

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

TIP NO. R-3307	SHEET NO. PMP-1
APPROVED: <i>Frank S. Early</i>	
DATE: 3-10-12	
SEAL	

PAVEMENT MARKING PLAN
CARTERET COUNTY

LOCATION: US 70 FROM EXISTING FOUR LANES AT RADIO ISLAND TO US 70 NORTH OF SR 1429 (OLGA ROAD)

T.I.P.: R-3307

CONTRACT: C202848

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 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 - 2 LANE AND MULTI LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOL AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT & TEMPORARY
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES & MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

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
US 70 (-L-)	THERMOPLASTIC	SNOWPLOWABLE
ALL OTHER ROADS	THERMOPLASTIC	MATCH EXISTING
BRIDGES	POLYUREA W/ HIGHLY REFLECTIVE ELEMENTS	RAISED

B) SIX-INCH WIDE MARKINGS INCLUDING BUT NOT LIMITED TO LANE LINES, EDGE LINES AND SKIPS SHALL BE USED ON ALL US ROUTES WITH CONTROLLED ACCESS.

C) ON ASPHALT SURFACES USE HEATED-IN-PLACE THERMOPLASTIC OR EXTRUDED THERMOPLASTIC MARKINGS FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS.

D) REMOVE ALL RESIDUE AND SURFACE LAITANCE BY WATER BLASTING OR GRINDING ON BRIDGE DECK(S) PRIOR TO PLACING POLYUREA PAVEMENT MARKINGS.

E) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

F) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS THAT HAVE BEEN DAMAGED BY THE END OF EACH DAY'S OPERATION.

G) PASSING ZONE(S) WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.

H) MARKERS SHALL BE INSTALLED ACCORDING TO THE NCDOT ROADWAY STANDARD DRAWING 1250.01.

I) STOPBARS AT NON-SIGNALIZED INTERSECTIONS ARE TO BE LOCATED A MIN OF 6' FROM THE EDGE OF TRAVEL LANE AND MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

J) PAVEMENT MARKING ADVANCE OF A HIGHWAY-RAIL CROSSING SHALL CONSIST OF TWO (2) CHARACTERS AND TWO (2) 16" LINES (FORMING AN X) WHICH ARE PAID FOR UNDER TWO SEPARATE PAY ITEMS. THE TWO (2) 24" TRANSVERSE BANDS WILL BE PAID FOR UNDER A SEPARATE PAY ITEM.

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN COVER SHEET
PMP-1A	PAVEMENT MARKING LEGEND & SCHEDULE
PMP-1B	CROSSWALK & STOP BAR PAVEMENT MARKING DETAIL
PMP-1C	DETAIL DRAWING FOR PAVEMENT MARKINGS - LANE DROPS (REPLACEMENT FOR RSD 1205.06 SHEET 1 OF 3)
PMP-02 THRU PMP-10	PAVEMENT MARKING DETAILS

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343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
C-1554

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

A. Alqudwah, PE SIGNING & DELINEATION REGIONAL ENGINEER
E. Ward SIGNING & DELINEATION PROJECT DESIGN ENGINEER

PLAN PREPARED BY: HNTB NORTH CAROLINA

R. B. Early, PE PROJECT ENGINEER
A. R. Landis, PE PROJECT DESIGNER

SYSTEMS
DESIGN
CONSTRUCTION
OPERATION
MAINTENANCE
QA/QC STAGE:
REVIEW:
CONCUR:
REVISE:
VERIFY:

FINAL PAVEMENT MARKING SCHEDULE

MATERIAL	SYMBOL	DESCRIPTION
PAVEMENT MARKING		
THERMOPLASTIC (4", 90 MILS)		
	TA	WHITE EDGELINE
	TB	YELLOW EDGELINE
THERMOPLASTIC (4", 120 MILS)		
	TC	WHITE SKIP
	TD	WHITE MINISKIP
	TE	WHITE SOLID LANE LINE
	TF	YELLOW SKIP
	TH	YELLOW SOLID LANE LINE
	TI	YELLOW DOUBLE CENTER LINE
POLYUREA (4", HIGHLY REFLECTIVE ELEMENTS)		
	VA	WHITE EDGELINE
	VB	YELLOW EDGELINE
	VC	WHITE SKIP
	VD	WHITE MINISKIP
POLYUREA (6", HIGHLY RELECTIVE ELEMENTS)		
	V6	WHITE EDGELINE
	V7	YELLOW EDGELINE
	VJ	WHITE SKIP
THERMOPLASTIC (6", 90 MILS)		
	T6	WHITE EDGELINE
	T7	YELLOW EDGELINE
THERMOPLASTIC (6", 120 MILS)		
	TJ	WHITE SKIP
	TK	WHITE MINISKIP
	TL	SOLID WHITE LANE LINE
	TN	YELLOW MINISKIP
THERMOPLASTIC (8", 90 MILS)		
	TT	YELLOW DIAGONAL
THERMOPLASTIC (8", 120 MILS)		
	TV	WHITE CROSSWALK LINE
THERMOPLASTIC (24", 120 MILS)		
	T2	WHITE STOP BAR
THERMOPLASTIC CHARACTERS (120 MILS)		
	UI	ALPHANUMERIC CHARACTER
THERMOPLASTIC SYMBOL (90 MILS)		
	UA	LEFT TURN ARROW
	UB	RIGHT TURN ARROW
	UC	STRAIGHT ARROW
	UD	STRAIGHT/LEFT ARROW
	UE	STRAIGHT/RIGHT ARROW
	UT	U-TURN SYMBOL

LEGEND

GENERAL

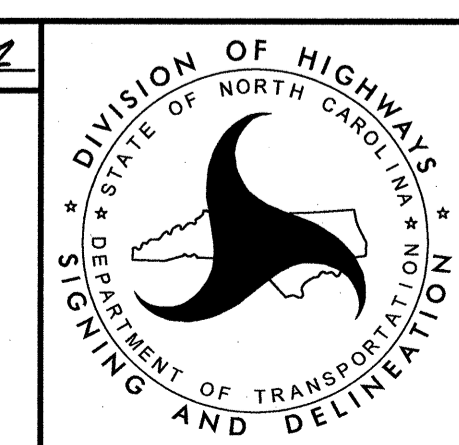
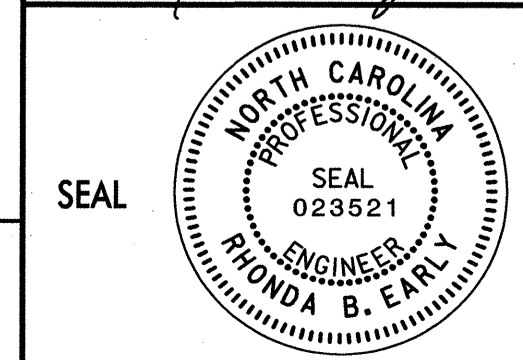
- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- PROPOSED PVMT. EXIST. PVMT.

PAVEMENT MARKINGS

PAVEMENT MARKING SYMBOLS

REVISIONS
 QA/QC STAGE:
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 CONCUR:
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APPROVED: *Handwritten Signature* DATE: 3-5-12



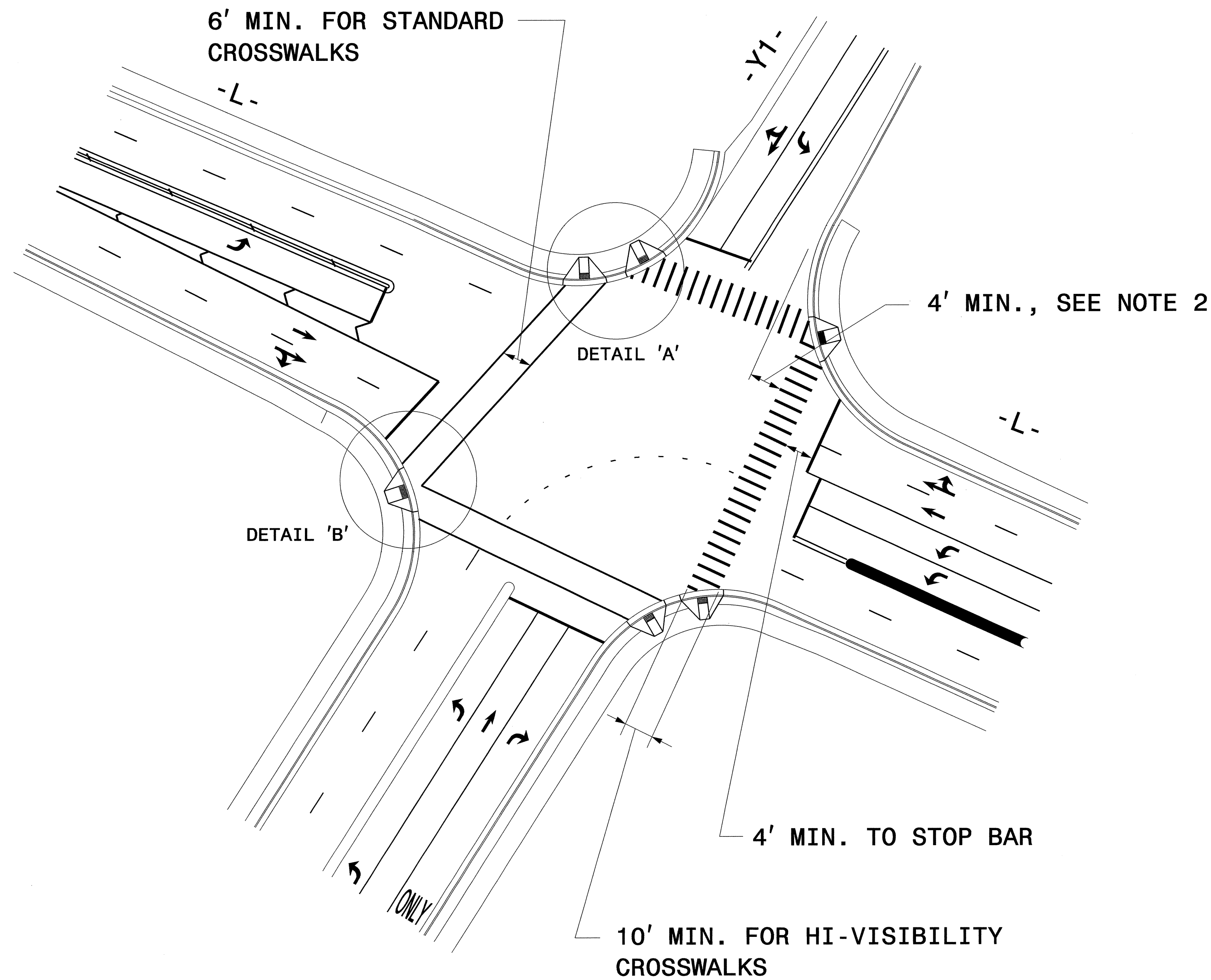
SIGNING AND DELINEATION

FINAL PAVEMENT MARKING PLANS

HNTB

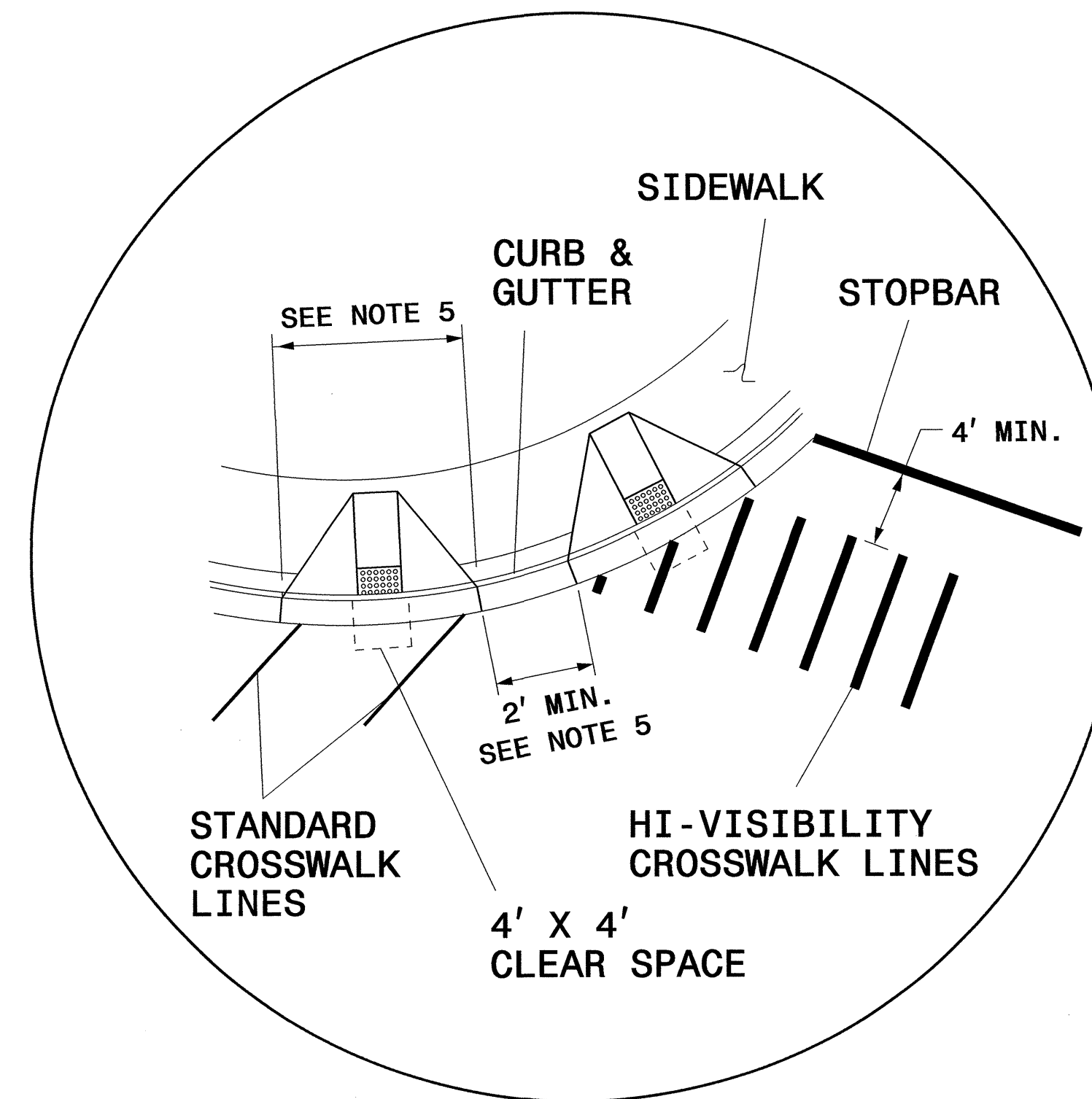
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DATE: 3-12-12	
SEAL	

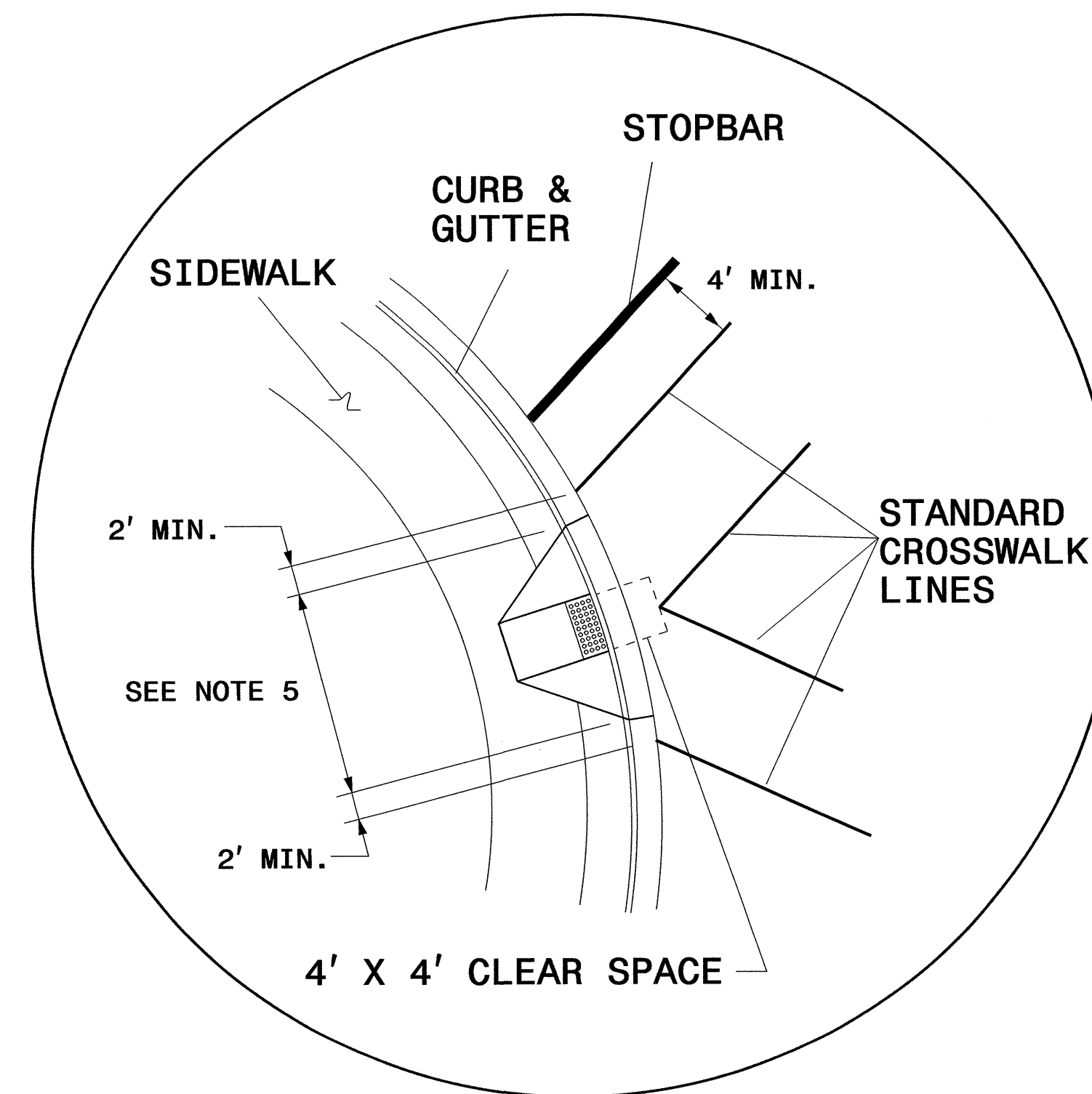


GUIDANCE DETAIL FOR STANDARD AND HI-VISIBILITY CROSSWALKS AT SIGNALIZED OR STOP SIGN CONTROLLED INTERSECTIONS

1. USE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALKS AND STOP BARS NOT STATIONED ON THE DETAIL SHEETS OR WHEN FIELD ADJUSTMENTS REQUIRED MOVING STATIONED MARKINGS AS DIRECTED BY THE ENGINEER. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
2. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN.
3. BEYOND THE CURB FACE, A CLEAR SPACE OF 4' X 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE CROSSWALK.
4. SINGLE DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2 FEET LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
5. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS.



DETAIL 'A'- DUAL CURB RAMPS

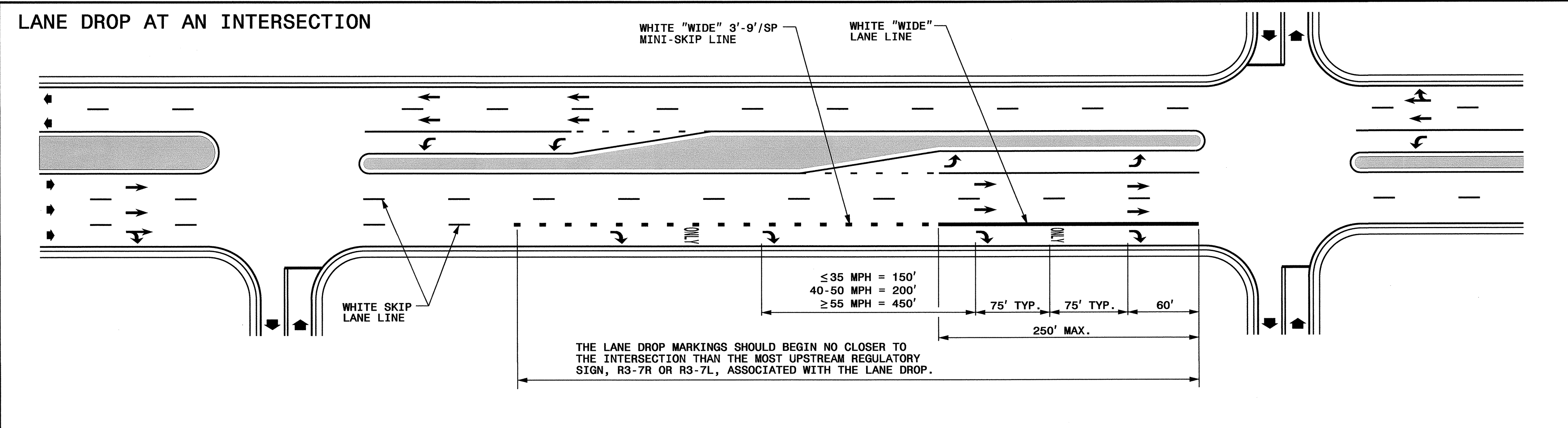


DETAIL 'B'- SINGLE DIAGONAL CURB RAMP

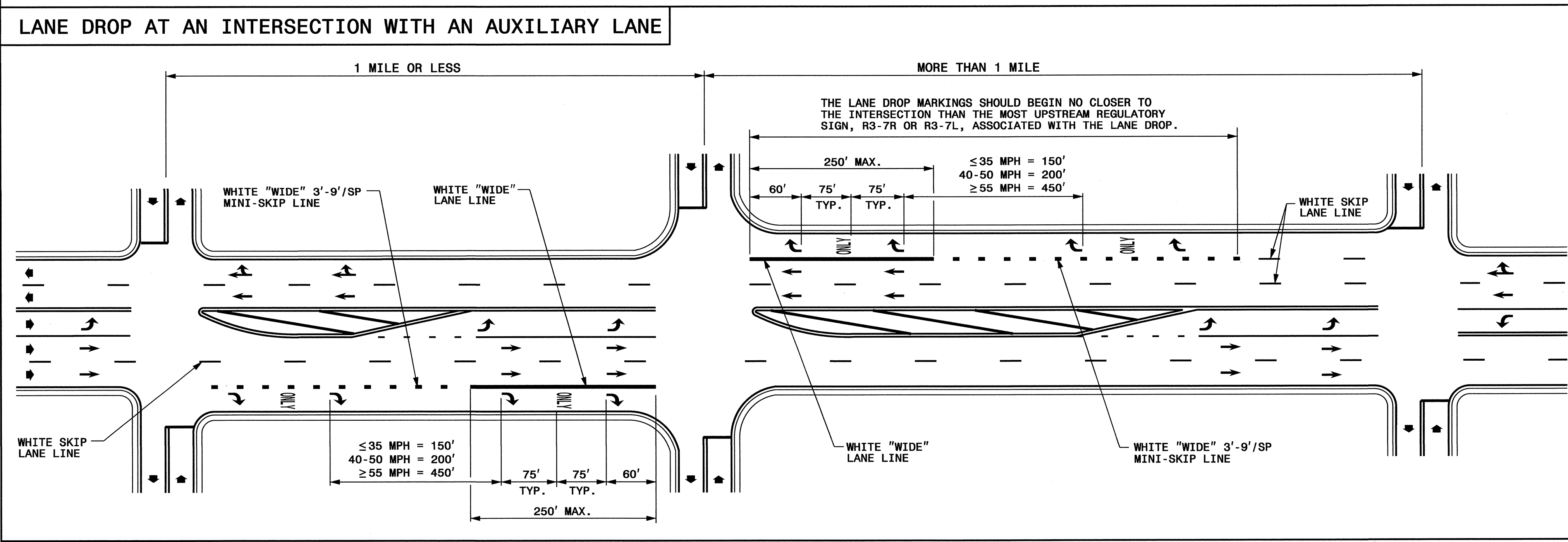
CROSSWALK AND STOP BAR PAVEMENT MARKING DETAIL

TIP NO. R-3307	SHEET NO. PMP-1C
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DATE: 3-12-12	
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.



ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
 LANE DROPS



GENERAL NOTES:

- USE THE GUIDANCE SHOWN ON THE ABOVE DETAILS IN CONJUNCTION WITH INTERSECTION GUIDANCE SHOWN ON ROADWAY STANDARD DRAWING 1205.04.
- LANE LINES INDICATED AS "WIDE" SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.

LEGEND	
W = WIDTH OF TRAVEL LANE	ONLY PAVEMENT MARKING SYMBOLS & CHARACTERS
➔ DIRECTION OF TRAFFIC FLOW	

SHEET 1 OF 3
1205D06

SHEET 1 OF 3
1205D06

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 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
 LANE DROPS

**REVISED PAVEMENT MARKING
ROADWAY STANDARD DRAWING**

12-MAR-2012 14:47
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-L- STA 10+00+/-
BEGIN PROJECT
 TIE TO EXISTING
 PAVEMENT MARKING

VAR	12'
VAR	12'
VAR	12'
VAR	12'

-L- (US 70)

25+00

30+00

35+00

-L- (US 70)

-L- STA 36+00+/-
 BREAK
 SEE SHEET PMP-03
 LINE

T6 TJ

T7

V6 VJ V7

T6 TJ

V7 VJ V6

-L- STA 28+99+/-

-L- STA 28+62+/-

TA TI TT

TT

TI

BREAK
 LINE
 (OLD US 70 / CEDAR ST)
 SEE SHEET PMP-08

RESTRIPE EXISTING PAVEMENT TO
 REMOVE LEFT TURN LANE AND MERGE LANE;
 USE RADIUS TO TRANSITION TO 14' LANES.

TA TI

PLACE PAVEMENT MARKING ON RESURFACED
 OLD CAUSEWAY RD (MATCH EXISTING PATTERN)
 FROM PIVERS ISLAND RD TO RADIO ISLAND RD
 ESTIMATED LENGTH = 0.5 MILES

T2

REVISIONS

QA/QC STAGE:

REVIEW:
 CONCUR:
 REVISE:
 VERIFY:

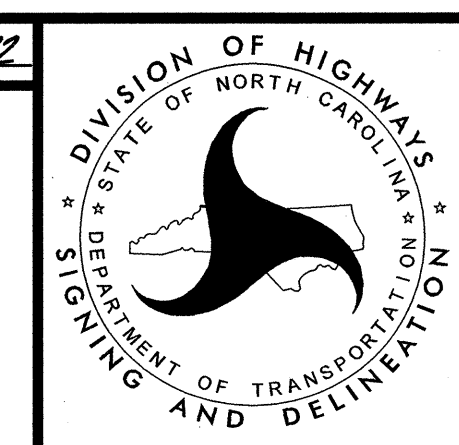
REFER TO SHEET PMP-1A FOR PAVEMENT MARKING SCHEDULE.

ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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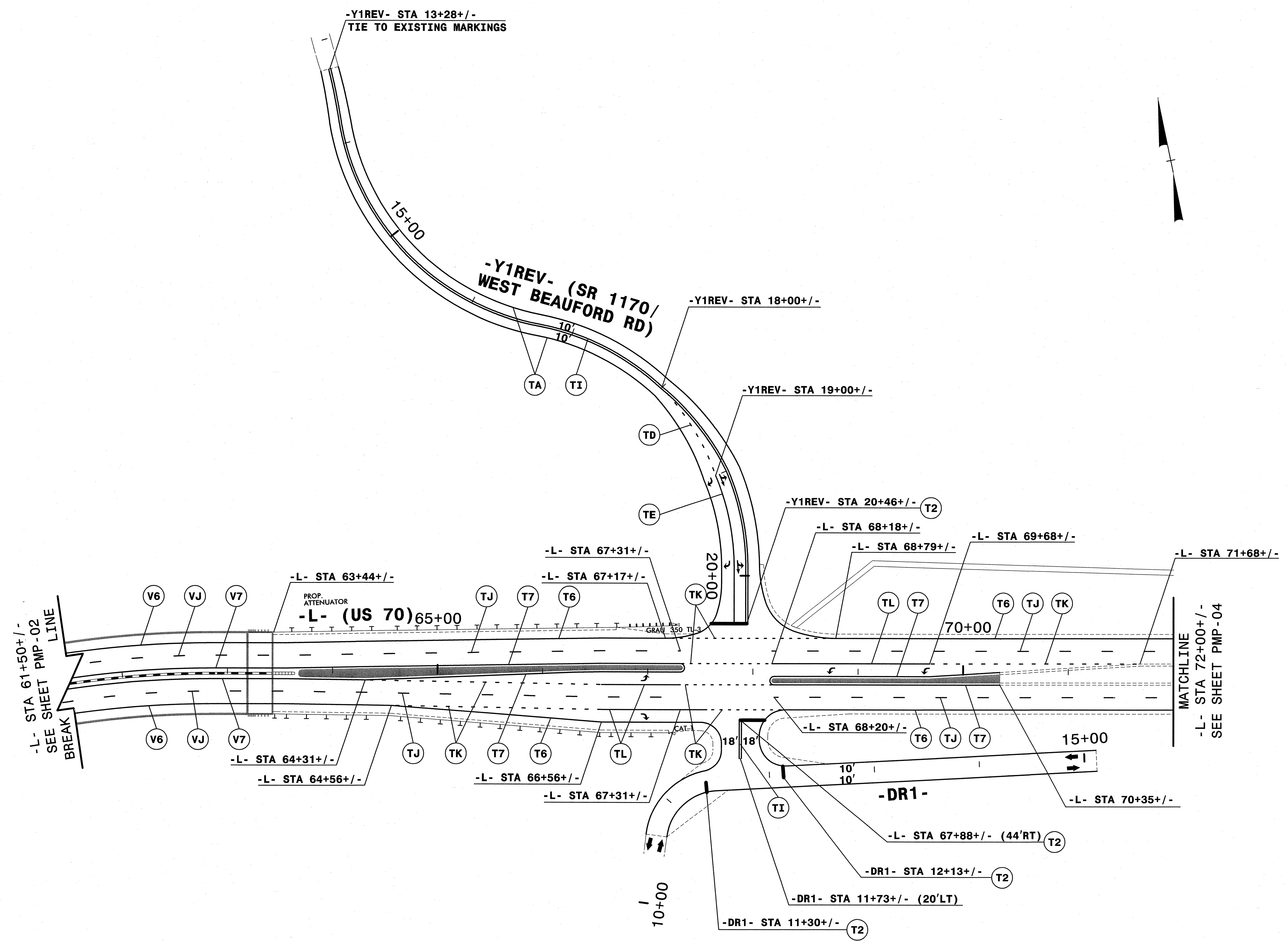
APPROVED: *Amelia S. Carly* DATE: 3-5-12

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 RYONDA B. EIRLY
 023521



SIGNING AND DELINEATION
**FINAL PAVEMENT
 MARKING PLANS**

8/17/99



REVISIONS

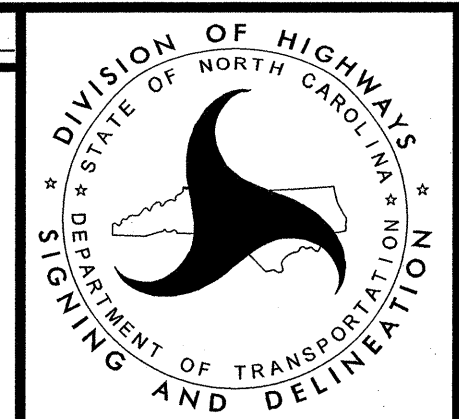
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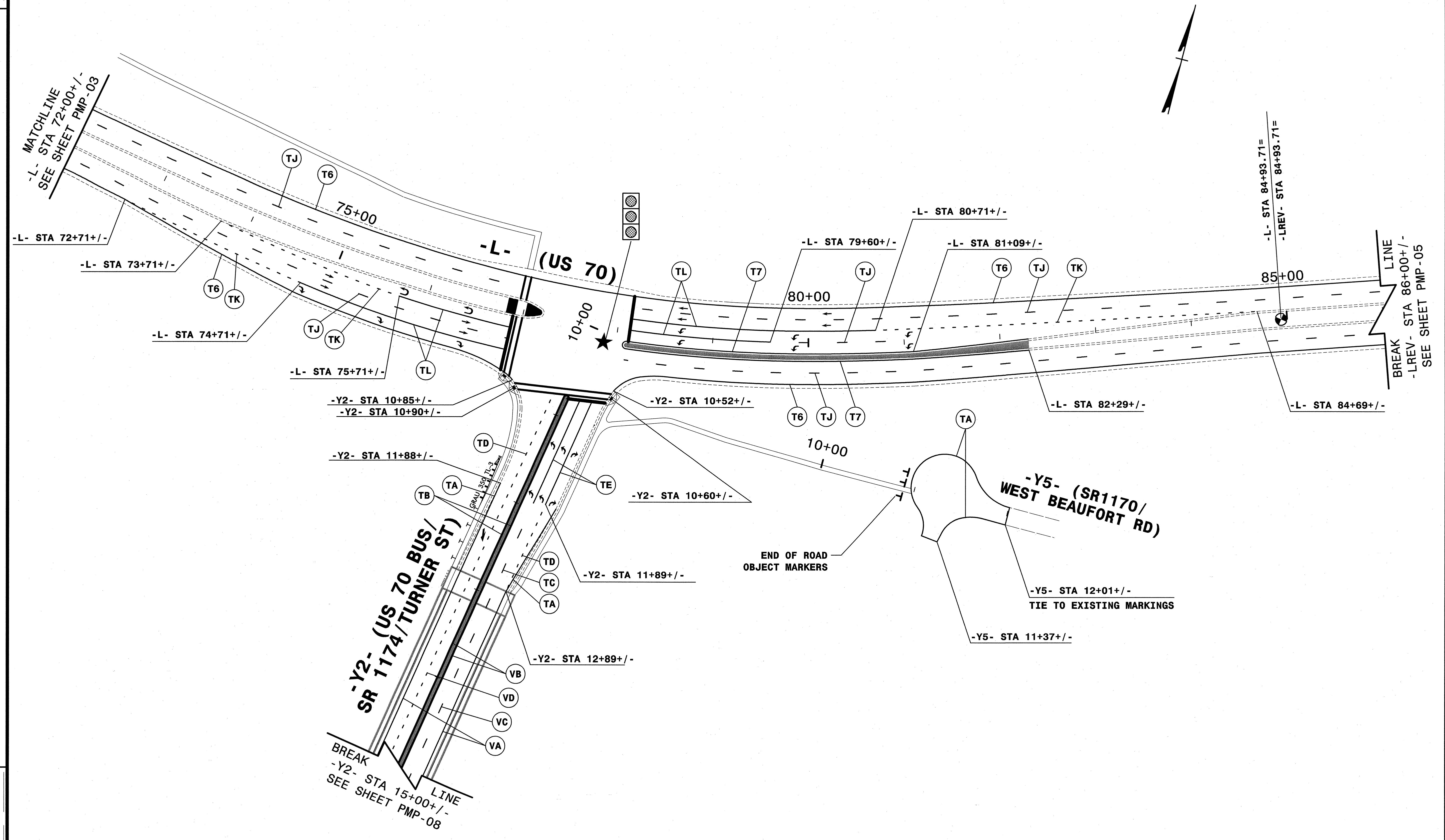
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APPROVED: *Theresa S. Early* DATE: 6-18-13
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 PRONDA B. EARLY
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SIGNING AND DELINEATION
 FINAL PAVEMENT MARKING PLANS

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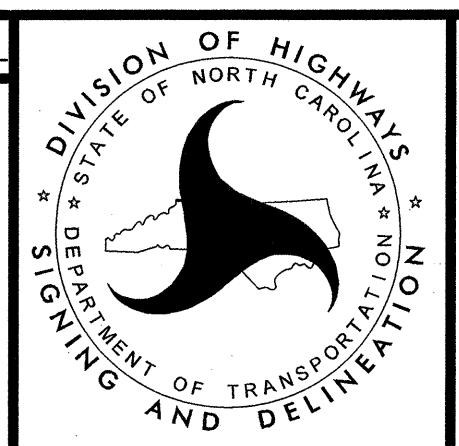
- REFER TO SHEET PMP-10 FOR SIGNAL STOP BAR DETAIL.
- REFER TO SHEET PMP-1A FOR PAVEMENT MARKING SCHEDULE.
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 PROFESSIONAL
 SEAL
 023521
 ENGINEER
 PRIONDA B. EARLY

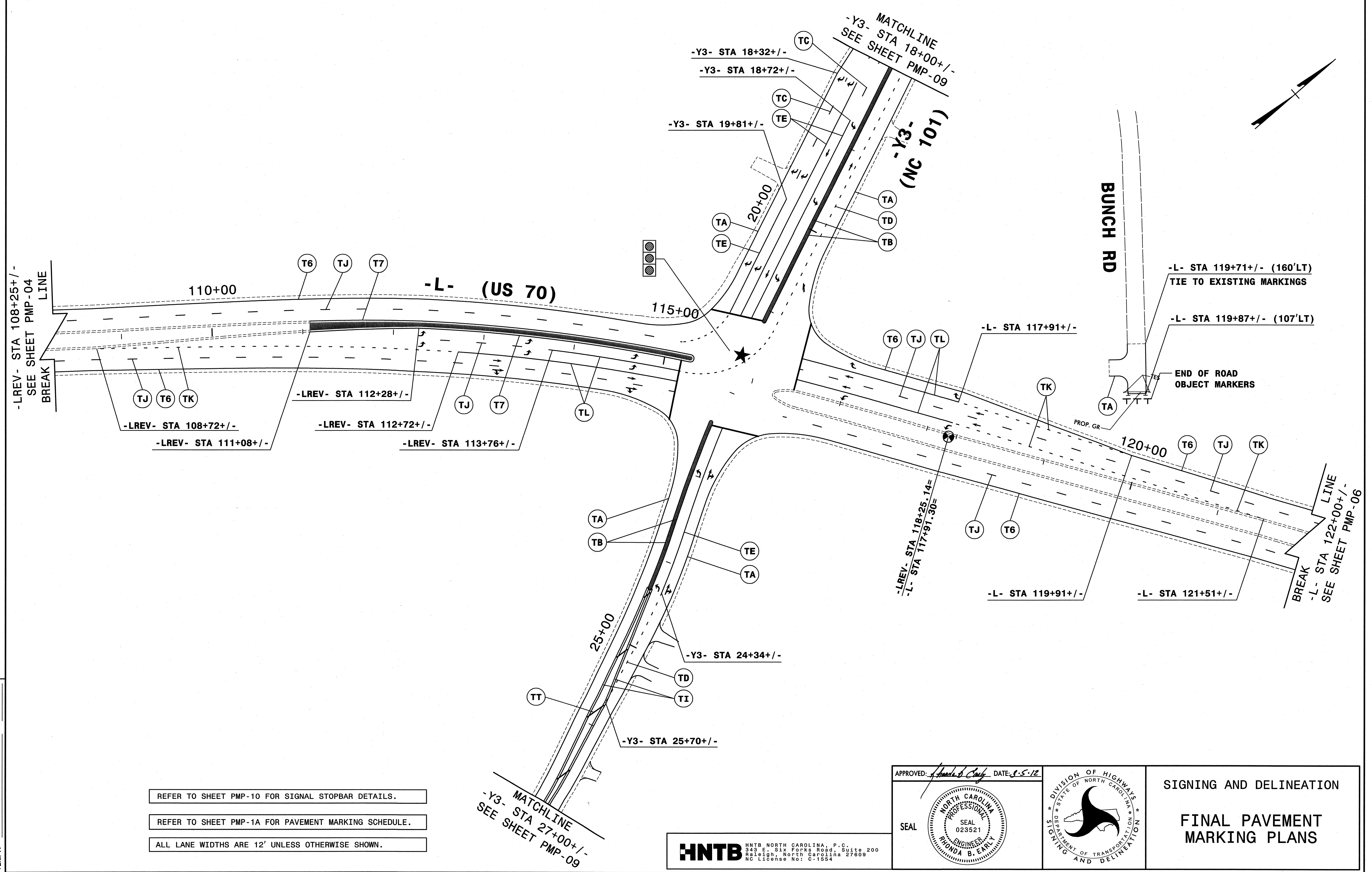


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FINAL PAVEMENT MARKING PLANS

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 REVISE:
 VERIFY:

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REVISIONS

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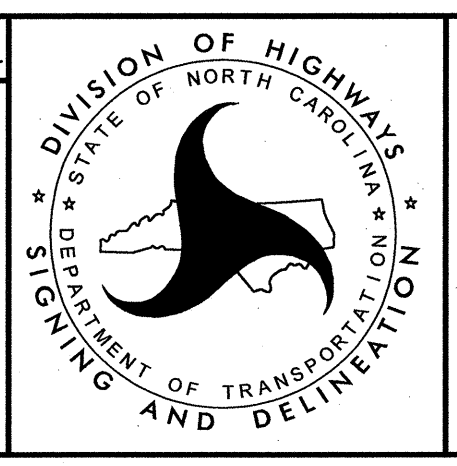
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VERIFY:

REFER TO SHEET PMP-10 FOR SIGNAL STOPBAR DETAILS.
REFER TO SHEET PMP-1A FOR PAVEMENT MARKING SCHEDULE.
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MATCHLINE
-Y3- STA 27+00+/-
SEE SHEET PMP-09

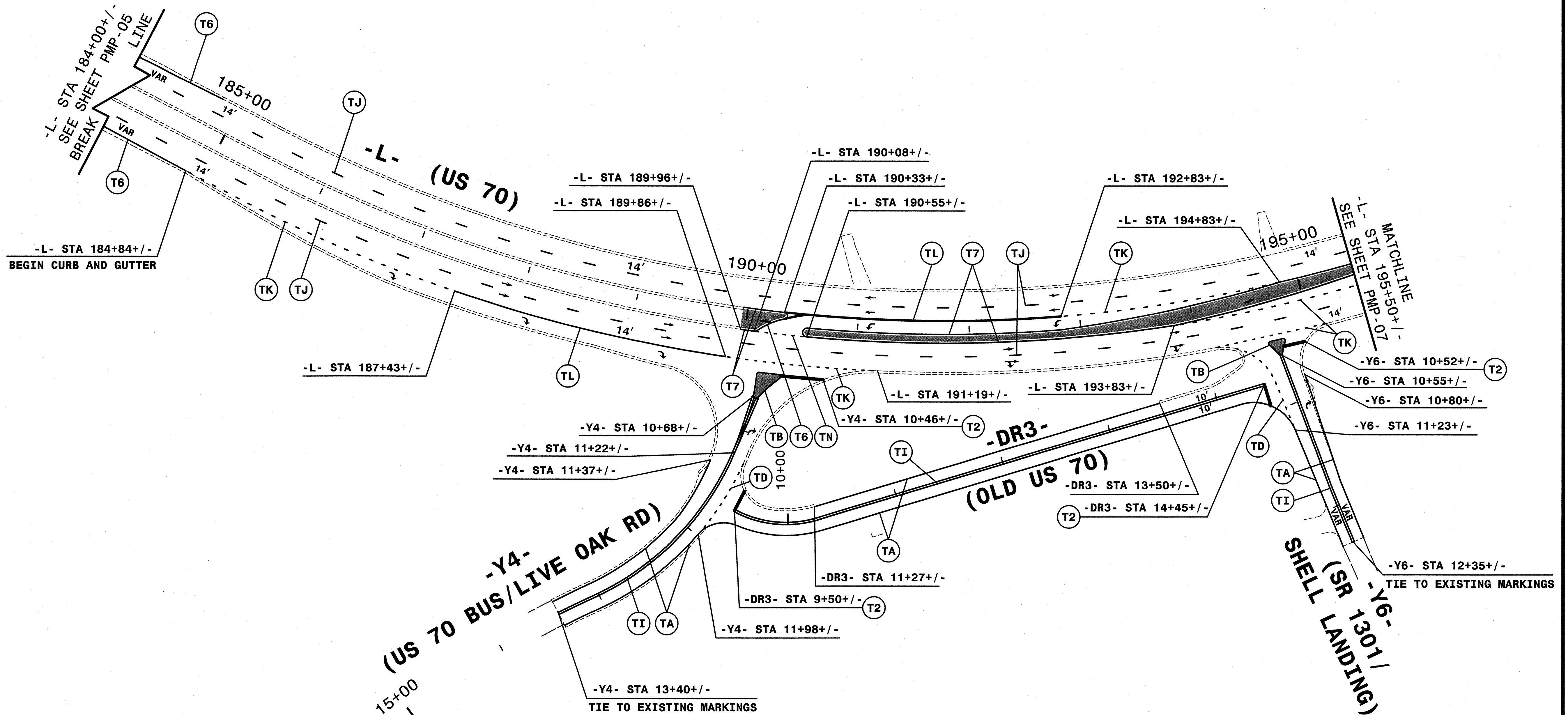
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FLORIDA B. EARLY
023521



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FINAL PAVEMENT MARKING PLANS

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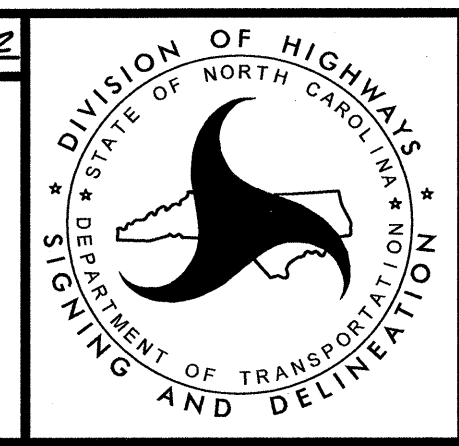
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REVIEW:
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REVISE:
VERIFY:

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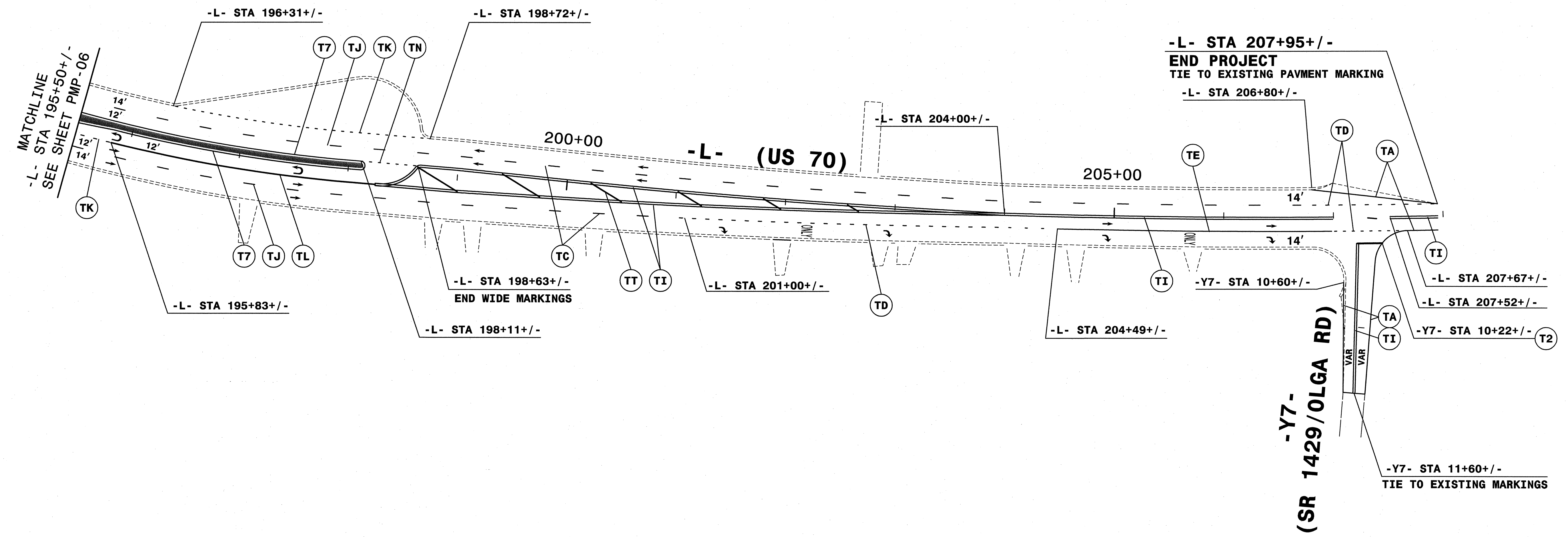
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SEAL 023521



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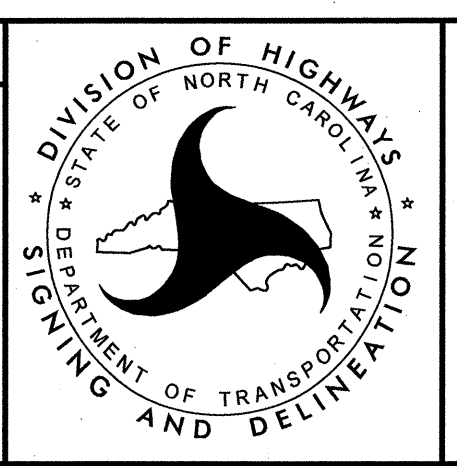
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CONCUR:
REVISE:
VERIFY:

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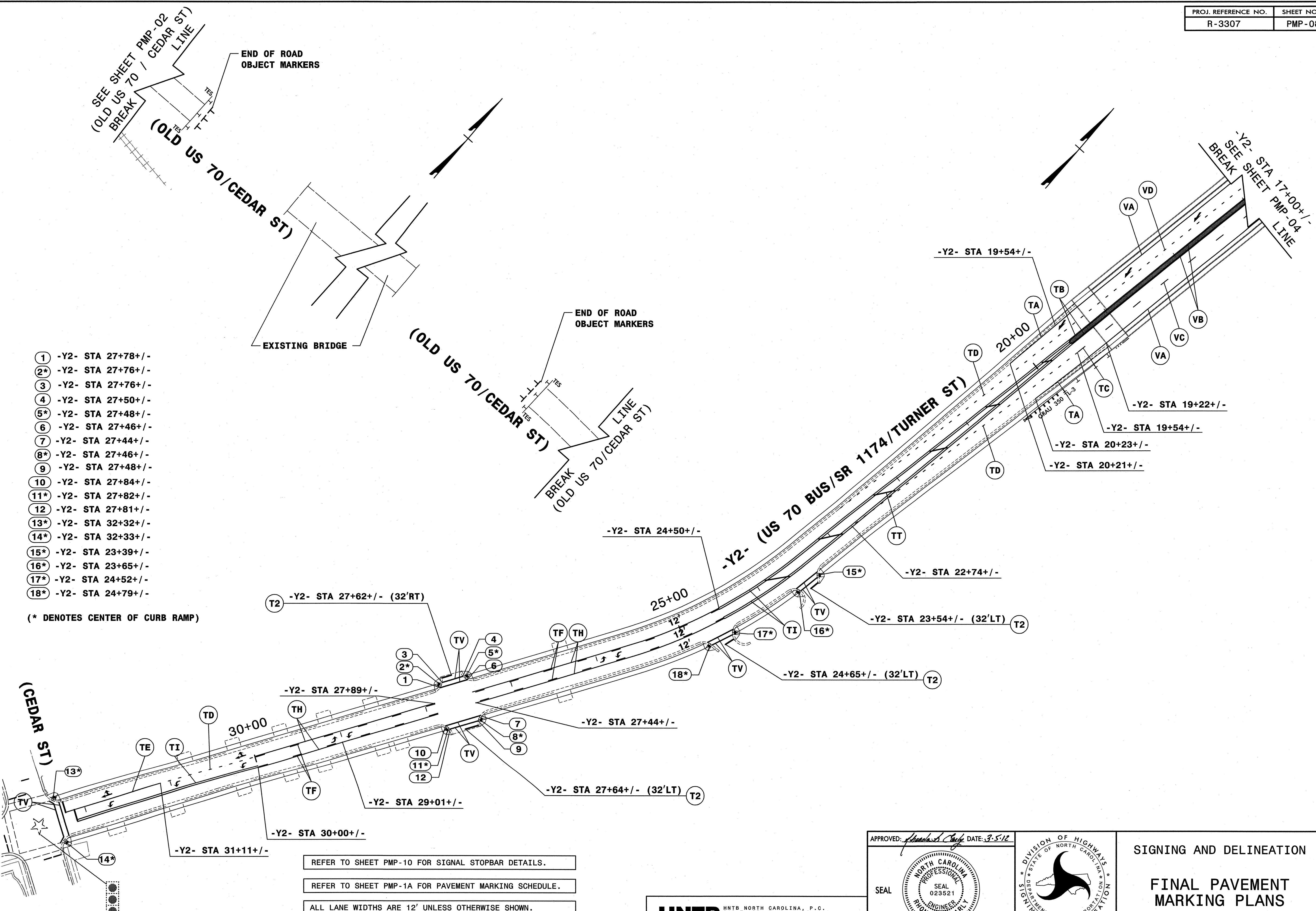
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- ① -Y2- STA 27+78+/-
- ②* -Y2- STA 27+76+/-
- ③ -Y2- STA 27+76+/-
- ④ -Y2- STA 27+50+/-
- ⑤* -Y2- STA 27+48+/-
- ⑥ -Y2- STA 27+46+/-
- ⑦ -Y2- STA 27+44+/-
- ⑧* -Y2- STA 27+46+/-
- ⑨ -Y2- STA 27+48+/-
- ⑩ -Y2- STA 27+84+/-
- ⑪* -Y2- STA 27+82+/-
- ⑫ -Y2- STA 27+81+/-
- ⑬* -Y2- STA 32+32+/-
- ⑭* -Y2- STA 32+33+/-
- ⑮* -Y2- STA 23+39+/-
- ⑯* -Y2- STA 23+65+/-
- ⑰* -Y2- STA 24+52+/-
- ⑱* -Y2- STA 24+79+/-

(* DENOTES CENTER OF CURB RAMP)

REFER TO SHEET PMP-10 FOR SIGNAL STOPBAR DETAILS.

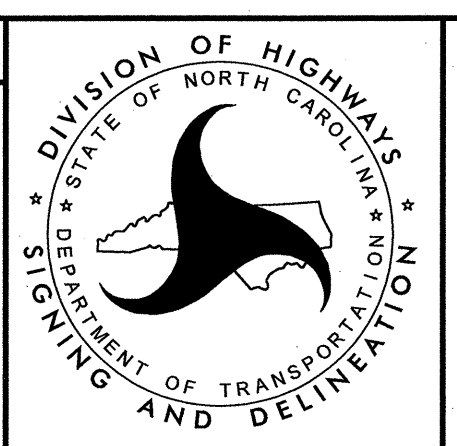
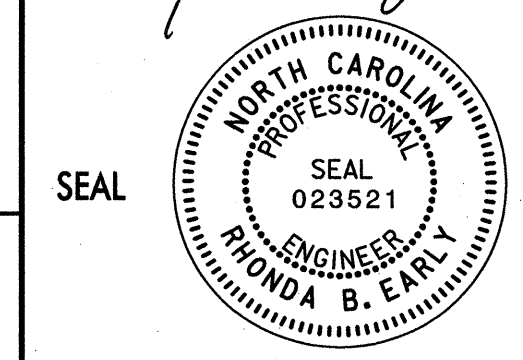
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REVISIONS

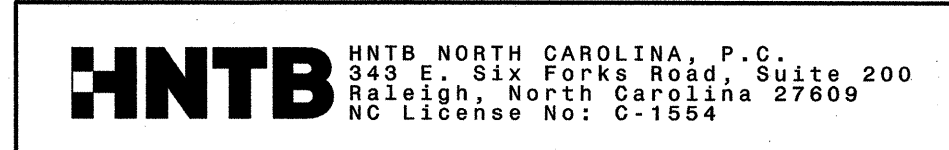
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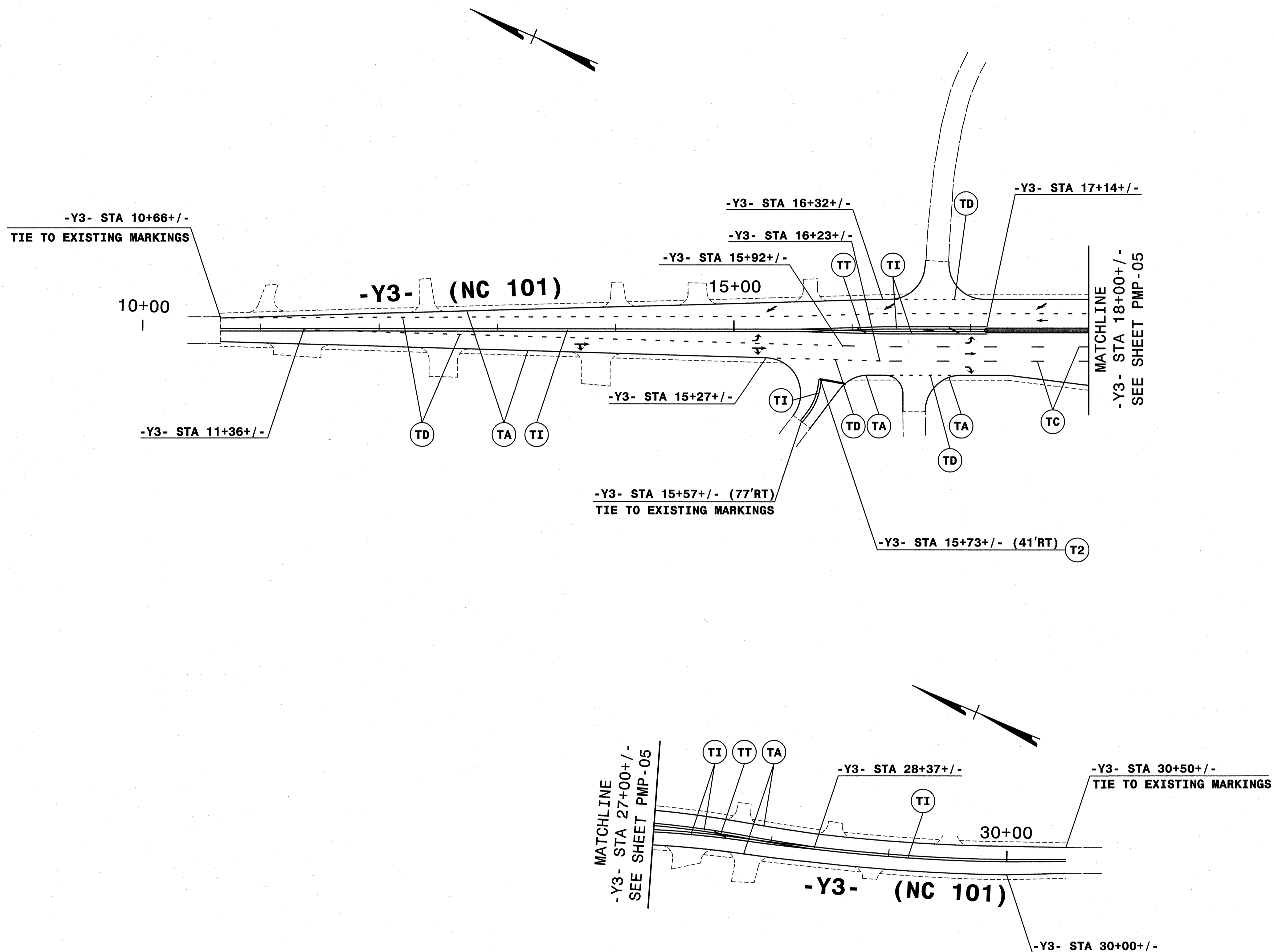


SIGNING AND DELINEATION

FINAL PAVEMENT MARKING PLANS



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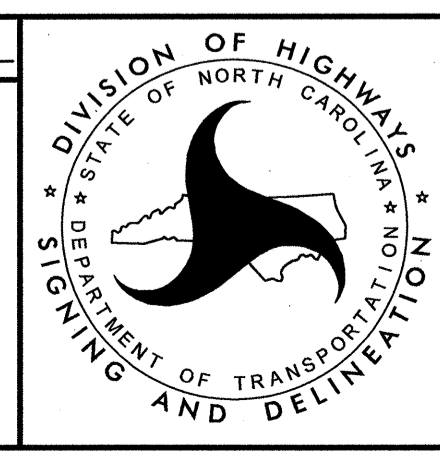
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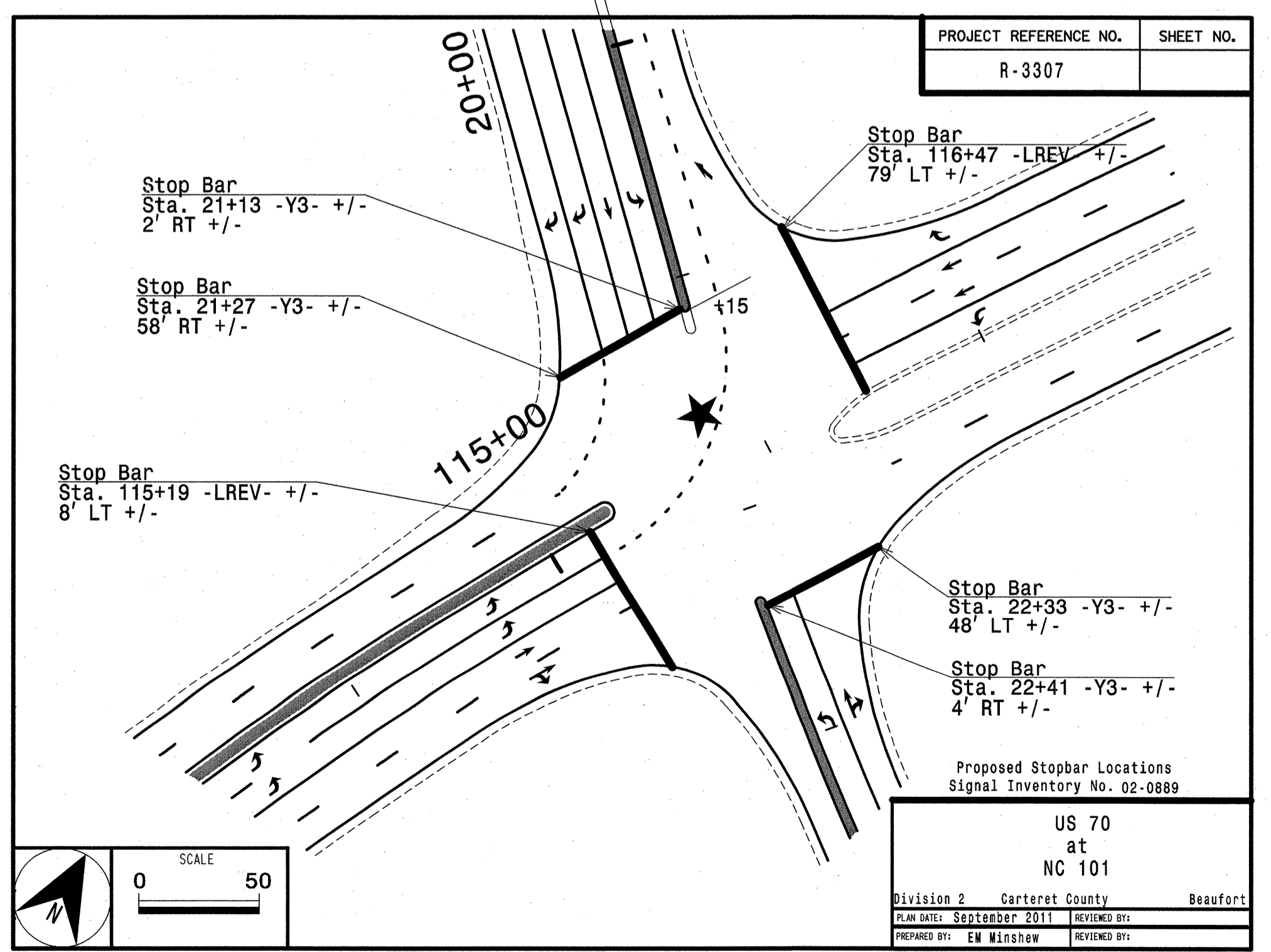
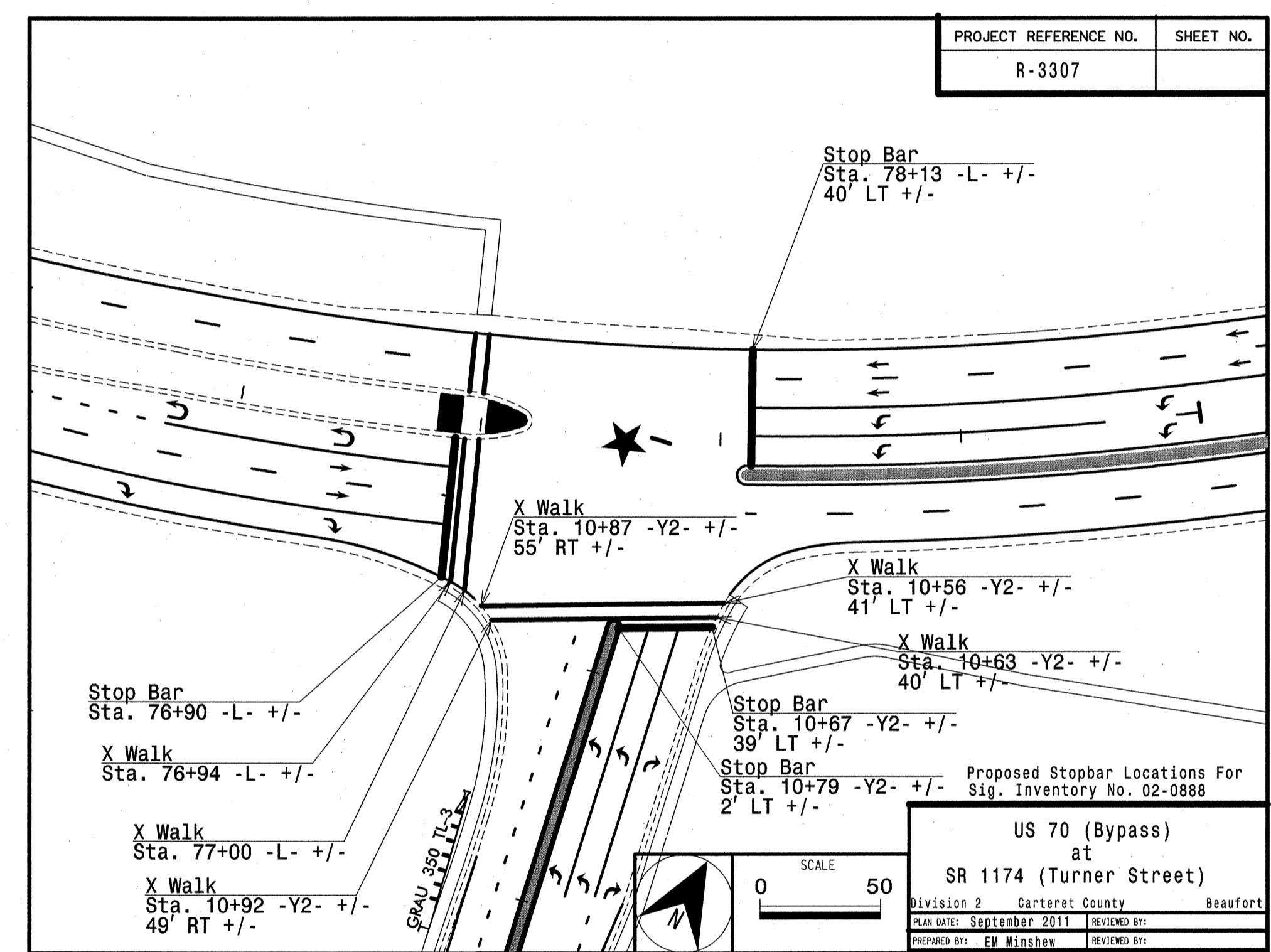
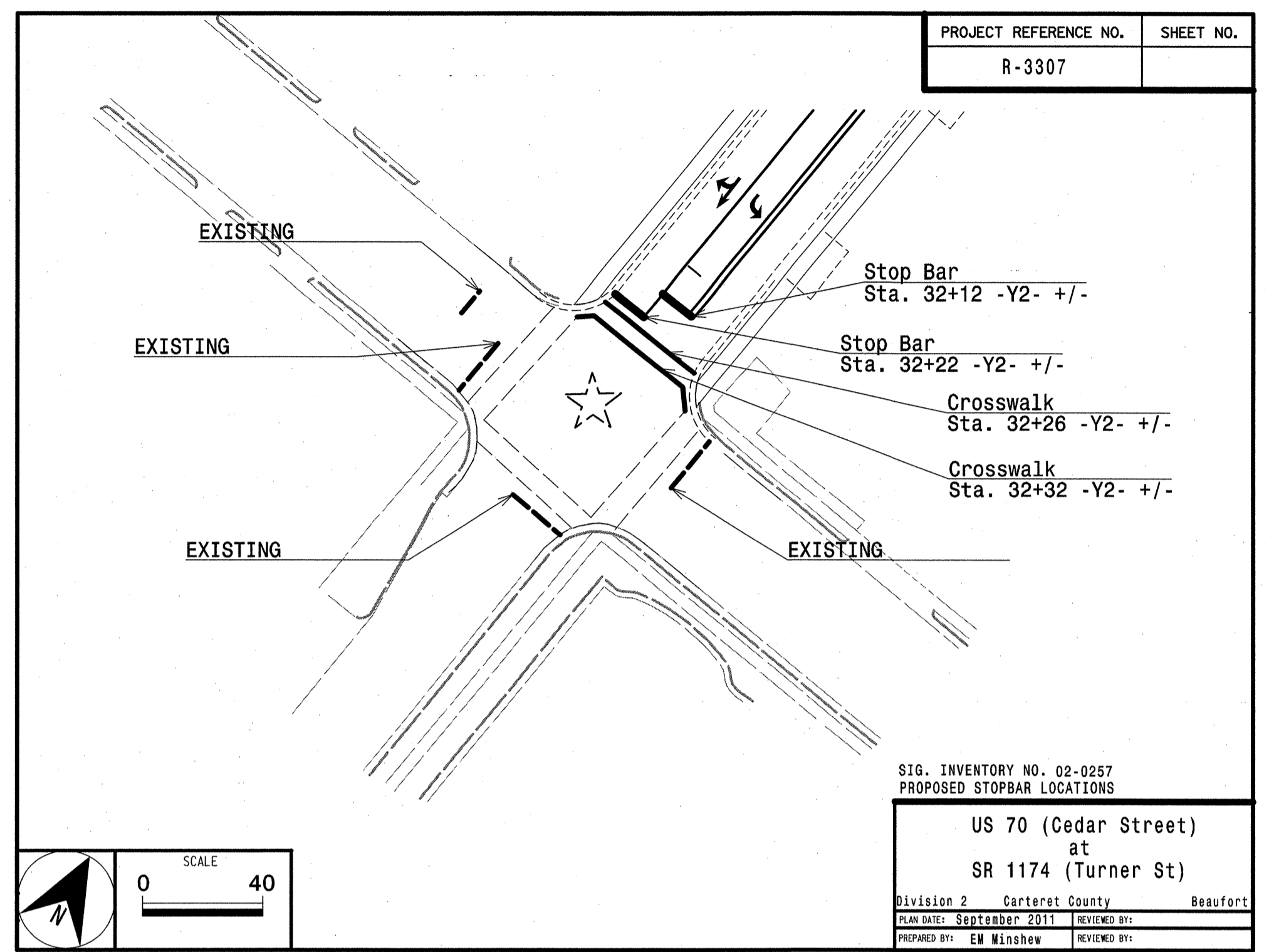
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 RONDA B. EARLY



SIGNING AND DELINEATION
FINAL PAVEMENT MARKING PLANS

8/17/99

REVISIONS



NOTE:
CROSSWALK AND STOP BAR LOCATIONS PROVIDED BY NCDOT SIGNAL DESIGN SECTION.

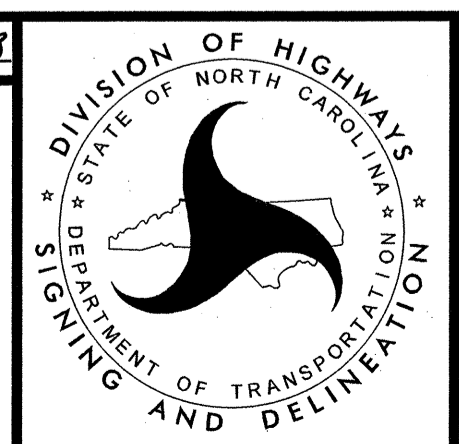
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QA/QC STAGE:
REVIEW:
CONCUR:
REVISE:
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ENGINEER
PIONDA B. EARLY
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SIGNING AND DELINEATION

FINAL PAVEMENT MARKING PLANS