

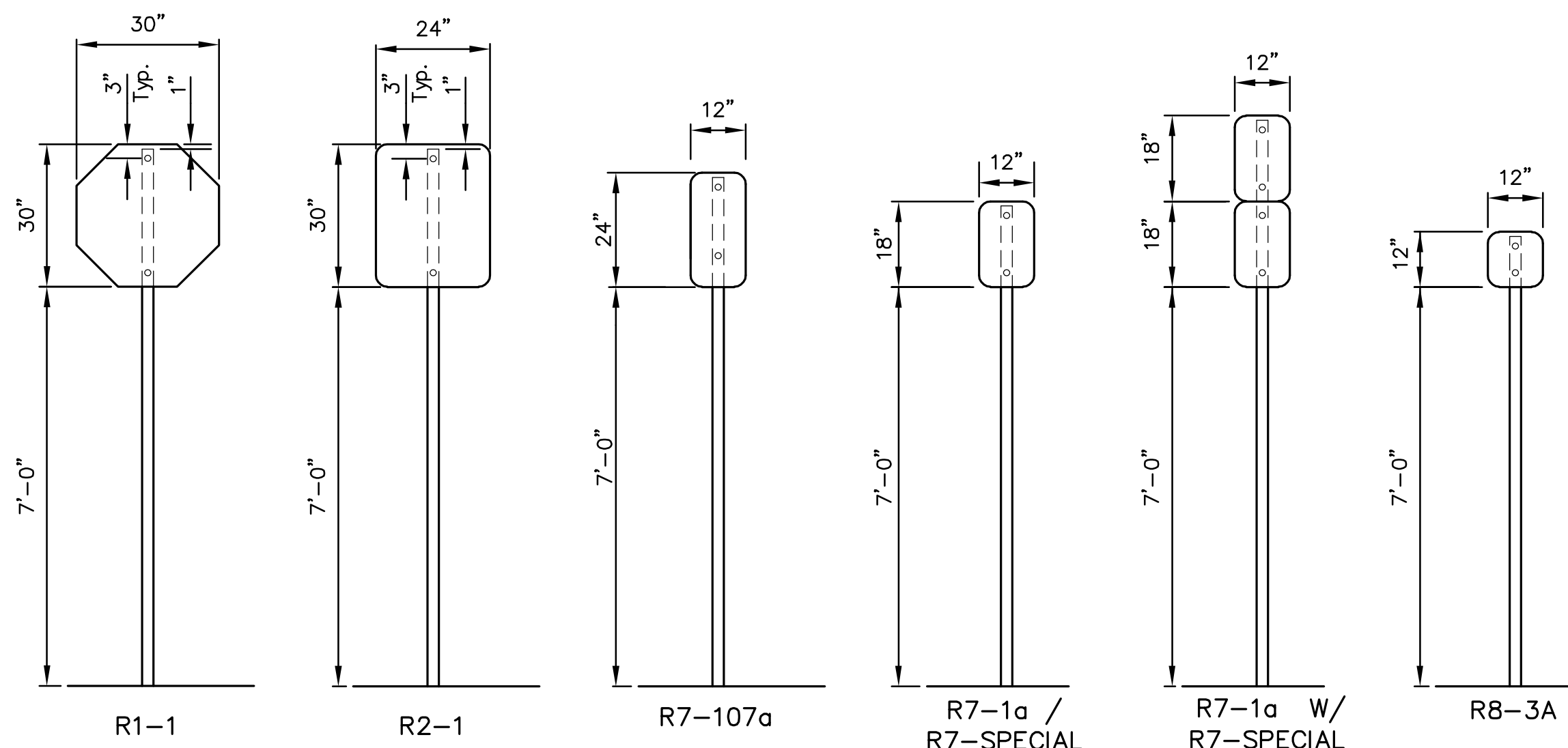
STATE	PROJECT NO.	YEAR	SHEET NO.	SHEETS
KANSAS	87 N-0349-01	2009	91	133

MKEC
ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

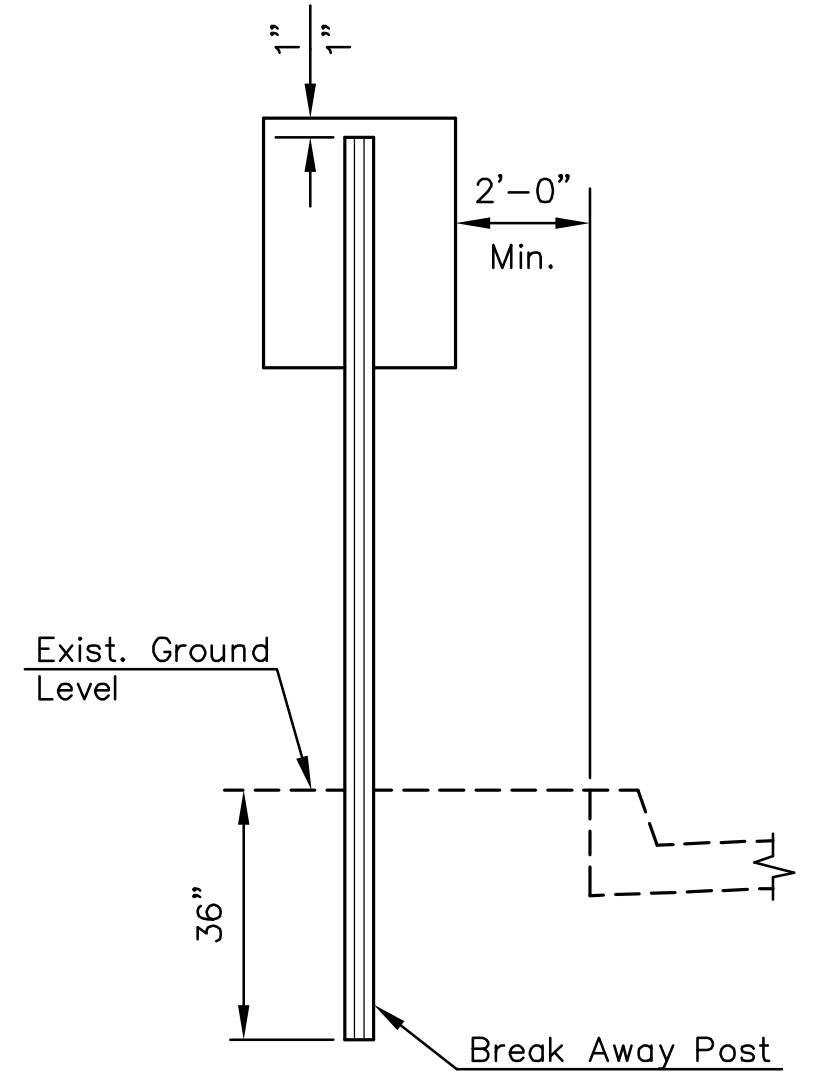
**17th STREET
FROM GROVE TO HILLSIDE**

TRAFFIC CONTROL SIGNS & SIGN POST

Station	Location from C	Classification - Each								Sign Post Length	
		R1-1	R2-1	R8-3A	R7-1a	R7-107a	R7-Special	Ⓢ	EXIST.	Breakaway 1-3/4"x1-3/4"	U-Channel
GROVE:											
48+70	Lt.		1								10.5'
51+27	Rt.		1								10.5'
17TH ST.:											
48+18	Lt.		1								10.5'
48+33	Lt.					1					10.0'
50+67	Rt.		1								10.5'
51+40	Rt.					1					10.0'
51+59	Lt.					1					10.0'
51+85	Rt.					1		1			11.0'
52+46	Rt.							1	1		11.0'
53+16	Lt.	1									10.5'
53+50	Rt.	1									10.5'
54+20	Lt.				1						9.5'
55+80	Rt.					1					10.0'
55+85	Lt.				1						9.5'
56+46	Lt.	1									10.5'
56+82	Rt.	1									10.5'
57+41	Rt.				1						9.5'
57+46	Lt.					1					10.0'
59+09	Rt.					1					10.0'
59+15	Lt.				1						9.5'
59+77	Lt.	1									10.5'
60+11	Rt.	1									10.5'
60+33	Lt.						1				10.0'
60+71	Rt.				1						9.5'
60+75	Lt.				1						10.0'
62+38	Lt.				1						9.5'
62+38	Rt.					1					10.0'
63+03	Lt.	1									10.5'
63+41	Rt.	1									10.5'
64+00	Lt.					1					10.0'
64+00	Rt.				1						9.5'
65+64	Rt.					1					10.0'
66+65	Rt.	1									10.5'
67+24	Rt.				1						9.5'
68+94	Lt.				1						9.5'
68+94	Rt.					1					10.0'
69+57	Lt.	1									10.5'
69+95	Rt.	1									10.5'
70+55	Lt.					1					10.0'
70+55	Rt.				1						9.5'
72+30	Lt.				1						9.5'
72+30	Rt.				1						9.5'
72+86	Lt.	1									10.5'
73+99	Rt.			1							9.0'
74+00	Lt.			1							9.0'
74+63	Lt.		1								10.5'
75+45	Rt.			1							9.0'
75+47	Lt.			1							9.0'
75+78	Lt.					1					10.0'
77+40	Rt.		1								10.5'
80+21	Rt.	1									10.5'
HILLSIDE:											
47+97	Lt.		1								10.5'
51+83	Lt.							2			8.5'
52+06	Lt.							2			8.5'
Total		13	7	4	13	13	2	1	5		539.0



SIGN MOUNTING DETAILS



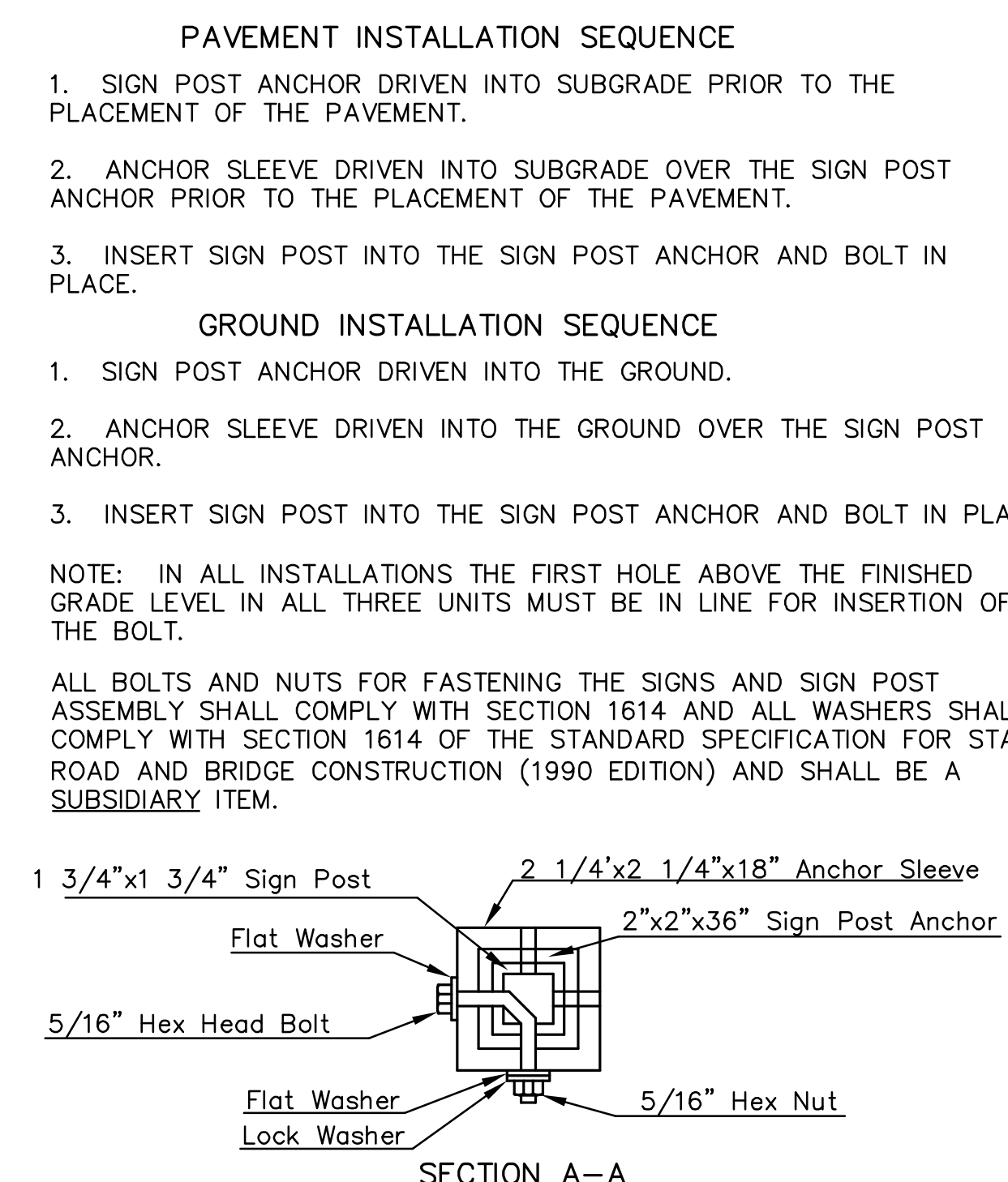
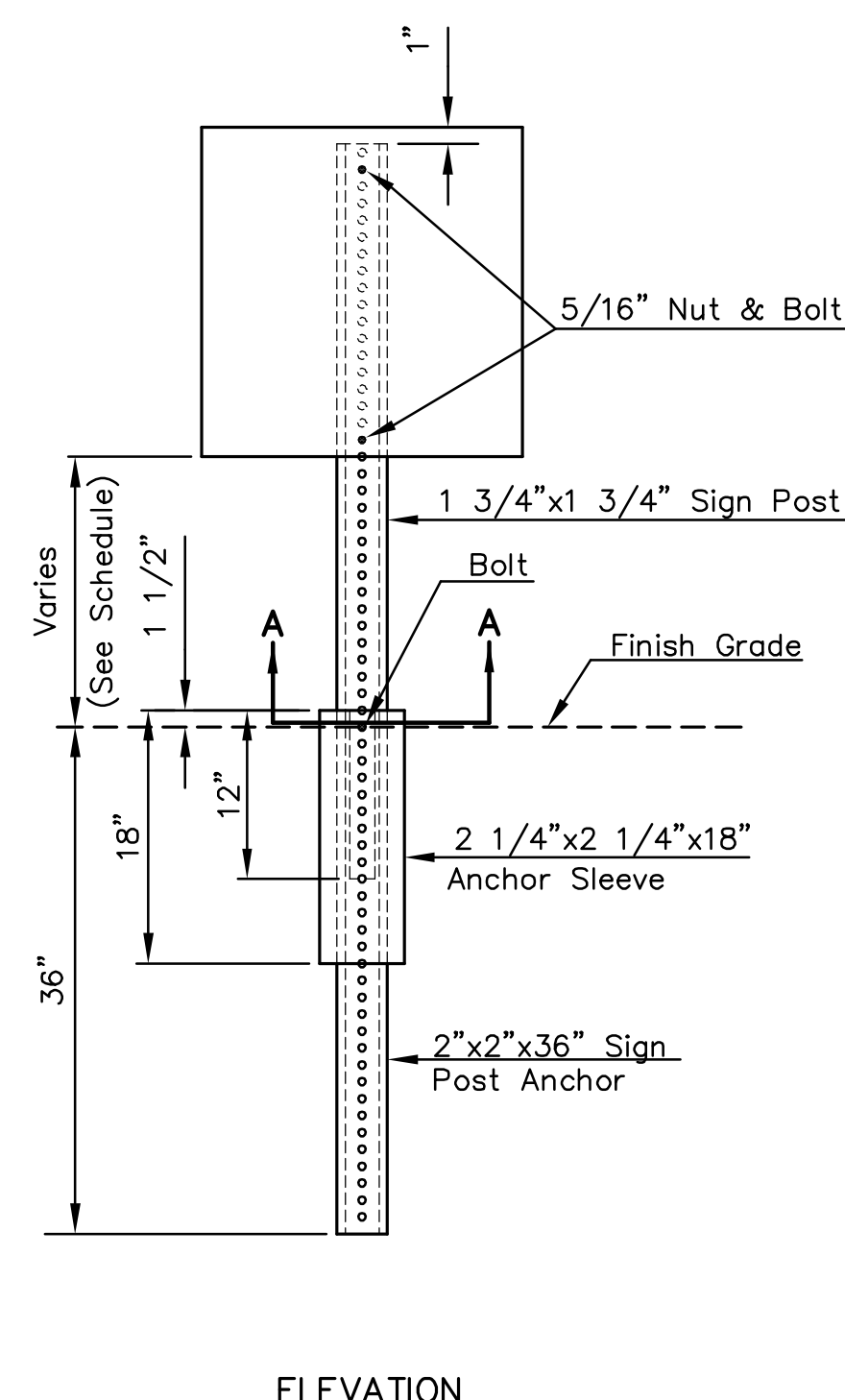
TRAFFIC SIGN INSTALLATION DETAIL

SIGN POST LENGTH SUMMARY	
BREAKAWAY SIGN POST:	
1 3/4"x1 3/4" LENGTH	EACH
8.5'	2
9.0'	4
9.5'	12
10.0'	14
10.5'	20
11.0'	2
2-1/4"x2-1/4"x18"	54
2"x2"x36"	54
U-CHANNEL	
LENGTH	EACH
STUBS 3'	
POSTS 8'	
POSTS 9'	
POSTS 9.5'	
POSTS 11'	

RECAPITULATION OF MATERIALS		
ITEMS	TOTAL	UNIT
Sign Face, (High Intensity HA Reflective Sheeting)	157.84	S.F.
Breakaway Sign Post, 1-3/4"x1-3/4"	539.0	L.F.
Breakaway Anchor Sleeve, 2-1/4"x2-1/4"x18"	81.0	L.F.
Breakaway Sign Post Anchor, 2"x2"x 36"	162.0	L.F.

RECAPITULATION OF QUANTITIES		
BID ITEMS	TOTAL	UNIT
Traffic Signing	LUMP SUM	L.S.

SIGN DESCRIPTION			
CLASSIFICATION	TYPE	SIZE	AREA
R1-1	STOP SIGN	30"x30"	5.18 SQ. FT.
R2-1	SPEED LIMIT	24"x30"	5.00 SQ. FT.
Ⓢ	SNOW ROUTE	18"x24"	3.00 SQ. FT.
R7-107a	NO PARKING (TRANSIT)	12"x24"	2.00 SQ. FT.
R7-1a	NO PARKING (ARROW)	12"x18"	1.50 SQ. FT.
R8-3A	NO PARKING	12"x12"	1.00 SQ. FT.



ELEVATION

SECTION A-A

BREAK-AWAY SIGN POST DETAIL

- PAVEMENT INSTALLATION SEQUENCE**
- SIGN POST ANCHOR DRIVEN INTO SUBGRADE PRIOR TO THE PLACEMENT OF THE PAVEMENT.
 - ANCHOR SLEEVE DRIVEN INTO SUBGRADE OVER THE SIGN POST ANCHOR PRIOR TO THE PLACEMENT OF THE PAVEMENT.
 - INSERT SIGN POST INTO THE SIGN POST ANCHOR AND BOLT IN PLACE.

- GROUND INSTALLATION SEQUENCE**
- SIGN POST ANCHOR DRIVEN INTO THE GROUND.
 - ANCHOR SLEEVE DRIVEN INTO THE GROUND OVER THE SIGN POST ANCHOR.
 - INSERT SIGN POST INTO THE SIGN POST ANCHOR AND BOLT IN PLACE.

NOTE: IN ALL INSTALLATIONS THE FIRST HOLE ABOVE THE FINISHED GRADE LEVEL IN ALL THREE UNITS MUST BE IN LINE FOR INSERTION OF THE BOLT.

ALL BOLTS AND NUTS FOR FASTENING THE SIGNS AND SIGN POST ASSEMBLY SHALL COMPLY WITH SECTION 1614 AND ALL WASHERS SHALL COMPLY WITH SECTION 1614 OF THE STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION (1990 EDITION) AND SHALL BE A SUBSIDIARY ITEM.



Ⓢ

NOTE: ALL LETTER, NUMBER, & SYMBOL SIZES, SPACING, AND COLORS AND SHALL CONFORM TO THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

ALL SIGN MATERIAL TO BE 0.080" ALUMINUM.

CONTRACTOR SHALL CONFIRM APPROPRIATE STYLE OF "NO PARKING" SIGNS PRIOR TO INSTALLATION.

J:\CIVIL\04179\DWG\DETAILS\04179SIGNDTL2.DWG

PLOTTED: Thursday, May 28, 2009 @ 10:47AM

SIGN DETAILS
SHEET TITLE
87 N-0349-01
PROJECT NUMBER

JRA
DESIGN BY
JSB
DRAWN BY
JRA
CHECKED BY

ISSUED
May 28, 2009
REVISED

SHEET NO.
91 of 133