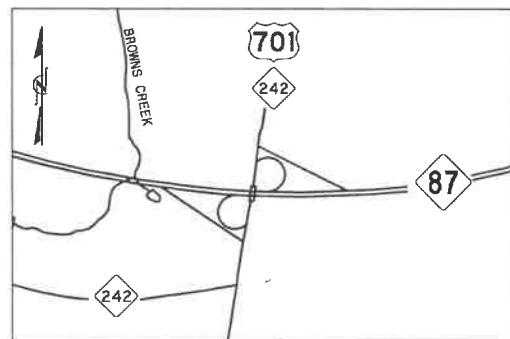


GAS, FOOD AND
LODGING/ATTRACTION SERVICES
NC-87 AT US 701



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOGO SIGNING PLANS
BLADEN COUNTY

LOGO NO.	SHEET NO.
L-06-NC87-US701	SIGN-1
DocuSigned by: Andrew D. Klinksiek	
APPROVED: Andrew D. Klinksiek	
E3D78FB4596E44B...	
DATE: 4/6/2021	
SEAL	

L-06-NC87-US701

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
0000100000	800	MOBILIZATION	1	LS
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATIONS	9	CY
4054000000	902	PLAIN CONCRETE SIGN FOUNDATIONS	1	CY
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	9756	LB
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	12	EA
S	SP	TRAFFIC CONTROL	1	LS

GENERAL NOTES

- SIGNS FURNISHED BY THE STATE.
- CONTRACTOR SHALL OBSERVE: STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DIVISION 9, SECTIONS 900 THRU 907 UNLESS SPECIFICALLY WAIVED BY THE ENGINEER.
- WORK ZONE TRAFFIC CONTROL DEVICES PROVISIONS APPLY.
- SIGN LOCATIONS ARE MARKED IN THE FIELD BY PAINT AND/ OR STAKES. IF PRESENT, STAKES MARK APPROXIMATE LOCATIONS OF SUPPORTS. IT IS INCUMBENT UPON THE CONTRACTOR TO LOCATE SUPPORTS ACCORDING TO ROADWAY STANDARD DRAWING 904.10 AND ALL OTHER APPLICABLE STANDARDS.
- CLEARING MAY BE REQUIRED FOR SIGHT DISTANCE. IF NEEDED, CLEAR VEGETATION ACCORDING TO SECTION 903-3 OF THE SPECIFICATIONS. CLEARING IS INCIDENTAL TO SIGN SUPPORTS.

PAY ITEM NOTES

- 1 SIGN ERECTION, TYPE A (GROUND MOUNTED)

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 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.10	TYPE 'A' SIGNS (SEE SIGN-1A SHEET 1 OF 2)
901.50	ARROWS AND SHIELDS
901.70	SIGN STRINGERS AND SUPPORT SPACING
901.80	SIGN MOUNTING DETAILS - FOR TYPE A AND TYPE B SIGNS
903.10	GROUND MOUNTED SIGN SUPPORTS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES

STATE FURNISHED SIGNS ITEM DESCRIPTIONS	QUANTITY	UNIT
TYPE A SIGNS	1230.00	SF

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-1A	REVISED NCDOT STANDARD DRAWING
SIGN-2	SUPPORT INFORMATION
SIGN-3-6	SIGNING PLAN SHEETS
TCP-1	TRAFFIC CONTROL PLAN

PLANS PREPARED FOR: N.C.D.O.T. SIGNING AND DELINEATION UNIT

MATT SPRINGER, PE SIGNING & DELINEATION STANDARDS ENGINEER
SEAN SIMMONS DIVISION 06 LOGO COORDINATOR



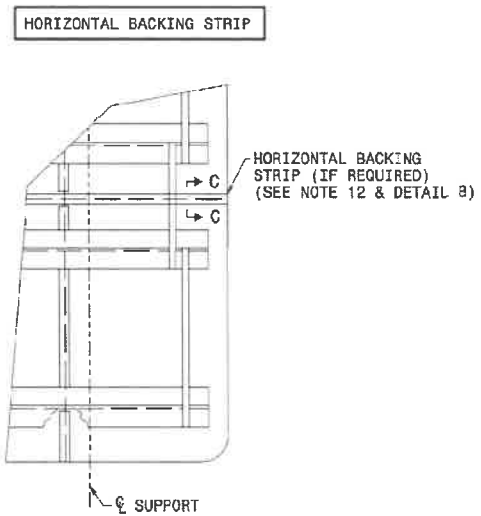
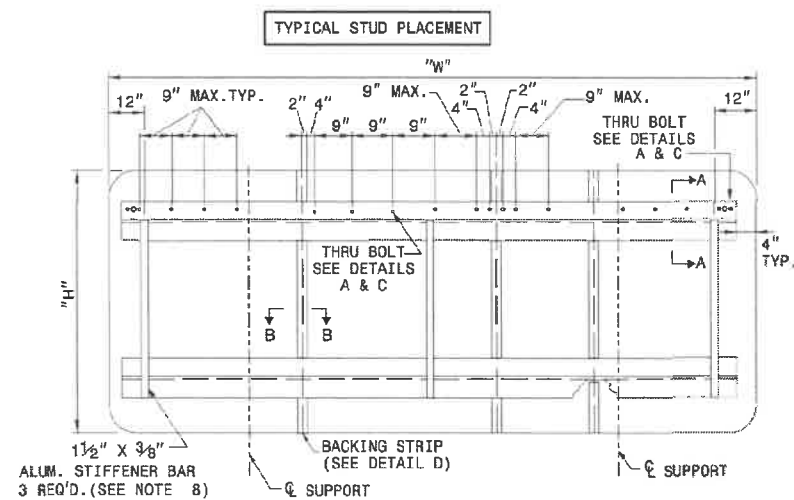
PLANS PREPARED BY :
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 548-8997
C.A. JOHNSON, III, PE SIGNING PROJECT MANAGER
A.D. KLINGSIEK, PE, PTOE SIGNING PROJECT ENGINEER
T.R. TERRELL SIGNING SENIOR DESIGN TECHNICIAN

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

2-19

ENGLISH DETAIL DRAWING FOR
TYPE 'A' SIGNS
WELED STUD CONSTRUCTION

SHEET 1 OF 2
901D10



NOTES:

1. USE THE NUMBER AND SIZE OF SUPPORTS SHOWN ON THE SUPPORT CHART IN PROJECT PLANS.
2. FABRICATE SIGN PANEL SECTIONS WITH SHEETS 4'-0" WIDE. WHEN FABRICATING SIGNS WHICH ARE NOT MULTIPLES OF 4'-0" IN WIDTH, DO NOT CUT MORE THAN TWO SHEETS TO LESS THAN 4'-0" IN WIDTH. THESE PANELS SHALL NOT BE LESS THAN 1'-0" IN WIDTH.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, FOR TYPE OF MATERIAL TO BE USED FOR SIGN PANELS, HANGER ASSEMBLIES, AND SUPPORTS.
4. USE GALVANIZED STEEL FOR BACKING PLATES AND MOUNTING BOLTS.
5. SEE ROADWAY STANDARD 904.20 WHEN TYPE "B" SECONDARY SIGN MOUNTING IS REQUIRED.
6. DETAILS FOR TYPE "A" SECONDARY SIGNS SHALL BE THE SAME AS FOR TYPE "A" SIGNS.
7. THE VERTICAL DIMENSION BETWEEN PRIMARY AND SECONDARY SIGNS IS TWO (2) INCHES.
8. ADJUST STIFFENERS TO AVOID CONFLICT WITH SUPPORTS.
9. SEE ROADWAY STANDARD 901.70 FOR SUPPORT AND "Z" BAR SPACING.
10. FABRICATE SIGNS TALLER THAN 12'-0" AS TWO SEPARATE SIGNS WITH A HORIZONTAL SPLICE. LOCATE STRINGERS ON EACH SECTION OF THE SIGN BY THE SIGN STRINGER CHART. (SEE ROADWAY STANDARD 901.70)
11. FABRICATE SIGNS TALLER THAN 12'-0" BUT SHORTER THAN 14'-6" WITH A HORIZONTAL SPLICE LOCATED 7'-0" FROM BOTTOM OF SIGN.
12. FABRICATE SIGNS 14'-6" TALL AND TALLER WITH A HORIZONTAL SPLICE. LOCATE THE SPLICE AT LEAST HALF OF THE SIGN HEIGHT FROM THE BOTTOM AND AT LEAST 7'-0" FROM THE TOP.
13. THERE SHALL ONLY BE A 1/8" GAP BETWEEN THE VERTICAL BACKING STRIP AND THE "Z" BAR.
14. SEE ROADWAY STANDARD 901.80 FOR DETAILS SHOWING SIGN MOUNTING TO SUPPORTS.
15. PLACE NYLON WASHER UNDER HEAD OF 3/8" THRU BOLTS.
16. FABRICATE EACH SIGN WITH 3/8" DIA. THRU BOLT, 4" FROM EACH END OF EACH "Z" BAR THRU SIGN PANEL AND "Z" BAR, SEE DETAILS A & C.
17. FABRICATE EACH SIGN WITH 3/8" DIA. THRU BOLT CENTERED IN EACH PANEL THRU THE TOP AND BOTTOM "Z" BAR, CENTERED THRU BOLT REQUIRED IN END PANELS GREATER THAN 2'-0" WIDE. SEE DETAILS A & C.
18. THRU BOLTS WILL HAVE A MINIMUM 1/8" TO MAXIMUM 1/2" GAP

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

2-19

ENGLISH DETAIL DRAWING FOR
TYPE 'A' SIGNS
WELED STUD CONSTRUCTION

SHEET 1 OF 2
901D10


TIP NO.	SHEET NO.
DocuSigned by: <i>Matthew V. Springs</i>	
APPROVED: 3/21/2019	DocuSigned by: <i>Andrew D. Klinski</i>
DATE: 3/21/2019	E3D78FB4596E44B...
SEAL	



LOGO NO.	SHEET NO.
L-06-NC87-US701	SIGN-1A
DocuSigned by: <i>Andrew D. Klinski</i>	
APPROVED: Andrew D. Klinski	E3D78FB4596E44B...
DATE: 4/6/2021	
SEAL	



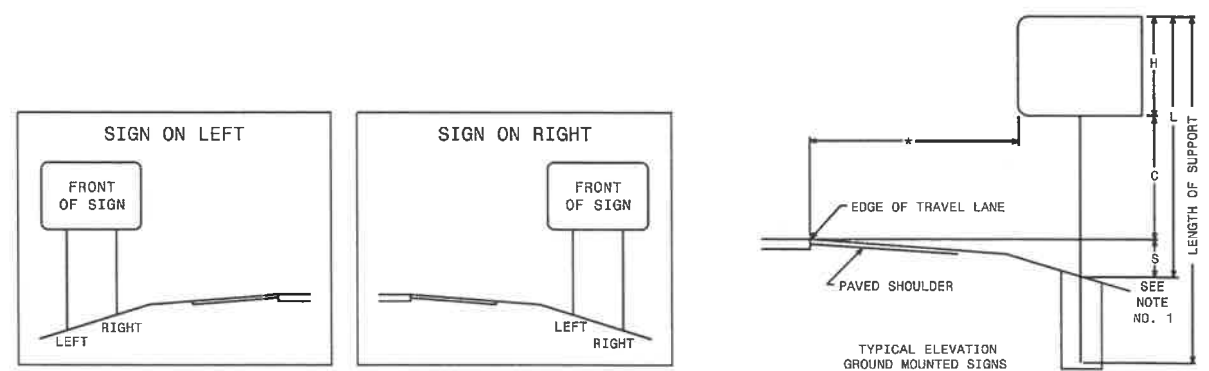
REVISED SIGNING
ROADWAY STANDARD DRAWING

LOGO NO.	SHEET NO.
L-06-NC87-US701	SIGN-2
DocuSigned by: Andrew D. Klinksieck E3D78FB4596E44B... DATE: 4/6/2021	
	

Version: 3.1 Posted: 6/2/2017

NUMBER	TYPE	SIGN SIZE (in.)			ROADWAY STATION	NUMBER OF SUPPORTS	BEAM SECTION	SUPPORT TYPE BA or S	OMNI COUPLER	ATTACHMENT METHOD	MOUNTING METHOD	HORIZONTAL CLEARANCE* (ft.)	SUPPORT SPACING	LENGTH (ft)			LEFT SUPPORT (ft)			CENTER SUPPORT (ft)			RIGHT SUPPORT (ft)			SUPPORT WEIGHTS		FOOTINGS				FIELD VERIFIED (mm/dd/yy)
		w	x	h										SNS HT "H"	MTG HT "C"	EMBED-MENT	S	L	LENGTH	S	L	LENGTH	S	L	LENGTH	B/A (lbs.)	SIMPLE (lbs.)	DIAMETER (ft.)	DEPTH (ft.)	REINFORCED (c.y.)	PLAIN (c.y.)	
		101	A	180										x	138	NC-87 SB	2	W10x26	BA	N/A	N/A	N/A	30.00	8.79	11.50	7.00	4.5	6.00	24.50	29.00	0.00	
102	A	180	x	120	NC-87 SB	2	W8x18	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.5	3.60	20.60	25.10	0.00	0.00	0.00	0.40	17.40	21.90	986.00	0	2.0	5	1.16	0.00	3/12/2021
103	A	180	x	120	NC-87 SB	2	W6x16	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.5	2.70	19.70	24.20	0.00	0.00	0.00	2.30	19.30	23.80	862.00	0	1.5	5	0.65	0.00	3/12/2021
104	A	90	x	84	SB Ramp	2	S4x7.7	BA	N/A	N/A	N/A	18.00	4.40	7.00	7.00	3.5	1.90	15.90	19.40	0.00	0.00	0.00	2.50	16.50	20.00	343.38	0	1.0	4	0.00	0.23	3/12/2021
105	A	90	x	72	SB Ramp	2	S4x7.7	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.5	1.60	14.60	18.10	0.00	0.00	0.00	2.50	15.50	19.00	325.67	0	1.0	4	0.00	0.23	3/12/2021
106	A	90	x	72	SB Ramp	2	S4x7.7	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.5	1.60	14.60	18.10	0.00	0.00	0.00	2.50	15.50	19.00	325.67	0	1.0	4	0.00	0.23	3/12/2021
107	A	90	x	84	NB Ramp LT	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	7.00	7.00	3.0	3.00	17.00	20.00	0.00	0.00	0.00	2.20	16.20	19.20	416.80	0	1.5	3.5	0.46	0.00	3/12/2021
108	A	90	x	72	NB Ramp LT	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.0	3.60	16.60	19.60	0.00	0.00	0.00	2.40	15.40	18.40	406.00	0	1.5	3.5	0.46	0.00	3/12/2021
109	A	90	x	72	NB Ramp LT	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.0	3.50	16.50	19.50	0.00	0.00	0.00	2.40	15.40	18.40	405.10	0	1.5	3.5	0.46	0.00	3/12/2021
110	A	180	x	138	NC-87 NB	2	W8x21	BA	N/A	N/A	N/A	30.00	8.79	11.50	7.00	4.5	4.00	22.50	27.00	0.00	0.00	0.00	5.90	24.40	28.90	1319.90	0	2.0	5	1.16	0.00	3/12/2021
111	A	180	x	120	NC-87 NB	2	W8x18	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.5	3.50	20.50	25.00	0.00	0.00	0.00	4.90	21.90	26.40	1065.20	0	2.0	5	1.16	0.00	3/12/2021
112	A	180	x	120	NC-87 NB	2	W10x22	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.0	5.70	22.70	26.70	0.00	0.00	0.00	7.60	24.60	28.60	1454.60	0	2.5	4.5	1.64	0.00	3/12/2021

TOTAL	TOTAL	TOTAL	TOTAL
9755.52	0.00	8.97	0.70
USE:	9756.00	0.00	9.00
		1.00	

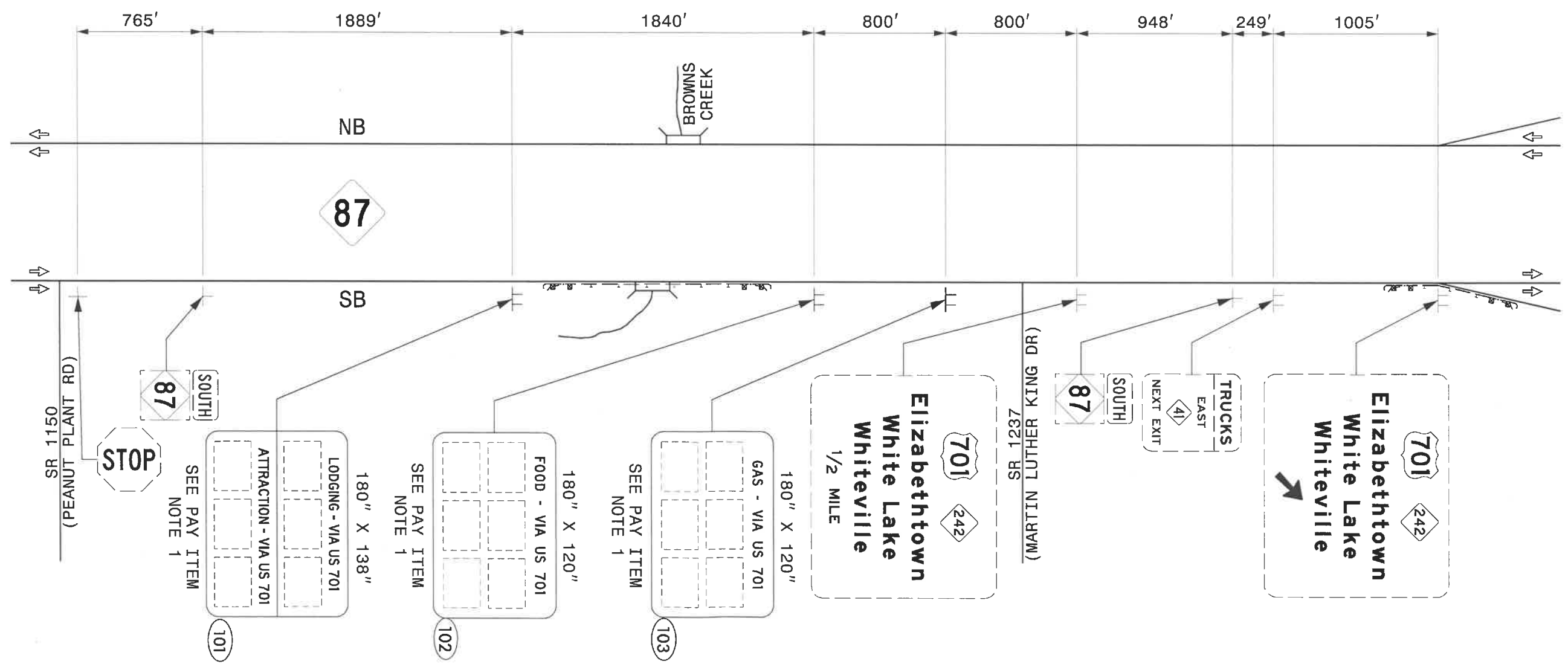


- NOTES
- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF TRAVEL LANE.
 - PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.
 - SIGN LOCATIONS ARE MARKED IN THE FIELD BY PAINT AND/OR STAKES. IF PRESENT, FIELD STAKES MARK APPROXIMATE LOCATIONS OF SUPPORTS. IT IS INCUMBENT UPON THE CONTRACTOR TO LOCATE SUPPORTS ACCORDING TO ROADWAY STANDARD DRAWING 904.1 AND ALL OTHER APPLICABLE STANDARDS.

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**TYPE A AND B
GROUND MOUNTED SIGNS**

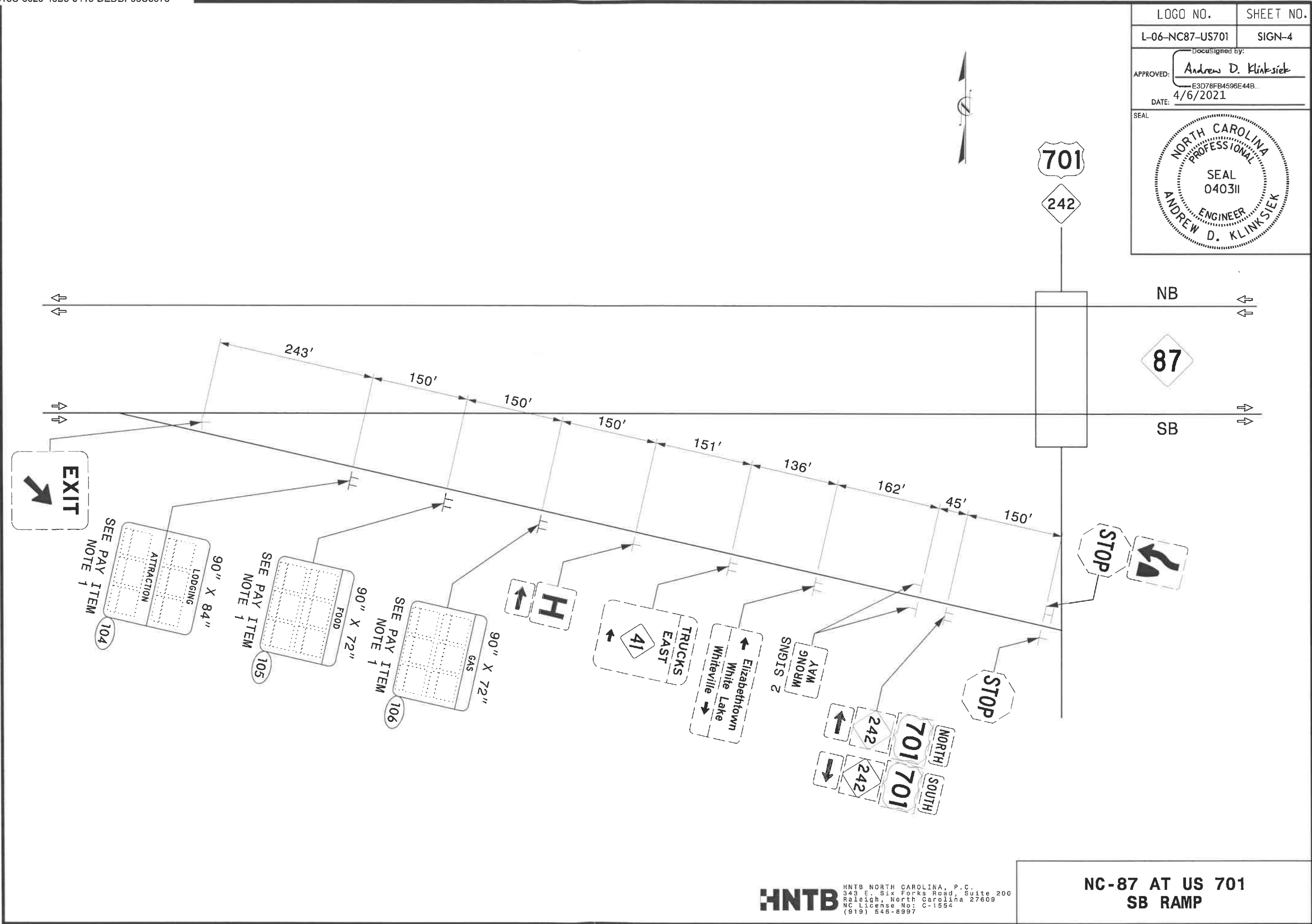
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L-06-NC87-US701	SIGN-1
DocuSigned by: Andrew D. Klinksiek	
APPROVED: Andrew D. Klinksiek E3D78FB4596E44B...	
DATE: 4/6/2021	
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**NC-87 AT US 701
 SB MAINLINE**

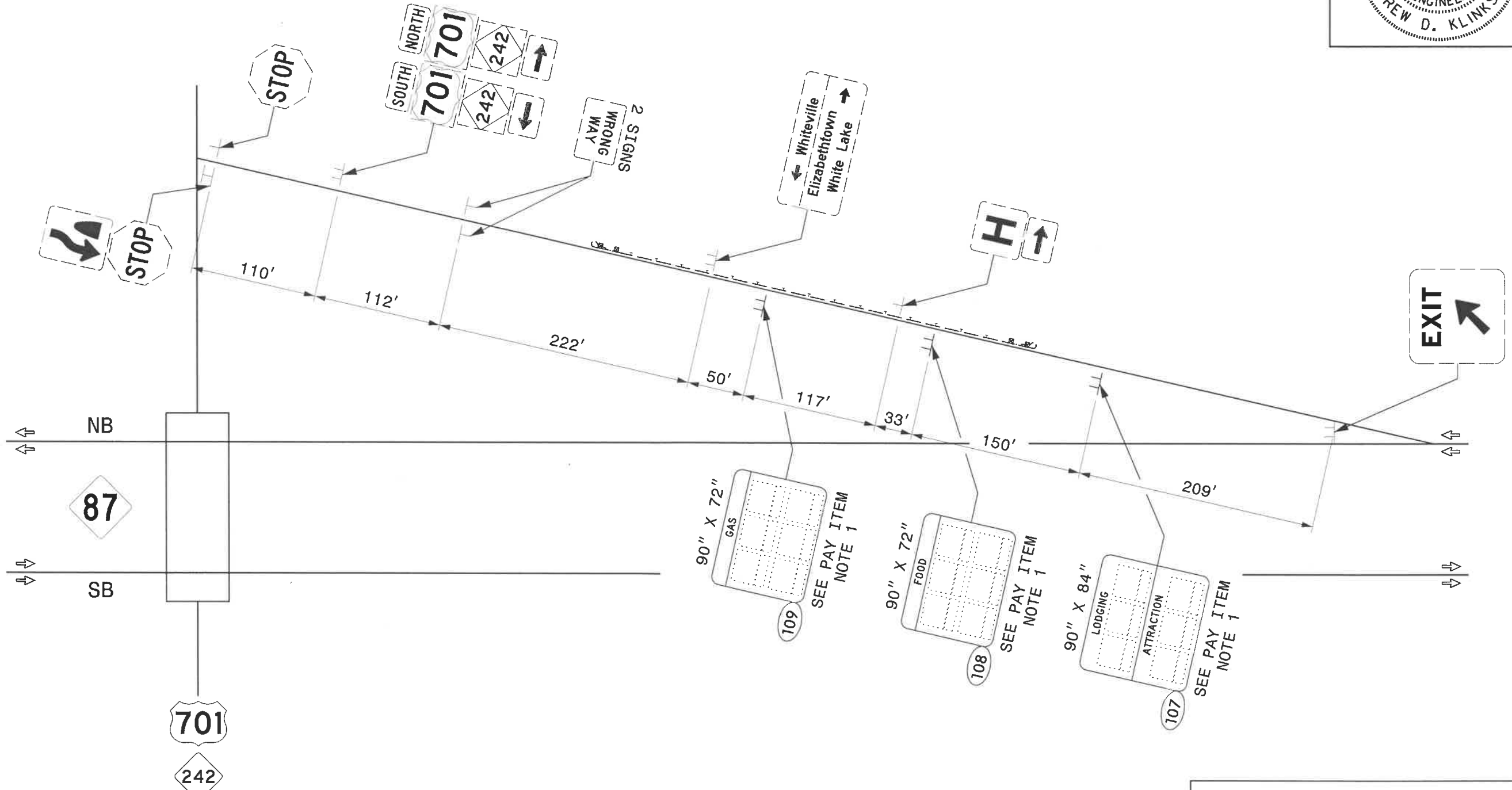
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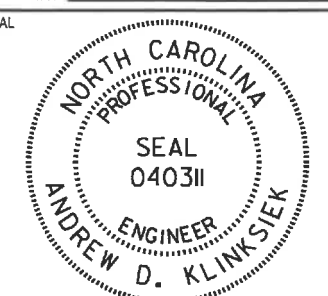
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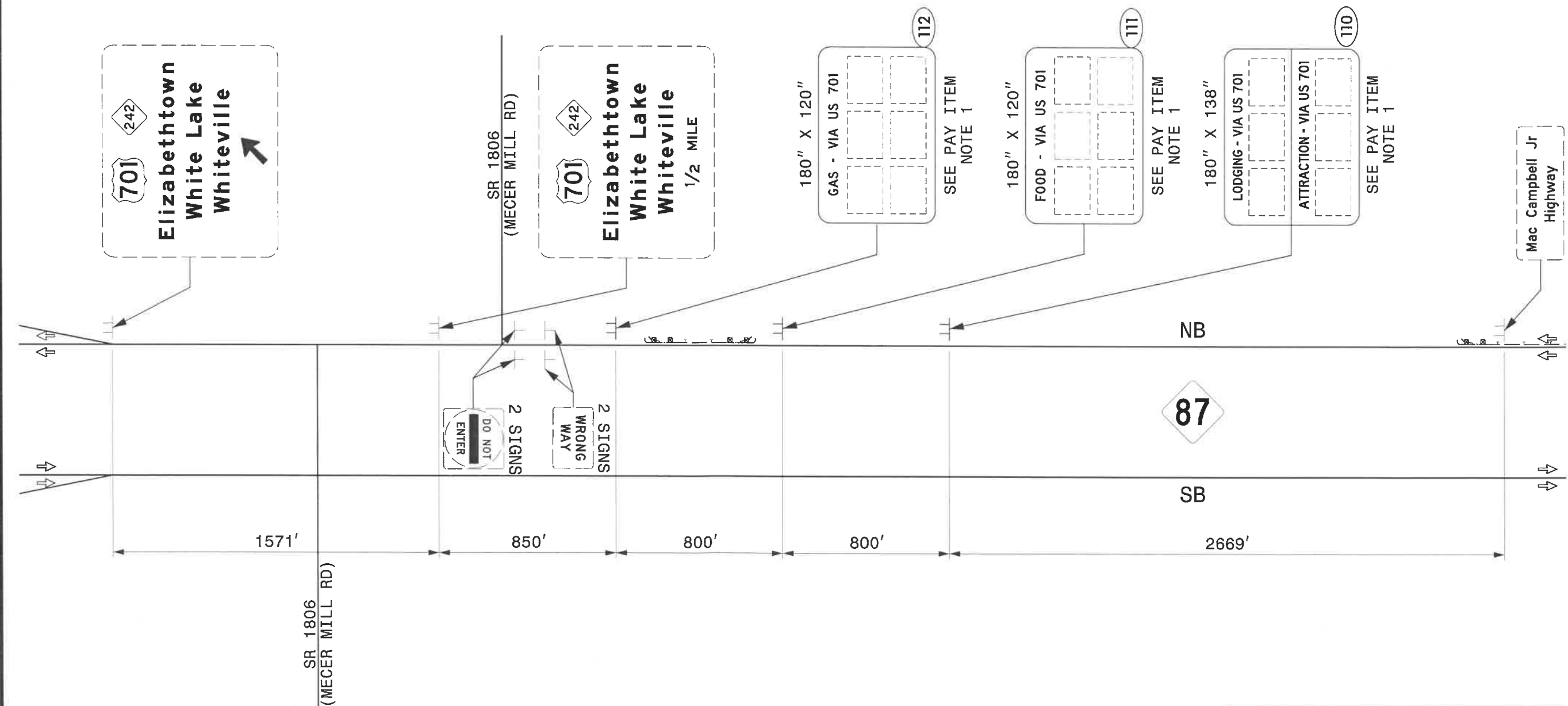
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DocuSigned by: Andrew D. Klinksiek	
APPROVED:	E3D78FB4596E44B...
DATE:	4/6/2021
SEAL	



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 343 E. SIX FORKS ROAD, SUITE 200
 RALEIGH, NORTH CAROLINA 27609
 NC LICENSE NO. C-1554
 (919) 446-8997


**NC-87 AT US 701
 NB RAMP**

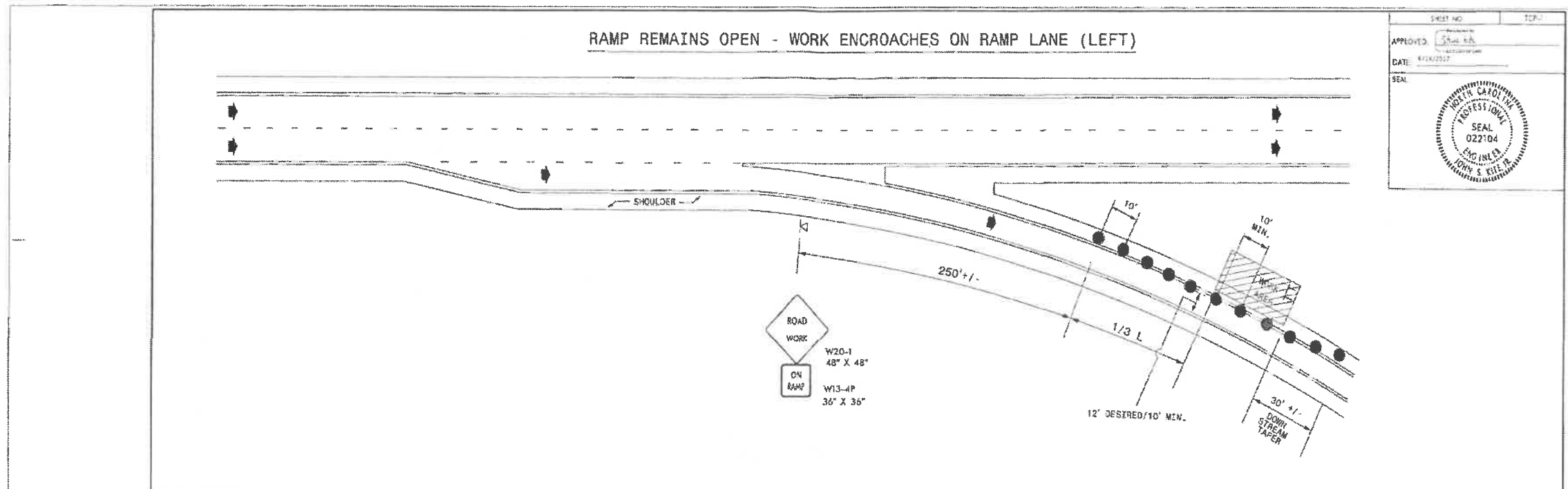
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DocuSigned by: <i>Andrew D. Klinski</i>	
APPROVED:	E3D78FB4596E44B...
DATE:	4/6/2021
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**NC-87 AT US 701
 NB MAINLINE**

LOGO NO.	SHEET NO.
L-06-NC87-US701	TCP-1
DocuSigned by: Andrew D. Klinksiek	
APPROVED: Andrew D. Klinksiek	
E3D78FB4596E44B...	
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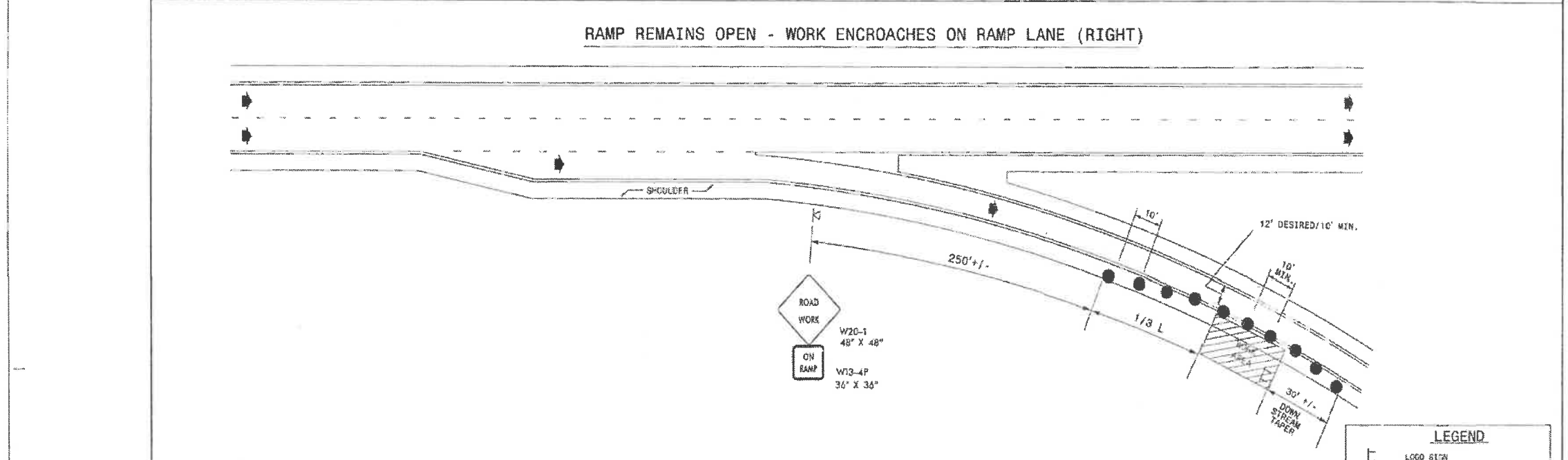


SHEET NO. TCP-1

APPROVED: 

DATE: 4/6/2021

SEAL



- GENERAL NOTES**
- REFER TO MUTCD SECTION 6F.25 FOR SIGN W13-4P GUIDANCE.
 - SIGNS SHALL NOT BE DISPLAYED WHEN WORK IS NOT IN EFFECT.
 - THE CONTRACTOR SHALL NOT CROSS MEDIANS, RAMPS, OR LOOPS WITH WORK VEHICLES UNLESS A LOCATION HAS BEEN APPROVED BY THE ENGINEER.
 - REFER TO ROADWAY STANDARD DRAWING 1101.11, SHEET 1 OF 4. USE 1/2 POSTED MAINLINE SPEED FOR (S) VALUE. USE THE LANE ENCOACHMENT DISTANCE AS THE LATERAL WIDTH (W) TO DETERMINE "L".

LEGEND

-  LOGO SIGN
-  DRUM
-  PORTABLE SIGN
-  DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL ON RAMP FOR LOGO SIGN INSTALLATION