

T.I.P.: R-2510C

**STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLANS  
BEAUFORT COUNTY**

**LOCATION: US 17 FROM NORTH OF SR 1509 (SPRINGS ROAD)  
TO NORTH OF NC 171**

TIP NO. R-2510C	SHEET NO. SIGN-1
APPROVED:	
DATE: 10-5-10	
SEAL	

**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
901.70	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 SUPPORTS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS

**SUMMARY OF QUANTITIES**

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4096000000	904	SIGN ERECTION, TYPE D .....	11	EA.
4102000000	904	SIGN ERECTION, TYPE E .....	213	EA.
4108000000	904	SIGN ERECTION, TYPE F .....	26	EA.
4048000000	902	REINFORCED CONCRETE SIGN FOUNDATION .....	1	C.Y.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM .....	495	LB.
4082000000	903	SUPPORTS, WOOD .....	3099	L.F.
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED) .....	1	EA.
4158000000	907	DISPOSAL OF SIGN SYSTEM, WOOD .....	50	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE F .....	1	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE D .....	2	EA.

**GENERAL NOTES**

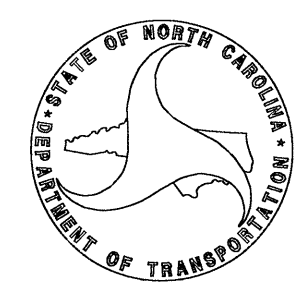
- . SIGNS FURNISHED BY STATE
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . SIGNING PLANS DO NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING OR PAVEMENT MARKINGS. 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.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

**INDEX**

SHEET NO.	DESCRIPTION
SIGN-1	SIGNING PLAN COVER SHEET QUANTITIES & NOTES
SIGN-2	TYPE "A" & "B" SIGN INFO. SHEET
SIGN-3-3C	GROUND MOUNTED SIGN SUPPORT AND SIGN MOUNTING DETAILS
SIGN-4-6	GROUND MOUNTED SIGN DESIGNS
SIGN-7-7A	E SHEET
SIGN-8	F SHEET
SIGN-9-17	SIGN ROADWAY SHEETS

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

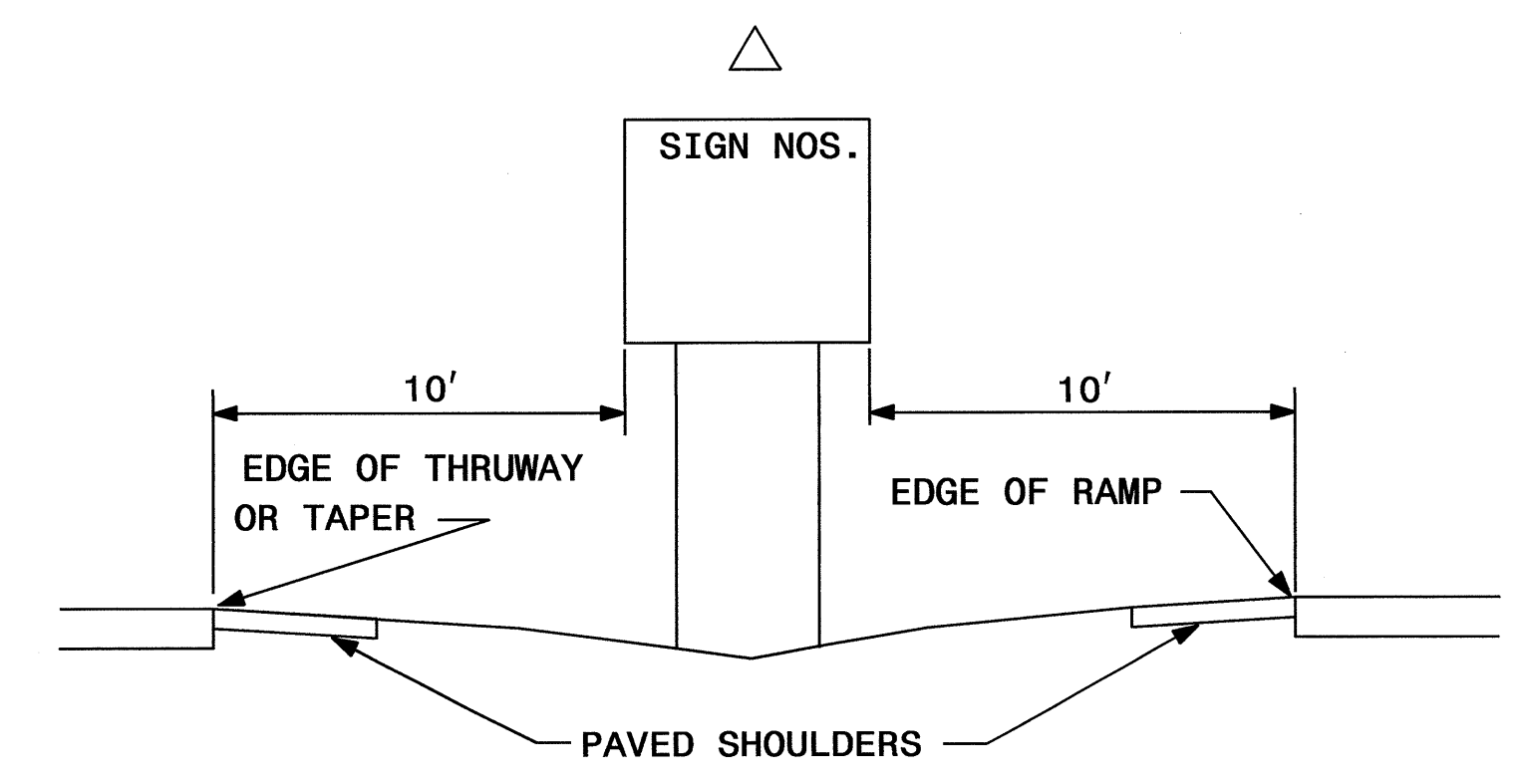
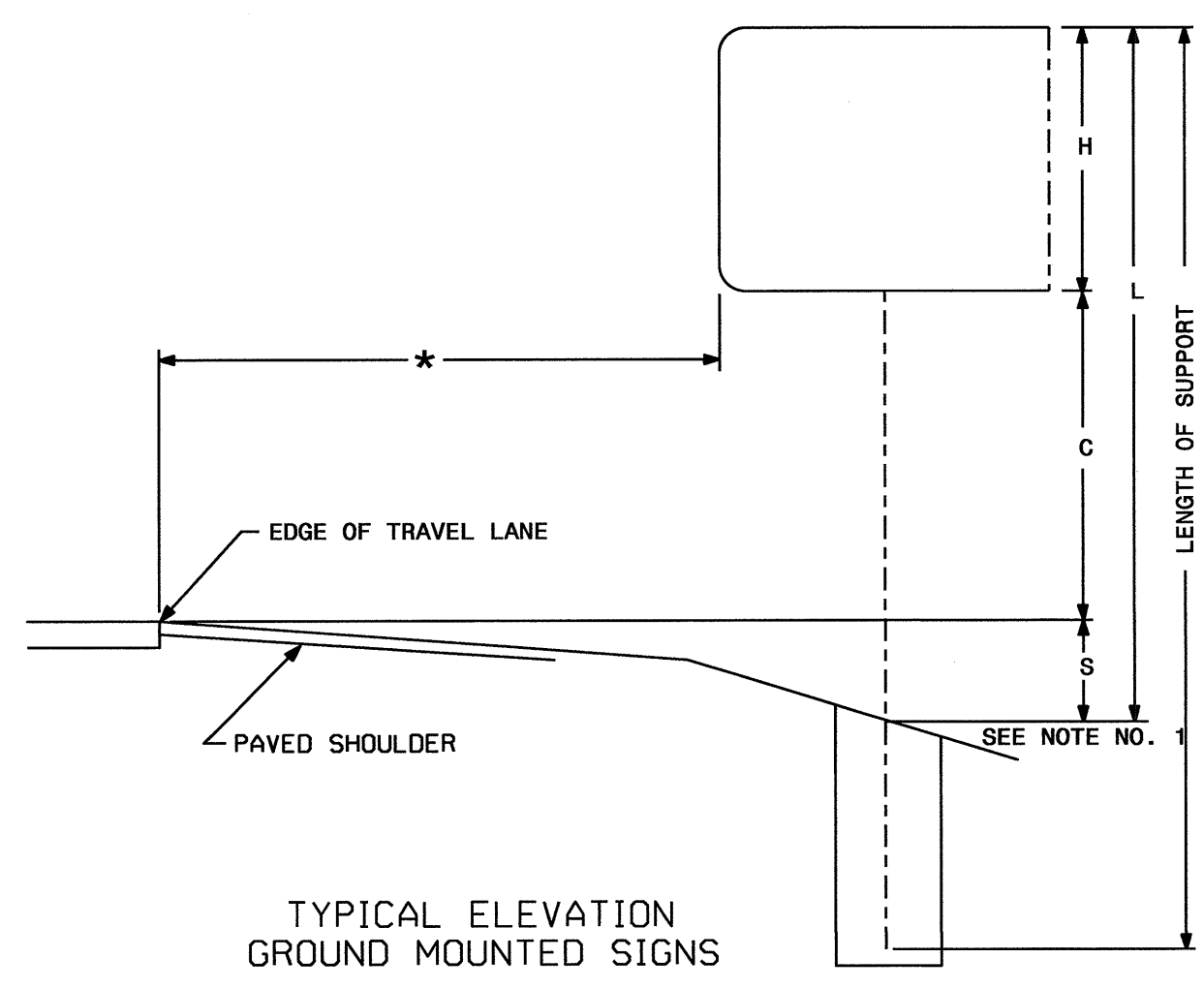
A. ALQUDWAH, P.E.      SIGNING & DELINEATION REGIONAL ENGINEER  
D. PILLAR                SIGNING & DELINEATION DESIGN ENGINEER



TIP NO. R-2510C	SHEET NO. SIGN-2
APPROVED: <i>[Signature]</i>	
DATE: 10-5-10	
SEAL	

SIGN NO.	SIGN TYPE	SIGN SIZE (in.)			ROADWAY STATION	NO. OF SUP.	BEAM SECTION	SUPPORT TYPE	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.)	REIN. FTGS. (c.y.)
		w	x	h								SNS HT	MTG HT	EMBED-MENT	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH	S	L	TOTAL LENGTH					
101	A	120	X	60	227+00	2	W6x9	BA	N/A	N/A	30.00	5.00	7.00	5	6.76	18.76	23.76	0.00	0.00	0.00	7.19	19.19	24.19	1.5	5.5	494.67	0.00	0.72

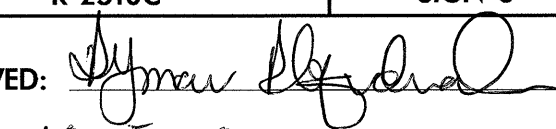

USE:	495	0	1
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**NOTES**

1. DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.
2. 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
3. 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"  
SIGN INFORMATION SHEET**

TIP NO. R-2510C	SHEET NO. SIGN-3
APPROVED: 	
DATE: 10-5-10	
SEAL	
	

**NOTES:**


1. DESIGN CONFORMS WITH THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS - A.A.S.H.T.O.
2. USE MATERIALS, FABRICATE AND ERECT SIGNS AND SUPPORTS THAT CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
3. 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.
4. 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
5. 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.
6. BASE PLATES DETAILS ARE FOR INSTALLATIONS ON THE RIGHT SHOULDER AND IN GORE AREAS.
7. 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
3/8"	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.

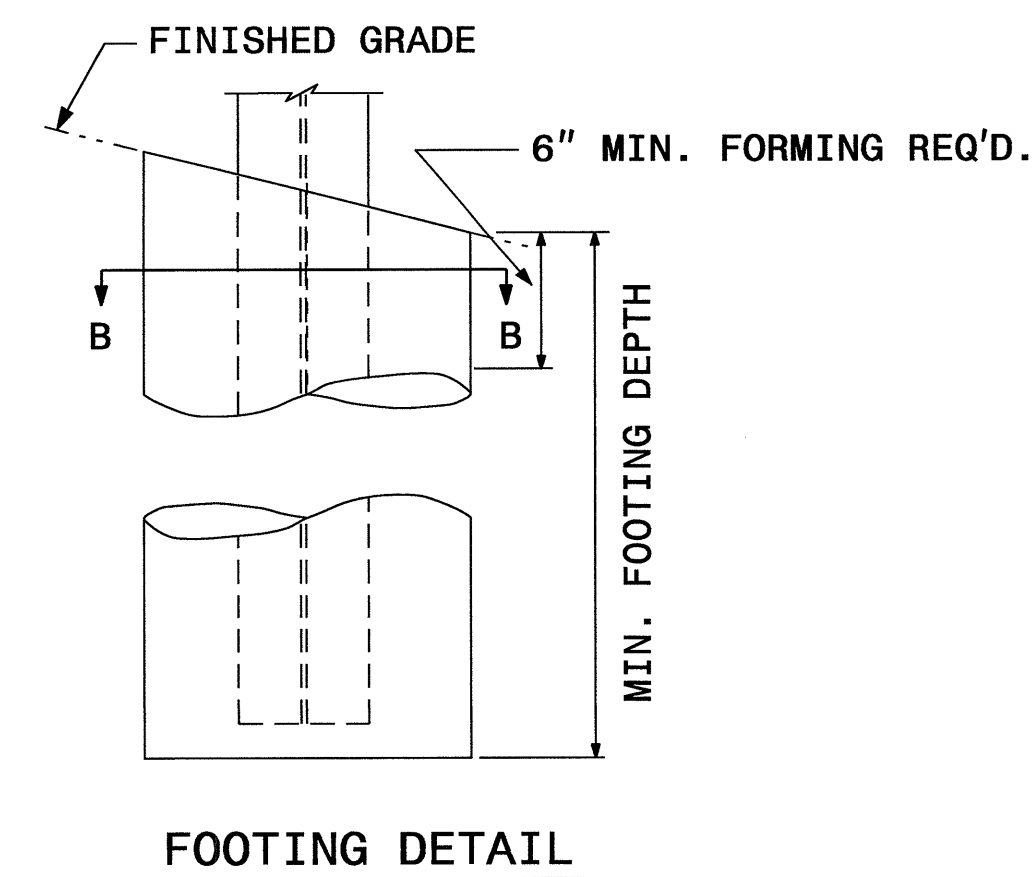
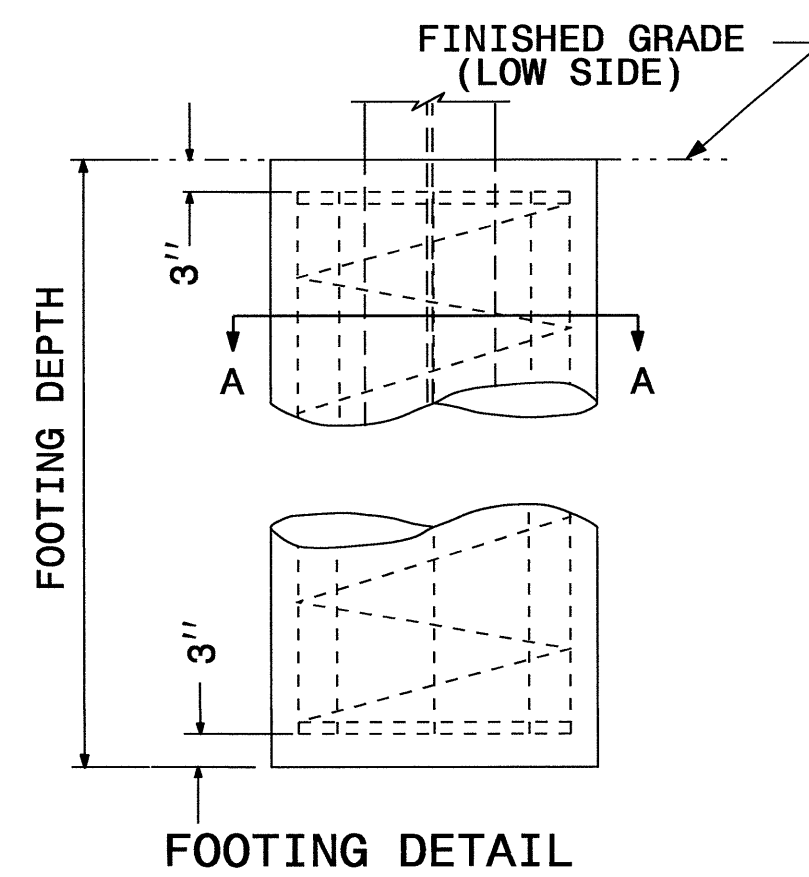
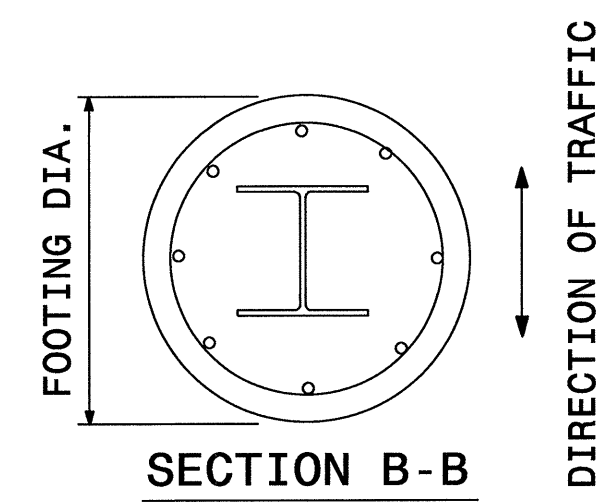
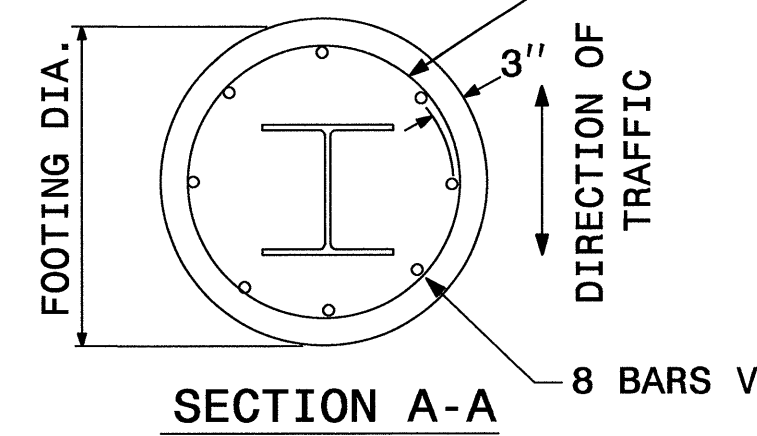
8. USE REINFORCED FOOTINGS WITH DIMENSIONS AS SHOWN IN PLANS. WHERE SOLID ROCK IS ENCOUNTERED, THE ENGINEER DIRECTS WHETHER TO PLACE THE FOOTING AT THE PRESCRIBED DEPTH OR EXTEND IT AT LEAST TWO FEET INTO THE ROCK. CONSTRUCT ALL FOOTINGS OF CLASS A CONCRETE.
9. FORM TOP 6" OF FOOTINGS. ENGINEER APPROVES THE METHOD USED.
10. 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.
11. ELIMINATE HINGE CONNECTION FOR ALL SINGLE SUPPORT SIGNS.
12. 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.
13. SHAPE THE TOPS OF THE FOOTINGS TO CONFORM WITH FINISHED GROUND ELEVATIONS SUCH THAT WATER WILL NOT COLLECT AGAINST THE SUPPORTS.
14. 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-2510C	SHEET NO. SIGN-3A
APPROVED: <i>[Signature]</i>	
DATE: 10-5-10	
SEAL	
	

BEAM SHAPE	SLIP BASE PLATE DATA								KEEPER PLATE DATA								HINGE CONNECTION DATA								BREAK AWAY SUPPORT WEIGHT CONSTANT LBS.	
	BOLT SIZE	A <sub>1</sub>	B <sub>1</sub>	C <sub>1</sub>	D <sub>1</sub>	E <sub>1</sub>	T <sub>1</sub>	R <sub>1</sub>	A <sub>2</sub>	B <sub>2</sub>	C <sub>2</sub>	D <sub>2</sub>	E <sub>2</sub>	R <sub>2</sub>	T <sub>2</sub>	BOLT SIZE	F	G	H	I	J	K	L	R <sub>3</sub>		T <sub>3</sub>
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. X 1 1/4"	2 1/4"	3 1/2"	4"	1/2"	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. X 1 1/4"	2 5/8"	3 1/2"	4"	1/2"	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. X 1 1/4"	4"	3 1/2"	4"	3/4"	1"	1/2"	2"	9/32"	3/8"	32
W6X12	5/8"DIA. X 3 3/4"	11"	5"	1 1/4"	7/8"	3 1/4"	1 1/4"	11/32"	11"	5"	1 1/4"	7/8"	3 1/4"	11/32"	28 GAUGE	5/8"DIA. X 2 1/4"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	11/32"	3/8"	39
W6X16	5/8"DIA. X 3 3/4"	12"	6"	1 1/4"	7/8"	4 1/4"	1 1/2"	11/32"	12"	6"	1 1/4"	7/8"	4 1/4"	11/32"	28 GAUGE	5/8"DIA. X 2 1/2"	4"	4"	4 1/2"	3/4"	1 1/8"	5/8"	2 1/4"	11/32"	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"	11/32"	13 1/2"	6 1/2"	1 1/4"	7/8"	4 3/4"	11/32"	28 GAUGE	5/8"DIA. X 2 1/2"	5 1/4"	4"	4 1/2"	1"	1 1/8"	5/8"	2 1/4"	11/32"	1/2"	70
W8X21	3/4"DIA. X 4 1/4"	14"	7"	1 1/2"	1"	5"	1 1/2"	13/32"	14"	7"	1 1/2"	1"	5"	13/32"	28 GAUGE	3/4"DIA. X 2 3/4"	5 1/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	1/2"	73
W10X22	3/4"DIA. X 4 1/4"	16"	8"	1 1/2"	1"	6"	1 1/2"	13/32"	16"	8"	1 1/2"	1"	6"	13/32"	28 GAUGE	3/4"DIA. X 2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	1/2"	119
W10X26	3/4"DIA. X 4 3/4"	16 1/2"	8"	1 1/2"	1"	6"	1 3/4"	13/32"	16 1/2"	8"	1 1/2"	1"	6"	13/32"	28 GAUGE	3/4"DIA. X 2 3/4"	5 3/4"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	5/8"	140
W12X26	3/4"DIA. X 4 3/4"	18 1/2"	9"	1 1/2"	1"	7"	1 3/4"	13/32"	18 1/2"	9"	1 1/2"	1"	7"	13/32"	28 GAUGE	3/4"DIA. X 2 3/4"	6 1/2"	6"	7"	1"	1 3/4"	3/4"	3 1/2"	13/32"	5/8"	176
W14X30	1"DIA. X 5"	22"	9"	2"	1 1/2"	6"	2"	17/32"	22"	9"	2"	1 1/2"	6"	17/32"	28 GAUGE	1"DIA. X 3"	6 3/4"	7"	8"	1 1/4"	2"	1"	4"	17/32"	5/8"	205
W16X31	1"DIA. X 5"	24"	9"	2"	1 1/2"	6"	2"	17/32"	24"	9"	2"	1 1/2"	6"	17/32"	28 GAUGE	1"DIA. X 3 1/4"	5 1/2"	7"	8"	1 1/4"	2"	1"	4"	17/32"	3/4"	223
W18X35	1"DIA. X 5"	25"	9"	2"	1 1/2"	6"	2"	17/32"	25"	9"	2"	1 1/2"	6"	17/32"	28 GAUGE	1"DIA. X 3 1/4"	6"	7"	8"	1 1/4"	2"	1"	4"	17/32"	3/4"	243
W18X40	1"DIA. X 5 1/2"	26"	9"	2"	1 1/2"	6"	2 1/4"	17/32"	26"	9"	2"	1 1/2"	6"	17/32"	28 GAUGE	1"DIA. X 3 3/4"	6"	7"	8"	1 1/4"	2"	1"	4"	17/32"	7/8"	278
W21X44	1"DIA. X 5 1/2"	29"	9"	2"	1 1/2"	6"	2 1/2"	17/32"	29"	9"	2"	1 1/2"	6"	17/32"	28 GAUGE	1"DIA. X 3 3/4"	6 1/2"	7"	8"	1 1/4"	2"	1"	4"	17/32"	7/8"	310

2" FLAT TURNS  
TOP AND BOTTOM  
(SEE NOTE 10)

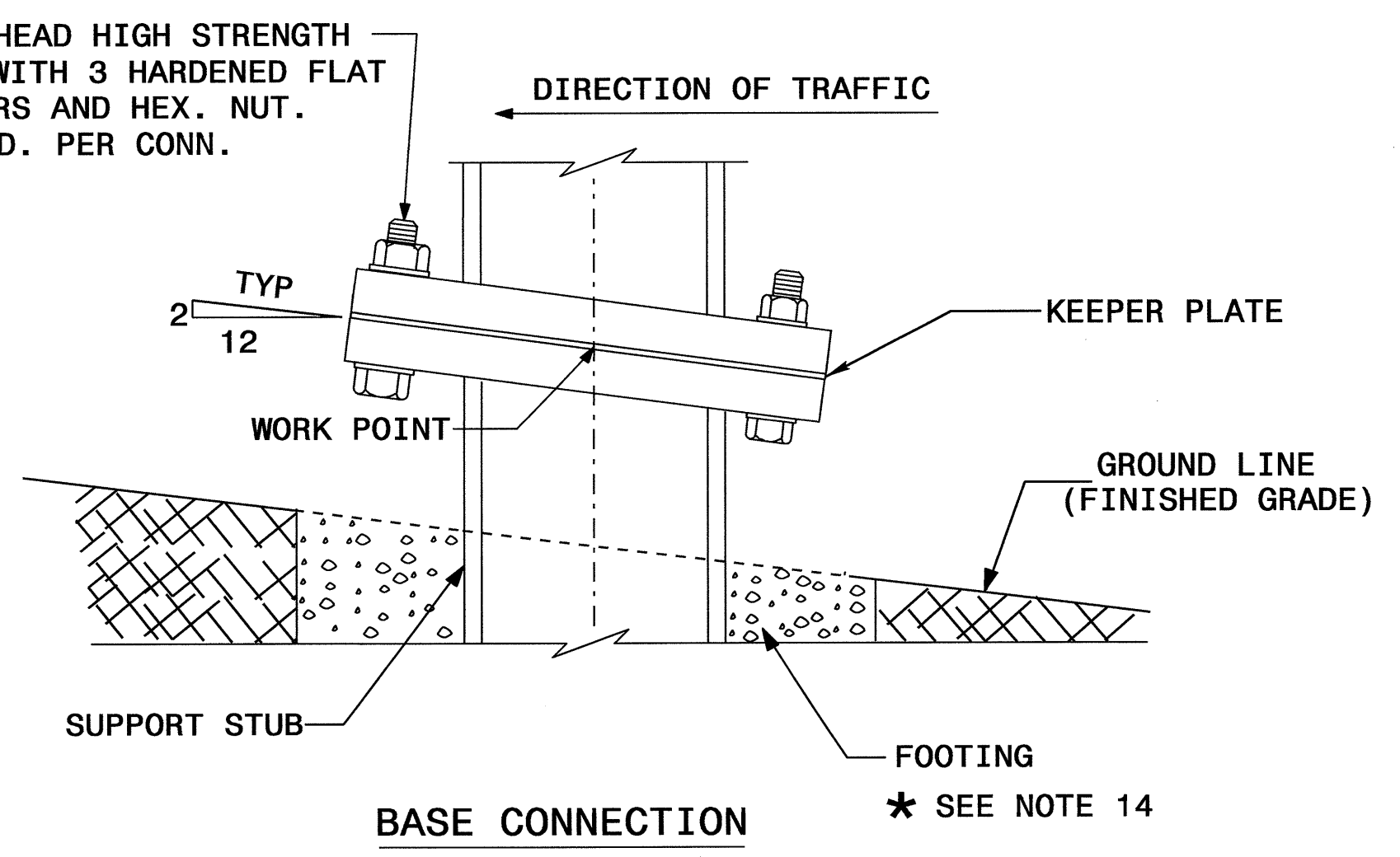
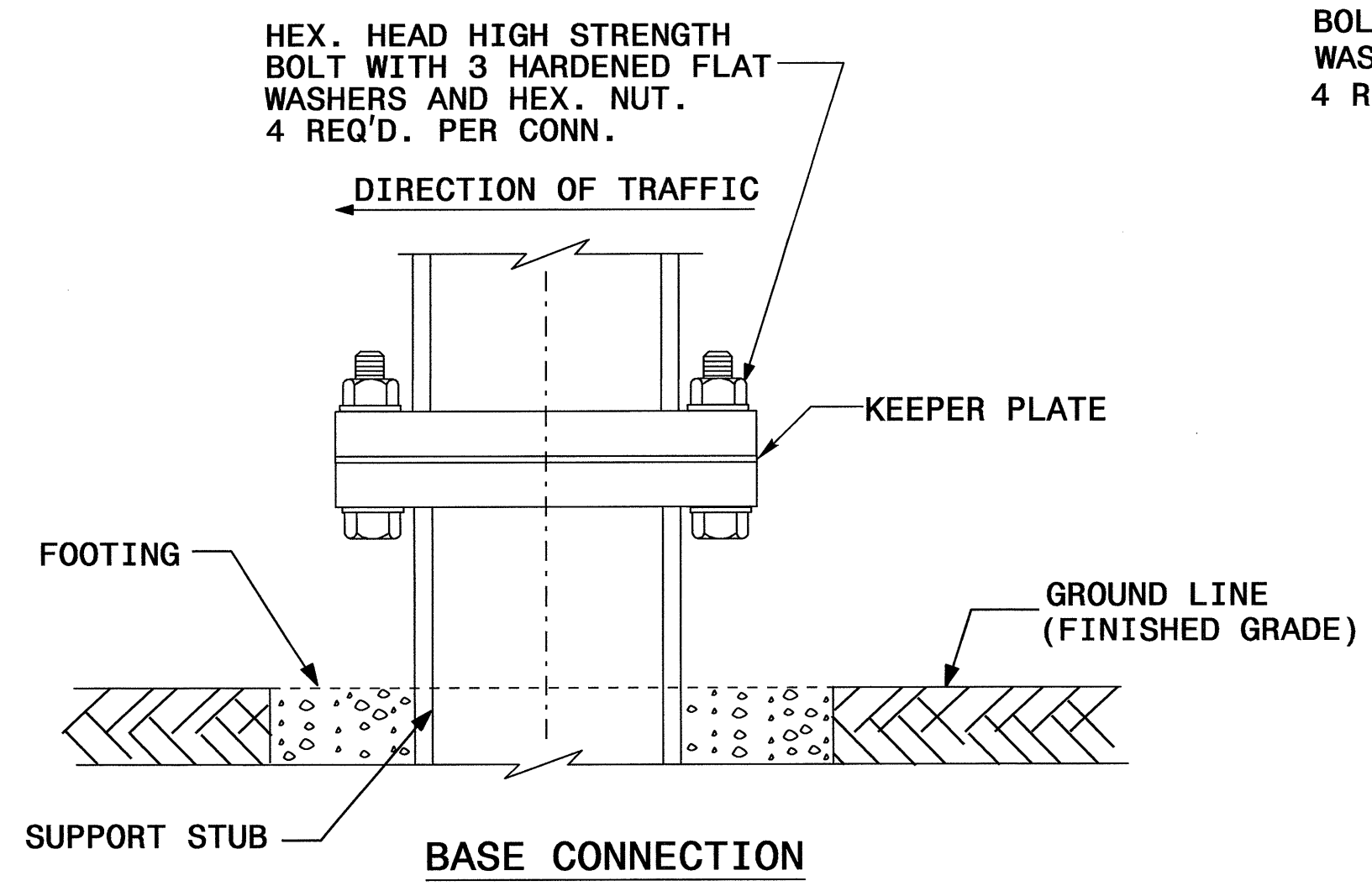
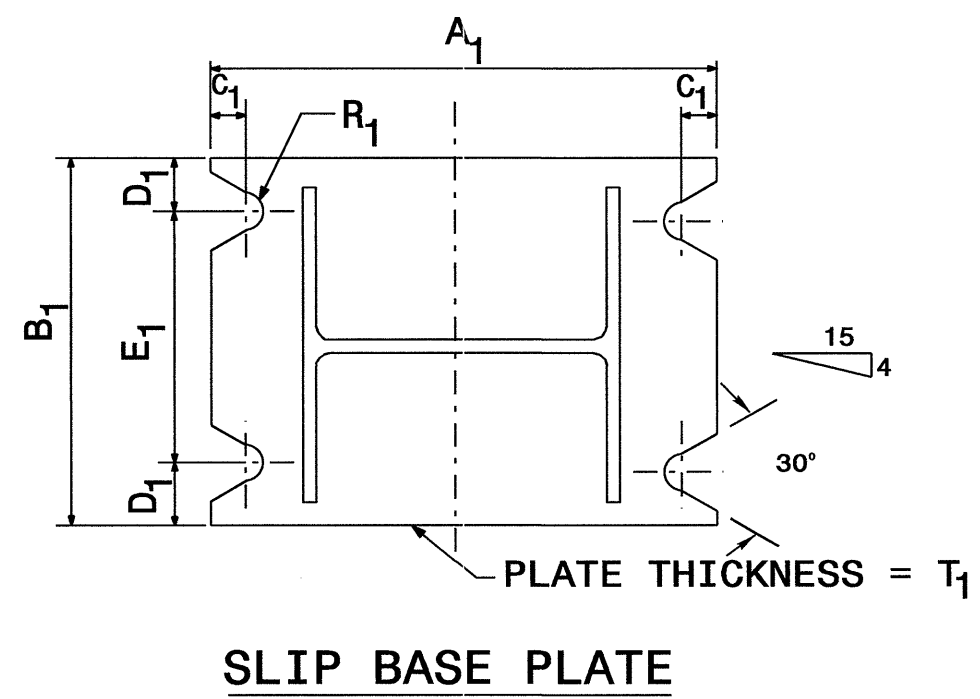
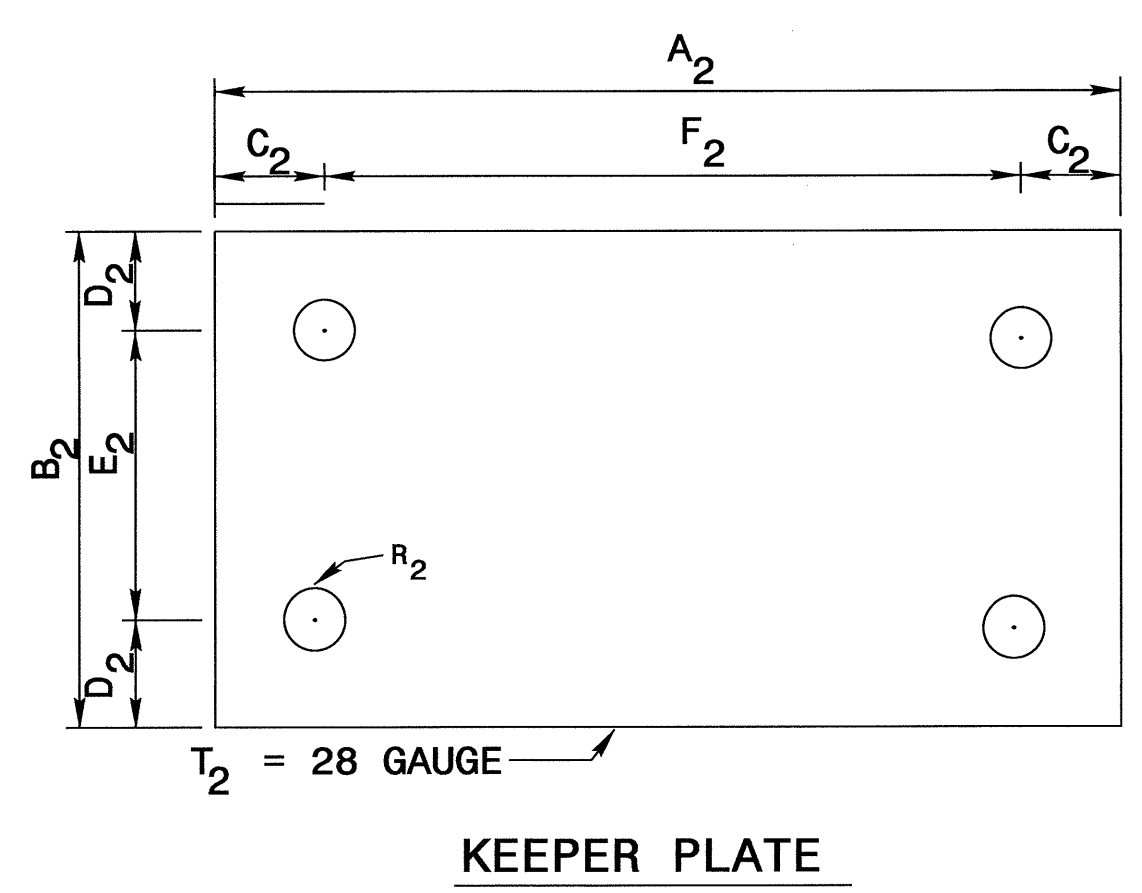
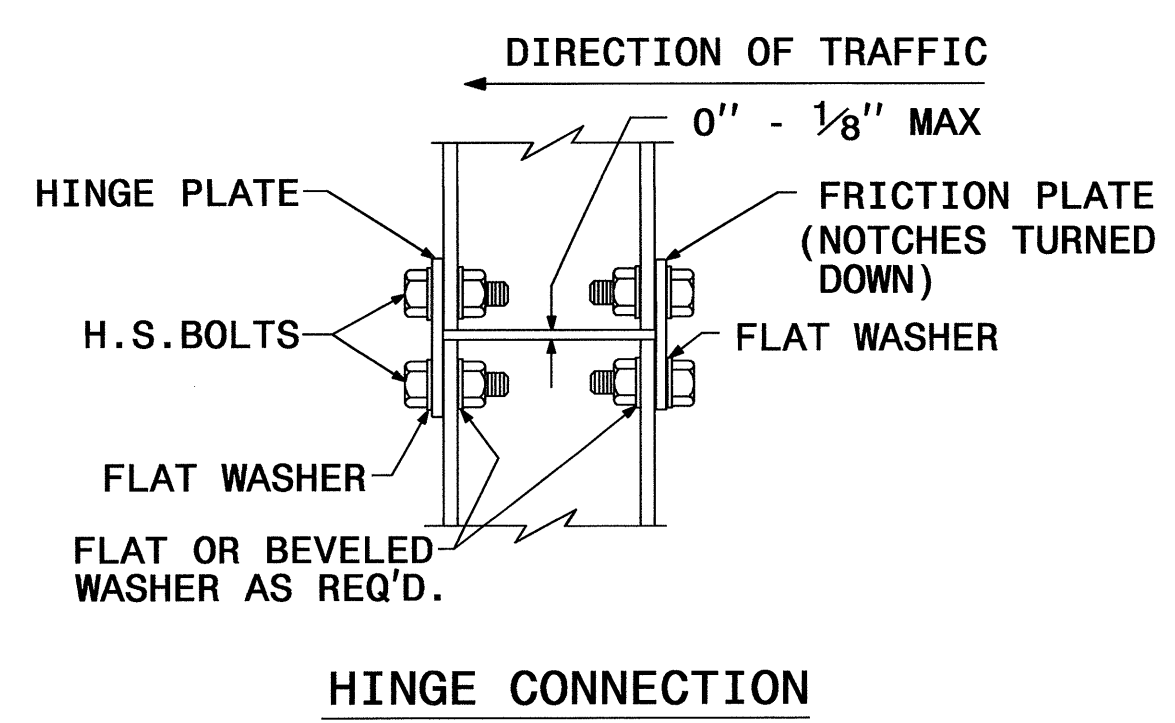
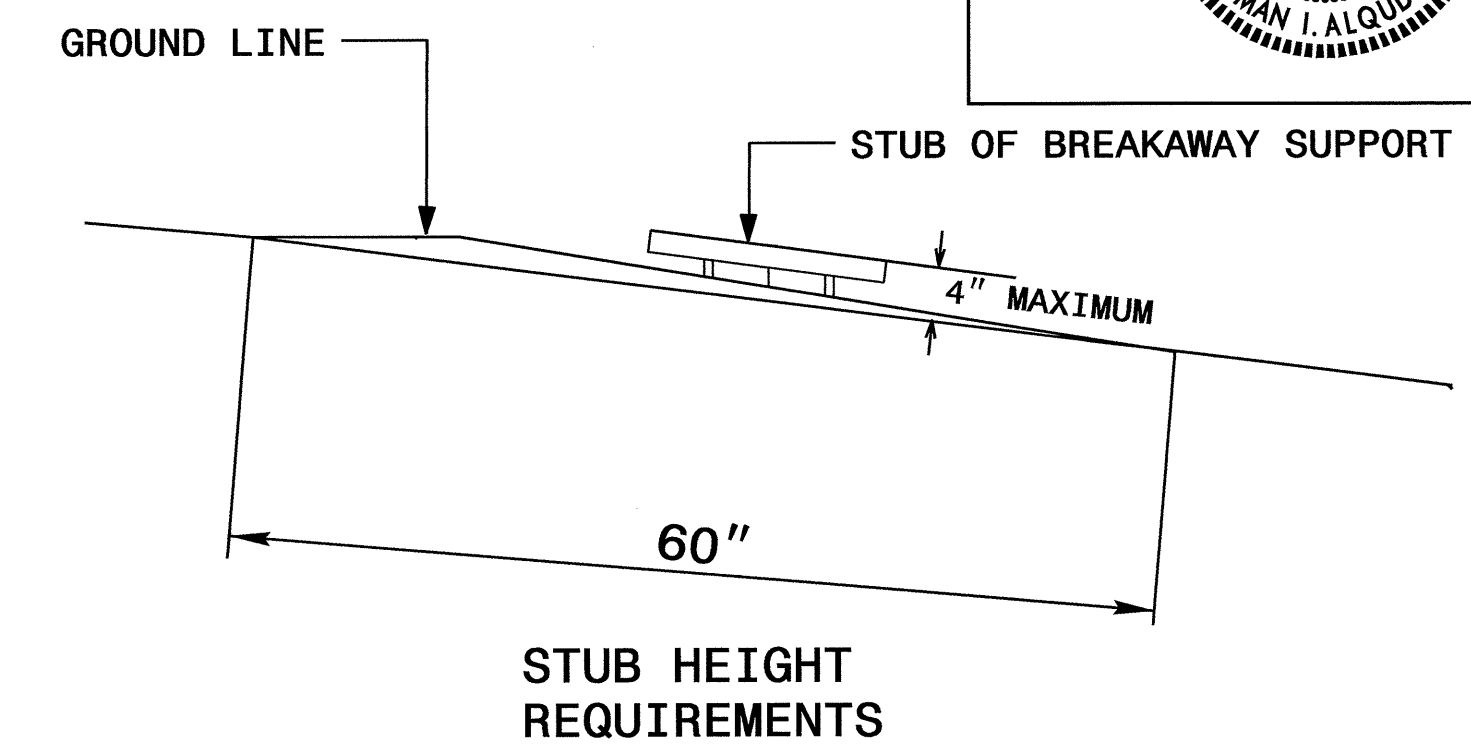
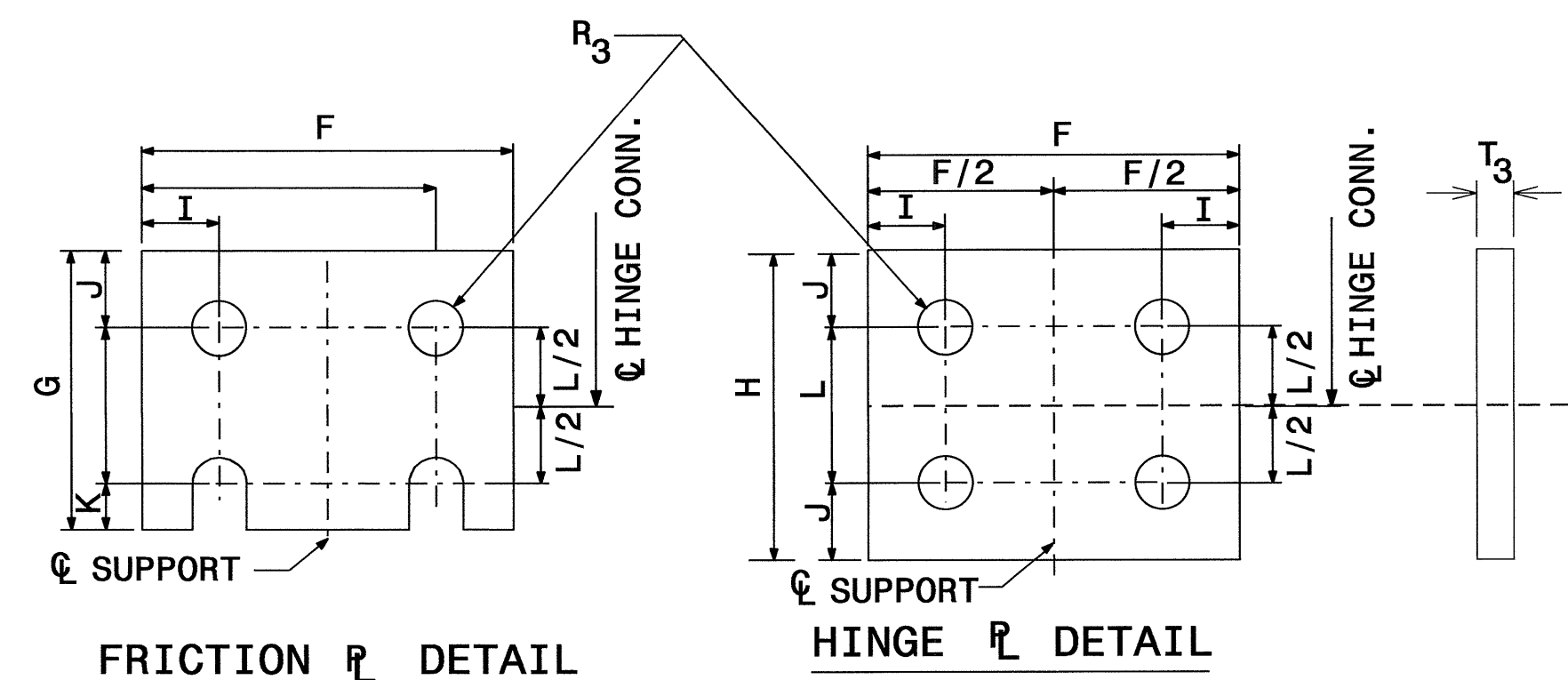
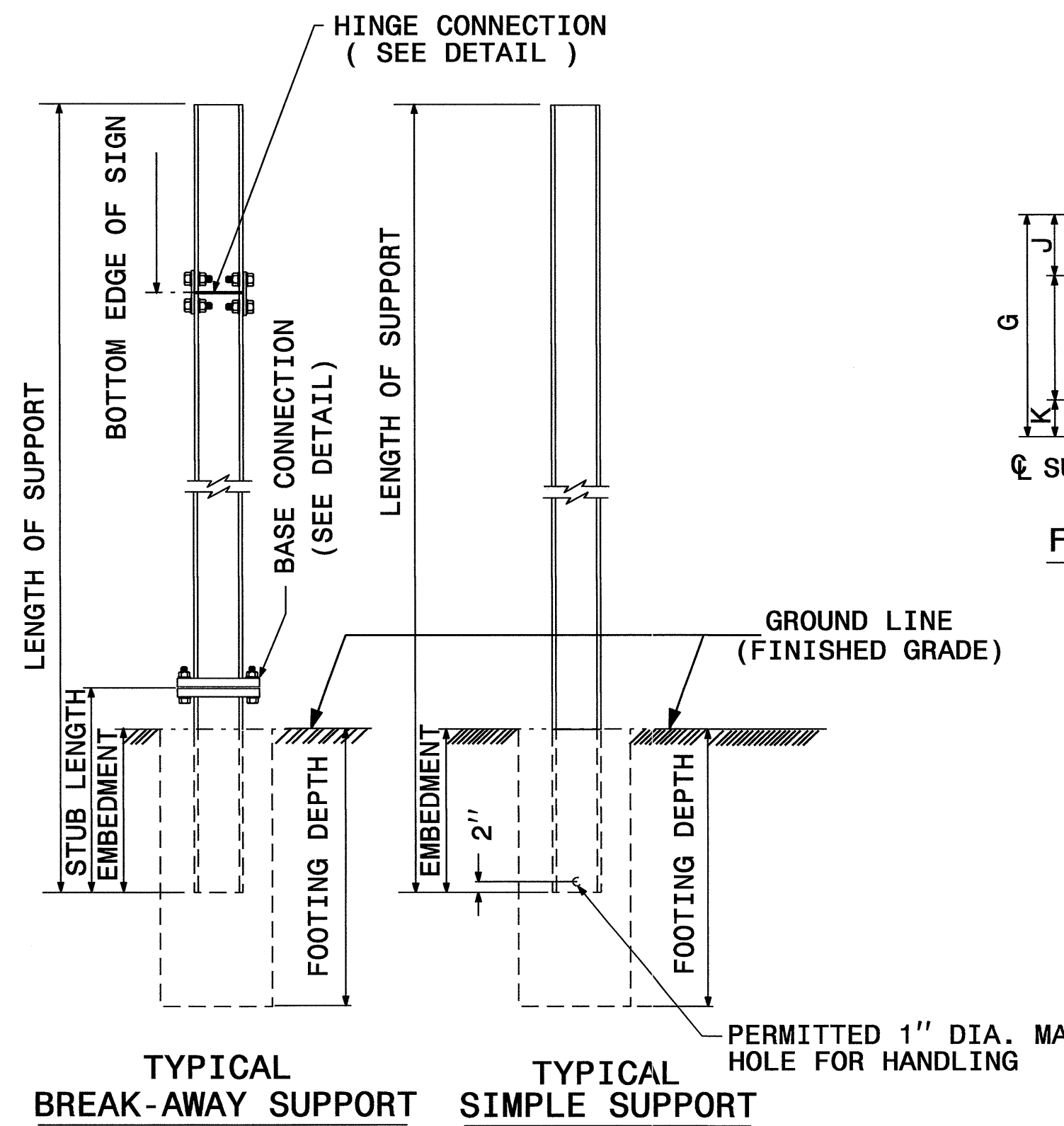


FOUNDATION DATA *		
FOOTING DIAMETER	REINFORCEMENT	SPIRAL BAR
1' 6"	8 # 6 BARS	#3 BAR, 3" PITCH
2'	8 # 7 BARS	#3 BAR, 3" PITCH
2' 6"	8 # 9 BARS	#3 BAR, 3" PITCH
3'	8 # 11 BARS	#3 BAR, 3" PITCH
3' 6"	8 # 12 BARS	#3 BAR, 3" PITCH
4'	8 # 14 BARS	#3 BAR, 3" PITCH

\* FOUNDATION DIMENSIONS ARE SHOWN IN PLANS  
SEE SHEET SIGN-8 FOR NOTES.

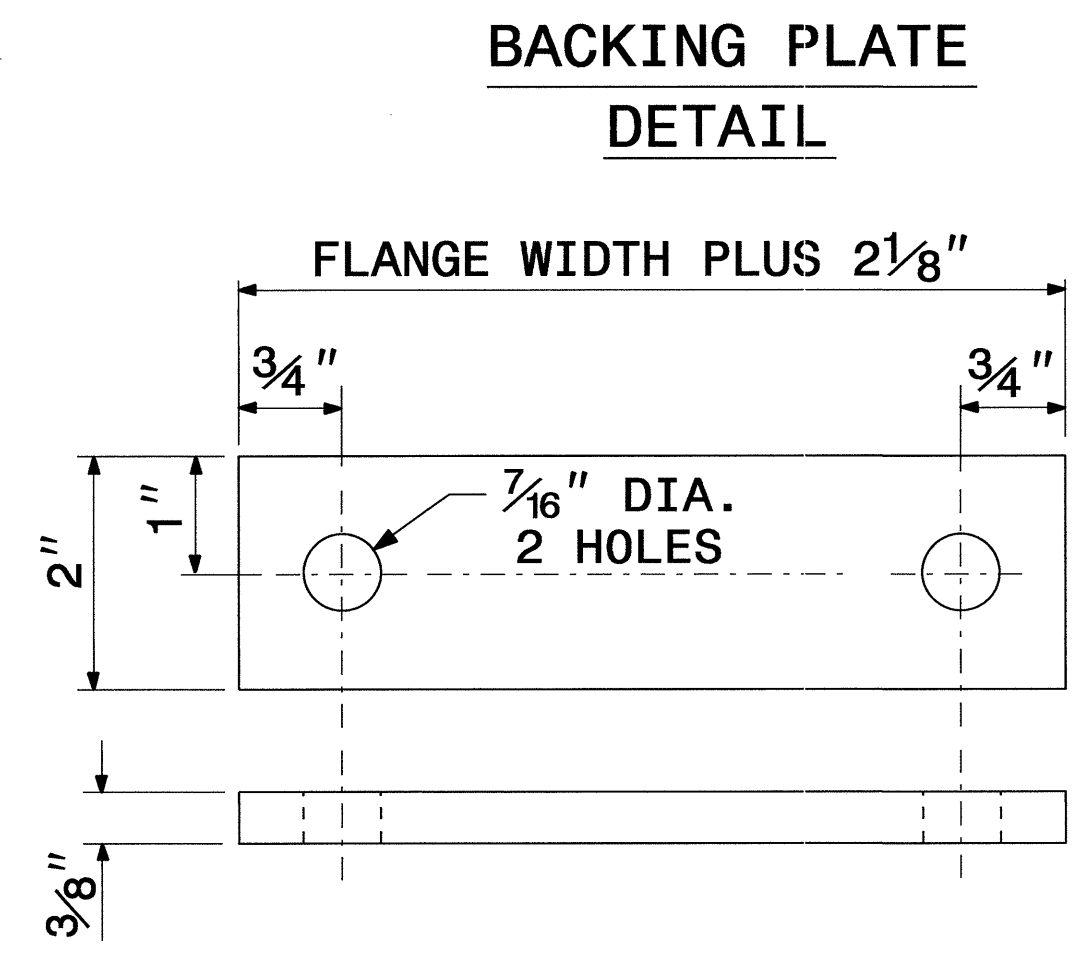
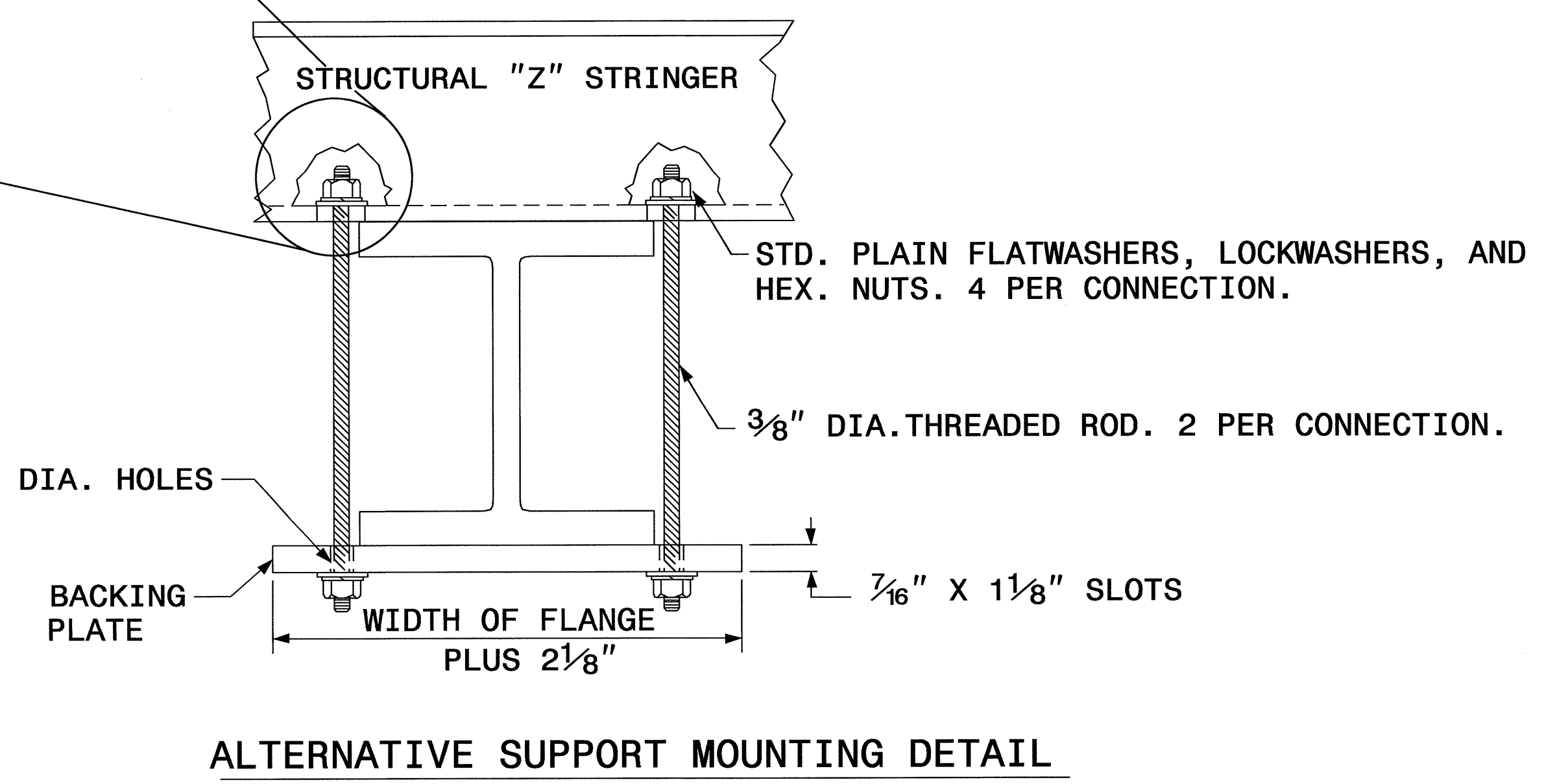
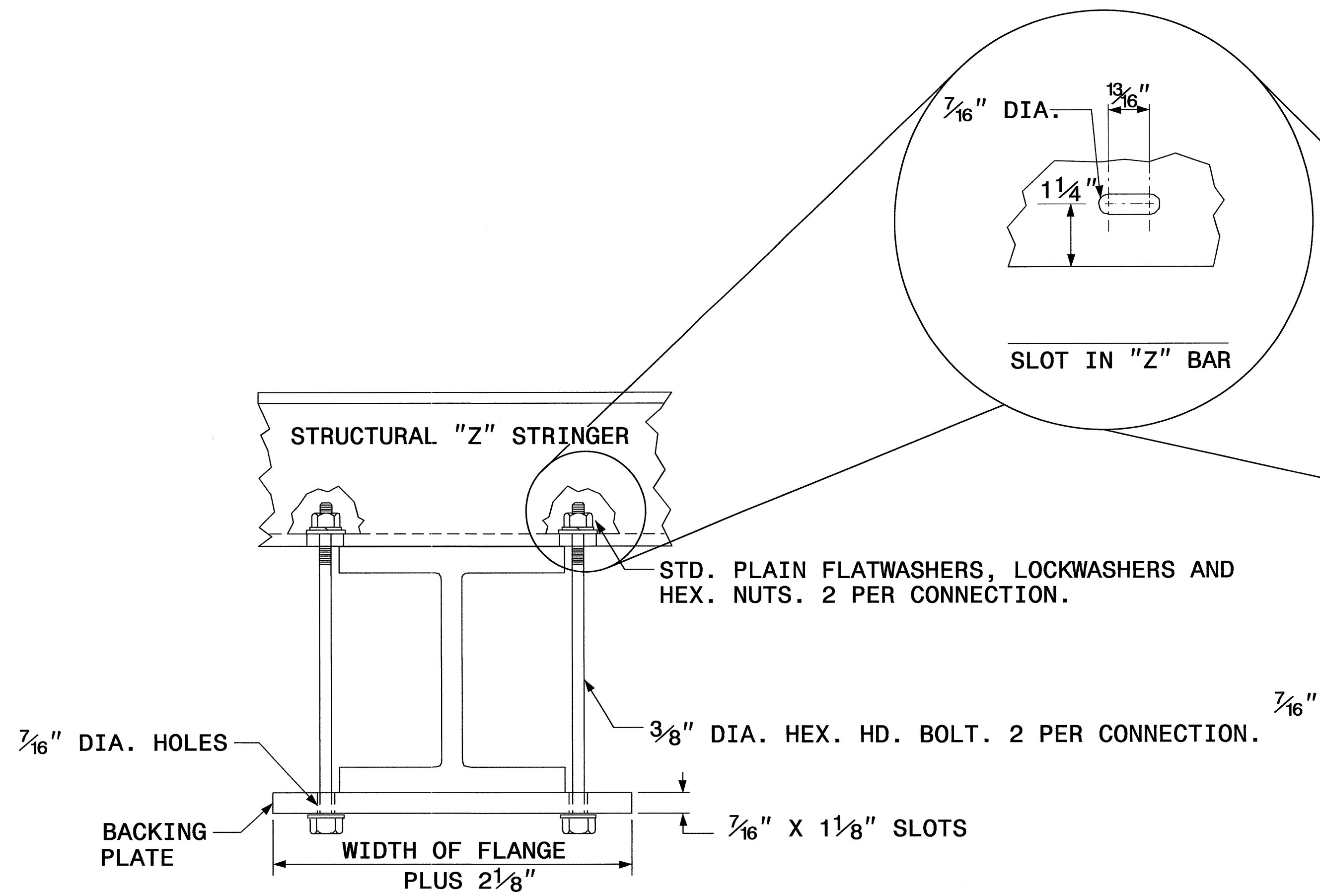
**GROUND MOUNTED SIGN SUPPORT**



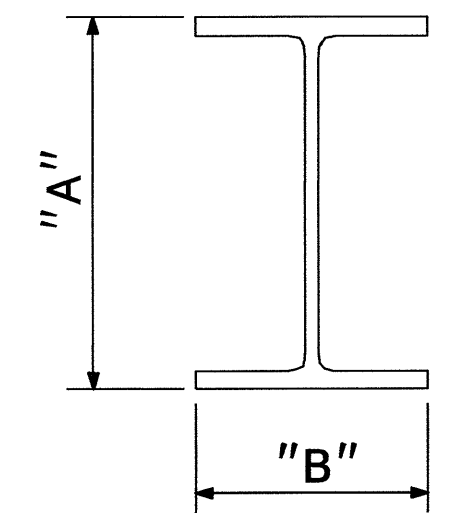


SEE SHEET SIGN-7 FOR DIMENSIONS.  
SEE SHEET SIGN-8 FOR NOTES.

**GROUND MOUNTED SIGN SUPPORT**



**SIGN SUPPORTS SECTION DIMENSIONS**



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

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 BOLTS AND THREADED RODS IN COMPLIANCE WITH ASTM A307 AND ASTM A153.



SIGN NUMBER: 101  
TYPE: A  
QUANTITY: 1  
SIGN WIDTH: 10'-0"  
HEIGHT: 5'-0"  
TOTAL AREA: 50.0 Sq.-Ft.  
BORDER TYPE: FLUSH  
RECESS: 0"  
WIDTH: 1"  
RADIUS: 6"  
NO. Z BARS: 2  
LENGTH: 112.0

BACKG COLOR: Green/Green  
COPY COLOR: White/White

SYMBOL	X	Y	WID	HT
ARMED	25.2	39.3	8	12.6
ARMED	99.4	15.1	8	12.6

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: D.P.  
PROJECT ID: R-2510C  
CHECKED BY: DME  
DIV: 2  
DATE: Oct 13, 2008

Panel Style: Logo 3.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS

Letter locations are panel edge to lower left corner											Series/Size	Text Length
W	i	i	i	i	a	m	s	t	o	n	D 2000	93
41.7	49.8	52.7	55.5	58.4	60.9	67	75.9	80	83.8	89.9	D 2000	93
29.5	35.6	41.7	50.8	56.2	60.3	67	69.9	72.7	75.3		D 2000	50.5
8.7	14.7	18.8	22.9	24	30	34.6	38.7	39.8	45.8	50.3	D 2000	45.8
59	65.8	67.9	74.1								D 2000	16.5
6	4										D 2000	12.4
90.3	96.7										D 2000	5.3
E											D 2000	5.3

FILENAME: R2510CSigns  
NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 301  
TYPE: D  
QUANTITY: 1  
SIGN WIDTH: 6'-6"  
HEIGHT: 3'-0"  
TOTAL AREA: 19.5 Sq.-Ft.  
BORDER TYPE: FLUSH  
RECESS: 0"  
WIDTH: 0.8"  
RADIUS: 3"  
NO. Z BARS: 2  
LENGTH: 112.0

BACKG COLOR: Blue  
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARMED	7.3	6	6	9.5

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: D.P.  
PROJECT ID: R-2510C  
CHECKED BY: DME  
DIV: 2  
DATE: Oct 13, 2008

Panel Style: Logo 3.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size	Text Length					
H	I	G	H	W	A	Y	P	A	T	R	O	L	D 2000	69.3			
4.6	5.5	2.3	5.4	5	5.7	5.5	5.2	6	4.4	5.5	4.6	5	5.6	3.7	4.2	D 2000	69.3
23.7	4.6	4.1	5.5	4.6	2.3	5.6	4.1	23.6								D 2000	30.7
4.4	5.6	5.5	3.7	6	6.1	2.4	4.6	3.7	6	6	5.5	4.2	6	4.1	4.1	D 2000	69.5

FILENAME: R2510CSigns  
NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 303  
TYPE: D  
QUANTITY: 1  
SIGN WIDTH: 5'-6"  
HEIGHT: 1'-6"  
TOTAL AREA: 8.3 Sq.-Ft.  
BORDER TYPE: FLUSH  
RECESS: 0"  
WIDTH: 0.75"  
RADIUS: 3"  
NO. Z BARS: 0  
LENGTH: 100.0

BACKG COLOR: Green  
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARMED	7.3	6	6	9.5

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: D.P.  
PROJECT ID: R-2510C  
CHECKED BY: DME  
DIV: 2  
DATE: Oct 13, 2008

Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS

Letter locations are panel edge to lower left corner											Series/Size	Text Length
W	a	s	s	h	i	n	g	t	o	n	D 2000	40.7
7.7	14	18.2	21.8	26.5	28.7	33.1	37.4	40.2	44.8		D 2000	40.7
3											D 2000	4.1

FILENAME: R2510CSigns  
NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 302  
TYPE: D  
QUANTITY: 1  
SIGN WIDTH: 9'-0"  
HEIGHT: 1'-6"  
TOTAL AREA: 13.5 Sq.-Ft.  
BORDER TYPE: FLUSH  
RECESS: 0"  
WIDTH: 0.8"  
RADIUS: 3"  
NO. Z BARS: 0  
LENGTH: 100.0

BACKG COLOR: Green  
COPY COLOR: White

SYMBOL	X	Y	WID	HT
ARMED	7.3	6	6	9.5

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: D.P.  
PROJECT ID: R-2510C  
CHECKED BY: DME  
DIV: 2  
DATE: Oct 13, 2008

Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size	Text Length							
V	O	I	C	E	O	F	A	M	E	R	I	C	A	D 2000	77.8				
22.9	5.3	5.6	2.3	5.4	3.7	6	5.6	3.7	6	6	6.1	4.7	5.1	2.3	4.9	5.1	7.3	D 2000	77.8

FILENAME: R2510CSigns  
NORTH CAROLINA D.O.T. SIGN DETAIL





SIGN NUMBER: 304 TYPE: D QUANTITY: 1 SIGN WIDTH: 5'-6" HEIGHT: 1'-6" TOTAL AREA: 8.3 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADII: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Green COPY COLOR: White SYMBOL X Y WID HT MAT'L: 0.125" (3.2 mm) ALUMINUM	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

Letter locations are panel edge to lower left corner												Series/Size Text Length	
W	i	l	i	a	m	s	t	o	n				D 2000
6.6	12.9	15.1	17.2	19.4	21.3	25.8	32.5	35.6	38.4	43			40
1	8												D 2000
52.5	55.3												6.9

FILENAME: R2510C51gns NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 314 TYPE: D QUANTITY: 1 SIGN WIDTH: 6'-0" HEIGHT: 2'-6" TOTAL AREA: 15.0 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADII: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Green COPY COLOR: White SYMBOL X Y WID HT ARMED 9.2 17 6 9.5 MAT'L: 0.125" (3.2 mm) ALUMINUM	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

Letter locations are panel edge to lower left corner												Series/Size Text Length	
W	a	s	h	i	n	g	t	o	n				D 2000
21.2	27.5	31.7	35.3	40	42.2	46.6	50.9	53.7	58.3				40.7
J	a	m	e	s	v	i	l	e					D 2000
23.8	28.7	33.2	40.1	44.1	47.2	52.2	54.4	56.5	58.4				38.1

FILENAME: R2510C51gns NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 305 TYPE: D QUANTITY: 1 SIGN WIDTH: 6'-0" HEIGHT: 3'-0" TOTAL AREA: 18.0 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADII: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Brown COPY COLOR: White SYMBOL X Y WID HT 49.5 5 17.3 26 MAT'L: 0.125" (3.2 mm) ALUMINUM	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

Letter spacings are to start of next letter												Series/Size Text Length	
H	I	S	T	O	R	I	C						D 2000
8.5	5.5	2	4.6	4.5	5.6	5.1	2.3	4.1	29.9				33.6
A	L	B	E	M	A	R	L						D 2000
5.2	6	4.6	5.1	4.7	5.6	6	5.1	3.7	26				40.9
H	I	G	H	W	A	Y							D 2000
8.5	5.5	2.3	5.4	5	5.7	5.5	5.2	29					34.5

FILENAME: R2510C51gns NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 316,317 TYPE: D QUANTITY: 2 SIGN WIDTH: 6'-0" HEIGHT: 1'-6" TOTAL AREA: 9.0 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADII: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Green COPY COLOR: White SYMBOL X Y WID HT ARMED 7.9 6 6 9.5 MAT'L: 0.125" (3.2 mm) ALUMINUM	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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Panel Style: Standard 6 Inch\_D.ssi  
M.U.T.C.D.: 2003 Edition

USE NOTES: 1,2  
1. Legend and border shall be direct applied Grade C sheeting.  
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

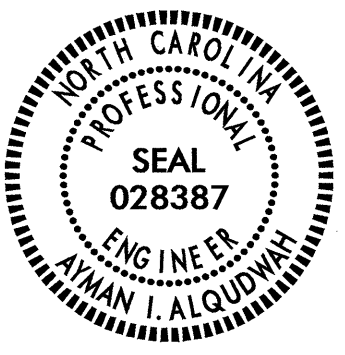
Letter locations are panel edge to lower left corner												Series/Size Text Length	
W	a	s	h	i	n	g	t	o	n				D 2000
23.4	29.8	34	37.6	42.2	44.4	48.8	53.1	55.9	60.5				40.7

FILENAME: R2510C51gns NORTH CAROLINA D.O.T. SIGN DETAIL

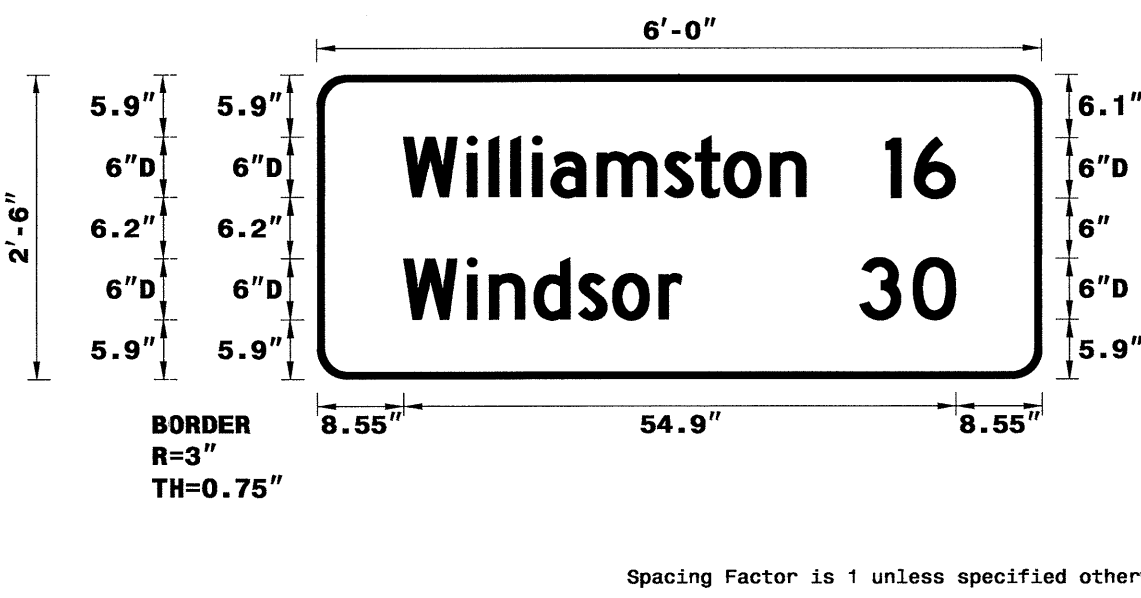
# GROUND MOUNTED SIGN DESIGNS



TIP NO. R-2510C	SHEET NO. SIGN-6
APPROVED: <i>[Signature]</i>	
DATE: 10-5-10	
SEAL	



SIGN NUMBER: 313 TYPE: D QUANTITY: 1 SIGN WIDTH: 6'-0" HEIGHT: 2'-6" TOTAL AREA: 15.0 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADIUS: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Green COPY COLOR: White SYMBOL	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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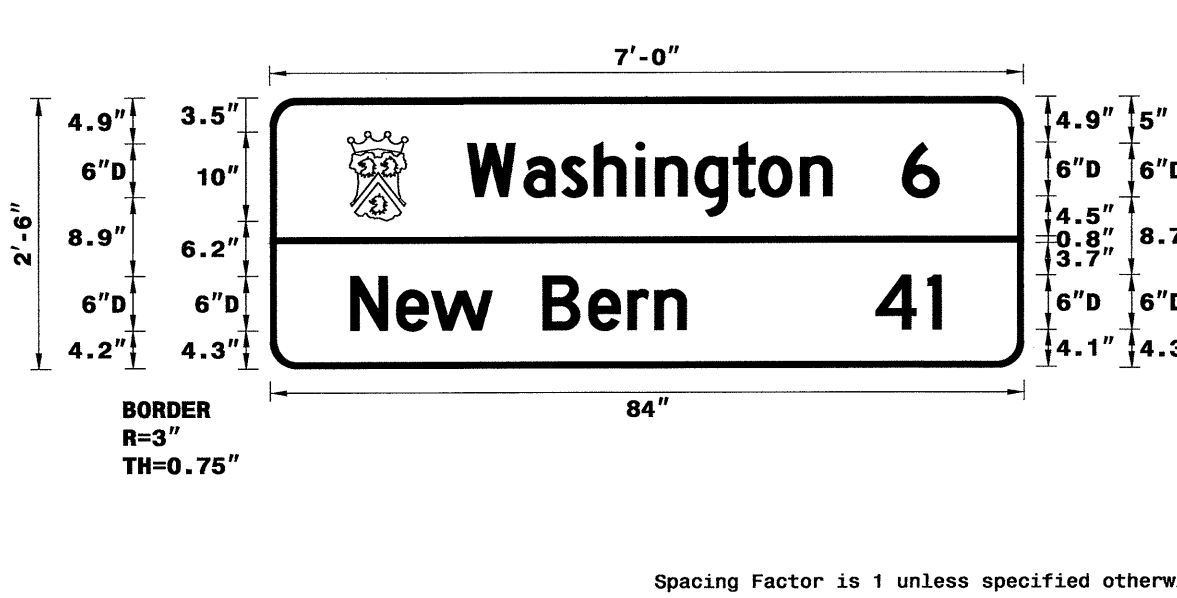


Spacing Factor is 1 unless specified otherwise

Letter locations are panel edge to lower left corner													Series/Size	
W	i	l	i	a	m	s	t	o	n				Text Length	
6.6	14.9	17.1	19.2	21.4	23.3	27.8	34.5	37.6	40.4	45				D 2000
1	6											D 2000		
56.5	59.3											6.9		
W	i	n	d	s	o	r							D 2000	
8.6	14.9	17.1	21.5	26	29.3	33.9							27.6	
3	0											D 2000		
53.9	59.2											9.5		

FILENAME: R2510C313gns NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 308 TYPE: D QUANTITY: 1 SIGN WIDTH: 7'-0" HEIGHT: 2'-6" TOTAL AREA: 17.5 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADIUS: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Green COPY COLOR: White SYMBOL	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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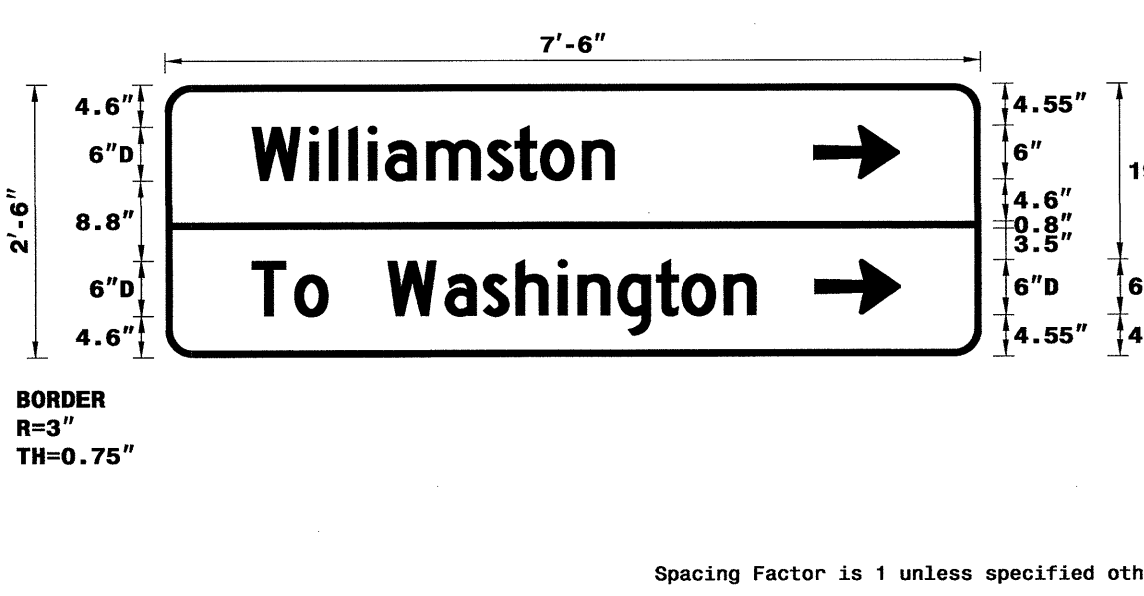


Spacing Factor is 1 unless specified otherwise

Letter locations are panel edge to lower left corner													Series/Size
W	a	s	h	i	n	g	t	o	n				Text Length
22	28.3	32.5	36.1	40.8	43	47.4	51.7	54.5	59.1				D 2000
6	6											D 2000	
70.5											4.1		
N	e	w										D 2000	
9	14.1	18										15.8	
B	e	r	n									D 2000	
30.4	35.5	39.9	42.9									16	
4	1										D 2000		
67.5	73.3										7.3		

FILENAME: R2510C308gns NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 315 TYPE: D QUANTITY: 1 SIGN WIDTH: 7'-6" HEIGHT: 2'-6" TOTAL AREA: 18.8 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0" WIDTH: 0.75" RADIUS: 3" NO. Z BARS: LENGTH:	BACKG COLOR: Green COPY COLOR: White SYMBOL	DESIGN BY: D.P. PROJECT ID: R-2510C CHECKED BY: DME DIV: 2 DATE: Oct 13, 2008
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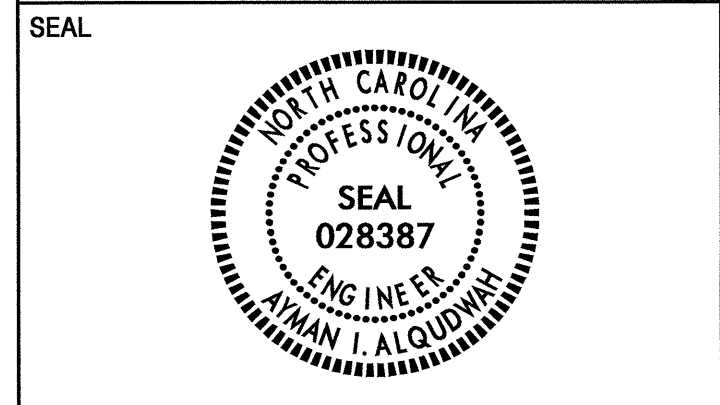


Spacing Factor is 1 unless specified otherwise


Letter locations are panel edge to lower left corner													Series/Size	
W	i	l	i	a	m	s	t	o	n				Text Length	
9.6	15.9	18.1	20.3	22.4	24.3	28.8	35.6	38.6	41.4	46.1				D 2000
40													D 2000	
9.5	14.3											8.4		
W	a	s	h	i	n	g	t	o	n				D 2000	
24.5	30.8	35	38.6	43.3	45.5	49.9	54.2	57	61.6				40.7	

FILENAME: R2510C315gns NORTH CAROLINA D.O.T. SIGN DETAIL

GROUND MOUNTED SIGN DESIGNS



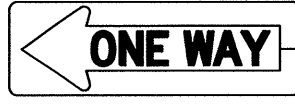
401 QUANTITY REQ'D 5



36 X 48  
R2-1

ONE WOOD POST PER SIGN


406 QUANTITY REQ'D 17



54 X 18  
R6-1 (L)

TWO WOOD POSTS PER SIGN

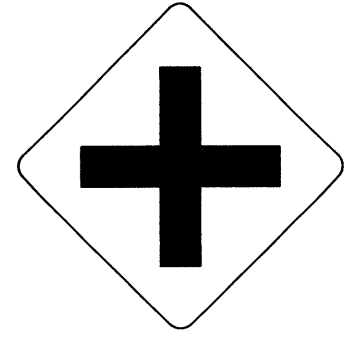
413 QUANTITY REQ'D 6



24 X 12  
W16-9P

A) MOUNT BELOW SIGN #412 IN 5 INSTALLATIONS  
B) MOUNT BELOW SIGN #523 IN 1 INSTALLATION


418 QUANTITY REQ'D 2



36 X 36  
W2-1

ONE WOOD POST PER SIGN


423 QUANTITY REQ'D 2



48 X 48  
W9-1

ONE WOOD POST PER SIGN

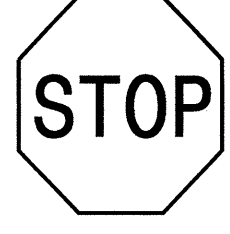
428 QUANTITY REQ'D 1



30 X 10  
S4-3

MOUNT BELOW SIGN #427  
IN 1 INSTALLATION  
(FLOURESCENT YELLOW GREEN BACKGROUND)

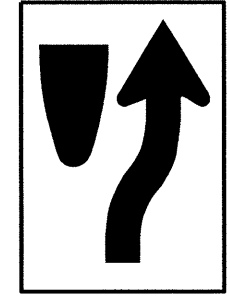
402 QUANTITY REQ'D 7



30 X 30  
R1-1

ONE WOOD POST PER SIGN

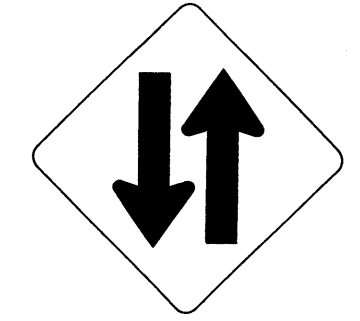
407 QUANTITY REQ'D 14



24 X 30  
R4-7

ONE WOOD POST PER SIGN

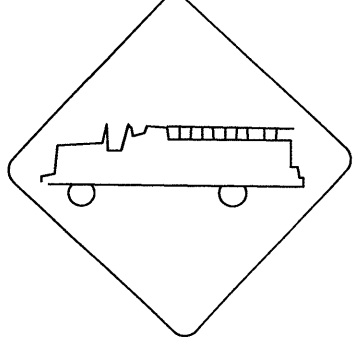
414 QUANTITY REQ'D 1



48 X 48  
W6-3

ONE WOOD POST PER SIGN

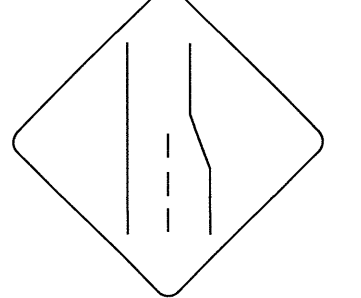
419 QUANTITY REQ'D 1



36 X 36  
W11-8

ONE WOOD POST PER SIGN

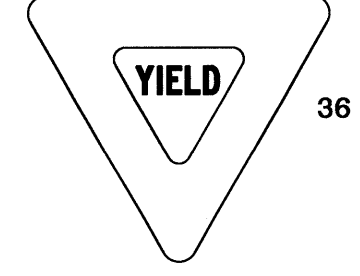
424 QUANTITY REQ'D 2



48 X 48  
W4-2(R)

ONE WOOD POST PER SIGN


429 QUANTITY REQ'D 5



36 X 36 X 36  
R1-2

ONE WOOD POST PER SIGN

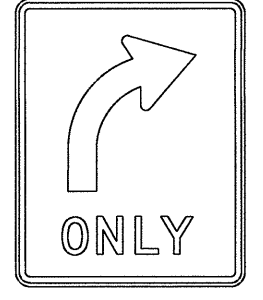
403 QUANTITY REQ'D 46



36 X 24  
R5-1a

ONE WOOD POST PER SIGN

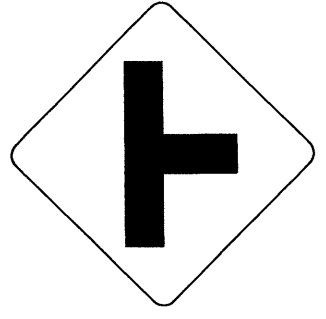
409 QUANTITY REQ'D 7



30 X 36  
R3-5 (R)

ONE WOOD POST PER SIGN


415 QUANTITY REQ'D 4



36 X 36  
W2-2(R)

ONE WOOD POST PER SIGN

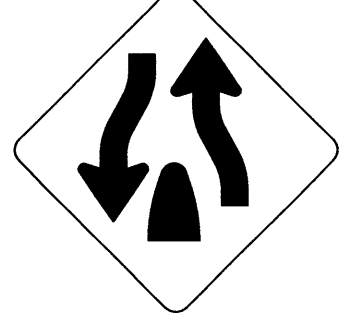
420 QUANTITY REQ'D 2



30 X 30  
W14-2

ONE WOOD POST PER SIGN


425 QUANTITY REQ'D 1



48 X 48  
W6-2

ONE WOOD POST PER SIGN

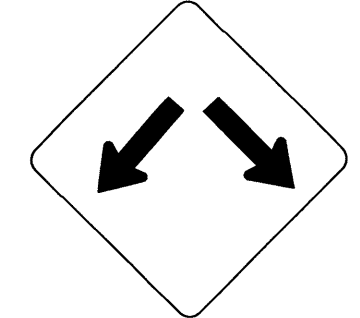
404 QUANTITY REQ'D 34



30 X 30  
R5-1

ONE WOOD POST PER SIGN

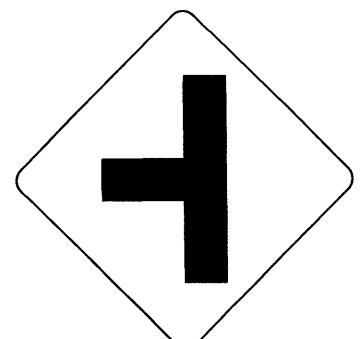
410 QUANTITY REQ'D 17



36 X 36  
W12-1

ONE WOOD POST PER SIGN

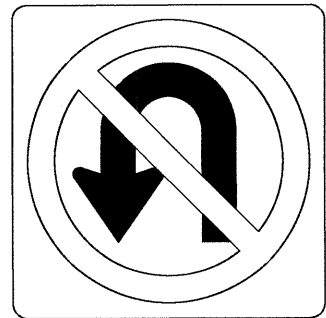
416 QUANTITY REQ'D 2



36 X 36  
W2-2(L)

ONE WOOD POST PER SIGN


421 QUANTITY REQ'D 7



24 X 24  
R3-4

MOUNT BELOW SIGN #523 IN ONE INSTALLATION

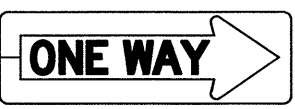
426 QUANTITY REQ'D 1



48 X 48  
W6-1

ONE WOOD POST PER SIGN

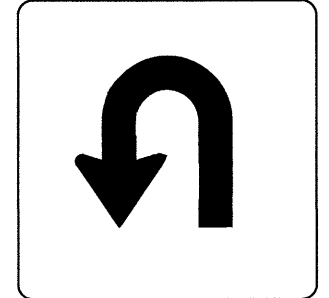
405 QUANTITY REQ'D 7



54 X 18  
R6-1 (R)

TWO WOOD POSTS PER SIGN

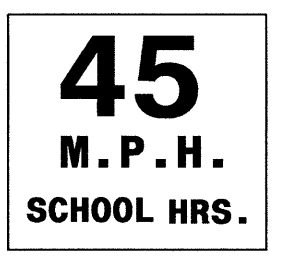
412 QUANTITY REQ'D 15



24 X 24  
SEE SIGN DESIGN  
(SHEET SIGN-7A)

1) MOUNT BELOW SIGN #507-#511, #513, #515-#522  
AND #524 @ 1 INSTALLATION PER SIGN

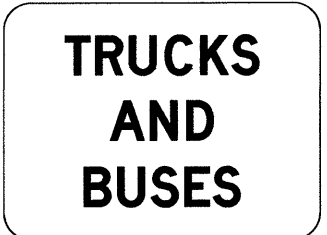
417 QUANTITY REQ'D 1



18 X 18  
W13-1

MOUNT BELOW SIGN #427 IN 1 INSTALLATION  
(FLOURESCENT YELLOW GREEN BACKGROUND)


422 QUANTITY REQ'D 7



24 X 18  
SEE SIGN DESIGN  
(SHEET SIGN-7A)

MOUNT BELOW SIGN #421 IN 7 INSTALLATIONS  
SEE SIGN DESIGN (SHEET SIGN-6)

427 QUANTITY REQ'D 1



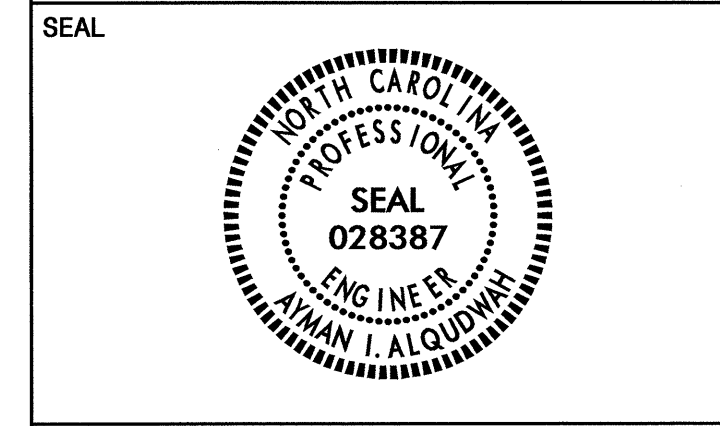
36 X 36  
S1-1

ONE WOOD POST PER SIGN  
(FLOURESCENT YELLOW GREEN BACKGROUND)

**TYPE "E" SIGNS**







501  
502

JCT 1-24 X 12

171 1-24 X 24

ONE WOOD POST PER SIGN

507  
516  
521

SOUTH NORTH 2-24 X 12

17 17 2-24 X 24

↑ 1-21 X 15

TWO WOOD POSTS PER SIGN

503

NORTH 1-24 X 12

171 1-24 X 24

→ 1-21 X 15

ONE WOOD POST PER SIGN

508  
509  
514  
517  
522  
526

SOUTH 1-24 X 12

17 1-24 X 24

ONE WOOD POST PER SIGN

504

NORTH 1-24 X 12

171 1-24 X 24

← 1-21 X 15

ONE WOOD POST PER SIGN

510 525  
512  
513  
515  
518  
519  
524

NORTH 1-24 X 12

17 1-24 X 24

ONE WOOD POST PER SIGN

505

NORTH 1-24 X 12

171 1-24 X 24

ONE WOOD POST PER SIGN

511 NORTH SOUTH 2-24 X 12  
520 17 17 2-24 X 24  
523 ↑ 1-21 X 15

TWO WOOD POSTS PER SIGN

506

TO 1-24 X 12

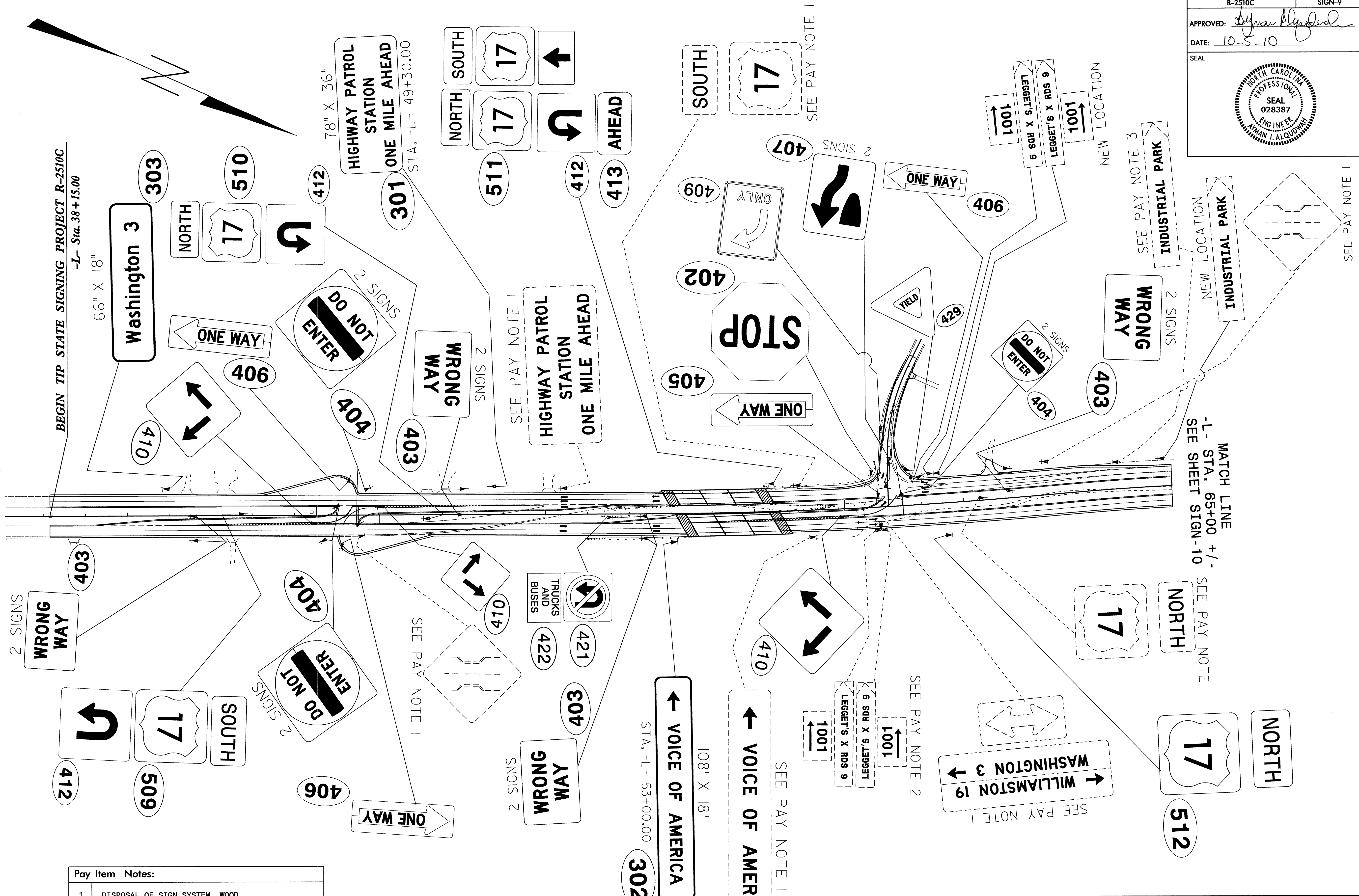
NORTH SOUTH 2-24 X 12

17 17 2-24 X 24

→ → 2-21 X 15

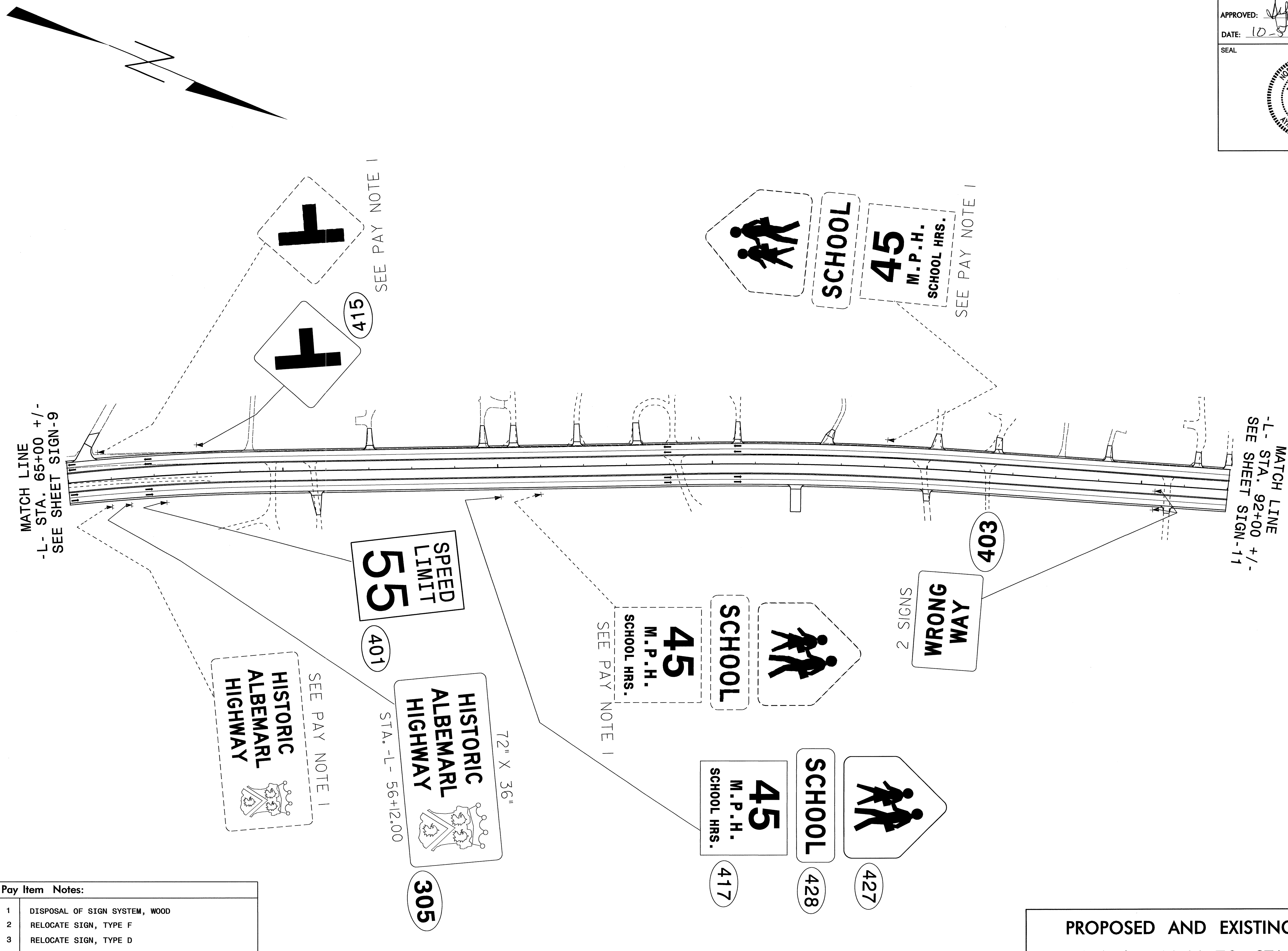
TWO WOOD POSTS PER SIGN

**TYPE "F" SIGNS**



Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE E

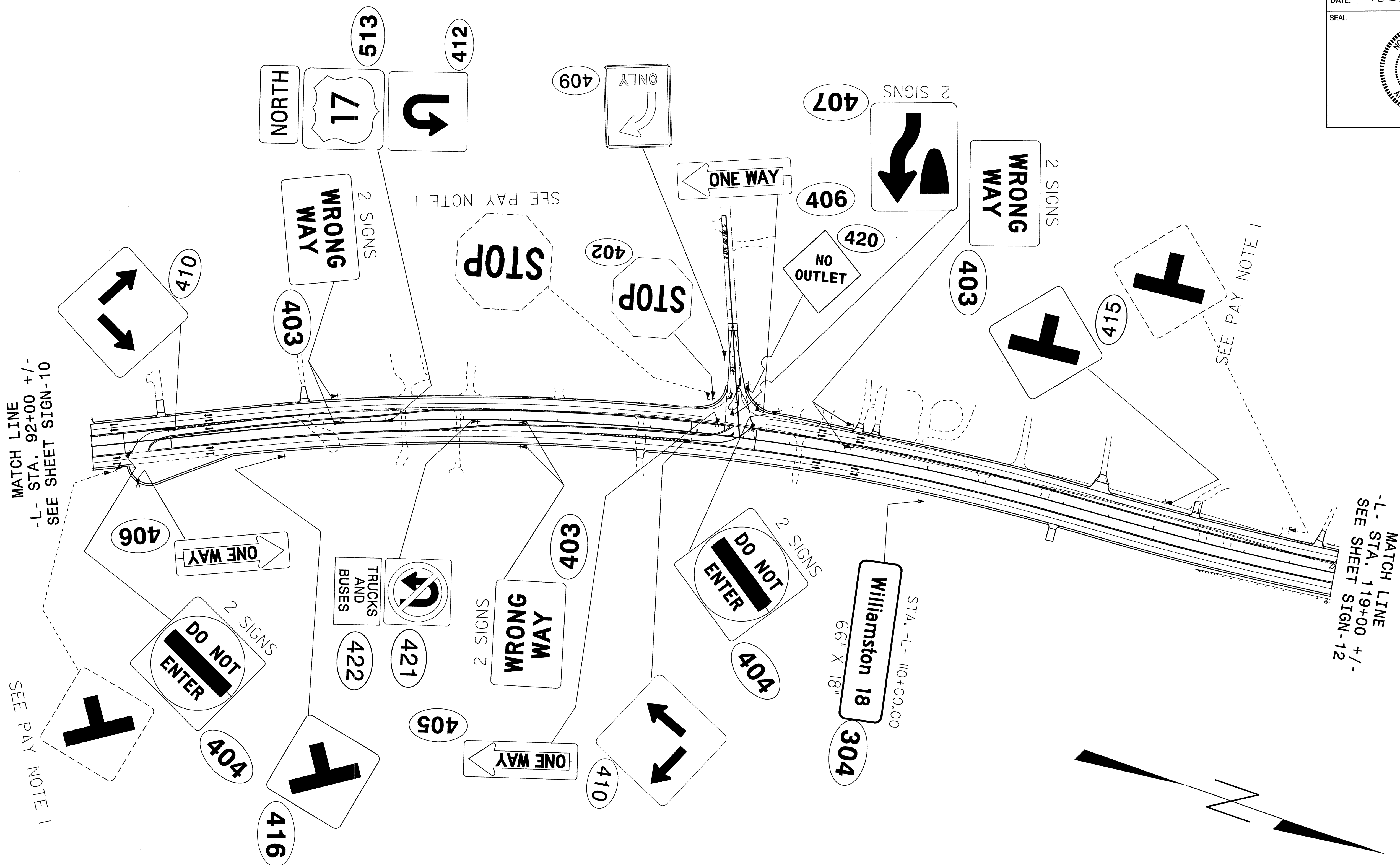
**PROPOSED & EXISTING SIGNS**  
-L- STA. 38+15.00 TO STA. 65+00.00



Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
-L- STA. 65+00.00 TO STA. 92+00.00



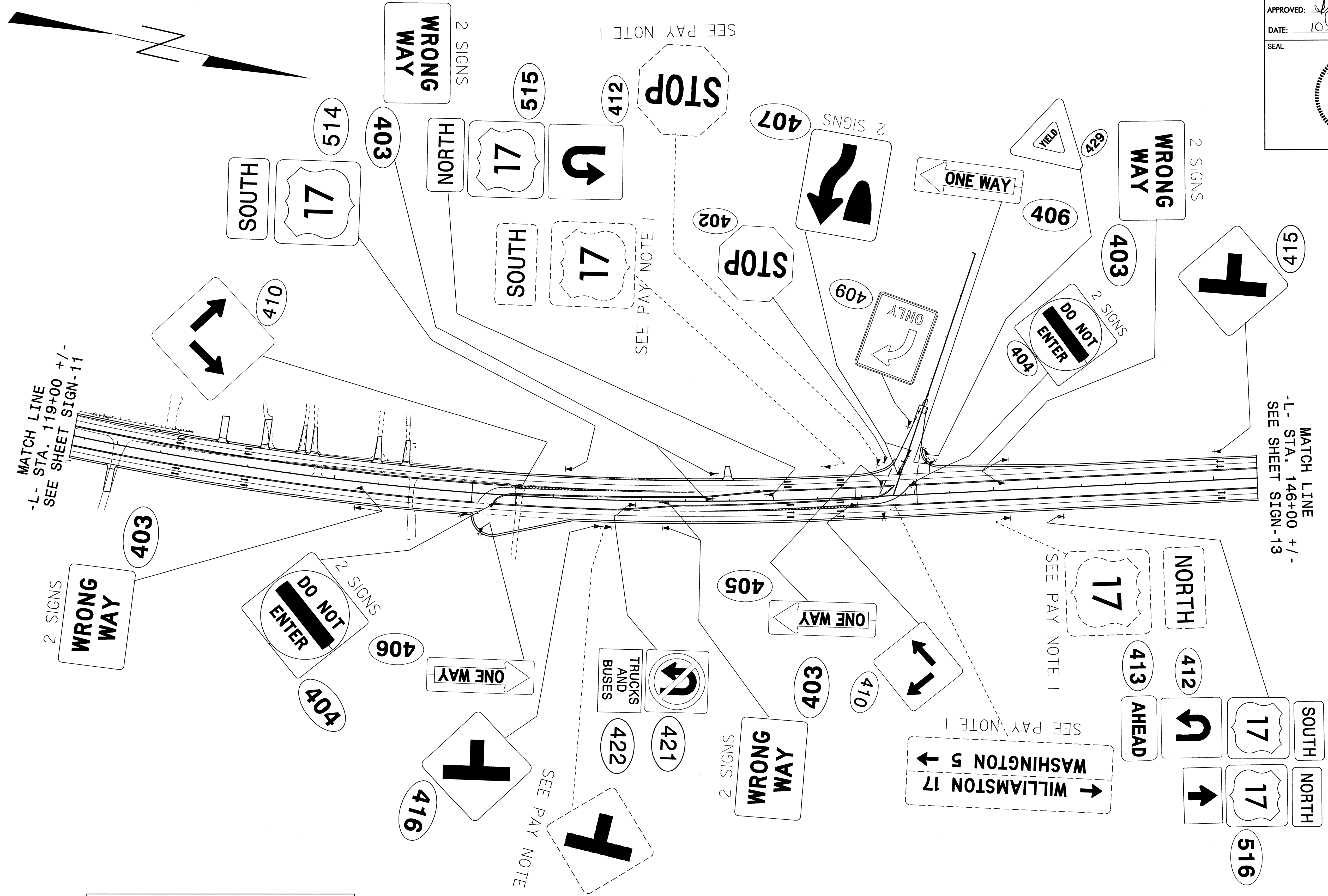


MATCH LINE  
-L- STA. 92+00 +/-  
SEE SHEET SIGN-10

MATCH LINE  
-L- STA. 119+00 +/-  
SEE SHEET SIGN-12

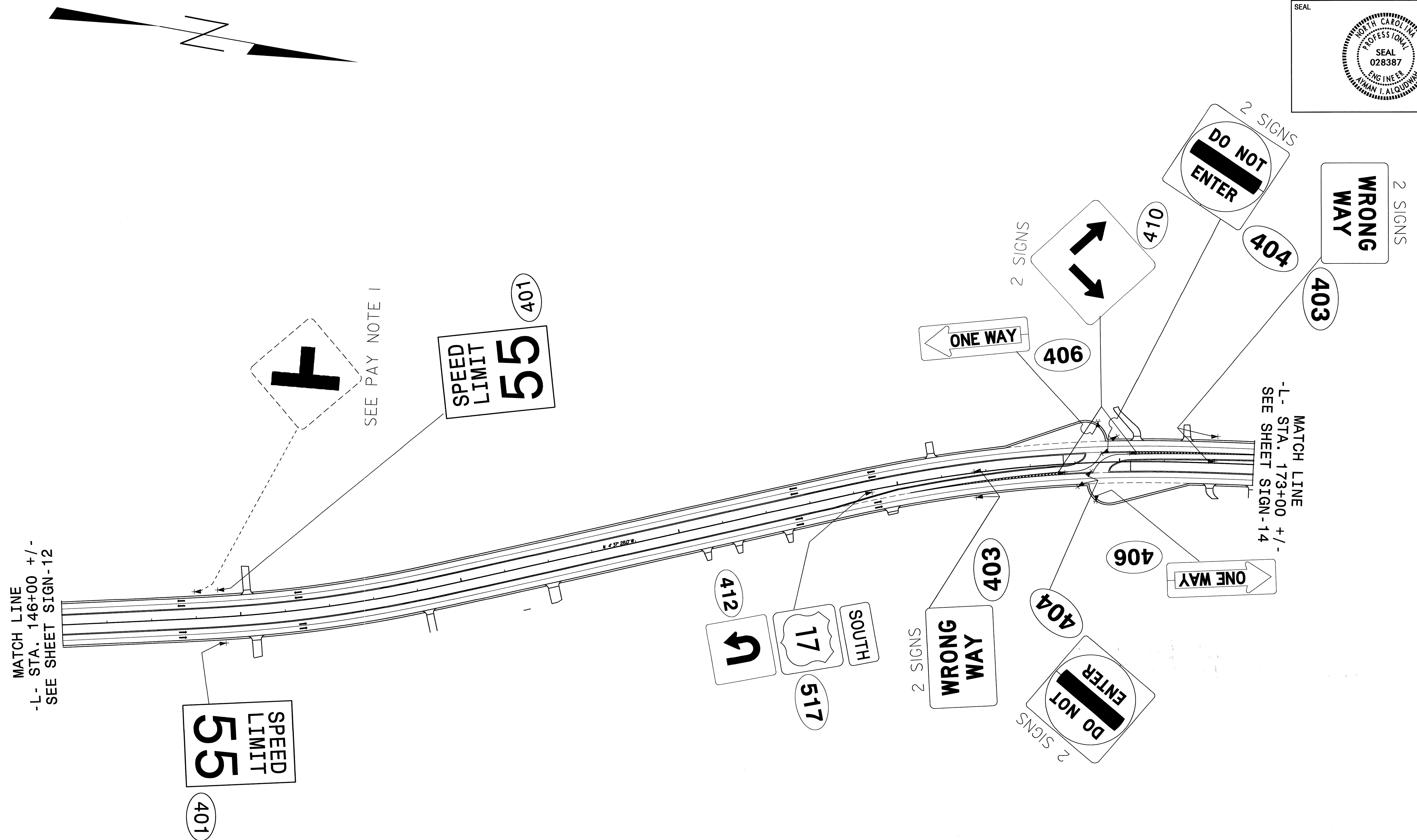
Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
-L- STA. 92+00.00 TO STA. 119+00.00



Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
-L- STA. 119+00.00 TO STA. 146+00.00



MATCH LINE  
-L- STA. 146+00 +/-  
SEE SHEET SIGN-12

MATCH LINE  
-L- STA. 173+00 +/-  
SEE SHEET SIGN-14

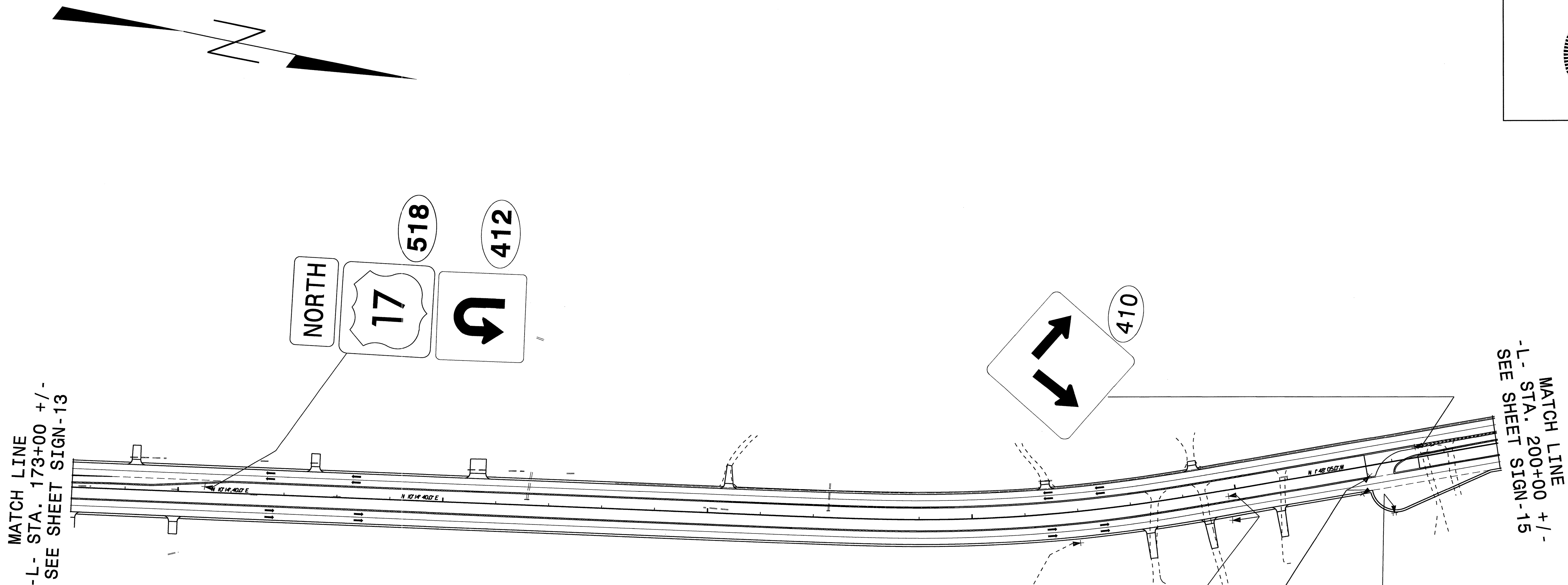
401  
SPEED LIMIT 55

401  
SPEED LIMIT 55

Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
-L- STA. 146+00.00 TO STA. 173+00.00

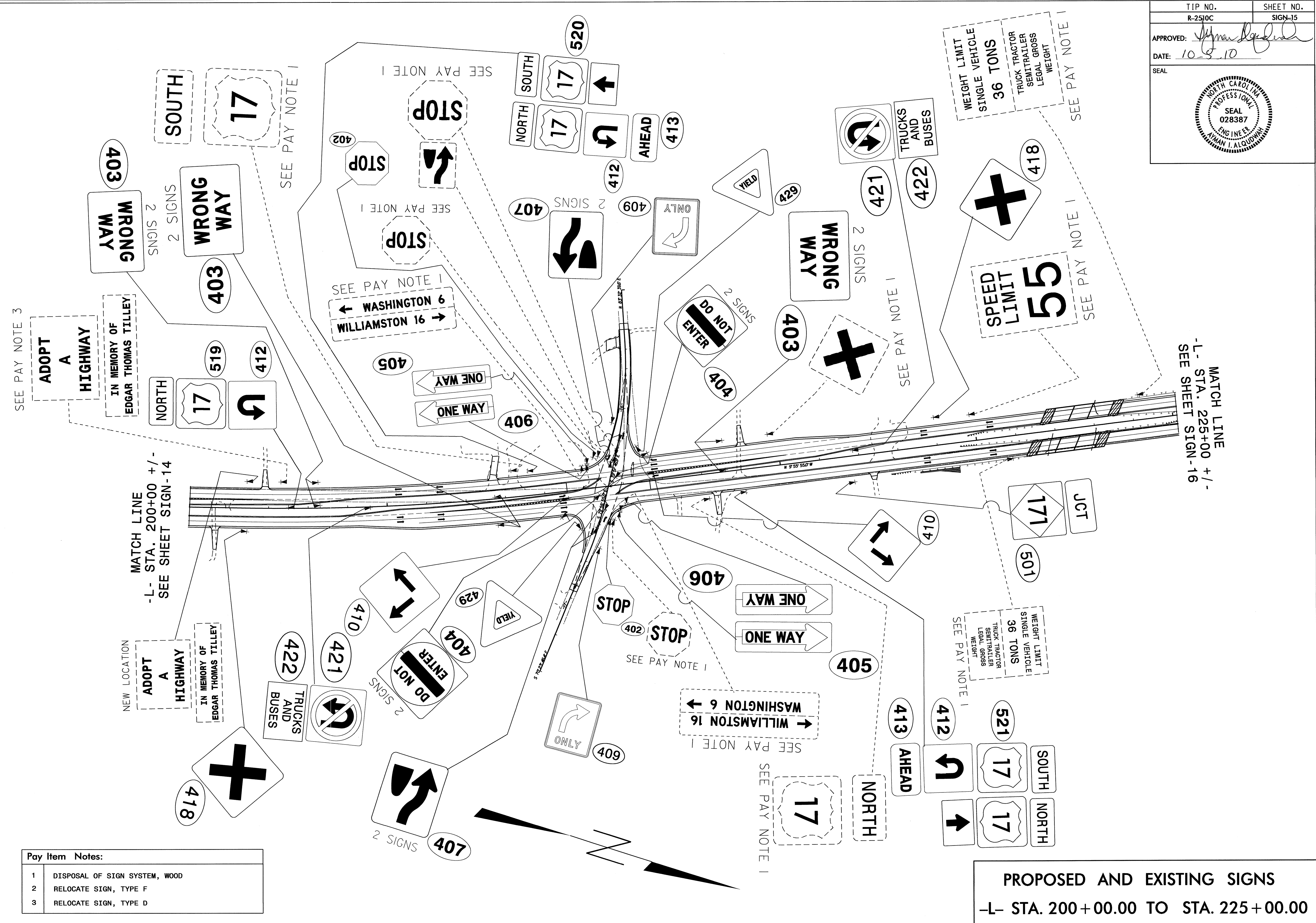




SEE PAY NOTE 1

Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
-L- STA. 173+00.00 TO STA. 200+00.00

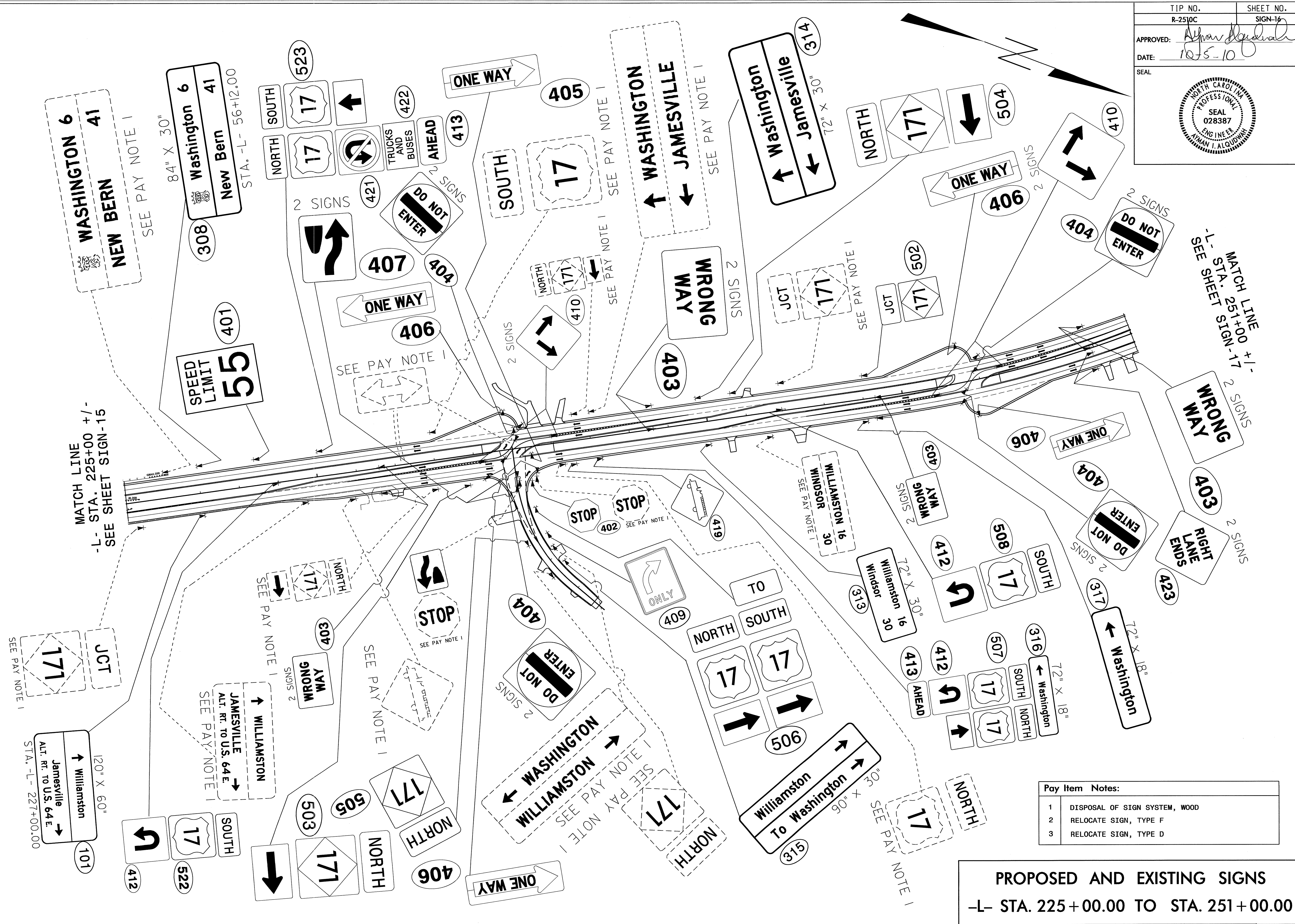


Pay Item Notes:

1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
 -L- STA. 200+00.00 TO STA. 225+00.00

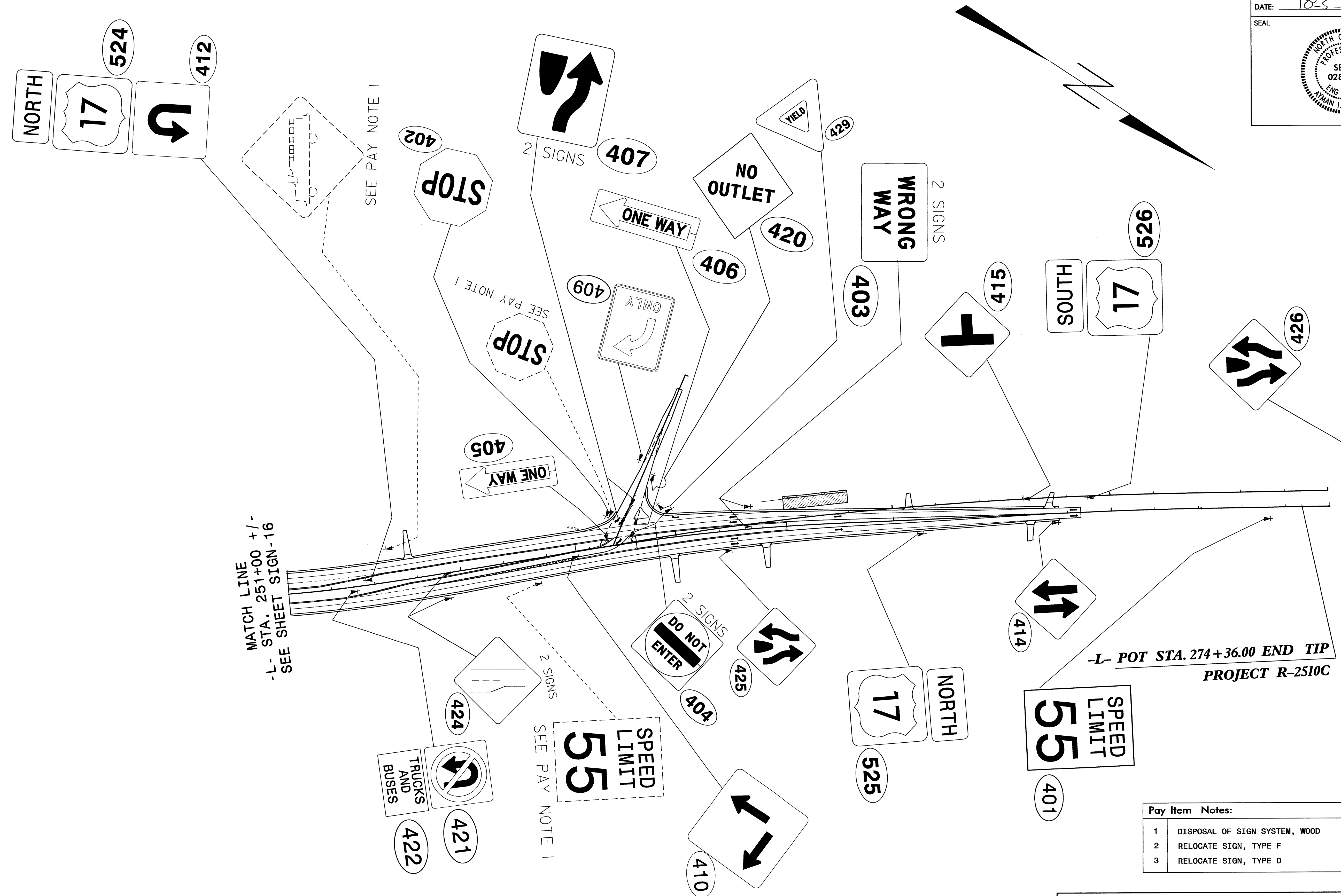
MATCH LINE  
 -L- STA. 225+00 +/-  
 -L- SEE SHEET SIGN-16



Pay Item Notes:	
1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
 -L- STA. 225+00.00 TO STA. 251+00.00





Pay Item Notes:

1	DISPOSAL OF SIGN SYSTEM, WOOD
2	RELOCATE SIGN, TYPE F
3	RELOCATE SIGN, TYPE D

**PROPOSED AND EXISTING SIGNS**  
 -L- STA. 251+00.00 TO STA. 274+36.00