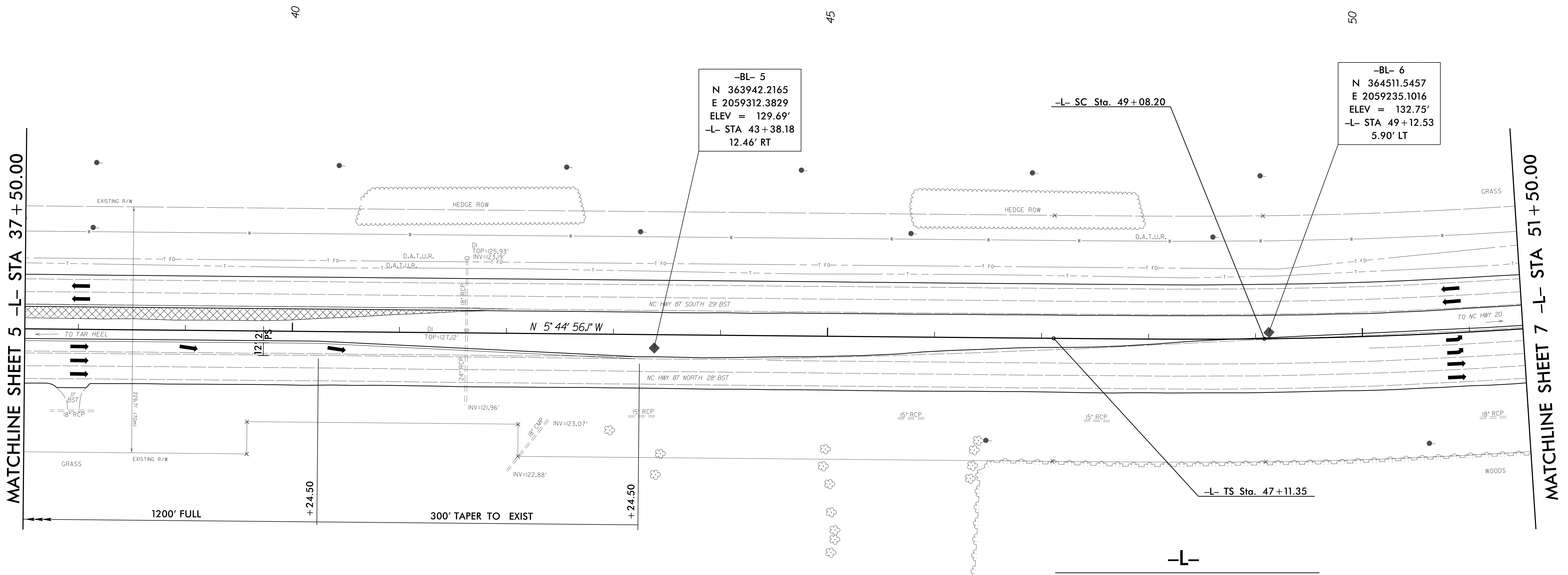


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REVISIONS

MATCHLINE SHEET 5 -L- STA 37 + 50.00

MATCHLINE SHEET 7 -L- STA 51 + 50.00



-BL- 5  
 N 363942.2165  
 E 2059312.3829  
 ELEV = 129.69'  
 -L- STA 43 + 38.18  
 12.46' RT

-BL- 6  
 N 364511.5457  
 E 2059235.1016  
 ELEV = 132.75'  
 -L- STA 49 + 12.53  
 5.90' LT

-L- SC Sta. 49 + 08.20

-L- TS Sta. 47 + 11.35

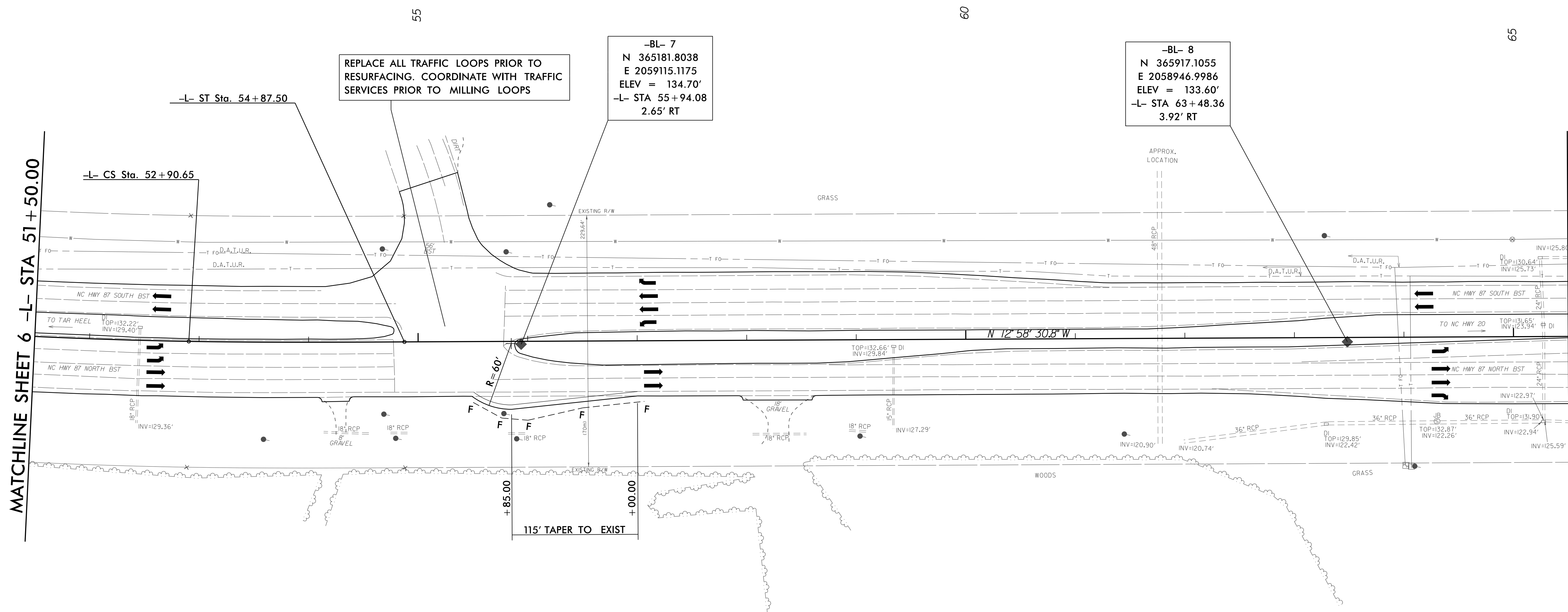
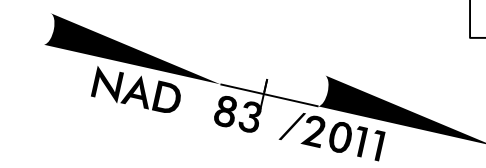
-L-

<i>Pis Sta</i> 48+42.59	<i>PI Sta</i> 50+99.54
<i>Os</i> = 1° 13' 40.0"	<i>Δ</i> = 4° 46' 14.7" (LT)
<i>LS</i> = 196.85'	<i>D</i> = 1° 14' 50.7"
<i>LT</i> = 131.24'	<i>L</i> = 382.45'
<i>ST</i> = 65.62'	<i>T</i> = 191.34'
	<i>R</i> = 4,593.17'

ALL DRAINAGE ADJUSTMENTS WILL BE  
 COMPLETED BY NCDOT MAINTENANCE  
 PLEASE COORDINATE WITH DISTRICT  
 ENGINEER KEN CLARK, PE AT 910-642-3760



SEE XSC FOR PROPOSED SUPER ELEVATION



REPLACE ALL TRAFFIC LOOPS PRIOR TO RESURFACING. COORDINATE WITH TRAFFIC SERVICES PRIOR TO MILLING LOOPS

-BL- 7  
 N 365181.8038  
 E 2059115.1175  
 ELEV = 134.70'  
 -L- STA 55+94.08  
 2.65' RT

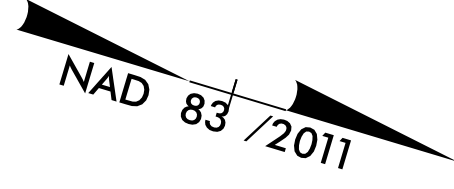
-BL- 8  
 N 365917.1055  
 E 2058946.9986  
 ELEV = 133.60'  
 -L- STA 63+48.36  
 3.92' RT

-L-  
 PI Sta 50+99.54      Pls Sta 53+56.27  
 $\Delta = 4' 46'' 14.7''$  (LT)       $\Theta_s = 1' 13'' 40.0''$   
 $D = 1' 14'' 50.7''$        $L_s = 196.85'$   
 $L = 382.45'$        $LT = 131.24'$   
 $T = 191.34'$        $ST = 65.62'$   
 $R = 4,593.17'$

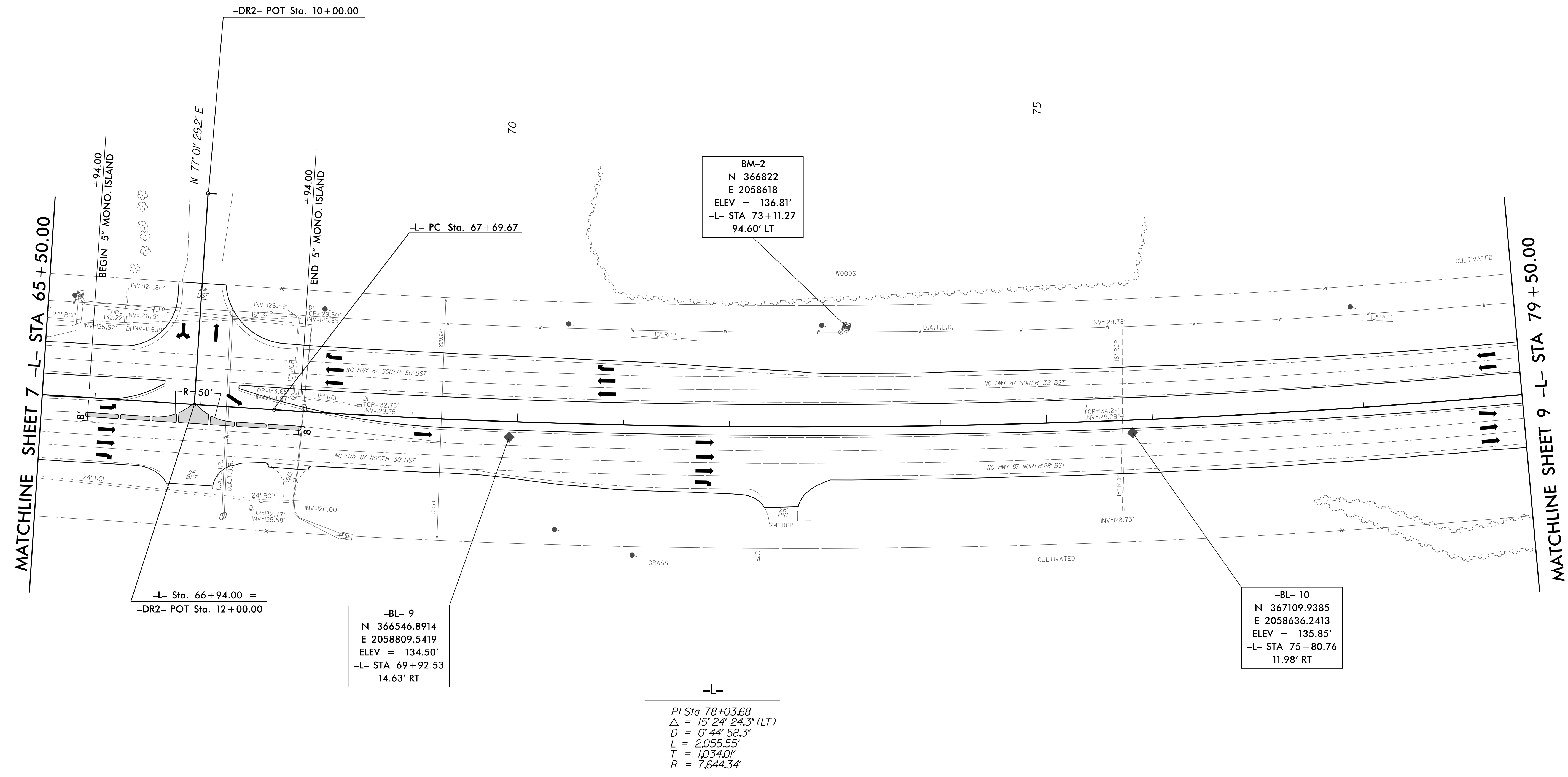
ALL DRAINAGE ADJUSTMENTS WILL BE COMPLETED BY NCDOT MAINTENANCE PLEASE COORDINATE WITH DISTRICT ENGINEER KEN CLARK, PE AT 910-642-3760

REVISIONS

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MATCHLINE SHEET 7 -L- STA 65+50.00

MATCHLINE SHEET 9 -L- STA 79+50.00

-DR2- POT Sta. 10+00.00

-L- PC Sta. 67+69.67

-L- Sta. 66+94.00 =  
-DR2- POT Sta. 12+00.00

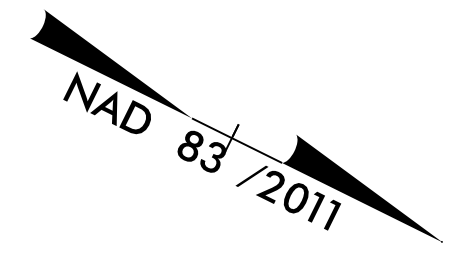
-BL- 9  
 N 366546.8914  
 E 2058809.5419  
 ELEV = 134.50'  
 -L- STA 69+92.53  
 14.63' RT

BM-2  
 N 366822  
 E 2058618  
 ELEV = 136.81'  
 -L- STA 73+11.27  
 94.60' LT

-L-  
 PI Sta 78+03.68  
 $\Delta = 15' 24' 24.3''$  (LT)  
 $D = 0' 44' 58.3''$   
 $L = 2,055.55'$   
 $T = 1,034.01'$   
 $R = 7,644.34'$

-BL- 10  
 N 367109.9385  
 E 2058636.2413  
 ELEV = 135.85'  
 -L- STA 75+80.76  
 11.98' RT

ALL DRAINAGE ADJUSTMENTS WILL BE COMPLETED BY NCDOT MAINTENANCE PLEASE COORDINATE WITH DISTRICT ENGINEER KEN CLARK, PE AT 910-642-3760



8/17/99

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 4335015866 NC 87 @ Smithfield\Roadway\Proj\N-5866\_Rdy.psh\_9.dgn

MATCHLINE SHEET 8 -L- STA 79 + 50.00

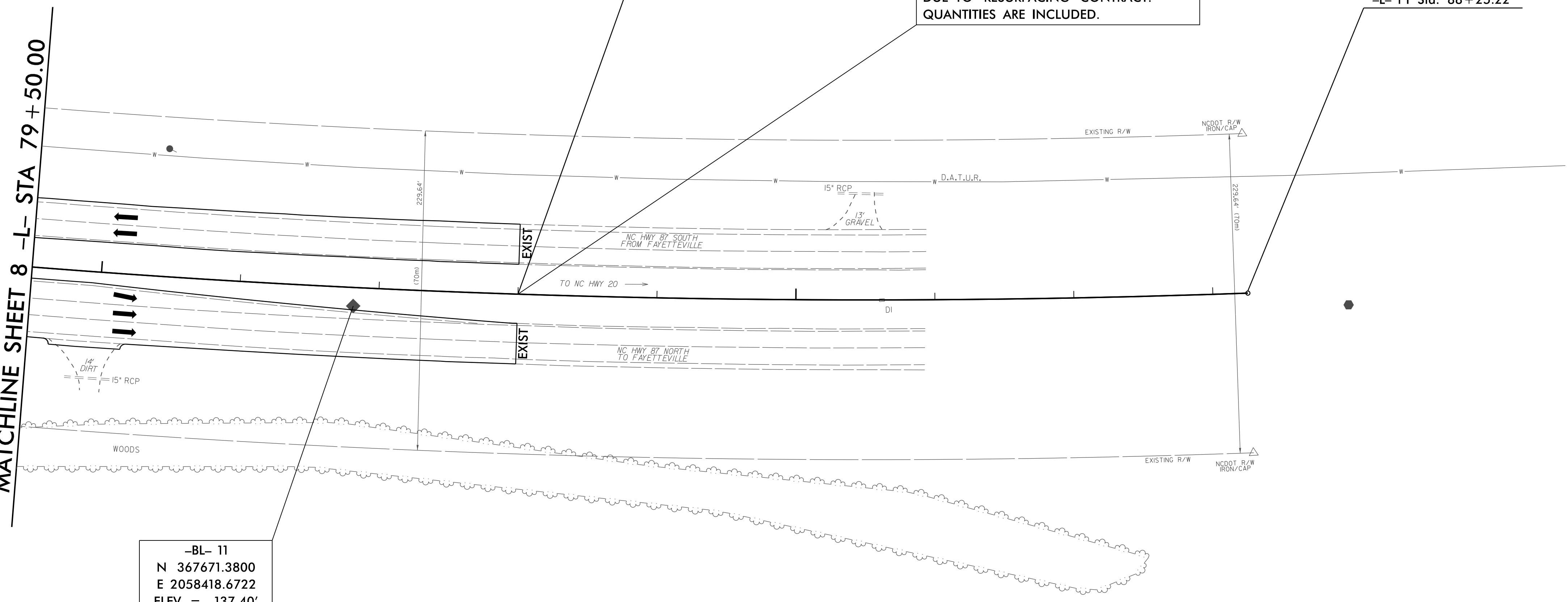
80

85

END TIP PROJECT R-5797  
 -L- Sta. 83 + 00.00

TIE IN MILLING MAY NOT BE NECESSARY  
 DUE TO RESURFACING CONTRACT.  
 QUANTITIES ARE INCLUDED.

-L- PT Sta. 88 + 25.22



-BL- 11  
 N 367671.3800  
 E 2058418.6722  
 ELEV = 137.40'  
 -L- STA 81 + 82.04  
 13.30' RT

-L-  
 PI Sta 78+03.68  
 $\Delta = 15^{\circ} 24' 24.3''$  (LT)  
 D = 0' 44' 58.3"  
 L = 2,055.55'  
 T = 1,034.01'  
 R = 7,644.34'

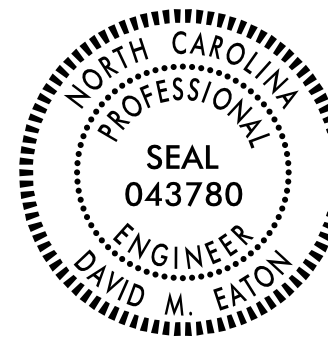
ALL DRAINAGE ADJUSTMENTS WILL BE  
 COMPLETED BY NCDOT MAINTENANCE  
 PLEASE COORDINATE WITH DISTRICT  
 ENGINEER KEN CLARK, PE AT 910-642-3760

**CONTRACT: DF00216 T.I.P.: R-5866**

**STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN  
 BLADEN COUNTY**

**LOCATION: NC 87 APPROXIMATELY 3 MILES SOUTH OF NC 20  
 AT SMITHFIELD FOOD'S PROCESSING CENTER**

TIP NO. R - 5866	SHEET NO. PMP - 1
Designed by: APPROVED: <u>David M. Eaton</u> <small>DDA105F247484FT</small>	
DATE: 5/1/2018	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**ROADWAY STANDARD DRAWING**

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXIT AND ENTRANCE RAMPS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.15	PAVEMENT MARKINGS - SUPERSTREETS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

**GENERAL NOTES**

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NC 87	THERMOPLASTIC	PERMANENT RAISED

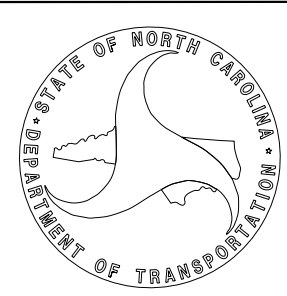
- D) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- E) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
- G) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- I) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.
- M) SEE ROADWAY PLANS FOR ALTERNATE CURB RAMP DESIGNS WHEN INDICATED ON PAVEMENT MARKING DETAIL SHEETS.

**INDEX**

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE
PMP-2	PAVEMENT MARKING SCHEDULE SHEET
PMP-3 Thru 7	PAVEMENT MARKING DETAIL SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

<b>A. I. ALQUDWAH, PE</b>	SIGNING & DELINEATION REGIONAL ENGINEER
<b>D. M. EATON, PE</b>	SIGNING & DELINEATION PROJECT DESIGN ENGINEER



SYSTEMS DESIGN CONSULTANTS  
 10000 W. GARDNER  
 SUITE 100  
 RALEIGH, NC 27615



### FINAL PAVEMENT MARKINGS

THERMOPLASTIC(24", 120 MILS)  
T2 WHITE STOPBAR

THERMOPLASTIC(4", 120 MILS)


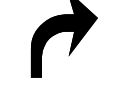





T8 2 FT. - 6 FT./SP WHITE MINISKIP  
T9 2 FT. - 6 FT./SP YELLOW MINISKIP  
TC 10 FT. WHITE SKIP  
TD 3 FT. - 9 FT./SP WHITE MINISKIP  
TE WHITE SOLID LANE LINE  
TI YELLOW DOUBLE CENTER

THERMOPLASTIC(12", 90 MILS)  
TU WHITE DIAGONAL

THERMOPLASTIC(8", 90 MILS)  
TN WHITE GORELINE  
TO WHITE DIAGONAL

THERMOPLASTIC(4", 90 MILS)  
TA WHITE EDGELINE  
TB YELLOW EDGELINE

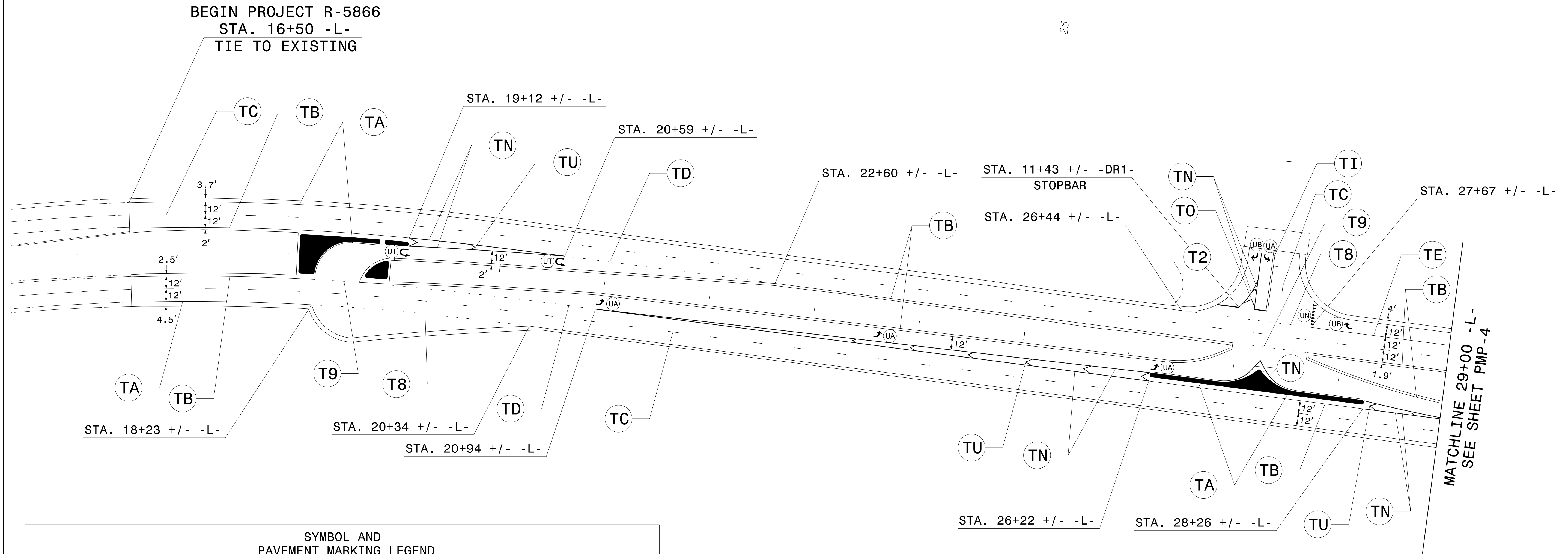
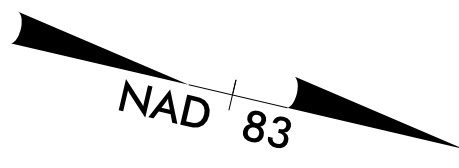
### FINAL PAVEMENT MARKING SYMBOLS AND CHARACTERS

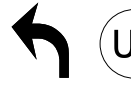
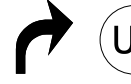


-  UA LEFT TURN ARROW (90 MILS)
-  UB RIGHT TURN ARROW (90 MILS)
-  UC STRAIGHT ARROW (90 MILS)
-  UF COMBO. LEFT/RIGHT (90 MILS)
-  UP MERGE ARROW (90 MILS)
-  UN 24 IN. YIELD LINE TRIANGLE
-  UT U-TURN ARROW

### PERMANENT RAISED MARKERS

YELLOW & YELLOW  
CRYSTAL & RED

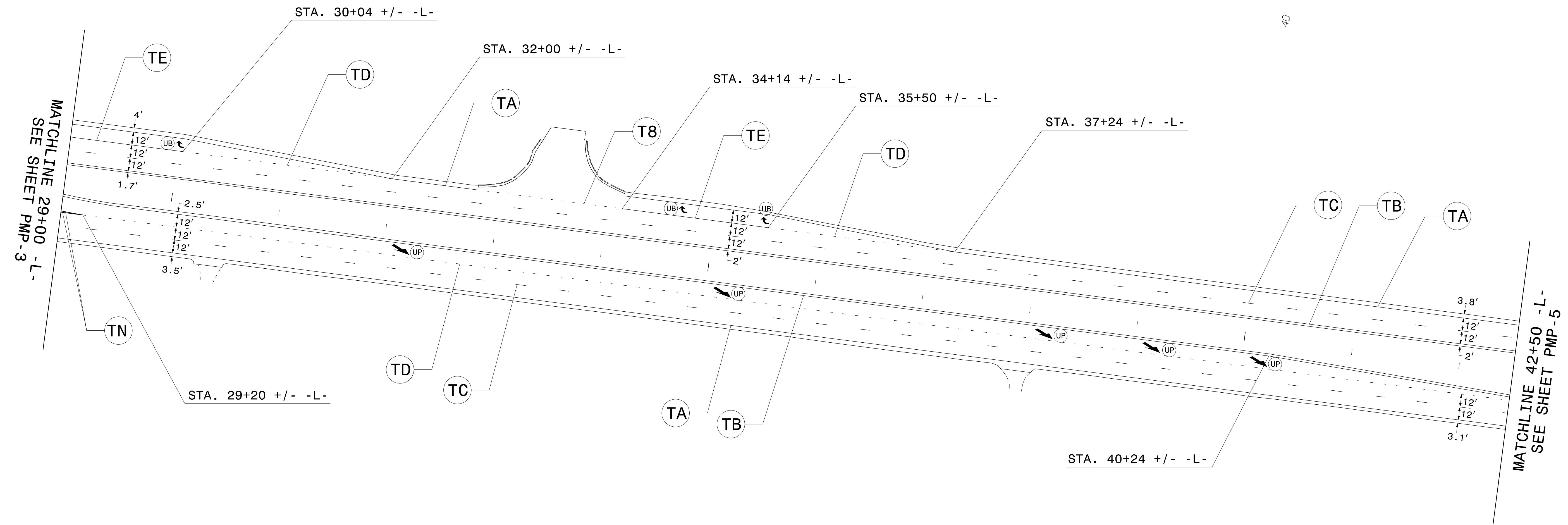
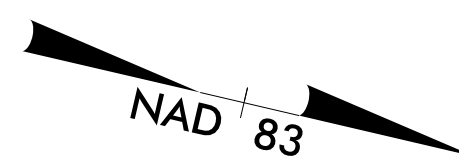
\$\$\$SYTIME\$\$\$  
 \$\$\$SERVAVE\$\$\$





SYMBOL AND PAVEMENT MARKING LEGEND	
 (UA)	LEFT TURN ARROW
 (UB)	RIGHT TURN ARROW
 (UT)	U-TURN ARROW
 (UN)	24 IN. YIELD LINE TRIANGLE
THERMOPLASTIC	
(T2)	WHITE STOPBAR (24")
(T8)	2 FT.-6 FT. SP. WHITE MINISKIP (4")
(T9)	2 FT.-6 FT. SP. YELLOW MINISKIP (4")
(TA)	WHITE EDGE LINE (4")
(TB)	YELLOW EDGE LINE (4")
(TC)	10 FT. WHITE SKIP (4")
(TD)	3 FT.-9 FT. SP. WHITE MINISKIP (4")
(TE)	WHITE SOLID LANE LINE (4")
(TI)	YELLOW DOUBLE CENTER (4")
(TN)	WHITE GORELINE (8")
(TO)	WHITE DIAGONAL (8")
(TU)	WHITE DIAGONAL (12")

PROPOSED PAVEMENT MARKINGS

SYSTEMS TIME SYSTEMS, INC. 10/1/2018 10:00 AM

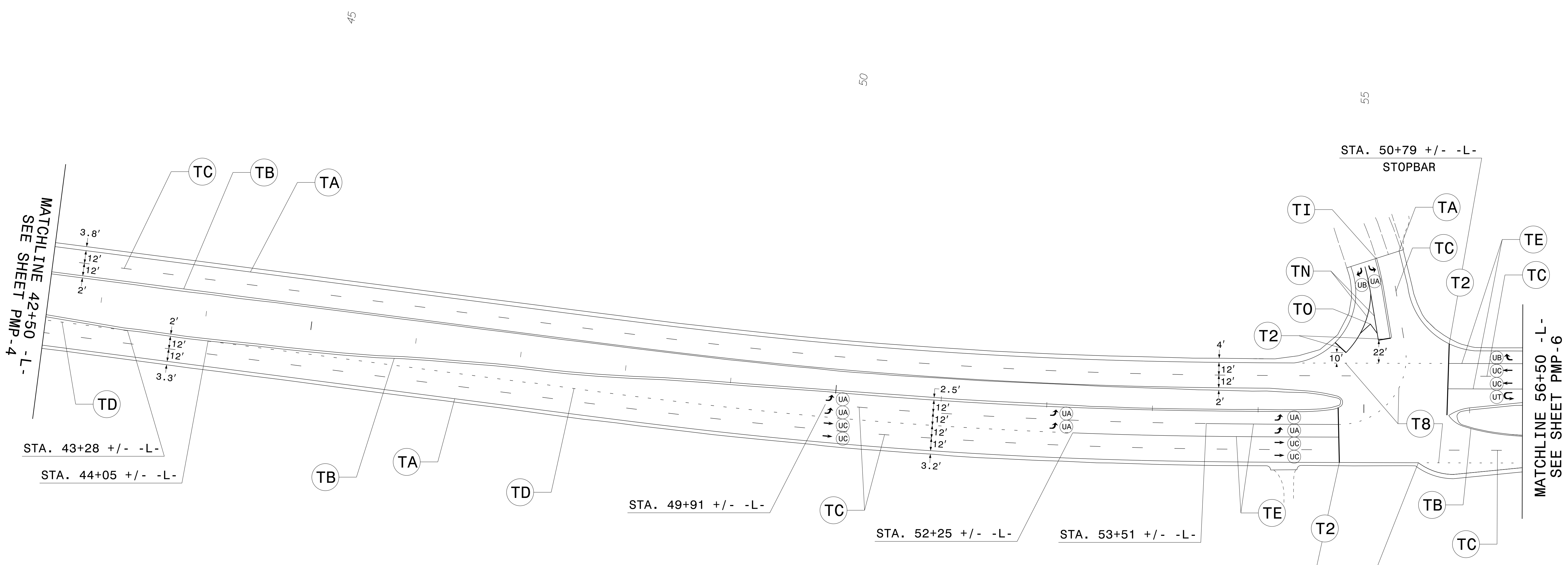
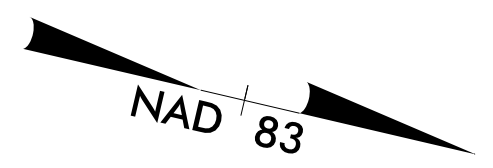
















SYMBOL AND PAVEMENT MARKING LEGEND	
 (UB) RIGHT TURN ARROW	 (UP) MERGE ARROW
THERMOPLASTIC	
(T8) 2 FT.-6 FT. SP. WHITE MINISKIP (4")	(TD) 3 FT.-9 FT. SP. WHITE MINISKIP (4")
(TA) WHITE EDGE LINE (4")	(TE) WHITE SOLID LANE LINE (4")
(TB) YELLOW EDGE LINE (4")	(TN) WHITE GORELINE (8")
(TC) 10 FT. WHITE SKIP (4")	

PROPOSED PAVEMENT MARKINGS

SYSTEMS DESIGN & CONSTRUCTION  
 1000 S. W. 10TH AVENUE  
 SUITE 100  
 BOCA RATON, FL 33432  
 (561) 995-1000  
 WWW.SDCON.COM



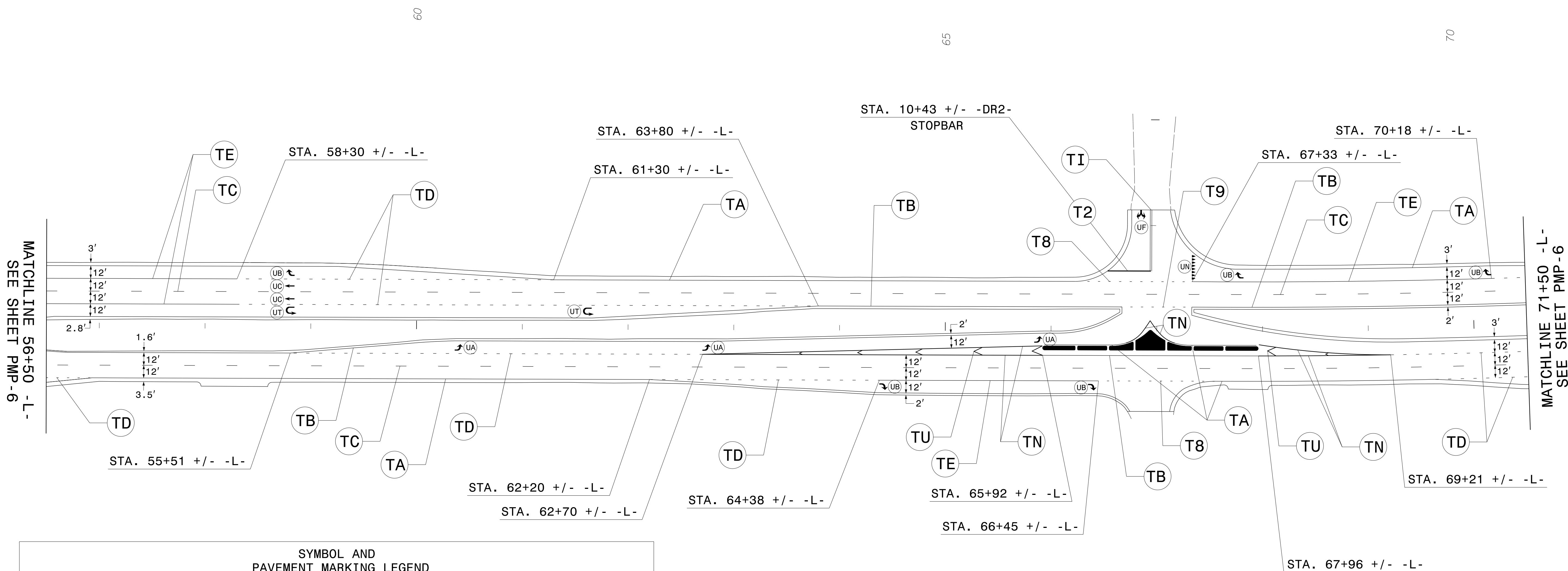
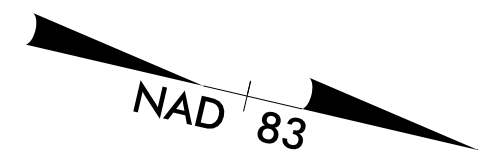


SYMBOL AND PAVEMENT MARKING LEGEND			
	UA LEFT TURN ARROW		UC STRAIGHT ARROW
	UB RIGHT TURN ARROW		UT U-TURN ARROW
THERMOPLASTIC			
	WHITE STOPBAR (24")		3 FT.-9 FT. SP. WHITE MINISKIP (4")
	2 FT.-6 FT. SP. WHITE MINISKIP (4")		WHITE SOLID LANE LINE (4")
	WHITE EDGE LINE (4")		YELLOW DOUBLE CENTER (4")
	YELLOW EDGE LINE (4")		WHITE GORELINE (8")
	10 FT. WHITE SKIP (4")		WHITE DIAGONAL (8")

PROPOSED PAVEMENT MARKINGS

SYSTEMS TIME SYSTEMS, INC. 10/1/2018 10:00 AM





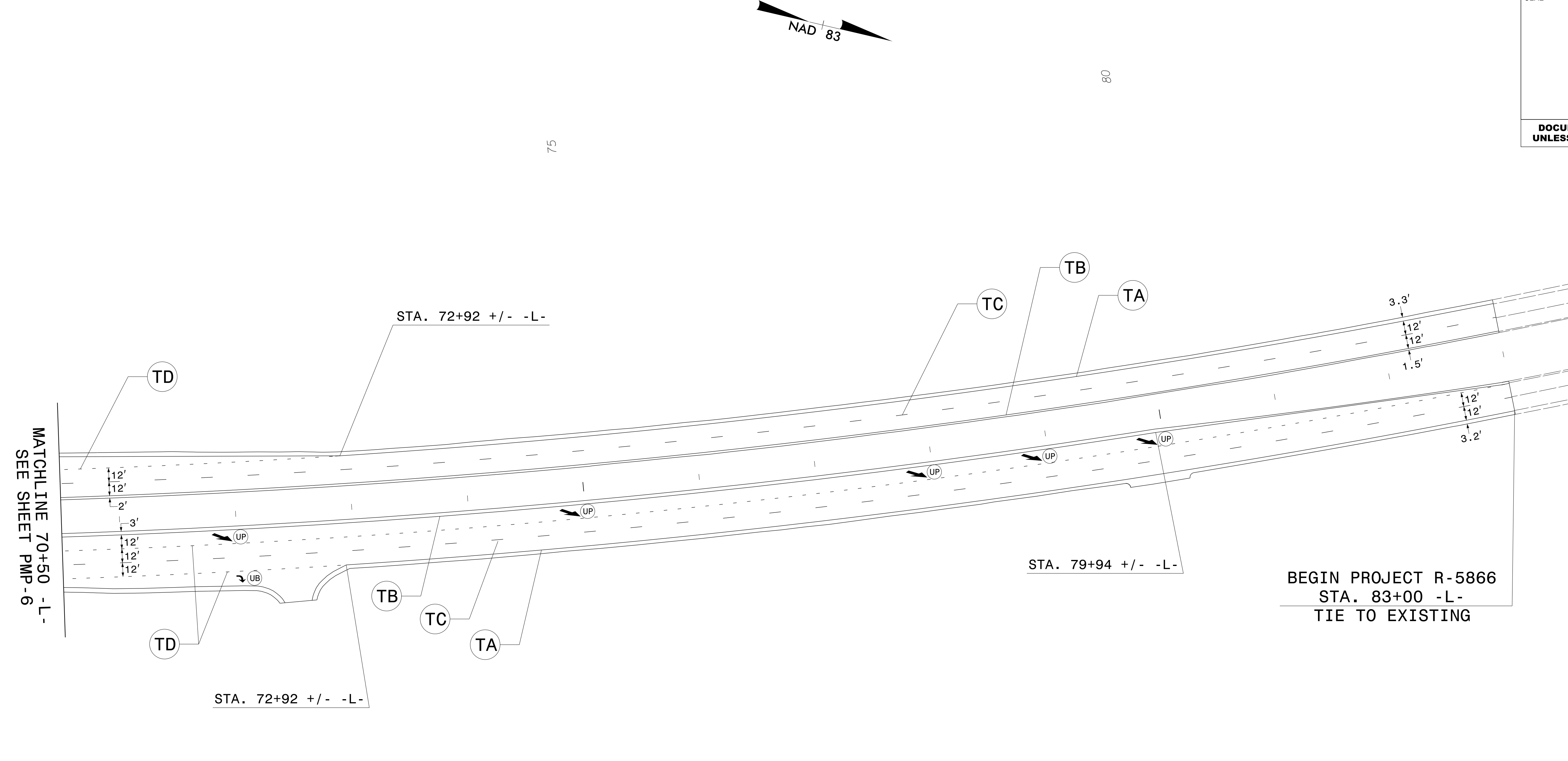
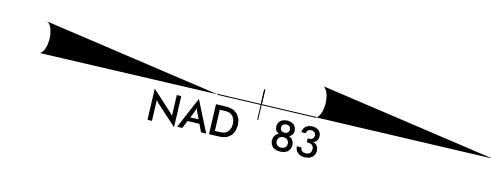
SYMBOL AND PAVEMENT MARKING LEGEND			
	UA LEFT TURN ARROW		UC STRAIGHT ARROW
	UB RIGHT TURN ARROW		UT U-TURN ARROW
	UF COMBO. LEFT/RIGHT		UN 24 IN. YIELD LINE TRIANGLE
THERMOPLASTIC			
	T2 WHITE STOPBAR (24")		TD 3 FT.-9 FT. SP. WHITE MINISKIP (4")
	T8 2 FT.-6 FT. SP. WHITE MINISKIP (4")		TE WHITE SOLID LANE LINE (4")
	T9 2 FT.-6 FT. SP. YELLOW MINISKIP (4")		TI YELLOW DOUBLE CENTER (4")
	TA WHITE EDGE LINE (4")		TN WHITE GORELINE (8")
	TB YELLOW EDGE LINE (4")		TU WHITE DIAGONAL (12")
	TC 10 FT. WHITE SKIP (4")		

PROPOSED PAVEMENT MARKINGS

SYSTEMS ENGINEERING & CONSTRUCTION  
 10100 WILSON ROAD, SUITE 100  
 RICHMOND, VA 23234  
 (804) 281-1111  
 WWW.SECONSTRUCTION.COM



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 UNLESS ALL SIGNATURES COMPLETED




SYMBOL AND PAVEMENT MARKING LEGEND	
	UB RIGHT TURN ARROW
	UP MERGE ARROW
<b>THERMOPLASTIC</b>	
TA	WHITE EDGE LINE (4")
TB	YELLOW EDGE LINE (4")
TC	10 FT. WHITE SKIP (4")
TD	3 FT.-9 FT. SP. WHITE MINISKIP (4")

PROPOSED PAVEMENT MARKINGS

\$\$\$\$\$\$SYTIME\$\$\$\$\$DODON\$\$\$\$\$REINVA\$\$\$\$\$

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PROJECT REFERENCE NO. R-5866	SHEET NO. SIGN-1
DocuSigned by: David M. Eaton ID: 00A1C0F247484F7...	
APPROVED: _____	
DATE: 4/30/2018	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**SIGNING PLAN**  
**BLADEN COUNTY**

LOCATION: NC 87 APPROXIMATELY 3 MILES SOUTH OF NC 20  
AT SMITHFIELD FOOD'S PROCESSING CENTER

**ROADWAY STANDARD DRAWING**

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.50	ARROWS AND SHIELDS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.30	SIGNING SIGNALIZED AND UNSIGNALIZED SUPERSTREET

**GENERAL NOTES**

- . SIGNS FURNISHED BY STATE
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE GRADE C REFLECTIVE SHEETING.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

**SUMMARY OF QUANTITIES**

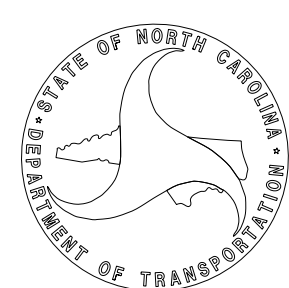
ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4026000000	902	DEPARTMENT FURNISHED, TYPE E SIGNS	262.79	S.F.
4026000000	902	DEPARTMENT FURNISHED, TYPE F SIGNS	25.25	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	630	L.F.
4102000000	904	SIGN ERECTION, TYPE E	40	EA.
4108000000	904	SIGN ERECTION, TYPE F	2	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	28	EA.

**INDEX**

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	SIGN TYPE E AND F SHEETS
SIGN-3 Thru 5	SIGNING PLAN SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

A. I. ALQUDWAH, PE SIGNING & DELINEATION REGIONAL ENGINEER  
D. M. EATON, PE SIGNING & DELINEATION PROJECT DESIGN ENGINEER



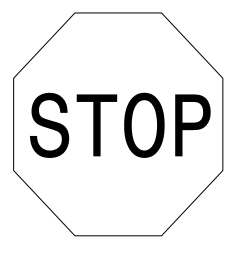
T.I.P.: R-5866

CONTRACT: DF00216

SYTIME  
>  
USLE  
#



**401** QUANTITY REQ'D   5  




36" X 36"  
R1-1

MOUNT BELOW SIGN NO. 406  
IN   3   INSTALLATIONS

ONE "U" POST PER SIGN


**406** QUANTITY REQ'D   3  



54" X 18"  
R6-1 (R)

TWO "U" POSTS PER SIGN

**411** QUANTITY REQ'D   1  



36" X 36"  
W11-10

ONE "U" POST PER SIGN

**501**



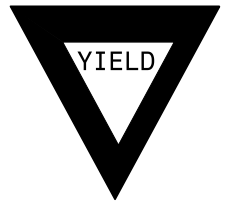
1 - 24" X 12"



1 - 24" X 24"

ONE "U" POST PER SIGN

**402** QUANTITY REQ'D   2  



36" X 36" X 36"  
R1-2

ONE "U" POST PER SIGN


**407** QUANTITY REQ'D   2  



54" X 18"  
R6-1 (L)

TWO "U" POSTS PER SIGN


**412** QUANTITY REQ'D   1  




24" X 24"  
W13-1P

MOUNT BELOW SIGN NO. 411  
IN   1   INSTALLATION


**502**




1 - 24" X 12"




2 - 24" X 12"




2 - 24" X 12"



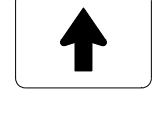
2 - 24" X 24"



2 - 24" X 24"



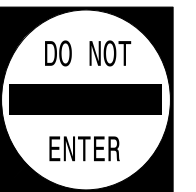
1 - 21" X 15"



1 - 21" X 21"

TWO "U" POSTS PER SIGN

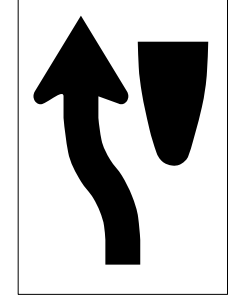
**403** QUANTITY REQ'D   6  



36" X 36"  
R5-1

ONE "U" POST PER SIGN

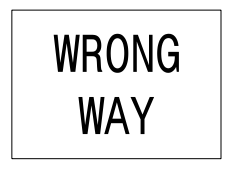
**408** QUANTITY REQ'D   2  



24" X 30"  
R4-8

ONE "U" POST PER SIGN

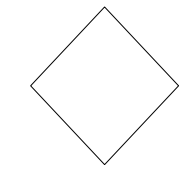
**404** QUANTITY REQ'D   12  



36" X 24"  
R5-1a

ONE "U" POST PER SIGN

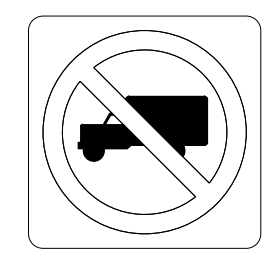
**409** QUANTITY REQ'D   2  



18" X 18"  
OM1-3

MOUNT BELOW SIGN NO.         
IN   \_   INSTALLATIONS

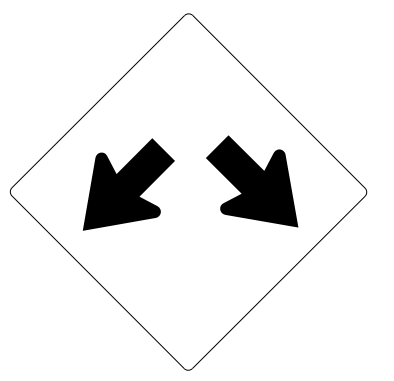
**405** QUANTITY REQ'D   1  



24" X 24"  
R5-2

ONE "U" POST PER SIGN

**410** QUANTITY REQ'D   3  



30" X 30"  
W12-1

ONE "U" POST PER SIGN

**TYPE "E" AND "F" SIGNS**

SYSTEMS CONNECTIONS

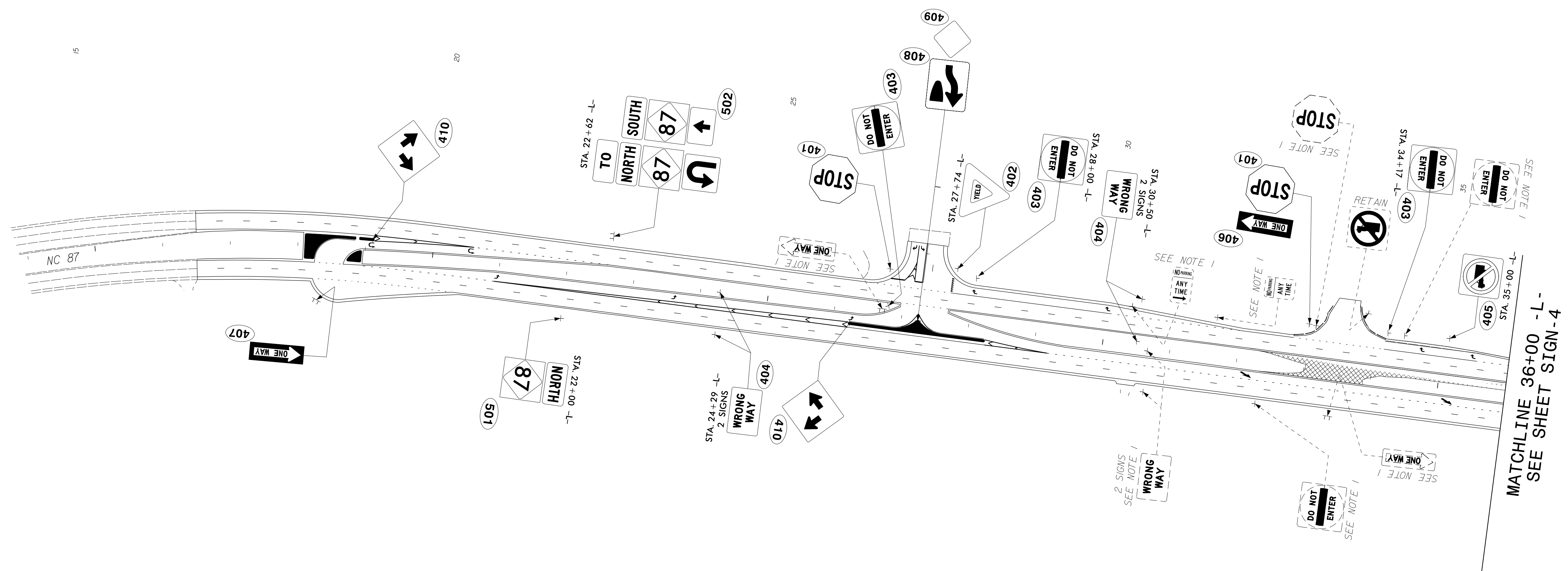
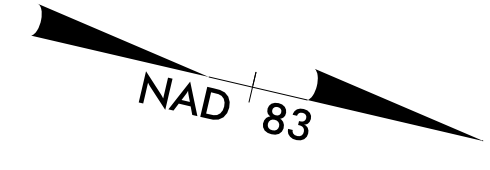


APPROVED: *David M. Eaton*  
DDA1C5F247484F7

DATE: 4/30/2018



**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



MATCHLINE 36+00 -L-  
SEE SHEET SIGN-4

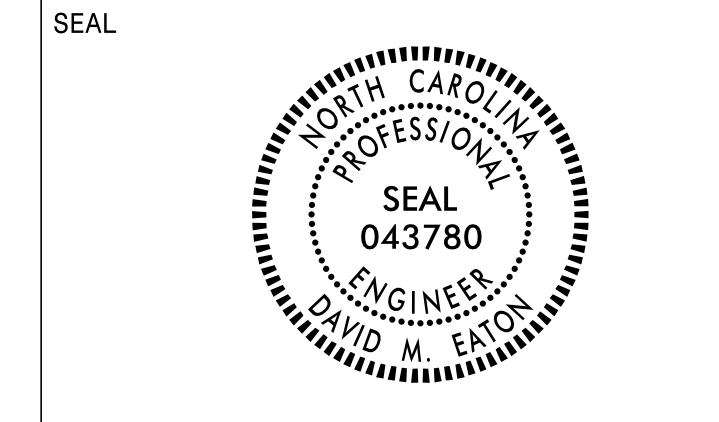
**PROJECT NOTES**

1. DISPOSAL OF SIGN SYSTEM, U-CHANNEL

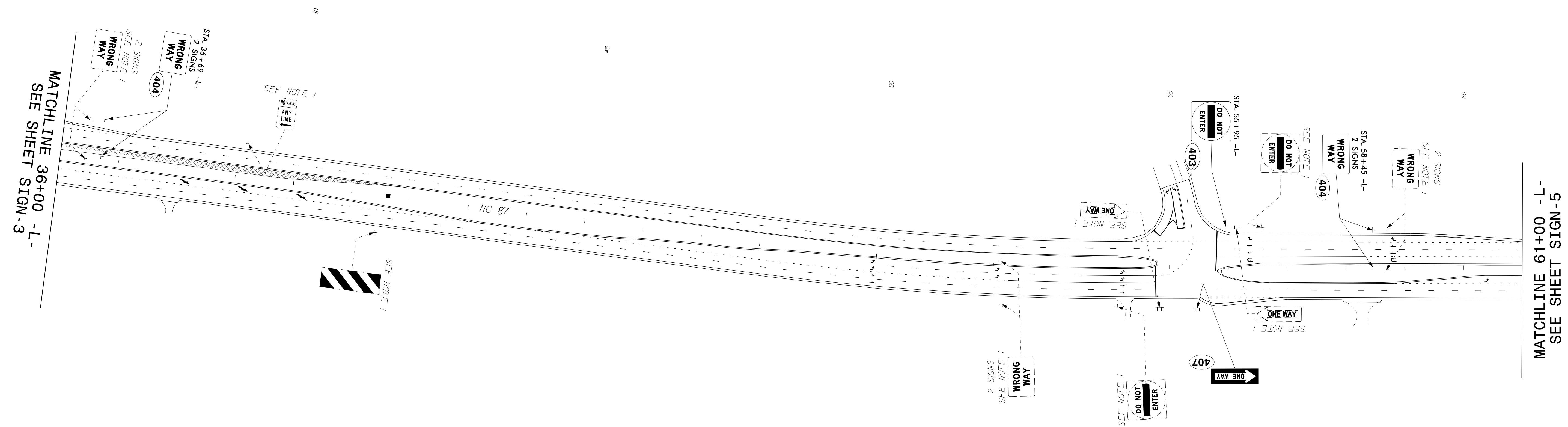
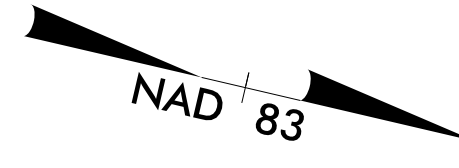
EXISTING AND PROPOSED SIGNS

\*\*\*\*\*SYSTEMS\*\*\*\*\*  
 \*\*\*\*\*USE ONLY\*\*\*\*\*  
 \*\*\*\*\*DO NOT\*\*\*\*\*  
 \*\*\*\*\*REPLACE\*\*\*\*\*

APPROVED: *David M. Eaton*  
DDA105F247484F7...  
 DATE: 4/30/2018



DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



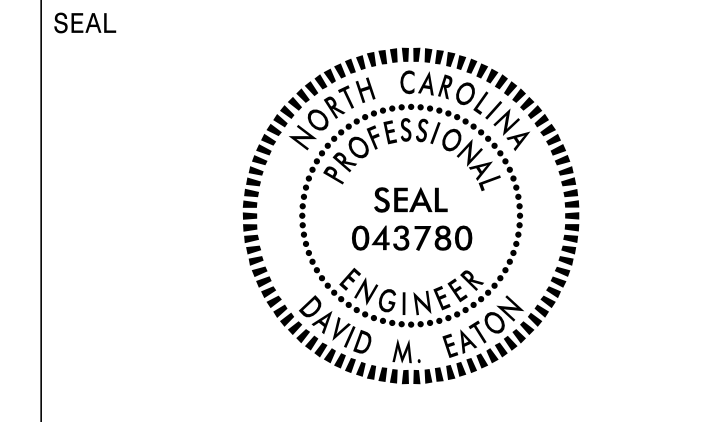
**PROJECT NOTES**

- DISPOSAL OF SIGN SYSTEM, U-CHANNEL

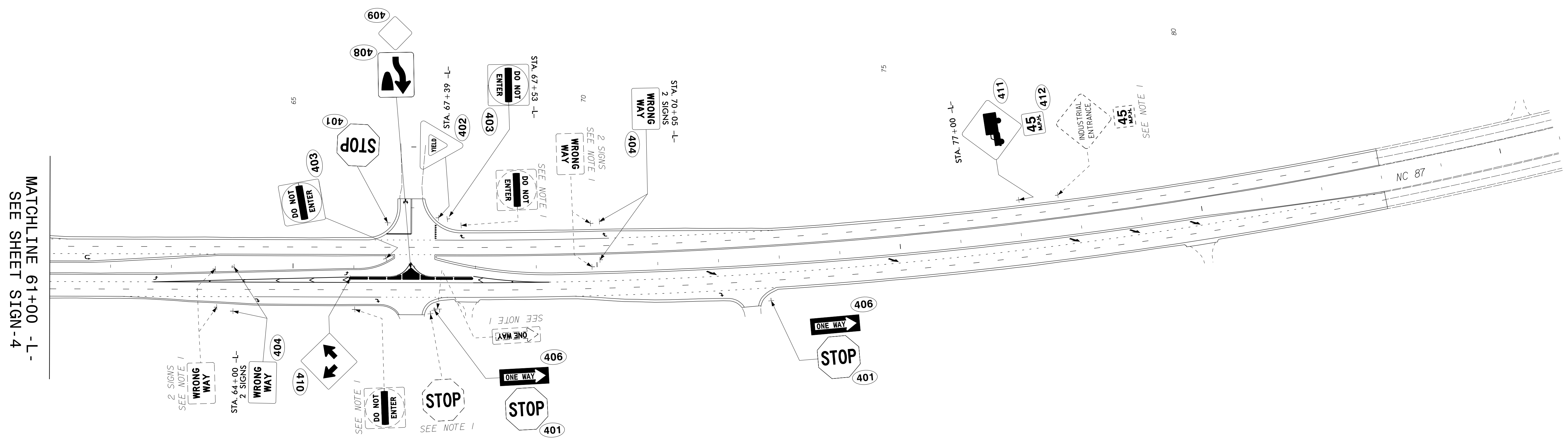
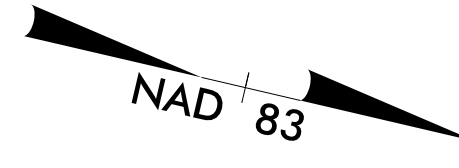
EXISTING AND PROPOSED SIGNS

\$\$\$ SYSTEMS DESIGN GROUP \$\$\$  
 \$\$\$ USE NAME \$\$\$

APPROVED: David M. Eaton  
DDA1CSP247484F7  
 DATE: 4/30/2018



**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**



**PROJECT NOTES**

- DISPOSAL OF SIGN SYSTEM, U-CHANNEL

EXISTING AND PROPOSED SIGNS

\*\*\*\*\*  
 SYSTEMS  
 \*\*\*\*\*



