

TIP NO. R-2000AF	SHEET NO. SIGN-1
APPROVED: _____	
DATE: _____	
SEAL	

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
WAKE COUNTY**

**LOCATION: INTERCHANGE IMPROVEMENTS AT I-540 AND
I-40 ON THE NORTHERN WAKE FREEWAY**

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 JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.10	TYPE 'A' SIGNS
901.20	TYPE 'B' SIGNS
901.30	VHB TAPE CONSTRUCTION - FOR TYPE 'A' SIGNS
901.40	VHB TAPE CONSTRUCTION - FOR TYPE 'B' SIGNS
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
903.20	WOOD SIGN POST
903.40	MEDIAN BARRIER SIGN SUPPORT AND ANCHORAGE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.20	SECONDARY SIGN MOUNTING
904.40	MILEPOST AND PLACEMENT
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

GENERAL NOTES

- . SIGNS FURNISHED BY CONTRACTOR
- . SIGNING PLANS DO NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING. SEE TRAFFIC CONTROL PLANS.
- . 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.
- . 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.

PROJECT NOTES

- A ERECT SIGN WHEN CONSTRUCTION BEGINS
- B REMOVE AND STOCKPILE UPON COMPLETION OF PROJECT

PAY ITEM NOTES

- DISPOSAL OF SIGN SYSTEM, U-CHANNEL
- DISPOSAL OF SIGN SYSTEM, OVERHEAD
- SIGN ERECTION, RELOCATE SIGN TYPE A (GROUND MOUNTED)
- SIGN ERECTION, RELOCATE SIGN TYPE B (GROUND MOUNTED)
- DISPOSAL OF SUPPORT, STEEL BEAM
- DISPOSAL OF SIGN SYSTEM, STEEL BEAM
- SIGN ERECTION, TYPE A (GROUND MOUNTED)
- STOCKPILE SIGN SYSTEM, WOOD

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET SUMMARY OF QUANTITIES NOTES
SIGN-2	SUPPORT INFORMATION
SIGN-3-6	GROUND MOUNT SHEETS
SIGN-7 - 10	OVERHEAD SHEETS
SIGN-11 - 15	SIGN DESIGN SHEETS
SIGN-16	E, F, AND MILEMARKER SHEET
SIGN-17-19	SIGN DETAIL SHEETS

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATION	4	C.Y.
4054000000	902	PLAIN CONCRETE SIGN FOUNDATION	2	C.Y.
4057000000	SP	OVERHEAD FOOTING	60	C.Y.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	4007	LB.
4066000000	903	SUPPORTS, SIMPLE STEEL BEAM	172	LB.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	126	L.F.
4078000000	903	SUPPORTS, 2 LB STEEL U-CHANNEL	1	EA.
4102000000	904	SIGN ERECTION, TYPE E	2	EA.
4108000000	904	SIGN ERECTION, TYPE F	1	EA.
4109000000	904	SIGN ERECTION, TYPE A (OVERHEAD)	9	EA.
4109000000	904	SIGN ERECTION, TYPE B (OVERHEAD)	5	EA.
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	7	EA.
4114000000	904	SIGN ERECTION, MILEMARKERS	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE A (GROUND MOUNTED)	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE B (GROUND MOUNTED)	1	EA.
4096000000	904	SIGN ERECTION, TYPE D	1	EA.
4138000000	907	DISPOSAL OF SUPPORT, STEEL BEAM	2	EA.
4149000000	907	DISPOSAL OF SIGN SYSTEM, OVERHEAD	4	EA.
4152000000	907	DISPOSAL OF SIGN SYSTEM, STEEL BEAM	5	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	5	EA.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "10+00 -CD-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "10+00 -RP2B-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "36+00 -L-"	1	L.S.
4082100000	SP	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STATION "25+70 -L-"	1	L.S.
4157000000	907	STOCKPILE SIGN SYSTEM, WOOD	1	EA.
4082000000	903	SUPPORTS, WOOD	45	L.F.

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

RON KING, PE STATE SIGNING & DELINEATION ENGINEER

SAMUEL D. COLEMAN SIGNING & DELINEATION PROJECT DESIGN ENGINEER

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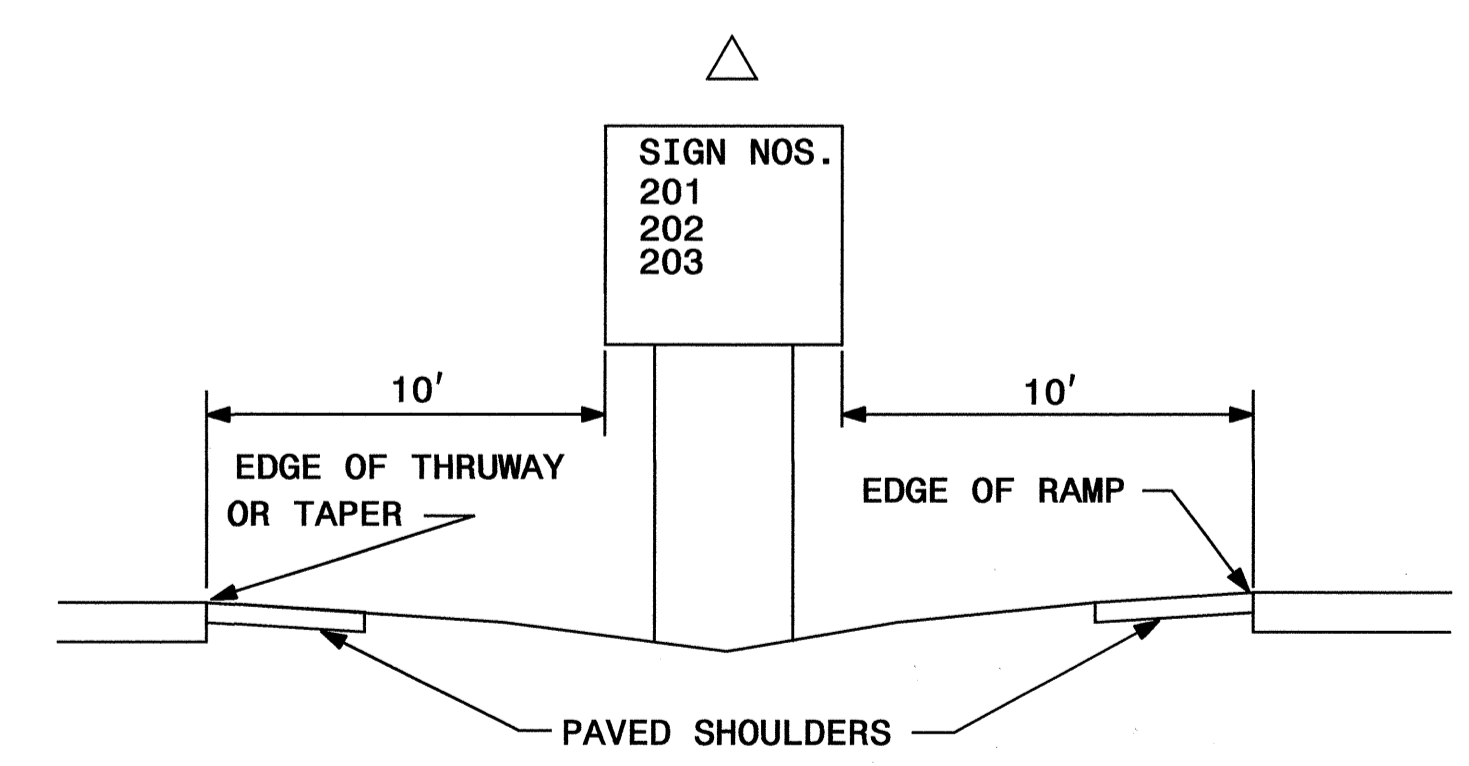
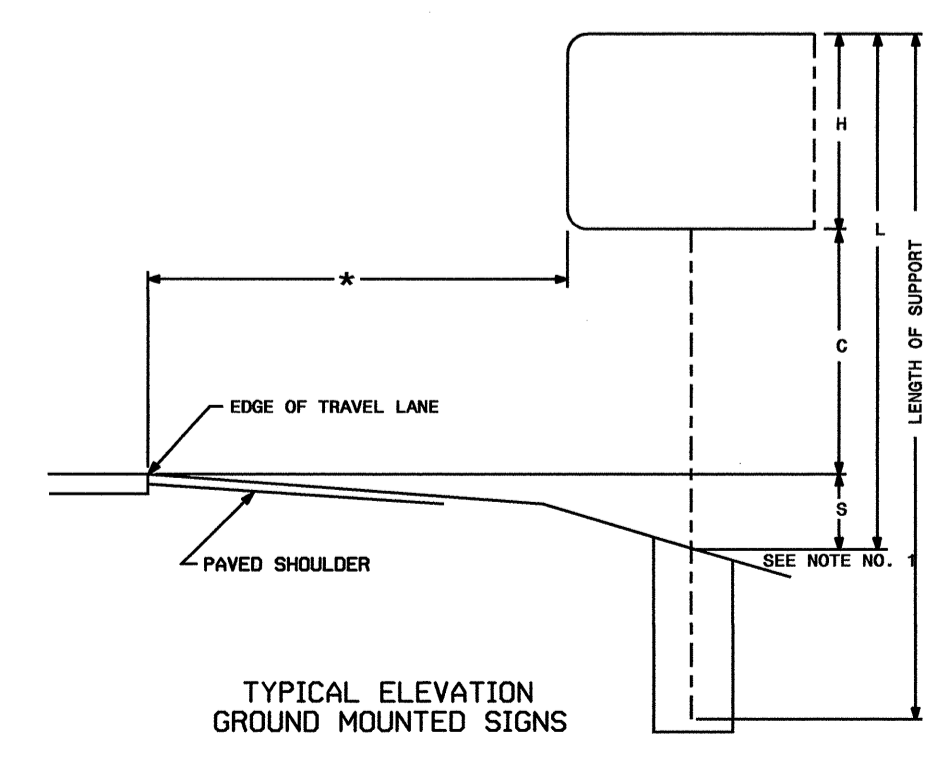
CONTRACT: C202277 T.I.P.: R-2000AF

TIP NO. R-2000AF	SHEET NO. SIGN-2
APPROVED: _____	
DATE: _____	
SEAL	

SIGN NO.	SIGN TYPE	SIGN SIZE (in.)		ROADWAY STATION	NO. OF SUP.	BEAM SECTION	SUPPORT TYPE BA or S	ATTACH METHOD	MOUNTING METHOD	HORIZ CLR. (ft.)	LENGTH (ft)				LEFT SUPPORT (ft)			CENTER SUPPORT (ft)			RIGHT SUPPORT (ft)			FOOTING DIAMETER (ft.)	FOOTING DEPTH (ft.)	B/A SUPPORT WEIGHTS (lbs.)	SIMPLE SUPPORT WEIGHTS (lbs.)	REINF. FTGS. (c.y.)	PLAIN FTGS. (c.y.)	FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)																					
		w	x								h	SNS H	HT C	EMBED-MENT	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH																												
101	A	90	X	54	L 33+50	2	S4x7.7	BA	N/A	N/A	30.00	4.50	7.00	4	3.91	15.41	19.41	0.00	0.00	0.00	3.97	15.47	19.47	1	4.5	340.00	0.00	0.00	0.26																						
102	A	264	X	84	L 31+50	3	W8x18	BA	N/A	N/A	30.00	7.00	7.00	6	5.81	19.81	25.81	8.07	22.07	28.07	9.61	23.61	29.61	2	6.5	1745.99	0.00	2.27	0.00																						
201	A	72	X	60	RP2B 16+00	2	S3x5.7	BA	N/A	N/A	10.00	5.00	7.00	3.5	0.22	12.22	15.72	0.00	0.00	0.00	0.46	12.46	15.96	1	4	216.11	0.00	0.00	0.23																						
202	A	90	X	60	L 19+50	2	S4x7.7	BA	N/A	N/A	10.00	5.00	7.00	4	0.33	12.33	16.33	0.00	0.00	0.00	0.85	12.85	16.85	1	4.5	296.03	0.00	0.00	0.26																						
203	A	96	X	60	CD 20+50	2	S4x7.7	BA	N/A	N/A	10.00	5.00	7.00	4	0.63	12.63	16.63	0.00	0.00	0.00	0.37	12.37	16.37	1	4.5	294.72	0.00	0.00	0.26																						
901	B	72	X	36	L 48+50	2	S3x5.7	S	N/A	N/A	18.00	3.00	7.00	3	2.65	12.65	15.65	0.00	0.00	0.00	1.48	11.48	14.48	1	3.5	0.00	171.75	0.00	0.20																						
902	A	180	X	138	L 43+00	2	W8x18	BA	N/A	N/A	30.00	11.50	8.45	6.5	1.43	21.38	27.88	0.00	0.00	0.00	-1.45	18.50	25.00	2	7	1113.97	0.00	1.63	0.00																						
																						TOTAL	TOTAL	TOTAL	TOTAL																										
																						4006.82	171.75	3.90	1.22																										
																						USE:	4007	172	4	2																									

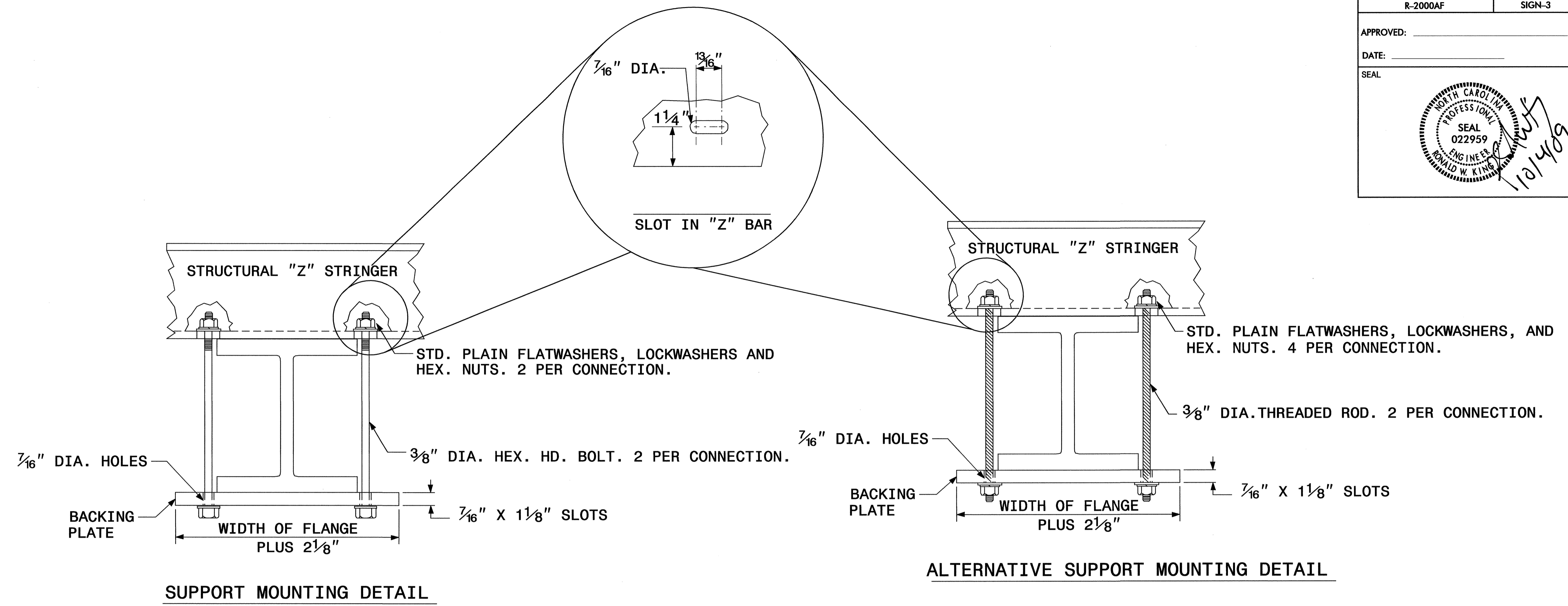
NOTES

- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.
- FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES
- PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND, THEREFORE 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.

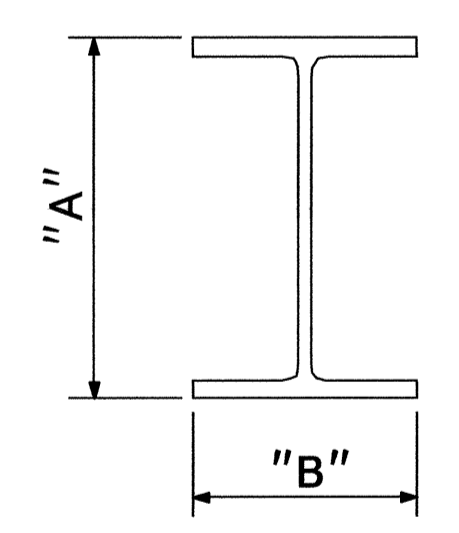


TYPE "A" AND TYPE "B" GROUND MOUNTED SIGNS

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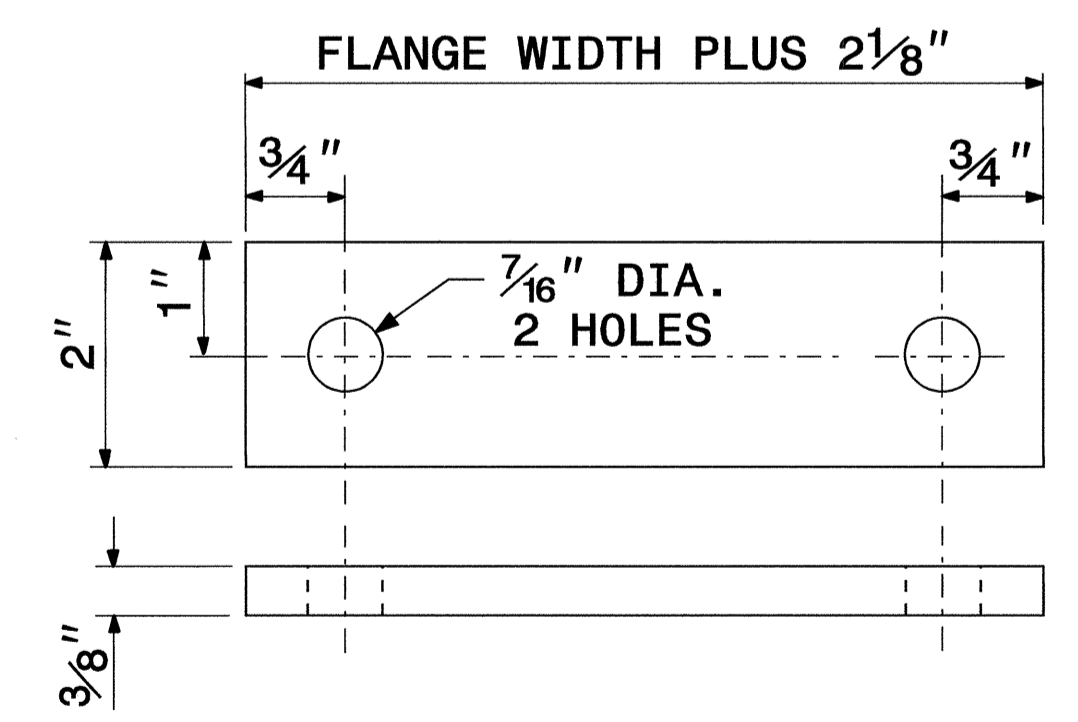


SIGN SUPPORTS SECTION DIMENSIONS



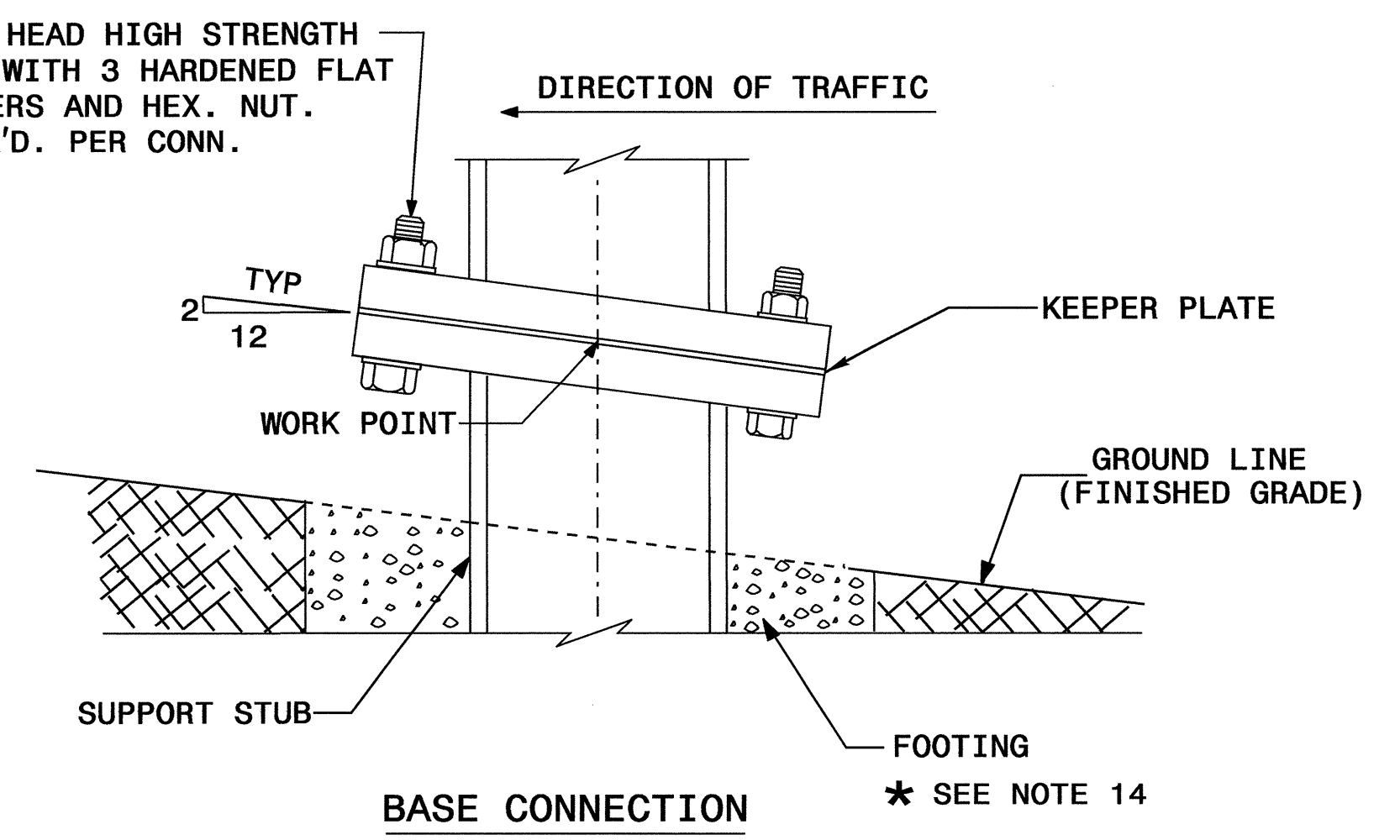
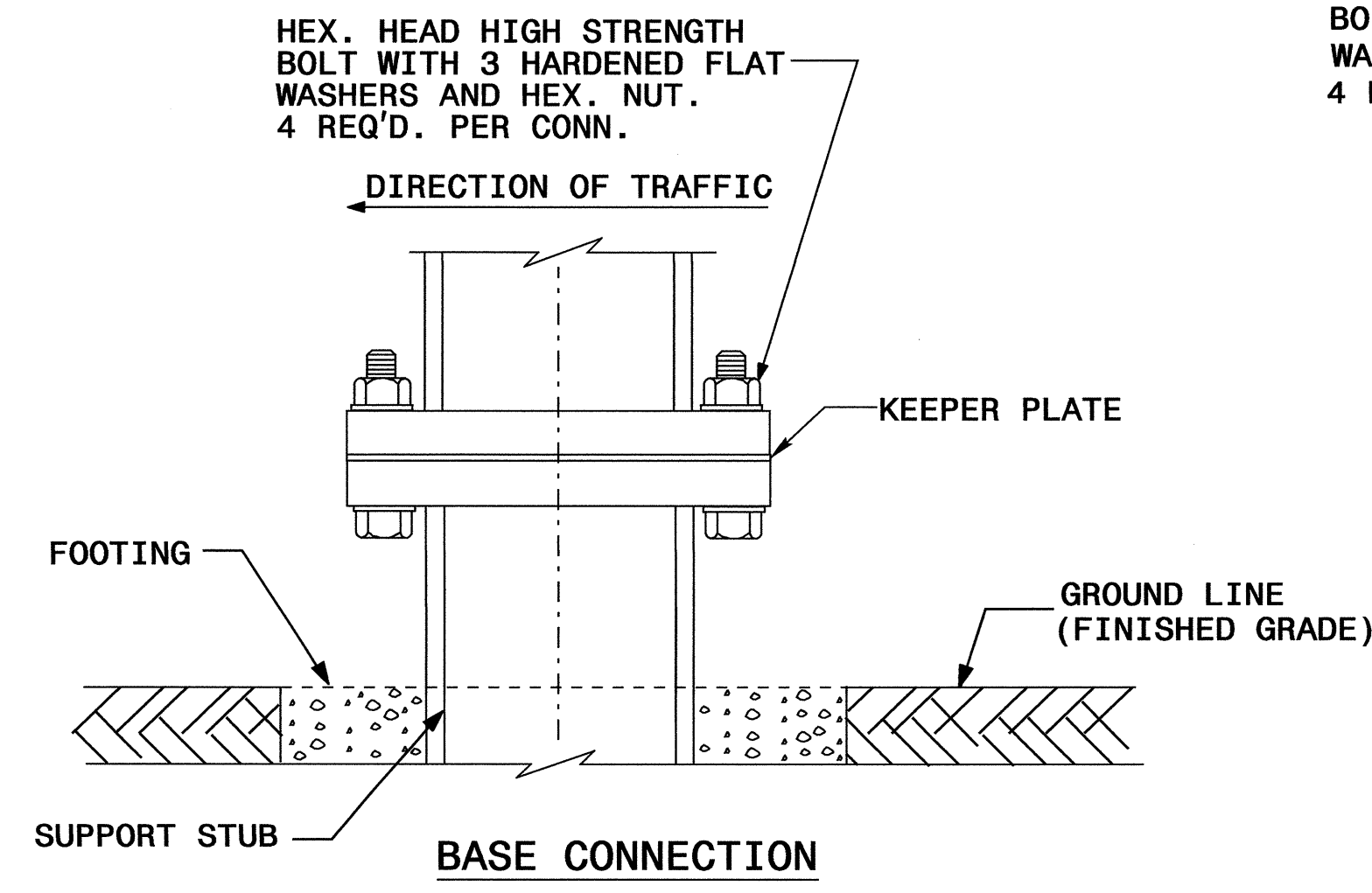
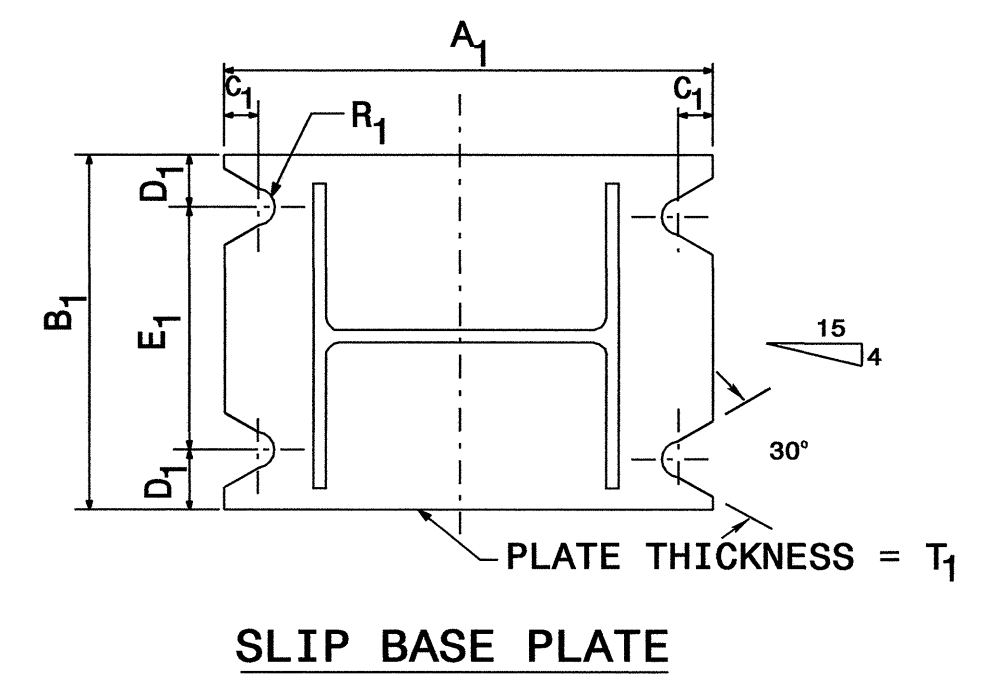
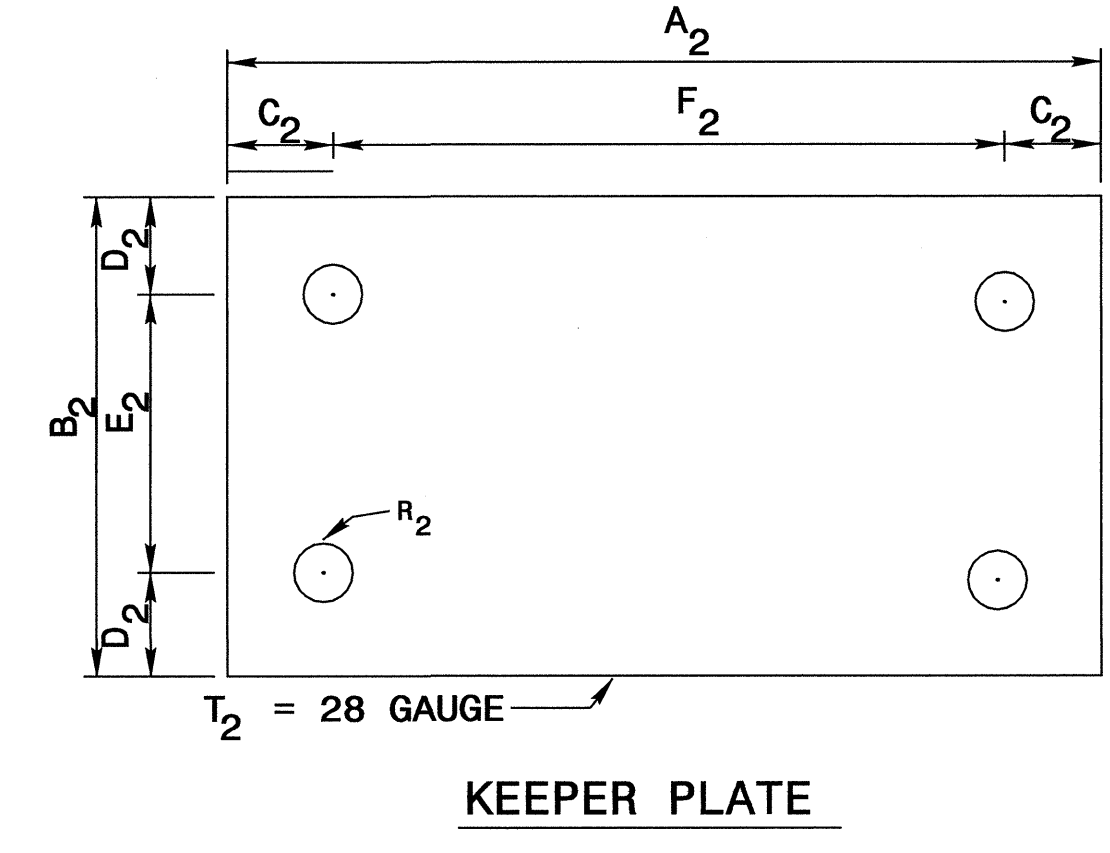
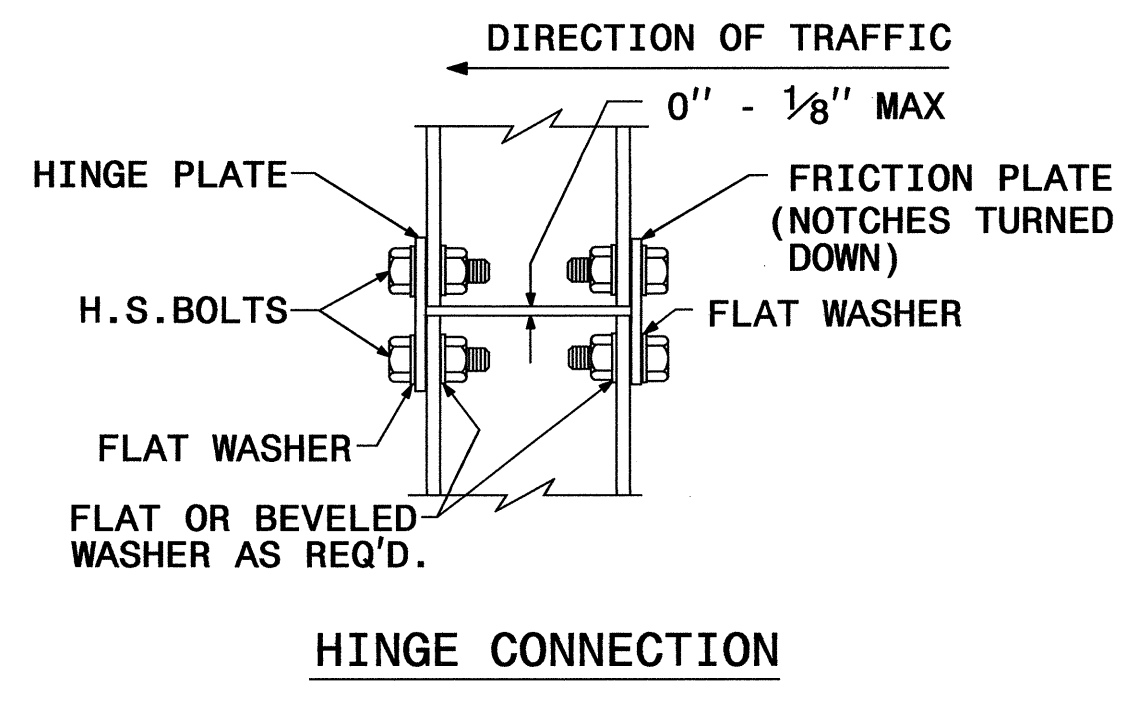
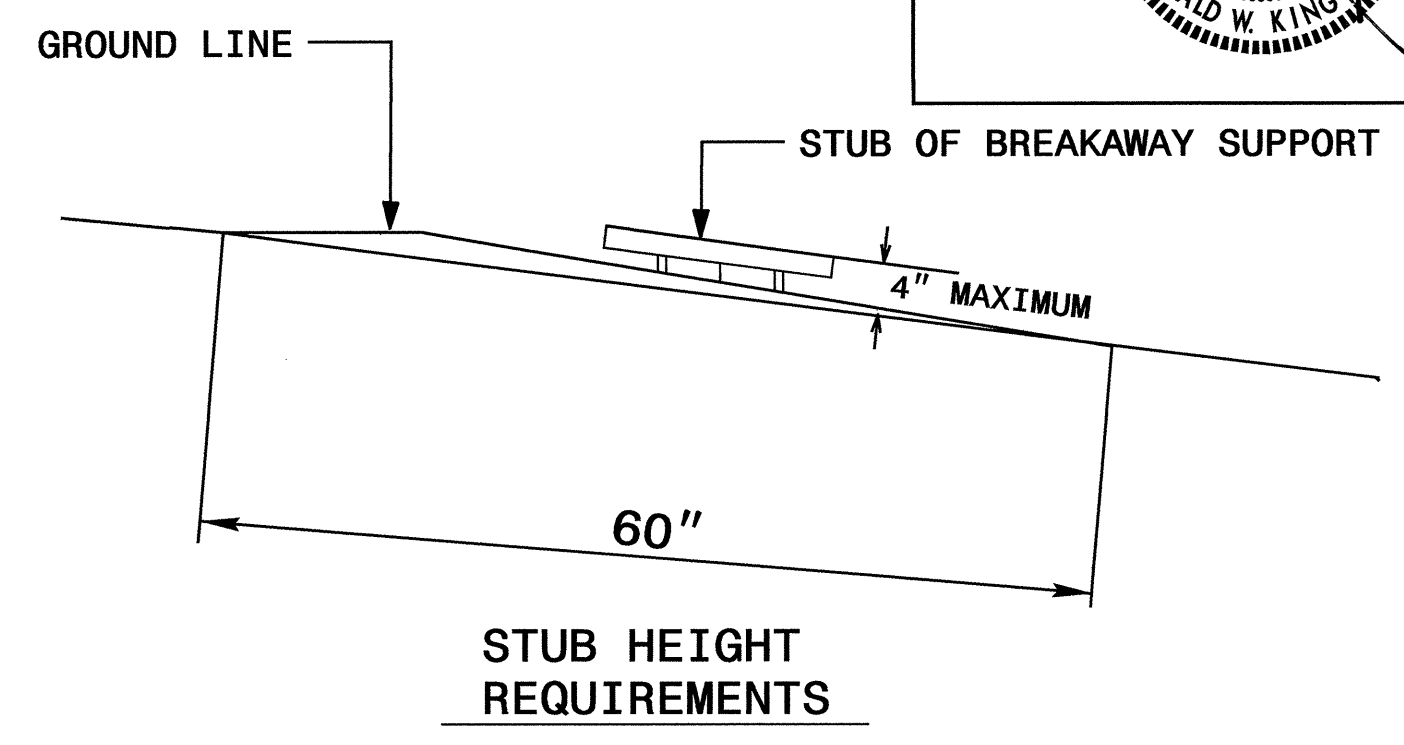
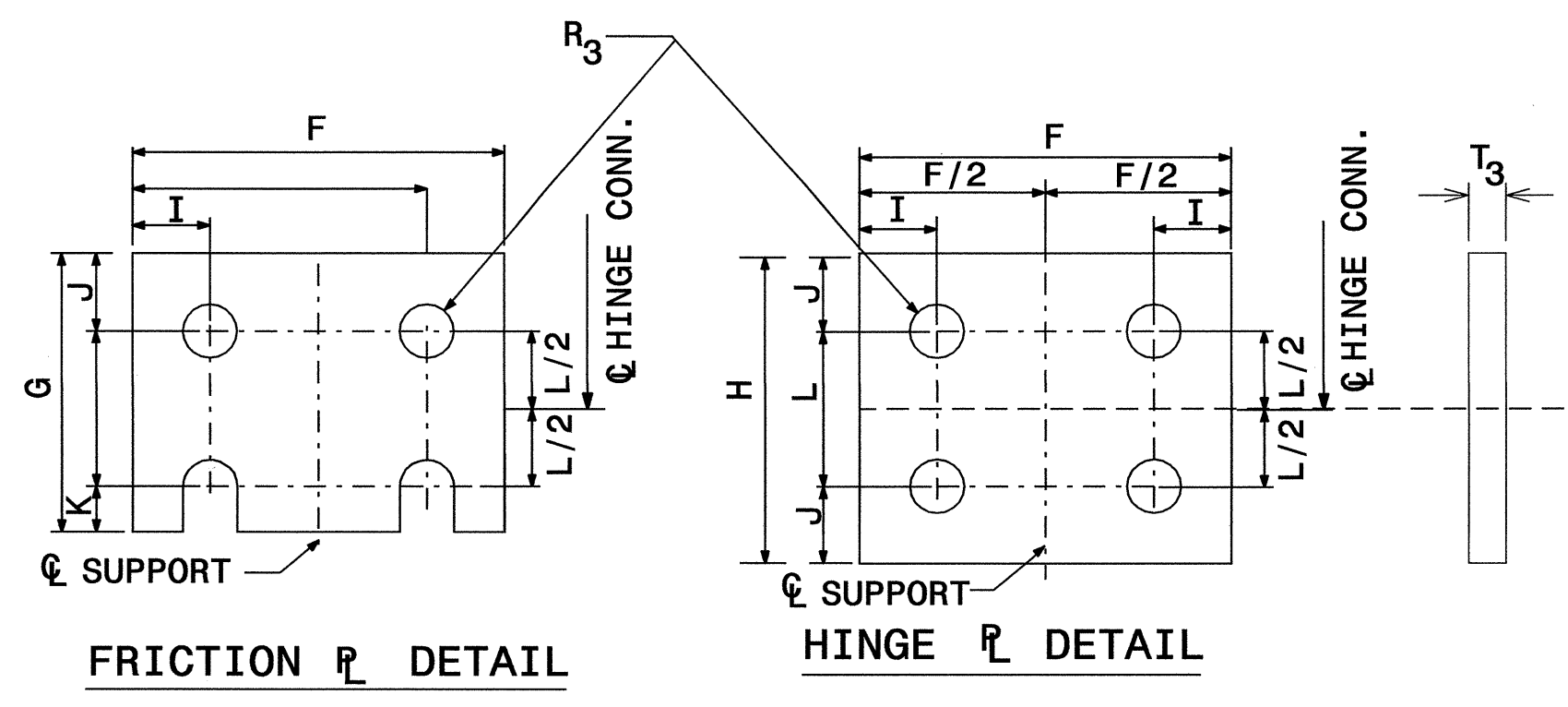
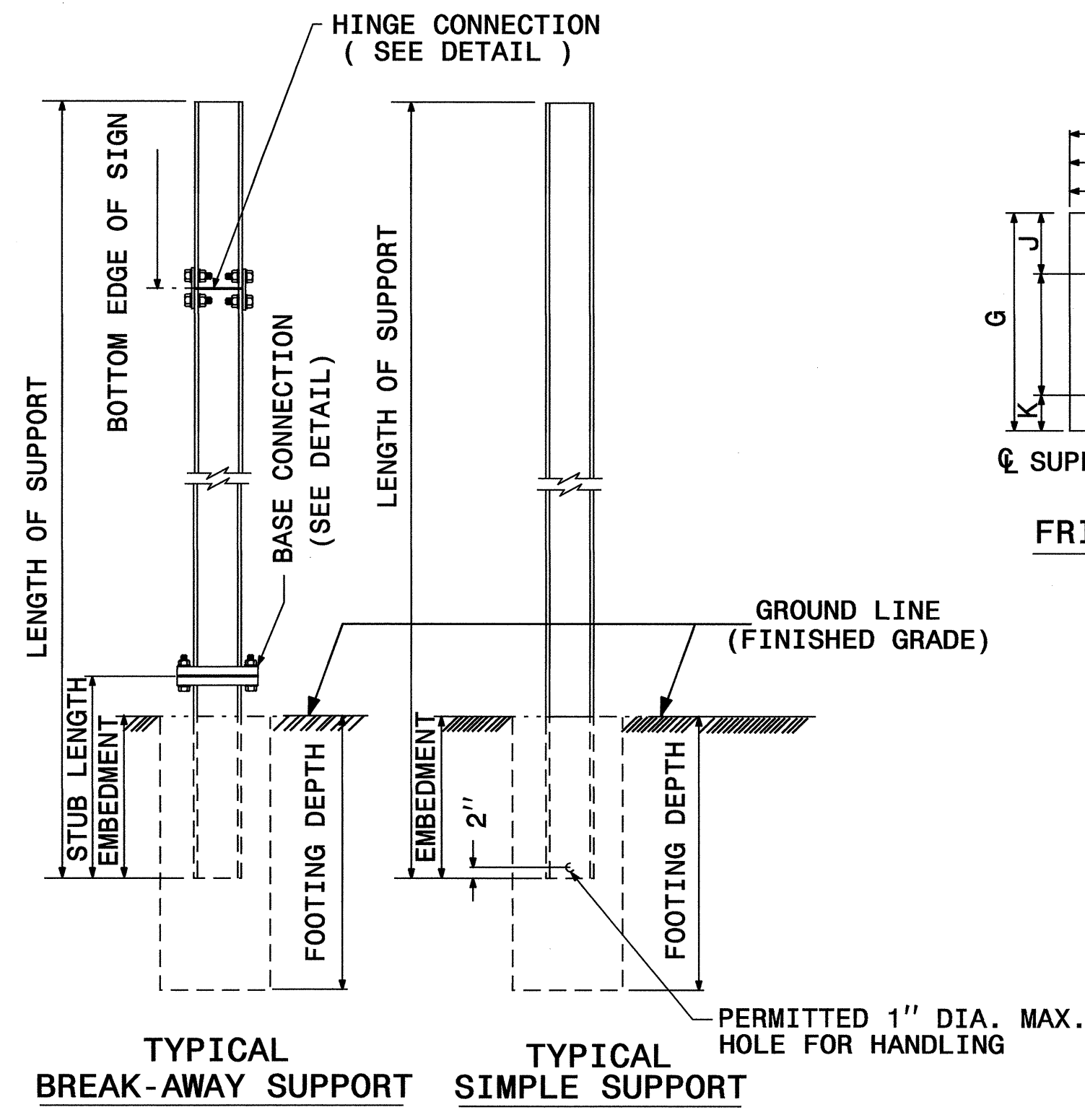
SECTION	A	B
S3 X 5.7	3"	$2\frac{3}{8}$ "
S4 X 7.7	4"	$2\frac{5}{8}$ "
W6 X 9	6"	4"
W6 X 12	6"	4"
W6 X 16	$6\frac{1}{4}$ "	4"
W8 X 18	$8\frac{1}{8}$ "	$5\frac{1}{4}$ "
W8 X 21	$8\frac{1}{4}$ "	$5\frac{1}{4}$ "
W10 X 22	$10\frac{1}{8}$ "	$5\frac{3}{4}$ "
W10 X 26	$10\frac{3}{8}$ "	$5\frac{3}{4}$ "
W12 X 26	$12\frac{1}{4}$ "	$6\frac{1}{2}$ "
W14 X 30	$13\frac{7}{8}$ "	$6\frac{3}{4}$ "
W16 X 31	$15\frac{7}{8}$ "	$5\frac{1}{2}$ "
W18 X 35	$17\frac{3}{4}$ "	6"
W18 X 40	$17\frac{7}{8}$ "	6"
W21 X 44	$20\frac{5}{8}$ "	$6\frac{1}{2}$ "

BACKING PLATE DETAIL



1. THE SUPPORT MOUNTING DETAIL SHOWS A "W" OR "S" BEAM. THIS DETAIL IS ALSO USED FOR MOUNTING SIGNS TO WOOD OR SQUARE TUBE SUPPORTS.
2. USE GALVANIZED STEEL FOR BACKING PLATES AND MOUNTING BOLTS IN ACCORDANCE WITH ASTM A123.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR TYPE OF MATERIAL TO BE USED FOR SIGN HANGER ASSEMBLIES AND SUPPORTS.
4. USE GALVANIZED STEEL FOR MOUNTING BOTTS AND THREADED RODS IN COMPLIANCE WITH ASTM A307 AND ASTM A153.

SIGN MOUNTING DETAILS



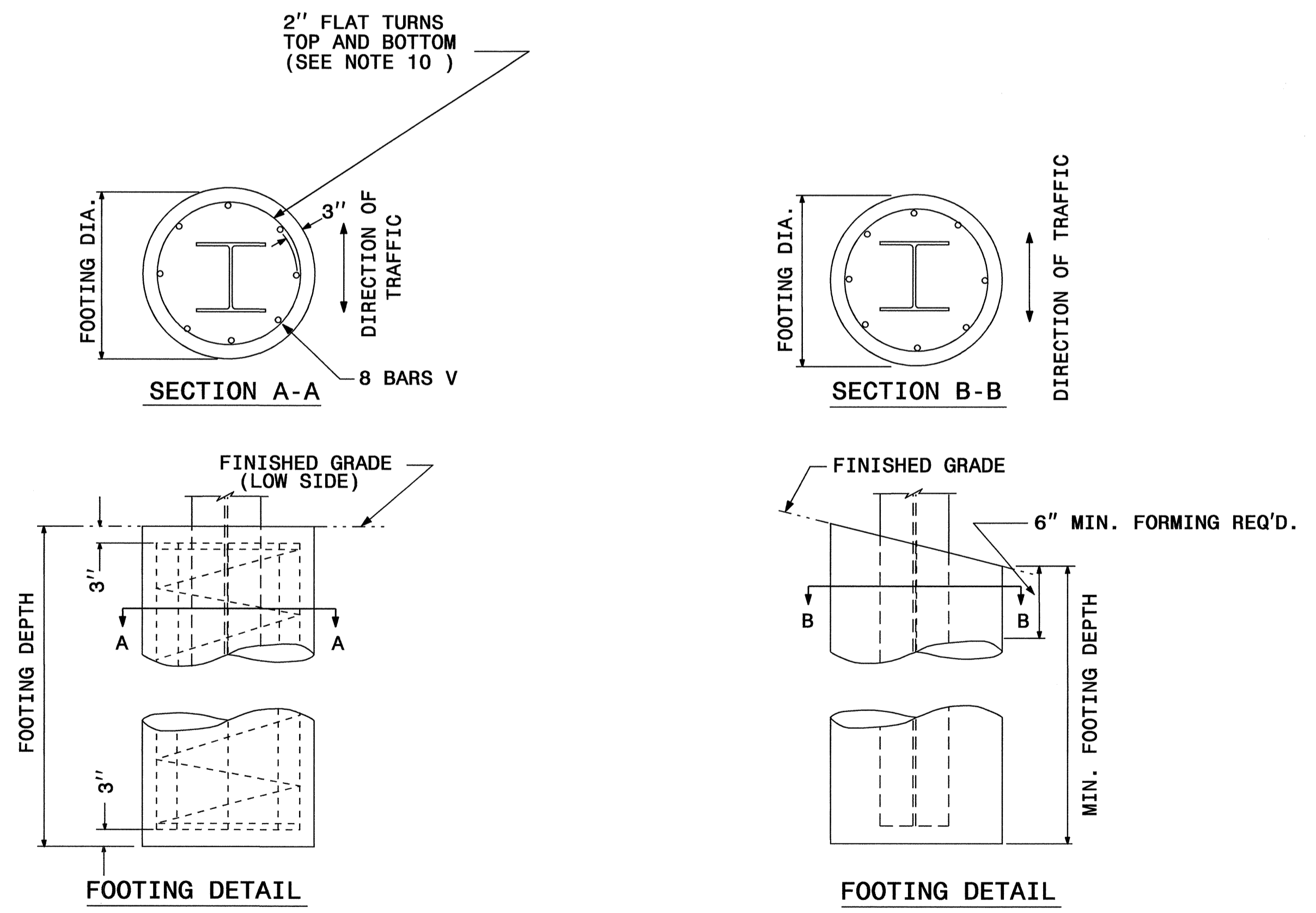
SEE SHEET SIGN-6 FOR DIMENSIONS.
SEE SHEET SIGN-7 FOR NOTES.

GROUND MOUNTED SIGN SUPPORT

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BEAM SHAPE	SLIP BASE PLATE DATA								KEEPER PLATE DATA							HINGE CONNECTION DATA							BREAK AWAY SUPPORT WEIGHT CONSTANT LBS.			
	BOLT SIZE	A ₁	B ₁	C ₁	D ₁	E ₁	T ₁	R ₁	A ₂	B ₂	C ₂	D ₂	E ₂	R ₂	T ₂	BOLT SIZE	F	G	H	I	J	K		L	R ₃	T ₃
S3X5.7	1/2"DIA.X 3"	7"	4"	1"	3/4"	2 1/2"	1"	9/32"	7"	4"	1"	3/4"	2 1/2"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	2 1/4"	3 1/2"	4"	1 1/2"	1"	1 1/2"	2"	9/32"	3/8"	18
S4X7.7	1/2"DIA.X 3"	8"	4"	1"	3/4"	2 1/2"	1"	9/32"	8"	4"	1"	3/4"	2 1/2"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	2 5/8"	3 1/2"	4"	1 1/2"	1"	1 1/2"	2"	9/32"	3/8"	20
W6X9	1/2"DIA.X 3"	10"	5"	1"	3/4"	3 1/2"	1"	9/32"	10"	5"	1"	3/4"	3 1/2"	9/32"	28 GAUGE	1/2"DIA.X1 1/4"	4"	3 1/2"	4"	3/4"	1"	1 1/2"	2"	9/32"	3/8"	32
W6X12	5/8"DIA.X3 3/4"	11"	5"	1 1/4"	7/8"	3 1/4"	1 1/4"	1 1/32"	11"	5"	1 1/4"	7/8"	3 1/4"	1 1/32"	28 GAUGE	5/8"DIA.X2 1/4"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	1 1/32"	3/8"	39
W6X16	5/8"DIA.X3 3/4"	12"	6"	1 1/4"	7/8"	4 1/4"	1 1/2"	1 1/32"	12"	6"	1 1/4"	7/8"	4 1/4"	1 1/32"	28 GAUGE	5/8"DIA.X2 1/2"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	1 1/32"	1/2"	47
W8X18	5/8"DIA.X 4 1/4"	13 1/2"	6 1/2"	1 1/4"	7/8"	4 3/4"	1 1/2"	1 1/32"	13 1/2"	6 1/2"	1 1/4"	7/8"	4 3/4"	1 1/32"	28 GAUGE	5/8"DIA.X2 1/2"	5 1/4"	4"	4 1/2"	1"	1 1/8"	5/8"	2 1/4"	1 1/32"	1/2"	70
W8X21	3/4"DIA.X 4 1/4"	14"	7"	1 1/2"	1"	5"	1 1/2"	1 3/32"	14"	7"	1 1/2"	1"	5"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 1/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	1/2"	73
W10X22	3/4"DIA.X 4 1/4"	16"	8"	1 1/2"	1"	6"	1 1/2"	1 3/32"	16"	8"	1 1/2"	1"	6"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	1/2"	119
W10X26	3/4"DIA.X4 3/4"	16 1/2"	8"	1 1/2"	1"	6"	1 3/4"	1 3/32"	16 1/2"	8"	1 1/2"	1"	6"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	5/8"	140
W12X26	3/4"DIA.X4 3/4"	18 1/2"	9"	1 1/2"	1"	7"	1 3/4"	1 3/32"	18 1/2"	9"	1 1/2"	1"	7"	1 3/32"	28 GAUGE	3/4"DIA.X2 3/4"	6 1/2"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	1 3/32"	5/8"	176
W14X30	1"DIA.X 5"	22"	9"	2"	1 1/2"	6"	2"	1 7/32"	22"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3"	6 3/4"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	5/8"	205
W16X31	1"DIA.X 5"	24"	9"	2"	1 1/2"	6"	2"	1 7/32"	24"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 1/4"	5 1/2"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	3/4"	223
W18X35	1"DIA.X 5"	25"	9"	2"	1 1/2"	6"	2"	1 7/32"	25"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 1/4"	6"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	3/4"	243
W18X40	1"DIA.X5 1/2"	26"	9"	2"	1 1/2"	6"	2 1/4"	1 7/32"	26"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 3/4"	6"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	7/8"	278
W21X44	1"DIA.X5 1/2"	29"	9"	2"	1 1/2"	6"	2 1/2"	1 7/32"	29"	9"	2"	1 1/2"	6"	1 7/32"	28 GAUGE	1"DIA.X3 3/4"	6 1/2"	7"	8"	1 1/4"	2"	1"	4"	1 7/32"	7/8"	310



FOUNDATION DATA *		
FOOTING DIAMETER	REINFORCEMENT	SPIRAL BAR
1' 6"	8 # 6 BARS	#3 BAR, 3" PITCH
2'	8 # 7 BARS	#3 BAR, 3" PITCH
2' 6"	8 # 9 BARS	#3 BAR, 3" PITCH
3'	8 # 11 BARS	#3 BAR, 3" PITCH
3' 6"	8 # 12 BARS	#3 BAR, 3" PITCH
4'	8 # 14 BARS	#3 BAR, 3" PITCH

* FOUNDATION DIMENSIONS ARE SHOWN IN PLANS SEE SHEET SIGN-7 FOR NOTES.

GROUND MOUNTED SIGN SUPPORT

TIP NO. R-2000AF	SHEET NO. SIGN-6
APPROVED: _____	
DATE: _____	
SEAL	

NOTES:

- DESIGN CONFORMS WITH THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS - A.A.S.H.T.O.
- USE MATERIALS, FABRICATE AND ERECT SIGNS AND SUPPORTS THAT CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- USE HIGH STRENGTH BOLTS, NUTS AND WASHERS THAT CONFORM TO A.S.T.M. A-325 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-153.
- USE BACKING PLATES, SLIP BASE PLATES, FRICTION PLATES, AND HINGE PLATES THAT CONFORM TO A.S.T.M. A-36 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-123 PRIOR TO GALVANIZING, GRIND SMOOTH ANY METAL PROJECTION BEYOND THE PLATE FACE. KEEPER PLATES SHALL BE MANUFACTURED FROM 28 GAUGE SHEET STEEL THAT CONFORMS TO A.S.T.M. A-36 AND IS GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-123
- ASSEMBLE HINGE CONNECTIONS IN THE SHOP. SHOP TIGHTEN BOLTS BY USE OF EITHER A CALIBRATED POWER WRENCH OR A MANUAL TORQUE WRENCH. TIGHTEN EACH HINGE CONNECTION BOLT TO 1/3 PAST SNUG.
- BASE PLATES DETAILS ARE FOR INSTALLATIONS ON THE RIGHT SHOULDER AND IN GORE AREAS.
- ASSEMBLE UPPER SUPPORT TO STUB AS SHOWN IN DETAIL. SLIP BASE PLATES SHALL BE FILLET WELDED ONTO POSTS ALL AROUND THE STRUCTURAL SHAPE SO AS TO INSURE NO LOSS OF STRENGTH. ASSEMBLE IN EITHER SHOP OR FIELD. 28 GAUGE KEEPER PLATE IS PLACED BETWEEN SLIP BASE PLATES TO PREVENT BOLT SLIPPING. TIGHTEN BOLTS TO THE FOLLOWING PRESCRIBED TORQUE:

BOLT DIAMETER	TORQUE (LB. FT.)
1/2"	9
5/8"	22
3/4"	37
1"	48

COMPLETELY ASSEMBLE B/A POSTS PRIOR TO ERECTION. B/A POST TO BE SET IN ONE PIECE. AFTER SUPPORT HAS BEEN ERECTED AND THE CONCRETE FOOTINGS HAS CURED AT LEAST 48 HRS., CLEAN CONCRETE FROM BASE CONNECTION BOLTS THEN LOOSEN AND RETIGHTEN EACH BOLT IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. DO NOT OVERTIGHTEN. BURR ALL BOLT THREADS OF BASE CONNECTIONS TO PREVENT LOOSENING.

- USE REINFORCED FOOTINGS WITH DIMENSIONS AS SHOWN IN PLANS. WHERE SOLID ROCK IS ENCOUNTERED, THE ENGINEER DIRECTS WHETHER TO PLACE THE FOOTING AT THE PRESCRIBED DEPTH OR EXTEND IT AT LEAST TWO FEET INTO THE ROCK. CONSTRUCT ALL FOOTINGS OF CLASS A CONCRETE.
- FORM TOP 6" OF FOOTINGS. ENGINEER APPROVES THE METHOD USED.
- THE FINAL FLAT TURN OF SPIRAL OR HOOPS NO. 3 OR LARGER PLACED 3" FROM TOP AND BOTTOM OF FOOTING MAY BE WELDED TO VERTICAL REINFORCING BARS. NO OTHER WELDING WILL BE PERMITTED.
- ELIMINATE HINGE CONNECTION FOR ALL SINGLE SUPPORT SIGNS.
- DETAIL IS FOR ONE DIRECTION BREAKAWAY. WHEN PLANS REQUIRE A TWO DIRECTION BREAKAWAY, TWO FRICTION PLATES SHALL BE USED IN LIEU OF ONE FRICTION PLATE AND ONE HINGE PLATE.
- SHAPE THE TOPS OF THE FOOTINGS TO CONFORM WITH FINISHED GROUND ELEVATIONS SUCH THAT WATER WILL NOT COLLECT AGAINST THE SUPPORTS.
- IF THE GROUNDWATER IS ENCOUNTERED AT AN DEPTH SHALLOWER THAN 7 FEET, THE SIGN FOUNDATION MUST BE REDESIGNED BASED UPON THE ACTUAL FIELD CONDITIONS. THE FOUNDATION DESIGN DOES NOT APPLY TO VERY SOFT OR LOOSE SOIL, MUCK, WEATHERED ROCK, OR HARD ROCK.

GROUND MOUNTED SIGN SUPPORT

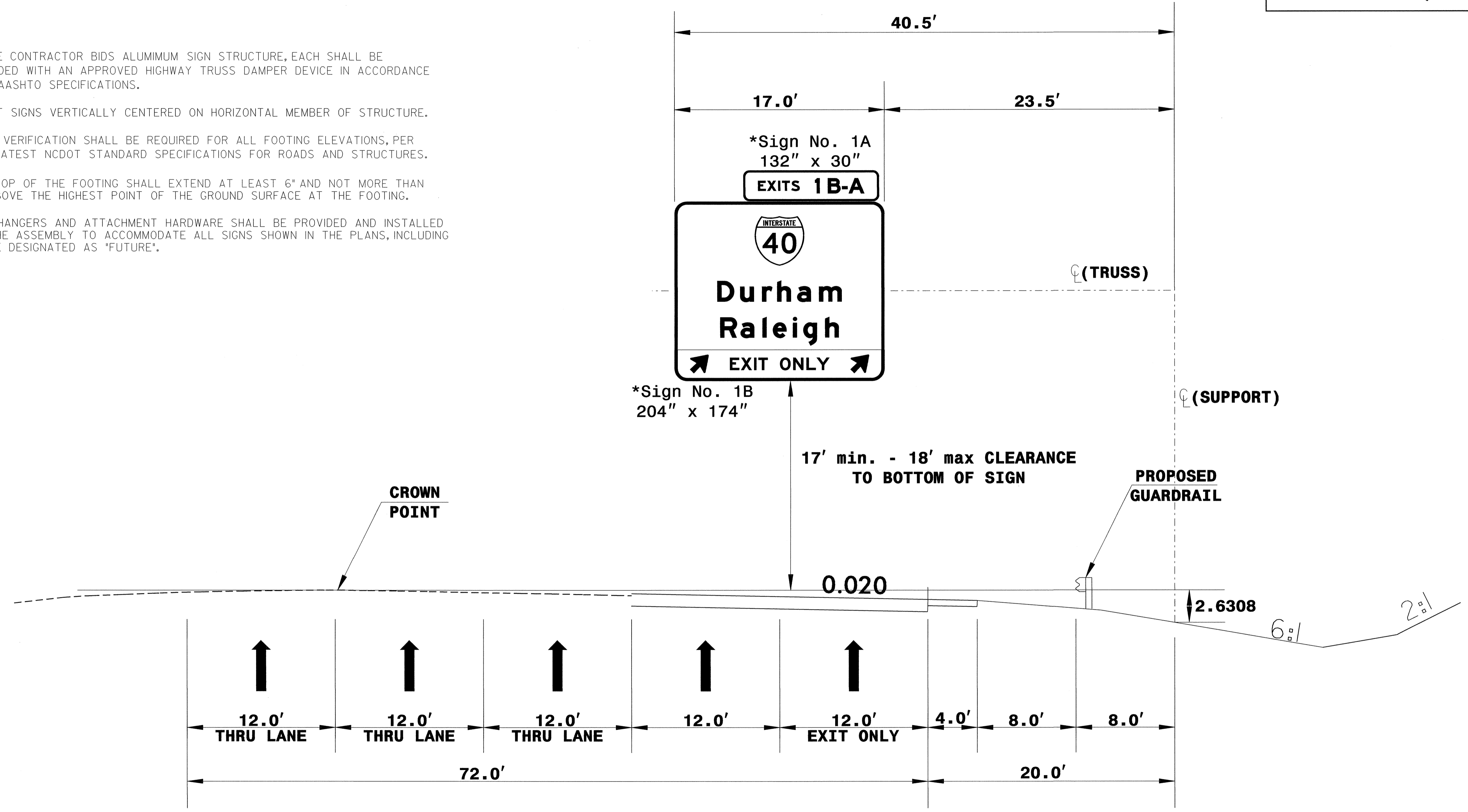
TIP NO. R-2000AF	SHEET NO. SIGN-7
APPROVED: _____	
DATE: _____	
SEAL	



* THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTING. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 100 M.P.H.

NOTES:

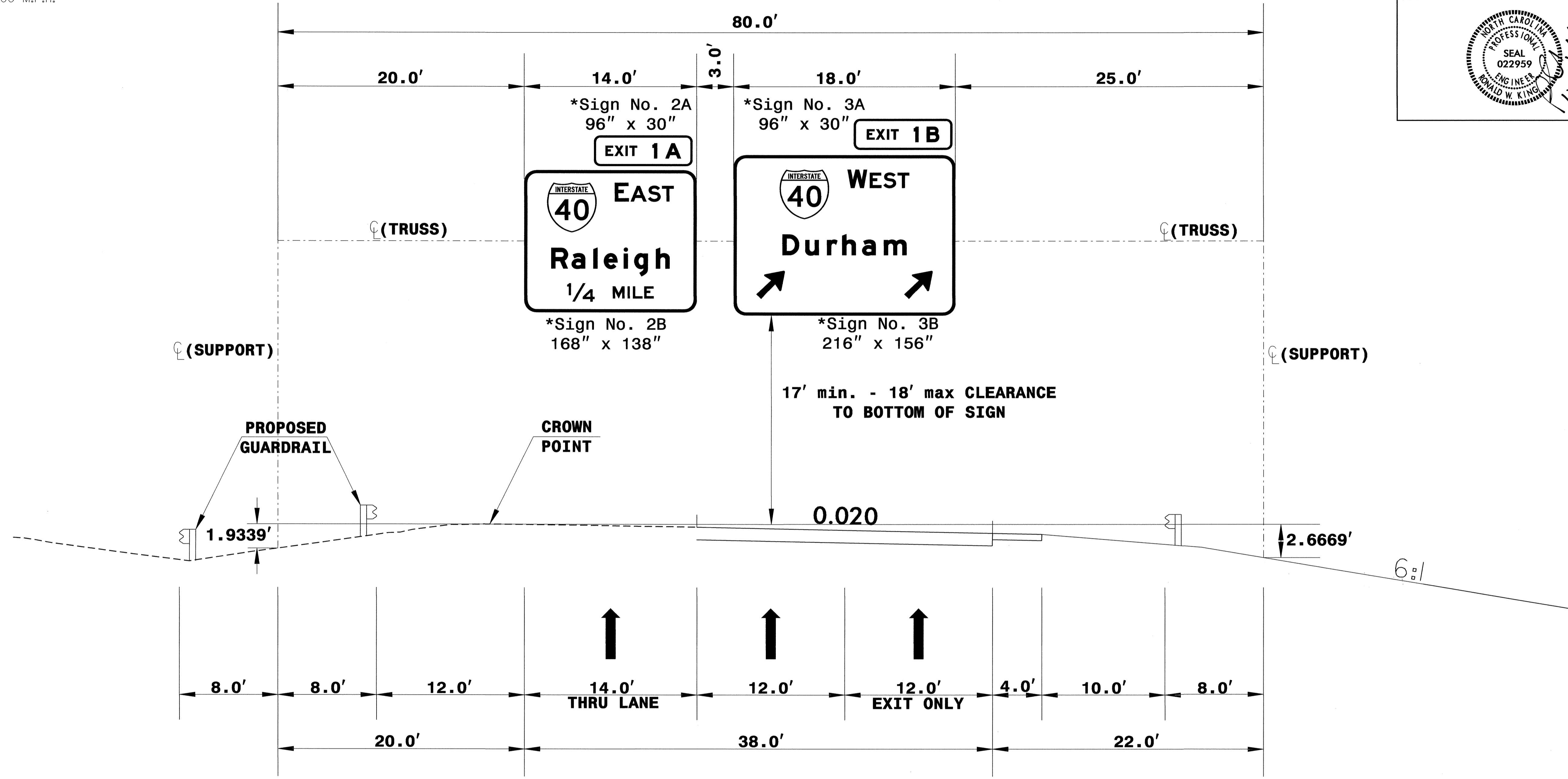
- A. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
- B. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
- C. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- D. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 6" AND NOT MORE THAN 24" ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
- E. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".



OVERHEAD ASSEMBLY
 @ -CD- STA 10+00 WBL
 I-540

TIP NO. R-2000AF	SHEET NO. SIGN-8
APPROVED: _____	
DATE: _____	
SEAL	

* THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTING. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 100 M.P.H.



NOTES:

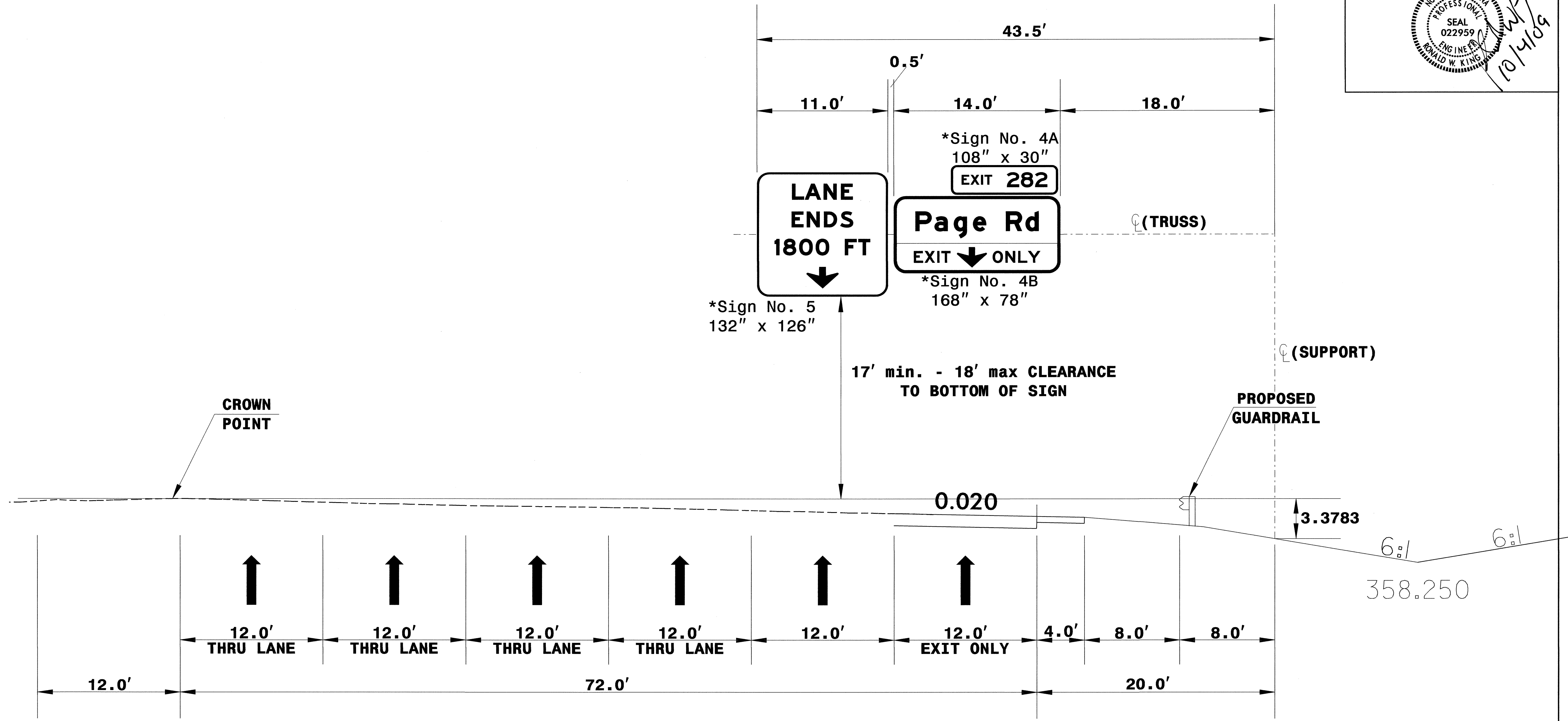
- A. IF THE CONTRACTOR BIDS ALUMMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
- B. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
- C. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- D. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 6" AND NOT MORE THAN 24" ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
- E. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

OVERHEAD ASSEMBLY
@ -RP2B- STA 10+00

TIP NO. R-2000AF	SHEET NO. SIGN-9
APPROVED: _____	
DATE: _____	
SEAL	



* THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTING. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 100 M.P.H.



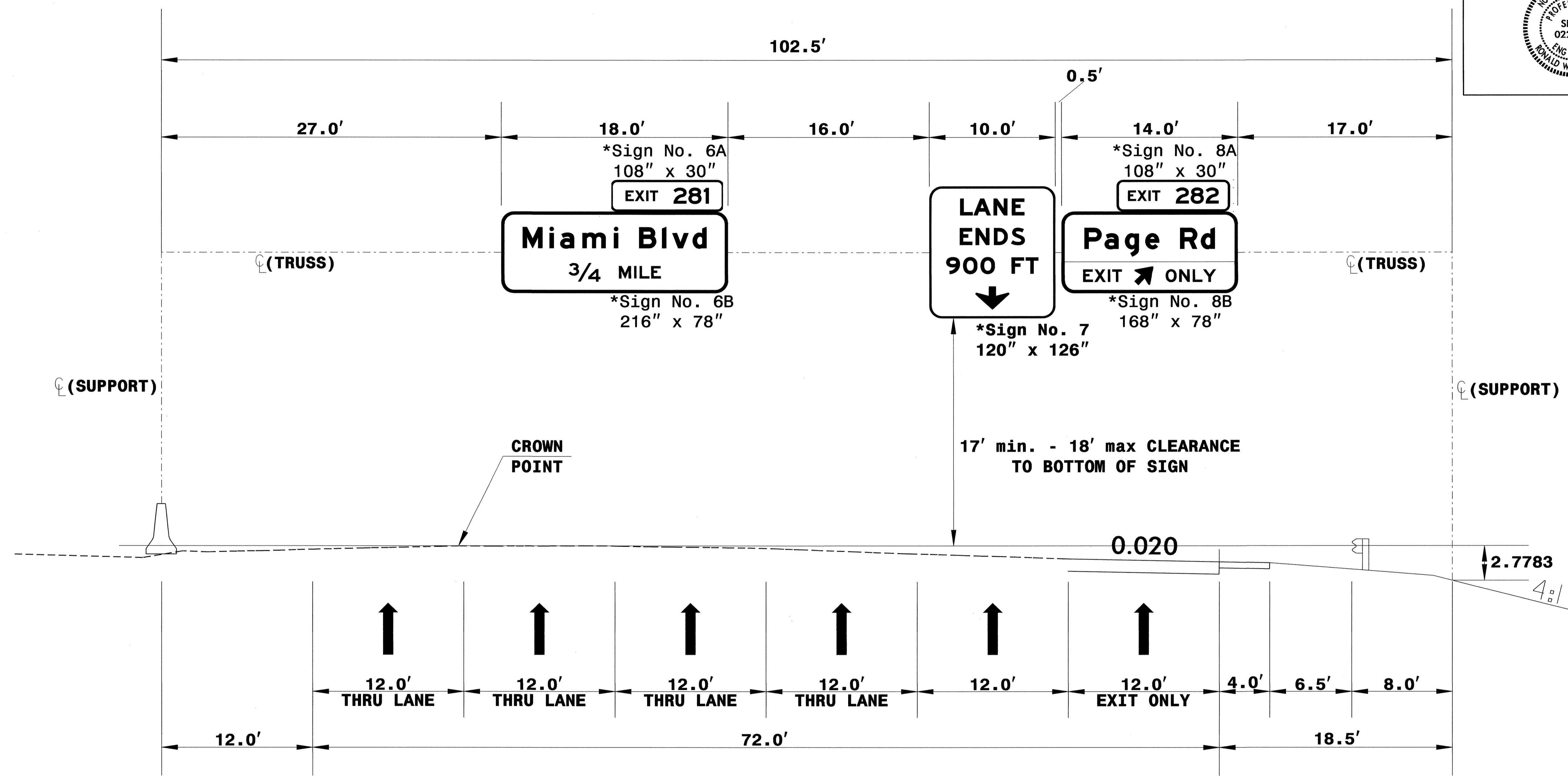
NOTES:

- A. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
- B. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
- C. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- D. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 6" AND NOT MORE THAN 24" ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
- E. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

OVERHEAD ASSEMBLY
@ -L- STA 36+00 WBL
I-40

TIP NO. R-2000AF	SHEET NO. SIGN-10
APPROVED: _____	
DATE: _____	
SEAL	

* THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTING. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 100 M.P.H.



NOTES:

- A. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
- B. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
- C. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- D. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 6" AND NOT MORE THAN 24" ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
- E. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

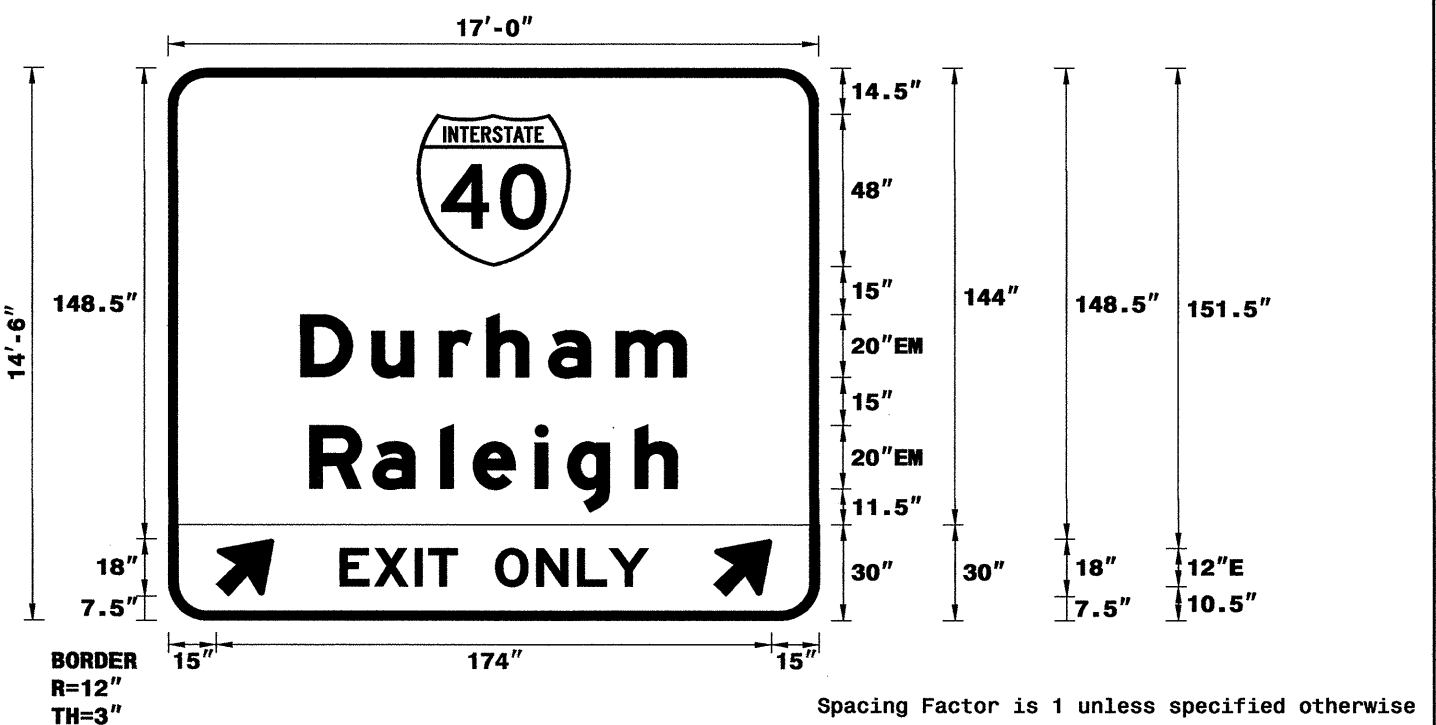
F. SEE PROJECT SPECIAL PROVISION "OVERHEAD SIGN ASSEMBLY AT STATION '25+70 -L-' LEFT SUPPORT" FOR DESIGN AND CONSTRUCTION REQUIREMENTS.

OVERHEAD ASSEMBLY
@ -L- STA 25+70 WBL
I-40

SIGN NUMBER: 1B TYPE: A QUANTITY: 1
 BACKG COLOR: Green COPY COLOR: White
 DESIGN BY: SDC CHECKED BY: DIV: 5 DATE: Oct 01, 2009
 PROJECT ID: R-2000AF

SYMBOL	X	Y	WID	HT
M1_1	78	111.5	48	48
ARSHRT	15	7.5	20	22.5
ARSHRT	171	7.5	20	22.5

SIGN WIDTH: 17'-0" SIGN HEIGHT: 14'-6" TOTAL AREA: 246.5 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 3" RADII: 12"
 NO. Z BARS: 0 LENGTH: 196.0 MAT'L: 0.125" (3.2 mm) ALUMINUM



USE NOTES: 1,2,3,4,5
 1. Legend and border shall be direct applied Grade A sheeting.
 2. Background shall be Grade C reflective sheeting.
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
 4. Shields shall be Grade A sheeting.
 5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter

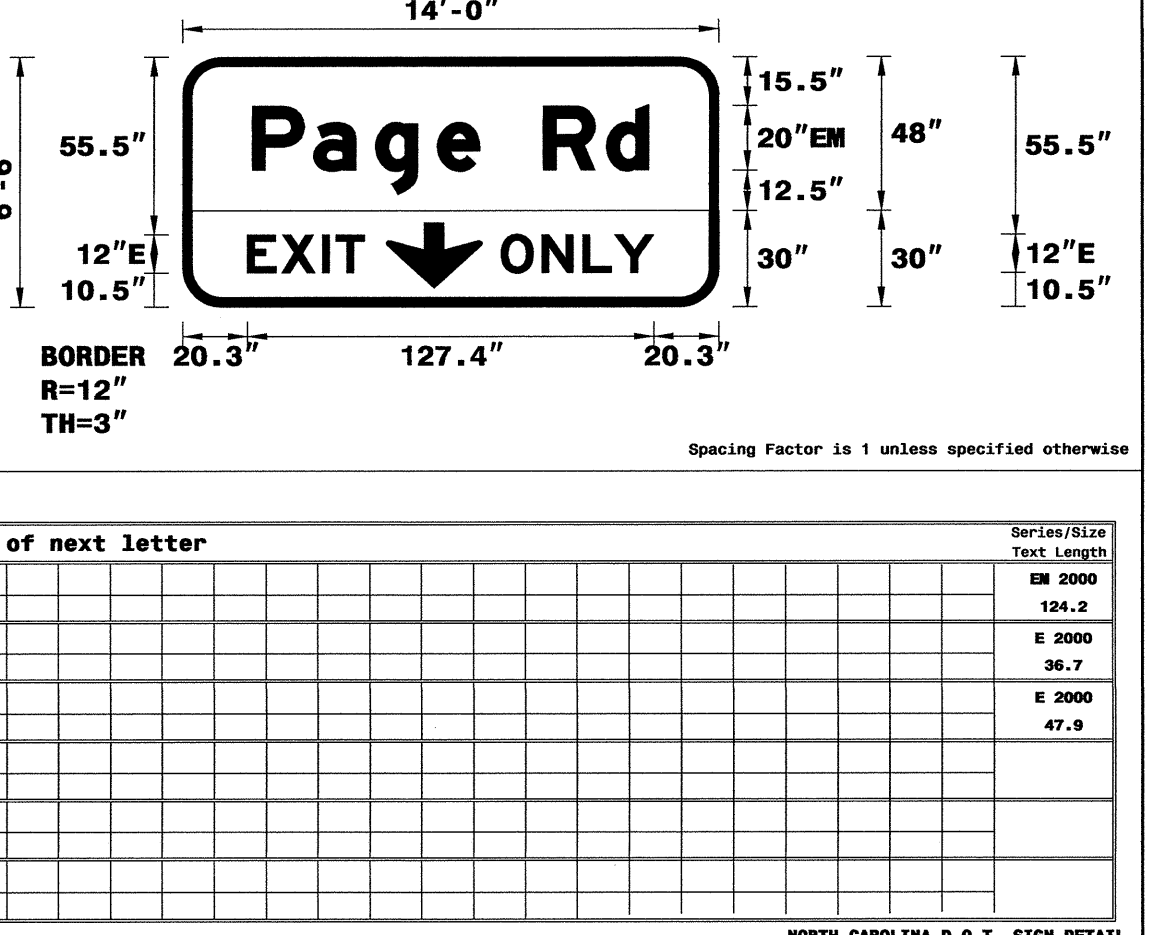
Series/Size	Text Length
EM 2000	120.8
EM 2000	115.2
E 2000	96.6

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 4B TYPE: A QUANTITY: 1
 BACKG COLOR: Green COPY COLOR: White
 DESIGN BY: SDC CHECKED BY: DIV: 5 DATE: Sep 17, 2009
 PROJECT ID: R-2000AF

SYMBOL	X	Y	WID	HT
M1_1	44.9	93.7	48	48
ARMED	22.2	16.1	22.5	35.4
ARMED	166.2	16.1	22.5	35.4

SIGN WIDTH: 14'-0" SIGN HEIGHT: 6'-6" TOTAL AREA: 91.0 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 3" RADII: 12"
 NO. Z BARS: 2 LENGTH: 160.0 MAT'L: 0.125" (3.2 mm) ALUMINUM



USE NOTES: 1,2,5
 1. Legend and border shall be direct applied Grade A sheeting.
 2. Background shall be Grade C reflective sheeting.
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
 4. Shields shall be Grade A sheeting.
 5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter

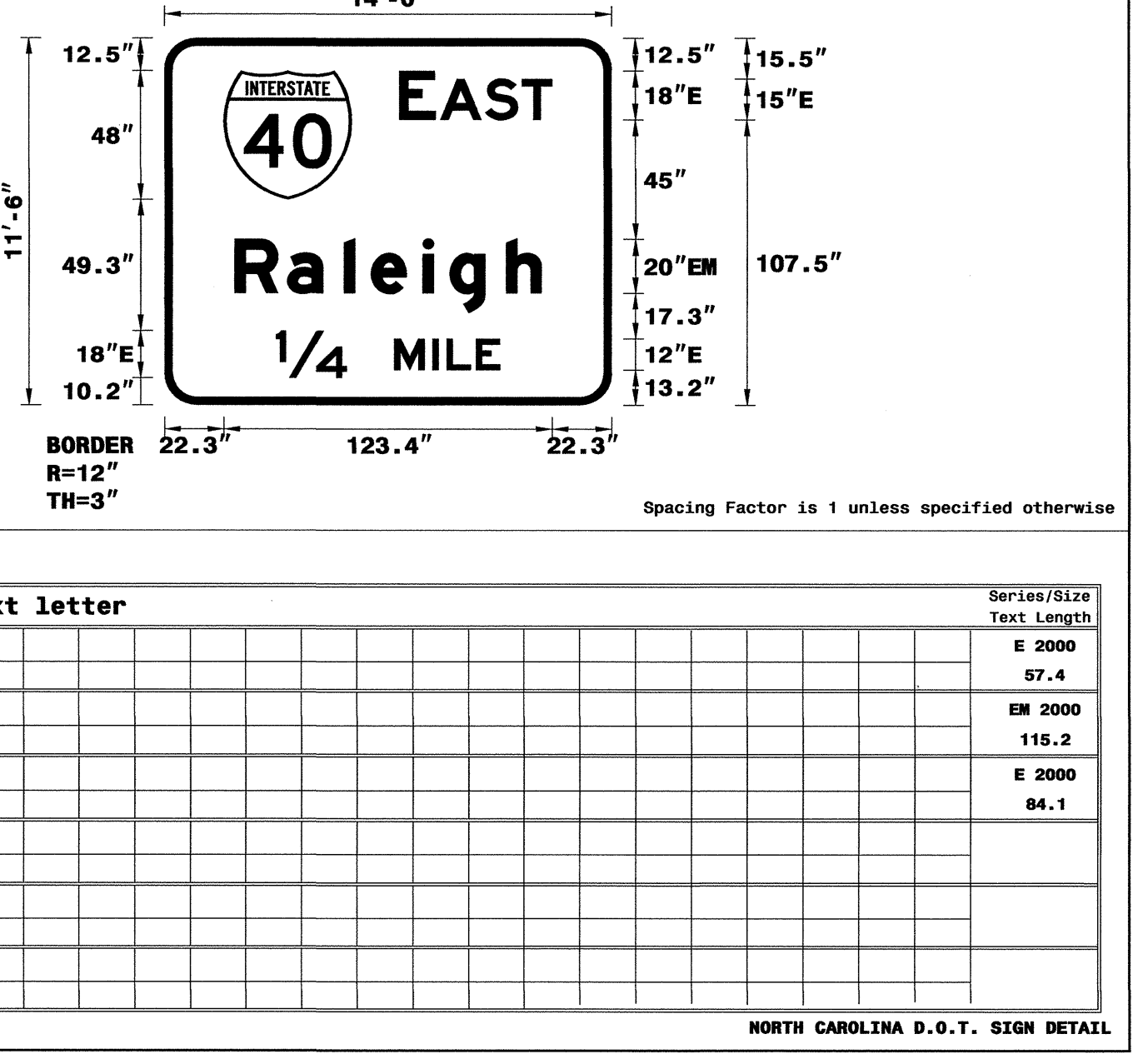
Series/Size	Text Length
EM 2000	124.2
E 2000	36.7
E 2000	47.9

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 2B TYPE: A QUANTITY: 1
 BACKG COLOR: Green COPY COLOR: White
 DESIGN BY: SDC CHECKED BY: DIV: 5 DATE: Oct 02, 2009
 PROJECT ID: R-2000AF

SYMBOL	X	Y	WID	HT
M1_1	22.3	77.5	48	48

SIGN WIDTH: 14'-0" SIGN HEIGHT: 11'-6" TOTAL AREA: 161.0 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 3" RADII: 12"
 NO. Z BARS: 3 LENGTH: 160.0 MAT'L: 0.125" (3.2 mm) ALUMINUM



USE NOTES: 1,2,3,4
 1. Legend and border shall be direct applied Grade A sheeting.
 2. Background shall be Grade C reflective sheeting.
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
 4. Shields shall be Grade A sheeting.
 5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter

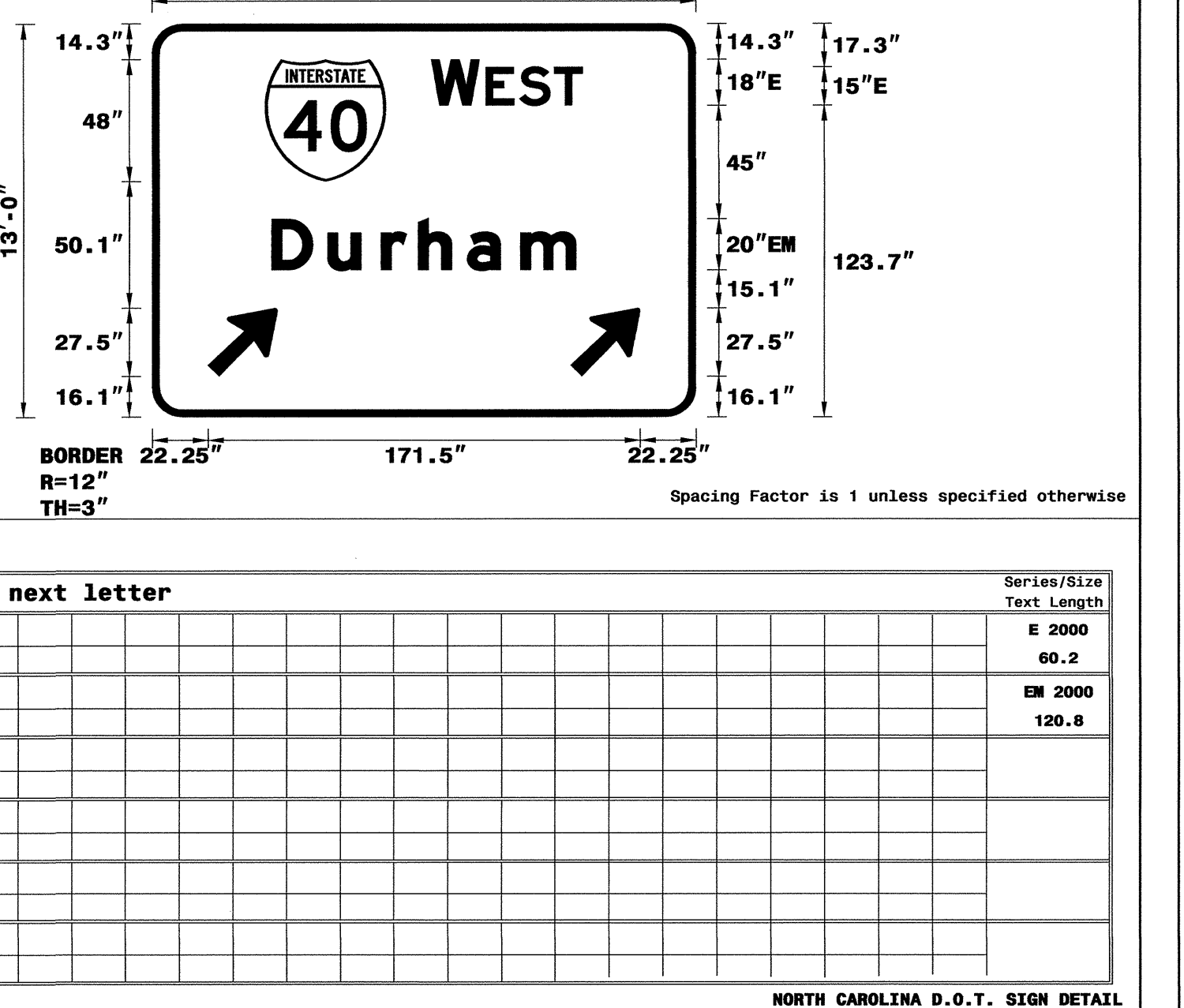
Series/Size	Text Length
E 2000	57.4
EM 2000	115.2
E 2000	84.1

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 3B TYPE: A QUANTITY: 1
 BACKG COLOR: Green COPY COLOR: White
 DESIGN BY: SDC CHECKED BY: DIV: 5 DATE: Oct 02, 2009
 PROJECT ID: R-2000AF

SYMBOL	X	Y	WID	HT
M1_1	44.9	93.7	48	48
ARMED	22.2	16.1	22.5	35.4
ARMED	166.2	16.1	22.5	35.4

SIGN WIDTH: 18'-0" SIGN HEIGHT: 13'-0" TOTAL AREA: 234.0 Sq.Ft.
 BORDER TYPE: FLUSH RECESS: 0" WIDTH: 3" RADII: 12"
 NO. Z BARS: 4 LENGTH: 208.0 MAT'L: 0.125" (3.2 mm) ALUMINUM



USE NOTES: 1,2,3,4
 1. Legend and border shall be direct applied Grade A sheeting.
 2. Background shall be Grade C reflective sheeting.
 3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
 4. Shields shall be Grade A sheeting.
 5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
E 2000	60.2
EM 2000	115.2
EM 2000	120.8

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

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Sign Designs

TIP NO. R-2000AF	SHEET NO. SIGN-12
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APPROVED: _____
DATE: _____
SEAL

SIGN NUMBER: 5
TYPE: A
QUANTITY: 1
SIGN WIDTH: 11'-0"
HEIGHT: 10'-6"
TOTAL AREA: 115.5 Sq.Ft.

BACKG COLOR: Green
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARDOWN	50	8.4	32.1	22

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"

NO. Z BARS: 3
LENGTH: 124.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
PROJECT ID: R-2000AF
CHECKED BY: DIV: 5
DATE: Sep 17, 2009

USE NOTES: 1,2
1. Legend and border shall be direct applied Grade A sheeting.
2. Background shall be Grade C reflective sheeting.
3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
4. Shields shall be Grade A sheeting.
5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter										Series/Size
L	A	N	E							Text Length
35.4	12.8	19	17.4	11.8	35.4					EM 2000
										61.1
35	15.2	17.4	16.3	13	35					EM 2000
										61.9
17.8	8.6	16.2	16.6	13.4	16	13.6	11.8	17.8		EM 2000
										96.3

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 6B
TYPE: A
QUANTITY: 1
SIGN WIDTH: 18'-0"
HEIGHT: 6'-0"
TOTAL AREA: 117.0 Sq.Ft.

BACKG COLOR: Green
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARDOWN	50	8.4	32.1	22

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 3"
RADII: 12"

NO. Z BARS: 2
LENGTH: 208.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
PROJECT ID: R-2000AF
CHECKED BY: DIV: 5
DATE: Sep 17, 2009

USE NOTES: 1,2
1. Legend and border shall be direct applied Grade A sheeting.
2. Background shall be Grade C reflective sheeting.
3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
4. Shields shall be Grade A sheeting.
5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter										Series/Size		
M	I	A	M	I	B	L	V	D			Text Length	
20.5	25.4	10.2	21.2	30	4	20	21.8	9.8	19.4	13.2	20.5	EM 2000
												175
64.2	30	18	14.4	5.3	11	9	64.2					E 2000
												87.7

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 7
TYPE: A
QUANTITY: 1
SIGN WIDTH: 10'-0"
HEIGHT: 10'-6"
TOTAL AREA: 105.0 Sq.Ft.

BACKG COLOR: Green
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARDOWN	44	8.4	32.1	22

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 2"
RADII: 12"

NO. Z BARS: 3
LENGTH: 112.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
PROJECT ID: R-2000AF
CHECKED BY: DIV: 5
DATE: Sep 17, 2009

USE NOTES: 1,2
1. Legend and border shall be direct applied Grade A sheeting.
2. Background shall be Grade C reflective sheeting.
3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
4. Shields shall be Grade A sheeting.
5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter										Series/Size
L	A	N	E							Text Length
29.4	12.8	19	17.4	11.8	29.4					EM 2000
										61.1
29	15.2	17.4	16.3	13	29					EM 2000
										61.9
16.2	16.2	16.6	13.4	16	13.6	11.8	16.2			EM 2000
										87.7

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 8B
TYPE: A
QUANTITY: 1
SIGN WIDTH: 14'-0"
HEIGHT: 6'-6"
TOTAL AREA: 91.0 Sq.Ft.

BACKG COLOR: Green
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARSHRT	69.4	7.5	20	22.5

BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 3"
RADII: 12"

NO. Z BARS: 2
LENGTH: 160.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
PROJECT ID: R-2000AF
CHECKED BY: DIV: 5
DATE: Sep 17, 2009

USE NOTES: 1,2,5
1. Legend and border shall be direct applied Grade A sheeting.
2. Background shall be Grade C reflective sheeting.
3. Shields shall be on 0.032" (0.8mm) aluminum and demountable.
4. Shields shall be Grade A sheeting.
5. Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:

LETTER POSITIONS

Letter spacings are to start of next letter										Series/Size	
P	a	g	e	R	d					Text Length	
21.9	19.2	19.4	19.4	13.2	20	19.8	13.2	21.9			EM 2000
											124.2
20.7	10.7	12.8	4.2	9	110.6					E 2000	
											36.7
99.4	12.8	12.8	10	12.2	20.7					E 2000	
											47.9

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

Sign Designs

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SIGN NUMBER: 102
 TYPE: A
 QUANTITY: 1
 SIGN WIDTH: 22'-0"
 HEIGHT: 7'-0"
 TOTAL AREA: 154.0 Sq.Ft.

BACKG COLOR: Green
 COPY COLOR: White

SYMBOL	X	Y	WID	HT

BORDER TYPE: FLUSH
 RECESS: 0"
 WIDTH: 2"
 RADII: 12"

NO. Z BARS: 0
 LENGTH: 256.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
 PROJECT ID: R-2000AF

CHECKED BY:
 DIV: 5

DATE: Sep 21, 2009



USE NOTES: 1,2

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
EM 2000	231
EM 2000	54.7
E 2000	104.8

FILENAME: r-2000af

SIGN NUMBER: 201
 TYPE: A
 QUANTITY: 1
 SIGN WIDTH: 6'-0"
 HEIGHT: 5'-0"
 TOTAL AREA: 30.0 Sq.Ft.

BACKG COLOR: Green
 COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARMED	43	6	18.8	29.5

BORDER TYPE: FLUSH
 RECESS: 0"
 WIDTH: 1.5"
 RADII: 8"

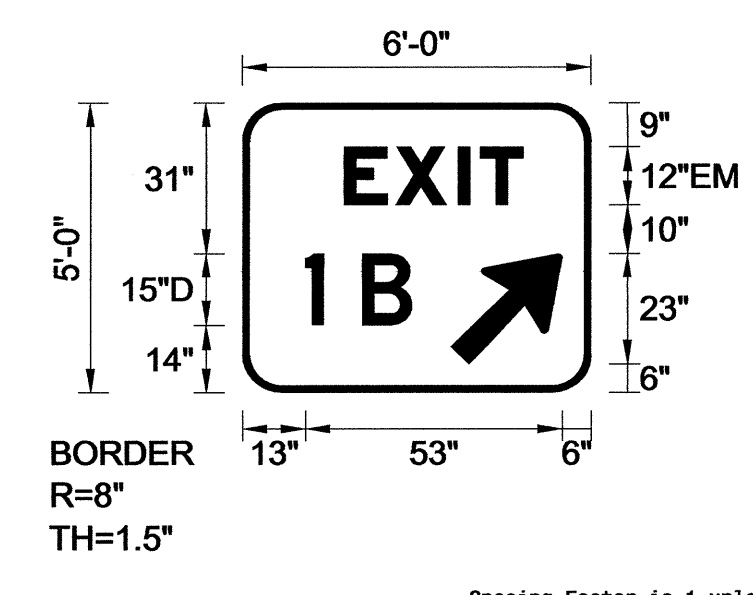
NO. Z BARS: 2
 LENGTH: 64.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: none
 PROJECT ID: R-2000AF

CHECKED BY:
 DIV: DIV

DATE: Jun 04, 2009



USE NOTES: 1,2

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
EM 2000	37
D 2000	22

FILENAME: r-2000af

SIGN NUMBER: 101 (99232SP)
 TYPE: A
 QUANTITY: 1
 SIGN WIDTH: 7'-6"
 HEIGHT: 4'-6"
 TOTAL AREA: 33.8 Sq.Ft.

BACKG COLOR: White
 COPY COLOR: Black

SYMBOL	X	Y	WID	HT

BORDER TYPE: FLUSH
 RECESS: 0.75"
 WIDTH: 1.25"
 RADII: 3"

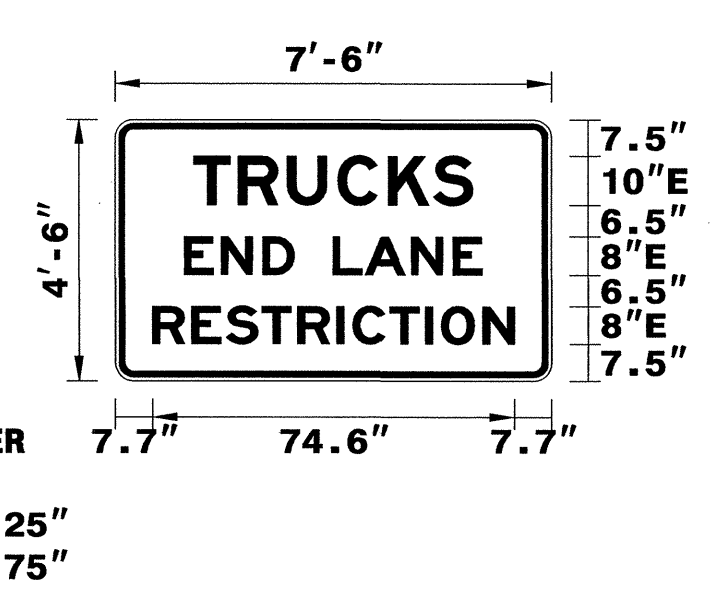
NO. Z BARS: 2
 LENGTH: 82.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
 PROJECT ID: R-2000AF

CHECKED BY:
 DIV: 5

DATE: Sep 21, 2009



LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
E 2000	57.5
E 2000	61.4
E 2000	74.6

FILENAME: r-2000af

SIGN NUMBER: 1A
 TYPE: B
 QUANTITY: 1
 SIGN WIDTH: 11'-0"
 HEIGHT: 2'-6"
 TOTAL AREA: 27.5 Sq.Ft.

BACKG COLOR: Green
 COPY COLOR: White

SYMBOL	X	Y	WID	HT

BORDER TYPE: FLUSH
 RECESS: 0"
 WIDTH: 2"
 RADII: 6"

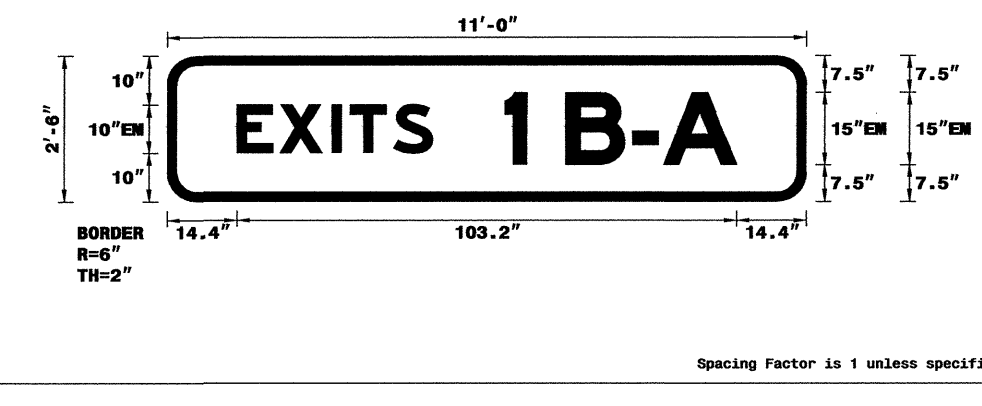
NO. Z BARS: 2
 LENGTH: 124.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SDC
 PROJECT ID: R-2000AF

CHECKED BY:
 DIV: 5

DATE: Oct 02, 2009



LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size	Text Length
EM 2000	100.2

FILENAME: r-2000af

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 p:\proj\proj\ec\3-1-1-EC221800
 ecotemen - AT

<p>SIGN NUMBER: 202 TYPE: A QUANTITY: 1 SIGN WIDTH: 7'-6" HEIGHT: 5'-0" TOTAL AREA: 37.5 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 1.5" RADIUS: 8" NO. Z BARS: 2 LENGTH: 82.0</p>	<p>BACKG COLOR: Green COPY COLOR: White</p> <table border="1"> <thead> <tr><th>SYMBOL</th><th>X</th><th>Y</th><th>WID</th><th>HT</th></tr> </thead> <tbody> <tr><td>ARMED</td><td>61</td><td>6</td><td>18.8</td><td>29.5</td></tr> </tbody> </table>	SYMBOL	X	Y	WID	HT	ARMED	61	6	18.8	29.5	<p>DESIGN BY: SDC PROJECT ID: R-2000AF</p>	<p>CHECKED BY: DIV: 5</p>	<p>DATE: Jun 04, 2009</p>
SYMBOL	X	Y	WID	HT										
ARMED	61	6	18.8	29.5										

BORDER R=8" TH=1.5"

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

	Letter					Series/Size Text Length	
	E	X	I	T			
	29.7	10.6	13	4.6	8.9	23.4	EM 2000
		2	8	2			D 2000
	12.3	13.2	13.2	10.2	41.1		36.6

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

<p>SIGN NUMBER: 203 TYPE: A QUANTITY: 1 SIGN WIDTH: 8'-0" HEIGHT: 5'-0" TOTAL AREA: 40.0 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 1.5" RADIUS: 8" NO. Z BARS: 2 LENGTH: 88.0</p>	<p>BACKG COLOR: Green COPY COLOR: White</p> <table border="1"> <thead> <tr><th>SYMBOL</th><th>X</th><th>Y</th><th>WID</th><th>HT</th></tr> </thead> <tbody> <tr><td>ARMED</td><td>67</td><td>6</td><td>18.8</td><td>29.5</td></tr> </tbody> </table>	SYMBOL	X	Y	WID	HT	ARMED	67	6	18.8	29.5	<p>DESIGN BY: SDC PROJECT ID: R-2000AF</p>	<p>CHECKED BY: DIV: 5</p>	<p>DATE: Oct 02, 2009</p>
SYMBOL	X	Y	WID	HT										
ARMED	67	6	18.8	29.5										

BORDER R=8" TH=1.5"

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

	Letter					Series/Size Text Length		
	E	X	I	T	S			
	26.9	10.6	13	4.6	10.7	9.7	20.6	EM 2000
		1						D 2000
	12.2	3.8	80					3.8
		B		A				D 2000
	24	11.4	6.2	12.6	41.7			30.3

FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

<p>SIGN NUMBER: 301 TYPE: D QUANTITY: 1 SIGN WIDTH: 5'-0" HEIGHT: 3'-6" TOTAL AREA: 17.5 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 1" RADIUS: 6" NO. Z BARS: LENGTH:</p>	<p>BACKG COLOR: Green COPY COLOR: White</p> <table border="1"> <thead> <tr><th>SYMBOL</th><th>X</th><th>Y</th><th>WID</th><th>HT</th></tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	SYMBOL	X	Y	WID	HT						<p>DESIGN BY: SDC PROJECT ID: R-2000AF</p>	<p>CHECKED BY: DIV: 5</p>	<p>DATE: Sep 21, 2009</p>
SYMBOL	X	Y	WID	HT										

BORDER R=6" TH=1"

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied Grade B sheeting.
- Background shall be Grade C reflective sheeting.
- Shields shall be on 0.032" (0.8mm) aluminum and demountable.
- Shields shall be Grade B sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

	Letter										Series/Size Text Length		
	W	E	L	C	O	H	E	T	O				
	19	2.7	2	1.9	2.2	2.4	2.6	1.5	3	1.9	1.8	19	C 2000
		D	U	R	H	A	M	C	O				D 2000
	6.4	5.4	5.5	5.1	5	6	4.7	6	5.3	4.3	6.4		47.2
		L	E	A	V	I	N	G					C 2000
	23.4	1.9	1.8	2.1	2.3	1.1	2.3	1.7	23.4				13.2
		W	A	K	E	C	O						D 2000
	11.9	5.7	6	5.2	3.7	6	5.3	4.3	11.9				36.2

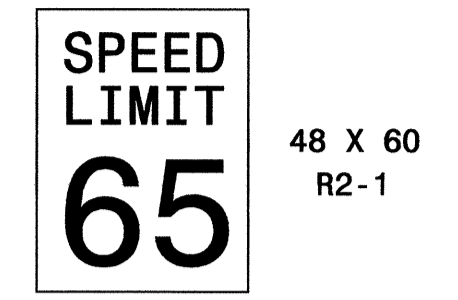
FILENAME: r-2000af NORTH CAROLINA D.O.T. SIGN DETAIL

Sign Designs

TIP NO. R-2000AF	SHEET NO. SIGN-16
APPROVED: _____	
DATE: _____	
SEAL	

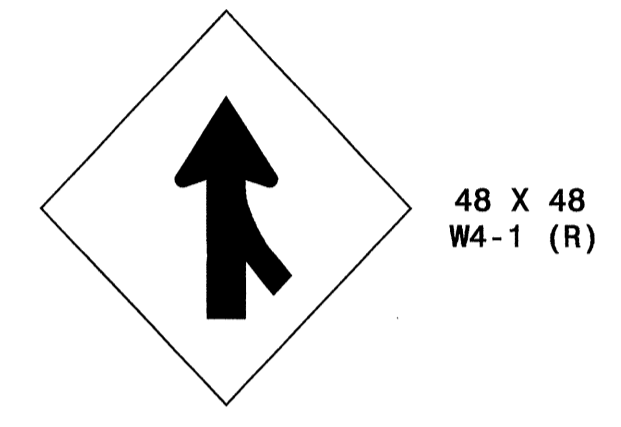


401 QUANTITY REQ'D 1



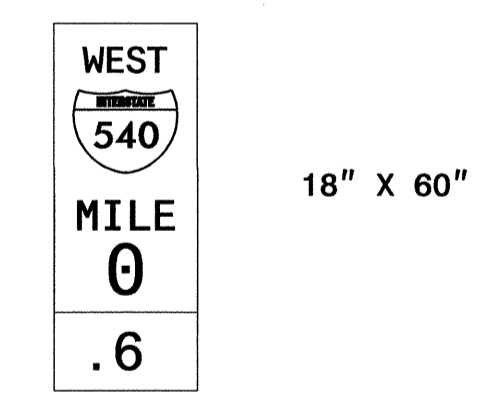
TWO "U" POSTS PER SIGN

406 QUANTITY REQ'D 1



TWO "U" POSTS PER SIGN

QUANTITY REQ'D 1



ONE "U" POST PER SIGN

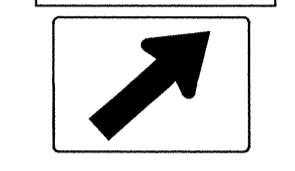
501



1 - 30" X 15"



1 - 36" X 36"

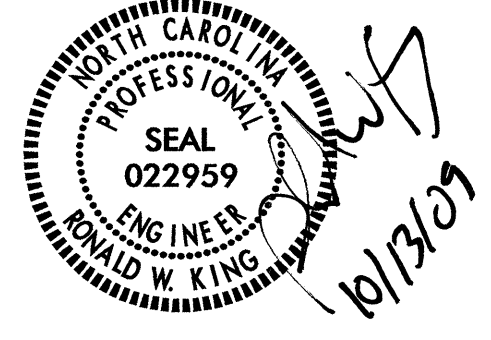


1 - 21" X 15"

ONE "U" POST PER SIGN

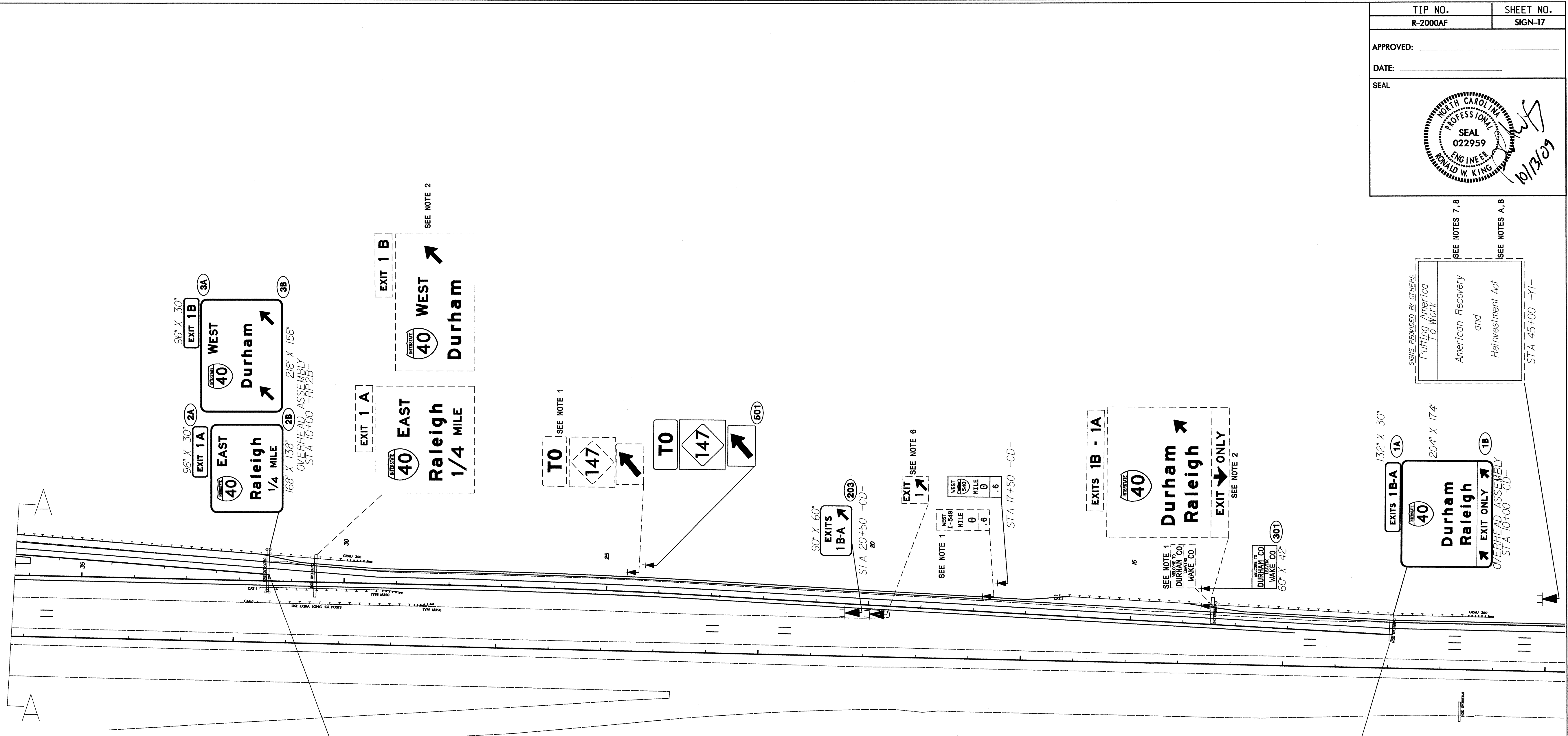
01-OCT-2009 14:17
P:\t\p\p\o\j\ec\13-1\100006\traffic\signing\cadd\signing_layout_plans\engseed.dgn
scoblenon AI 11/22/09

**TYPE "E", "F" AND
MILEMARKER SIGNS**



SEALS PROVIDED BY OTHERS:
 Putting America To Work
 American Recovery and Reinvestment Act
 STA 45+00 -YI-

SEALS PROVIDED BY OTHERS:
 Putting America To Work
 American Recovery and Reinvestment Act
 STA 45+00 -YI-



-RP2B- POT Sta. 10+00.00
 -CD- STA. 31+43.22 -12.00

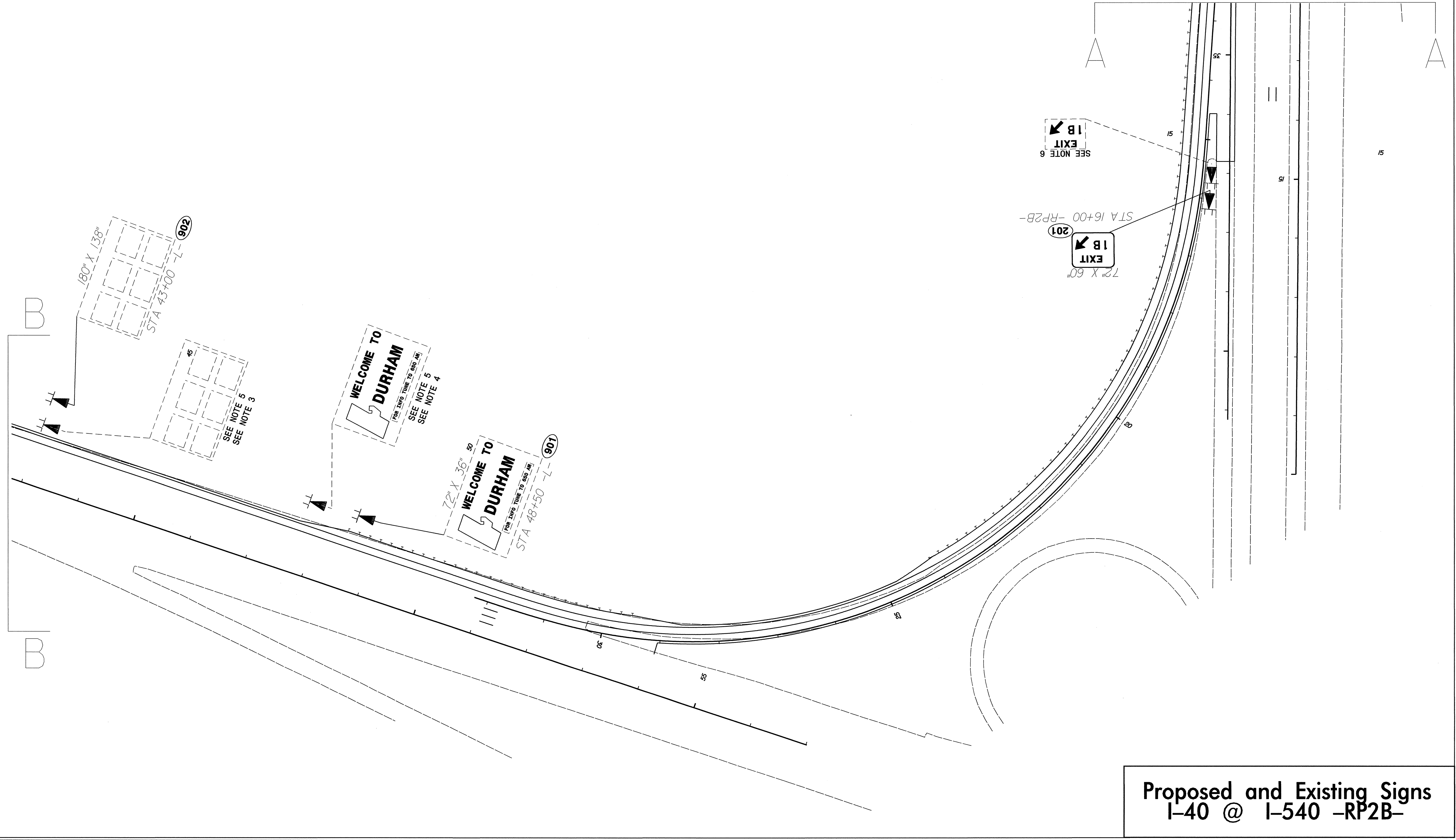
-CD- POT Sta. 10+00.00
 -YI- STA. 42+07.84 -63.00

**Proposed and Existing Signs
 I-540 -CD-**

13-OCT-2009 14:06
 p:\tip\project\1-2000af\traffic\signing\cadd\signing_layout_plans\1-2000af_sgn_sgn17.dgn
 scoteman AT 11/22/2009

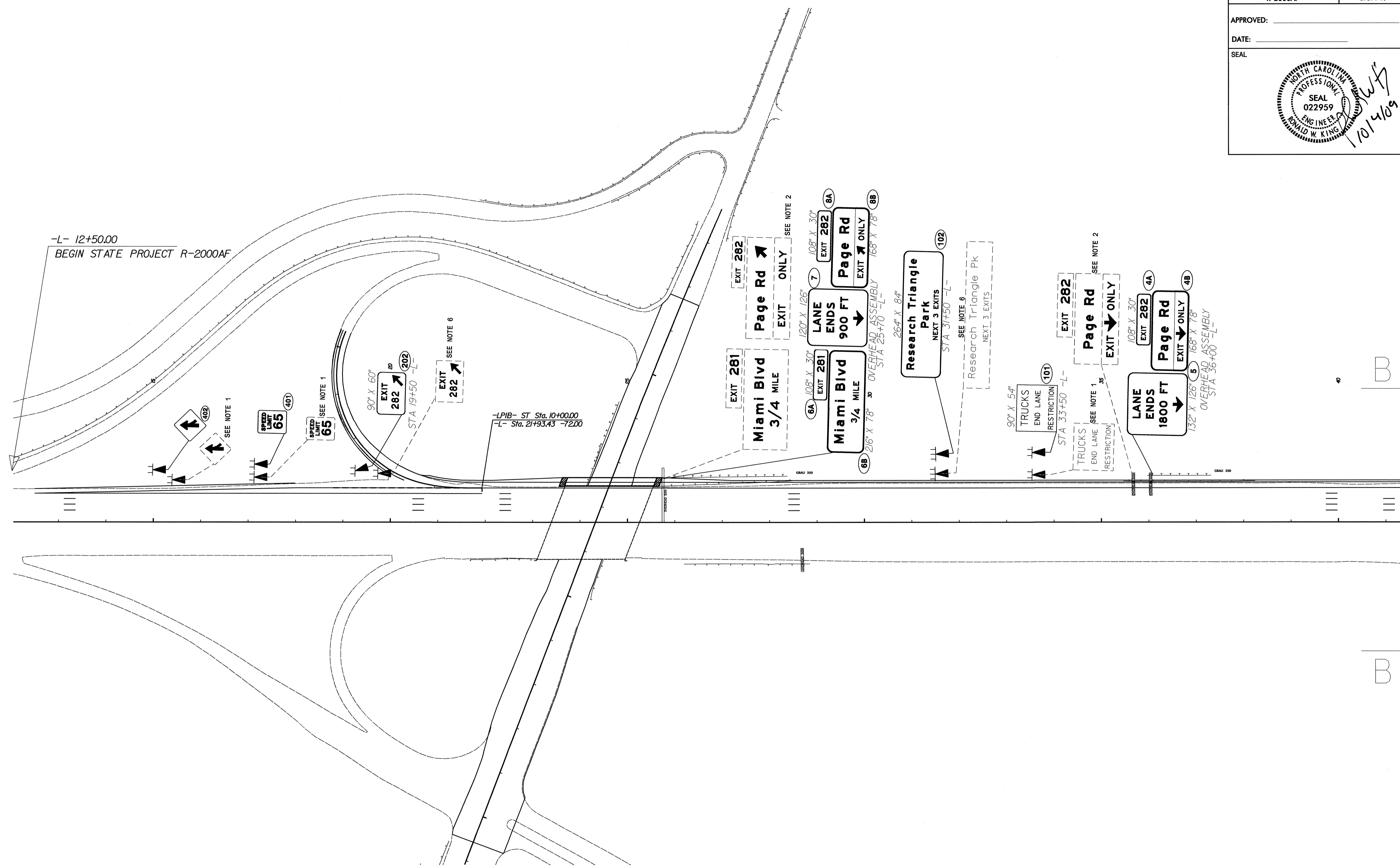
TIP NO. R-2000AF	SHEET NO. SIGN-18
APPROVED: _____	
DATE: _____	
SEAL	

02-OCT-2009 14:09
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 scobleman - AT - EC221650



Proposed and Existing Signs
I-40 @ I-540 -RP2B-

TIP NO. R-2000AF	SHEET NO. SIGN-19
APPROVED: _____	
DATE: _____	
SEAL	



-L- 12+50.00
BEGIN STATE PROJECT R-2000AF

-LPIB- ST Sta. 10+00.00
-L- Sta. 21+93.43 -72.00

**Proposed and Existing Signs
I-40 -L-**

02-OCT-2009 14:11
p:\v\p\p\c\ec\3\1\6\2009\6\traffic\signing\cadd\signing layout plans\I-2000af_sgn_sign19.dgn
sc0lemont - AT - 11/22/09