

**CONTRACT: C203127 T.I.P.: U-3459**

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN  
ROWAN COUNTY**

**LOCATION: PROPOSED SR 2541 (KLUMAC ROAD) GRADE SEPERATION  
WITH THE NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN CORPOORATION.**

**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 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.50	ARROWS AND SHIELDS
901.70	SIGN STRINGERS AND SUPPORT SPACING
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

**PAY ITEM NOTES**

- 1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- 2 DISPOSAL OF SIGN, D, E OR F

**INDEX**

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2 THRU SIGN-4	D, E AND F SHEETS
SIGN-5 THRU SIGN-8	SIGN DETAIL SHEETS

**SUMMARY OF QUANTITIES**

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4025000000	901	CONTRACTOR FURNISHED, TYPE D SIGN	25	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN	157	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE F SIGN	263	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	675	L.F.
4096000000	904	SIGN ERECTION, TYPE D	2	EA.
4102000000	904	SIGN ERECTION, TYPE E	20	EA.
4108000000	904	SIGN ERECTION, TYPE F	12	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	16	EA.
4238000000	907	DISPOSAL OF SIGN, D, E OR F	12	EA.

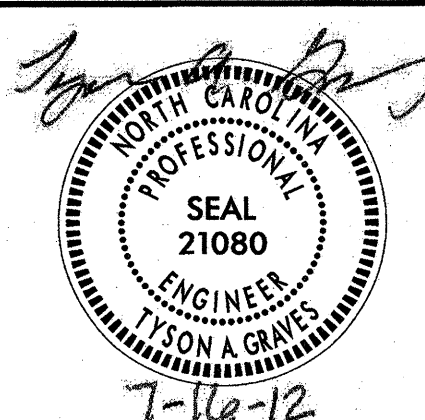
**GENERAL NOTES**

- . SIGNS FURNISHED BY CONTRACTOR
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . 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
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . 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 TYPE C REFLECTIVE SHEETING.
- . THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT TO THE N.C.D.O.T. FOR APPROVAL, DETAIL DRAWINGS OF LUMINAIRE RETRIEVAL SYSTEM MOUNTING ON OHS ASSEMBLY.
- . THE CONTRACTOR SHALL USE LUMINAIRE RETRIEVAL SYSTEM ON ALL OVERHEAD STRUCTURES. WALKWAY AND HANDRAIL IS NOT REQUIRED.
- . INSTALLATION OF LUMINAIRE RETRIEVAL SYSTEM SHALL ALLOW LUMINAIRE MAINTENACE FROM THE SHOULDER WITHOUT THE NEED FOR LANE CLOSURE. THE DRIVE HANDLE OF THE LUMINAIRE RETRIEVAL SYSTEM SHALL BE LOCATED A MINIMUM OF 0.92M (3 ') FROM THE RIGHT EDGE OF THE SHOULDER AWAY FROM THE ROADWAY TRAFFIC.
- . THE CONTRACTOR SHALL ENSURE THAT COORDINATION IS ESTABLISHED BETWEEN THE OHS ASSEMBLY AND LUMINAIRE RETRIEVAL SYSTEM FABRICATORS SO THAT A FULLY FUNCTIONAL SIGN AND LIGHTING SYSTEM IS INSTALLED. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY OHS ASSEMBLY AND LUMINAIRE RETRIEVAL SYSTEM INCOMPATIBILITIES, OR INSTALLATION OF A LIGHTING SYSTEM NOT FUNCTIONING TO ITS INTENDED PURPOSE.
- . DO NOT BEGIN FABRICATION FOR TYPES A & B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

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Florence & Hutcheson/7/2012

NO.	BY	DATE	REVISION



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
**RAIL DIVISION**  
 PREPARED BY: **ENGINEERING & SAFETY BRANCH**  
MAIL: 1556 MAIL SERVICE CENTER RALEIGH, NC 27699-1556 DELIVERY: 850 CAPITAL BOULEVARD RALEIGH, NC 27603 PHONE: (919) 715-8803 FAX: (919) 715-8804

PROJECT U-3459 - KLUMAC ROAD	
TITLE <b>SIGNING DETAIL</b>	
LOCATION KLUMAC ROAD (SR 2541) IN SALISBURY, NC	
DGN BY GEP	RAILROAD NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN
DWN BY GEP	VAL SEC
CHK BY	DATE JULY 2012
MILE POST MP 335.2	SCALE
<b>SIGN-1</b>	

**SIGN NUMBER:** 301 **BACKG COLOR:** Green / Green **DESIGN BY:** gep **CHECKED BY:** FLO. & HUT. **DATE:** Jun 01, 2012  
**TYPE:** D **COPY COLOR:** White **PROJECT ID:** U-3459 **DIV:** DIV 09

**QUANTITY:** 1

SYMBOL	X	Y	WID	HT
ARSHRT	5.9	19.7	6	9
ARSHRT	44	4.7	6	9

**SIGN WIDTH:** 5'-0" **HEIGHT:** 2'-6" **TOTAL AREA:** 12.5 Sq.Ft.

**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 0.75"  
**RADII:** 3"

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

**USE NOTES: 1 & 2**

- Legend and border(except those that are colored black) shall be direct applied Grade B sheeting.
- Background shall be Grade A, B, or C reflective sheeting.
- Shields; A, B, and C type arrows shall be on 0.032" (0.8mm) aluminum and demountable.
- Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2009 Edition

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter locations are panel edge to lower left corner

Letter	C	h	a	r	l	o	t	t	e	Series/Size	Text Length
Charlotte	20.9	26.2	30.6	35.1	38.1	40.1	44.1	46.7	49.5	D 2000	32.1
Salisbury	4.9	9.6	14.2	16.4	18.2	21.8	26.3	31	33.5	D 2000	33.1

FILENAME: sign design **NORTH CAROLINA D.O.T. SIGN DETAIL**

**SIGN NUMBER:** 302 **BACKG COLOR:** Green / Green **DESIGN BY:** GEP **CHECKED BY:** FLO & HUT **DATE:** Jun 01, 2012  
**TYPE:** D **COPY COLOR:** White **PROJECT ID:** U-3459 **DIV:** DIV 09

**QUANTITY:** 1

SYMBOL	X	Y	WID	HT
ARSHRT	4.9	19.9	6	9
ARSHRT	43	4.7	6	9

**SIGN WIDTH:** 5'-0" **HEIGHT:** 2'-6" **TOTAL AREA:** 12.5 Sq.Ft.

**BORDER TYPE:** FLUSH  
**RECESS:** 0"  
**WIDTH:** 0.75"  
**RADII:** 3"

**MAT'L:** 0.125" (3.2 mm) ALUMINUM

**USE NOTES: 1 & 2**

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Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2009 Edition

Spacing Factor is 1 unless specified otherwise

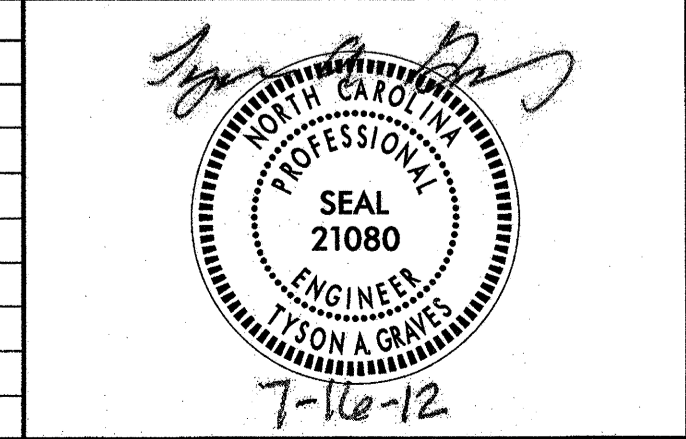
**LETTER POSITIONS**

Letter locations are panel edge to lower left corner

Letter	S	a	l	i	s	b	u	r	y	Series/Size	Text Length
Salisbury	20	24.6	29.2	31.4	33.2	36.8	41.3	46	48.5	D 2000	33.1
Charlotte	5	10.2	14.6	19.2	22.2	24.1	28.2	30.7	33.5	D 2000	32.1

FILENAME: sign design **NORTH CAROLINA D.O.T. SIGN DETAIL**

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 Florence & Hutcheson 7/2012



**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION**

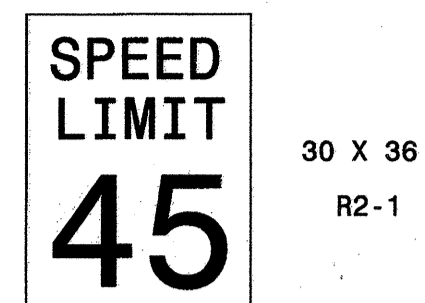
# RAIL DIVISION

PREPARED BY: **ENGINEERING & SAFETY BRANCH**

MAIL: 1536 MAIL SERVICE CENTER RALEIGH, NC 27603  
 DELIVERY: 860 CAPITAL BOULEVARD RALEIGH, NC 27603  
 PHONE: (919) 715-8803 FAX: (919) 715-9804

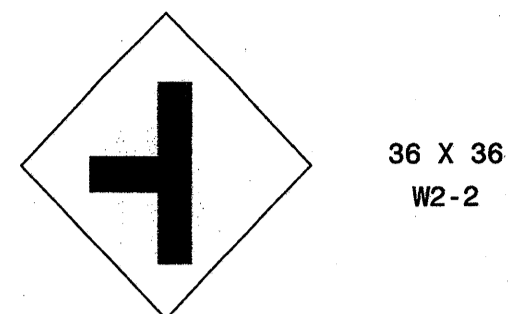
<b>PROJECT</b>	U-3459 - KLUMAC ROAD		
<b>TITLE</b>	TYPE "D" SIGNS		
<b>LOCATION</b>	KLUMAC ROAD (SR 2541) IN SALISBURY, NC		
<b>DGN BY</b>	GEP	<b>RAILROAD</b>	NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN
<b>DWN BY</b>	GEP	<b>VAL SEC</b>	
<b>CHK BY</b>	TAG	<b>DATE</b>	JULY 2012
		<b>SCALE</b>	
<b>MP</b>	335.2	<b>SIGN</b>	SIGN-2

401 QUANTITY REQ'D 2



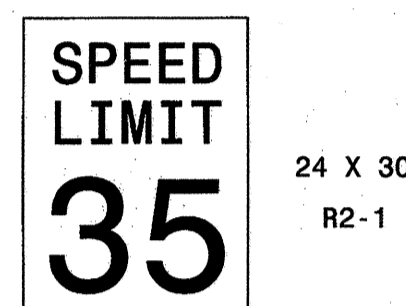
TWO "U" POSTS PER SIGN

405 QUANTITY REQ'D 1



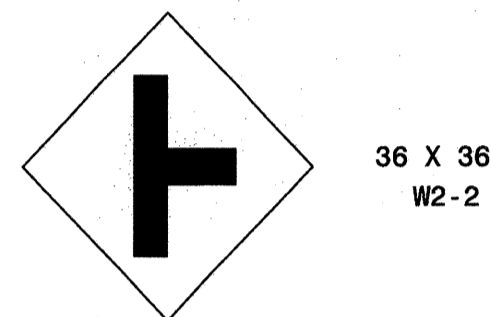
ONE "U" POST PER SIGN

402 QUANTITY REQ'D 2



ONE "U" POST PER SIGN

406 QUANTITY REQ'D 1



ONE "U" POST PER SIGN

403 QUANTITY REQ'D 5



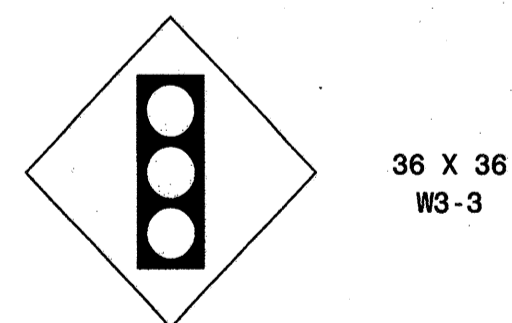
ONE "U" POST PER SIGN

407 QUANTITY REQ'D 3



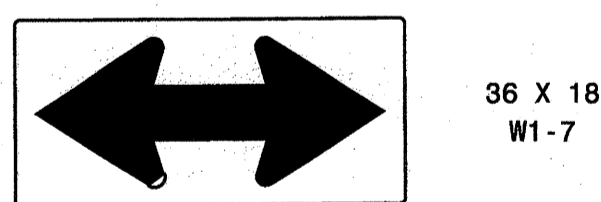
ONE "U" POST PER SIGN

404 QUANTITY REQ'D 5

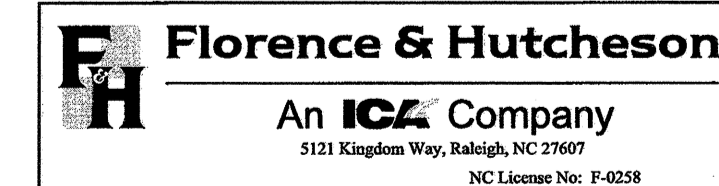


ONE "U" POST PER SIGN

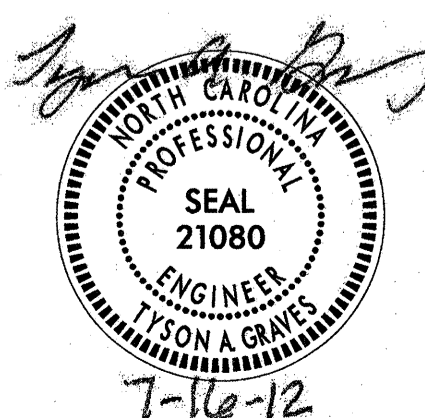
408 QUANTITY REQ'D 1



ONE "U" POST PER SIGN



NO.	BY	DATE	REVISION



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
**RAIL DIVISION**  
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 PHONE: (919) 715-8803 FAX: (919) 715-8804

PROJECT		U-3459 - KLUMAC ROAD	
TITLE		TYPE "E" SIGNS	
LOCATION KLUMAC ROAD (SR 2541) IN SALISBURY, NC			
DGN BY	GEP	RAILROAD	NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN
DWN BY	GEP	VAL SEC	MILE POST MP 335.2
CHK BY	TAG	DATE	JULY 2012
			SCALE
			<b>SIGN-3</b>

**501**

JCT 1 - 21" X 15"  
 29 1 - 24" X 24"  
 70 1 - 24" X 24"  
 150 1 - 36" X 36"

ONE "U" POST PER SIGN

**504**

SOUTH NORTH 2 - 24" X 12"  
 29 29 2 - 24" X 24"  
 WEST EAST 2 - 24" X 12"  
 70 70 2 - 24" X 24"  
 ← → 2 - 21" X 15"

TWO "U" POSTS PER SIGN

**507**

EAST TO 2 - 24" X 12"  
 150 85 1 - 36" X 36"  
 1 - 24" X 24"  
 ← ↑ 2 - 21" X 15"

ASSEMBLY 507 MOUNTED  
 BELOW SIGN 302

**510**

TO 1 - 24" X 12"  
 85 1 - 24" X 24"  
 ← 1 - 21" X 15"  
 WEST 1 - 24" X 12"  
 150 1 - 36" X 36"  
 → 1 - 21" X 15"

ONE "U" POST PER SIGN

**502**

SOUTH NORTH 2 - 24" X 12"  
 29 29 2 - 24" X 24"  
 WEST EAST 2 - 24" X 12"  
 70 70 2 - 24" X 24"  
 ← → 2 - 21" X 15"

TWO "U" POSTS PER SIGN

**505**

JCT 1 - 21" X 15"  
 29 1 - 24" X 24"  
 70 1 - 24" X 24"

ONE "U" POST PER SIGN

**508**

NORTH SOUTH 2 - 24" X 12"  
 29 29 2 - 24" X 24"  
 EAST WEST 2 - 24" X 12"  
 70 70 2 - 24" X 24"  
 ← → 2 - 21" X 15"

TWO "U" POSTS PER SIGN

**511**

TO 1 - 24" X 12"  
 85 1 - 24" X 24"  
 ← 1 - 21" X 15"  
 WEST 1 - 24" X 12"  
 150 1 - 36" X 36"  
 → 1 - 21" X 15"

ONE "U" POST PER SIGN

**503**

WEST EAST 2 - 24" X 12"  
 150 150 2 - 36" X 36"  
 ↑ → 2 - 21" X 15"

ASSEMBLY 503 MOUNTED  
 BELOW SIGN 301

**506**

NORTH SOUTH 2 - 24" X 12"  
 29 29 2 - 24" X 24"  
 EAST WEST 2 - 24" X 12"  
 70 70 2 - 24" X 24"  
 ← → 2 - 21" X 15"

TWO "U" POSTS PER SIGN

**509**

WEST 1 - 24" X 12"  
 150 1 - 36" X 36"  
 ← 1 - 21" X 15"  
 TO 1 - 24" X 12"  
 85 1 - 24" X 24"  
 → 1 - 21" X 15"

ONE "U" POST PER SIGN

**512**

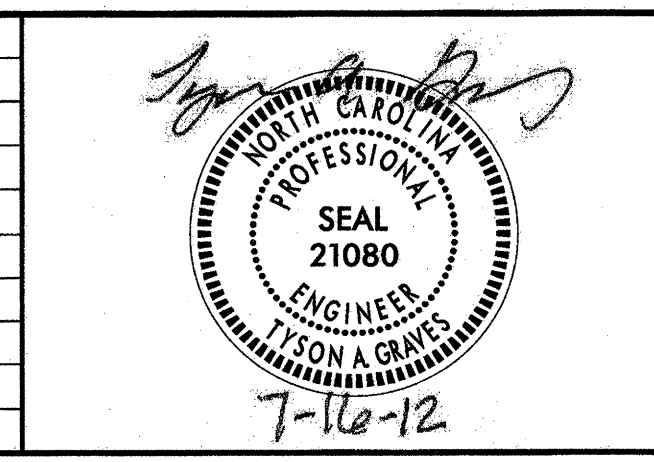
TO 1 - 24" X 12"  
 85 1 - 24" X 24"  
 ↑ 1 - 21" X 15"

ONE "U" POST PER SIGN



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NO.	BY	DATE	REVISION



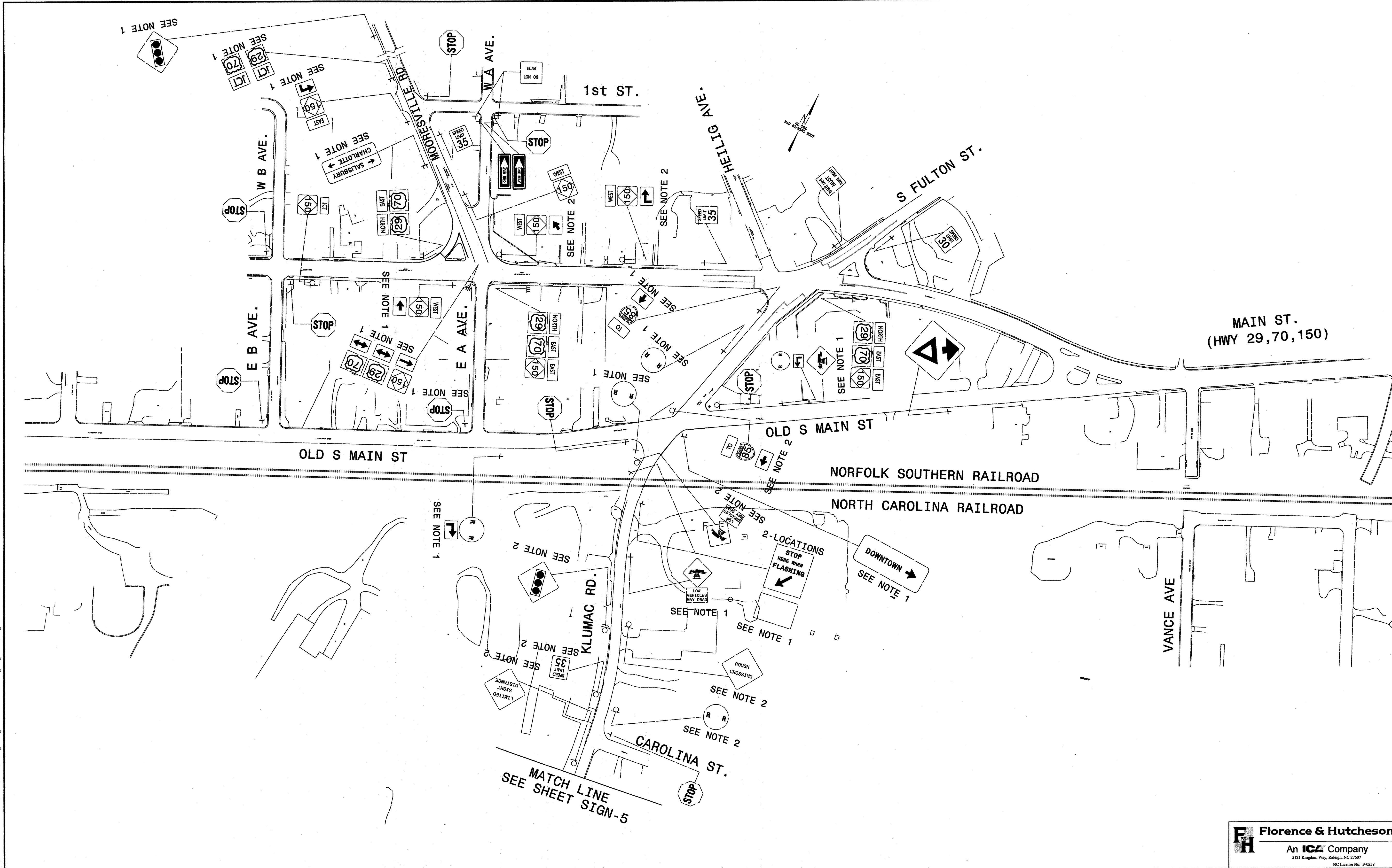
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
**RAIL DIVISION**

PREPARED BY: **ENGINEERING & SAFETY BRANCH**

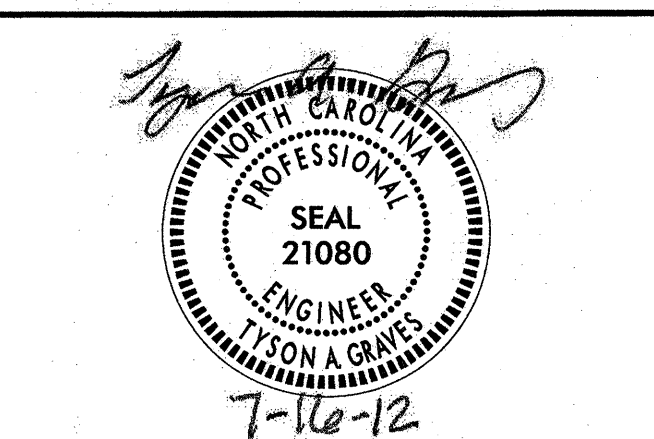
MAIL: 1556 MAIL SERVICE CENTER RALEIGH, NC 27699-1556  
 DELIVERY: 800 CAPITAL BOULEVARD RALEIGH, NC 27603  
 PHONE: (919) 715-8803 FAX: (919) 715-8804

PROJECT	U-3459 - KLUMAC ROAD		
TITLE	TYPE "F" SIGNS		
LOCATION	KLUMAC ROAD (SR 2541) IN SALISBURY, NC		
DGN BY	GEP	RAILROAD	NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN
OWN BY	GEP	VAL SEC	MILE POST MP 335.2
CHK BY	TAG	DATE	JULY 2012
		SCALE	SIGN-4





NO.	BY	DATE	REVISION



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

## RAIL DIVISION

PREPARED BY: **ENGINEERING & SAFETY BRANCH**

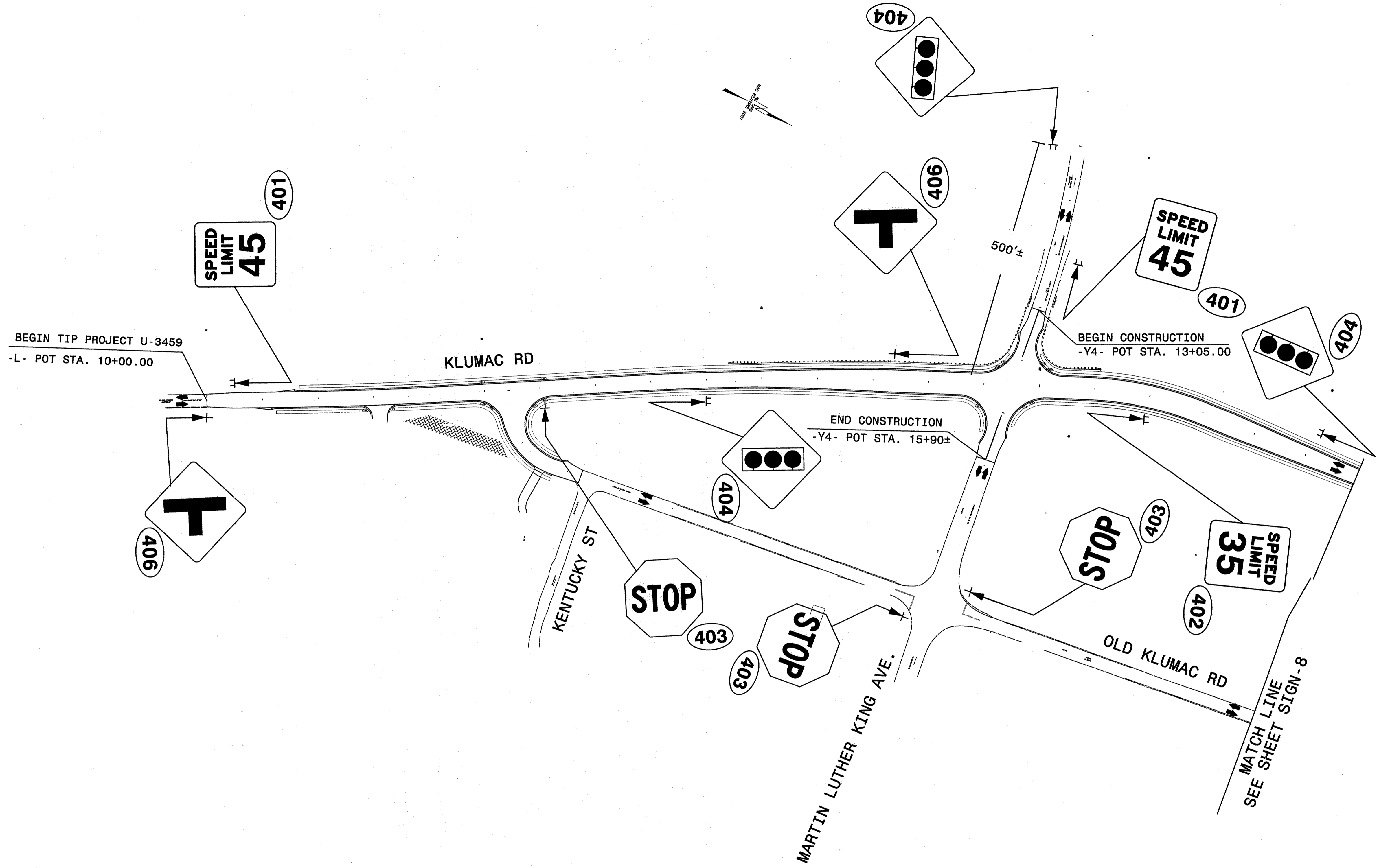
MAIL: 1536 MAIL SERVICE CENTER, RALEIGH, NC 27603-1536  
 DELIVERY: 860 CAPITAL BOULEVARD, RALEIGH, NC 27603  
 PHONE: (919) 715-8803  
 FAX: (919) 715-8804

PROJECT <b>U-3459 - KLUMAC ROAD</b>		MILE POST <b>MP 335.2</b>	
TITLE <b>EXISTING SIGNING DETAIL</b>			
LOCATION <b>KLUMAC ROAD (SR 2541) IN SALISBURY, NC</b>			
DGN BY	GEP	RAILROAD	NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN
DWN BY	GEP	VAL SEC	
CHK BY	TAG	DATE	JULY 2012
		SCALE	
			<b>SIGN-6</b>

**FH** Florence & Hutcheson  
 An ICA Company  
5121 Kingdom Way, Raleigh, NC 27607  
 NC License No. F-0258

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Florence & Hutcheson #17/2012



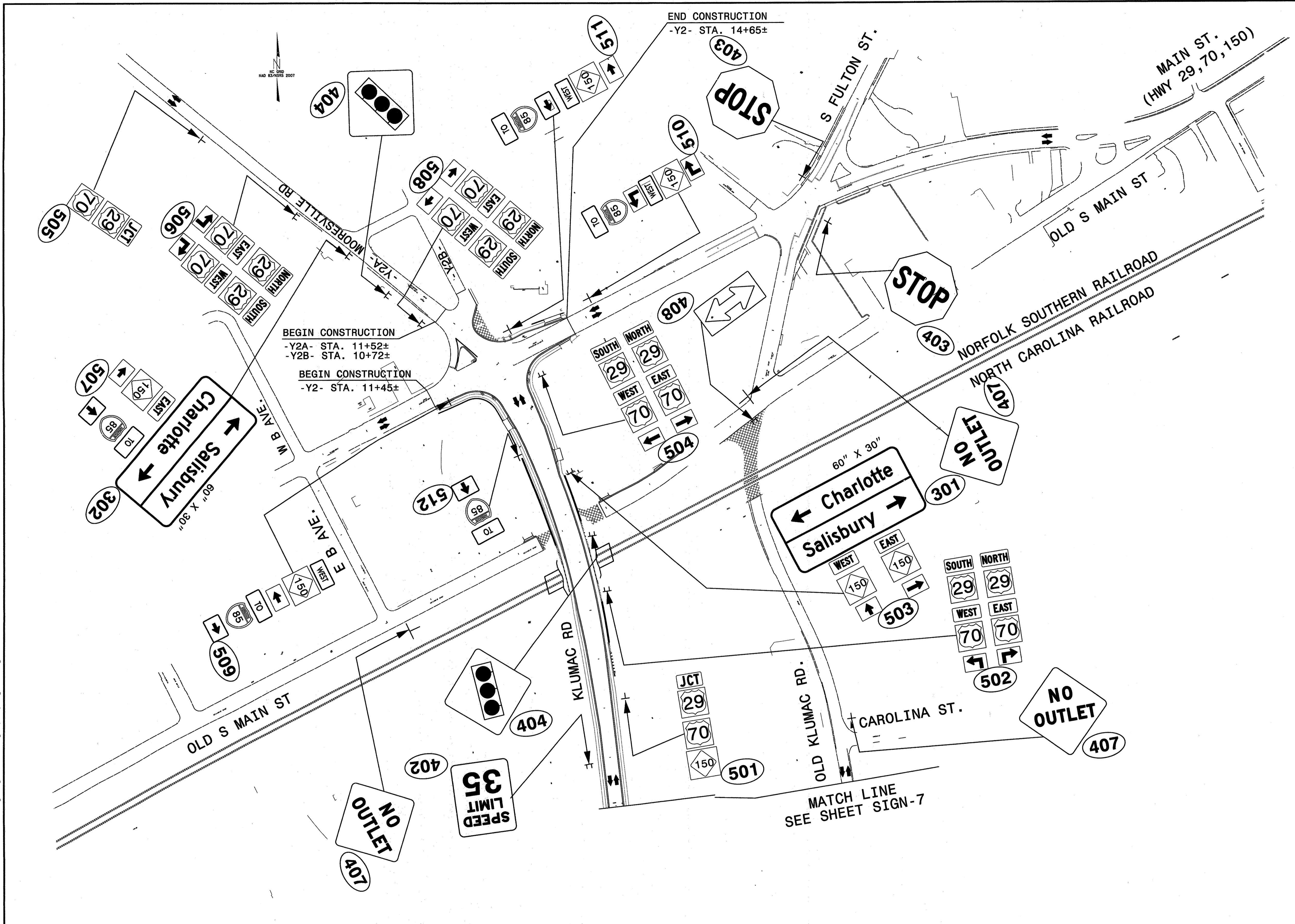
**FH** Florence & Hutcheson  
 An ICA Company  
 5121 Klagdon Way, Raleigh, NC 27607  
 NC License No. F-0258

NO.	BY	DATE	REVISION

*John P. ...*  
 NORTH CAROLINA  
 PROFESSIONAL ENGINEER  
 SEAL 21080  
 LAWSON & GRAVES  
 7-16-12

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
**RAIL DIVISION**  
 PREPARED BY: **ENGINEERING & SAFETY BRANCH**  
 MAIL: 1556 MAIL SERVICE CENTER RALEIGH, NC 27603-1556  
 DELIVERY: 8601 CAPITAL BOULEVARD RALEIGH, NC 27603  
 PHONE: (919) 715-8803 FAX: (919) 715-8804

PROJECT	U-3459 - KLUMAC ROAD		
TITLE	PROPOSED SIGNING DETAIL		
LOCATION	KLUMAC ROAD (SR 2541) IN SAUSBURY, NC		
DGN BY	GEP	RAILROAD	NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN
DWN BY	GEP	VAL SEC	
CHK BY	TAG	DATE	JULY 2012
		SCALE	
		MILE POST	MP 335.2
			<b>SIGN-7</b>



NO.	BY	DATE	REVISION

*Tyson A. Graves*

7-16-12

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

# RAIL DIVISION

PREPARED BY: **ENGINEERING & SAFETY BRANCH**

MAIL: 1536 MAIL SERVICE CENTER, RALEIGH, NC 27639-1556  
 DELIVERY: 860 CAPITAL BOULEVARD, RALEIGH, NC 27603  
 PHONE: (919) 715-8803  
 FAX: (919) 715-8804

PROJECT U-3459 - KLUMAC ROAD			
TITLE PROPOSED SIGNING DETAIL			
LOCATION	KLUMAC ROAD (SR 2541) IN SALISBURY, NC		
DGN BY	RAILROAD	NORTH CAROLINA RAILROAD/NORFOLK SOUTHERN	MILE POST MP 335.2
DWN BY	VAL SEC		
CHK BY	TAG	DATE JULY 2012	SCALE
			<b>SIGN-8</b>

**Florence & Hutcheson**  
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 5121 Kingdom Way, Raleigh, NC 27607  
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