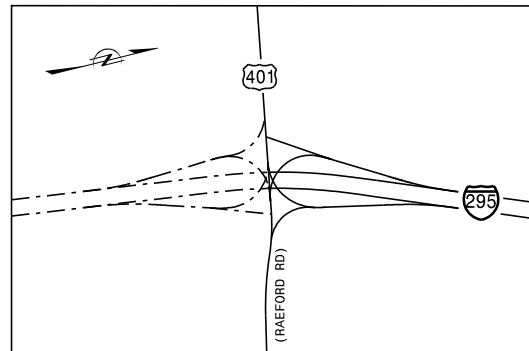


GAS AND FOOD SERVICES
I-295 AT US 401 (RAEFORD RD)
EXIT 12 (SOUTHBOUND ONLY)



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOGO SIGNING PLANS
CUMBERLAND COUNTY

LOGO NO. L-06-I295-E12	SHEET NO. SIGN-1
DocuSigned by: Andrew D. Klinksiek	
APPROVED: E3D78FB4596E44B...	
DATE: 2/8/2021	
SEAL	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

L-06-I295-E12

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
0000100000	800	MOBILIZATION	1	LS
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATIONS	4	CY
4054000000	902	PLAIN CONCRETE SIGN FOUNDATIONS	1	CY
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	3925	LB
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	6	EA
S	SP	TRAFFIC CONTROL	1	LS

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 SHEET SIGN-1A, SHEET 1 OF 2)
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

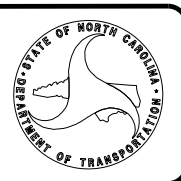
PAY ITEM NOTES

1 SIGN ERECTION, TYPE A (GROUND MOUNTED)

STATE FURNISHED SIGNS ITEM DESCRIPTIONS	QUANTITY	UNIT
TYPE A SIGNS	615.0	SF

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) 546-8997

C.A. JOHNSON, III, PE SIGNING PROJECT MANAGER
 A.D. KLINGSIEK, PE, PTOE SIGNING PROJECT ENGINEER
 T.R. TERRELL SIGNING SENIOR DESIGN TECHNICIAN

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-1A	REVISED NCDOT STANDARD DRAWING
SIGN-2	SUPPORT INFORMATION
SIGN-3-4	SIGNING PLAN SHEETS
TCP-1	TRAFFIC CONTROL PLAN

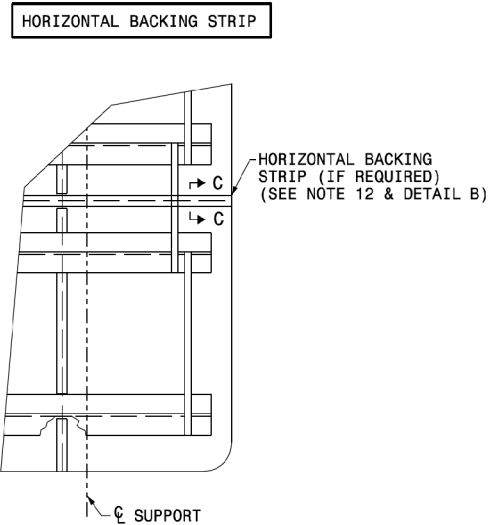
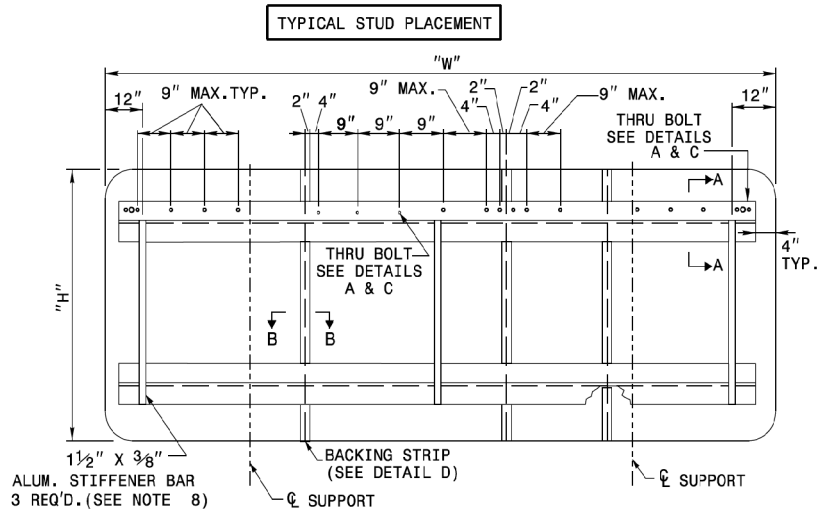
03/20/19 Standard Group\Standards and Drawings\Drawings\2018 Standard Dwg\Division 9 Final\901D10_sgn_sht1.dwg a sign_2-19.dgn User:dfokes

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

2-19

ENGLISH DETAIL DRAWING FOR
TYPE 'A' SIGNS
WELDED 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 1/16" TO MAXIMUM 1/8" GAP

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

2-19

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

SHEET 1 OF 2
901D10

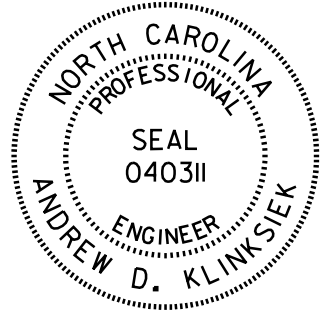
**REVISED SIGNING
ROADWAY STANDARD DRAWING**

TIP NO.	SHEET NO.
DocuSigned by: <i>Matthew V. Springer</i>	
APPROVED: 3/21/2019	BC00FEE6B584403...
DATE:	
SEAL	

LOGO NO. L-06-1295-E12	SHEET NO. SIGN-1A
DocuSigned by: <i>Andrew D. Klinskiak</i>	
APPROVED: E3D78FB4596E44B...	
DATE: 2/8/2021	
SEAL	

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

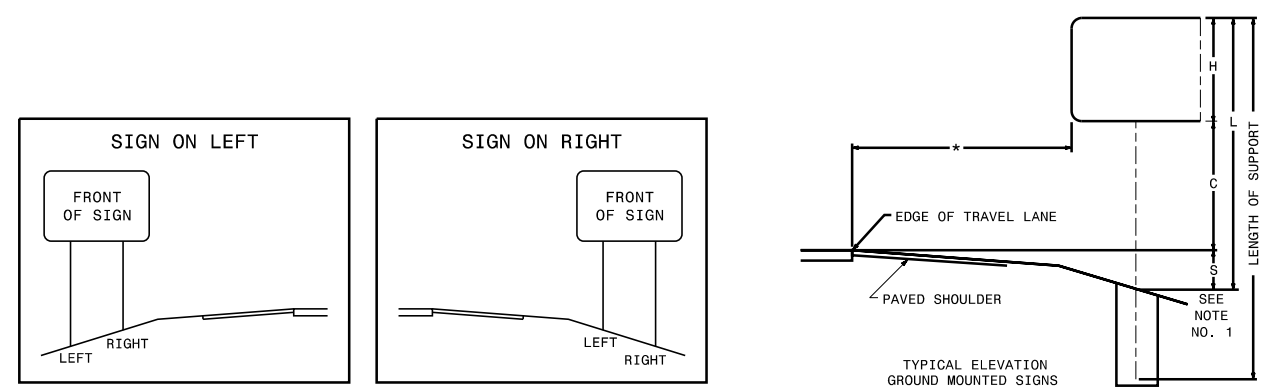
**REVISED NCDOT STANDARD
DRAWING**

LOGO NO. L-06-1295-E12	SHEET NO. SIGN-2
DocuSigned by: Andrew D. Klinskiak E3D78FB4596E44B...	
APPROVED: Andrew D. Klinskiak DATE: 2/8/2021	
	
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Version: 3.1 Posted: 6/2/2017

SIGN					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)
NUMBER	TYPE	SIZE (in.)												SNS HT	MTG HT	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.)	
		w	x	h																												
101	A	90	x	84	SB Ramp	2	S4x7.7	BA	N/A	N/A	N/A	18.00	4.40	7.00	7.00	3.0	1.20	15.20	18.20	0.00	0.00	0.00	1.90	15.90	18.90	325.67	0	1.0	3.5	0.00	0.20	12/15/2020
102	A	90	x	72	SB Ramp	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.0	2.30	15.30	18.30	0.00	0.00	0.00	3.10	16.10	19.10	400.60	0	1.5	3.5	0.46	0.00	12/15/2020
103	A	90	x	72	SB Ramp	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.0	1.70	14.70	17.70	0.00	0.00	0.00	3.00	16.00	19.00	394.30	0	1.5	3.5	0.46	0.00	12/15/2020
104	A	180	x	138	I-295 SB	2	W8x18	BA	N/A	N/A	N/A	29.00	8.79	11.50	7.00	4.5	3.80	22.30	26.80	0.00	0.00	0.00	4.80	23.30	27.80	1122.80	0	2.0	5	1.16	0.00	12/15/2020
105	A	180	x	120	I-295 SB	2	W6x16	BA	N/A	N/A	N/A	35.00	8.79	10.00	7.10	4.5	2.20	19.30	23.80	0.00	0.00	0.00	-0.10	17.00	21.50	818.80	0	1.5	5	0.65	0.00	12/15/2020
106	A	180	x	120	I-295 SB	2	W6x16	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.5	2.30	19.30	23.80	0.00	0.00	0.00	2.70	19.70	24.20	862.00	0	1.5	5	0.65	0.00	12/15/2020

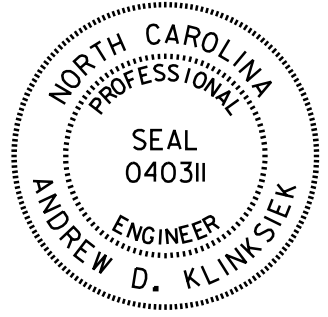
TOTAL	TOTAL	TOTAL	TOTAL
3924.17	0.00	3.39	0.20
USE:	3925.00	0.00	4.00 1.00

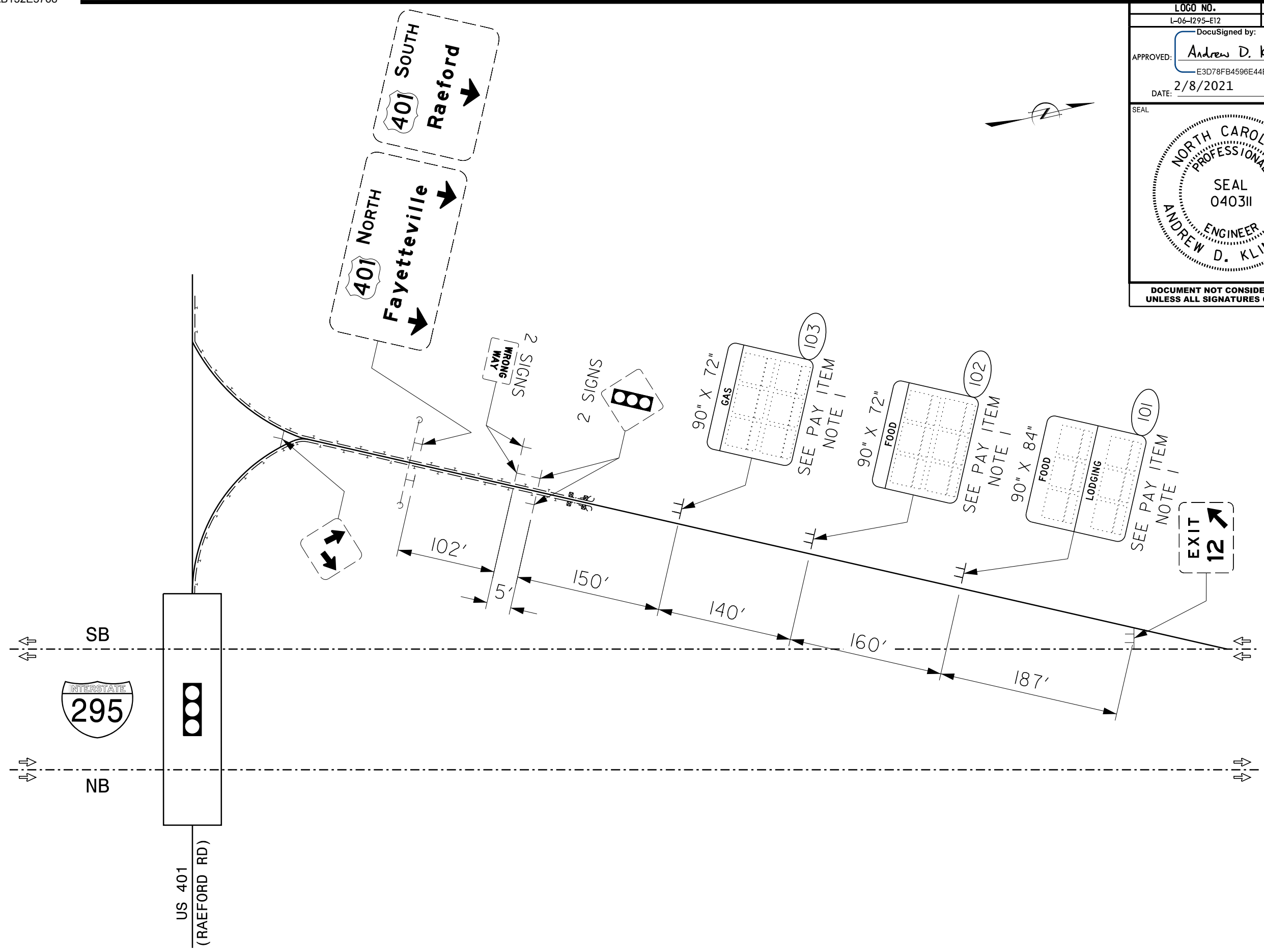


- NOTES
1. DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF TRAVEL LANE.
 2. PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.
 3. 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.

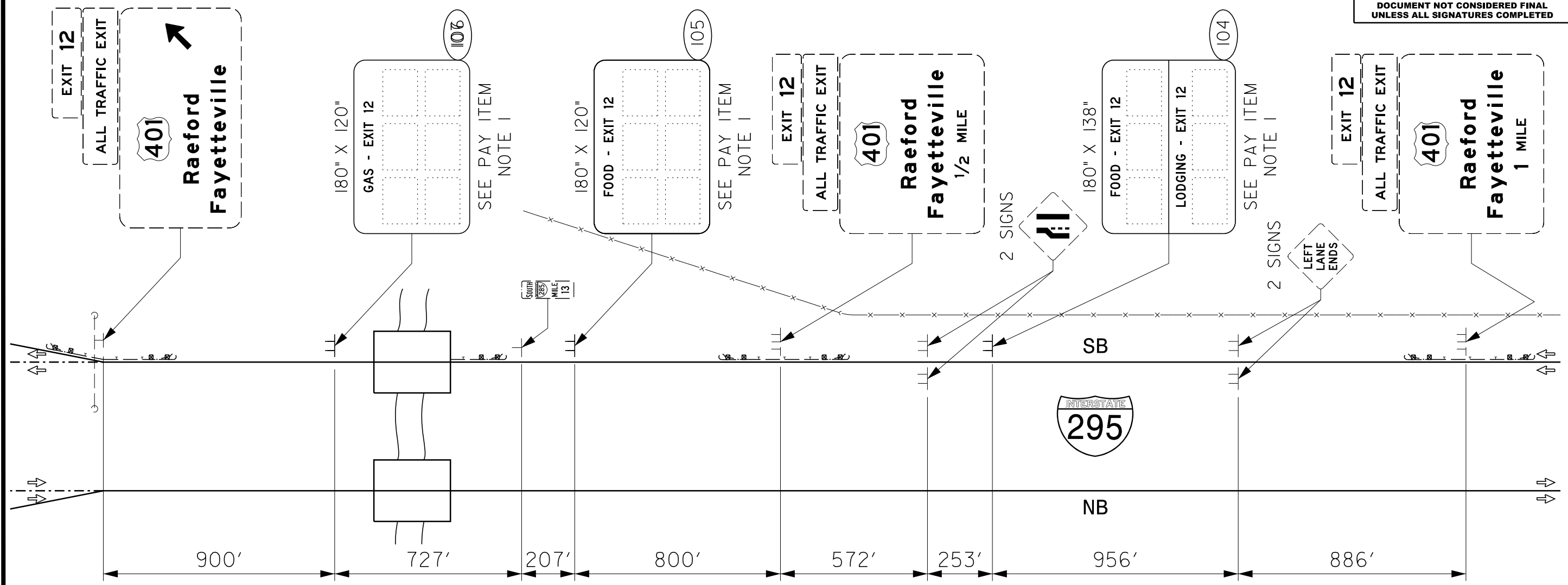
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

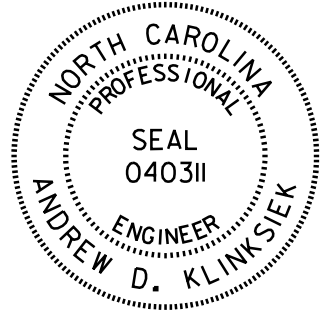
**TYPE A AND B
GROUND MOUNTED SIGNS**

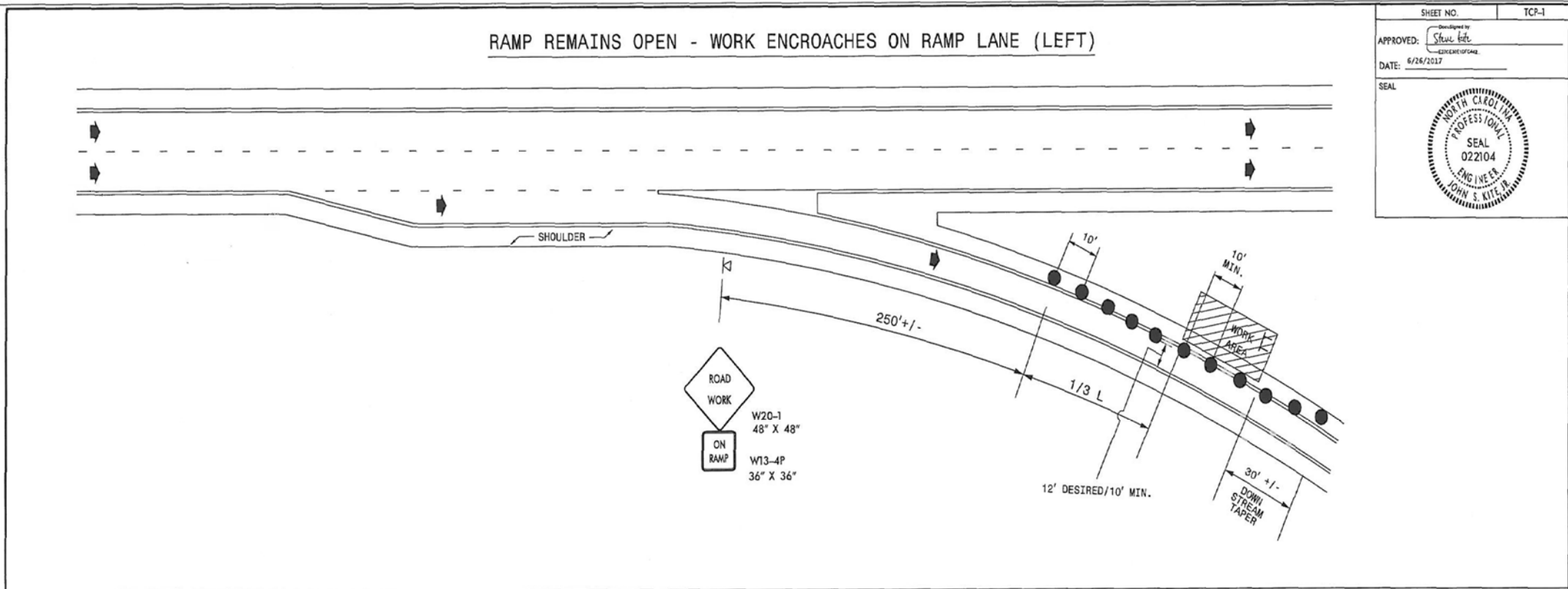
LOGO NO. L-06-1295-E12	SHEET NO. SIGN-3
DocuSigned by: Andrew D. Klinksiek E3D78FB4596E44B...	
APPROVED: Andrew D. Klinksiek	
DATE: 2/8/2021	
	
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LOGO NO. L-06-1295-E12	SHEET NO. SIGN-4
DocuSigned by: Andrew D. Klinskiak E3D78FB4596E44B...	
APPROVED: Andrew D. Klinskiak	
DATE: 2/8/2021	
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LOGO NO. L-06-1295-E12	SHEET NO. TCP-1
DocuSigned by: Andrew D. Klinskiak E3D78FB4596E44B...	
APPROVED: Andrew D. Klinskiak	
DATE: 2/8/2021	
SEAL	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

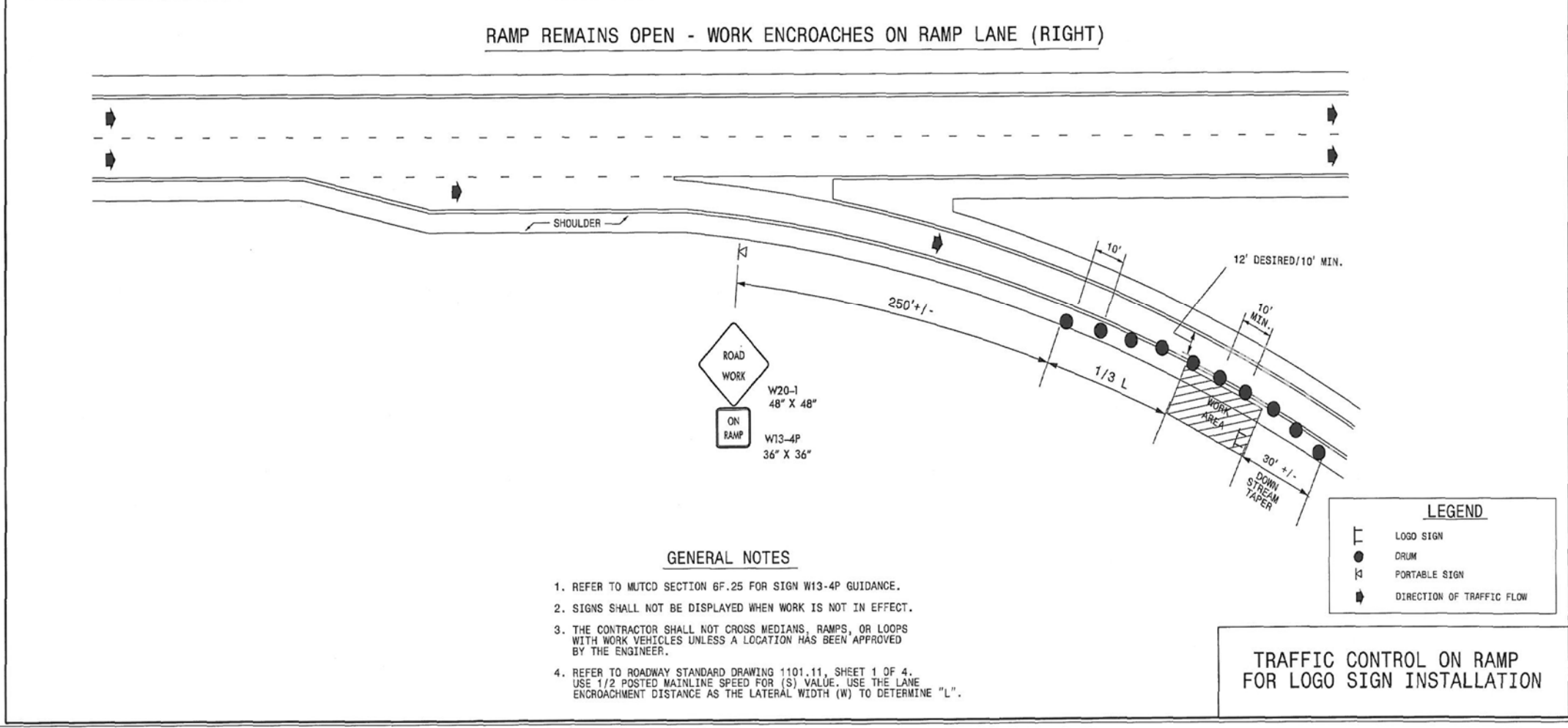


SHEET NO. TCP-1

APPROVED: 
DATE: 6/26/2017

SEAL

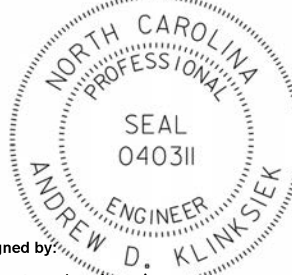




L-06-I295-E12

SIGN PANEL DESIGNS

February 8, 2021



DocuSigned by:
Andrew D. Klinksiek
E3D78FB4596E44B...

2/8/2021

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UNLESS ALL SIGNATURES COMPLETED

Designs Prepared and Approved by:

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, NC 27609
C-1554

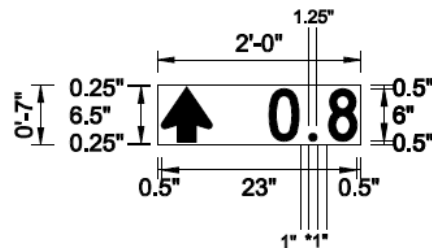
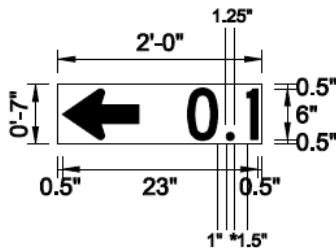
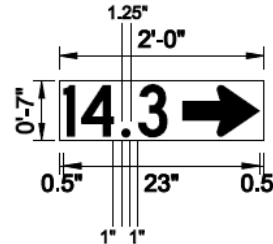
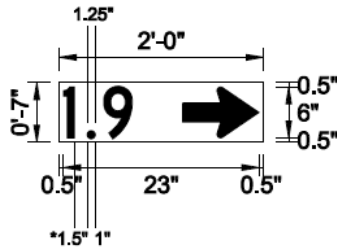
Signing Design Technician – T.R. Terrell
Signing Engineer – A.D. Klinksiek, P.E.

NCDOT Standard for Logo Mileage Panels Mounted under Business Panels on Ramp Logo Signs

THIS MILEAGE PANEL DESIGN STANDARD SHALL BE USED ON LOGO RAMP SIGNS. THE FOLLOWING DESIGN REQUIREMENTS SHALL APPLY:

1. PANEL SHALL BE .032" ALUMINUM
2. USE MINIMUM GRADE C SHEETING
3. USE 6"C WHITE NUMBERS
4. USE 9" X 6" STANDARD WHITE ARROW;
EXCEPT MODIFY TO 6.5" X 6 FOR THROUGH (UP) ARROW
5. PANEL SHALL HAVE BLUE BACKGROUND
6. PLACE LEGEND AND ARROW .5" FROM EACH END OF PANEL
7. PLACE VERTICAL ARROW .25" FROM TOP AND BOTTOM OF PANEL
8. DECIMAL SHALL BE 1.25" DIAMETER WITH 1" SPACING LEFT AND RIGHT OF DECIMAL, EXCEPT WHEN USING NUMBER 1, AT WHICH TIME SPACING SHALL BE 1.5" LEFT OR RIGHT OF DECIMAL
(SEE * ON EXAMPLE DESIGNS)
9. MILEAGE SHALL BE SHOWN TO THE NEAREST TENTH

EXAMPLE DESIGNS:



REVISED 4/7/08

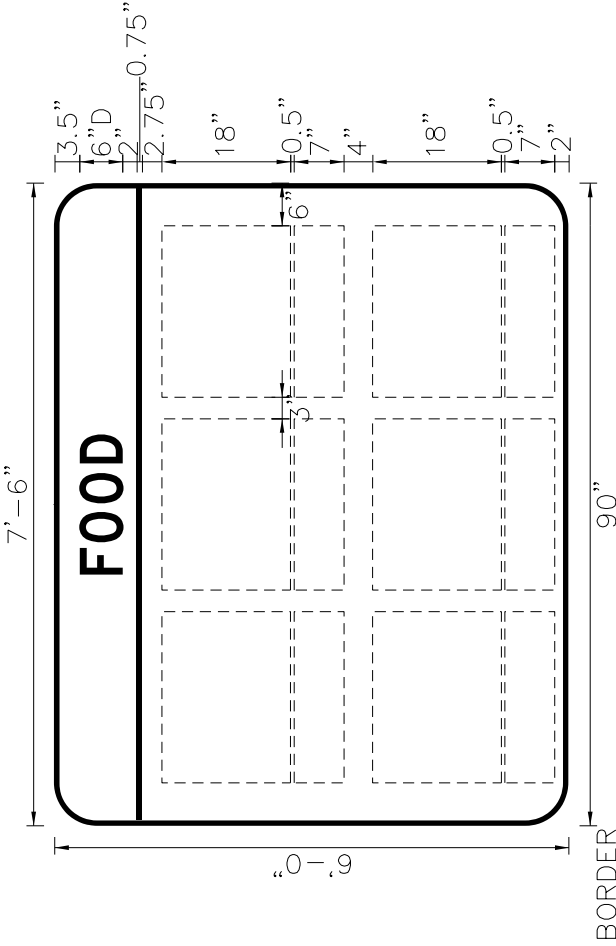
Sign Panel Designs

L-06-l295-E12

Number of Signs	Sign Number	Original Date	Revision Date	Revision Date	Revision Date	Revision Date
1)	101	12-2020				
2)	102	12-2020				
3)	103	12-2020				
4)	104	12-2020				
5)	105	12-2020				
6)	106	12-2020				
7)						
8)						
9)						
10)						
11)						
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29)						
30)						
31)						
32)						
33)						
34)						
35)						
36)						

Signing Design Technician – T.R. Terrell
Signing Engineer – A.D. Klinksiek, P.E.

SIGN NUMBER: 102
TYPE: A
QUANTITY: 1
BACKG COLOR: Blue
COPY COLOR: White
DESIGN BY: TRT
CHECKED BY: ADK/CAJ
PROJECT ID: L-06-1295-E12
DIV: 06
DATE: December 2020



BORDER
R=6"
TH=0.75"

Spacing Factor is 1 unless specified otherwise

SYMBOL	X	Y	WID	HT
24x18_24x7	6	31.5	24	25.5
24x18_24x7	33	31.5	24	25.5
24x18_24x7	60	31.5	24	25.5
24x18_24x7	6	2	24	25.5
24x18_24x7	33	2	24	25.5
24x18_24x7	60	2	24	25.5

MAT'L: 0.125" ALUMINUM

NO. Z BARS: 2
LENGTH: 82.0

NOTES:

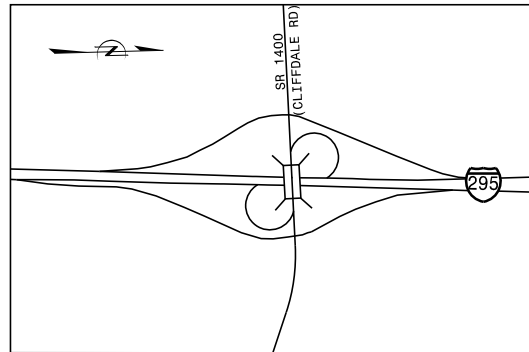
1. Legend and border shall be direct applied
2. Grade C reflective sheeting.
3. Background shall be Grade C reflective sheeting.
3. See NCDOT Standard for Logo Mileage Panels mounted under Business Panels.

LETTER POSITIONS

				Series/Size	Text Length
F	O	O	D	D	2000
35.2	4.5	5.5	5.6	4.1	35.2
					19.6

Letter spacings are to start of next letter

GAS AND FOOD SERVICES
 I-295 AT
 SR 1400 (CLIFFDALE RD)
 EXIT 15



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION

LOGO SIGNING PLANS
 CUMBERLAND COUNTY

LOGO NO. L-06-I295-E15	SHEET NO. SIGN-1
DocuSigned by: Andrew D. Klinksiek	
APPROVED: Andrew D. Klinksiek	
E3D78FB4596E44B...	
DATE: 2/8/2021	
SEAL	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

L-06-I295-E15

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
0000100000	800	MOBILIZATION	1	LS
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATIONS	6	CY
4054000000	902	PLAIN CONCRETE SIGN FOUNDATIONS	1	CY
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	6019	LB
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	8	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)
901.70	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.....	840.00	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



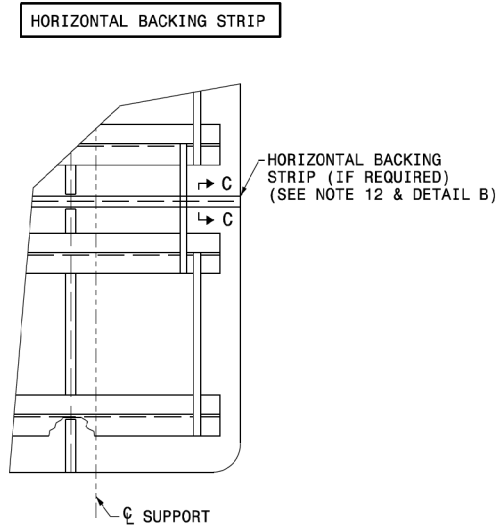
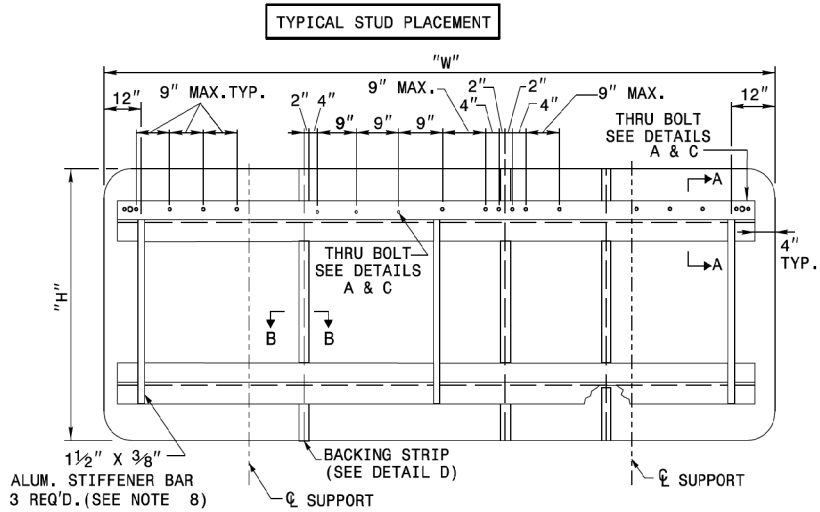
PLANS PREPARED BY :
HNTB
 HNTB NORTH CAROLINA, P.C.
 343 E. Six Forks Road, Suite 200
 Raleigh, North Carolina 27609
 NC License No: C-1554
 (919) 546-8997
 C.A. JOHNSON, III, PE SIGNING PROJECT MANAGER
 A.D. KLINGSIEK, PE, PTOE SIGNING PROJECT ENGINEER
 T.R. TERRELL SIGNING SENIOR DESIGN TECHNICIAN

03/20/19 Standards Group\Standards and Drawings\Drawings\2008 Standard Dwg\Division 9 Final\0901010_sgn_sht1.dgn

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

ENGLISH DETAIL DRAWING FOR
TYPE 'A' SIGNS
WELDED 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 1/16" TO MAXIMUM 1/8" GAP

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
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ENGLISH DETAIL DRAWING FOR
TYPE 'A' SIGNS
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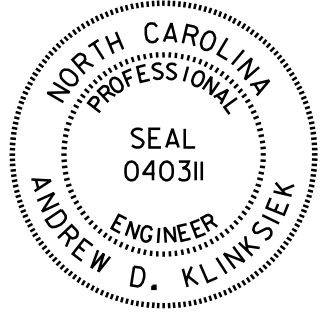
SHEET 1 OF 2
901D10

**REVISED SIGNING
ROADWAY STANDARD DRAWING**

TIP NO.	SHEET NO.
DocuSigned by: <i>Matthew V. Spring</i>	
APPROVED:	3/21/2019
DATE:	BC60FEE6B584403...
SEAL	

LOGO NO. L-06-1295-E15	SHEET NO. SIGN-1A
DocuSigned by: <i>Andrew D. Klinskiak</i>	
APPROVED:	Andrew D. Klinskiak
DATE:	2/8/2021
SEAL	
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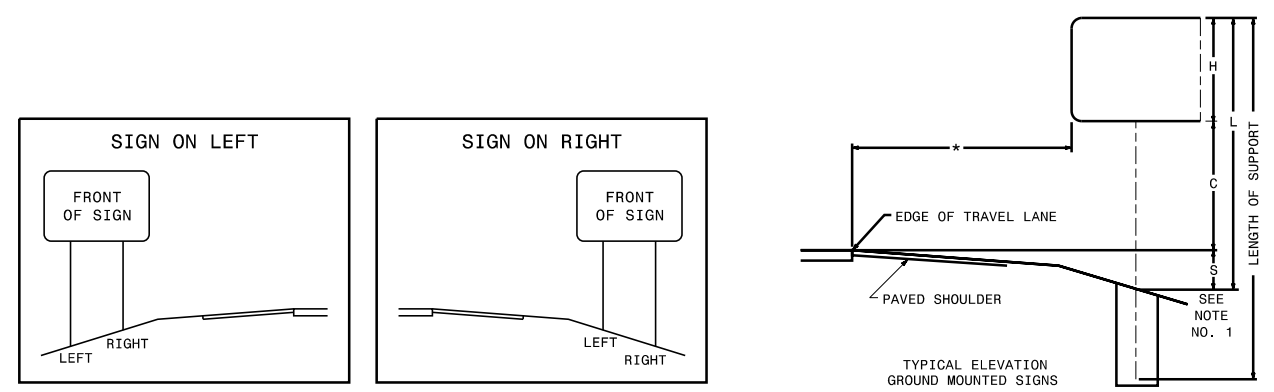
**REVISED NCDOT STANDARD
DRAWING**

LOGO NO. L-06-1295-E15	SHEET NO. SIGN-2
DocuSigned by: Andrew D. Klinskiak E3D78FB4596E44B...	
APPROVED: Andrew D. Klinskiak E3D78FB4596E44B...	
DATE: 2/8/2021	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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	n										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	120	I-295 NB	2	W6x16	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.5	2.50	19.50	24.00	0.00	
102	A	180	x	138	I-295 NB	2	W10x22	BA	N/A	N/A	N/A	30.00	8.79	11.50	7.00	4.0	5.10	23.60	27.60	0.00	0.00	0.00	7.20	25.70	29.70	1498.60	0	2.5	4.5	1.64	0.00	12/15/2020
103	A	90	x	72	NB Ramp	2	S4x7.7	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.5	1.90	14.90	18.40	0.00	0.00	0.00	2.50	15.50	19.00	327.98	0	1.0	4	0.00	0.23	12/15/2020
104	A	90	x	84	NB Ramp	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	7.00	7.00	3.0	1.90	15.90	18.90	0.00	0.00	0.00	2.70	16.70	19.70	411.40	0	1.5	3.5	0.46	0.00	12/15/2020
105	A	90	x	72	SB Ramp Lt	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	6.00	7.00	3.0	3.90	16.90	19.90	0.00	0.00	0.00	2.90	15.90	18.90	413.20	0	1.5	3.5	0.46	0.00	12/15/2020
106	A	90	x	84	SB Ramp Lt	2	W6x9	BA	N/A	N/A	N/A	18.00	4.40	7.00	7.00	3.0	4.10	18.10	21.10	0.00	0.00	0.00	3.00	17.00	20.00	433.90	0	1.5	3.5	0.46	0.00	12/15/2020
107	A	180	x	120	I-295 SB	2	W8x18	BA	N/A	N/A	N/A	30.00	8.79	10.00	7.00	4.5	4.30	21.30	25.80	0.00	0.00	0.00	5.30	22.30	26.80	1086.80	0	2.0	5	1.16	0.00	12/15/2020
108	A	180	x	138	I-295 SB	2	W8x18	BA	N/A	N/A	N/A	35.00	8.79	11.50	7.40	4.0	2.70	21.60	25.60	0.00	0.00	0.00	-0.40	18.50	22.50	1005.80	0	2.0	4.5	1.05	0.00	12/15/2020

TOTAL	TOTAL	TOTAL	TOTAL
6018.88	0.00	5.88	0.23
USE:	6019.00	0.00	6.00 1.00

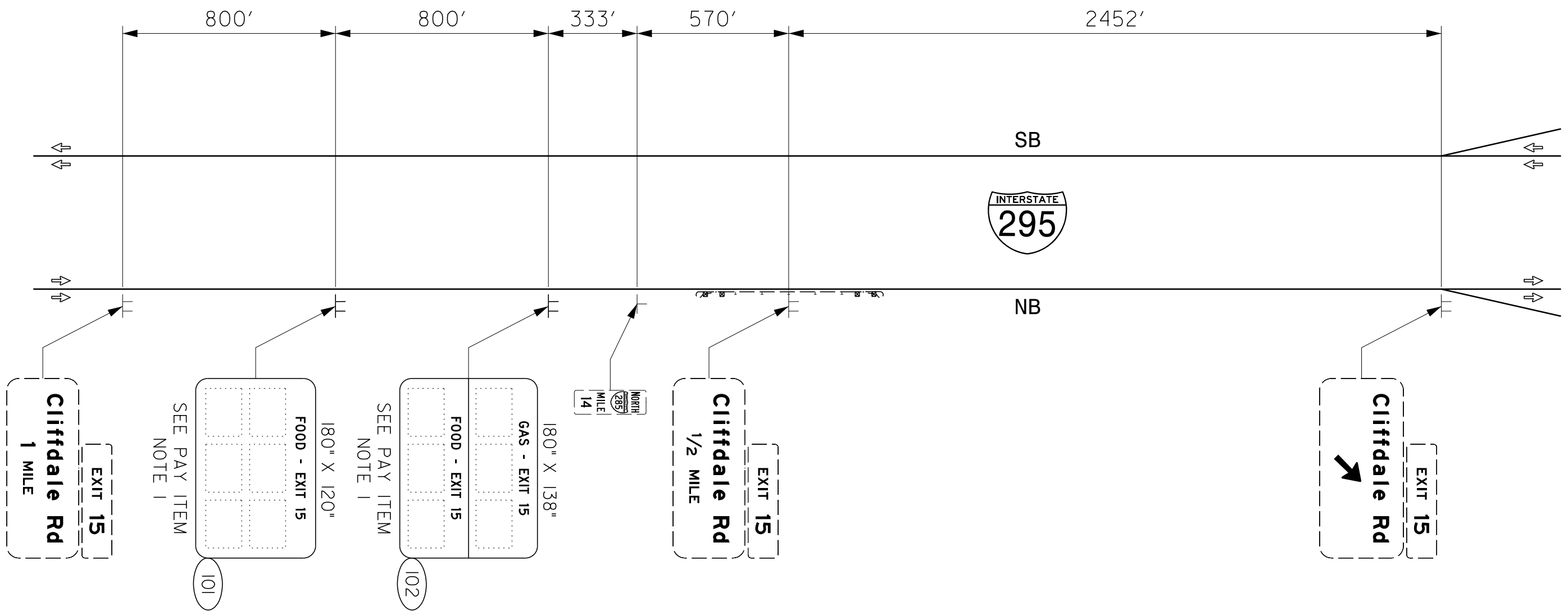


- NOTES
1. DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF TRAVEL LANE.
 2. PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.
 3. 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.

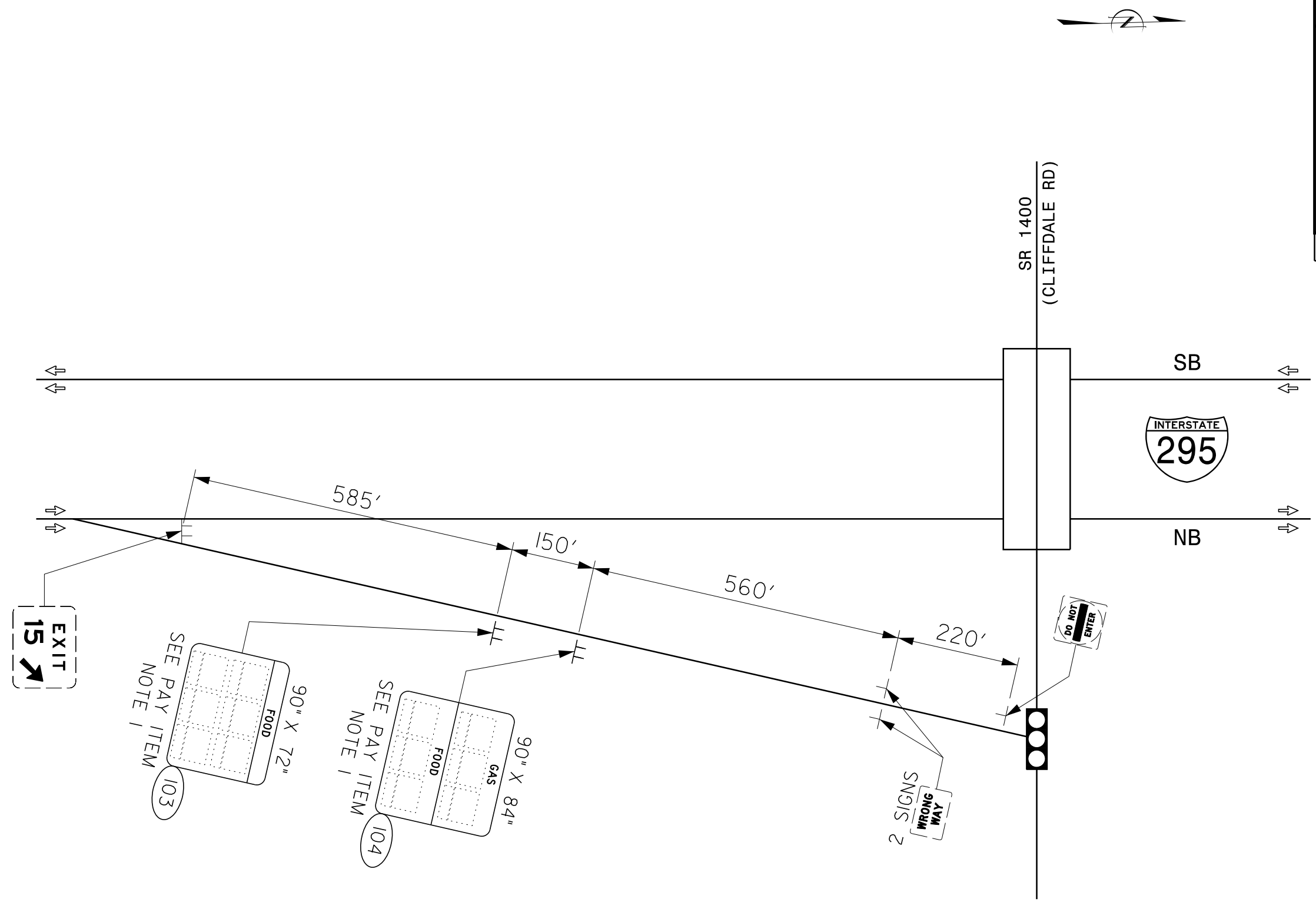
HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

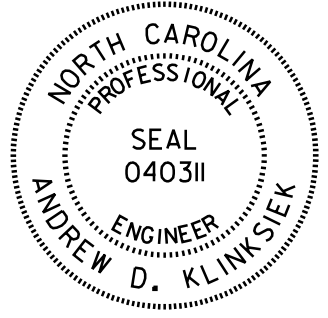
**TYPE A AND B
GROUND MOUNTED SIGNS**

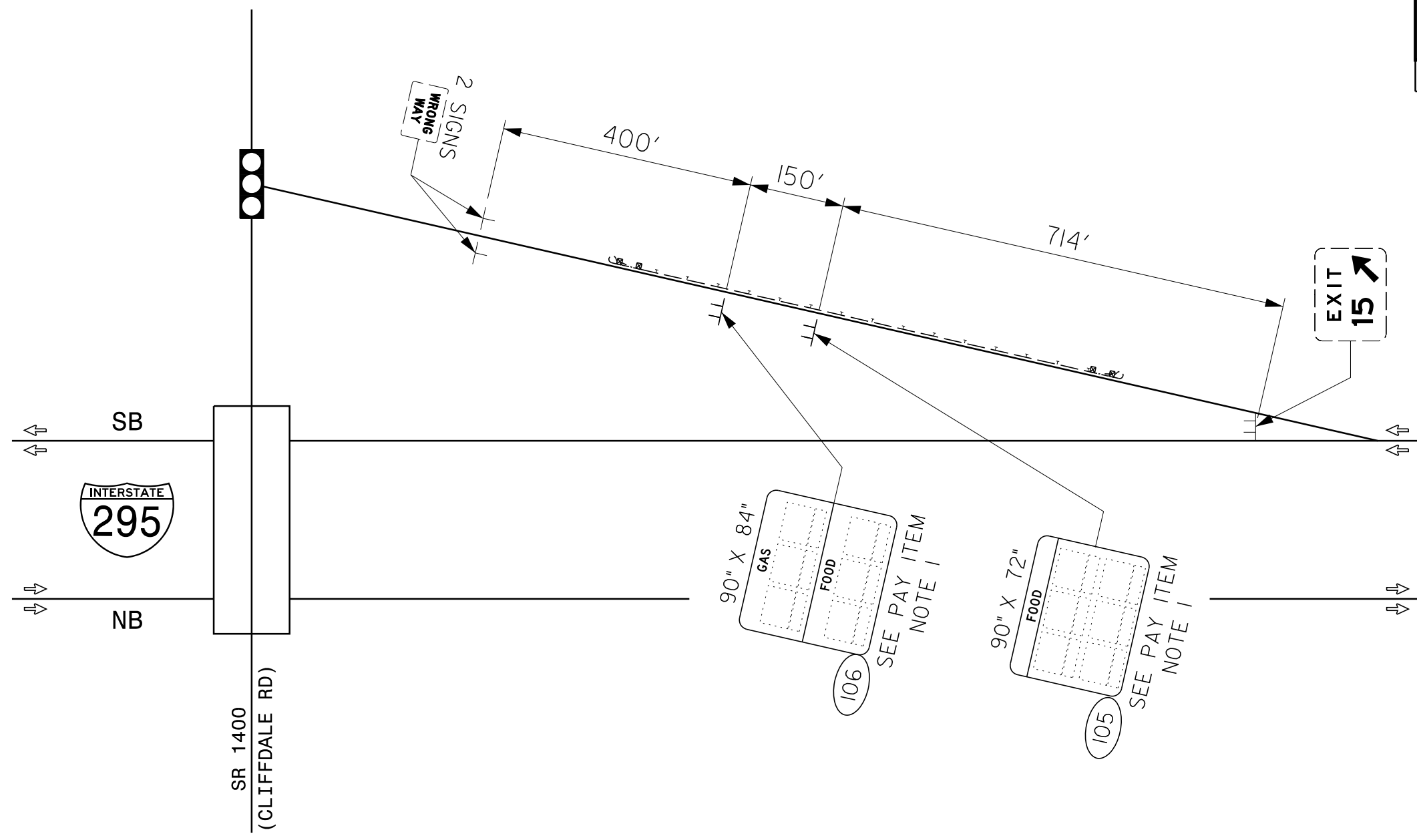
LOGO NO. L-06-I295-E15	SHEET NO. SIGN-3
DocuSigned by: Andrew D. Klinksiek E3D78FB4596E44B...	
APPROVED: Andrew D. Klinksiek DATE: 2/8/2021	
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040311 ANDREW D. KLINKSIEK	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



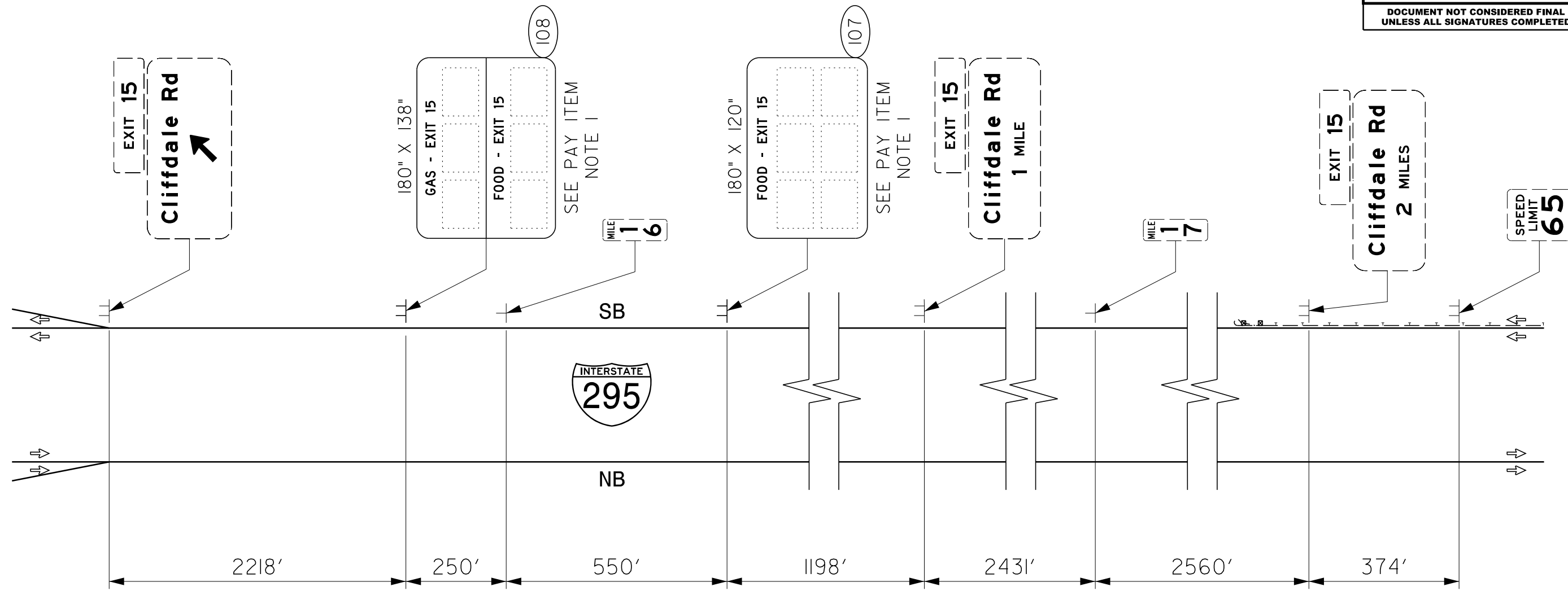
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DocuSigned by: Andrew D. Klinksiek E3D78FB4596E44B...	
APPROVED: Andrew D. Klinksiek DATE: 2/8/2021	
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040311 ANDREW D. KLINKSIEK	
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LOGO NO. L-06-1295-E15	SHEET NO. SIGN-5
DocuSigned by: Andrew D. Klinksiek	
APPROVED: E3D78FB4596E44B...	
DATE: 2/8/2021	
SEAL	
	
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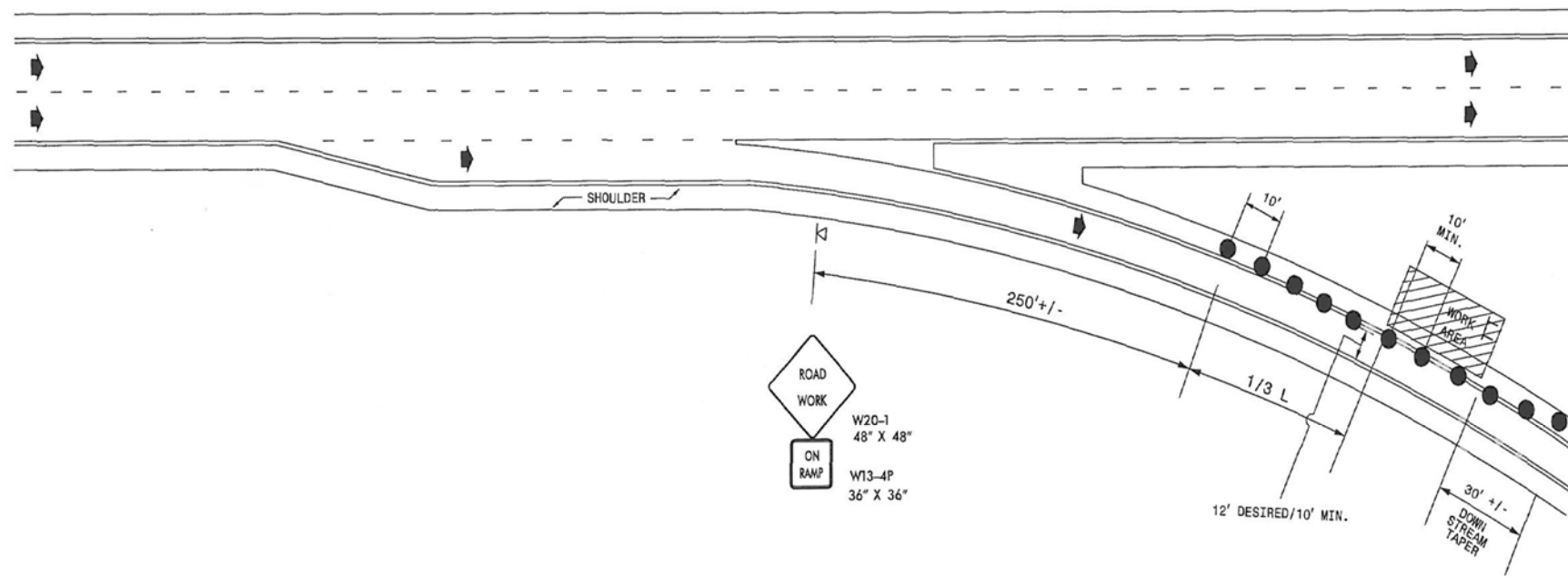


LOGO NO. L-06-1295-E15	SHEET NO. SIGN-6
DocuSigned by: Andrew D. Klinksiek	
APPROVED: Andrew D. Klinksiek E3D78FB4596E44B...	
DATE: 2/8/2021	
SEAL	
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LOGO NO. L-06-1295-E15	SHEET NO. TCP-1
DocuSigned by: Andrew D. Klinskiak	
APPROVED: Andrew D. Klinskiak	
DATE: 2/8/2021	
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022104 JOHN S. KITE, JR.	
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 040311 ANDREW D. KLINSIAK	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

RAMP REMAINS OPEN - WORK ENCROACHES ON RAMP LANE (LEFT)



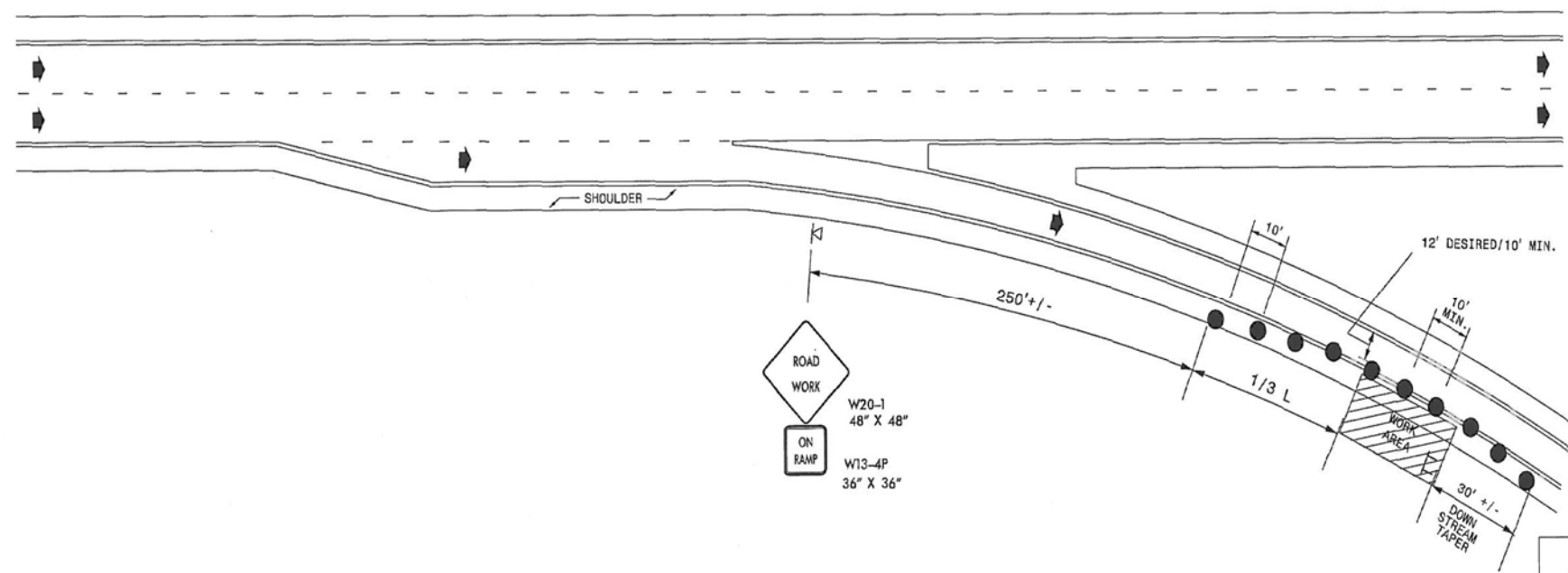
SHEET NO. TCP-1

APPROVED: *Steve Eide*

DATE: 6/26/2017

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 022104
JOHN S. KITE, JR.

RAMP REMAINS OPEN - WORK ENCROACHES ON RAMP LANE (RIGHT)



GENERAL NOTES

1. REFER TO MUTCD SECTION 6F.25 FOR SIGN W13-4P GUIDANCE.
2. SIGNS SHALL NOT BE DISPLAYED WHEN WORK IS NOT IN EFFECT.
3. THE CONTRACTOR SHALL NOT CROSS MEDIANS, RAMP, OR LOOPS WITH WORK VEHICLES UNLESS A LOCATION HAS BEEN APPROVED BY THE ENGINEER.
4. REFER TO ROADWAY STANDARD DRAWING 1101.11, SHEET 1 OF 4. USE 1/2 POSTED MAINLINE SPEED FOR (S) VALUE. USE THE LANE ENCROACHMENT 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

L-06-I295-E15

SIGN PANEL DESIGNS

February 8, 2021



DocuSigned by:
Andrew D. Klinksiek 2/8/2021
E3D78FB4596E44B...

DOCUMENT NOT CONSIDERED FINAL
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Designs Prepared and Approved by:

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, NC 27609
C-1554

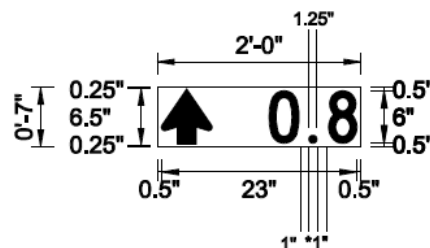
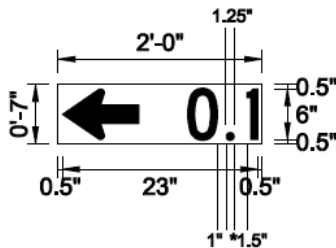
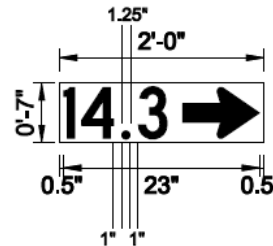
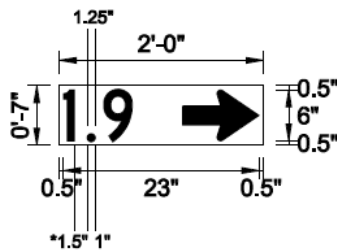
Signing Design Technician – T.R. Terrell
Signing Engineer – A.D. Klinksiek, P.E.

NCDOT Standard for Logo Mileage Panels Mounted under Business Panels on Ramp Logo Signs

THIS MILEAGE PANEL DESIGN STANDARD SHALL BE USED ON LOGO RAMP SIGNS. THE FOLLOWING DESIGN REQUIREMENTS SHALL APPLY:

1. PANEL SHALL BE .032" ALUMINUM
2. USE MINIMUM GRADE C SHEETING
3. USE 6"C WHITE NUMBERS
4. USE 9" X 6" STANDARD WHITE ARROW;
EXCEPT MODIFY TO 6.5" X 6 FOR THROUGH (UP) ARROW
5. PANEL SHALL HAVE BLUE BACKGROUND
6. PLACE LEGEND AND ARROW .5" FROM EACH END OF PANEL
7. PLACE VERTICAL ARROW .25" FROM TOP AND BOTTOM OF PANEL
8. DECIMAL SHALL BE 1.25" DIAMETER WITH 1" SPACING LEFT AND RIGHT OF DECIMAL, EXCEPT WHEN USING NUMBER 1, AT WHICH TIME SPACING SHALL BE 1.5" LEFT OR RIGHT OF DECIMAL
(SEE * ON EXAMPLE DESIGNS)
9. MILEAGE SHALL BE SHOWN TO THE NEAREST TENTH

EXAMPLE DESIGNS:



REVISED 4/7/08

Sign Panel Designs**L-06-I295-E15**

Number of Signs	Sign Number	Original Date	Revision Date	Revision Date	Revision Date	Revision Date
1)	101	12-2020				
2)	102	12-2020				
3)	103	12-2020				
4)	104	12-2020				
5)	105	12-2020				
6)	106	12-2020				
7)	107	12-2020				
8)	108	12-2020				
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Signing Design Technician – T.R. Terrell
Signing Engineer – A.D. Klinksiek, P.E.

