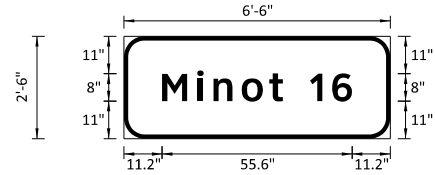


SIGN NUMBER	HWY 83 - SN 1
WIDTH x HEIGHT	6'-6" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 182.795 Rt **AREA: 16.3 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

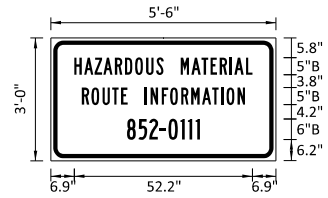
PANEL STYLE: ND_Expwy_Distance.ssi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)								LENGTH	SIZE	SERIES
M	i	n	o	t	1	6		55.6	8/6.5	ClearviewHwy-5-W
11.2	21.5	26.2	34.5	42.6	54.5	61				

SIGN NUMBER	HWY 83 - SN 2
WIDTH x HEIGHT	5'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0.75")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective COLOR: White
LEGEND/BORDER	TYPE: Non-Reflective COLOR: Black

STATION(S):
RP 198.037 RT **AREA: 16.5 Sq.Ft.**
RP 204.500 Lt



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Regulatory.ssi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)																LENGTH	SIZE	SERIES			
H	A	Z	A	R	D	O	U	S		M	A	T	E	R	I	A	L	52.2	5	B 2000	
6.9	9.8	12.9	15.4	18.8	21.8	24.7	28	30.9	33.1	38.1	41.2	44.2	46.8	49.5	52.5	53.8	57.2				
R	O	U	T	E		I	N	F	O	R	M	A	T	I	O	N			47.8	5	B 2000
9.1	11.9	15.2	18	20.6	22.5	27.5	29.3	32.5	35	38.2	41.2	44.3	47.3	49.9	51.5	54.8					
8	5	2	-	0	1	1	1											21.4	6	B 2000	
22.3	25.7	28.9	31.9	34.4	38	40.2	42.4														

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Sign Details

Various Locations along US-83

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	354

SIGN NUMBER	HWY 83 - SN 3					STATION(S): RP 197.563 Lt	AREA: 37.5 Sq.Ft.									
WIDTH x HEIGHT	12'-6" x 3'-0"															
BORDER WIDTH	1.25" (inset 0")															
CORNER RADIUS	6"															
MOUNTING	Ground															
BACKGROUND	TYPE: IV Reflective															
	COLOR: Brown															
LEGEND/BORDER	TYPE: IV Reflective															
	COLOR: White															
SYMBOL	X	Y	WID	HT	ANGLE											

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Recreation.ssi																				LETTER POSITION (X)					LENGTH	SIZE	SERIES							
V	e	t	e	r	a	n	s		o	f		F	o	r	e	i	g	n		W	a	r	s							132.7	6/4.9	ClearviewHwy-5-W		
8.6	15.2	21	25.5	32	36.1	42.5	48.5	52.3	58.8	65	67.9	74.5	79.8	86.5	90.8	97.1	100.4	107.1	111.2	117.8	127.1	133.5	137.5											
M	e	m	o	r	i	a	l		H	i	g	h	w	a	y																	93.2	6/4.9	ClearviewHwy-5-W
28.4	36	42.5	51.3	58	62.4	65.6	71.9	73.8	80.5	87.3	90.6	97.3	103.1	111.3	116.9																			

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Sign Details
Various Locations along Minot - US 83

SIGN NUMBER	HWY 83 - SN 5				
WIDTH x HEIGHT	7'-0" x 7'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	12"				
MOUNTING	Ground				
BACKGROUND	TYPE:	IV Reflective			
	COLOR:	Green			
LEGEND/BORDER	TYPE:	IV Reflective			
	COLOR:	White			
SYMBOL	X	Y	WID	HT	ANGLE
M1_4	6.4	47	18	18	0
M1_4	30.4	47	18	18	0
M1_4	54.4	47	18	18	0

STATION(S):
RP 198.268 RT

AREA: 49.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES
B	Y	-	P	A	S	S					25.4	4.5	ClearviewHwy-3-W
50.7	54.4	58.7	61.5	65.2	69.5	73.2							
D	e	v	i	l	s		L	a	k	e	57.2	6/4.9	ClearviewHwy-5-W
13.4	20.1	25.8	31.8	35.4	38.6	42.5	49.2	54.3	60.6	66.2			
W	i	l	l	i	s	t	o	n			44	6/4.9	ClearviewHwy-5-W
20	29.6	33.1	36.8	40.4	43.5	48.6	53.2	59.8					
J	a	m	e	s	t	o	w	n			54.9	6/4.9	ClearviewHwy-5-W
14.5	19.9	26.2	35.1	41	46.2	50.7	56.7	65.3					
R	I	G	H	T		L	A	N	E		43.5	4.5	ClearviewHwy-5-W
20.3	25.2	27.7	33.2	38	41.3	46.2	49.8	55.4	60.9				

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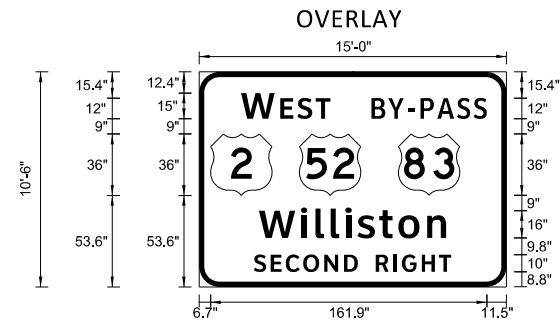
Sign Details

Various Locations along Minot - US 83

SIGN NUMBER	HWY 83 - SN 6
WIDTH x HEIGHT	15'-0" x 10'-6"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: XI Reflective COLOR: Green
LEGEND/BORDER	TYPE: XI Reflective COLOR: White

STATION(S):
RP 198.433 Rt

AREA: 157.5 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Expwy_Advance_Overhead.asi

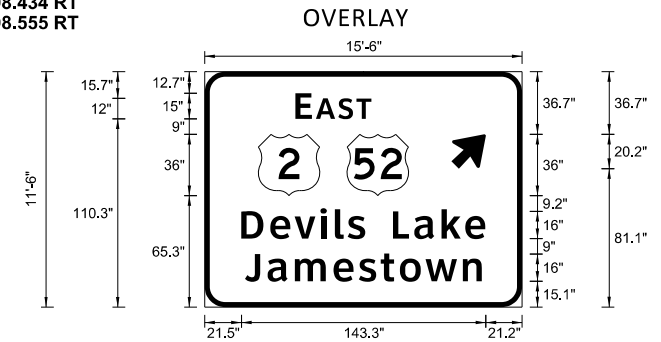
SYMBOL	X	Y	WID	HT	ANGLE
M1_4	6.7	53.6	36	36	0
M1_4	58.7	53.6	36	36	0
M1_4	116.7	53.6	36	36	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
W	E	S	T								52.4	15,12	ClearviewHwy-5-W-R	
24.5	47.4	57.5	68.2											
B	Y	-	P	A	S	S					67.6	12	ClearviewHwy-3-W	
100.9	110.7	122.2	129.7	139.5	151.1	160.8								
W	i	l	l	i	s	t	o	n			109.6	16/13	ClearviewHwy-5-W-R	
35	59.6	68.1	77	85.6	92.7	105.5	116.7	133.6						
S	E	C	O	N	D		R	I	G	H	T	115.8	10	ClearviewHwy-5-W-R
32	41.9	50.7	61	73.3	84.9	93	103.5	113.8	118.8	130.4	140.5			

SIGN NUMBER	HWY 83 - SN 7
WIDTH x HEIGHT	15'-6" x 11'-6"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: XI Reflective COLOR: Green
LEGEND/BORDER	TYPE: XI Reflective COLOR: White

STATION(S):
RP 198.434 RT
RP 198.555 RT

AREA: 178.3 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Expwy_Advance_Overhead.asi

SYMBOL	X	Y	WID	HT	ANGLE
AREXIT	144.6	81.2	22.3	25	45
M1_4	31.4	65.3	36	36	0
M1_4	83.4	65.3	36	36	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	A	S	T								44.4	15,12	ClearviewHwy-5-W-R
53.2	65.2	78.2	89										
D	e	v	i	l	s		L	a	k	e	143	16/13	ClearviewHwy-5-W-R
21.5	38.4	52.7	67.8	76.3	83.8	94	110.4	122.8	138.8	152.7			
J	a	m	e	s	t	o	w	n			138.8	16/13	ClearviewHwy-5-W-R
23.6	36.8	52.9	75.5	90.3	103.1	114.3	129.4	151.3					

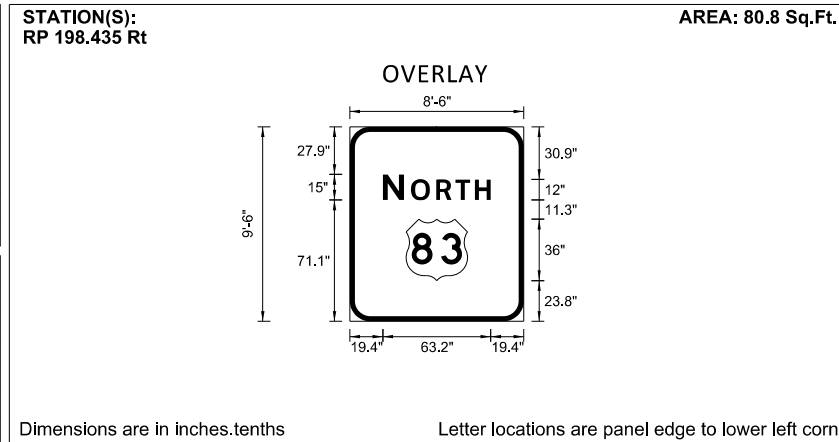
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Sign Details

Various Locations along Minot - US 83

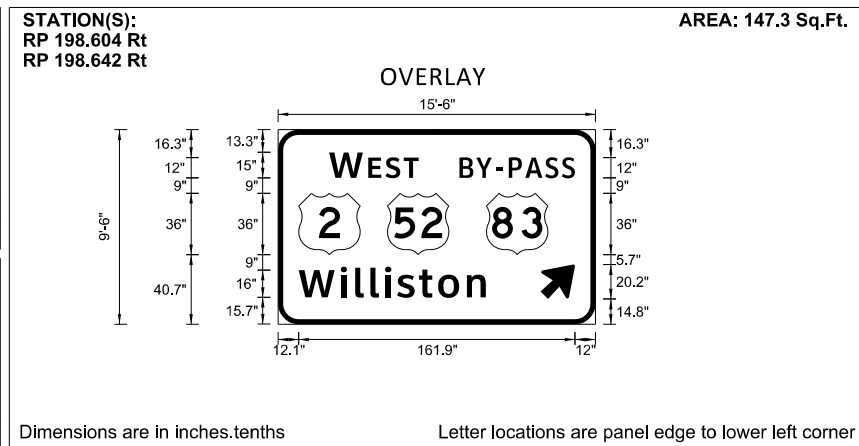
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	357

SIGN NUMBER	HWY 83 - SN 8				
WIDTH x HEIGHT	8'-6" x 9'-6"				
BORDER WIDTH	3" (inset 0")				
CORNER RADIUS	12"				
MOUNTING	Overhead				
BACKGROUND	TYPE: XI Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: XI Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
M1_4	33	23.8	36	36	0



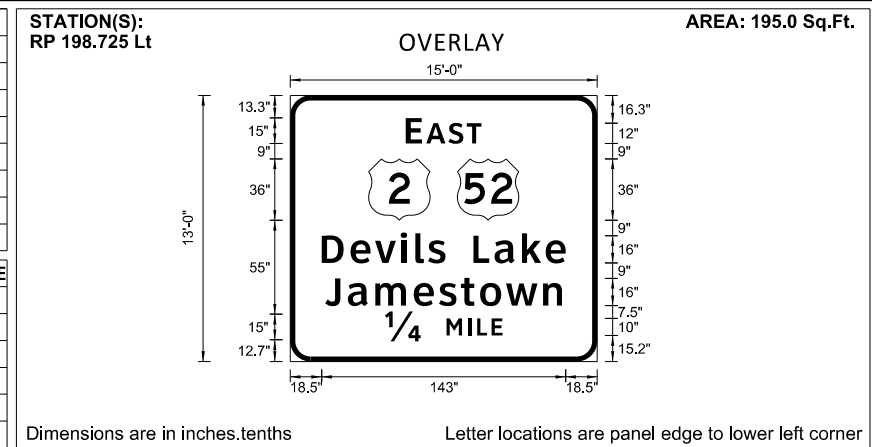
LETTER POSITION (X)					LENGTH	SIZE	SERIES	
N	O	R	T	H		63.2	15,12	ClearviewHwy-5-W-R
19.4	35.8	50.6	61.9	73.4				

SIGN NUMBER	HWY 83 - SN 9				
WIDTH x HEIGHT	15'-6" x 9'-6"				
BORDER WIDTH	3" (inset 0")				
CORNER RADIUS	12"				
MOUNTING	Overhead				
BACKGROUND	TYPE: XI Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: XI Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
M1_4	12.1	40.7	36	36	0
M1_4	64.1	40.7	36	36	0
M1_4	122.1	40.7	36	36	0
AREXIT	153.8	14.8	22.3	25	45



LETTER POSITION (X)					LENGTH	SIZE	SERIES				
W	E	S	T		52.4	15,12	ClearviewHwy-5-W-R				
29.9	52.8	62.9	73.6								
B	Y	-	P	A	S	S					
106.3	116.1	127.6	135.1	144.9	156.5	166.2	67.6	12	ClearviewHwy-3-W		
W	i	l	l	i	s	t	o	n			
12.1	36.7	45.2	54.1	62.7	69.7	82.5	93.8	110.6	109.6	16/13	ClearviewHwy-5-W-R

SIGN NUMBER	HWY 83 - SN 10				
WIDTH x HEIGHT	15'-0" x 13'-0"				
BORDER WIDTH	3" (inset 0")				
CORNER RADIUS	12"				
MOUNTING	Overhead				
BACKGROUND	TYPE: XI Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: XI Reflective				
	COLOR: White				



SYMBOL	X	Y	WID	HT	ANGLE
M1_4	46	82.7	36	36	0
M1_4	98	82.7	36	36	0

LETTER POSITION (X)					LENGTH	SIZE	SERIES						
E	A	S	T		44.4	15,12	ClearviewHwy-5-W-R						
67.8	79.7	92.8	103.6										
D	e	v	i	l	s	L	a	k	e				
18.5	35.4	49.7	64.8	73.3	80.8	91.1	107.4	119.8	135.8	149.7	143	16/13	ClearviewHwy-5-W-R
J	a	m	e	s	t	o	w	n					
20.6	33.8	49.9	72.5	87.3	100.1	111.3	126.4	148.3			138.8	16/13	ClearviewHwy-5-W-R
1/4	M	I	L	E									
55.6	91.6	104.2	109.6	118.1							68.9	15,10	ClearviewHwy-5-W-R

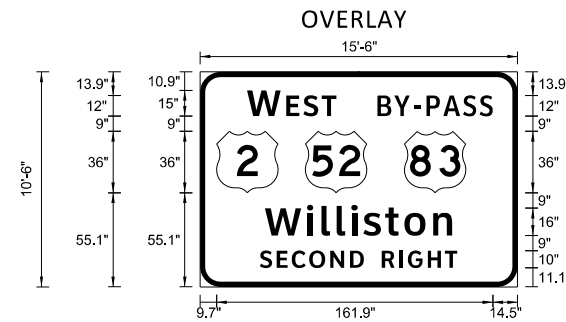
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Sign Details
Various Locations along Minot - US 83

SIGN NUMBER	HWY 83 - SN 11
WIDTH x HEIGHT	15'-6" x 10'-6"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: XI Reflective COLOR: Green
LEGEND/BORDER	TYPE: XI Reflective COLOR: White

STATION(S):
RP 198.726 Lt

AREA: 162.8 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Expwy_Advance_Overhead.asd

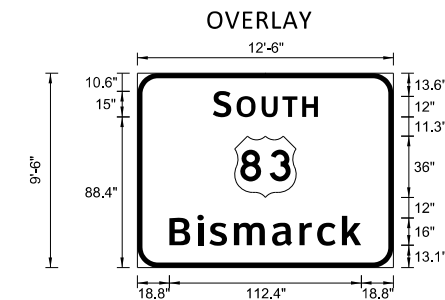
SYMBOL	X	Y	WID	HT	ANGLE
M1_4	9.7	55.2	36	36	0
M1_4	61.7	55.2	36	36	0
M1_4	119.7	55.1	36	36	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
W	E	S	T								52.4	15,12	ClearviewHwy-5-W-R	
27.5	50.4	60.5	71.2											
B	Y	-	P	A	S	S					67.6	12	ClearviewHwy-3-W	
103.9	113.7	125.2	132.7	142.5	154.1	163.8								
W	i	l	l	i	s	t	o	n			109.6	16/13	ClearviewHwy-5-W-R	
38	62.6	71.1	80	88.6	95.7	108.5	119.7	136.6						
S	E	C	O	N	D		R	I	G	H	T	115.8	10	ClearviewHwy-5-W-R
35	44.9	53.7	64	76.3	87.9	96	106.5	116.8	121.8	133.4	143.5			

SIGN NUMBER	HWY 83 - SN 12
WIDTH x HEIGHT	12'-6" x 9'-6"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Overhead
BACKGROUND	TYPE: XI Reflective COLOR: Green
LEGEND/BORDER	TYPE: XI Reflective COLOR: White

STATION(S):
RP 198.727 Lt

AREA: 118.8 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Expwy_Advance_Overhead.asd

SYMBOL	X	Y	WID	HT	ANGLE
M1_4	57	41.1	36	36	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES
S	O	U	T	H							61.6	15,12	ClearviewHwy-5-W-R
44.2	58.1	72.9	85.1	96.6									
B	i	s	m	a	r	c	k				112.4	16/13	ClearviewHwy-5-W-R
18.8	35.1	42.2	56.6	78.9	94.9	105.3	119.9						

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Sign Details
Various Locations along Minot - US 83

SIGN NUMBER	HWY 85 - SN 1A				
WIDTH x HEIGHT	12'-6" x 5'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	8.2	45.8	7.1	9	180
Camping	8.2	8.5	18	12.5	0
Trailer Camping	32.2	8.5	18	11.5	0
RS-054	56.2	8.1	18	13.3	0
RS-076	80.2	5.9	18	17.7	0

STATION(S):
RP 5.411 Lt

AREA: 62.5 Sq.Ft.

Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITION (X)														LENGTH	SIZE	SERIES			
B	o	w	m	a	n	H	a	l	e	y	D	a	m	100.4	6/4.9	ClearviewHwy-5-W			
23.2	29.6	35.6	44.2	52.9	59.3	63.4	70.6	77.1	83.5	87	92.7	97.4	103.8	110.4	116.8				
R	e	c	r	e	a	t	i	o	n	A	r	e	a	1	0	116.8	6/4.9	ClearviewHwy-5-W	
23.2	29.5	35.7	41.5	45.8	51.9	57.7	62.3	65.6	72.3	76.5	82.9	90.3	94.5	100.6	130.2	135.1			

SIGN NUMBER	HWY 85 - SN 1				
WIDTH x HEIGHT	12'-6" x 5'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	132.8	35.3	7.1	9	0
Camping	10	8.1	18	12.5	0
Trailer Camping	34	8.1	18	11.5	0
RS-054	58	8.1	18	13.3	0
RS-076	82	5.9	18	17.7	0

STATION(S):
RP 5.259 Rt

AREA: 62.5 Sq.Ft.

Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITION (X)														LENGTH	SIZE	SERIES			
B	o	w	m	a	n	H	a	l	e	y	D	a	m	100.4	6/4.9	ClearviewHwy-5-W			
10	16.4	22.4	31	39.7	46.1	50.2	57.4	63.9	70.3	73.8	79.5	84.2	90.6	97.2	103.6				
R	e	c	r	e	a	t	i	o	n	A	r	e	a	1	0	116.8	6/4.9	ClearviewHwy-5-W	
10	16.3	22.5	28.3	32.6	38.7	44.5	49.1	52.4	59.1	63.3	69.7	77.1	81.3	87.4	117	121.9			

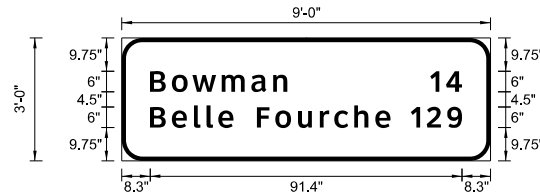
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Sign Details

Various Locations along US-85

SIGN NUMBER	HWY 85 - SN 2
WIDTH x HEIGHT	9'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 32.591 Lt **AREA: 27.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

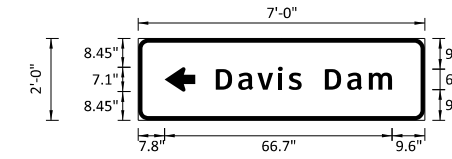
PANEL STYLE: ND_Conv_Distance.ssi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)													LENGTH	SIZE	SERIES					
B	o	w	m	a	n	1	4						91.4	6/4.9	ClearviewHwy-5-W					
8.3	14.7	20.7	29.2	38	44.3	90.3	95													
B	e	l	l	e	F	o	u	r	c	h	e	1	2	9				91.4	6/4.9	ClearviewHwy-5-W
8.3	14.7	21.1	24.8	28.3	32.7	39.6	45	51.6	58	62.3	68.1	74.3	84.7	89.3	95.3					

SIGN NUMBER	HWY 85 - SN 3
WIDTH x HEIGHT	7'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 39.252 Rt **AREA: 14.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.ssi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.8	8.4	7.1	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
D	a	v	i	s	D	a	m			51.7	6/4.9	ClearviewHwy-5-W
22.8	29.3	35	41	44.1	47.9	54.7	61.3	67.6				

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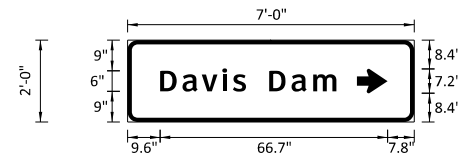
Sign Details

Various Locations along US-85

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	361

SIGN NUMBER	HWY 85 - SN 4				
WIDTH x HEIGHT	7'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	67.2	8.4	7.2	9	0

STATION(S):
RP 39.521 Lt **AREA: 14.0 Sq.Ft.**

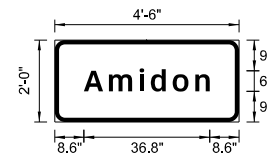


Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)										LENGTH	SIZE	SERIES
D	a	v	i	s	D	a	m			51.7	6/4.9	ClearviewHwy-5-W
9.6	16.1	21.8	27.8	30.9	34.7	41.5	48.1	54.4				

SIGN NUMBER	HWY 85 - SN 5				
WIDTH x HEIGHT	4'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 41.101 Rt **AREA: 9.0 Sq.Ft.**

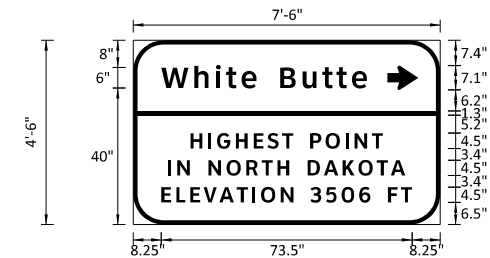


Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)						LENGTH	SIZE	SERIES
A	m	i	d	o	n	36.8	6/4.9	ClearviewHwy-5-W
8.6	15.9	24.9	28.2	34.6	41.3			

SIGN NUMBER	HWY 85 - SN 6				
WIDTH x HEIGHT	7'-6" x 4'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green / Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	74.5	39.4	7.1	9	0

STATION(S):
RP 43.185 Rt **AREA: 33.8 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)													LENGTH	SIZE	SERIES				
W	h	i	t	e	B	u	t	t	e				60.3	6/4.9	ClearviewHwy-5-W				
8.3	18	24.3	27.2	31.8	36.2	43.1	49.7	55.5	59.6	64.1									
H	I	G	H	E	S	T	P	O	I	N	T		56.4	4.5	ClearviewHwy-5-W				
16.8	22.1	24.6	30.1	35.3	39.4	43.7	46.9	51.9	56.4	62.2	64.9	69.9							
I	N		N	O	R	T	H		D	A	K	O	T	A	69.5	4.5	ClearviewHwy-5-W		
10.3	13	16.7	22.1	27.4	33.2	37.7	42.3	45.7	51.1	55.9	61.4	66	71.4	75.5					
E	L	E	V	A	T	I	O	N		3	5	0	6		F	T	73.5	4.5	ClearviewHwy-5-W
8.3	12.7	16.8	20.7	25.3	30.4	35	37.5	43.3	47	52	56.5	61.1	66.3	69.5	74.7	78.5			

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Sign Details

Various Locations along US-85

SIGN NUMBER	HWY 85 - SN 7					STATION(S): RP 43.318 Lt	AREA: 33.8 Sq.Ft.
WIDTH x HEIGHT	7'-6" x 4'-6"						
BORDER WIDTH	1.25" (inset 0")						
CORNER RADIUS	9"						
MOUNTING	Ground						
BACKGROUND	TYPE: IV Reflective COLOR: Green / Green						
LEGEND/BORDER	TYPE: IV Reflective COLOR: White						
SYMBOL	X	Y	WID	HT	ANGLE		
ARDD	6.5	39.4	7.1	9	180		

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Corv_Destination,ssl

LETTER POSITION (X)														LENGTH	SIZE	SERIES			
W	h	i	t	e		B	u	t	t	e				60.3	6/4.9	ClearviewHwy-5-W			
21.5	31.2	37.5	40.4	44.9	49.4	56.3	62.9	68.6	72.8	77.3									
H	I	G	H	E	S	T		P	O	I	N	T		56.4	4.5	ClearviewHwy-5-W			
16.8	22.1	24.6	30.1	35.3	39.4	43.7	46.9	51.9	56.4	62.2	64.9	69.9							
I	N		N	O	R	T	H		D	A	K	O	T	A	69.5	4.5	ClearviewHwy-5-W		
10.3	12.9	16.7	22.1	27.4	33.2	37.7	42.3	45.7	51.1	55.9	61.4	66	71.4	75.5					
E	L	E	V	A	T	I	O	N		3	5	0	6	F	T	73.5	4.5	ClearviewHwy-5-W	
8.3	12.7	16.8	20.7	25.3	30.4	35	37.5	43.3	47	52	56.5	61.1	66.3	69.5	74.7	78.5			

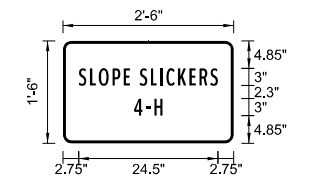
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Sign Details

Various Locations along US-85

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	363

SIGN NUMBER	HWY 85 - SN 8					STATION(S):	RP 44.988 Rt					AREA:	3.8 Sq.Ft.
WIDTH x HEIGHT	2'-6" x 1'-6"												
BORDER WIDTH	0.5" (inset 0")												
CORNER RADIUS	1.5"												
MOUNTING	Ground												
BACKGROUND	TYPE: IV Reflective												
	COLOR: Blue												
LEGEND/BORDER	TYPE: IV Reflective												
	COLOR: White												
SYMBOL	X	Y	WID	HT	ANGLE								



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)														LENGTH	SIZE	SERIES	
S	L	O	P	E		S	L	I	C	K	E	R	S		24.5	3	ClearviewHwy-1-W
2.8	4.8	6.3	8.7	10.7	11.8	13.5	15.5	17.1	18.2	20.2	22.3	24	25.9				
4	-	H													5	3	ClearviewHwy-1-W
12.5	14.6	16.1															

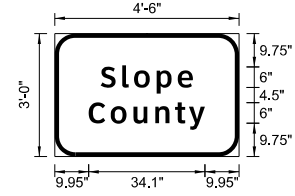
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Sign Details

Various Locations along US-85

SIGN NUMBER	HWY 85 - SN 9
WIDTH x HEIGHT	4'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 57.331 Lt AREA: 13.5 Sq.Ft.



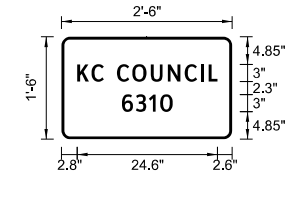
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)							LENGTH	SIZE	SERIES
S	l	o	p	e			27	6/4.9	ClearviewHwy-5-W
13.5	19.8	23.2	29.9	36.1					
C	o	u	n	t	y		34.1	6/4.9	ClearviewHwy-5-W
10	16.4	23.1	29.5	35.3	39.3				

SIGN NUMBER	HWY 85 - SN 11
WIDTH x HEIGHT	2'-6" x 1'-6"
BORDER WIDTH	0.5" (inset 0")
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 89.002 Rt AREA: 3.8 Sq.Ft.



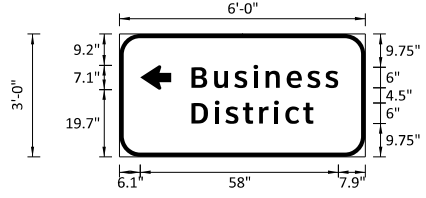
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
K	C		C	O	U	N	C	I	L	24.6	3	ClearviewHwy-3-W
2.8	5.3	7.5	9.8	12.4	15.7	18.7	21.7	24.5	25.9			
6	3	1	0							8.9	3	ClearviewHwy-3-W
10.6	13.1	15.4	17.3									

SIGN NUMBER	HWY 85 - SN 10
WIDTH x HEIGHT	6'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 74.806 Rt AREA: 18.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	6.1	19.7	7.1	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
B	u	s	i	n	e	s	s			43	6/4.9	ClearviewHwy-5-W
21.1	27.7	33.6	39.2	42.8	49	55	60.3					
D	i	s	t	r	i	c	t			35.7	6/4.9	ClearviewHwy-5-W
21.1	27.9	31	36.2	40.9	45.3	48.6	53.8					

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Sign Details
Various Locations along US-85

SIGN NUMBER	HWY 85 - SN 12
WIDTH x HEIGHT	5'-6" x 3'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Brown
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S): RP 89.675 Rt
AREA: 19.3 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

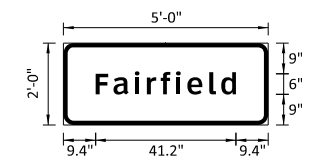
PANEL STYLE: ND_Conv_Recreation.asd

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
H	i	s	t	o	r	i	c	a	l	47.7	6/4.9	ClearviewHwy-5-W
9.2	16	19.1	24.2	28.7	35.4	39.8	43.1	48.6	54.9			
M	a	r	k	e	r					33.1	6/4.9	ClearviewHwy-5-W
16.4	23.9	30.3	34.8	40.4	46.8							
1	0	0	0	F	T					40.1	6	ClearviewHwy-5-W
12.9	17.9	24.8	31.7	36.6	43.7	48.7						

SIGN NUMBER	HWY 85 - SN 13
WIDTH x HEIGHT	5'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S): RP 91.418 Rt
RP 92.024 Lt
AREA: 10.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

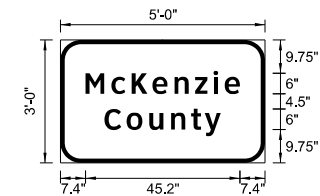
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
F	a	i	r	f	i	e	l	d		41.2	6/4.9	ClearviewHwy-5-W
9.4	14.7	20.9	24.5	28.5	33	36.3	42.8	46.2				

SIGN NUMBER	HWY 85 - SN 14
WIDTH x HEIGHT	5'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S): RP 106.677 Rt
AREA: 15.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
M	c	K	e	n	z	i	e			45.2	6/4.9	ClearviewHwy-5-W
7.4	15	20.9	27	33.5	39.5	44.9	48.2					
C	o	u	n	t	y					34.1	6/4.9	ClearviewHwy-5-W
13	19.4	26.1	32.5	38.3	42.3							

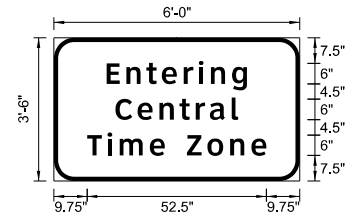
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Sign Details

Various Locations along US-85

SIGN NUMBER	HWY 85 - SN 15
WIDTH x HEIGHT	6'-0" x 3'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 126.735 Rt **AREA: 21.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

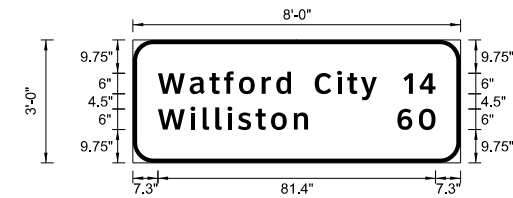
PANEL STYLE: ND_Conv_Destination.asi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	n	t	e	r	i	n	g				41.1	6/4.9	ClearviewHwy-5-W
15.4	21.2	27.1	31.6	38.1	42.4	46	52.2						
C	e	n	t	r	a	l					35.9	6/4.9	ClearviewHwy-5-W
18	24.5	31	36.8	41.6	45.7	52.1							
T	i	m	e		Z	o	n	e			52.5	6/4.9	ClearviewHwy-5-W
9.7	15.7	19.2	28.1	32.5	39	45	51.6	57.8					

SIGN NUMBER	HWY 85 - SN 16
WIDTH x HEIGHT	8'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 127.303 Rt **AREA: 24.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Distance.asi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)																LENGTH	SIZE	SERIES
W	a	t	f	o	r	d		C	i	t	y	1	4			81.4	6/4.9	ClearviewHwy-5-W
7.3	16.7	22.4	26.7	31.1	37.8	42	46.4	53.3	59.8	62.8	66.8	79.3	84					
W	i	l	l	i	s	t	o	n	6	0						81.4	6/4.9	ClearviewHwy-5-W
7.3	16.9	20.4	24.1	27.7	30.8	36	40.5	47.1	77.5	83.8								

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Sign Details

Various Locations along US-85

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	367

SIGN NUMBER	HWY 85 - SN 18					STATION(S):		RP 148.920 Rt					AREA: 3.8 Sq.Ft.			
WIDTH x HEIGHT	2'-6" x 1'-6"															
BORDER WIDTH	0.5" (inset 0")															
CORNER RADIUS	1.5"															
MOUNTING	Ground															
BACKGROUND	TYPE: IV Reflective COLOR: Blue															
LEGEND/BORDER	TYPE: IV Reflective COLOR: White															
SYMBOL	X	Y	WID	HT	ANGLE											
<small>PANEL STYLE: ND_Adopt-a-Highway.sst</small>																
LETTER POSITION (X)													LENGTH	SIZE	SERIES	
A	R	N	E	G	A	R	D							22	3	ClearviewHwy-3-W
3.5	6.6	9.3	12.4	14.7	17.5	20.6	23.4									
L	I	O	N	S										11.6	3	ClearviewHwy-3-W
8.7	10.9	12.2	15.5	18.4												

Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

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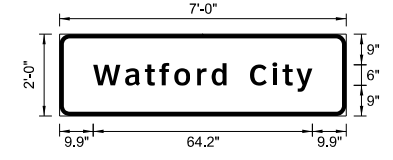
Sign Details

Various Locations along US-85

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	368

SIGN NUMBER	HWY 85 B - SN 19
WIDTH x HEIGHT	7'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S): RP 954.000 Lt **AREA: 14.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

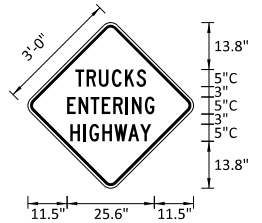
PANEL STYLE: ND_Conv_Destination.sst

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
W	a	t	f	o	r	d		C	i	t	y	64.2	6/4.9	ClearviewHwy-5-W
9.9	19.2	25	29.3	33.7	40.3	44.6	48.9	55.8	62.4	65.4	69.4			

SIGN NUMBER	HWY 85 B - SN 21
WIDTH x HEIGHT	4'-1" x 4'-1"
BORDER WIDTH	0" (inset 0")
CORNER RADIUS	0"
MOUNTING	Ground
BACKGROUND	TYPE: XI Reflective
	COLOR: Yellow
LEGEND/BORDER	TYPE: Non-Reflective
	COLOR: Black

STATION(S): RP 953.378 Rt **AREA: 16.4 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

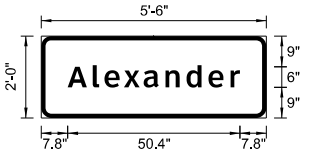
PANEL STYLE: ND_Misc_Warning_36x36 diamond.sst

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
T	R	U	C	K	S							20.7	5	C 2000
13.9	17.2	20.8	24.6	28.4	31.8									
E	N	T	E	R	I	N	G					25.6	5	C 2000
11.5	14.9	18.4	21.6	25	28.7	30.5	34.3							
H	I	G	H	W	A	Y						23.7	5	C 2000
12.4	16.3	18	21.8	25.3	29.4	32.9								

SIGN NUMBER	HWY 85 B - SN 20
WIDTH x HEIGHT	5'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S): RP 971.088 Rt **AREA: 11.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.sst

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
A	l	e	x	a	n	d	e	r				50.4	6/4.9	ClearviewHwy-5-W
7.8	15.1	18.6	24.2	30	36.4	42.6	49	55.5						

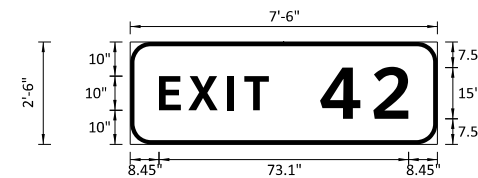
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Sign Details

Various Locations along US-85 B

SIGN NUMBER	HWY I94 - SN 1A
WIDTH x HEIGHT	7'-6" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S):
RP 43.104 Lt **AREA:** 18.8 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

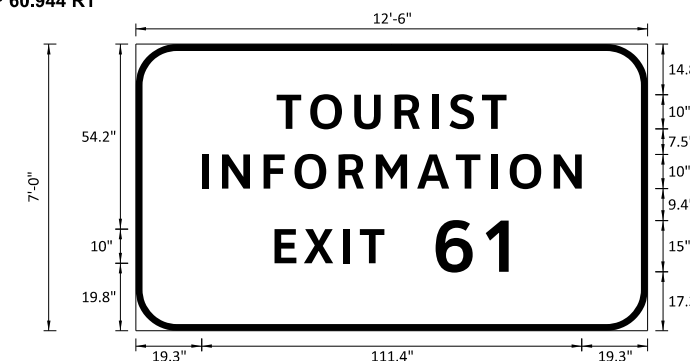
PANEL STYLE: ND_Fwy_Advance_Int.ssf

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)							LENGTH	SIZE	SERIES
E	X	I	T	4	2		73.1	10,15	ClearviewHwy-5-W
8.5	17	28.5	33.4	55.7	71.2				

SIGN NUMBER	HWY I94 - SN 2
WIDTH x HEIGHT	12'-6" x 7'-0"
BORDER WIDTH	2" (inset 0")
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S):
RP 60.944 RT **AREA:** 87.5 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

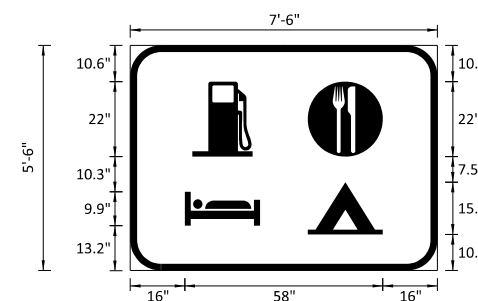
PANEL STYLE: ND_Fwy_General Services.ssf

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)												LENGTH	SIZE	SERIES		
T	O	U	R	I	S	T							67.4	10	ClearviewHwy-5-W	
41.3	51.1	64	75.8	86.8	91.9	101.5										
I	N	F	O	R	M	A	T	I	O	N				111.4	10	ClearviewHwy-5-W
19.3	25.3	37.5	46.5	59.4	70.4	82.5	93.8	104	109.6	122.5						
E	X	I	T	6	1									68.6	10,15	ClearviewHwy-5-W
40.7	49.3	60.7	65.7	87.9	102.5											

SIGN NUMBER	HWY I94 - SN 1
WIDTH x HEIGHT	7'-6" x 5'-6"
BORDER WIDTH	2" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S):
RP 43.104 Lt NE RAMP **AREA:** 41.3 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_General Services.ssf

SYMBOL	X	Y	WID	HT	ANGLE
Gas	18.2	33.4	17.7	22	0
Food	52	33.4	22	22	0
Lodging	16	13.1	22	9.9	0
Camping	52	10.6	22	15.3	0

LETTER POSITION (X)												LENGTH	SIZE	SERIES		

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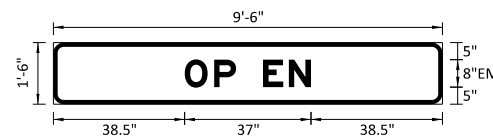
Sign Details
Various Locations along I-94

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	370

SIGN NUMBER	HWY I94 - SN 2A
WIDTH x HEIGHT	9'-6" x 1'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: 3A Reflective COLOR: Blue
LEGEND/BORDER	TYPE: 3A Reflective COLOR: White

STATION(S): RP 60.944 RT
AREA: 14.3 Sq.Ft.

OVERLAY



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Next Services.ssi

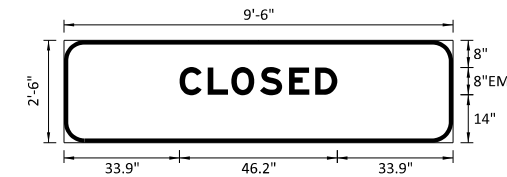
SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)						LENGTH	SIZE	SERIES
O	P	E	N			37	8	EM 2000
38.5	47.1	53.6	61.4	69				

SIGN NUMBER	HWY I94 - SN 2B
WIDTH x HEIGHT	9'-6" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: 3A Reflective COLOR: Blue
LEGEND/BORDER	TYPE: 3A Reflective COLOR: White

STATION(S): RP 60.944 RT
AREA: 23.8 Sq.Ft.

OVERLAY



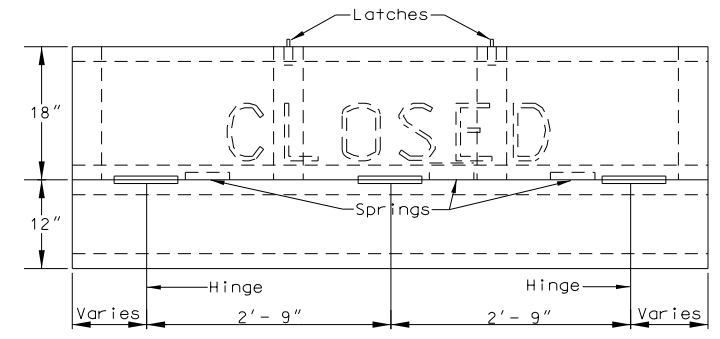
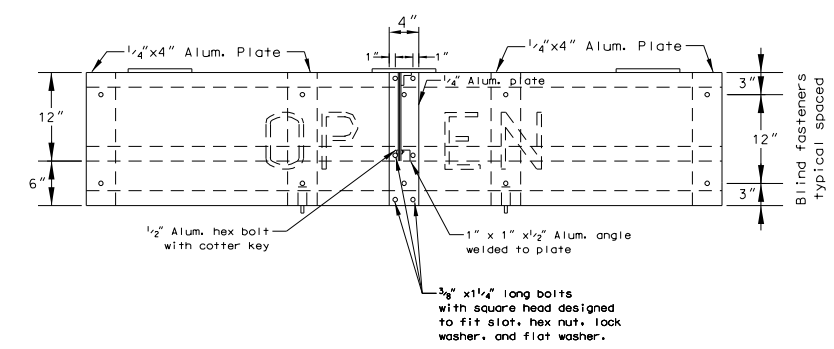
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Next Services.ssi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)						LENGTH	SIZE	SERIES
C	L	O	S	E	D	46.2	8	EM 2000
33.9	42.2	49.1	57.5	66	73.6			

WEIGH STATION OPEN - CLOSED SIGN ASSEMBLY

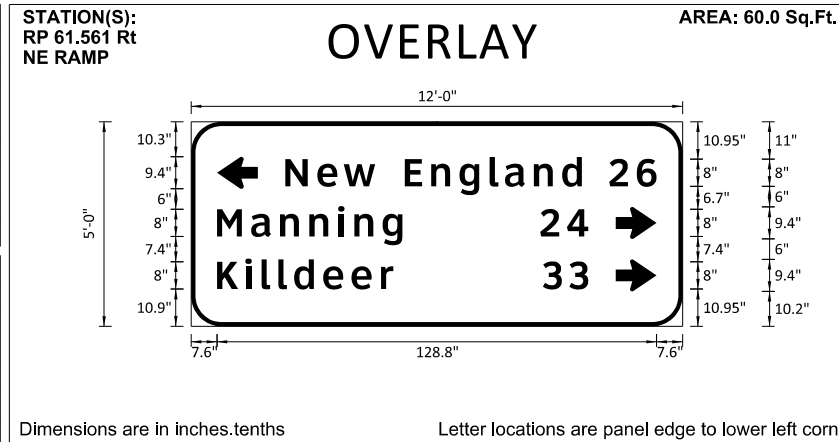


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Sign Details
Various Locations along I-94

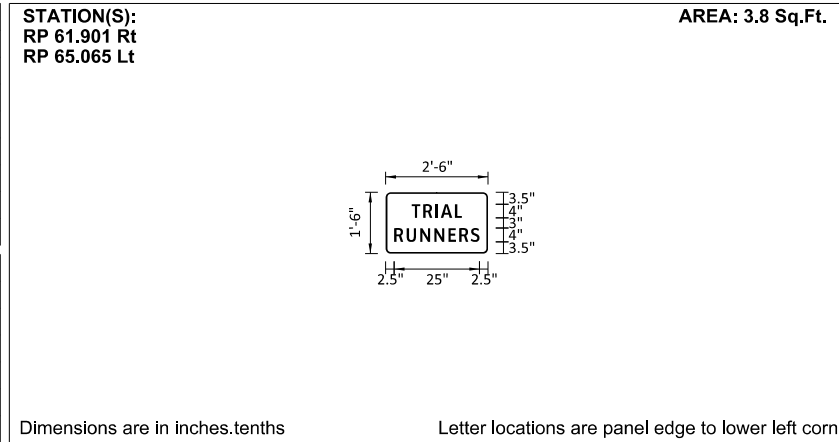
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	371

SIGN NUMBER	HWY I94 - SN 3
WIDTH x HEIGHT	12'-0" x 5'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE
ARDD	7.6 40.4 9.4 12 180
ARDD	124.4 25.6 9.4 12 0
ARDD	124.4 10.3 9.4 12 0



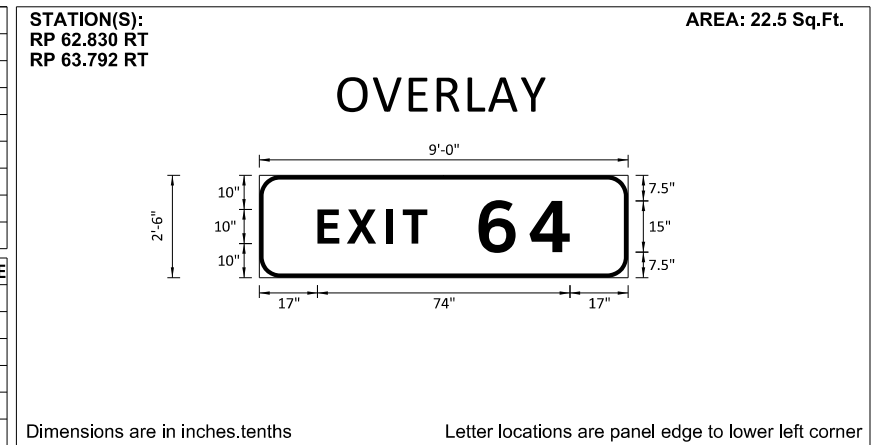
LETTER POSITION (X)												LENGTH	SIZE	SERIES			
N	e	w		E	n	g	l	a	n	d	2	6			108.8	8/6.5	ClearviewHwy-5-W
27.6	37	44.7	54	62.6	70.4	78.6	87.5	92	100.5	108.7	122.5	130.6					
M	a	n	n	i	n	g	2	4							108.8	8/6.5	ClearviewHwy-5-W
7.6	17.6	26.1	34.7	43.1	47.8	56.1	102.3	110.1									
K	i	l	l	d	e	e	r	3	3						108.8	8/6.5	ClearviewHwy-5-W
7.6	15.9	20.6	25.6	30.2	38.7	47	55.6	103.1	110.8								

SIGN NUMBER	HWY I94 - SN 4
WIDTH x HEIGHT	2'-6" x 1'-6"
BORDER WIDTH	0.5" (inset 0")
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



LETTER POSITION (X)												LENGTH	SIZE	SERIES			
T	R	I	A	L											14.7	4	ClearviewHwy-3-W
7.6	11	14.7	16.2	20.3													
R	U	N	N	E	R	S									25	4	ClearviewHwy-3-W
2.5	6.2	10.1	14.3	18.4	21.6	24.9											

SIGN NUMBER	HWY I94 - SN 5A
WIDTH x HEIGHT	9'-0" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Overhead
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White



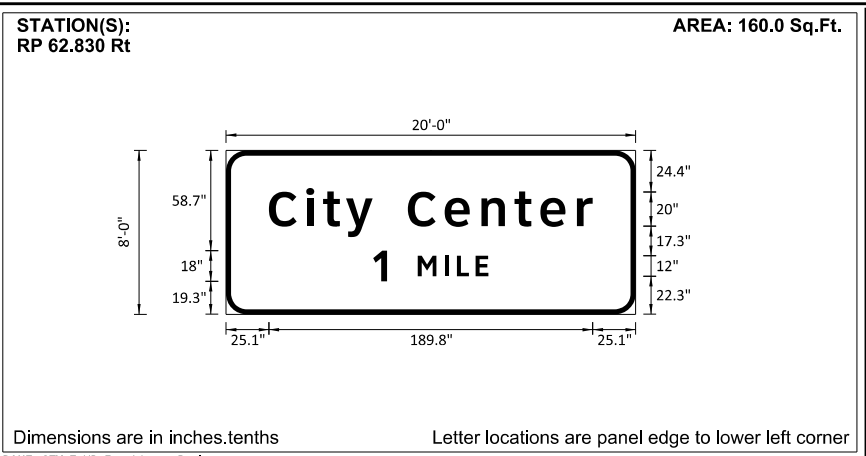
SYMBOL	X Y WID HT ANGLE
---------------	---

LETTER POSITION (X)												LENGTH	SIZE	SERIES			
E	X	I	T	6	4										74	10,15	ClearviewHwy-5-W
17	25.6	37	42	64.2	79.1												

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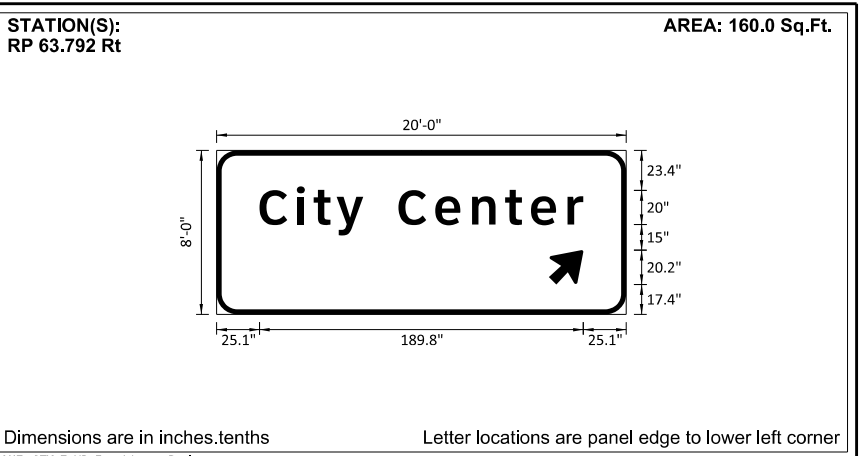
Sign Details
Various Locations along I-94

SIGN NUMBER	HWY 194 - SN 5B
WIDTH x HEIGHT	20'-0" x 8'-0"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



LETTER POSITION (X)													LENGTH	SIZE	SERIES
C	i	t	y		C	e	n	t	e	r			189.8	20/16.3	ClearviewHwy-5-W
25.1	47	56.9	70.3	86	106.6	128.1	149.6	169.1	184.2	205.7					
1	M	I	L	E									67.6	18,12	ClearviewHwy-5-W
86.2	112.3	128.1	135.3	146.2											

SIGN NUMBER	HWY 194 - SN 5
WIDTH x HEIGHT	20'-0" x 8'-0"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE
AREXIT	194.7 17.4 22.3 25 45



LETTER POSITION (X)													LENGTH	SIZE	SERIES
C	i	t	y		C	e	n	t	e	r			189.8	20/16.3	ClearviewHwy-5-W
25.1	47	56.9	70.3	86	106.6	128.1	149.6	169.1	184.2	205.7					

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Sign Details

Various Locations along I-94

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	373

SIGN NUMBER	HWY I94 - SN 6A				
WIDTH x HEIGHT	9'-6" x 2'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	94.2	10.3	9.4	12	0

STATION(S):
RP 63.982 RT

AREA: 23.8 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES
C	i	t	y	C	e	n	t	e	r		75.9	8/6.5	ClearviewHwy-5-W
10.2	19	22.9	28.3	34.6	42.8	51.4	60.1	67.8	73.9	82.5			

SIGN NUMBER	HWY I94 - SN 6				
WIDTH x HEIGHT	9'-6" x 6'-0"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARGORE	70.3	16.1	18.3	30	45

STATION(S):
RP 64.001 Rt

AREA: 57.0 Sq.Ft.

OVERLAY

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	X	I	T								38.6	12	ClearviewHwy-5-W
37.7	48	61.7	67.7										
6	4										32.1	18	ClearviewHwy-5-W
20.2	38.1												

SIGN NUMBER	HWY I94 - SN 7A				
WIDTH x HEIGHT	9'-0" x 2'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Overhead				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 64.695 LT

AREA: 22.5 Sq.Ft.

OVERLAY

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	X	I	T	6	4						74	10,15	ClearviewHwy-5-W
17	25.6	37	42	64.2	79.1								

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Sign Details

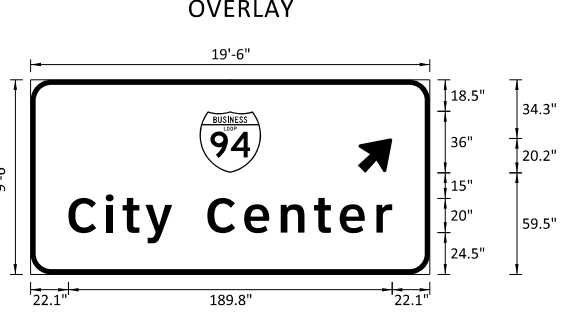
Various Locations along I-94

SIGN NUMBER	HWY 194 - SN 7				
WIDTH x HEIGHT	19'-6" x 9'-6"				
BORDER WIDTH	3" (inset 0")				
CORNER RADIUS	12"				
MOUNTING	Ground				
BACKGROUND	TYPE:	IV Reflective			
	COLOR:	Green			
LEGEND/BORDER	TYPE:	IV Reflective			
	COLOR:	White			

SYMBOL	X	Y	WID	HT	ANGLE
M1_2	99	59.5	36	36	0
AREXIT	191.7	59.5	22.3	25	45

STATION(S):
RP 64.695 Lt

AREA: 185.3 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Advance_B.ssf

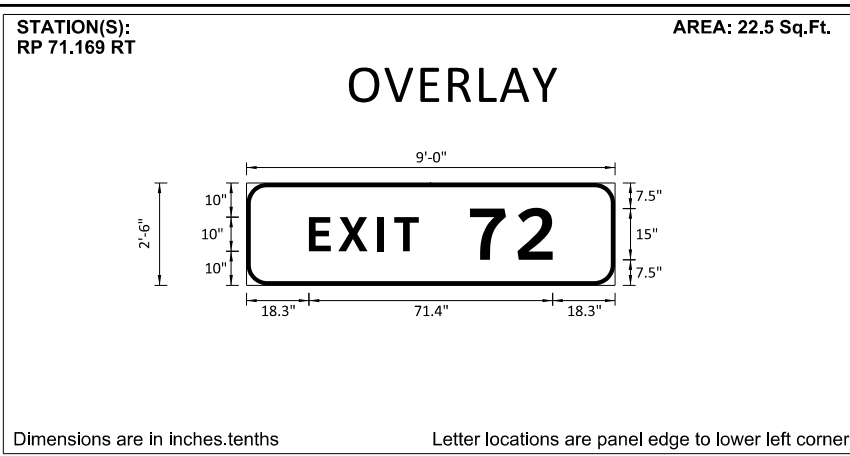
LETTER POSITION (X)										LENGTH	SIZE	SERIES													
C	i	t	y		C	e	n	t	e	r												189.8	20/16.3	ClearviewHwy-5-W	
22.1	44	53.9	67.3	83	103.6	125.1	146.6	166.1	181.2	202.7															

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Sign Details

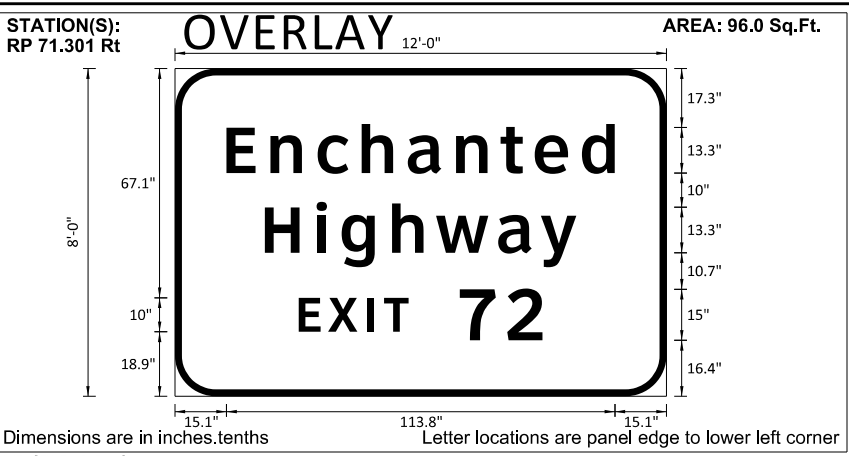
Various Locations along I-94

SIGN NUMBER	HWY I94 - SN 8A
WIDTH x HEIGHT	9'-0" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Overhead
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



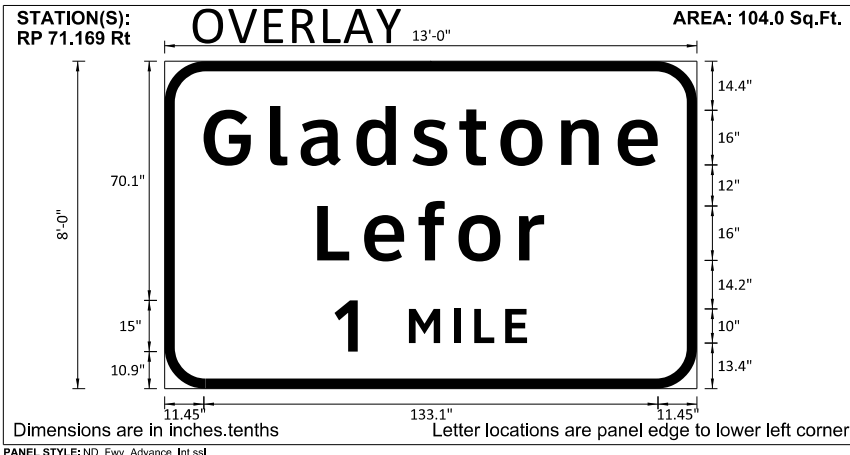
LETTER POSITION (X)							LENGTH	SIZE	SERIES
E	X	I	T	7	2		71.4	10,15	ClearviewHwy-5-W
18.3	26.9	38.3	43.3	65.5	79.4				

SIGN NUMBER	HWY I94 - SN 9
WIDTH x HEIGHT	12'-0" x 8'-0"
BORDER WIDTH	2" (inset 0")
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



LETTER POSITION (X)										LENGTH	SIZE	SERIES
E	n	c	h	a	n	t	e	d		113.8	13.3/10.8	ClearviewHwy-5-W
15.1	28	41.8	54.7	68.2	82.4	95.4	105.4	119.2				
H	i	g	h	w	a	y				91.4	13.3/10.8	ClearviewHwy-5-W
26.3	41.5	48.8	63.6	76.5	94.7	107.2						
E	X	I	T	7	2					71.4	10,15	ClearviewHwy-5-W
36.3	44.9	56.3	61.3	83.5	97.4							

SIGN NUMBER	HWY I94 - SN 8
WIDTH x HEIGHT	13'-0" x 8'-0"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



LETTER POSITION (X)									LENGTH	SIZE	SERIES
G	l	a	d	s	t	o	n	e	133.1	16/13	ClearviewHwy-5-W
11.5	30.9	39.8	56.2	72.6	86.4	98.4	116.2	132.7			
L	e	f	o	r					66.5	16/13	ClearviewHwy-5-W
44.7	58.5	74.4	86.1	103.9							
1	M	I	L	E					56.4	15,10	ClearviewHwy-5-W
49.8	71.6	84.8	90.7	99.8							

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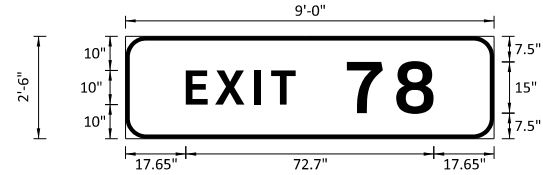
Sign Details
Various Locations along I-94

SIGN NUMBER	HWY I94 - SN 10A
WIDTH x HEIGHT	9'-0" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Overhead
BACKGROUND	TYPE: IV Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S):
RP 77.376 RT

AREA: 22.5 Sq.Ft.

OVERLAY



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Exit_Panel.bs1

SYMBOL	X	Y	WID	HT	ANGLE

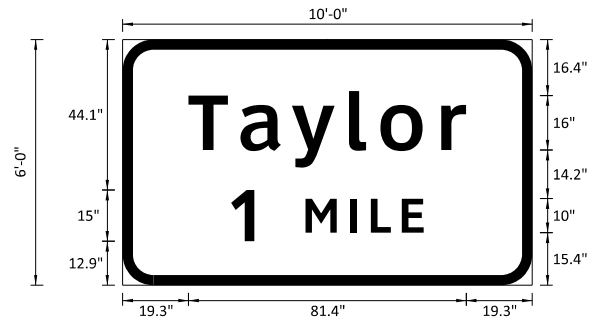
LETTER POSITION (X)							LENGTH	SIZE	SERIES
E	X	I	T	7	8		72.7	10,15	ClearviewHwy-5-W
17.7	26.3	37.7	42.6	64.9	79.3				

SIGN NUMBER	HWY I94 - SN 10
WIDTH x HEIGHT	10'-0" x 6'-0"
BORDER WIDTH	3" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective
	COLOR: White

STATION(S):
RP 77.376 Rt

AREA: 60.0 Sq.Ft.

OVERLAY



Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Advance_Int.bs1

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)							LENGTH	SIZE	SERIES
T	a	y	l	o	r		81.4	16/13	ClearviewHwy-5-W
19.3	34.5	49.6	66.3	75.5	93.3				
1	M	I	L	E			56.4	15,10	ClearviewHwy-5-W
31.8	53.6	66.8	72.7	81.8					

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Sign Details

Various Locations along I-94

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	378

SIGN NUMBER	HWY 194 - SN 13				
WIDTH x HEIGHT	18'-6" x 11'-6"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	12"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
Camping	19.6	15.4	22	15.3	0
RS-044	55	15.4	22	15.5	0
Equestrian	90.4	13	22	20.3	0
RS-068	125.8	12.1	13.3	22	0

STATION(S):
RP 85.490 Lt

AREA: 212.8 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Recreation.usf

LETTER POSITION (X)													LENGTH	SIZE	SERIES				
S	c	h	n	e	l	l							81.6	13.4/10.9	ClearviewHwy-5-W				
70.2	83.6	96.6	111	124.9	139.3	147.6													
R	e	c	r	e	a	t	i	o	n	A	r	e	a				182.8	13.4/10.9	ClearviewHwy-5-W
19.6	33.6	47.5	60.5	70	83.7	96.5	106.9	114.3	129.2	138.5	153	169.3	178.8	192.5					
E	X	I	T	8	4												74.2	10,15	ClearviewHwy-5-W
73.9	82.5	93.9	98.9	121.1	136.3														

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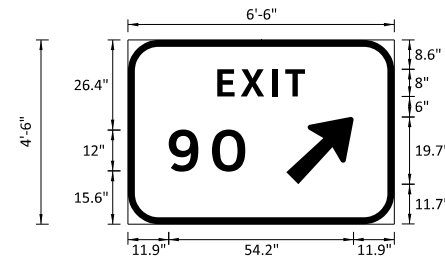
Sign Details

Various Locations along I-94

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	379

SIGN NUMBER	HWY I94 - SN 14				
WIDTH x HEIGHT	6'-6" x 4'-6"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARGORE	46.4	11.8	15.1	25	45

STATION(S): RP 90.326 Lt AREA: 29.3 Sq.Ft.



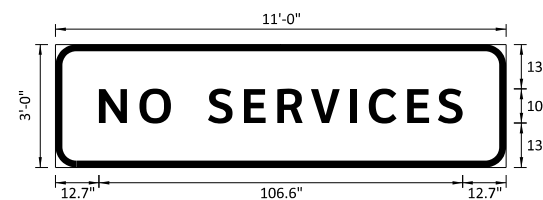
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE:ND_Fwy_Gore_Minor.ssd

LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	X	I	T								25.8	8	ClearviewHwy-5-W
26.1	33	42.1	46.1										
9	0										22.5	12	ClearviewHwy-5-W
11.9	24.6												

SIGN NUMBER	HWY I94 - SN 14A				
WIDTH x HEIGHT	11'-0" x 3'-0"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Blue				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S): RP 90.326 Lt AREA: 33.0 Sq.Ft.



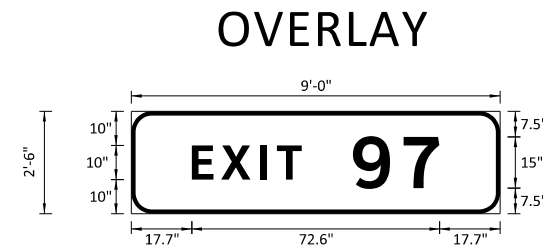
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE:ND_Fwy_General Services.ssd

LETTER POSITION (X)											LENGTH	SIZE	SERIES
N	O	S	E	R	V	I	C	E	S		106.5	10	ClearviewHwy-5-W
12.7	24.6	33.9	44.7	55.2	65	74.9	86.2	91.8	103	112			

SIGN NUMBER	HWY I94 - SN 15A				
WIDTH x HEIGHT	9'-0" x 2'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Overhead				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S): RP 96.903 RT AREA: 22.5 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE:ND_Fwy_Exit Panel.ssd

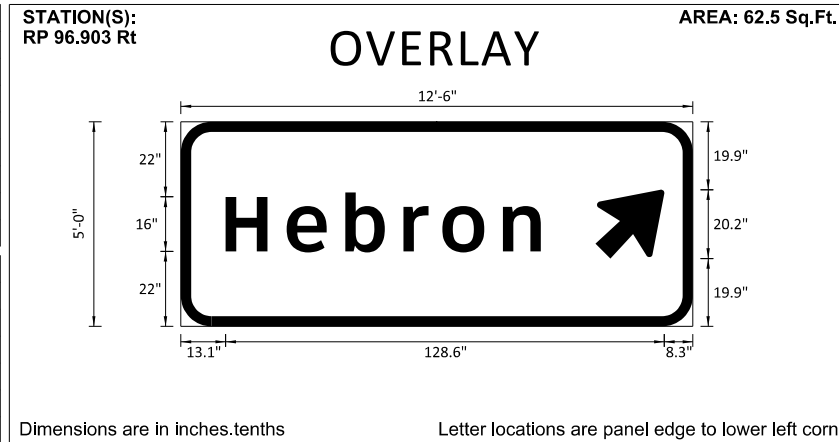
LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	X	I	T	9	7						72.6	10,15	ClearviewHwy-5-W
17.7	26.3	37.7	42.7	64.9	79.7								

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Sign Details
Various Locations along I-94

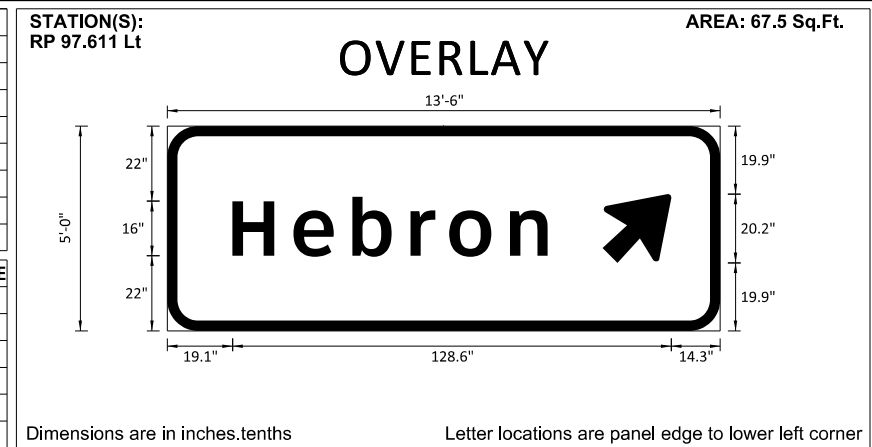
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	380

SIGN NUMBER	HWY I94 - SN 15				
WIDTH x HEIGHT	12'-6" x 5'-0"				
BORDER WIDTH	3" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
AREXIT	121.5	19.9	22.3	25	45



LETTER POSITION (X)						LENGTH	SIZE	SERIES
H	e	b	r	o	n	92.4	16/13	ClearviewHwy-5-W
13.1	31	48.2	65.3	76.6	94.4			

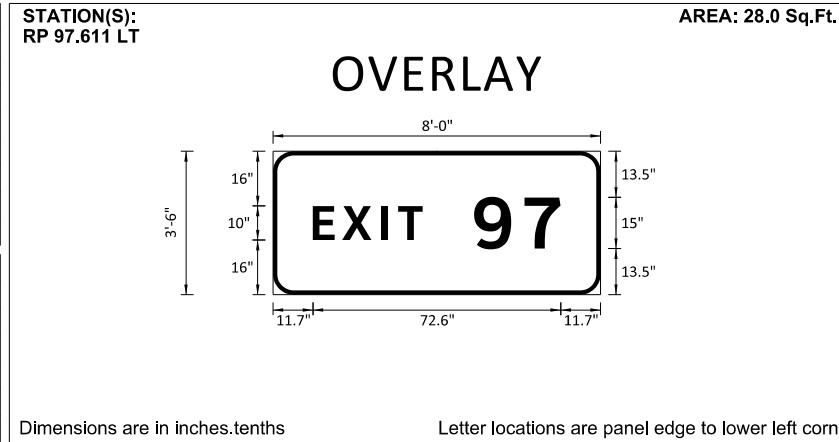
SIGN NUMBER	HWY I94 - SN 16				
WIDTH x HEIGHT	13'-6" x 5'-0"				
BORDER WIDTH	3" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				



SYMBOL	X	Y	WID	HT	ANGLE
AREXIT	127.5	19.9	22.3	25	45

LETTER POSITION (X)						LENGTH	SIZE	SERIES
H	e	b	r	o	n	92.4	16/13	ClearviewHwy-5-W
19.1	37	54.2	71.2	82.6	100.4			

SIGN NUMBER	HWY I94 - SN 16A				
WIDTH x HEIGHT	8'-0" x 3'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Overhead				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE



LETTER POSITION (X)						LENGTH	SIZE	SERIES
E	X	I	T	9	7	72.6	10,15	ClearviewHwy-5-W
11.7	20.3	31.7	36.7	58.9	73.7			

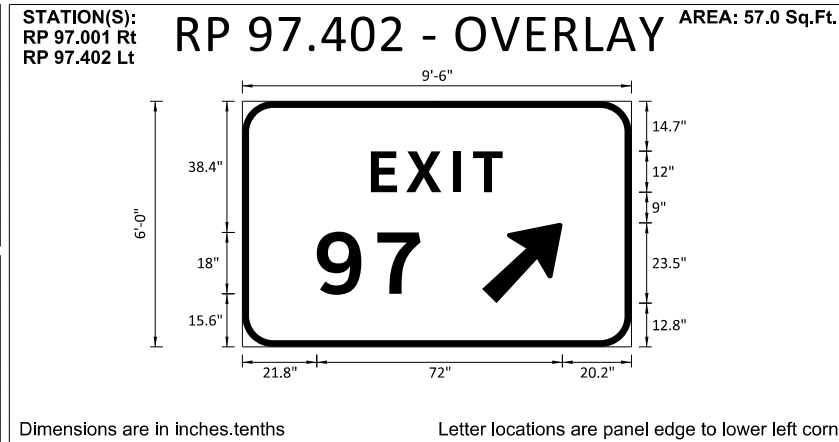
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Sign Details

Various Locations along I-94

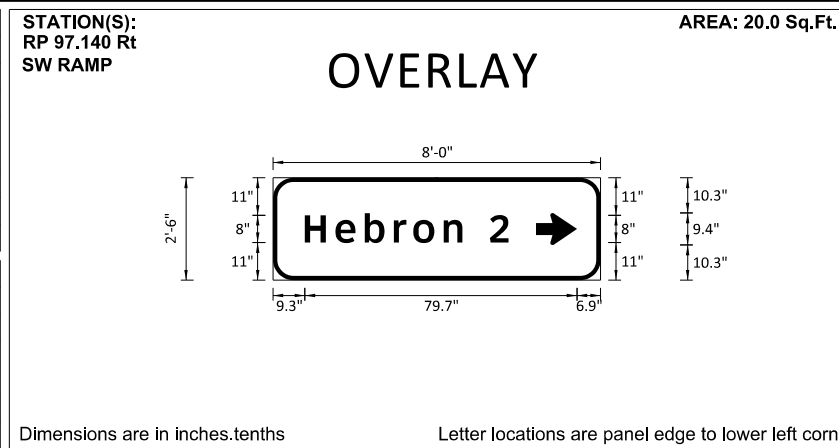
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	381

SIGN NUMBER	HWY I94 - SN 17				
WIDTH x HEIGHT	9'-6" x 6'-0"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARGORE	70.3	12.8	18.3	30	45



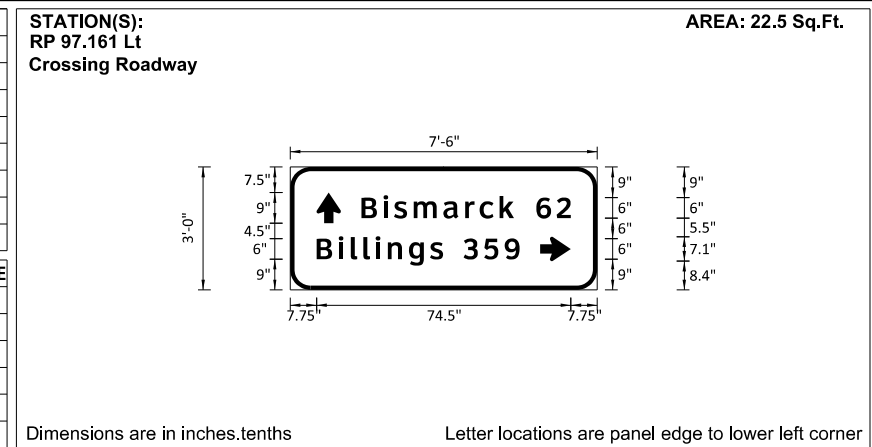
LETTER POSITION (X)						LENGTH	SIZE	SERIES
E	X	I	T			38.6	12	ClearviewHwy-5-W
37.7	48	61.7	67.7					
9	7					30.5	18	ClearviewHwy-5-W
21.8	39.6							

SIGN NUMBER	HWY I94 - SN 18				
WIDTH x HEIGHT	8'-0" x 2'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	77.1	10.3	9.4	12	0



LETTER POSITION (X)						LENGTH	SIZE	SERIES
H	e	b	r	o	n	2		
9.3	18.3	26.9	35.4	41.1	50	63.5	59.7	8/6.5

SIGN NUMBER	HWY I94 - SN 19				
WIDTH x HEIGHT	7'-6" x 3'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				



SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.7	19.5	7.1	9	90
ARDD	73.3	8.4	7.1	9	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES
B	i	s	m	a	r	c	k	6	2		61.4	6/4.9	ClearviewHwy-5-W
20.9	27.4	30.4	36.2	44.9	51.3	55.5	61.4	72.2	78.1				
B	i	l	l	i	n	g	s	3	5	9	59.5	6/4.9	ClearviewHwy-5-W
7.7	14.2	17.8	21.5	25.1	28.6	34.8	41	50.8	56.9	62.9			

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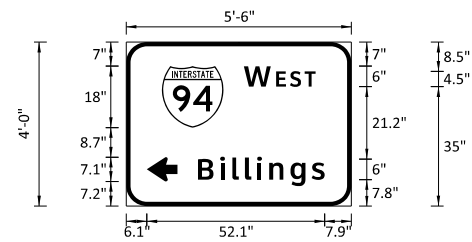
Sign Details
Various Locations along I-94

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	382

SIGN NUMBER	HWY I94 - SN 20
WIDTH x HEIGHT	5'-6" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 97.185 Lt
Crossing Roadway

AREA: 22.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.sst

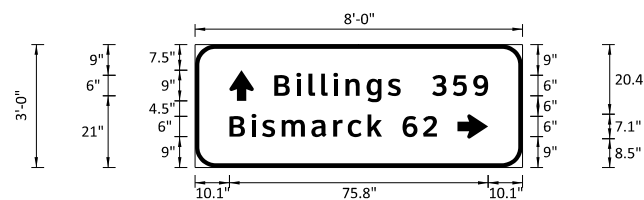
SYMBOL	X	Y	WID	HT	ANGLE
M1_1	10.5	23	18	18	0
ARDD	6.1	7.2	7.1	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
W	E	S	T							21	6/4.5	ClearviewHwy-5-W
34.5	43.9	48	52.3									
B	i	l	l	i	n	g	s			37.1	6/4.9	ClearviewHwy-5-W
21.1	27.5	31.1	34.8	38.4	41.9	48.1	54.3					

SIGN NUMBER	HWY I94 - SN 21
WIDTH x HEIGHT	8'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 97.185 Lt
Crossing Roadway

AREA: 24.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.sst

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	10.1	19.5	7.1	9	90
ARDD	76.9	8.4	7.1	9	0

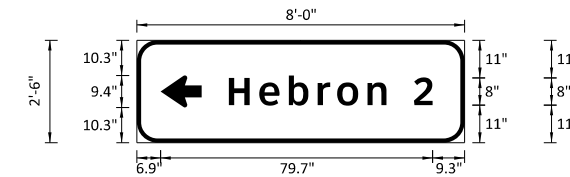
LETTER POSITION (X)												LENGTH	SIZE	SERIES
B	i	l	l	i	n	g	s	3	5	9		62.7	6/4.9	ClearviewHwy-5-W
23.2	29.7	33.3	37	40.5	44.1	50.3	56.5	69.5	75.5	81.5				
B	i	s	m	a	r	c	k	6	2			60.8	6/4.9	ClearviewHwy-5-W
10.1	16.6	19.6	25.4	34.1	40.5	44.8	50.6	60.8	66.8					

SIGN NUMBER	HWY I94 - SN 22
WIDTH x HEIGHT	8'-0" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 97.271 Lt
NE RAMP

AREA: 20.0 Sq.Ft.

OVERLAY



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Fwy_Destination.sst

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	6.9	10.3	9.4	12	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
H	e	b	r	o	n	2				59.7	8/6.5	ClearviewHwy-5-W
26.9	35.9	44.5	53	58.7	67.6	81.1						

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Sign Details
Various Locations along I-94

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	383

SIGN NUMBER	HWY I94B - SN 32
WIDTH x HEIGHT	7'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 901.334 Rt

AREA: 22.5 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

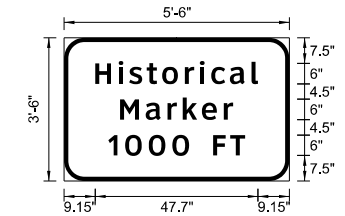
SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)											LENGTH	SIZE	SERIES					
L	i	t	t	i	e		M	i	s	s	o	u	r	i		72.3	6/4.9	ClearviewHwy-5-W
8.8	14.1	17.1	21.2	26	29.4	33.8	40.7	48.5	51.5	56.8	62.3	69	75.4	79.8				
S	c	e	n	i	c		R	i	v	e	r					62.7	6/4.9	ClearviewHwy-5-W
13.6	19.7	25.2	31.7	38	41.3	45.4	52	58.4	61.2	67.1	73.6							

SIGN NUMBER	HWY I94B - SN 34
WIDTH x HEIGHT	5'-6" x 3'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Brown
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 901.968 Lt

AREA: 19.3 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

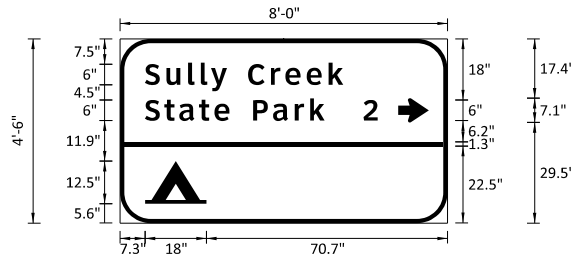
SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
H	i	s	t	o	r	i	c	a	l			47.7	6/4.9	ClearviewHwy-5-W
9.2	16	19.1	24.2	28.7	35.4	39.8	43.1	48.6	54.9					
M	a	r	k	e	r							33.1	6/4.9	ClearviewHwy-5-W
16.4	23.9	30.3	34.8	40.4	46.8									
1	0	0	0		F	T						40.1	6	ClearviewHwy-5-W
12.9	17.9	24.8	31.7	36.6	43.7	48.7								

SIGN NUMBER	HWY I94B - SN 33
WIDTH x HEIGHT	8'-0" x 4'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 901.941 Rt

AREA: 36.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	81.5	29.5	7.1	9	0
Camping	7.3	5.7	18	12.5	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
S	u	l	l	y		C	r	e	e	k		58.1	6/4.9	ClearviewHwy-5-W
7.3	13.6	20	23.7	26.6	31.3	37.5	44.2	48.5	54.7	61.2				
S	t	a	t	e		P	a	r	k	2		68.2	6/4.9	ClearviewHwy-5-W
7.3	13	17.4	23.2	27.7	32.1	39	44.8	51.2	55.7	71.3				

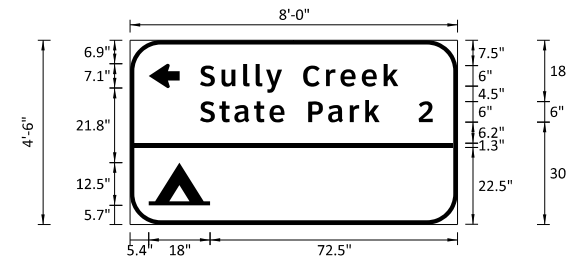
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Sign Details

Various Locations along I-94 Bus. Rural

SIGN NUMBER	HWY I94B - SN 35
WIDTH x HEIGHT	8'-0" x 4'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 902.097 Lt **AREA: 36.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

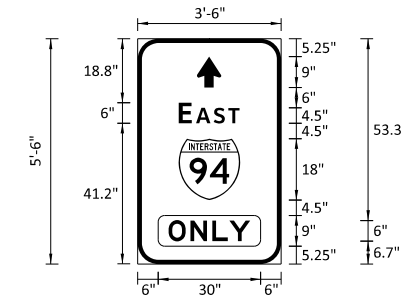
PANEL STYLE: ND_Conv_Recreation.usi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	5.5	40	7.1	9	180
Camping	5.4	5.7	18	12.5	0

LETTER POSITION (X)												LENGTH	SIZE	SERIES
S	u	l	l	y		C	r	e	e	k		58.1	6/4.9	ClearviewHwy-5-W
20.5	26.8	33.2	36.9	39.8	44.5	50.7	57.4	61.7	67.9	74.4				
S	t	a	t	e		P	a	r	k	2		68.2	6/4.9	ClearviewHwy-5-W
20.5	26.2	30.6	36.3	40.9	45.3	52.2	58	64.4	68.9	84.5				

SIGN NUMBER	HWY I94B - SN 36
WIDTH x HEIGHT	3'-6" x 5'-6"
BORDER WIDTH	2.88" (inset 1.25")
CORNER RADIUS	4.75"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: Non-Reflective COLOR: Black/White

STATION(S): RP 902.373 Rt **AREA: 19.3 Sq.Ft.**

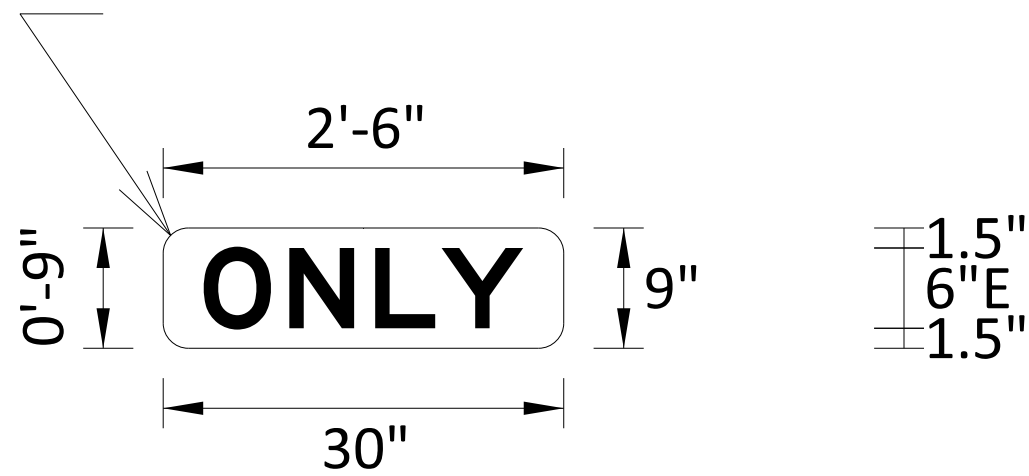


Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.usi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	17.3	51.8	7.1	9	90
M1_1	12	18.8	18	18	0

LETTER POSITION (X)												LENGTH	SIZE	SERIES
E	A	S	T									17.8	6,4.5	ClearviewHwy-5-W
12	17.1	22.3	26.5											
O	N	L	Y									23.9	6	E 2000
9	15.5	21.9	26.9											



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Sign Details
Various Locations along I-94 Bus. Rural

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	386

SIGN NUMBER	HWY I94 B - SN 24				
WIDTH x HEIGHT	4'-6" x 7'-6"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Overhead				
BACKGROUND	TYPE: XI Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: XI Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
M1_1	9.5	31.3	36	36	0
ARDOWN	11	5.1	32	22	0

STATION(S):
RP 907.013 Rt

AREA: 33.8 Sq.Ft.

OVERLAY

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Guide.sst

LETTER POSITION (X)		LENGTH	SIZE	SERIES
T	O			
16.8	27.3	20.4	10.7	ClearviewHwy-5-W

SIGN NUMBER	HWY I94 B - SN 25				
WIDTH x HEIGHT	9'-6" x 6'-6"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Overhead				
BACKGROUND	TYPE: XI Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: XI Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
R3-5L	42	9.5	30	36	0

STATION(S):
RP 907.014 Rt

AREA: 61.8 Sq.Ft.

OVERLAY

Black non-reflective legend on type XI reflective white background.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Guide.sst

LETTER POSITION (X)		LENGTH	SIZE	SERIES				
1	0	t	h	A	v	e		
18.1	26.9	38.4	46.8	54.2	65.8	77.5	88	77.7
								10.7/8.7
								ClearviewHwy-5-W

SIGN NUMBER	HWY I94 B - SN 26				
WIDTH x HEIGHT	6'-6" x 6'-6"				
BORDER WIDTH	2" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Overhead				
BACKGROUND	TYPE: XI Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: XI Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
R3-5R					

STATION(S):
RP 907.018 Rt

AREA: 42.3 Sq.Ft.

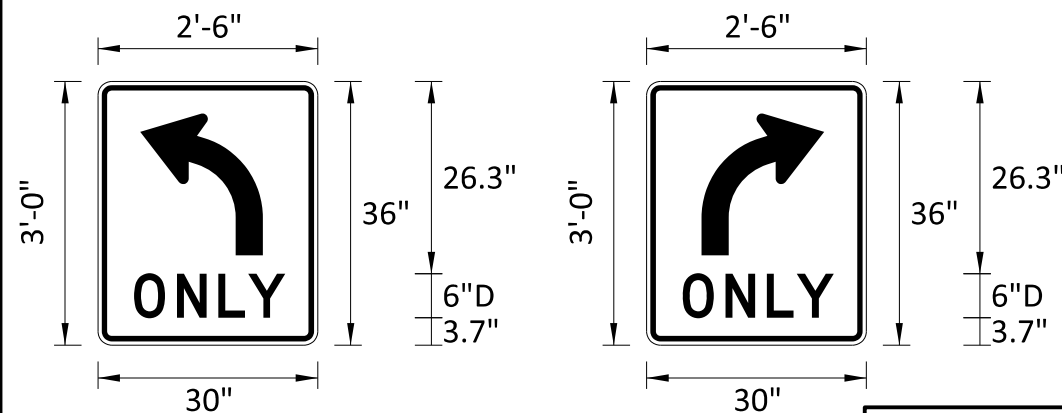
OVERLAY

Black non-reflective legend on type XI reflective white background.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Guide.sst

LETTER POSITION (X)		LENGTH	SIZE	SERIES					
E	V	i	l	l	a	r	d		
7.4	13.3	21.4	31.7	36.9	42.3	47.3	57.3	63.6	63.2
									10.7/8.7
									ClearviewHwy-3-W



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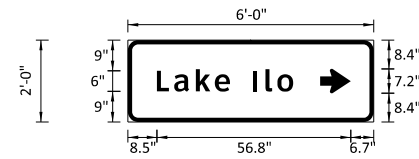
Sign Details

Various Locations along Dickinson - I-94B

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	391

SIGN NUMBER	HWY 200 - SN 1
WIDTH x HEIGHT	6'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 99.596 Rt **AREA: 12.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

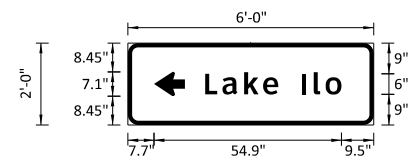
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	56.3	8.4	7.2	9	0

LETTER POSITION (X)										LENGTH	SIZE	SERIES
L	a	k	e		l	l	o			39.9	6/4.9	ClearviewHwy-5-W
8.5	13.5	19.9	25.5	29.9	36.8	40.3	43.8					

SIGN NUMBER	HWY 200 - SN 2
WIDTH x HEIGHT	6'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 100.934 Lt **AREA: 12.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

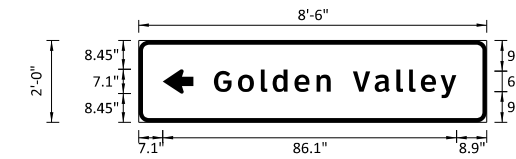
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.7	8.4	7.1	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
L	a	k	e		l	l	o			39.9	6/4.9	ClearviewHwy-5-W
22.7	27.7	34	39.6	44	50.9	54.5	57.9					

SIGN NUMBER	HWY 200 - SN 3
WIDTH x HEIGHT	8'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 130.411 Lt **AREA: 17.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.1	8.4	7.1	9	180

LETTER POSITION (X)													LENGTH	SIZE	SERIES
G	o	l	d	e	n		V	a	l	l	e	y	71.1	6/4.9	ClearviewHwy-5-W
22.1	29.1	35.8	39.3	45.7	52.1	56.3	62.8	69.2	75.5	79.2	82.7	88.4			

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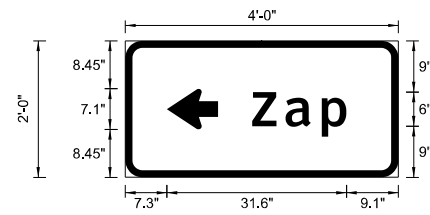
Sign Details

Various Locations along ND-200

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	392

SIGN NUMBER	HWY 200 - SN 4				
WIDTH x HEIGHT	4'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.3	8.4	7.1	9	180

STATION(S):
RP 137.436 Lt **AREA: 8.0 Sq.Ft.**



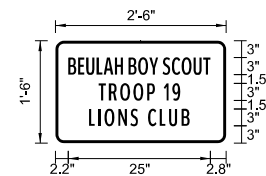
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Corr_Destination.ssf

LETTER POSITION (X)													LENGTH	SIZE	SERIES
Z	a	p											16.6	6/4.9	ClearviewHwy-5-W
22.3	28.2	34.5													

SIGN NUMBER	HWY 200 - SN 5				
WIDTH x HEIGHT	2'-6" x 1'-6"				
BORDER WIDTH	0.5" (inset 0")				
CORNER RADIUS	1.5"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Blue				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 146.026 Lt **AREA: 3.8 Sq.Ft.**



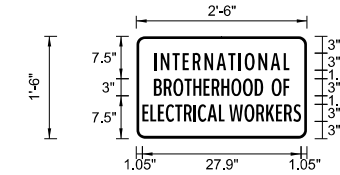
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Adopt-a-Highway.ssf

LETTER POSITION (X)															LENGTH	SIZE	SERIES	
B	E	U	L	A	H	B	O	Y	S	C	O	U	T		25	3	ClearviewHwy-1-W	
2.2	4	5.4	7.2	8.5	10.5	11.9	12.9	14.5	16.5	18.1	18.8	20.5	22.2	24.3	26			
T	R	O	O	P		1	9								14.3	3	ClearviewHwy-1-W	
7.6	9.4	11.4	13.7	16.1	17.5	19	20.5											
L	I	O	N	S		C	L	U	B						17.7	3	ClearviewHwy-1-W	
5.9	7.5	8.6	11	13.2	14.5	16.3	18.3	20	22.2									

SIGN NUMBER	HWY 200 - SN 6				
WIDTH x HEIGHT	2'-6" x 1'-6"				
BORDER WIDTH	0.5" (inset 0")				
CORNER RADIUS	1.5"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Blue				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 150.021 Lt **AREA: 3.8 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Adopt-a-Highway.ssf

LETTER POSITION (X)															LENGTH	SIZE	SERIES			
I	N	T	E	R	N	A	T	I	O	N	A	L			23.8	3	ClearviewHwy-1-W			
3.1	4.3	6.3	8.2	9.9	12	14.1	16.2	18	19	21.5	23.6	25.9								
B	R	O	T	H	E	R	H	O	O	D	O	F			23.8	3	ClearviewHwy-1-W			
3.1	4.8	6.5	8.5	10	11.8	13.2	15	16.7	18.7	20.8	23.8	25.9								
E	L	E	C	T	R	I	C	A	L	W	O	R	K	E	R	S	27.9	3	ClearviewHwy-1-W	
1.1	2.5	3.8	5.2	6.8	8.4	10.1	10.8	12.5	14.5	15.5	16.3	19	21.1	22.8	24.6	26	27.6			

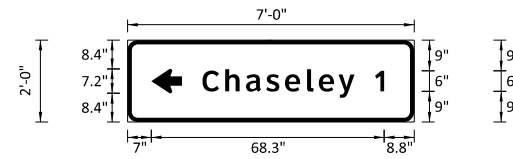
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Sign Details
Various Locations along ND-200

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	396

SIGN NUMBER	HWY 200 - SN 13
WIDTH x HEIGHT	7'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 259.149 Rt **AREA: 14.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

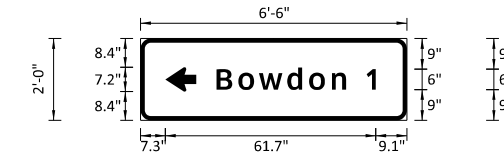
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7	8.4	7.2	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
C	h	a	s	e	l	e	y	1		53.3	6/4.9	ClearviewHwy-5-W
22	28.7	34.7	40.6	46.2	52.6	56.1	61.8	72.5				

SIGN NUMBER	HWY 200 - SN 15
WIDTH x HEIGHT	6'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 264.848 Rt **AREA: 13.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

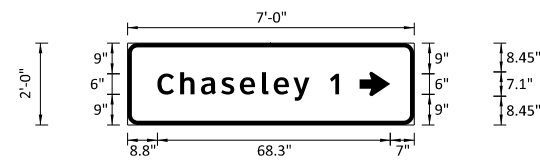
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.3	8.4	7.2	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
B	o	w	d	o	n	1				46.7	6/4.9	ClearviewHwy-5-W
22.3	28.6	34.7	43	49.4	56.1	66.2						

SIGN NUMBER	HWY 200 - SN 14
WIDTH x HEIGHT	7'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 259.344 Lt **AREA: 14.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	68	8.4	7.1	9	0

LETTER POSITION (X)										LENGTH	SIZE	SERIES
C	h	a	s	e	l	e	y	1		53.3	6/4.9	ClearviewHwy-5-W
8.8	15.5	21.5	27.4	33	39.4	42.9	48.6	59.3				

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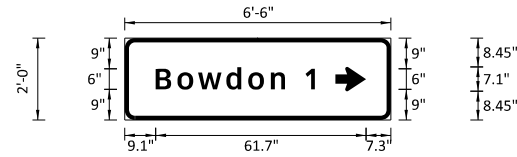
Sign Details

Various Locations along ND-200

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	397

SIGN NUMBER	HWY 200 - SN 16				
WIDTH x HEIGHT	6'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	61.7	8.4	7.1	9	0

STATION(S):
RP 265.011 Lt **AREA: 13.0 Sq.Ft.**



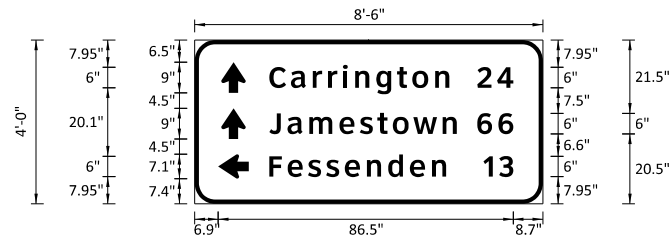
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asl

LETTER POSITION (X)											LENGTH	SIZE	SERIES
B	o	w	d	o	n	1					46.7	6/4.9	ClearviewHwy-5-W
9.1	15.4	21.5	29.8	36.2	42.9	53							

SIGN NUMBER	HWY 200 - SN 17				
WIDTH x HEIGHT	8'-6" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.8	32.5	7.1	9	90
ARDD	7.8	19	7.1	9	90
ARDD	6.9	7.4	7.1	9	180

STATION(S):
RP 268.428 Rt **AREA: 34.0 Sq.Ft.**



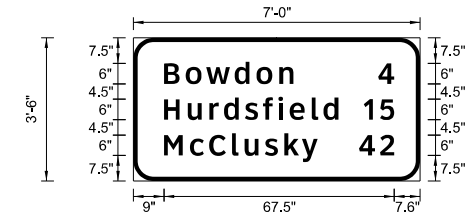
PANEL STYLE: ND_Conv_Destination.asl

LETTER POSITION (X)											LENGTH	SIZE	SERIES				
C	a	r	r	i	n	g	t	o	n	2	4				71.5	6/4.9	ClearviewHwy-5-W
21.9	28.2	34.6	39.1	43.4	47	53.2	59.3	63.8	70.4	82.8	88.6						
J	a	m	e	s	t	o	w	n	6	6					71.5	6/4.9	ClearviewHwy-5-W
21.9	27.2	33.5	42.4	48.4	53.5	58	64.1	72.6	82.8	89							
F	e	s	s	e	n	d	e	n	1	3					71.5	6/4.9	ClearviewHwy-5-W
21.9	27.2	33.2	38.5	44	50.5	56.7	63.1	69.5	84.6	89.2							

Letter locations are panel edge to lower left corner

SIGN NUMBER	HWY 200 - SN 18				
WIDTH x HEIGHT	7'-0" x 3'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 268.469 Lt **AREA: 24.5 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Distance.asl

LETTER POSITION (X)											LENGTH	SIZE	SERIES				
B	o	w	d	o	n	4					67.5	6/4.9	ClearviewHwy-5-W				
9	15.3	21.4	29.7	36.1	42.8	71.7											
H	u	r	d	s	f	i	e	l	d	1	5				67.5	6/4.9	ClearviewHwy-5-W
9	15.9	22.3	26.5	32.7	38	42.5	45.8	52.3	55.7	67.5	72.3						
M	c	C	l	u	s	k	y	4	2						67.5	6/4.9	ClearviewHwy-5-W
9	16.6	22.2	28.9	32.6	38.5	44.3	49.4	66.1	72.3								

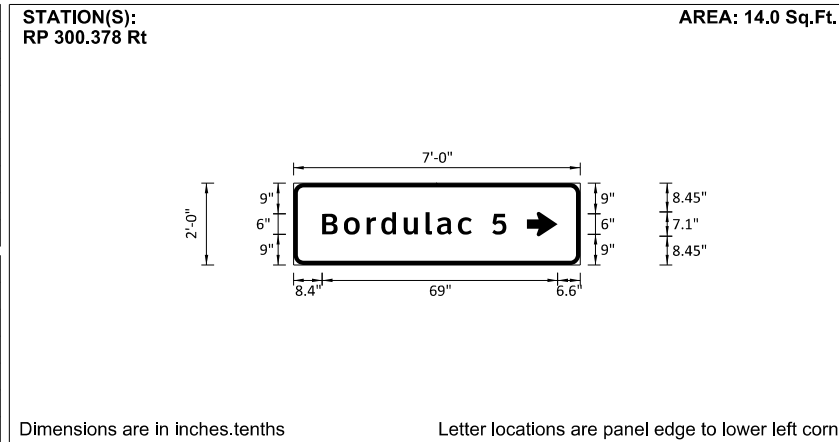
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Sign Details

Various Locations along ND-200

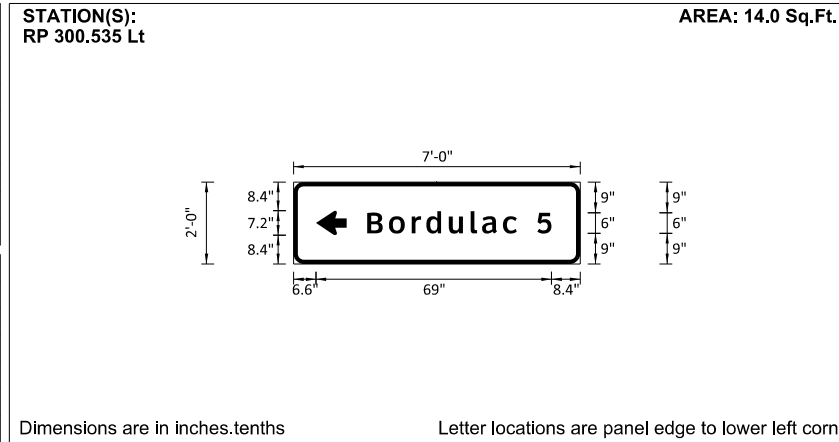
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	398

SIGN NUMBER	HWY 200 - SN 22				
WIDTH x HEIGHT	7'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	68.4	8.4	7.1	9	0



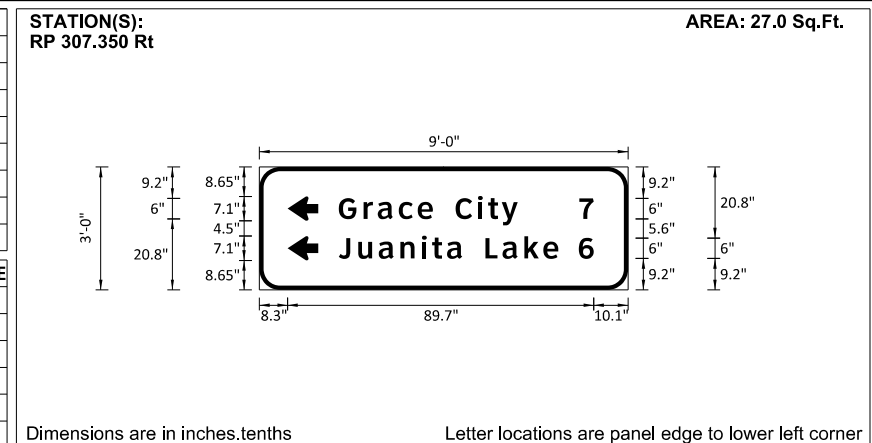
LETTER POSITION (X)										LENGTH	SIZE	SERIES
B	o	r	d	u	l	a	c	5		54	6/4.9	ClearviewHwy-5-W
8.4	14.8	21.4	25.7	32.3	38.7	42.1	48.2	58.3				

SIGN NUMBER	HWY 200 - SN 23				
WIDTH x HEIGHT	7'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	6.6	8.4	7.2	9	180



LETTER POSITION (X)										LENGTH	SIZE	SERIES
B	o	r	d	u	l	a	c	5		54	6/4.9	ClearviewHwy-5-W
21.6	28	34.6	38.9	45.5	51.9	55.3	61.4	71.5				

SIGN NUMBER	HWY 200 - SN 24				
WIDTH x HEIGHT	9'-0" x 3'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				



SYMBOL	X	Y	WID	HT	ANGLE
ARDD	8.3	20.2	7.1	9	180
ARDD	8.3	8.6	7.1	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES			
G	r	a	c	e	C	i	t	y	7	74.7	6/4.9	ClearviewHwy-5-W			
23.3	30.5	34.7	40.8	46.4	50.8	57.5	64.1	67	71	93.7					
J	u	a	n	i	t	a	L	a	k	e	6	74.7	6/4.9	ClearviewHwy-5-W	
23.3	28.9	34.9	41.3	47.6	50.6	55	59.4	66.2	71.2	77.6	83.2	93.6			

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Sign Details
Various Locations along ND-200

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	399

SIGN NUMBER	HWY 200 - SN 25				
WIDTH x HEIGHT	9'-0" x 3'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	90.7	20.3	7.1	9	0
ARDD	90.7	8.6	7.1	9	0

STATION(S):
RP 307.561 Lt

AREA: 27.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES	
G	r	a	c	e	C	i	t	y	7		74.7	6/4.9	ClearviewHwy-5-W	
10.1	17.3	21.5	27.6	33.2	37.6	44.3	50.9	53.8	57.8	80.5				
J	u	a	n	i	t	a	L	a	k	e	6			
10.1	15.7	21.7	28.1	34.4	37.4	41.8	46.2	53	58	64.4	70	80.4		

SIGN NUMBER	HWY 200 - SN 26				
WIDTH x HEIGHT	6'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 308.370 Rt
RP 308.412 Lt

AREA: 13.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES
J	a	m	e	s	R	i	v	e	r		61.5	6/4.9	ClearviewHwy-5-W
8.3	13.6	20	28.8	34.8	38.6	45.4	51.8	54.6	60.5	67			

SIGN NUMBER	HWY 200 - SN 27				
WIDTH x HEIGHT	6'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	61.1	8.4	7.1	9	0

STATION(S):
RP 311.330 Rt

AREA: 13.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)											LENGTH	SIZE	SERIES
K	e	n	s	a	l	1	1				45.4	6/4.9	ClearviewHwy-5-W
9.7	15.8	22.3	28.2	33.6	40	47.9	52.4						

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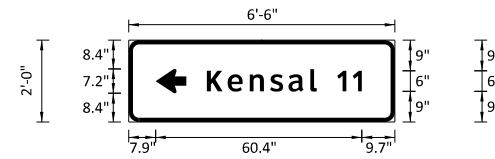
Sign Details

Various Locations along ND-200

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	400

SIGN NUMBER	HWY 200 - SN 28
WIDTH x HEIGHT	6'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 311.513 Lt **AREA: 13.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

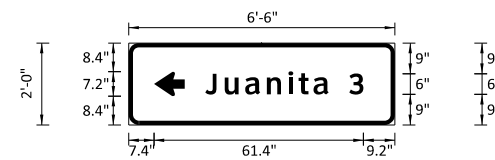
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.9	8.4	7.2	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
K	e	n	s	a	l	1				45.4	6/4.9	ClearviewHwy-5-W
22.9	29	35.5	41.4	46.8	53.2	61.1	65.6					

SIGN NUMBER	HWY 200 - SN 29
WIDTH x HEIGHT	6'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 313.331 Rt **AREA: 13.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

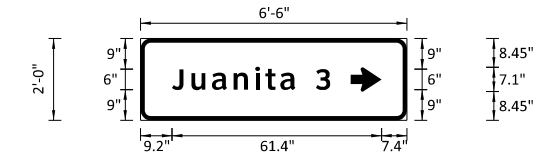
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.4	8.4	7.2	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
J	u	a	n	i	t	a	3			46.4	6/4.9	ClearviewHwy-5-W
22.4	28.1	34.1	40.5	46.8	49.8	54.2	64.6					

SIGN NUMBER	HWY 200 - SN 30
WIDTH x HEIGHT	6'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 313.504 Lt **AREA: 13.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	61.6	8.4	7.1	9	0

LETTER POSITION (X)										LENGTH	SIZE	SERIES
J	u	a	n	i	t	a	3			46.4	6/4.9	ClearviewHwy-5-W
9.2	14.9	20.9	27.3	33.6	36.6	41	51.4					

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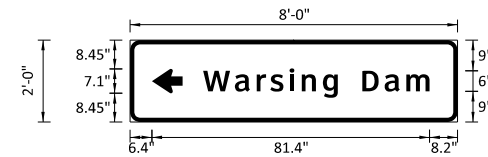
Sign Details

Various Locations along ND-200

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	405

SIGN NUMBER	HWY 281 - SN 7
WIDTH x HEIGHT	8'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE
ARDD	6.4 8.4 7.1 9 180

STATION(S):
RP 138.780 Lt **AREA: 16.0 Sq.Ft.**



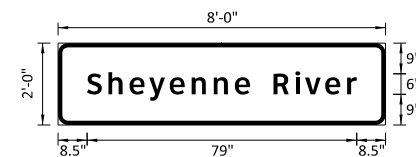
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)											LENGTH	SIZE	SERIES
W	a	r	s	i	n	g	D	a	m		66.4	6/4.9	ClearviewHwy-5-W
21.4	30.7	37.1	41.1	46.8	50.3	56.5	60.9	68	74.6	81			

SIGN NUMBER	HWY 281 - SN 8
WIDTH x HEIGHT	8'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE

STATION(S):
RP 139.607 Rt
RP 139.641 Lt **AREA: 16.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)											LENGTH	SIZE	SERIES			
S	h	e	y	e	n	n	e	R	i	v	e	r		79	6/4.9	ClearviewHwy-5-W
8.5	14.8	21	26.7	32.7	39.2	45.6	51.8	56.3	63.2	69.6	72.4	78.3	84.7			

SIGN NUMBER	HWY 281 - SN 9
WIDTH x HEIGHT	9'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 139.667 Lt **AREA: 27.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)													LENGTH	SIZE	SERIES					
W	e	l	c	o	m	e	t	o					60.3	6/4.9	ClearviewHwy-5-W					
23.9	33.3	39.8	43.2	48.8	55.5	64.3	68.8	75	79.5											
S	p	i	r	i	t	L	a	k	e	N	a	t	i	o	n		92.8	6/4.9	ClearviewHwy-5-W	
7.6	13.9	20.1	23.7	28.1	31	34	40.6	45.7	52	57.6	62	68.9	75.8	81.6	86.2	89.6	96.2			

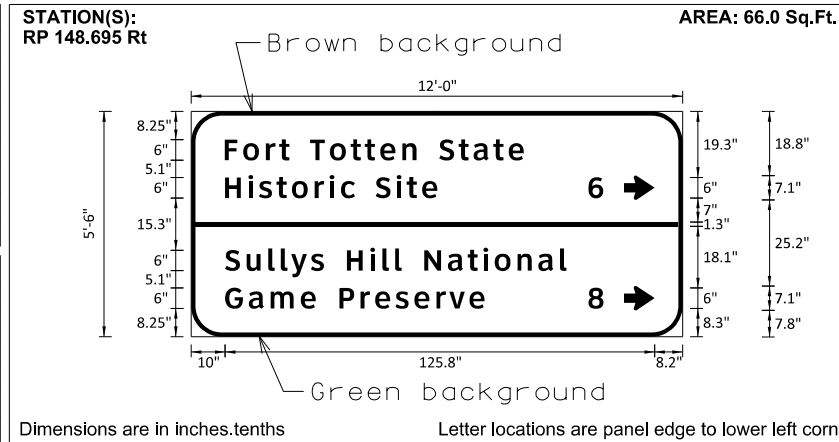
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Sign Details

Various Locations along US-281

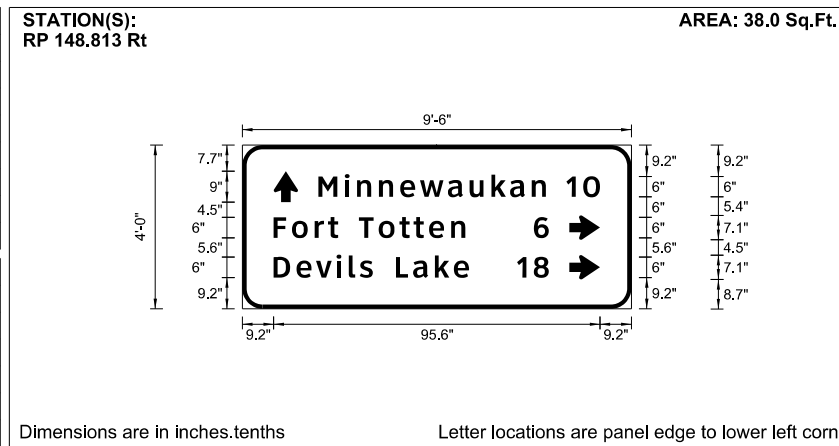
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	407

SIGN NUMBER	HWY 281 - SN 13				
WIDTH x HEIGHT	12'-0" x 5'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green / Brown				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	126.8	40.1	7.1	9	0
ARDD	126.8	7.7	7.1	9	0



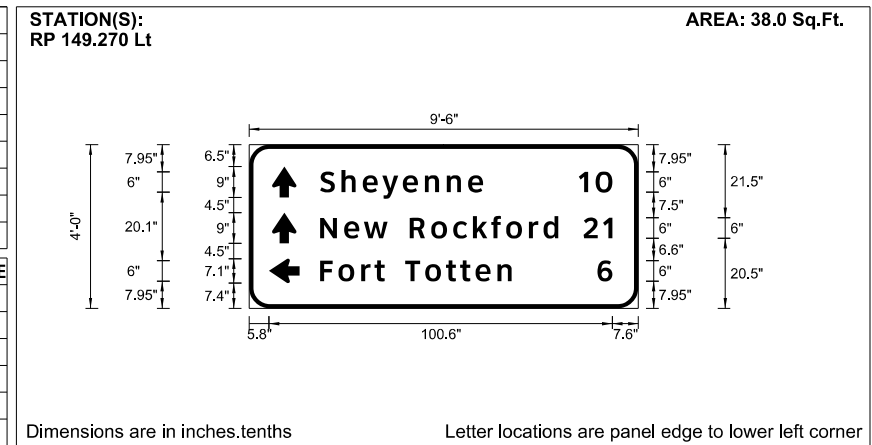
LETTER POSITION (X)													LENGTH	SIZE	SERIES								
F	o	r	t	T	o	t	t	e	n	S	t	a	t	e		87.6	6/4.9	ClearviewHwy-5-W					
9.9	15.3	21.9	25.8	28.8	34.9	40.7	46.8	50.9	55.4	61.9	66.1	72.7	78.4	82.8	88.6	93.1							
H	i	s	t	o	r	i	c	S	i	t	e	6						110.8	6/4.9	ClearviewHwy-5-W			
10	16.8	19.9	25	29.5	36.2	40.6	43.9	48	54.1	60.2	63.2	67.7	116.4										
S	u	l	l	y	s	H	i	l	l	N	a	t	i	o	n	a	100	6/4.9	ClearviewHwy-5-W				
10	16.2	22.6	26.3	29.3	35.1	38.9	45.7	52.5	56.1	59.8	61.7	68.3	75.3	81	85.7	89	95.6	101.7	108.1				
G	a	m	e	P	r	e	s	e	r	v	e	8									110.8	6/4.9	ClearviewHwy-5-W
10	16.9	23.3	32.1	36.5	43.4	49.7	53.9	59.9	65.4	71.9	75.7	81.6	116.4										

SIGN NUMBER	HWY 281 - SN 14				
WIDTH x HEIGHT	9'-6" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	9.2	31.3	7.1	9	90
ARDD	95.8	20.3	7.1	9	0
ARDD	95.8	8.6	7.1	9	0



LETTER POSITION (X)													LENGTH	SIZE	SERIES									
M	i	n	n	e	w	a	u	k	a	n	1	0									82.5	6/4.9	ClearviewHwy-5-W	
22.3	30.1	33.6	40	46.3	52.1	60.3	66.6	73	78.4	84.8	95	99.9												
F	o	r	t	T	o	t	t	e	n	6														
9.2	14.6	21.2	25.1	28.1	34.1	40	46.1	50.2	54.7	61.2	85.5													
D	e	v	i	l	s	L	a	k	e	1	8													
9.2	15.9	21.6	27.7	31.2	34.4	38.3	45	50.1	56.4	62	80.5	85.4												

SIGN NUMBER	HWY 281 - SN 15				
WIDTH x HEIGHT	9'-6" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				



SYMBOL	X	Y	WID	HT	ANGLE
ARDD	6.7	32.5	7.1	9	90
ARDD	6.7	19	7.1	9	90
ARDD	5.8	7.4	7.1	9	180

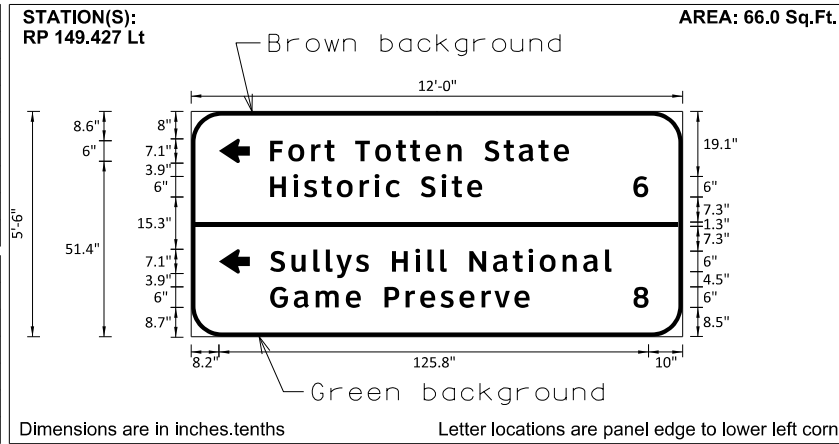
LETTER POSITION (X)													LENGTH	SIZE	SERIES													
S	h	e	y	e	n	n	e	1	0														85.6	6/4.9	ClearviewHwy-5-W			
20.8	27.1	33.3	39	45	51.5	57.9	64.1	96.6	101.5																			
N	e	w	R	o	c	k	f	o	r	d	2	1													85.6	6/4.9	ClearviewHwy-5-W	
20.8	27.8	33.6	40.6	47.1	53.3	59.8	65.6	70.9	75.3	82	86.2	98	103.7															
F	o	r	t	T	o	t	t	e	n	6																85.6	6/4.9	ClearviewHwy-5-W
20.8	26.2	32.8	36.7	39.7	45.7	51.6	57.7	61.8	66.3	72.8	102.1																	

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Sign Details
Various Locations along US-281

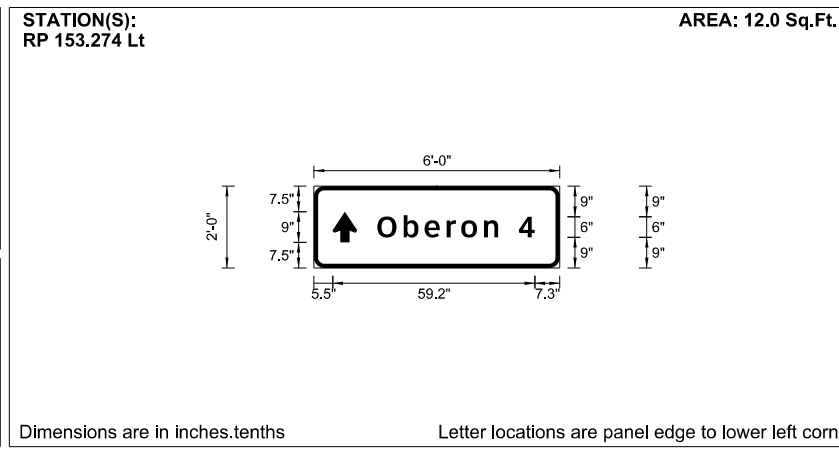
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	408

SIGN NUMBER	HWY 281 - SN 16				
WIDTH x HEIGHT	12'-0" x 5'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green / Brown				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	8.2	50.9	7.1	9	180
ARDD	8.2	18.5	7.1	9	180



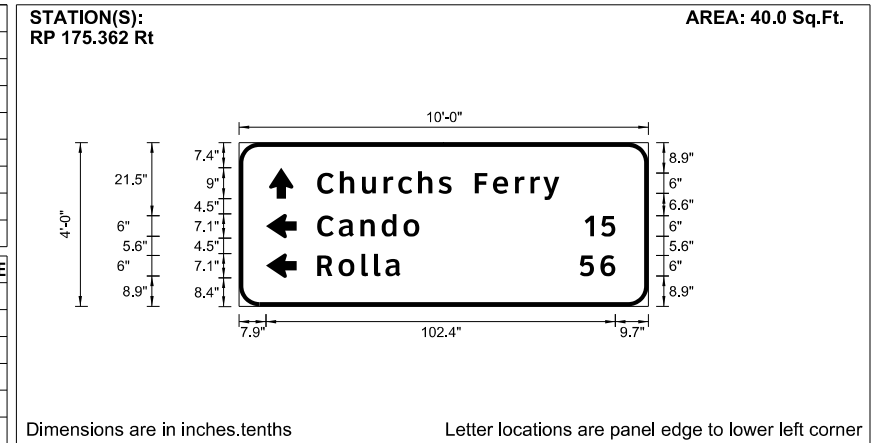
LETTER POSITION (X)													LENGTH	SIZE	SERIES	
F	o	r	t	T	o	t	t	e	S	t	a	t	e	87.6	6/4.9	ClearviewHwy-5-W
23.2	28.5	35.2	39.1	42	48.1	53.9	60	64.2	68.7	75.1	79.3	86	91.6	96	101.8	106.3
H	i	s	t	o	r	i	c	S	i	t	e	6				
23.2	30	33	38.2	42.7	49.4	53.8	57.1	61.2	67.3	73.4	76.4	80.9	129.6			
S	u	l	l	y	s	H	i	l	N	a	t	i	o	n	a	100
23.2	29.4	35.8	39.5	42.5	48.3	52.1	58.9	65.7	69.3	73	74.9	81.5	88.5	94.2	98.9	102.2
G	a	m	e	P	r	e	s	e	r	v	e	8				
23.2	30.1	36.5	45.3	49.7	56.6	62.9	67.1	73.1	78.6	85.1	88.9	94.8	129.6			

SIGN NUMBER	HWY 281 - SN 17				
WIDTH x HEIGHT	6'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	5.5	7.5	7.1	9	90



LETTER POSITION (X)													LENGTH	SIZE	SERIES	
O	b	e	r	o	n	4							46.1	6/4.9	ClearviewHwy-5-W	
18.6	26.3	32.4	38.9	43.2	49.8	60										

SIGN NUMBER	HWY 281 - SN 18				
WIDTH x HEIGHT	10'-0" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				



LETTER POSITION (X)													LENGTH	SIZE	SERIES
C	h	u	r	c	h	s	F	e	r	r	y		71	6/4.9	ClearviewHwy-5-W
22.9	29.6	36.1	42.4	46.7	52.5	58.5	62.3	69.1	74.4	80.9	85.4	89.2			
C	a	n	d	o	1	5							87.4	6/4.9	ClearviewHwy-5-W
22.9	29.2	35.6	41.8	48.2	101.3	106.2									
R	o	l	l	a	5	6							87.4	6/4.9	ClearviewHwy-5-W
22.9	29.2	35.9	39.6	42.9	99.9	105.9									

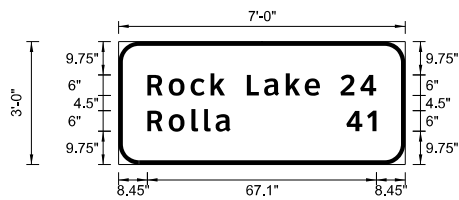
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Sign Details
Various Locations along US-281

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	410

SIGN NUMBER	HWY 281 - SN 24
WIDTH x HEIGHT	7'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 190.801 Rt **AREA: 21.0 Sq.Ft.**



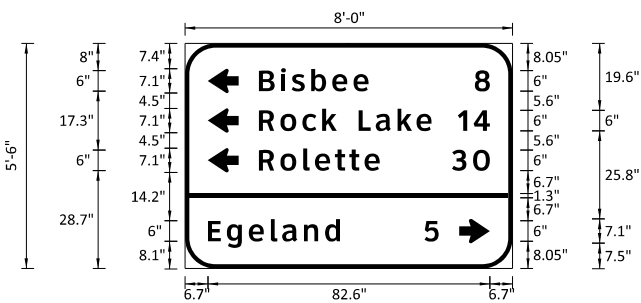
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)											LENGTH	SIZE	SERIES
R	o	c	k	L	a	2	4				67.1	6/4.9	ClearviewHwy-5-W
8.4	14.7	21.2	27	31.2	37.6	42.7	49	54.6	65	70.8			
R	o	l	l	a	4	1					67.1	6/4.9	ClearviewHwy-5-W
8.4	14.7	21.4	25.1	28.4	66.7	72.9							

SIGN NUMBER	HWY 281 - SN 25
WIDTH x HEIGHT	8'-0" x 5'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green / Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 200.158 Rt **AREA: 44.0 Sq.Ft.**



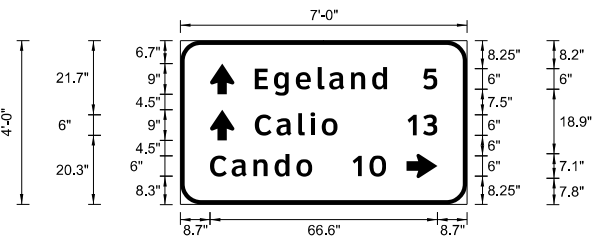
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Distance.asd

LETTER POSITION (X)											LENGTH	SIZE	SERIES
B	i	s	b	e	e	8					67.6	6/4.9	ClearviewHwy-5-W
21.7	28.2	31.2	37	43.1	49.4	84.9							
R	o	c	k	L	a	k	e	1	4		67.6	6/4.9	ClearviewHwy-5-W
21.7	28	34.4	40.2	44.5	50.9	55.9	62.3	67.8	80	84.6			
R	o	l	e	t	t	e	3	0			67.6	6/4.9	ClearviewHwy-5-W
21.7	28	34.6	38.1	44	48.1	52.6	78.3	84.4					
E	g	e	l	a	n	d	5				67.6	6/4.9	ClearviewHwy-5-W
6.7	12.3	18.7	25.2	28.5	34.9	41.1	70.2						

SIGN NUMBER	HWY 281 - SN 26
WIDTH x HEIGHT	7'-0" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 200.298 Lt **AREA: 28.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)											LENGTH	SIZE	SERIES
E	g	e	l	a	n	d	5				53.5	6/4.9	ClearviewHwy-5-W
21.8	27.4	33.8	40.3	43.6	50	56.2	71.2						
C	a	l	i	o	1	3					53.5	6/4.9	ClearviewHwy-5-W
21.8	28.2	34.5	38.1	41.4	66.6	71.1							
C	a	n	d	o	1	0					51.6	6/4.9	ClearviewHwy-5-W
8.7	15	21.4	27.6	34	50.5	55.4							

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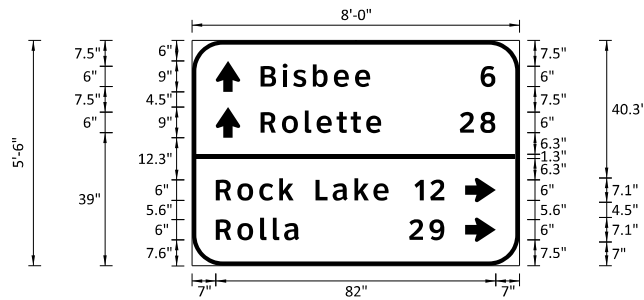
Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	411

SIGN NUMBER	HWY 281 - SN 27
WIDTH x HEIGHT	8'-0" x 5'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green / Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 202.068 Rt **AREA: 44.0 Sq.Ft.**



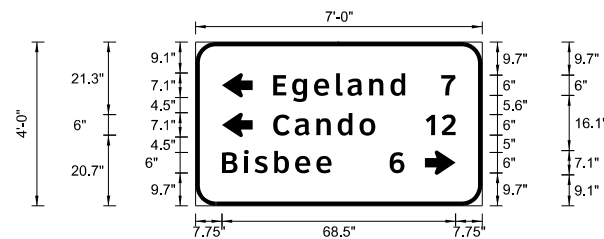
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7	51	7.1	9	90
ARDD	7	37.5	7.1	9	90
ARDD	80	18.6	7.1	9	0
ARDD	80	7	7.1	9	0

LETTER POSITION (X)										LENGTH	SIZE	SERIES	
B	i	s	b	e	e	6				68.8	6/4.9	ClearviewHwy-5-W	
20.1	26.6	29.7	35.4	41.6	47.8	84.6							
R	o	l	e	t	t	e	2	8		68.8	6/4.9	ClearviewHwy-5-W	
20.1	26.4	33.1	36.5	42.4	46.5	51	78.5	84.5					
R	o	c	k	L	a	k	e	1	2	67	6/4.9	ClearviewHwy-5-W	
7	13.3	19.7	25.5	29.8	36.2	41.2	47.6	53.2	65.2	69.8			
R	o	l	l	a	2	9				67	6/4.9	ClearviewHwy-5-W	
7	13.3	20	23.7	27	63.6	69.6							

SIGN NUMBER	HWY 281 - SN 28
WIDTH x HEIGHT	7'-0" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 202.325 Lt **AREA: 28.0 Sq.Ft.**



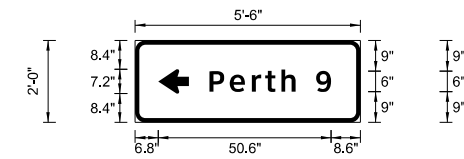
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.7	31.8	7.1	9	180
ARDD	7.7	20.2	7.1	9	180
ARDD	67.2	9.1	7.1	9	0

LETTER POSITION (X)										LENGTH	SIZE	SERIES
E	g	e	l	a	n	d	7			53.5	6/4.9	ClearviewHwy-5-W
22.8	28.3	34.7	41.2	44.5	50.9	57.1	72					
C	a	n	d	o	1	2				53.5	6/4.9	ClearviewHwy-5-W
22.8	29.1	35.5	41.7	48.1	67.5	72.1						
B	i	s	b	e	e	6				53.5	6/4.9	ClearviewHwy-5-W
7.8	14.2	17.3	23.1	29.2	35.4	56.9						

SIGN NUMBER	HWY 281 - SN 29
WIDTH x HEIGHT	5'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 208.201 Rt **AREA: 11.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	6.8	8.4	7.2	9	180

LETTER POSITION (X)										LENGTH	SIZE	SERIES
P	e	r	t	h	9					35.6	6/4.9	ClearviewHwy-5-W
21.8	27.8	34.2	38.1	42.9	53							

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Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	412

SIGN NUMBER	HWY 281 - SN 30				
WIDTH x HEIGHT	5'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	50.2	8.4	7.1	9	0

STATION(S):
RP 208.469 Lt

AREA: 11.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)										LENGTH	SIZE	SERIES
P	e	r	t	h	9					35.6	6/4.9	ClearviewHwy-5-W
8.6	14.6	21	24.9	29.7	39.8							

SIGN NUMBER	HWY 281 - SN 31				
WIDTH x HEIGHT	9'-6" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.7	32.3	7.1	9	90
ARDD	7.7	18.8	7.1	9	90
ARDD	97.3	7.7	7.1	9	0

STATION(S):
RP 213.617 Rt

AREA: 38.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)										LENGTH	SIZE	SERIES				
R	o	l	l	a	1	8				85.4	6/4.9	ClearviewHwy-5-W				
20.9	27.1	33.8	37.5	40.9	97	101.9										
P	e	a	c	e	G	a	r	d	e	n	5	2	85.4	6/4.9	ClearviewHwy-5-W	
20.9	26.8	32.9	39.1	44.6	49.1	55.7	62.7	69	73.3	79.7	86.2	96.3	102.1			
R	o	c	k	L	a	k	e	2					83.5	6/4.9	ClearviewHwy-5-W	
7.7	14	20.5	26.3	30.5	36.9	42	48.3	53.9	87.1							

SIGN NUMBER	HWY 281 - SN 32				
WIDTH x HEIGHT	8'-0" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.1	31.6	7.1	9	90
ARDD	6.1	20	7.1	9	180
ARDD	6.1	8.3	7.1	9	180

STATION(S):
RP 213.759 Lt

AREA: 32.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)										LENGTH	SIZE	SERIES
C	a	n	d	o	2	3				66.9	6/4.9	ClearviewHwy-5-W
21.1	27.5	33.8	40	46.4	78.1	83.9						
R	o	c	k	L	a	k	e	2		66.9	6/4.9	ClearviewHwy-5-W
21.1	27.4	33.9	39.7	43.9	50.3	55.4	61.7	67.3	83.9			
L	a	n	g	d	o	n	4	2		66.9	6/4.9	ClearviewHwy-5-W
21.1	26.2	32.5	38.7	45.1	51.5	58.2	77.7	83.9				

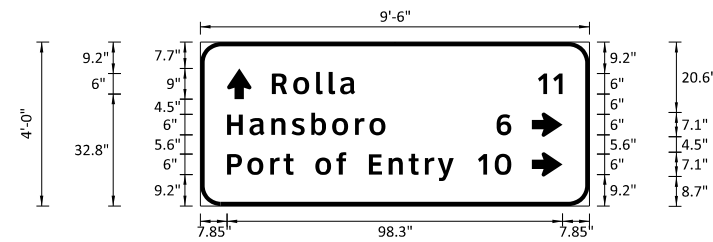
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Sign Details

Various Locations along US-281

SIGN NUMBER	HWY 281 - SN 33
WIDTH x HEIGHT	9'-6" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 221.013 Rt **AREA: 38.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

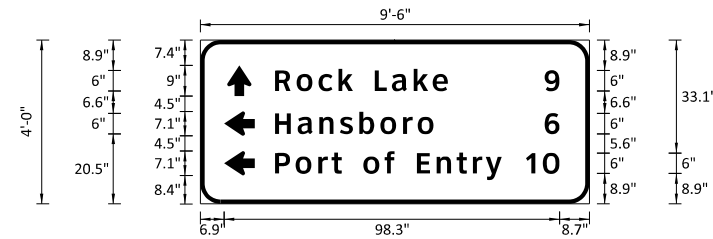
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.8	31.3	7.1	9	90
ARDD	97.2	20.3	7.1	9	0
ARDD	97.2	8.6	7.1	9	0

LETTER POSITION (X)											LENGTH	SIZE	SERIES				
R	o	l	l	a	1	1					85.2	6/4.9	ClearviewHwy-5-W				
21	27.3	33.9	37.6	41	98.9	103.4											
H	a	n	s	b	o	r	o	6			83.3	6/4.9	ClearviewHwy-5-W				
7.8	14.4	20.8	26.8	32.5	38.7	45.3	49.6	86.8									
P	o	r	t	o	f	E	n	t	r	y	1	0			83.3	6/4.9	ClearviewHwy-5-W
7.8	13.8	20.5	24.4	27.3	33.7	39.9	42.8	49.4	55.2	61	65.8	69.6	81.3	86.3			

SIGN NUMBER	HWY 281 - SN 34
WIDTH x HEIGHT	9'-6" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 221.352 Lt **AREA: 38.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

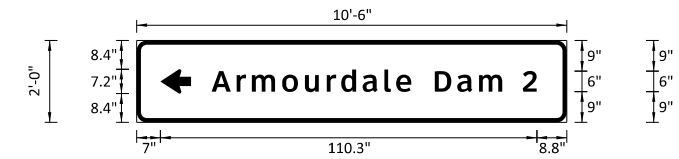
PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.9	31.6	7.1	9	90
ARDD	6.9	20	7.1	9	180
ARDD	6.9	8.3	7.1	9	180

LETTER POSITION (X)											LENGTH	SIZE	SERIES				
R	o	c	k	L	a	k	e	9			83.3	6/4.9	ClearviewHwy-5-W				
21.9	28.2	34.7	40.5	44.7	51.1	56.2	62.5	68.1	100.9								
H	a	n	s	b	o	r	o	6			83.3	6/4.9	ClearviewHwy-5-W				
21.9	28.5	34.9	40.9	46.6	52.8	59.4	63.7	100.9									
P	o	r	t	o	f	E	n	t	r	y	1	0			83.3	6/4.9	ClearviewHwy-5-W
21.9	27.9	34.6	38.5	41.4	47.8	54	56.9	63.5	69.3	75.1	79.9	83.7	95.4	100.4			

SIGN NUMBER	HWY 281 - SN 35
WIDTH x HEIGHT	10'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S): RP 223.292 Lt **AREA: 21.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7	8.4	7.2	9	180

LETTER POSITION (X)													LENGTH	SIZE	SERIES			
A	r	m	o	u	r	d	a	l	e	D	a	m	2			95.3	6/4.9	ClearviewHwy-5-W
22	29.3	33.8	42.6	49.3	55.7	59.9	66.2	72.6	76	80.5	87.4	93.9	100.3	113.1				

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Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	414

SIGN NUMBER	HWY 281 - SN 36				
WIDTH x HEIGHT	6'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.1	8.4	7.2	9	180

STATION(S):
RP 225.133 Rt

AREA: 12.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)							LENGTH	SIZE	SERIES
P	e	r	t	h	1	0	41.1	6/4.9	ClearviewHwy-5-W
22.1	28	34.5	38.4	43.2	53.3	58.2			

SIGN NUMBER	HWY 281 - SN 37				
WIDTH x HEIGHT	6'-0" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	55.9	8.4	7.1	9	0

STATION(S):
RP 225.276 Lt

AREA: 12.0 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)							LENGTH	SIZE	SERIES
P	e	r	t	h	1	0	41.1	6/4.9	ClearviewHwy-5-W
8.9	14.8	21.3	25.2	30	40.1	45.1			

SIGN NUMBER	HWY 281 - SN 38				
WIDTH x HEIGHT	4'-6" x 3'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE

STATION(S):
RP 228.103 Lt

AREA: 13.5 Sq.Ft.

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITION (X)							LENGTH	SIZE	SERIES
T	o	w	n	e	r		35.8	6/4.9	ClearviewHwy-5-W
9.1	14.9	20.9	29.5	35.7	42.2				
C	o	u	n	t	y		34.1	6/4.9	ClearviewHwy-5-W
10	16.4	23.1	29.5	35.3	39.3				

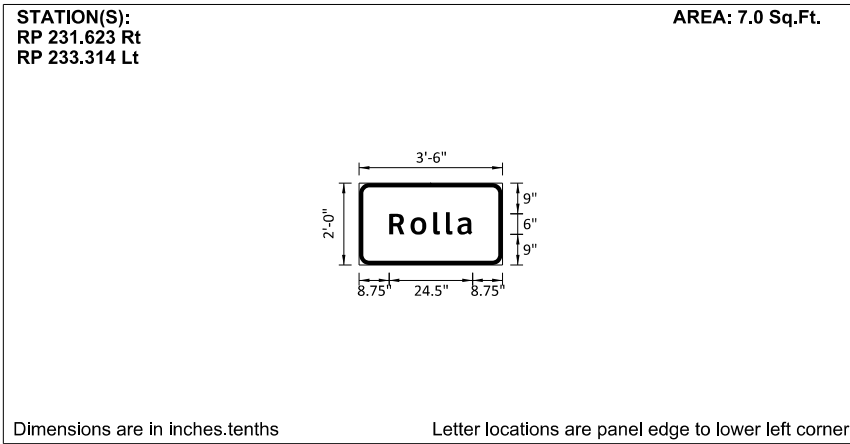
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Sign Details

Various Locations along US-281

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	415

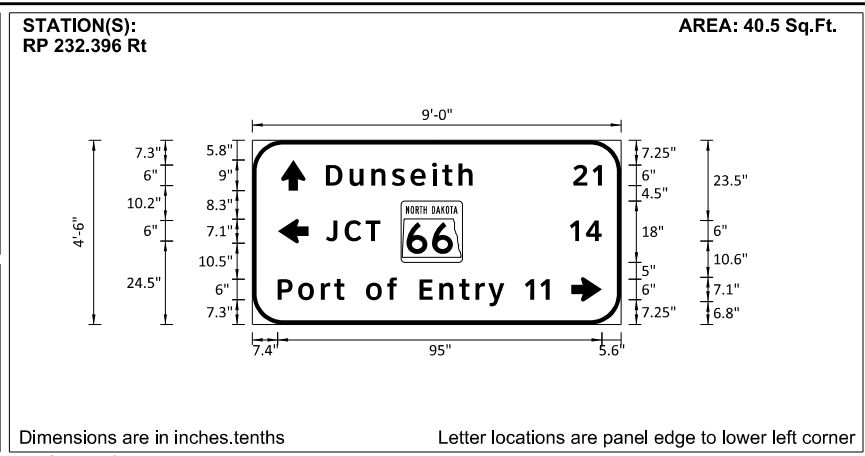
SIGN NUMBER	HWY 281 - SN 39
WIDTH x HEIGHT	3'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)					LENGTH	SIZE	SERIES
R	o	l	l	a	24.5	6/4.9	ClearviewHwy-5-W
8.8	15.1	21.7	25.4	28.8			

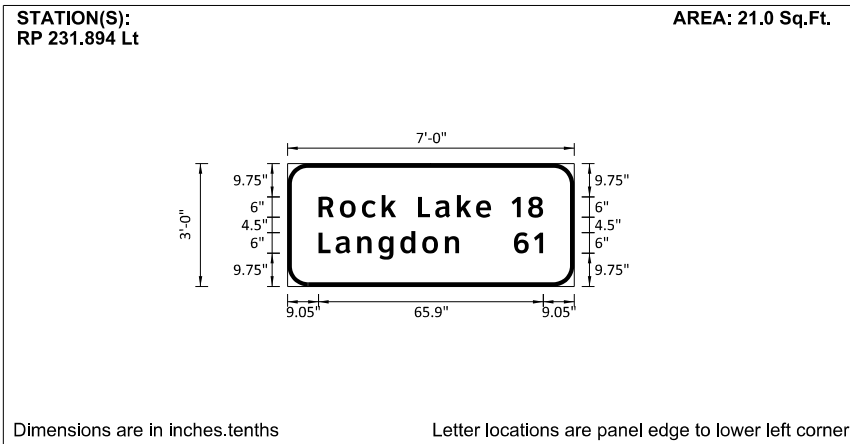
SIGN NUMBER	HWY 281 - SN 41
WIDTH x HEIGHT	9'-0" x 4'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE
ARDD	8.4 39.2 7.1 9 90
ARDD	7.5 23.8 7.1 9 180
M1-5_GS2	43.5 18.2 18 18 0
ARDD	93.4 6.8 7.1 9 0



PANEL STYLE: ND_Conv_Distance.asd

LETTER POSITION (X)					LENGTH	SIZE	SERIES										
D	u	n	s	e	i	t	h	2	1	80.9	6/4.9	ClearviewHwy-5-W					
21.5	28.5	34.8	40.8	46.3	52.7	55.6	60.4	94	99.7								
J	C	T	1	4	80.9	6	ClearviewHwy-5-W										
21.5	27	33.2	93	97.7													
P	o	r	t	o	f	E	n	t	r	y	1	1	79.7	6/4.9	ClearviewHwy-5-W		
7.4	13.4	20.1	24	26.9	33.3	39.5	42.4	49	54.8	60.6	65.4	69.2	79.9	84.4			

SIGN NUMBER	HWY 281 - SN 40
WIDTH x HEIGHT	7'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



PANEL STYLE: ND_Conv_Distance.asd

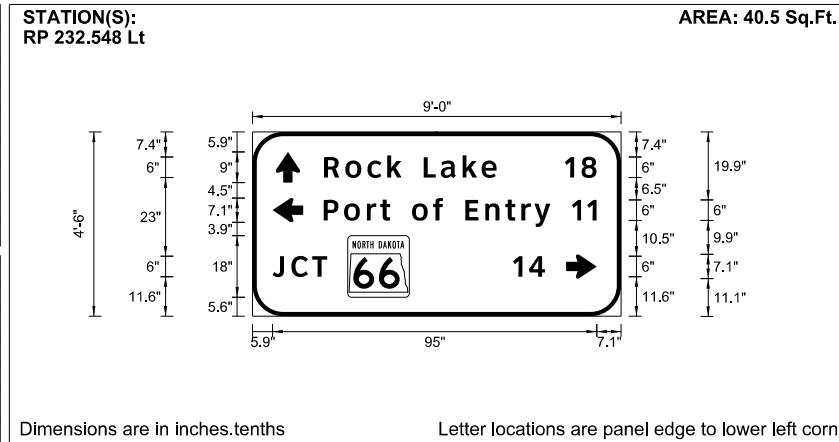
LETTER POSITION (X)					LENGTH	SIZE	SERIES						
R	o	c	k	L	a	k	e	1	8	65.9	6/4.9	ClearviewHwy-5-W	
9.1	15.4	21.8	27.6	31.9	38.3	43.3	49.7	55.2	65.7	70.5			
L	a	n	g	d	o	n	6	1	65.9	6/4.9	ClearviewHwy-5-W		
9.1	14.1	20.5	26.7	33.1	39.5	46.2	66.4	72.2					

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Sign Details
Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	416

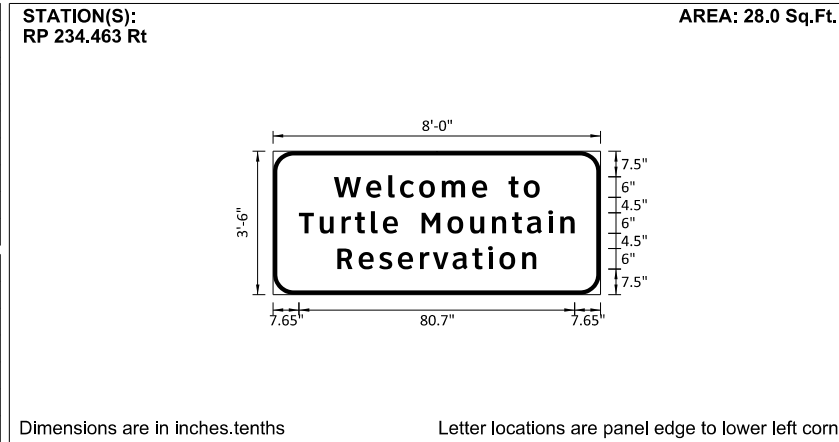
SIGN NUMBER	HWY 281 - SN 42				
WIDTH x HEIGHT	9'-0" x 4'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	6.8	39.1	7.1	9	90
ARDD	5.9	27.5	7.1	9	180
ARDD	91.9	11	7.1	9	0
M1-5_GS2	27.9	5.6	18	18	0



PANEL STYLE: ND_Conv_Distance.asl

LETTER POSITION (X)													LENGTH	SIZE	SERIES		
R	o	c	k	L	a	k	e	1	8				79.9	6/4.9	ClearviewHwy-5-W		
20.9	27.2	33.7	39.5	43.7	50.1	55.2	61.5	67.1	91.5	96.4							
P	o	r	t	o	f	E	n	t	r	y	1	1	80	6/4.9	ClearviewHwy-5-W		
20.8	26.8	33.5	37.4	40.4	46.7	52.9	55.8	62.4	68.2	74	78.8	82.6	93.6	98.1			
J	C	T	1	4									79.9	6	ClearviewHwy-5-W		
5.9	11.4	17.5	76.4	81													

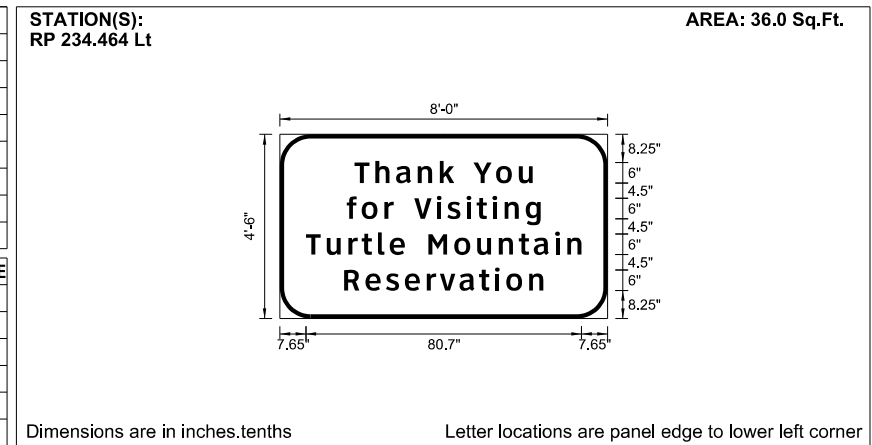
SIGN NUMBER	HWY 281 - SN 43				
WIDTH x HEIGHT	8'-0" x 3'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE



PANEL STYLE: ND_Conv_Destination.asl

LETTER POSITION (X)													LENGTH	SIZE	SERIES		
W	e	l	c	o	m	e	t	o					60.3	6/4.9	ClearviewHwy-5-W		
17.9	27.3	33.8	37.2	42.8	49.5	58.3	62.8	69	73.5								
T	u	r	t	l	e	M	o	u	n	t	a	i	n	80.7	6/4.9	ClearviewHwy-5-W	
7.6	13.7	20.1	24	28.7	32.2	36.6	43.5	51.1	57.8	64.2	70	74.4	80.7	84.2			
R	e	s	e	r	v	a	t	i	o	n				58.4	6/4.9	ClearviewHwy-5-W	
18.8	25.1	31.1	36.6	43.1	46.8	52.6	58.4	63	66.3	73							

SIGN NUMBER	HWY 281 - SN 44				
WIDTH x HEIGHT	8'-0" x 4'-6"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				



PANEL STYLE: ND_Conv_Destination.asl

LETTER POSITION (X)													LENGTH	SIZE	SERIES		
T	h	a	n	k	Y	o	u						52.2	6/4.9	ClearviewHwy-5-W		
21.9	28	34.1	40.4	46.9	51.1	56.8	63.3	70									
f	o	r	V	i	s	i	t	i	n	g			56.8	6/4.9	ClearviewHwy-5-W		
19.6	24	30.6	33.4	39.3	46	49.1	54.7	57.7	62.3	65.8	72						
T	u	r	t	l	e	M	o	u	n	t	a	i	n	80.7	6/4.9	ClearviewHwy-5-W	
7.6	13.7	20.1	24	28.7	32.2	36.6	43.5	51.1	57.8	64.2	70	74.4	80.7	84.2			
R	e	s	e	r	v	a	t	i	o	n				58.4	6/4.9	ClearviewHwy-5-W	
18.8	25.1	31.1	36.6	43.1	46.8	52.6	58.4	63	66.3	73							

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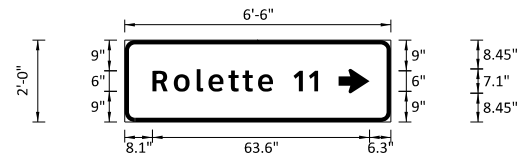
Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	417

SIGN NUMBER	HWY 281 - SN 45				
WIDTH x HEIGHT	6'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	62.7	8.4	7.1	9	0

STATION(S): RP 244.313 Lt AREA: 13.0 Sq.Ft.



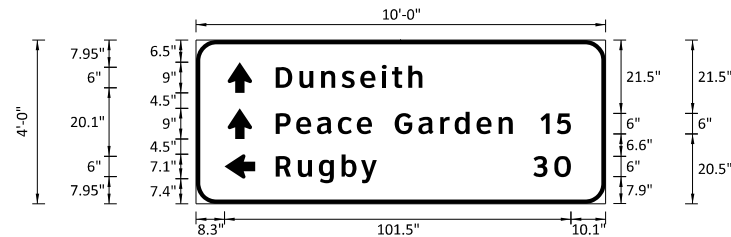
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)										LENGTH	SIZE	SERIES
R	o	l	e	t	t	e	1	1		48.6	6/4.9	ClearviewHwy-5-W
8.1	14.4	21.1	24.5	30.4	34.5	39.1	49.5	54				

SIGN NUMBER	HWY 281 - SN 46				
WIDTH x HEIGHT	10'-0" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	9.3	32.5	7.1	9	90
ARDD	9.3	19	7.1	9	90
ARDD	8.3	7.4	7.1	9	180

STATION(S): RP 253.090 Rt AREA: 40.0 Sq.Ft.



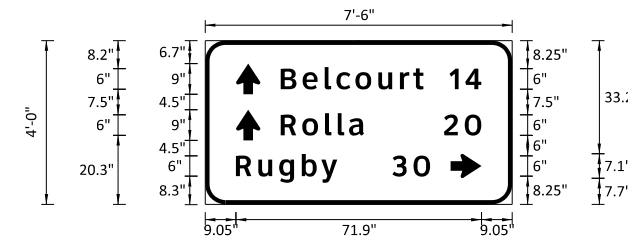
Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)										LENGTH	SIZE	SERIES				
D	u	n	s	e	i	t	h			43	6/4.9	ClearviewHwy-5-W				
23.3	30.3	36.7	42.6	48.1	54.5	57.4	62.2									
P	e	a	c	e	G	a	r	d	e	n	1	5	86.5	6/4.9	ClearviewHwy-5-W	
23.3	29.3	35.4	41.6	47.1	51.6	58.2	65.2	71.5	75.8	82.2	88.6	100.9	105.7			
R	u	g	b	y	3	0							86.5	6/4.9	ClearviewHwy-5-W	
23.3	29.9	36	42.7	48.3	98.8	105										

SIGN NUMBER	HWY 281 - SN 47				
WIDTH x HEIGHT	7'-6" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				

STATION(S): RP 253.329 Lt AREA: 30.0 Sq.Ft.



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asd

LETTER POSITION (X)										LENGTH	SIZE	SERIES
B	e	l	c	o	u	r	t	1	4	58.8	6/4.9	ClearviewHwy-5-W
22.2	28.5	35	38.5	44	50.7	57.1	61	71.6	76.2			
R	o	l	l	a	2	0				58.8	6/4.9	ClearviewHwy-5-W
22.2	28.5	35.1	38.8	42.2	69.9	76.1						
R	u	g	b	y	3	0				56.9	6/4.9	ClearviewHwy-5-W
9.1	15.6	21.7	28.4	34	54.9	61.1						

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Sign Details
Various Locations along US-281

SIGN NUMBER	HWY 281 - SN 48
WIDTH x HEIGHT	8'-6" x 3'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 253.438 Rt **AREA: 29.8 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

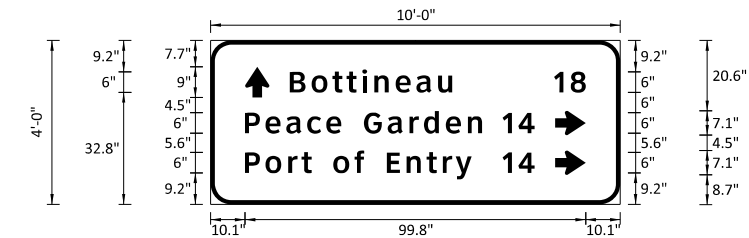
PANEL STYLE: ND_Conv_Destination.usi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	85.1	6.9	7.2	9	0

LETTER POSITION (X)													LENGTH	SIZE	SERIES
I	n	t	e	r	n	a	t	i	o	n	a	l	65.7	6/4.9	ClearviewHwy-5-W
9.7	13.2	19	23.5	30	34.5	40.6	46.4	51	54.3	61	67.1	73.4			
P	e	a	c	e	G	a	r	d	e	n			69.5	6/4.9	ClearviewHwy-5-W
9.7	15.6	21.8	27.9	33.5	37.9	44.5	51.5	57.8	62.1	68.5	75				
M	u	s	i	c	C	a	m	p					59.3	6/4.9	ClearviewHwy-5-W
9.7	17.5	23.4	29.1	32.4	36.4	42.8	49.1	55.5	64.6						

SIGN NUMBER	HWY 281 - SN 50
WIDTH x HEIGHT	10'-0" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 253.552 Rt **AREA: 40.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.usi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	10.1	31.3	7.1	9	90
ARDD	100.9	20.3	7.1	9	0
ARDD	100.9	8.6	7.1	9	0

LETTER POSITION (X)													LENGTH	SIZE	SERIES		
B	o	t	t	i	n	e	a	u	1	8			86.7	6/4.9	ClearviewHwy-5-W		
23.2	29.6	35.7	39.8	44.4	48	54.2	60.3	66.7	100.6	105.5							
P	e	a	c	e	G	a	r	d	e	n	1	4	84.8	6/4.9	ClearviewHwy-5-W		
10.1	16.1	22.2	28.3	33.9	38.3	45	51.9	58.3	62.5	68.9	75.4	85.5	90.2				
P	o	r	t		o	f	E	n	t	r	y	1	4	84.8	6/4.9	ClearviewHwy-5-W	
10.1	16.1	22.7	26.6	29.6	36	42.2	45	51.6	57.4	63.3	68	71.8	85.5	90.2			

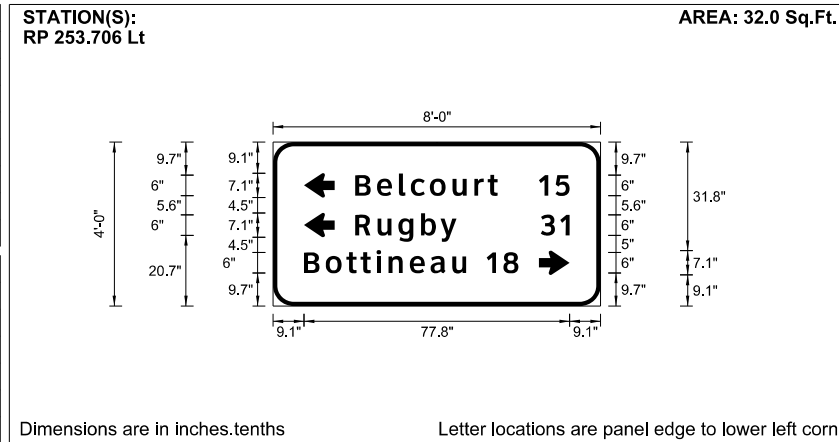
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Sign Details

Various Locations along US-281

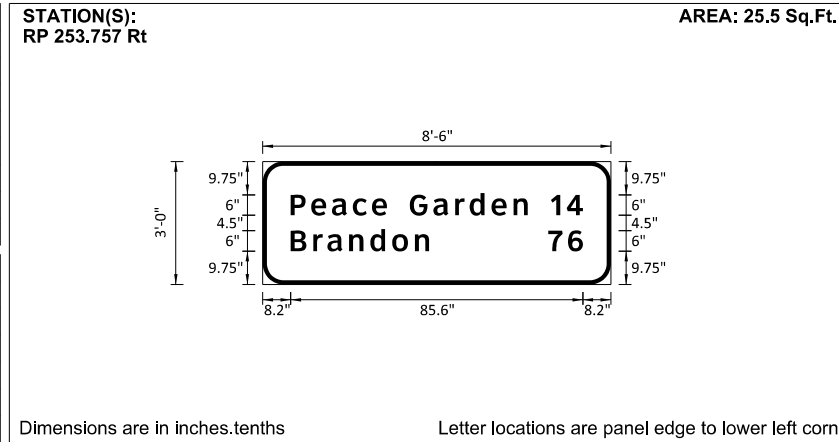
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	419

SIGN NUMBER	HWY 281 - SN 51
WIDTH x HEIGHT	8'-0" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE
ARDD	9.1 31.8 7.1 9 180
ARDD	9.1 20.2 7.1 9 180
ARDD	77.9 9.1 7.1 9 0



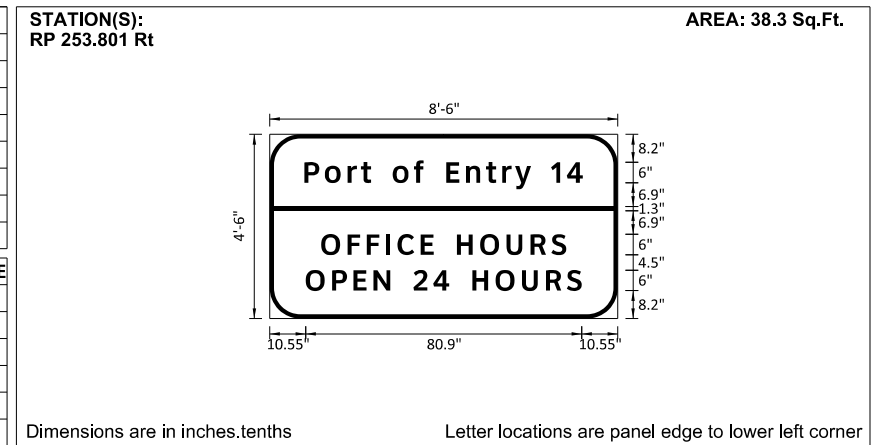
LETTER POSITION (X)											LENGTH	SIZE	SERIES
B	e	l	c	o	u	r	t	1	5		62.8	6/4.9	ClearviewHwy-5-W
24.1	30.5	36.9	40.4	46	52.6	59	62.9	78	82.8				
R	u	g	b	y	3	1					62.8	6/4.9	ClearviewHwy-5-W
24.1	30.6	36.7	43.4	49.1	78.5	84.2							
B	o	t	t	i	n	e	a	u	1	8	62.8	6/4.9	ClearviewHwy-5-W
9.1	15.5	21.5	25.7	30.3	33.9	40.1	46.2	52.5	62.6	67.5			

SIGN NUMBER	HWY 281 - SN 52
WIDTH x HEIGHT	8'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White
SYMBOL	X Y WID HT ANGLE



LETTER POSITION (X)											LENGTH	SIZE	SERIES			
P	e	a	c	e		G	a	r	d	e	n	1	4	85.6	6/4.9	ClearviewHwy-5-W
8.2	14.2	20.3	26.4	32	36.4	43.1	50	56.4	60.6	67	73.5	84.4	89.1			
B	r	a	n	d	o	n	7	6						85.6	6/4.9	ClearviewHwy-5-W
8.2	14.8	18.9	25.3	31.5	37.9	44.6	83.7	89.4								

SIGN NUMBER	HWY 281 - SN 53
WIDTH x HEIGHT	8'-6" x 4'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green / Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White



LETTER POSITION (X)														LENGTH	SIZE	SERIES		
P	o	r	t												81.6	6/4.9	ClearviewHwy-5-W	
10.2	16.2	22.8	26.7	29.7	36.1	42.3	45.1	51.7	57.6	63.4	68.1	71.9	76.6	82.4	87.1			
O	F	F	I	C	E											71.8	6	ClearviewHwy-5-W
15.1	22.8	28.5	34.1	37.5	44.2	48.1	54.9	61.7	69.4	76.5	82.6							
O	P	E	N													80.9	6	ClearviewHwy-5-W
10.6	18.3	24.6	30.5	35.4	42.1	47.9	52.7	59.4	66.2	73.9	81	87.1						

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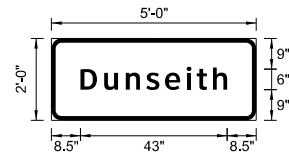
Sign Details

Various Locations along US-281

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	420

SIGN NUMBER	HWY 281 - SN 54
WIDTH x HEIGHT	5'-0" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 254.783 Lt **AREA: 10.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

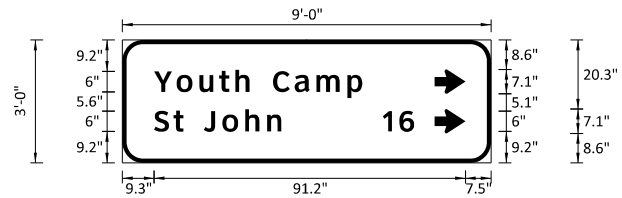
PANEL STYLE: ND_Conv_Destination.asi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
D	u	n	s	e	i	t	h			43	6/4.9	ClearviewHwy-5-W
8.5	15.4	21.8	27.8	33.3	39.6	42.6	47.3					

SIGN NUMBER	HWY 281 - SN 55
WIDTH x HEIGHT	9'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 263.508 Rt **AREA: 27.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.asi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	91.5	20.2	7.1	9	0
ARDD	91.5	8.6	7.1	9	0

LETTER POSITION (X)										LENGTH	SIZE	SERIES			
Y	o	u	t	h		C	a	m	p				61	6/4.9	ClearviewHwy-5-W
9.3	15.9	22.6	28.3	33.1	37.2	44.1	50.5	56.9	65.9						
S	t		J	o	h	n		1	6				76.2	6/4.9	ClearviewHwy-5-W
9.3	15	17.9	23.9	29.3	36	42.4	76.3	81.2							

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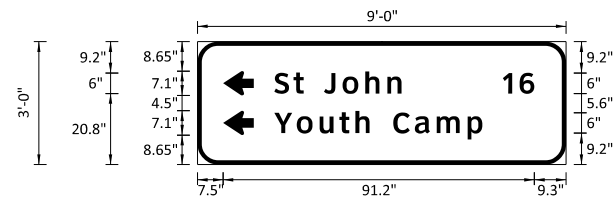
Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	421

SIGN NUMBER	HWY 281 - SN 57
WIDTH x HEIGHT	9'-0" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 263.720 Lt **AREA: 27.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

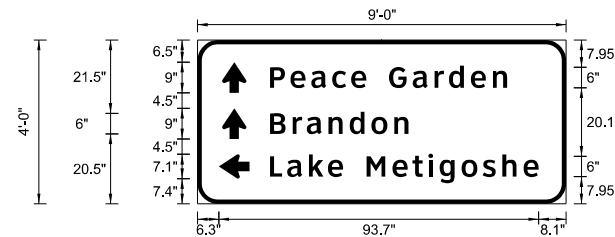
PANEL STYLE: ND_Conv_Destination.asl

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.5	20.2	7.1	9	180
ARDD	7.5	8.6	7.1	9	180

LETTER POSITION (X)											LENGTH	SIZE	SERIES
S	t		J	o	h	n	1	6			76.2	6/4.9	ClearviewHwy-5-W
22.5	28.2	31.1	37.1	42.5	49.2	55.6	89.5	94.4					
Y	o	u	t	h		C	a	m	p		61	6/4.9	ClearviewHwy-5-W
22.5	29.1	35.8	41.5	46.3	50.5	57.4	63.7	70.1	79.1				

SIGN NUMBER	HWY 281 - SN 58
WIDTH x HEIGHT	9'-0" x 4'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 263.692 Rt **AREA: 36.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

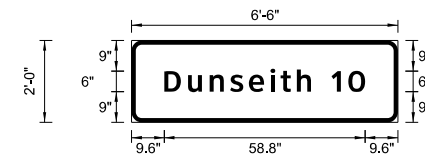
PANEL STYLE: ND_Conv_Destination.asl

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.2	32.5	7.1	9	90
ARDD	7.2	19	7.1	9	90
ARDD	6.3	7.4	7.1	9	180

LETTER POSITION (X)											LENGTH	SIZE	SERIES				
P	e	a	c	e		G	a	r	d	e	n				69.5	6/4.9	ClearviewHwy-5-W
21.3	27.2	33.3	39.5	45	49.5	56.1	63.1	69.4	73.7	80.1	86.5						
B	r	a	n	d	o	n									40.6	6/4.9	ClearviewHwy-5-W
21.3	27.9	32	38.4	44.6	51	57.7											
L	a	k	e		M	e	t	i	g	o	s	h	e		78.7	6/4.9	ClearviewHwy-5-W
21.3	26.3	32.6	38.2	42.6	49.5	57.1	63	67.6	71	77.4	83.6	89.3	95.5				

SIGN NUMBER	HWY 281 - SN 59
WIDTH x HEIGHT	6'-6" x 2'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	3"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 263.693 Lt **AREA: 13.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Distance.asl

SYMBOL	X	Y	WID	HT	ANGLE
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LETTER POSITION (X)											LENGTH	SIZE	SERIES
D	u	n	s	e	i	t	h	1	0		58.8	6/4.9	ClearviewHwy-5-W
9.6	16.5	22.9	28.9	34.4	40.7	43.7	48.4	58.6	63.5				

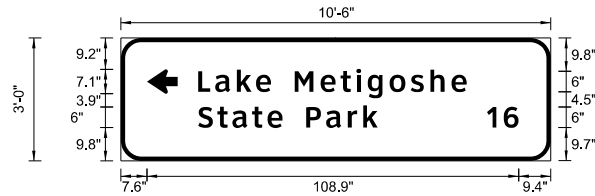
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Sign Details

Various Locations along US-281

SIGN NUMBER	HWY 281 - SN 60
WIDTH x HEIGHT	10'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Brown
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 263.718 Rt **AREA: 31.5 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

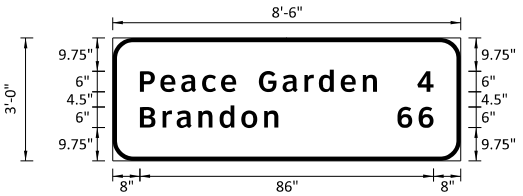
PANEL STYLE: ND_Conv_Recreation.usi

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.6	19.7	7.1	9	180

LETTER POSITION (X)														LENGTH	SIZE	SERIES	
L	a	k	e	M	e	t	i	g	o	s	h	e			78.7	6/4.9	ClearviewHwy-5-W
22.6	27.7	34	39.6	44	50.9	58.5	64.4	69	72.3	78.8	85	90.7	96.9				
S	t	a	t	e	P	a	r	k							52.6	6/4.9	ClearviewHwy-5-W
22.6	28.3	32.7	38.5	43	47.4	54.3	60.2	66.5	71								
1	6														9.2	6	ClearviewHwy-5-W
107.3	112.2																

SIGN NUMBER	HWY 281 - SN 62
WIDTH x HEIGHT	8'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 263.895 Rt **AREA: 25.5 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Distance.usi

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)														LENGTH	SIZE	SERIES	
P	e	a	c	e	G	a	r	d	e	n	4				86	6/4.9	ClearviewHwy-5-W
8	14	20.1	26.2	31.8	36.2	42.9	49.8	56.2	60.4	66.8	73.3	89.3					
B	r	a	n	d	o	n	6	6							86	6/4.9	ClearviewHwy-5-W
8	14.6	18.7	25.1	31.3	37.7	44.4	83.4	89.7									

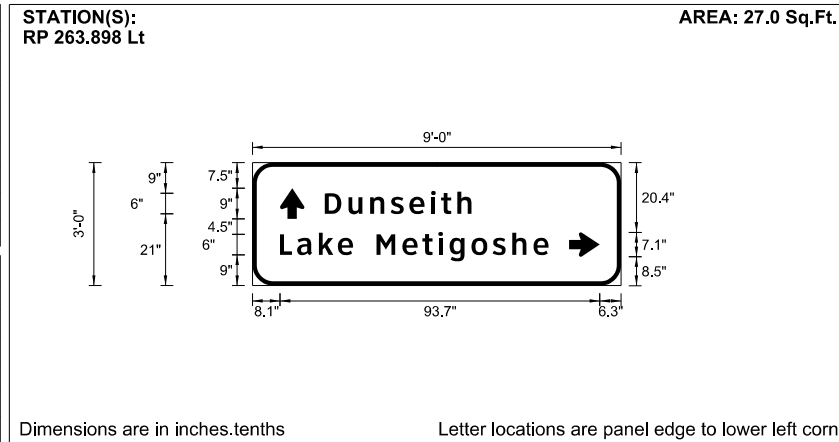
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Sign Details

Various Locations along US-281

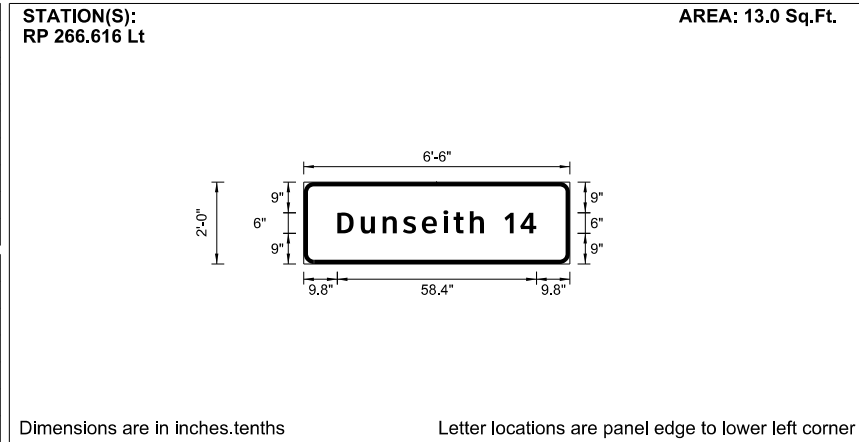
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	423

SIGN NUMBER	HWY 281 - SN 63				
WIDTH x HEIGHT	9'-0" x 3'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	8.1	19.5	7.1	9	90
ARDD	92.7	8.4	7.1	9	0



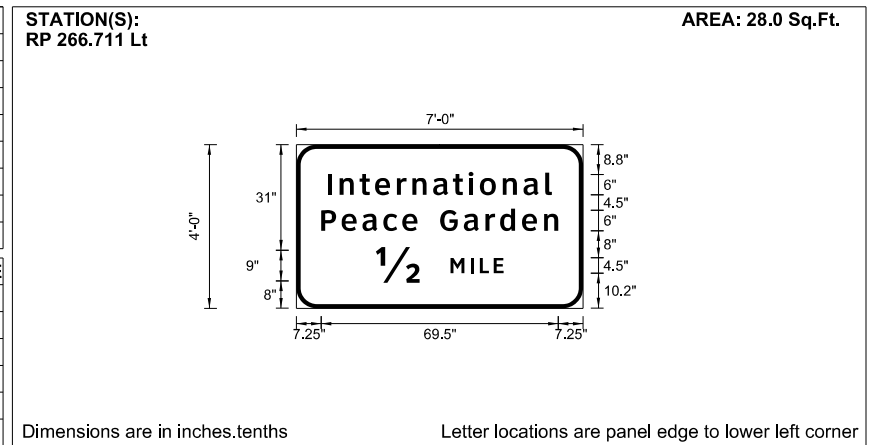
LETTER POSITION (X)											LENGTH	SIZE	SERIES					
D	u	n	s	e	i	t	h				43	6/4.9	ClearviewHwy-5-W					
21.2	28.1	34.5	40.5	46	52.3	55.3	60											
L	a	k	e	M	e	t	i	g	o	s	h	e				78.7	6/4.9	ClearviewHwy-5-W
8.1	13.1	19.4	25	29.4	36.3	43.9	49.8	54.4	57.7	64.2	70.4	76.1	82.3					

SIGN NUMBER	HWY 281 - SN 64				
WIDTH x HEIGHT	6'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE



LETTER POSITION (X)											LENGTH	SIZE	SERIES
D	u	n	s	e	i	t	h	1	4		58.4	6/4.9	ClearviewHwy-5-W
9.8	16.8	23.1	29.1	34.6	41	43.9	48.7	58.8	63.5				

SIGN NUMBER	HWY 281 - SN 65				
WIDTH x HEIGHT	7'-0" x 4'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	6"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective				
	COLOR: Brown				
LEGEND/BORDER	TYPE: IV Reflective				
	COLOR: White				



LETTER POSITION (X)											LENGTH	SIZE	SERIES					
I	n	t	e	r	n	a	t	i	o	n	a	l				65.7	6/4.9	ClearviewHwy-5-W
9.2	12.7	18.5	23	29.5	34	40.1	45.9	50.5	53.8	60.5	66.6	72.9						
P	e	a	c	e	G	a	r	d	e	n						69.5	6/4.9	ClearviewHwy-5-W
7.3	13.3	19.4	25.5	31.1	35.5	42.1	49.1	55.4	59.7	66.1	72.6							
1/2	M	I	L	E												37.4	9,4.5	ClearviewHwy-5-W
23.3	45.1	51.1	53.8	57.8														

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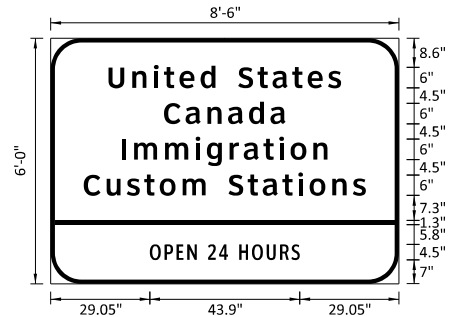
Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	424

SIGN NUMBER	HWY 281 - SN 66
WIDTH x HEIGHT	8'-6" x 6'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	9"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green / Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 266.947 Rt **AREA: 51.0 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Destination.ssf

LETTER POSITION (X)														LENGTH	SIZE	SERIES	
U	n	i	t	e	d		S	t	a	t	e	s			68.2	6/4.9	ClearviewHwy-5-W
16.9	23.9	30.2	33.2	37.7	43.9	48.3	54.9	60.6	65	70.8	75.3	81.3					
C	a	n	a	d	a										35.7	6/4.9	ClearviewHwy-5-W
33.2	39.5	45.9	52	58.1	64.4												
l	m	m	i	g	r	a	t	i	o	n					60.2	6/4.9	ClearviewHwy-5-W
20.9	24.4	33.5	42.4	45.8	52.4	56.6	62.3	67	70.3	76.9							
C	u	s	t	o	m		S	t	a	t	i	o	n	s	82.6	6/4.9	ClearviewHwy-5-W
9.7	16.4	22.3	27.4	31.9	38.6	45.4	52.1	57.7	62.1	67.9	72.5	75.8	82.5	88.5			
O	P	E	N		2	4		H	O	U	R	S			43.9	4.5	ClearviewHwy-2-W
29	33.4	36.9	40	42.8	46.1	49.2	52	55.2	59	63.3	67.2	70.5					

SIGN NUMBER	HWY 281 - SN 68
WIDTH x HEIGHT	6'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 219.718 Rt **AREA: 19.5 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_General Services.ssf

LETTER POSITION (X)														LENGTH	SIZE	SERIES	
R	E	S	T		A	R	E	A							58.1	8	ClearviewHwy-3-W
10	17.3	23	29.4	34.4	40.2	48.5	55.8	61.4									
4	M	I	L	E	S										42.5	10,8	ClearviewHwy-3-W
17.8	30.8	39.8	43.5	49.4	55.1												

SIGN NUMBER	HWY 281 - SN 67
WIDTH x HEIGHT	8'-6" x 3'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Brown
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 267.183 Rt **AREA: 29.8 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Conv_Recreation.ssf

LETTER POSITION (X)														LENGTH	SIZE	SERIES	
I	n	t	e	r	n	a	t	i	o	n	a	l			65.7	6/4.9	ClearviewHwy-5-W
22.9	26.4	32.2	36.7	43.2	47.7	53.8	59.6	64.2	67.5	74.2	80.3	86.6					
P	e	a	c	e		G	a	r	d	e	n				69.5	6/4.9	ClearviewHwy-5-W
22.9	28.8	35	41.1	46.7	51.1	57.7	64.7	71	75.3	81.7	88.2						
E	n	t	r	a	n	c	e								43.1	6/4.9	ClearviewHwy-5-W
22.9	28.7	34.5	39.3	43.4	49.8	56	61.6										

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Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	425

SIGN NUMBER	HWY 281 - SN 69
WIDTH x HEIGHT	6'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 226.598 Lt **AREA: 19.5 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

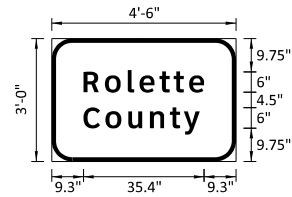
PANEL STYLE: ND_Conv_General Services.sst

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
R	E	S	T		A	R	E	A		58.1	8	ClearviewHwy-3-W
10	17.3	23	29.4	34.4	40.2	48.5	55.8	61.4				
3	M	I	L	E	S					41.5	10,8	ClearviewHwy-3-W
18.2	30.4	39.3	43.1	48.9	54.6							

SIGN NUMBER	HWY 281 - SN 70
WIDTH x HEIGHT	4'-6" x 3'-0"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Green
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 228.131 Rt **AREA: 13.5 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

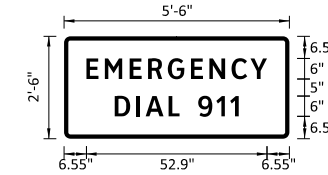
PANEL STYLE: ND_Conv_Destination.sst

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
R	o	l	e	t	t	e				35.4	6/4.9	ClearviewHwy-5-W
9.3	15.6	22.3	25.7	31.6	35.8	40.3						
C	o	u	n	t	y					34.1	6/4.9	ClearviewHwy-5-W
9.3	15.8	22.5	28.8	34.7	38.7							

SIGN NUMBER	HWY 281 - SN 72
WIDTH x HEIGHT	5'-6" x 2'-6"
BORDER WIDTH	1.25" (inset 0")
CORNER RADIUS	1.88"
MOUNTING	Ground
BACKGROUND	TYPE: IV Reflective COLOR: Blue
LEGEND/BORDER	TYPE: IV Reflective COLOR: White

STATION(S):
RP 266.42 Lt **AREA: 13.8 Sq.Ft.**



Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Misc_Gen Serv_Emergency Dial 911.sst

SYMBOL	X	Y	WID	HT	ANGLE

LETTER POSITION (X)										LENGTH	SIZE	SERIES
E	M	E	R	G	E	N	C	Y		52.9	6	ClearviewHwy-4-W
6.5	11.9	19.2	24.6	30.4	37.2	42.5	49.1	54.6				
D	I	A	L		9	1	1			36.3	6	ClearviewHwy-4-W
14.8	21.3	23.9	30.6	33.8	39.3	44.6	48.6					

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Sign Details

Various Locations along US-281

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	426

SIGN NUMBER	HWY 1804 - SN 1					STATION(S): RP 276.347 Lt	AREA: 47.3 Sq.Ft.										
WIDTH x HEIGHT	10'-6" x 4'-6"																
BORDER WIDTH	1.25" (inset 0")																
CORNER RADIUS	9"																
MOUNTING	Ground																
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown																
LEGEND/BORDER	TYPE: IV Reflective COLOR: White																
SYMBOL	X	Y	WID	HT	ANGLE	<p>Dimensions are in inches.tenths Letter locations are panel edge to lower left corner</p>											
ARDD	109.2	29.7	7.1	9	0												
RS-054	9.6	5.5	18	13.3	0												
LETTER POSITION (X)																	
W	h	i	t	e	E	a	r	t	h	B	a	y	LENGTH	SIZE	SERIES		
9.6	19.3	25.6	28.5	33	37.5	44.4	49.8	56.2	60.1	64.8	69	76.1	82.4	88	83.2	6/4.9	ClearviewHwy-5-W
R	e	c	r	e	a	t	i	o	n	A	r	e	a	9	93.7	6/4.9	ClearviewHwy-5-W
9.6	15.8	22.1	27.9	32.1	38.2	44	48.6	52	58.6	62.8	69.3	76.6	80.9	87	98.9		

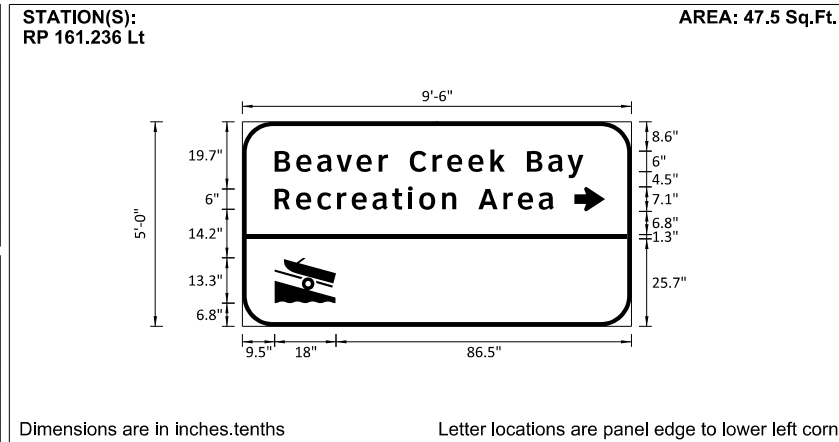
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Sign Details

Various Locations along ND-1804

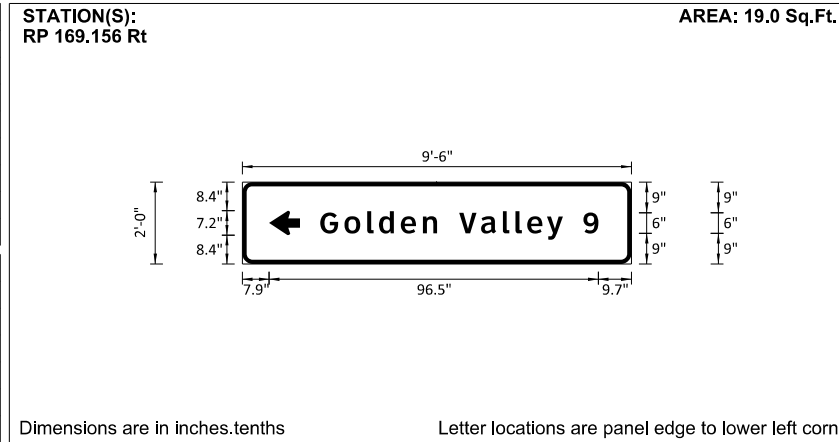
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	428

SIGN NUMBER	HWY 1806 - SN 1				
WIDTH x HEIGHT	9'-6" x 5'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	9"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Brown / Brown				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	97.3	33.8	7.1	9	0
RS-054	9.5	6.8	18	13.3	0



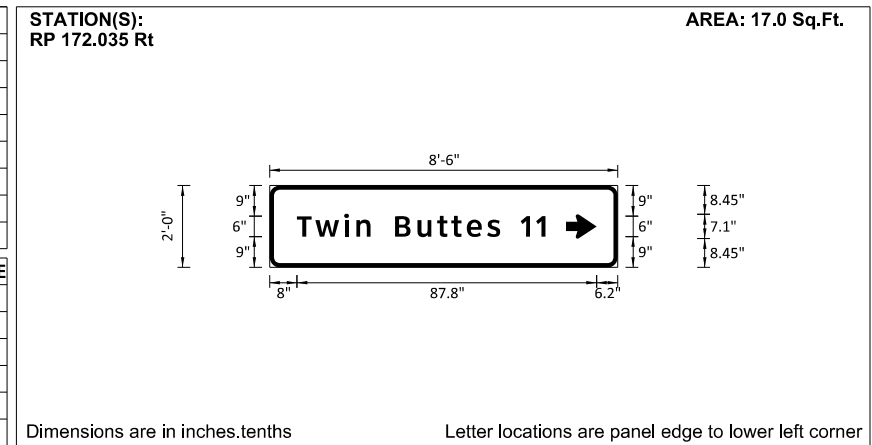
LETTER POSITION (X)													LENGTH	SIZE	SERIES					
B	e	a	v	e	r		C	r	e	e	k		B	a	y			90.5	6/4.9	ClearviewHwy-5-W
9.5	15.8	21.9	27.6	33.5	40	42.7	49.1	55.8	60	66.3	72.7	77	83.4	89.6	95.3					
R	e	c	r	e	a	t	i	o	n		A	r	e	a				81.9	6/4.9	ClearviewHwy-5-W
9.5	15.8	22	27.8	32.1	38.2	43.9	48.6	51.9	58.5	62.7	69.2	76.5	80.8	86.9						

SIGN NUMBER	HWY 1806 - SN 2				
WIDTH x HEIGHT	9'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.9	8.4	7.2	9	180



LETTER POSITION (X)													LENGTH	SIZE	SERIES					
G	o	l	d	e	n		V	a	l	l	e	y	9					81.5	6/4.9	ClearviewHwy-5-W
22.9	29.9	36.6	40.1	46.5	52.9	57.1	63.6	70	76.4	80.1	83.5	89.3	100							

SIGN NUMBER	HWY 1806 - SN 3				
WIDTH x HEIGHT	8'-6" x 2'-0"				
BORDER WIDTH	1.25" (inset 0")				
CORNER RADIUS	3"				
MOUNTING	Ground				
BACKGROUND	TYPE: IV Reflective COLOR: Green				
LEGEND/BORDER	TYPE: IV Reflective COLOR: White				
SYMBOL	X	Y	WID	HT	ANGLE
ARDD	86.8	8.4	7.1	9	0



LETTER POSITION (X)													LENGTH	SIZE	SERIES					
T	w	i	n		B	u	t	t	e	s	1	1						72.8	6/4.9	ClearviewHwy-5-W
8	13.4	21.9	25.4	29.6	36.7	43.3	49.1	53.2	57.8	63.7	73.6	78.1								

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Sign Details

Various Locations along ND-1806

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	429

SIGN NUMBER						HWY 1806 - SN 4						STATION(S):						AREA: 31.5 Sq.Ft.					
WIDTH x HEIGHT						10'-6" x 3'-0"						RP						297.957 Lt					
BORDER WIDTH						1.25" (inset 0")																	
CORNER RADIUS						6"																	
MOUNTING						Ground																	
BACKGROUND						TYPE: IV Reflective																	
						COLOR: Brown																	
LEGEND/BORDER						TYPE: IV Reflective																	
						COLOR: White																	

SYMBOL	X	Y	WID	HT	ANGLE
ARDD	7.2	18.7	7.1	9	90

Dimensions are in inches.tenths Letter locations are panel edge to lower left corner

PANEL STYLE: ND_Corv_Recreation.sst

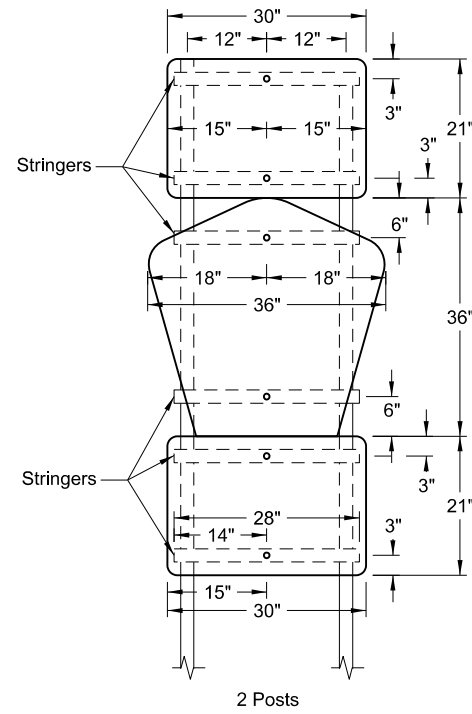
LETTER POSITION (X)															LENGTH	SIZE	SERIES
T	o	b	a	c	c	o	G	a	r	d	e	n			81.7	6/4.9	ClearviewHwy-5-W
20.4	26.2	32.9	38.9	45	50.6	56.2	60.8	67.5	74.4	80.8	85	91.4	97.9				
R	e	c	r	e	a	t	i	o	n	A	r	e	a		81.9	6/4.9	ClearviewHwy-5-W
20.4	26.6	32.9	38.7	42.9	49	54.8	59.4	62.7	69.4	73.6	80.1	87.4	91.7	97.8			
1	2														8.8	6	ClearviewHwy-5-W
108.2	112.8																

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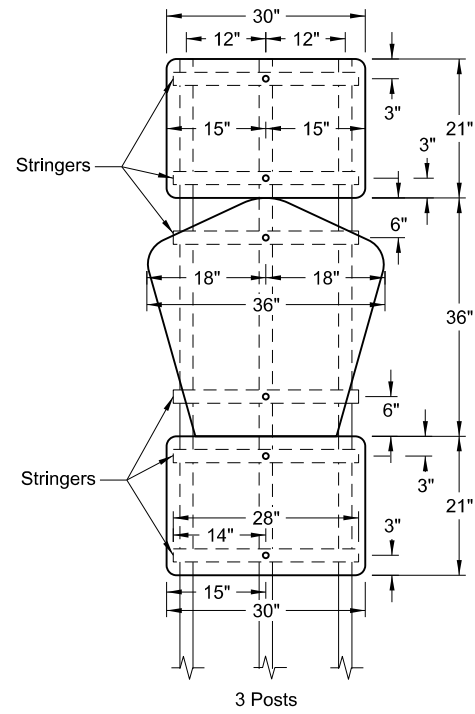
Sign Details

Various Locations along ND-1806

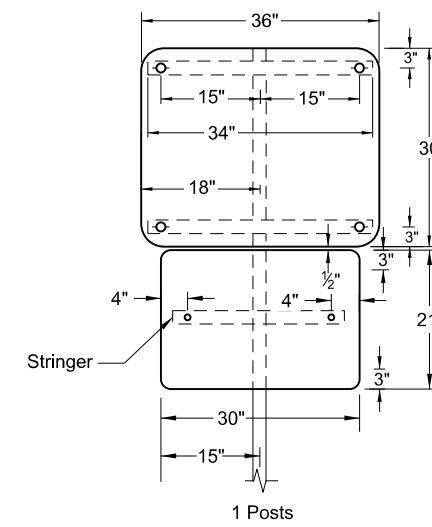
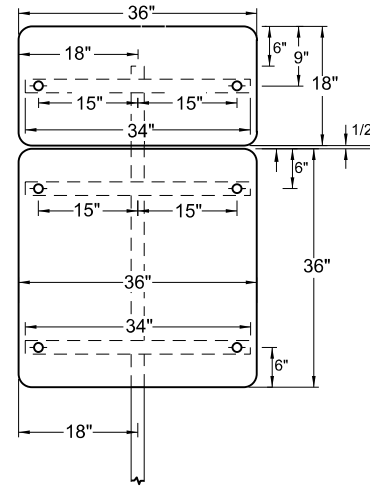
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	430



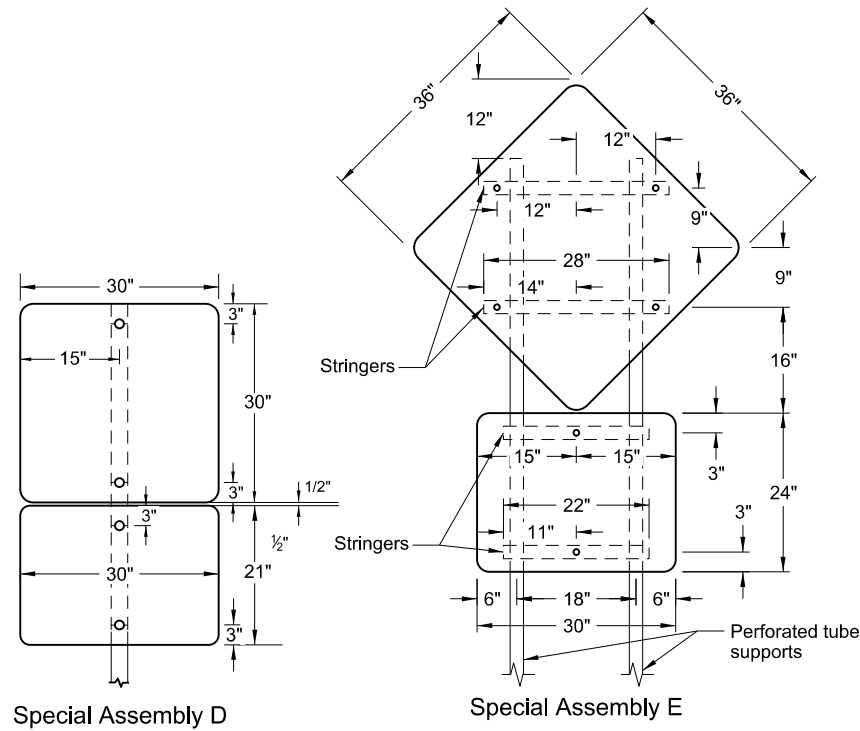
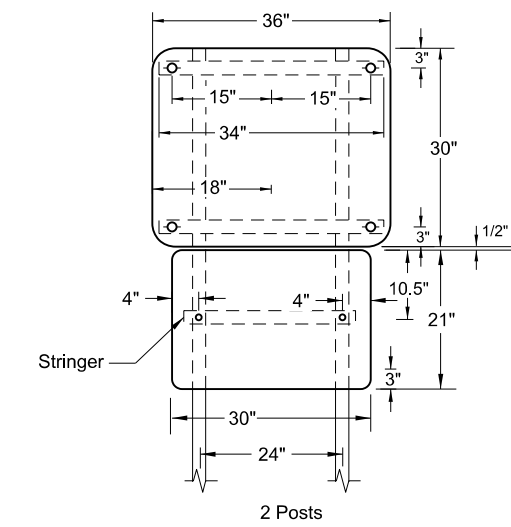
Special Assembly A



Special Assembly B

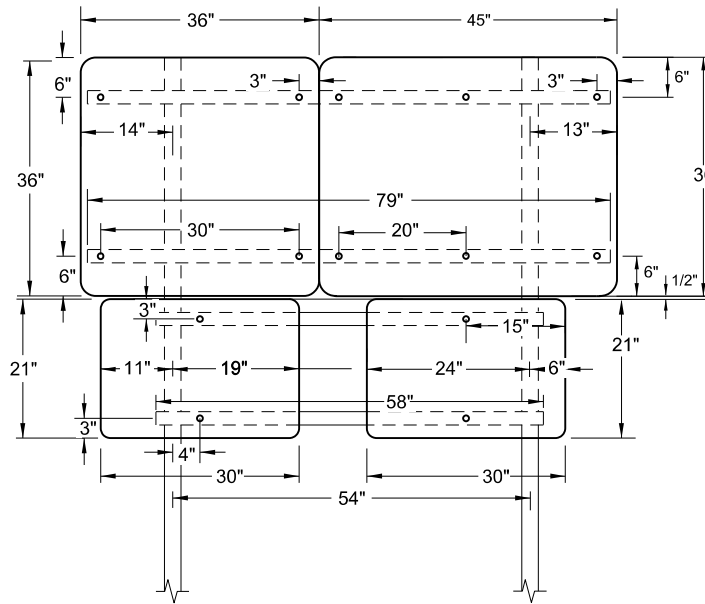


Special Assembly C



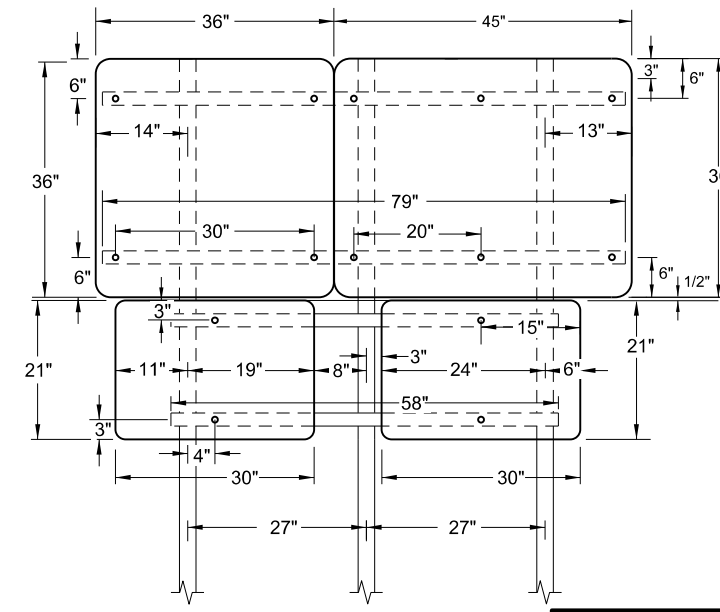
Special Assembly D

Special Assembly E



2 Posts

Special Assembly F



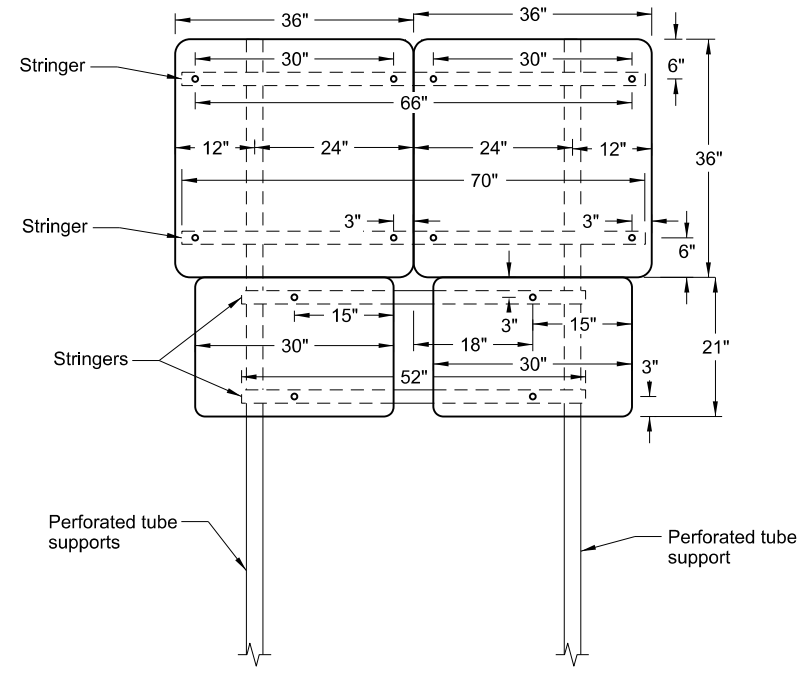
3 Posts

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Sign Special Assemblies

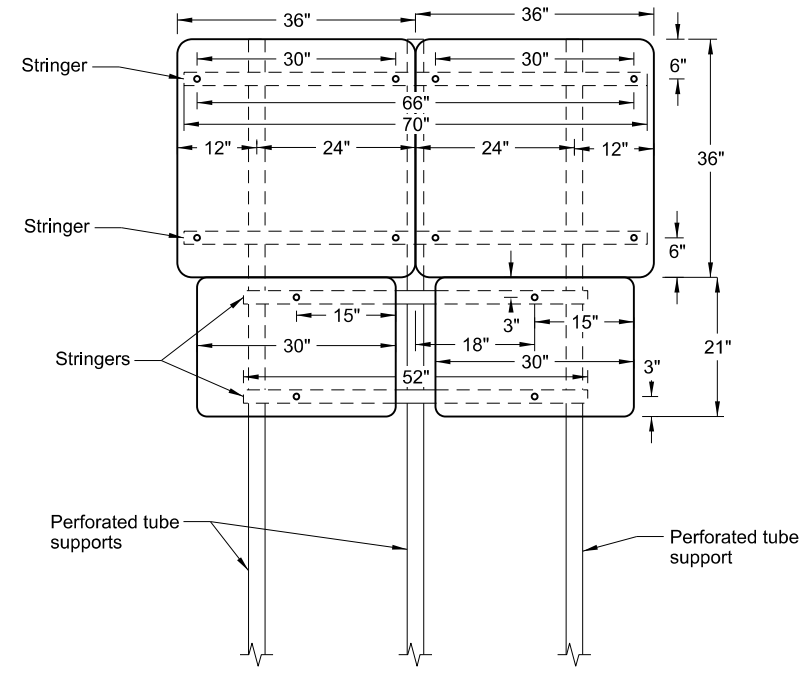
Various Locations

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	431

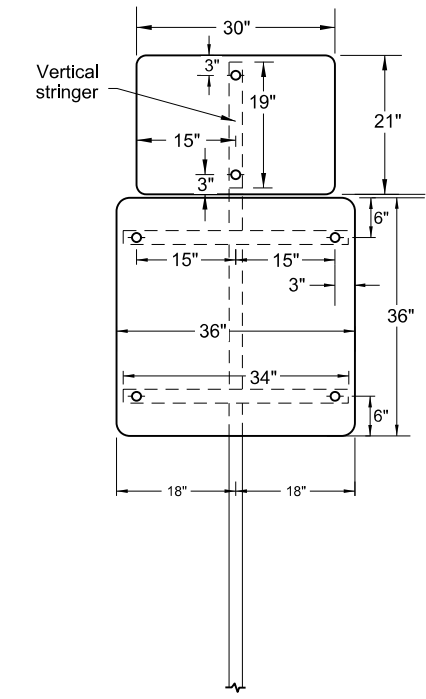


2 Posts

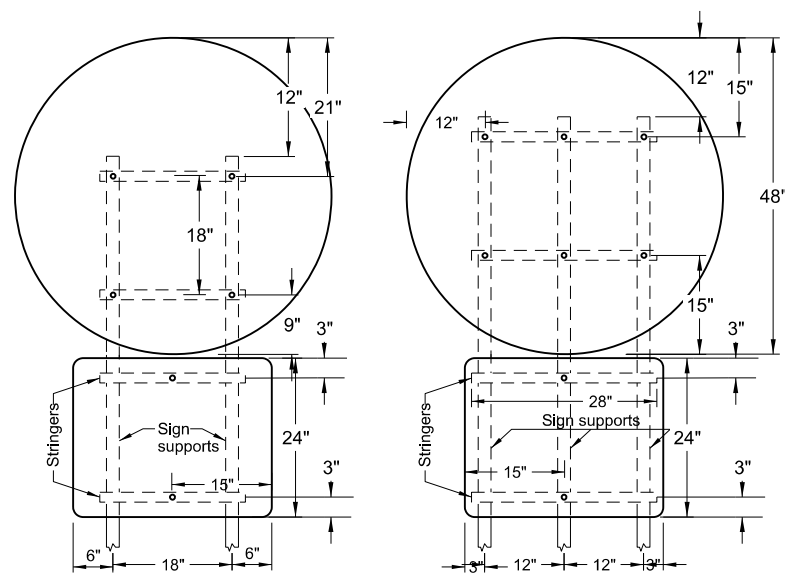
Special Assembly G



3 Posts



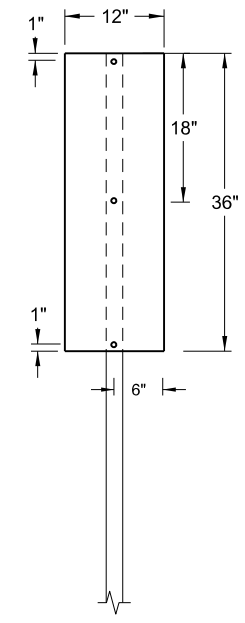
Special Assembly H



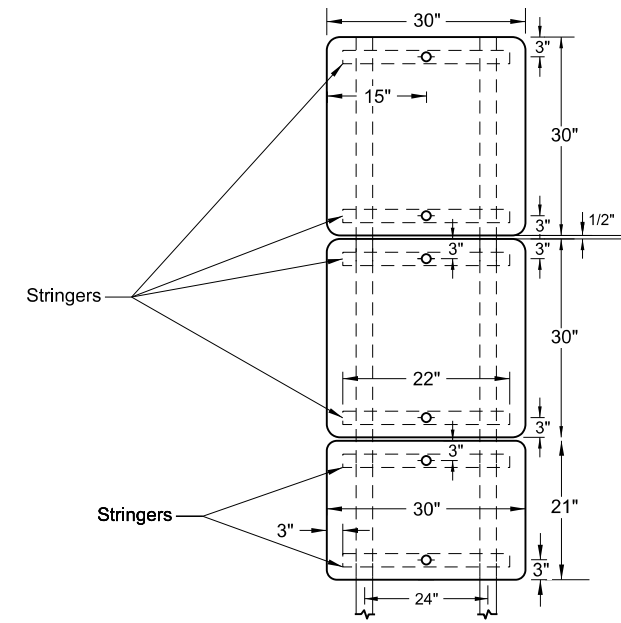
2 Posts

3 Posts

Special Assembly J



Special Assembly K

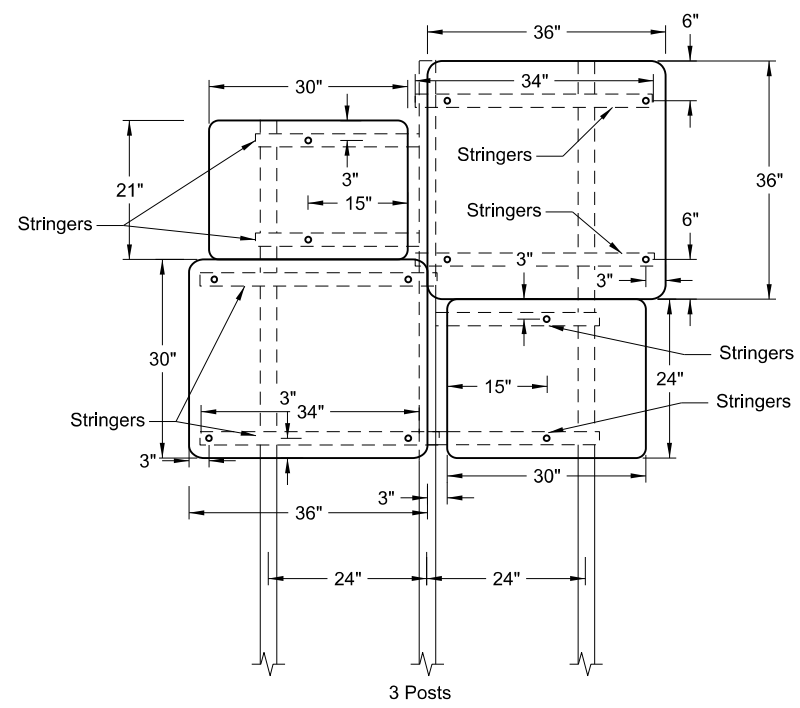


Special Assembly L

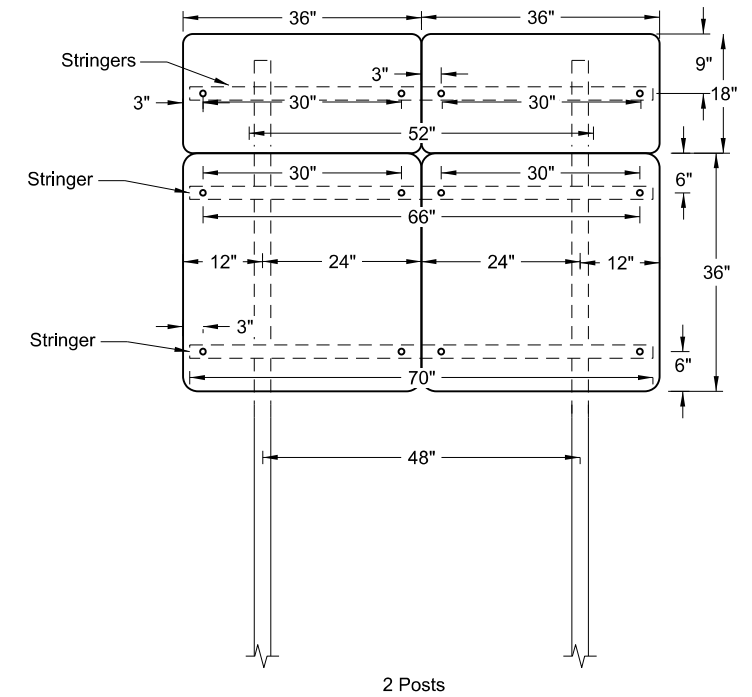
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Sign Special Assemblies
Various Locations

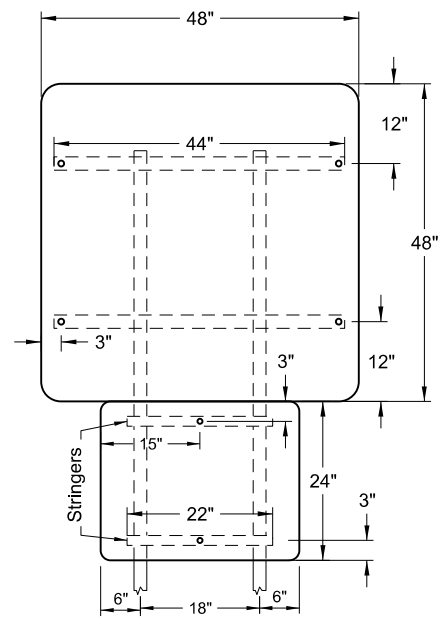
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	432



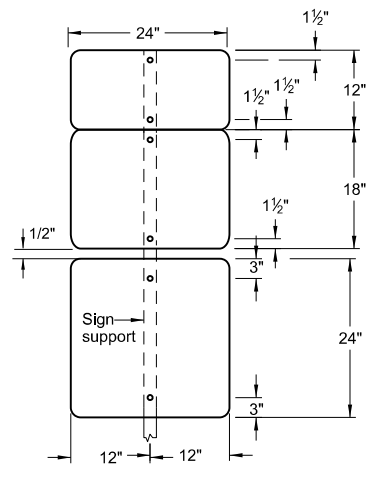
Special Assembly M



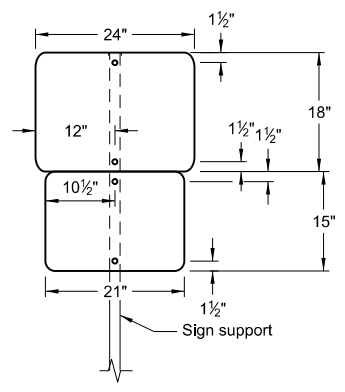
Special Assembly N



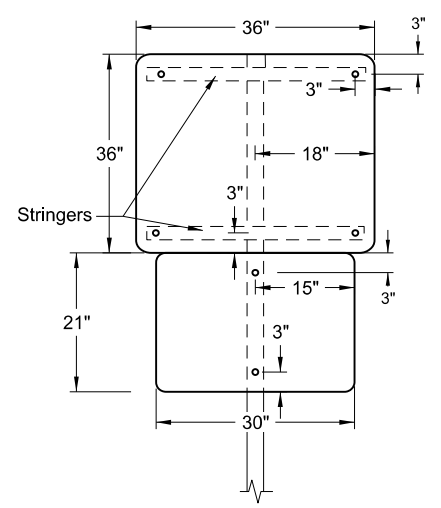
Special Assembly O



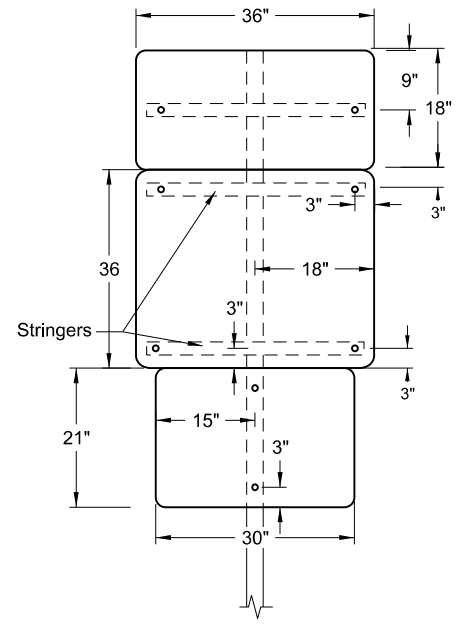
Special Assembly P



Special Assembly Q



Special Assembly R

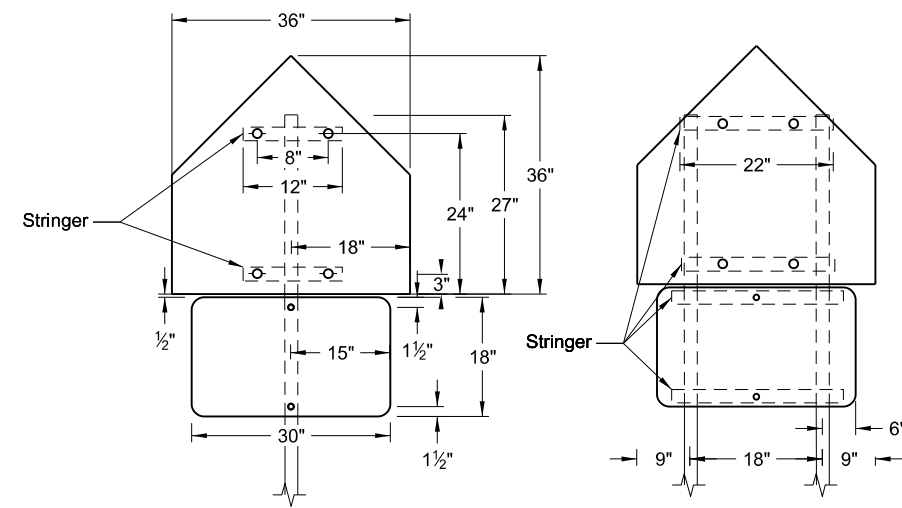


Special Assembly S

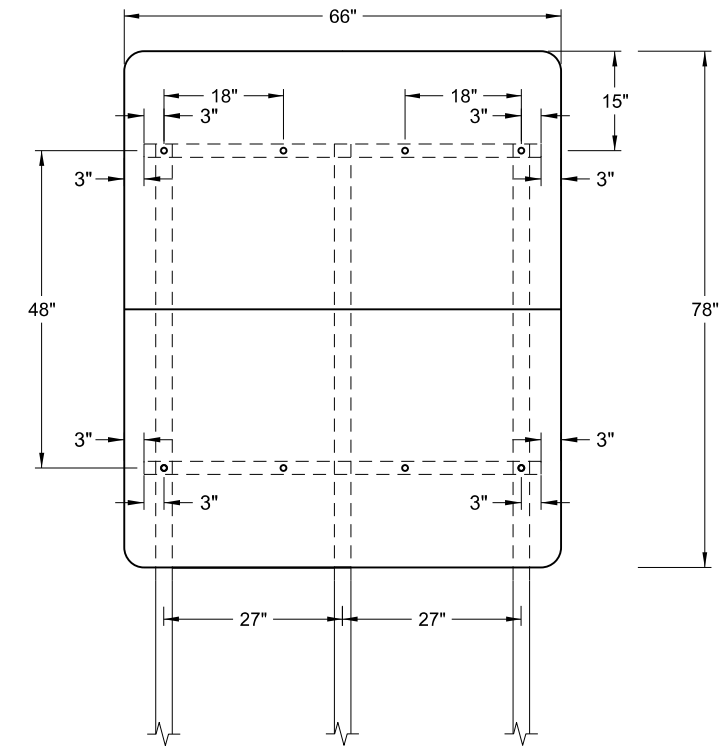
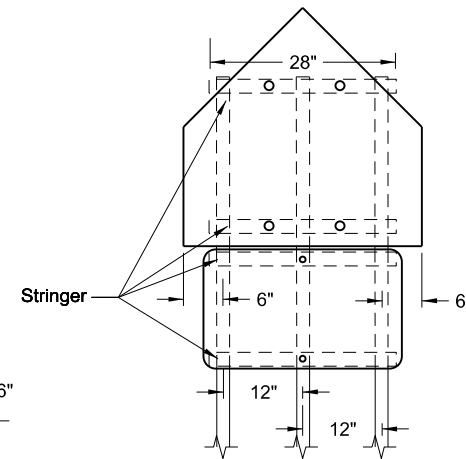
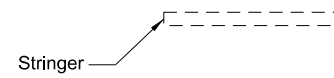
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Sign Special Assemblies
Various Locations

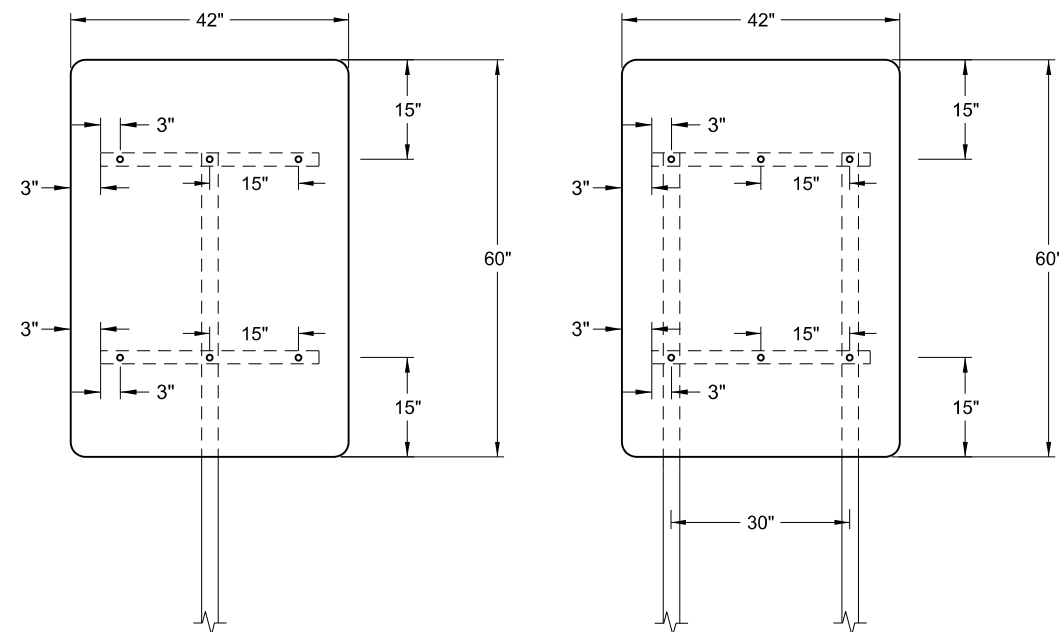
	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	SHE-9-999(346)	110	433



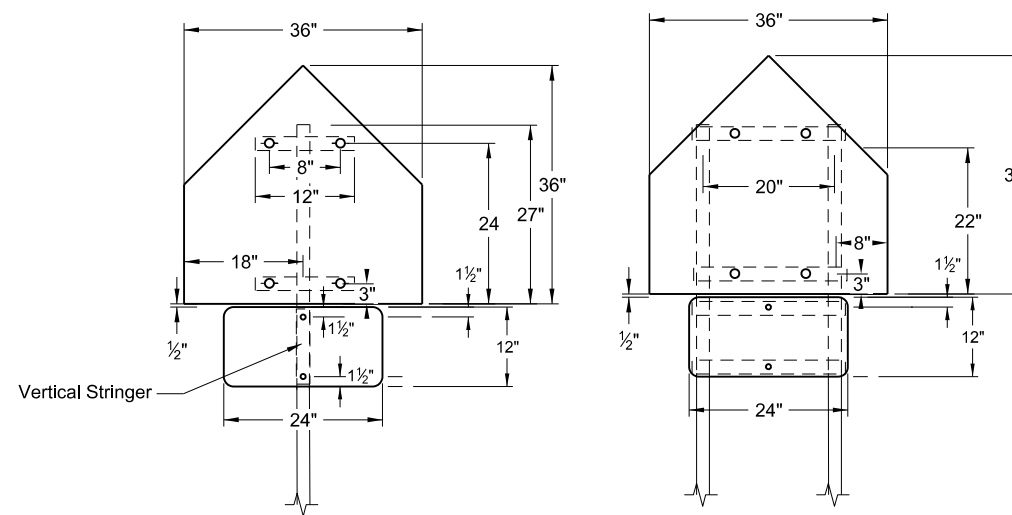
Special Assembly T



Special Assembly U



Special Assembly V

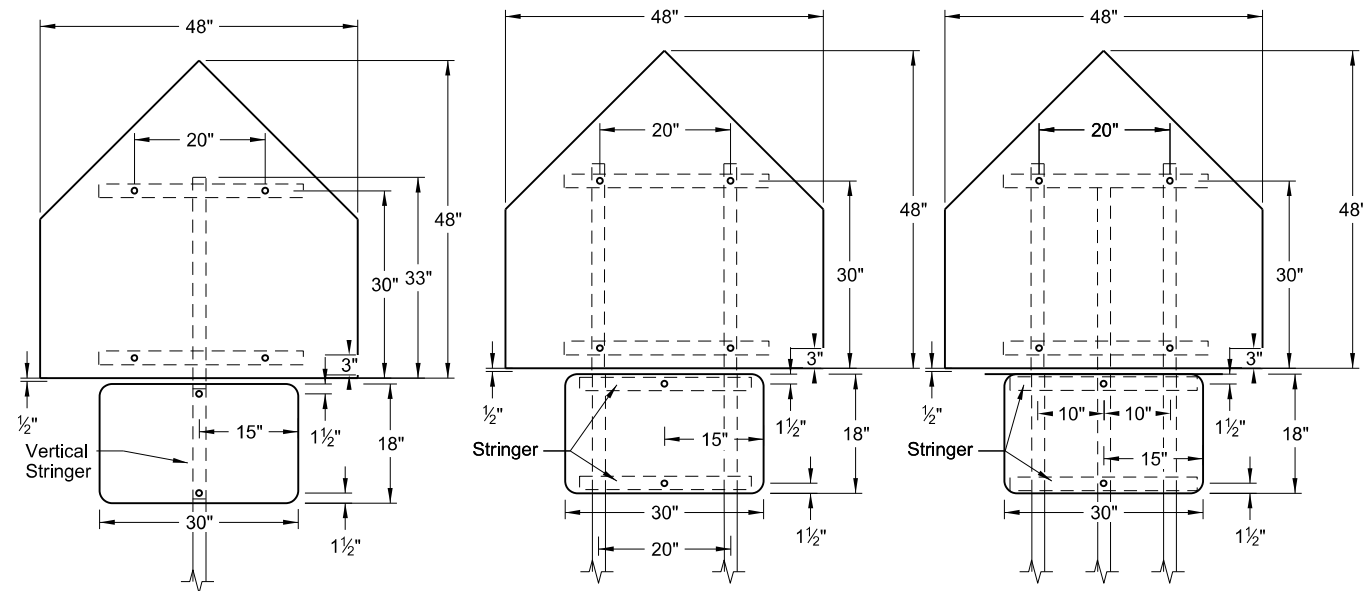


Special Assembly W

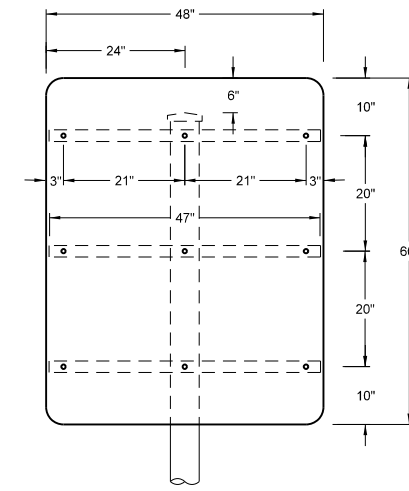
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Sign Special Assemblies
Various Locations

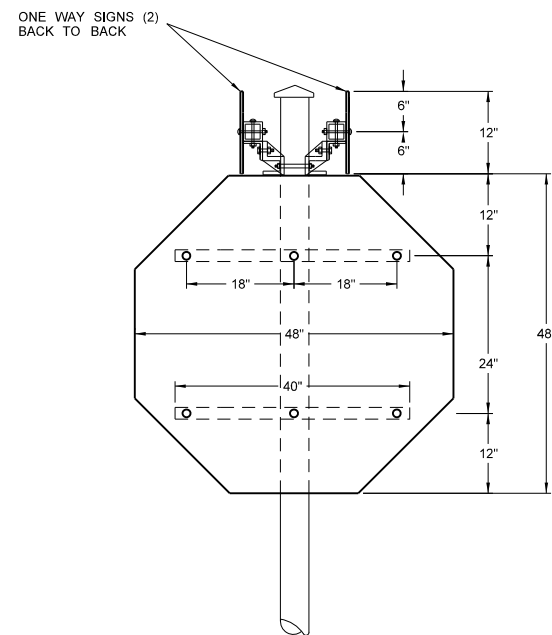
STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SHE-9-999(346)	110	434



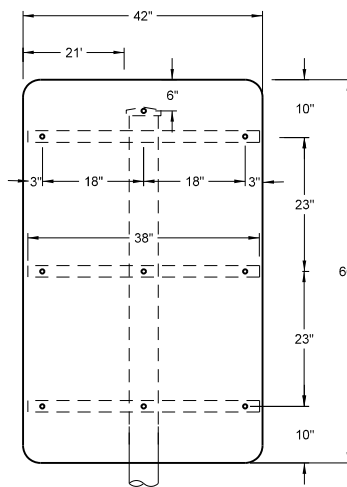
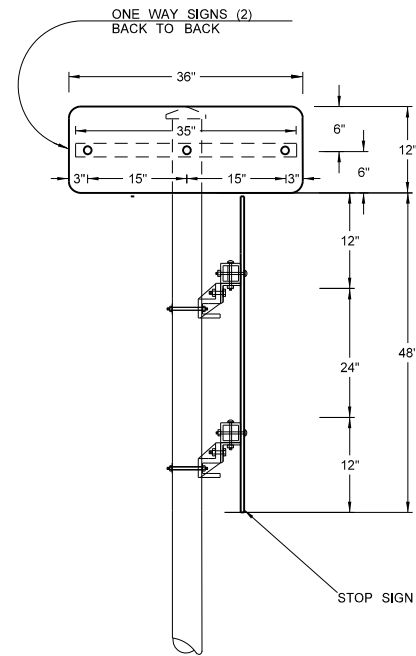
Special Assembly X



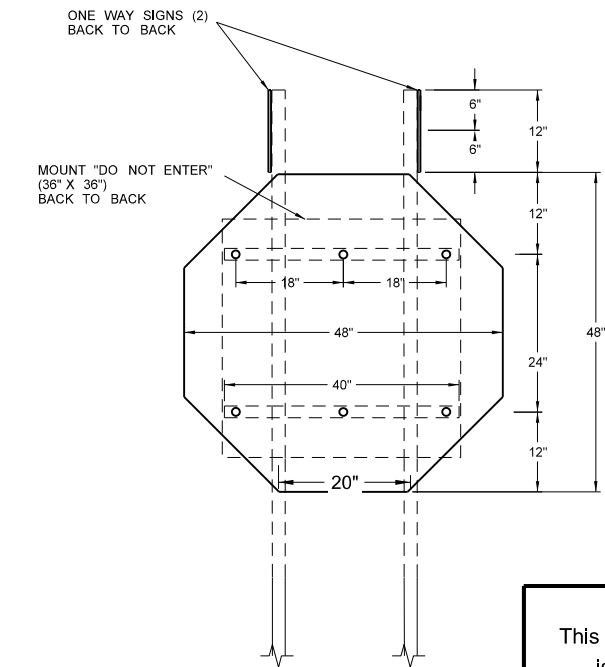
Special Assembly Y



Special Assembly Z



Special Assembly AA



Special Assembly AB

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Sign Special Assemblies
Various Locations

NDDOT ABBREVIATIONS

? This is a special text character used in the labeling of existing features. It indicates a feature that has an unknown characteristic, potentially based on: lack of description, location accuracy or purpose.

Abn abandoned
 Abut abutment
 Ac acres
 Adj adjusted
 Aggr aggregate
 Ahd ahead
 ARV air release valve
 Align alignment
 Al alley
 Alt alternate
 Alum aluminum
 ADA Americans with Disabilities Act
 A ampere
 & and
 Appr approach
 Approx approximate
 ACP asbestos cement pipe
 Asph asphalt
 AC asphalt cement
 Assmd assumed
 @ at
 Atten attenuation
 ATR automatic traffic recorder
 Ave Avenue
 Avg average
 ADT average daily traffic
 Az azimuth
 Bk back
 BF back face
 Bs backsight
 Balc balcony
 B Wire barbed wire
 Barr barricade
 Btry battery
 Brg bearing
 BI beehive inlet
 Beg begin
 BM bench mark
 Bkwy bikeway
 Bit bituminous
 Blk block
 Bd Ft board feet
 BH bore hole
 BS both sides
 Bot bottom
 Blvd Boulevard
 Bndry boundary
 BC brass cap
 Brkwy breakaway
 Br bridge
 Bldg building

BV butterfly valve
 Byp bypass
 C Gdrl cable guardrail
 Calc calculate
 Cd candela
 CIP cast iron pipe
 CB catch basin
 CRS cationic rapid setting
 C Gd cattle guard
 C To C center to center
 Cl or C centerline
 Cm centimeter
 Ch chain
 Chnlk chain-link
 Ch Blk channel block
 Ch Ch channel change
 Chk check
 Chsld chiseled
 Cir circle
 Cl class
 Cl clay
 Cl F clay fill
 Cl Hvy clay heavy
 Cl Lm clay loam
 Clnt clean-out
 Clr clear
 Cl&gr clearing & grubbing
 Co S coal slack
 Comb. combination
 Coml commercial
 Compr compression
 CADD computer aided drafting & design
 Conc concrete
 Cond conductor
 Const construction
 Cont continuous
 CSB continuous split barrel sample
 Contr contraction
 Contr contractor
 CP control point
 Coord coordinate
 Cor corner
 Corr corrected
 CAES corrugated aluminum end section
 CAP corrugated aluminum pipe
 CMES corrugated metal end section
 CMP corrugated metal pipe
 CPVCP corrugated poly-vinyl chloride pipe
 CSES corrugated steel end section
 CSP corrugated steel pipe
 C coulomb
 Co County
 Crse course
 C Gr course gravel
 CS course sand

Ct Court
 Xarm cross arm
 Xbuck cross buck
 Xsec cross sections
 Xing crossing
 Xrd Crossroad
 Crn crown
 CF cubic feet
 M3 cubic meter
 M3/s cubic meters per second
 CY cubic yard
 Cy/mi cubic yards per mile
 Culv culvert
 C&G curb & gutter
 CI curb inlet
 CR curb ramp
 CS curve to spiral
 C cut
 Dd Ld dead load
 Defl deflection
 Defm deformed
 Deg or D degree
 DInt delineate
 DIntr delineator
 Depr depression
 Desc description
 Det detail
 DWP detectable warning panel
 Dtr detour
 Dia diameter
 Dir direction
 Dist distance
 DM disturbed material
 DB ditch block
 DG ditch grade
 Dbl double
 Dn down
 Dwg drawing
 Dr drive
 Drwy driveway
 DI drop inlet
 D dry density
 Ea each
 Esmt easement
 E East
 EB Eastbound
 Elast elastomeric
 EL electric locker
 E Mtr electric meter
 Elec electric/al
 EDM electronic distance meter
 Elev or El elevation
 Ellipt elliptical
 Emb embankment
 Emuls emulsion/emulsified

ES end section
 Engr engineer
 ESS environmental sensor station
 Eq equal
 Eq equation
 Evgr evergreen
 Exc excavation
 Exst existing
 Exp expansion
 Expy Expressway
 E external of curve
 Extru extruded
 FOS factor of safety
 F Fahrenheit
 FS far side
 F farad
 Fed Federal
 FP feed point
 Ft feet/foot
 Fn fence
 Fn P fence post
 FO fiber optic
 FB field book
 FD field drive
 F fill
 FAA fine aggregate angularity
 FS fine sand
 FH fire hydrant
 Fl flange
 Flrd flared
 FES flared end section
 F Bcn flashing beacon
 FA flight auger sample
 FL flow line
 Ftg footing
 FM force main
 Fs foresight
 Fnd found
 Fdn foundation
 Frac fractional
 Frwy freeway
 Frt front
 FF front face
 F Disp fuel dispenser

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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NDDOT ABBREVIATIONS

D-101-2

FFP	fuel filler pipes	IPn	Iron Pin	MC	medium curing	Ped	pedestal
FLS	fuel leak sensor	IP	iron Pipe	M	mega	Ped	pedestrian
Furn	furnish/ed	Jt	joint	Mer	meridian	PPP	pedestrian pushbutton post
Gal	gallon	J	joule	M	meter	Pen.	penetration
Galv	galvanized	Jct	junction	M/s	meters per second	Perf	perforated
Gar	garage	K	kelvin	M	mid ordinate of curve	Per.	perimeter
Gs L	gas line	Kn	kilo newton	Mi	mile	PL	pipeline
G Reg	gas line regulator	Kpa	kilo pascal	MM	mile marker	PI	place
GMV	gas main valve	Kg	kilogram	MP	mile post	P&P	plan & profile
G Mtr	gas meter	Kg/m3	kilogram per cubic meter	MI	milliliter	PL	plastic limit
GSV	gas service valve	Km	kilometer	Mm	millimeter	PI	plate
GVP	gas vent pipe	K	Kip(s)	Mm/hr	millimeters per hour	Pt	point
GV	gate valve	LS	Land Surveyor (licensed)	Min	minimum	PCC	point of compound curve
Ga	gauge	LSIT	Land Surveyor In Training	Misc	miscellaneous	PC	point of curve
Geod	geodetic	Ln	lane	Mon	monument	PI	point of intersection
GIS	Geographical Information System	Lg	large	Mnd	mound	PRC	point of reverse curvature
G	giga	Lat	latitude	Mtbl	mountable	PT	point of tangent
GPS	Global Positioning System	Lt	left	Mtd	mounted	POC	point on curve
Gov	government	L	length of curve	Mtg	mounting	POT	point on tangent
Grd	graded/grade	Lens	lenses	Mk	muck	PE	polyethylene
Gr	gravel	Lvl	level	Mun	municipal	PVC	polyvinyl chloride
Grnd	ground	LB	level book	N	nano	PCC	Portland Cement concrete
GWM	ground water monitor	Lvng	leveling	NGS	National Geodetic Survey	Lb or #	pounds
Gdrl	guardrail	Lht	light	NS	near side	PP	power pole
Gtr	gutter	LP	light pole	Neop	neoprene	Preempt	preemption
H Plg	H piling	Ltg	lighting	Ntwk	network	Prefab	prefabricated
Hdwl	headwall	Lig Co	lignite coal	N	newton	Prfmd	performed
Ha	hectare	Lig Sl	lignite slack	N	North	Prep	preparation
Ht	height	LF	linear foot	NE	North East	Press.	pressure
HI	height of instrument	Liq	liquid	NW	North West	PRV	pressure relief valve
Hel	helical	LL	liquid limit	NB	Northbound	Prestr	prestressed
H	henry	L	litre	No. or #	number	Pvt	private
HZ	hertz	Lm	loam	Obsc	obscure(d)	PD	private drive
HDPE	high density polyethylene	Loc	location	Obsn	observation	Prod.	production/produce
HM	high mast	LC	long chord	Ocpd	occupied	Prog	programmed
HP	high pressure	Long.	longitude	Ocpy	occupy	Prop.	property
HPS	high pressure sodium	Lp	loop	Off Loc	office location	Prop Ln	property line
Hwy	highway	LD	loop detector	O/s	offset	Ppsd	proposed
Hor	horizontal	Lm	lumen	OC	on center	PB	pull box
HBP	hot bituminous pavement	Lum	luminaire	C	one dimensional consolidation		
HMA	hot mix asphalt	L Sum	lump sum	OC	organic content		
Hr	hour(s)	Lx	lux	Orig	original		
Hyd	hydrant	ML	main line	O To O	out to out		
Ph	hydrogen ion content	M Hr	man hour	OD	outside diameter		
Id	identification	MH	manhole	OH	overhead		
In or "	inch	Mkd	marked	PMT	pad mounted transformer		
Incl	inclinometer tube	Mkr	marker	Pg	pages		
IMH	inlet manhole	Mkg	marking	Pntd	painted		
ID	inside diameter	MA	mast arm	Pr	pair		
Inst	instrument	Matl	material	Pnl	panel		
Intchg	interchange	Max	maximum	Pk	park		
Intmdt	intermediate	MC	meander corner	PK	Parker-Kalon nail		
Intscn	intersection	Meas	measure	Pa	pascal		
Inv	invert	Mdn	median	PSD	passing sight distance		
IM	iron monument	MD	median drain	Pvmt	pavement		

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NDDOT ABBREVIATIONS

D-101-3

Qty	quantity	SN	sign number	Tan	tangent	Wb	weber
Qtr	quarter	Sig	signal	T	tangent (semi)	WIM	weigh in motion
Rad or R	radius	Si Cl	silt clay	TS	tangent to spiral	W	west
RR	railroad	Si Cl Lm	silty clay loam	Tel	telephone	WB	westbound
Rlwy	railway	Si Lm	silty loam	Tel B	Telephone Booth	Wrng	wiring
Rsd	raised	Sgl	single	Tel P	telephone pole	W/	with
RTP	random traverse point	SC	slow curing	Tv	television	W/o	without
Rge or R	range	SS	slow setting	Temp	temperature	WC	witness corner
RC	rapid curing	Sm	small	Temp	temporary	WGS	world geodetic system
Rec	record	S	South	TBM	temporary bench mark	Z	zenith
Rcy	recycle	SE	South East	T	tesla		
RAP	recycled asphalt pavement	SW	South West	T	thinwall tube sample		
RPCC	recycled portland cement concrete	SB	Southbound	T/mi	tons per mile		
Ref	reference	Sp	spaces	Ts	topsoil		
R Mkr	reference marker	Spcl	special	Twp or T	township		
RM	reference monument	SA	special assembly	Traf	traffic		
Refl	reflectorized	SP	special provisions	TSCB	traffic signal control box		
RCB	reinforced concrete box	G	specific gravity	Tr	trail		
RCES	reinforced concrete end section	Spk	spike	Transf	transformer		
RCP	reinforced concrete pipe	SC	spiral to curve	TB	transit book		
RCPS	reinforced concrete pipe sewer	ST	spiral to tangent	Trans	transition		
Reinf	reinforcement	SB	split barrel sample	TT	transmission tower		
Res	reservation	SH	sprinkler head	Trans	transverse		
Ret	retaining	SV	sprinkler valve	Trav	traverse		
Rev	reverse	Sq	square	TP	traverse point		
Rt	right	SF	square feet	Trtd	treated		
R/W	right of way	Km2	square kilometer	Trmt	treatment		
Riv	river	M2	square meter	Qc	triaxial compression		
Rd	road	SY	square yard	TERO	tribal employment rights ordinance		
Rdbd	road bed	Stk	stake	Tpl	triple		
Rdwy	roadway	Std	standard	TP	turning point		
RWIS	roadway weather information system	N	standard penetration test	Typ	typical		
Rk	rock	Std Specs	standard specifications	Qu	unconfined compressive strength		
Rt	route	Sta	station	Ugrnd	underground		
Salv	salvage(d)	Sta Yd	station yards	USC&G	US Coast & Geodetic Survey		
Sd	sand	Stm L	steam line	USGS	US Geologic Survey		
Sdy Cl	sandy clay	SEC	steel encased concrete	Util	utility		
Sdy Cl Lm	sandy clay loam	SMA	stone matrix asphalt	VG	valley gutter		
Sdy Fl	sandy fill	SSD	stopping sight distance	Vap	vapor		
Sdy Lm	sandy loam	SD	storm drain	Vert	vertical		
San	sanitary sewer line	St	street	VC	vertical curve		
Sc	scoria	SPP	structural plate pipe	VCP	vitrified clay pipe		
Sec	seconds	SPPA	structural plate pipe arch	V	volt		
Sec	section	Str	structure	Vol	volume		
SL	section line	Subd	subdivision	Wkwy	walkway		
Sep	separation	Sub	subgrade	W	water content		
Seq	sequence	Sub Prep	subgrade preperation	WGV	water gate valve		
Serv	service	Ss	subsoil	WL	water line		
Sh	shale	SE	superelevation	WM	water main		
Sht	sheet	SS	supplement specification	WMV	water main valve		
Shtng	sheeting	Supp	supplemental	W Mtr	water meter		
Shldr	shoulder	Surf	surfacing	WSV	water service valve		
Sw	sidewalk	Surv	survey	WW	water well		
S	siemens	Sym	symmetrical	W	watt		
SD	sight distance	SI	systems international	Wrng	wearing		

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NDDOT UTILITY COMPANY AND ORGANIZATION ABBREVIATIONS

D-101-10

702COM 702 Communications
 ACCENT Accent Communications
 AGASSIZ WU Agassiz Water Users Incorporated
 AGC Associated General Contractors of America
 AII PI Alliance Pipeline
 ALL SEAS WU All Seasons Water Users Association
 AMOCO PI Amoco Pipeline Company
 AMRDA HESS Amerada Hess Corporation
 AT&T AT&T Corporation
 B PAW Bear Paw Energy Incorporated
 BAKER ELEC Baker Electric
 BASIN ELEC Basin Electric Cooperative Incorporated
 BEK TEL Bek Communications Cooperative
 BELLE PL Belle Fourche Pipeline Company
 BLM Bureau of Land Management
 BNSF Burlington Northern Santa Fe Railway
 BOEING Boeing
 BRNS RWD Barnes Rural Water District
 BURK-DIV ELEC Burke-Divide Electric Cooperative
 BURL WU Burleigh Water Users
 Cable One Cable One
 CABLE SERV Cable Services
 CAP ELEC Capital Electric Cooperative Incorporat
 CASS CO ELEC Cass County Electric Cooperative
 CASS RWU Cass Rural Water Users Incorporated
 CAV ELEC Cavalier Rural Electric Cooperative
 CBLCOM Cablecom Of Fargo
 CENEX PL Cenex Pipeline
 CENT PL WATER DIST Central Pipe Line Water District
 CENT PWR ELEC Central Power Electric Cooperative
 COE Corps of Engineers
 CONS TEL Consolidated Telephone
 CONT RES Continental Resource Inc
 CPR Canadian Pacific Railway
 D O E Department Of Energy
 DAK CARR Dakota Carrier Network
 DAK CENT TEL Dakota Central Telephone
 DAK RWD Dakota Rural Water District
 DGC Dakota Gasification Company
 DICKEY R NET Dickey Rural Networks
 DICKEY RWU Dickey Rural Water Users Association
 DICKEY TEL Dickey Telephone
 DNRR Dakota Northern Railroad
 DOME PL Dome Pipeline Company
 DVELEC Dakota Valley Electric Cooperative
 DVMW Dakota, Missouri Valley & Western
 ENBRDG Enbridge Pipelines Incorporated
 ENVENTIS Enventis Telephone
 FALK MNG Falkirk Mining Company
 FHWA Federal Highway Administration
 G FKS-TRL WD Grand Forks-traill Water District
 GETTY TRD & TRAN Getty Trading & Transportation
 GLDN W ELEC Golden West Electric Cooperative
 GRGS CO TEL Griggs County Telephone

GT PLNS NAT GAS Great Plains Natural Gas Company
 HALS TEL Halstad Telephone Company
 IDEA1 Idea1
 INT-COMM TEL Inter-Community Telephone Company
 KANEB PL Kaneb Pipeline Company
 KEM ELEC Kem Electric Cooperative Incorporated
 KOCH GATH SYS Koch Gathering Systems Incorporated
 LKHD PL Lakehead Pipeline Company
 LNGDN RWU Langdon Rural Water Users Incorporated
 LWR YELL R ELEC Lower Yellowstone Rural Electric
 MCKNZ CON McKenzie Consolidated Telcom
 MCKENZIE ELEC McKenzie Electric Cooperative
 MCKNZ WRD McKenzie County Water Resource District
 MCLEOD McLeod USA
 MCLN ELEC McLean Electric Cooperative
 MCLN-SHRDN R WAT McLean-Sheridan Rural Water
 MDU Montana-dakota Utilities
 MID-CONT CABLE Mid-Continent Cable
 MIDSTATE TEL Midstate Telephone Company
 MINOT CABLE Minot Cable Television
 MINOT TEL Minot Telephone Company
 MISS W W S Missouri West Water System
 MNKOTA PWR Minnkota Power
 MOR-GRAN-SOU ELEC Mor-gran-sou Electric Cooperative
 MOUNT-WILLI ELEC Mountrail-williams Electric Cooperative
 MRE LBTY TEL Moore & Liberty Telephone
 MUNICIPAL City Water And Sewer
 MUNICIPAL City Of '.....'
 N CENT ELEC North Central Electric Cooperative
 N VALL W DIST North Valley Water District
 ND PKS & REC North Dakota Parks And Recreation
 ND TEL North Dakota Telephone Company
 NDDOT North Dakota Department of Transportation
 NDSU SOIL SCI DEPT NDSU Soil Science Department
 NEMONT TEL Nemont Telephone
 NODAK R ELEC Nodak Rural Electric Cooperative
 NOON FRMS TEL Noonan Farmers Telephone Company
 NPR Northern Plains Railroad
 NSP Northern States Power
 NTH PRAIR RW Northern Prairie Rural Water Association
 NTHN BRDR PL Northern Border Pipeline
 NTHN PLNS ELEC Northern Plains Electric Cooperative Incorporated
 NTHWSTRN REF Northwestern Refinery Company
 NW COMM Northwest Communication Cooperation
 ONEOK Oneok gas
 OSHA Occupational Safety and Health Administration
 OTTR TL PWR Otter Tail Power Company
 P L E M Prairielands Energy Marketing
 POLAR COM Polar Communications
 PVT ELEC Private Electric
 QWEST Qwest Communications
 R & T W SUPPLY R & T Water Supply Association
 RAMSEY R SEW Ramsey Rural Sewer Association
 RAMSEY RW Ramsey Rural Water Association
 RAMSEY UTIL Ramsey County Rural Utilities

RED RIV TEL Red River Rural Telephone
 RESVTN TEL Reservation Telephone
 ROBRTS TEL Roberts Company Telephone
 R-RIDER ELEC Roughrider Electric Coop
 RRVW Red River Valley & Western Railroad
 RSR ELEC R.S.R. Electric Cooperative
 S E W U South East Water Users Incorporated
 SCOTT CABLE Scott Cable Television Dickinson
 SHERDN ELEC Sheridan Electric Cooperative
 SHEYN VLY ELEC Sheyenne Valley Electric Cooperative
 SKYTECH Skyland Technologies Incorporated
 SLOPE ELEC Slope Electric Cooperative Incorporated
 SOURIS RIV TELCOM Souris River Telecommunications
 ST WAT COMM State Water Commission
 STATE LN WATER State Line Water Cooperative
 STER ENG Sterling Energy
 STUT RWU Stutsman Rural Water Users
 SW PL PRJ Southwest Pipeline Project
 T M C Turtle Mountain Communications
 TCI TCI of North Dakota
 TESORO GHG PLNS PL Tesoro High Plains Pipeline
 TRI-CNTY WU Tri-County Water Users Incorporated
 TRL CO RWU Traill County Rural Water Users
 UNTD TEL United Telephone
 UPPR SOUR WUA Upper Souris Water Users Association
 US SPRINT U.S. Sprint
 USAF MSL CABLE U.S.A.F. Missile Cable
 USFWS US Fish and Wildlife Service
 USW COMM U.S. West Communications
 VRNDRY ELEC Verendrye Electric Cooperative
 W RIV TEL West River Telephone Incorporated
 WEB W. E. B. Water Development Association
 WILLI RWA Williams Rural Water Association
 WILSTN BAS PL Williston Basin Interstate Pipeline Company
 WLSH RWD Walsh Water Rural Water District
 WOLVRTN TEL Wolverton Telephone
 XLENER Xcel Energy
 YSVR Yellowstone Valley Railroad

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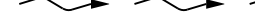
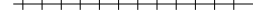
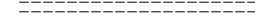
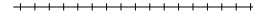
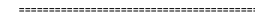

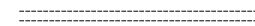


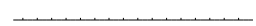

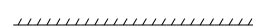

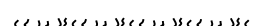










Line Styles

.....	Limits of Const Transition Line	—— s —— s ——	Floating Silt Curtain	—— ——— ———	Existing Aggregate (Cross Section View)	- - - - -	Existing Centerline
.....	Bale Check	—— ——— T ——	Existing Telephone Line	—— ——— ———	Existing Curb and Gutter (Cross Section View)	- - - - -	Supplemental Contour
.....	Rock Check	—— ——— TV ——	Existing TV Line	—— ——— ———	Existing Riprap	—— - - - - -	Right of Way
.....	Sight Distance Triangle Line	Void — void — void — v	Existing Assumed Ground (Not Surveyed)	—— ——— ———	Existing Underground Vault or Lift Station	—— - - - - -	Existing Right of Way
- - - - -	Small Hidden Object	Void — void — void — v	Tentative Ground Line	—— ——— ———	Tangent Line	—— - - - - -	Existing Right of Way Railroad
- - - - -	Dimension Leader	—— ——— w ——	Existing Water or Steam Line	- - - - -	Hidden Object	- - - - -	Failure Line
- - - - -	Existing Ground	=====	Existing Under Drain	—— ——— ———	Existing Dirt Surface	- - - - -	Existing Conditions
- - - - -	Existing Topsoil (Cross Section View)	=====	Under Drain	—— ——— ———	Existing Conduit	- - - - -	Existing Ground (Details)
—— ——— ———	Large Hidden Object	=====	Wall	—— ——— ———	Topsoil Profile	—— - - - - -	Existing Sixteenth Section Line
—— ——— ———	Edge Drain	=====	Existing Slotted Drain	- - - - -	Existing Conductor	- - - - -	Existing Right of Way Not State Owned
—— D —— D ——	Geotextile Fabric Type D	—— + —— + ——	Existing Cemetary Boundary	- - - - -	Conductor	- - - - -	Phantom Object
—— ——— E ——	Existing Electrical	—— ——— ———	Centerline Pavement Marking	- - - - -	Fiber Optic	- - - - -	Centerline Main
—— ——— FO ——	Existing Fiber Optic Line	=====	Barrier with Centerline Pavement Marking	- - - - -	Existing Loop Detector	-	Existing Guardrail Cable
—— ——— FO ——	Existing TV Fiber Optic	=====	Barrier Pavement Marking	- - - - -	Subgrade, Subcut or Ditch Grade	— . — . — . — .	Existing Guardrail Metal
—— ——— G ——	Existing Gas Pipe	- - - - -	Stripe 4 IN Dotted Extension White	—— ——— ———	Existing Asphalt Surface	—— . ——— . ——— .	Existing Edge of Water
—— Geo —— Geo ——	Geogrid	- - - - -	Stripe 8 IN Dotted Extension White	—— ——— ———	Existing Asphalt (Cross Section View)	- - - - -	Excavation Limits
—— ——— OH ——	Existing Overhead Utility Line	- - - - -	Stripe 8 IN Lane Drop	—— ——— ———	Existing Reinforcement Rebar	——	Existing Government Lot Line
—— ——— P ——	Existing Power	—— v v v v ——	Wetland Mitigation	—— ——— ———	Existing Tie Point Line	Existing Adjacent Block Lines
—— ——— PL ——	Existing Fuel Pipeline	- - - - -	Existing Box Culvert Bridge	—— ——— ———	Existing State or International Line	Existing Adjacent Lot Lines
—— ——— PL ——	Existing Undefined Above Ground Pipe Line	- - - - -	Existing Concrete Surface	—— ——— ———	Existing Quarter Section Line	Existing Adjacent Property Line
—— ——— R —— R ——	Geotextile Fabric Type R	- - - - -	Existing Drainage Structure	—— ——— ———	Existing County	Existing Adjacent Subdivision Lines
—— ——— R —— R ——	Geotextile Fabric Type R1	- - - - -	Easement	—— ——— ———	Existing Section Line		
—— REMOVE —— REMOVE ——	Remove Line	- - - - -	Existing Concrete	—— ——— ———	Existing Township		
—— RR —— RR ——	Geotextile Fabric Type RR	- - - - -	Existing Easement	—— ——— ———	Existing Railroad Centerline		
—— S —— S ——	Geotextile Fabric Type S	—— ——— ———	Existing Gravel Surface	—— - - - - -	Centerline		

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Line Styles

	Subgrade Reinforcement		Existing Railroad Switch		Sheet Piling
	Existing Down Guy Wire Down Guy		Overhead Sign Structure Cantilever		W-Beam w Posts
	Existing Fence		24 Inch Pipe		Existing W-Beam Guardrail with Posts
	Existing Railroad		Reinforced Concrete Pipe		Exst Wet Area-Vegetation Break
	Existing Sanitary Sewer		Signal Head with Mast Arm		Existing Wetland Delineated
	Existing Sanitary Force Main		Existing Signal Head with Mast Arm		
	Existing Storm Drain		Tie Bar at Random Spacing		
	Existing Storm Drain Force Main		3-Cable w Posts		
	Fence		Existing 3-Cable w Posts		
	Silt Fence		Site Boundary		
	Existing Field Line		Fiber Rolls		
	Exst Flow		Doweled Joint		
	Flow		Tie Bar 30 Inch 4 Foot Center to Center		
	Existing Culvert		Tie Bar 18 Inch 3 Foot Center to Center		
	Existing Curb		Existing Berm, Dike, Pit, or Earth Dam		
	Existing Valley Gutter		Existing Ditch Block		
	Existing Driveway Gutter		Depression Contours		
	Existing Curb and Gutter		Existing City Corporate Limits or Reservation Boundary		
	Existing Mountable Curb and Gutter		Gravel Pit - Borrow Area		
	Existing Double Micro Loop Detector		Existing Tree Boundary		
	Micro Loop Detector Double		Tree Row		
	Existing Overhead Sign Structure		Existing Brush or Shrub Boundary		
	Existing Micro Loop Detector		Existing Retaining Wall		
	Micro Loop Detector		Existing Planter or Wall		
	Existing Overhead Sign Structure Cantilever		Retaining Wall (Plan View)		

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






























Symbols

	North Arrow (Half Scale)		Attenuation Device		Existing Railroad Battery Box		Existing Delineator Type E
	Truck Mounted Attenuator		Diamond Grade Delineator Type A		Existing Bush or Shrub		Existing EFB Misc
	Type I Barricade		Diamond Grade Delineator Type B		Existing Gas Cap or Stub		Existing Flashing Beacon
	Type II Barricade		Diamond Grade Delineator Type C		Existing Sanitary Cap or Stub		Existing Pipe Mounted Flasher
	Type III Barricade		Diamond Grade Delineator Type D		Existing Storm Drain Cap or Stub		Existing Pad Mounted Feed Point
	Catch Basin		Diamond Grade Delineator Type E		Existing Water Cap or Stub		Existing Pipe Mounted Feed Point with Pad
	Cairn or Stone Circle		Flexible Delineator		Existing Sanitary Cleanout		Existing Pole Mounted Feed Point
	Video Detection Camera		Flexible Delineator Type A		Existing Concrete Foundation		Existing Railroad Frog
	Storm Drain Cap or Stub		Flexible Delineator Type B		Existing Traffic Signal Controller		Existing Snow Gate 18
	Corrugated Metal End Section 18 Inch		Flexible Delineator Type C		Existing Pad Mounted Signal Controller		Existing Snow Gate 28
	Corrugated Metal End Section 24 Inch		Flexible Delineator Type D		Existing Sixteenth Section Corner		Existing Snow Gate 40
	Corrugated Metal End Section 30 Inch		Flexible Delineator Type E		Existing Quarter Section Corner		Existing Headwall
	Corrugated Metal End Section 36 Inch		Delineator Type A		Existing Section Corner		Existing Pedestrian Head with Number
	Corrugated Metal End Section 42 Inch		Delineator Type A Reset		Existing Railroad Crossbuck		Existing Signal Head
	Corrugated Metal End Section 48 Inch		Delineator Type B		Existing Satellite Dish		Existing Sprinkler Head
	Concrete Foundation		Delineator Type B Reset		Existing Fuel Dispensers		Existing Fire Hydrant
	Ground Connection Conductor		Delineator Type C		Existing Flexible Delineator Type A		Existing Catch Basin Drop Inlet
	Neutral Connection Conductor		Delineator Type D		Existing Flexible Delineator Type B		Existing Curb Inlet
	Phase 1 Connection Conductor		Delineator Type E		Existing Flexible Delineator Type C		Existing Manhole Inlet
	Phase 2 Connection Conductor		Delineator Drums		Existing Flexible Delineator Type D		Existing Junction Box
	Traffic Cone		Spot Elevation		Existing Flexible Delineator Type E		
	Signal Controller		Existing Access Control Arrow		Existing Delineator Type A		
	Pad Mounted Signal Controller		Existing Artifact		Existing Delineator Type B		
	Alignment Data Point		Existing Flashing Beacon		Existing Delineator Type C		
	Emergency Vehicle Detector		Existing Benchmark		Existing Delineator Type D		

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Symbols































































































	Existing Light Standard		Existing Manhole with Valve Water		Existing Telephone Pole		Existing Undefined Manhole
	Existing High Mast Light Standard 10 Luminaire		Existing Water Manhole		Existing Wood Pole		Existing Undefined Pull Box
	Existing High Mast Light Standard 3 Luminaire		Existing Mile Post Type A		Existing Post		Existing Undefined Pedestal
	Existing High Mast Light Standard 4 Luminaire		Existing Mile Post Type B		Existing Pedestrian Push Button Post		Existing Undefined Valve
	Existing High Mast Light Standard 5 Luminaire		Existing Mile Post Type C		Existing Control Point CP		Existing Undefined Pipe Vent
	Existing High Mast Light Standard 6 Luminaire		Existing Reference Marker		Existing Control Point GPS-RTK		Existing Gas Valve
	Existing High Mast Light Standard 7 Luminaire		Existing RW Marker		Existing Control Point TRI		Existing Water Valve
	Existing High Mast Light Standard 8 Luminaire		Existing Utility Marker		Existing Reference Marker Point NGS		Existing Fuel Pipe Vent
	Existing High Mast Light Standard 9 Luminaire		Iron Monument Found		Existing Pull Box		Existing Gas Pipe Vent
	Existing Overhead Sign Structure Load Center		Iron Pin R/W Monument		Existing Intelligent Transportation Pull Box		Existing Sanitary Pipe Vent
	Existing Luminaire		Existing Object Marker Type I		Existing Water Pump		Existing Storm Drain Pipe Vent
	Existing Light Standard Luminaire		Existing Object Marker Type II		Existing Slotted Reinforced Concrete Pipe		Existing Water Pipe Vent
	Existing Federal Mailbox		Existing Object Marker Type III		Existing RR Profile Spot		Existing Weather Station
	Existing Private Mailbox		Existing Electrical Pedestal		Existing Fuel Leak Sensors		Existing Ground Water Well Bore Hole
	Existing Meander Section Corner		Existing Telephone Pedestal		Existing Highway Sign		Existing Windmill or Tower
	Existing Meter		Existing Fiber Optic Telephone Pedestal		Existing Miscellaneous Spot		Existing Witness Corner
	Existing Electrical Manhole		Existing TV Pedestal		Existing Lighting Standard Pole		Flashing Beacon
	Existing Gas Manhole		Existing Fiber Optic TV Pedestal		Existing Traffic Signal Standard		Flagger
	Existing Sanitary Manhole		Existing Fuel Filler Pipes		Existing Transformer		Pipe Mounted Flasher
	Existing Sanitary Force Main Manhole		Existing Traverse PI Aerial Panel		Existing Large Evergreen Tree		Sanitary Force Main with Valve
	Existing Sanitary Manhole with Valve		Existing Pole		Existing Small Evergreen Tree		
	Existing Storm Drain Manhole		Existing Power Pole		Existing Large Tree		
	Existing Force Main Storm Drain Manhole		Existing Power Pole with Transformer		Existing Small Tree		
	Existing Force Main Storm Drain Manhole with Valve				Existing Tree Trunk		
	Existing Telephone Manhole				Existing Pad Mounted Traffic Signal Control Box		

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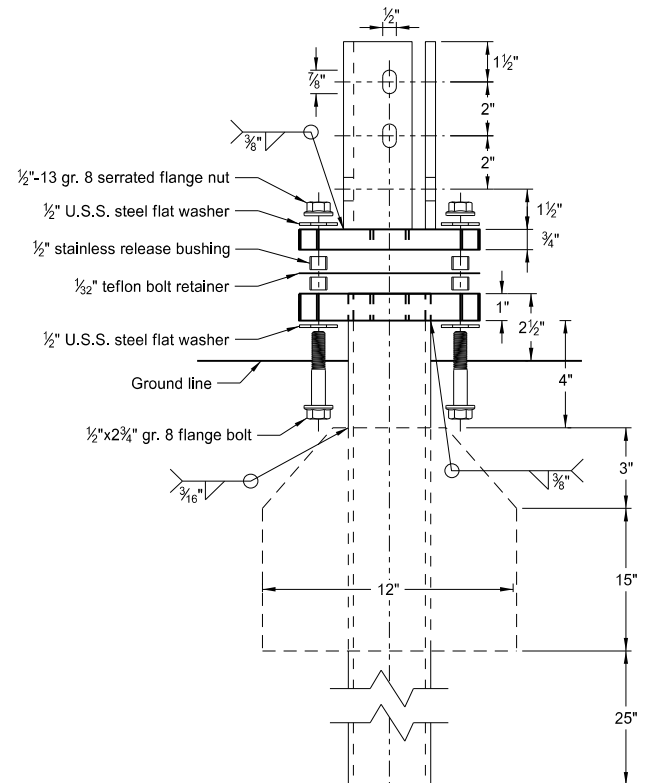
Symbols

D-101-32

 Pad Mounted Feed Point  Pipe Mounted Feed Point with Pad  Pole Mounted Feed Point  Headwall  Double Headwall with Vegetation Barrier  Single Headwall with Vegetation Barrier  Pole Mounted Head  Sprinkler Head  Fire Hydrant  Inlet Type 1  Inlet Type 2  Double Inlet Type 2  Inlet Gate Type 2  Junction Box  High Mast Light Standard 10 Luminaire  High Mast Light Standard 3 Luminaire  High Mast Light Standard 4 Luminaire  High Mast Light Standard 5 Luminaire  High Mast Light Standard 6 Luminaire  High Mast Light Standard 7 Luminaire  High Mast Light Standard 8 Luminaire  High Mast Light Standard 9 Luminaire  Relocate Light Standard  Overhead Sign Structure Load Center  Light Standard 100 Watt High Pressure Sodium Vapor Luminaire	 Light Standard 1000 Watt High Pressure Sodium Vapor Luminaire  Light Standard 150 Watt High Pressure Sodium Vapor Luminaire  Light Standard 175 Watt High Pressure Sodium Vapor Luminaire  Light Standard 200 Watt High Pressure Sodium Vapor Luminaire  Light Standard 250 Watt High Pressure Sodium Vapor Luminaire  Light Standard 310 Watt High Pressure Sodium Vapor Luminaire  Light Standard 35 Watt High Pressure Sodium Vapor Luminaire  Light Standard 400 Watt High Pressure Sodium Vapor Luminaire  Light Standard 50 Watt High Pressure Sodium Vapor Luminaire  Light Standard 70 Watt High Pressure Sodium Vapor Luminaire  Light Standard 700 Watt High Pressure Sodium Vapor Luminaire  Manhole  Manhole 48 Inch  Sanitary Force Main Manhole  Sanitary Sewer Manhole  Storm Drain Manhole  Storm Drain Manhole with Inlet  Reset Mile Post  Mile Post Type A  Mile Post Type B  Mile Post Type C  Right of Way Marker  Tubular Marker  Alignment Monument  Iron Pin Reference Monument	 Object Marker Type I  Object Marker Type II  Object Marker Type III  Caution Mode Arrow Panel  Back to Back Vertical Panel Sign  Double Direction Arrow Panel  Left Directional Arrow Panel  Right Directional Arrow Panel  Sequencing Arrow Panel  Truck Mounted Arrow Panel  Power Pole  Wood Pole  Pedestrian Push Button Post  Property Corner  Pull Box  Intelligent Transportation Pull Box  Sanitary Pump  Storm Drain Pump  Reinforced Pavement  Reinforced Concrete End Section 15 Inch  Reinforced Concrete End Section 18 Inch  Reinforced Concrete End Section 24 Inch  Reinforced Concrete End Section 30 Inch  Reinforced Concrete End Section 36 Inch  Reinforced Concrete End Section 42 Inch	 Reinforced Concrete End Section 48 Inch  Reinforced Concrete End Section 54 Inch  Reset Right of Way Marker  Reset USGS Marker  Right of Way Markers  Riser 30 Inch  Continuous Split Barrel Sample  Flight Auger Sample  Split Barrel Sample  Thinwall Tube Sample  Highway Sign  SNOW GATE 18 FT  SNOW GATE 28 FT  SNOW GATE 40 FT  Standard Penetration Test  Transformer  Inclinometer Tube  Underdrain Cleanout  Excavation Unit  Water Valve
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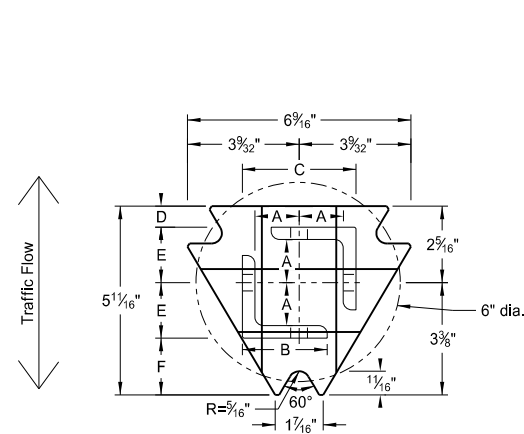
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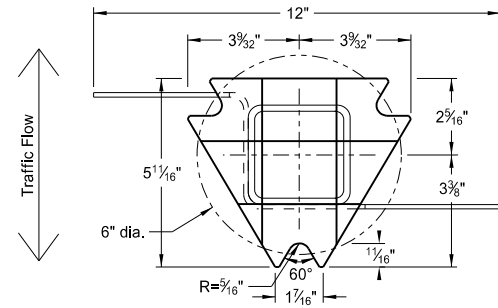


Multi-Directional Slip Base Assembly

Perforated Tube



Top Post Receiver
Plate - ASTM A572 grade 50
Angle Receiver - 2 1/2"x2 1/2"x3/8" ASTM A36 structural angle



Bottom Soil Stub
Tube - 3"x3"x7 gauge ASTM A500 grade B tube
Stabilizing Wing - 7 gauge H.R.P.O. ASTM A1011
Plate - ASTM A572 grade 50

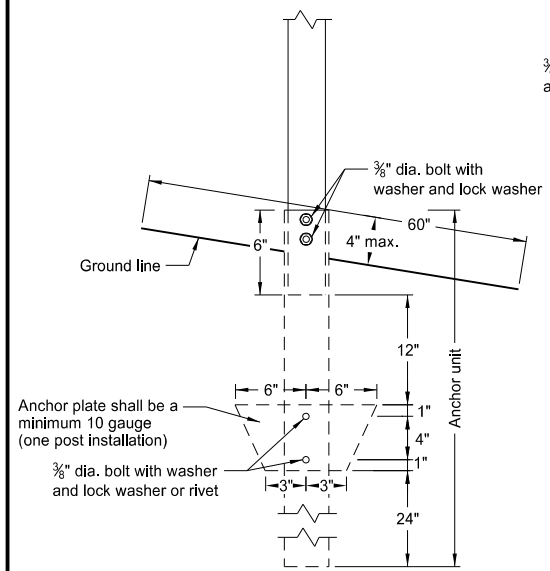
Notes:

1. Slip base bolts shall be torqued as specified by the manufacturer.
2. Anchor shall have a yield strength of 43.9 KSI and tensile strength of 59.3 KSI.
3. The 4" vertical clearance is required for the anchor or breakaway base. The 4"x60" measurement shall be made above and below post location and also back and ahead of the post.
4. When used in concrete sidewalk, anchor shall be same except without the wings.
5. Four post signs shall have over 7' between the first and the fourth posts.

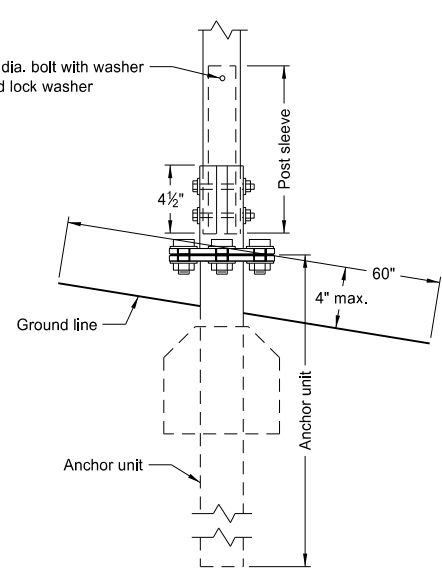
Telescoping Perforated Tube						
Number of Posts	Post Size in.	Wall Thickness Gauge	Sleeve Size in.	Wall Thickness Gauge	Slip Base	Anchor Size without Slip Base in.
1	2	12			No	2 1/4
1	2 1/4	12			No	2 1/2
1	2 1/2	12			(A)	3
1	2 1/2	10			Yes	
1	2 1/4	12	2	12	Yes	
1	2 1/2	12	2 1/4	12	Yes	
2	2	12			No	2 1/4
2	2 1/4	12			No	2 1/2
2	2 1/2	12			Yes	
2	2 1/2	12			Yes	
2	2 1/4	10	2	12	Yes	
2	2 1/2	12	2 1/4	12	Yes	
3 & 4	2 1/2	12			Yes	
3 & 4	2 1/2	10			Yes	
3 & 4	2 1/2	12	2 1/4	12	Yes	
3 & 4	2 1/4	12	2	12	Yes	
3 & 4	2 1/2	10	2 3/16	10	Yes	

Properties of Telescoping Perforated Tube						
Tube Size in.	Wall Thickness in.	U.S. Standard Gauge	Weight per Foot lbs.	Moment of Inertia in. ⁴	Cross Sec. Area in. ²	Section Modulus in. ³
1 1/2 x 1 1/2	0.105	12	1.702	0.129	0.380	0.172
2 x 2	0.105	12	2.416	0.372	0.590	0.372
2 1/4 x 2 1/4	0.105	12	2.773	0.561	0.695	0.499
2 3/16 x 2 3/16	0.135	10	3.432	0.605	0.841	0.590
2 1/2 x 2 1/2	0.105	12	3.141	0.804	0.803	0.643
2 1/2 x 2 1/2	0.135	10	4.006	0.979	1.010	0.785

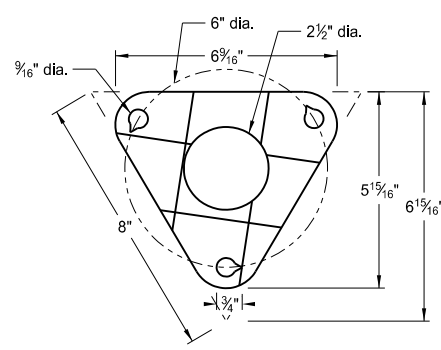
Top Post Receiver Data Table						
Square Post Sizes (B)	A	B	C	D	E	F
2 3/16"x10 ga.	1 9/64"	2 1/2"	3 1/32"	2 5/32"	1 33/64"	1 1/8"
2 1/2"x10 ga.	1 9/32"	2 1/2"	3 5/16"	5/8"	1 21/32"	1 3/4"



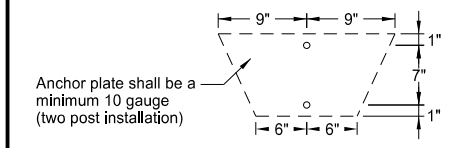
Anchor Unit and Post Assembly



Multi-Directional Slip Base Anchor Unit and Post Sleeve Assembly



Bolt Retainer for Base Connection
Bolt Retainer - 1/32" Reprocessed Teflon

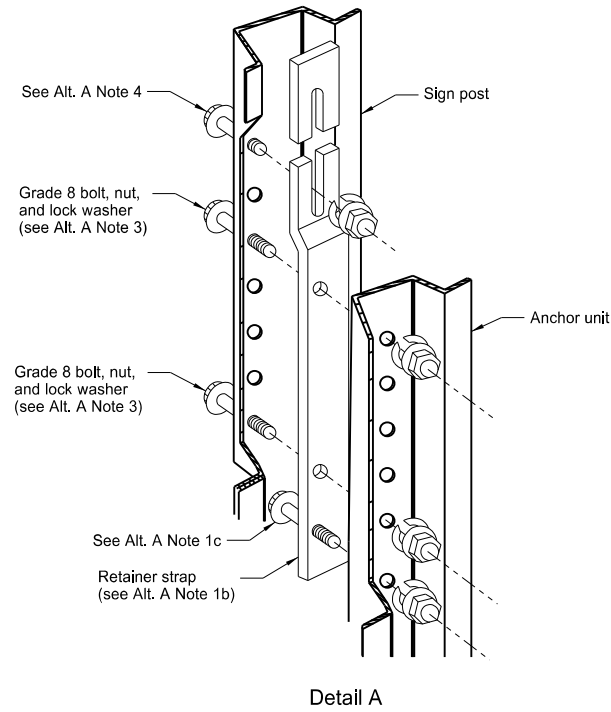


Anchor plate shall be a minimum 10 gauge (two post installation)

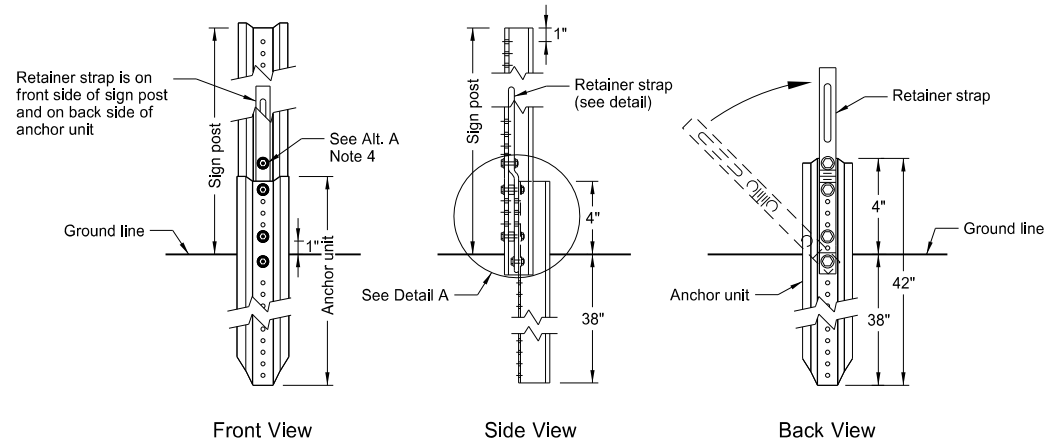
- (A) The breakaway base is required when the support is placed in weak soils. The Engineer shall determine if the soils are weak.
 (B) The 2 3/16"x10 ga. may be inserted into 2 1/2"x10 ga. for additional wind load.

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U-Channel Post



Detail A



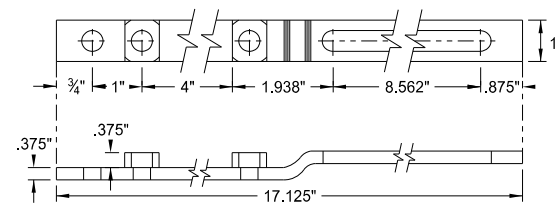
Front View

Side View

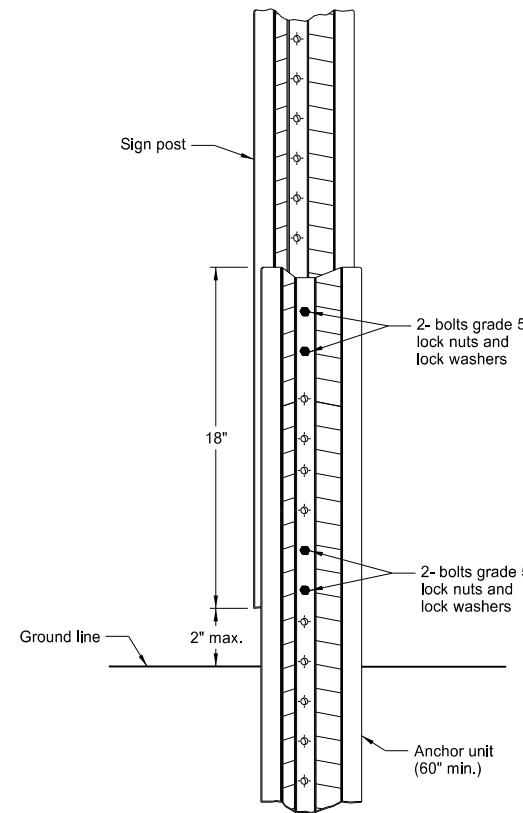
Back View

Breakaway U-Channel Detail Alternate A

A maximum of 2 posts shall be installed within 7'.

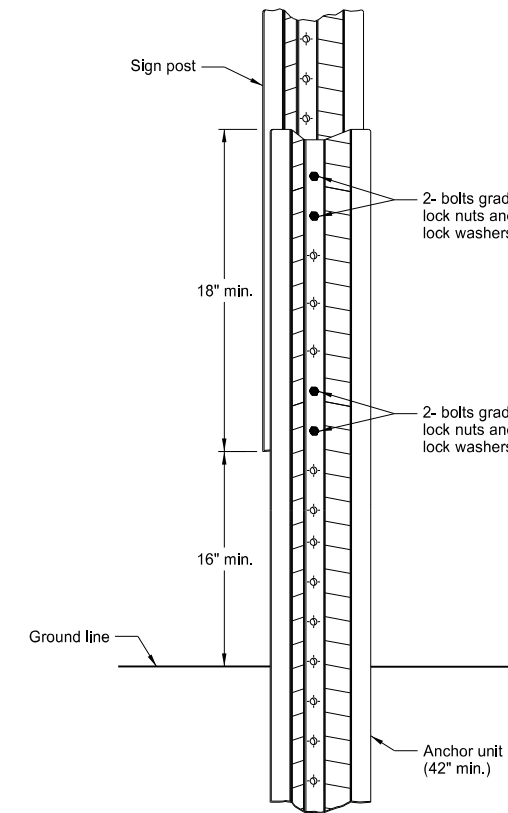


Retainer Strap Detail



Breakaway U-Channel Splice Detail Alternate B (2.5 and 3 lb/ft)

A maximum of 3 posts shall be installed within 7'.



Breakaway U-Channel Splice Detail Alternate C (2.5 and 3 lb/ft)

A maximum of 3 posts shall be installed within 7'.

Alternate A Steps of Installation:

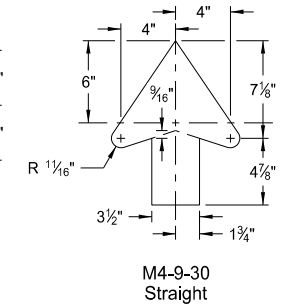
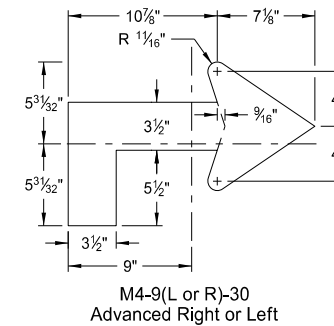
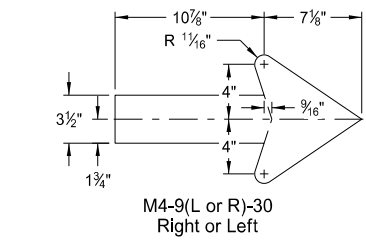
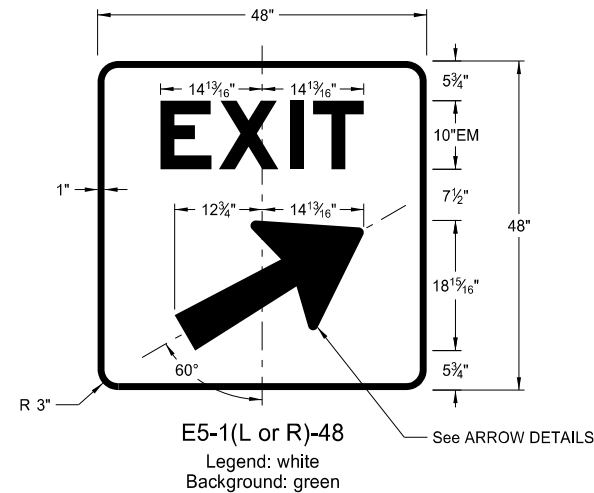
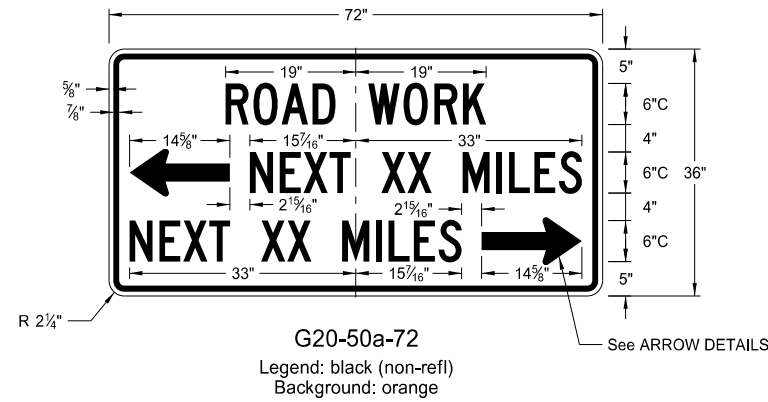
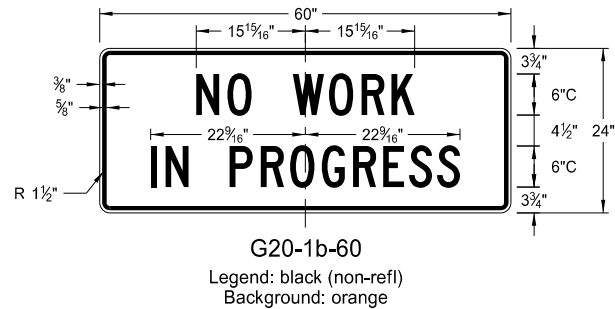
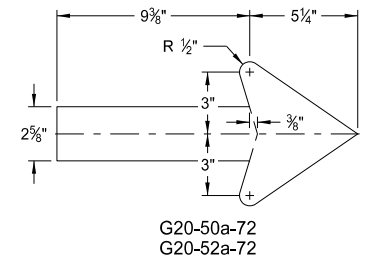
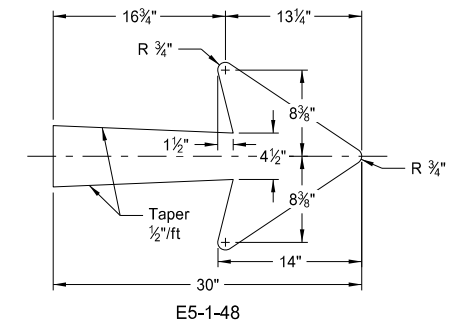
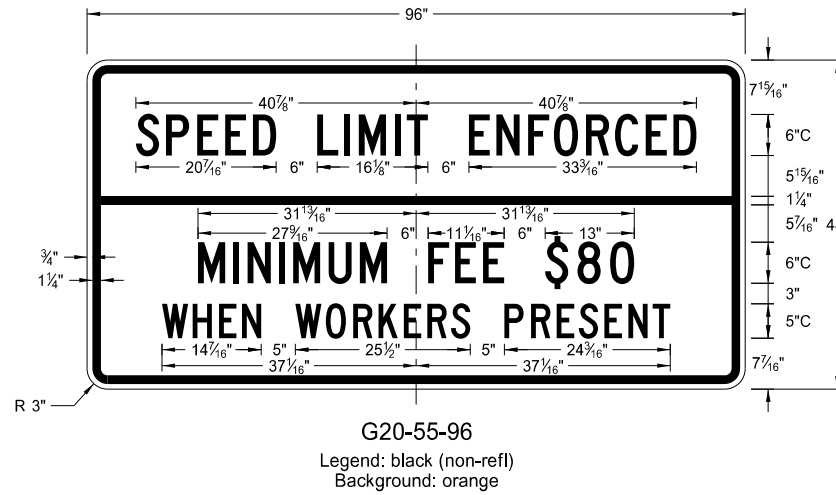
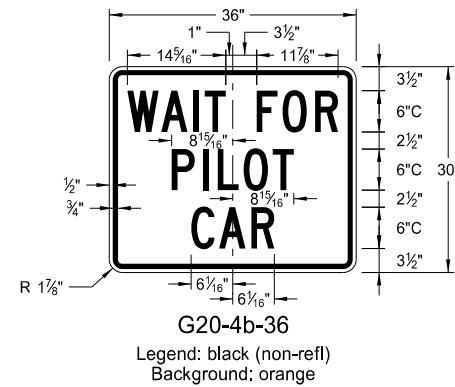
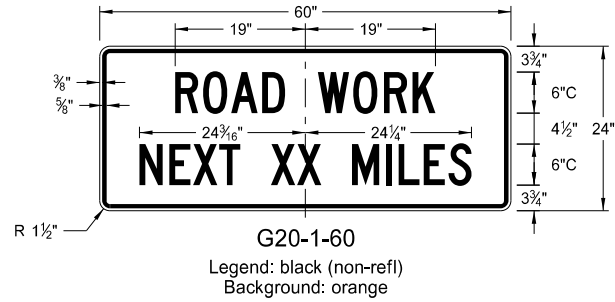
1. a) Drive anchor unit to within 12" of ground level.
b) Proper assembly established by lining up the bottom hole of retainer strap with the 6th hole from the top of the anchor unit.
c) Assemble strap to back of anchor unit using 5/16"x2" bolt, lock washer and nut.
d) Rotate strap 90° to left.
2. a) Drive anchor unit to 4" above ground.
b) Rotate strap to vertical position.
3. a) Place 5/16"x2" bolt, lock washer and nut in bottom of sign post to facilitate alignment of sign post with proper hole in anchor unit.
b) Alternately tighten two connector bolts.
4. Complete assembly by tightening 5/16"x2" bolt (this fastens sign post to retainer strap).
5. The base post, strap and sign post shall be properly nested. Proper nesting occurs when all flat surfaces of the base post, strap, and sign post at the bolts have full contact across the entire width.

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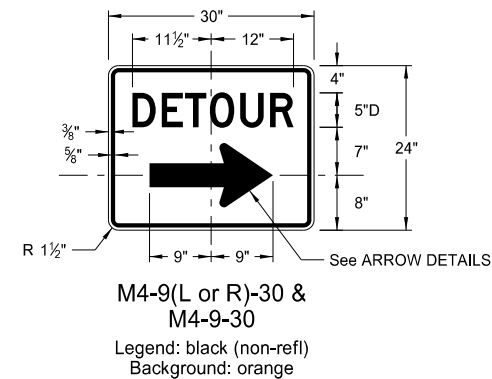
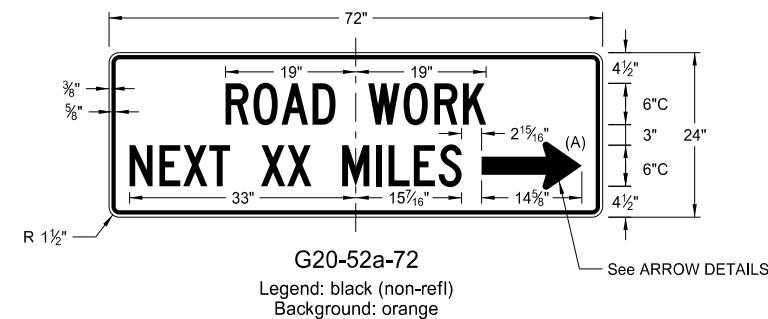
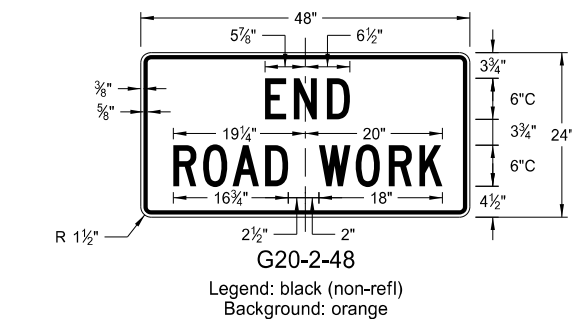
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CONSTRUCTION SIGN DETAILS
 TERMINAL AND GUIDE SIGNS

D-704-9



ARROW DETAILS



NOTES:

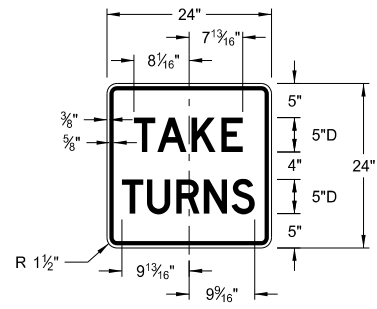
(A) Arrow may be right or left of the legend to indicate construction to the right or left.

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DATE	CHANGE

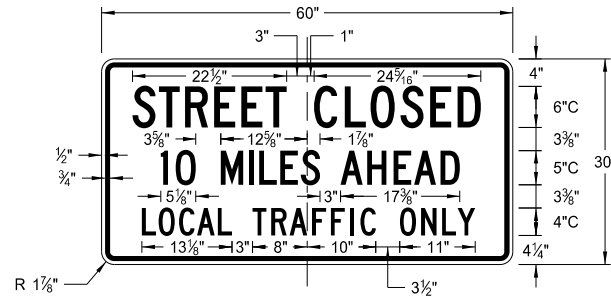
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 of Transportation

CONSTRUCTION SIGN DETAILS
REGULATORY SIGNS

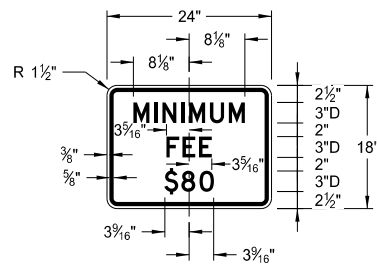
D-704-10



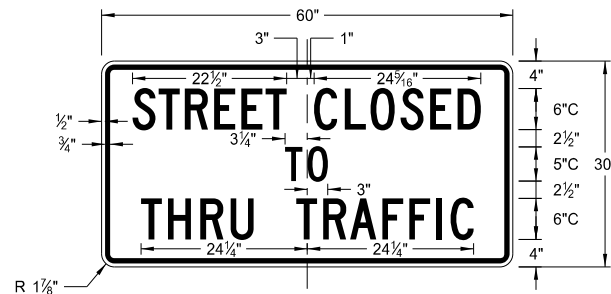
R1-50-24
Legend: black (non-refl)
Background: white



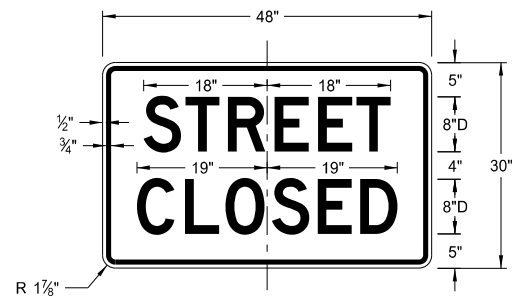
R11-3c-60
Legend: black (non-refl)
Background: white



R2-1a-24
Legend: black (non-refl)
Background: white



R11-4a-60
Legend: black (non-refl)
Background: white



R11-2a-48
Legend: black (non-refl)
Background: white

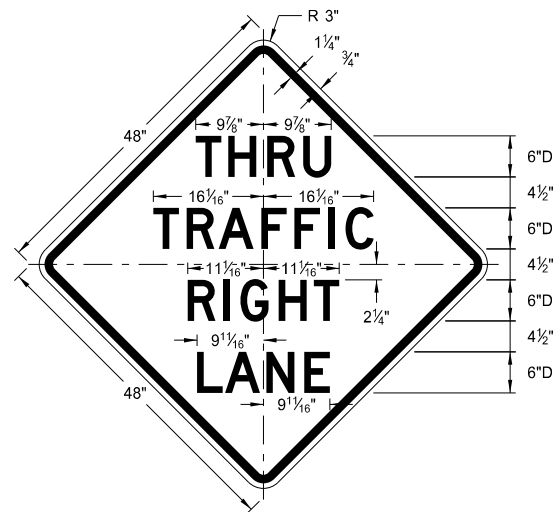
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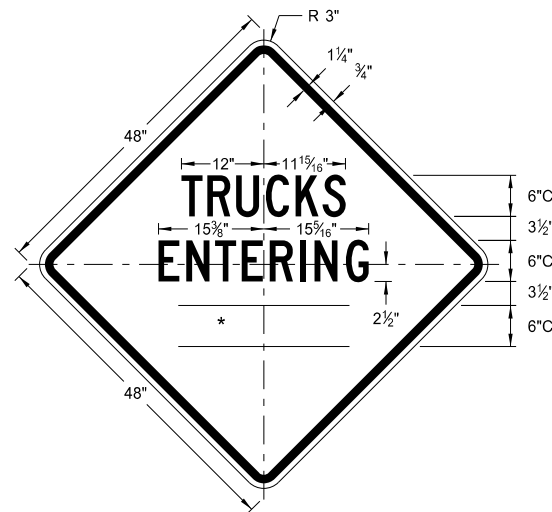
CONSTRUCTION SIGN DETAILS
WARNING SIGNS

WORD	LETTER SPACING
AHEAD	Standard
200 FT	Standard
350 FT	Standard
500 FT	Standard
1000 FT	Reduce 40%
1500 FT	Reduce 40%
½ MILE	Reduce 50%
1 MILE	Standard

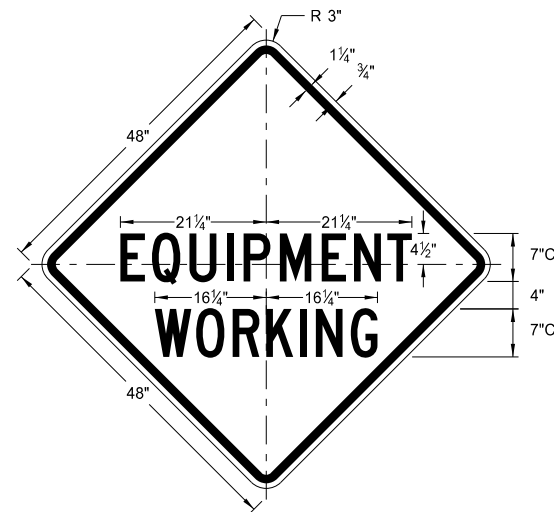
* DISTANCE MESSAGES



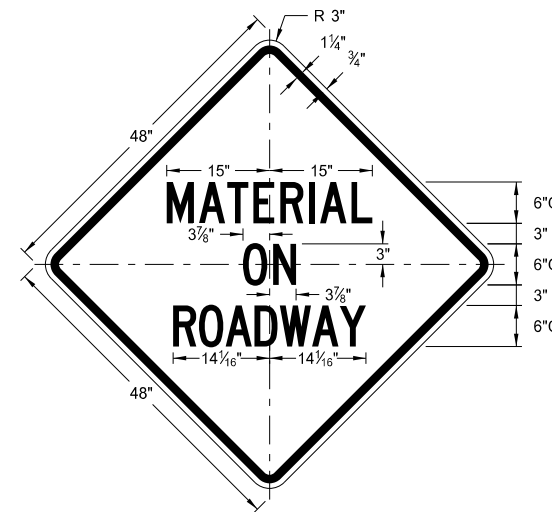
W5-8-48
Legend: black (non-refl)
Background: orange



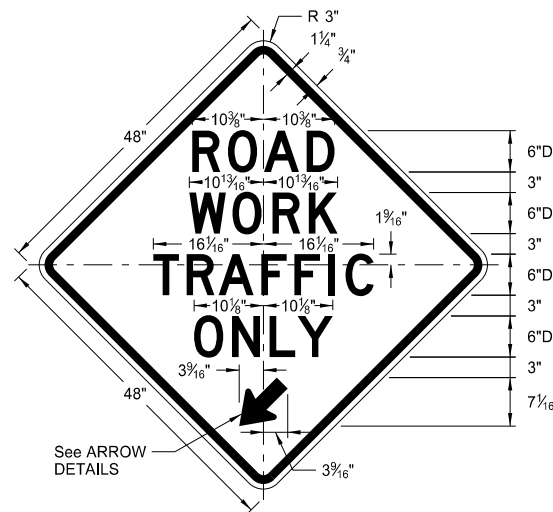
W8-54-48
Legend: black (non-refl)
Background: orange



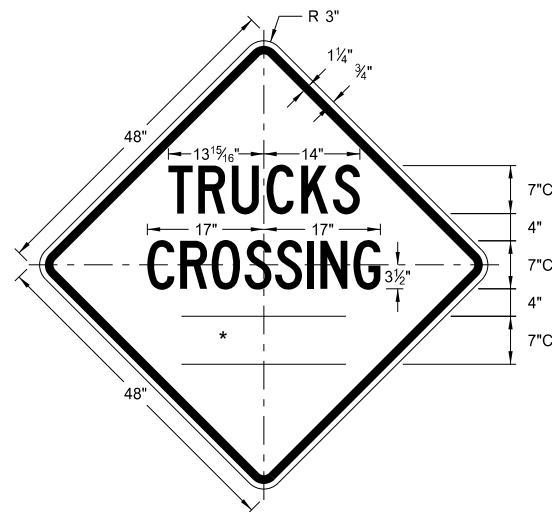
W20-51-48
Legend: black (non-refl)
Background: orange



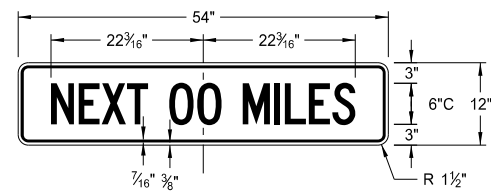
W21-51-48
Legend: black (non-refl)
Background: orange



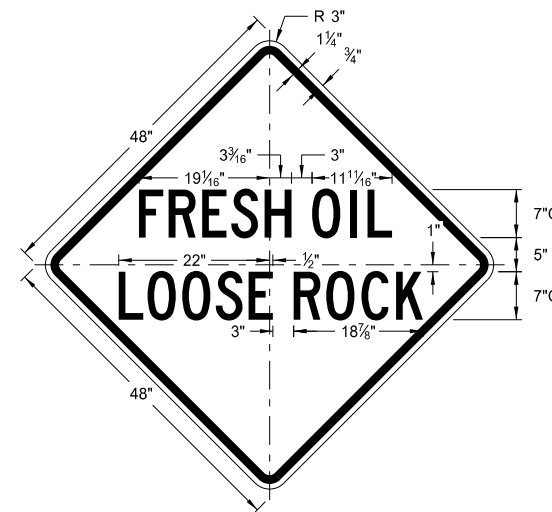
W5-9-48
Legend: black (non-refl)
Background: orange



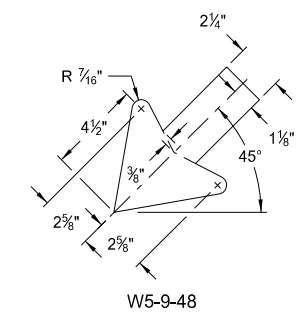
W8-55-48
Legend: black (non-refl)
Background: orange



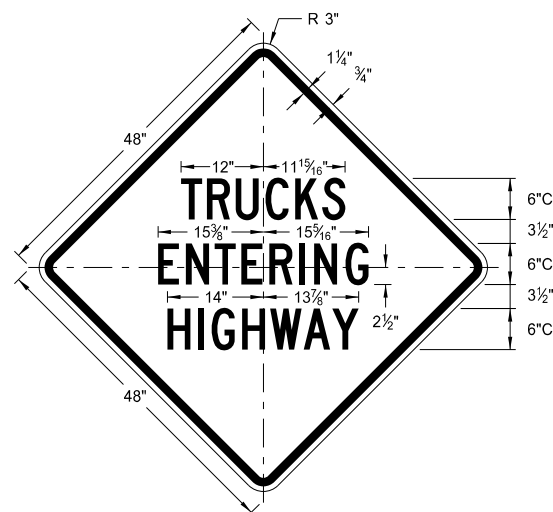
W20-52-54
Legend: black (non-refl)
Background: orange



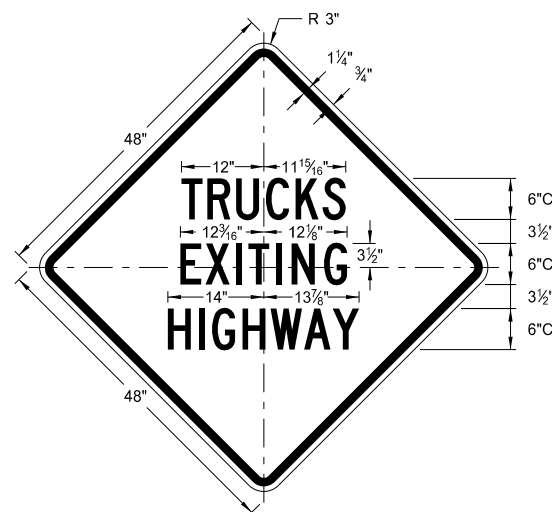
W22-8-48
Legend: black (non-refl)
Background: orange



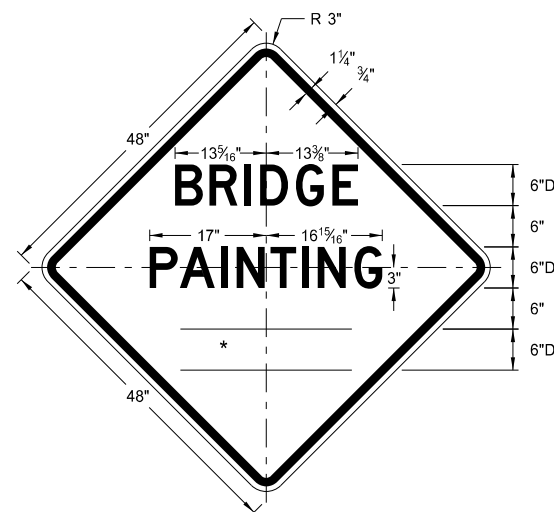
W5-9-48
ARROW DETAILS



W8-53-48
Legend: black (non-refl)
Background: orange



W8-56-48
Legend: black (non-refl)
Background: orange



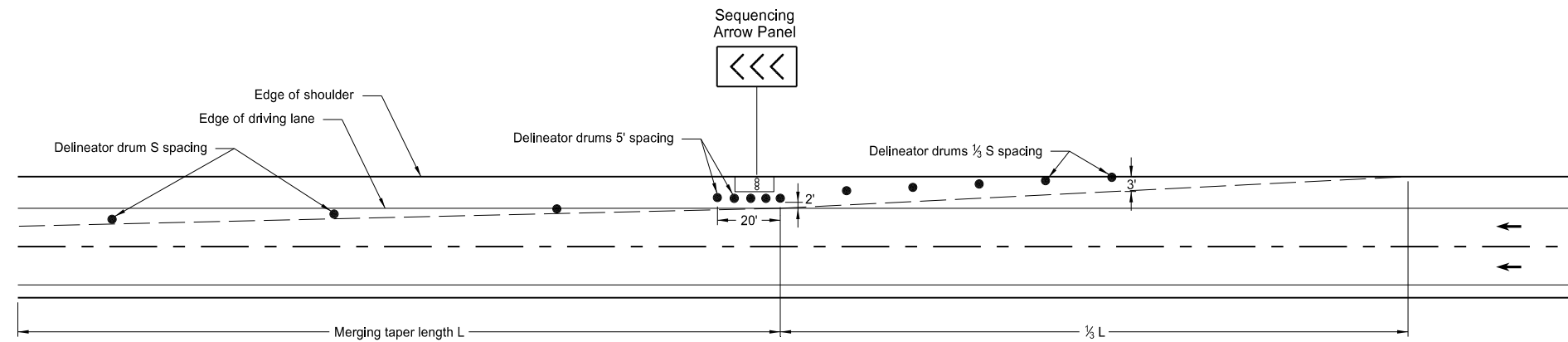
W21-50-48
Legend: black (non-refl)
Background: orange

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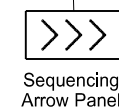
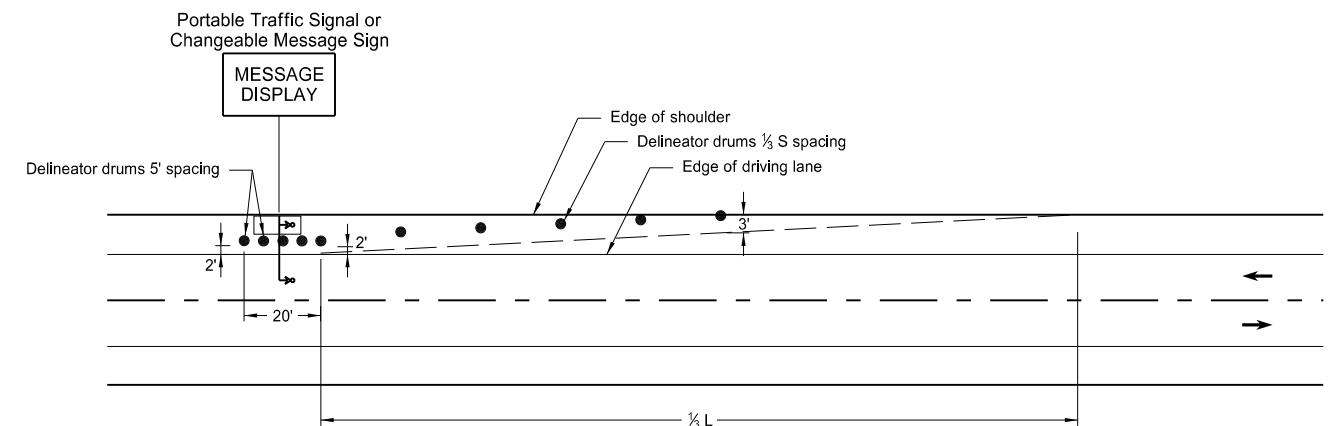
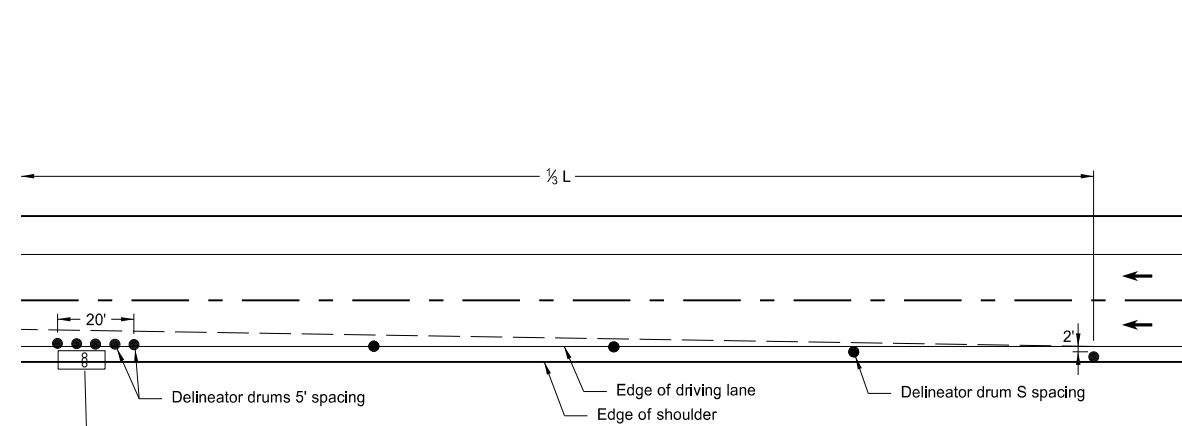
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SHOULDER CLOSURE TAPERS

D-704-12



SHOULDER CLOSURE WITH LANE CLOSURE
(when shoulder is 8' or wider)



SHOULDER CLOSURE USED WITH LANE CLOSURE
(when shoulder is less than 8' wide)

PORTABLE TRAFFIC SIGNAL OR CHANGEABLE MESSAGE SIGN ON SHOULDER

KEY	
● Delineator Drum	∞ Sequencing Arrow Panel
• Message Display	↳ Portable Traffic Signal

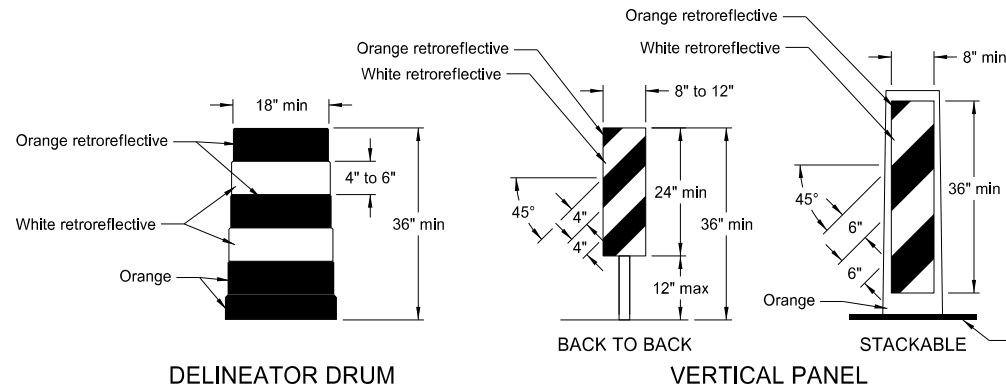
Notes:

- S = Posted Speed Limit in mph
W = Width of offset in feet
L = Taper length in feet
L = $WS^2/60$ (40mph or less)
L = WS (45mph or more)
- If a shoulder taper is used, it should have a length of approximately $1/3L$. If a shoulder is used as a travel lane, a normal merging or shifting taper should be used.
- When paved shoulders of 8 foot width or more are closed, channelizing devices shall be used to close the shoulder in advance to delineate the beginning of the work space and direct vehicular traffic to remain within the traveled way.

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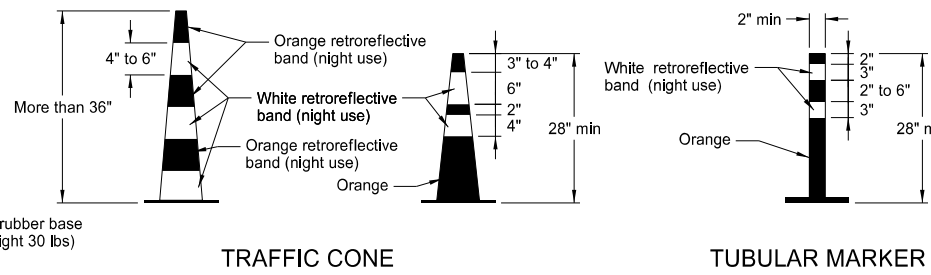
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BARRICADE AND CHANNELIZING DEVICE DETAILS



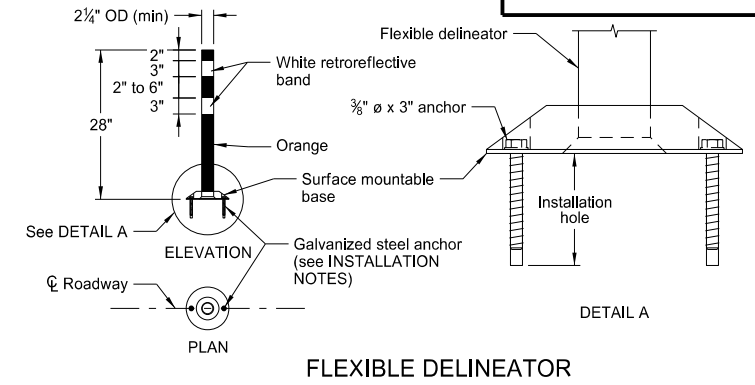
The markings on drums shall be horizontal, circumferential, alternating orange and white retroreflective stripes 4" to 6" wide. Each drum shall have a minimum of two orange and two white stripes with the top stripe being orange. Any nonretroreflectORIZED spaces between the horizontal orange and white stripes shall not exceed 3" wide. Stripes shall not be placed on ribs or indentations in the drum. Drums shall have closed tops that will not allow collection of construction debris or other debris. Ballast shall not be placed on the top of a drum.

Markings for vertical panels shall be alternating orange and white retroreflective stripes, sloping downward in the direction vehicular traffic is to pass. Retroreflective sheeting shall be placed on both sides of panel and shall have a minimum of 270 square inches of retroreflective area facing vehicular traffic. Where the height of the retroreflective material on the vertical panel is 36 inches or more, a stripe width of 6 inches shall be used.



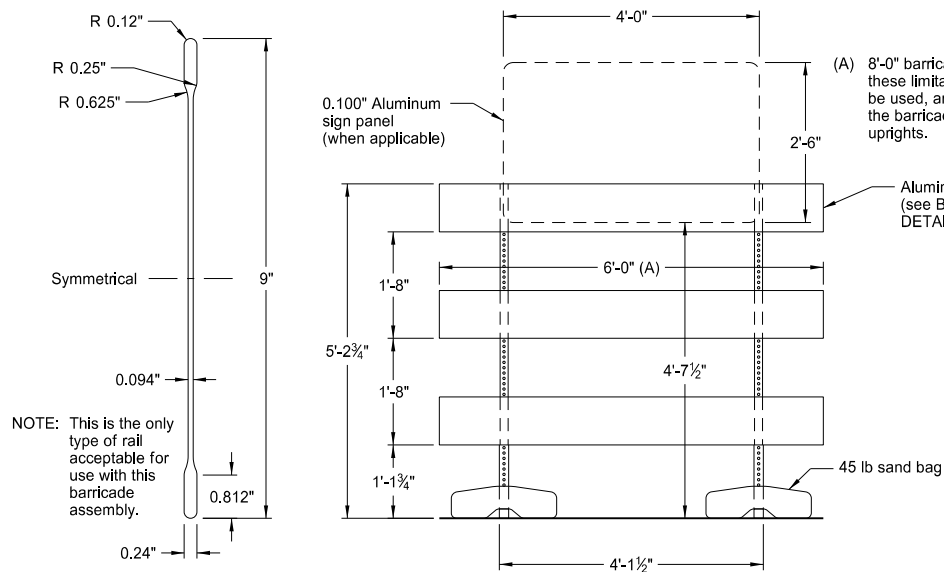
RetroreflectORIZATION of cones more than 36" in height shall be provided by alternating orange and white retroreflective stripes. Each cone shall have a minimum of two orange and two white stripes with the top stripe being orange. Any nonretroreflectORIZED space between the orange and white stripes shall not exceed 3" wide.

RetroreflectORIZATION of tubular markers more than 42" in height shall be provided by alternating four 4" to 6" wide orange and white stripes with the top stripe being orange.



INSTALLATION NOTES:

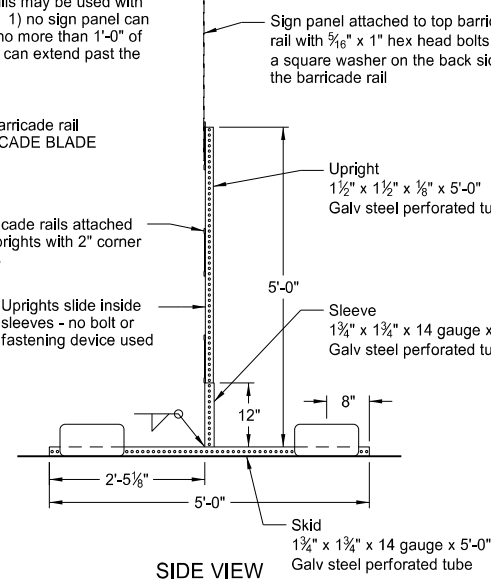
1. Drill installation holes to diameter and depth as required by manufacturer's specifications.
2. For removal, remove anchors and fill installation hole with an epoxy designed to bond to pavement surface.
3. In lieu of bolted down base, the contractor may use an 8" x 8" butyl pad or hot melt butyl. Butyl shall be removed as close as possible to pavement surface.



BARRICADE BLADE DETAIL

ELEVATION VIEW

BARRICADE ASSEMBLY DETAIL (Aluminum Barricade Rails)

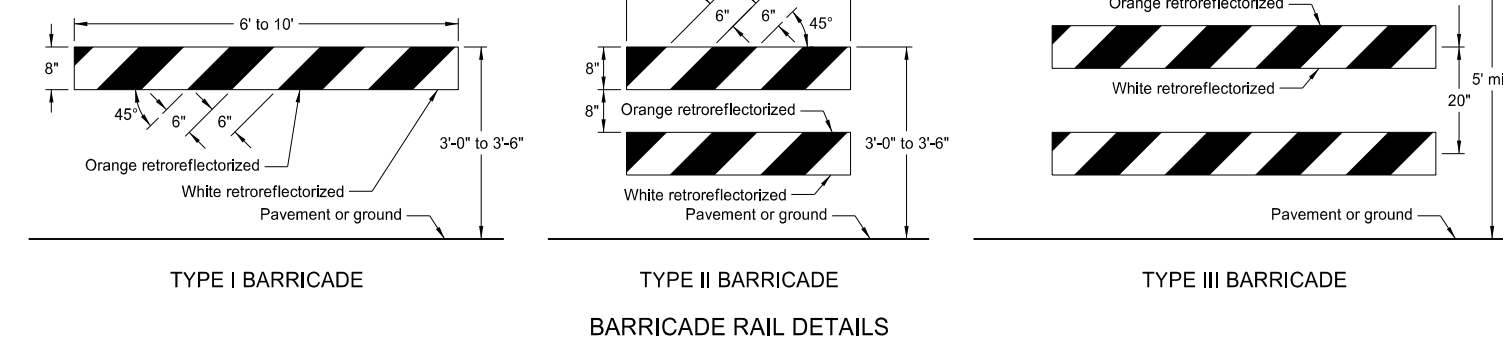


ELEVATION VIEW

SIDE VIEW

BARRICADE ASSEMBLY DETAIL (Wood or Plastic Rails)

NOTE: Markings for barricades shall be alternating orange and white retroreflective stripes, sloping downward in the direction traffic is to pass. Retroreflective sheeting shall be placed on both sides of the rails and shall have a minimum of 270 square inches of visible retroreflective area facing vehicular traffic. When the barricade length is less than 36", the rail stripe width shall be 4".

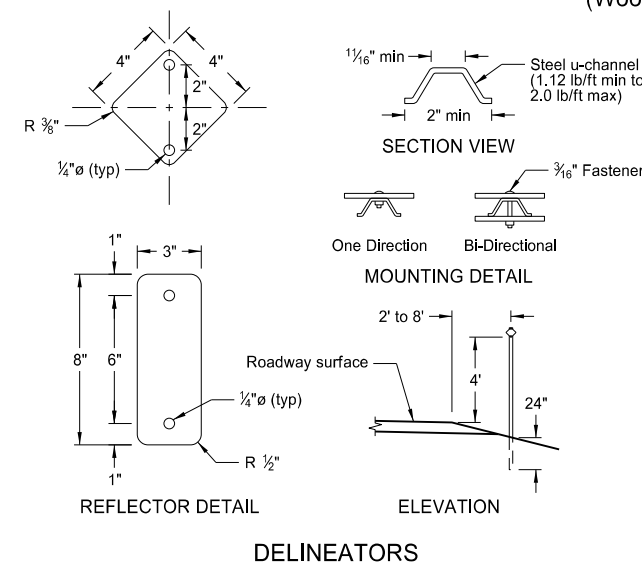


TYPE I BARRICADE

TYPE II BARRICADE

TYPE III BARRICADE

BARRICADE RAIL DETAILS



REFLECTOR DETAIL

ELEVATION

DELINEATORS

MINIMUM BALLAST (For each side of barricade support)

Without Sign	4 - 25 lb sandbags
With Sign	6 - 25 lb sandbags

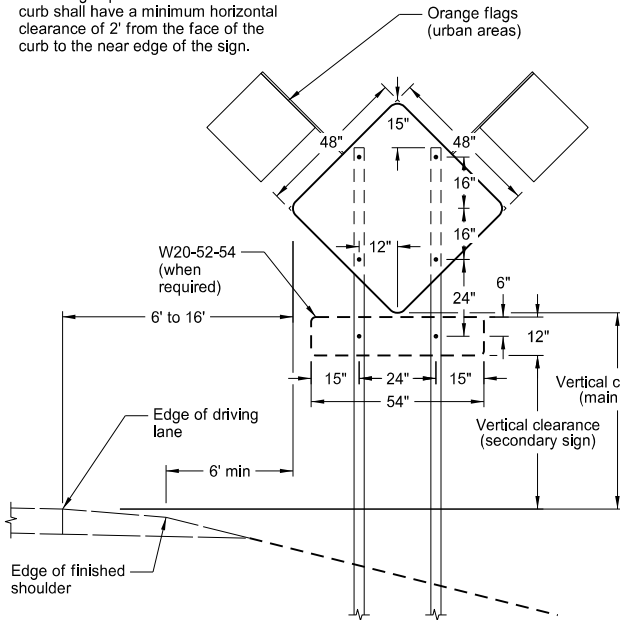
Note: The number of sandbags are based on a wind speed of 55 MPH. The sandbags are assumed to be placed at or near the ends of the skids.

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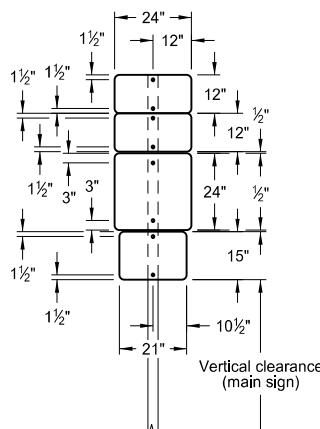
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CONSTRUCTION SIGN PUNCHING AND MOUNTING DETAILS

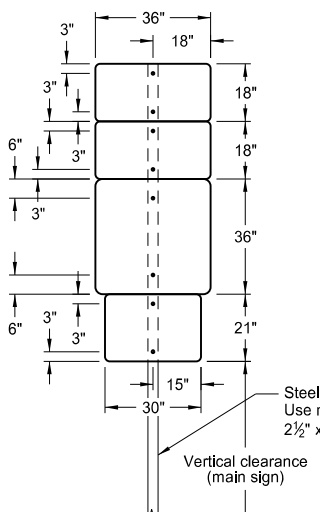
Note: Signs placed in sections with curb shall have a minimum horizontal clearance of 2' from the face of the curb to the near edge of the sign.



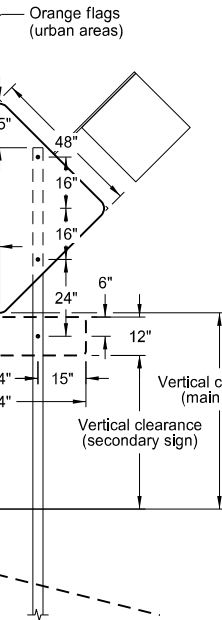
TYPICAL SECTION
(48" x 48" diamond warning sign shown)



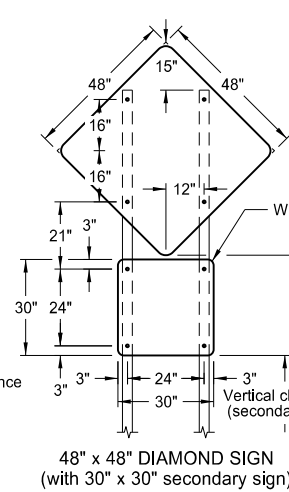
24" x 24" ROUTE MARKER ASSEMBLY



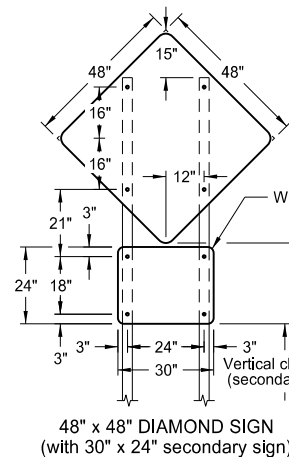
36" x 36" ROUTE MARKER ASSEMBLY



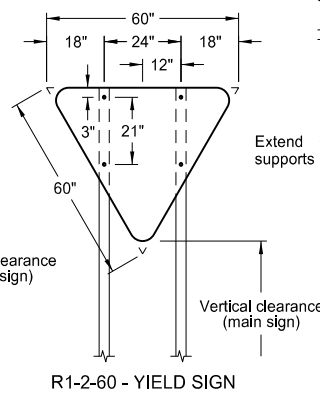
18" x 18" DIAMOND SIGN



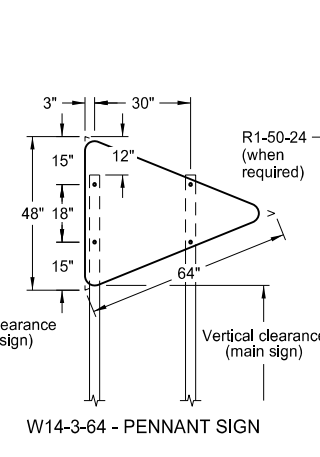
48" x 48" DIAMOND SIGN
(with 30" x 30" secondary sign)



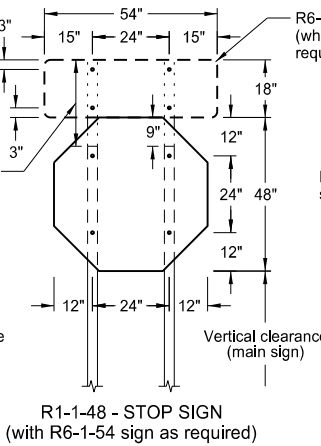
48" x 48" DIAMOND SIGN
(with 30" x 24" secondary sign)



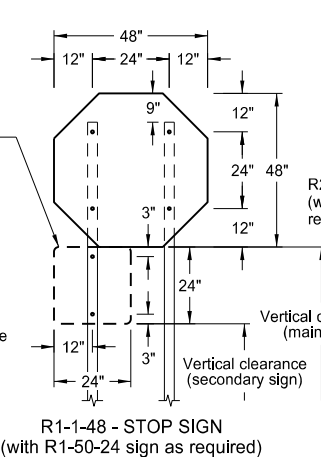
R1-2-60 - YIELD SIGN



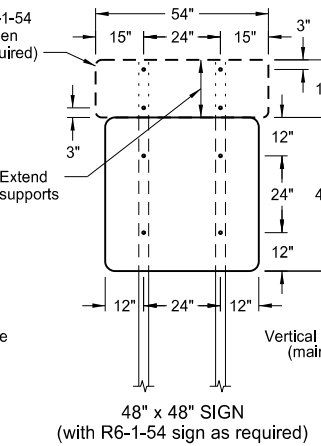
W14-3-64 - PENNANT SIGN



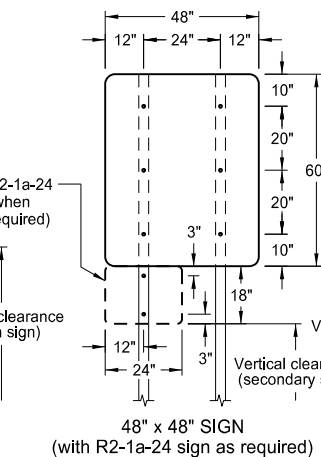
R1-1-48 - STOP SIGN
(with R6-1-54 sign as required)



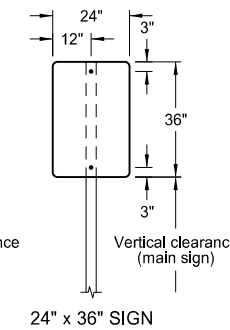
R1-1-48 - STOP SIGN
(with R1-50-24 sign as required)



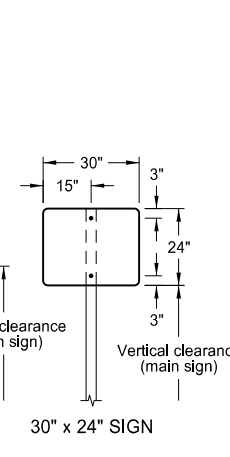
48" x 48" SIGN
(with R6-1-54 sign as required)



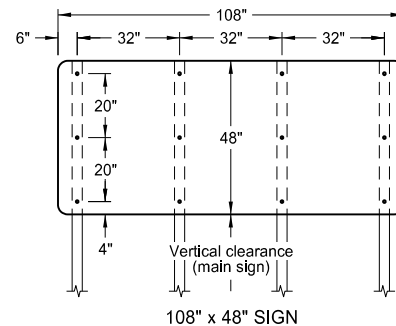
48" x 48" SIGN
(with R2-1a-24 sign as required)



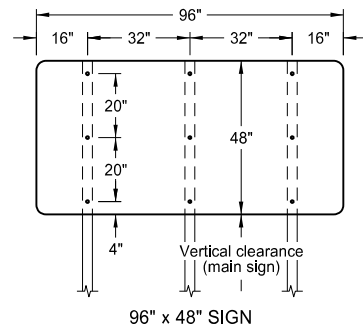
24" x 36" SIGN



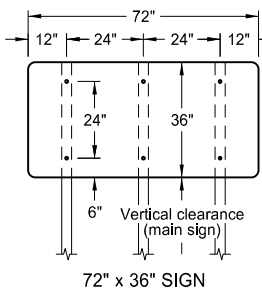
30" x 24" SIGN



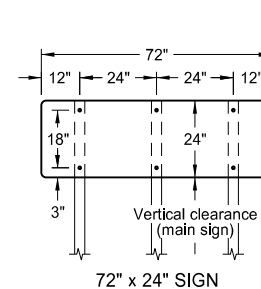
108" x 48" SIGN



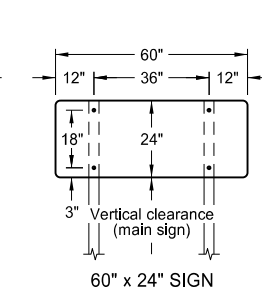
96" x 48" SIGN



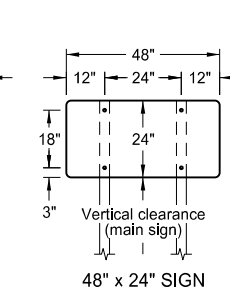
72" x 36" SIGN



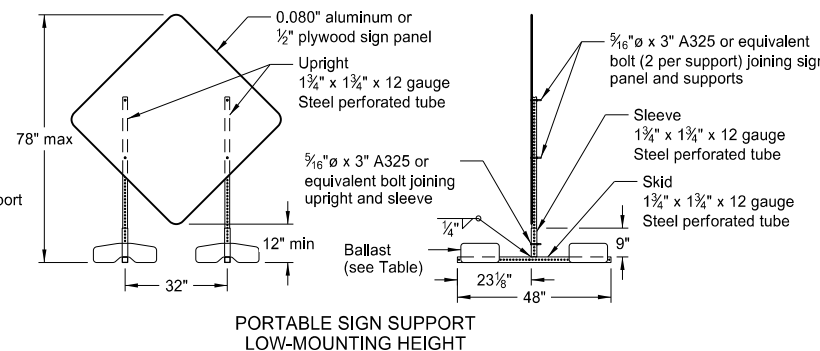
72" x 24" SIGN



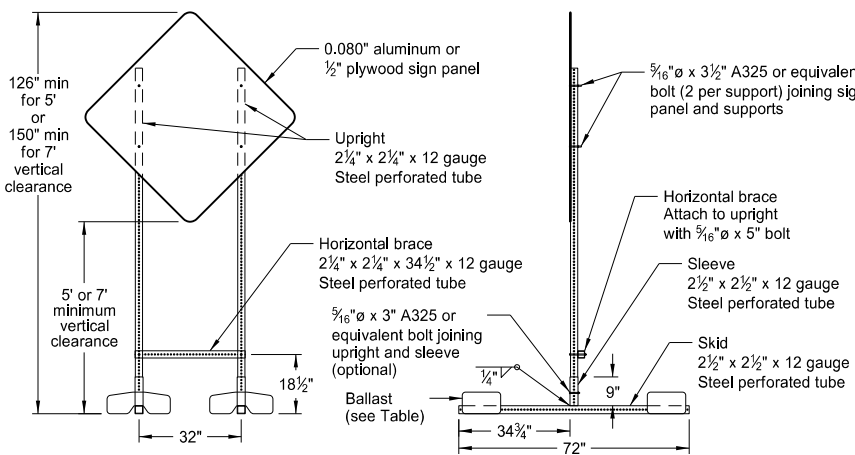
60" x 24" SIGN



48" x 24" SIGN



PORTABLE SIGN SUPPORT
LOW-MOUNTING HEIGHT



PORTABLE SIGN SUPPORT
HIGH-MOUNTING HEIGHT

NOTES:

1. Sign Supports: Supports shall be galvanized or painted. Minimum post sizes are 2.5 lb/ft u-channel or 2" x 2" x 12 gauge steel perforated tube, except where noted. When installing signs on u-channel, the minimum post size for assemblies containing a secondary sign is 3.0 lb/ft. Post sizes are based on a wind speed of 55 MPH.

Signs over 50 square feet should be installed on 2 1/2" x 2 1/2" perforated tube supports as a minimum.

Guy wires shall not be attached to sign supports. Wind beams may be attached to u-posts behind the sign panels.

2. Sign Panels: Provide sign panels made of 0.100" aluminum, 1/2" plywood, or other approved material, except where noted. All holes to be punched round for 3/8" bolts.

3. Alternate Messages: The signs that have alternate messages may have these alternate messages placed on a reflectorized plate (without a border) and installed and removed as required. (i.e. "Left" and "Right" message on a lane closure sign)

4. Route Marker Auxiliary Signs: Provide route marker auxiliary signs, such as the cardinal direction and directional arrows, with a background and legend that match the route marker they are used with:

Interstate - white legend on blue background
Interstate Business Loop - white legend on green background
US and State - black legend on white background
County - yellow legend on blue background

5. Vertical Clearance: Install signs with a vertical clearance of 5'-0" (see TYPICAL SECTION.) In areas where parking or pedestrian movements are likely or the view of the sign may be obstructed, install signs with a vertical clearance of 7'-0" from the top of the curb or from the near edge of the driving lane in absence of a curb.

The vertical clearance to secondary signs is 1'-0" less than the vertical clearance as stated above.

Large signs having an area exceeding 50 square feet shall have a minimum clearance of 7'-0" from the ground at the post.

6. Portable Signs: Provide portable signs that meet the vertical clearance as stated above. Use portable signs when it is necessary to place signs within the pavement surface.

When portable signs are used for 5 days or less, low-mounting height (minimum 12" vertical clearance) sign supports may be used as long as the view of the sign is not obstructed. Time delays caused by unforeseen circumstances, such as equipment breakdown, rain, subgrade failures, etc., will not accrue towards the 5 day period. The R9-8 through R9-11a series, W1-5 through W1-8 series, M4-10, and E5-1 may be used for longer than 5 days.

Signs mounted to the portable sign supports shown in the LOW-MOUNTING HEIGHT and HIGH-MOUNTING HEIGHT Details shall have a maximum surface area of 16 square feet.

MINIMUM BALLAST
(For each side of sign support base)

Sign Panel Mounting Height (ft)	Number of 25 lb sandbags for 4' x 4' sign panel
1'	6
5'	8
7'	10

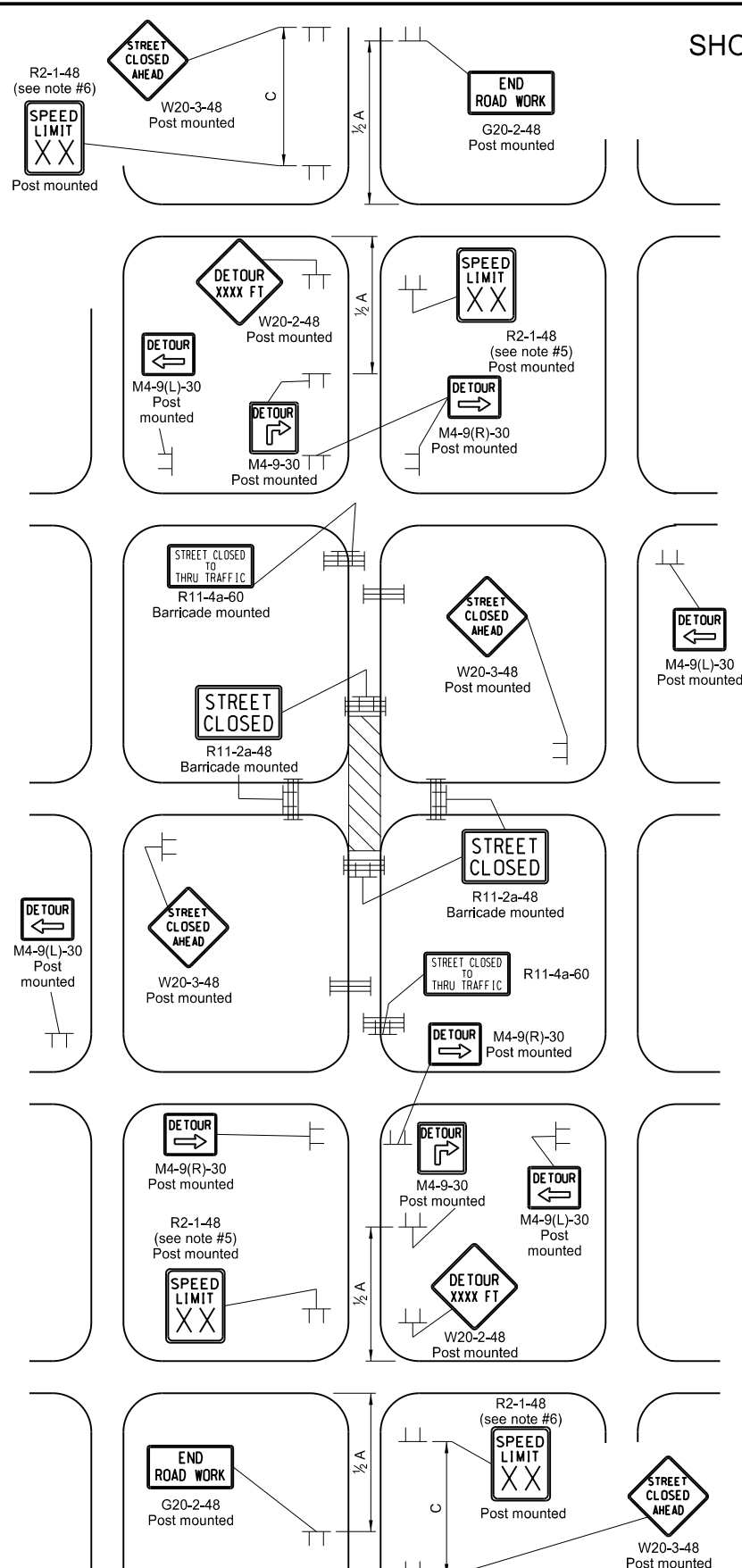
Note: The number of sandbags are based on a wind speed of 55 MPH. The sandbags are assumed to be placed at or near the ends of the skids.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-4-13	
REVISIONS	
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11-14-13	Revised Note 6.

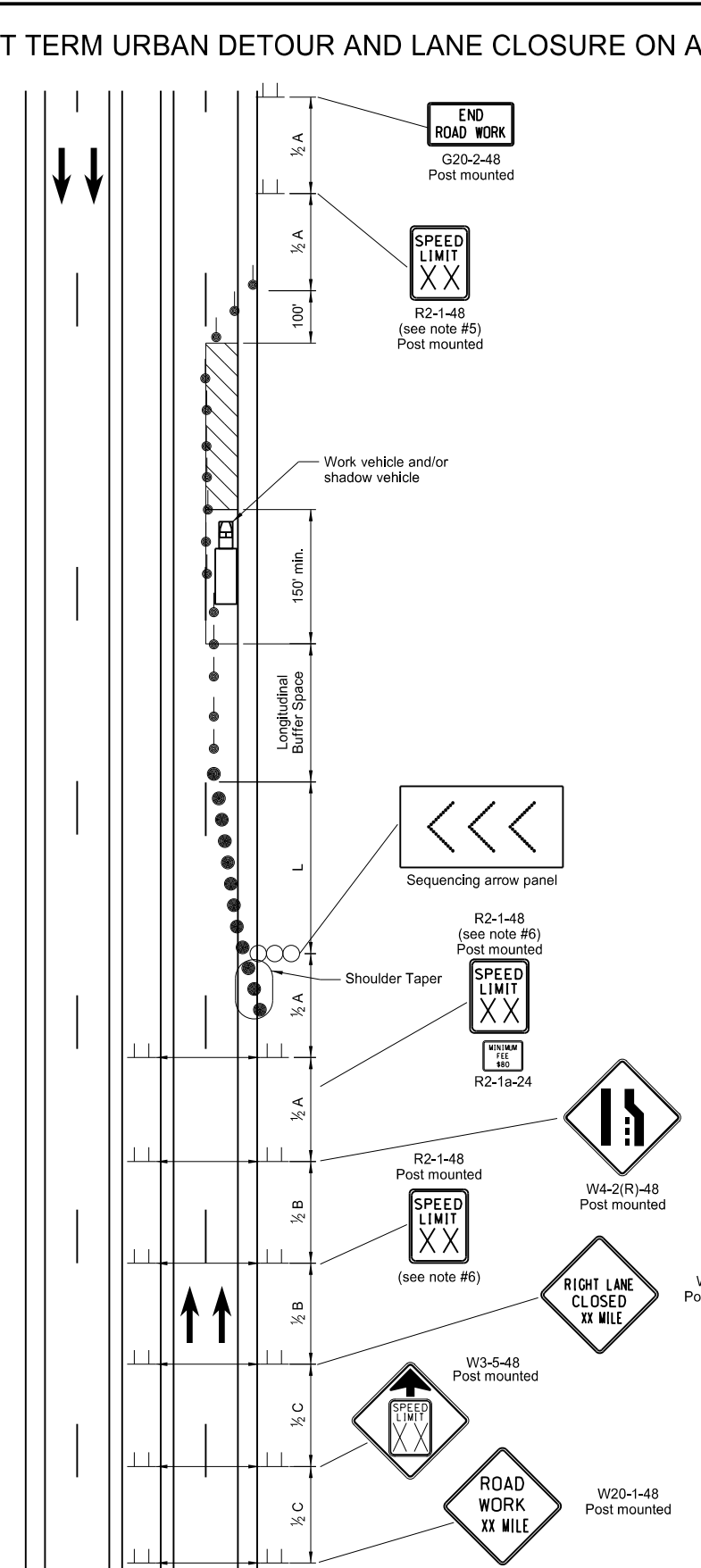
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SHORT TERM URBAN DETOUR AND LANE CLOSURE ON A DIVIDED HIGHWAY LAYOUTS

D-704-23



TYPE Q
DETOUR FOR A CLOSED STREET
 Where city streets are used for detouring traffic.
 Urban projects do not require the G20-55-96 and R2-1a-24 signs.



TYPE P
STATIONARY LANE CLOSURE ON A DIVIDED HIGHWAY
 4 lane divided roadway where 1/2 of roadway is closed.
 Short-term (more than 1 hour within a single daylight period.)

- Notes
- Variables
 - S = Numerical value of speed limit or 85th percentile.
 - W = The width of taper
 - L = Minimum length of taper, or $S \times W$ for freeways, expressways, and all other roads with speeds of 45 mph or greater, or $W \times S^2 / 60$ for urban, residential, and other streets with speeds of 40 mph or less.
 - Barricades placed on roadway shall be on a moveable assembly. Signs placed on the roadway shall be placed on skid mounted assemblies.
 - Delinicator drums used for tapering traffic shall be spaced at dimension "S". Delinicator drums or tubular markers used for tangents shall be spaced at 2 times "S".
 - Sequencing Arrow Panels
 - Panels should normally be placed at the beginning of the taper. Where shoulder width does not provide sufficient room the panel should be moved closer to the work area so that it can be placed on the roadway surface.
 - Type A shall be used on roadways with slow moving traffic speeds and low volume (25 mph or less and 750 ADT or less).
 - Type B shall be used on roadways with moderate traffic speeds and volumes (40 mph or less and 5000 ADT or less).
 - Type C shall be used on roadways with high traffic speeds and volumes (over 40 mph or over 5000 ADT).
 - The speed limit shall be re-established. The exact speed limit shall be determined in the field, dependent on location and conditions.
 - The reduced speed limit shall be determined dependent on the in place speed limit before construction. The speed limit reduction should not exceed 10 mph below the existing speed limit, unless the design speed of the work zone feature has been reduced below the 10 mph. In this case, the speed limit reduction shall not exceed 30 MPH. Where speed limits are to be reduced more than 30 MPH, a second speed limit sign shall be installed with the desired speed reduction but shall not exceed 30 MPH. The second speed limit sign shall be placed at 1/2 B.
 - When warning signs are used in urban areas and the signs are not portable, flags shall be installed. The flags shall be 24 inches square, mounted perpendicular to the edges of the diamond sign, and at such a distance above the edge so that when the flag is limp it will not touch the sign. Rural areas will not require flags.
 - Existing speed limit signs within a reduced speed zone shall be covered.
 - Obliterated or covered pavement marking shall be paid for as Obliteration of Pavement Marking. The covering shall be approved by the engineer.
 - Intersection control for Type Q may have to be changed on detour. The Engineer in the field shall determine what control is necessary.
 - Where necessary, safe speed to be determined by the Engineer. When parking is present, signs shall be placed so they are entirely visible above parked vehicles or placed at the edge of the parking area so they are visible to oncoming traffic. These signs may be skid mounted when placed on the roadway surface.
 - The contractor has the option of using portable sign supports in lieu of post mounted signs in accordance with the NDDOT Standard Specifications.

Longitudinal Buffer Space	
Speed (mph)	Length Min (feet)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

Road Type	Distance Between Signs Min. (ft)		
	A	B	C
Urban - Low Speed (30 mph or less)	150	150	150
Urban - Low Speed (over 30 to 40 mph)	280	280	280
Urban - High Speed (over 40 mph to 50 mph)	360	360	360
Rural - High Speed (over 50 mph to 65 mph)	720	720	720
Urban Expressway and Freeway (55 mph to 60 mph)	850	1350	2200
Rural Expressway and Freeway (70 mph to 75 mph)	1000	1500	2640
Interstate/4-Lane Divided (Maintenance and Surveying)	750	1000	1500

KEY

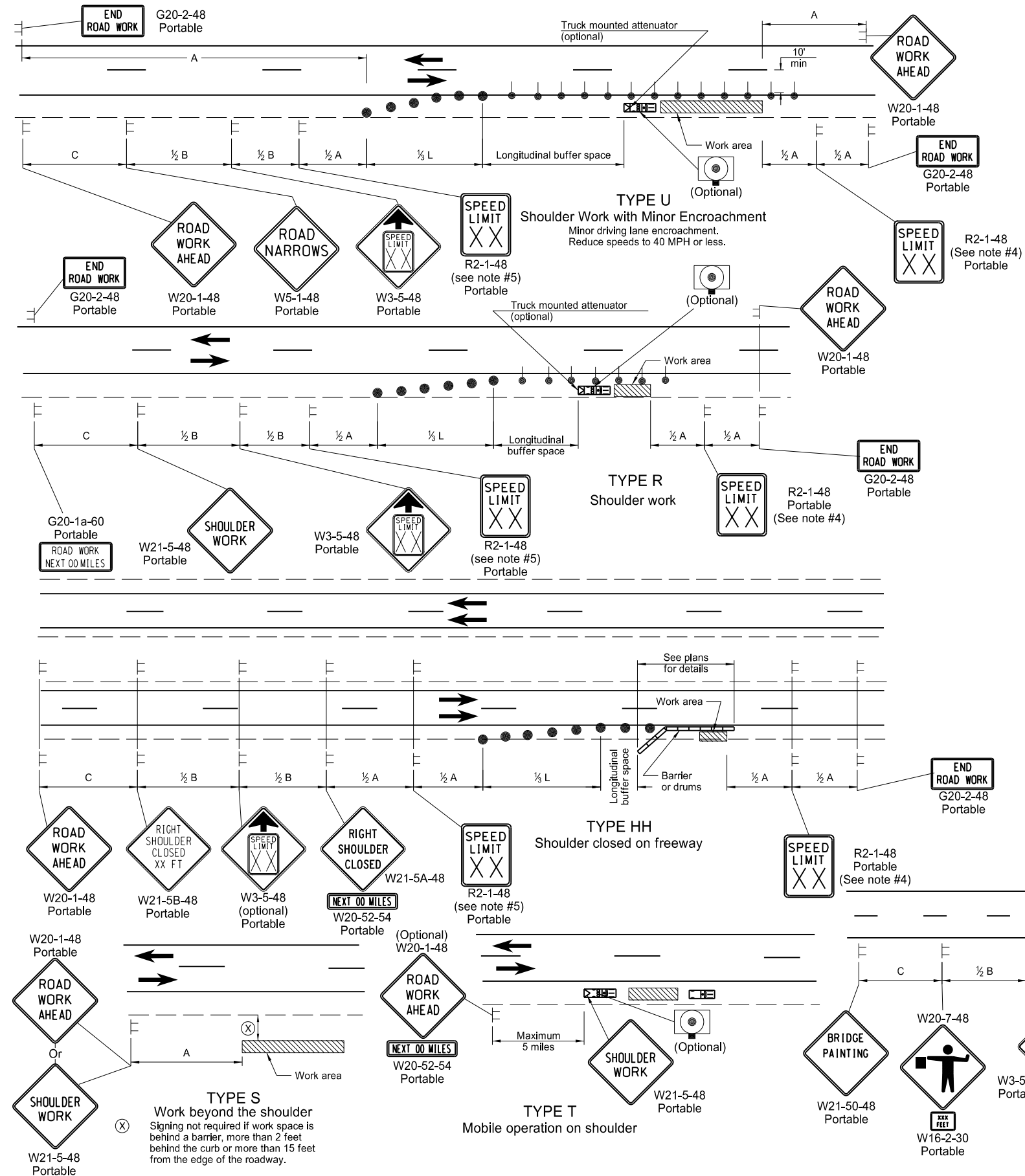
	Type III barricade		Work area
	Sign		Sequencing arrow panel
	Delineator Drum		Tubular Markers

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SHOULDER CLOSURES AND BRIDGE PAINTING LAYOUTS

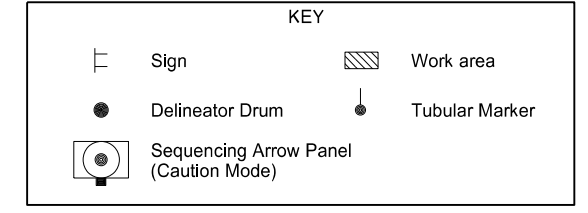
D-704-24



- Notes
- Variables
S = Numerical value of speed limit or 85th percentile.
W = The width of the taper.
L = Minimum length of taper, or $S \times W$ for freeways, expressways, and all other roads with speeds of 45 mph or greater, or $W \times S^2 / 60$ for urban, residential, and other streets with speeds of 40 mph or less.
 - Delineator drums used for tapering traffic shall be spaced at dimension "S".
Delineator drums or tubular markers used for tangents shall be spaced at 2 times "S".
 - Sequencing Arrow Panels
Type A shall be used on roadways with slow moving traffic speeds and low volume (25 mph or less and 750 ADT or less).
Type B shall be used on roadways with moderate traffic speeds and volumes (40 mph or less and 5000 ADT or less).
Type C shall be used on roadways with high traffic speeds and volumes (over 40 mph or over 5000 ADT).
 - The speed limit shall be re-established. The exact speed limit shall be determined in the field, dependent on location and conditions.
 - The reduced speed limit shall be determined dependent on the in place speed limit before construction. The speed limit reduction should not exceed 10 mph below the existing speed limit, unless the design speed of the work zone feature has been reduced below the 10 mph. In this case, the speed limit reduction shall not exceed 30 MPH. Where speed limits are to be reduced more than 30 MPH, a second speed limit sign shall be installed with the desired speed reduction but shall not exceed 30 MPH. The second speed limit sign shall be placed at $\frac{1}{2}B$.
 - When warning signs are used in urban areas and the signs are not portable, flags shall be installed. The flags shall be 24 inches square, mounted perpendicular to the edges of the diamond sign, and at such a distance above the edge so that when the flag is limp it will not touch the sign. Rural areas will not require flags.
 - Existing speed limit signs within a reduced speed zone shall be covered.
 - The contractor has the option of using portable sign supports in lieu of post mounted signs in accordance with the NDDOT Standard Specifications.

Longitudinal Buffer Space	
Speed (mph)	Length Min (feet)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

ADVANCE WARNING SIGN SPACING			
Road Type	Distance Between Signs Min. (ft)		
	A	B	C
Urban - Low Speed (30 mph or less)	150	150	150
Urban - Low Speed (over 30 to 40 mph)	280	280	280
Urban - High Speed (over 40 mph to 50 mph)	360	360	360
Rural - High Speed (over 50 mph to 65 mph)	720	720	720
Urban Expressway and Freeway (55 mph to 60 mph)	850	1350	2200
Rural Expressway and Freeway (70 mph to 75 mph)	1000	1500	2640
Interstate/4-Lane Divided (Maintenance and Surveying)	750	1000	1500

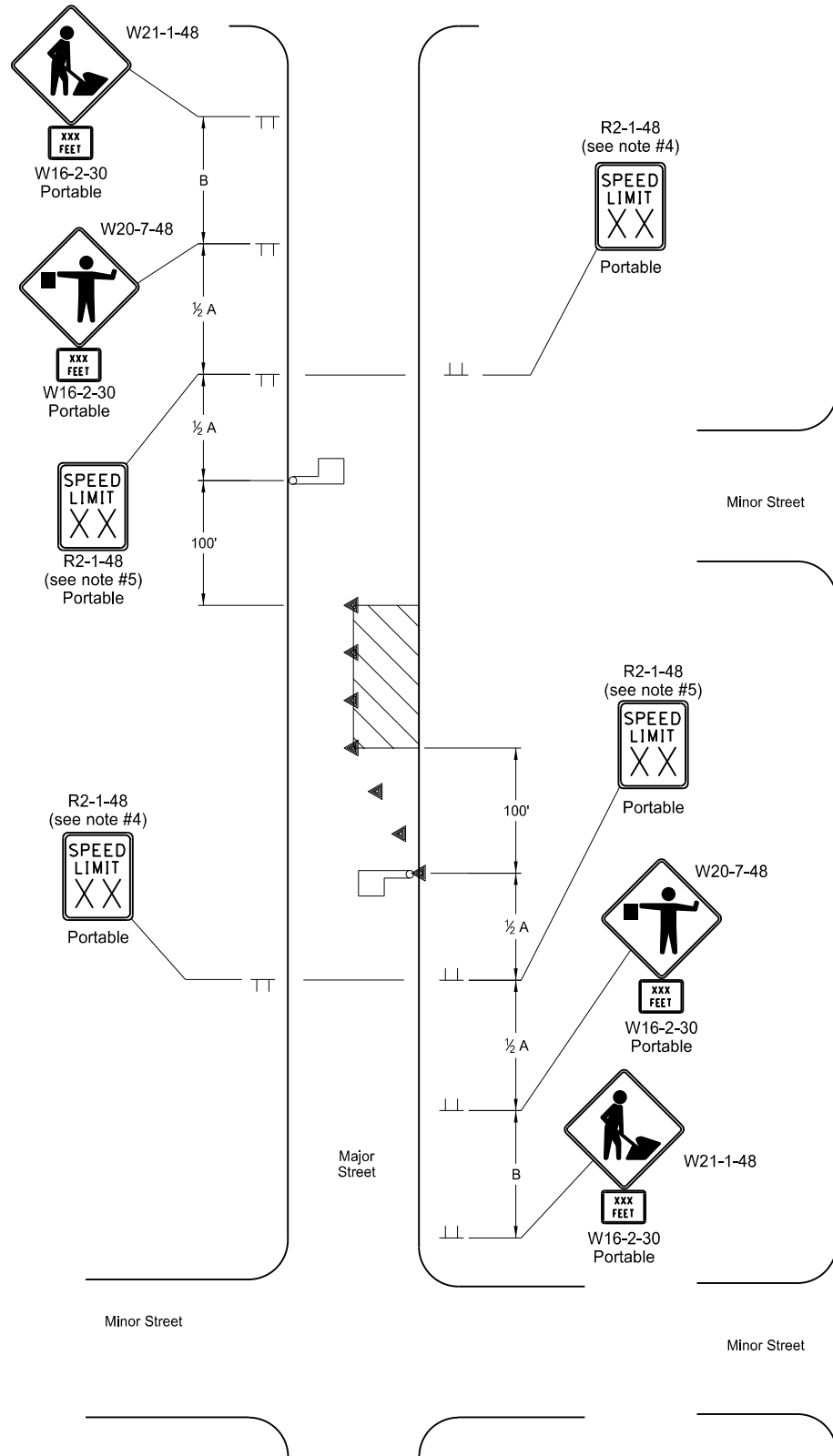


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LANE CLOSURES ON URBAN STREETS LAYOUTS

D-704-25

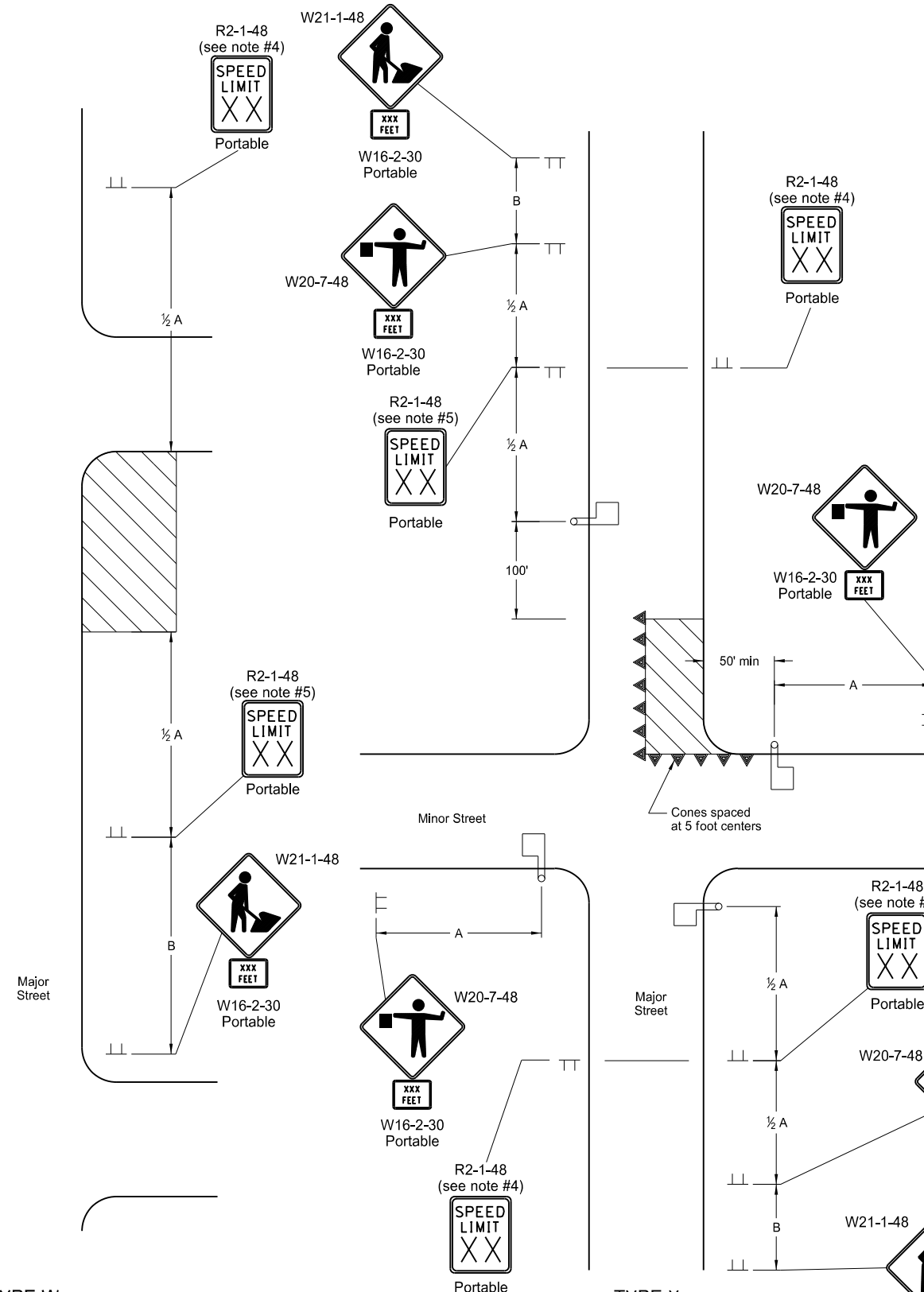


TYPE V
LANE CLOSURE ON URBAN STREET

When portion of roadway is closed to traffic only during daylight hours (mid block location).

TYPE W
WORK BEYOND CURB ON URBAN STREET

When work area is outside of driving lane and no closure is necessary



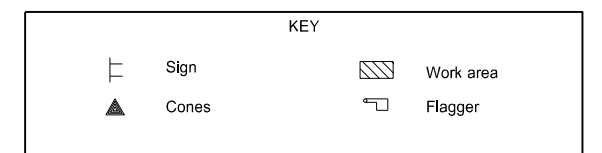
TYPE X
LANE CLOSURE NEAR INTERSECTION ON URBAN STREET

When portion of roadway is closed to traffic only during daylight hours (end block location).

Notes

1. For Type V: The contractor will be allowed to work only on one side of the roadway at a time so as not to block off any more than one lane of traffic.
2. When parking is present, the signs shall be placed so they are entirely visible above the parked vehicles or placed at the edge of the parking area so they are visible to oncoming traffic. These signs may be skid mounted when placed on the roadway surface.
3. Delineator cones used for tapering traffic shall be placed at 3 equal spaces. Delineator cones for tangents shall be spaced at dimension "S". "S" = the numerical value of speed limit.
4. The speed limit shall be re-established. The exact speed limit shall be determined in the field, dependent on location and conditions.
5. The reduced speed limit shall be determined dependent on the in place speed limit before construction. The speed limit reduction should not exceed 10 mph below the existing speed limit, unless the design speed of the work zone feature has been reduced below the 10 mph. In this case, the speed limit reduction shall not exceed 30 MPH. Where speed limits are to be reduced more than 30 MPH, a second speed limit sign shall be installed with the desired speed reduction but shall not exceed 30 MPH. The second speed limit sign shall be placed at 1/2 B.
6. When warning signs are used in urban areas and the signs are not portable, flags shall be installed. The flags shall be 24 inches square, mounted perpendicular to the edges of the diamond sign, and at such a distance above the edge so that when the flag is limp it will not touch the sign. Rural areas will not require flags.
7. Existing speed limit signs within a reduced speed zone shall be covered.
8. Where necessary, safe speed to be determined by the Engineer.
9. The contractor has the option of using portable sign supports in lieu of post mounted signs in accordance with the NDDOT Standard Specifications.
10. Urban projects do not need the G20-55-96 and R2-1a-24 signs.

Road Type	Distance Between Signs Min. (ft)		
	A	B	C
Urban - Low Speed (30 mph or less)	150	150	150
Urban - Low Speed (over 30 to 40 mph)	280	280	280
Urban - High Speed (over 40 mph to 50 mph)	360	360	360
Rural - High Speed (over 50 mph to 65 mph)	720	720	720
Urban Expressway and Freeway (55 mph to 60 mph)	850	1350	2200
Rural Expressway and Freeway (70 mph to 75 mph)	1000	1500	2640
Interstate/4-Lane Divided (Maintenance and Surveying)	750	1000	1500

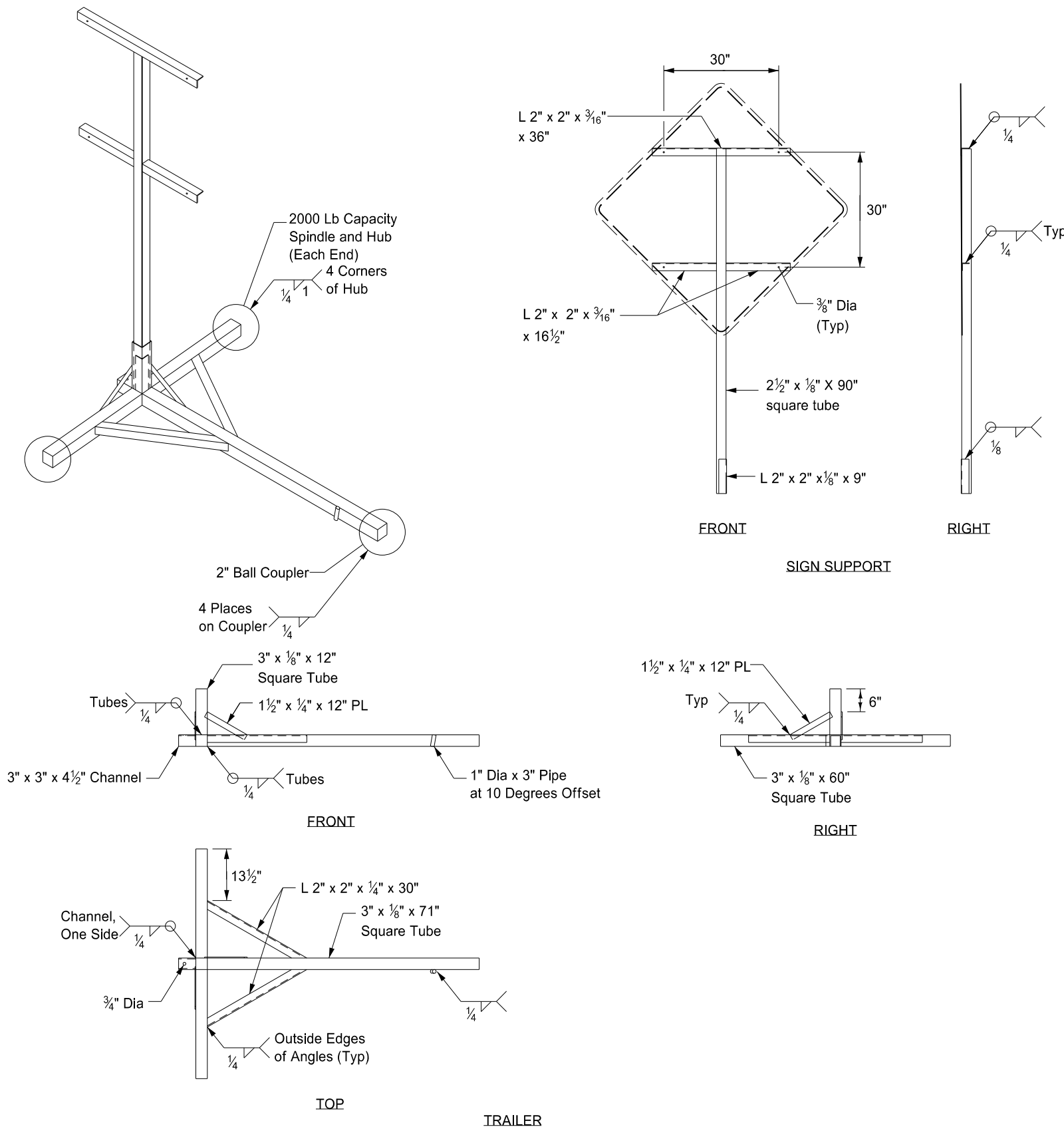


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PORTABLE SIGN SUPPORT ASSEMBLY

D-704-50



Notes:

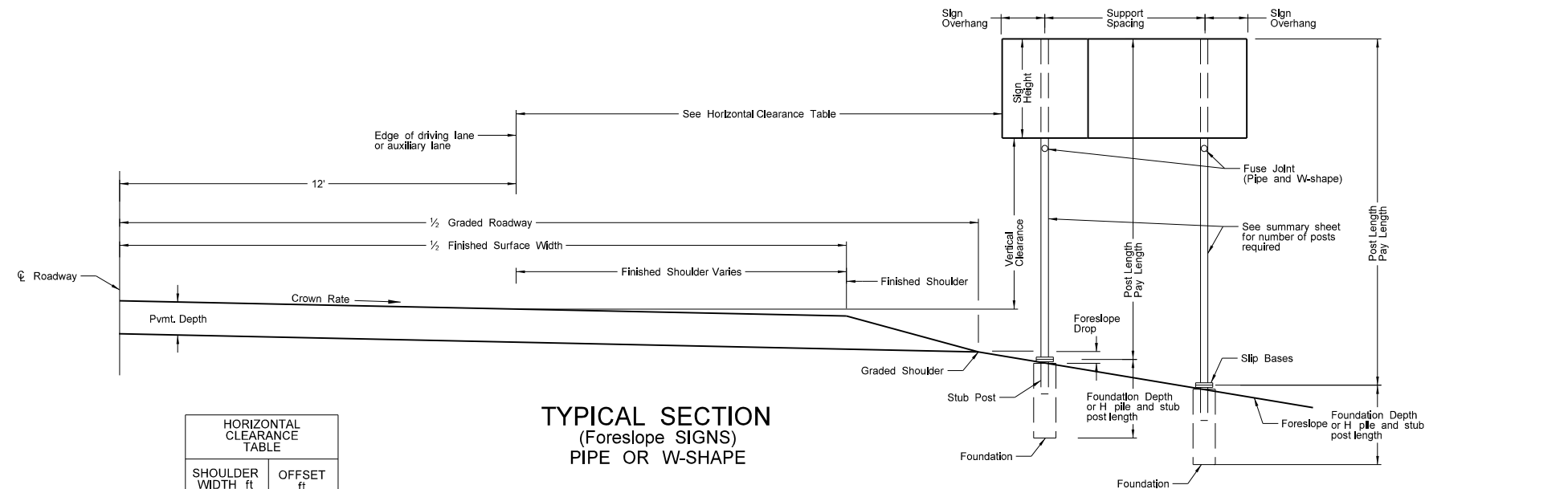
- ① The maximum weight of the assembly is 250 pounds.
- ② Use a 14" wheel and tire.
- ③ Automotive and equipment axle assemblies may not be used for trailer-mounted sign supports.
- ④ Other NCHRP 350 crash tested assemblies are acceptable.

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11-23-10	
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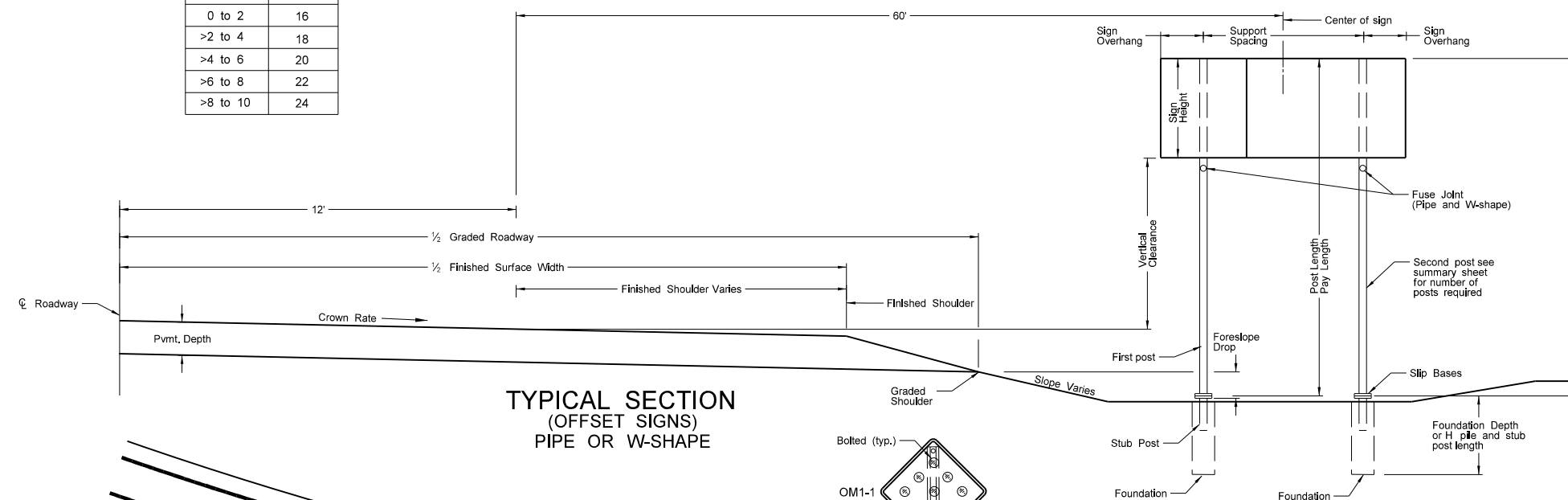
PIPE OR W-SHAPE ASSEMBLY DETAILS

D-754-1

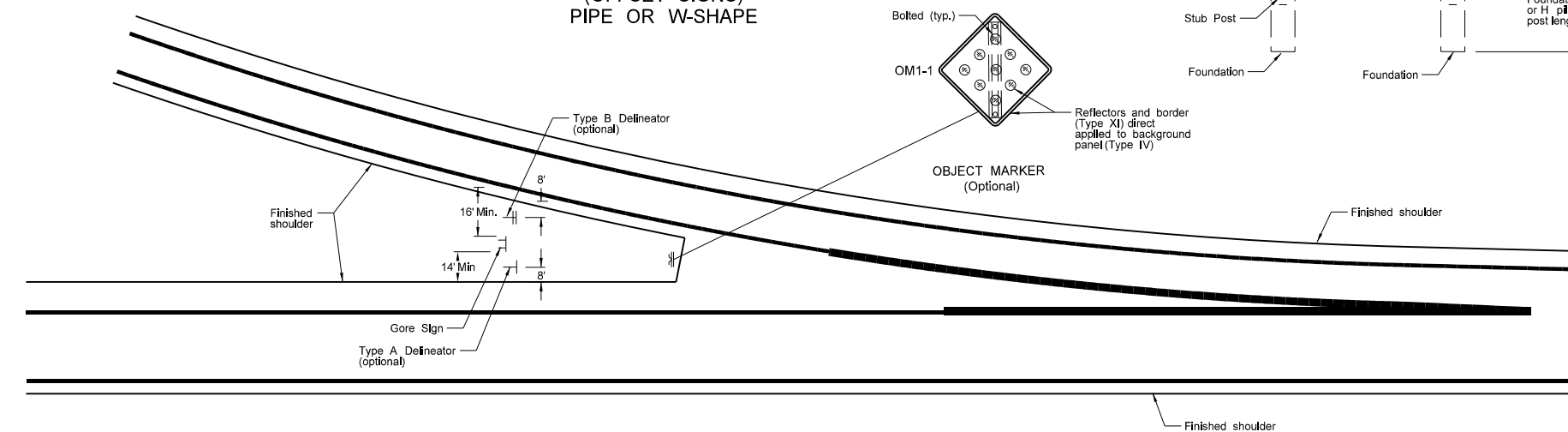


HORIZONTAL CLEARANCE TABLE	
SHOULDER WIDTH ft	OFFSET ft
0 to 2	16
>2 to 4	18
>4 to 6	20
>6 to 8	22
>8 to 10	24

TYPICAL SECTION (FORESLOPE SIGNS) PIPE OR W-SHAPE

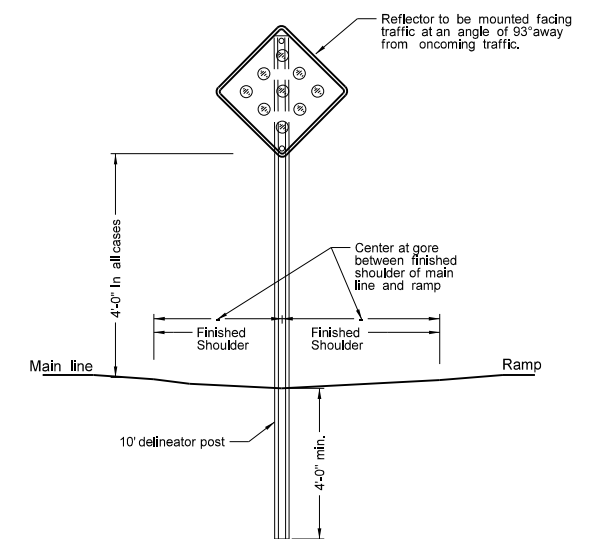


TYPICAL SECTION (OFFSET SIGNS) PIPE OR W-SHAPE



EXIT RAMP GORE SIGN PLACEMENT

NOTES:
MINIMUM VERTICAL CLEARANCE:
 Signs installed at the side of the road in rural districts shall be at least 5 feet measured from the bottom of the sign to the edge of driving lane, or Auxiliary Lane. Where parking or pedestrian movements occur, the clearance to the bottom of the sign shall be at least 7 feet.
 Signs on freeways, expressways, and multi-lane conventional roadways shall be installed with a minimum height of 7 feet.
 Where signs are placed at least 30 feet or more from the edge of the traveled way, the height to the bottom of such sign shall be 5 feet above the edge of driving lane.
 Signs may be placed a maximum of 6" above the vertical clearance specified above.

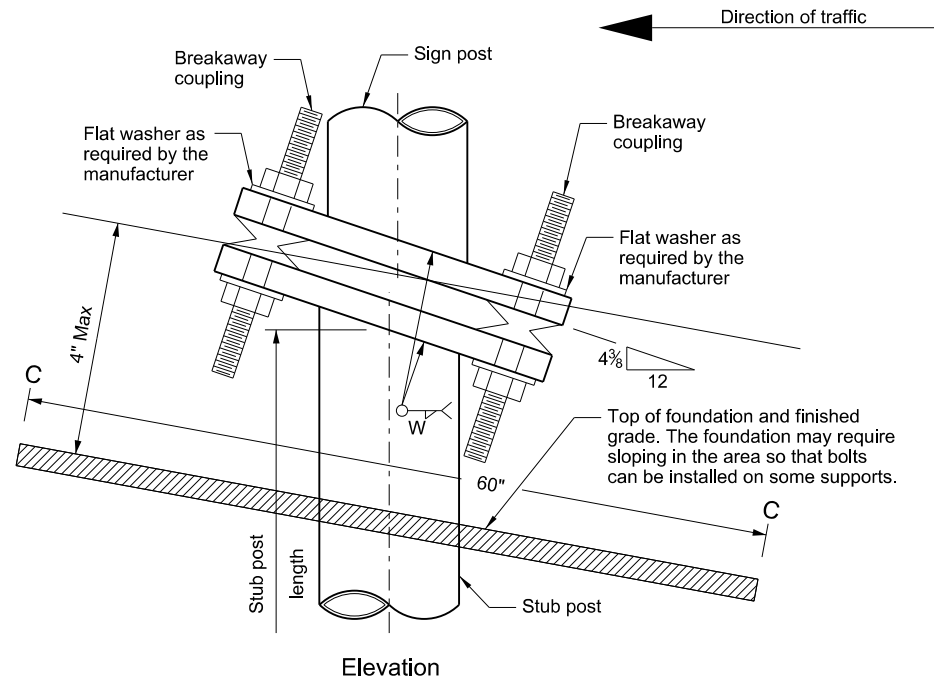


OBJECT MARKER INSTALLATION
 (Posts shall conform to section 894.04 A of Standard Specifications.)

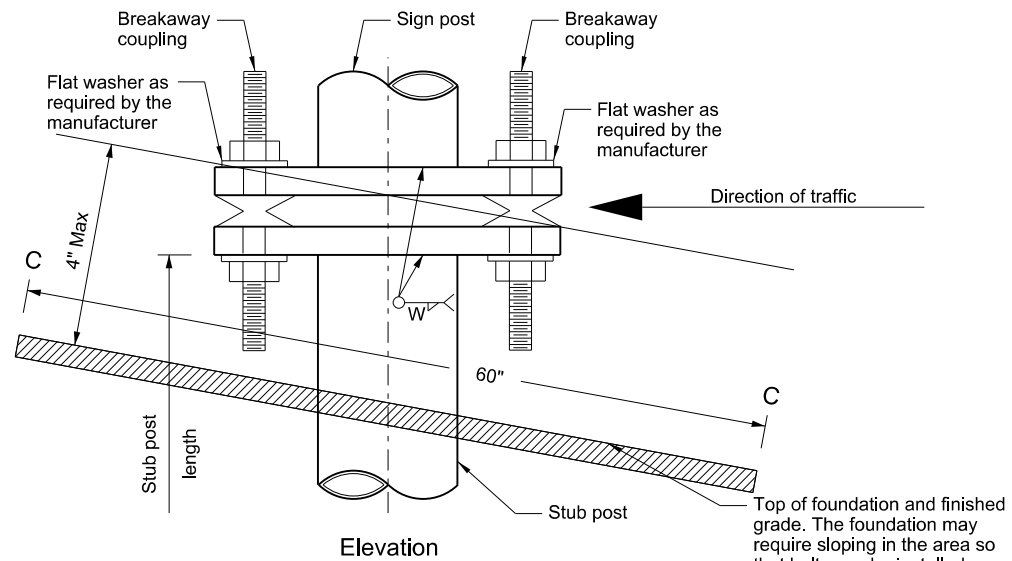
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
12-1-10	
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DATE	CHANGE
7-18-14	Modify notes and update reflective sheeting for object marker. Add correct section number for object marker post.

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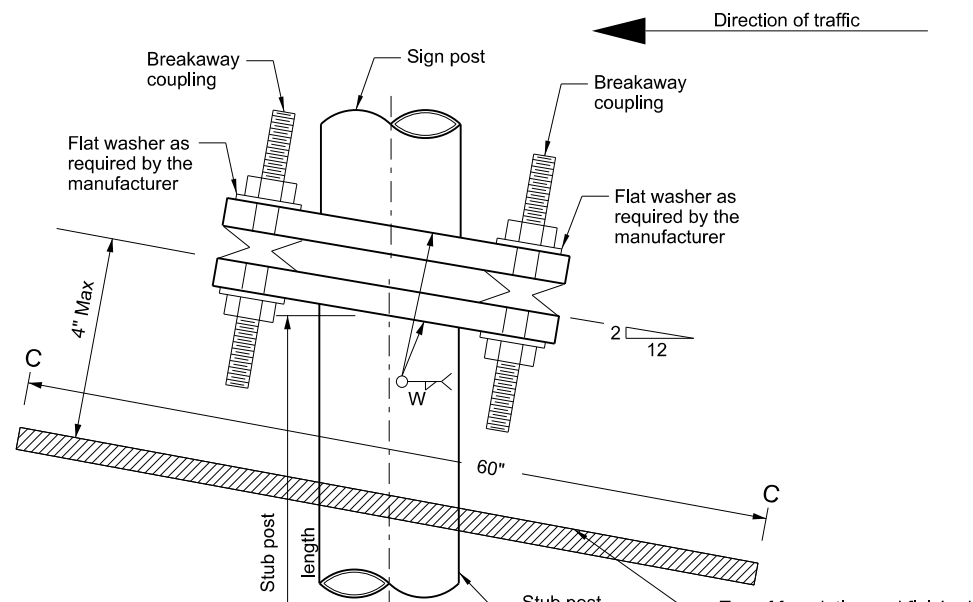
Breakaway Coupler System for Standard Pipe Stub Post



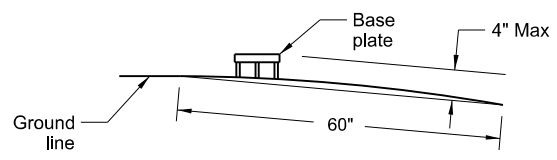
Single Post Sign and Stub Post Type A



Two or More Post Sign and Stub Post For two post signs with 8' or more post spacing and all three or more post signs Type C



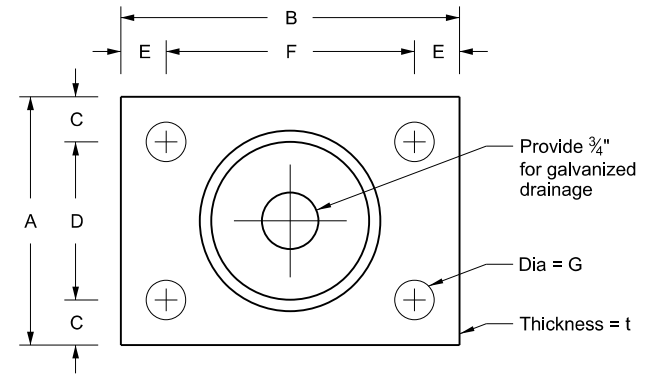
Two Post Sign and Stub Post For signs with less than 8' post spacing Type B



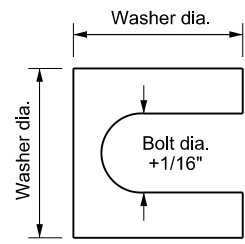
Section C - C
Max. protection of the stub post is 4" above a 60" chord aligned radially to the center line of the highway and connecting any point, within the length of the chord, on the ground surface on one side of the support to a point in the ground surface on the other side.

Notes:

- In lieu of the breakaway base system on standards D-754-3 and D-754-4 the breakaway coupler system may be used. The breakaway coupler system shall be manufactured from material meeting the requirements of ASTM A325 fasteners with the special requirements as specified by DENT BREAKAWAY IND., INC. which meets the requirements of NCHRP Report 350.
- Fuse Joint Cuts - Steel posts may be cut after galvanizing and cut surface treated in accordance with ASTM A780 or the cut may be galvanized after fabrication. Aluminum posts will need no treatment.
- Shim as required to plumb post.
- Tighten all bolts the maximum possible with 12" to 15" wrench.



Plan Base Plate



Shim Detail

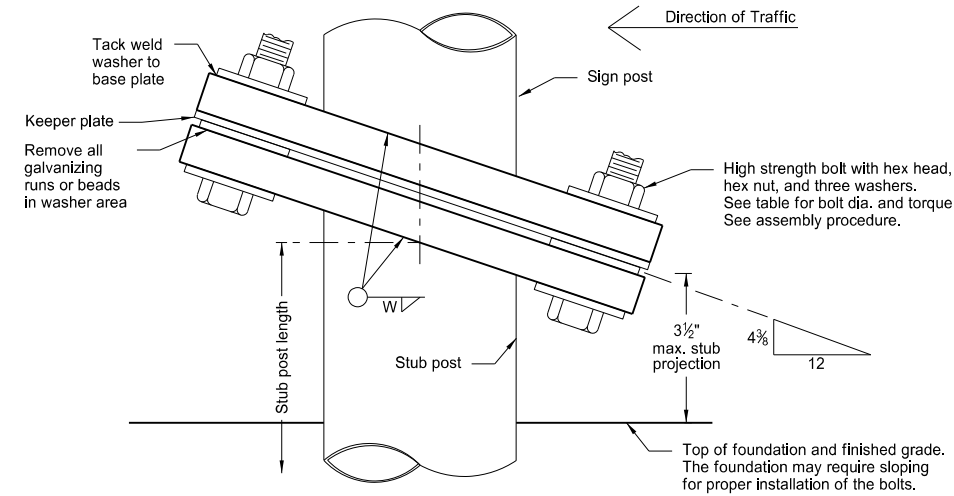
Furnish 2 - .012"± thick and 2 - .032"± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.

Dimension Nom. Pipe Size	Base Table Data										Stub Post Length
	Breakaway Coupling	A	B	C	D	E	F	G	t	W	
Steel											
3 1/2"	1/2" x 4 1/2"	5 1/2"	8 3/8"	13 1/16"	3 7/8"	13 1/16"	6 3/4"	9 1/16"	3/4"	3/8"	1'-6"
4"	5/8" x 4 1/2"	5 1/2"	8 3/4"	1"	3 1/2"	1"	6 3/4"	1 1/16"	3/4"	3/8"	1'-6"
5"	3/4" x 5 1/4"	6 1/2"	10"	1 1/8"	4 1/4"	1 1/8"	7 3/4"	13 1/16"	1"	7/16"	2'-0"
6"	1" x 5 1/2"	7 1/2"	11 3/4"	1 3/8"	4 3/4"	1 3/8"	9"	1 1/16"	1 1/4"	7/16"	2'-0"
8"	1" x 5 1/4"	9 1/2"	13 1/4"	1 3/8"	6 3/4"	1 3/8"	10 1/2"	1 1/16"	1 1/4"	7/16"	2'-6"
10"	1" x 5 1/4"	11 3/4"	15 1/4"	1 3/8"	9"	1 3/8"	12 1/2"	1 1/16"	1 1/4"	1/2"	3'-0"
12"	1" x 7"	13 3/4"	18"	1 5/8"	10 1/2"	1 5/8"	14 3/4"	1 1/16"	1 1/2"	1/2"	3'-0"
Aluminum											
3 1/2"	1/2" x 4 1/2"	5 1/2"	8 3/8"	13 1/16"	3 7/8"	13 1/16"	6 3/4"	9 1/16"	3/4"	3/8"	1'-6"
4"	5/8" x 4 1/2"	5 1/2"	8 3/4"	1"	3 1/2"	1"	6 3/4"	1 1/16"	1"	7/16"	1'-6"
5"	3/4" x 5 1/4"	6 1/2"	10"	1 1/8"	4 1/4"	1 1/8"	7 3/4"	13 1/16"	1"	1/2"	2'-0"
6"	1" x 5 1/4"	7 1/2"	11 3/4"	1 3/8"	4 3/4"	1 3/8"	9"	1 1/16"	1 1/4"	1/2"	2'-0"
8"	1" x 5 1/4"	9 1/2"	13 1/4"	1 3/8"	6 3/4"	1 3/8"	10 1/2"	1 1/16"	1 1/4"	1/2"	2'-6"
10"	1" x 5 1/4"	11 3/4"	15 1/4"	1 3/8"	9"	1 3/8"	12 1/2"	1 1/16"	1 1/2"	7/16"	3'-0"
12"	1" x 7"	13 3/4"	18"	1 5/8"	10 1/4"	1 5/8"	14 3/4"	1 1/16"	1 3/4"	1 1/16"	3'-0"

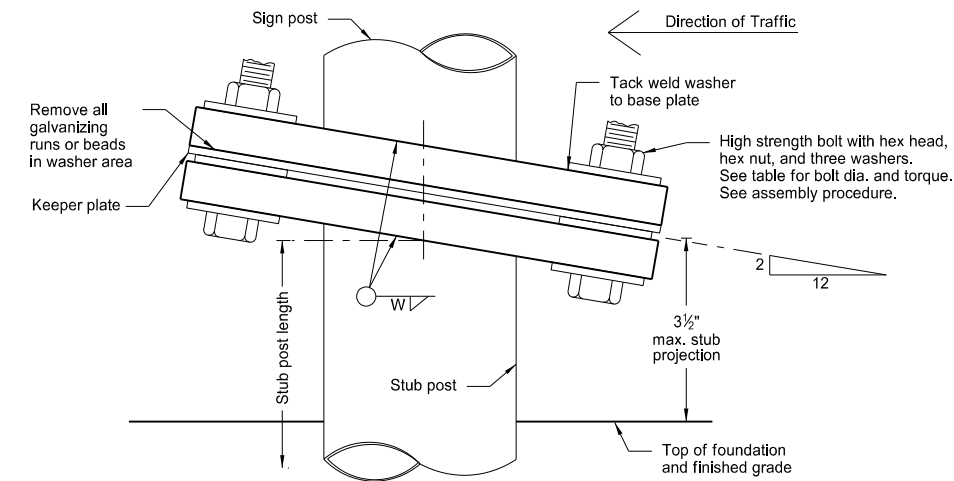
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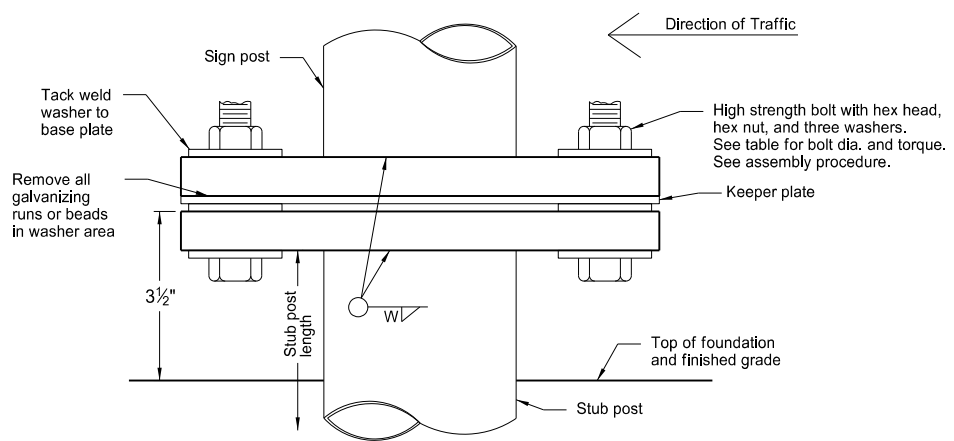
Breakaway System for Standard Pipe Stub Post



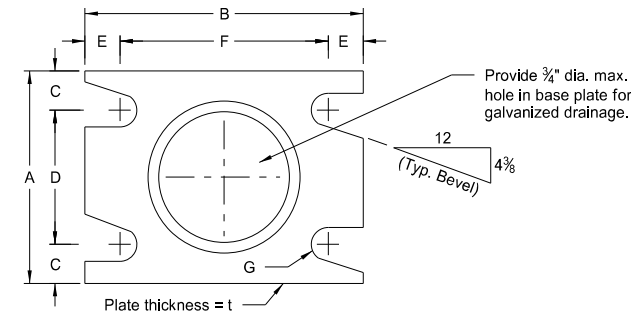
Stub Post Connection - Type A
Elevation View
(Single Post)



Stub Post Connection - Type B
Elevation View
(Two Posts)

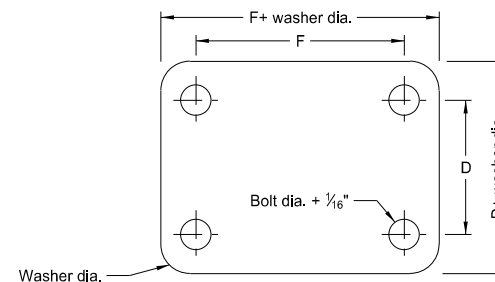


Stub Post Connection - Type C
Elevation View
(Two Posts)



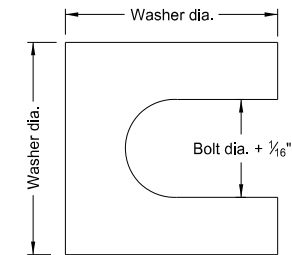
Base Plate Plan View

The bevel shall be toward the roadway on the approach side and away on the other.



Keeper Plate Detail

Keeper plate shall be placed above the center washer between the top and bottom slip bases. Keeper plate shall be fabricated from 28 gauge material, galvanized after fabrication conforming to ASTM A653 G60 coating.



Shim Detail

Furnish 2 each ±.012" thick and 2 each ±.032" thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.

Notes:
When the base plate is fabricated in aluminum, the aluminum base plate washers shown shall be tack welded to the base as shown.

Use standard drawing D-754-6 for fuse plate, hinge plate, and foundation details.

Assembly Procedure:

1. Assemble post to stub with bolts and with one flat washer between base plates and keeper plate.
2. Shim as required.
3. Tighten all bolts the maximum possible with 12" to 15" wrench to bed washers and shims and to clean bolt threads, then loosen.
4. Retighten bolts in a systematic order to prescribed torque. (see table)
5. Loosen each bolt and apply thread locking liquid resin. The liquid locking resin shall conform to ASTM D5363-03 (2008). The thread locker shall secure the entire assembly from vibration, pressure and corrosion. The thread locker shall fill the gaps between the thread and the mating surface to form solid, one part assemblies.
6. Retighten each bolt to prescribed torque in the same order as initial retightening.

Base Data Table												
Nominal Post Size dia.	Bolt Size (dia. x length)	Base Bolt Torque ft. lb.	A	B	C	D	E	F	G	t	W	Stub Post Length
Steel												
3 1/2"	1/2"x2 1/2"	12	5 1/2"	8 3/8"	1 3/16"	3 7/8"	1 3/16"	6 3/4"	9/32"	3/4"	3/8"	1'-6"
4"	5/8"x2 3/4"	29	5 1/2"	8 3/4"	1"	3 1/2"	1"	6 3/4"	1 1/32"	3/4"	3/8"	1'-6"
5"	3/4"x3 1/2"	46	6 1/2"	10"	1 1/8"	4 1/4"	1 1/8"	7 3/4"	1 3/32"	1"	7/16"	2'-0"
6"	1"x4 1/4"	61	7 1/2"	11 1/4"	1 3/8"	4 3/4"	1 3/8"	9"	1 1/32"	1 1/4"	7/16"	2'-0"
Aluminum												
3 1/2"	1/2"x2 1/2"	12	5 1/2"	8 3/8"	1 3/16"	3 7/8"	1 3/16"	6 3/4"	9/32"	3/4"	3/8"	1'-6"
4"	5/8"x2 3/4"	29	5 1/2"	8 3/4"	1"	3 1/2"	1"	6 3/4"	1 1/32"	1"	7/16"	1'-6"
5"	3/4"x3 1/2"	46	6 1/2"	10"	1 1/8"	4 1/4"	1 1/8"	7 3/4"	1 3/32"	1"	1/2"	2'-0"
6"	1"x4 1/4"	61	7 1/2"	11 1/4"	1 3/8"	4 3/4"	1 3/8"	9"	1 1/32"	1 1/4"	1/2"	2'-0"

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 11-21-11	
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2-28-14	Removed lower post and foundation details.

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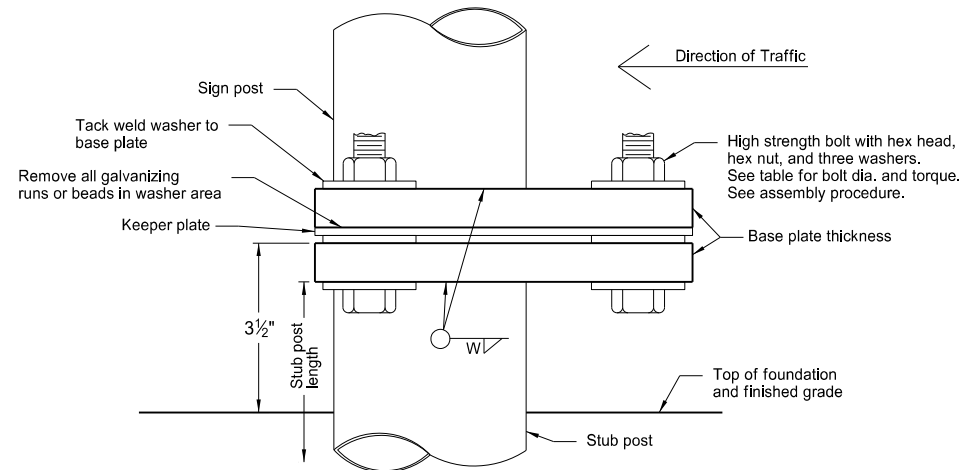
Multi-Directional Breakaway System for Standard Pipe Stub Post

Notes:
When the base plate is fabricated in aluminum, the aluminum base plate washers shown shall be tack welded to the base as shown.

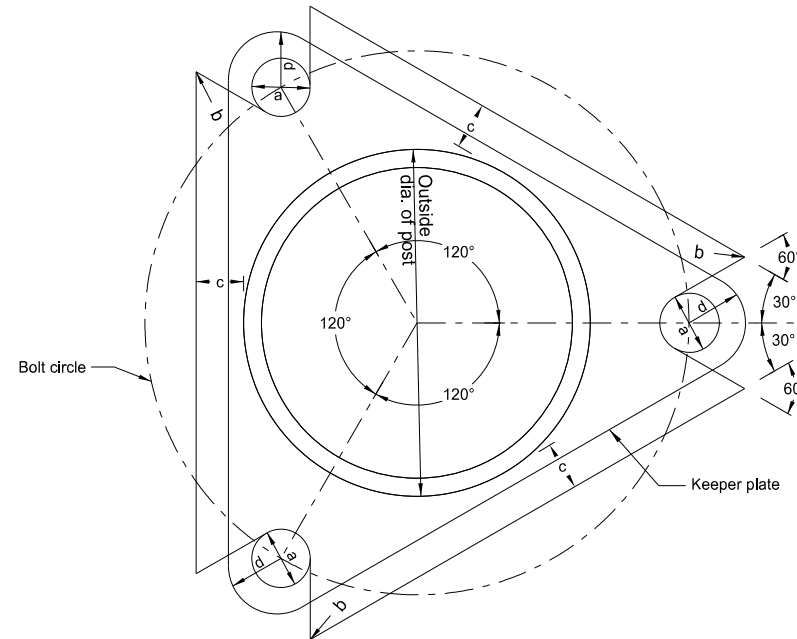
Use standard drawing D-754-6 for fuse plate, hinge plate, and foundation details.

Assembly Procedure:

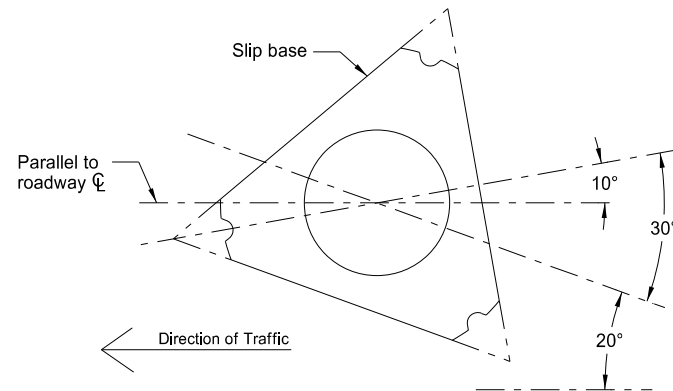
1. Assemble post to stub with bolts and with one flat washer between base plates and keeper plate.
2. Shim as required.
3. Tighten all bolts the maximum possible with 12" to 15" wrench to bed washers and shims and to clean bolt threads, then loosen.
4. Retighten bolts in a systematic order to prescribed torque. (see table)
5. Loosen each bolt and apply thread locking liquid resin. The liquid locking resin shall conform to ASTM D5363-03 (2008). The thread locker shall secure the entire assembly from vibration, pressure and corrosion. The thread locker shall fill the gaps between the thread and the mating surface to form solid, one part assemblies.
6. Retighten each bolt to prescribed torque in the same order as initial retightening.



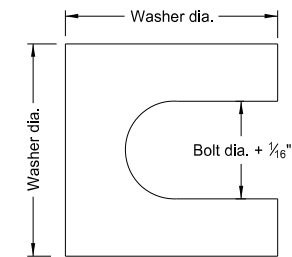
Stub Post Connection - Type D
Elevation View
(Single Post)



Stub Post Detail
Top View



Slip Base Orientation
Top View



Shim Detail

Furnish 2 each ±.012" thick and 2 each ±.032" thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.

Base Data Table											
Nominal Post Size dia.	Outside Post dia.	Bolt Circle	a rad.	b rad.	c rad.	Bolt Size (dia. x length)	Base Plate Thickness	W	Base Bolt Torque ft. lb.	d rad.	Stub Post Length
Steel											
3 1/2"	4"	7"	1 1/16"	1/8"	1 1/8"	1" x 4"	1 1/4"	5/16"	55	1 1/8"	1'-6"
4"	4.5"	7 1/2"	1 1/16"	1/8"	1 1/8"	1" x 4 1/2"	1 1/2"	3/8"	98	1 1/8"	1'-6"
5"	5.563"	9 1/2"	1 5/16"	1/8"	1 1/8"	1 1/4" x 5"	1 1/2"	3/8"	167	1 3/8"	2'-0"
Aluminum											
3 1/2"	4"	7"	1 3/16"	1/8"	7/8"	3/4" x 3 1/2"	1"	5/16"	43	7/8"	1'-6"
4"	4.5"	7 1/2"	1 3/16"	1/8"	3/4"	3/4" x 4"	1 1/4"	5/16"	76	7/8"	1'-6"
5"	5.563"	9 1/2"	1 1/16"	1/8"	1 1/8"	1" x 4"	1 1/4"	5/16"	98	1 1/8"	2'-0"
6"	6.625"	10 1/4"	1 1/16"	1/8"	3/4"	1" x 4 1/2"	1 1/2"	3/8"	134	1 1/8"	2'-0"

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FOUNDATION DATA FOR STEEL SUPPORTS

D-754-5

Foundation Diameter	Depth	Foundation		Vertical Reinforcing Steel				Horizontal Tie Bars		
		Conc. Vol. for 1 Post (CU YDS)	Conc. Vol. for 2 Posts (CU YDS)	Length of Each Bar	Size	No. Bars for 1 Post	No. Bars for 2 Posts	Size	No. Bars for 1 Post	No. Bars for 2 Posts
1' - 4"	4' - 6"	0.23	0.47	4' - 2"	5	6	12	3	6	12
1' - 4"	5' - 0"	0.26	0.52	4' - 8"	5	6	12	3	7	14
1' - 4"	5' - 6"	0.28	0.57	5' - 2"	5	6	12	3	8	16
1' - 4"	6' - 0"	0.31	0.62	5' - 8"	5	6	12	3	8	16
1' - 4"	6' - 6"	0.34	0.67	6' - 2"	5	6	12	3	9	18
1' - 4"	7' - 0"	0.36	0.72	6' - 8"	5	6	12	3	9	18
1' - 4"	7' - 6"	0.39	0.78	7' - 2"	5	6	12	3	10	20
1' - 4"	8' - 0"	0.41	0.83	7' - 8"	5	6	12	3	11	22
1' - 4"	8' - 6"	0.44	0.88	8' - 2"	5	6	12	3	11	22
1' - 4"	9' - 0"	0.47	0.93	8' - 8"	5	6	12	3	12	24
1' - 4"	9' - 6"	0.49	0.98	9' - 2"	5	6	12	3	12	24
1' - 4"	10' - 0"	0.52	1.03	9' - 8"	5	6	12	3	13	26
1' - 4"	10' - 6"	0.54	1.09	10' - 2"	5	6	12	3	14	28
1' - 4"	11' - 0"	0.57	1.14	10' - 8"	5	6	12	3	14	28
1' - 4"	11' - 6"	0.59	1.19	11' - 2"	5	6	12	3	15	30
1' - 4"	12' - 0"	0.62	1.24	11' - 8"	5	6	12	3	15	30

Foundation Diameter	Depth	Foundation		Vertical Reinforcing Steel				Horizontal Tie Bars		
		Conc. Vol. for 1 Post (CU YDS)	Conc. Vol. for 2 Posts (CU YDS)	Length of Each Bar	Size	No. Bars for 1 Post	No. Bars for 2 Posts	Size	No. Bars for 1 Post	No. Bars for 2 Posts
1' - 9"	4' - 6"	0.40	0.80	4' - 2"	5	10	20	3	6	12
1' - 9"	5' - 0"	0.45	0.89	4' - 8"	5	10	20	3	7	14
1' - 9"	5' - 6"	0.49	0.98	5' - 2"	5	10	20	3	8	16
1' - 9"	6' - 0"	0.53	1.07	5' - 8"	5	10	20	3	8	16
1' - 9"	6' - 6"	0.58	1.16	6' - 2"	5	10	20	3	9	18
1' - 9"	7' - 0"	0.62	1.25	6' - 8"	5	10	20	3	9	18
1' - 9"	7' - 6"	0.67	1.34	7' - 2"	5	10	20	3	10	20
1' - 9"	8' - 0"	0.71	1.43	7' - 8"	5	10	20	3	11	22
1' - 9"	8' - 6"	0.76	1.51	8' - 2"	5	10	20	3	11	22
1' - 9"	9' - 0"	0.80	1.60	8' - 8"	5	10	20	3	12	24
1' - 9"	9' - 6"	0.85	1.69	9' - 2"	5	10	20	3	12	24
1' - 9"	10' - 0"	0.89	1.78	9' - 8"	5	10	20	3	13	26
1' - 9"	10' - 6"	0.94	1.87	10' - 2"	5	10	20	3	14	28
1' - 9"	11' - 0"	0.98	1.96	10' - 8"	5	10	20	3	14	28
1' - 9"	11' - 6"	1.02	2.05	11' - 2"	5	10	20	3	15	30
1' - 9"	12' - 0"	1.07	2.14	11' - 8"	5	10	20	3	15	30

Foundation Diameter	Depth	Foundation		Vertical Reinforcing Steel				Horizontal Tie Bars		
		Conc. Vol. for 1 Post (CU YDS)	Conc. Vol. for 2 Posts (CU YDS)	Length of Each Bar	Size	No. Bars for 1 Post	No. Bars for 2 Posts	Size	No. Bars for 1 Post	No. Bars for 2 Posts
2' - 0"	4' - 6"	0.52	1.05	4' - 2"	6	10	20	3	6	12
2' - 0"	5' - 0"	0.58	1.16	4' - 8"	6	10	20	3	7	14
2' - 0"	5' - 6"	0.64	1.28	5' - 2"	6	10	20	3	8	16
2' - 0"	6' - 0"	0.70	1.40	5' - 8"	6	10	20	3	8	16
2' - 0"	6' - 6"	0.76	1.51	6' - 2"	6	10	20	3	9	18
2' - 0"	7' - 0"	0.81	1.63	6' - 8"	6	10	20	3	9	18
2' - 0"	7' - 6"	0.87	1.75	7' - 2"	6	10	20	3	10	20
2' - 0"	8' - 0"	0.93	1.86	7' - 8"	6	10	20	3	11	22
2' - 0"	8' - 6"	0.99	1.98	8' - 2"	6	10	20	3	11	22
2' - 0"	9' - 0"	1.05	2.09	8' - 8"	6	10	20	3	12	24
2' - 0"	9' - 6"	1.11	2.21	9' - 2"	6	10	20	3	12	24
2' - 0"	10' - 0"	1.16	2.33	9' - 8"	6	10	20	3	13	26
2' - 0"	10' - 6"	1.22	2.44	10' - 2"	6	10	20	3	14	28
2' - 0"	11' - 0"	1.28	2.56	10' - 8"	6	10	20	3	14	28
2' - 0"	11' - 6"	1.34	2.68	11' - 2"	6	10	20	3	15	30
2' - 0"	12' - 0"	1.40	2.79	11' - 8"	6	10	20	3	15	30
2' - 0"	12' - 6"	1.45	2.91	12' - 2"	6	10	20	3	16	32
2' - 0"	13' - 0"	1.51	3.03	12' - 8"	6	10	20	3	17	34
2' - 0"	13' - 6"	1.57	3.14	13' - 2"	6	10	20	3	17	34
2' - 0"	14' - 0"	1.63	3.26	13' - 8"	6	10	20	3	18	36
2' - 0"	14' - 6"	1.69	3.37	14' - 2"	6	10	20	3	18	36
2' - 0"	15' - 0"	1.75	3.49	14' - 8"	6	10	20	3	19	38

Foundation Diameter	Depth	Foundation		Vertical Reinforcing Steel				Horizontal Tie Bars		
		Conc. Vol. for 1 Post (CU YDS)	Conc. Vol. for 2 Posts (CU YDS)	Length of Each Bar	Size	No. Bars for 1 Post	No. Bars for 2 Posts	Size	No. Bars for 1 Post	No. Bars for 2 Posts
2' - 4"	4' - 6"	0.71	1.43	4' - 2"	6	14	28	3	6	12
2' - 4"	5' - 0"	0.79	1.58	4' - 8"	6	14	28	3	7	14
2' - 4"	5' - 6"	0.87	1.74	5' - 2"	6	14	28	3	8	16
2' - 4"	6' - 0"	0.95	1.90	5' - 8"	6	14	28	3	8	16
2' - 4"	6' - 6"	1.03	2.06	6' - 2"	6	14	28	3	9	18
2' - 4"	7' - 0"	1.11	2.22	6' - 8"	6	14	28	3	9	18
2' - 4"	7' - 6"	1.19	2.38	7' - 2"	6	14	28	3	10	20
2' - 4"	8' - 0"	1.27	2.53	7' - 8"	6	14	28	3	11	22
2' - 4"	8' - 6"	1.35	2.69	8' - 2"	6	14	28	3	11	22
2' - 4"	9' - 0"	1.43	2.85	8' - 8"	6	14	28	3	12	24
2' - 4"	9' - 6"	1.50	3.01	9' - 2"	6	14	28	3	12	24
2' - 4"	10' - 0"	1.58	3.17	9' - 8"	6	14	28	3	13	26
2' - 4"	10' - 6"	1.66	3.33	10' - 2"	6	14	28	3	14	28
2' - 4"	11' - 0"	1.74	3.48	10' - 8"	6	14	28	3	14	28
2' - 4"	11' - 6"	1.82	3.64	11' - 2"	6	14	28	3	15	30
2' - 4"	12' - 0"	1.90	3.80	11' - 8"	6	14	28	3	15	30
2' - 4"	12' - 6"	1.98	3.96	12' - 2"	6	14	28	3	16	32
2' - 4"	13' - 0"	2.06	4.12	12' - 8"	6	14	28	3	17	34
2' - 4"	13' - 6"	2.14	4.28	13' - 2"	6	14	28	3	17	34
2' - 4"	14' - 0"	2.22	4.43	13' - 8"	6	14	28	3	18	36
2' - 4"	14' - 6"	2.30	4.59	14' - 2"	6	14	28	3	18	36
2' - 4"	15' - 0"	2.38	4.75	14' - 8"	6	14	28	3	19	38
2' - 4"	15' - 6"	2.45	4.91	15' - 2"	6	14	28	3	20	40
2' - 4"	16' - 0"	2.53	5.07	15' - 8"	6	14	28	3	20	40
2' - 4"	16' - 6"	2.61	5.23	16' - 2"	6	14	28	3	21	42
2' - 4"	17' - 0"	2.69	5.38	16' - 8"	6	14	28	3	21	42
2' - 4"	17' - 6"	2.77	5.54	17' - 2"	6	14	28	3	22	44
2' - 4"	18' - 0"	2.85	5.70	17' - 8"	6	14	28	3	23	46

Foundation Diameter	Depth	Foundation		Vertical Reinforcing Steel				Horizontal Tie Bars		
		Conc. Vol. for 1 Post (CU YDS)	Conc. Vol. for 2 Posts (CU YDS)	Length of Each Bar	Size	No. Bars for 1 Post	No. Bars for 2 Posts	Size	No. Bars for 1 Post	No. Bars for 2 Posts
2' - 6"	4' - 6"	0.82	1.64	4' - 2"	6	16	32	3	6	12
2' - 6"	5' - 0"	0.91	1.82	4' - 8"	6	16	32	3	7	14
2' - 6"	5' - 6"	1.00	2.00	5' - 2"	6	16	32	3	8	16
2' - 6"	6' - 0"	1.09	2.18	5' - 8"	6	16	32	3	8	16
2' - 6"	6' - 6"	1.18	2.36	6' - 2"	6	16	32	3	9	18
2' - 6"	7' - 0"	1.27	2.55	6' - 8"	6	16	32	3	9	18
2' - 6"	7' - 6"	1.36	2.73	7' - 2"	6	16	32	3	10	20
2' - 6"	8' - 0"	1.45	2.91	7' - 8"	6	16	32	3	11	22
2' - 6"	8' - 6"	1.55	3.09	8' - 2"	6	16	32	3	11	22
2' - 6"	9' - 0"	1.64	3.27	8' - 8"	6	16	32	3	12	24
2' - 6"	9' - 6"	1.73	3.45	9' - 2"	6	16	32	3	12	24
2' - 6"	10' - 0"	1.82	3.64	9' - 8"	6	16	32	3	13	26
2' - 6"	10' - 6"	1.91	3.82	10' - 2"	6	16	32	3	14	28
2' - 6"	11' - 0"	2.00	4.00	10' - 8"	6	16	32	3	14	28
2' - 6"	11' - 6"	2.09	4.18	11' - 2"	6	16	32	3	15	30
2' - 6"	12' - 0"	2.18	4.36	11' - 8"	6	16	32	3	15	30
2' - 6"	12' - 6"	2.27	4.55	12' - 2"	6	16	32	3	16	32
2' - 6"	13' - 0"	2.36	4.73	12' - 8"	6	16	32	3	17	34
2' - 6"	13' - 6"	2.45	4.91	13' - 2"	6	16	32	3	17	34
2' - 6"	14' - 0"	2.55	5.09	13' - 8"	6	16	32	3	18	36
2' - 6"	14' - 6"	2.64	5.27	14' - 2"	6	16	32	3	18	36
2' - 6"	15' - 0"	2.73	5.45	14' - 8"	6	16	32	3	19	38
2' - 6"	15' - 6"	2.82	5.64	15' - 2"	6	16	32	3	20	40
2' - 6"	16' - 0"	2.91	5.82	15' - 8"	6	16	32	3	20	40
2' - 6"	16' - 6"	3.00	6.00	16' - 2"	6	16	32	3	21	42
2' - 6"	17' - 0"	3.09	6.18	16' - 8"	6	16	32	3	21	42
2' - 6"	17' - 6"	3.18	6.36	17' - 2"	6	16	32	3	22	44
2' - 6"	18' - 0"	3.27	6.54	17' - 8"	6	16	32	3	23	46
2' - 6"	18' - 6"	3.36	6.73	18' - 2"	6	16	32	3	23	46
2' - 6"	19' - 0"	3.45	6.91	18' - 8"	6	16	32	3	24	48
2' - 6"	19' - 6"	3.55	7.09	19' - 2"	6	16	32	3	24	48
2' - 6"	20' - 0"	3.64	7.27	19' - 8"	6	16	32	3	25	50

NOTES:

1. All reinforcing steel shall be Grade 60 steel.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-3-13	
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Hinge Plate, Fuse Plate and Foundation Details for Standard Pipe

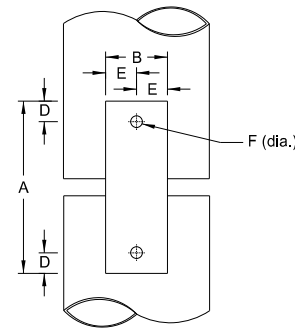
Notes:
Fuse joints cuts for steel posts may be cut after galvanizing and cut surface shall be treated with an approved method meeting ASTM A780 or the cut may be galvanized after fabrication. Aluminum posts will not require treatment.

Use standard drawings D-754-2, D-754-3 and D-754-4 for information on breakaway base details.

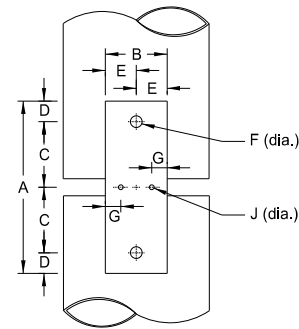
The vertical clearance of the break-away base, 4" height and 60" clearance, shall be made above and below post location, and also back and ahead of post.

Assembly Procedure:

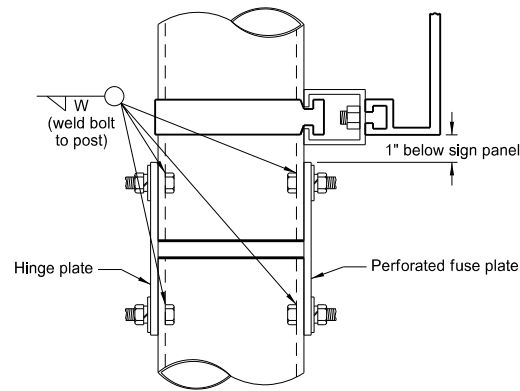
1. Assemble hinge plate to post with bolts and one flat washer and lock washer under nut.
2. Tighten all bolts the maximum possible with 12" to 15" wrench.



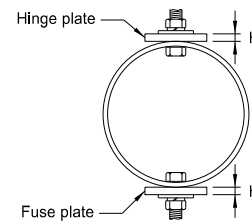
Hinge Plate



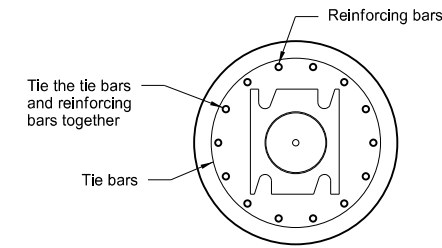
Perforated Fuse Plate



Side View

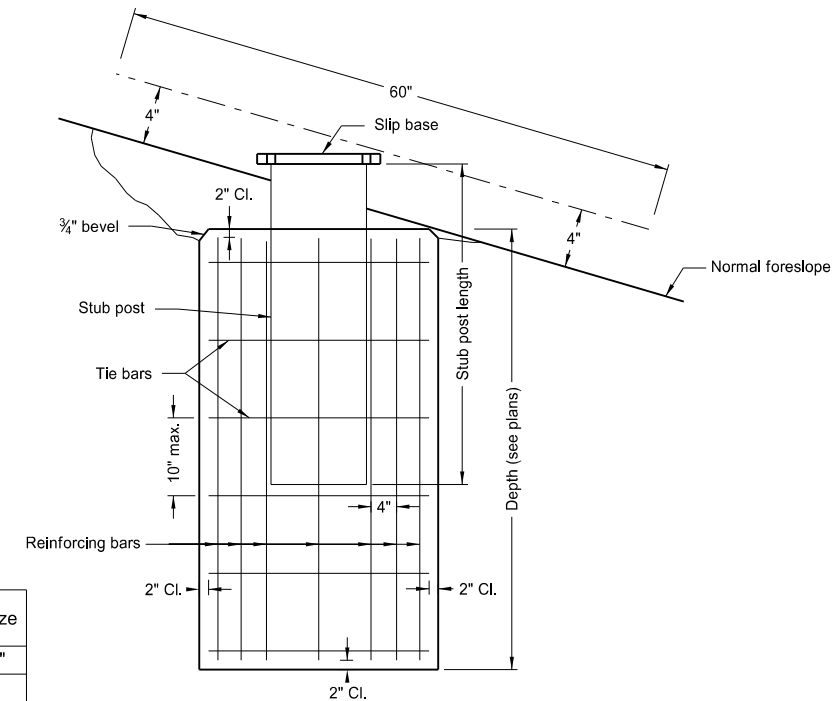


Top View



Top View

See standard drawing D-754-5 for size, number and length of rebar. If using Type D only 3 bolt base plate is required.



Foundation Front View

Foundation detail for breakaway base with stub post connection.

Foundation diameter	Post Size
1'-4"	3 1/2"-4"
1'-9"	5"-6"

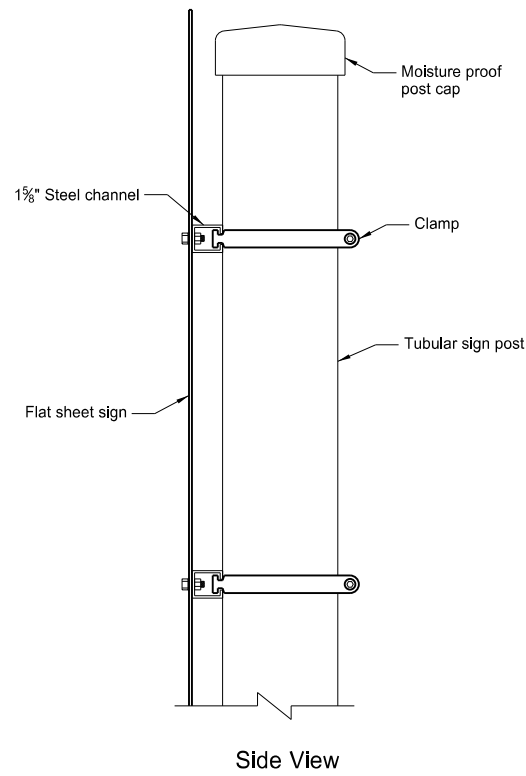
Round Metal Posts							
Dimensions				Properties			
Nominal dia. in.	Outside dia. in.	Inside dia. in.	Wall Thickness in.	Weight per Foot Pound	Moment of Inertia in. ⁴	Cross Sec. Area in. ²	Section Diameter in. ²
Steel							
3 1/2	4.000	3.548	.226	9.11	4.788	2.680	2.394
4	4.500	4.026	.237	10.79	7.233	3.174	3.215
5	5.563	5.047	.258	14.62	15.16	4.300	5.449
6	6.625	6.065	.280	18.97	28.14	5.581	8.495
Aluminum							
3 1/2	4.000	3.548	.226	3.151	4.788	2.680	2.394
4	4.500	4.026	.237	3.733	7.232	3.174	3.214
5	5.563	5.047	.258	5.057	15.16	4.300	5.451
6	6.625	6.065	.280	6.564	28.14	5.581	8.496

Nominal Pipe Size dia.	Fuse and Hinge Plate Data										
	Bolt Size	A	B	C	D	E	F	G	H	I	J
3 1/2"	1/2" ø x 1 1/2"	5"	1 3/4"	1 1/16"	1 3/16"	7/8"	9/16"	1 5/32"	1/4"	1 3/32"	7/16"
4"	5/8" ø x 1 1/2"	5 3/4"	2"	1 7/8"	1"	1"	1 1/16"	1 7/32"	3/8"	1 5/32"	9/16"
5"	5/8" ø x 1 3/4"	5 3/4"	2"	1 7/8"	1"	1"	1 1/16"	9/16"	1/2"	7/16"	5/8"
6"	3/4" ø x 2 1/4"	6 1/4"	2 1/4"	2"	1 1/8"	1 1/8"	1 3/16"	5/8"	1/2"	1/2"	5/8"

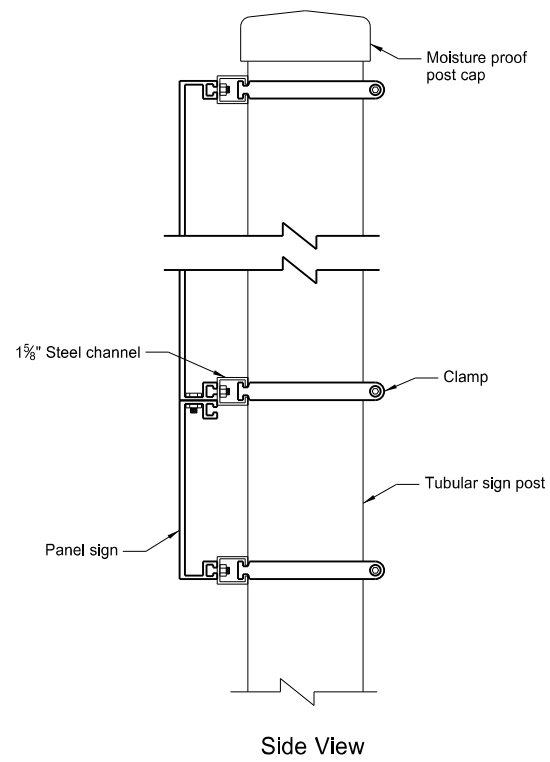
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 2-28-14	
REVISIONS	
DATE	CHANGE

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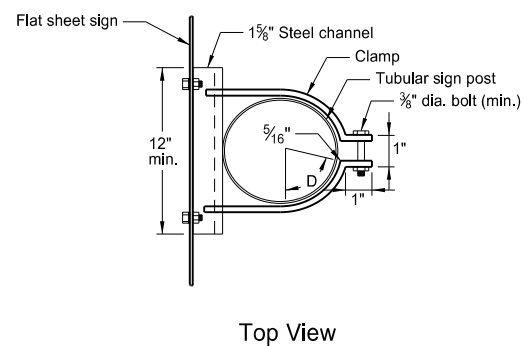
PIPE SUPPORT AND SIGN MOUNTING DETAILS



Side View

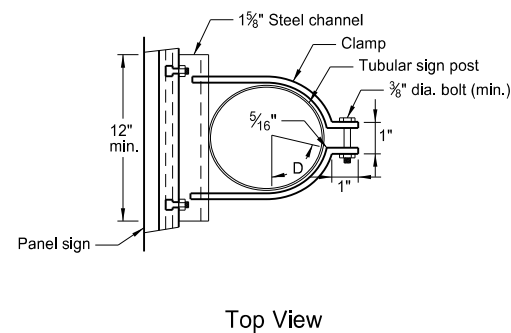


Side View



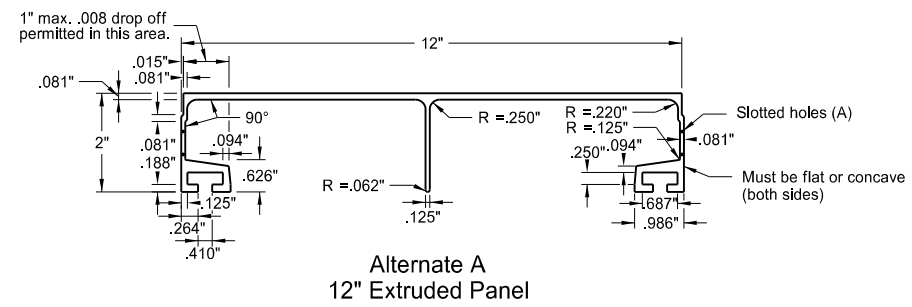
Top View

Flat Sheet Sign Clamp Mounting Details

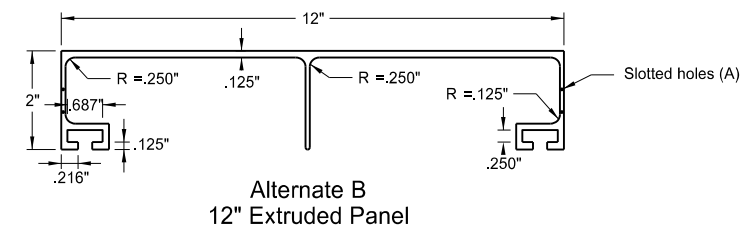


Top View

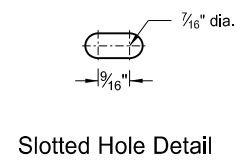
Panel Sign Clamp Mounting Details



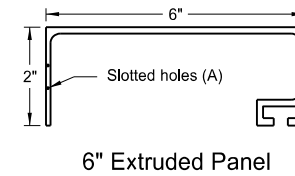
Alternate A
12" Extruded Panel



Alternate B
12" Extruded Panel



Slotted Hole Detail



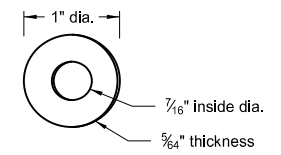
6" Extruded Panel

Aluminum Panel Details

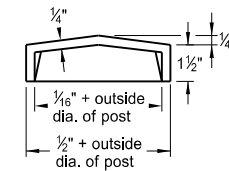
(A) Slotted holes shall be punched in the aluminum panels at 1'-0" on center, spacing from end as listed below:

12" even length panels	4'-0" etc.
9" odd + 6" length panels	5'-6" etc.
6" odd length panels	5'-0" etc.
3" even + 6" length panels	4'-6" etc.

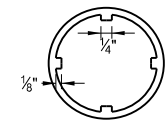
Wall thickness = .078" unless specified otherwise.
All inside and outside corners = .031" radius unless specified otherwise.



Flat Washer Detail



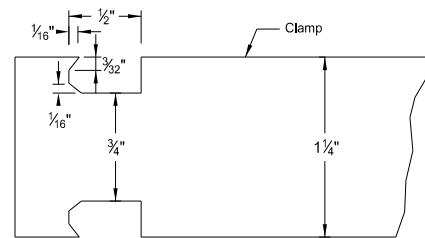
Side View



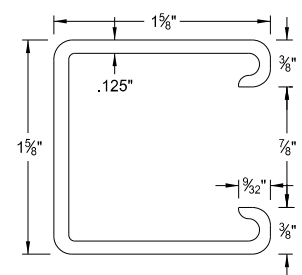
Top View

Post Cap Detail

Post caps shall be furnished for all steel or aluminum posts.
In place of post cap, a 1/8" plate welded all around may be used.



Clamp Detail



Steel Channel Detail

Post Size dia.	Clamp Gauge min.
3 1/2" to 5"	11
6" to 12"	10

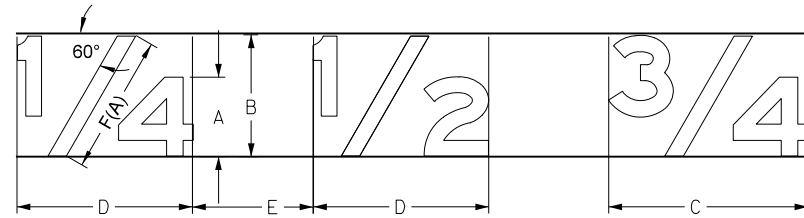
Post Size dia. in.	D in.
3 1/2	3
4	3 3/16
5	5 1/8
6	7 1/16
8	13 1/16
10	20 3/4
12	29 5/8

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
2-21-14	
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LETTER AND ARROW DETAILS FOR VARIABLE LENGTH SIGNS

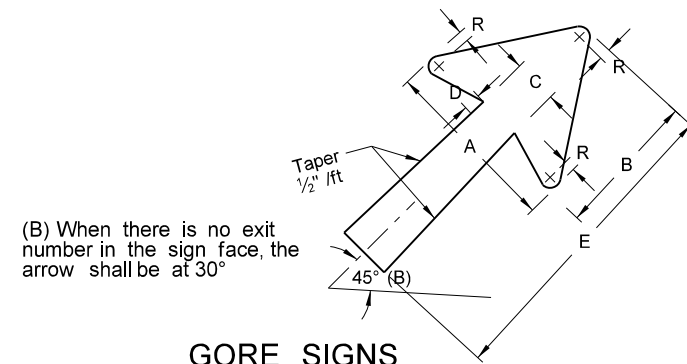
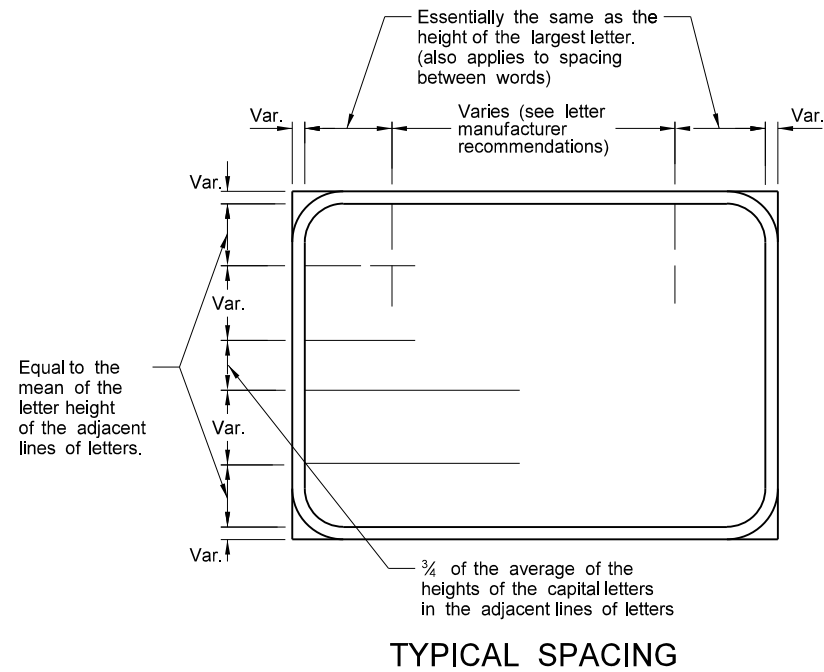
D-754-9



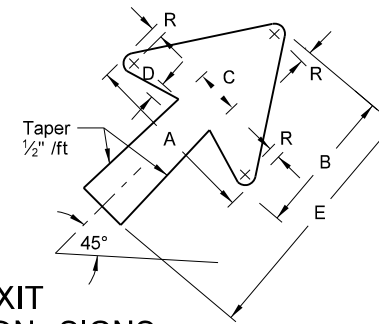
SIZE OF THE FRACTION IS DETERMINED AS FOLLOWS:

SYMBOL	TITLE	RATIO TO HEIGHT OF CAPITAL OR UPPER CASE
A	Letter height	1.0 of capital or upper case
B	Fraction height	1.5 X A
C	Fraction width	2.5 X A
D	Fraction width	2 X A
E	Space to next character	1 to 1.5 X A
F(A)	Length of diagonal	1.75 X A

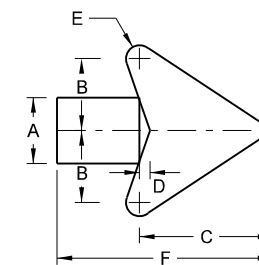
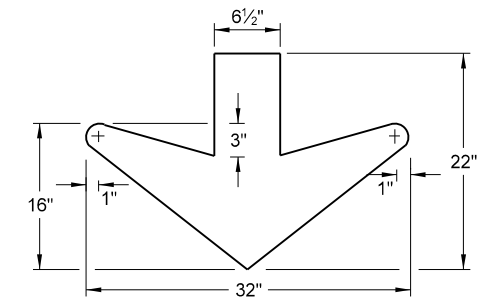
(A) Diagonal stroke of fraction is to be centered optically.



"EXIT" LETTER SIZE (Upper Case)	A	B	C	D	E	R
8"	15 1/8"	11 1/16"	3 3/4"	1 5/16"	25"	13 1/16"
10" - 13 1/3"	18 1/4"	14"	4 1/2"	1 1/2"	30"	3/4"



LETTER SIZE (Upper Case)	A	B	C	D	E	R
8"	15 1/8"	11 1/16"	3 3/4"	1 5/16"	17"	13 1/16"
10" - 13 1/3"	18 1/4"	14"	4 1/2"	1 1/2"	20"	3/4"
16" - 20"	22 1/4"	17"	5 3/8"	1 3/4"	25"	1"



LETTER SIZE (Upper Case)	A	B	C	D	E	F
4"	1 3/4"	2"	3 9/16"	5/16"	3/8"	6"
6"	2 3/4"	3"	5 9/16"	7/16"	9/16"	9"
8"	3 1/2"	4"	7 1/8"	9/16"	1 1/16"	12"
12"	5 1/4"	6"	10 5/8"	13/16"	1 1/16"	18"

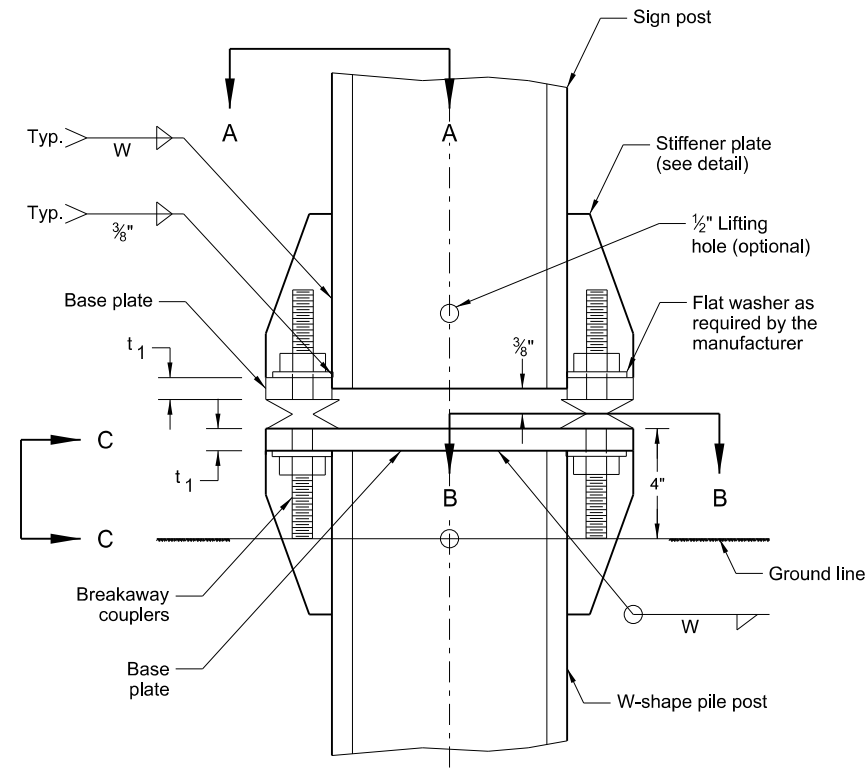
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-3-11	
REVISIONS	
DATE	CHANGE
7-8-14	Revised gore sign and added 4" D & D arrow

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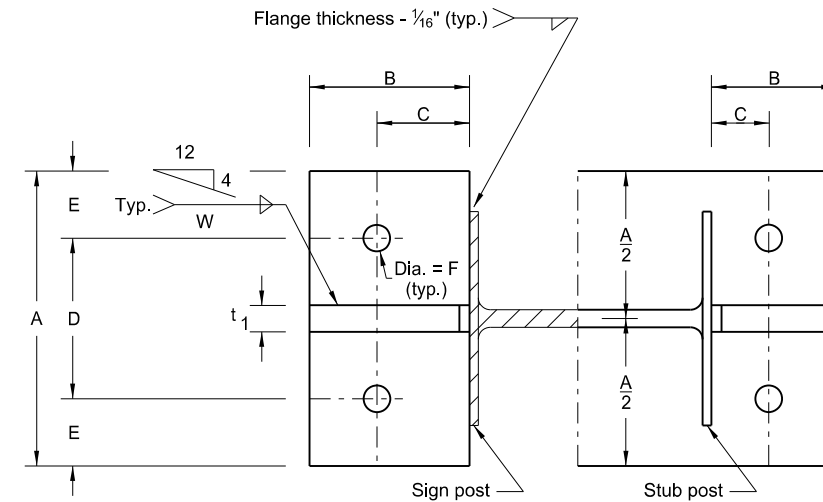
Breakaway Coupler System Structural Details for W-Shape Supports

Notes:

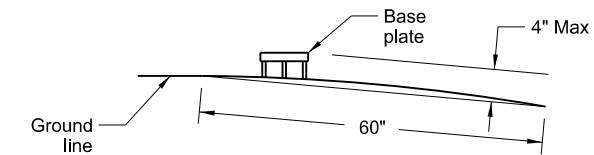
- In lieu of the breakaway base system shown on standard D-754-13 the breakaway coupling system may be used. The breakaway coupling system shall be manufactured from material meeting the requirements of ASTM A325 fasteners with the special requirements as specified by DENT BREAKAWAY IND., INC. which meets the requirements of NCHRP Report 350.
- Structural steel shall conform to Sec. 894.03 B.6. High strength bolts shall conform to ASTM - A325. Refer to "Sign Summary" sheet for specific data on each individual sign installation.
- Assembly procedure according to the manufacturer's recommendations.



Sign Post and Stub Post
Elevation



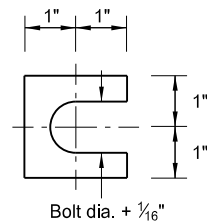
Section A - A Section B - B
(See Table for Dimensions)



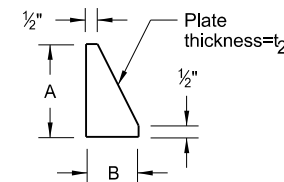
Section C - C

Max. protection of the stub post is 4" above a 60" chord aligned radially to the center line of the highway and connecting any point, within the length of the chord, on the ground surface on one side of the support to a point in the ground surface on the other side.

Sections shown are for installations on right shoulder and in gore. Plate slot bevels are opposite hand from that shown for installations on left shoulder.

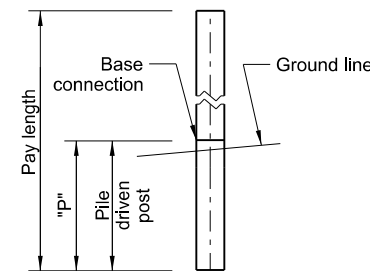


Shim Detail



Stiffener Plate Detail
(See Table for Dimensions)

Furnish 2 - .012"± thick and 2 - .032"± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.



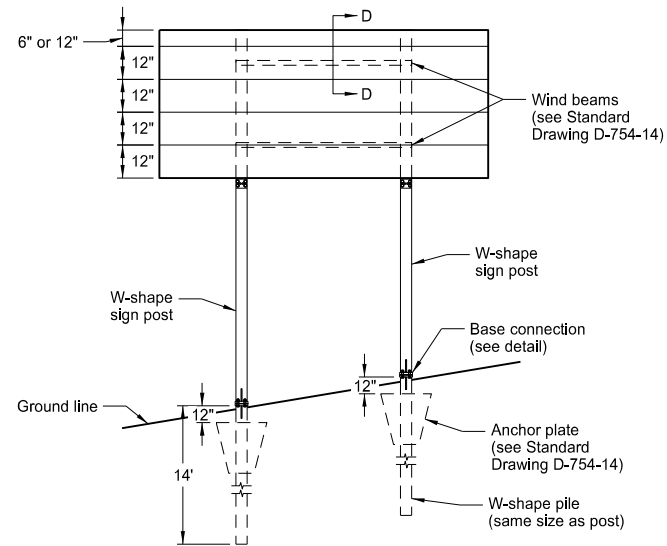
W-Shape - Pile Footing

W-Shape Post & Pile Size	Base Connection Data										W-Shape Pile Post "P"
	Bolt Size	A	B	C	D	E	t ₁	t ₂	W	F	
W4X13	3/4" x 5 1/4"	6"	2 1/2"	1 1/2"	3 1/2"	1 1/4"	1"	1/2"	1/4"	13/16"	14'
W5X16		6"	2 1/2"	1 1/2"	3 1/2"	1 1/4"	1"	1/2"	1/4"	13/16"	14'
W6X20	7/8" x 5 1/4"	8"	3"	1 3/4"	4"	2"	1 1/4"	1/2"	1/4"	15/16"	14'
W8X24		8"	3"	1 3/4"	4"	2"	1 1/4"	1/2"	1/4"	15/16"	14'
W8X28	1" x 5 1/4"	8"	3"	2"	4"	2"	1 1/2"	3/4"	5/16"	1 1/16"	14'

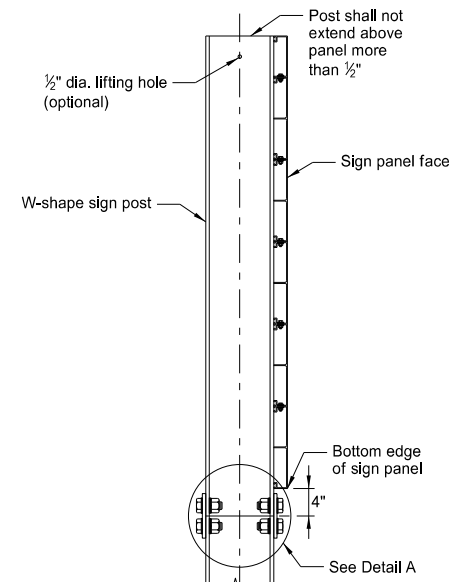
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-4-2013	
REVISIONS	
DATE	CHANGE
7-8-14	Revised notes 2 and 3

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PE-2930,
on 7/8/14 and the original document is stored at the North Dakota Department of Transportation

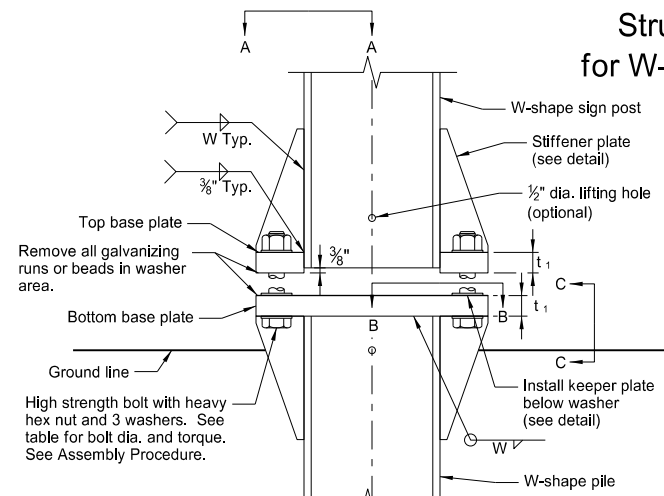
Breakaway System
Structural Details
for W-Shape Supports



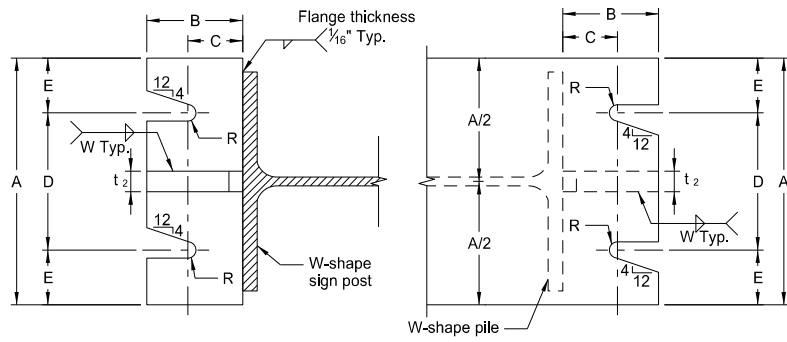
Typical Panel Mounting on W-shape Sign Posts



Fuse Joint (Side View)



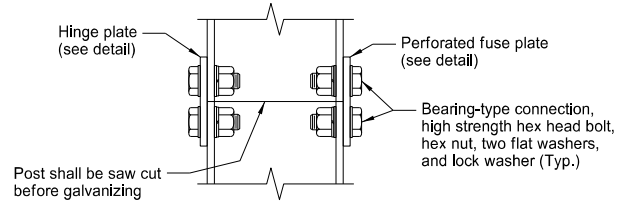
Base Connection Detail



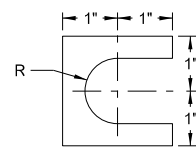
Section A-A

Section B-B

Sections shown are for installations on right shoulder. Installations on the left shoulder shall have the plate slot bevels reversed.

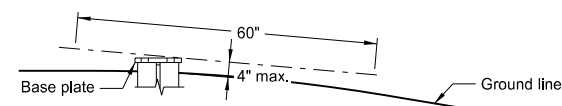


Detail A



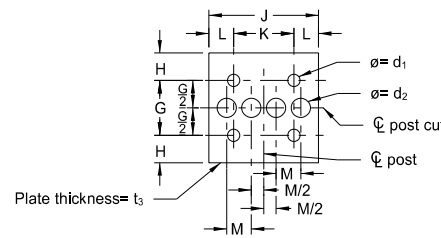
Shim Detail

Furnish 2 each .012"± thick and 2 each .032"± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.

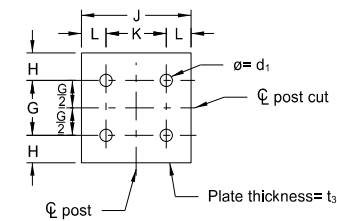


Section C-C
Stub Height Requirements

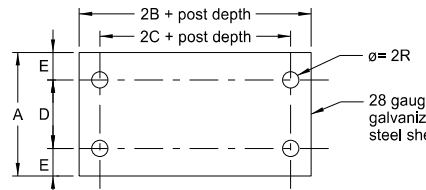
Maximum projection of base plate shall not extend above a line 4" parallel to any chord, which is perpendicular to, or aligned radially to, the center line of the highway and has the chord's end points on the ground surface on opposite sides of the stub post.



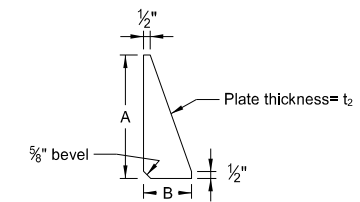
Perforated Fuse Plate



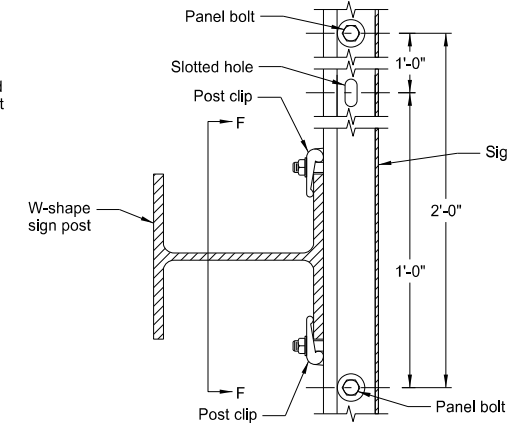
Hinge Plate



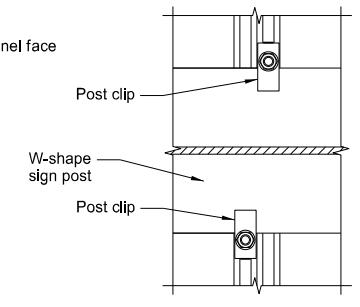
Keeper Plate



Stiffener Plate

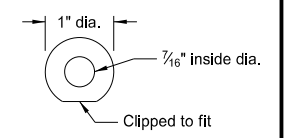


Section E-E



Section F-F

Post clips shall be installed on both sides of each post at each panel joint as indicated.



Flat Washer Detail
Thickness = 5/64"

Notes:

Structural steel shall conform to Section 894.03 B.6 of the Standard Specifications. High strength bolts shall conform to ASTM A325.

Refer to Sign Summary sheet for specific data on each individual sign installation.

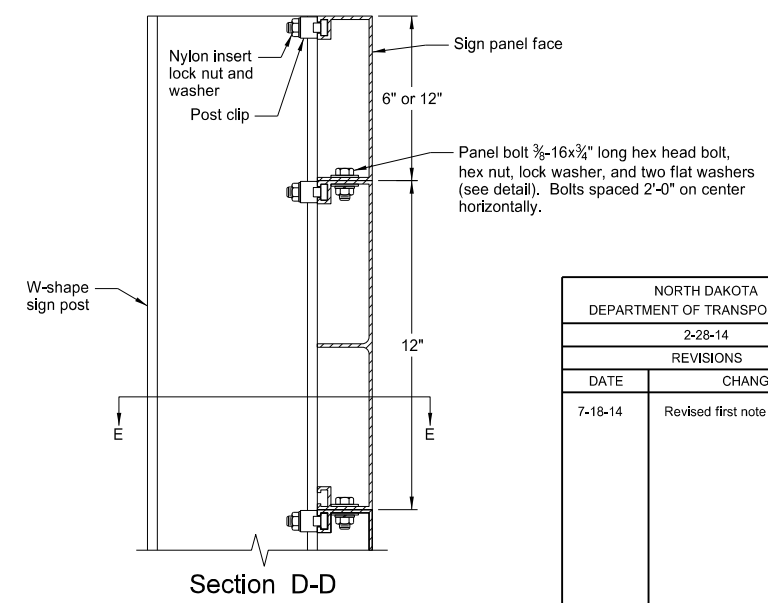
Perforated fuse plate shall be installed on side of post facing traffic.

All posts shall be saw cut. Plates may be sheared or flame cut using a mechanically guided cutting torch in accordance with Section 754.04 D.4.b of the Standard Specifications. Edge preparation shall be in accordance with Section 754.04 D.4.c of the Standard Specifications.

Assembly Procedure:

1. Assemble base plates together with bolts and with one flat washer between top base plate and the keeper plate.
2. Shim as required to plumb post.
3. Tighten all base connection bolts the maximum possible with 12" to 15" wrench to bed washers and shims and to clean bolt threads.
4. Loosen each bolt in turn and retighten in a systematic order to the prescribed torque (see table).
5. Assemble perforated fuse and hinge plates to post with bolts and with one flat washer and lock washer under nut.

W-Shape Post and Pile Size	Bolt Size and Torque	Base Connection Dimensions										Fuse and Hinge Plate Dimensions									
		A	B	C	D	E	t ₁	t ₂	W	R	G	H	J	K	L	M	d ₁	d ₂	t ₃	Bolt dia.	
W4x13	3/4" ø x 3 1/2" Torque = 600 in-lb	6"	2 1/2"	1 1/2"	3 1/2"	1 1/4"	1"	1/2"	1/4"	13/32"	2"	1 1/4"	4"	2 1/4"	7/8"	1"	1 1/16"	3/4"	3/8"	5/8"	
W5x16	3/4" ø x 3 1/2" Torque = 600 in-lb	6"	2 1/2"	1 1/2"	3 1/2"	1 1/4"	1"	1/2"	1/4"	13/32"	2 1/2"	1 1/4"	5"	2 3/4"	1 1/8"	1 1/8"	13/16"	7/8"	3/8"	3/4"	
W6x20	7/8" ø x 4 1/4" Torque = 800 in-lb	8"	3"	1 3/4"	4"	2"	1 1/4"	1/2"	1/4"	15/32"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	1 3/8"	13/16"	1 1/8"	3/8"	3/4"	
W8x24	7/8" ø x 4 1/4" Torque = 800 in-lb	8"	3"	1 3/4"	4"	2"	1 1/4"	1/2"	1/4"	15/32"	2 1/2"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 1/2"	15/16"	1 1/4"	1/2"	7/8"	
W8x28	1" ø x 5" Torque = 1000 in-lb	8"	3"	2"	4"	2"	1 1/2"	3/4"	5/16"	17/32"	2 1/2"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 5/8"	1 1/16"	1 1/8"	1/2"	1"	
W8x31	1 1/8" ø x 5" Torque = 1200 in-lb	9"	3 1/2"	2"	5"	2"	1 1/2"	3/4"	5/16"	19/32"	3"	1 3/4"	8"	5 1/2"	1 1/4"	2"	1 1/16"	1 1/2"	1/2"	1"	
W10x39	1 1/8" ø x 5" Torque = 1200 in-lb	9"	3 1/2"	2"	5"	2"	1 1/2"	3/4"	5/16"	19/32"	3"	1 3/4"	8"	5 1/2"	1 1/4"	1 7/8"	1 3/16"	1 3/8"	1/2"	1 1/8"	

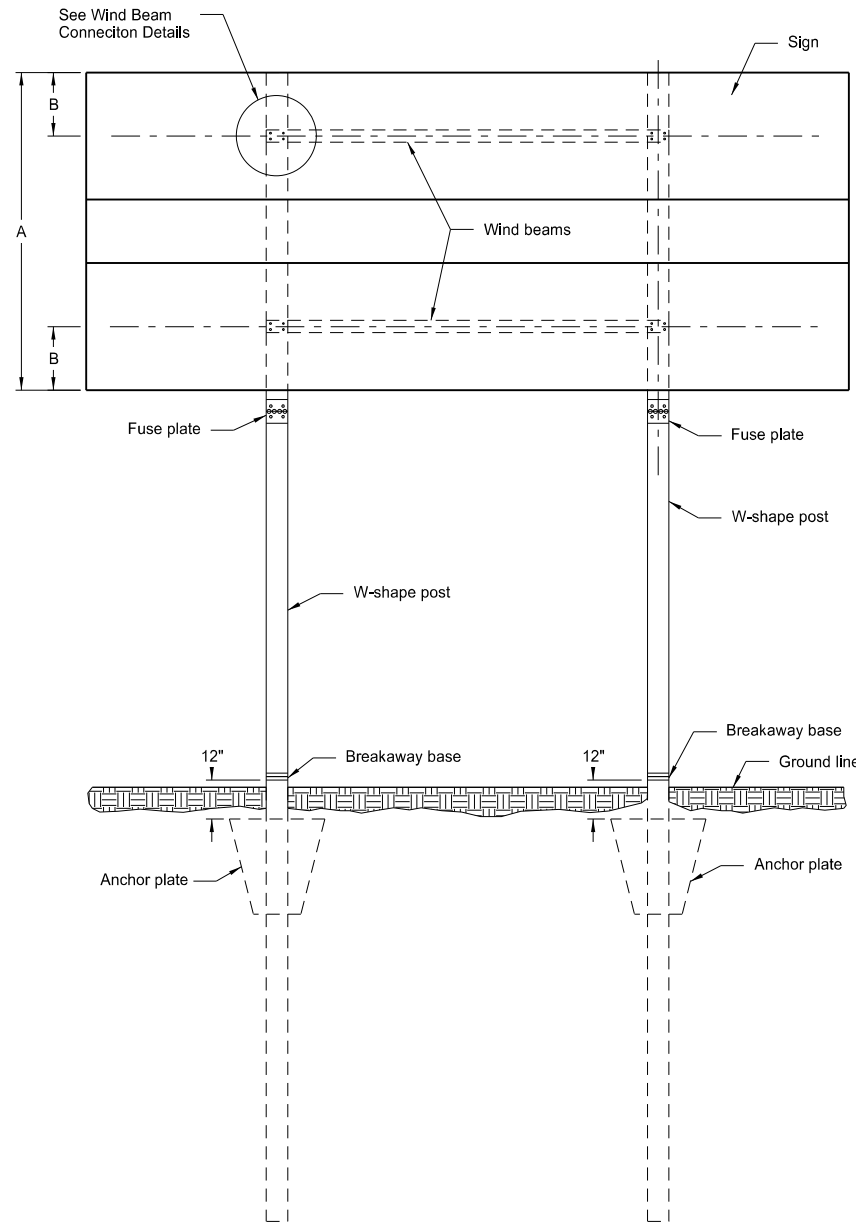


Section D-D

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 2-28-14	
REVISIONS	
DATE	CHANGE
7-18-14	Revised first note

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WIND BEAMS AND ANCHOR PLATES
FOR W-SHAPE SUPPORTS



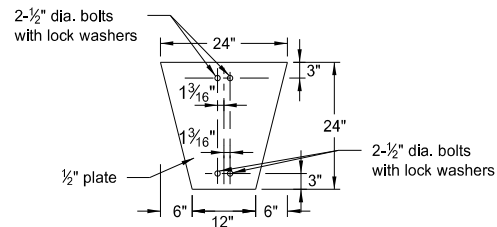
ASSEMBLY DETAIL
FOR WIND BEAMS
AND ANCHOR PLATES

Notes:

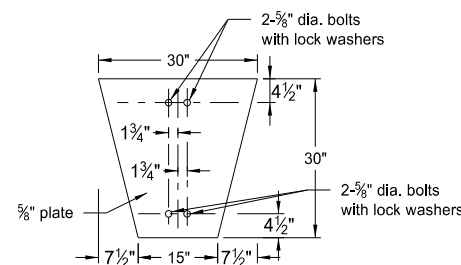
The B distance is calculated by the following formula, $B=A/4$.

The wind beam shall conform to Section 894.03 B.6 of the Standard Specifications.

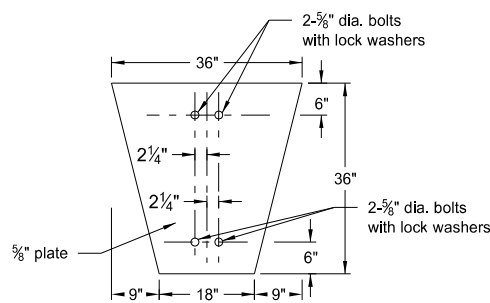
The bolts shall conform to requirements of ASTM A307 and galvanized according to ASTM A153.



W4-13 & W5-16

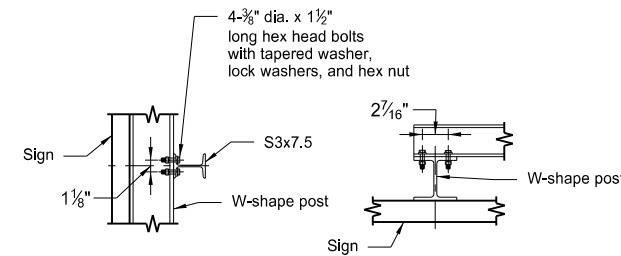


W6-20, W8-24 & W8-28

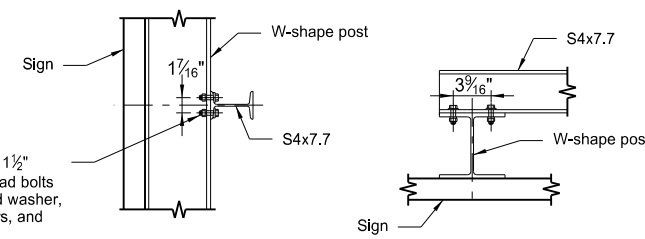


W8-31 & W10-39

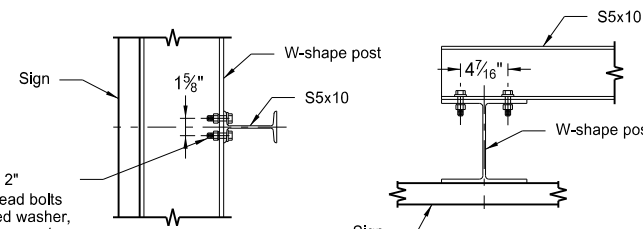
ANCHOR PLATE DETAILS



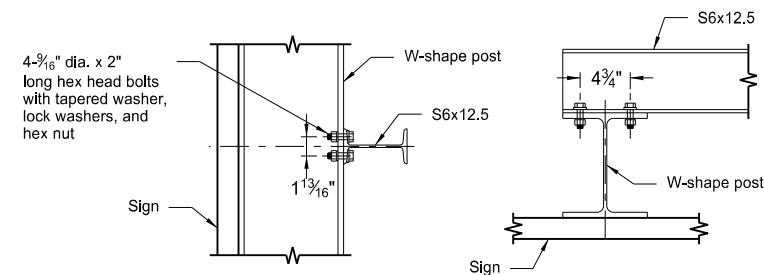
End View
W4-13 & W5-16



End View
W6-20, W8-24 and W8-28

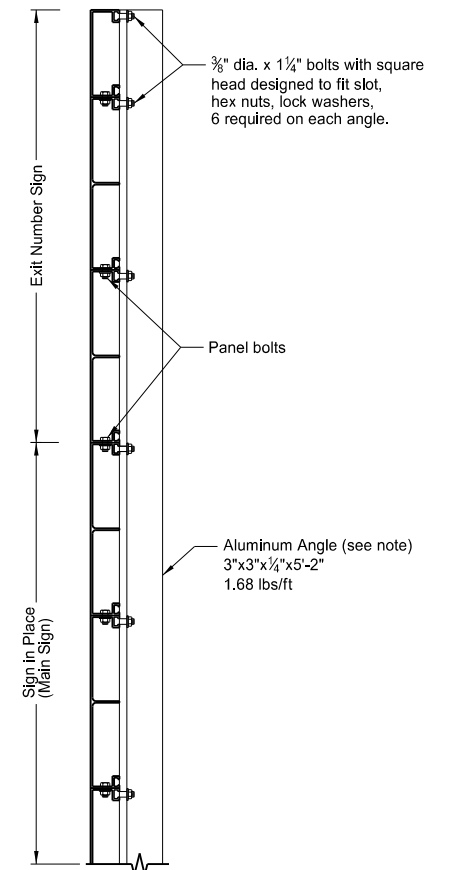


End View
W8-31



End View
W10-39

WIND BEAM CONNECTION DETAILS



ASSEMBLY DETAIL FOR
EXIT NUMBER SIGNS

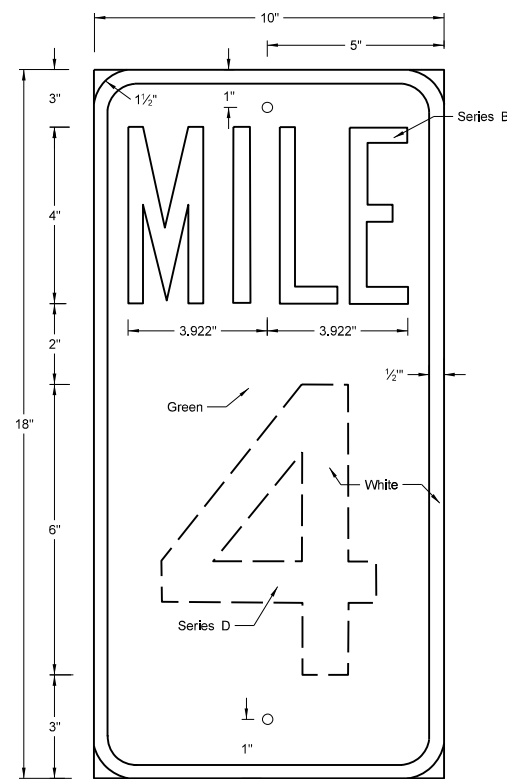
Note: Two aluminum angles required on each sign. The distance between angles varies depending on post spacing of sign in place. Angles shall be placed as near as possible to posts. The Engineer shall determine the exact location.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-3-13	
REVISIONS	
DATE	CHANGE
7-8-14	Revised second note

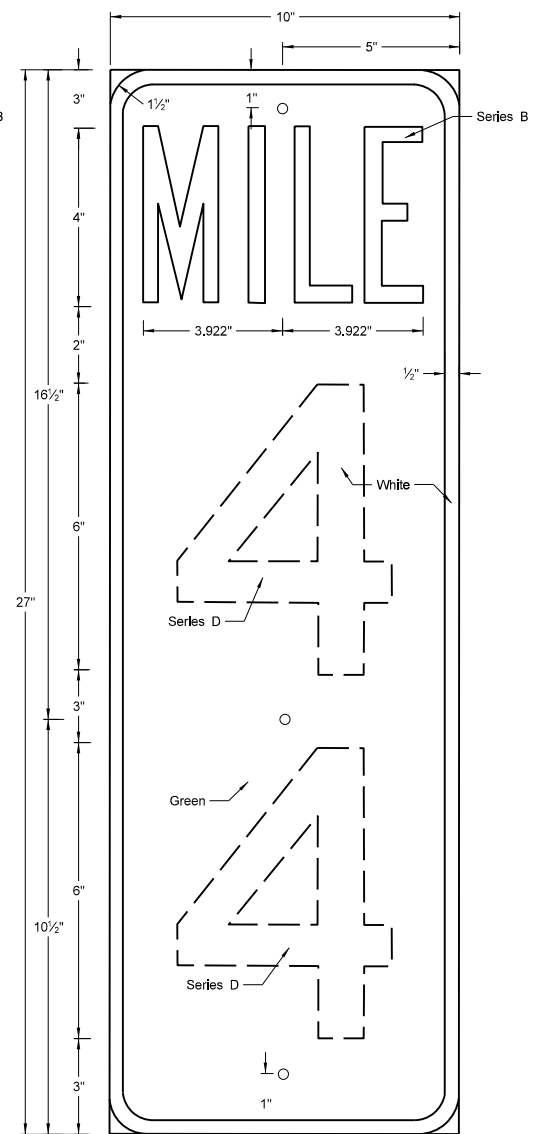
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(CONVENTIONAL USE) REFERENCE MARKERS

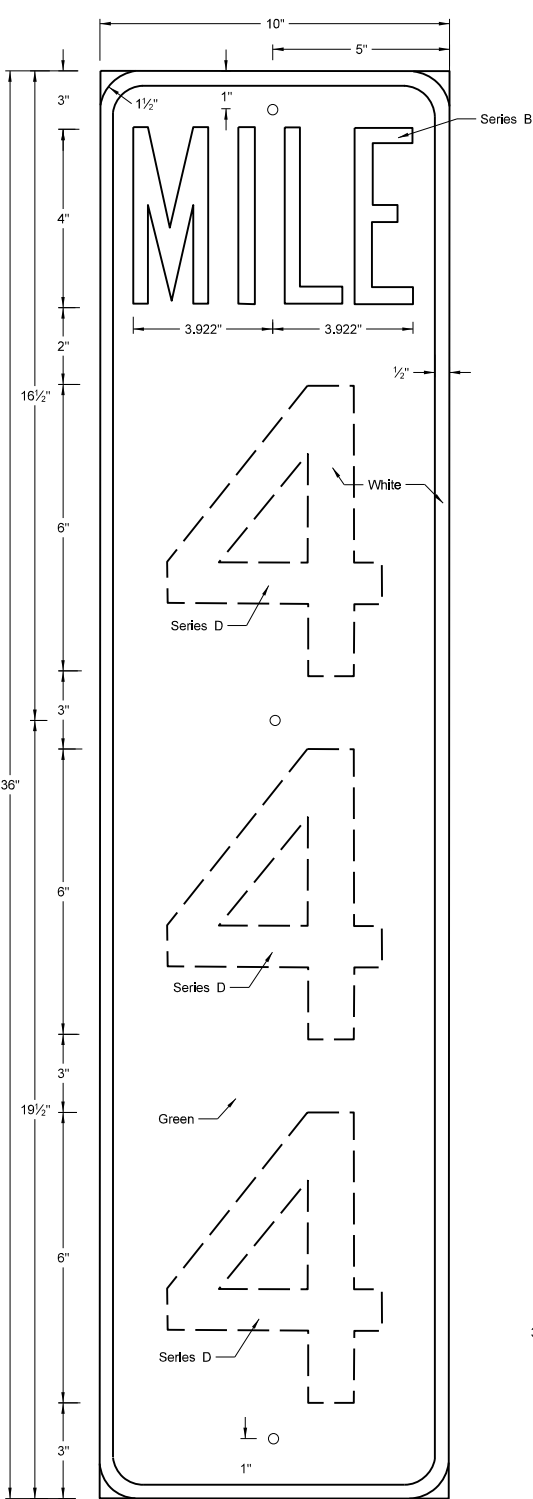
D-754-19



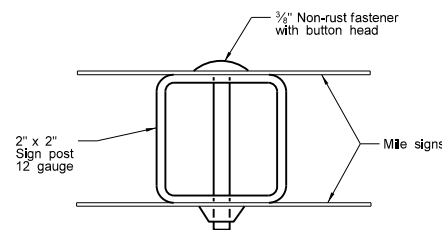
TYPE A
Area = 1.25 S.F.



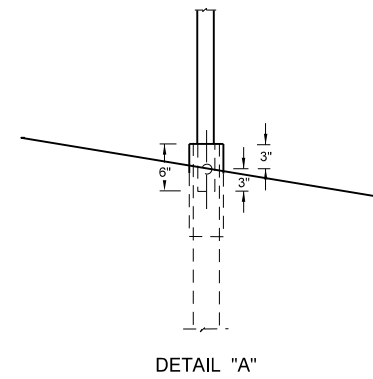
TYPE B
Area = 1.88 S.F.



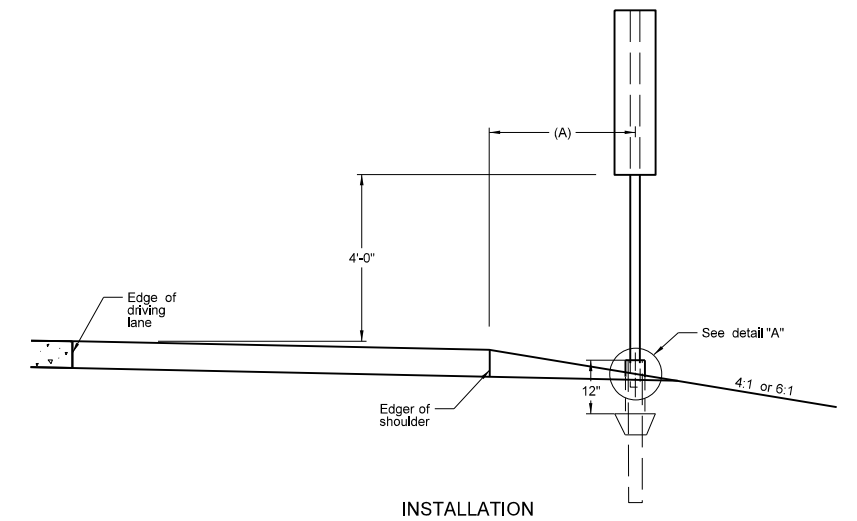
TYPE C
Area = 2.50 S.F.



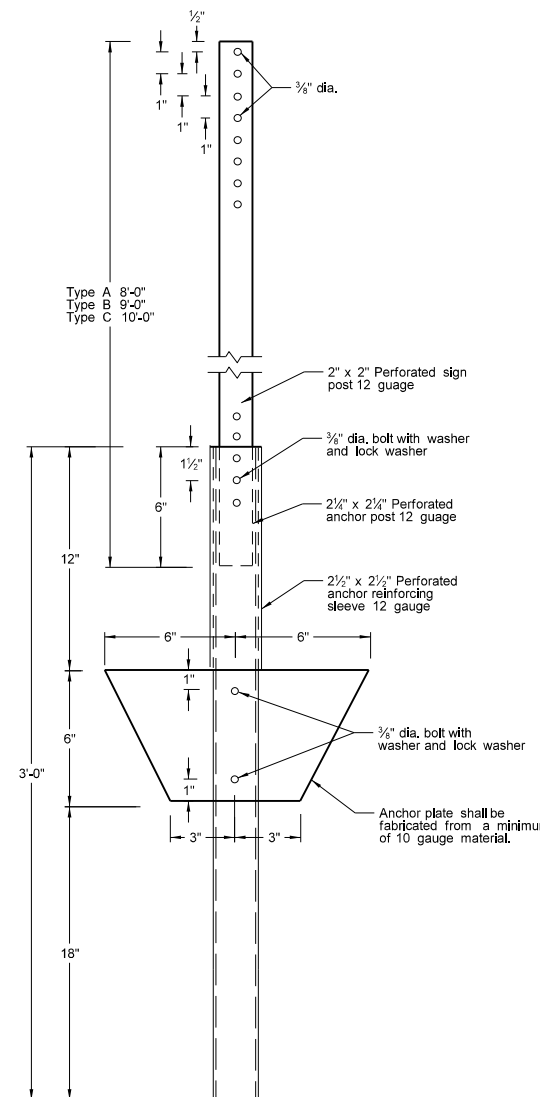
ASSEMBLY DETAIL
(back to back)



DETAIL "A"



INSTALLATION



POST AND ANCHOR PLATE DETAIL

(A) 8' Clearance to finished shoulder or in line with existing delineator posts

NOTES:

Installation: Posts shall be installed along right shoulder.

Sign: Backing shall be fabricated of 0.080 aluminum. Sheeting shall conform to section 894.01 of the Standard Specifications.

Posts: Posts shall conform to section 894.03 of the Standard Specifications.

Fasteners: The signs shall be attached to the post by tension pin type fastener or other suitable vandal resistant non-rust fastener.

Reflective Sheeting: Sheeting shall be Type IV.

Numbers: Numbers shall be of the series shown and may be screened or applied copy. Screening and reflective sheeting for applied copy shall conform to section 754 & 894 of the Standard Specifications.

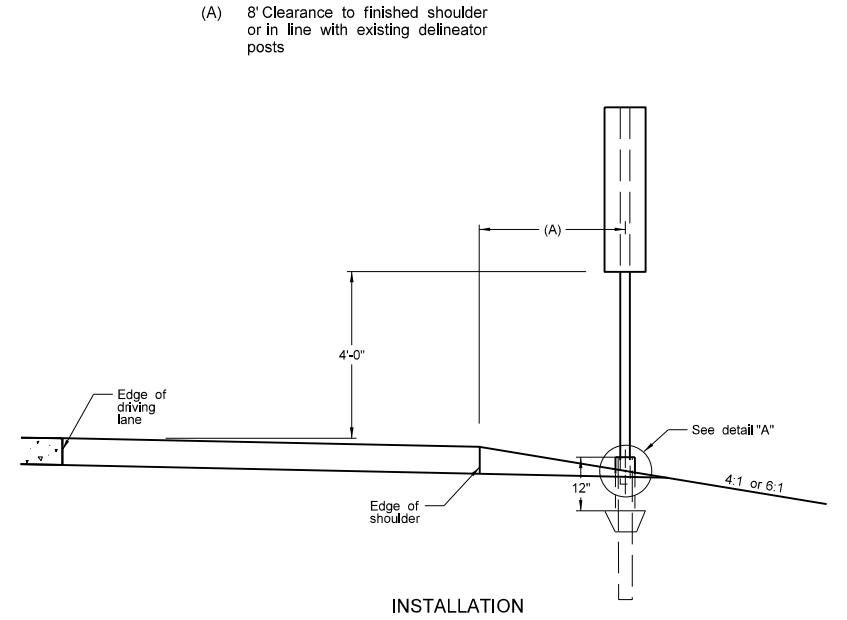
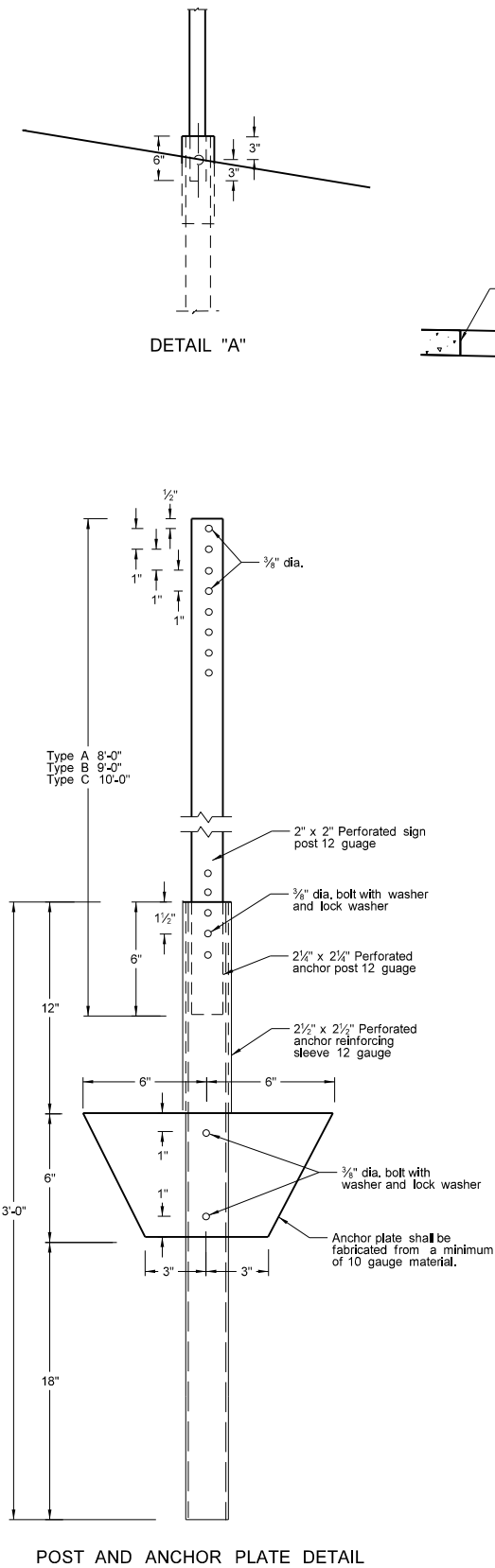
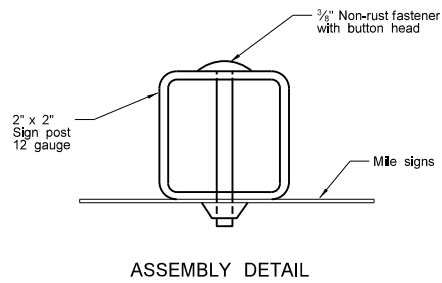
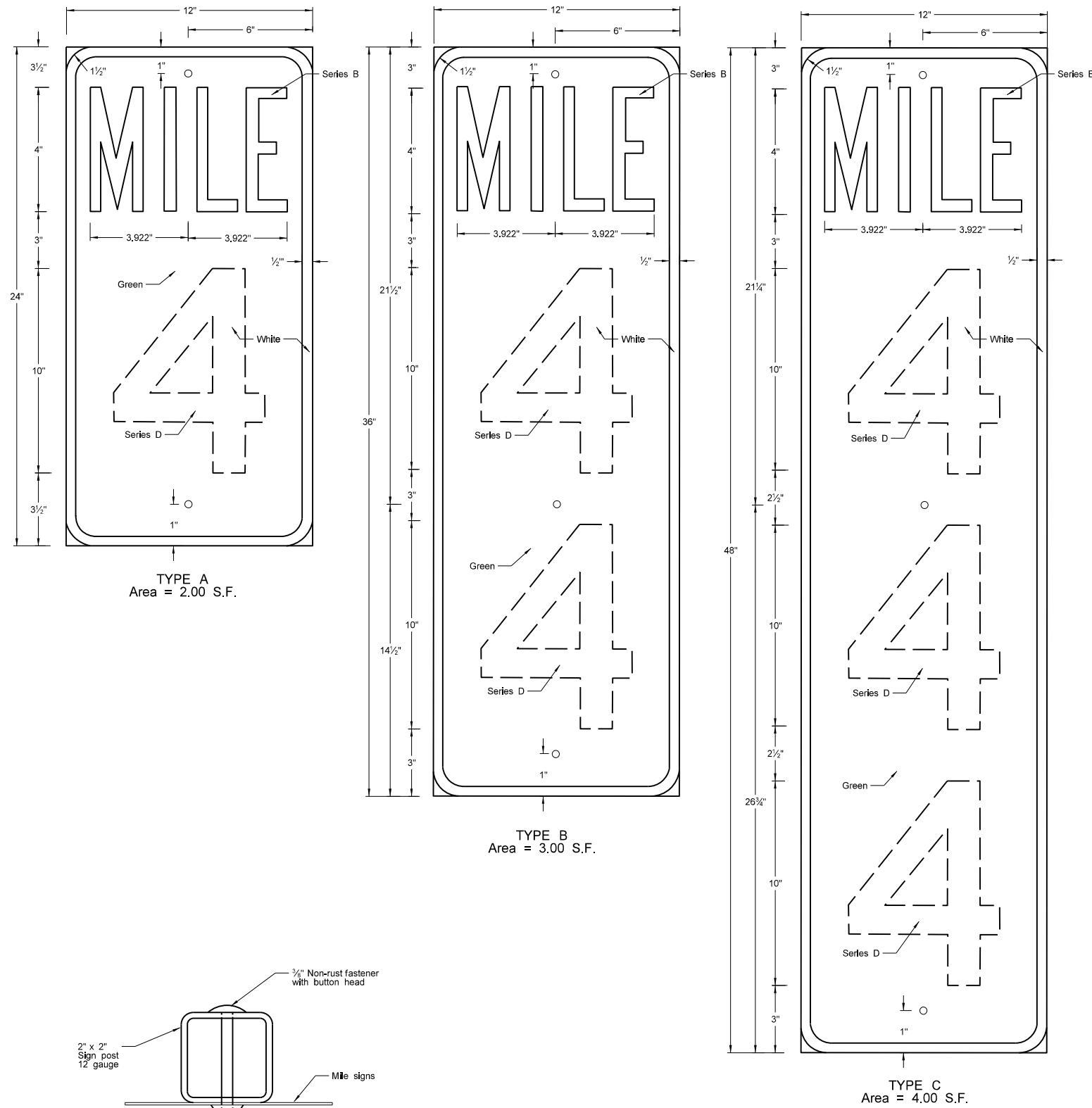
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
12-1-10	
REVISIONS	
DATE	CHANGE

7-8-14	Revised post and reflective sheeting notes
--------	--

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(EXPRESSWAY-FREEWAY USE) MILE POSTS

D-754-20



- NOTES:**
- Installation: Posts shall be installed along right shoulder in line with delineators.
 - Mile Sign Backing: Backing shall be fabricated of 0.080 aluminum. Sheeting shall conform to section 894.01 of the Standard Specifications.
 - Posts: Posts shall conform to section 894.03 of the Standard Specifications.
 - Fasteners: The mile signs shall be attached to the post by tension pin type fastener or other suitable vandal resistant non-rust fastener.
 - Reflective Sheeting: Sheeting shall be Type IV.
 - Numbers: Numbers shall be of the series shown and may be screened or applied copy. Screening and reflective sheeting for applied copy shall conform to section 754 & 894 of the Standard Specifications.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
12-1-10	
REVISIONS	
DATE	CHANGE
7-8-14	Revised post and reflective sheeting notes

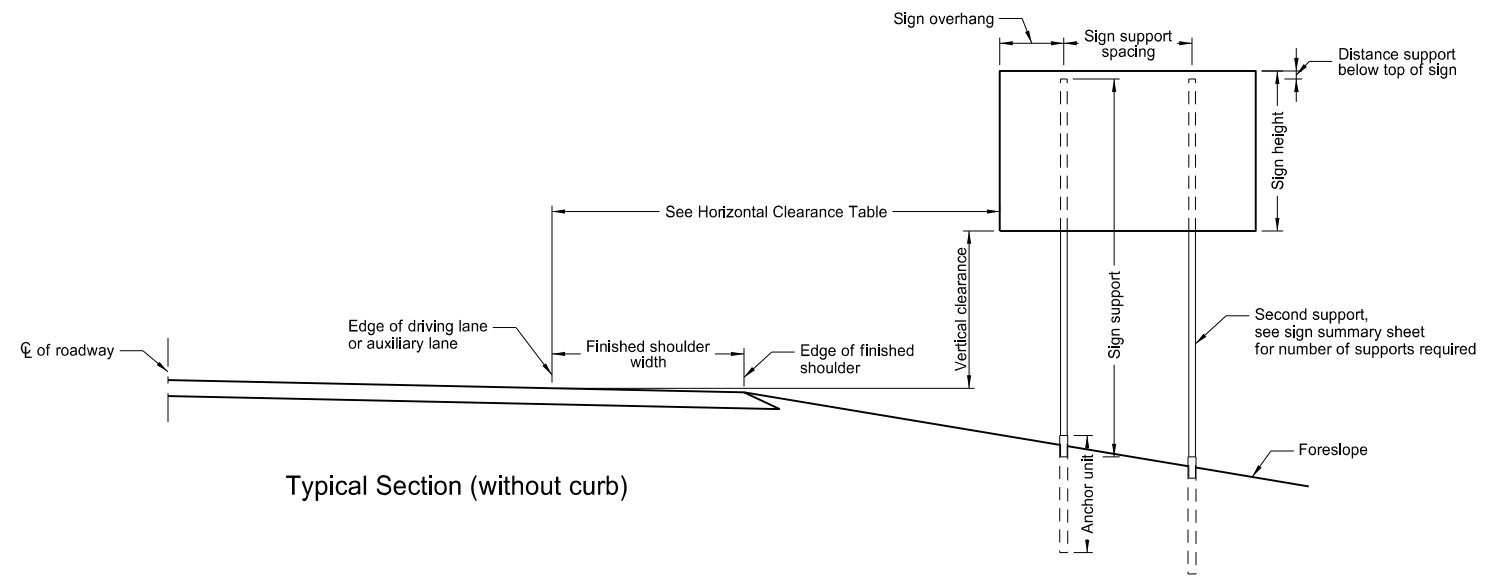
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PERFORATED TUBE ASSEMBLY DETAILS

D-754-23

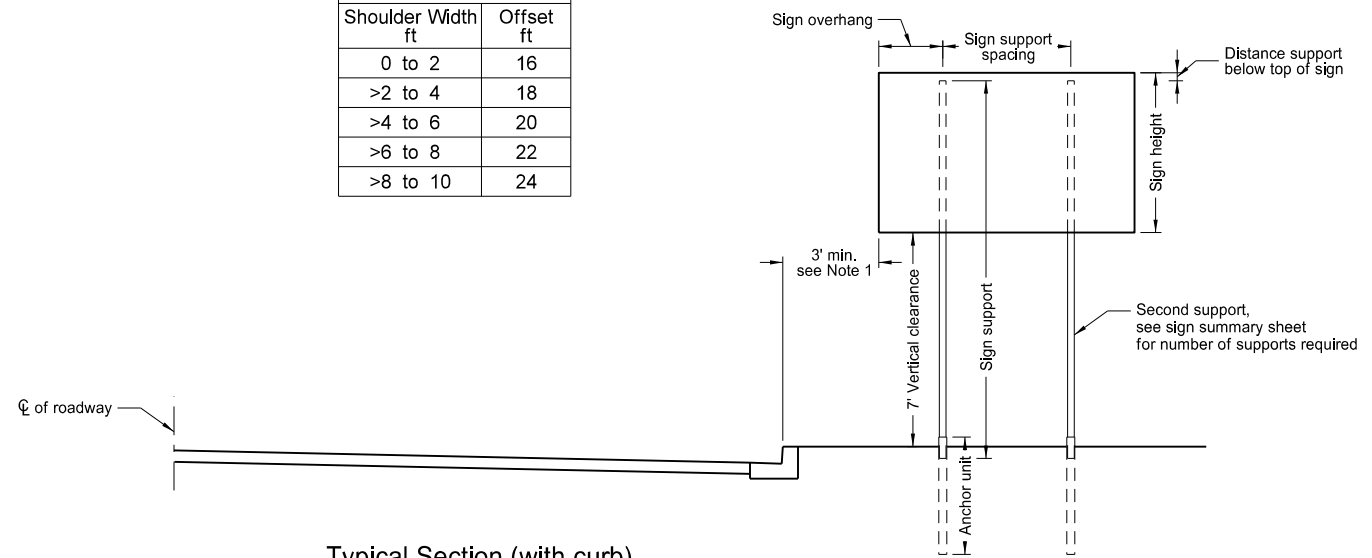
Notes:

1. Curbed Roadways: The clearance from the face of the curb should be 3' except where right of way or sidewalk width is limited, a minimum clearance of 2' shall be provided. The horizontal clearance may need to be increased to maintain a minimum sidewalk clear width of 4' from the sign support, not including any attached curb.
2. Minimum vertical clearance: Signs installed at the side of the road in rural districts shall be at least 5' measured from the bottom of the sign to the edge of the driving lane or auxiliary lane. Where parking or pedestrian movements occur, the clearance to the bottom of the sign shall be at least 7'.
- Signs on expressways shall be installed with a minimum height of 7'.
- Adopt-a-highway signs installed on Freeways shall be at least 7' above the edge of the driving lane.
- The vertical clearance shall have a maximum height of 6" above the vertical clearance specified above.
3. Offset signs: Where signs are placed at least 30 feet or more from the edge of the traveled way, the height to the bottom of such sign shall be 5' above the edge of the driving lane.
4. The clearance from edge of shared use path to edge of sign should be 3' except where width is limited, a minimum clearance of 2' shall be provided.

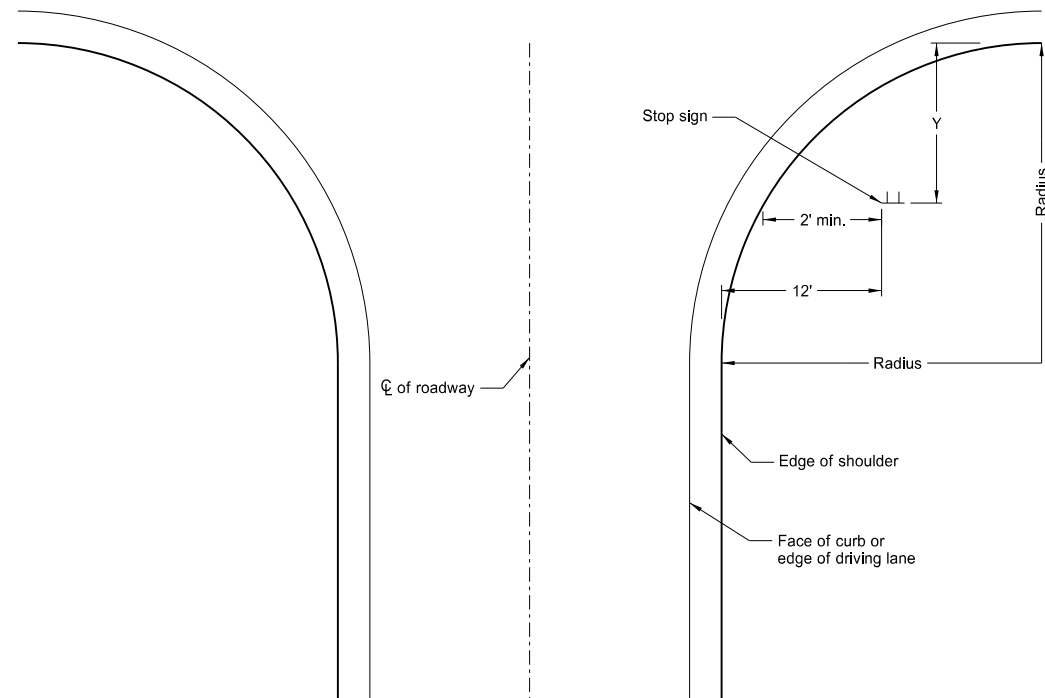


Typical Section (without curb)

Horizontal Clearance Table	
Shoulder Width ft	Offset ft
0 to 2	16
>2 to 4	18
>4 to 6	20
>6 to 8	22
>8 to 10	24



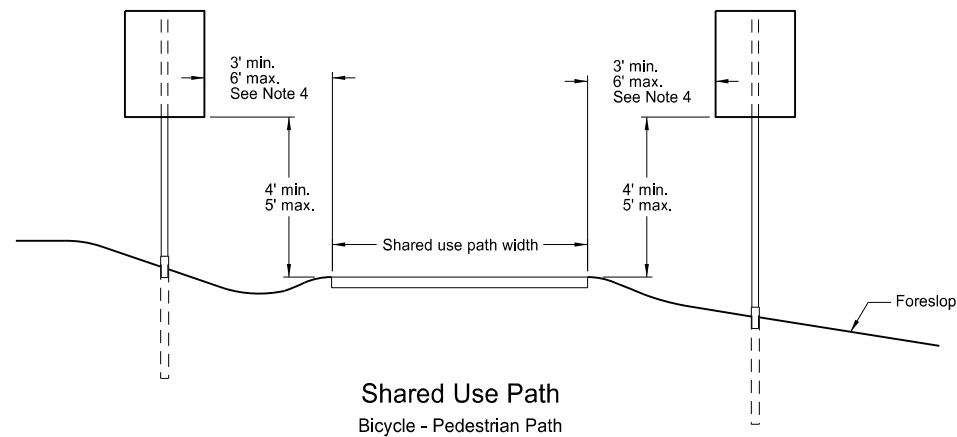
Typical Section (with curb)
Residential or Business District



Stop Sign Location
Wide Throat Intersection

This layout is to be used for the placement of "Stop" signs.

Radius ft.	Y-max. ft.	Y-min. ft.
40	50	15
45	50	18
50	50	21
55	50	25
60	50	28
65	50	32
70	50	35
75	50	39
80	50	43



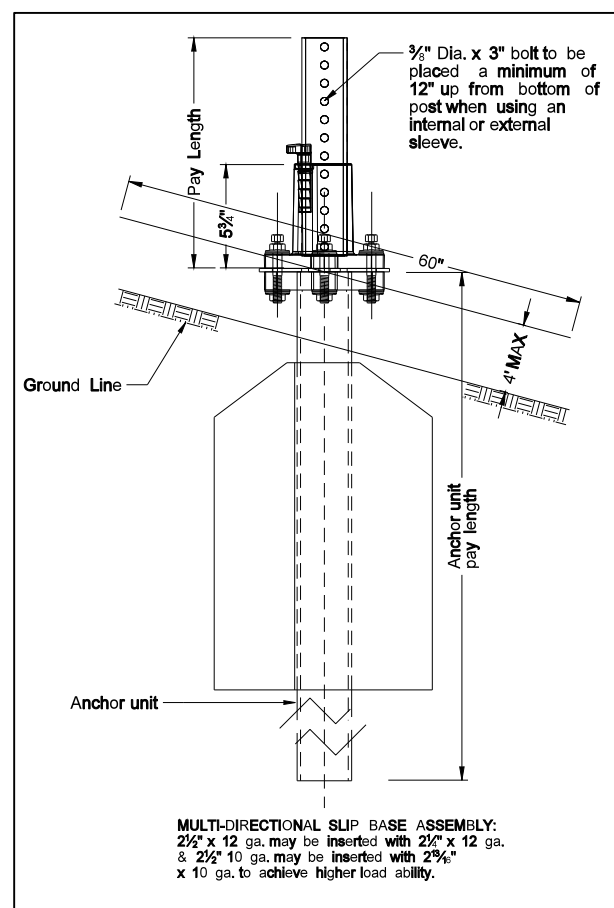
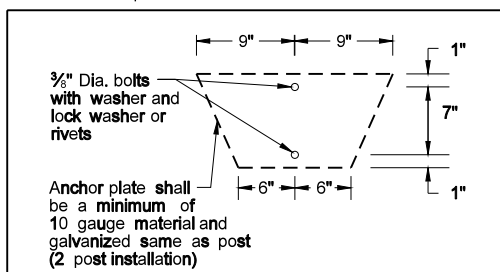
Shared Use Path
Bicycle - Pedestrian Path

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-3-13	
REVISIONS	
DATE	CHANGE
7-8-14	Revised note 2, added note 4.

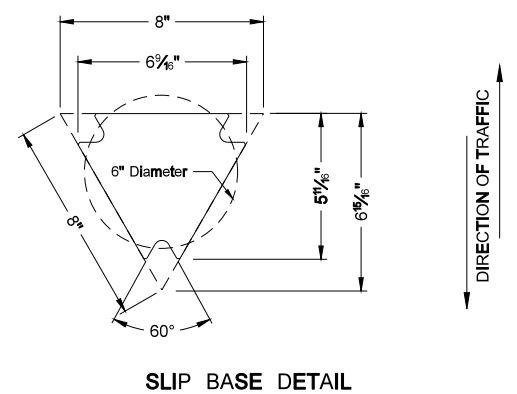
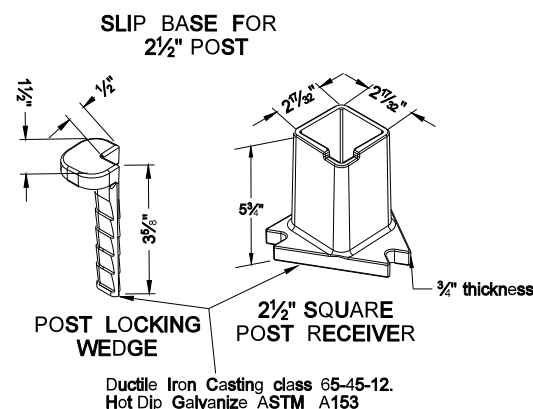
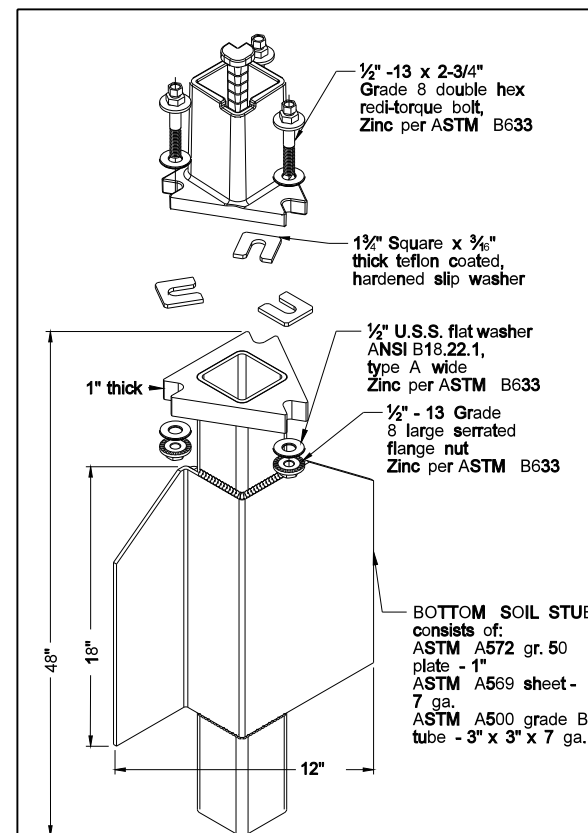
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Number of Posts	Telescoping Perforated Tube						
	Post Size In.	Wall Thickness Gauge	Sleeve Size In.	Wall Thickness Gauge	Slip Base	Anchor Size Without Slip Base In.	Anchor Wall Thickness Gauge
1	2	12			No	2 1/2	12
1	2 1/2	12			No	2 1/2	12
1	2 1/2	12			(B)	3(C)	7
1	2 1/2	10			Yes		7
1	2 1/2	12	2 1/2(D)	12	Yes		7
1	2 1/2	12	2 1/2	12	Yes		7
2	2 1/2	10			Yes		7
2	2 1/2	12	2 1/2(D)	12	Yes		7
2	2 1/2	12	2 1/2	12	Yes		7
3 & 4	2 1/2	12			Yes		7
3 & 4	2 1/2	10			Yes		7
3 & 4	2 1/2	12	2 1/2	12	Yes		7
3 & 4	2 1/2	12	2 1/2(D)	12	Yes		7
3 & 4	2 1/2	10	2 1/2	10	Yes		7

(B) - The 2 1/2", 12 gauge posts do not need breakaway bases when placed in standard soils, but require a shim as specified by the manufacturer. The breakaway base is required when the support is placed in weak soils. The Engineer shall determine if the soils are weak. Weak soils are classified as boggy, wet, or loose soil areas.
 (C) - 3" anchor unit
 (D) - 2 1/2" x 12 ga. x 18" minimum length external sleeve required.



Mounting Details Perforated Tube

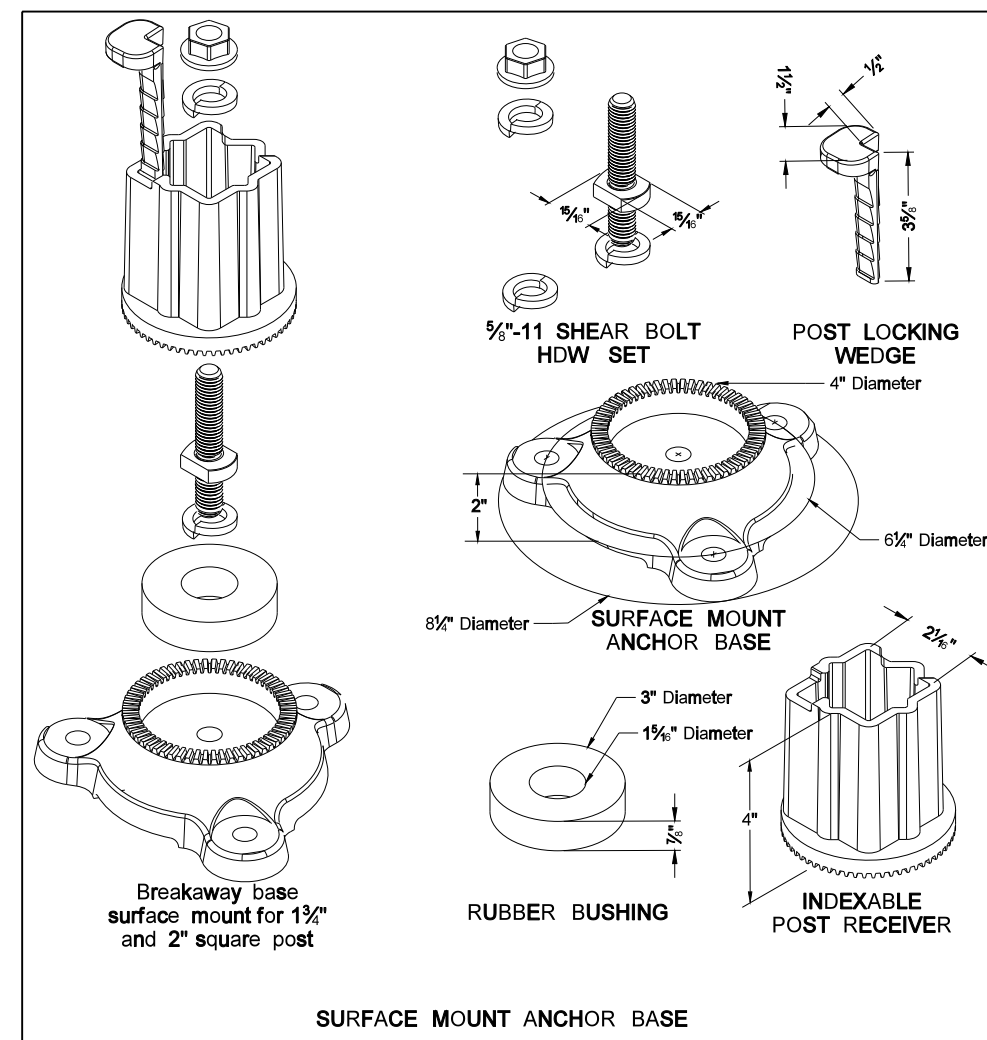


Tube Size In.	Wall Thickness in.	U.S. Standard Gauge	Weight Per Foot Lbs.	Moment of Inertia In. ⁴	Cross Sect. Area In. ²	Section Modulus In. ³
1 1/2 x 1 1/2	0.105	12	1.702	0.129	0.380	0.172
2 x 2	0.105	12	2.416	0.372	0.590	0.372
2 1/2 x 2 1/2	0.105	12	2.773	0.561	0.695	0.499
2 3/8 x 2 3/8	0.135	10	3.432	0.605	0.841	0.590
2 1/2 x 2 1/2	0.105	12	3.141	0.804	0.803	0.643
2 1/2 x 2 1/2	0.135	10	4.006	0.979	1.010	0.783

The 2 3/8" size 10 gauge is shown as 2.19" size on the plans; The 2 1/2" size is shown as 2.51" size on the plans.

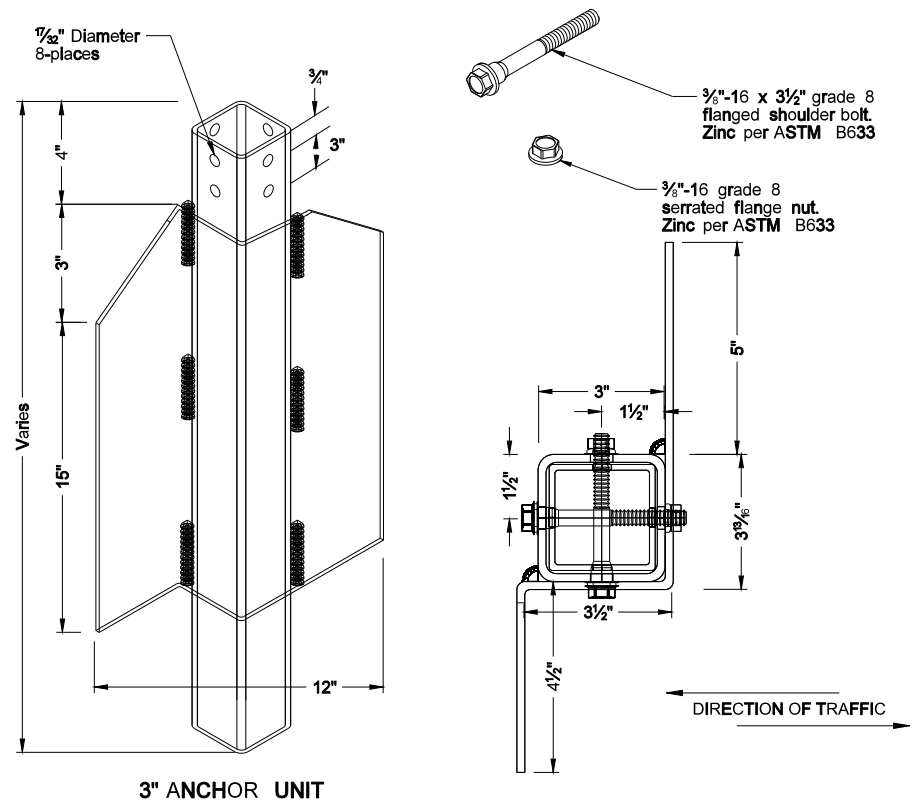
NOTE:

- 4" Vertical clearance of anchor or breakaway base. The 4" x 60" measurement shall be made above and below post location and also back and ahead of post.
- Anchor material shall be 7 gauge H.R.P.O. Commercial quality ASTM A569 and 3" x 3" x 7" gauge ASTM A500 grade B. Anchor shall have a yield strength 43.9 KSI and tensile strength of 59.3 KSI. Anchor shall be hot dipped galvanized per ASTM A123/153. All tolerances on anchor unit and slip base bottom assembly are +/- 0.005" unless otherwise noted.
- When used in concrete sidewalk, anchor shall be the same concept without the wings.
- Four post signs shall have over 8" between the first and fourth posts.
- Installation procedures as per manufacturers recommendation.
- Concrete fasteners for surface mount breakaway base shall be a minimum 1/2" diameter x 4" grade 8.



SHOULDER BOLT

Shimming agent to reduce tolerance between 3" anchor unit and 2 1/2" post. (standard 3/8" diameter grade 8 bolt may be used with proper shim)



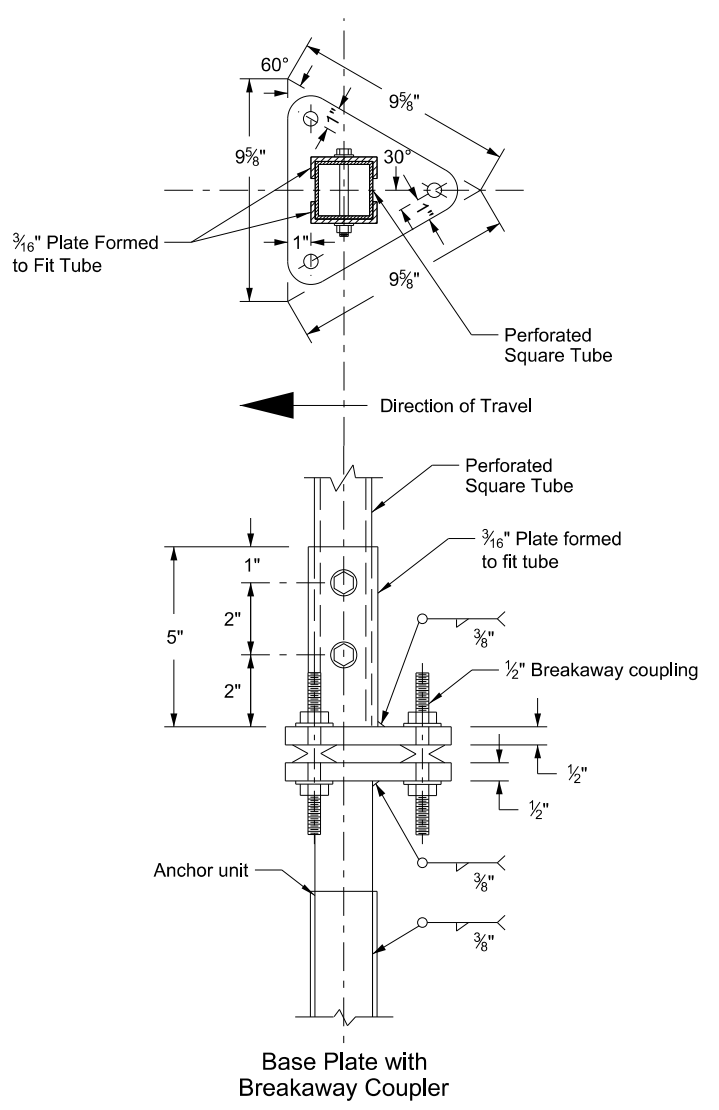
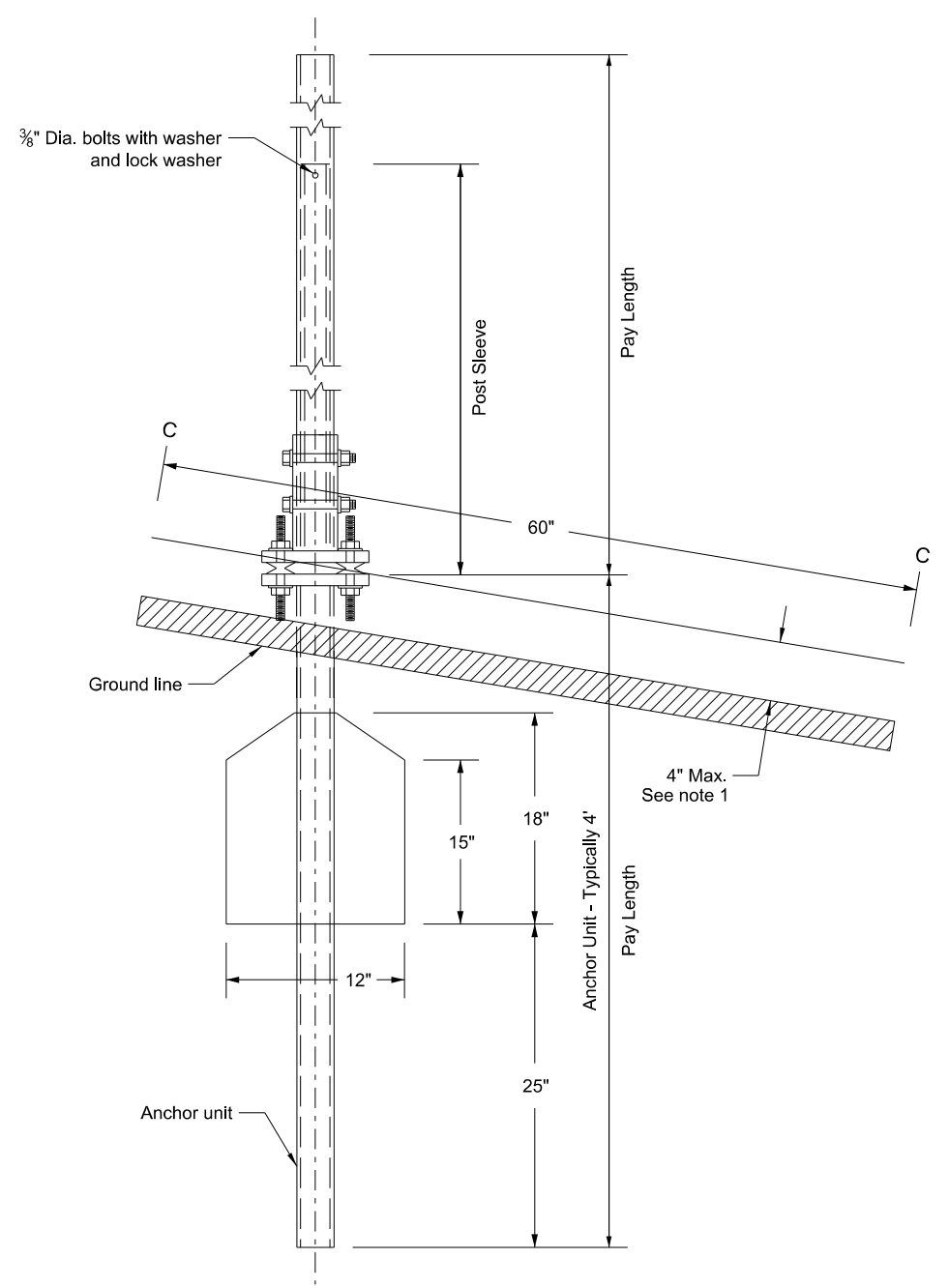
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8-6-09	
REVISIONS	
DATE	CHANGE

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Breakaway Coupler System for Perforated Tubes

Notes:

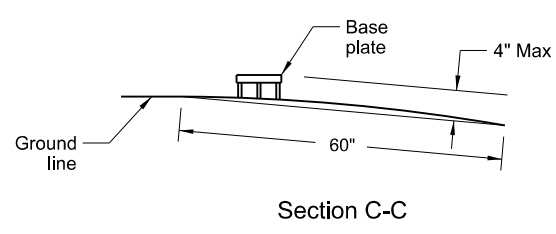
- 4" Vertical clearance of anchor or breakaway base. The 4" x 60" measurement shall be made above and below post location and also back and ahead of post.
- Anchor unit shall be the same size as the post and shall have the same specification as the post.
- Four post signs shall have over 8' between the first and fourth post.
- In lieu of the breakaway base system on standard D-754-24 the breakaway coupling system may be used. The breakaway coupler system shall be manufactured from material meeting the requirements of ASTM A325 fasteners with the special requirements as specified by DENT BREAKAWAY IND., INC. which meets the test requirements of NCHRP Report 350.



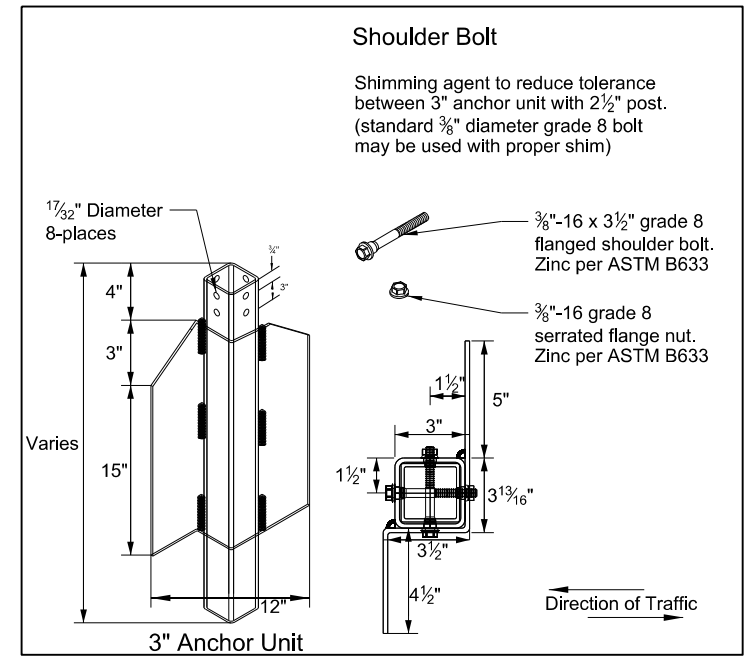
Number of Posts	Telescoping Perforated Tube						
	Post Size In.	Wall Thickness Gauge	Sleeve Size In.	Wall Thickness Gauge	Slip Base	Anchor Size Without Slip Base In.	Anchor Wall Thickness Gauge
1	2	12			No	2 1/4	12
1	2 1/4	12			No	2 1/2	12
1	2 1/2	12			(B)	3(C)	7
1	2 1/2	10			Yes		7
1	2 1/4	12	2	12	Yes		7
1	2 1/2	12	2 1/4	12	Yes		7
2	2 1/2	10			Yes		7
2	2 1/4	12	2	12	Yes		7
2	2 1/2	12	2 1/4	12	Yes		7
3 & 4	2 1/2	12			Yes		7
3 & 4	2 1/2	10			Yes		7
3 & 4	2 1/2	12	2 1/4	12	Yes		7
3 & 4	2 1/4	12	2	12	Yes		7
3 & 4	2 1/2	10	2 3/16	10	Yes		7

(B) - The 2 1/2" 12 gauge posts do not need breakaway bases when placed in standard soils. The breakaway base is required when the support is placed in weak soils. The Engineer shall determine if the soils are weak. Weak soils are classified as boggy, wet, or loose soil areas.

(C) - 3" anchor unit



Max. protection of the stub post is 4" above a 60" chord aligned radially to the center line of the highway and connecting any point, within the length of the chord, on the ground surface on one side of the support to a point in the ground surface on the other side.



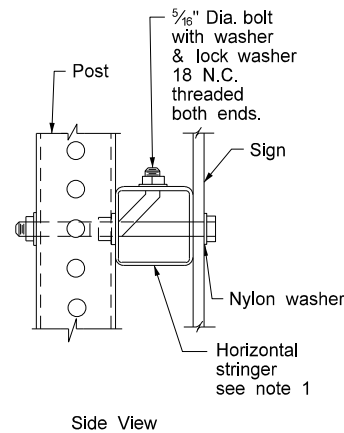
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-3-2013	
REVISIONS	
DATE	CHANGE

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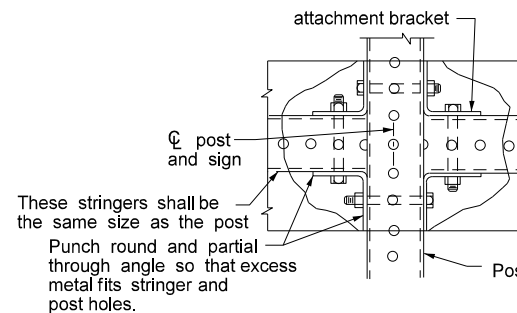
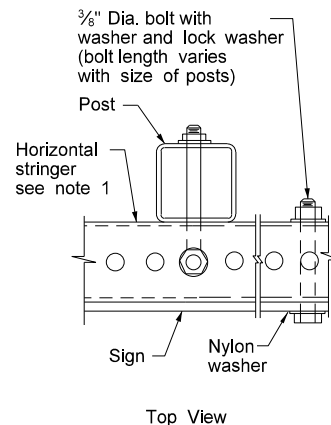
Mounting Details Perforated Tube

Note:

- Horizontal stringers - In lieu of perforated tubes, the contractor may substitute z bar stringers. The z bar stringers shall be 1 1/2" x 3/16" thick, 1.08 lbs./ft aluminum or 3.16 lbs./ft steel.
- Metal washers used on sign face shall have a minimum outside diameter of 5/16" ± 1/65" and 10 gauge thickness.
- No Parking Signs: All no parking signs with directional arrows shall be placed at a 30 to 45 degree angle with the line of traffic flow. No parking signs required at the above angles may have the support turned to the correct angle. If the no parking sign is placed with another sign that has to be placed at a 90 degree angle with the line of traffic flow, the detailed angle strap should be used to mount the no parking sign. Flat washers and lock washers shall be used with all nylon washers.
- In lieu of using the bent bolt to attach the post to the stringer, the contractor may choose to punch the sign backing and place the bolt through the sign, the stringer and the post.
- 4" vertical clearance of anchor or breakaway base. The 4" x 60" measurement shall be made above and below post location and also back and ahead of post.

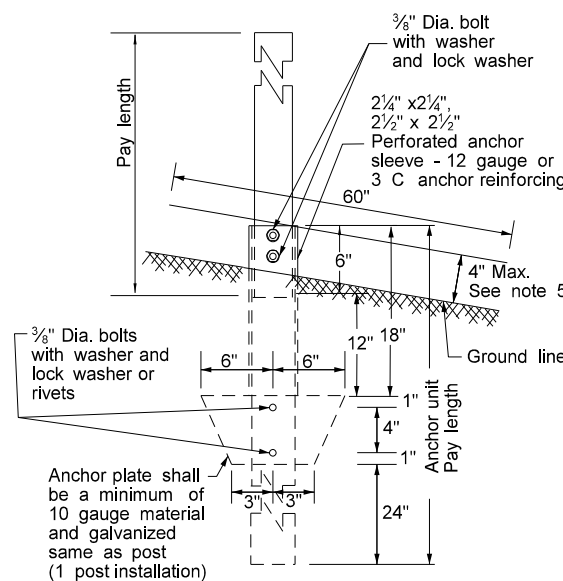


STRINGER MOUNTING
(WITH STRINGER IN FRONT OF POST)



STREET NAME SIGNS
AND ONE WAY SIGNS
SINGLE POST ASSEMBLY
ONE STRINGER OR
BACK TO BACK MOUNTING

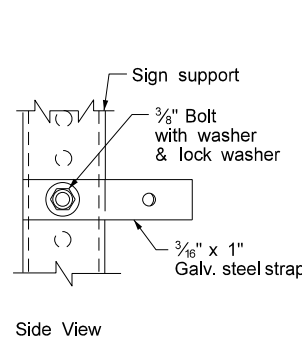
These stringers shall be the same size as the post. Punch round and partial through angle so that excess metal fits stringer and post holes.



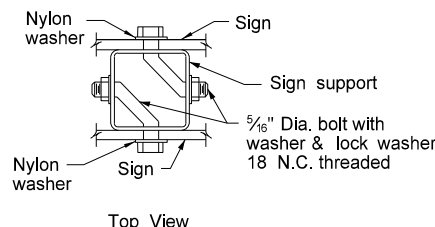
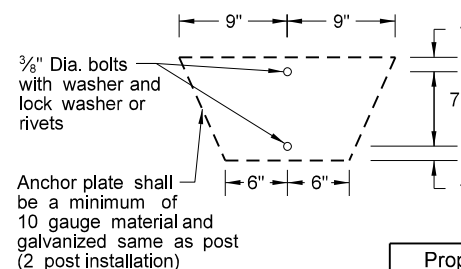
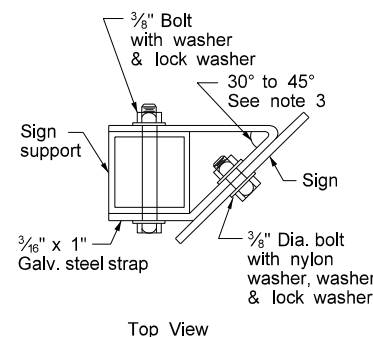
ANCHOR UNIT AND
POST ASSEMBLY

Number of Posts	Telescoping Perforated Tube						
	Post Size In.	Wall Thickness Gauge	Sleeve Size In.	Wall Thickness Gauge	Slip Base	Anchor Size Without Slip Base In.	Anchor Wall Thickness Gauge
1	2	12			No	2 1/4	12
1	2 1/4	12			No	2 1/2	12
1	2 1/2	12			(B)	3(C)	7
1	2 1/2	10			Yes		7
1	2 1/4	12	2 1/2(D)	12	Yes		7
1	2 1/2	12	2 1/4	12	Yes		7
2	2 1/2	10			Yes		7
2	2 1/4	12	2 1/2(D)	12	Yes		7
2	2 1/2	12	2 1/4	12	Yes		7
3 & 4	2 1/2	12			Yes		7
3 & 4	2 1/2	10			Yes		7
3 & 4	2 1/2	12	2 1/4	12	Yes		7
3 & 4	2 1/4	12	2 1/2(D)	12	Yes		7
3 & 4	2 1/2	10	2 3/16	10	Yes		7

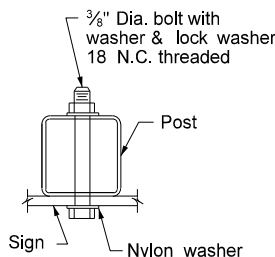
(B) - The 2 1/2", 12 gauge posts do not need breakaway bases when placed in standard soils, but require a shim as specified by the manufacturer. The breakaway base is required when the support is placed in weak soils. The Engineer shall determine if the soils are weak. Weak soils are classified as boggy, wet, or loose soil areas.
(C) - 3" anchor unit
(D) - 2 1/2" x 12 ga. x 18" minimum length external sleeve required.



STRAP DETAIL



BACK TO BACK
MOUNTING



BOLT MOUNTING

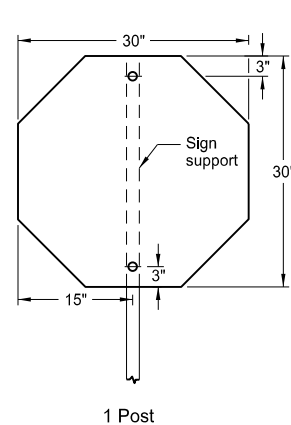
Tube Size In.	Wall Thickness In.	U.S. Standard Gauge	Weight Per Foot Lbs.	Moment of Inertia In. ⁴	Cross Sect. area In. ²	Section Modulus In. ³
1 1/2 x 1 1/2	0.105	12	1.702	0.129	0.380	0.172
2 x 2	0.105	12	2.416	0.372	0.590	0.372
2 1/4 x 2 1/4	0.105	12	2.773	0.561	0.695	0.499
2 3/16 x 2 3/16	0.135	10	3.432	0.605	0.841	0.590
2 1/2 x 2 1/2	0.105	12	3.141	0.804	0.803	0.643
2 1/2 x 2 1/2	0.135	10	4.006	0.979	1.010	0.783

The 2 3/16" size 10 gauge is shown as 2.19" size on the plans. The 2 1/2" size is shown as 2.51" size on the plans.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-6-09	
REVISIONS	
DATE	CHANGE
7-8-14	Revised Note 3

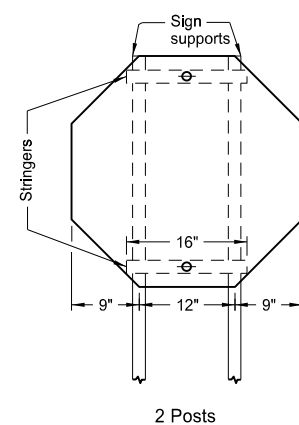
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS REGULATORY, WARNING AND GUIDE SIGNS

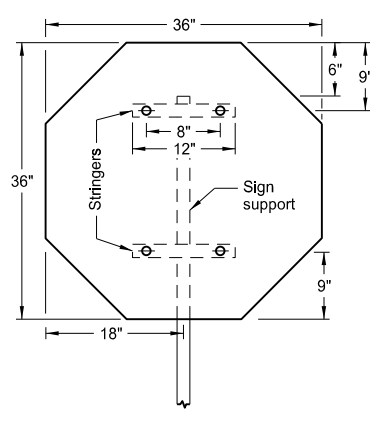


1 Post

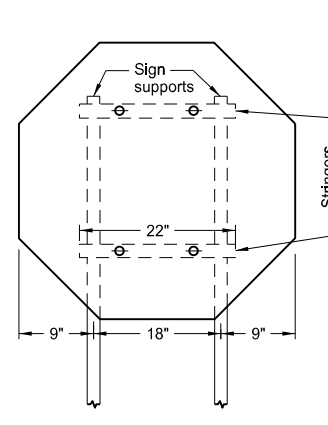
Assembly No. 1



2 Posts

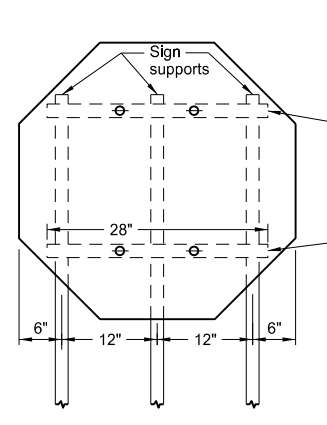


1 Post



2 Posts

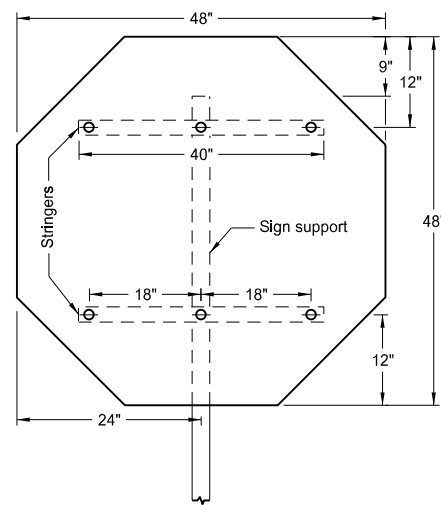
Assembly No. 2



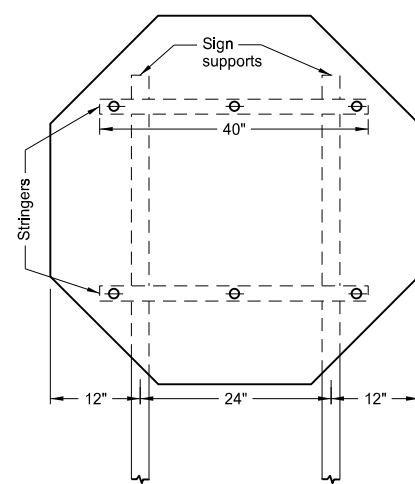
3 Posts

Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
3. Perforated square tube stringer shall be 1 1/2" x 1 1/2".
4. All holes shall be punched round for 3/8" bolt.

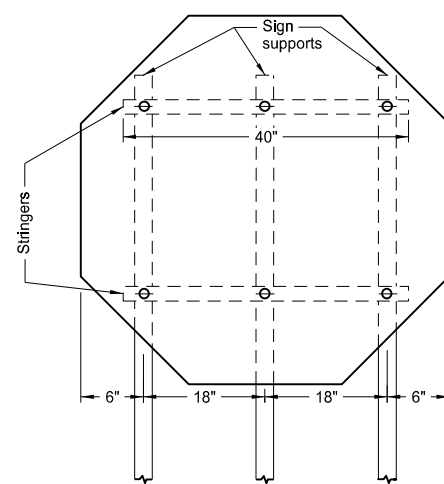


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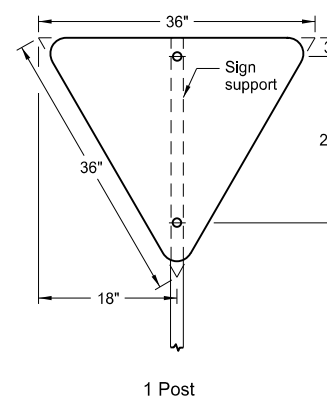


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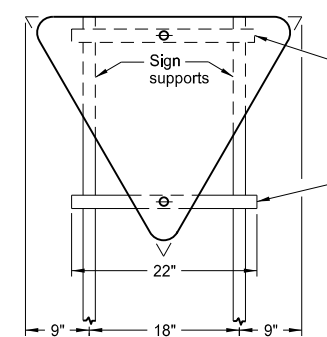
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3 Posts

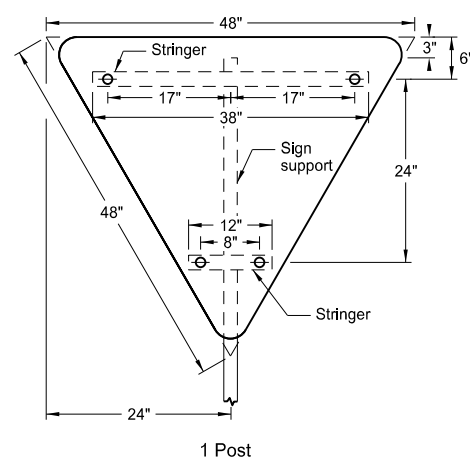


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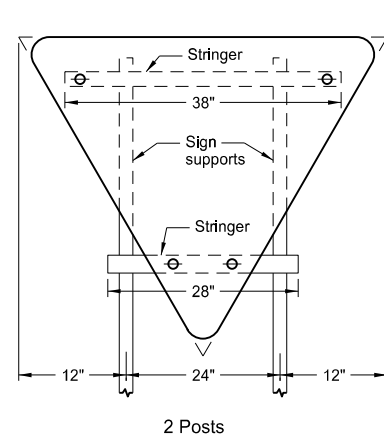


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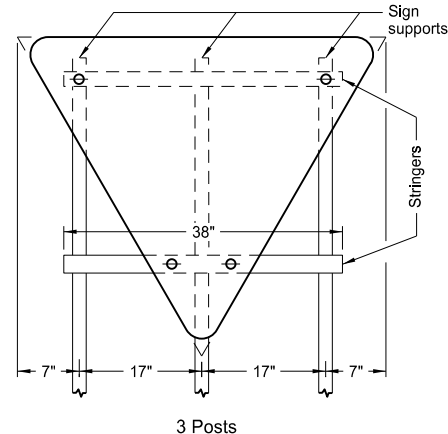


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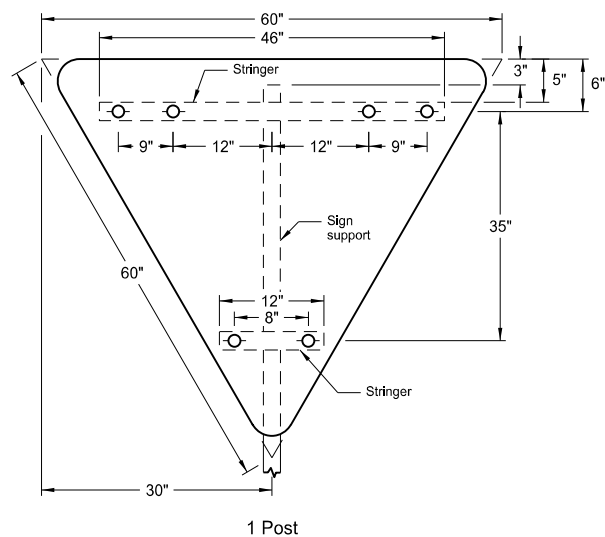


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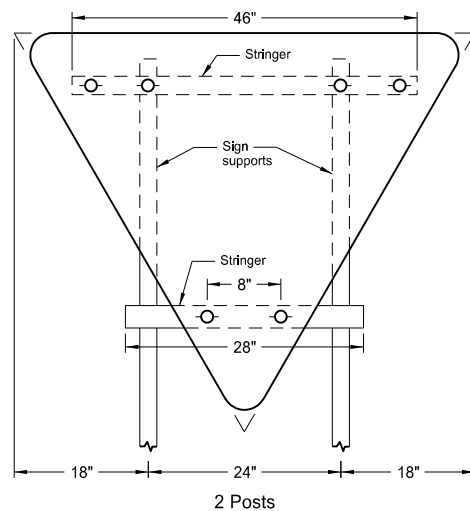
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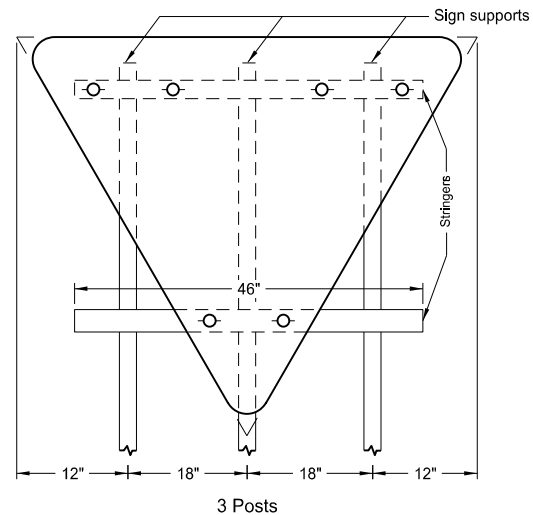
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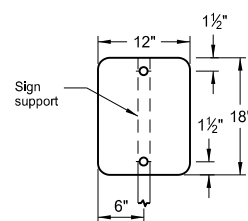


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Assembly No. 6

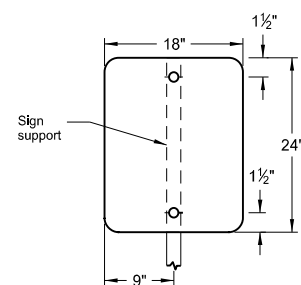
Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
3. Perforated square tube stringer shall be 1½" x 1½".
4. All holes shall be punched round for ⅜" bolt.



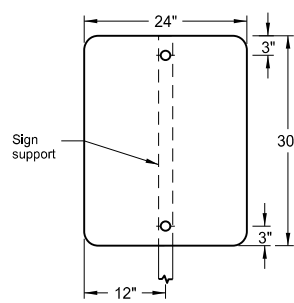
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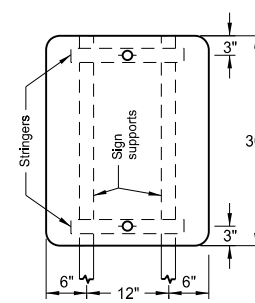
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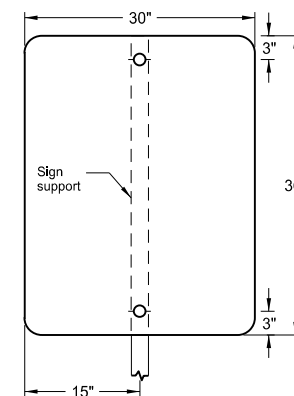


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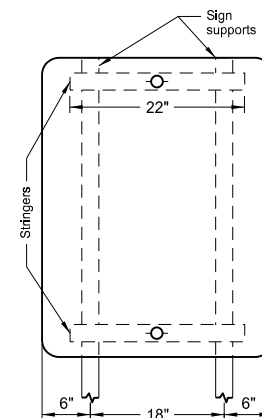
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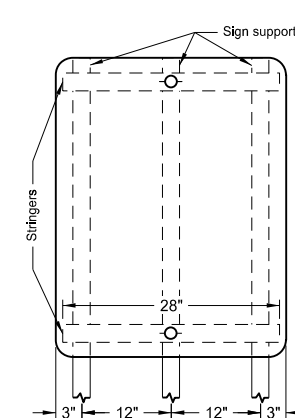


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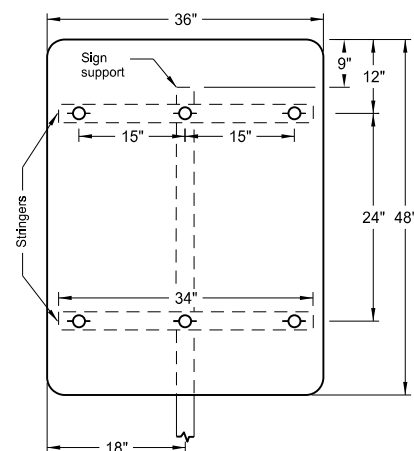


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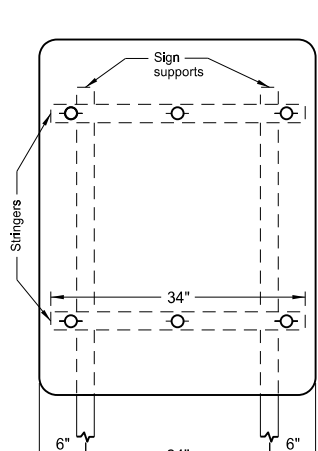
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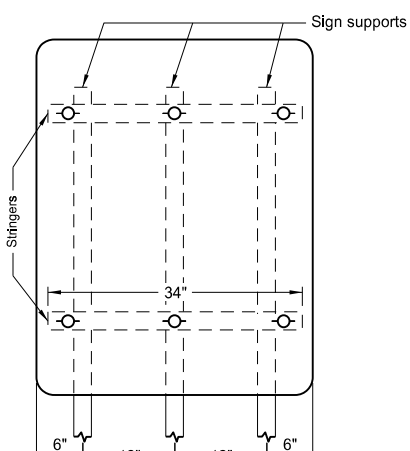


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Assembly No. 11

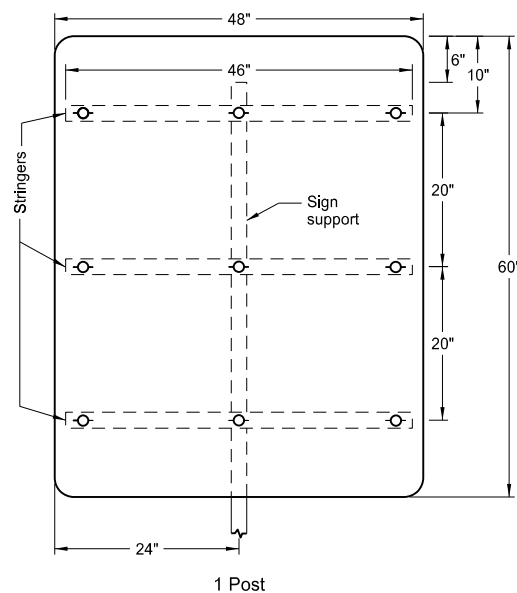


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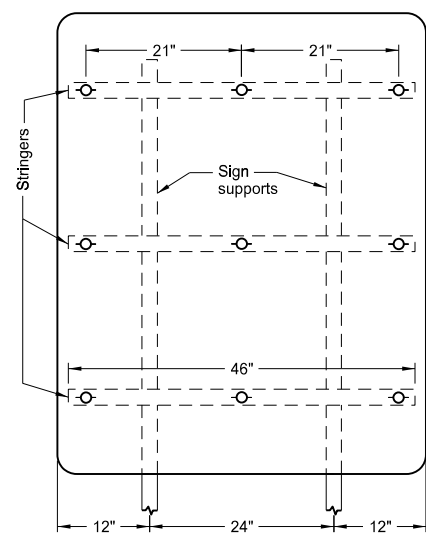
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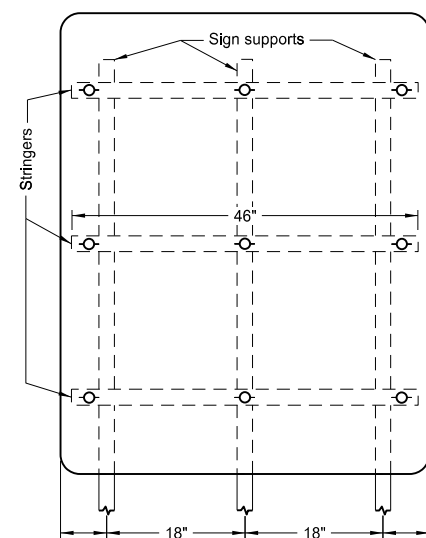


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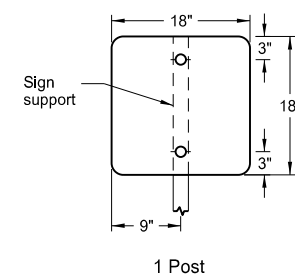


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Assembly No. 12

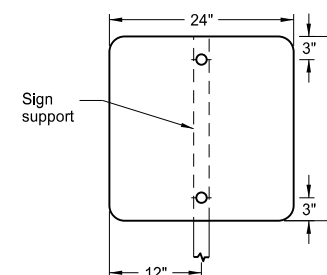


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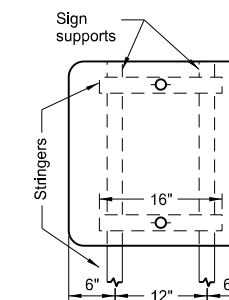
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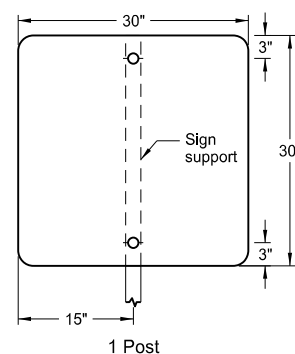


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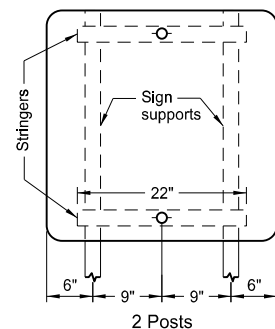


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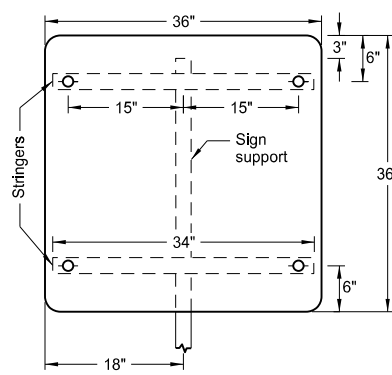


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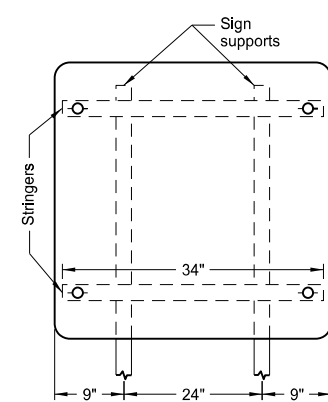
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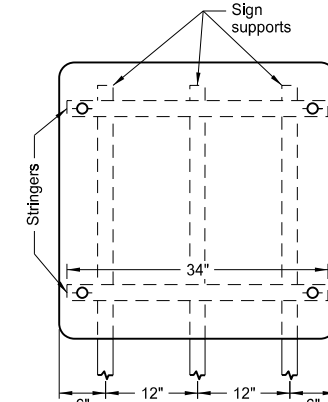


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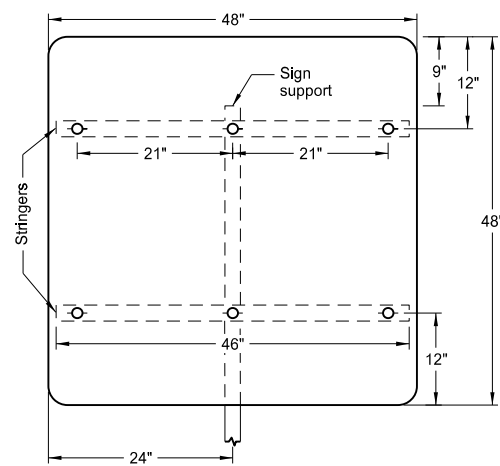


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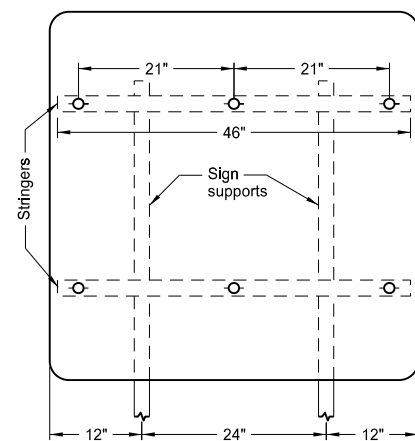
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3 Posts

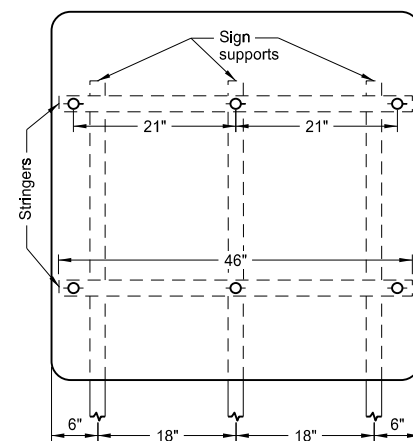


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Assembly No. 17



3 Posts

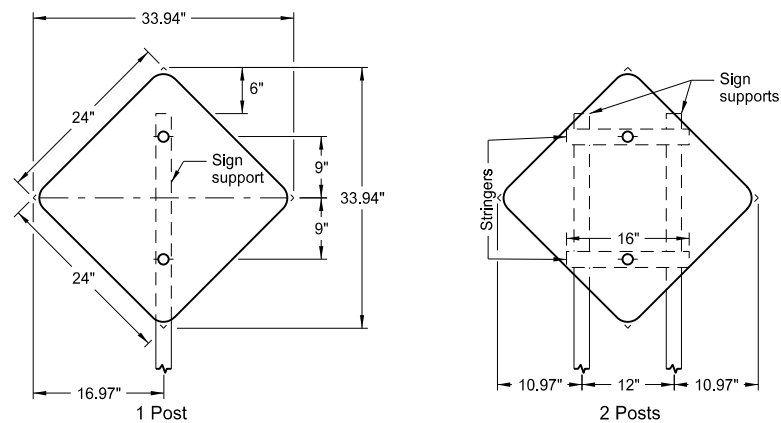
Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
3. Perforated square tube stringer shall be 1½" x 1½".
4. All holes shall be punched round for ⅜" bolt.

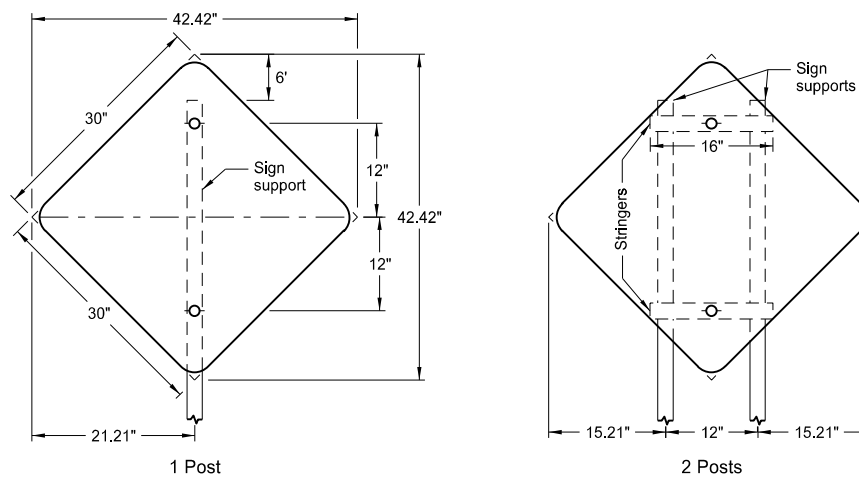
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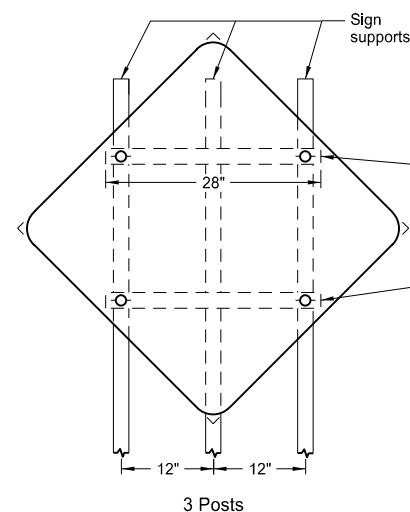
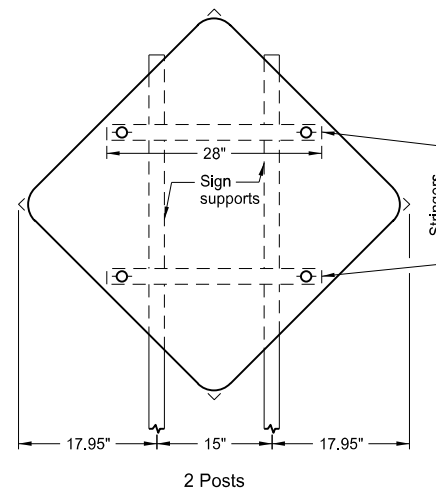
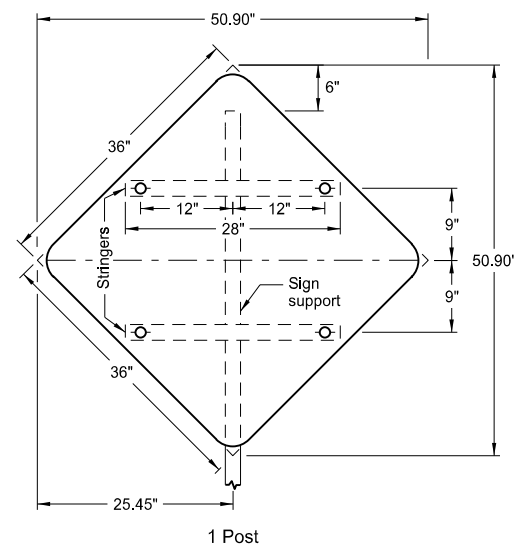
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS REGULATORY, WARNING AND GUIDE SIGNS



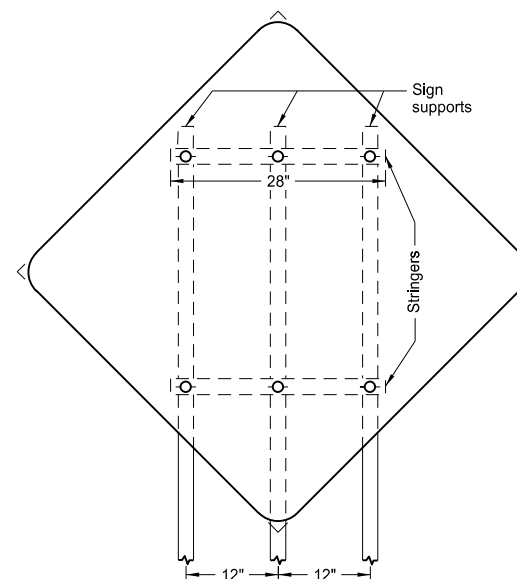
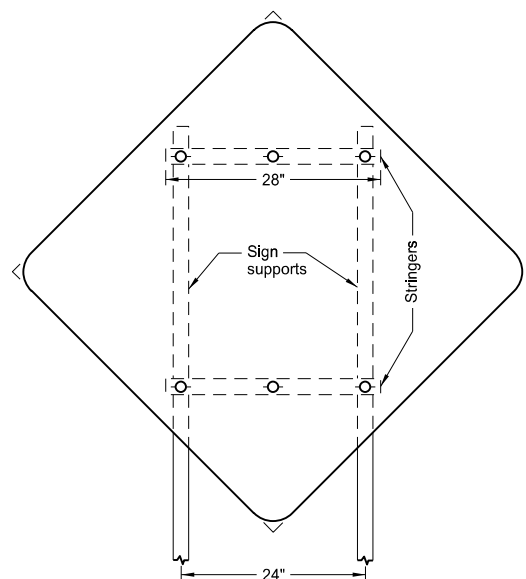
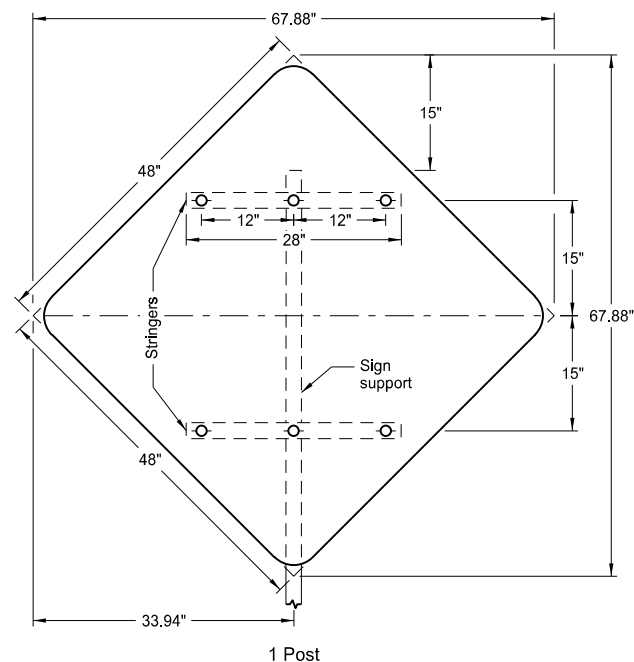
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Assembly No. 19



Assembly No. 20



Assembly No. 21

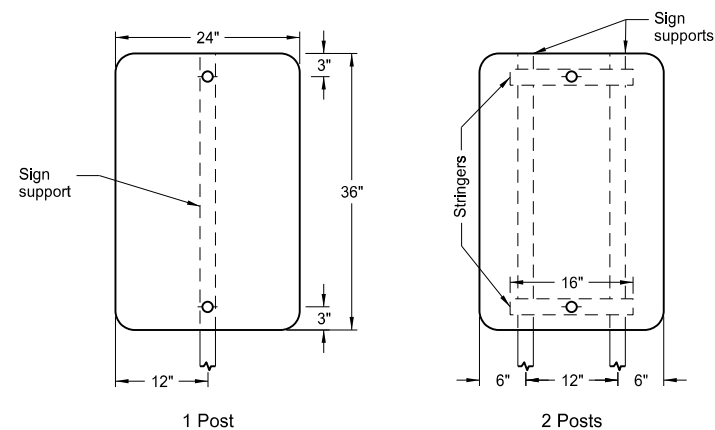
Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
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4. All holes shall be punched round for ⅜" bolt.

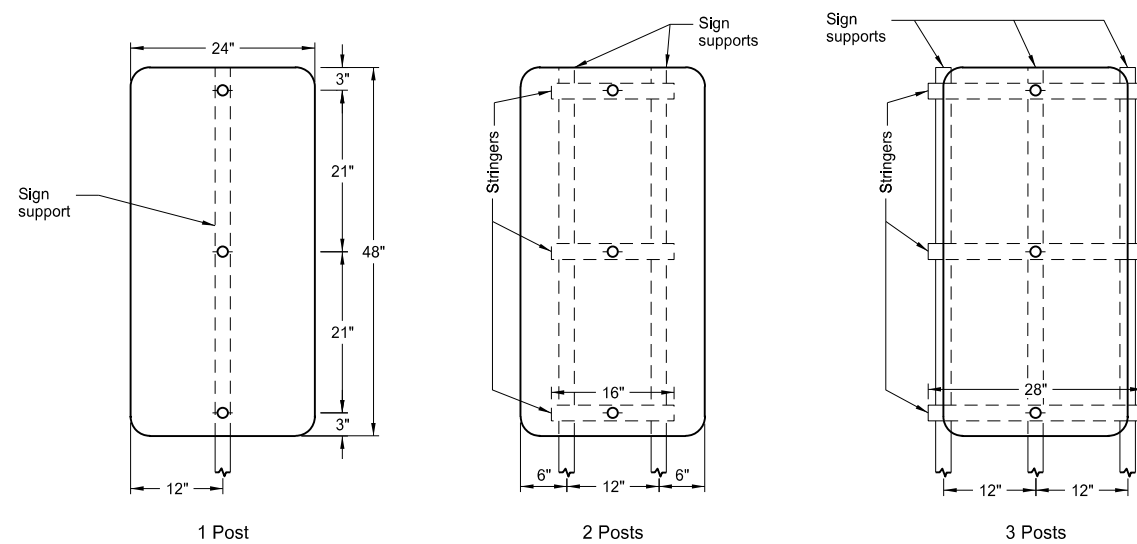
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION
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Assembly No. 23

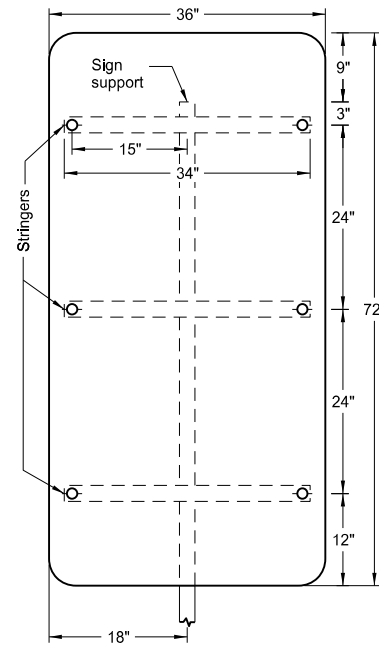
Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
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4. All holes shall be punched round for ⅜" bolt.

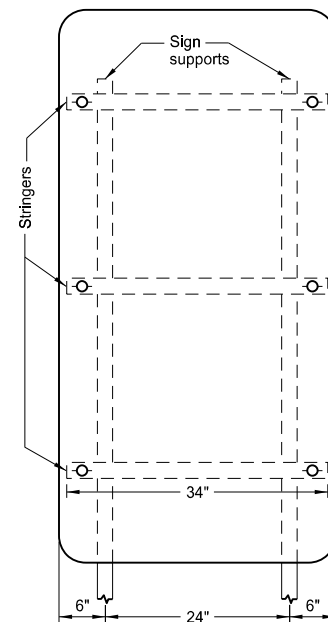
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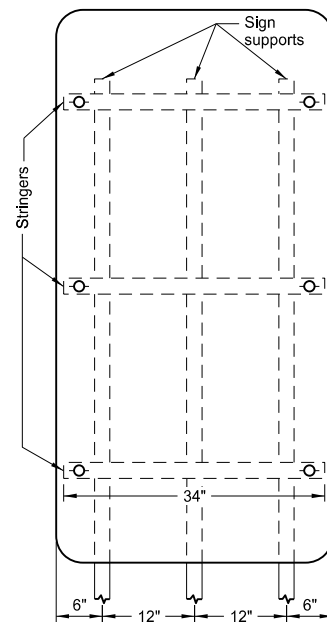
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION
DETAILS REGULATORY, WARNING AND GUIDE SIGNS



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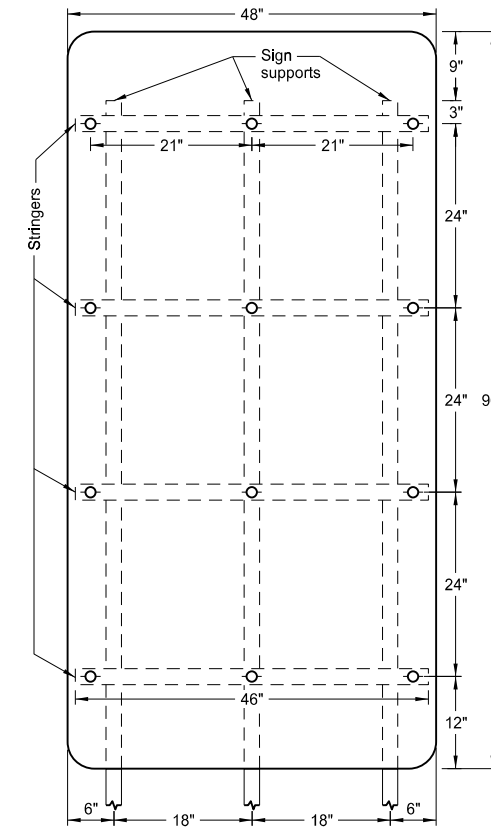


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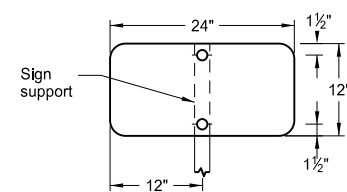
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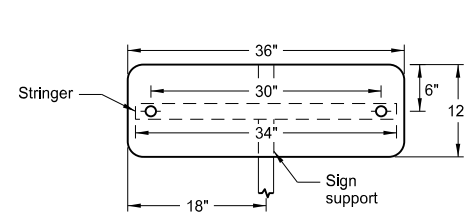
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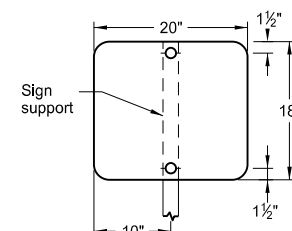
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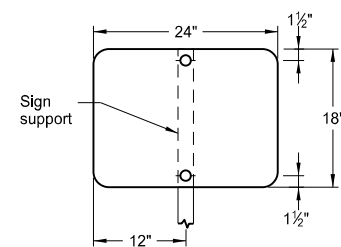
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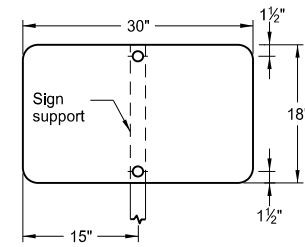
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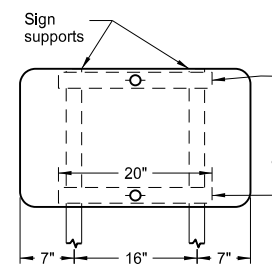
1 Post

Assembly No. 29



1 Post

Assembly No. 30



2 Posts

Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
3. Perforated square tube stringer shall be 1 1/2" x 1 1/2".
4. All holes shall be punched round for 3/8" bolt.

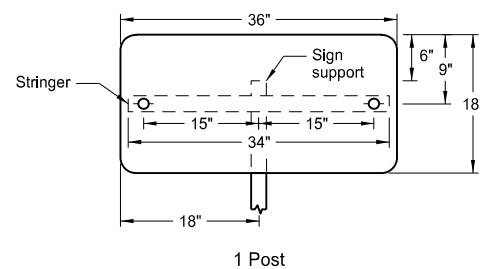
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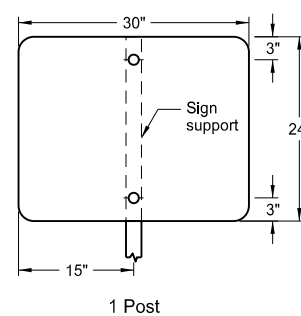
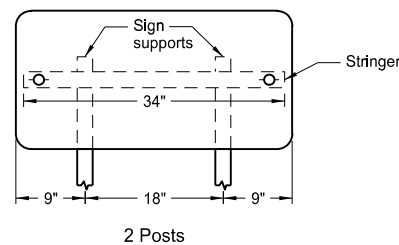
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION
DETAILS REGULATORY, WARNING AND GUIDE SIGNS

Notes:

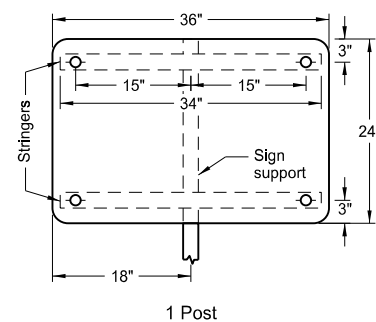
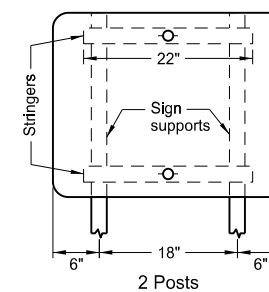
1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
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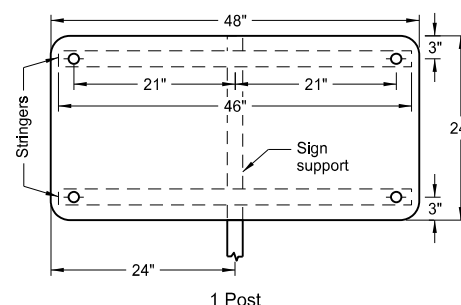
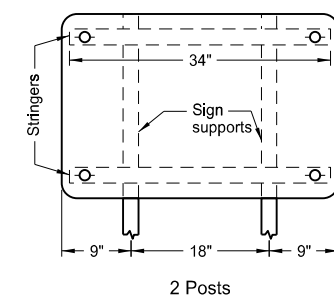
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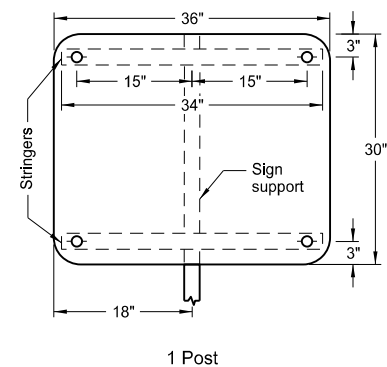
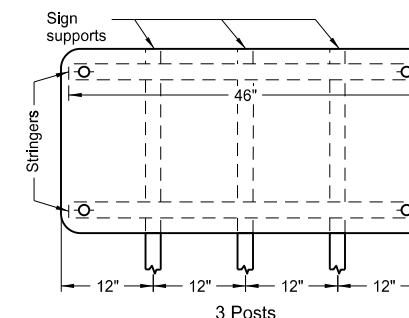
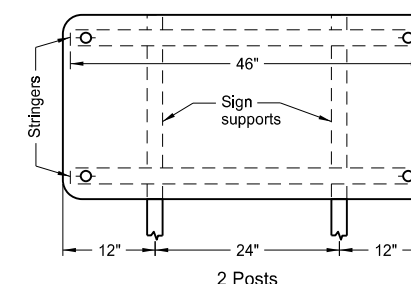
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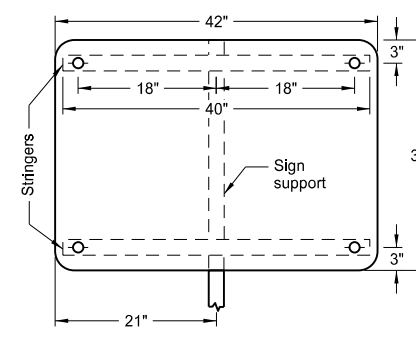
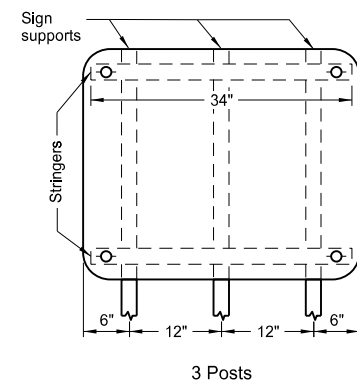
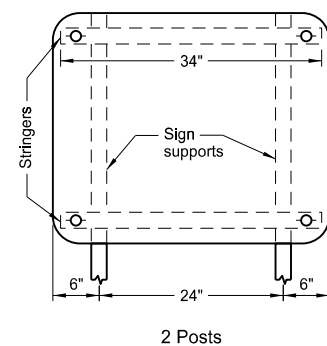
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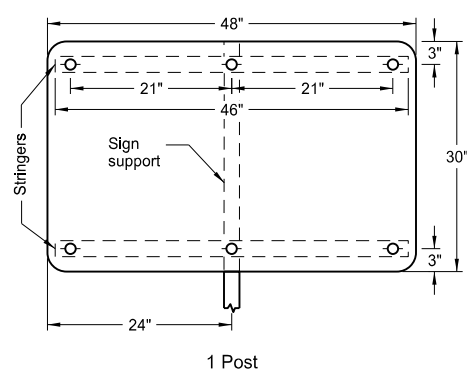
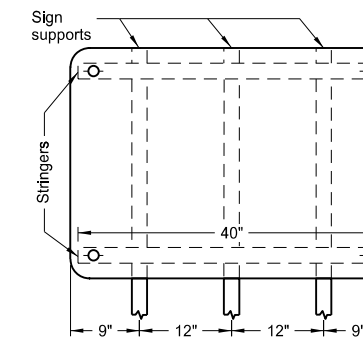
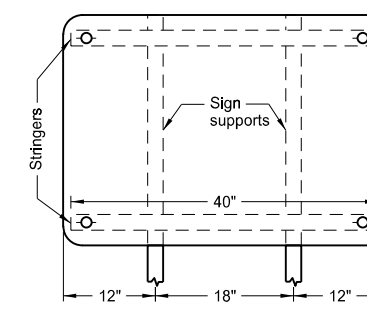
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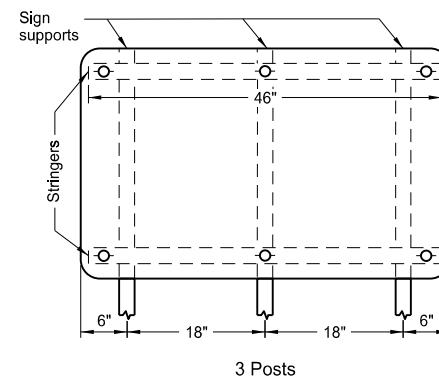
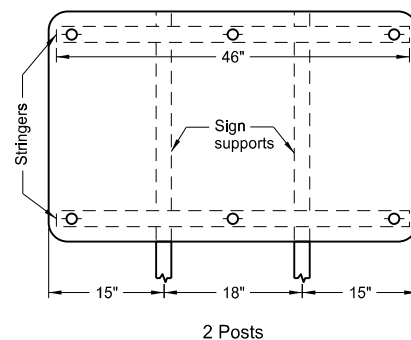
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Assembly No. 36



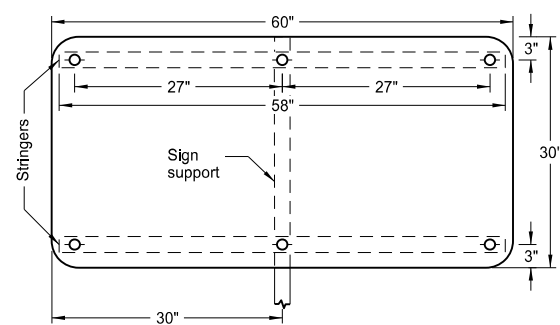
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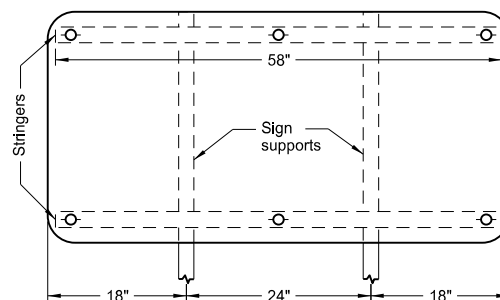
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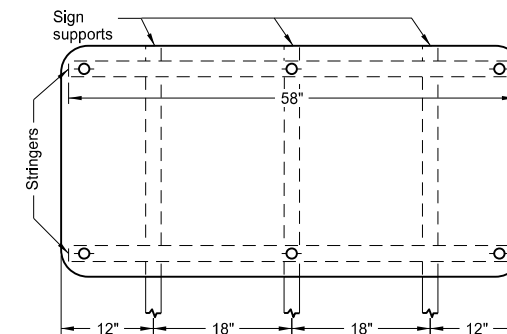
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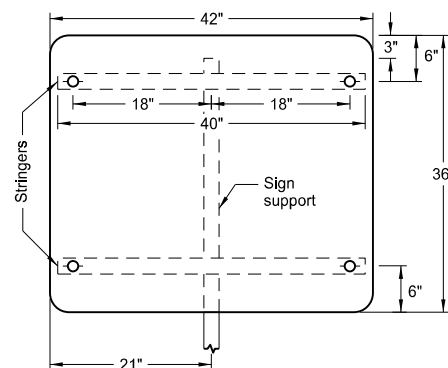


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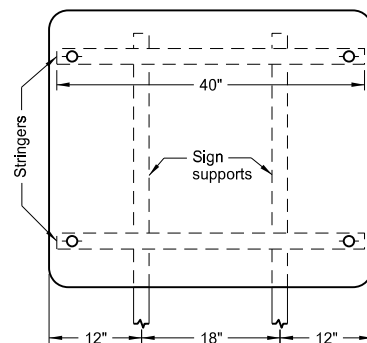


3 Posts

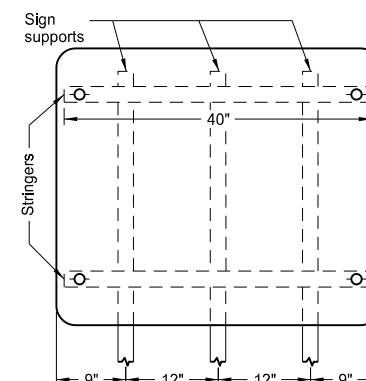
Assembly No. 38



1 Post

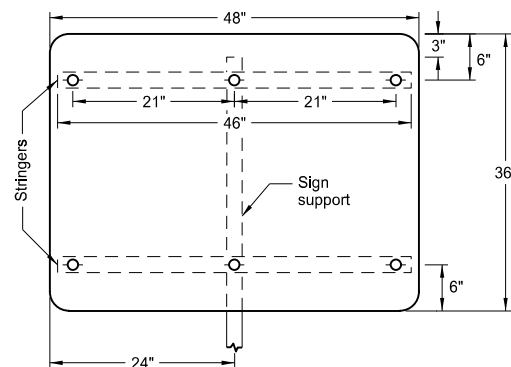


2 Posts

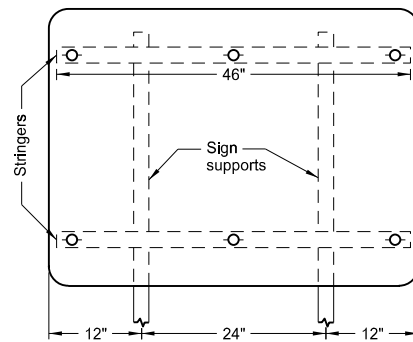


3 Posts

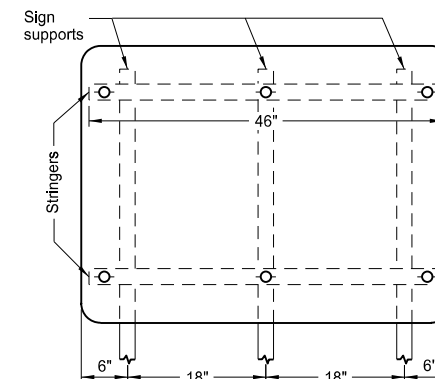
Assembly No. 39



1 Post



2 Posts



3 Posts

Assembly No. 40

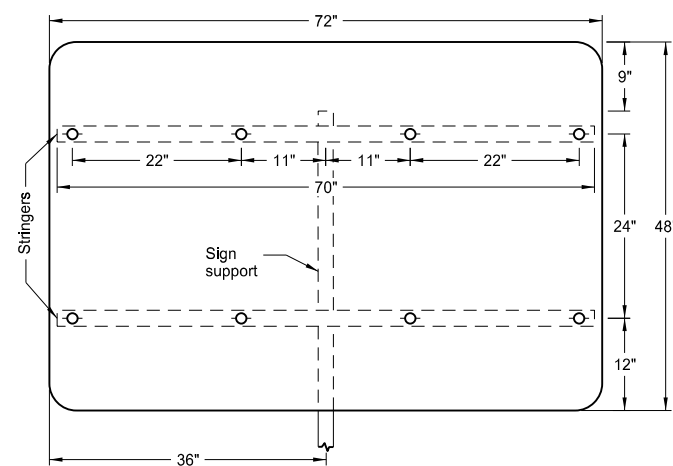
Notes:

1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
3. Perforated square tube stringer shall be 1½" x 1½".
4. All holes shall be punched round for ⅜" bolt.

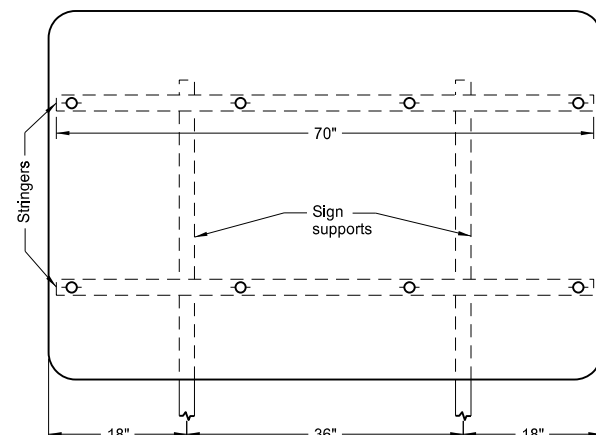
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12-1-10	
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DATE	CHANGE

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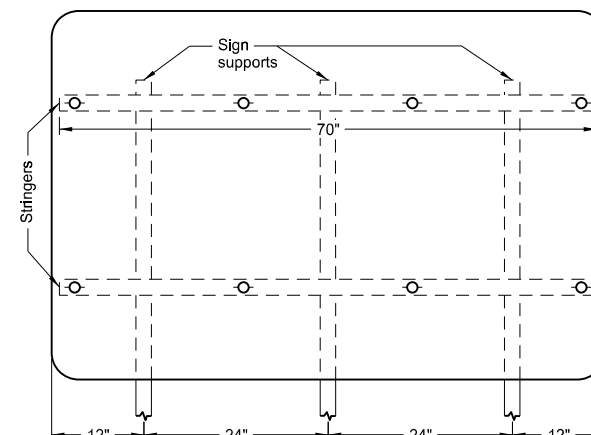
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION
DETAILS REGULATORY, WARNING AND GUIDE SIGNS



1 Post



2 Posts

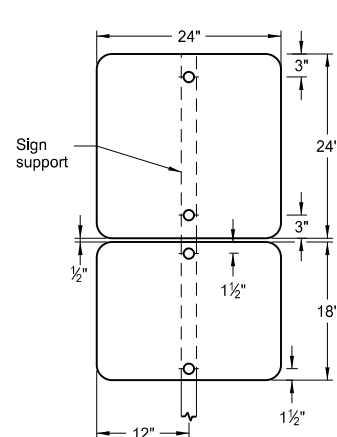


3 Posts

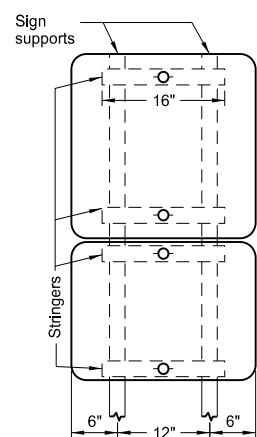
Assembly No. 41

Notes:

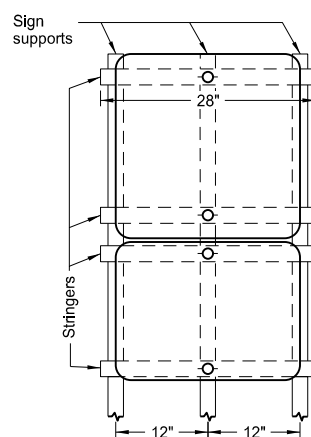
1. See Standard D-754-25 for mounting details.
2. The minimum sign backing material thickness shall be 0.100 inch.
3. Perforated square tube stringer shall be 1 1/2" x 1 1/2".
4. All holes shall be punched round for 3/8" bolt.



1 Post

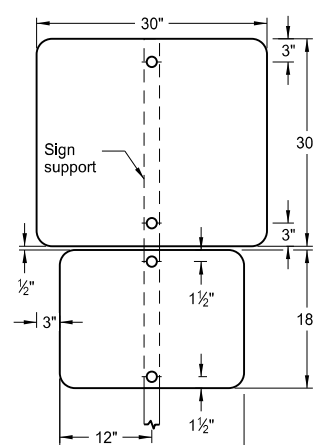


2 Posts

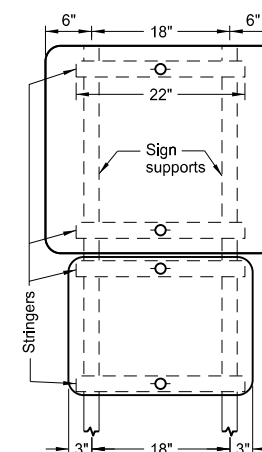


3 Posts

Assembly No. 42

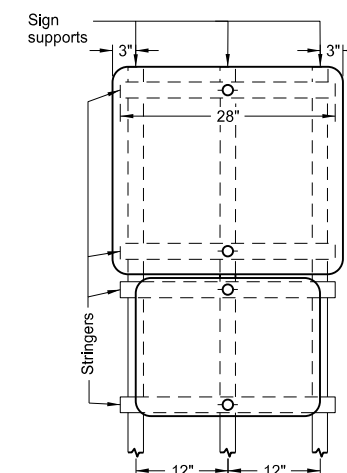


1 Post



2 Posts

Assembly No. 43



3 Posts

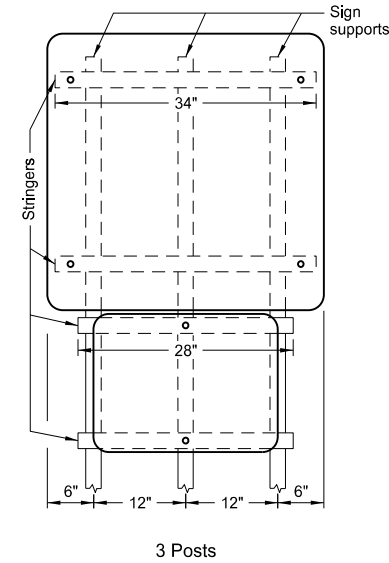
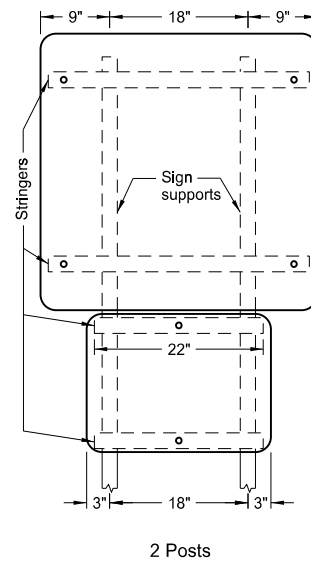
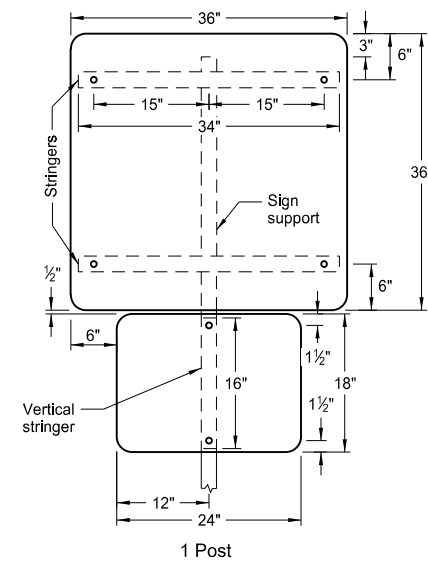
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12-1-10	
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DATE	CHANGE

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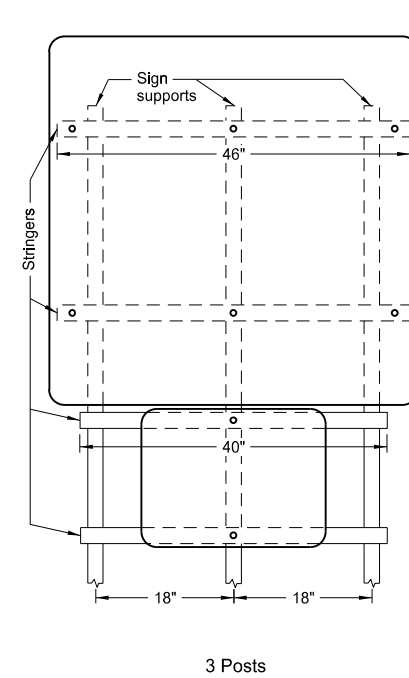
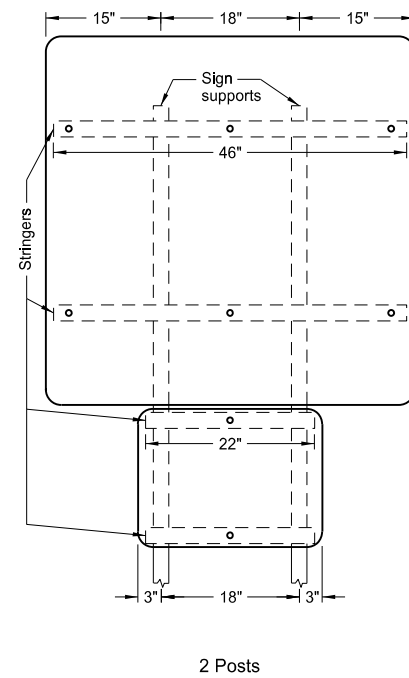
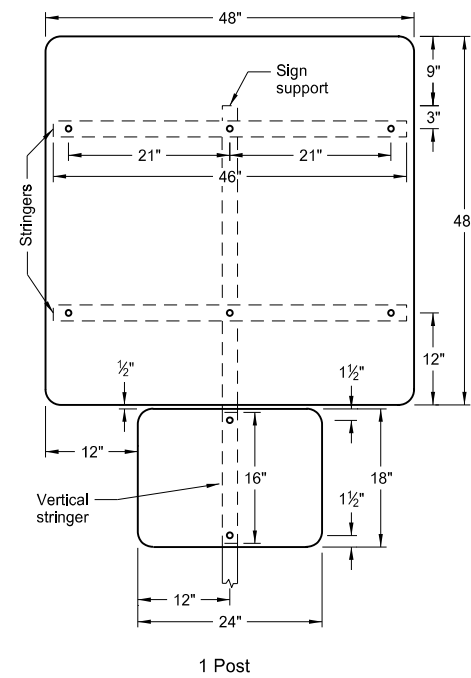
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS

Notes:

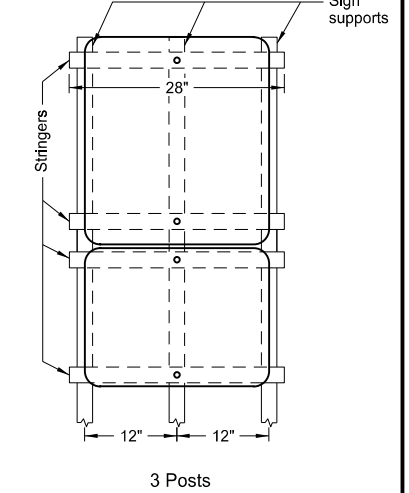
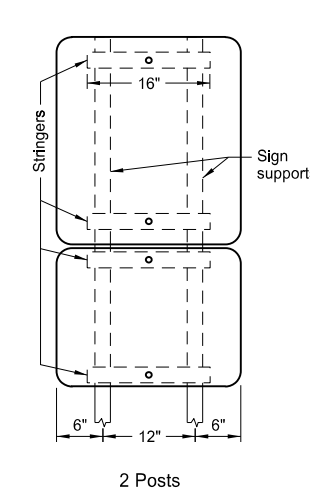
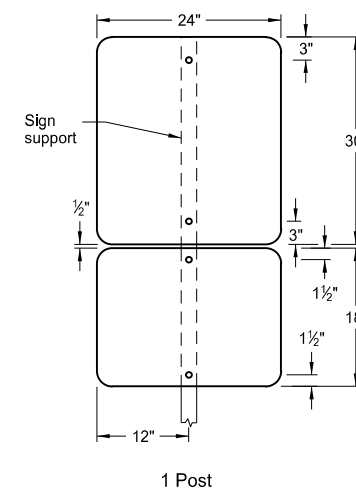
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.



Assembly No. 44



Assembly No. 45



Assembly No. 46

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
REVISIONS	
DATE	CHANGE

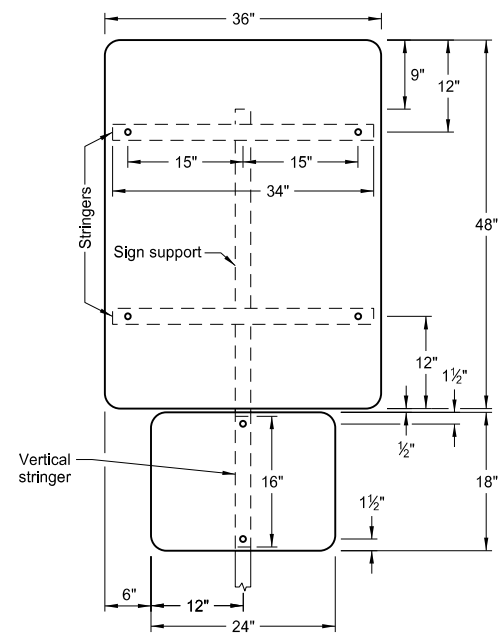
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**SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS**

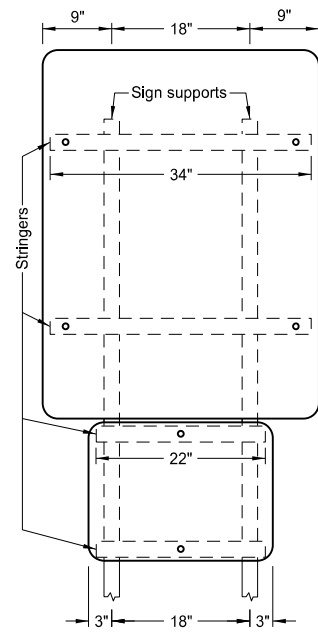
D-754-36

Notes:

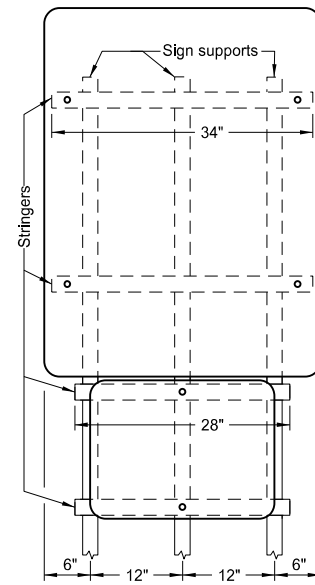
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.



1 Post

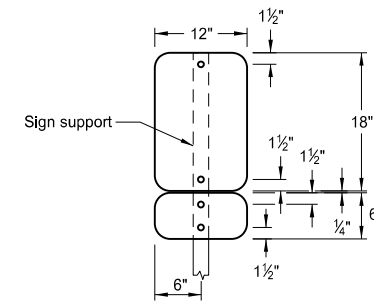


2 Posts



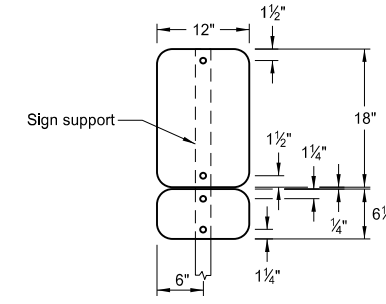
3 Posts

Assembly No. 47



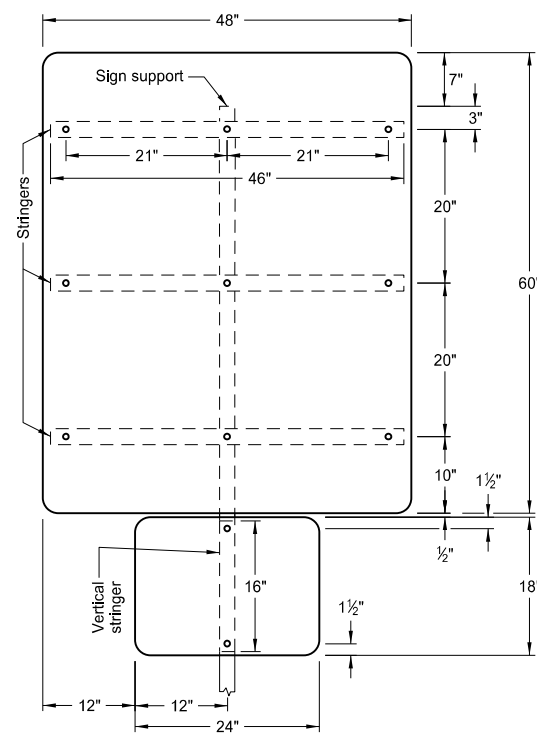
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Assembly No. 49

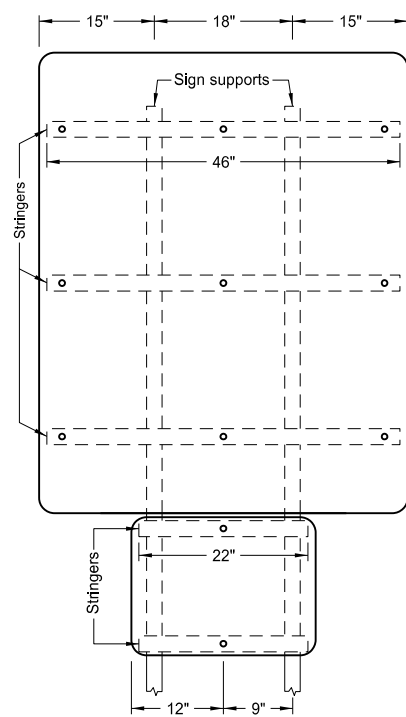


1 Post

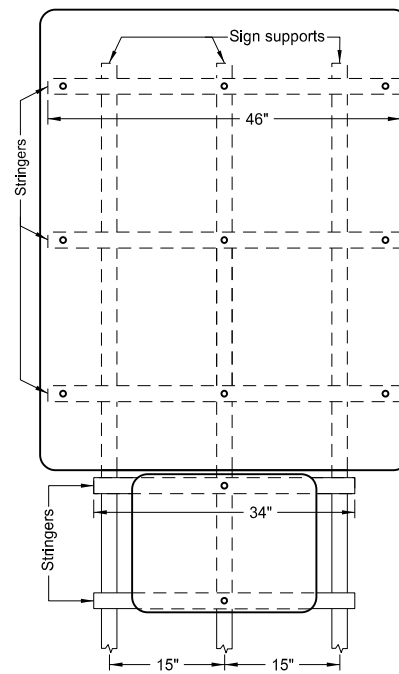
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1 Post

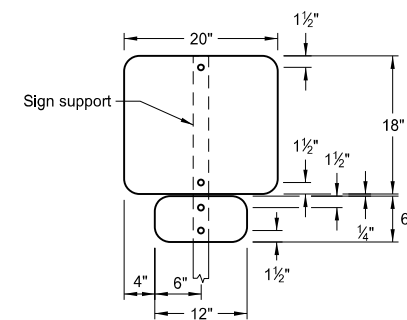


2 Posts



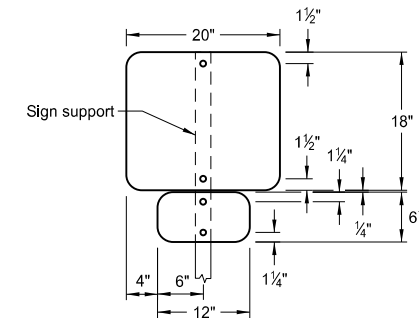
3 Posts

Assembly No. 48



1 Post

Assembly No. 51



1 Post

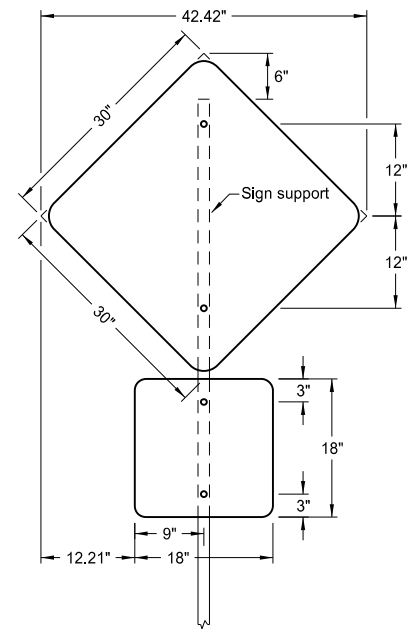
Assembly No. 52

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
REVISIONS	
DATE	CHANGE

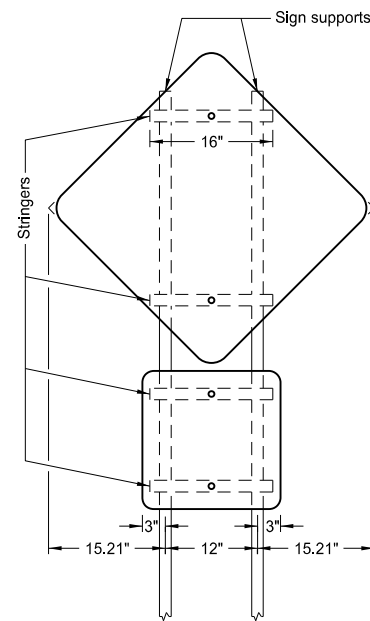
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS

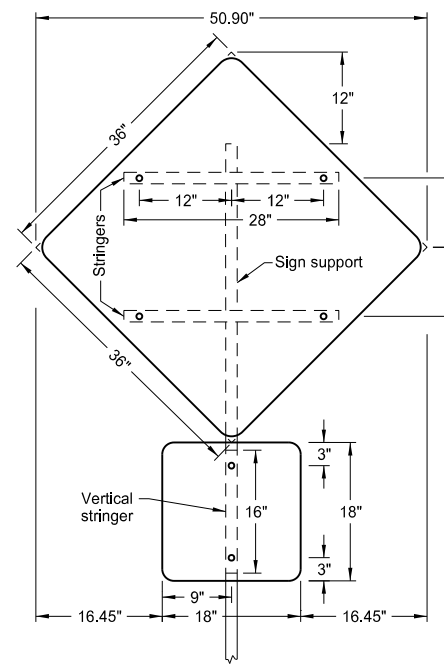
D-754-37



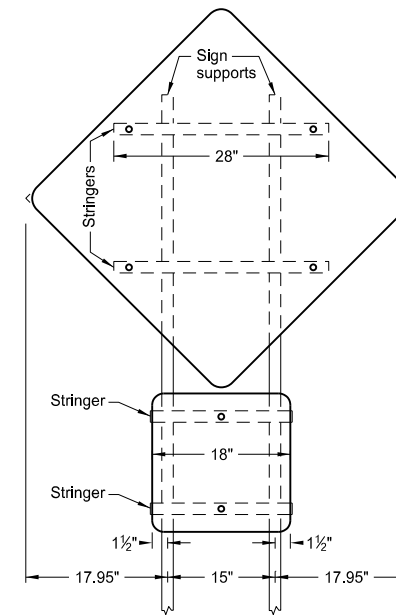
1 Post



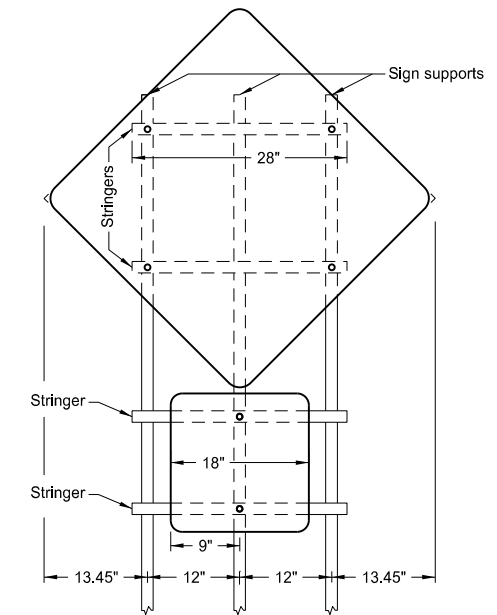
2 Posts



1 Post



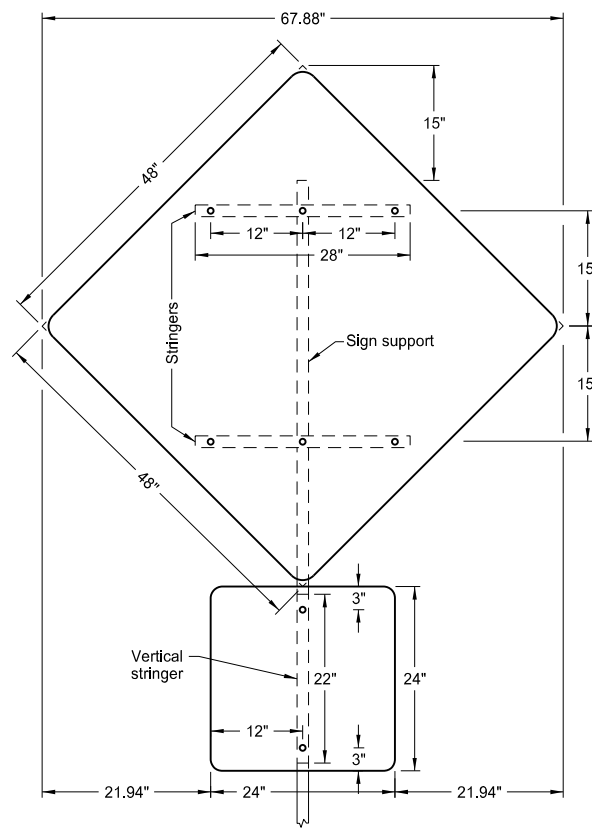
2 Posts



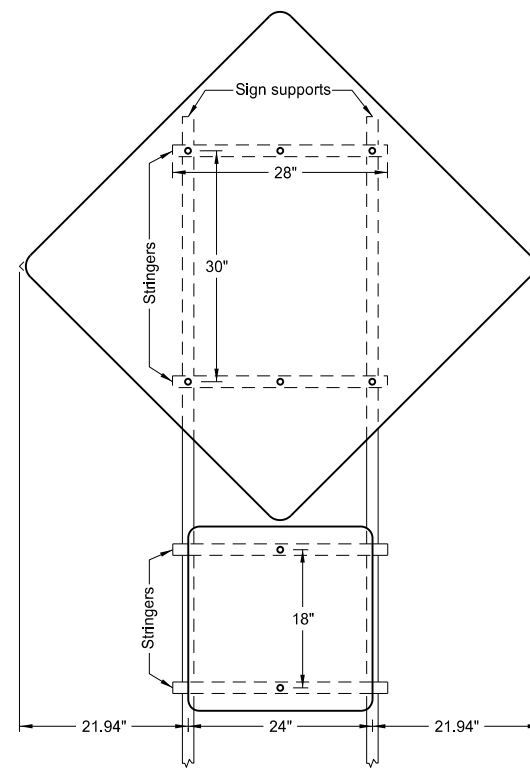
3 Posts

ASSEMBLY NO. 53

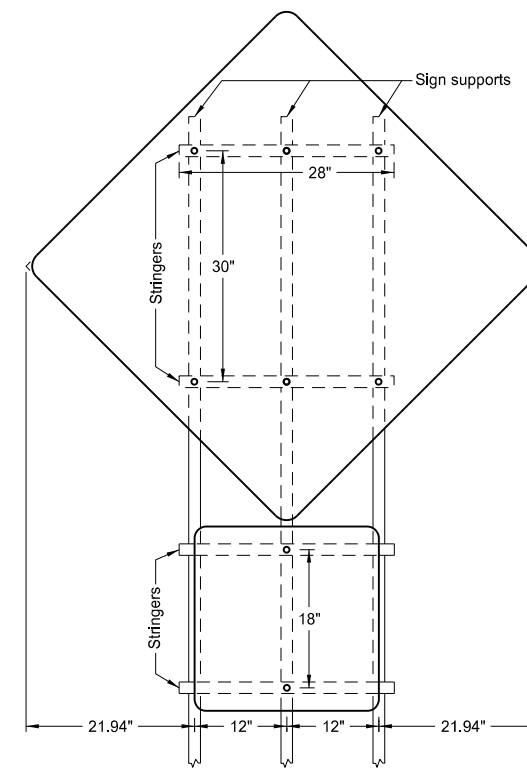
ASSEMBLY NO. 54



1 Post



2 Posts



3 Posts

ASSEMBLY NO. 55

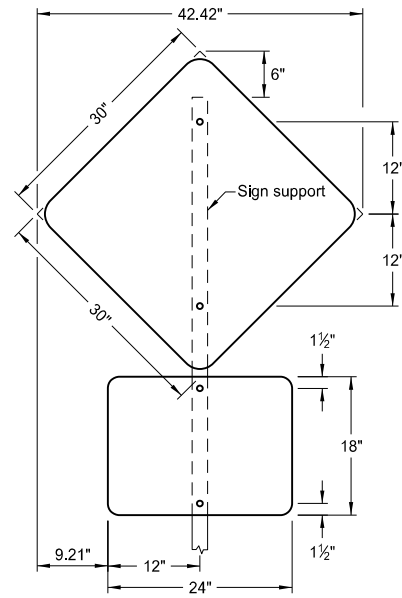
Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.

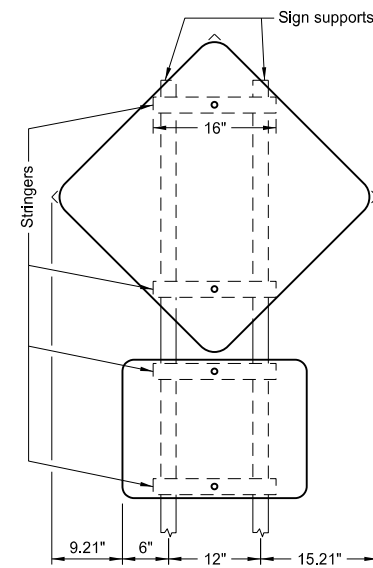
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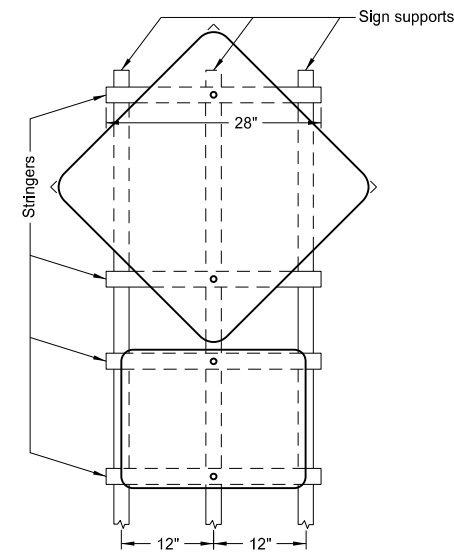
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS



1 Post



2 Posts

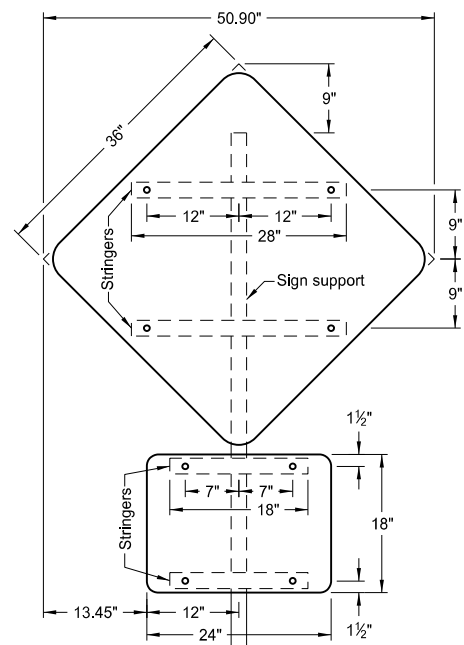


3 Posts

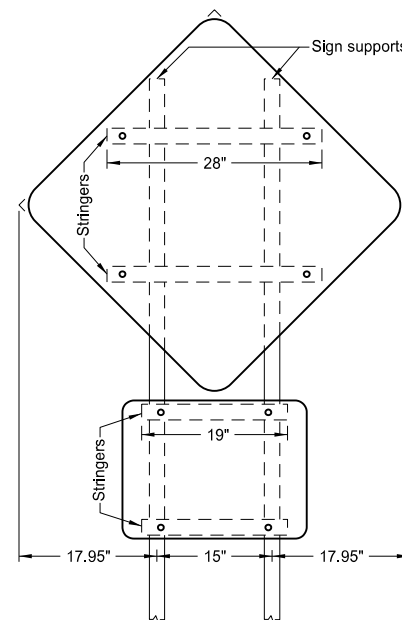
ASSEMBLY NO. 56

Notes:

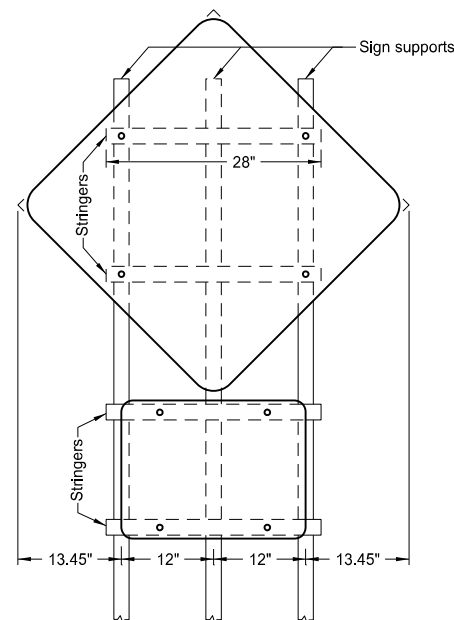
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.



1 Post



2 Posts



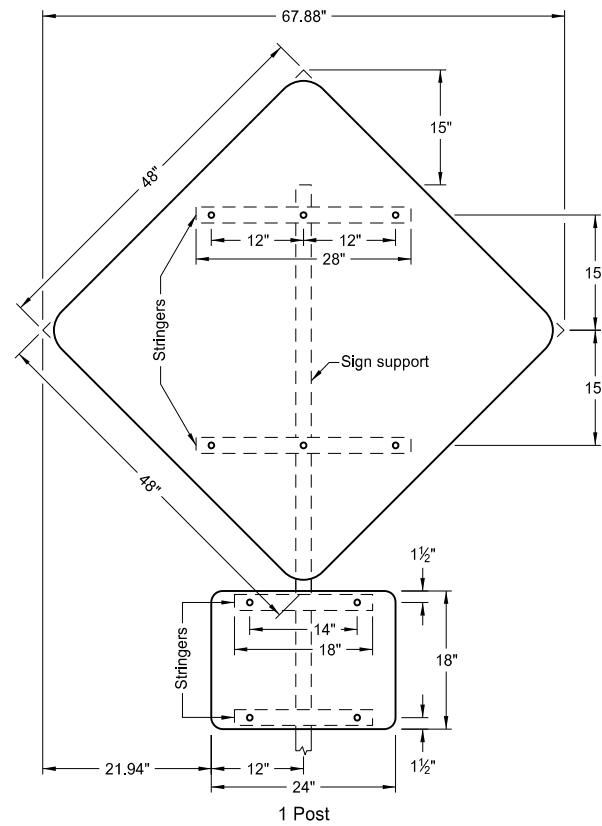
3 Posts

ASSEMBLY NO. 57

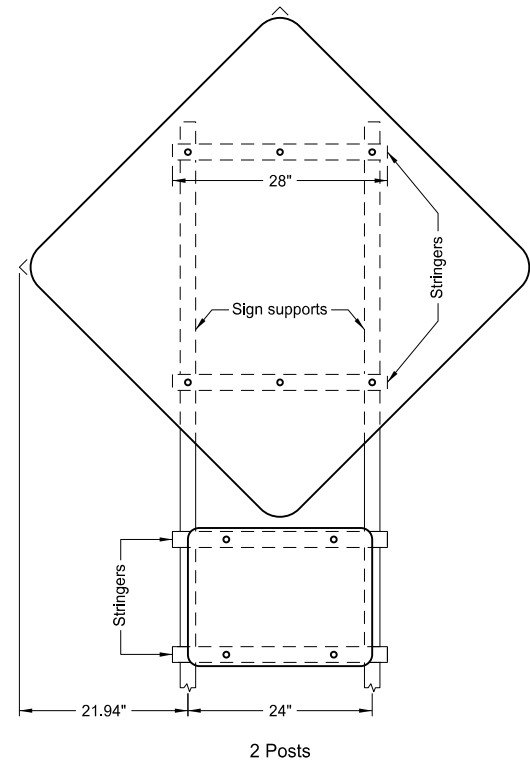
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8-22-12	
REVISIONS	
DATE	CHANGE

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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS

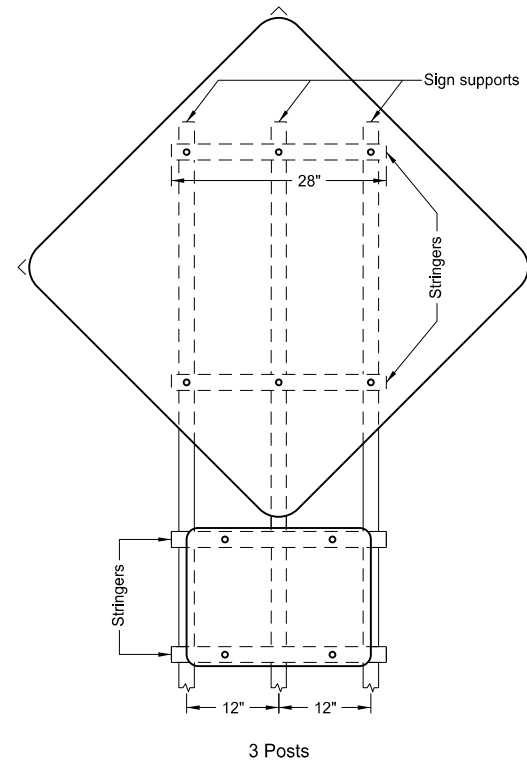


1 Post

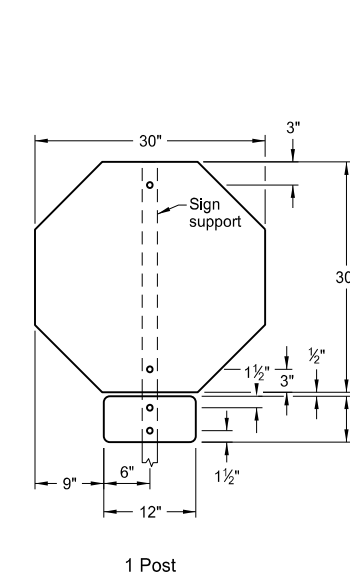


2 Posts

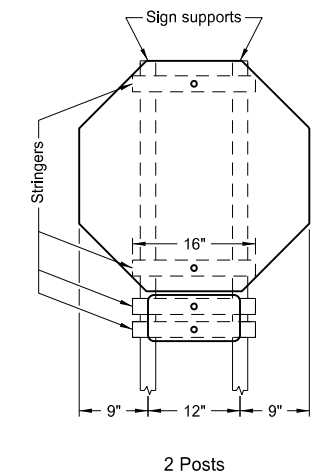
ASSEMBLY NO. 58



3 Posts

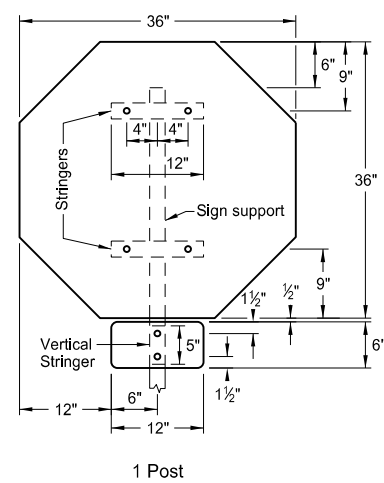


1 Post

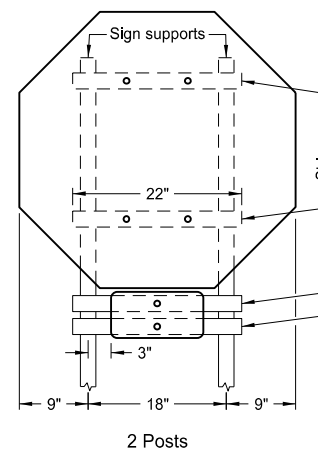


2 Posts

ASSEMBLY NO. 59

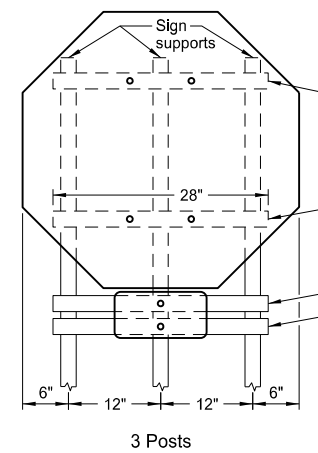


1 Post

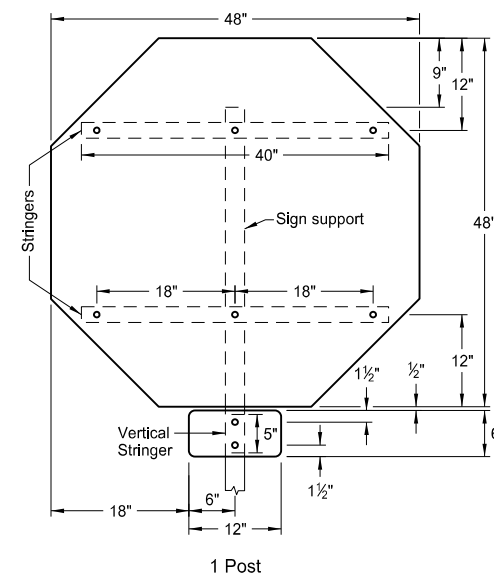


2 Posts

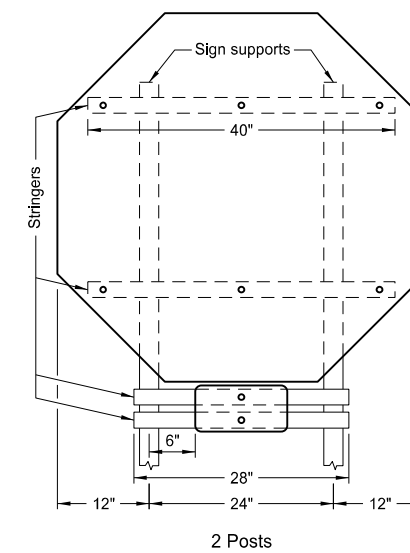
ASSEMBLY NO. 60



3 Posts

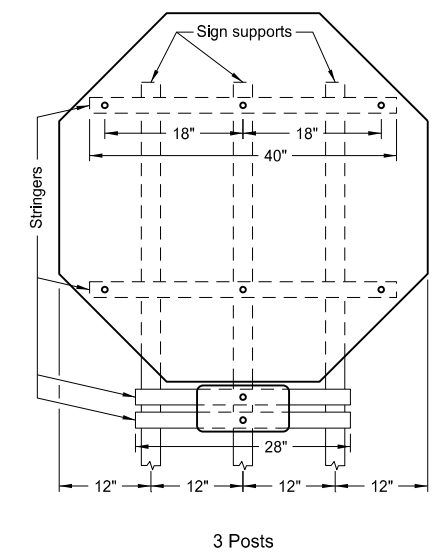


1 Post



2 Posts

ASSEMBLY NO. 61



3 Posts

Notes:

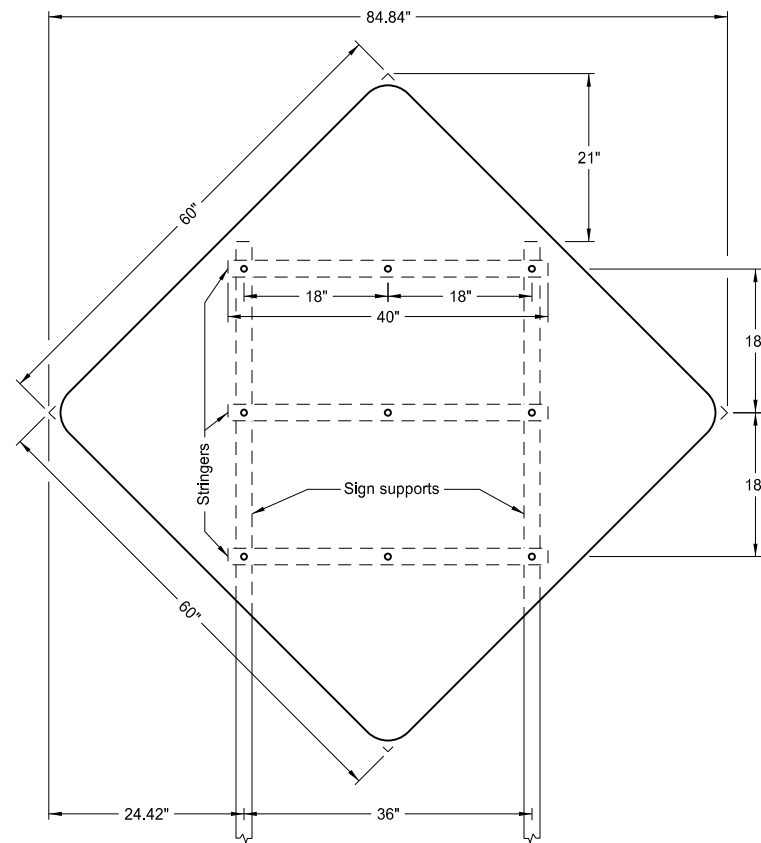
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

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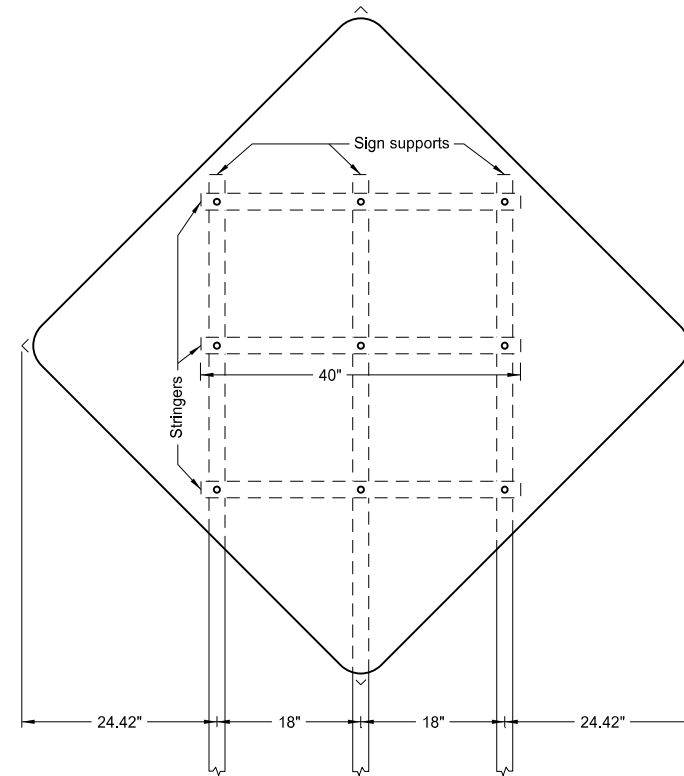
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS

D-754-40



2 Posts

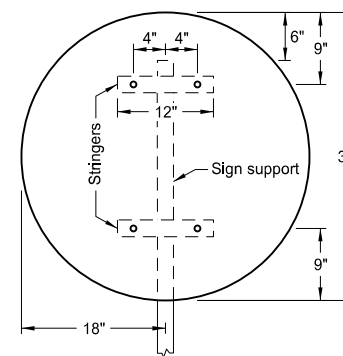
ASSEMBLY NO. 62



3 Posts

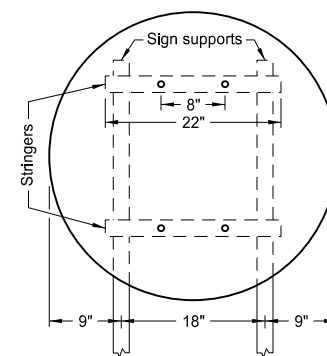
Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.



1 Post

ASSEMBLY NO. 63



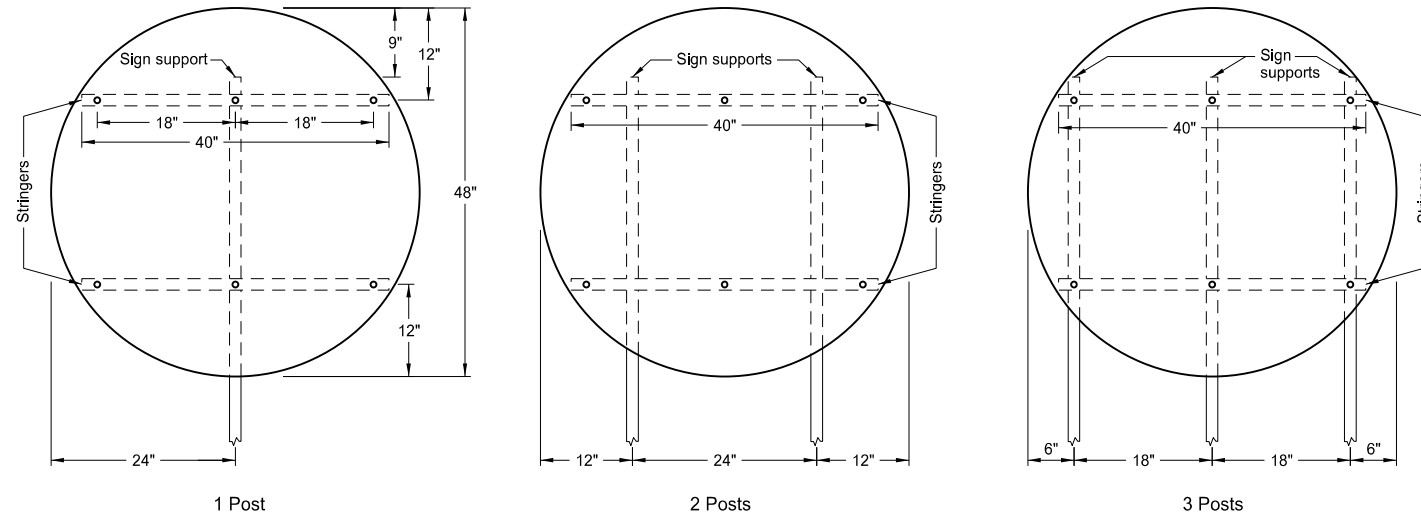
2 Posts

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
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DATE	CHANGE

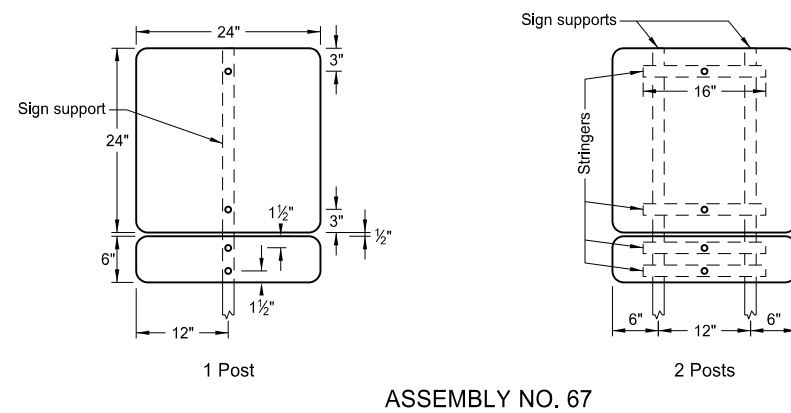
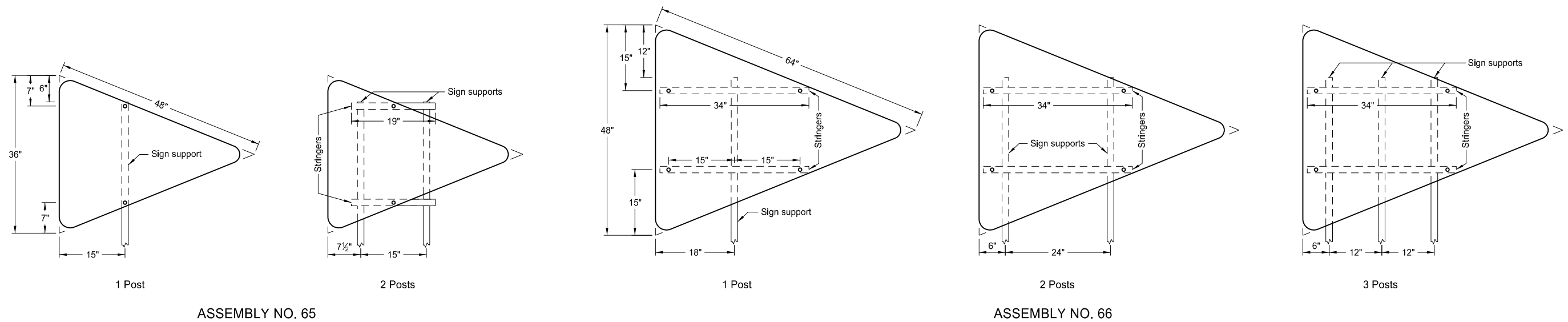
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**SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS**

D-754-41



- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1½"x1½".
 3. All holes shall be punched round for ⅜" bolt.



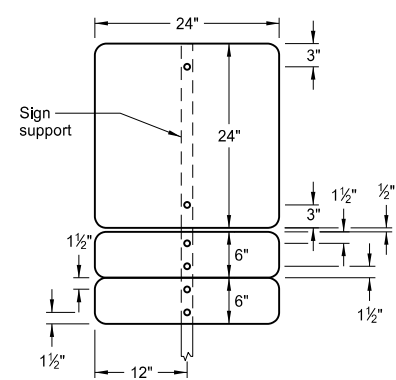
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8-22-12	
REVISIONS	
DATE	CHANGE

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 of Transportation

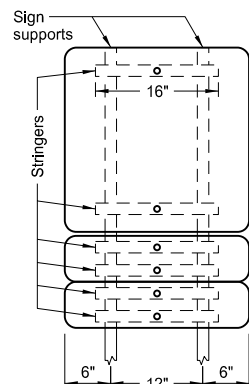
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING, AND GUIDE SIGNS

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.

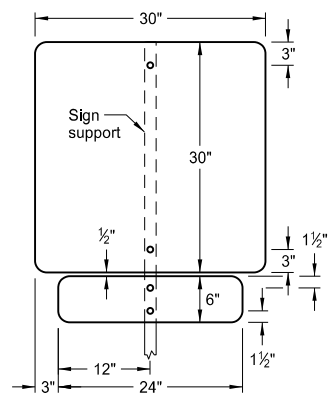


1 Post

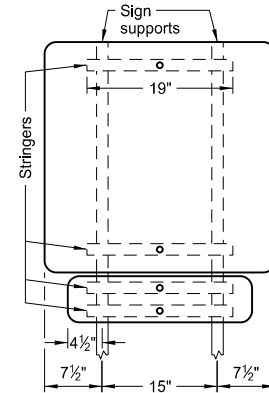


2 Posts

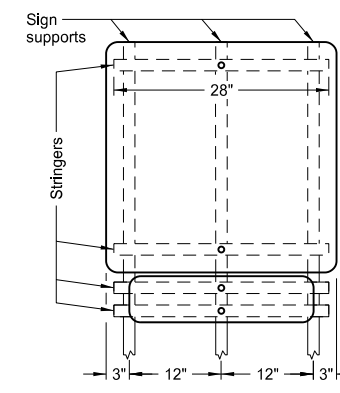
ASSEMBLY NO. 68



1 Post

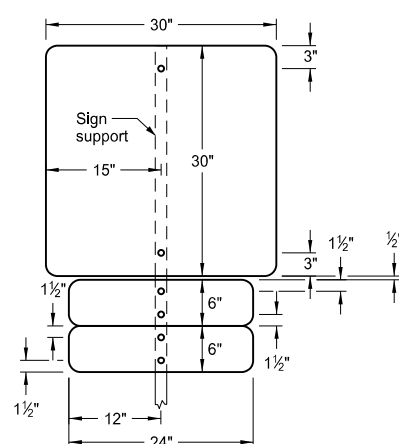


2 Posts

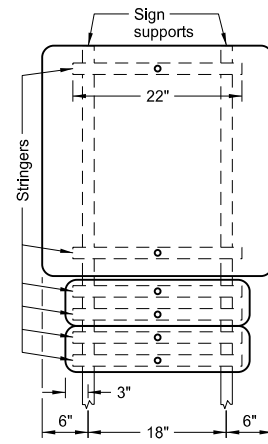


3 Posts

ASSEMBLY NO. 69

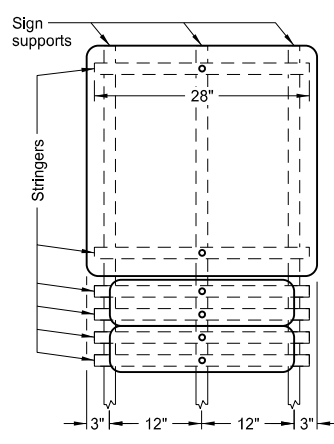


1 Post

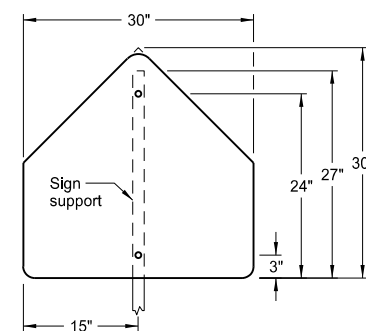


2 Posts

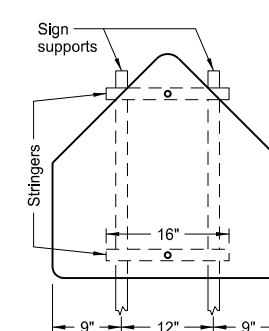
ASSEMBLY NO. 70



3 Posts

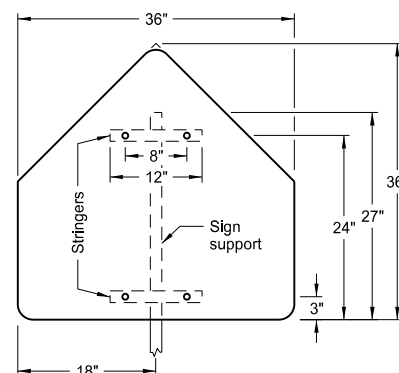


1 Post

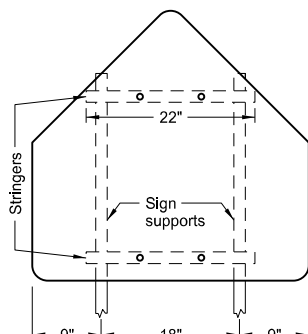


2 Posts

ASSEMBLY NO. 71

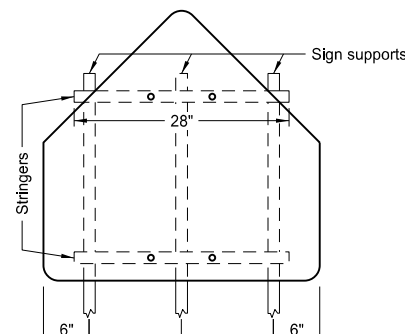


1 Post



2 Posts

ASSEMBLY NO. 72



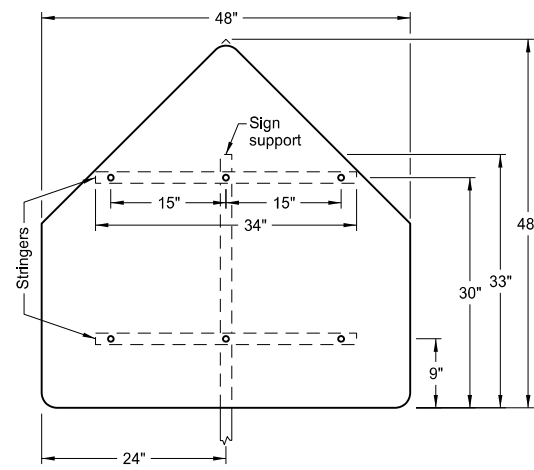
3 Posts

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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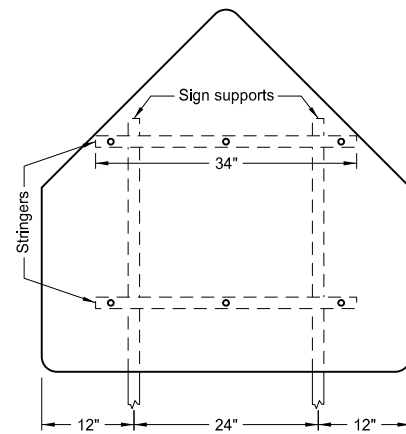
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**SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS**

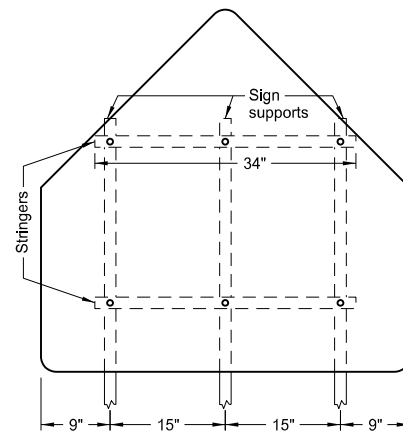
D-754-43



1 Post

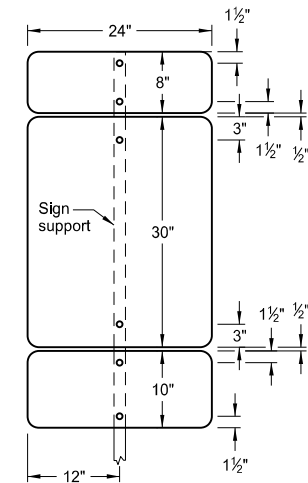


2 Posts

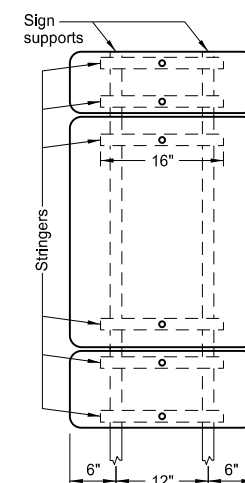


3 Posts

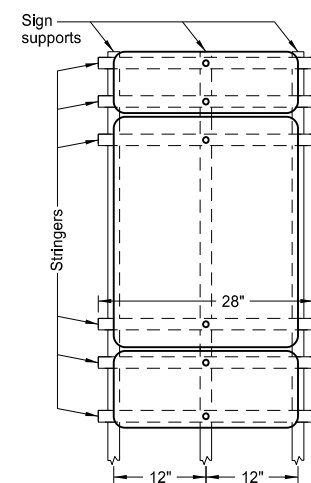
ASSEMBLY NO. 73



1 Post

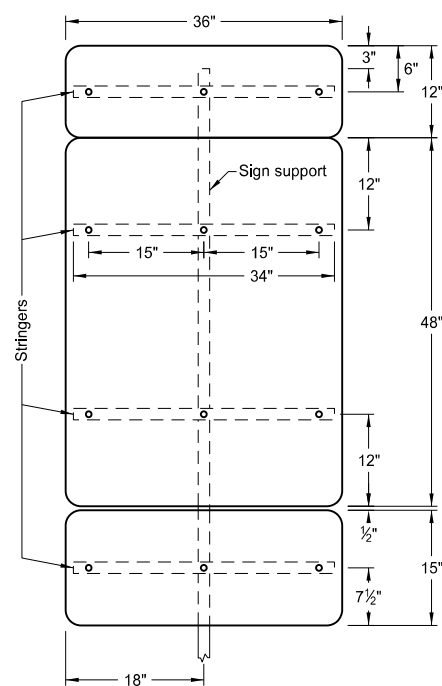


2 Posts

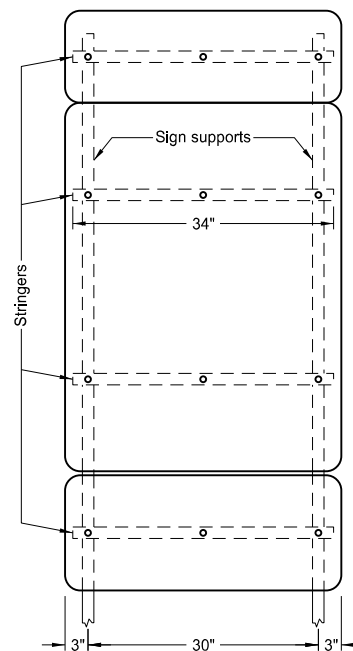


3 Posts

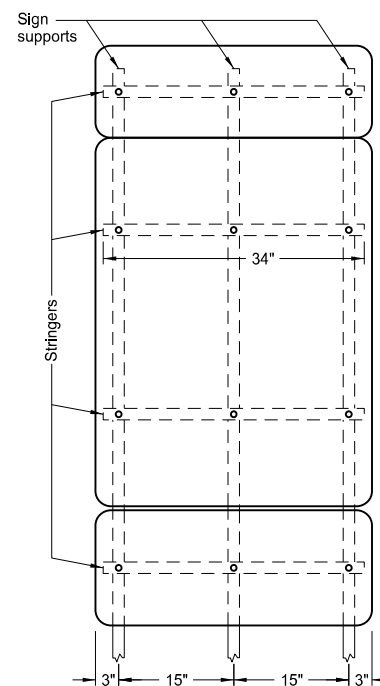
ASSEMBLY NO. 74



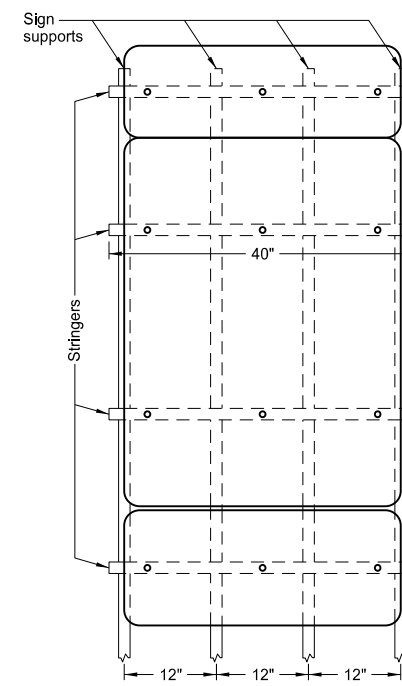
1 Post



2 Posts



3 Posts



4 Posts

ASSEMBLY NO. 75

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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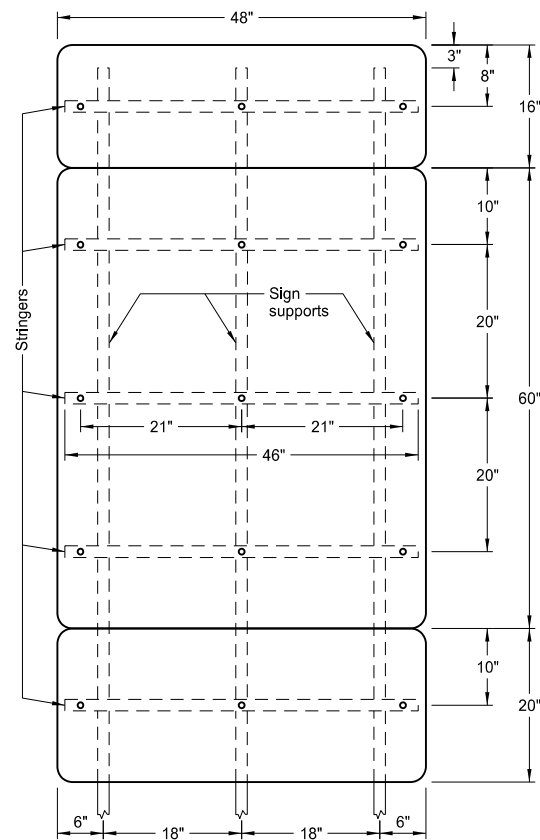
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS

D-754-44

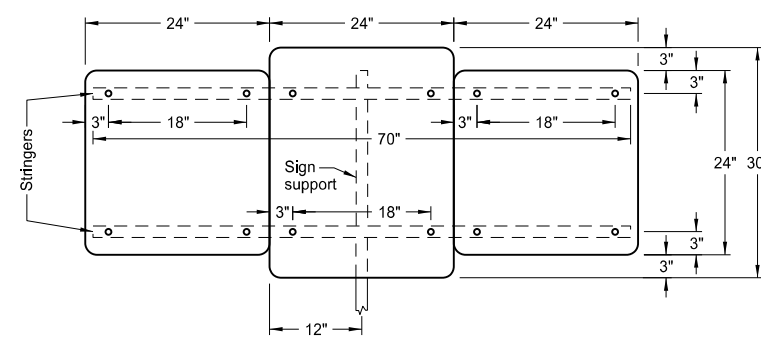
Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.

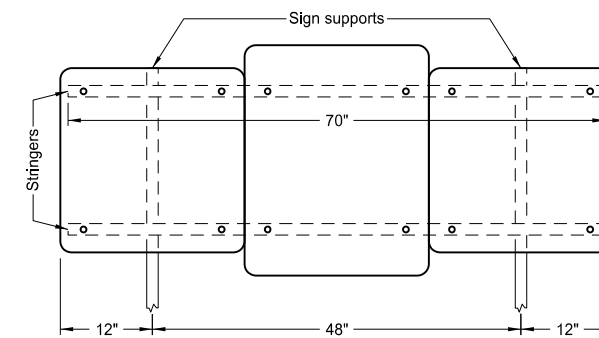


3 Posts

ASSEMBLY NO. 76

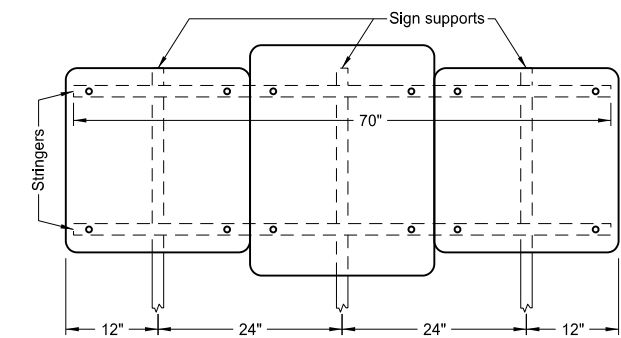


1 Post



2 Posts

ASSEMBLY NO. 77

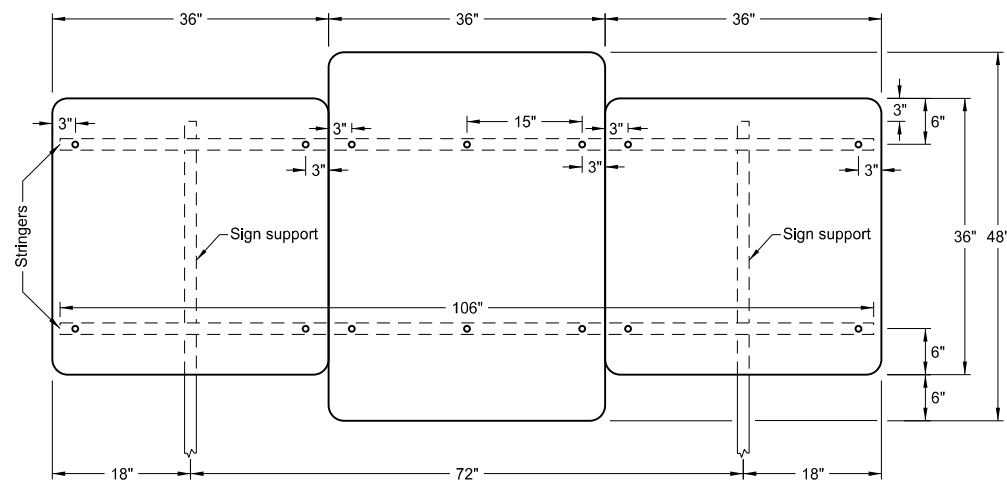


3 Posts

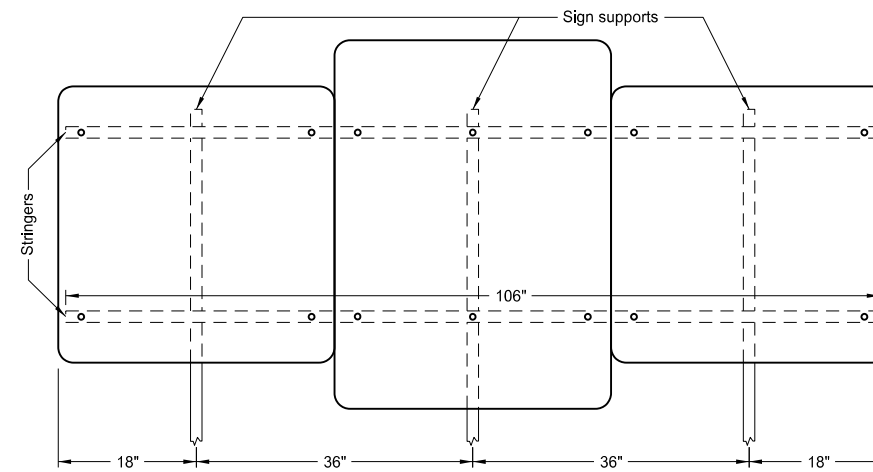
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS
REGULATORY, WARNING AND GUIDE SIGNS



2 Posts

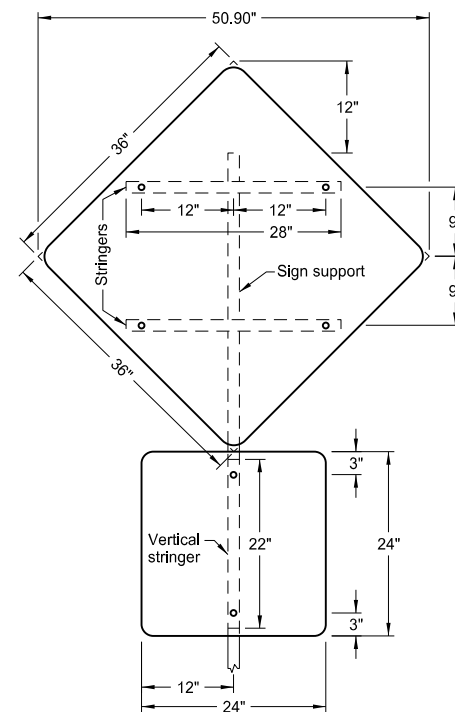


3 Posts

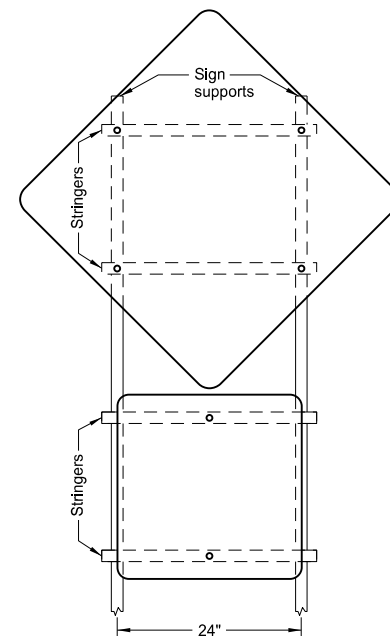
ASSEMBLY NO. 78

Notes:

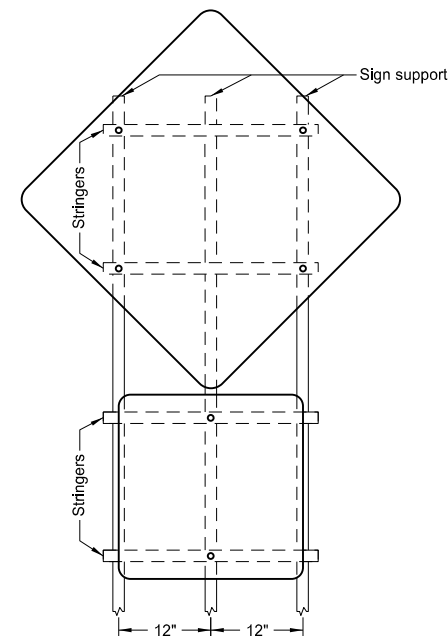
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.



1 Post



2 Posts



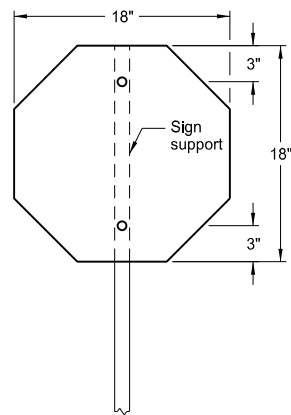
3 Posts

ASSEMBLY NO. 80

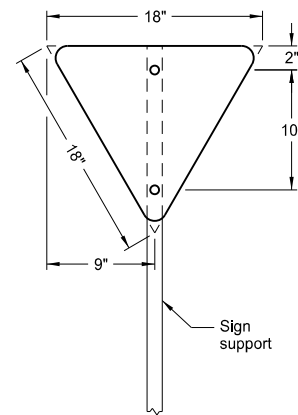
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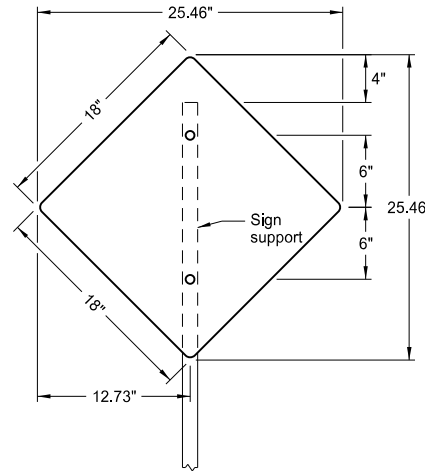
PUNCHING, STRINGER, AND SUPPORT LOCATION DETAILS FOR REGULATORY, WARNING AND GUIDE BIKE ROUTE SIGNS



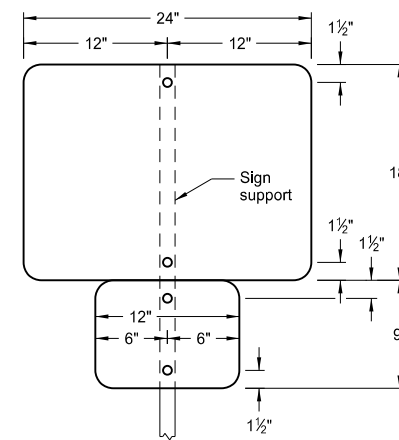
1 Post
Assembly No. 100



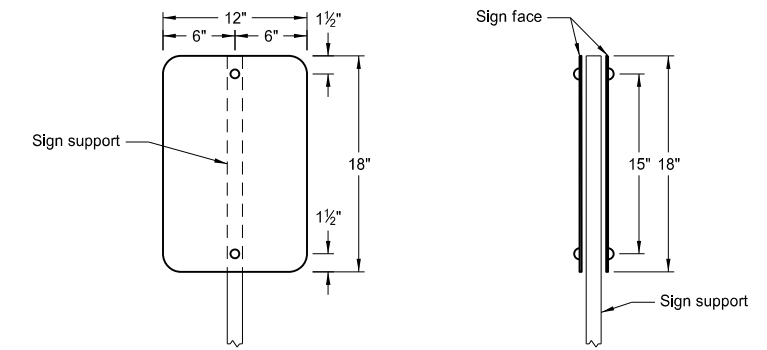
1 Post
Assembly No. 101



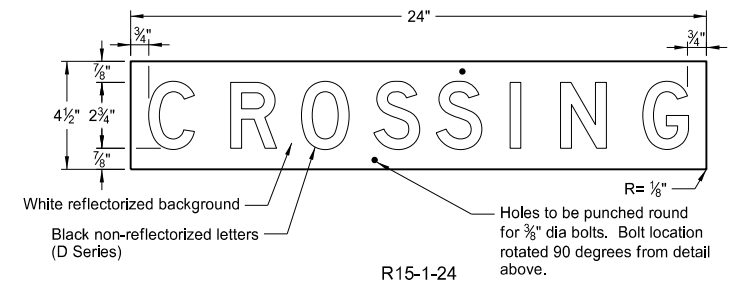
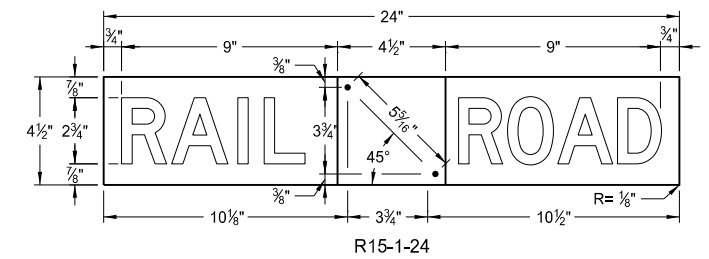
1 Post
Assembly No. 102



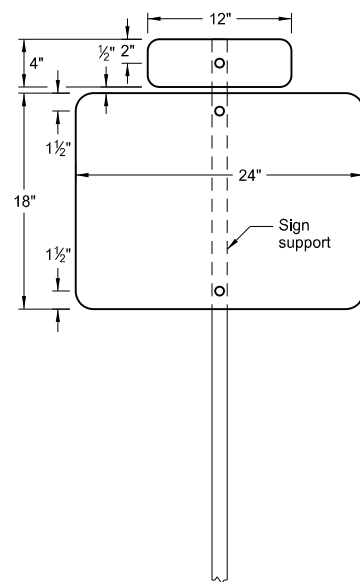
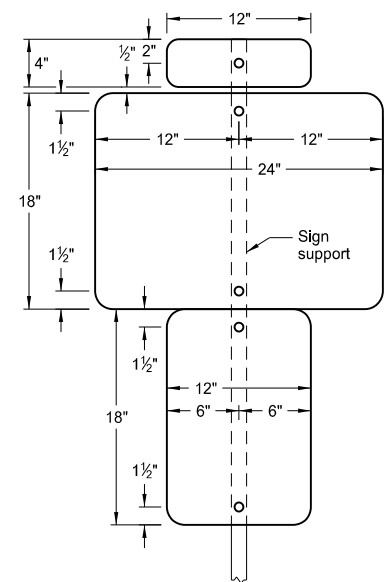
1 Post
Assembly No. 103



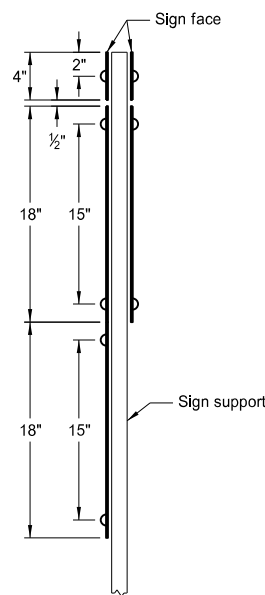
1 Post
back to back
Assembly No. 104



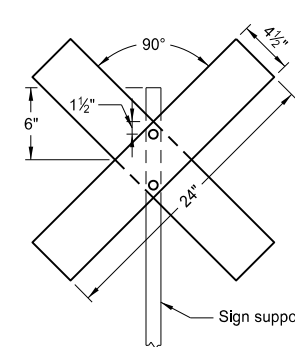
Railroad Crossing Sign Details



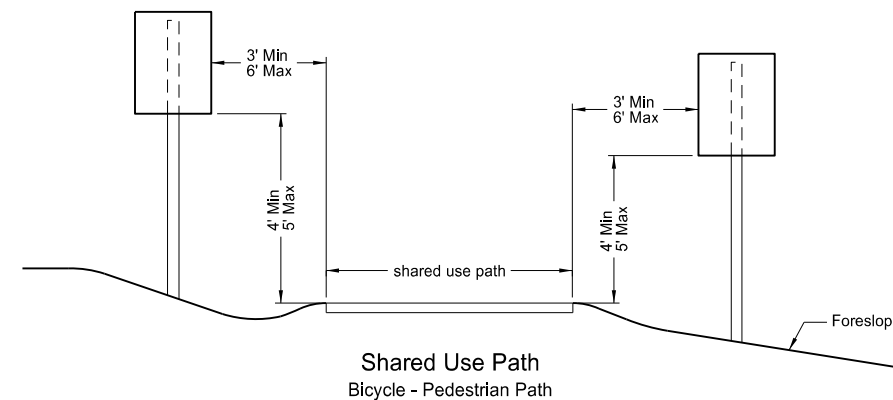
1 Post
back to back
Assembly No. 105



1 Post
Assembly No. 106



1 Post
Assembly No. 107



Shared Use Path
Bicycle - Pedestrian Path

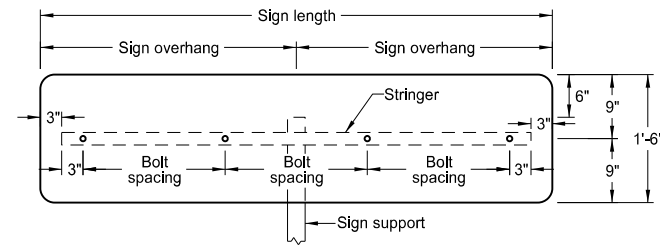
Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. All holes shall be punched round for 3/8" bolt.

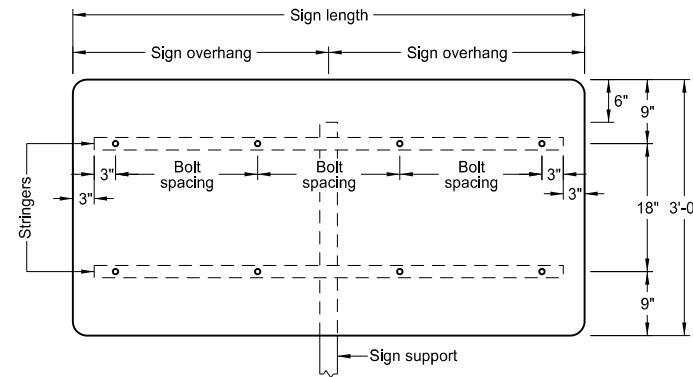
NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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DATE	CHANGE
9-18-15	Revised Title Name

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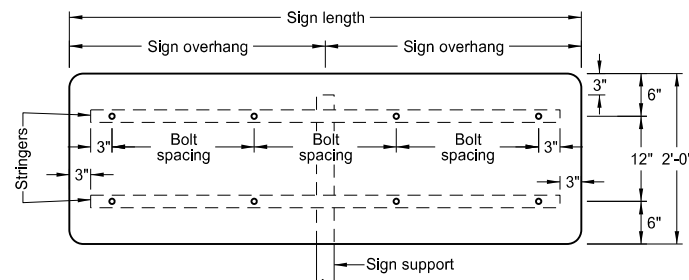
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS FOR VARIABLE LENGTH SIGNS



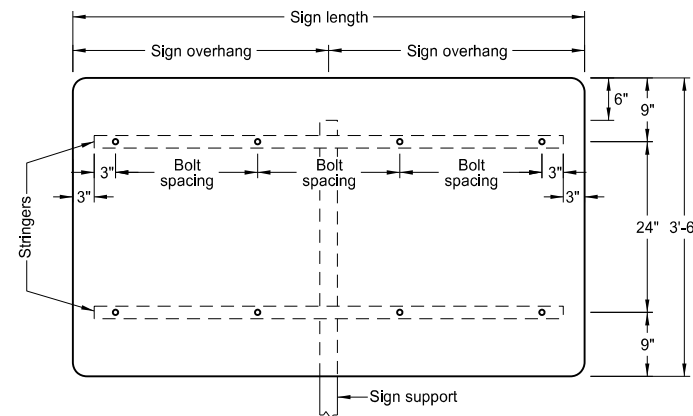
VARIES X 1'-6"



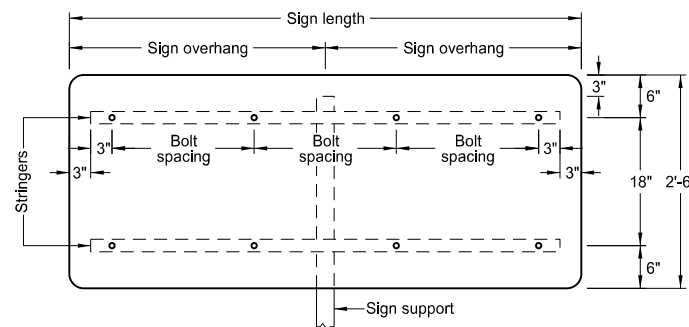
VARIES X 3'-0"



VARIES X 2'-0"



VARIES X 3'-6"



VARIES X 2'-6"

1 POST		
Sign Length	Sign Overhang	Bolt Spacing
4'-0"	2'-0"	18"
4'-6"	2'-3"	21"
5'-0"	2'-6"	24"
5'-6"	2'-9"	18"
6'-0"	3'-0"	20"
6'-6"	3'-3"	22"
7'-0"	3'-6"	24"
7'-6"	3'-9"	2-20" & 2-19"
8'-0"	4'-0"	21"
8'-6"	4'-3"	2-22" & 2-23"
9'-0"	4'-6"	24"
9'-6"	4'-9"	4-20" & 1-22"
10'-0"	5'-0"	2-21" & 3-22"
10'-6"	5'-3"	4-23" & 1-22"
11'-0"	5'-6"	24"
11'-6"	5'-9"	21"
12'-0"	6'-0"	22"

Notes:

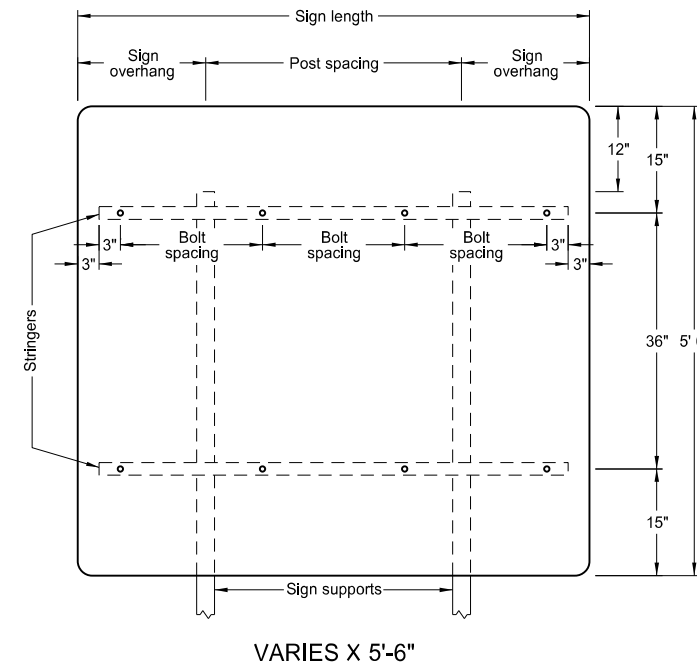
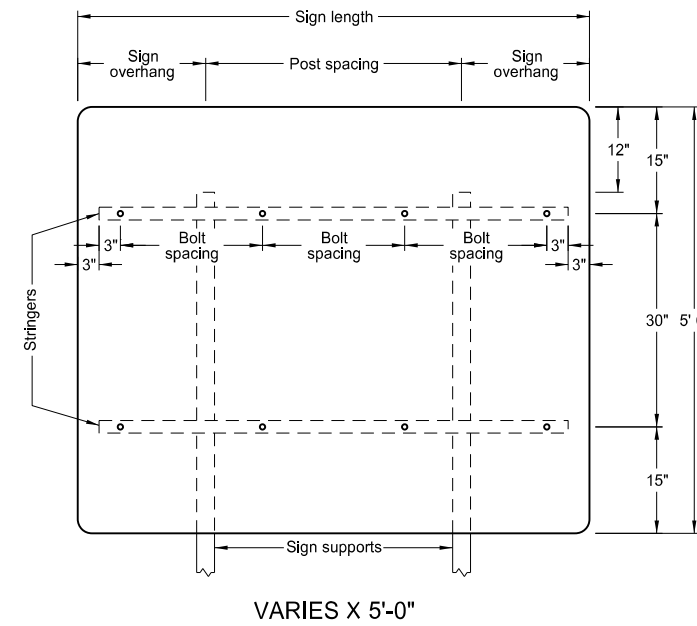
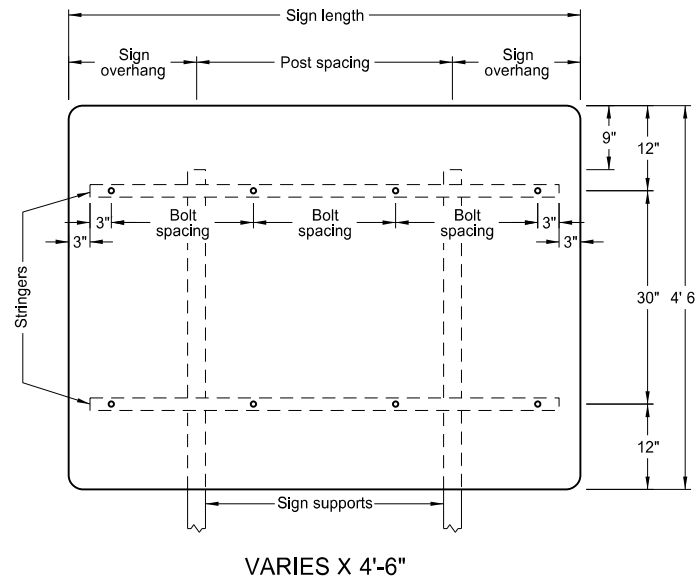
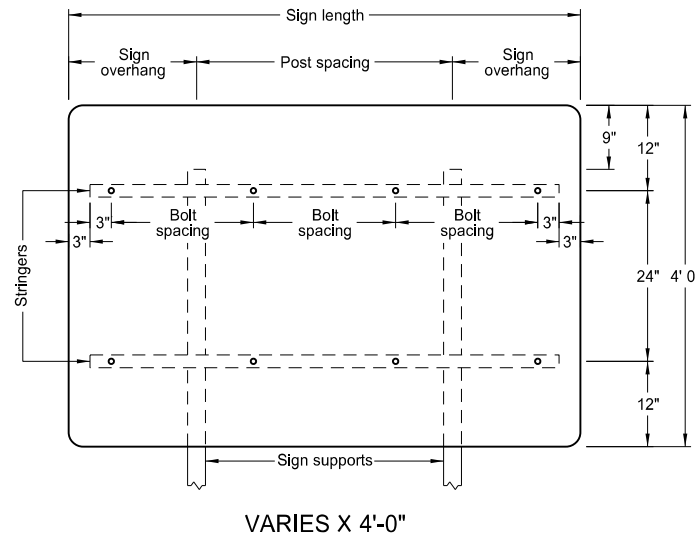
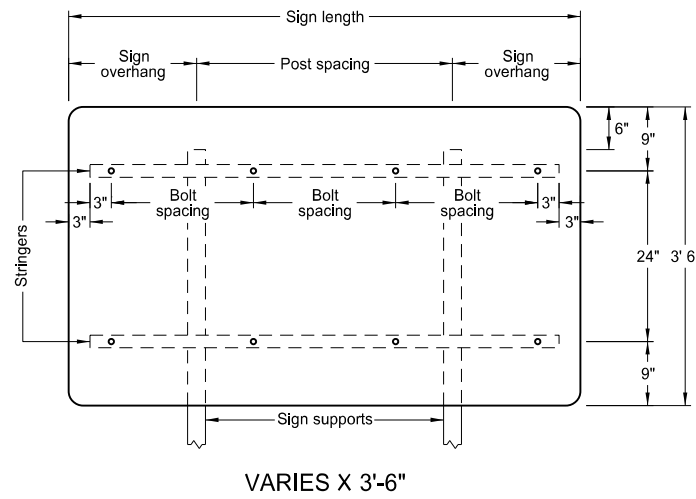
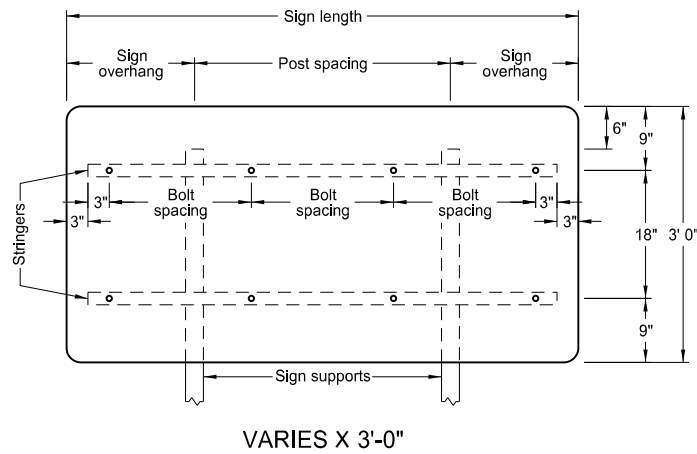
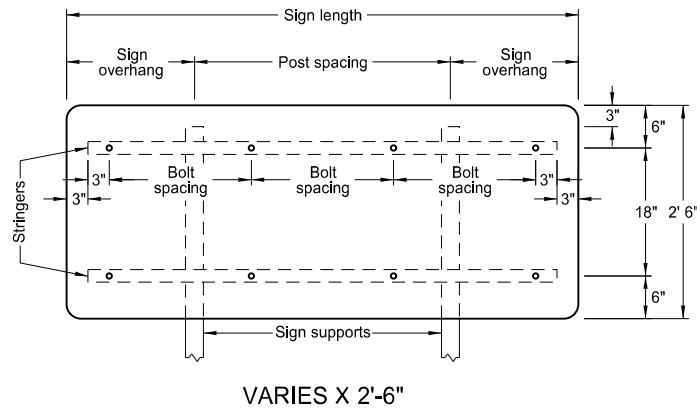
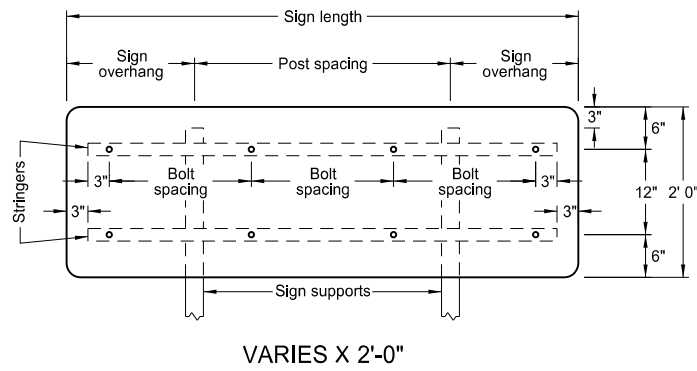
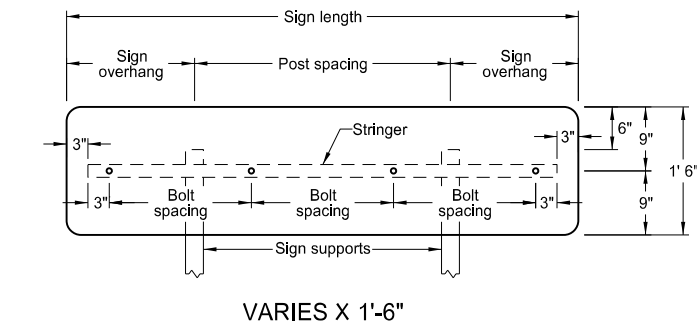
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½" x 1½".
3. All holes shall be punched round for ⅜" bolt.
4. Single stringer and single post signs shall have stringers attached to the post using the special stringer angle, shown on the "Mounting Details Perforated Tube" standard drawing.

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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS FOR VARIABLE LENGTH SIGNS

D-754-48



2 POSTS			
Sign Length	Sign Overhang	Post Spacing	Bolt Spacing
4'-0"	1'-0"	2'-0"	18"
4'-6"	1'-3"	2'-0"	21"
5'-0"	1'-0"	3'-0"	24"
5'-6"	1'-3"	3'-0"	18"
6'-0"	1'-6"	3'-0"	20"
6'-6"	1'-3"	4'-0"	22"
7'-0"	1'-6"	4'-0"	24"
7'-6"	1'-9"	4'-0"	2'-20" & 2'-19"
8'-0"	2'-0"	4'-0"	21"
8'-6"	1'-9"	5'-0"	2'-22" & 2'-23"
9'-0"	2'-0"	5'-0"	24"
9'-6"	1'-9"	6'-0"	4'-20" & 1'-22"
10'-0"	2'-0"	6'-0"	2'-21" & 3'-22"
10'-6"	2'-3"	6'-0"	4'-23" & 1'-22"
11'-0"	2'-6"	6'-0"	24"
11'-6"	2'-9"	6'-0"	21"
12'-0"	2'-0"	8'-0"	22"
12'-6"	2'-3"	8'-0"	23"
13'-0"	2'-6"	8'-0"	24"
13'-6"	2'-9"	8'-0"	3'-22" & 4'-21"
14'-0"	3'-0"	8'-0"	2'-23" & 5'-22"
14'-6"	3'-3"	8'-0"	6'-23" & 1'-24"
15'-0"	3'-6"	8'-0"	24"
15'-6"	2'-9"	10'-0"	6'-22" & 2'-21"
16'-0"	3'-0"	10'-0"	4'-23" & 4'-22"
16'-6"	3'-3"	10'-0"	6'-23" & 2'-24"
17'-0"	3'-6"	10'-0"	24"
17'-6"	3'-9"	10'-0"	22"
18'-0"	3'-0"	12'-0"	6'-23" & 3'-22"
18'-6"	3'-3"	12'-0"	6'-23" & 3'-24"
19'-0"	3'-6"	12'-0"	24"
19'-6"	3'-9"	12'-0"	8'-22" & 2'-23"
20'-0"	4'-0"	12'-0"	8'-23" & 2'-22"

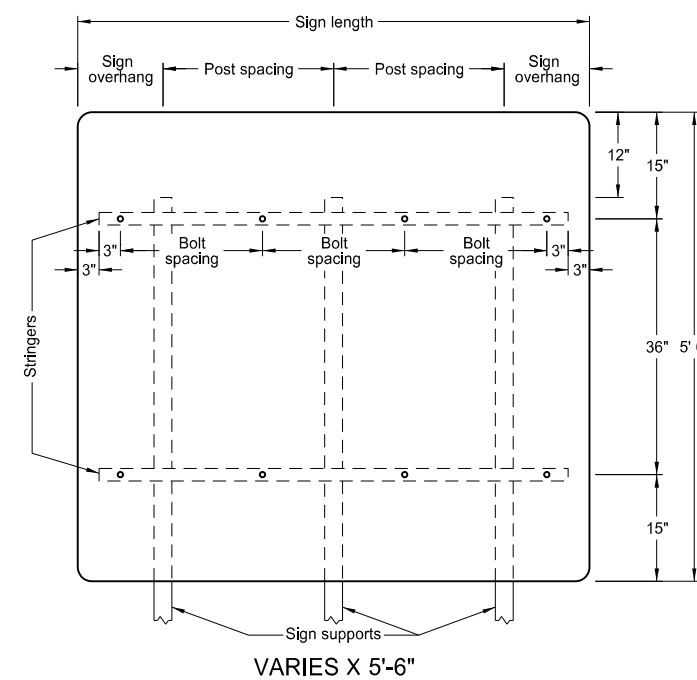
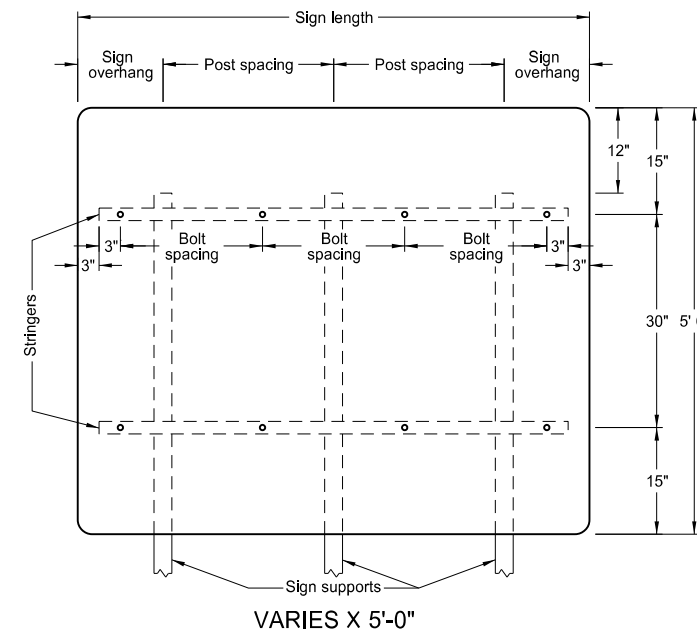
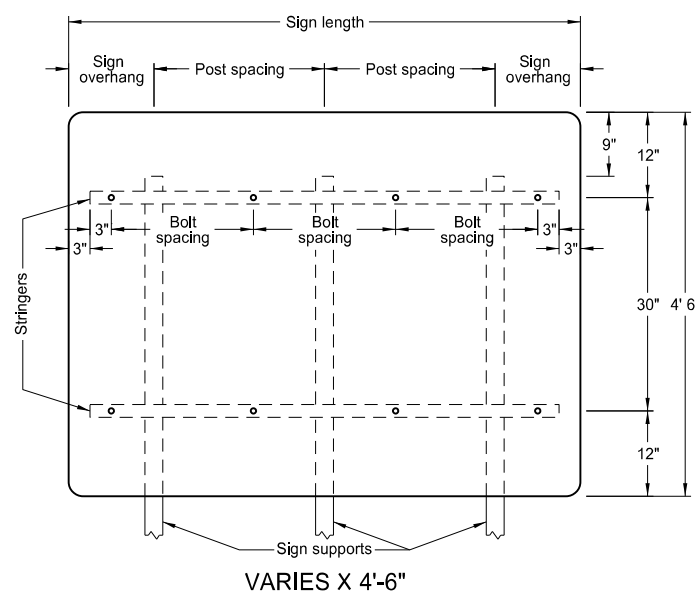
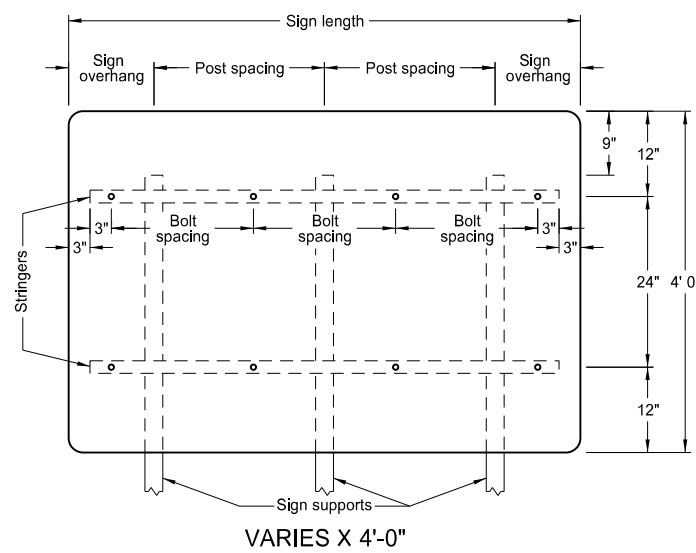
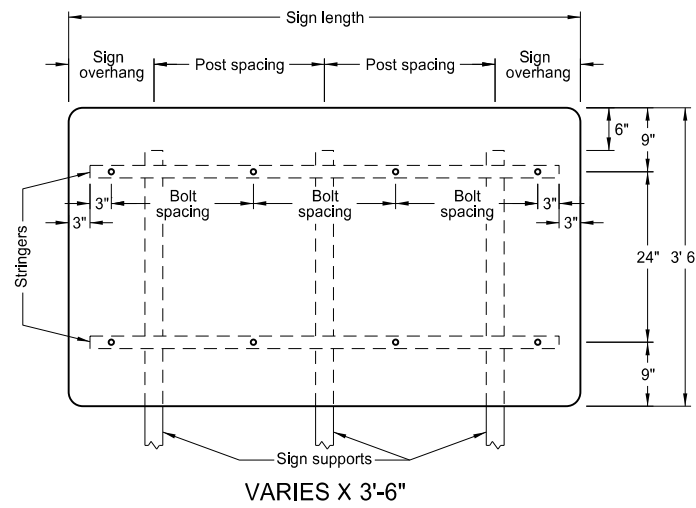
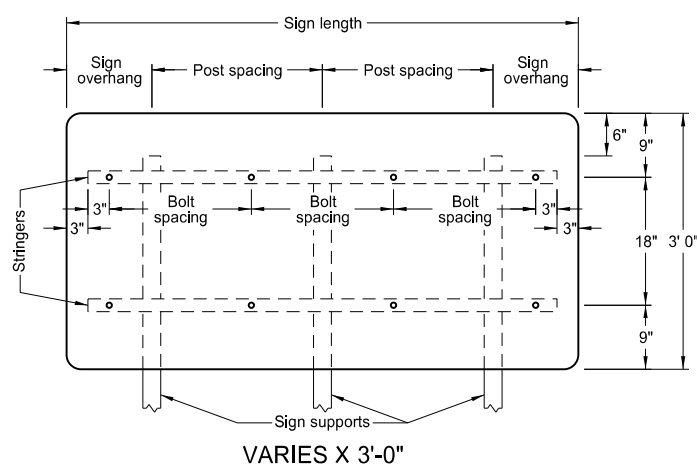
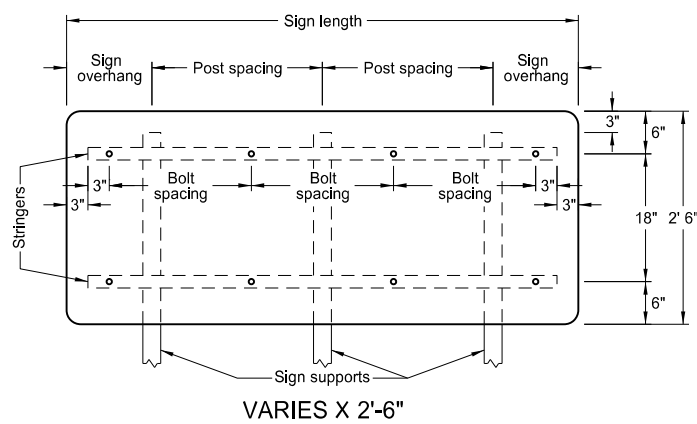
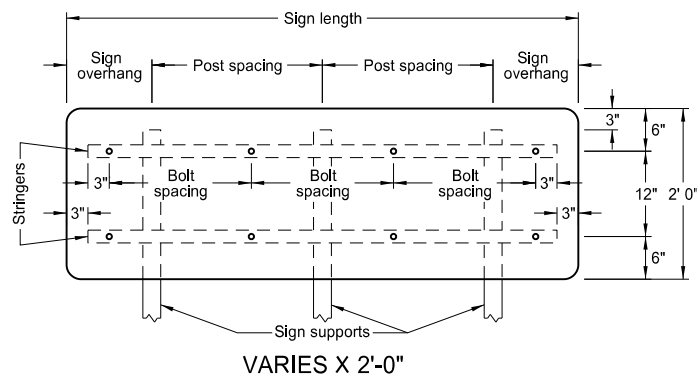
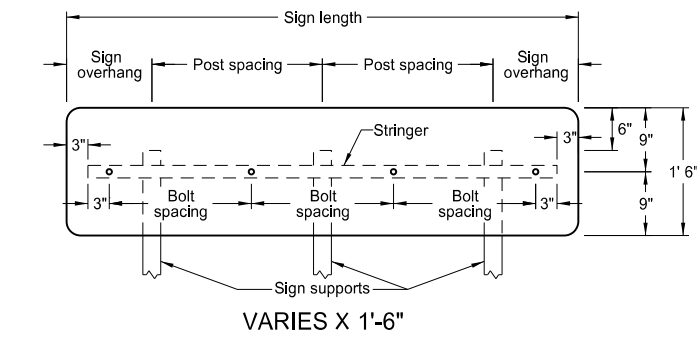
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1½" x 1½".
 3. All holes shall be punched round for ⅜" bolt.

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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS FOR VARIABLE LENGTH SIGNS

D-754-49



3 POSTS			
Sign Length	Sign Overhang	Post Spacing	Bolt Spacing
4'-0"	0'-6"	1'-6"	18"
4'-6"	0'-6"	1'-9"	21"
5'-0"	0'-6"	2'-0"	24"
5'-6"	1'-3"	1'-6"	18"
6'-0"	1'-0"	2'-0"	20"
6'-6"	1'-3"	2'-0"	22"
7'-0"	1'-6"	2'-0"	24"
7'-6"	1'-6"	2'-3"	2-20" & 2-19"
8'-0"	1'-9"	2'-3"	21"
8'-6"	2'-0"	2'-3"	2-22" & 2-23"
9'-0"	1'-6"	3'-0"	24"
9'-6"	1'-9"	3'-0"	4-20" & 1-22"
10'-0"	1'-9"	3'-3"	2-21" & 3-22"
10'-6"	1'-9"	3'-6"	4-23" & 1-22"
11'-0"	2'-0"	3'-6"	24"
11'-6"	2'-3"	3'-6"	21"
12'-0"	2'-4"	3'-8"	22"
12'-6"	2'-5"	3'-10"	23"
13'-0"	2'-6"	4'-0"	24"
13'-6"	2'-9"	4'-0"	3-22" & 4-21"
14'-0"	3'-0"	4'-0"	2-23" & 5-22"
14'-6"	3'-3"	4'-0"	6-23" & 1-24"
15'-0"	3'-6"	4'-0"	24"
15'-6"	2'-4"	5'-5"	6-22" & 2-21"
16'-0"	2'-5"	5'-7"	4-23" & 4-22"
16'-6"	2'-5"	5'-10"	6-23" & 2-24"
17'-0"	2'-6"	6'-0"	24"
17'-6"	3'-3"	5'-6"	22"
18'-0"	3'-6"	5'-6"	6-23" & 3-22"
18'-6"	3'-9"	5'-6"	6-23" & 3-24"
19'-0"	3'-6"	6'-0"	24"
19'-6"	4'-3"	5'-6"	8-22" & 2-23"
20'-0"	4'-4"	5'-8"	8-23" & 2-22"

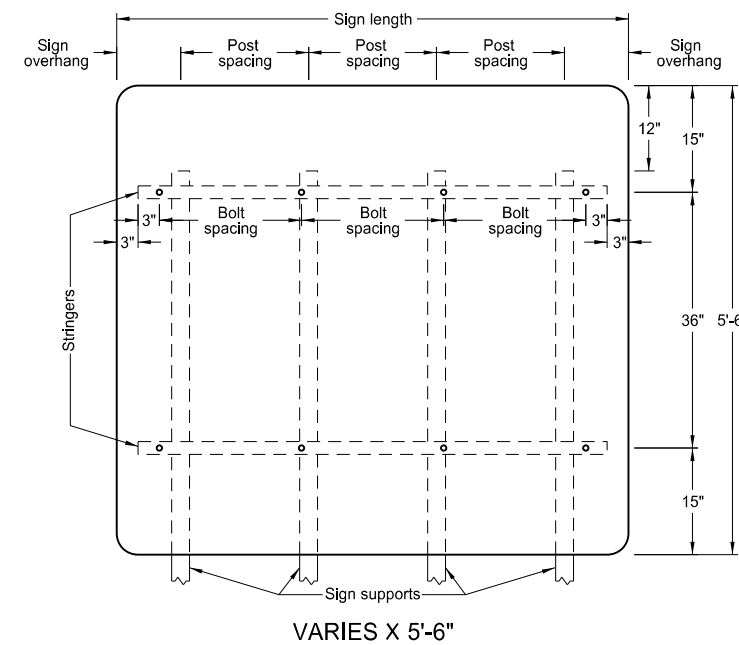
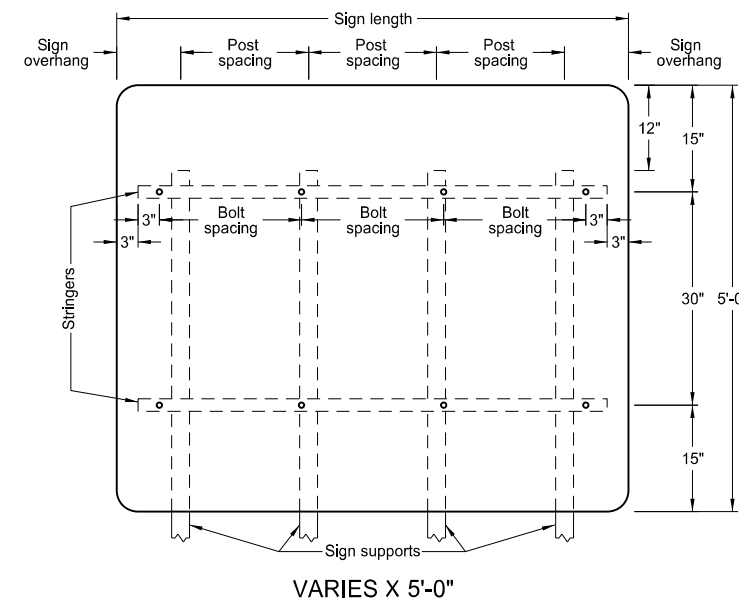
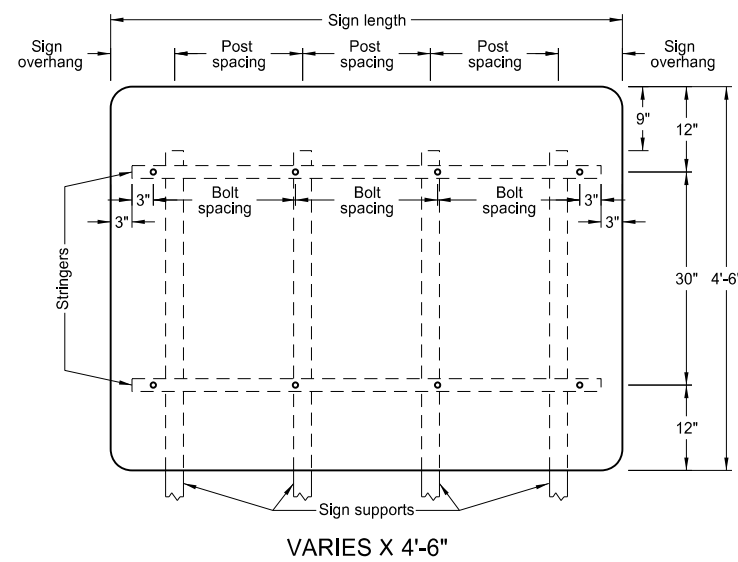
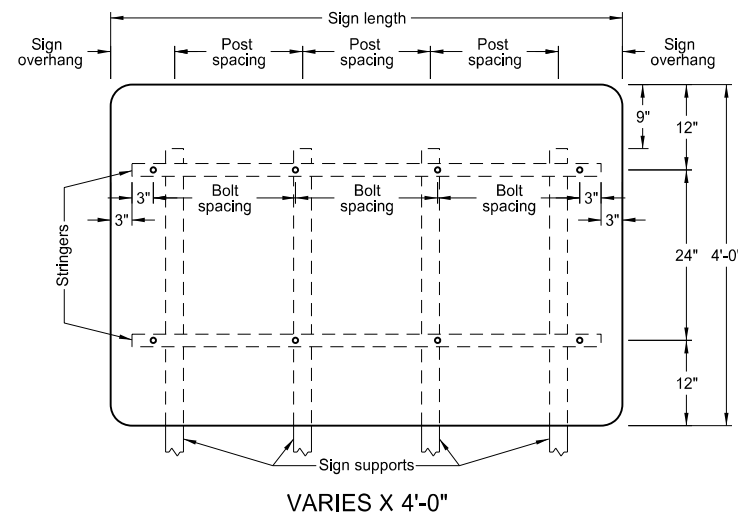
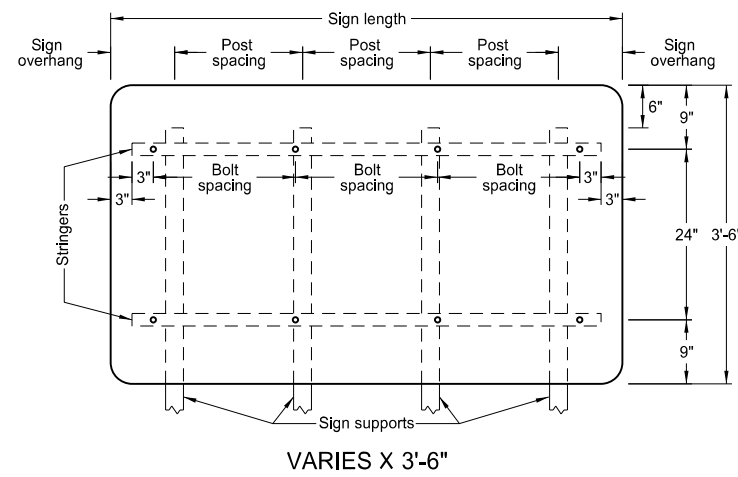
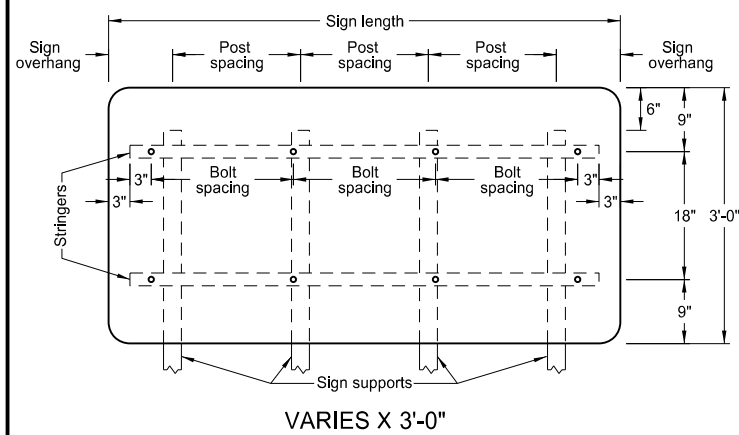
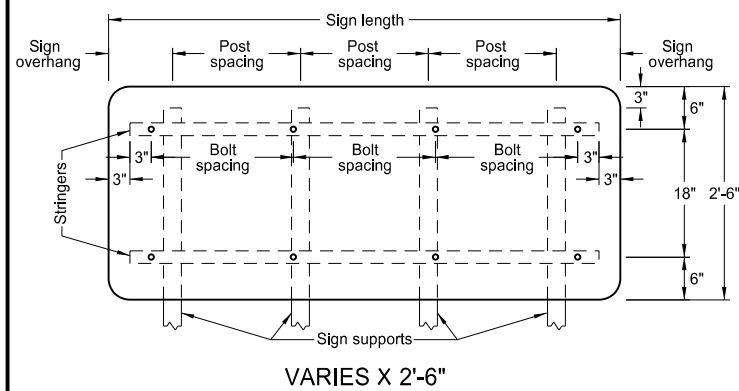
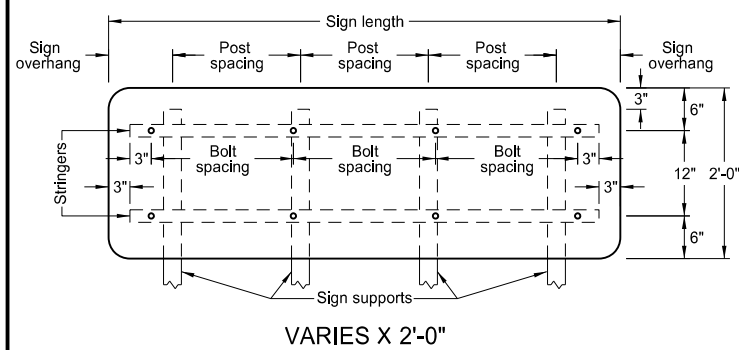
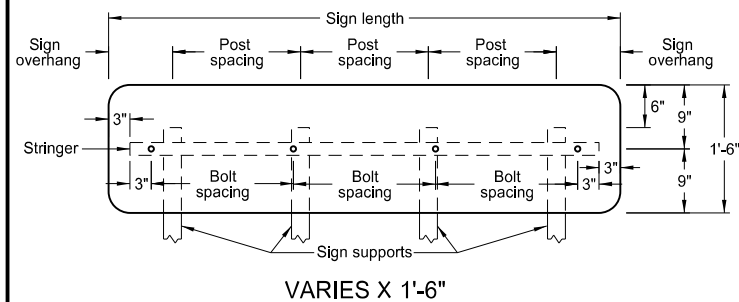
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1½" x 1½".
 3. All holes shall be punched round for ⅜" bolt.

NORTH DAKOTA	
DEPARTMENT OF TRANSPORTATION	
9-25-12	
REVISIONS	
DATE	CHANGE

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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS FOR VARIABLE LENGTH SIGNS

D-754-50



4 POSTS			
Sign Length	Sign Overhang	Post Spacing	Bolt Spacing
8'-6"	0'-3"	2'-8"	2-22" & 2-23"
9'-0"	0'-6"	2'-8"	24"
9'-6"	0'-9"	2'-8"	4-20" & 1-22"
10'-0"	1'-0"	2'-8"	2-21" & 3-22"
10'-6"	1'-3"	2'-8"	4-23" & 1-22"
11'-0"	1'-0"	3'-0"	24"
11'-6"	0'-6"	3'-6"	21"
12'-0"	0'-6"	3'-8"	22"
12'-6"	0'-6"	3'-10"	23"
13'-0"	0'-6"	4'-0"	24"
13'-6"	1'-3"	3'-8"	3-22" & 4-21"
14'-0"	1'-6"	3'-8"	2-23" & 5-22"
14'-6"	1'-3"	4'-0"	6-23" & 1-24"
15'-0"	1'-6"	4'-0"	24"
15'-6"	1'-0"	4'-6"	6-22" & 2-21"
16'-0"	1'-0"	4'-8"	4-23" & 4-22"
16'-6"	1'-0"	4'-10"	6-23" & 2-24"
17'-0"	1'-0"	5'-0"	24"
17'-6"	0'-6"	5'-6"	22"
18'-0"	2'-0"	4'-8"	6-23" & 3-22"
18'-6"	1'-9"	5'-0"	6-23" & 3-24"
19'-0"	0'-6"	6'-0"	24"
19'-6"	3'-0"	4'-6"	8-22" & 2-23"
20'-0"	3'-0"	4'-8"	8-23" & 2-22"

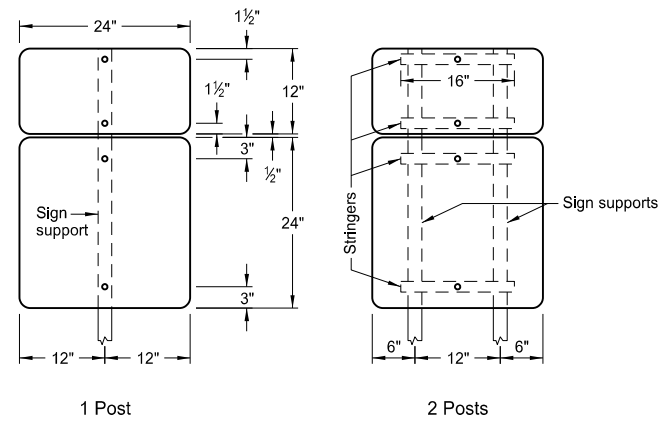
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1½" x 1½".
 3. All holes shall be punched round for ⅝" bolt.

NORTH DAKOTA	
DEPARTMENT OF TRANSPORTATION	
9-25-12	
REVISIONS	
DATE	CHANGE

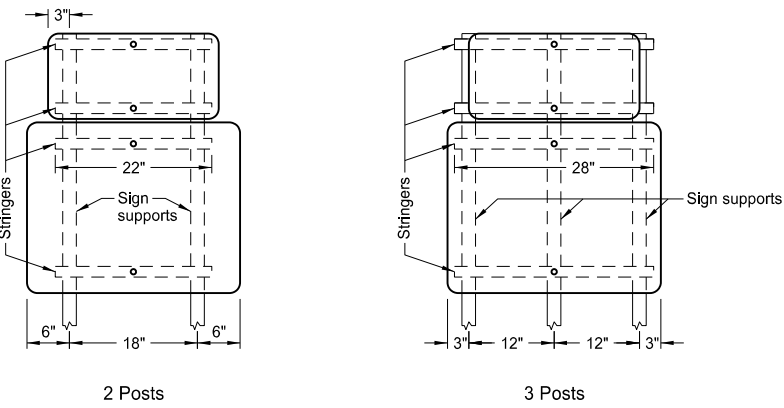
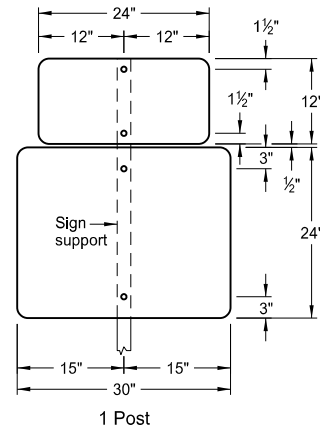
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-51

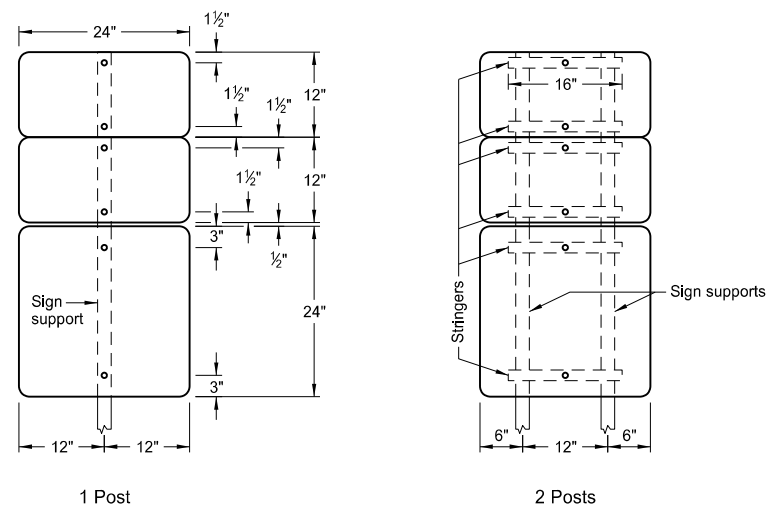


ASSEMBLY NO. 371

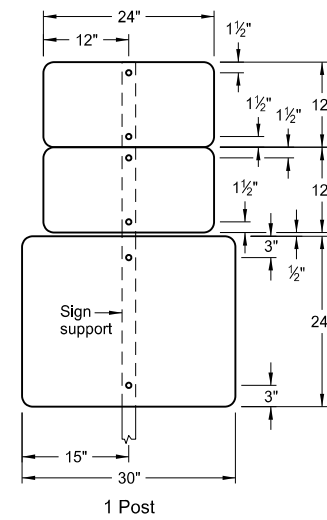
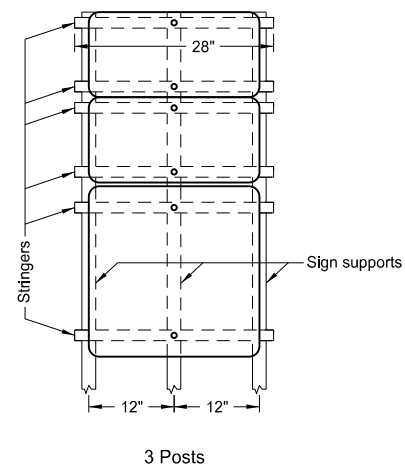


ASSEMBLY NO. 372

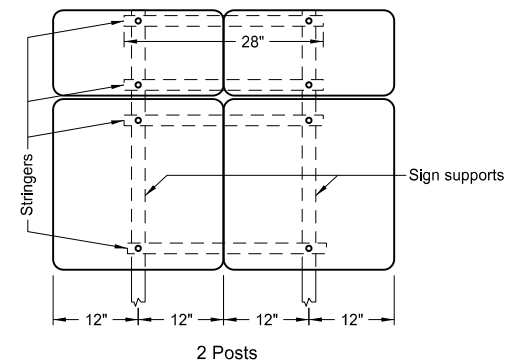
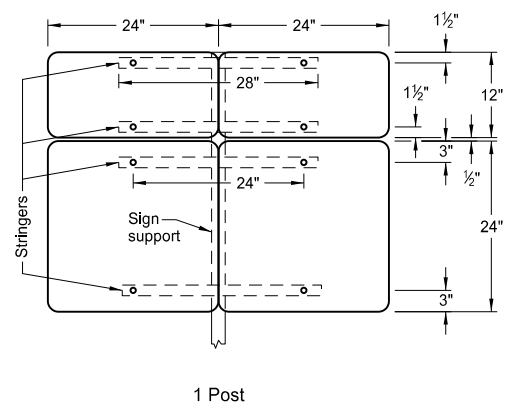
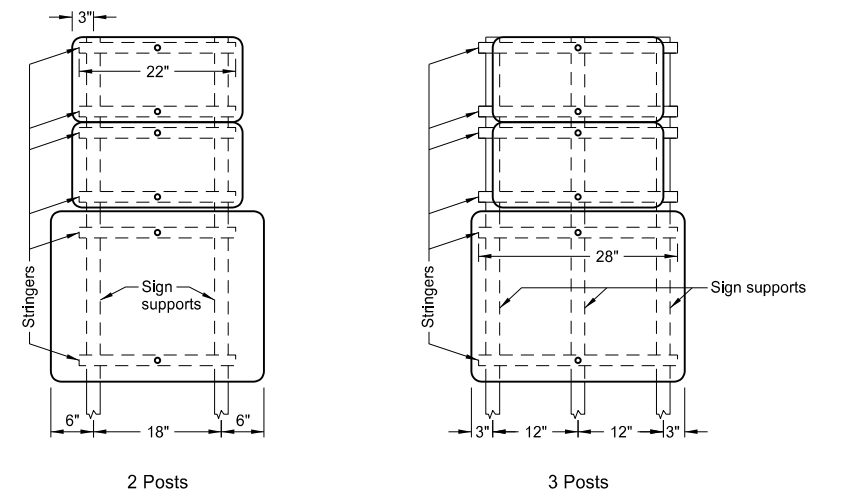
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
 3. All holes shall be punched round for 3/8" bolt.



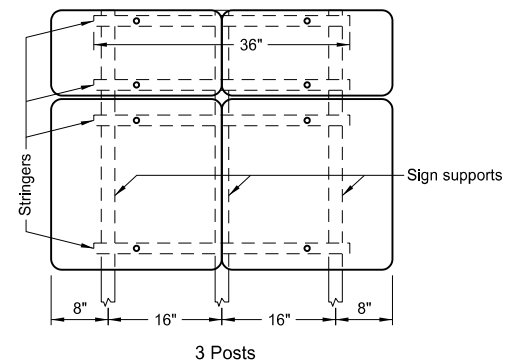
ASSEMBLY NO. 373



ASSEMBLY NO. 374



ASSEMBLY NO. 375

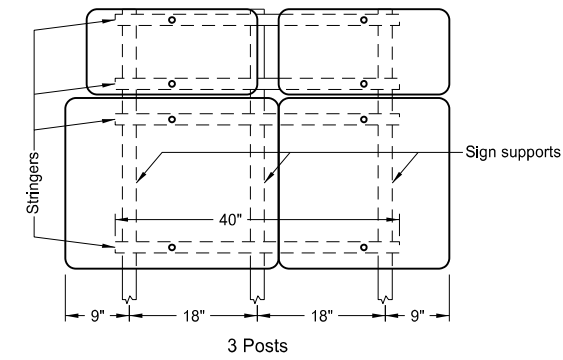
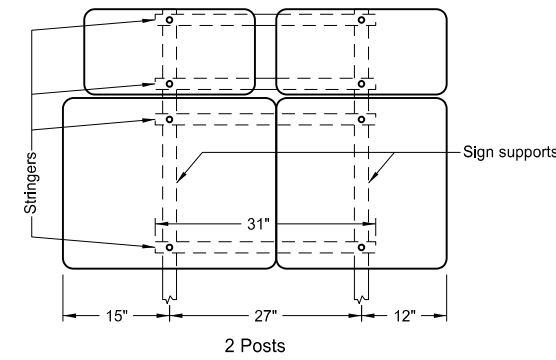
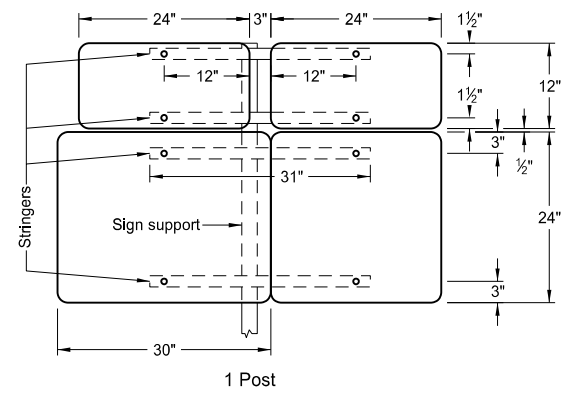


NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 8-22-12	
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DATE	CHANGE

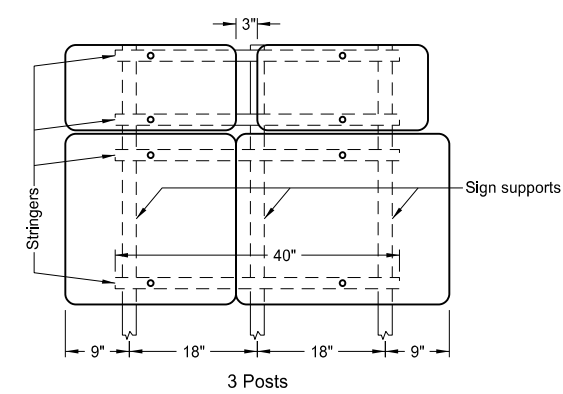
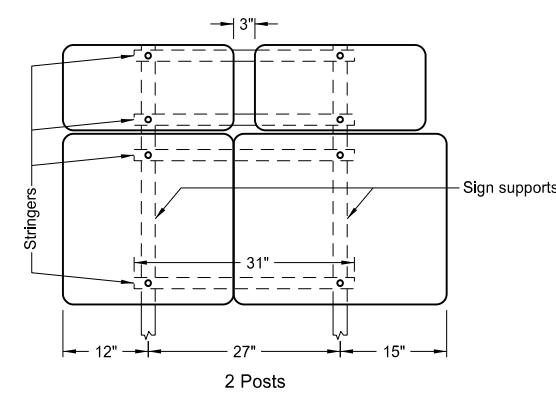
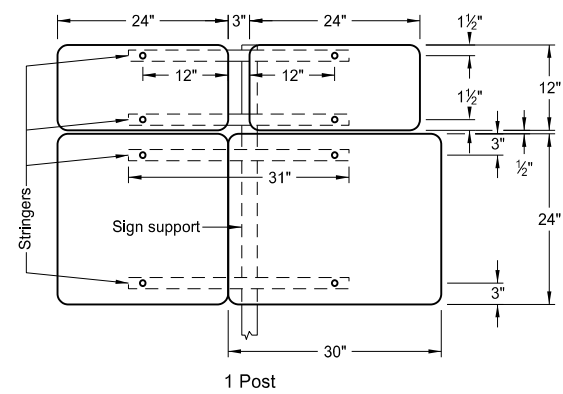
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

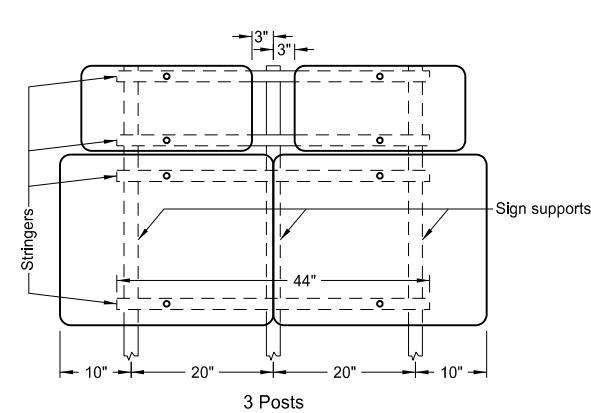
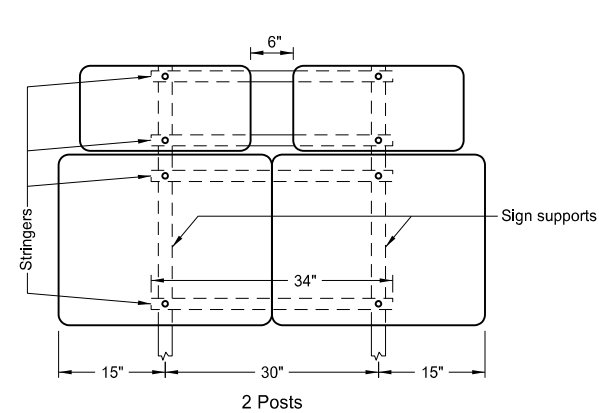
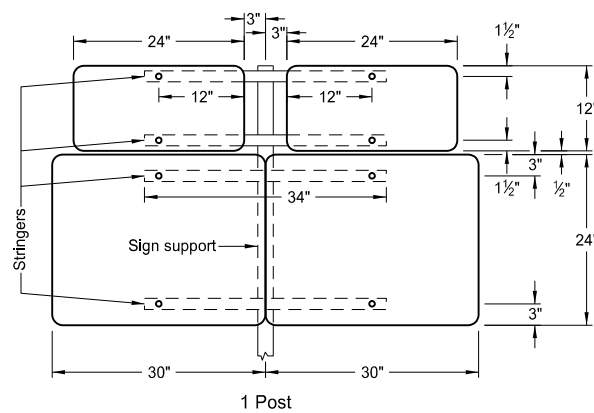
D-754-52



ASSEMBLY NO. 376



ASSEMBLY NO. 377



ASSEMBLY NO. 378

Notes:

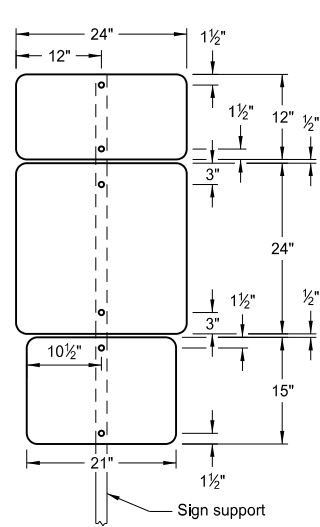
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
REVISIONS	
DATE	CHANGE

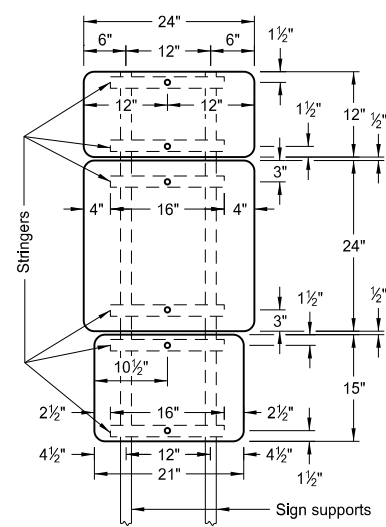
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-53

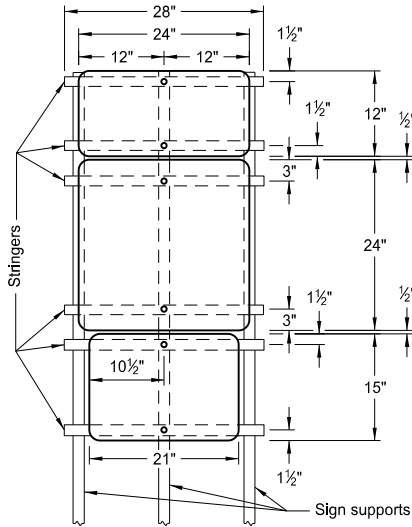


1 Post

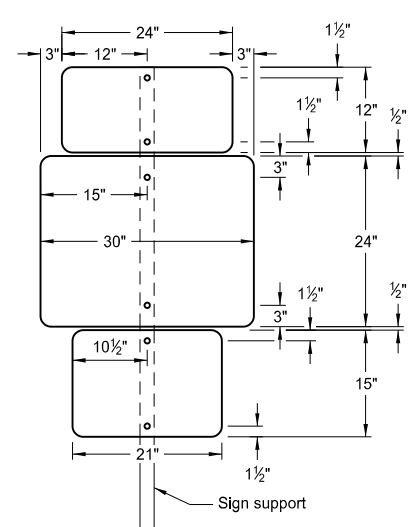


2 Posts

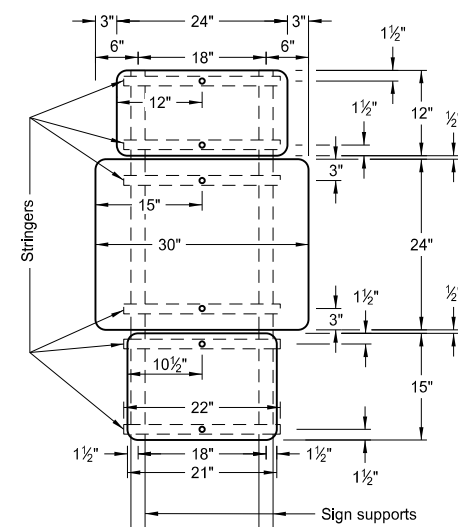
ASSEMBLY NO. 379



3 Posts

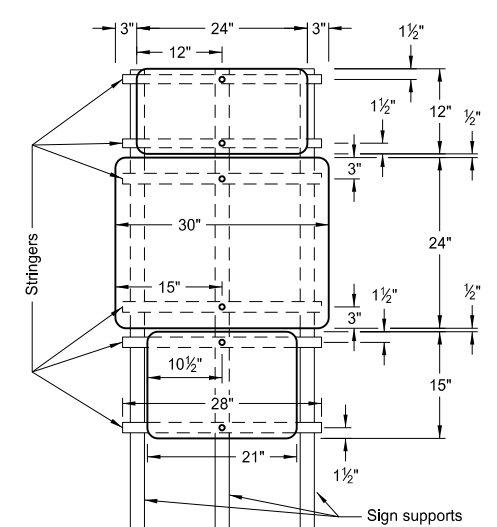


1 Post

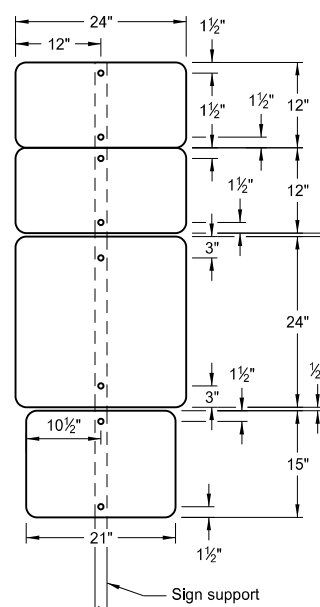


2 Posts

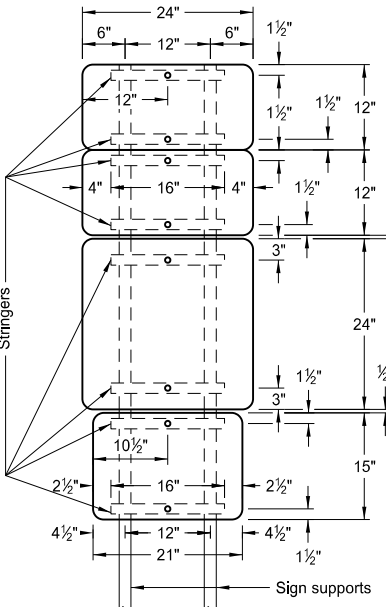
ASSEMBLY NO. 380



3 Posts

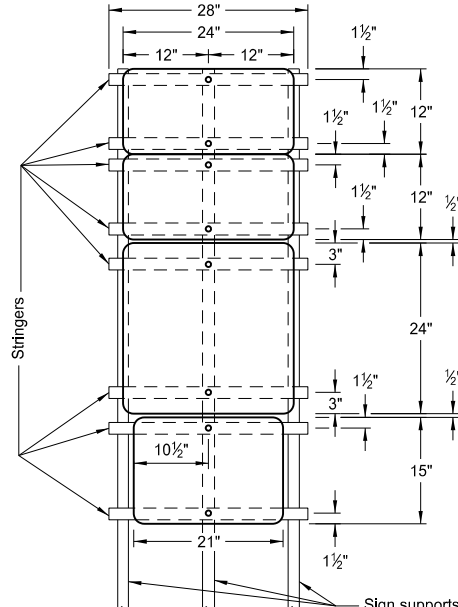


1 Post

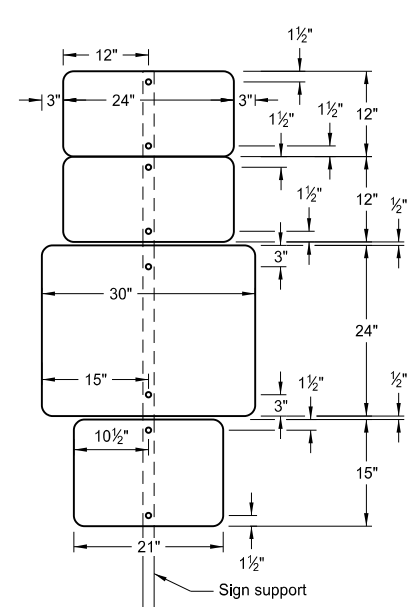


2 Posts

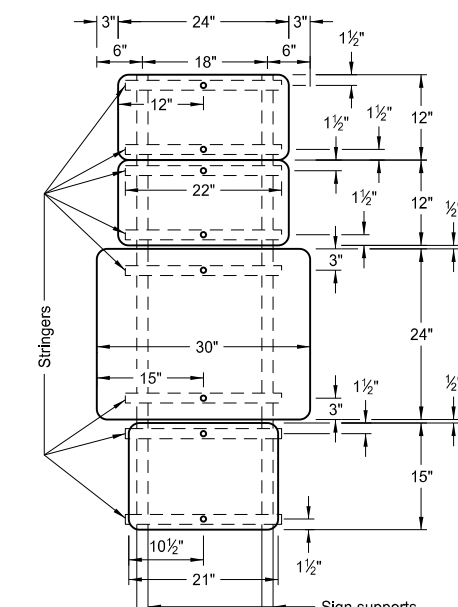
ASSEMBLY NO. 381



3 Posts

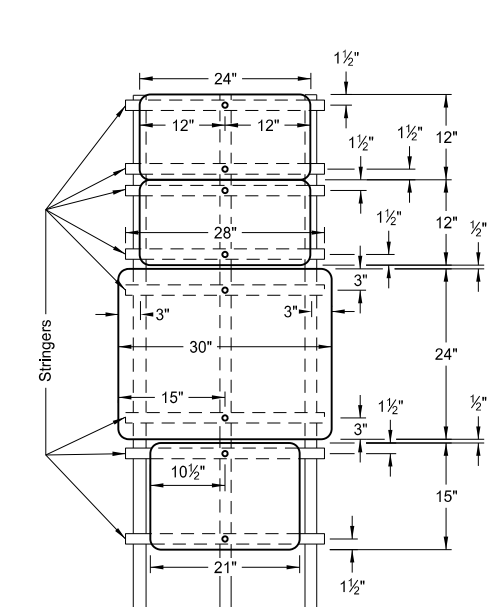


1 Post



2 Posts

ASSEMBLY NO. 382



3 Posts

Notes:

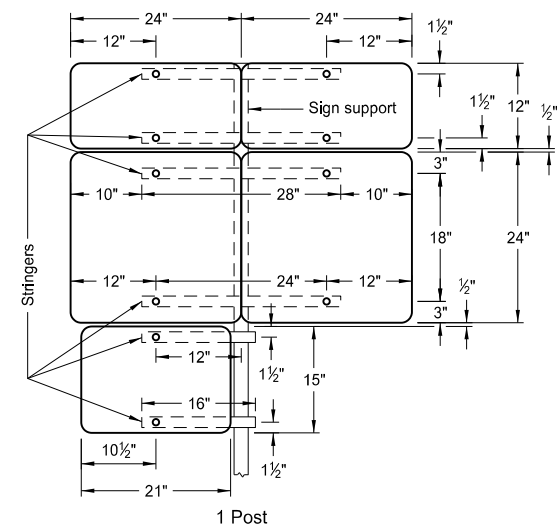
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
REVISIONS	
DATE	CHANGE

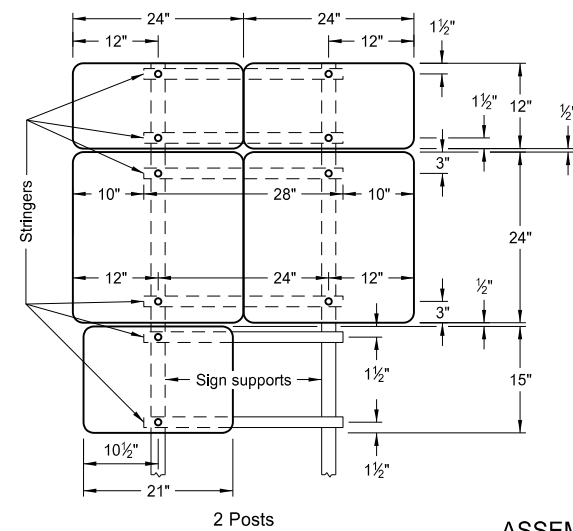
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

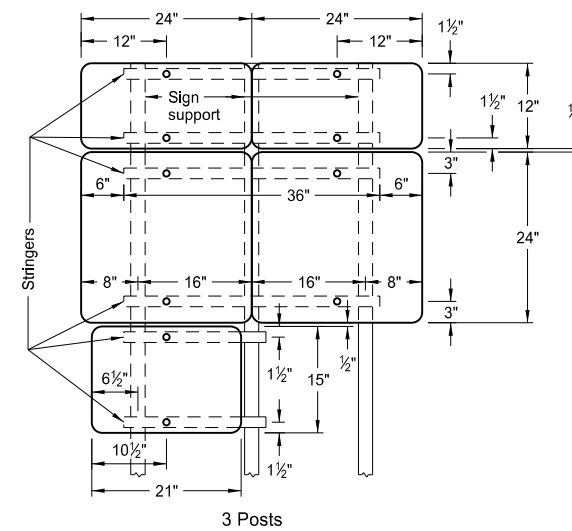
D-754-54



1 Post



2 Posts

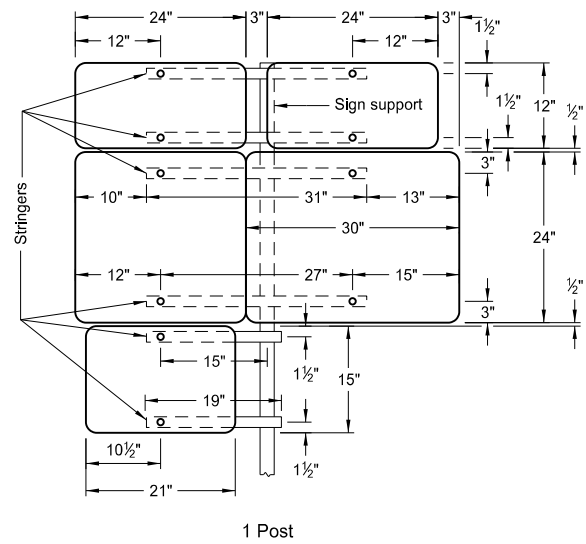


3 Posts

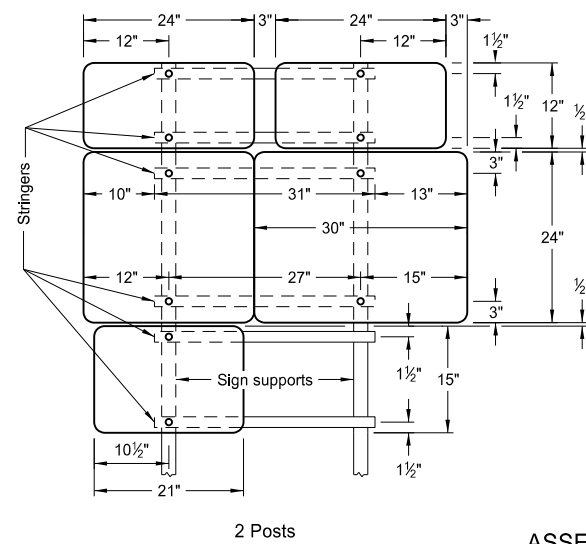
ASSEMBLY 383

Notes:

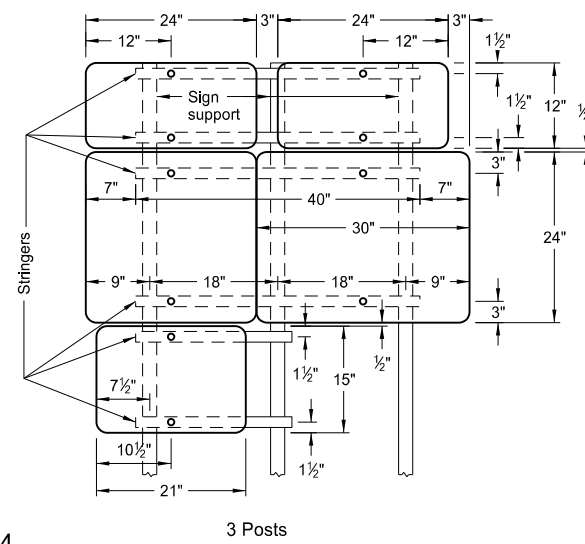
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.



1 Post

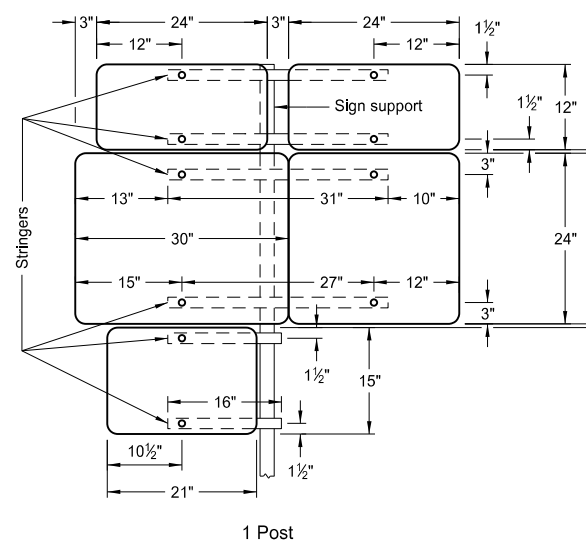


2 Posts

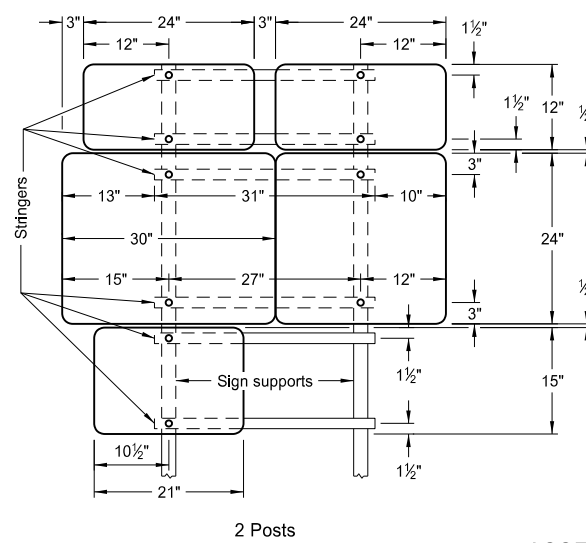


3 Posts

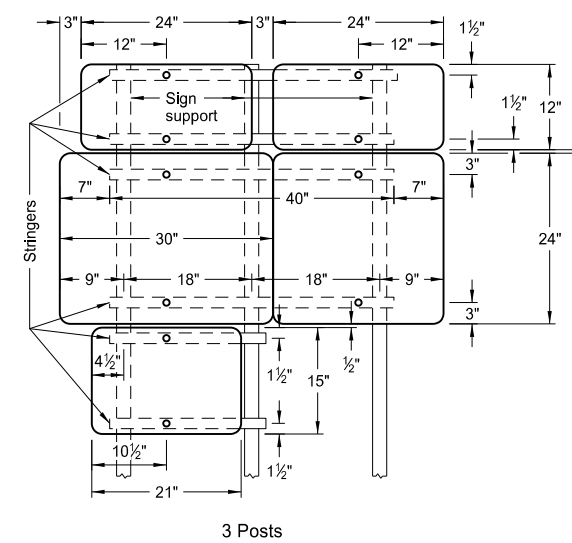
ASSEMBLY 384



1 Post



2 Posts



3 Posts

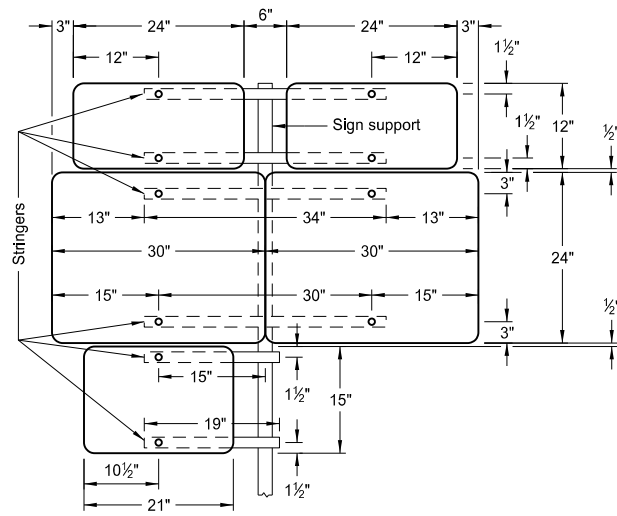
ASSEMBLY 385

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 8-22-12	
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DATE	CHANGE

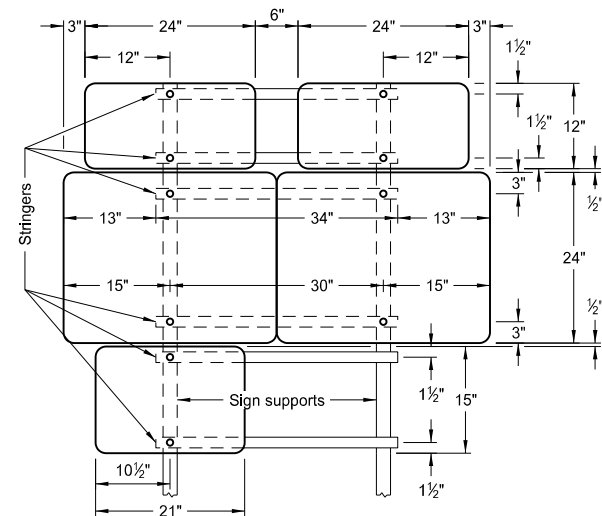
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-55

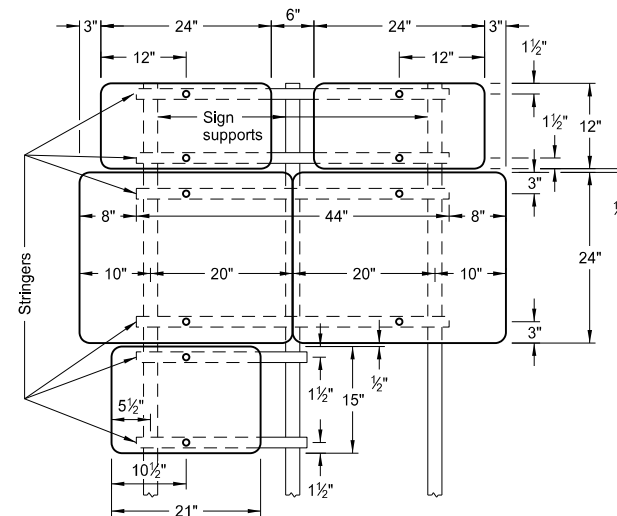


1 Post



2 Posts

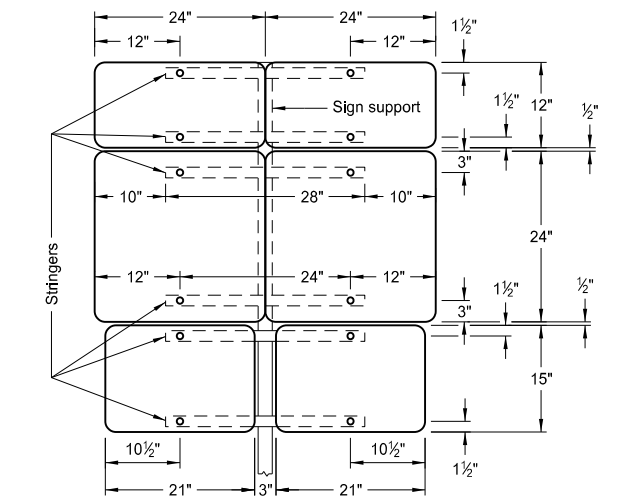
ASSEMBLY 386



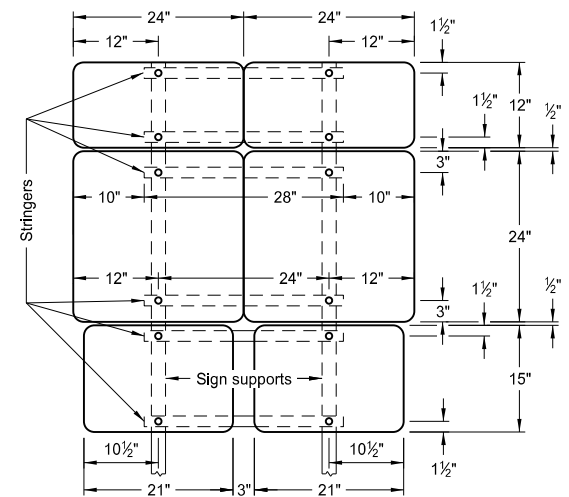
3 Posts

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

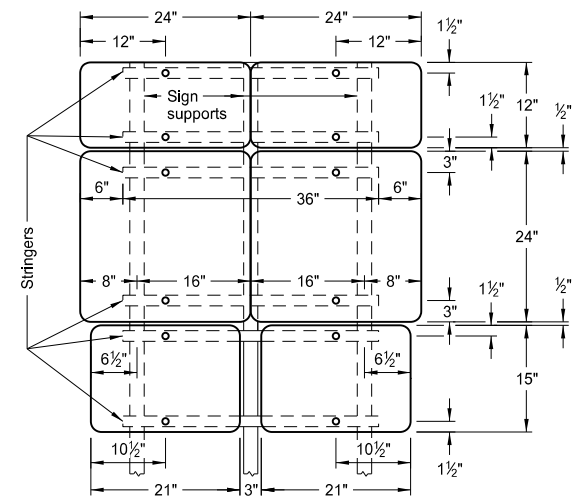


1 Post

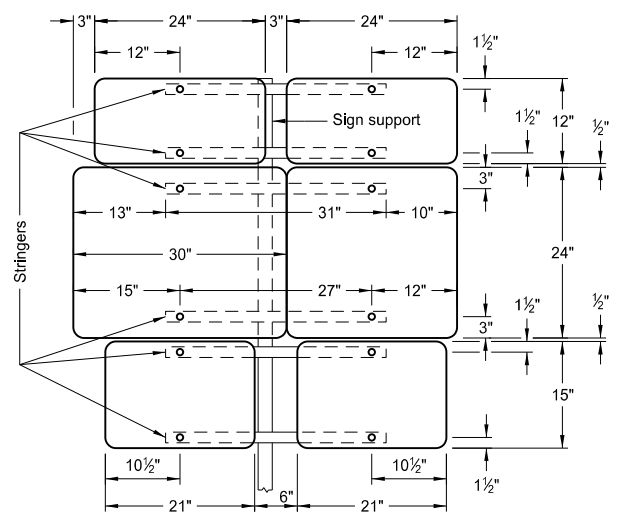


2 Posts

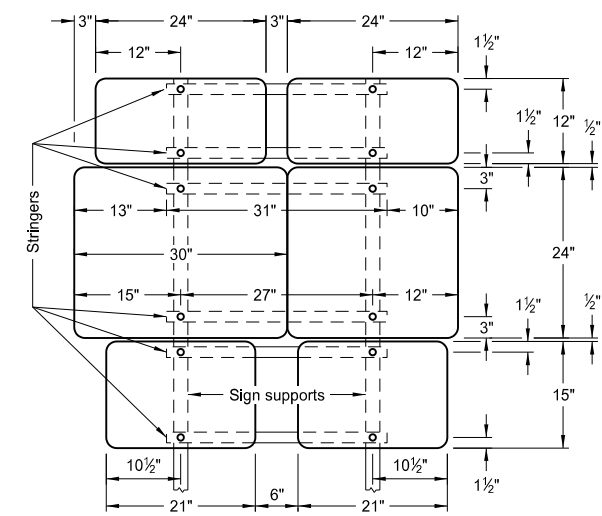
ASSEMBLY 387



3 Posts

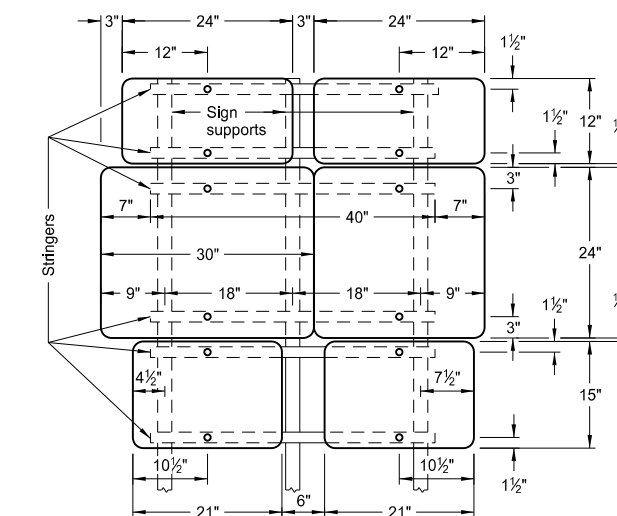


1 Post



2 Posts

ASSEMBLY 388



3 Posts

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
REVISIONS	
DATE	CHANGE

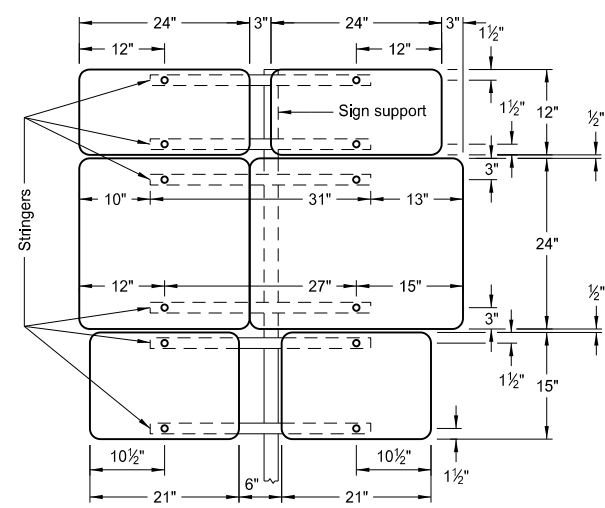
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

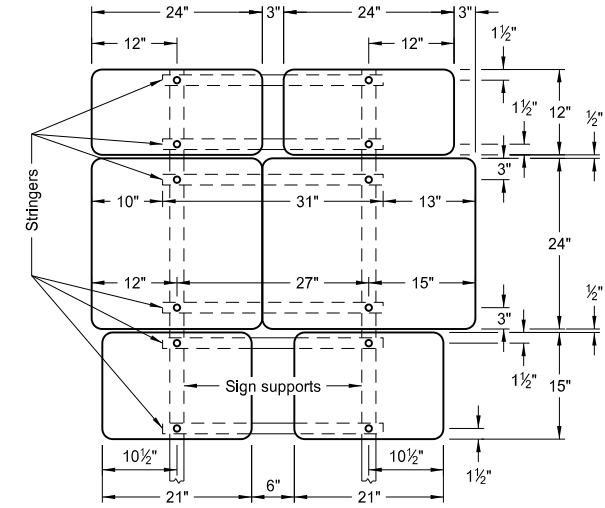
D-754-56

Notes:

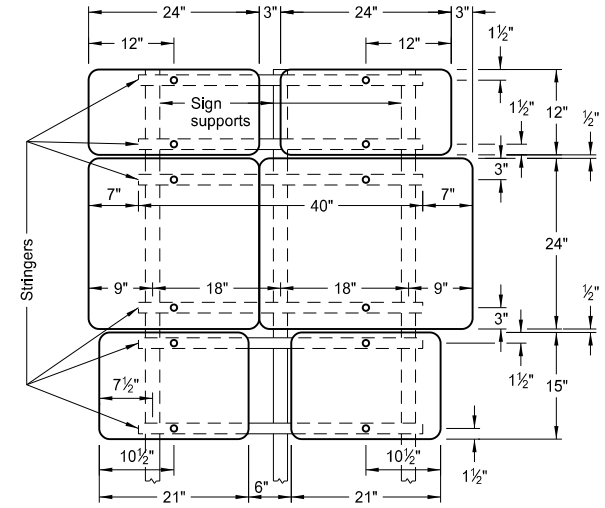
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.



1 Post

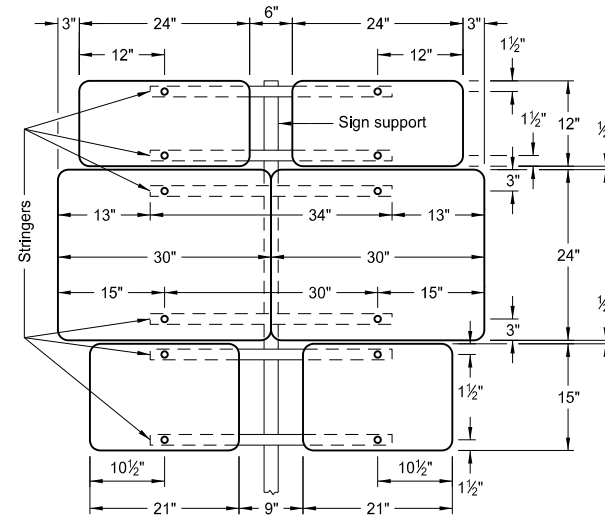


2 Posts

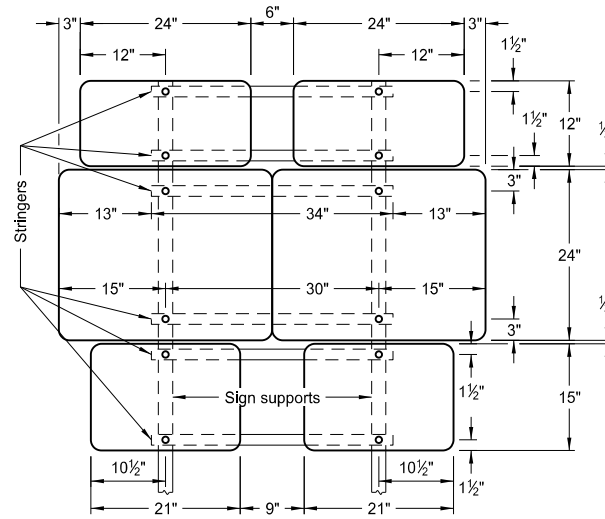


3 Posts

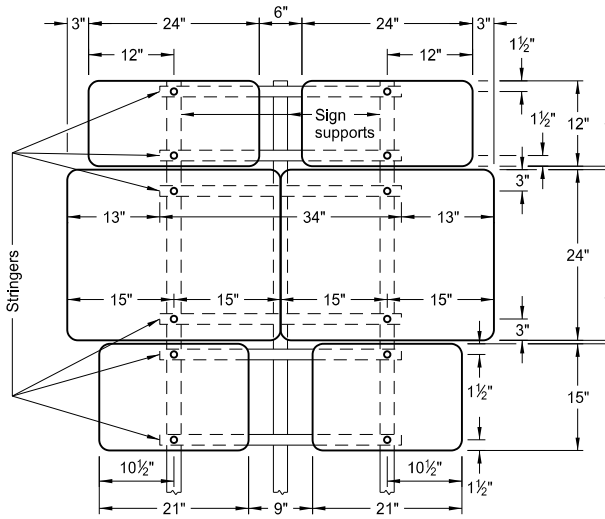
ASSEMBLY 389



1 Post



2 Posts



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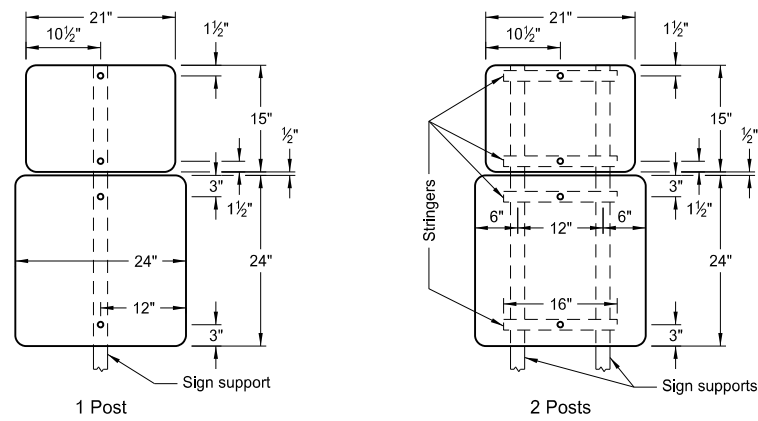
ASSEMBLY 390

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
8-22-12	
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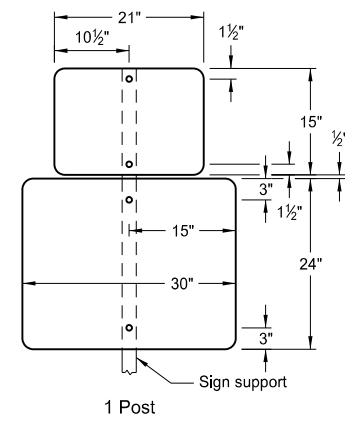
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

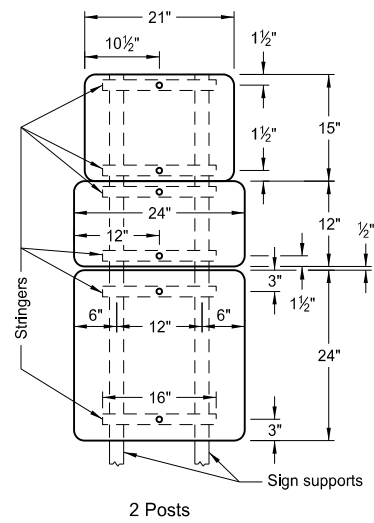
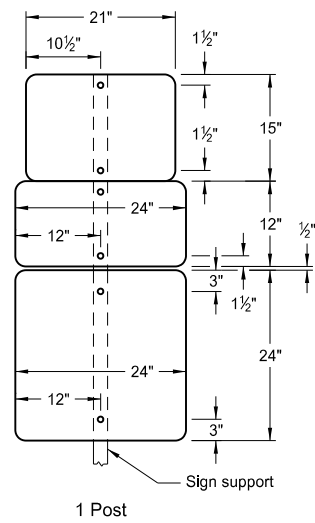
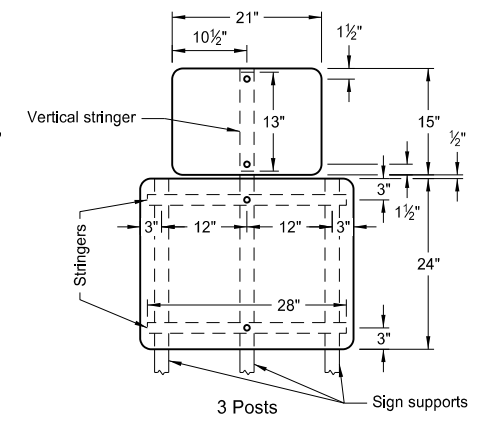
D-754-57



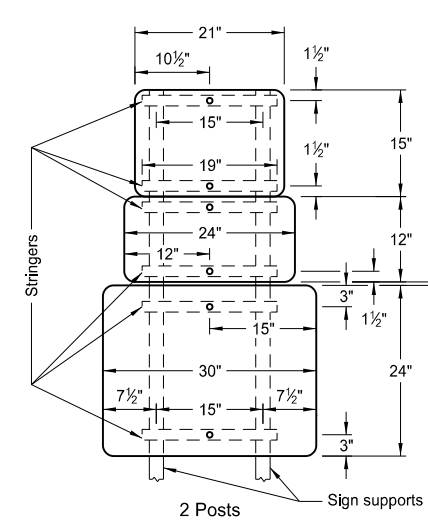
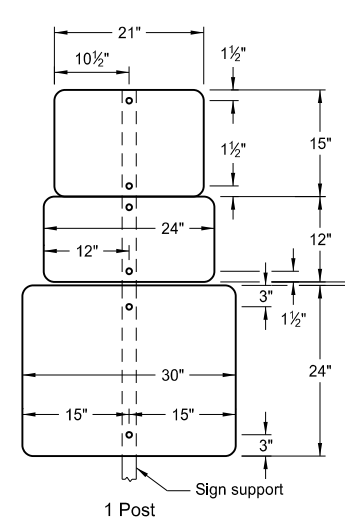
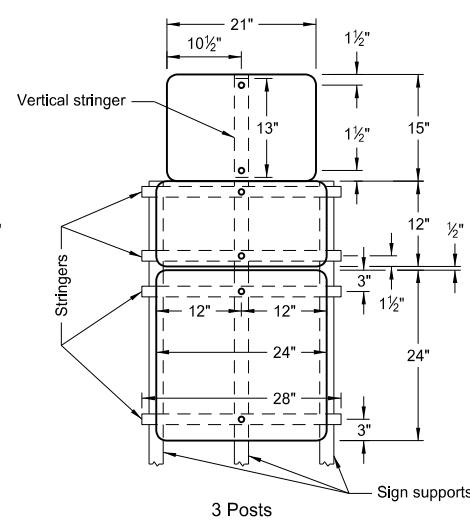
ASSEMBLY 391



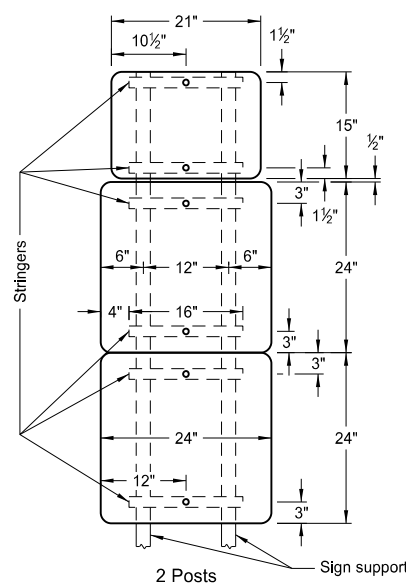
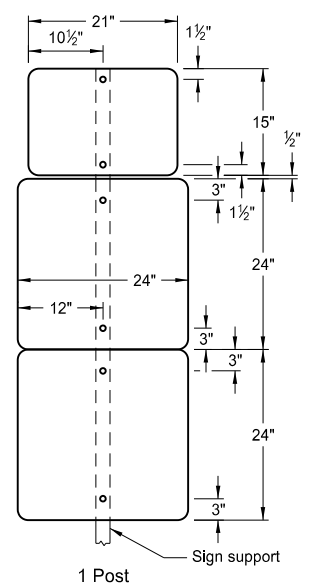
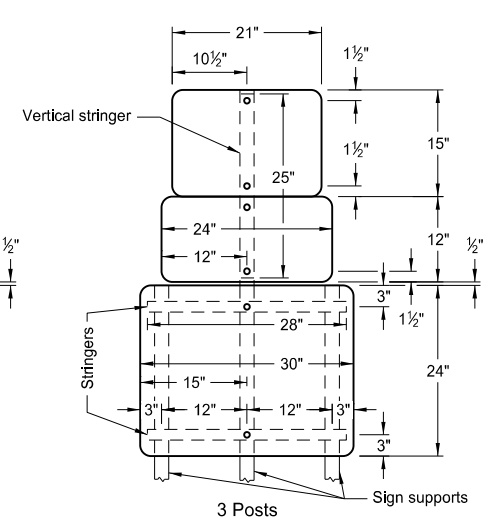
ASSEMBLY 392



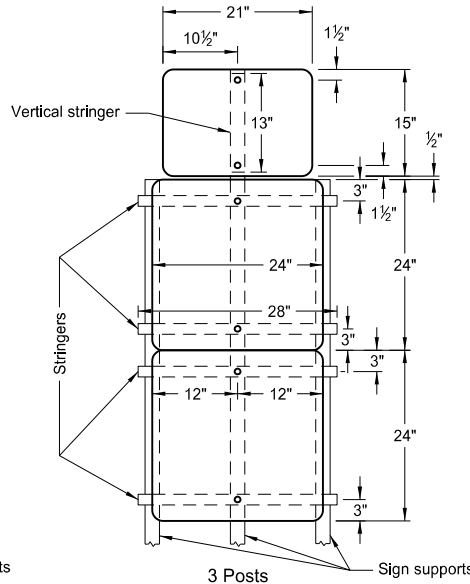
ASSEMBLY 393



ASSEMBLY 394



ASSEMBLY 395



Notes:

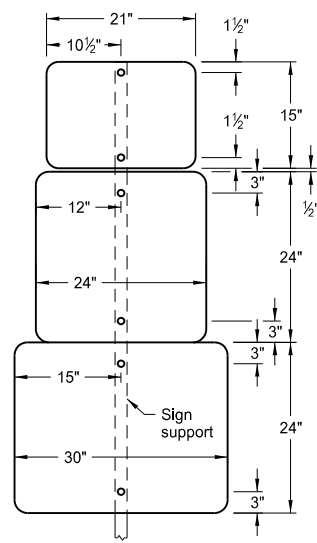
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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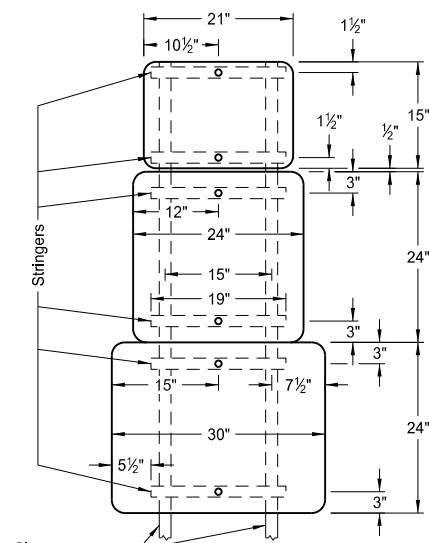
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

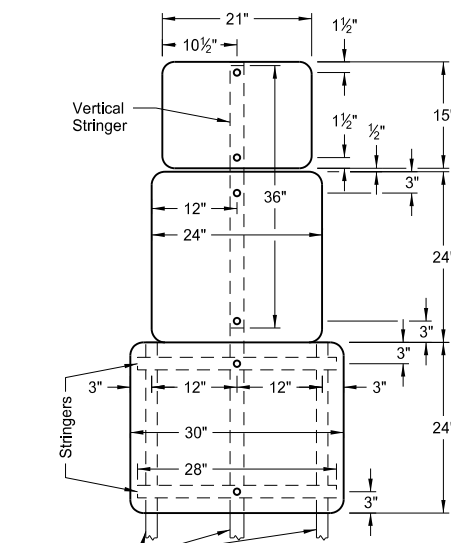
D-754-58



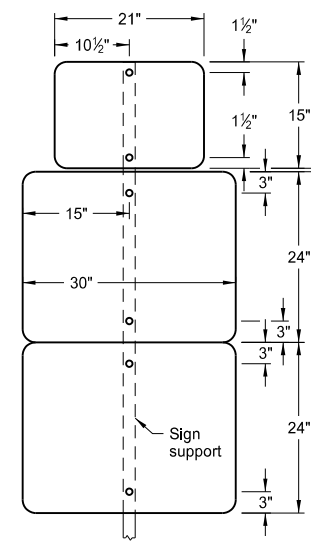
1 Post



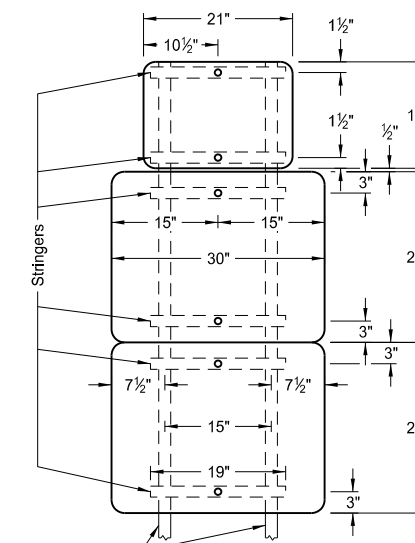
2 Posts
ASSEMBLY 396



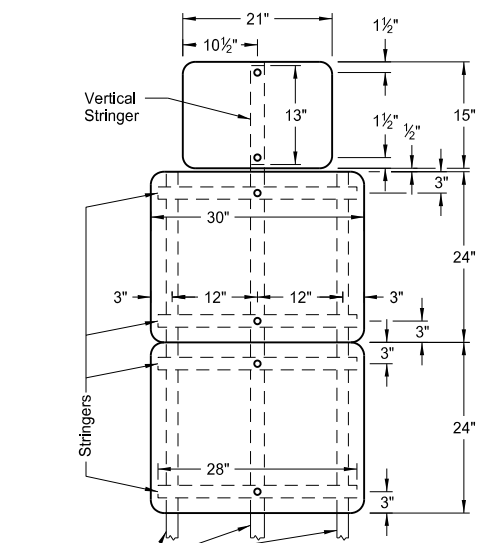
3 Posts



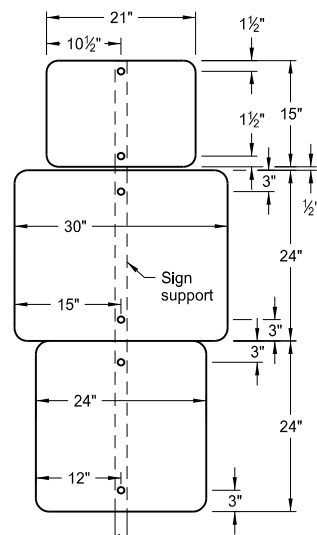
1 Post



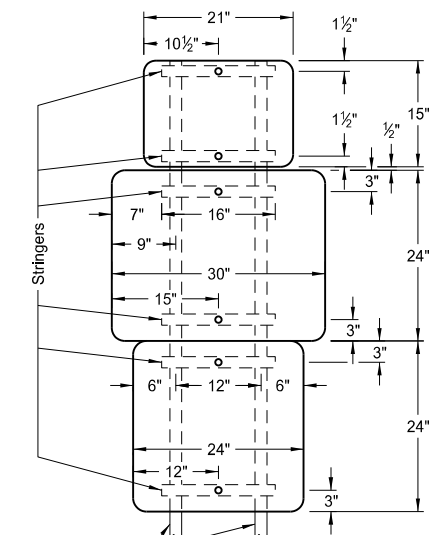
2 Posts
ASSEMBLY 397



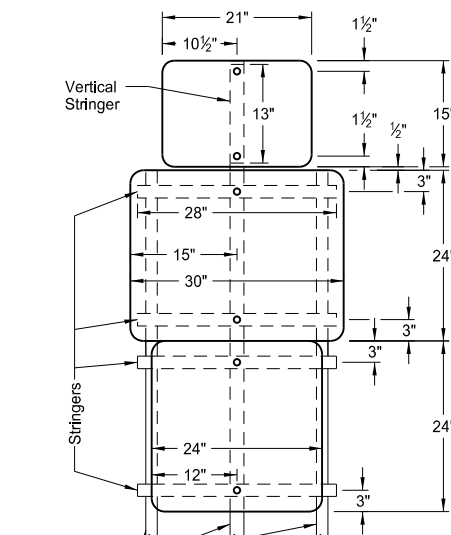
3 Posts



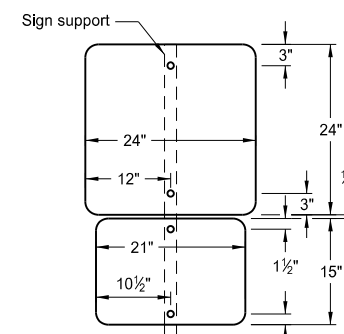
1 Post



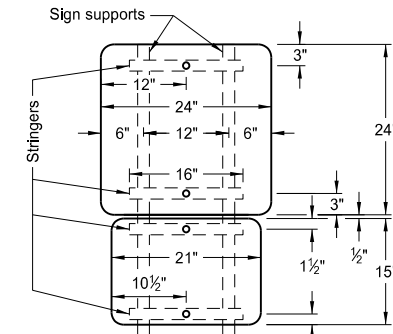
2 Posts
ASSEMBLY 398



3 Posts



1 Post



2 Posts

ASSEMBLY 399

Notes:

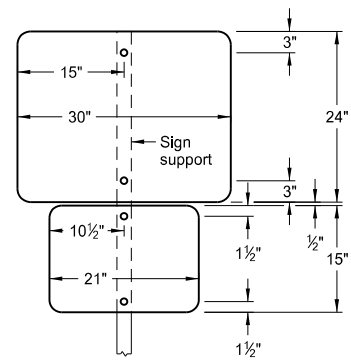
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 8-22-12	
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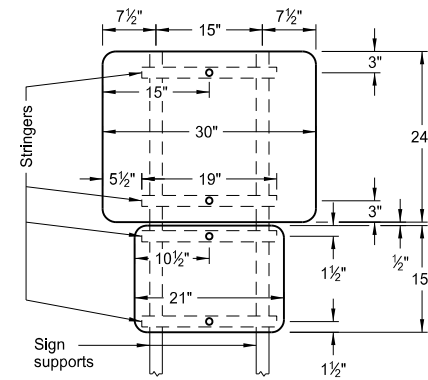
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

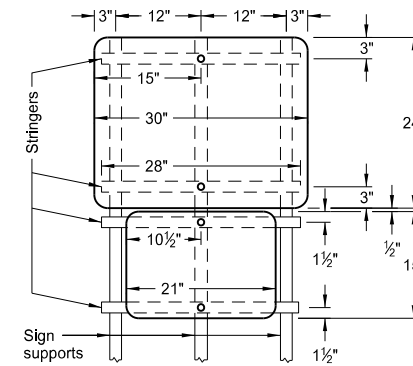
D-754-59



1 Post



2 Posts

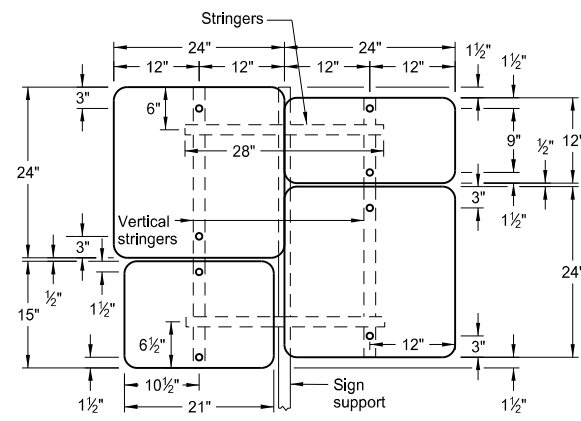


3 Posts

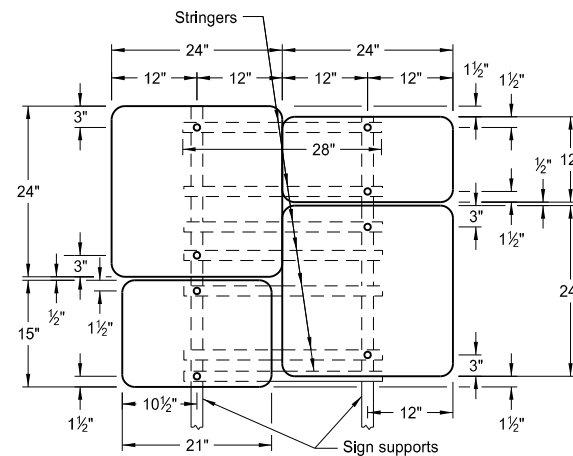
ASSEMBLY NO. 400

Notes:

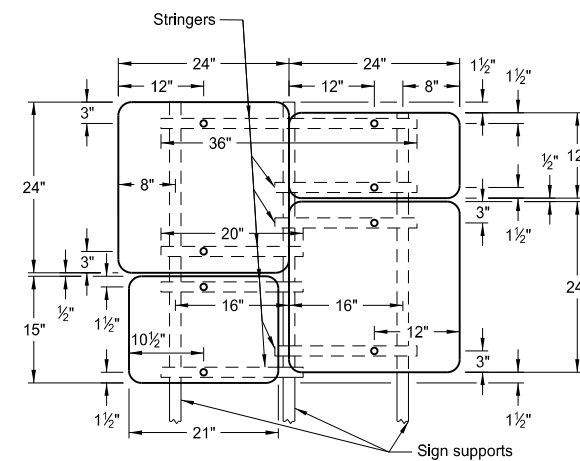
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2" x 1 1/2".
3. All holes shall be punched round for 3/8" bolt.



1 Post

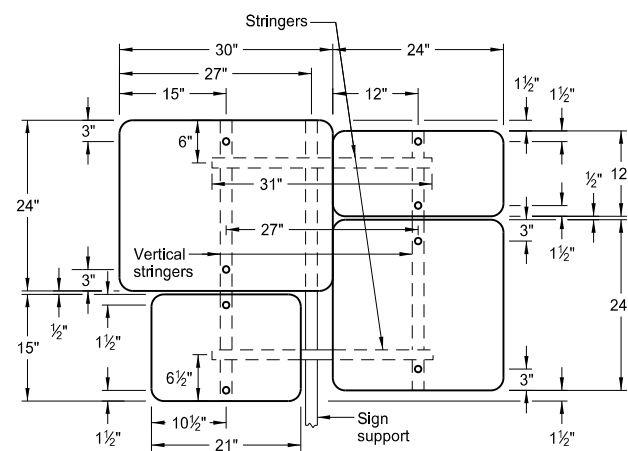


2 Posts

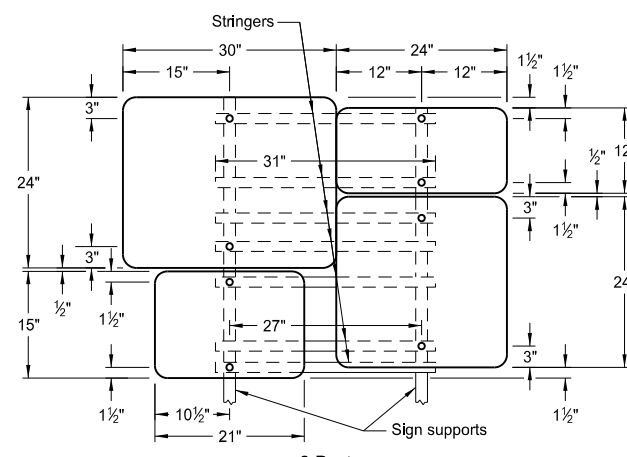


3 Posts

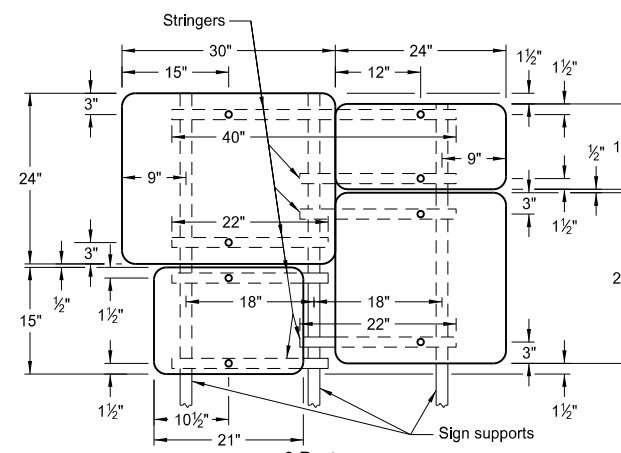
ASSEMBLY NO. 401



1 Post



2 Post



3 Posts

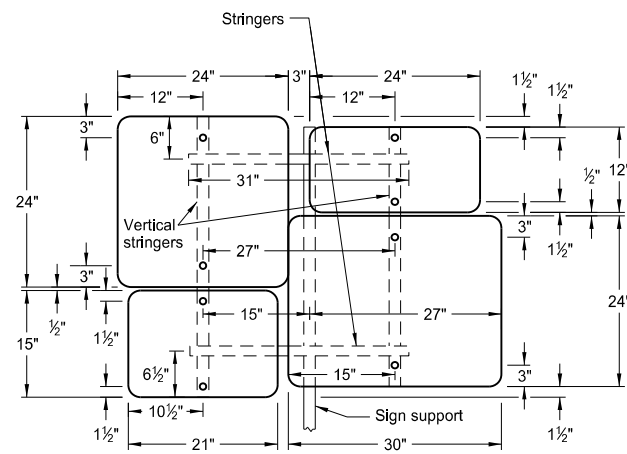
ASSEMBLY NO. 402

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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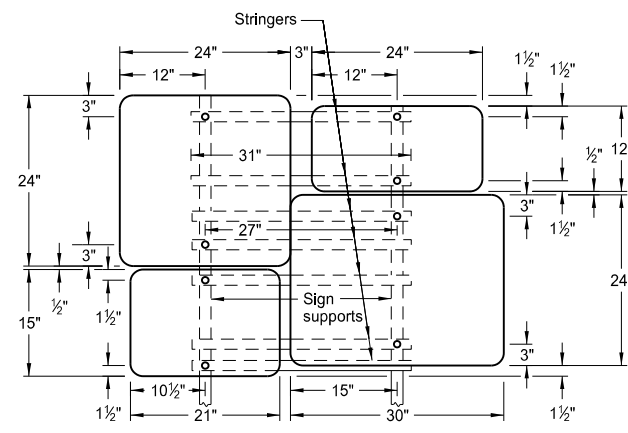
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

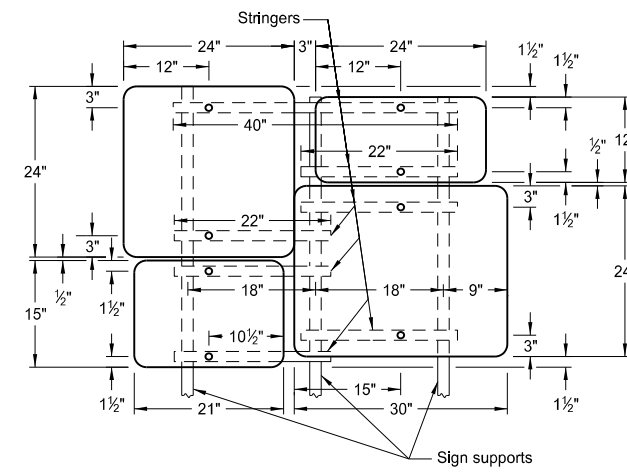
D-754-60



1 Post



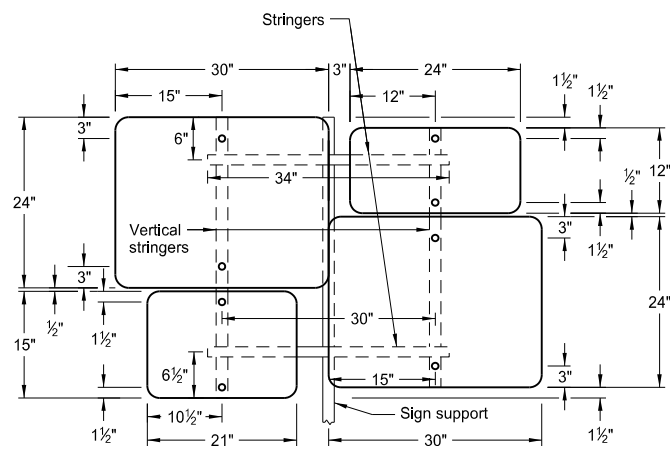
2 Posts



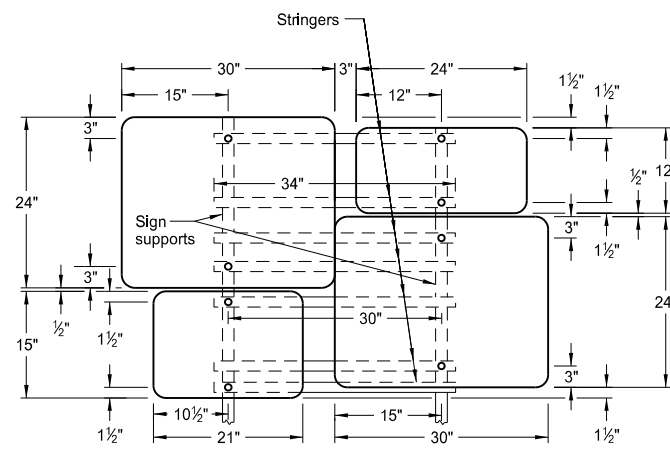
3 Posts

- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
 3. All holes shall be punched round for 3/8" bolt.

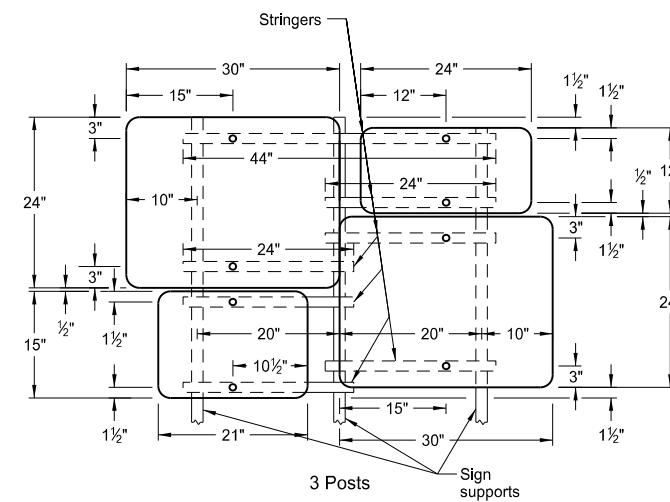
ASSEMBLY NO. 403



1 Post

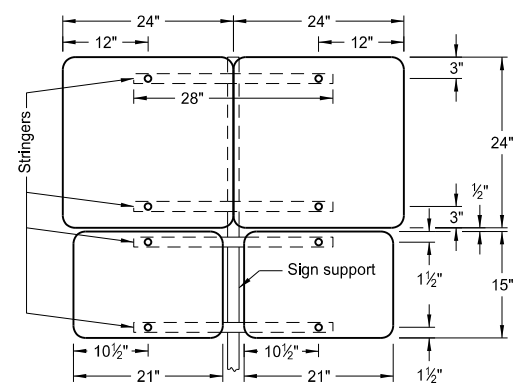


2 Posts

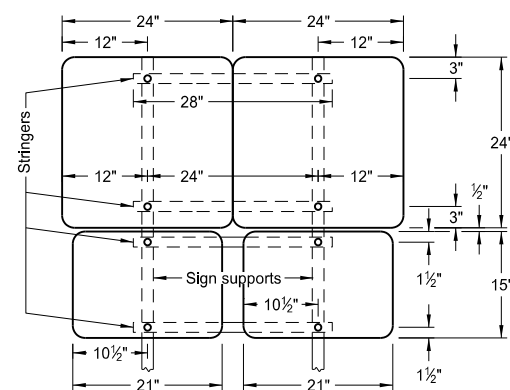


3 Posts

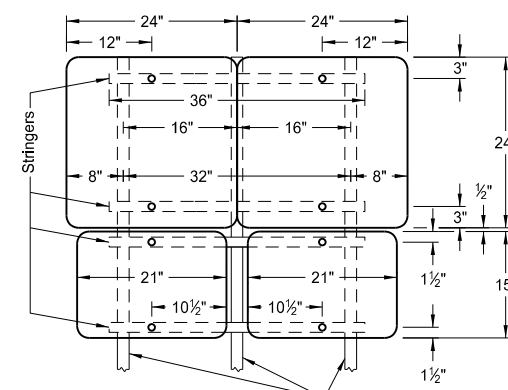
ASSEMBLY NO. 404



1 Post



2 Posts



3 Posts

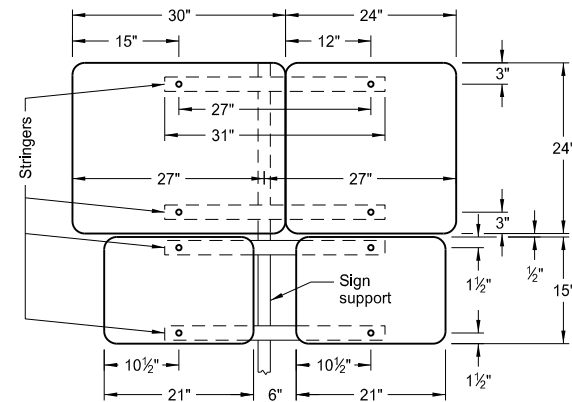
ASSEMBLY NO. 405

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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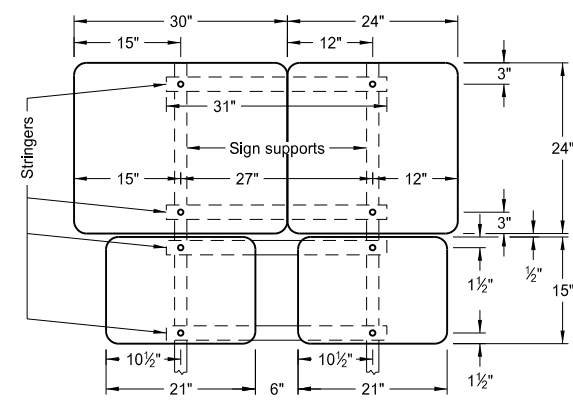
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

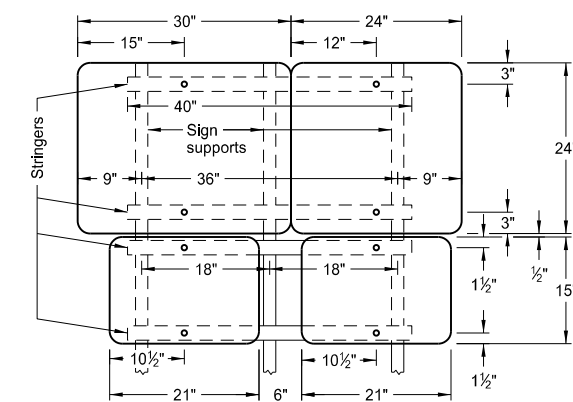
D-754-61



1 Post

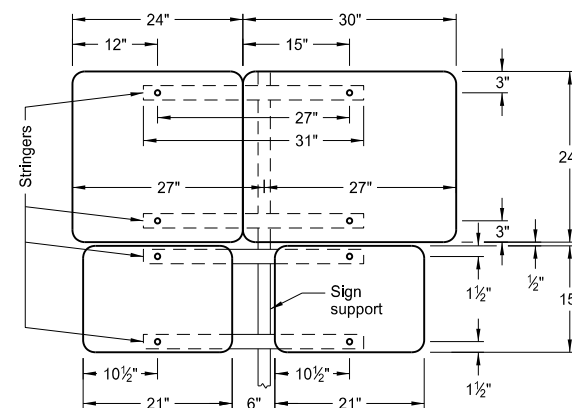


2 Posts

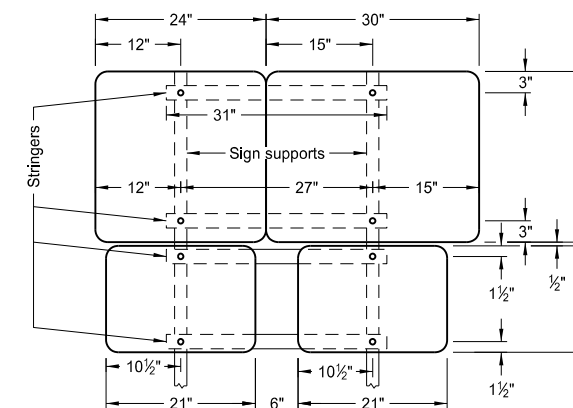


3 Posts

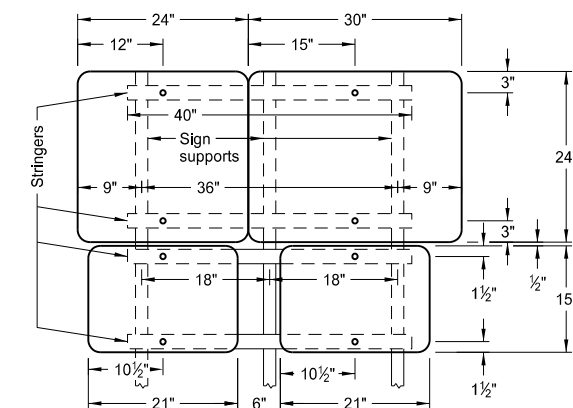
ASSEMBLY 406



1 Post

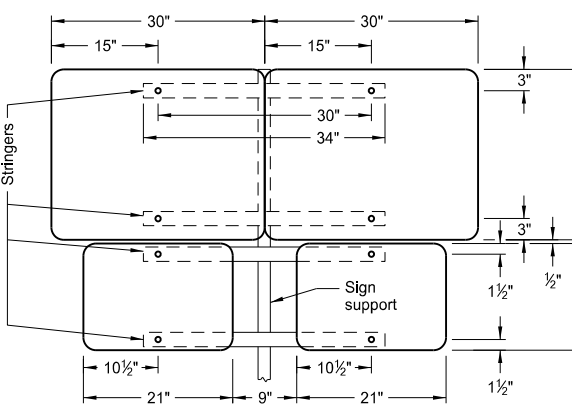


2 Posts

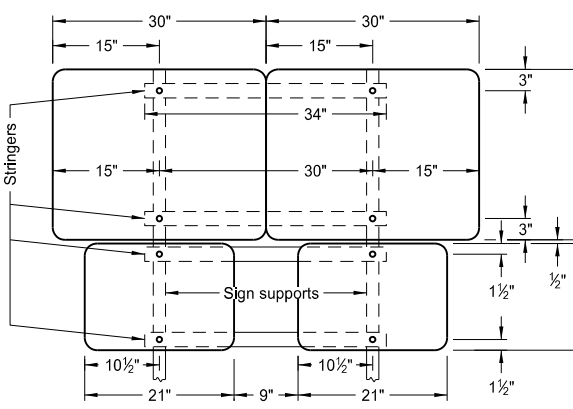


3 Posts

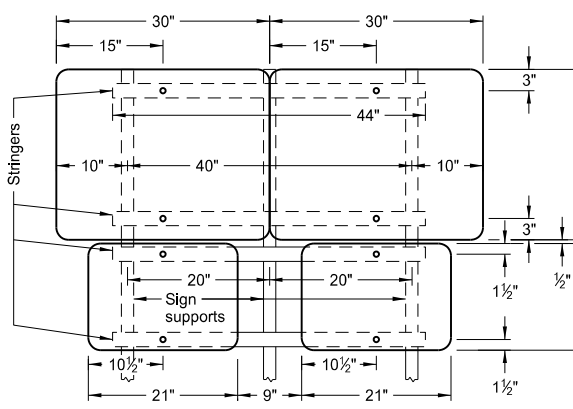
ASSEMBLY 407



1 Post



2 Posts



3 Posts

ASSEMBLY 408

Notes:

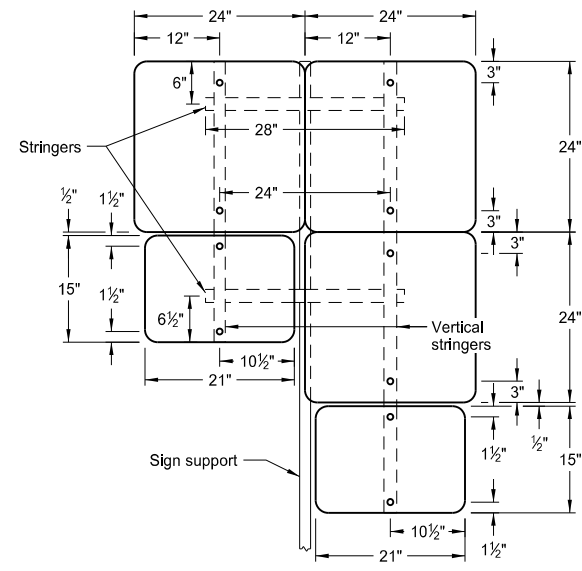
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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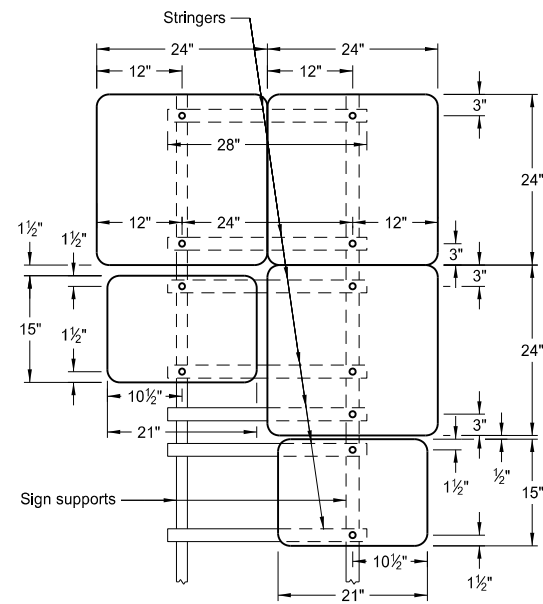
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-62

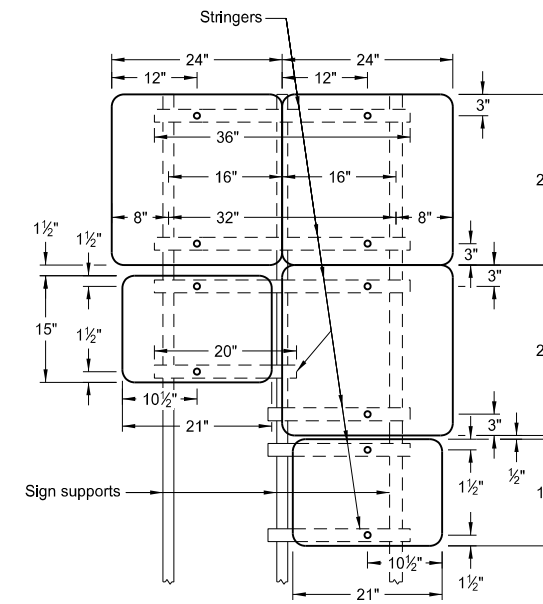


1 Post



2 Posts

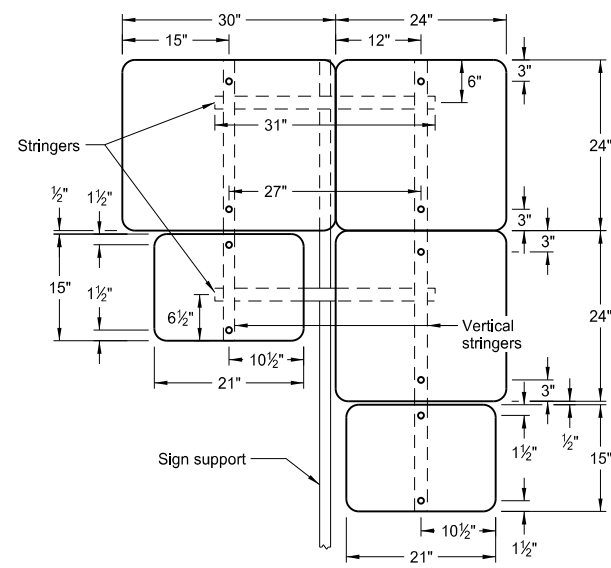
ASSEMBLY NO. 409



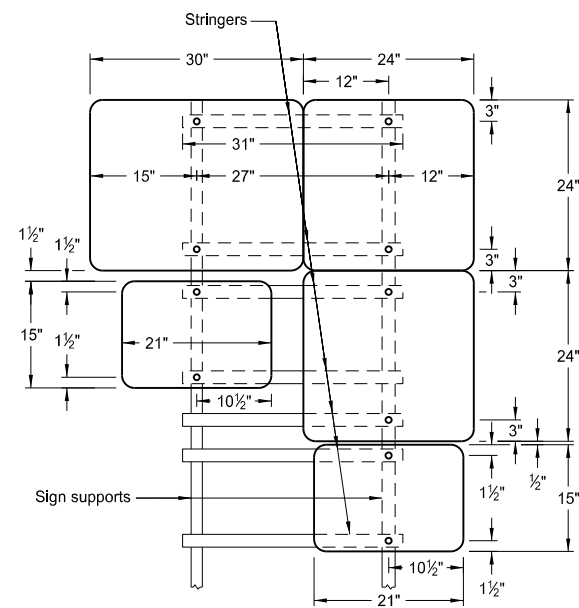
3 Posts

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

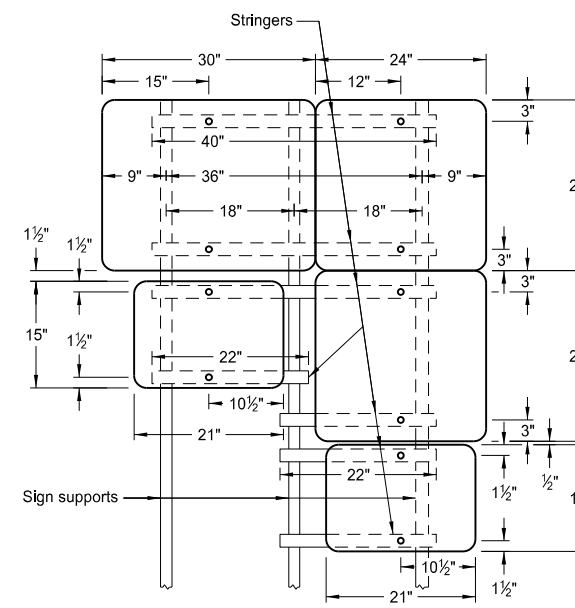


1 Post



2 Posts

ASSEMBLY NO. 410



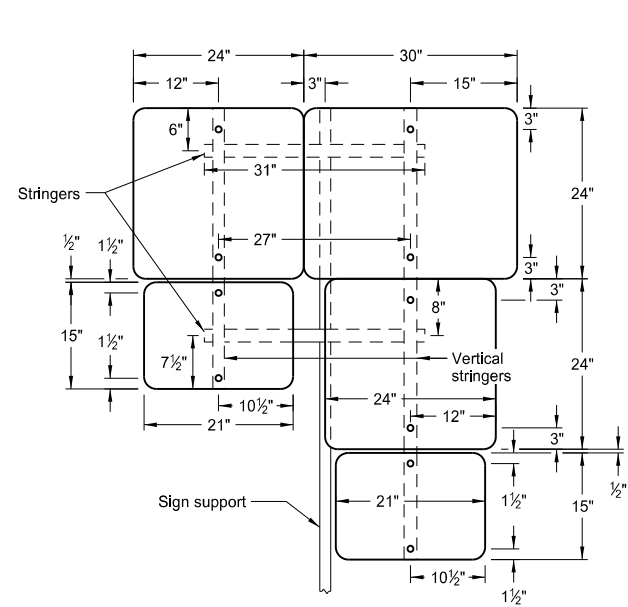
3 Posts

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 8-22-12	
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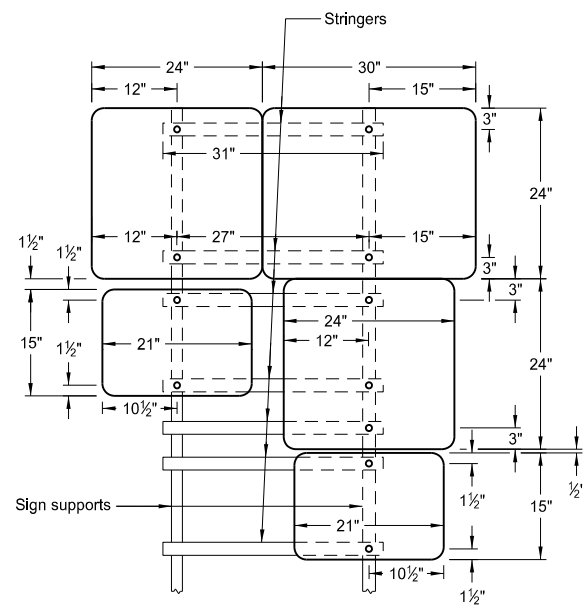
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-63

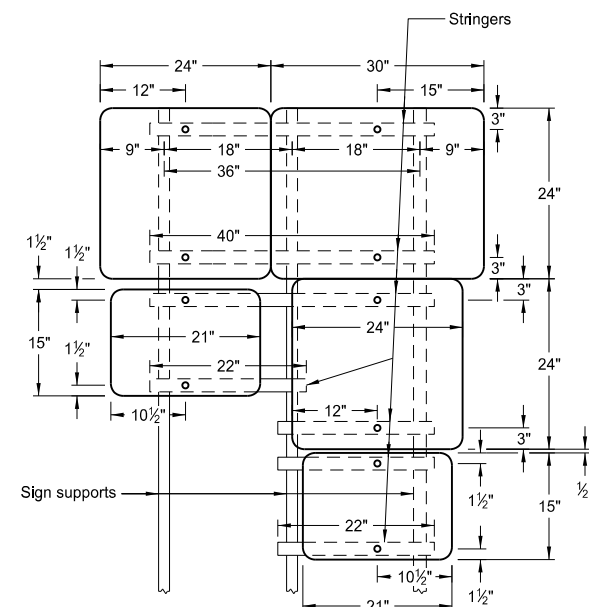


1 Post



2 Posts

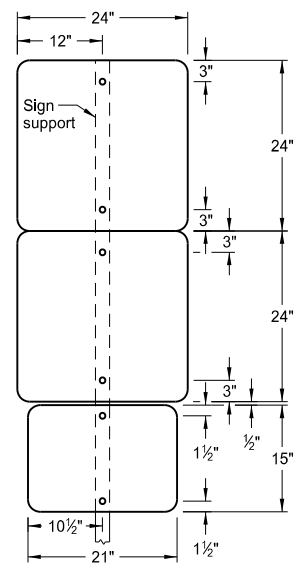
ASSEMBLY NO. 411



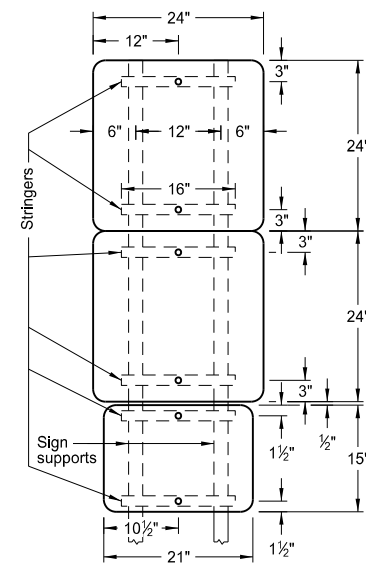
3 Posts

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

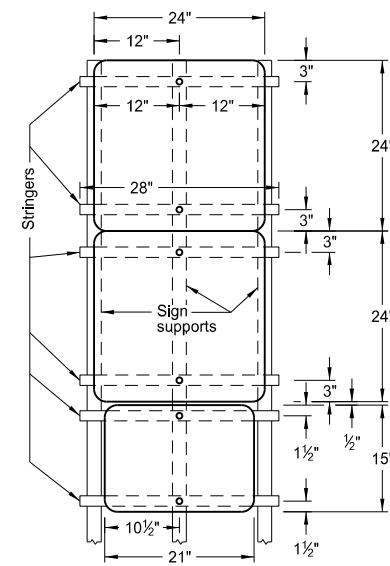


1 Post

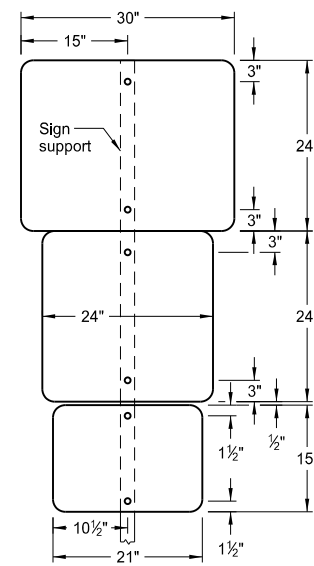


2 Posts

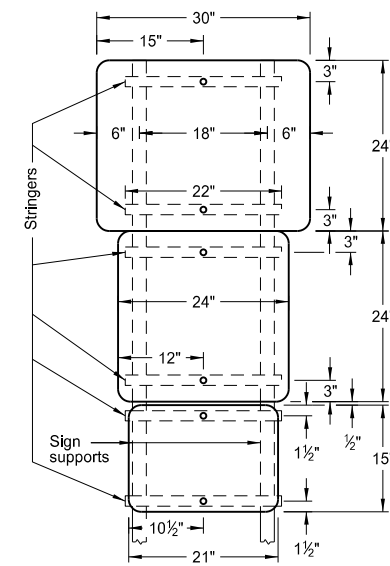
ASSEMBLY NO. 412



3 Posts

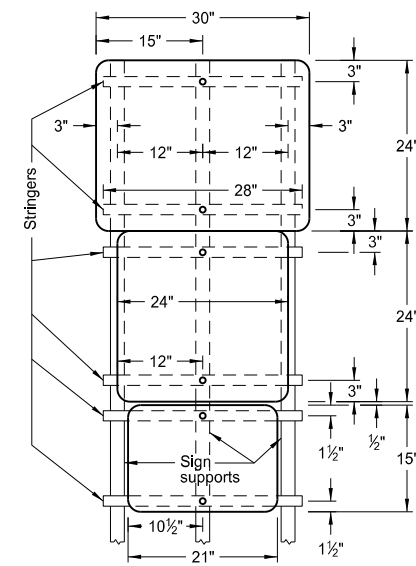


1 Post



2 Posts

ASSEMBLY NO. 413



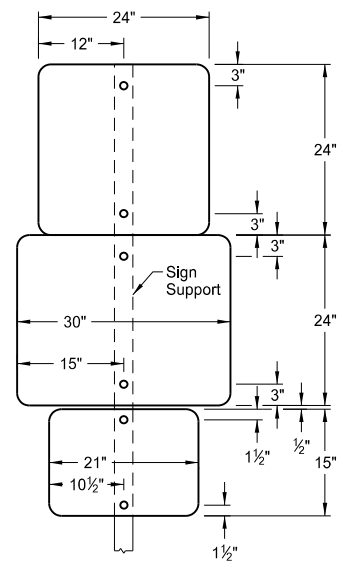
3 Posts

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION 8-22-12	
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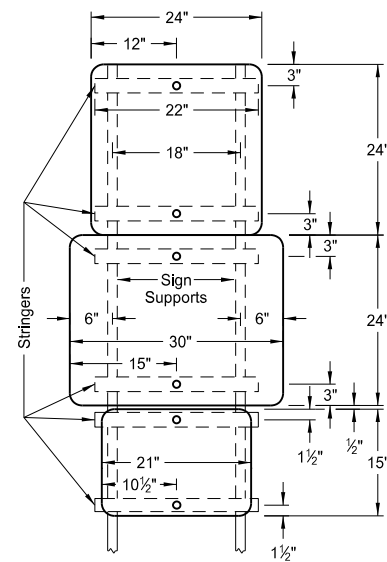
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

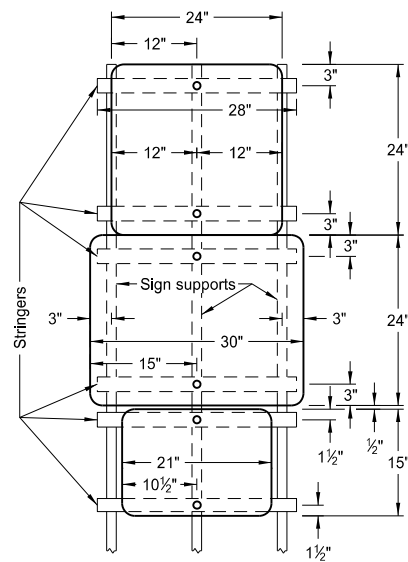
D-754-64



1 Post

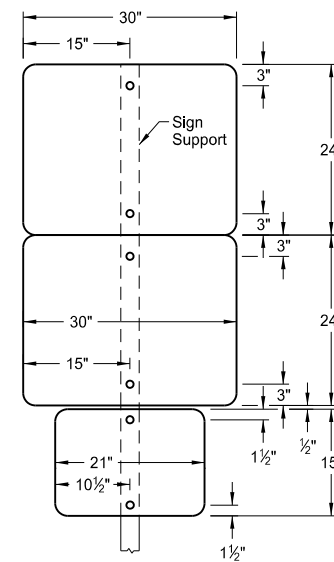


2 Posts

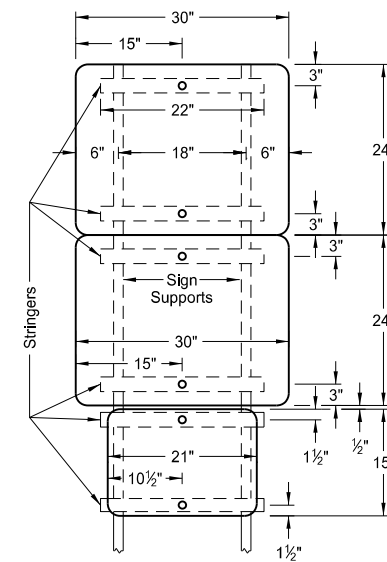


3 Posts

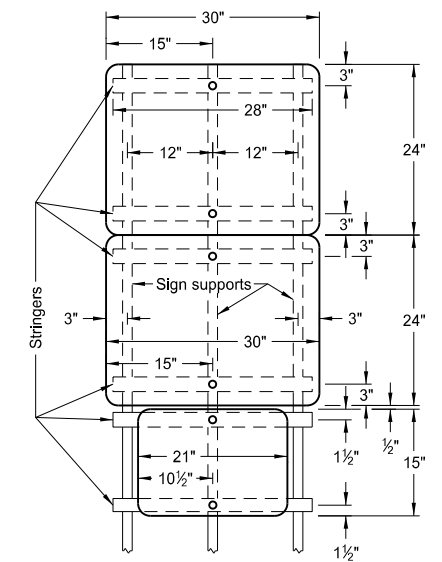
ASSEMBLY NO. 414



1 Post

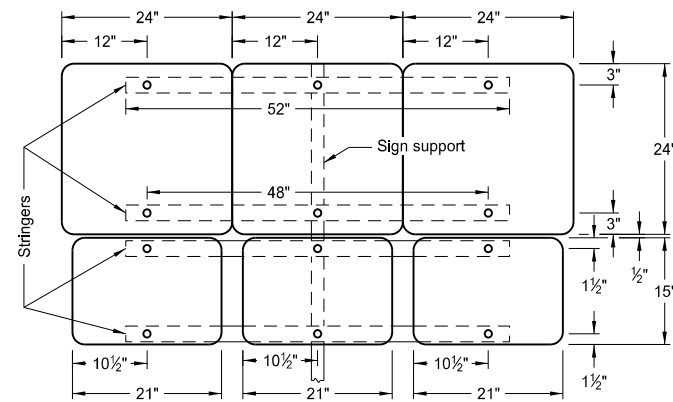


2 Posts

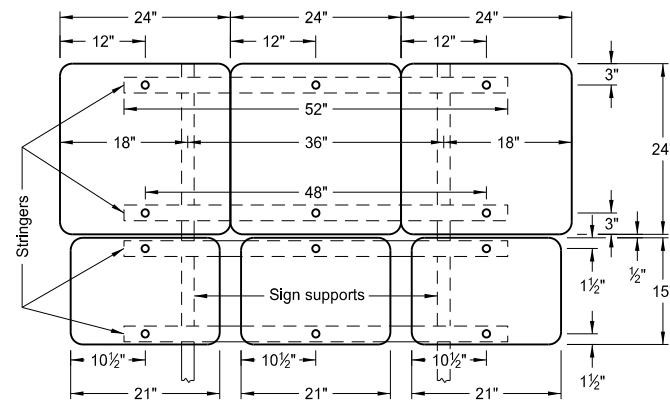


3 Posts

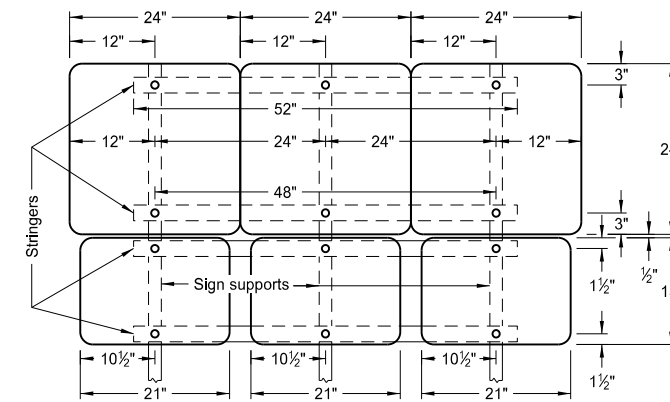
ASSEMBLY NO. 415



1 Post



2 Posts



3 Posts

ASSEMBLY NO. 416

Notes:

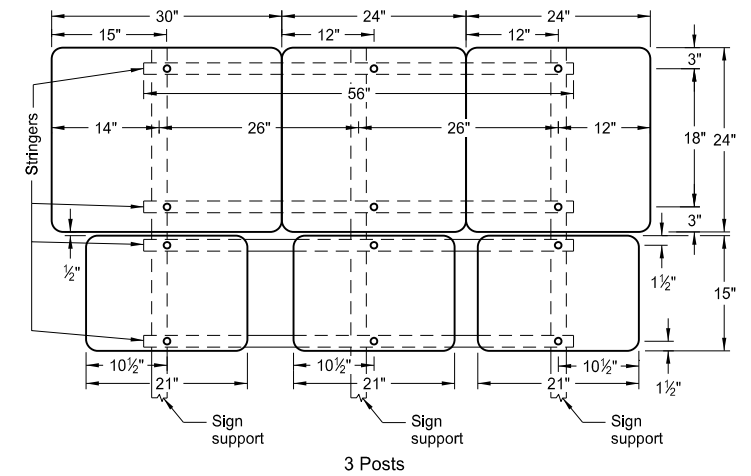
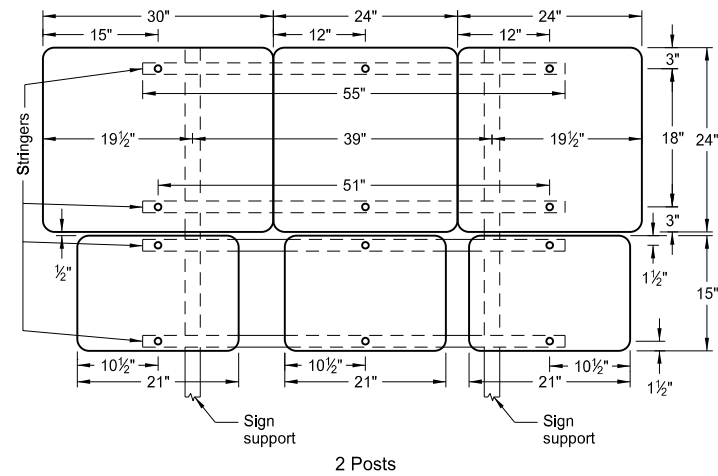
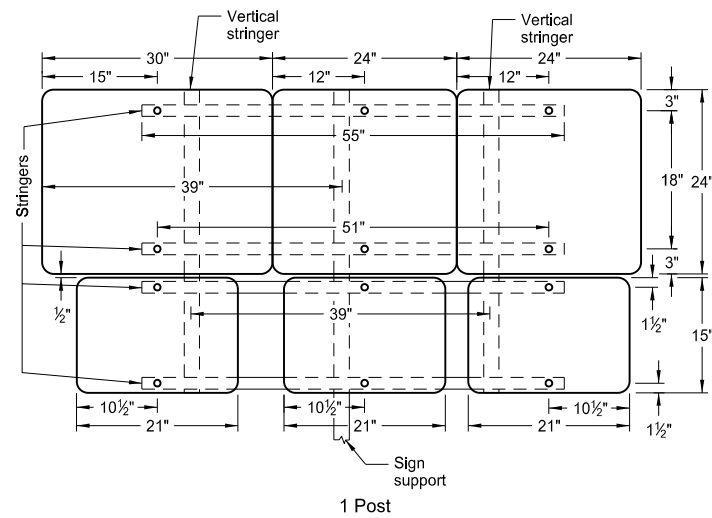
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

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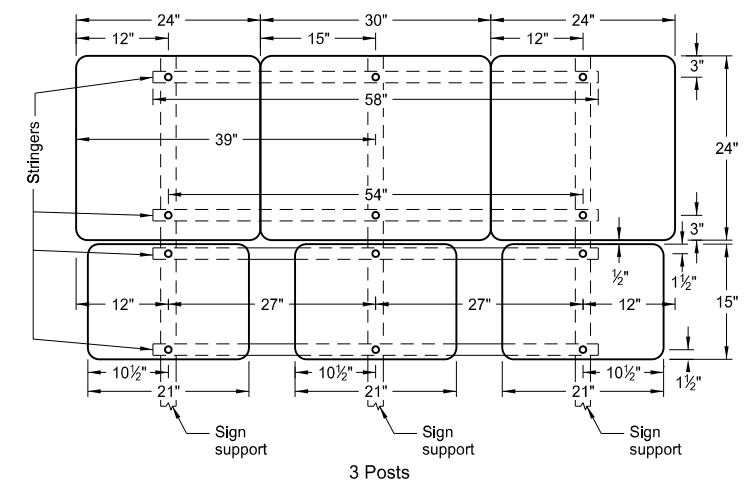
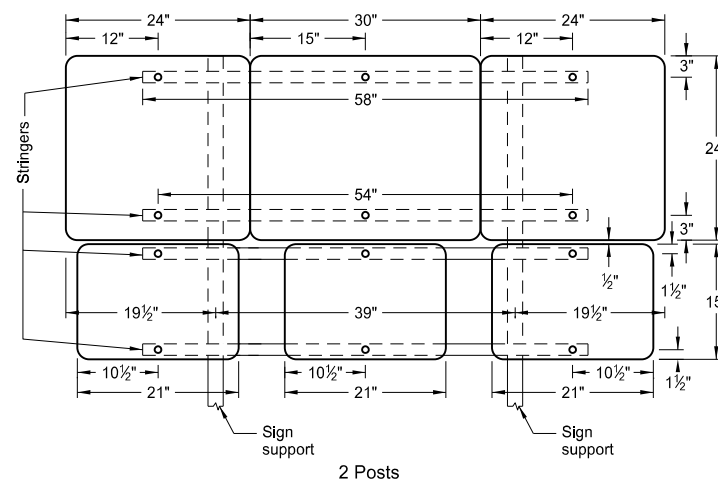
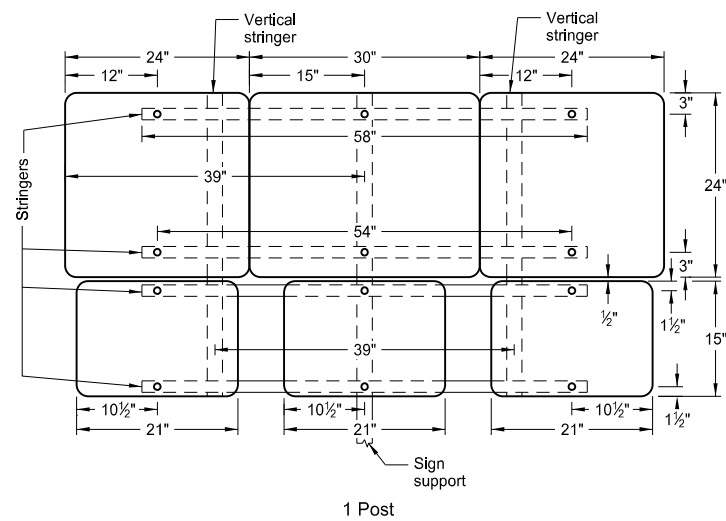
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-65



ASSEMBLY NO. 417



ASSEMBLY NO. 418

Notes:

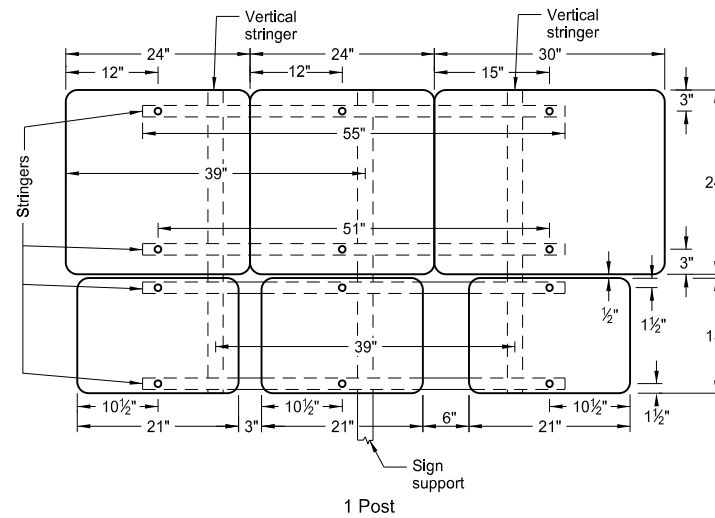
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.

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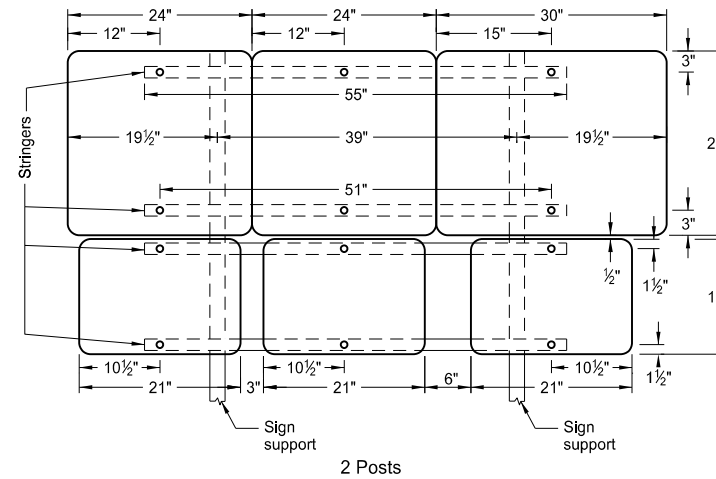
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

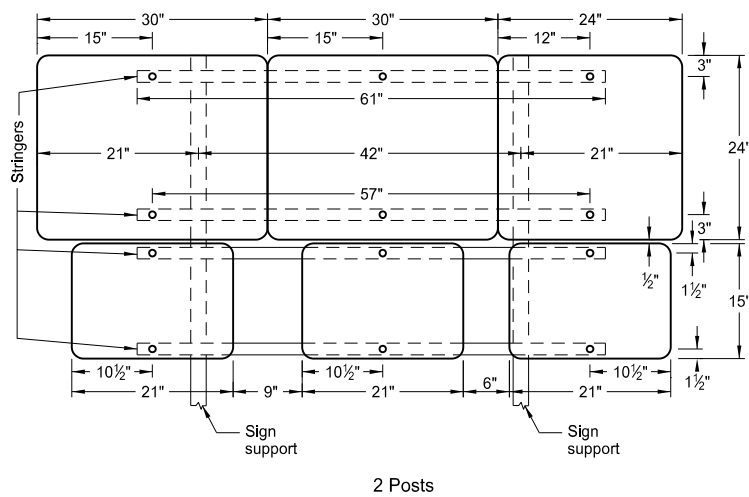
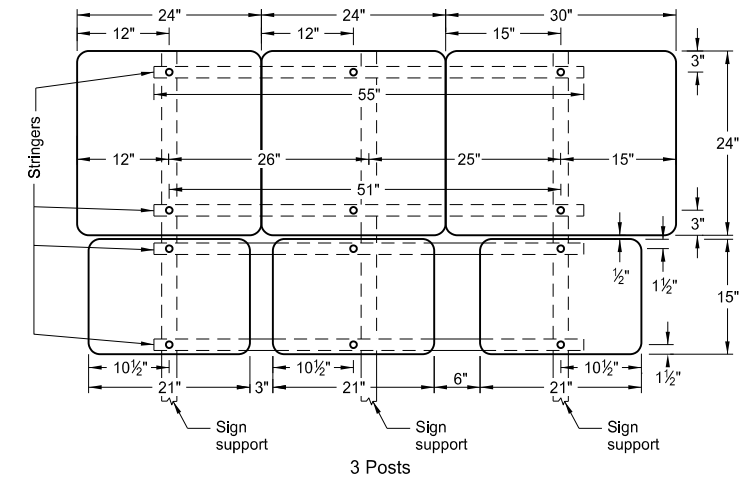
D-754-66



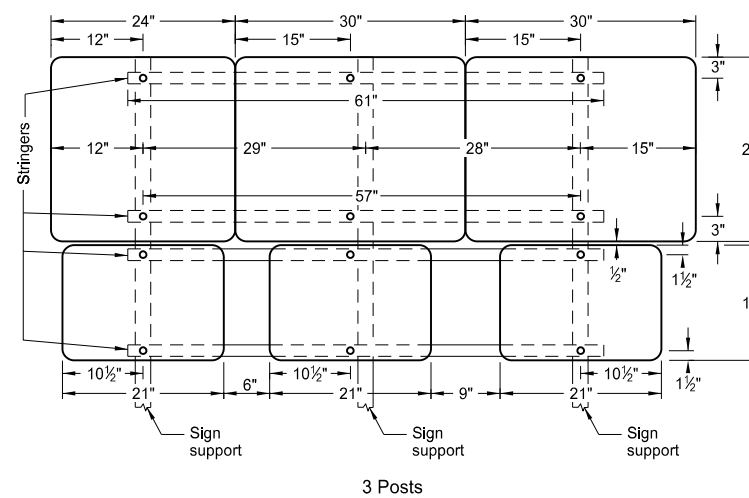
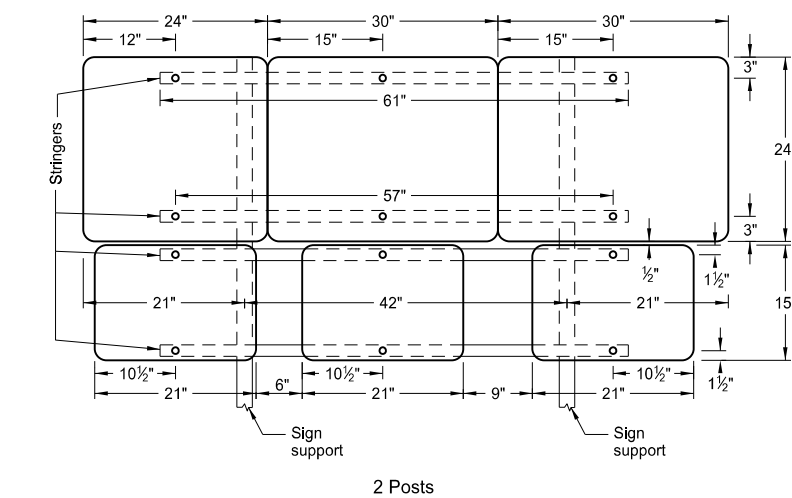
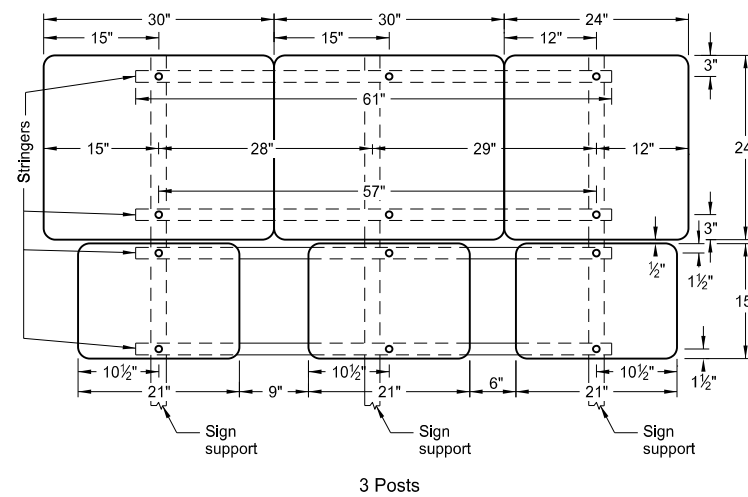
ASSEMBLY NO. 419



ASSEMBLY NO. 420



ASSEMBLY NO. 421



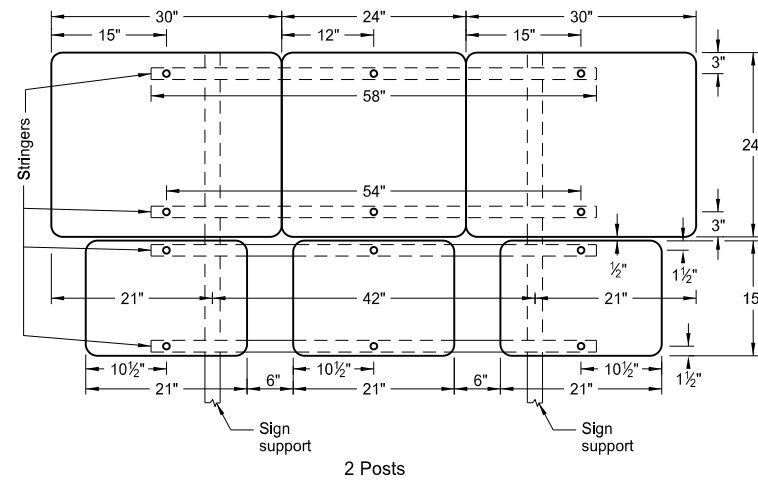
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
 3. All holes shall be punched round for 3/8" bolt.

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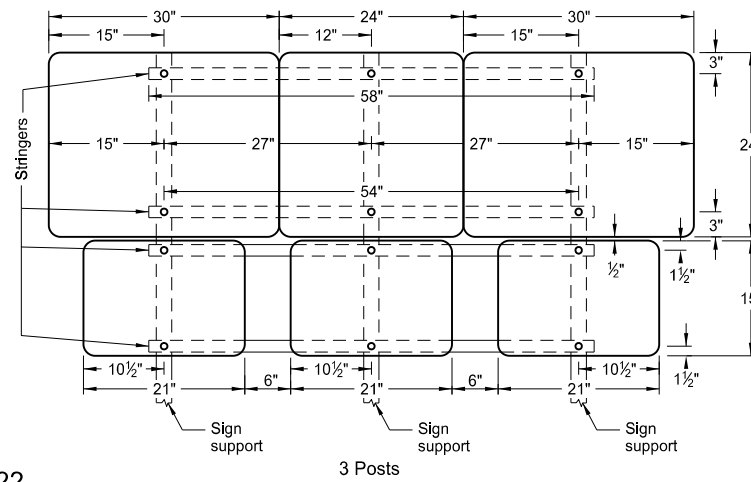
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

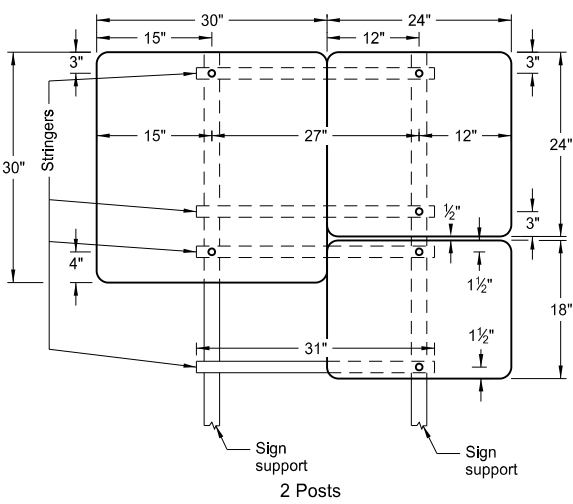
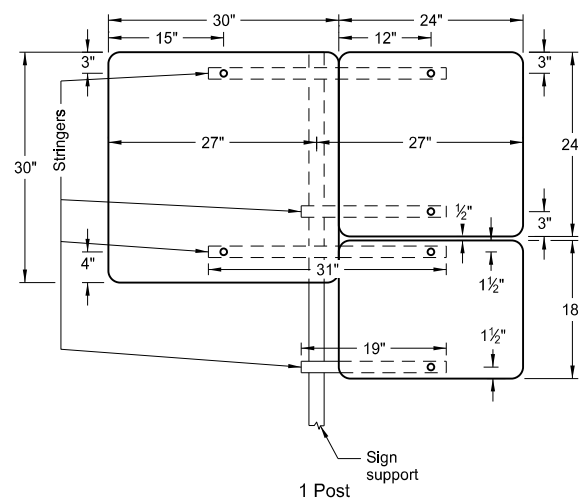
D-754-67



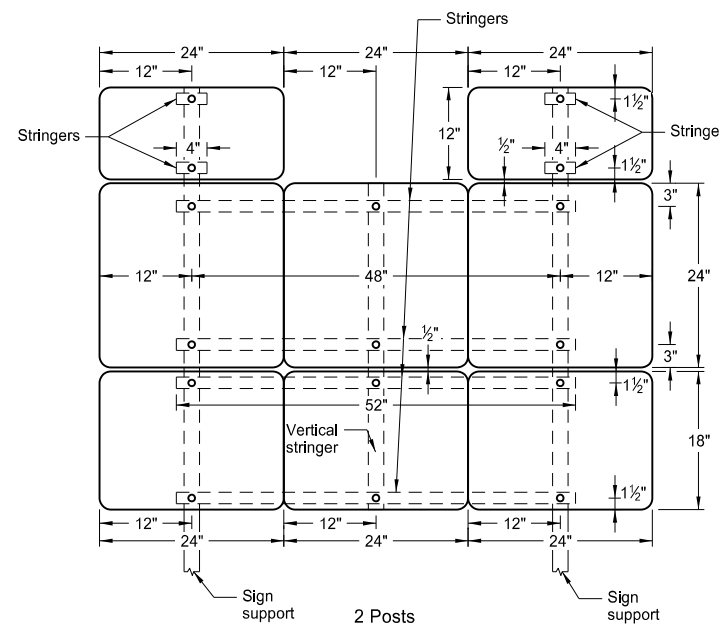
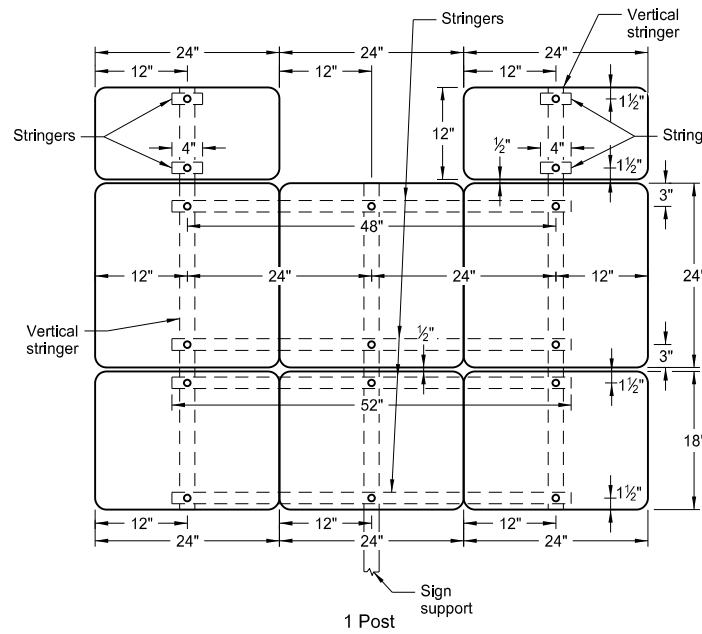
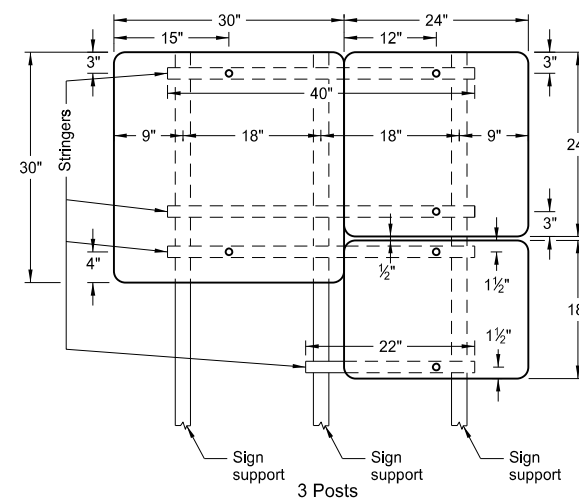
ASSEMBLY NO. 422



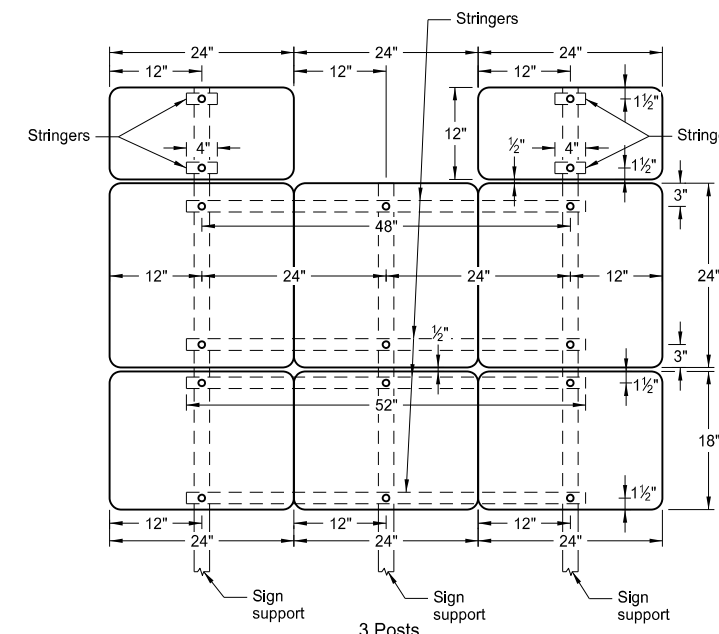
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
 3. All holes shall be punched round for 3/8" bolt.



ASSEMBLY NO. 423



ASSEMBLY NO. 424

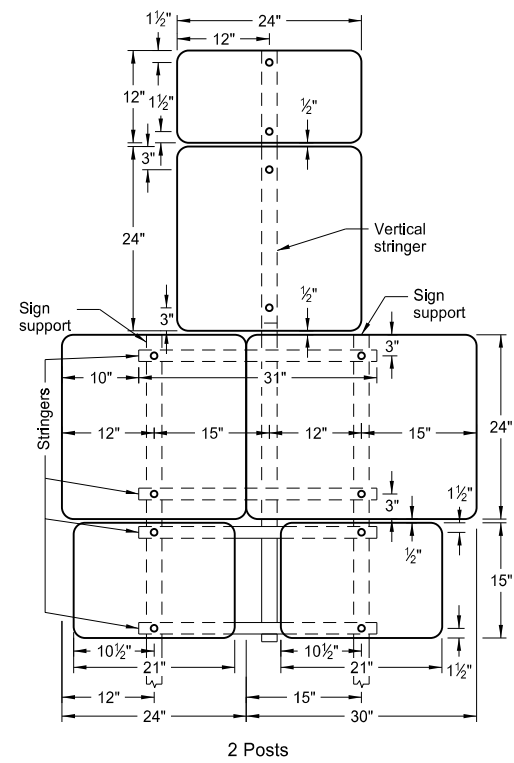


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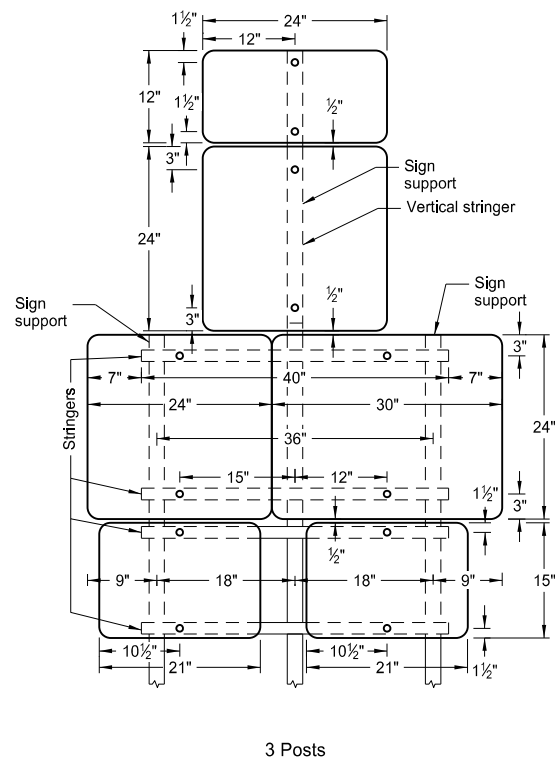
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

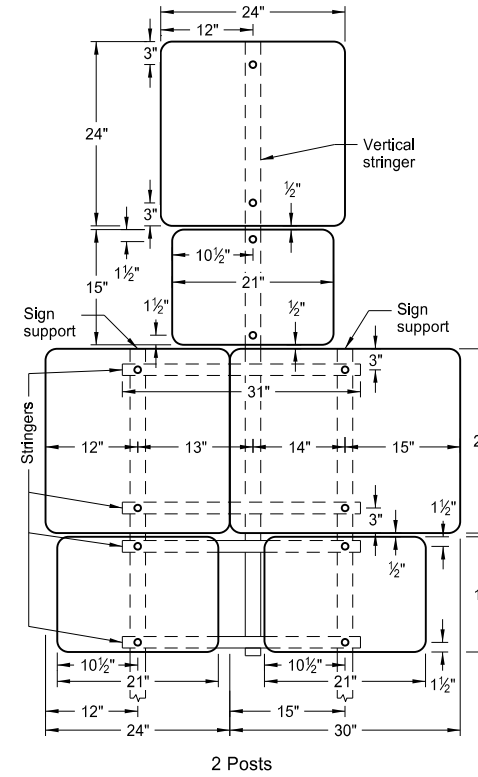
D-754-69



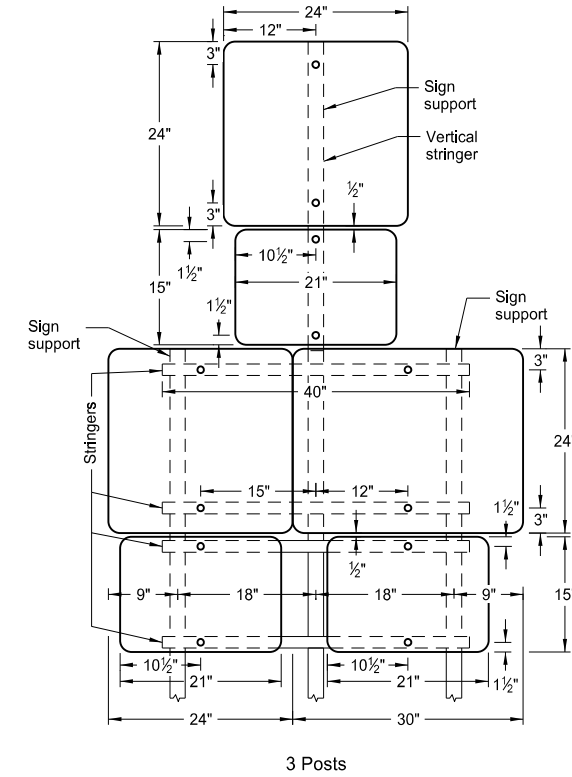
ASSEMBLY NO. 425



3 Posts

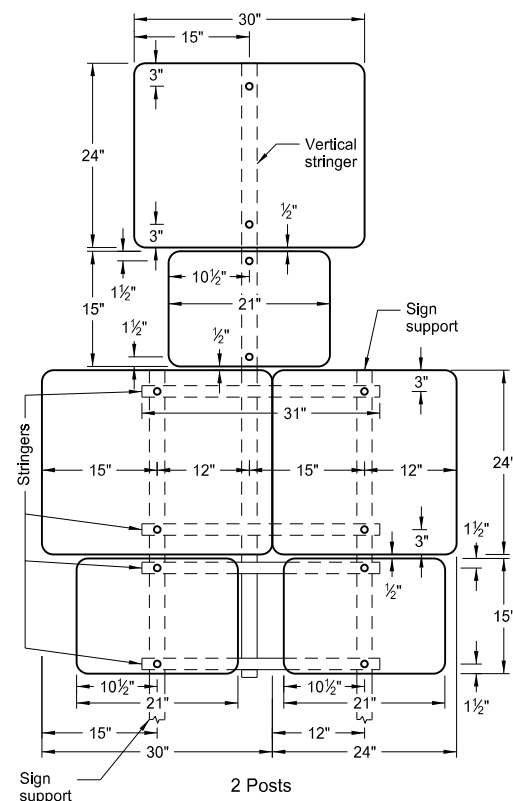


2 Posts



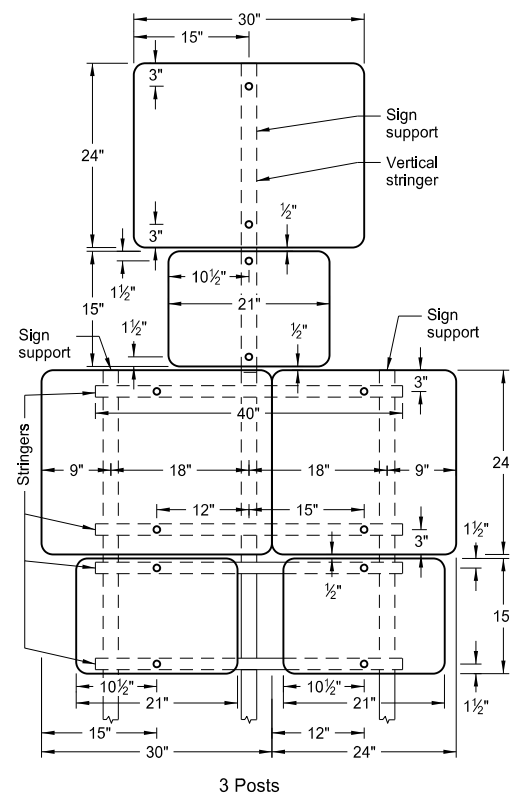
3 Posts

ASSEMBLY NO. 426



2 Posts

ASSEMBLY NO. 427



3 Posts

Notes:

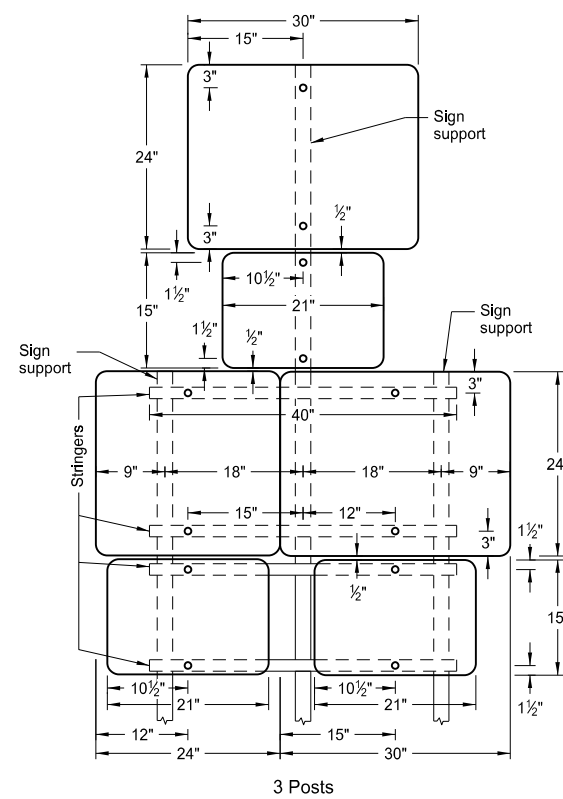
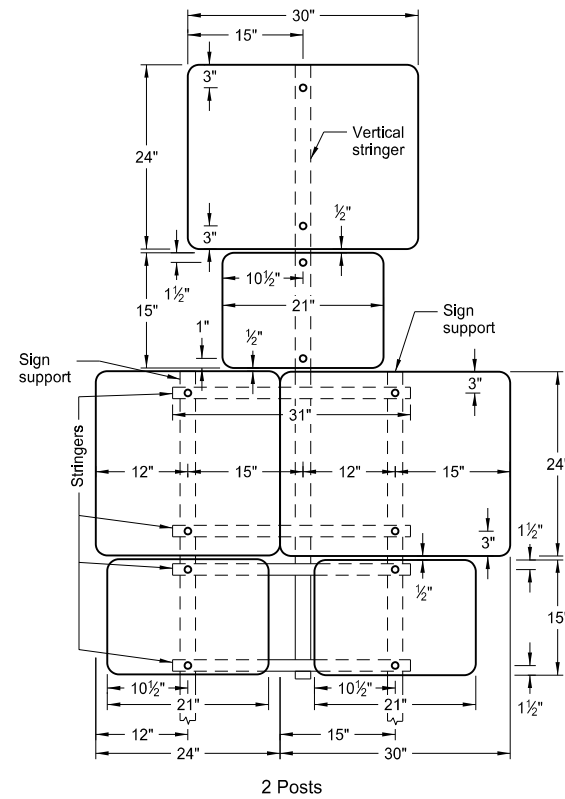
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

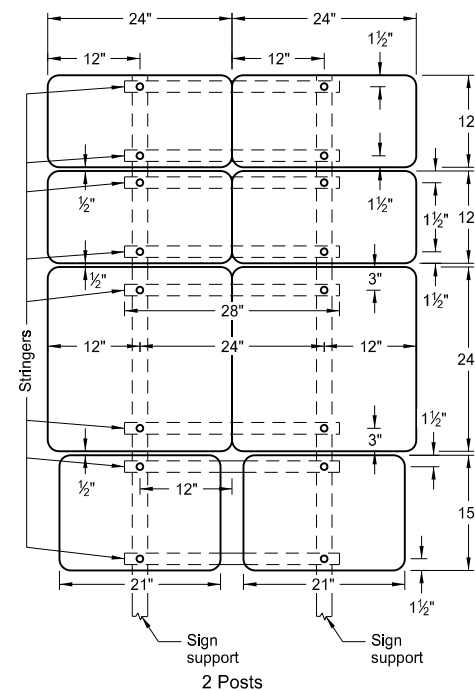
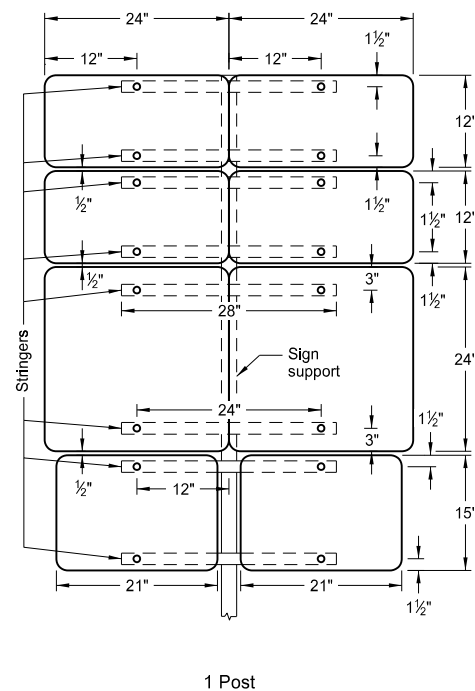
D-754-70



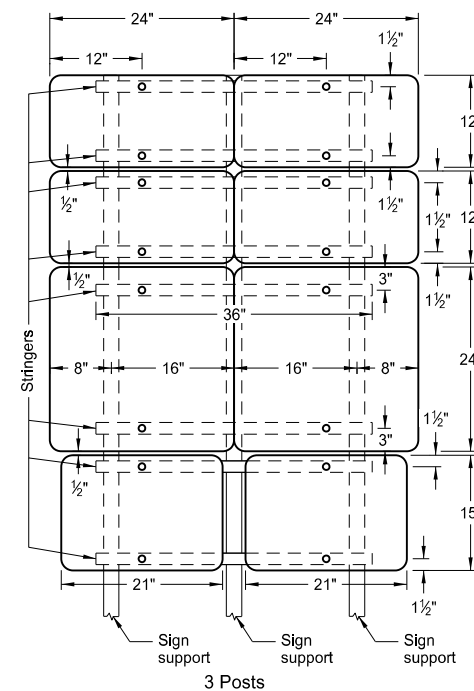
ASSEMBLY NO. 428

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.



ASSEMBLY NO. 429



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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DATE	CHANGE

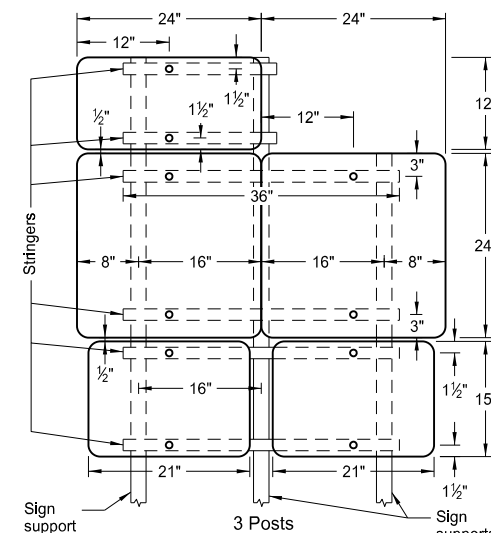
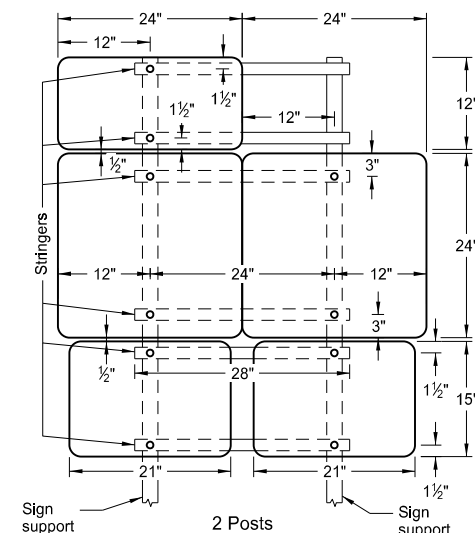
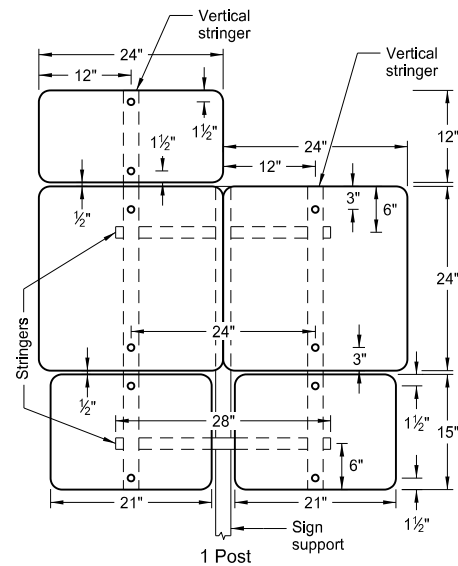
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

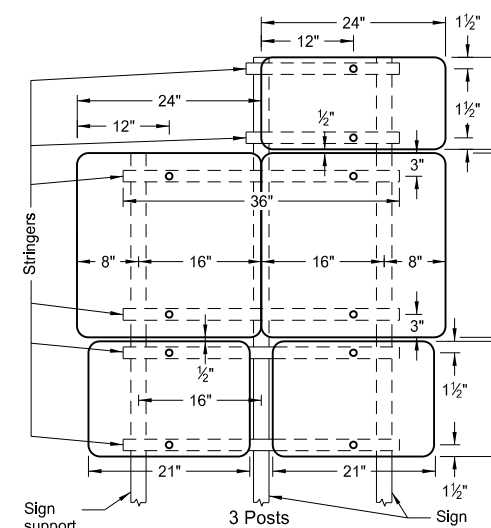
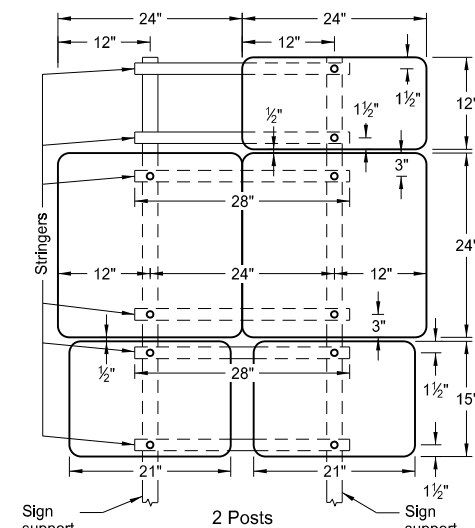
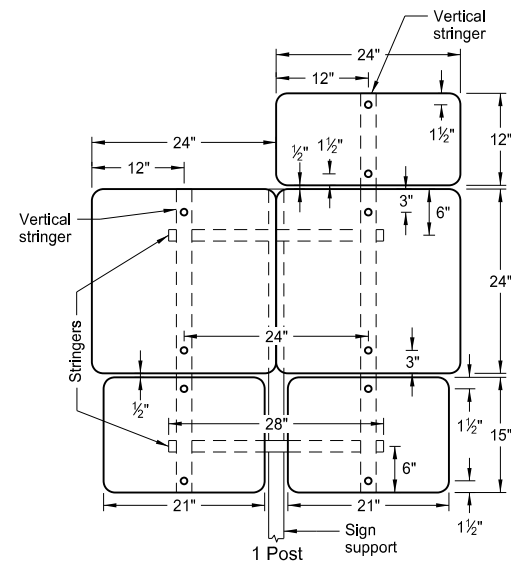
D-754-72

Notes:

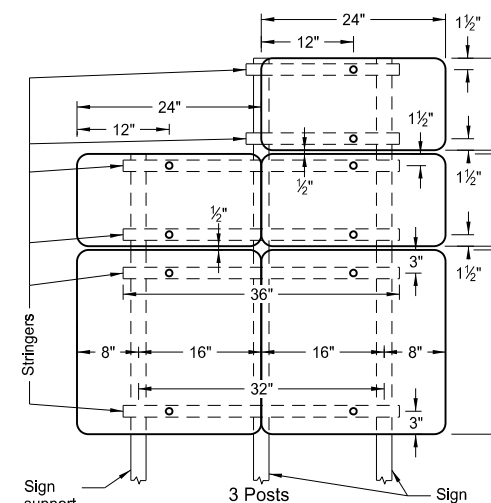
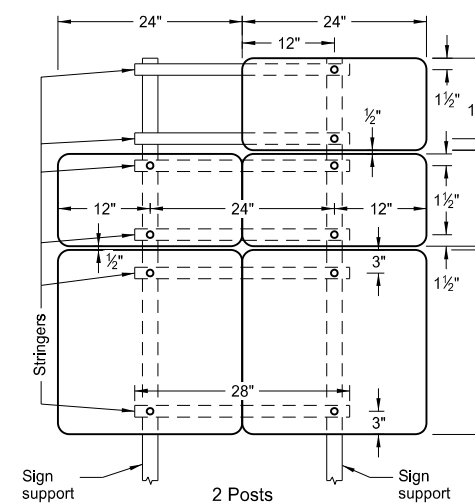
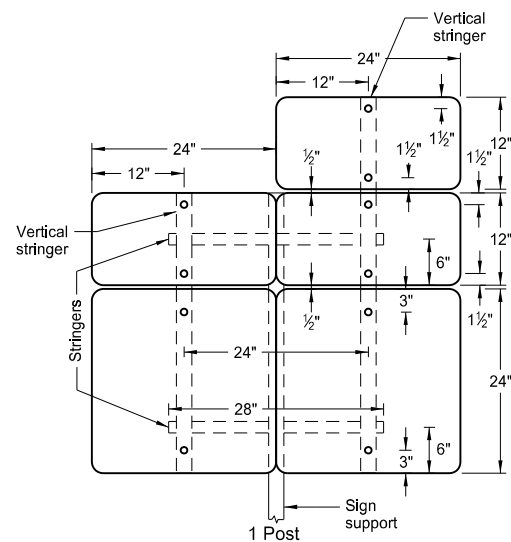
1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ¾" bolt.



ASSEMBLY NO. 430



ASSEMBLY NO. 431



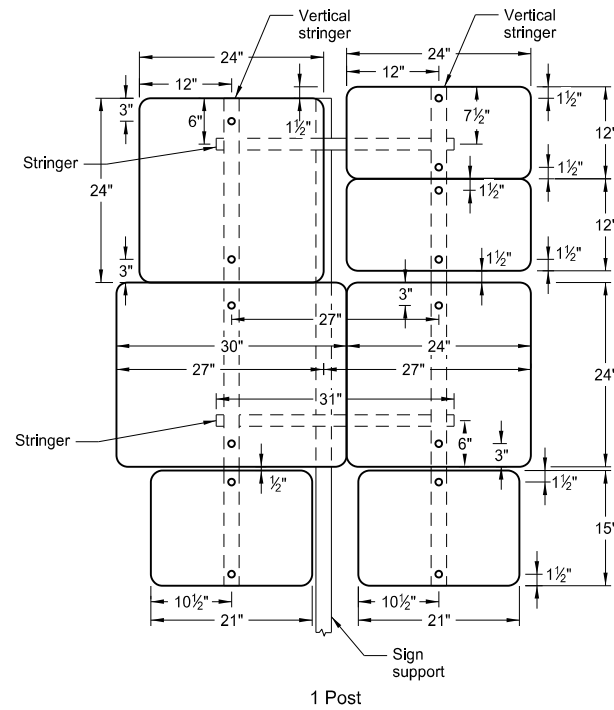
ASSEMBLY NO. 432

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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DATE	CHANGE

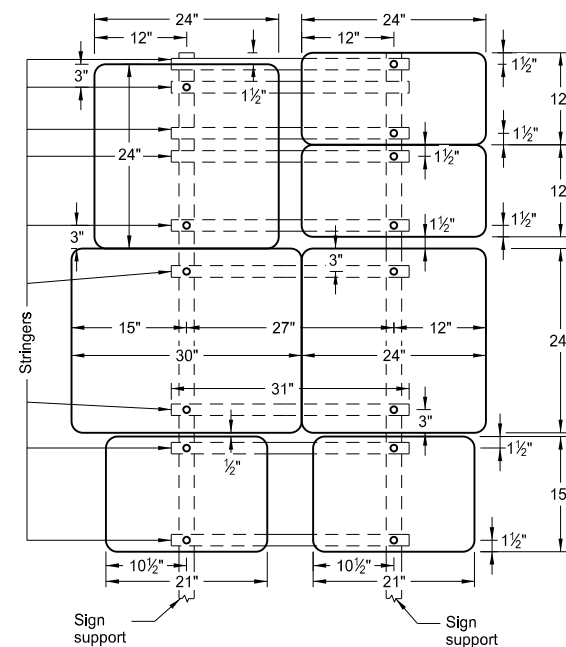
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

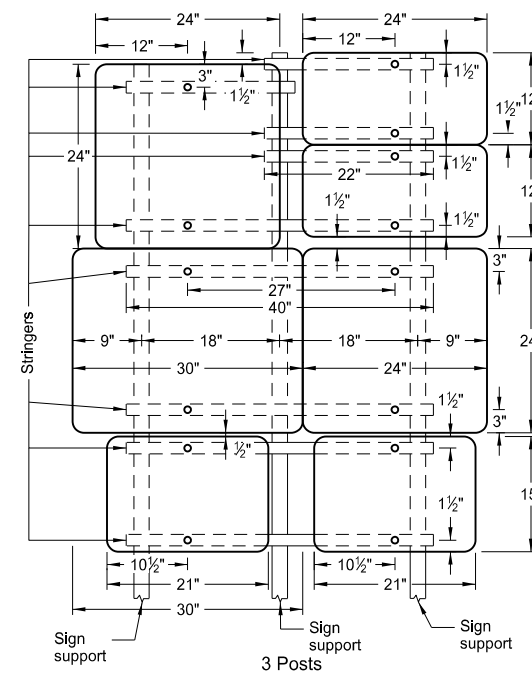
D-754-73



1 Post



2 Posts

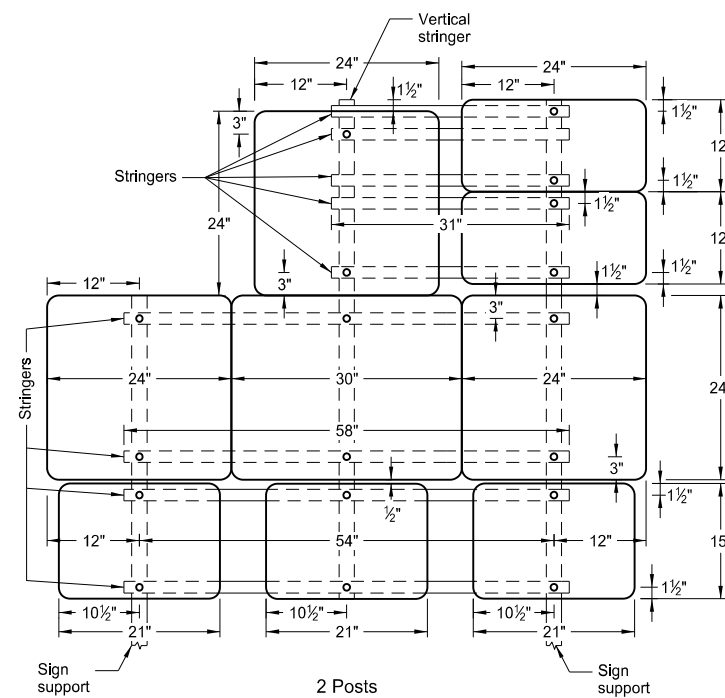


3 Posts

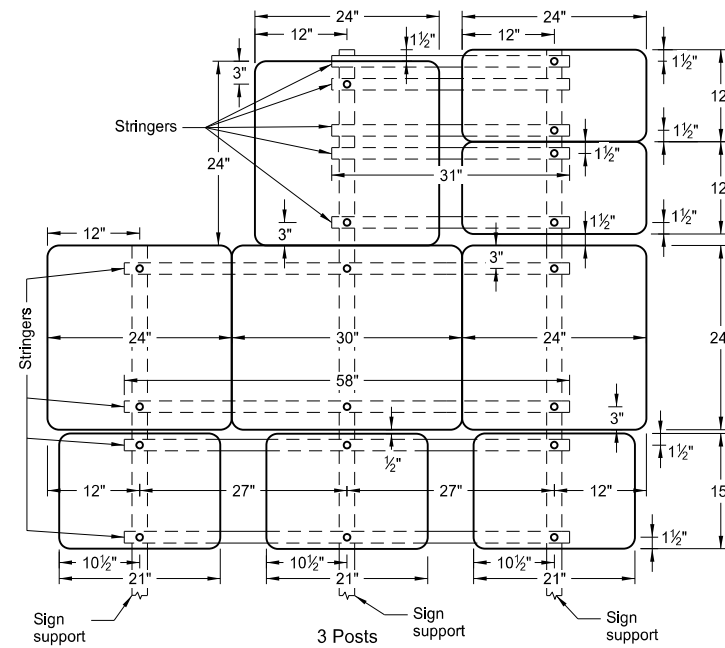
ASSEMBLY NO. 433

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1 1/2"x1 1/2".
3. All holes shall be punched round for 3/8" bolt.



2 Posts



3 Posts

ASSEMBLY NO. 434

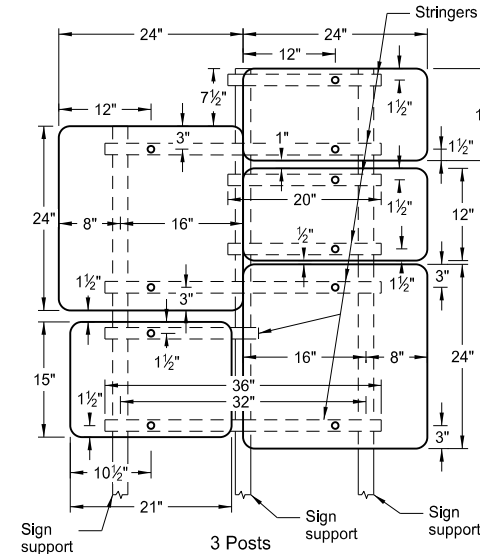
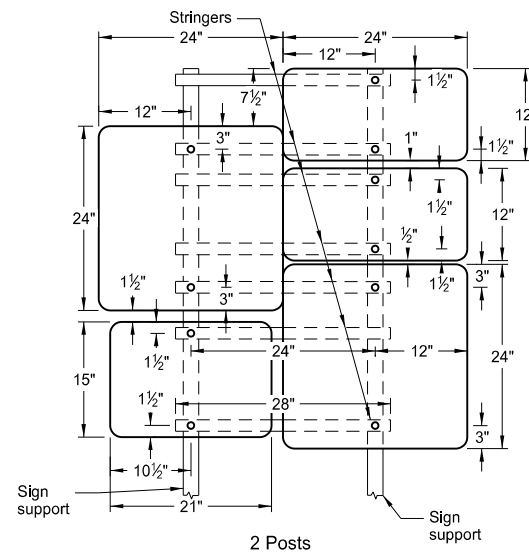
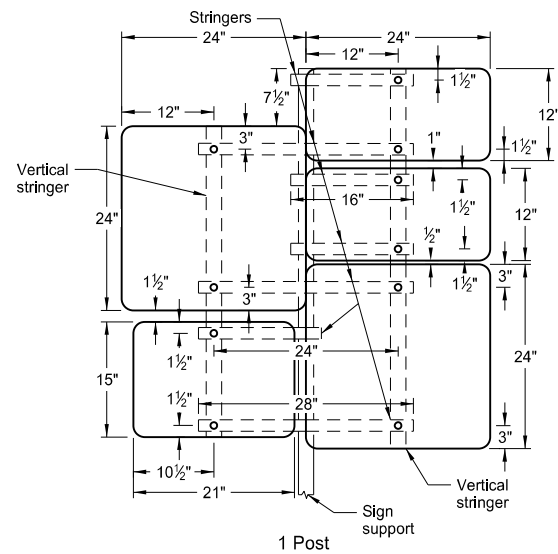
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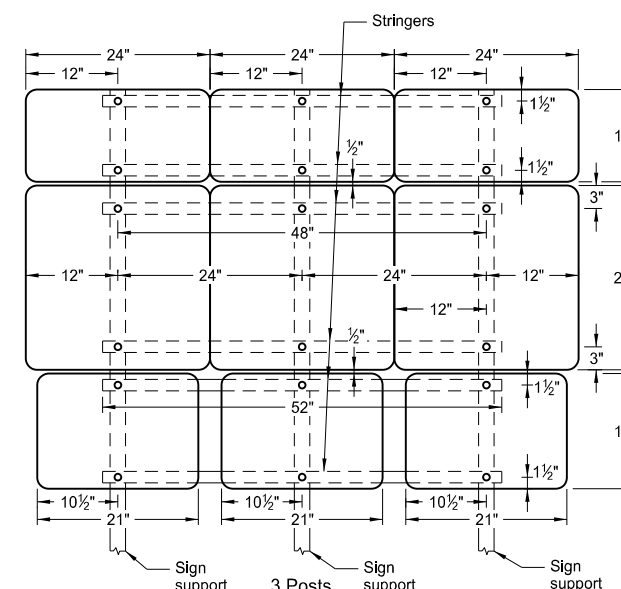
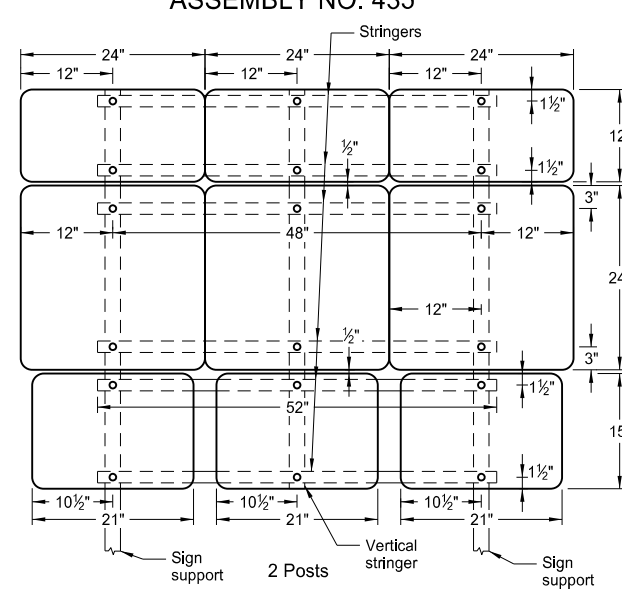
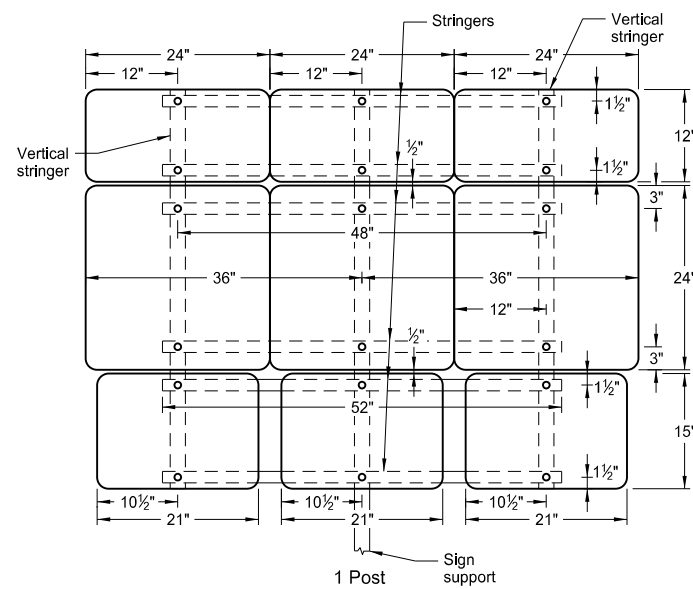
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS - ROUTE MARKER SIGNS

D-754-74

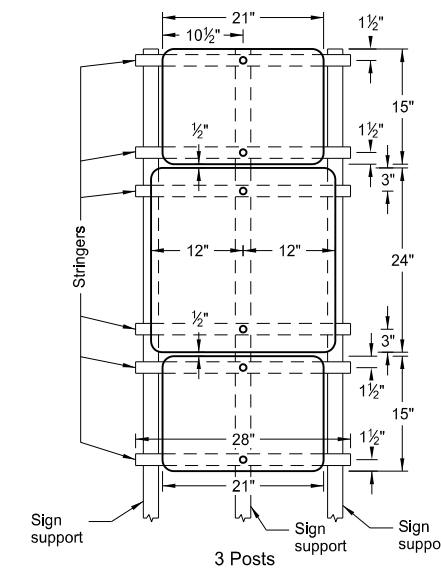
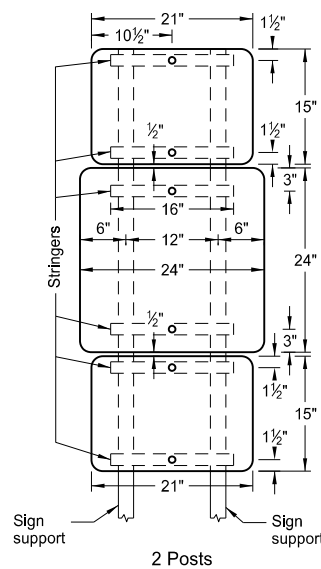
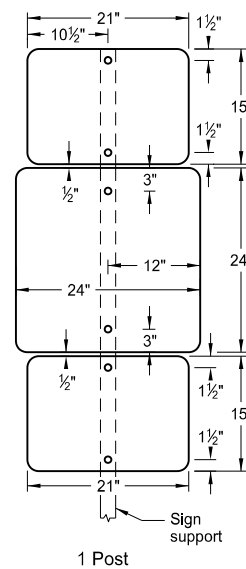
- Notes:
1. The minimum sign backing material thickness shall be 0.100 inch.
 2. Perforated square tube stringer shall be 1½"x1½".
 3. All holes shall be punched round for ⅜" bolt.



ASSEMBLY NO. 435



ASSEMBLY NO. 436



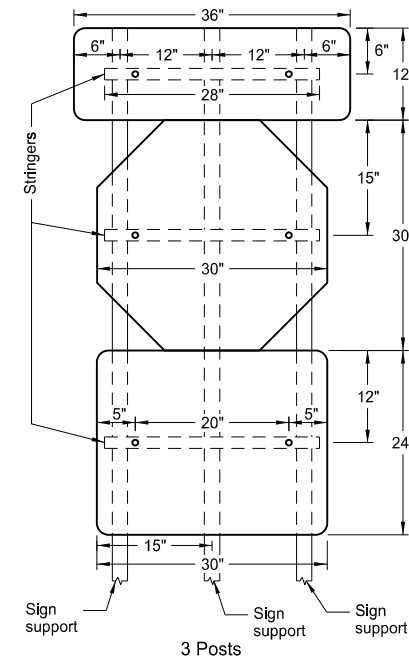
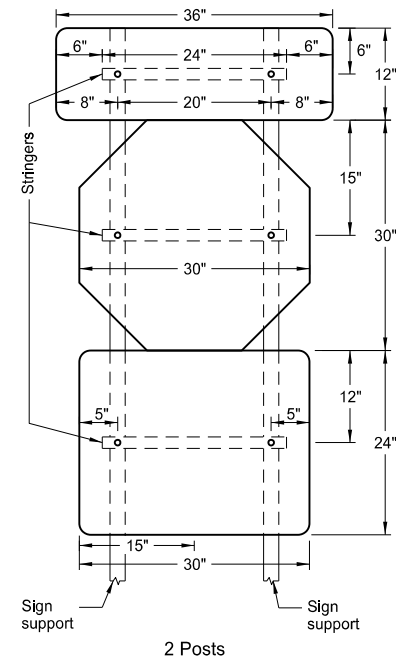
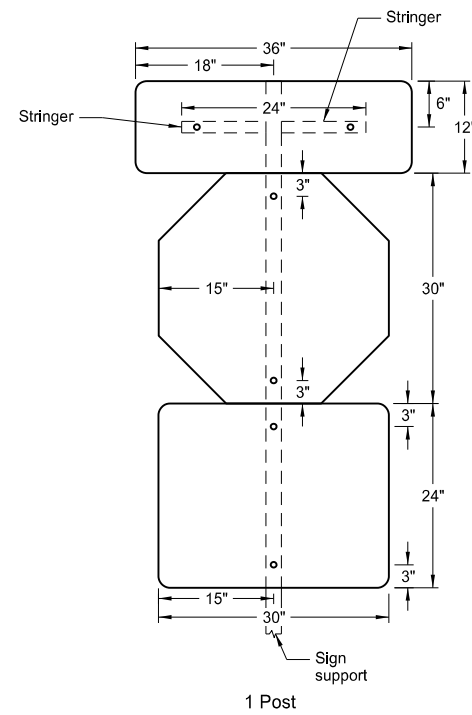
ASSEMBLY NO. 437

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
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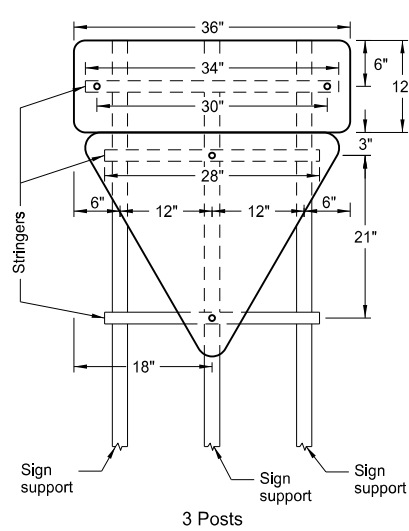
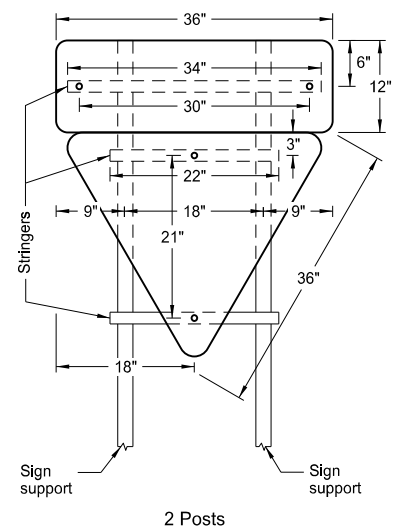
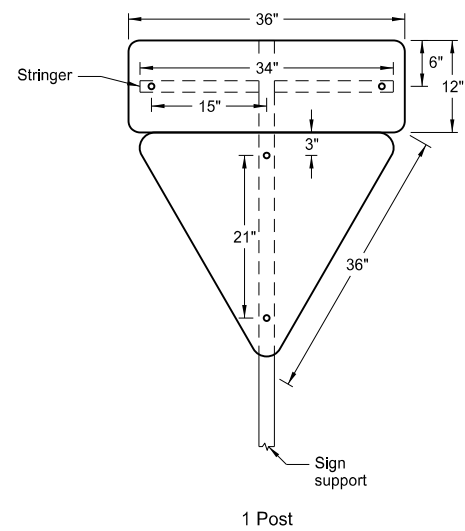
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS -
DIVIDED HIGHWAY CONTROL SIGNS

D-754-77



ASSEMBLY NO. 445 & 449



ASSEMBLY NO. 446 & 450

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.
4. Assemblies 445 and 446 have single one way signs. Assemblies 449 and 450 have back to back one way signs.

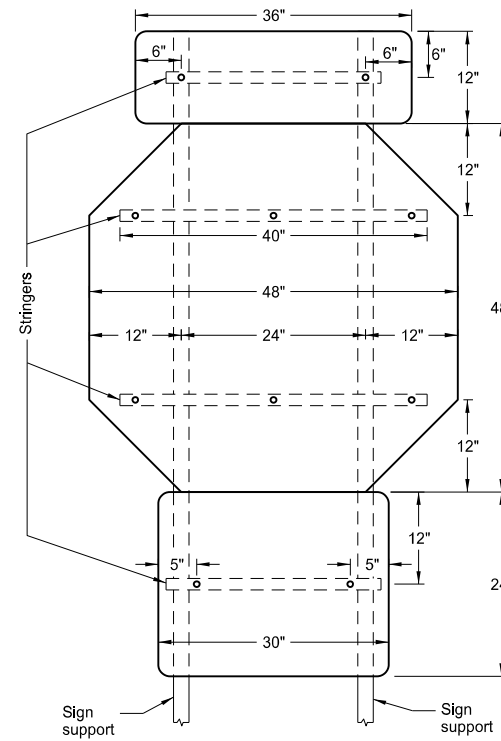
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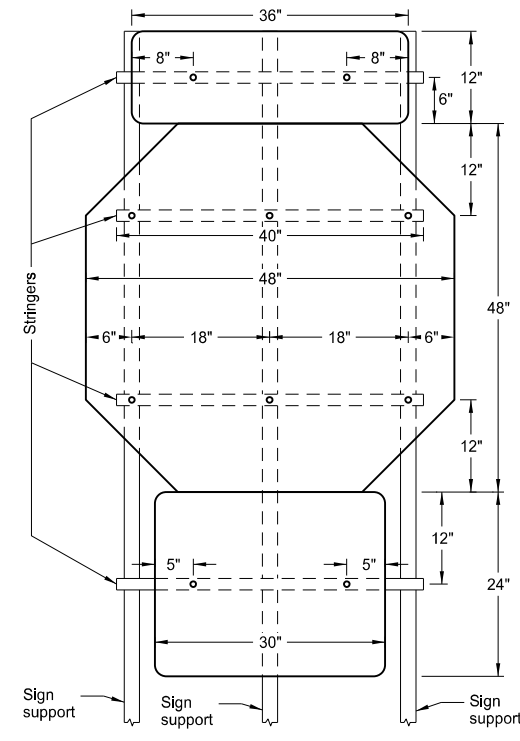
SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS -
DIVIDED HIGHWAY CONTROL SIGNS

Notes:

1. The minimum sign backing material thickness shall be 0.100 inch.
2. Perforated square tube stringer shall be 1½"x1½".
3. All holes shall be punched round for ⅜" bolt.
4. Assemblies 447 and 448 have single one way signs.
Assemblies 451 and 452 have back to back one way signs.

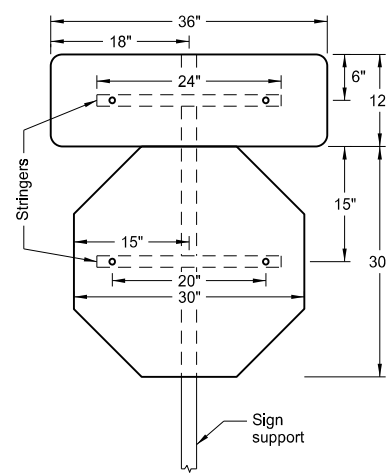


2 Posts

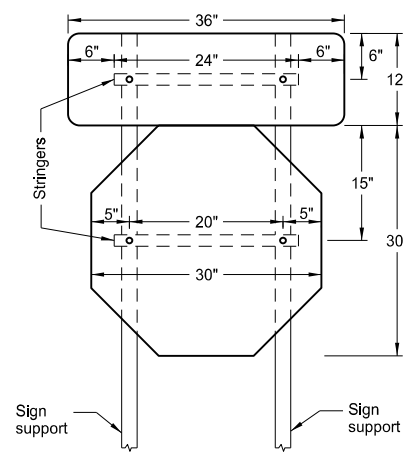


3 Posts

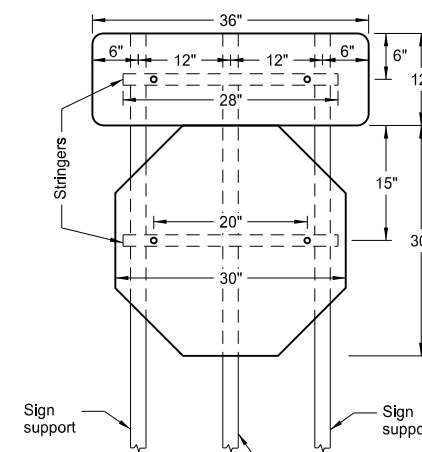
ASSEMBLY NO. 447 & 451



1 Post



2 Posts



3 Posts

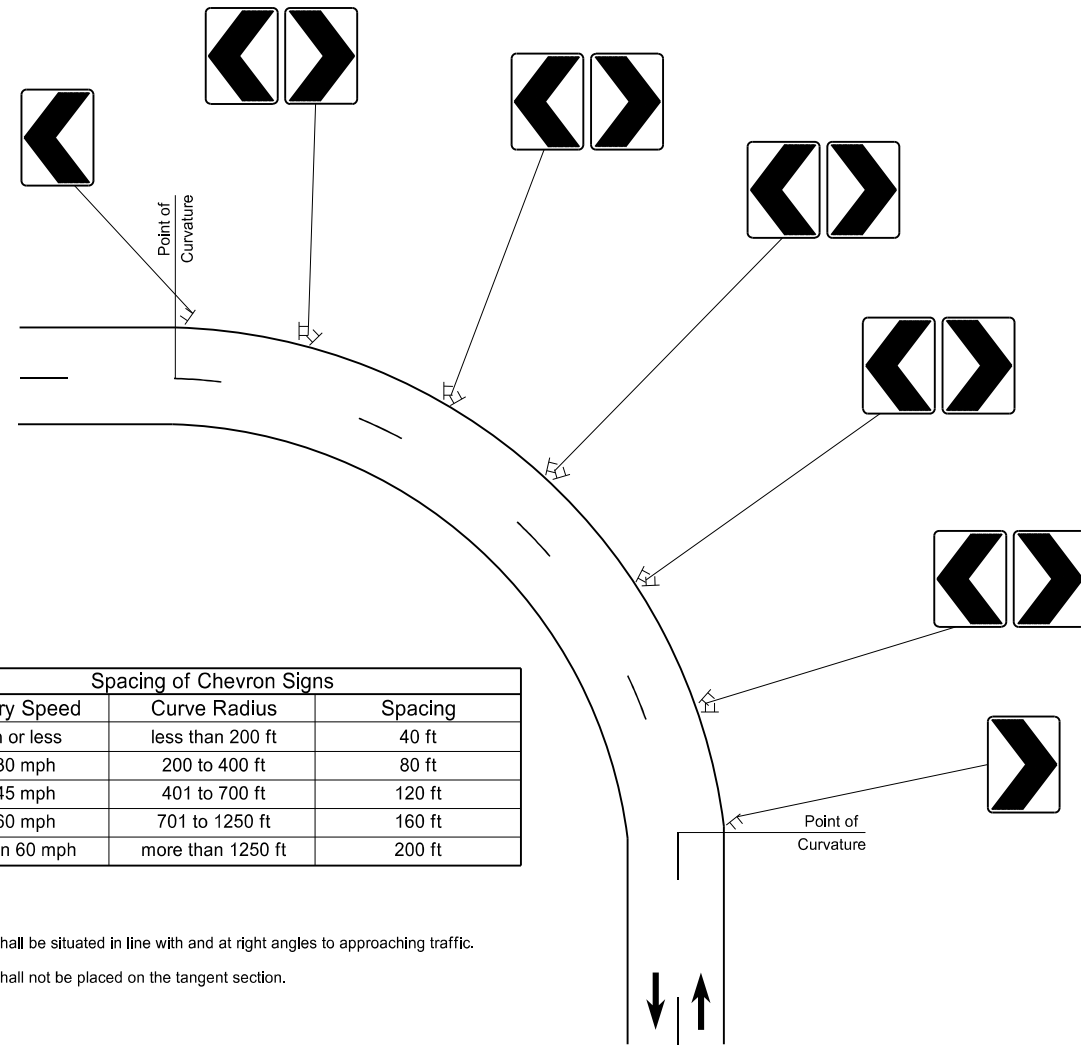
ASSEMBLY NO. 448 & 452

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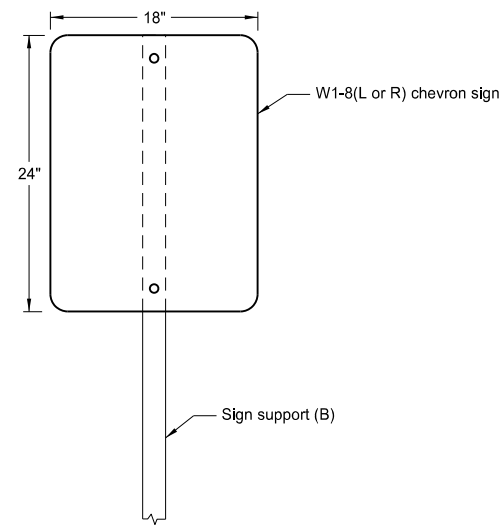
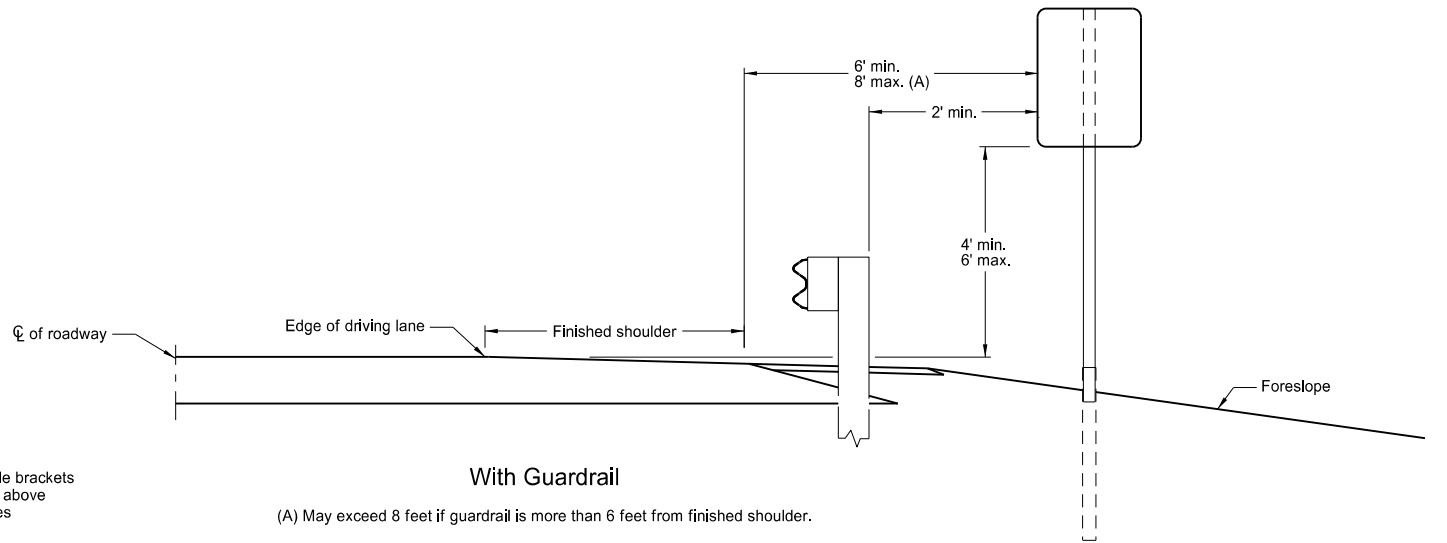
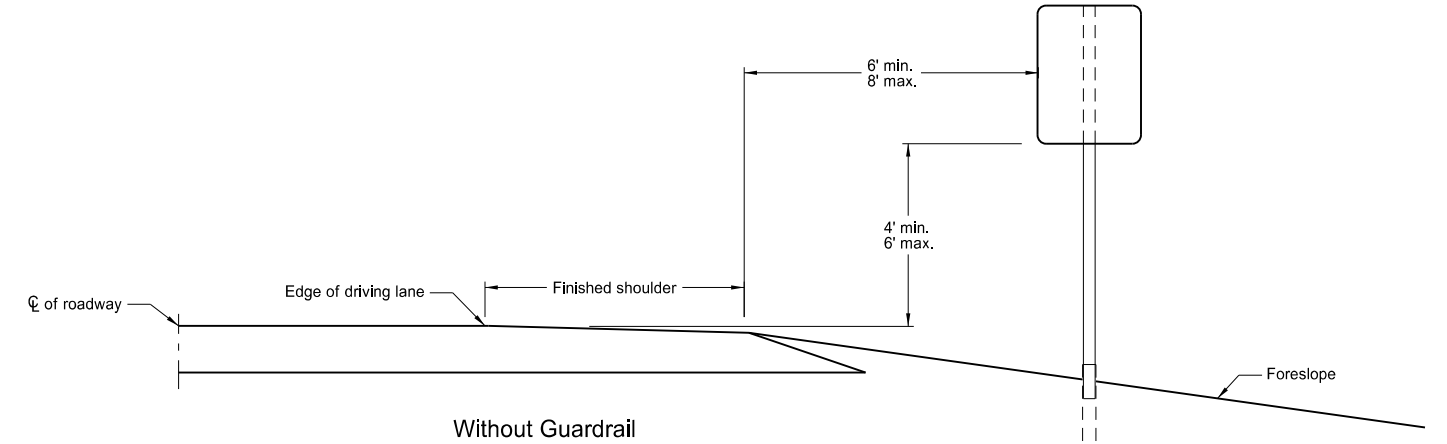
CHEVRON INSTALLATION DETAILS

D-754-79

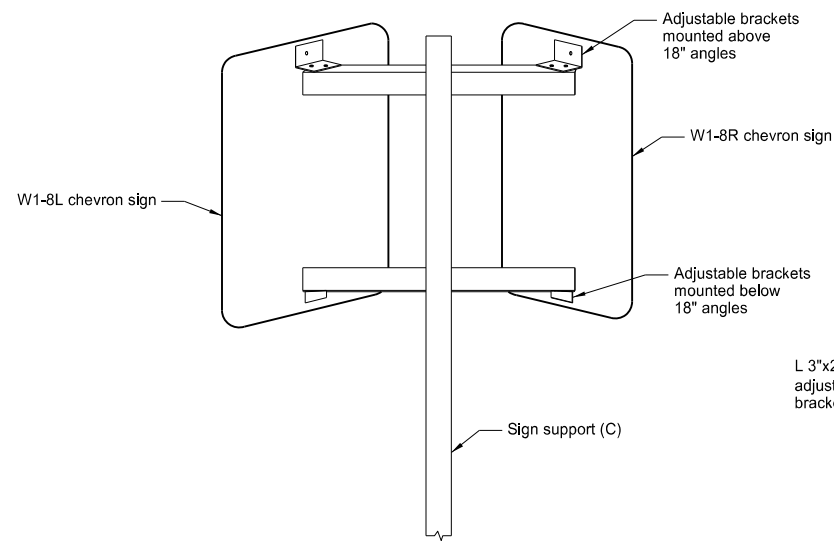


Spacing of Chevron Signs		
Advisory Speed	Curve Radius	Spacing
15 mph or less	less than 200 ft	40 ft
20 to 30 mph	200 to 400 ft	80 ft
35 to 45 mph	401 to 700 ft	120 ft
50 to 60 mph	701 to 1250 ft	160 ft
more than 60 mph	more than 1250 ft	200 ft

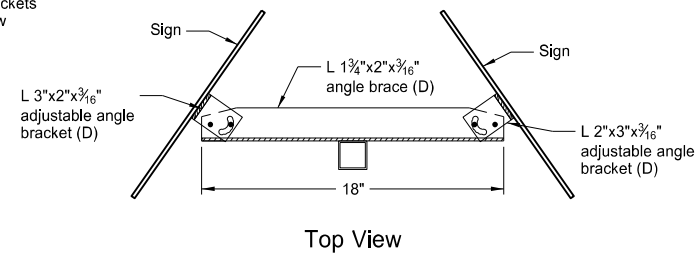
- Notes:
1. Chevrons shall be situated in line with and at right angles to approaching traffic.
 2. Chevrons shall not be placed on the tangent section.



Chevron Single Sign Assembly
 (B) Single sign support shall be 2x2x12ga. perforated tube
 Anchor unit shall be 2.25x2.25x12ga. perforated tube



Chevron Double Sign Assembly
 (C) Double sign support shall be 2.25x2.25x12ga. perforated tube
 Anchor unit shall be 2.5x2.5x12ga. perforated tube

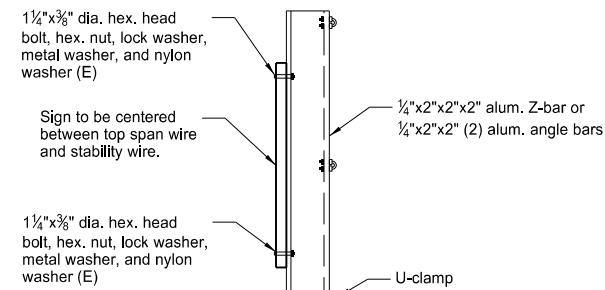
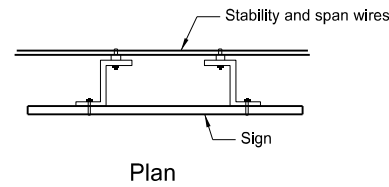
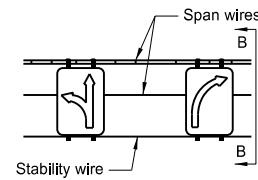


(D) All angles shown shall be aluminum or steel. The sizes are the minimum allowed, larger sizes may be used if approved by the Engineer.

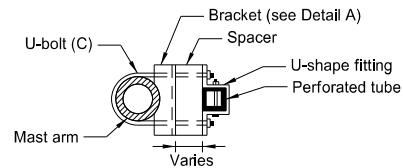
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10-10-13	
REVISIONS	
DATE	CHANGE

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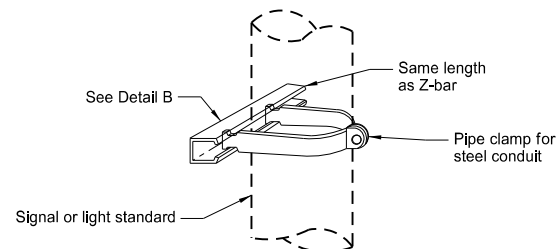
LIGHT STANDARD, SIGNAL STANDARD,
AND SPAN WIRE MOUNTED SIGN
ASSEMBLY DETAIL



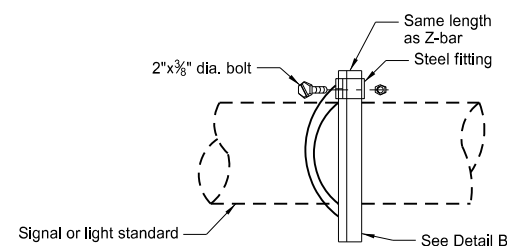
Section B-B
Span Wire Mounted Sign Detail



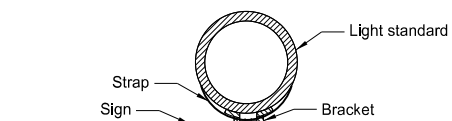
Section A-A



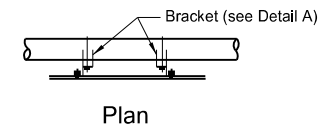
Vertical Mounting
(2 clamps required per sign)



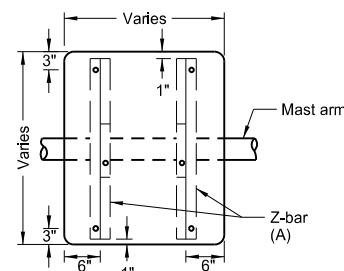
Horizontal Mounting
alternate clamp mounting
(2 clamps required per sign)



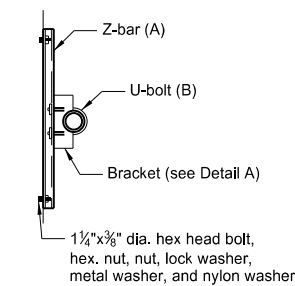
Light Standard Mounted Sign Bracket Detail
Max. 24"x30" signs (D)



Plan

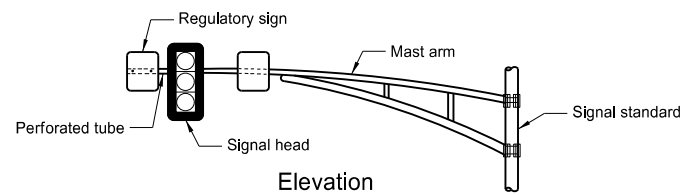


Elevation

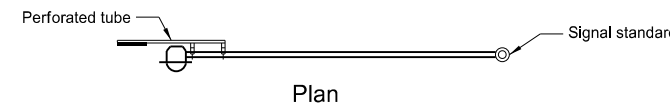


Side View

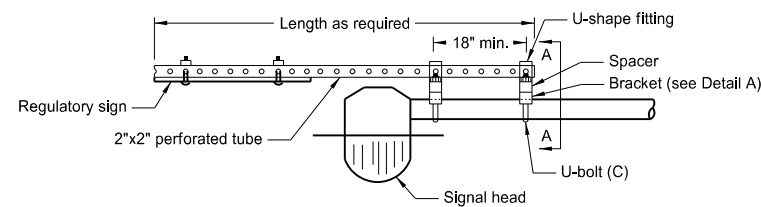
Mast Arm Mounted Regulatory Sign Detail



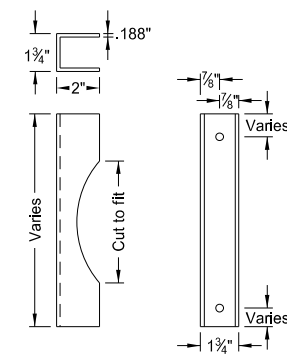
Elevation



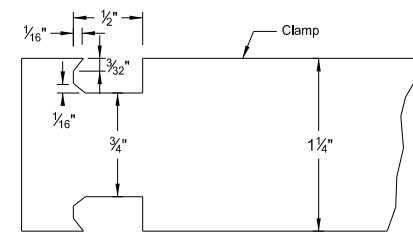
Plan



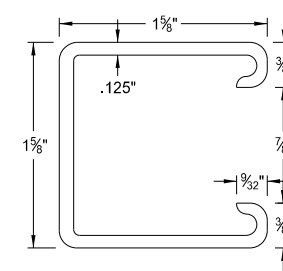
Sign Mounted Beyond End of Mast Arm Detail



Detail A



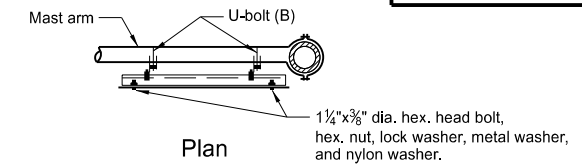
Clamp Detail



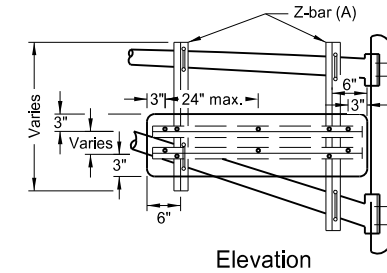
Detail B
Steel Channel

Post Size dia.	Clamp Gauge min.
3 1/2" to 5"	11
6" to 12"	10

Clamp	
Post Size dia. in.	D in.
3 1/2	3
4	3 3/16
5	5 1/8
6	7 7/16
8	13 1/16
10	20 3/4
12	29 5/8

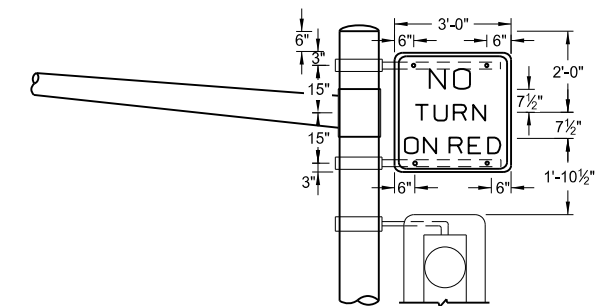


Plan



Elevation

Mast Arm Mounted Street Name Sign Detail



Signal Standard Mounted Sign Attachment Detail

Notes:

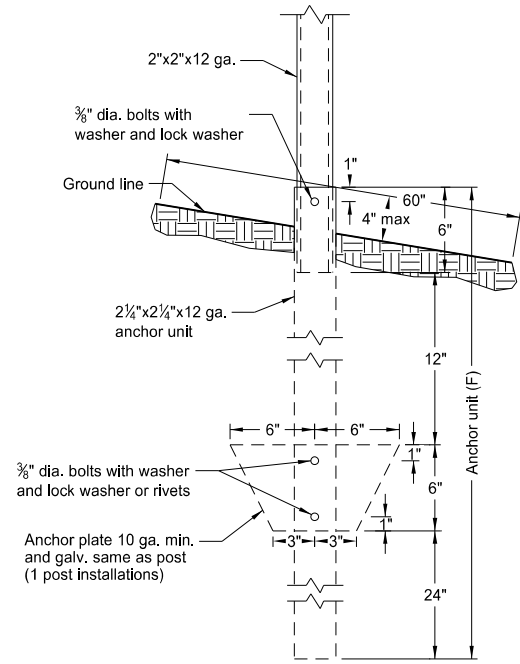
- (A) Z-bar - Use 1 1/4"x3/16" thick 1.08 lb/ft aluminum alloy. In place of Z-bar, two angles bolted together may be used or a channel. 1 1/4"x1 1/4"x3/16" angles or 1 1/4"x2"x.188" channels.
- (B) 3/8" U-bolt, hex. nut, lock washer, and length depends on dia. of mast arm.
- (C) 3/8" U-bolt, hex. nut, lock washer, and length depends on dia. of mast arm.
2"x2" maximum support length 9.9'
2 1/4"x2 1/4" maximum support length 12.6'
2 1/2"x2 1/2" maximum support length 15.7'
- (D) Bracket shall be of galv. steel consisting of strap and sign attachment bracket similar to the one shown in the detail. The cost of the bracket assembly is to be included in the price bid for flat sheet signs. Punching shall be as shown on the Standard Drawings. There shall be a 7" vertical clearance to the bottom of all signs mounted on light standards.
- (E) Metal washers and nylon washers used on sign face shall have a minimum outside dia. of 1 5/16" ± 1/16" and 10 gauge thickness.

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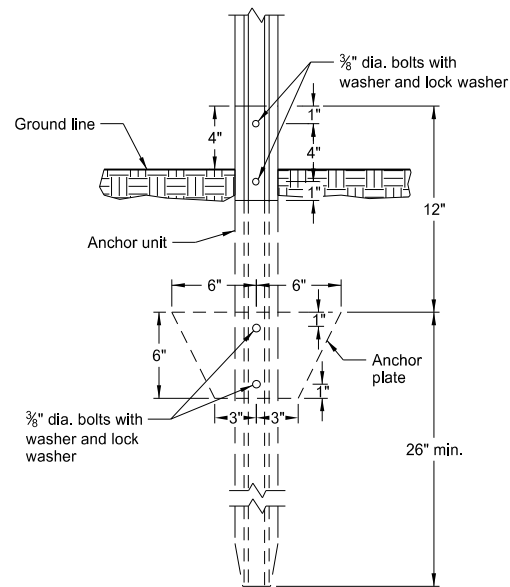
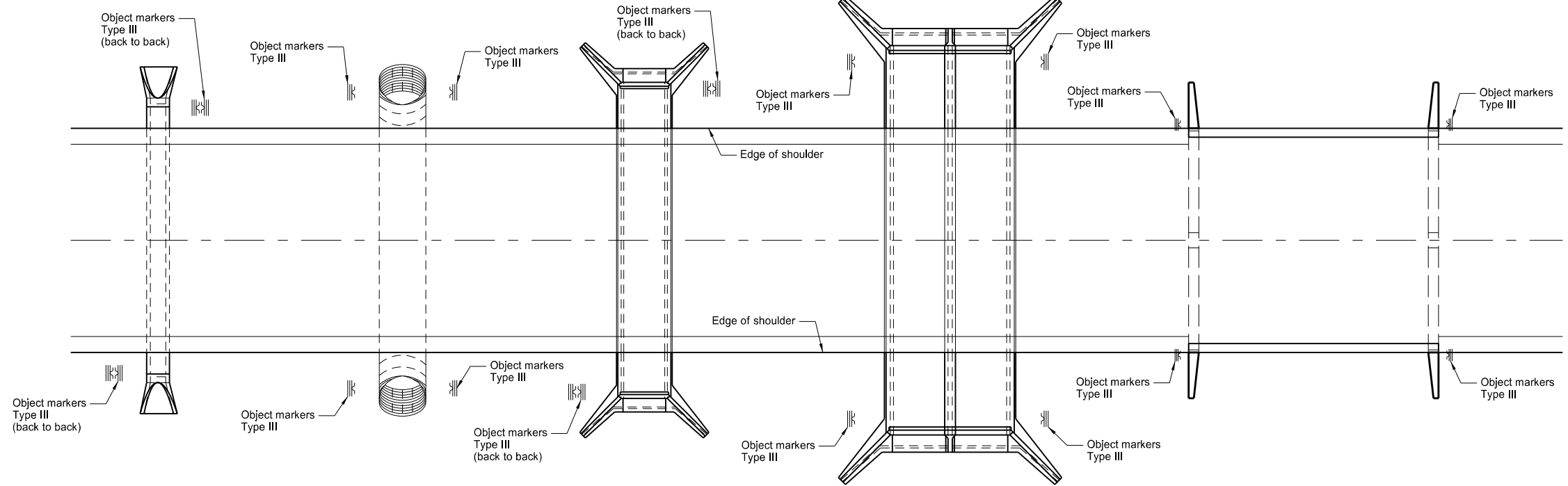
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OBJECT MARKERS

D-754-82



Perforated Tube Anchor Unit Assembly



U-Channel Anchor Unit Assembly

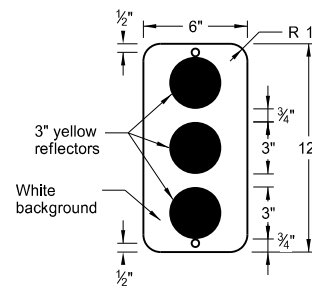
Pipe Culverts 10' max

Pipe Culverts greater than 10'

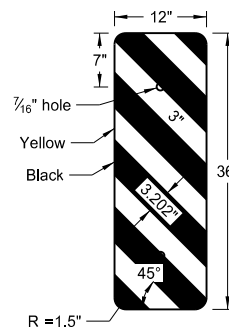
Box Culverts 10' max

Box Culverts greater than 10'

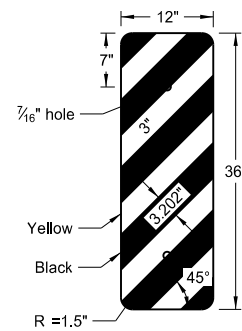
Bridges (B)



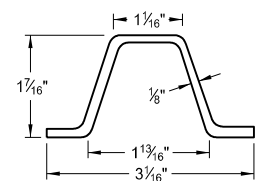
Object Marker OM2-1V (C) Type II



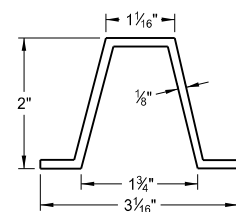
Object Marker Left OM-3L (C) Type III



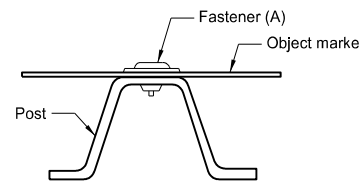
Object Marker Right OM-3R (C) Type III



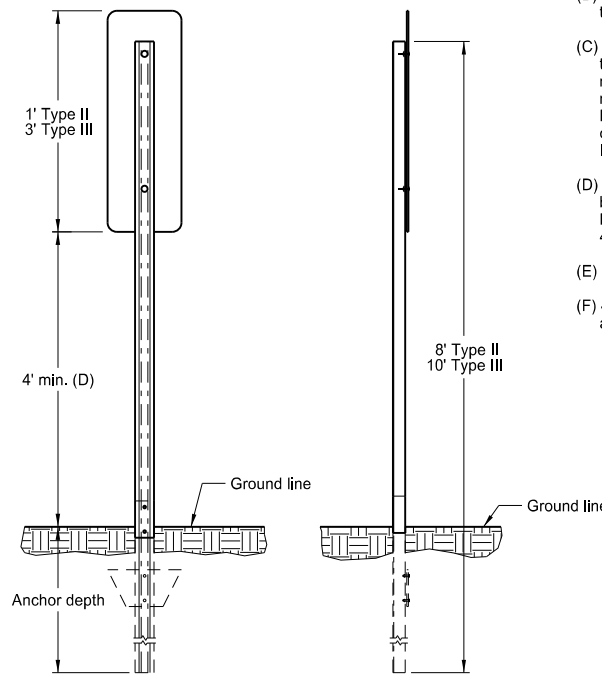
Steel Post Detail (E)
 Approx. 2 lb/ft



Aluminum Post Detail (E)
 Approx. 0.88 lb/ft



Fastener Detail



Object Marker Installation Detail

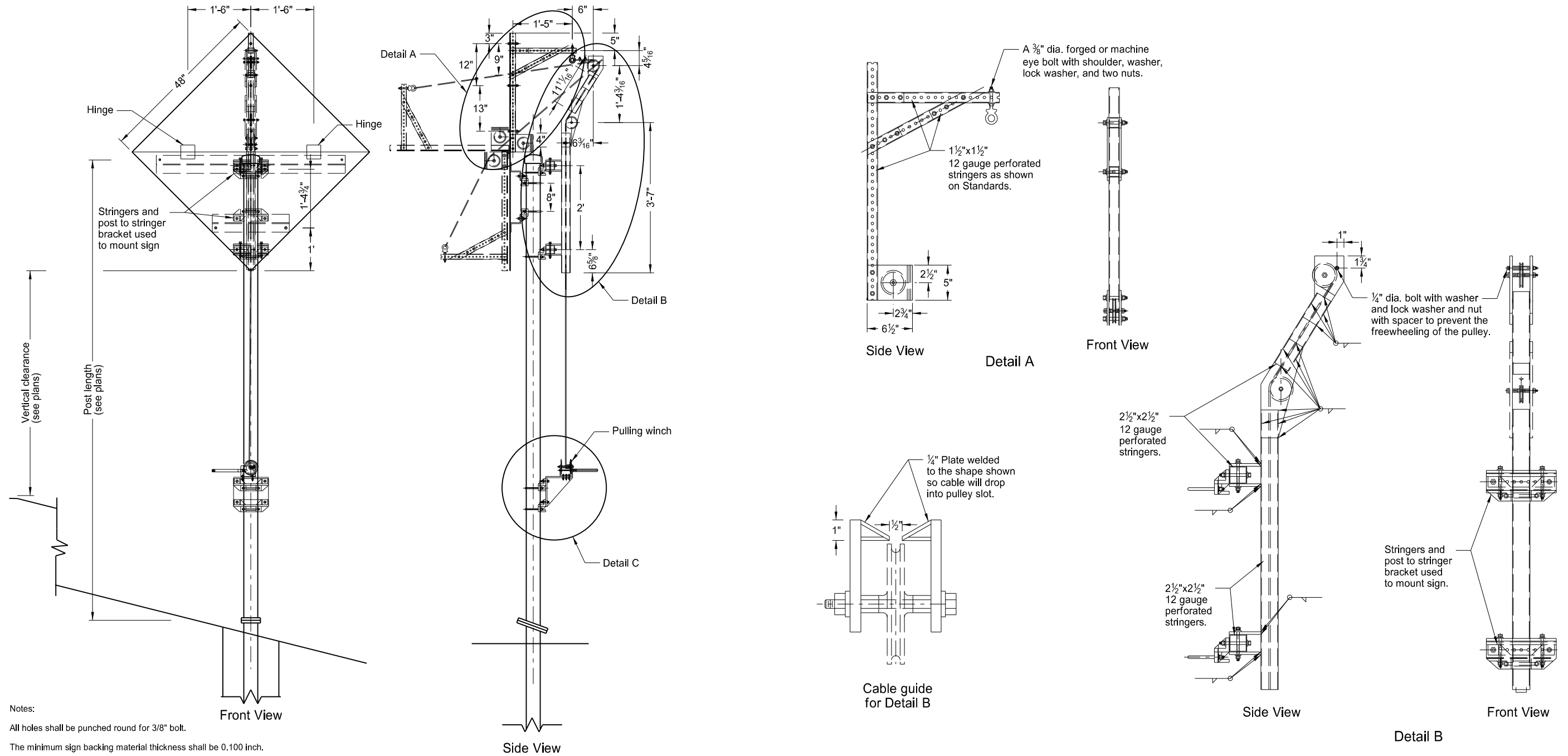
Notes:

- (A) The fastener shall be 3/8" dia. with flat washer having a min. outside dia. of 1 1/16". Fasteners shall be tension pin type or other non-rust vandal resistant fastener.
- (B) Object markers are not required if approach guardrail is installed with reflectors and end terminal with impact head object markers.
- (C) Back to back mountings require two object markers. The 3" yellow reflector shall conform to the requirements of Section 894.06 B.2 of the Standard Specifications. Object markers to be mounted vertically on steel posts in front of the bridge railing on each side of highway to mark the horizontal clearance on all bridges where the distance between wheel guards is less than approach width. All sign backing material shall be .100" sheet aluminum. Type III object markers shall be ASTM Type XI sheeting. Type II object markers shall be ASTM Type IV background sheeting with ASTM Type XI reflectors.
- (D) When an object marker is located 8' or less from shoulder or curb, vertical clearance shall be a minimum of 4' from the near edge of the traveled way to the bottom of the sign. If located more than 8' from the shoulder or curb the vertical clearance shall be a minimum of 4' from the ground to the bottom of the sign.
- (E) Posts shall conform to Section 894.03 B of the Standard Specifications.
- (F) 4" vertical clearance of anchor or breakaway base. The 4"x60" measurement shall be made above and below post location and back and ahead of post.

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7-18-14	Revised Note C

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PULLEY WINCH SIGN COVER FOR WARNING SIGNS



Notes:

All holes shall be punched round for 3/8" bolt.

The minimum sign backing material thickness shall be 0.100 inch.

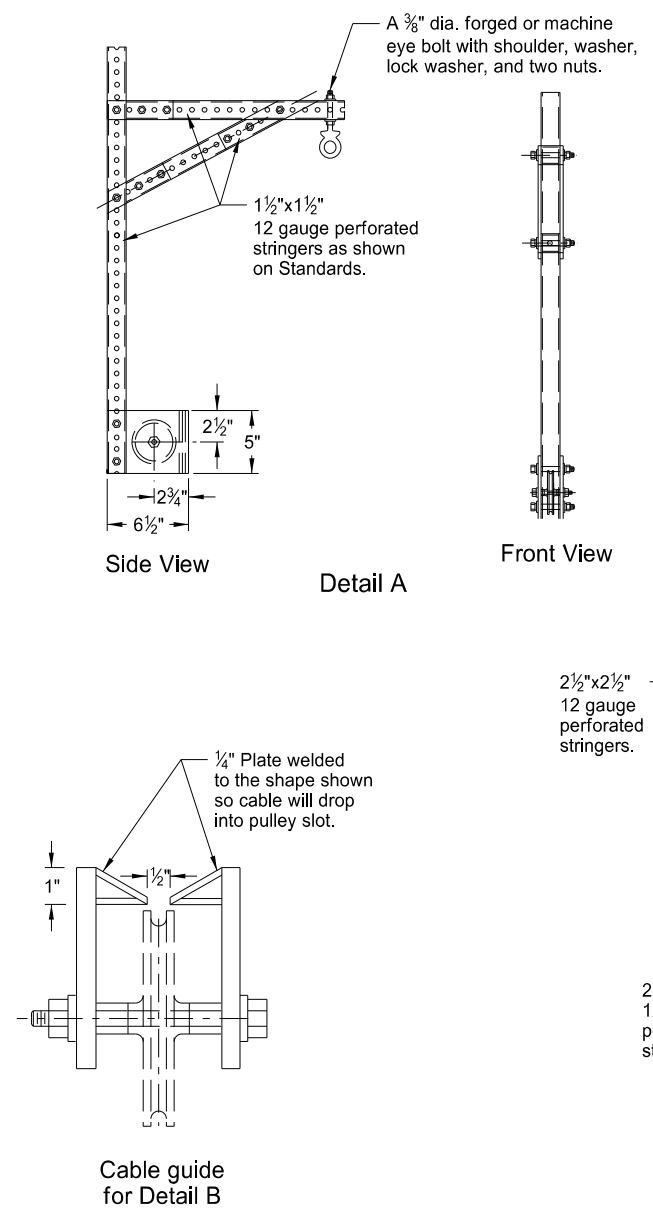
Pulling Winch shall be built for pulling operations with a self locking mechanism. The winch and cable attachment shall comply with SAE Standard J1853 and be mounted using three 3/8" diameter bolts, washers and lock washers.

Gears shall be laminated, high carbon steel. Gears shall be arc welded and drive gears shall be copper brazed. Reel shall be rigid welded construction for added strength. The reel shall be free wheeling when the ratchet is disengaged. Gear ratio shall be matched for easy cranking. Finish shall be zinc plated. Handle shall be heavy duty steel with molded grips. Base shall be embossed reinforced steel. All drive shafts shall have permanently lubricated bearings. A cable clamp shall be included. Pulling winch shall have the large hub for use with the cable operation.

Hinges shall be stainless steel, 4" wide x 2" deep x 1/8" thick with 4-3/16" Dia [#10-24] x 5/8" long slotted countersunk flat head stainless steel stove bolts/machine screws with stainless steel locking nuts to attach to the extruded panels. Centerline of the hinge pin shall be placed with offset letters so the sign will hang down vertically.

Attachment hardware for the pulling winch and pulleys shall be 3/8" thick steel plate conforming to AASHTO M270 Grade 36 and galvanized in conformance with ASTM A153. Pulleys shall be approximately 3" in diameter plus a 5/16" diameter for the cable ride. Pulleys shall have spacers between the hub and the attachment brackets so they will ride in the center of the brackets without moving back and forth. Bolts, nuts and washers shall be fabricated of steel meeting ASTM A307 and galvanized in conformance with ASTM A153.

Cable shall be a double galvanized 7 strand steel wire cable not less than 3/16" in diameter meeting ASTM A475.

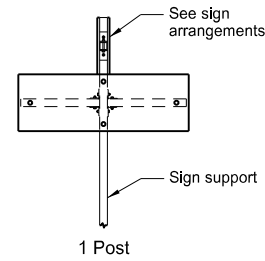


NORTH DAKOTA	
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02-26-14	
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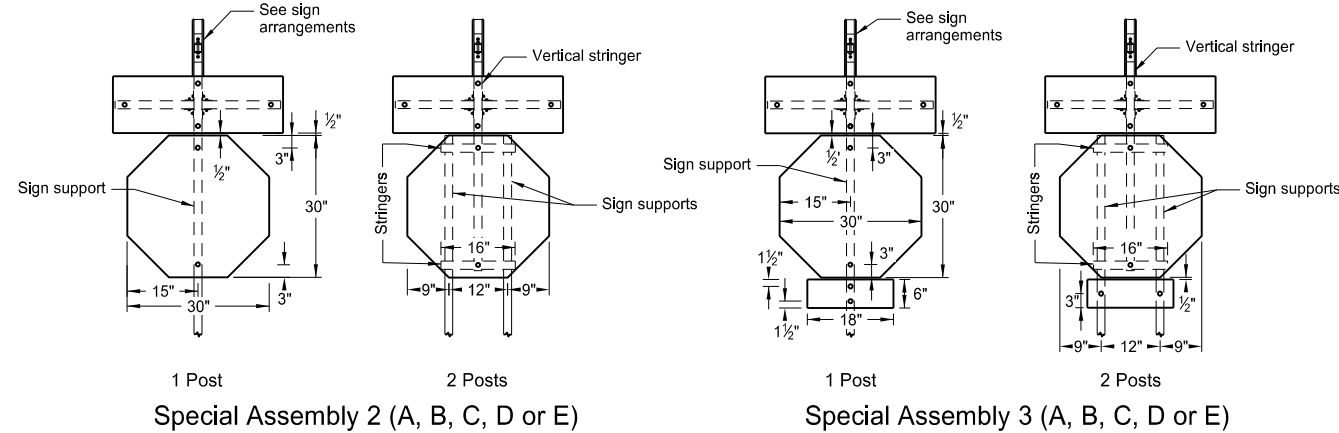
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SIGN PUNCHING, STRINGER AND SUPPORT LOCATION DETAILS FOR STREET NAME SIGNS AND 911 SIGNS

- A - Single sign
- B - Single sign back to back
- C - Single sign each direction
- D - Single sign one direction, back to back other direction
- E - Back to back both directions

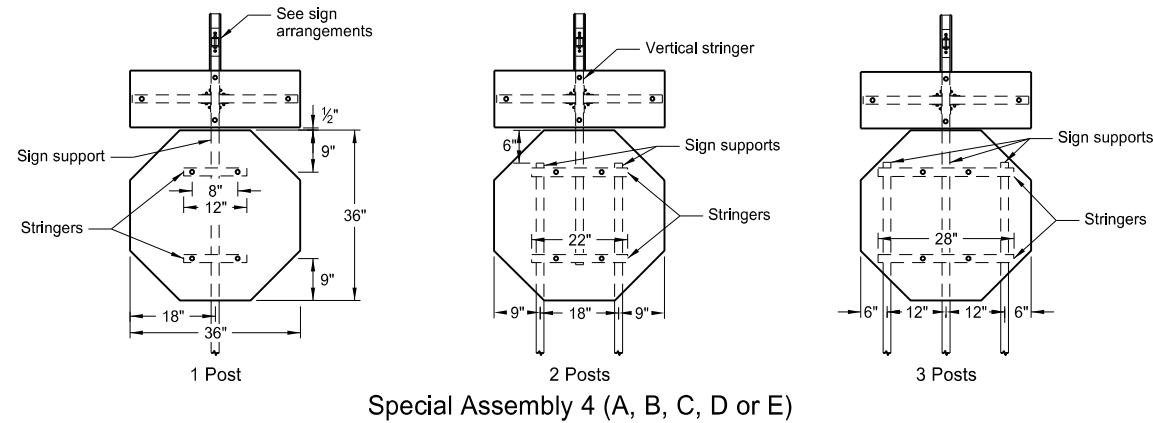


Special Assembly 1 (A, B, C, D or E)

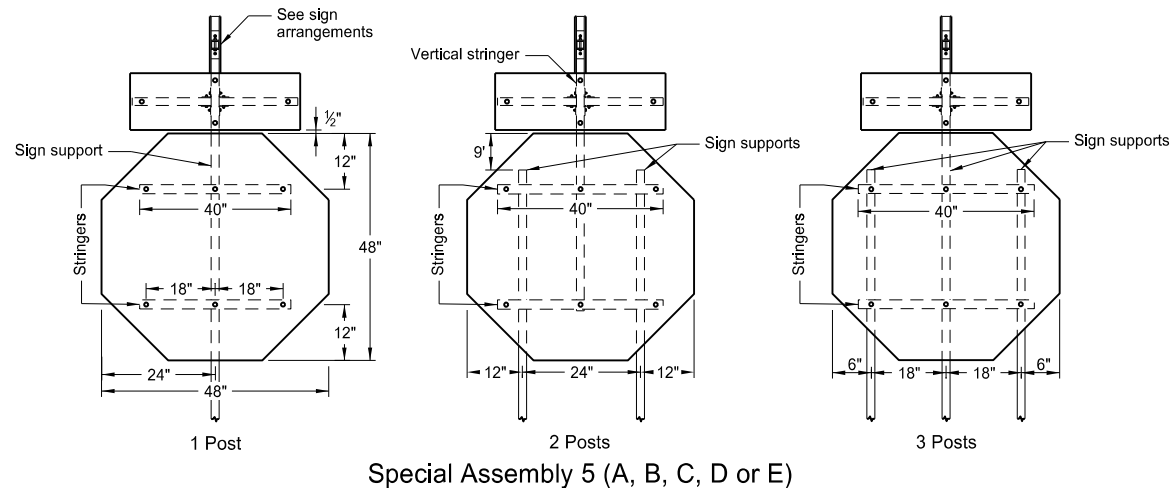


Special Assembly 2 (A, B, C, D or E)

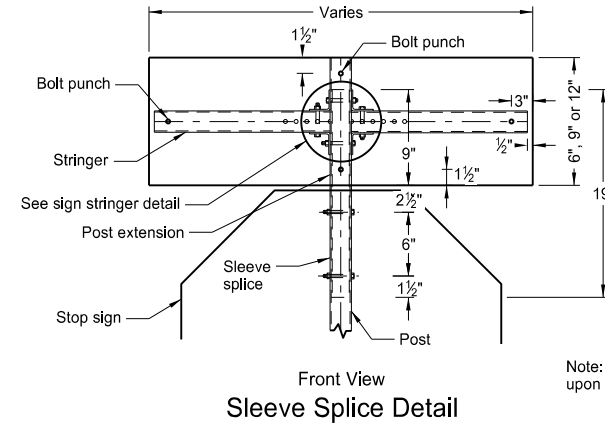
Special Assembly 3 (A, B, C, D or E)



Special Assembly 4 (A, B, C, D or E)

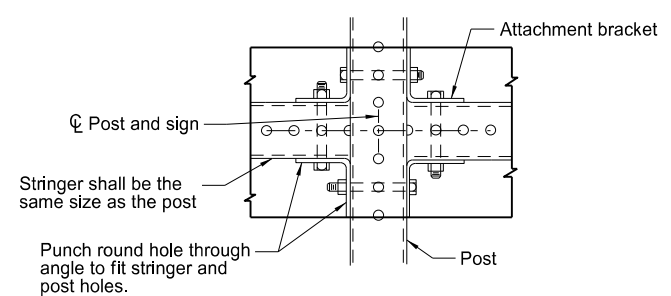


Special Assembly 5 (A, B, C, D or E)



Sleeve Splice Detail

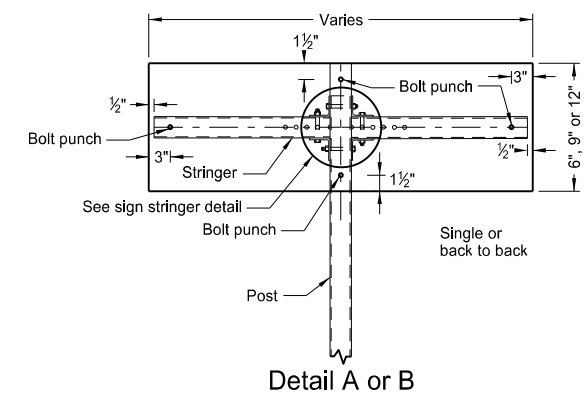
Note: The splice method may be used upon approval of the engineer.



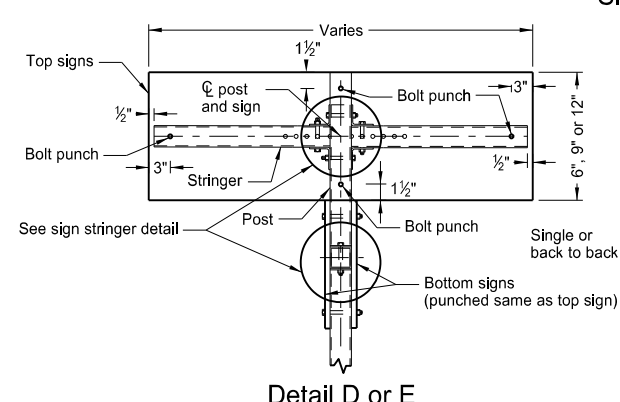
Sign Stringer Detail

Stringer shall be the same size as the post

Punch round hole through angle to fit stringer and post holes.

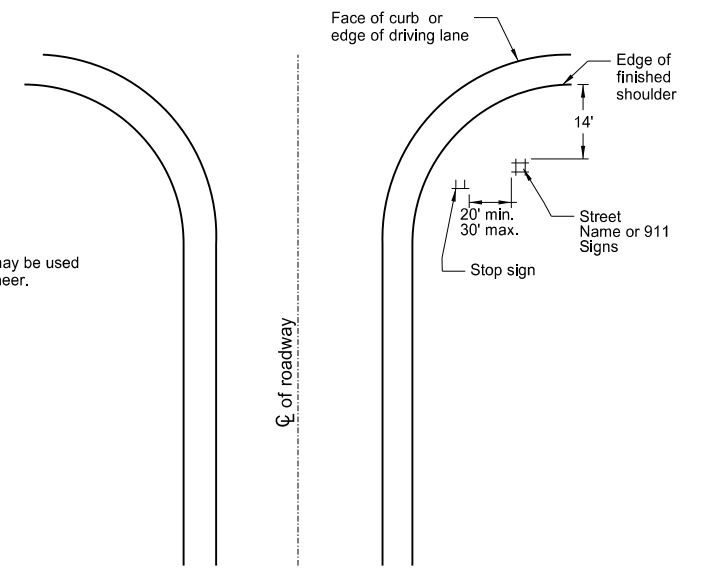


Detail A or B



Detail D or E

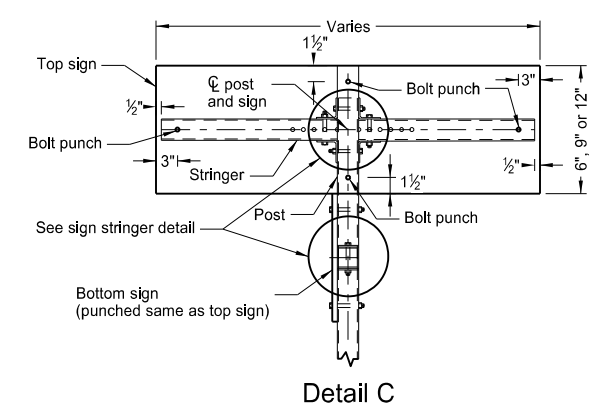
Note: See Standard Drawing D-754-86 for 911 support information and sign layout details.



Intersection Layout

Note: This layout is to be used for street name signs or 911 signs that are used with Special Assembly 1.

Sign Arrangements

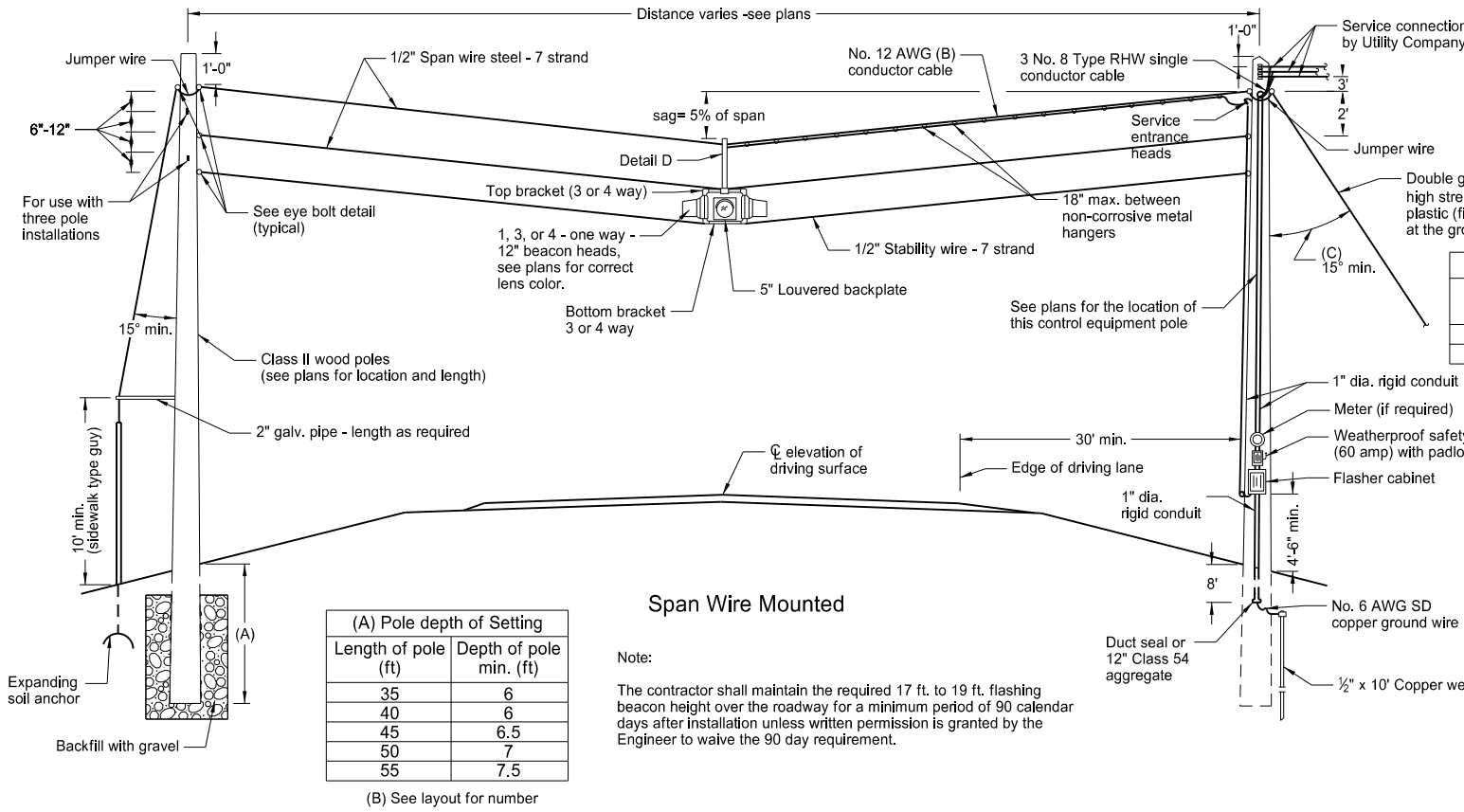
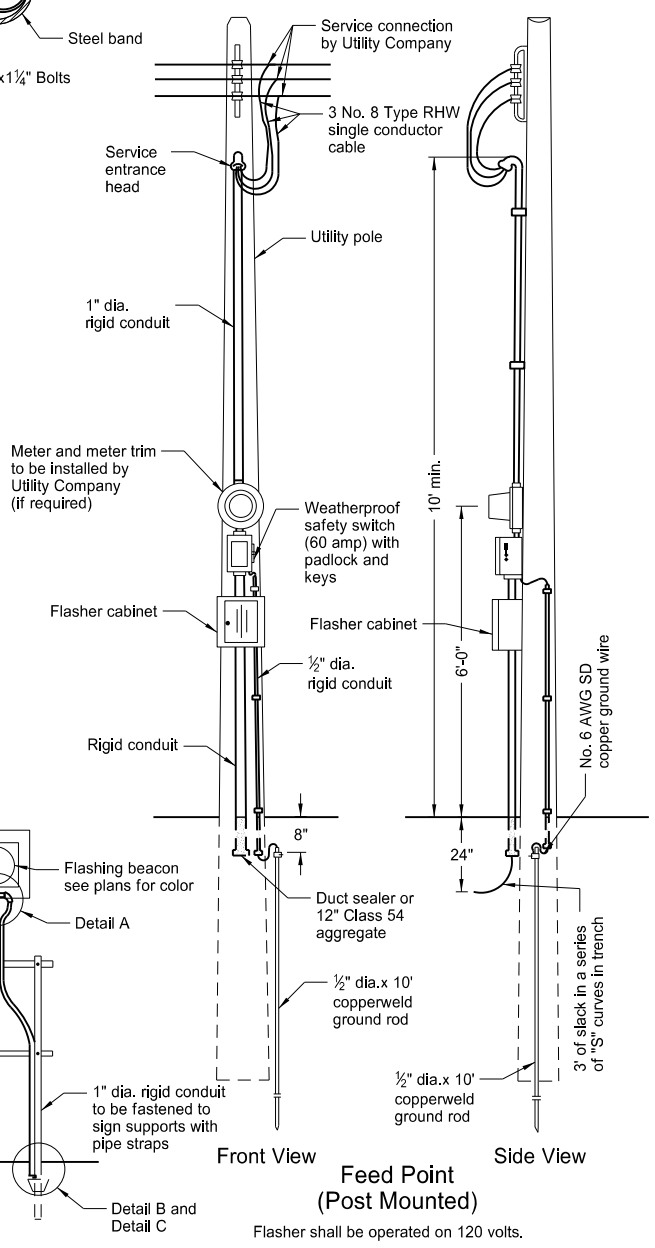
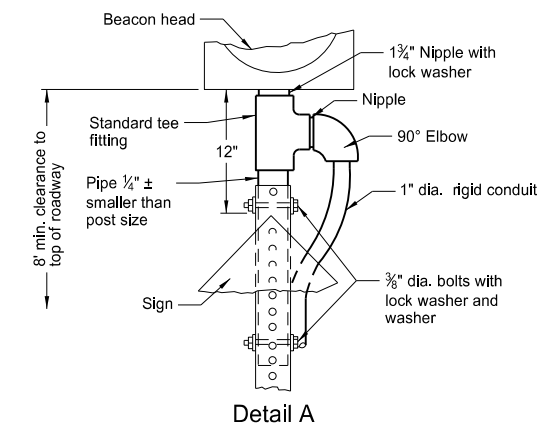
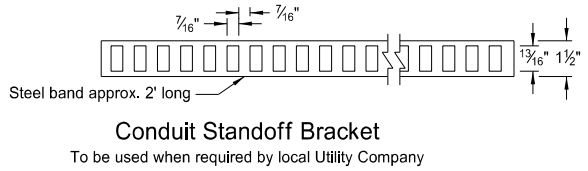
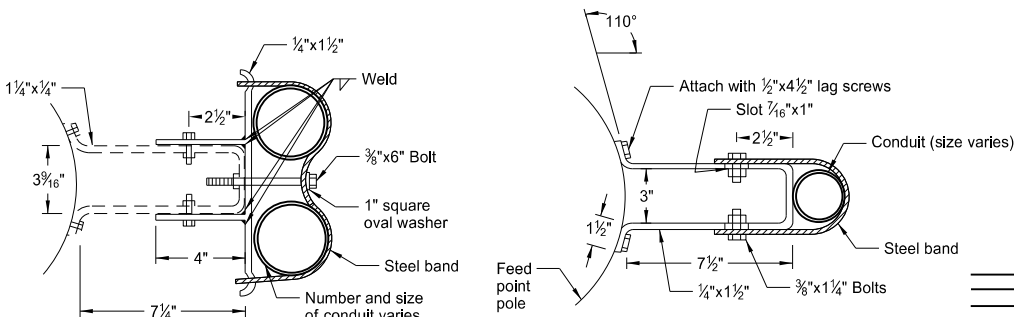
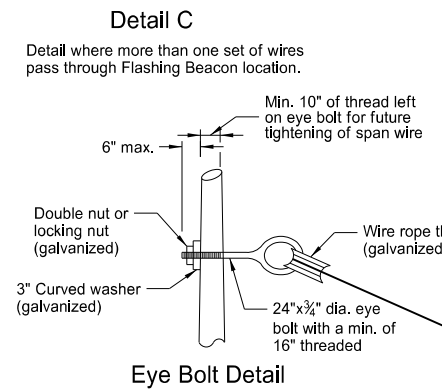
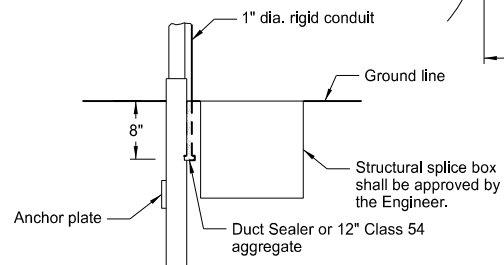
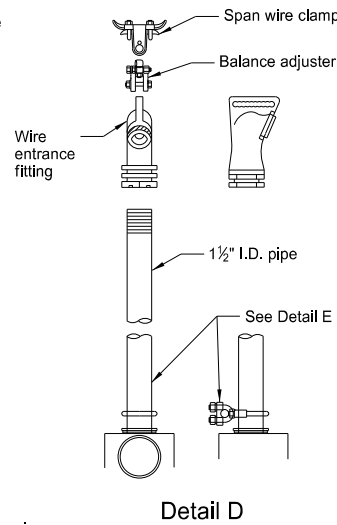
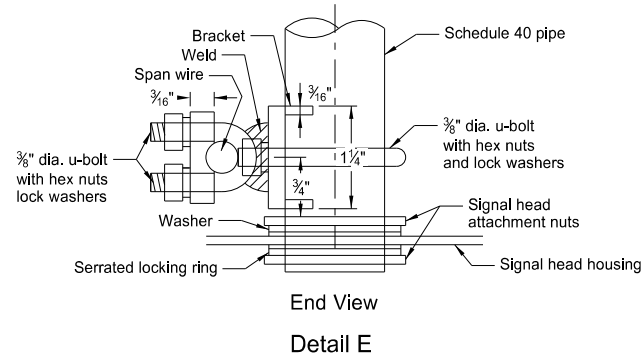
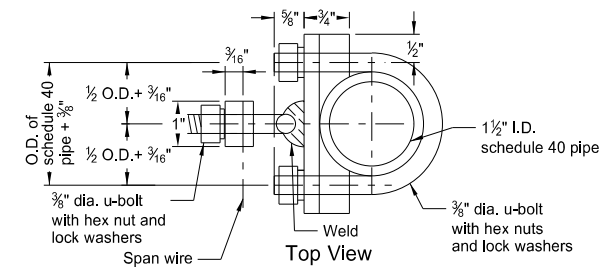


Detail C

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FLASHING BEACON



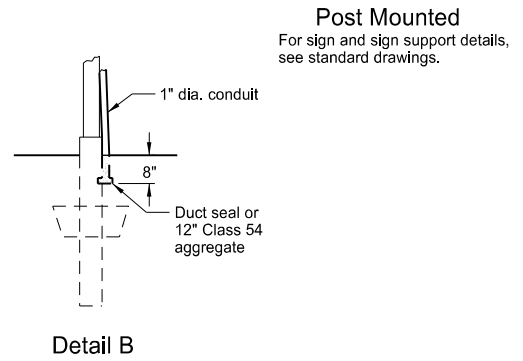
(C) Guy wire

Angle	Anchor Resistance min.
30°	12,000 lbs.
15°	24,500 lbs.

(A) Pole depth of Setting

Length of pole (ft)	Depth of pole min. (ft)
35	6
40	6
45	6.5
50	7
55	7.5

Note:
The contractor shall maintain the required 17 ft. to 19 ft. flashing beacon height over the roadway for a minimum period of 90 calendar days after installation unless written permission is granted by the Engineer to waive the 90 day requirement.



NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION
2-28-14

REVISIONS	
DATE	CHANGE
7-8-14	Span wire size and sag

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