STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	1	121

FEDERAL AID PROJ. NO.

SIGNING & DELINEATION

District Four, Area One

KDOT Installed project

Only applicable pages included for material ordering purposes.

INDEX OF SHEETS

SEE SHEET NO. 2

STATE OF KANSAS

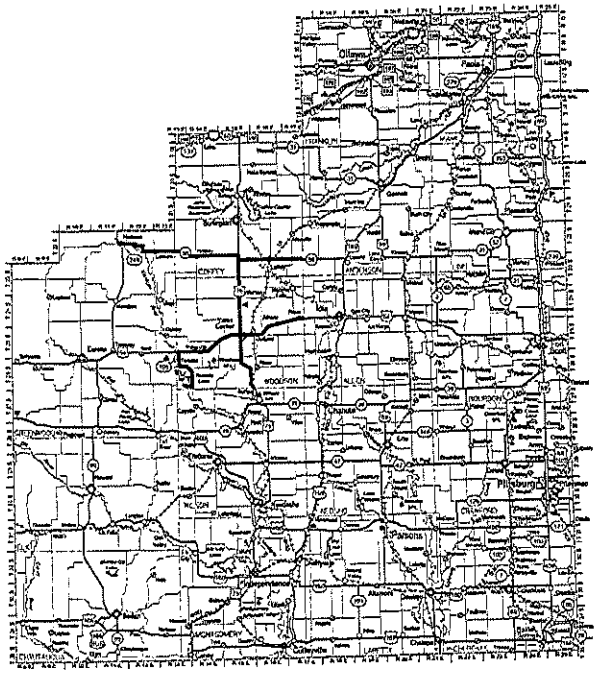
DEPARTMENT OF TRANSPORTATION

SIGNING AND DELINEATION

STATE HIGHWAY

FEDERAL AID PROJECT
GREENWOOD, COFFEY, AND WOODSON COUNTIES

K-58, US-75, US-54, and K-105



NOT TO SCALE

KEY TO COUNTIES

PROJECT NUMBER	KA-4113-02
GROSS LENGTH OF PROJECT	
EXCEPTIONS	
ADDITIONS	
NET LENGTH OF PROJECT	

PLANS PREPARED BY:

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
303 SOUTH TOPEKA WICHITA, KS 67202
316-262-2691 www.pec1.com

Approved _____
Date

State Transportation Engineer

By:

Chief, Bureau of Transportation Safety & Technology

KANSAS DEPARTMENT OF TRANSPORTATION

DESIGNED	DJB	01-20-2015
DETAILED	DRP	01-20-2015
CHECKED	SAG	01-20-2015

Drawn By: drp
Plotted: 01-JUN-2016 09:34
File: D:\Wichita-Civil\2013\130611\02\Trans\Traffic\Signing\DGN Project DGN\Title Sheet\ka-4113-02rt-02.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	75	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
6	KRM0	6" x 6"	0.25	1.5			"0" See Sheet No. 105
26	KRM1	6" x 6"	0.25	6.5			"1" See Sheet No. 105
26	KRM2	6" x 6"	0.25	6.5			"2" See Sheet No. 105
26	KRM3	6" x 6"	0.25	6.5			"3" See Sheet No. 105
8	KRM4	6" x 6"	0.25	2			"4" See Sheet No. 105
8	KRM5	6" x 6"	0.25	2			"5" See Sheet No. 105
6	KRM6	6" x 6"	0.25	1.5			"6" See Sheet No. 105
8	KRM7	6" x 6"	0.25	2			"7" See Sheet No. 105
8	KRM8	6" x 6"	0.25	2			"8" See Sheet No. 105
6	KRM9	6" x 6"	0.25	1.5			"9" See Sheet No. 105
4	M1-4	24" x 24"	4	16			"75"
44	M1-5	24" x 24"	4	176			"58"
2	M1-5	24" x 24"	4	8			"99"
2	M1-5	30" x 24"	5	10			"249"
4	M2-1	21" x 15"	2.19	8.76			"Jct"
9	M3-2	24" x 12"	2	18			"East"
9	M3-4	24" x 12"	2	18			"West"
2	M4-6	24" x 12"	2	4			"End"
3	M5-1L	21" x 15"	2.19	6.57			Straight Arrow and Left 90°
6	M5-1R	21" x 15"	2.19	13.14			Straight Arrow and Right 90°
1	M5-2L	21" x 15"	2.19	2.19			Straight Arrow and Left 45°
1	M5-2R	21" x 15"	2.19	2.19			Straight Arrow and Right 45°
5	M6-1L	21" x 15"	2.19	10.95			Directional Arrow (Symbol)
6	M6-1R	21" x 15"	2.19	13.14			Directional Arrow (Symbol)
3	M6-4	21" x 15"	2.19	6.57			Directional Arrow (Symbol)
1	M6-6R	21" x 15"	2.19	2.19			Straight Arrow and Right Arrow
60	OM-3L	12" x 36"	3	180			Object Marker
147	OM-3R	12" x 36"	3	441			Object Marker
4	OM2-2v	6" x 12"	0.5	2			Object Marker
8	OM4-3	18" x 18"	2.25	18			Object Marker
122	R1-1	36" x 36"	7.46	910.12			"Stop"
3	R1-1	48" x 48"	13.25	39.75			"Stop"
2	R2-1	24" x 30"	5	10			"Speed Limit 20"
2	R2-1	24" x 30"	5	10			"Speed Limit 25"
9	R2-1	24" x 30"	5	45			"Speed Limit 30"
4	R2-1	24" x 30"	5	20			"Speed Limit 35"
6	R2-1	24" x 30"	5	30			"Speed Limit 45"
3	R2-1	24" x 30"	5	15			"Speed Limit 50"
6	R2-1	24" x 30"	5	30			"Speed Limit 55"
11	R2-1	24" x 30"	5	55			"Speed Limit 60"
2	R3-7R	30" x 30"	6.25	12.5			"Right Lane Must Turn Right"
				2,171.07			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	R4-3	24" x 30"	5	5			"Slower Traffic Keep Right"
2	S3-1	36" x 36"	9	18			School Bus Stop Ahead (Symbol)
11	T2D	(3) 3" x 3"	0.19	2.06			Object Marker
8	W1-1L	30" x 30"	6.25	68.75			Turn (Symbol)
9	W1-1R	30" x 30"	6.25	50			Turn (Symbol)
4	W1-2L	30" x 30"	6.25	25			Curve (Symbol)
4	W1-2R	30" x 30"	6.25	25			Curve (Symbol)
2	W1-3L	30" x 30"	6.25	12.5			Reverse Turn (Symbol)
2	W1-4L	30" x 30"	6.25	12.5			Reverse Turn (Symbol)
1	W1-5L	30" x 30"	6.25	6.25			Winding Road (Symbol)
1	W1-5R	30" x 30"	6.25	6.25			Winding Road (Symbol)
2	W1-7	48" x 24"	8	16			Two Direction Large Arrow (Symbol)
60	W1-8L	24" x 30"	5	300			Chevron (Symbol)
60	W1-8R	24" x 30"	5	300			Chevron (Symbol)
4	W2-1	30" x 30"	6.25	25			Cross Road (Symbol)
14	W3-1	36" x 36"	9	126			Stop Ahead (Symbol)
2	W3-1	48" x 48"	16	32			Stop Ahead (Symbol)
5	W3-5	36" x 36"	9	45			Speed Limit Ahead 30 MPH (Symbol)
1	W3-5	36" x 36"	9	9			Speed Limit Ahead 45 MPH (Symbol)
4	W5-2	30" x 30"	6.25	25			"Narrow Bridge"
2	W10-1	36" x 36"	9	18			Railroad Crossing (Symbol)
1	W11-8	36" x 36"	9	9			Emergency Vehicle
9	W13-1	18" x 18"	2.25	20.25			"25 MPH"
10	W13-1	18" x 18"	2.25	22.5			"30 MPH"
10	W13-1	18" x 18"	2.25	22.5			"35 MPH"
2	W13-1	18" x 18"	2.25	4.5			"40 MPH"
2	W13-1	18" x 18"	2.25	4.5			"45 MPH"
2	W13-1	18" x 18"	2.25	4.5			"50 MPH"
87	W14-3	48" x 36"	5.56	483.72			"No Passing Zone"
				1,693.78			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	7/17/15	Current Release	R.A.D.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION

QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-58

TE433hp

FHWA APPROVAL | APPD. | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN L.E. | DETAIL CH. | SIGN. CH. | TRACE. CH.

Sh. No. 75

Drawn By : drp
File : U:\Wichita-Civil\2013\13081\002\Traffic\Signing\Quantities\KA-4113-02qq433hp-01.dgn
Plotted : 01-JUN-2016 09:35

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	76	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	D1-2	6'-0" x 2'-6"			15	15	RP 0.082 WB K-58 See Sheet No. 106
2	KI-92	48" x 24"	8	16			RP 0.560 EB K-58 RP 1.521 WB K-58 See Sheet No. 106
1	D1-3	6'-0" x 3'-6"			21	21	RP 1.046 EB K-58 See Sheet No. 106
1	D2-2	5'-0" x 2'-6"			12.5	12.5	RP 1.535 EB K-58 See Sheet No. 106
2	KI-3	48" x 24"	8	16			RP 2.928 EB K-58 RP 2.978 WB K-58 See Sheet No. 106
2	KI-96	48" x 24"	8	16			RP 8.105 EB K-58 RP 8.343 WB K-58 See Sheet No. 106
1	D2-1	60" x 18"	7.5	7.5			RP 8.105 WB K-58 See Sheet No. 106
1	D2-2	60" x 30"	12.5	12.5			RP 8.343 EB K-58 See Sheet No. 106
1	KI-97	48" x 24"	8	8			RP 12.260 EB K-58 See Sheet No. 106
1	KI-97	48" x 24"	8	8			RP 12.278 WB K-58 See Sheet No. 106
2	KI-92	60" x 24"	10	20			RP 17.017 EB K-58 RP 17.759 WB K-58 See Sheet No. 106
1	D2-2	72" x 30"	15	15			RP 17.017 WB K-58 See Sheet No. 106
1	KD1-1b	60" x 24"	10	10			RP 17.565 WB K-58 See Sheet No. 106
1	D2-2	60" x 30"	12.5	12.5			RP 17.759 EB K-58 See Sheet No. 107
1	KD7-2	60" x 24"	10	10			
1	KD7-2	60" x 24"	10	10			RP 17.940 WB K-58 See Sheet No. 107
1	D2-2	72" x 30"	15	15			RP 25.258 WB K-58 See Sheet No. 107
1	D1-3	96" x 42"	28	28			RP 25.298 EB K-58 See Sheet No. 107
1	D1-3	84" x 42"	24.5	24.5			RP 26.638 WB K-58 See Sheet No. 107
1	D2-2	60" x 30"	12.5	12.5			RP 26.638 EB K-58 See Sheet No. 108
2	KI-3	48" x 24"	8	16			RP 31.007 EB K-58 RP 31.143 WB K-58 See Sheet No. 108
				257.50		47.50	

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	E3-1	12'-6" x 8'-6"			100	200	RP 31.969 EB K-58 RP 32.835 WB K-58 See Sheet No. 108
2	KI-92	60" x 24"	10	20			RP 32.031 EB K-58 RP 32.770 WB K-58 See Sheet No. 108
1	D2-2	60" x 30"	12.5	12.5			RP 32.031 WB K-58 See Sheet No. 108
1	D2-1	60" x 18"	7.5	7.5			RP 32.795 EB K-58 See Sheet No. 108
2	KI-3	48" x 24"	8	16			RP 33.323 EB K-58 RP 33.385 WB K-58 See Sheet No. 108
1	KD1-1bR	84" x 24"	14	14			RP 34.545 EB K-58 See Sheet No. 108
1	KD1-1bL	84" x 24"	14	14			RP 34.645 WB K-58 See Sheet No. 108
1	KD1-1bL	84" x 24"	14	14			RP 36.474 EB K-58 See Sheet No. 108
1	KD1-1bR	84" x 24"	14	14			RP 36.605 WB K-58 See Sheet No. 108
1	KI-97	48" x 24"	8	8			RP 38.491 EB K-58 See Sheet No. 108
				120.00		70.00	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	7/17/15	Current Revision	K.L.R.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-58

TE433hp

FINAL APPROVAL | APPD.
KANSAS | MATHEW D. FOX | TRAFFIC
DESIGN CK. | DESIGN CK. | DRAWN CK. | TRACE CK.

Sh. No. 76

Drawn By : drp
File : U:\Wichita-Ch\2013\13081\002\Trans\Traffic\Signing\Quantities\KA-4113-02pq433hp-02.dgn
Plotted : 01-JUN-2016 09:35

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	77	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	D9-6	24" x 24"	4	8			Handicapped Accessible (Symbol)
2	KD12-5	30" x 36"	7.5	15			"Call 511" See Sheet No. 109
2	KD5-1	36" x 30"	7.5	15			"Rest Area 1 Mile"
2	KD5-1c	36" x 30"	7.5	15			"Rest Area 1000 Ft"
1	KD5-2L	36" x 30"	7.5	7.5			"Rest Area"
1	KD5-2R	36" x 30"	7.5	7.5			"Rest Area"
4	KRM0	6" x 6"	0.25	1			"0" See Sheet No. 105
4	KRM1	6" x 6"	0.25	1			"1" See Sheet No. 105
4	KRM2	6" x 6"	0.25	1			"2" See Sheet No. 105
4	KRM3	6" x 6"	0.25	1			"3" See Sheet No. 105
6	KRM4	6" x 6"	0.25	1.5			"4" See Sheet No. 105
4	KRM5	6" x 6"	0.25	1			"5" See Sheet No. 105
18	KRM6	6" x 6"	0.25	4.5			"6" See Sheet No. 105
24	KRM7	6" x 6"	0.25	6			"7" See Sheet No. 105
26	KRM8	6" x 6"	0.25	6.5			"8" See Sheet No. 105
6	KRM9	6" x 6"	0.25	1.5			"9" See Sheet No. 105
4	M1-4	24" x 24"	4	16			"54"
23	M1-4	24" x 24"	4	92			"75"
8	M1-5	24" x 24"	4	32			"58"
3	M2-1	21" x 15"	2.19	6.57			"Jct"
7	M3-1	24" x 12"	2	14			"North"
9	M3-3	24" x 12"	2	18			"South"
2	M5-1L	21" x 15"	2.19	4.38			Straight Arrow and Left 90°
2	M6-1L	21" x 15"	2.19	4.38			Directional Arrow (Symbol)
7	M6-3	21" x 15"	2.19	15.33			Directional Arrow (Symbol)
2	M6-4	21" x 15"	2.19	4.38			Directional Arrow (Symbol)
1	M6-6R	21" x 15"	2.19	2.19			Straight Arrow and Right
36	OM2-2v	6" x 12"	0.5	18			Object Marker
77	R1-1	36" x 36"	7.46	574.42			"Stop"
2	R1-1	48" x 48"	13.25	26.5			"Stop"
2	R1-4	18" x 6"	0.75	1.5			"All Way"
3	R2-1	24" x 30"	5	15			"Speed Limit 35"
2	R2-1	24" x 30"	5	10			"Speed Limit 50"
20	R2-1	24" x 30"	5	100			"Speed Limit 65"
1	W2-1	30" x 30"	6.25	6.25			Intersection (Symbol)
8	W3-1	36" x 36"	9	72			Stop Ahead (Symbol)
1	W3-5	36" x 36"	9	9			Speed Limit Ahead 45 MPH (Symbol)
1	W3-5	36" x 36"	9	9			Speed Limit Ahead 50 MPH (Symbol)
				1,143.90			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	W4-2R	36" x 36"	9	18			Lane Ends (Symbol)
1	W13-1	18" x 18"	2.25	2.25			"50 MPH"
1	W14-2	30" x 30"	6.25	6.25			"No Outlet"
46	W14-3	48" x 36"	5.56	255.76			"No Passing Zone"
				282.26			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD.
1	5/27/15	Current Release	W.L.B.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
US-75

TE433hp

FHWA APPROVAL | APPD. | DESIGNED | DETAILED | QUANTITIES | TRACED | DESIGN CK. | DETAIL CK. | COMP. CK. | TRACE CK.

Sh. No. 77

Plotted: 01-JUN-2016 09:38
Drawn By: dfp
File: U:\Wichita-Cir\2013\13081\002\Trans\Traffic\Signing\Quantities\KA-4113-02pt433hp-03.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	78	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KI-97	48" x 24"	8	8			RP 63.149 NB US-75 See Sheet No. 107
1	KI-97	48" x 24"	8	8			RP 63.240 SB US-75 See Sheet No. 109
1	KD1-1B	60" x 24"	10	10			RP 63.253 SB US-75 See Sheet No. 109
1	KD7-2	84" x 36"	21	21			RP 69.757 NB US-75 See Sheet No. 105
1	KD7-2	84" x 36"	21	21			RP 69.885 SB US-75 See Sheet No. 105
1	KD7-2	72" x 24"	12	12			RP 71.767 NB US-75 See Sheet No. 109
1	KD7-2	72" x 24"	12	12			RP 71.933 SB US-75 See Sheet No. 109
1	D2-3	84" x 42"	24.5	24.5			RP 74.355 SB US-75 See Sheet No. 109
1	KD4-5L	48" x 24"	8	8			RP 74.622 NB US-75 See Sheet No. 109
1	KD4-5R	48" x 24"	8	8			RP 74.678 SB US-75 See Sheet No. 109
1	D1-3	72" x 42"	21	21			RP 74.799 NB US-75 See Sheet No. 109
1	D1-3	84" x 42"	24.5	24.5			RP 74.916 SB US-75 See Sheet No. 105
2	KI-92	60" x 24"	10	20			RP 75.361 SB US-75 RP 74.355 NB US-75 See Sheet No. 105
1	D2-3	72" x 42"	21	21			RP 75.371 NB US-75 See Sheet No. 105
2	KD7-1	72" x 36"	18	36			RP 76.026 SB US-75 RP 73.885 NB US-75 See Sheet No. 105
1	KD1-2b	8'-6" x 3'-0"			25.5	25.5	RP 81.639 NB US-75 See Sheet No. 105
				255.00		25.50	

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KD1-2b	8'-6" x 3'-0"			25.5	25.5	RP 81.768 SB US-75 See Sheet No. 106
1	KI-97	48" x 24"	8	8			RP 85.732 NB US-75 See Sheet No. 104
1	KI-97	48" x 24"	8	8			RP 85.764 SB US-75 See Sheet No. 107
1	D2-2	84" x 30"	17.5	17.5			RP 88.678 SB US-75 See Sheet No. 107
1	D1-3	72" x 42"	21	21			RP 88.687 NB US-75 See Sheet No. 107
1	D1-2	84" x 30"	17.5	17.5			RP 88.786 SB US-75 See Sheet No. 107
1	D1-3	72" x 42"	21	21			RP 89.618 NB US-75 See Sheet No. 107
				93.00		25.50	

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APP'D
1	1/17/16	Current Release	K.S.A.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
US-75

TE433hp

DWG. APPROVAL | APP'D
DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN CK. | DETAIL CK. | QUAN. CK. | TRACE CK.

Sh. No. 78

Drawn By : drp Plotted : 01-JUN-2016 09:36
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing Quantities\KA-4113-02pqt433hp-04.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	79	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT PER SIGN	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	D9-3a	24" x 30"	5	10			Rest Area (Symbol)
2	KD9-0	24" x 6"	1	2			Directional Arrow (Symbol) See Sh. No. 105
2	KD12-5	30" x 36"	7.5	15			"Call 511" See Sheet No. 109
20	KRM0	6" x 6"	0.25	5			"0" See Sheet No. 105
24	KRM1	6" x 6"	0.25	6			"1" See Sheet No. 105
20	KRM2	6" x 6"	0.25	5			"2" See Sheet No. 105
58	KRM3	6" x 6"	0.25	14.5			"3" See Sheet No. 105
6	KRM4	6" x 6"	0.25	1.5			"4" See Sheet No. 105
6	KRM5	6" x 6"	0.25	1.5			"5" See Sheet No. 105
6	KRM6	6" x 6"	0.25	1.5			"6" See Sheet No. 105
6	KRM7	6" x 6"	0.25	1.5			"7" See Sheet No. 105
4	KRM8	6" x 6"	0.25	1			"8" See Sheet No. 105
4	KRM9	6" x 6"	0.25	1			"9" See Sheet No. 105
26	M1-4	24" x 24"	4	104			"54"
4	M1-4	24" x 24"	4	16			"75"
4	M1-5	30" x 24"	5	20			"105"
4	M2-1	21" x 15"	2.19	8.76			"Jct"
11	M3-2	24" x 12"	2	22			"East"
10	M3-4	24" x 12"	2	20			"West"
1	M4-6	24" x 12"	2	2			"End"
1	M6-1R	21" x 15"	2.19	2.19			Directional Arrow (Symbol)
4	M6-3	21" x 15"	2.19	8.76			Directional Arrow (Symbol)
3	M6-4	21" x 15"	2.19	6.57			Directional Arrow (Symbol)
2	OM-3L	12" x 36"	3	6			Object Marker
12	OM-3R	12" x 36"	3	36			Object Marker
46	OM2-2v	6" x 12"	0.5	23			Object Marker
71	R1-1	36" x 36"	7.46	$29.66			"Stop"
2	R1-1	48" x 48"	13.25	26.5			"Stop"
2	R1-4	18" x 6"	0.75	1.5			"All Way"
10	R2-1	24" x 30"	5	50			"Speed Limit 35"
5	R2-1	24" x 30"	5	25			"Speed Limit 55"
20	R2-1	24" x 30"	5	100			"Speed Limit 65"
2	T2D	(3) 3" x 3"	0.19	0.38			Object Marker
16	W3-1	36" x 36"	9	144			Stop Ahead (Symbol)
2	W3-5	36" x 36"	9	18			Speed Limit Ahead 35 MPH (Symbol)
2	W3-5	36" x 36"	9	18			Speed Limit Ahead 55 MPH (Symbol)
2	W4-2R	36" x 36"	9	18			Lane Ends
2	W11-8	36" x 36"	9	18			Emergency Vehicle (Symbol)
				1,289.82			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT PER SIGN	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	W14-2	30" x 30"	6.25	6.25			"No Outlet"
24	W14-3	48" x 36"	5.56	133.44			"No Passing Zone"
				139.69			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
	7/17/14	Contract Release	R.L.H.	M.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
US-54

TE433hp

FHWA APPROVAL | APPD. | ELEVATION | DETAILED | QUANTITIES | TRACED | DESIGN CK. | DETAIL CK. | QUAN. CK. | TRACE CK.

Sh. No. 79

Drawn By: drp
Plotted: 01-JUN-2016 09:36
File: U:\Wichita-Civil\2013\13031\002\Traffic\Signing\Quantities\KA-4113-02pqt433hp-05.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	80	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KI-97	48" x 24"	8	8			RP 301.813 WB US-54 See Sheet No. 104
1	KD1-1b	72" x 24"	12	12			RP 302.251 EB US-54 See Sheet No. 104
1	D2-2	60" x 30"	12.5	12.5			RP 302.268 WB US-54 See Sheet No. 104
1	KD7-2	84" x 36"	21	21			RP 302.299 EB US-54 See Sheet No. 104
1	D1-2	84" x 30"	17.5	17.5			RP 302.347 EB US-54 See Sheet No. 104
1	D2-2	84" x 30"	17.5	17.5			RP 302.465 EB US-54 See Sheet No. 104
1	D1-2	60" x 30"	12.5	12.5			RP 302.465 WB US-54 See Sheet No. 104
1	KD7-2	84" x 36"	21	21			RP 302.552 WB US-54 See Sheet No. 104
1	KD1-1b	72" x 24"	12	12			RP 302.606 WB US-54 See Sheet No. 105
1	Special	84" x 42"	24.5	24.5			RP 305.649 WB US-54 See Sheet No. 109
1	KD7-2	84" x 36"	21	21			RP 306.531 EB US-54 See Sheet No. 105
1	KD7-2	84" x 36"	21	21			RP 306.665 WB US-54 See Sheet No. 105
1	KD7-2	60" x 36"	15	15			RP 310.445 EB US-54 See Sheet No. 105
1	KD7-2	60" x 36"	15	15			RP 310.611 WB US-54 See Sheet No. 105
2	KD7-1	72" x 36"	18	36			RP 313.675 EB US-54 RP 316.680 WB US-54 See Sheet No. 105
2	KI-92	60" x 24"	10	20			RP 314.535 EB US-54 RP 315.798 WB US-54 See Sheet No. 105
1	D2-2	72" x 30"	15	15			RP 314.535 WB US-54 See Sheet No. 105
1	KD4-5	48" x 24"	8	8			RP 314.645 EB US-54 See Sheet No. 105
				309.50			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KD4-5	48" x 24	8	8			RP 314.703 WB US-54 See Sheet No. 105
1	D1-3	72" x 42"	21	21			RP 314.741 EB US-54 See Sheet No. 105
1	D1-3	84" x 42"	24.5	24.5			RP 314.836 WB US-54 See Sheet No. 109
1	D2-2	72" x 30"	15	15			RP 315.812 EB US-54 See Sheet No. 109
1	SP-1 Special	60" x 36"	15	15			RP 315.852 WB US-54 See Sheet No. 109
2	KI-3	30" x 24"	5	10			RP 318.815 EB US-54 RP 318.864 WB US-54 See Sheet No. 109
1	KD1-1bL	84" x 24"	14	14			RP 325.469 EB US-54 See Sheet No. 108
1	KD1-1bR	84" x 24"	14	14			RP 325.697 WB US-54 See Sheet No. 108
1	D1-1	48" x 18"	6	6			RP 326.532 EB US-54 See Sheet No. 109
1	D1-1	48" x 18"	6	6			RP 326.669 WB US-54 See Sheet No. 109
1	KI-97	48" x 24"	8	8			RP 327.614 WB US-54 See Sheet No. 109
				141.50			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISION	BY	APPD
1	3/17/9	Current Release		

KANSAS DEPARTMENT OF TRANSPORTATION

QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
US-54

TE433hp

FINAL APPROVAL | APPD | INSPECTED | DETAILED | QUANTITIES | TRACED | DESIGNED | DETAIL CK. | QUANTITIES | TRACE CK.

Sh. No. 80

Drawn By : dlp
Plotted : 01-JUN-2016 09:35
File : U:\Wichita-Civil\2013\1308\K02\Trans\Traffic\Signing\Quantities\KA-4113-02qpt433hp-66.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	81	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KR7-1L	24" x 30"	5	5			"No Parking Any Time"
2	KRM0	6" x 6"	0.25	0.5			"0" See Sheet No. 105
4	KRM1	6" x 6"	0.25	1			"1" See Sheet No. 105
2	KRM2	6" x 6"	0.25	0.5			"2" See Sheet No. 105
2	KRM3	6" x 6"	0.25	0.5			"3" See Sheet No. 105
2	KRM4	6" x 6"	0.25	0.5			"4" See Sheet No. 105
2	KRM5	6" x 6"	0.25	0.5			"5" See Sheet No. 105
2	KRM6	6" x 6"	0.25	0.5			"6" See Sheet No. 105
2	KRM7	6" x 6"	0.25	0.5			"7" See Sheet No. 105
2	KRM8	6" x 6"	0.25	0.5			"8" See Sheet No. 105
2	KRM9	6" x 6"	0.25	0.5			"9" See Sheet No. 105
1	M1-4	24" x 24"	4	4			"54"
17	M1-5	30" x 24"	5	85			"105"
1	M2-1	21" x 15"	2.19	2.19			"Jct"
5	M3-1	24" x 12"	2	10			"North"
3	M3-3	24" x 12"	2	6			"South"
1	M4-6	24" x 12"	2	2			"End"
2	M5-1L	21" x 15"	2.19	4.38			Straight Arrow and Left 90°
2	M5-1R	21" x 15"	2.19	4.38			Straight Arrow and Right 90°
2	M6-1L	21" x 15"	2.19	4.38			Directional Arrow (Symbol)
2	M6-1R	21" x 15"	2.19	4.38			Directional Arrow (Symbol)
4	OM-3L	12" x 36"	3	12			Object Marker
24	OM-3R	12" x 36"	3	72			Object Marker
36	R1-1	36" x 36"	7.46	268.56			"Stop"
1	R1-1	48" x 48"	13.25	13.25			"Stop"
2	R1-2	36" x 36"	3.9	7.8			"Yield"
7	R2-1	24" x 30"	5	35			"Speed Limit 20"
13	R2-1	24" x 30"	5	65			"Speed Limit 30"
7	R2-1	24" x 30"	5	35			"Speed Limit 45"
6	R2-1	24" x 30"	5	30			"Speed Limit 60"
2	W1-2L	30" x 30"	6.25	12.5			Curve (Symbol)
2	W1-2R	30" x 30"	6.25	12.5			Curve (Symbol)
2	W1-4R	30" x 30"	6.25	12.5			Reverse Turn (Symbol)
1	W1-5R	30" x 30"	6.25	6.25			Winding Road (Symbol)
1	W1-6R	60" x 30"	12.5	12.5			One Direction Large Arrow (Symbol)
1	W1-7	60" x 30"	12.5	12.5			Two Direction Large Arrow (Symbol)
1	W2-2L	30" x 30"	6.25	6.25			Side Road (Symbol)
2	W2-2R	30" x 30"	6.25	12.5			Side Road (Symbol)
6	W3-1	36" x 36"	9	54			Stop Ahead (Symbol)
				817.32			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	FLAT SHEET TOTAL SQ FT	REINFORCED PANEL SQ FT PER SIGN	REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
2	W3-5	36" x 36"	9	18			Speed Limit Ahead 30 MPH (Symbol)
2	W3-5	36" x 36"	9	18			Speed Limit Ahead 45 MPH (Symbol)
2	W13-1	18" x 18"	2.25	4.5			"20 MPH"
1	W13-1	18" x 18"	2.25	2.25			"35 MPH"
2	W13-1	18" x 18"	2.25	4.5			"40 MPH"
25	W14-3	48" x 36"	5.56	139			"No Passing Zone"
				186.25			

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

NO.	DATE	REVISIONS	BY	APPD
1	2/17/16	Current Release	K.S.D.	N.D.F.

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-105

TE433hp

Sh. No. 01

Plotted : 01-JUN-2016 09:36
Drawn By : drp
File : U:\Wichita-Civil\2013\1303\1\002\trans\Traffic\Signing\Quantities\KA-4113-02pqt433hp-07.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	82	121

QUANTITIES SHEET

SIGNS TO BE INSTALLED ON PROJECT

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT PER SIGN	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)
1	KD7-2	84" x 36"	21	21			RP 1.705 NB K-105 See Sheet No. 81
1	KD7-2	84" x 36"	21	21			RP 1.783 SB K-105 See Sheet No. 81
1	KD1-1b	60" x 24"	10	10			RP 1.840 SB K-105 See Sheet No. 81
1	KD7-2	72" x 48"	24	24			RP 5.501 NB K-105 See Sheet No. 81
1	KD7-2	72" x 48"	24	24			RP 5.814 SB K-105 See Sheet No. 81
1	KD7-2	60" x 24"	10	10			RP 6.882 NB K-105 See Sheet No. 81
2	KI-92	48" x 24"	8	16			RP 7.050 NB K-105 RP 7.854 SB K-105 See Sheet No. 81
1	KD7-2	60" x 24"	10	10			RP 7.137 SB K-105 See Sheet No. 81
1	D1-2	96" x 30"	20	20			RP 10.132 NB K-105 See Sheet No. 81
1	D2-1	60" x 18"	7.5	7.5			RP 10.132 SB K-105 See Sheet No. 81
				163.50			

QUANTITY	SIGN NO.	SIGN SIZE	TYPE OF SIGN: FLAT SHEET SQ FT PER SIGN	TYPE OF SIGN: FLAT SHEET TOTAL SQ FT	TYPE OF SIGN: REINFORCED PANEL SQ FT PER SIGN	TYPE OF SIGN: REINFORCED PANEL TOTAL SQ FT	DESIGN DETAILS (AS REQUIRED)

NOTE:
SEE STANDARD PLAN SHEET TE590
FOR DETAILED SPECIFICATIONS.

THIS QUANTITY SHEET FOR USE WITH
HIGH PERFORMANCE SIGNING PROJECTS

1	5/27/16	Current Release	R.S.A.	M.G.F.
NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION
QUANTITIES SHEET
HIGH PERFORMANCE
SIGN INSTALLATIONS
K-105

TE433hp

TRFX APPROVAL | APPD
DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN CK. | DETAIL CK. | QUANT. CK. | TRACE CK.

SA. No. 82

Drawn By: drp
Plotted: 01-JUN-2016 09:36
File: U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Quantities\KA-4113-02pqt433hp-03.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	83	121

SUMMARY OF QUANTITIES

SIGNS

TYPE	NUMBER	SQUARE FEET
FLAT SHEET	2,082	9,064.09
REINFORCED PANEL	7	168.50
OVERLAY		

DELINEATORS

TYPE	FLEXIBLE DELINEATOR		RIGID DELINEATOR	
	TYPE I ANCHOR	TYPE III ANCHOR	"U" POST	BRACKET MOUNT
TYPE 'A' WHITE				
TYPE 'A' YELLOW				
TYPE 'B' WHITE				
TYPE 'B' YELLOW				
TYPE 'A' WHITE (BACK TO BACK)				
TYPE 'A' YELLOW (BACK TO BACK)				

POSTS AND ALUMINUM BEAMS

	4" x 6" POST				"U" POST		GALVANIZED STEEL BEAM POST						PERFORATED SQUARE STEEL TUBE (PSST)			
	WOOD		STEEL				W6x9		W10x12		W10x22					
	FLAT SHEET SIGN	REINFORCED PANEL SIGN	STRUCTURAL TUBING	312.25 ALUMINUM BEAM	2 LBS/FT	3 LBS/FT	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	1-3/4"	2"	2-1/4"	2-1/2"
NUMBER																
FEET																

OBJECT MARKERS

TYPE	NUMBER
TYPE 2 ("U" POST)	
TYPE 3 ("U" POST)	

POST FOOTINGS AND PSST COUPLERS

	CONCRETE FOOTING (DIA.)					PERFORATED SQUARE STEEL TUBE (PSST)					
	WOOD	A36 STEEL		A572 STEEL (ALT)		PERFORATED SQUARE STEEL TUBE FOOTING				COUPLER	COUPLER WITH FOOTING
	18"	24"	30"	24"	30"	1-3/4"	2"	2-1/4"	2-1/2"		
NUMBER											
FEET											

SIGN STRUCTURES

TYPE	NEW	MODIFIED
OVERHEAD STRUCTURE		
CANTILEVER STRUCTURE		
BUTTERFLY STRUCTURE		
BRIDGE MOUNT ATTACHMENT		
MAST ARM SIGN SUPPORT		

REMOVALS

TYPE	NUMBER
SIGNS	
POSTS	
FOOTINGS	
SIGN STRUCTURES	

BASE PLATES AND STUB POSTS

	W6x9		W10x12		W10x22	
BREAKAWAY BASES	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)
BASE PLATE (TOP)						
STUB POST WITH BASE PLATE						
NON-BREAKAWAY BASES						
BASE PLATE						

NUMBER & LENGTHS OF POSTS & ALUMINUM BEAMS (INFORMATION ONLY)

LENGTH OF POST OR BEAM	4" x 6" POST				"U" POST		GALVANIZED STEEL BEAM POST						PERFORATED SQUARE STEEL TUBE (PSST)			
	WOOD		STEEL				W6x9		W10x12		W10x22					
	FLAT SHEET SIGN	REINFORCED PANEL SIGN	STRUCTURAL TUBING	312.25 ALUMINUM BEAM	2 LBS/FT	3 LBS/FT	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	A36 STEEL	A572 STEEL (ALT)	1-3/4"	2"	2-1/4"	2-1/2"
2.1' - 4'																
4.1' - 6'																
6.1' - 8'																
8.1' - 10'																
10.1' - 12'																
12.1' - 14'																
14.1' - 16'																
16.1' - 18'																
18.1' - 20'																
20.1' - 22'																
22.1' - 24'																
24.1' - 26'																
26.1' - 28'																
28.1' - 30'																
30.1' - 32'																

NO.	DATE	REVISION	BY	APP'D
1	7/23/03	Revised Trees	D.D.G.	D.R.

KANSAS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
FOR
INSTALLATIONS AND REMOVALS

TE439 7/1/03

TRFC APPROVAL 7/23/2003 APPD Steven L. Rumsey
DESIGNED R.D.G./K.L.G. R.D.G. QUANTITIES TRACED
KARR, CK. K.A.R./DEAN, CK. R.D.G. DRAW, CK. TRACE, CK.

Sh. No. 83

Plotted : 01-JUN-2016 09:36
Drawn By : drp
File : U:\Wichita-Cra\2013\1303\1002\Trans\Traffic\Signing\Standards\KA-4113-02pss439.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	84	121

RECAPITULATION OF SIGNING & DELINEATION BID ITEMS

BID ITEMS	APPROXIMATE QUANTITIES		UNITS
SIGN (FLAT SHEET) (HIGH PERFORMANCE)	9,064.09		SQUARE FOOT
SIGN (REINFORCED PANEL) (HIGH PERFORMANCE)	168.50		SQUARE FOOT
SIGN (OVERLAY) (HIGH PERFORMANCE)			SQUARE FOOT
SIGN POST (4" x 6" WOOD) (FLAT SHEET SIGN)			LINEAR FOOT
SIGN POST (4" x 6" WOOD) (REINFORCED PANEL SIGN)			LINEAR FOOT
SIGN POST (2 LB/FT "U" STEEL)			LINEAR FOOT
SIGN POST (3 LB/FT "U" STEEL)			LINEAR FOOT
SIGN POST (1-3/4" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (2" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (2-1/4" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (2-1/2" PERFORATED SQUARE STEEL TUBE)			LINEAR FOOT
SIGN POST (4" X 6" STRUCTURAL STEEL)			LINEAR FOOT
SIGN POST (3 I 2.25 ALUMINUM)			LINEAR FOOT
	A36	A572(ALT)	
SIGN POST (W6X9 STEEL BEAM)			LINEAR FOOT
SIGN POST (W10X12 STEEL BEAM)			LINEAR FOOT
SIGN POST (W10X22 STEEL BEAM)			LINEAR FOOT
SIGN POST STUB WITH BREAKAWAY BASE PLATE (W6X9)			EACH
SIGN POST STUB WITH BREAKAWAY BASE PLATE (W10X12)			EACH
SIGN POST STUB WITH BREAKAWAY BASE PLATE (W10X22)			EACH
SIGN POST BREAKAWAY BASE PLATE (W6X9)			EACH
SIGN POST BREAKAWAY BASE PLATE (W10X12)			EACH
SIGN POST BREAKAWAY BASE PLATE (W10X22)			EACH
SIGN POST FOOTING (24" Dia. CONCRETE)(STEEL BEAM POST)			LINEAR FOOT
SIGN POST FOOTING (30" Dia. CONCRETE)(STEEL BEAM POST)			LINEAR FOOT
SIGN POST FOOTING (18" Dia. CONCRETE)(WOOD POST)			LINEAR FOOT
SIGN POST FOOTING (1-3/4" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (2" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (2-1/4" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (2-1/2" PERFORATED SQUARE STEEL TUBE)			EACH
SIGN POST FOOTING (SIGN POST SQUARE COUPLER) (2-1/4")			EACH
SIGN POST SQUARE COUPLER (2-1/4")			
SIGNING OBJECT MARKER (TYPE 2)			EACH
SIGNING OBJECT MARKER (TYPE 3)			EACH
SIGNING DELINEATOR (TYPE A)(WHITE RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE A)(YELLOW RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE B)(WHITE RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE B)(YELLOW RIGID, "U" POST)			EACH
SIGNING DELINEATOR (TYPE A)(WHITE FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE A)(YELLOW FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(WHITE FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(YELLOW FLEXIBLE)(TYPE I ANCHOR)			EACH
SIGNING DELINEATOR (TYPE A)(WHITE FLEXIBLE)(TYPE 3 ANCHOR)			EACH
SIGNING DELINEATOR (TYPE A)(YELLOW FLEXIBLE)(TYPE 3 ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(WHITE FLEXIBLE)(TYPE 3 ANCHOR)			EACH
SIGNING DELINEATOR (TYPE B)(YELLOW FLEXIBLE)(TYPE 3 ANCHOR)			EACH

BID ITEMS	APPROXIMATE QUANTITIES	UNITS

NOTE:
THE QUANTITIES FOR STEEL BEAM POSTS, STUB POSTS, BASE PLATES, AND FOOTINGS IN THE CONTRACT ARE FOR A36 STEEL. WHEN FURNISHING A572 ALTERNATE STEEL BEAM POSTS, STUB POSTS, BASE PLATES, AND FOOTINGS, PAYMENT FOR THESE ITEMS WILL BE BASED ON THE A36 STEEL UNIT PRICES INCLUDED IN THE CONTRACT.

NO.	DATE	REVISIONS	BY	APPD
1	7/23/09	Changed Bid Items as per Spec Book (2009)	D.R.J.	G.S.

KANSAS DEPARTMENT OF TRANSPORTATION
RECAPITULATION OF
SIGNING & DELINEATION
BID ITEMS

TE450 7/1/03

FINAL APPROVAL 7/23/2009 APPD STEVEN A. PARKER
CHECKED DESIGN STANDARD R.W.N. QUANTITIES TRACED
DESIGN EN. DETAIL EN. R.W.N. DRAWN EN. TRACE EN.

Sh. No. 84

Drawn By : drp
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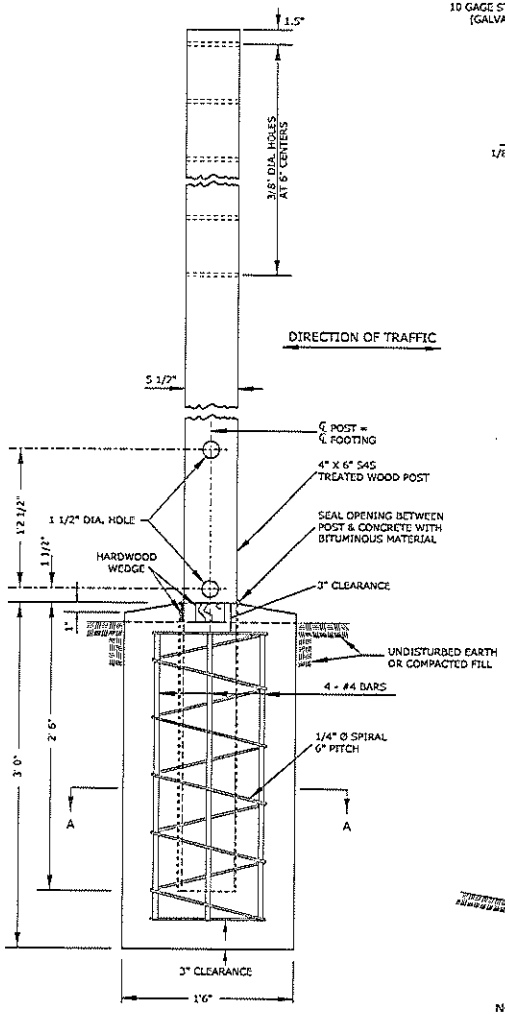
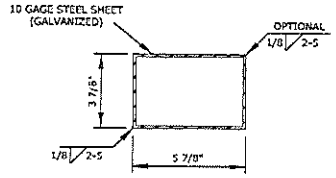
Plotted : 01-JUN-2016 09:36

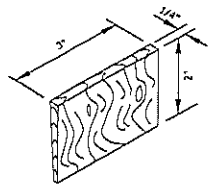
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	85	121



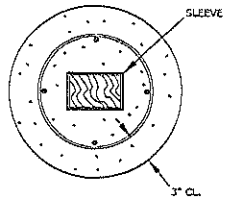
SIDE ELEVATION



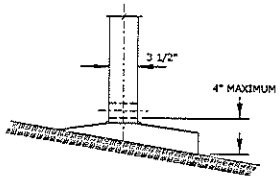
SECTION THRU SLEEVE



HARDWOOD WEDGE



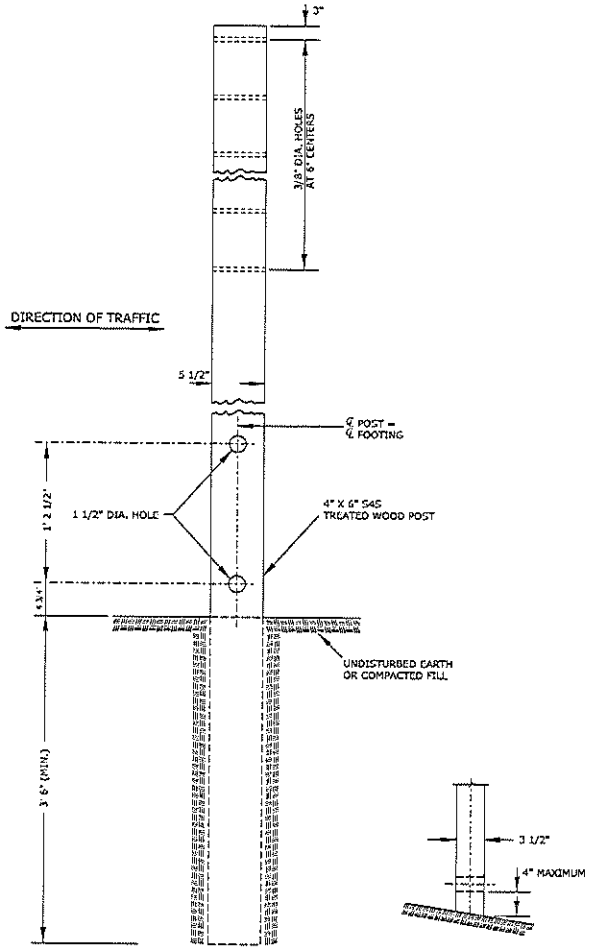
SECTION A-A



FRONT ELEVATION

NOTE:
COMMERCIAL GRADE CONCRETE MAY BE SUBSTITUTED FOR GRADE 25 CONCRETE FOR SIGN SUPPORT FOOTINGS.

WOOD POST IN CONCRETE FOOTING



SIDE ELEVATION

FRONT ELEVATION

WOOD POST IN SOIL

GENERAL NOTES

DESIGN CONFORMS WITH ASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 2002". FOUNDATION DESIGN CONFORMS WITH "DESIGN PROCEDURE COMPARED TO FULL-SCALE TESTS OF DRILLED SHAFT FOOTINGS", TEXAS TRANSPORTATION INSTITUTE, FEBRUARY 1970.

THE POST SLEEVE SHALL BE FORMED FROM STEEL SHEET WHICH WAS PRODUCED TO MEET THE REQUIREMENTS OF ASTM A653M AND ZINC COATED TO MEET THE REQUIREMENTS OF COATING DESIGNATION A123. IT IS PERMISSIBLE TO CLOSE THE BOTTOM OF THE SLEEVE WITH A METAL PLATE. BASIS OF ACCEPTANCE SHALL BE VISUAL INSPECTION OF THE FINISHED SLEEVE AND DETERMINATION OF ZINC THICKNESS BY MAGNETIC GAGE.

ALL SIGN MOUNTING HOLES IN THE WOOD POSTS SHALL BE DRILLED PRIOR TO TREATING.

BREAKAWAY HOLES AND FIELD CUTS SHALL BE TREATED IN ACCORDANCE WITH THE PRESERVATIVE TREATMENT SPECIFICATIONS.

PRIOR TO SEALING THE OPENING BETWEEN THE WOOD POST AND THE TOP OF THE CONCRETE FOOTING, PLACE TWO HARDWOOD WEDGES INTO THE OPENING ON TWO ADJACENT SIDES OF POST AND FORCE DOWN TO WITHIN 3/8" OF TOP OF FOOTING.

NOTE TO THE ENGINEER:
THE INTENT OF THE "ROADSIDE DESIGN GUIDE" AND THESE PLANS IS TO HAVE A 4" OR LESS PROJECTION ABOVE THE GROUND LINE AFTER IMPACT.

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR WOOD POSTS

TE460 7/1/03

FINAL APPROVAL 7/22/2003 JAMES STEVEN A. HUNSICKER
CHANGED JOHN C. MILLER KARL DUMBELER DRAWN
DESIGN CO. S.A. WINTERS CO. JOHN DAVIS CO. CHECK CO.

Sh. No. 85

Drawn By: dip
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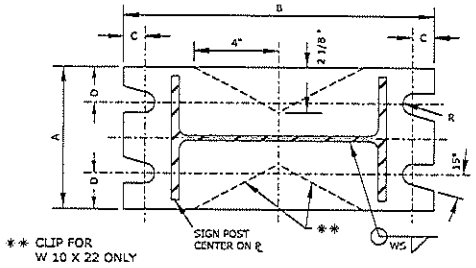
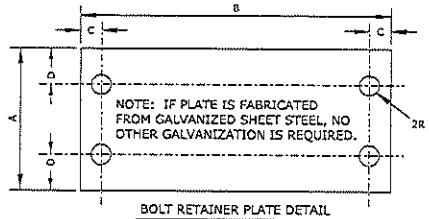
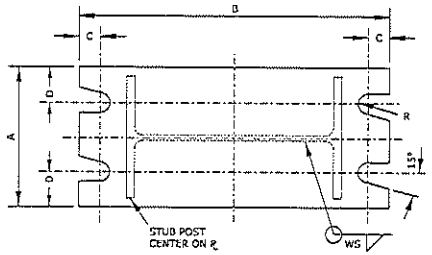


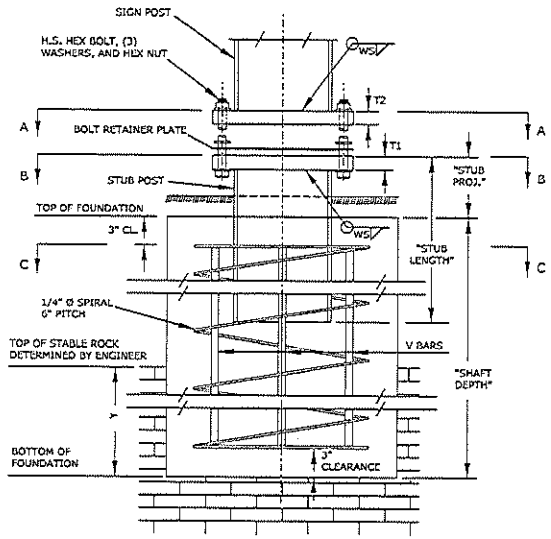
SECTION A-A



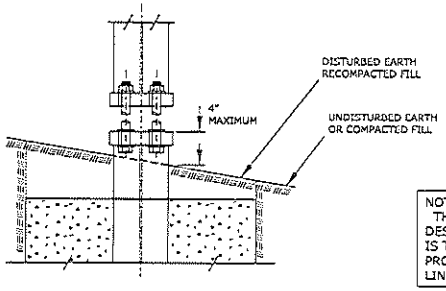
BOLT RETAINER PLATE DETAIL
30 GAGE SHEET STEEL



SECTION B-B



SIDE ELEVATION



FRONT ELEVATION

NOTE TO THE ENGINEER:
THE INTENT OF THE "ROADSIDE DESIGN GUIDE" AND THESE PLANS IS TO HAVE A 4" OR LESS PROJECTION ABOVE THE GROUND LINE AFTER IMPACT.

FOUNDATION DATA TABLE								
POST SIZE	STUB LENGTH	STUB PROJ.	SHAFT DIA.	SHAFT DEPTH			V BAR	
				A572M ALT.	A36M	Y*1	NO.	SIZE
S 3 X 5.7	1' 9"	6"	2' 0"	6' 0"	6' 0"	2' 6"	5	#4
W 6 X 9	2' 6"	6 1/4"	2' 0"	6' 0"	6' 0"	3' 6"	6	#4
W 10 X 12	2' 9"	6 1/4"	2' 0"	8' 0"	8' 0"	4' 0"	5	#6
W 10 X 22	3' 3"	7"	2' 6"	12' 0"	11' 0"	5' 6"	13	#6

*1 WHEN ROCK IS ENCOUNTERED, WHILE DRILLING THE SHAFT FOR THE CONCRETE FOUNDATION, EXTEND THE SHAFT INTO THE ROCK THE DISTANCE "Y". THE TOTAL SHAFT DEPTH SHALL NOT EXCEED THAT GIVEN FOR THE CORRESPONDING POST SIZE AND STEEL TYPE.

GENERAL NOTES

DESIGN CONFORMS WITH AASHTO " STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAT SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 2002". BREAKAWAY BASE AND HINGE DESIGN CONFORMS WITH "BREAKAWAY ROADSIDE SIGH SUPPORT STRUCTURES"' TEXAS TRANSPORTATION INSTITUTE' TEXAS A&M UNIVERSITY, JULY 1967.

FOUNDATION DESIGN CONFORMS WITH "DESIGN PROCEDURE COMPARED TO FULL-SCALE TESTS OF DRILLED SHAFT FOOTINGS", TEXAS TRANSPORTATION INSTITUTE, FEB. 1970.

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 OR A572 GRADE 345. ALTERNATES USING ASTM A588 OR A242 GRADE 345 OR OTHER APPROVED STEELS MAY BE SUBSTITUTED FOR ASTM 572 STEEL. ALL STRUCTURAL STEEL SHALL BE GALVANISED IN ACCORDANCE WITH ASTM A123 AFTER FABRICATION.

ALL HIGH STRENGTH BOLTS, NUTS, AND WASHERS SHALL CONFORM TO ASTM A325 AND SHALL BE COATED IN ACCORDANCE WITH THE COATING SPECIFICATIONS.

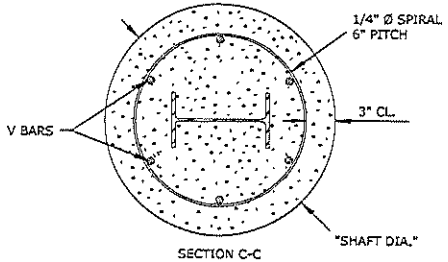
PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

1. ASSEMBLE POST TO STUB WITH BOLTS; WITH BOLT RETAINER PLATE AND ONE FLAT WASHER (ON EACH BOLT) BETWEEN BASE PLATES.
2. PLUMB POST BY VARYING THICKNESS OF WASHERS BETWEEN BASE PLATES.
3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12 TO 15 INCH WRENCH TO BED WASHERS AND SHIM AND TO CLEAN BOLT THREADS. THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE (SEE TABLE). DO NOT OVER TIGHTEN.
4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

BASE CONNECTION DATA TABLE										
POST SIZE	BOLT SIZE	TORQUE (IN. LBS.)	WS	T1	T2	A	B	C	D	R
S 3 X 5.7 ⊕	1/2" X 2 3/4"	140	1/4"	3/4"	5/8"	3"	6 1/2"	3/4"	3/4"	9/32"
W 6 X 9	5/8" X 3"	345	1/4"	7/8"	5/8"	4 5/8"	9 5/8"	3/4"	1 1/16"	11/32"
W 10 X 12	5/8" X 3 1/4"	345	1/4"	1"	3/4"	4 5/8"	11 5/8"	3/4"	1 1/16"	11/32"
W 10 X 22	7/8" X 4"	640	3/8"	1 3/8"	1"	6 5/8"	12 5/8"	7/8"	1 11/16"	15/32"

⊕ S 3 X 7.5 STEEL POST MAY BE SUBSTITUTED FOR THE S 3 X 5.7 STEEL POST

NOTE:
THE SECTIONS SHOWN ARE FOR RIGHT SHOULDER OR GORE INSTALLATIONS. THE PLATE SLOT BEVELS ARE TO BE REVERSED FOR LEFT SHOULDER INSTALLATIONS.



SECTION C-C

NOTE: COMMERCIAL GRADE CONCRETE MAY BE SUBSTITUTED FOR GR. 25 CONCRETE FOR SIGN SUPPORT FOOTINGS.

ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR
STEEL BEAM BREAKAWAY POSTS
SHEET 1 OF 2

TE463 7/1/03

FINAL APPROVAL 12/22/2003 APPD. Steven A. Buehler
DESIGNED RAVI M. TARGO R.A.R. CHAMBERS TRACED
DRAWN BY S.A.R. TRICHAL S.V. D.R.V. CHAMBERS CHKD.

Sh. No. 86

Drawn By : dlp Plotted : 01-JUN-2016 09:35
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02pss433.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
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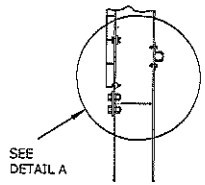
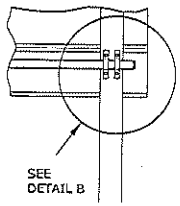
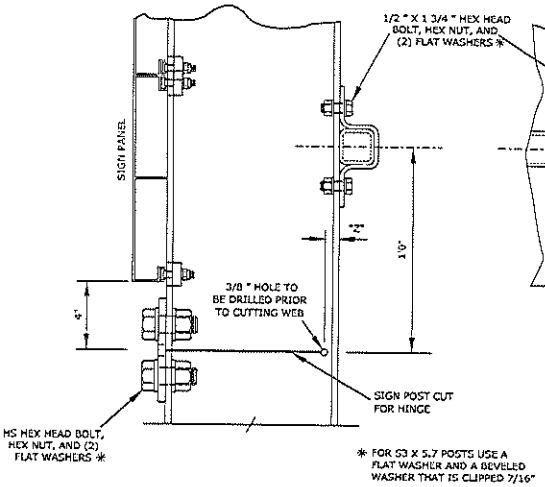


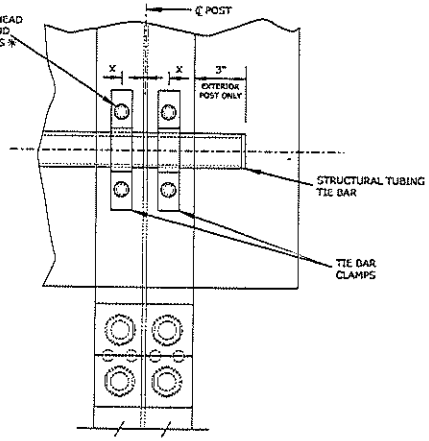
SIDE ELEVATION



REAR ELEVATION



DETAIL A



DETAIL B

BREAKAWAY HINGE AND STRUCTURAL TUBE TIE BAR MOUNTING

GENERAL NOTES

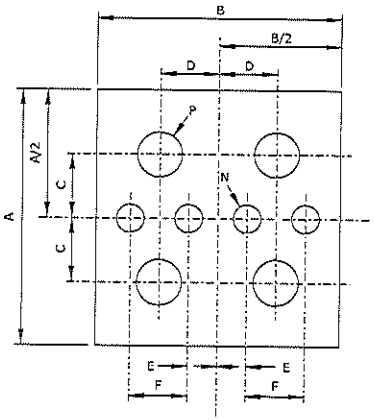
DESIGN CONFORMS WITH AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 2002". BREAKAWAY BASE AND HINGE DESIGN CONFORMS WITH "BREAKAWAY ROADSIDE SIGN SUPPORT STRUCTURES", TEXAS TRANSPORTATION INSTITUTE, TEXAS A&M UNIVERSITY, JULY 1967.

FUSE PLATE STEEL SHALL CONFORM TO ASTM A36 (NO SUBSTITUTES WILL BE ALLOWED). ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 OR A572 GRADE 345. ALTERNATES USING ASTM A588 OR A242 GRADE 345 OR OTHER APPROVED STEELS MAY BE SUBSTITUTED FOR ASTM 572 STEEL. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER FABRICATION.

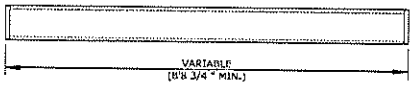
ALL HIGH STRENGTH BOLTS, NUTS, AND WASHERS SHALL CONFORM TO ASTM A325 AND SHALL BE COATED IN ACCORDNCE WITH THE COATING SPECIFICATIONS.

THE FUSE PLATE SHALL BE CENTERED ON THE SAW CUT AND THE STEEL POST.

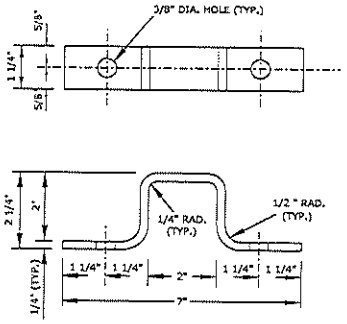
IT IS PERMISSIBLE TO CLOSE THE ENDS OF THE STRUCTURAL TUBING TIE BAR WITH A STEEL PLATE.



FUSE PLATE DETAIL



STRUCTURAL TUBE TIE BAR
2" X 2" X 3/16 " WALL



TIE BAR CLAMP

FUSE DATA TABLE												
POST SIZE	BOLT SIZE	A	B	C	D	E	F	N	P	T3	X	Z
S 3 X 5.7 ✱✱	1/2" X 1 3/4"	4 1/4"	2 3/8"	1 1/4"	11/16"	9/32"	9/16"	11/32"	9/16"	1/4"	11/16"	3/4"
W 6 X 9	5/8" X 1 3/4"	4 3/4"	4"	1 3/8"	1"	15/32"	15/16"	1/2"	11/16"	3/16"	1 1/8"	5/8"
W 10 X 12	3/4" X 2"	4 3/4"	4"	1 3/8"	1"	15/32"	15/16"	15/32"	13/16"	1/4"	1 1/8"	11/16"
W 10 X 22	1" X 2 1/2"	6"	5 3/4"	1 1/2"	1 3/8"	11/16"	1 3/8"	21/32"	1 1/16"	5/16"	1 3/8"	13/16"

✱✱ S3 X 7.5 STEEL POST MAY BE SUBSTITUTED FOR THE S3 X 5.7 STEEL POST

DIMENSIONS "N" AND "P" ARE HOLE DIAMETERS.
DIMENSION "T3" IS THE FUSE PLATE THICKNESS.

ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE NOTED.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR
STEEL BEAM BREAKAWAY POSTS
SHEET 2 OF 2

TE464 7/1/03

TYPE APPROVAL 7/22/2003 APPD. Steven L. Hunter
DESIGNED R.J.D./M.K.T./A.E.D. DRAWN D.E.S. CHECKED
DWGR. CK. S.A.B./M.C.M./J.K. D.D.S. DRAWN CK. TRACE CK.

Sh. No. 07

Plotted : 01-JUN-2016 09:36
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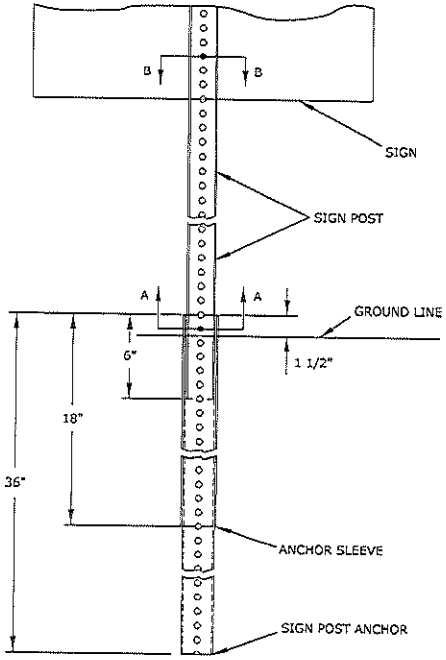
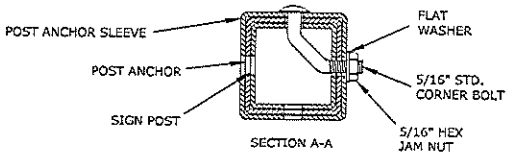
Drawn By : drp

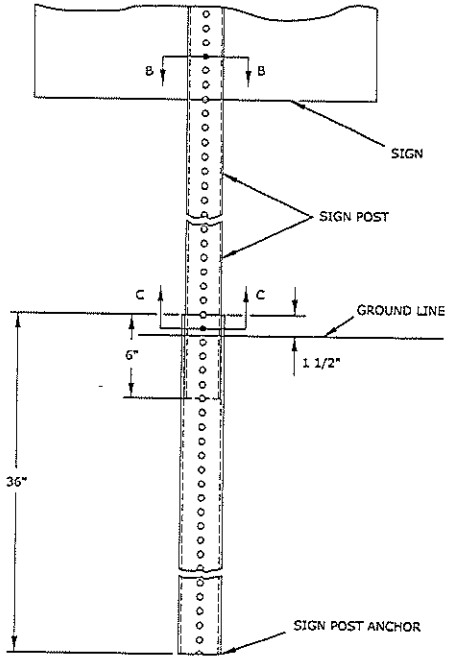
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	88	121

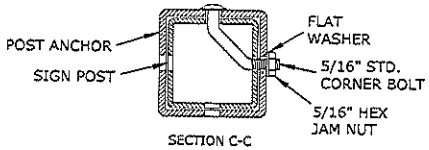




SECTION A-A

DETAILS FOR 1 3/4", 2", OR 2 1/4" SIGN POST





SECTION C-C

DETAILS FOR 2 1/2" SIGN POST

MATERIAL REQUIREMENTS

SIGN POSTS, POST ANCHORS, AND POST ANCHOR SLEEVES:
THE SIGN POSTS, POST ANCHORS, AND POST ANCHOR SLEEVES SHALL CONFORM TO (1) HOT ROLLED CARBON STEEL ASTM A-570 GRADE 33 OR ASTM STRUCTURAL QUALITY C 1021 WITH A HOT-DIPPED GALVANIZING CONFORMING TO AASHTO M-120 WITH AN INLINE SYSTEM FOLLOWED BY A CHROMATE CONVERSION AND A CROSS-LINKED POLYURETHANE ACRYLIC EXTERIOR COATING OR (2) A GALVANIZED FINISH COLD ROLLED CARBON STEEL ASTM A-446 GRADE A WITH A GALVANIZING CONFORMING TO ASTM A-525, DESIGNATION G-90.

THE SIGN POST SHALL HAVE 7/16" DIA. HOLES OR 7/16" DIA. EMBOSSED RING (DIE-CUT KNOCKOUTS) AT 1" CENTERS ON ALL FOUR SIDES FOR TOTAL LENGTH OF POST.

THE POST ANCHOR AND POST ANCHOR SLEEVE MAY BE FURNISHED WITHOUT THE BOLT HOLES ON ALL FOUR SIDES WITH THE EXCEPTION OF THE HOLES IMMEDIATELY ABOVE THE GROUND LINE.

ALL HOLES SHALL BE DRILLED OR PUNCHED AND ALL WELDS, CUTS, BURRS, AND SHARP EDGES ARE TO BE SMOOTHED OFF BEFORE APPLICATION OF FINISH.

FASTENING ACCESSORIES:
THE BOLTS, NUTS, AND WASHERS SHALL COMPLY WITH SUBSECTION 1614 OF THE STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION (1990 EDITION).

THE BOLTS, NUTS, AND WASHERS SHALL BE BID SUBSIDIARY TO THE BID ITEM 'SQUARE STEEL POST'.

BASIS OF ACCEPTANCE:
ACCEPTANCE OF THE STEEL POSTS, ANCHORS, SLEEVES, AND FASTENERS FURNISHED TO COMPLY WITH THE ABOVE REQUIREMENTS WILL BE BASED ON RECEIPT AND APPROVAL OF A TYPE D CERTIFICATION AS DESCRIBED IN SECTION 2600 OF THE STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION (1990 EDITION) AND VISUAL INSPECTION FOR CONDITION AND DIMENSIONAL REQUIREMENTS.

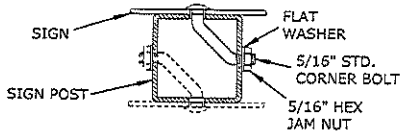
INSTALLATION SEQUENCE

1. DRIVE POST ANCHOR INTO SUBGRADE.
2. DRIVE POST ANCHOR SLEEVE (IF REQUIRED) INTO SUBGRADE OVER THE POST ANCHOR.
3. INSTALL SIGN POST INTO THE POST ANCHOR.

NOTE:
IN ALL INSTALLATIONS, THE FIRST HOLE ABOVE THE GROUND LINE ON THE SIGN POST, POST ANCHOR, AND POST ANCHOR SLEEVE (IF REQUIRED) MUST BE IN LINE FOR INSERTION OF THE CORNER BOLT.

MATERIALS TABLE FOR SIGN POST AND FOOTING		
SIGN POST 12 GA. OR 14 GA.	FOOTING	
	POST ANCHOR	POST ANCHOR SLEEVE
1 3/4 " X 1 3/4 "	2" X 2" X 12 GA.	2 1/4" X 2 1/4" X 12 GA.
2" X 2"	2 1/4" X 2 1/4" X 12 GA.	2 1/2" X 2 1/2" X 12 GA.
2 1/4" X 2 1/4"	2 1/2" X 2 1/2" X 12 GA.	3" X 3" X 7 GA.
2 1/2" X 2 1/2"	3" X 3" X 7 GA.	NOT REQUIRED

NOTE: 14 GA. POSTS MUST MEET A CERTIFIED MINIMUM YIELD STRENGTH OF 60,000 P.S.I.



SECTION B-B

NO.	DATE	REVISION	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR PERFORATED SQUARE STEEL TUBE POSTS (PSST)

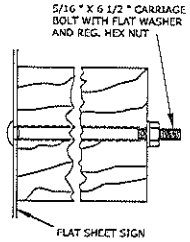
TE466 7/1/03

FIRM APPROVAL 7/22/2003 (APPD) Steven A. Dunlap
DESIGNED DRAWN CALD. A.A.D. CHECKED DRAWN CK. J.L.B. DATE CK. DATE CK.

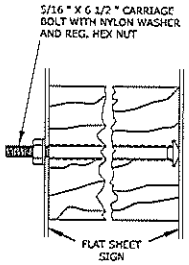
Sh. No. 88

Drawn By: drp
Plotted : 01-JUN-2016 09:36
File : U:\Work\a-Civil\2013\13\3910021\Transl\Traffic\Signing\Standards\KA-4113-02psst456.dgn

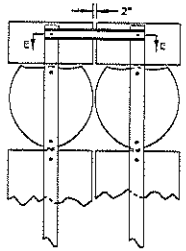
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	89	121

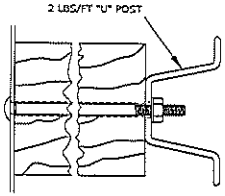


SECTION A-A



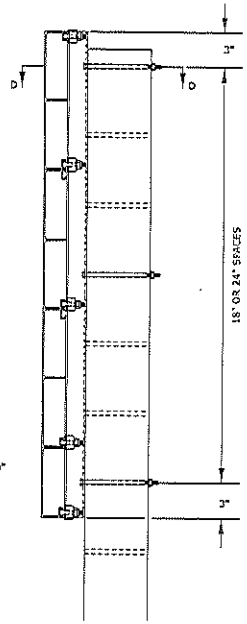
SECTION B-B



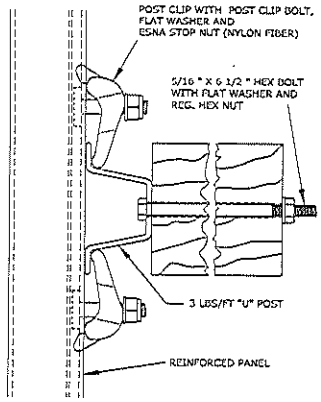


SECTION E-E

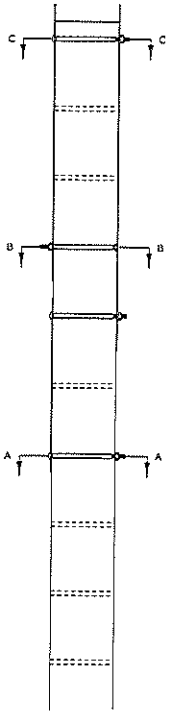
ROUTE MARKER ASSEMBLY ATTACHMENT



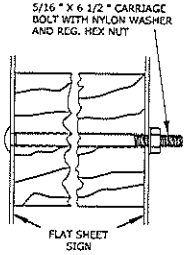
TYPICAL MOUNTING OF REINFORCED PANEL SIGNS



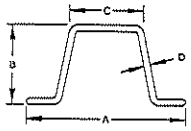
TOP VIEW



TYPICAL MOUNTING OF FLAT SHEET SIGNS



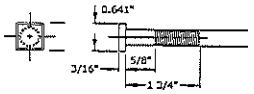
SECTION C-C



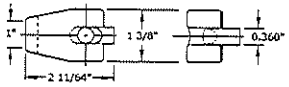
DIM.	2 LBS/FT	3 LBS/FT
A	3 1/8 "	3 1/2 "
B	1 17/32 "	1 3/4 "
C	1 1/4 "	1 5/8 "
D	1/8 "	9/64 "

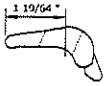
(DIMENSIONS ARE NOMINAL)

'U' POST DIMENSION DETAILS

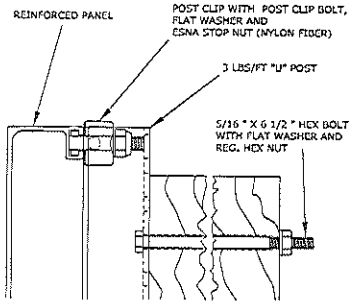


POST CLIP BOLT





POST CLIP



SIDE VIEW

SECTION D-D

NOTES:

THE TOP OF THE POST SHALL NOT EXTEND ABOVE THE TOP OF THE SIGN.

WHEN SIGNS ARE MOUNTED BACK TO BACK, THE SIGNS SHALL BE MOUNTED AT THEIR PRESCRIBED HEIGHT. IN GENERAL INSTALLATIONS, THE BOTTOM HOLES OF THE SIGNS SHOULD BE ALIGNED. IN ORDER TO PREVENT HAVING TO DRILL HOLES IN THE SIGNS OR POSTS, THE SIGN ON THE BACK SHOULD BE RAISED AND POSITIONED SUCH THAT THE HOLES ARE ALIGNED. WHEN A SIGN IS MOUNTED ON THE BACK OF THE "YIELD" (R1-2) SIGN, THE TOP HOLES OF THE SIGNS SHOULD BE ALIGNED.

WHEN MOUNTED WITH ANOTHER SIGN (PRIMARY SIGN), THE ADVISORY PLATE, TYPE 1 OBJECT MARKER, OR SECONDARY SIGN, SHALL BE MOUNTED AT THEIR PRESCRIBED HEIGHT. THE PRIMARY SIGN SHALL BE MOUNTED AT THEIR PRESCRIBED HEIGHT, BUT UNDER NO CIRCUMSTANCES SHALL THE SIGNS OVERLAP EACH OTHER.

ADDITIONAL MOUNTING HOLES, EITHER THROUGH THE SIGN OR POST, SHALL BE DRILLED BY THE CONTRACTOR. ALL HOLES DRILL IN THE POST SHALL BE TREATED WITH A PERSERVATIVE. ALL HOLES IN THE SIGN SHALL BE FREE OF ANY DEFECTS AND THE SHEETING AROUND THE HOLE SHALL NOT BE DAMAGED.

A NYLON WASHER SHALL BE USED WHEN A NUT IS TO BE TIGHTENED AGAINST THE SIGN FACE.

WHEN THE 2 LBS/FT STEEL "U" POST IS USED AS A ROUTE MARKER ASSEMBLY ATTACHMENT, IT SHALL BE SUBSIDIARY TO THE BID ITEM '4" X 6" WOOD POST (FLAT SHEET SIGN)'.

THE POST CLIP BOLT MAY HAVE A RECTANGULAR HEAD, IF THE SMALLER DIMENSION IS EQUAL TO THE SQUARE HEAD DIMENSION.

ALL DIMENSIONS ARE IN INCHES

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR MOUNTING SIGNS ON WOOD POSTS

FLAT SHEET AND REINFORCED PANEL

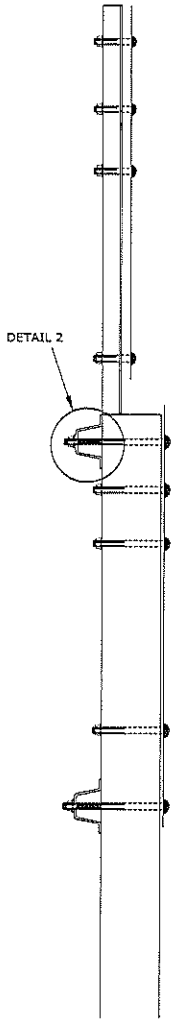
TE481 7/1/03

TYPE: JUNIORIA 1-22-2003 (JRPS) DRAWN: L.Hartley
DESIGN: RUSS DETMER K.S.R. COMMITTEE CHECK:
DESIGN CK: S.A.R. DETAIL CK: D.B.G. DRAIN. CK: BRACE CK:

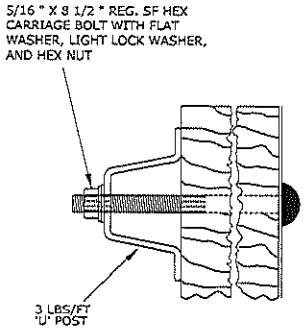
Sh. No. 89

Drawn By: drp
File: U:\KSHFa-Ch\F2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02pss481.dgn
Plotted: 01-JUN-2016 09:35

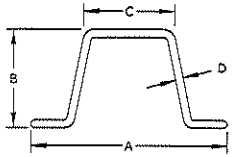
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	90	121



TYPICAL SIDE VIEW



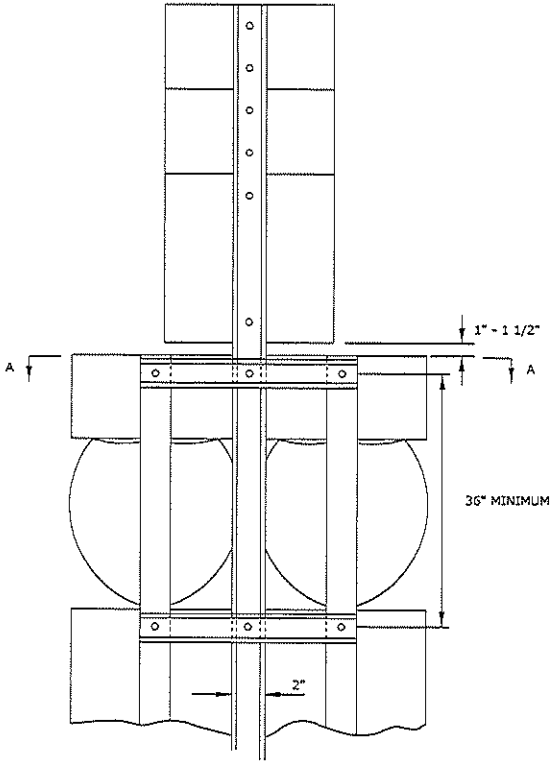
DETAIL 2



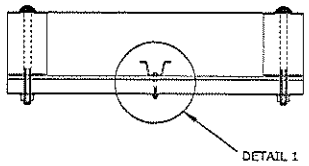
DIM.	3 LBS/FT
A	3 1/2 "
B	1 3/4 "
C	1 5/8 "
D	9/64 "

(DIMENSIONS ARE NOMINAL)

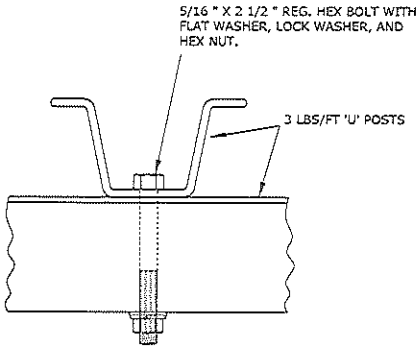
'U' POST DIMENSION DETAILS



TYPICAL STANDARD MOUNTING
(VIEW FROM THE BACK)



SECTION A-A



DETAIL 1

NOTE:
THE 3 LBS/FT STEEL 'U' POSTS, WHEN USED AS A ROUTE MARKER ASSEMBLY ATTACHMENT, SHALL BE SUBSIDIARY TO THE BID ITEM 4" X 6" WOOD POST (FLAT SHEET SIGN).

ALL DIMENSIONS ARE IN INCHES

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR MOUNTING SIGNS ABOVE TURN ASSEMBLIES

WOOD POST

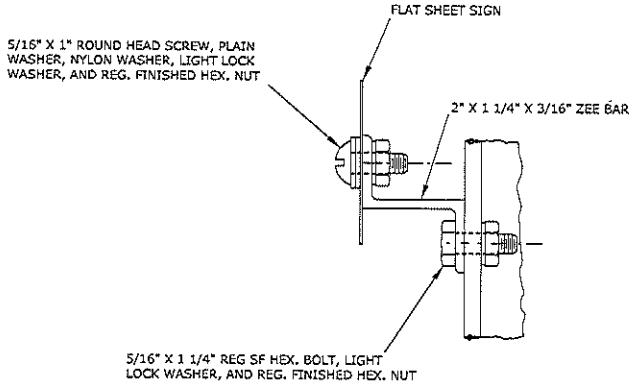
TE484 7/1/03

FHWA APPROVAL 12/22/2003 APP'D SENIOR L. ENGINEER
DESIGNED R.D.O. DETAILED A.A.R. QUANTITIES T.MACE
DESIGN EN. A.A.R. DETAIL EN. R.D.O. QUANT. EN. T.MACE EN.

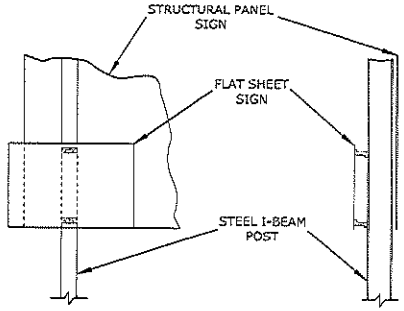
Sh. No. 90

Drawn By : drp
Plotted : 01-JUN-2016 09:30
File : U:\Wichita-Civil\2013\13081\002\Transit\Traffic\Signing\Standards\KA-4113-02pss484.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	91	121

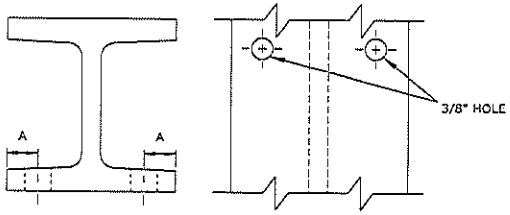


SECTION A-A

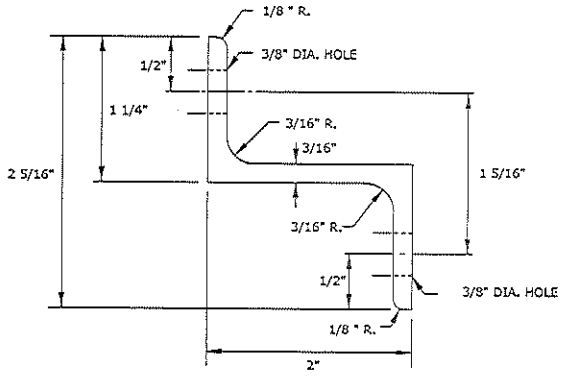


TYPICAL MOUNTING

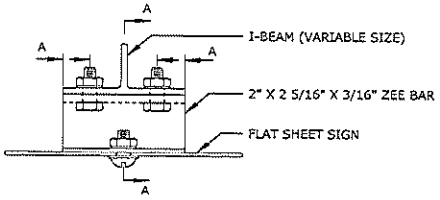
BEAM	A
S3X5.7	7/16"
W6X9	3/4"
W10X12	1 1/4"
W10X22	1 1/4"



TYPICAL I-BEAM



TYPICAL ZEE BAR



NOTE:
ALL BOLTS, NUTS, WASHERS & MACHINE SCREWS SHALL BE STEEL.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS FOR MOUNTING FLAT SHEET SIGN ON STEEL I-BEAM POST

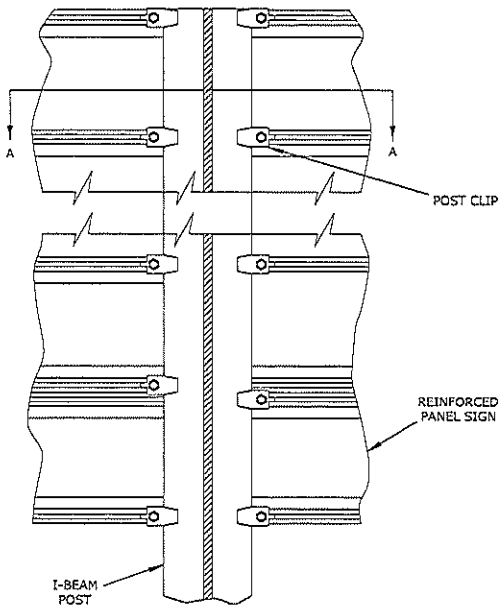
TE487 7/1/03

FINAL ORIGINAL | TRACED | STRUCT. & ENGRG.
CHECKED | DESIGN DETAILED | DESIGN QUANTITIES | TRACED
DESIGN CK. | DESIGN DETAIL CK. | DESIGN QUANT. CK. | TRACE CK.

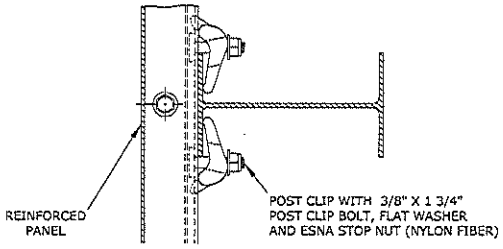
Sh. No. 91

Plotted : 01-JUN-2016 09:39
Drawn By : dlp
File : U:\Wichita-Civil\2013\1303100\2\Trans\Traffic\Signing\Standards\KA-4113-02pss497.dgn

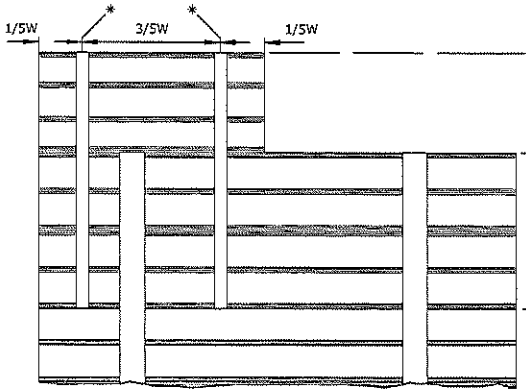
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	92	121



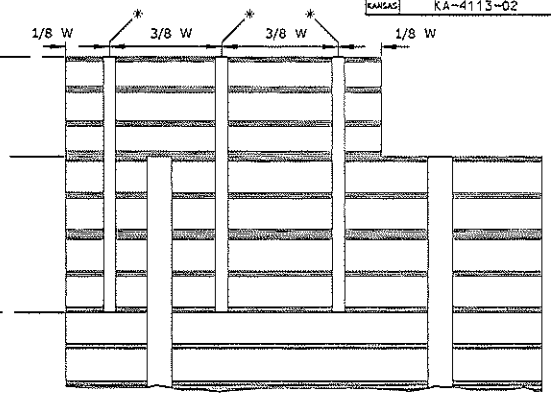
MOUNTING OF REINFORCED PANELS TO I-BEAM POST



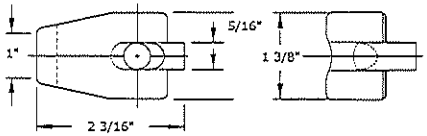
SECTION A-A

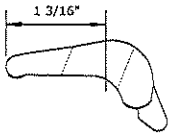


E1-5 MOUNTING FROM RIGHT EXIT
(2 I-BEAMS)

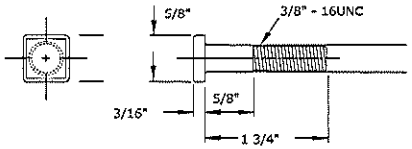


E1-5 MOUNTING FROM RIGHT EXIT
(3 I-BEAMS)





POST CLIP
ALUMINUM



POST CLIP BOLT
ALUMINUM

NOTES:
* - CENTERLINE OF ALUMINUM I-BEAM
H1 - HEIGHT OF ADDED SIGN (E1-5)
H2 - H1 + 12" OR TO THE BOTTOM OF THE NEXT STIFFENER
THE E1-5 SIGN SHALL BE POSITIONED ABOVE THE GUIDE SIGN ACCORDING TO THE DIRECTION OF THE EXIT:
RIGHT EXIT - RIGHT EDGE OF SIGN
LEFT EXIT - LEFT EDGE OF SIGN
TWO EXITS (ONE LEFT AND ONE RIGHT) - CENTER OF SIGN
THE ALUMINUM I-BEAMS ARE TO BE MOUNTED AT THE SPACINGS SHOWN. IF THE I-BEAM SPACING CONFLICTS WITH THE SIGN POSTS, THEN THE I-BEAM IS TO BE MOVED TO THE SIDE OF THE SIGN POST THAT MORE CLOSELY FITS THE SPACINGS AND AS DETERMINED BY THE ENGINEER.
THE POST CLIP BOLT MAY HAVE A RECTANGULAR HEAD, IF THE SMALLER DIMENSION IS EQUAL TO THE SQUARE HEAD DIMENSION.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

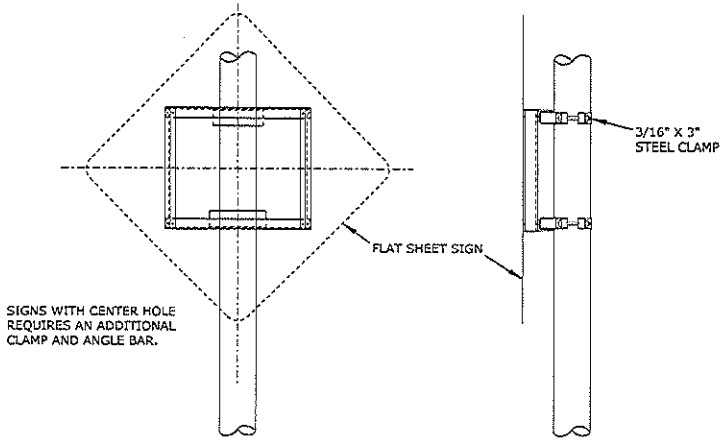
DETAILS FOR MOUNTING REINFORCED PANEL SIGN ON I-BEAM POST

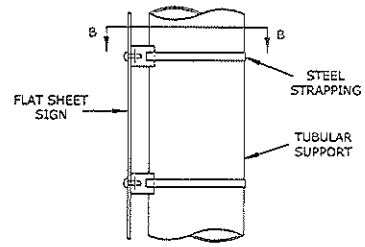
TE490 7/1/03

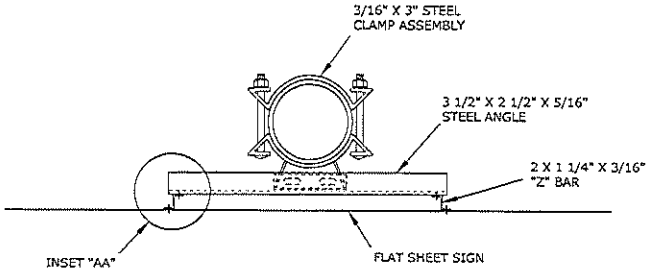
Sh. No. 92

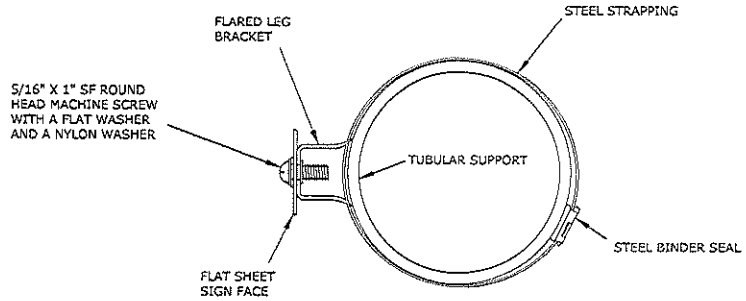
Drawn By : drp
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02pss450.dgn
Plotted : 01-JUN-2016 09:36

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	93	121

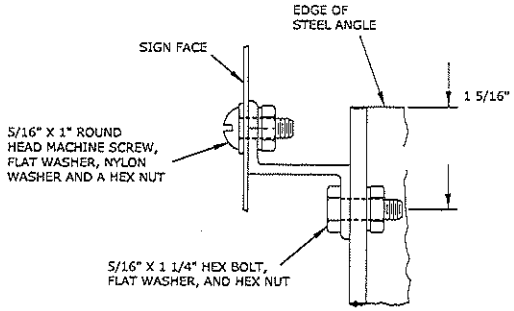




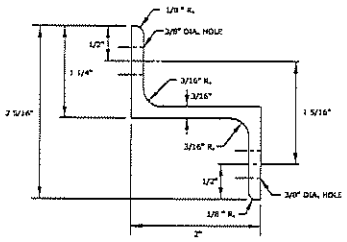




SECTION BB



INSET AA



ALUMINUM "Z" BAR

NOTES:
THE STEEL STRAPPING, STEEL CLAMP ASSEMBLY, ANGLE BAR, 'Z' BAR, AND FASTENERS ARE SUBSIDIARY TO THE BID ITEM "FLAT SHEET SIGNS".

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD.

KANSAS DEPARTMENT OF TRANSPORTATION

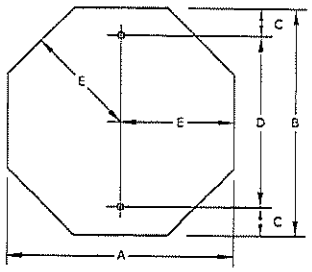
DETAILS FOR MOUNTING
FLAT SHEET SIGNS
ON VERTICAL SUPPORTS

TE493 7/1/03

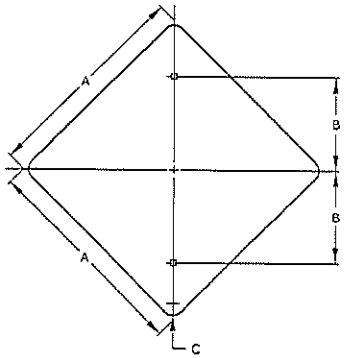
Sh. No. 93

Plotted: 01-JUN-2016 09:39
Drawn By: drp
File: U:\Wichita-Civil\2013\130861\002\Trans\Traffic\Signing\Standards\KA-4113-02pss493.dgn

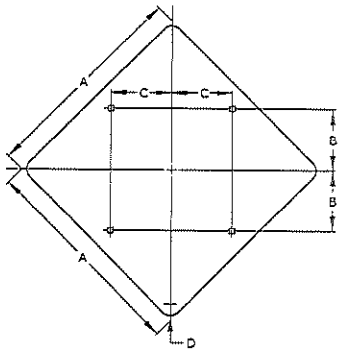
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	94	121



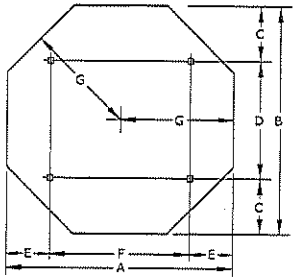
SIGN SIZE	A	B	C	D	E	T	AREA
30 X 30	30	30	3	24	15	0.080	5.18
36 X 36	36	36	6	24	18	0.080	7.46



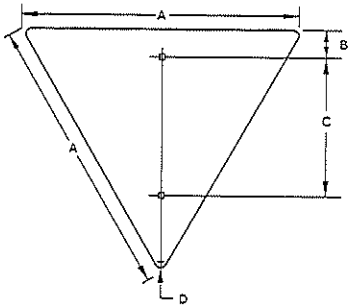
	SIGN SIZE	A	B	C	T	AREA
1	5 X 5	5	2 1/2	3/8	0.040	0.17
	18 X 18	18	6	1 1/2	0.080	2.25
	24 X 24	24	12	1 1/2	0.080	4.00
	30 X 30	30	12	1 7/8	0.080	6.25
2	36 X 36	36	18	2 1/4	0.080	9.00



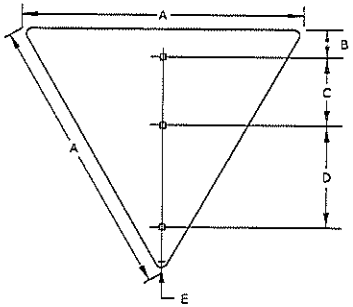
SIGN SIZE	A	B	C	D	T	AREA
48 X 48	48	12	15	3	2 1/2	16.00



SIGN SIZE	A	B	C	D	E	F	G	T	AREA
48 X 48	48	48	12	24	9	30	24	2 1/2	13.25



SIGN SIZE	A	B	C	D	T	AREA
36 X 36	36	3	18	2	0.080	3.90



SIGN SIZE	A	B	C	D	E	T	AREA
48 X 48	48	3	12	18	3	0.080	6.93
60 X 60	60	3	18	18	4	0.100	10.83

NOTE:
ALL HOLES ARE 3/8 " SQUARE UNLESS OTHERWISE NOTED.

THE DIMENSION "T" IS THE THICKNESS OF THE ALUMINUM BLANK.

ALL DIMENSIONS ARE IN INCHES.

1. HOLES SHALL BE 5/16 " DIAMETER.
2. CENTER HOLE IS REQUIRED.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN BLANK DETAILS FOR FLAT SHEET SIGNS

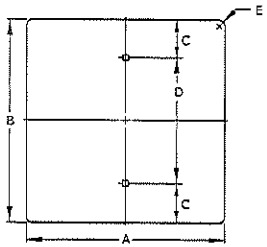
TE503 7/1/03

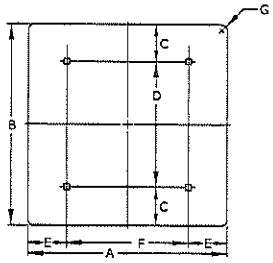
FORM APPROVAL 7/22/2003 APP'D Steven A. Rockhold
DESIGNED WORKING GROUP A.P.D. DRAWN BY STACEY
REVISED A.A.B.C.T.M. CO. P.D.D. CHANK. BY STACEY CO.

Sh. No. 94

Plotted : 01-JUN-2016 09:36
Drawn By : dfp
File : U:\Wichita-Civil\2013\33810\02\Transit\Traffic\Signing\Standards\KA-4113-02pss503.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	95	121





	SIGN SIZE	A	B	C	D	E	T	AREA
1	3 X 8	3	8	1	6	3/8	0.040	0.17
	6 X 12	6	12	3	6	3/8	0.040	0.50
	12 X 6	12	6	1 1/2	3	3/8	0.063	0.50
	12 X 18	12	18	3	12	1 1/2	0.063	1.50
	12 X 24	12	24	3	18	1 1/2	0.080	2.00
	12 X 36	12	36	6	24	1 1/2	0.080	3.00
	12 X 48	12	48	6	36	1 1/2	0.080	4.00
	15 X 15	15	15	1 1/2	12	1 1/2	0.063	1.56
	18 X 6	18	6	1 1/2	3	1 1/2	0.063	0.75
	18 X 12	18	12	3	6	1 1/2	0.063	1.50
	18 X 18	18	18	3	12	1 1/2	0.063	2.25
	18 X 24	18	24	3	18	1 1/2	0.080	3.00
	21 X 15	21	15	1 1/2	12	1 1/2	0.080	2.19
	24 X 6	24	6	1 1/2	3	1 1/2	0.080	1.00
	24 X 12	24	12	3	6	1 1/2	0.080	2.00
	24 X 18	24	18	3	12	1 1/2	0.080	3.00
	24 X 24	24	24	3	18	1 1/2	0.080	4.00
	24 X 30	24	30	3	24	1 1/2	0.080	5.00
	24 X 36	24	36	6	24	1 1/2	0.080	6.00
	30 X 15	30	15	1 1/2	12	1 1/2	0.080	3.13
	30 X 18	30	18	3	12	1 1/2	0.080	3.75
	30 X 24	30	24	3	18	1 1/2	0.080	5.00
	30 X 30	30	30	3	24	1 1/2	0.080	6.25
	30 X 36	30	36	6	24	1 1/2	0.080	7.50
	36 X 12	36	12	3	6	1 1/2	0.080	3.00
	36 X 18	36	18	3	12	1 1/2	0.080	4.50
	36 X 24	36	24	3	18	1 1/2	0.080	6.00
	36 X 30	36	30	3	24	1 1/2	0.080	7.50
	36 X 36	36	36	6	24	2	0.080	9.00

	SIGN SIZE	A	B	C	D	E	F	G	T	AREA
	36 X 12	36	12	3	6	6	24	1 1/2	0.080	3.00
	36 X 18	36	18	6	12	6	30	1 1/2	0.080	4.50
	36 X 24	36	24	6	12	6	24	1 1/2	0.080	6.00
	36 X 30	36	30	6	18	6	30	1 1/2	0.080	7.50
	36 X 36	36	36	6	24	6	24	1 1/2	0.080	9.00
	36 X 42	36	42	6	30	6	30	1 1/2	0.080	10.50
	48 X 12	48	12	3	6	9	30	1 1/2	0.080	4.00
	48 X 18	48	18	3	12	9	30	1 1/2	0.080	6.00
	48 X 24	48	24	6	12	9	30	2	0.080	8.00
	48 X 30	48	30	6	18	9	30	0	0.100	10.00
	48 X 36	48	36	6	24	9	30	0	0.100	12.00
	48 X 42	48	42	6	30	9	30	0	0.100	14.00
	48 X 48	48	48	9	30	9	30	0	0.100	16.00
2	48 X 72	48	72	15	42	9	30	0	0.100	24.00
2	48 X 96	48	96	21	54	9	30	0	0.100	32.00
	54 X 36	54	36	6	30	12	30	0	0.100	13.50
	54 X 42	54	42	6	30	12	30	0	0.100	15.75
	60 X 12	60	12	3	6	12	36	0	0.100	5.00
	60 X 18	60	18	3	12	12	36	0	0.100	7.50

SIGN SIZE	A	B	C	D	E	F	G	T	AREA
60 X 24	60	24	6	12	12	36	0	0.100	10.00
60 X 30	60	30	6	18	12	36	0	0.100	12.50
60 X 36	60	36	6	24	12	36	0	0.100	15.00
60 X 42	60	42	6	30	12	36	0	0.100	17.50
60 X 48	60	48	9	30	12	36	0	0.100	20.00
60 X 60	60	60	12	36	12	36	0	0.100	25.00
72 X 12	72	12	3	6	15	42	0	0.100	6.00
72 X 18	72	18	3	12	15	42	0	0.100	9.00
72 X 24	72	24	6	12	15	42	0	0.100	12.00
72 X 30	72	30	6	18	15	36	0	0.100	15.00
72 X 36	72	36	6	24	15	42	0	0.100	18.00
72 X 42	72	42	6	30	15	42	0	0.100	21.00
72 X 48	72	48	9	30	15	42	0	0.100	24.00
84 X 18	84	18	6	12	15	48	0	0.100	10.50
84 X 30	84	30	6	18	18	48	0	0.100	17.50
84 X 36	84	36	6	24	18	48	0	0.100	21.00
84 X 42	84	42	6	30	18	48	0	0.100	24.50
84 X 48	84	48	9	30	18	48	0	0.100	28.00

NOTE:
ALL HOLES ARE 3/8 " SQUARE, UNLESS OTHERWISE NOTED.

THE DIMENSION "T" IS THE THICKNESS OF THE ALUMINUM BLANK.

1 HOLES SHALL BE 5/16 " DIAMETER.

2 DIMENSION "D" REQUIRES A CENTER HOLE.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN BLANK DETAILS FOR FLAT SHEET SIGNS

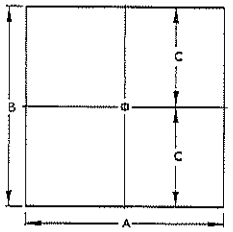
TE506 7/1/03

FHWA APPROVAL 7/22/2003 APPD STEVEN A. SWAYNE
DESIGNED D.R.G. DETAILED A.A.A. QUANTITIES TRACED
REVIEW CK. A.A.A. DETAIL CK. D.R.G. QUANT. CK. LINKS CK.

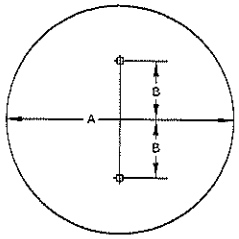
Sh. No. 95

Drawn By : drp
Plotted : 01-JUN-2016 09:38
File : U:\Wichita-Civil\2013\13081002\Trans\TrafficSigns\Standards\KA-4113-02pss506.dgn

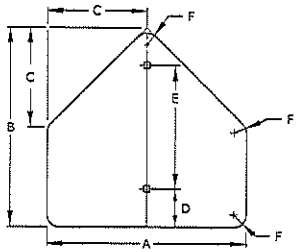
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	96	121



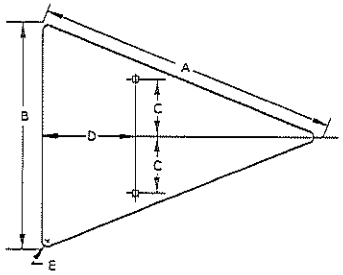
SIGN SIZE	A	B	C	T	AREA
6 X 6	6	6	3	0.063	0.25



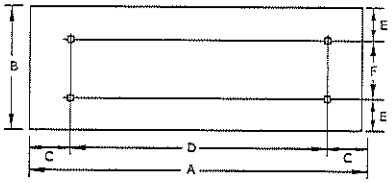
SIGN SIZE	A	B	T	AREA
36 DIA	36	12	0.080	7.07



SIGN SIZE	A	B	C	D	E	F	T	AREA
30 X 30	30	30	15	3	24	48	0.080	4.69
36 X 36	36	36	18	6	24	2 1/4	0.080	6.75

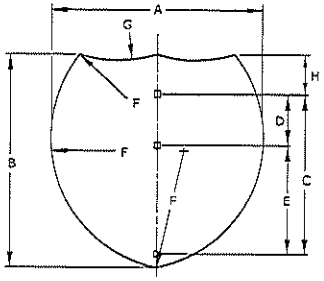


SIGN SIZE	A	B	C	D	E	T	AREA
48 X 36	48	36	9	14 3/4	2 1/4	0.125	5.56



SIGN SIZE	A	B	C	D*	E	F	T	AREA
102 X 18	102	18	3	13 HOLES @ 8" SPACING	3	12	0.100	12.75

* 3/8" DIA. HOLES



INDEPENDENT USE

DIMENSIONS										
SIZE	A	B	C	D	E	F	G	H	T	AREA
24 X 24	24	24	18	-	-	15	15	3	0.080	3.20
36 X 36	36	36	30	12	18	22.5	22.5	3	0.080	7.20
30 X 24	30	24	18	-	-	17	24	3	0.080	3.99
45 X 36	45	36	30	12	18	25.5	36	3	0.100	8.99

NOTES:
ALL HOLES ARE 3/8 " SQUARE, UNLESS OTHERWISE NOTED.
THE DIMENSION "T" IS THE THICKNESS OF THE ALUMINUM BLANK.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

SIGN BLANK DETAILS FOR
FLAT SHEET SIGNS

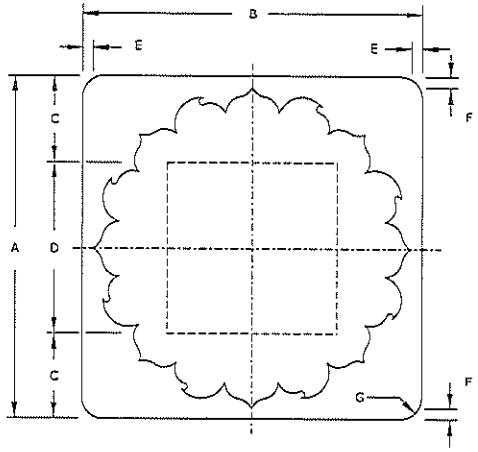
TE509 7/1/03

FHWA APPROVAL 7/22/2003 APP'D Steven A. Hunsley
DESIGNED D.D.G. DETAILED A.A.D. QUANTITIES TRACED
DESIGN CK. S.A.R. DETAIL CK. D.D.G. QUAN. CK. TRACE CK.

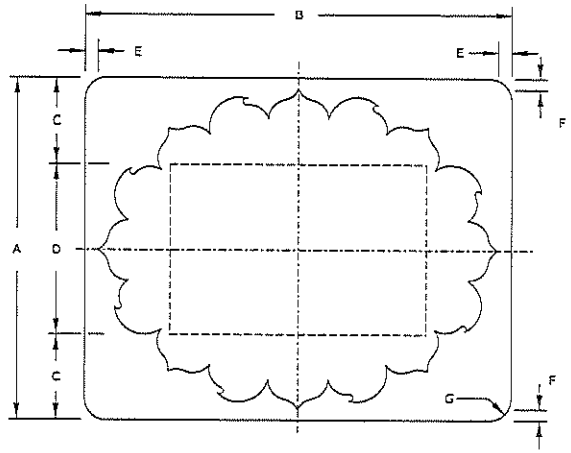
Sh. No. 96

Drawn By : drp
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02pss509.dgn
Plotted : 01-JUN-2016 09:36

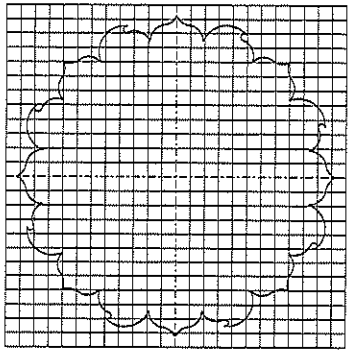
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	97	121

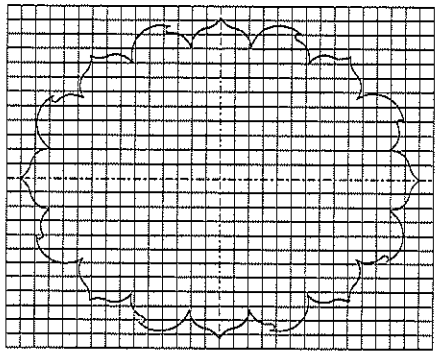


1 OR 2 DIGITS



3 DIGITS





COLORS
BACKGROUND AROUND SUNFLOWER - BLACK
SUNFLOWER - YELLOW
NUMERALS - BLACK

SIZE	A	B	C	D	E	F	G
24 X 24	24	24	6	12	0.75	0.75	1.5
30 X 24	24	30	6	12	1	0.75	1.5

ALL DIMENSIONS IN INCHES.

NOTE:
SEE PLAN, QUANTITY, OR SIGN DESIGN LAYOUT SHEETS FOR NUMERALS TO BE USED. THE NUMERALS SHALL BE SERIES "D" LEGEND. OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE.

SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

PROCESSED SIGN DETAILS
KANSAS ROUTE MARKERS

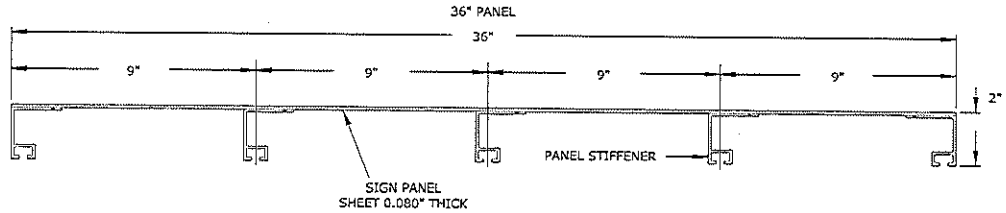
TE515 7/1/03

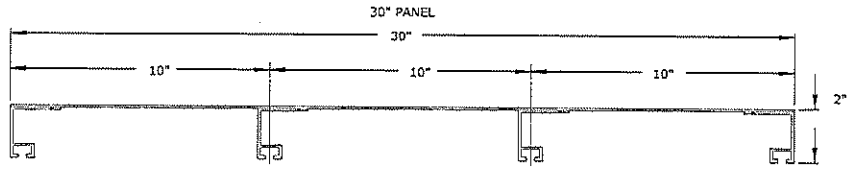
FINAL APPROVAL 7/22/2003 APPD. A.PRINE, R.MAHONY
DESIGNED SUBD/DETAILED R.A.M. QUANTITIES TRACED
DESIGN CK. S.A.P/DETAIL CK. R.D.A. DRAWN CK. TRACE CK.

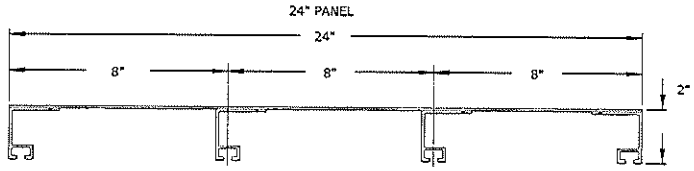
Sh. No. 97

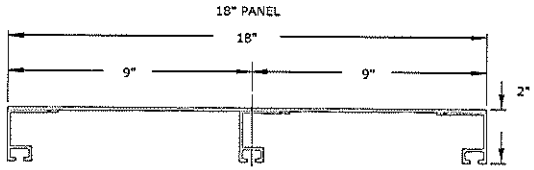
Plotted: 01-JUN-2016 09:36
Drawn By: drp
File: U:\Work-Civil\20013113081\0002\Transtraffic\Signing\Standards\KA-4113-02psss515.dgn

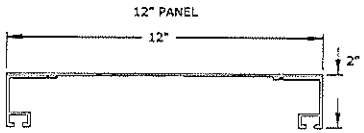
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	98	121



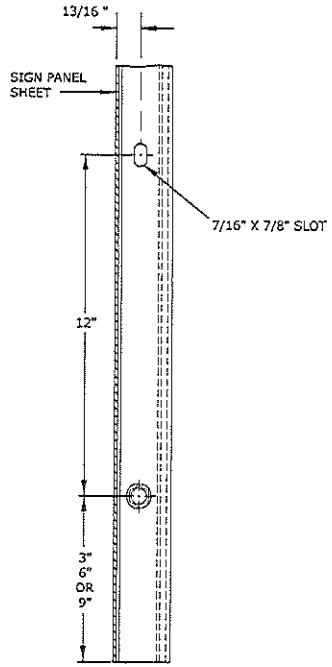




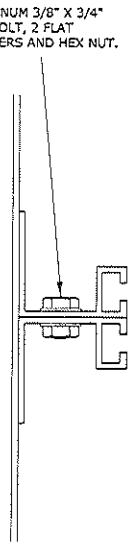




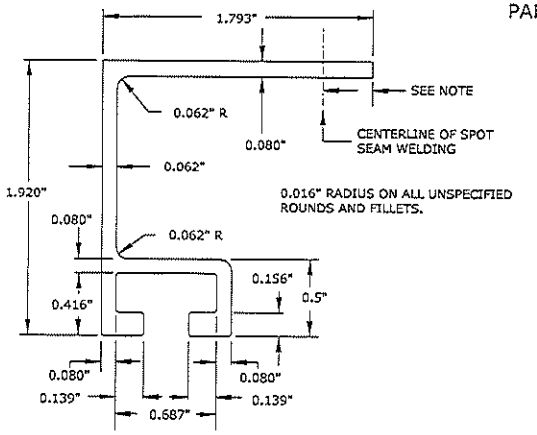
STRUCTURAL SIGN PANEL WIDTHS



PANEL CONNECTOR SLOTS



PANEL CONNECTIONS



PANEL STIFFENER

NOTE:
SIGN PANEL STIFFENERS SHALL BE ATTACHED TO SIGN PANEL USING INTERMITTENT SEAM WELDING WITH SPOT ON 8" CENTERS THE LENGTH OF THE STIFFENER AND A MINIMUM OF 1/2" FROM THE EDGE OF THE STIFFENER.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

REINFORCED PANEL DETAILS
EXTRUSHEET FABRICATION

TE551 7/1/03

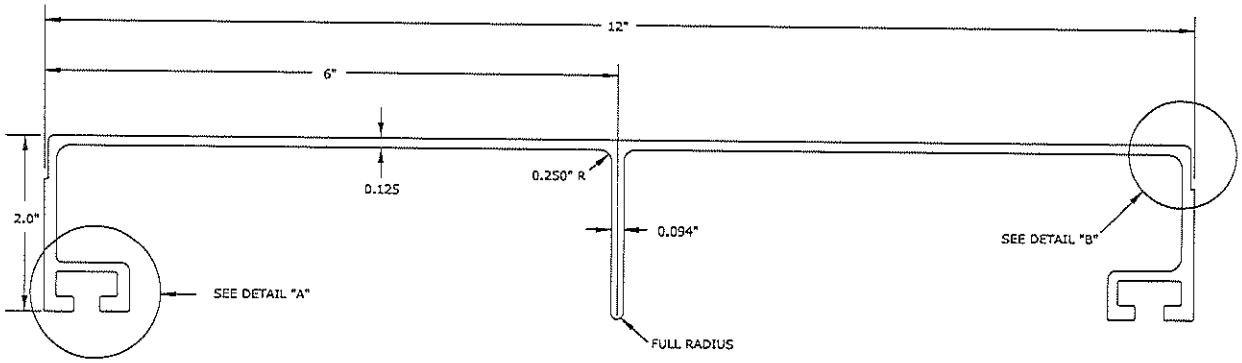
FINAL APPROVAL 7/22/2003 APPD. SECRETARY A. SUNDER
DESIGNED D.D.D. DETAILED D.A.M. QUANTITIES TRACED
DESIGN CK. S.A.R. DETAIL CK. D.D.D. DRAWN CK. TRACE CK.

Sh. No. 98

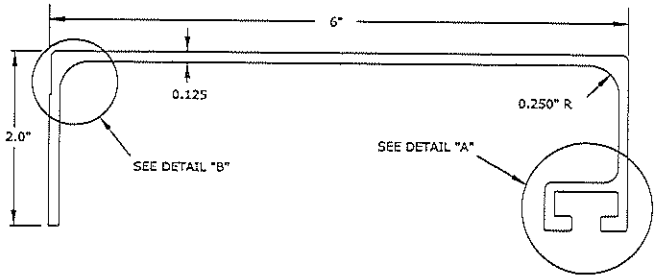
Plotted : 01-JUN-2016 09:38
Drawn By : dtp
File : U:\Kdot\a-Civil\2013\13031\002\Trans\Traffic\Sign\StandardsKA-4113-02pss551.dgn

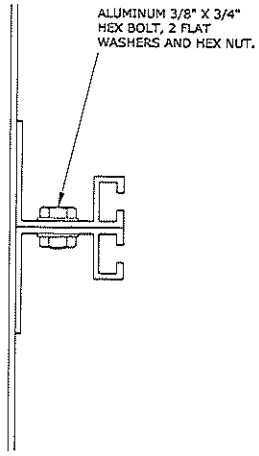
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	99	121

12" PANEL

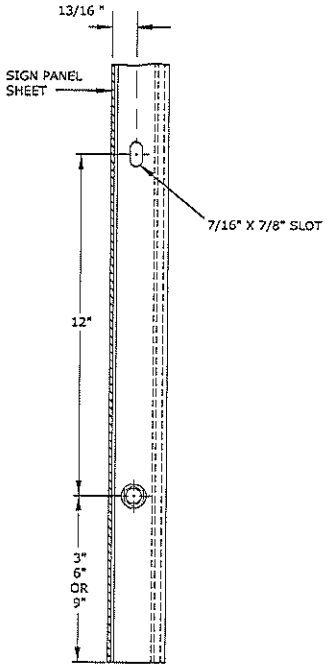


6" PANEL

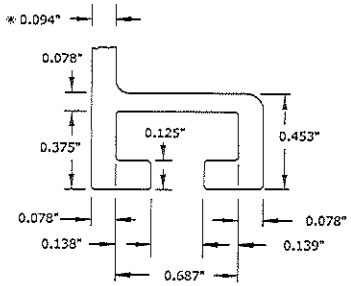




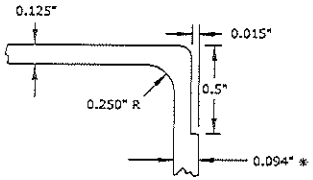
PANEL CONNECTIONS



PANEL CONNECTOR SLOTS



DETAIL "A"



DETAIL "B"

0.031" RADIUS ON ALL UNSPECIFIED ROUNDS AND FILLETS.

* 0.078" FOR 6" PANEL

NOTE:
FOR EXTRUDED PANEL SIGNS WITH AN OVERALL HEIGHT IN INTERVALS OF 6", USE THE 6" PANEL AT THE TOP OR BOTTOM OF THE SIGN. ALL OTHER PANELS ARE TO BE THE 12" PANEL.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

REINFORCED PANEL DETAILS
EXTRUDED FABRICATION 0.125"
1 OF 2

TE554 7/1/03

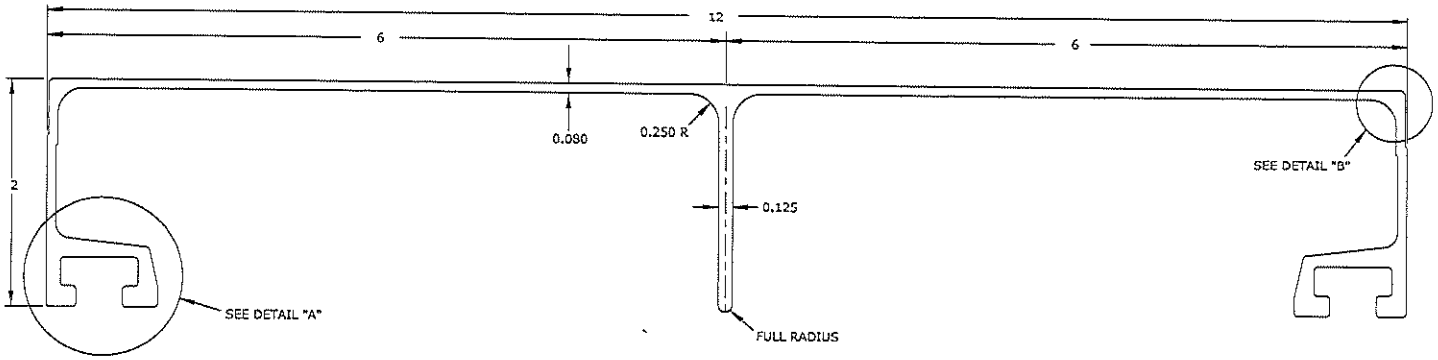
FHWA APPROVAL 7/22/2003 (APPD) DATE
DESIGNED D.D.R./D.D.P.A.D. R.P.A./D.D.P.A.D. DATE
DESIGN CK. K.A.R./D.E.M. CK. D.D.R./D.D.P.A.D. CK. DATE CK.

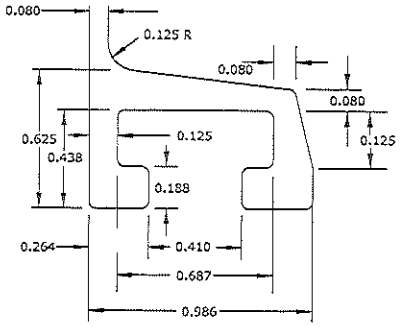
Sh. No. 99

Drawn By: drp
Plotted: 01-JUN-2016 09:36
File: U:\Wichita-Civil\2013\1303110\02\Trans\Traffic\Signing\Standards\KA-4113-02psx554.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	100	121

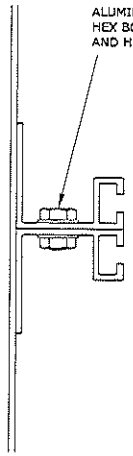
12" PANEL



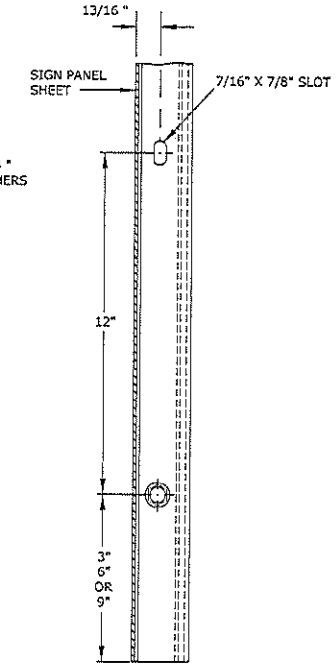


NOTE:
.016" RADIUS ON ALL UNSPECIFIED ROUNDS AND FILLETS.

DETAIL "A"

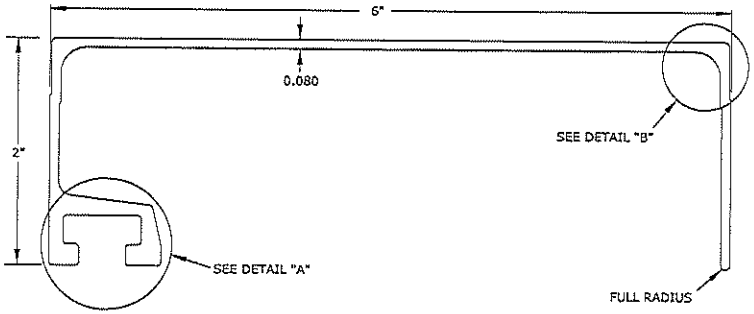


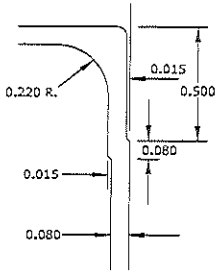
PANEL CONNECTIONS



PANEL CONNECTOR SLOTS

6" PANEL





DETAIL "B"

FOR EXTRUDED PANEL SIGNS WITH AN OVERALL HEIGHT IN INTERVALS OF 6", USE THE 6" PANEL AT THE TOP OR BOTTOM OF THE SIGN. ALL OTHER PANELS ARE TO BE THE 12" PANEL.

ALL DIMENSIONS IN INCHES

NO.	DATE	REVISIONS	BY	APPD

KANSAS DEPARTMENT OF TRANSPORTATION

REINFORCED PANEL DETAILS
EXTRUDED FABRICATION .080"
2 OF 2

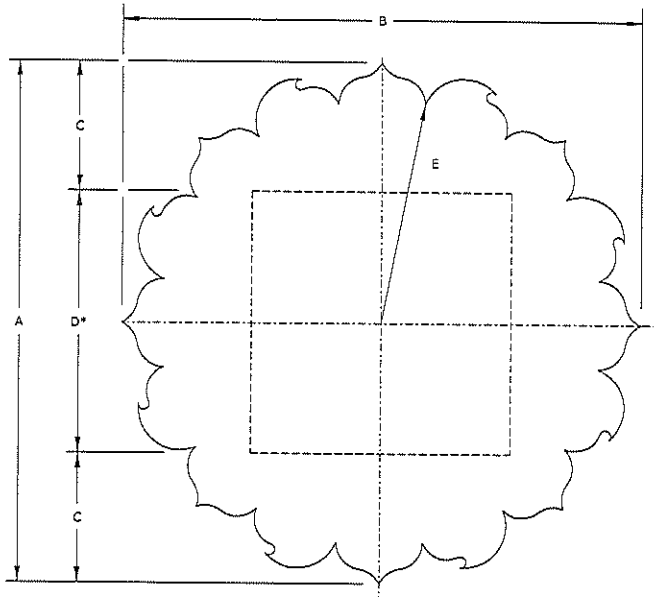
TES55 7/1/03

CHKD. APPROVAL 12/22/2003 APPD. SENIOR E. ENGINEER
DESIGNED N/A DATE RAPL SUBMITTED TRACED
DESIGN CK. N/A DATE RAPL SUBMIT. CK. TRACE CK.

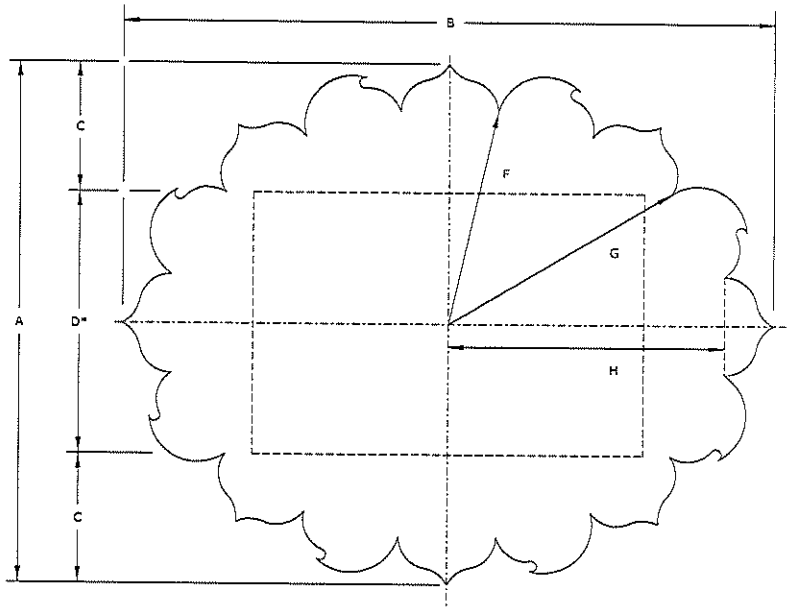
Sh. No. 100

Plotted: 01-JUN-2016 09:36
Drawn By: dip
File: U:\Wichita-Civil\2013\1303\1\002\Traffic\Signs\Standards\KA-4113-02pss555.dgn

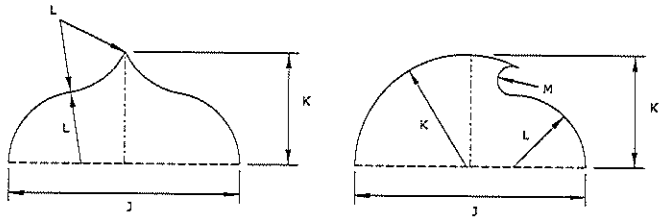
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	101	121



1 OR 2 DIGITS



3 DIGITS



PETALS

SIZE	A	B	C	D*	E	F	G	H	J	K	L	M
24" X 24"	24	24	1/4	12 D	10 1/4	-	-	-	4	1 7/8	1 1/4	1/4
36" X 36"	36	36	9	18 D	15 3/8	-	-	-	1/4	3	1 7/8	3/8
30" X 24"	24	36	1/4	12 D	-	10	12	12 3/4	4 1/2	2 1/4	1 1/2	1/4
45" X 36"	36	45	9	18 D	-	15	18	19	6 3/4	3 3/8	2 1/4	3/8

ALL DIMENSIONS IN INCHES.
D* - NUMERALS OPTICALLY SPACED ABOUT VERTICAL CENTERLINE

COLORS:
BACKGROUND - YELLOW
LEGEND - BLACK

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
GUIDE SIGN
LEGEND DETAILS
KANSAS ROUTE SHIELDS

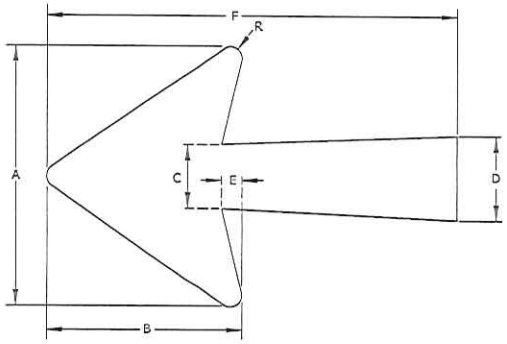
TE557 7/1/03

FHWA APPROVAL 7/22/2003 APP'D Stevens A. Buckley
DESIGNED D.G.G. DETAILED R.A.H. QUANTITIES TRACED
DESIGN CK. S.A.R. DETAIL CK. D.G.G. QUAN. CK. STRUCT. CK.

Sh. No. 101

Drawn By : drp
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02pss557.dgn
Plotted : 01-JUN-2016 09:36

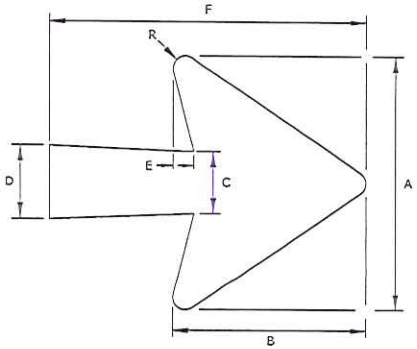
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	102	121



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	R
10.67" U.C.	15⅞	11 9/16	3¾	5	1 7/16	24¼	13/16
13.33" U.C.	18¼	14	4½	6	1½	29¼	¾
16" U.C.	22¼	17	5⅝	7⅛	1¾	35⅝	1

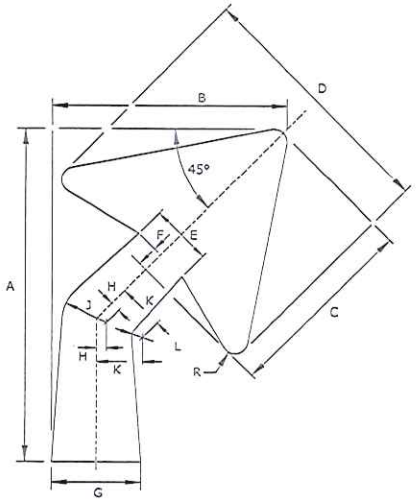
TYPE "A" ARROW



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	R
10.67" U.C.	11⅞	8 11/16	2¾	3¼	15/16	14¼	9/16

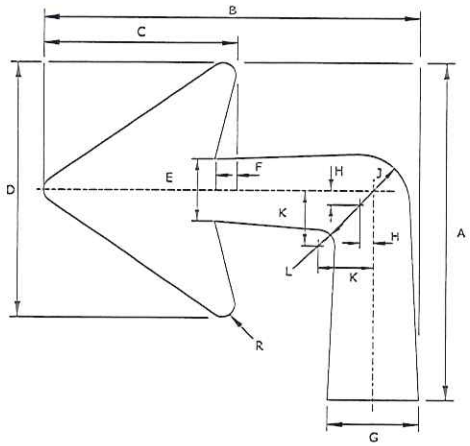
TYPE "B" ARROW



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	G	H	J	K	L	R
10.67" U.C.	15⅞	10¾	8 11/16	11⅞	2¾	1 5/16	4	7/16	2	2 1/16	½	9/16
13.33" U.C.	18¼	13	10⅞	14¾	3½	1 7/16	4½	9/16	2½	2 9/16	⅝	1 1/16
16" U.C.	22¼	15⅝	13	17	4⅛	1 11/16	5¼	⅝	3	3⅜	¾	⅞

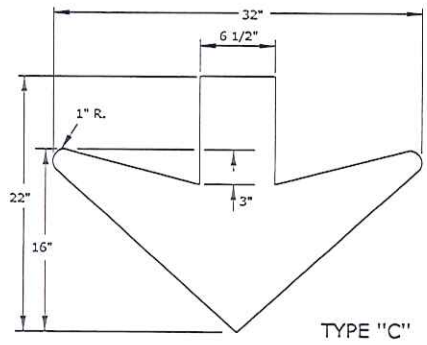
ADVANCE TURN (45°)



ARROW DIMENSIONS (INCHES)

	A	B	C	D	E	F	G	H	J	K	L	R
10.67" U.C.	15⅞	17	8 11/16	11⅞	2¾	1 5/16	4⅛	⅝	2¾	2½	¾	9/16
13.33" U.C.	18¾	20½	10⅞	14¾	3½	1 7/16	5⅛	⅝	2¾	2⅞	1	1 1/16
16" U.C.	22¾	25	13	17	4⅛	1 11/16	6⅛	¾	3¼	3⅞	1¼	⅞

ADVANCE TURN (90°)



TYPE "C"

NOTE:
USE TYPE 'A' ARROWS ON INTERSTATE AND EXPRESSWAY WITH INTERCHANGES. USE TYPE 'B' ARROWS ON THE MAINLINE OF EXPRESSWAYS WITH AT-GRADE INTERSECTIONS.
SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

GUIDE SIGN
LEGEND DETAILS
ARROWS

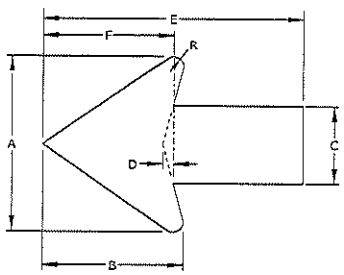
TE560 7/1/03

FHWA APPROVAL 7/22/2003 APP'D Steven A. Dunkley
DESIGNED DDS DETAILED W.D.B. QUANTITIES TRACED
DESIGN EN. SAN DETAIL EN. DDS QUAN. EN. TRACE EN.

Sh. No. 102

Plotted: 01-JUN-2016 09:38
Drawn By: drp
File: U:\Work\Ks-Civil\2013\13203\KDOT\Trans\TrafficSigning\Standards\KA-4113-02pss560.dgn

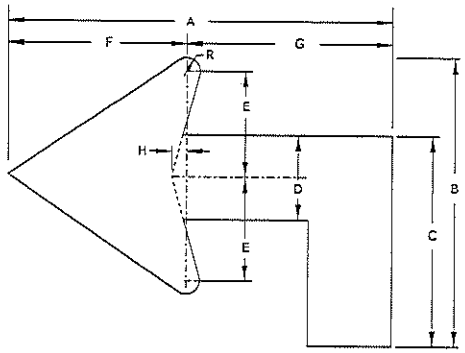
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	103	121



ARROW DIMENSIONS (INCHES)

LETTER HEIGHT	A	B	C	D	E	F	R
4"	4	3¼	1½	7/32	6	3	5/16
6"	6	4⅞	2¼	5/16	9	4½	7/16
8"	8	6½	3	7/16	12	6	⅝

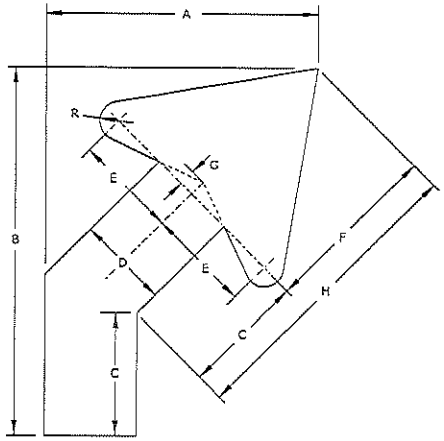
STANDARD ARROW



ARROW DIMENSIONS (INCHES)

LETTER HEIGHT	A	B	C	D	E	F	G	H	R
6"	10⅛	7½	5⅝	2¼	2 9/16	4½	5⅝	5/16	7/16
8"	13½	10	7½	3	3⅜	6	7½	7/16	⅝

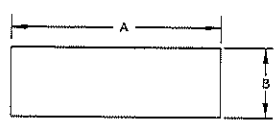
ADVANCE TURN (90°)



ARROW DIMENSIONS (INCHES)

LETTER HEIGHT	A	B	C	D	E	F	G	H	R
6"	6¾	9	3	2¼	65	4¼	5/16	7½	7/16
8"	9	12	3 15/16	3	3⅜	6	11	10	⅝

ADVANCE TURN (45°)



HYPHEN
DIMENSIONS (INCHES)

LETTER HEIGHT	A	B
6"	3	1
8"	4½	1½
10.67"	6	2
13.33"	7½	2½
16"	9	3

HYPHEN

NOTE:
SEE STANDARD PLAN SHEET TE590 FOR DETAILED SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APP'D

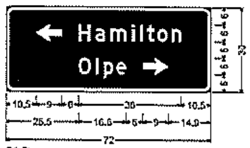
KANSAS DEPARTMENT OF TRANSPORTATION
GUIDE SIGN
LEGEND DETAILS
ARROWS AND HYPHENS

TE563 7/1/03

Sh. No. 103

Drawn By : drp Plotted : 01-JUN-2016 09:36
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02pss563.dgn

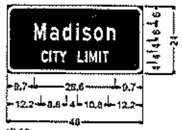
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	104	121



D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Hamilton] D; [Olpe] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	←	H	a	m	i	l	t	o	n	
10.5	15.0	5.8	5.3	7.6	2.9	2.4	3.7	5.1	3.3	10.5

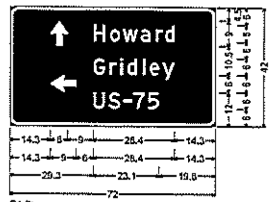
	O	l	p	e	→	
25.5	6.9	2.9	4.4	8.4	8.0	14.0



KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Madison] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

	M	a	d	i	s	o	n	
9.7	6.8	4.4	4.9	2.2	4.0	4.6	2.9	9.7

	C	I	T	Y	L	I	M	I	T	
12.2	2.9	1.2	2.2	6.5	2.7	1.4	3.5	1.2	2.0	12.2

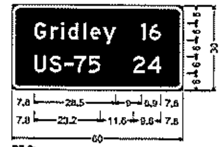


D1-3;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Howard] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Gridley] D; [US-75] D;
Table of distances between letter and object lefts.

	↑	H	o	w	a	r	d	
14.3	15.0	5.7	4.5	6.3	5.3	3.3	3.3	14.3

	←	G	r	i	d	l	e	y	
14.3	15.0	5.7	3.7	2.5	5.3	2.5	4.4	4.3	14.3

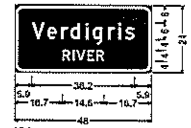
	U	S	-	7	5	
29.3	5.4	5.1	3.4	5.2	4.0	19.6



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Gridley] D; [16] D; [US-75] D;
[24] D;
Table of distances between letter and object lefts.

	G	r	i	d	l	e	y	1	6	
7.8	5.7	3.7	2.5	5.3	2.6	4.5	13.3	2.8	4.0	7.8

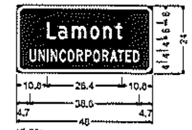
	U	S	-	7	5	2	4	
7.8	5.4	5.2	3.4	5.1	15.7	5.2	4.4	7.8



KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Verdigris] D; [RIVER] D;
Table of distances between letter and object lefts.

	V	e	r	d	i	g	r	i	s	
5.9	5.4	4.9	3.3	6.3	2.5	5.3	3.8	2.3	3.4	5.9

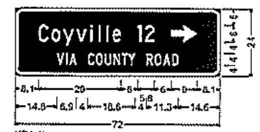
	R	I	V	E	R	
16.7	3.6	1.4	3.7	3.2	2.7	16.7



KI-86;
3.0" Radius, 1.0" Border, White on Green;
[Lamont] C;
[UNINCORPORATED] C;
Table of distances between letter and object lefts.

	L	a	m	o	n	t	
10.8	4.0	4.8	6.4	4.6	4.3	2.3	10.8

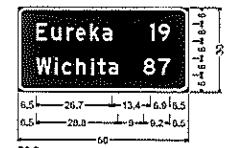
	U	N	I	N	C	O	R	P	O	R	A	T	E	D	
4.7	3.0	3.0	1.4	3.1	2.8	3.2	3.0	2.9	3.1	2.8	2.7	2.7	2.7	2.1	4.7



KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
[Coyville 12] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

	C	o	y	v	i	l	l	e	1	2	→	
8.1	4.6	4.1	4.6	4.9	2.8	2.7	2.4	8.9	2.5	9.3	9.0	8.1

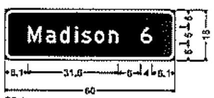
	V	I	A	C	O	U	N	T	Y	R	O	A	D	
14.6	3.2	1.2	6.5	2.9	3.1	3.0	2.9	2.2	6.5	2.9	3.0	3.2	2.2	14.6



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Eureka] D; [19] D; [Wichita] D;
[87] D;
Table of distances between letter and object lefts.

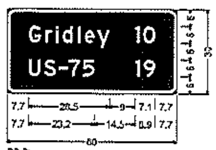
	E	u	r	e	k	a	1	9	
6.5	5.3	5.3	3.3	5.0	4.4	10.8	2.9	4.0	6.5

	W	i	c	h	i	t	a	8	7	
6.5	6.6	2.5	4.9	5.3	2.4	3.8	17.3	5.2	4.0	6.5



D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Madison] D; [6] D;
Table of distances between letter and object lefts.

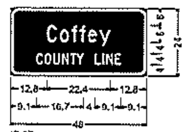
	M	a	d	i	s	o	n	6	
8.1	6.4	4.9	5.3	2.3	4.5	5.0	11.4	4.0	8.1



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Gridley] D; [10] D; [US-75] D;
[19] D;
Table of distances between letter and object lefts.

	G	r	i	d	l	e	y	1	0	
7.7	5.7	3.7	2.6	5.3	2.5	4.5	13.3	2.9	4.2	7.7

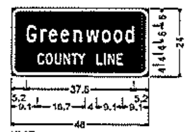
	U	S	-	7	5	1	9	
7.7	5.5	5.1	3.4	5.1	10.6	2.9	4.0	7.7



KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Coffey] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

	C	o	f	f	e	y	
12.8	4.6	4.1	2.9	3.0	3.0	3.9	12.8

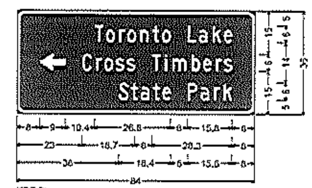
	C	O	U	N	T	Y	L	I	N	E	
9.1	2.9	3.1	3.1	2.8	2.3	8.5	2.6	1.4	3.1	2.0	9.1



KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Greenwood] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

	G	r	e	e	n	w	o	o	d	
5.2	4.9	3.0	4.0	4.5	4.4	5.6	4.1	4.2	2.9	5.2

	C	O	U	N	T	Y	L	I	N	E	
9.1	2.9	3.1	3.1	2.8	2.3	6.5	2.6	1.4	3.1	2.0	9.1

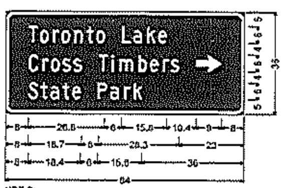


KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Toronto Lake] C; [Cross Timbers] C;
[State Park] C;
Table of distances between letter and object lefts.

	←	T	o	r	o	n	t	o	L	a	k	e	
8.0	19.4	4.0	4.5	3.0	4.6	4.3	3.4	9.0	4.0	4.9	4.0	2.9	8.0

	C	r	o	s	s	T	i	m	b	e	r	s	
23.0	4.9	2.8	4.1	3.0	8.9	4.5	2.7	6.8	4.0	4.5	2.9	2.9	8.0

	S	t	a	t	e	P	a	r	k	
36.0	4.3	3.5	4.3	3.4	8.9	4.5	4.8	3.4	2.9	8.0

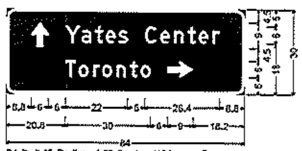


KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Toronto Lake] C; [Cross Timbers] C;
[State Park] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	T	o	r	o	n	t	o	L	a	k	e	→	
8.0	3.9	4.6	2.9	4.6	4.3	3.4	9.1	4.0	4.8	4.0	13.4	9.0	8.0

	C	r	o	s	s	T	i	m	b	e	r	s	
8.0	4.9	2.9	4.1	3.9	8.9	4.5	2.7	6.8	4.0	4.5	2.9	2.9	23.0

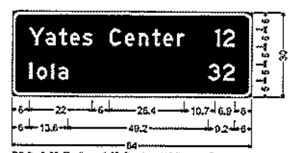
	S	t	a	t	e	P	a	r	k	
8.0	4.3	3.4	4.3	3.4	9.0	4.4	4.8	3.4	3.0	36.0



D1-2; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Yates Center] D; [Toronto] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	↑	Y	a	t	e	s	C	e	n	t	e	r	
8.8	12.0	5.7	4.8	3.8	4.4	9.3	5.4	5.0	4.7	3.8	4.0	2.6	8.8

	T	o	r	o	n	t	o	→	
20.8	4.6	5.1	3.3	5.0	4.8	3.8	9.4	9.0	18.2



D2-2; 3.0" Radius, 1.0" Border, White on Green;
[Yates Center] D; [12] D; [Iola] D; [32] D;
Table of distances between letter and object lefts.

	Y	a	t	e	s	C	e	n	t	e	r	1	2	
6.0	5.7	4.8	3.7	4.5	9.3	5.4	4.9	4.8	3.8	4.0	13.3	2.9	4.0	6.0

	I	o	l	a	3	2	
6.0	2.7	5.0	2.5	52.8	5.2	4.0	6.0

D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Eureka] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Toronto] D;
Table of distances between letter and object lefts.

	↑	E	u	r	e	k	a	
8.5	13.0	5.3	5.3	3.3	5.0	4.4	3.4	11.8

	←	T	o	r	o	n	t	o	
8.5	13.0	4.6	5.1	3.3	5.0	4.0	3.7	3.5	8.5

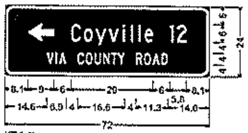
NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

DESIGN DETAILS
FOR GUIDE SIGNS

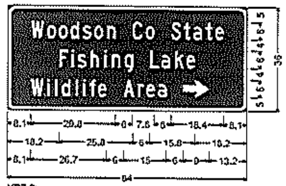
Drawn By : drp
Plotted : 01-JUN-2016 09:36
File : U:\Wichita-CiviI\2013\13081002\Trans\Traffic\Signing\Signs\Sign Layouts\KA-4113-02psl-01.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	105	121



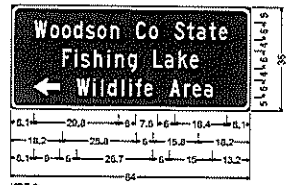
KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Coyville 12] C; [VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

8.1	← 15.0	C 4.6	o 4.1	y 4.6	v 4.9	i 2.0	l 2.7	l 2.4	e 8.9	1 2.5	2 3.3	8.1		
14.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	14.6



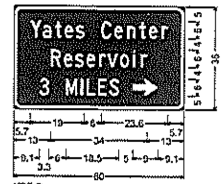
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Woodson Co State] C; [Fishing Lake] C;
[Wildlife Area] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.1	W 5.7	o 4.1	o 4.1	d 4.3	s 4.1	o 4.5	n 9.0	C 4.5	o 9.1	S 4.3	t 3.4	a 4.3	t 3.4	e 3.0	8.1
18.2	F 4.2	i 2.2	s 4.5	h 4.8	i 2.8	n 4.4	g 8.9	L 4.0	a 4.9	k 4.0	e 2.9	18.2			
8.1	W 5.8	i 2.8	l 2.3	d 4.8	l 2.8	i 2.3	f 2.0	e 9.0	A 5.0	r 3.0	e 4.1	a 8.9	→ 9.0	13.2	



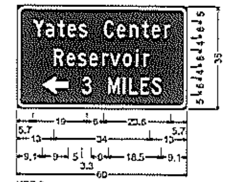
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Woodson Co State] C; [Fishing Lake] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Wildlife Area] C;
Table of distances between letter and object lefts.

8.1	W 5.7	o 4.1	o 4.1	d 4.3	s 4.1	o 4.5	n 9.0	C 4.5	o 9.1	S 4.3	t 3.4	a 4.3	t 3.4	e 3.0	8.1
18.2	F 4.2	i 2.2	s 4.5	h 4.8	i 2.8	n 4.4	g 8.9	L 4.0	a 4.9	k 4.0	e 2.9	18.2			
8.1	← 15.0	W 5.8	i 2.8	l 2.3	d 4.8	l 2.8	i 2.3	f 2.0	e 9.0	A 5.0	r 3.0	e 4.1	a 2.9	13.2	



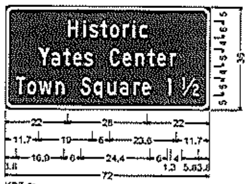
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Yates Center] C; [Reservoir] C;
[3 MILES] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

5.7	Y 4.4	a 4.3	t 3.4	e 4.0	s 8.9	C 4.6	e 4.5	n 4.3	t 3.4	e 4.5	r 2.3	5.7
13.0	R 4.6	e 4.0	s 4.0	e 4.5	r 2.8	v 4.5	o 4.6	i 2.7	r 2.3	13.0		
9.1	3 9.3	M 5.1	I 2.1	L 4.0	E 4.0	S 8.3	→ 9.0	9.1				



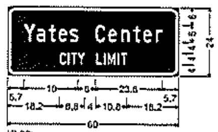
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Yates Center] C; [Reservoir] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[3 MILES] C;
Table of distances between letter and object lefts.

5.7	Y 4.4	a 4.3	t 3.4	e 4.0	s 8.9	C 4.6	e 4.5	n 4.3	t 3.4	e 4.5	r 2.3	5.7
13.0	R 4.6	e 4.0	s 4.0	e 4.5	r 2.8	v 4.5	o 4.6	i 2.7	r 2.3	13.0		
9.1	← 14.0	3 9.3	M 5.1	I 2.1	L 4.0	E 4.0	S 3.3	9.1				



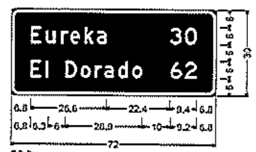
KD7-1;
3.0" Radius, 1.0" Border, White on Brown;
[Historic] C; [Yates Center] C;
[Town Square] C; [1] C; [½] C;
Table of distances between letter and object lefts.

22.0	H 6.3	i 2.2	s 3.9	t 3.4	o 4.6	r 3.3	i 2.4	c 2.9	22.0				
11.7	Y 4.4	a 4.3	t 3.4	e 4.0	s 8.9	C 4.6	e 4.5	n 4.3	t 3.4	e 4.5	r 2.3	11.7	
3.8	T 3.9	o 4.1	w 6.0	n 8.9	S 4.4	q 4.0	u 4.4	a 4.8	r 3.0	e 8.9	1 5.3	½ 6.8	3.8



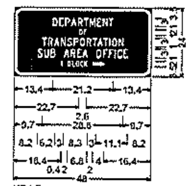
KI-02;
3.0" Radius, 1.0" Border, White on Green;
[Yates Center] C; [CITY LIMIT] C;
Table of distances between letter and object lefts.

5.7	Y 4.4	a 4.3	t 3.4	e 4.0	s 8.9	C 4.6	e 4.5	n 4.3	t 3.4	e 4.5	r 2.3	5.7
18.2	C 2.0	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	18.2		



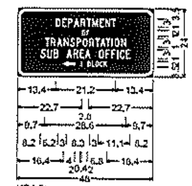
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Eureka] D; [30] D; [El Dorado] D;
[62] D;
Table of distances between letter and object lefts.

6.8	E 5.3	u 5.3	r 3.3	e 5.0	k 4.4	a 25.7	3 5.2	0 4.2	6.8		
6.8	E 5.3	l 7.0	D 5.3	o 5.0	r 3.3	a 4.9	d 5.0	o 13.4	6 5.2	2 4.0	6.8



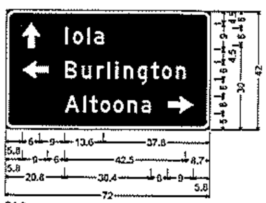
KD4-5;
3.0" Radius, 1.0" Border, White on Green;
[DEPARTMENT] C;
[OF] C;
[TRANSPORTATION] C;
[SUB AREA OFFICE] C;
[1 BLOCK] C;
Standard Arrow Custom 4.0" X 2.0" 0°;
Table of distances between letter and object lefts.

13.4	D 2.3	E 2.0	P 2.1	A 2.4	R 2.2	T 2.0	M 2.6	E 2.0	N 2.2	T 1.5	13.4				
22.7	O 1.6	F 1.0	22.7												
9.7	T 2.0	R 2.2	A 2.4	N 2.2	S 2.3	P 2.2	O 2.3	R 2.2	T 1.6	A 2.1	T 2.0	I 1.1	O 2.3	N 1.7	9.7
8.2	S 2.3	U 2.2	B 4.7	A 2.3	R 2.3	E 1.9	A 4.8	O 2.4	F 2.0	F 2.0	I 1.1	C 2.1	E 1.5	8.2	
16.4	1 2.4	B 1.5	L 1.3	O 1.5	C 1.4	K 3.1	→ 4.0	16.4							



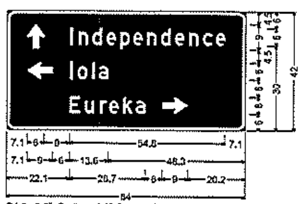
KD4-5;
3.0" Radius, 1.0" Border, White on Green;
[DEPARTMENT] C;
[OF] C;
[TRANSPORTATION] C;
[SUB AREA OFFICE] C;
Standard Arrow Custom 4.0" X 2.0" 180°;
[1 BLOCK] C;
Table of distances between letter and object lefts.

13.4	D 2.3	E 2.0	P 2.1	A 2.4	R 2.2	T 2.0	M 2.6	E 2.0	N 2.2	T 1.5	13.4				
22.7	O 1.6	F 1.0	22.7												
9.7	T 2.0	R 2.2	A 2.4	N 2.2	S 2.3	P 2.2	O 2.3	R 2.2	T 1.6	A 2.1	T 2.0	I 1.1	O 2.3	N 1.7	9.7
8.2	S 2.3	U 2.2	B 4.7	A 2.3	R 2.3	E 1.8	A 4.8	O 2.4	F 2.0	F 2.0	I 1.1	C 2.1	E 1.5	8.2	
16.4	← 6.0	1 2.4	B 1.5	L 1.3	O 1.5	C 1.4	K 1.1	16.4							



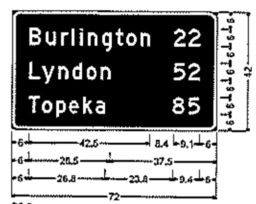
D1-3;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Iola] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Burlington] D; [Altoona] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

5.8	↑ 15.0	I 2.7	o 5.0	l 2.5	a 3.4	37.8						
5.8	← 15.0	B 6.0	u 5.3	r 3.7	l 2.0	i 2.0	n 4.9	g 4.8	t 3.7	o 5.1	n 3.3	8.7
20.8	A 6.4	l 2.3	t 3.8	o 4.6	o 5.0	n 4.9	a 9.4	→ 9.0	5.8			



D1-3; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Independence] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Iola] D; [Eureka] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

7.1	↑ 15.0	I 3.1	n 4.9	d 4.9	e 4.9	p 4.5	e 4.9	n 4.9	d 4.9	e 5.0	n 4.9	c 4.5	e 3.4	7.1
7.1	← 15.0	I 2.7	o 5.1	l 2.5	a 3.3	48.3								
22.1	E 5.4	u 6.3	r 3.3	e 4.9	k 4.6	a 9.3	→ 9.0	20.2						



D2-3;
3.0" Radius, 1.0" Border, White on Green;
[Burlington] D; [22] D; [Lyndon] D;
[52] D; [Topeka] D; [85] D;
Table of distances between letter and object lefts.

6.0	B 5.8	u 5.3	r 3.7	l 2.9	i 2.9	n 4.0	g 4.8	t 3.8	o 5.0	n 11.8	2 5.1	2 4.0	6.0
6.0	L 4.5	y 5.8	n 4.9	d 4.8	o 5.1	n 25.7	5 5.1	2 4.0	6.0				
6.0	T 4.8	o 6.0	p 4.5	e 4.9	k 4.5	a 27.1	8 5.4	5 4.0	6.0				

KRM;
No border, White on Green;
[0] C;
Table of distances between letter and object lefts.

1.8	0 2.4	1.8

KD9-0;
1.5" Radius, 0.5" Border, White on Blue;
Standard Arrow Custom 15.0" X 4.0" 0°;
Table of distances between letter and object lefts.

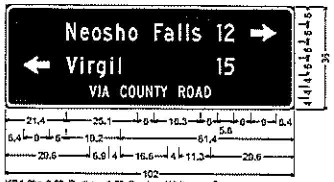
4.5	— 15.0	4.5

KANSAS DEPARTMENT OF TRANSPORTATION

DESIGN DETAILS
FOR GUIDE SIGNS

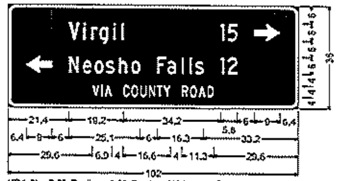
Drawn By : dnp
Plotted : 01-JUN-2016 09:36
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Signs\Sign Layouts\KA-4113-02psl02.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	106	121



KD1-2b; 3.0" Radius, 1.0" Border, White on Green;
[Neosho Falls] C; [12] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Standard Arrow Custom 9.0" X 6.0" 180°; [Virgil] C; [15] C;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

21.4	N 5.0	e 4.1	o 4.0	s 4.5	h 4.4	o 9.1	F 3.8	a 4.8	l 2.7	l 2.3	s 8.9	1 7.5	2 9.3	→ 9.0	6.4
6.4	← 15.0	V 5.1	i 2.7	r 3.0	g 4.8	i 2.7	l 35.1	1 2.5	5 3.3	21.4					
29.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 7.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	29.6	

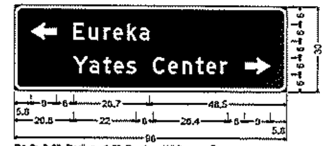


KD1-2b; 3.0" Radius, 1.0" Border, White on Green;
[Virgil] C; [15] C; Standard Arrow Custom 9.0" X 6.0" 0°;
Standard Arrow Custom 9.0" X 6.0" 180°; [Neosho Falls] C;
[12] C; [VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

21.4	V 5.1	i 2.7	r 3.0	g 4.8	i 2.7	l 35.1	1 2.5	5 9.3	→ 9.0	6.4					
6.4	← 15.0	N 5.0	e 4.1	o 4.0	s 4.5	h 4.4	o 9.1	F 3.0	a 4.8	l 2.7	l 2.3	s 8.9	1 2.5	2 3.3	21.4
29.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.8	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	29.6	

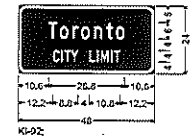
D2-1;
3.0" Radius, 1.0" Border, White on Green;
[Toronto] D; [2] D;
Table of distances between letter and object lefts.

6.0	T 4.6	o 5.0	r 3.3	o 5.1	n 4.8	t 3.7	o 17.5	2 4.0	6.0



D1-2; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°; [Eureka] D;
[Yates Center] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

5.8	← 15.0	E 5.4	u 5.3	r 3.3	e 4.9	k 4.5	a 3.3	48.5					
20.8	Y 5.7	a 4.8	t 3.8	e 4.4	s 9.3	C 6.4	e 5.0	n 4.7	t 3.8	e 4.9	r 8.8	→ 9.0	5.8

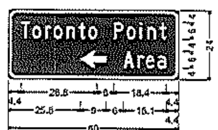


KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Toronto] C;
[CITY LIMIT] C;
Table of distances between letter and object lefts.

10.6	T 3.9	o 4.8	r 3.0	o 4.5	n 4.3	t 3.4	o 3.1	10.6		
12.2	C 2.9	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	12.2

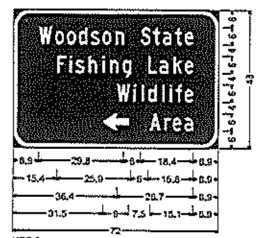
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Toronto Point] C; [Area] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

4.4	T 3.9	o 4.6	r 3.0	o 4.5	n 4.4	t 3.4	o 9.0	P 4.5	o 4.5	i 2.8	n 4.3	t 2.3	4.4
4.4	A 5.1	r 2.9	e 4.1	a 9.0	→ 9.0	25.5							



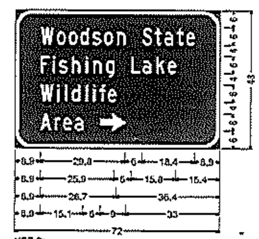
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Toronto Point] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Area] C;
Table of distances between letter and object lefts.

4.4	T 3.9	o 4.6	r 3.0	o 4.5	n 4.4	t 3.4	o 9.0	P 4.6	o 4.5	i 2.8	n 4.3	t 2.3	4.4
25.5	← 15.0	A 5.1	r 3.0	e 4.1	a 2.8	4.4							



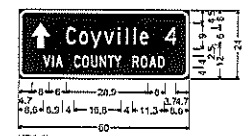
KD7-2;
6.0" Radius, 1.3" Border, White on Brown;
[Woodson State] C; [Fishing Lake] C;
[Wildlife] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Area] C;
Table of distances between letter and object lefts.

8.9	W 5.7	o 4.1	o 4.1	d 4.4	s 4.0	o 4.5	n 9.0	S 4.3	t 3.4	a 4.3	t 3.4	e 3.0	8.9
15.4	F 4.3	i 2.2	s 4.4	h 4.9	i 2.7	n 4.4	g 9.0	L 4.0	a 4.8	k 4.0	e 3.0	8.9	
36.4	W 6.8	i 2.7	l 2.4	d 4.8	l 2.8	i 2.2	f 3.0	e 3.0	8.9				
31.5	← 16.5	A 5.1	r 2.9	e 4.1	a 3.0	8.9							



KD7-2;
6.0" Radius, 1.3" Border, White on Brown;
[Woodson State] C; [Fishing Lake] C;
[Wildlife] C; [Area] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.9	W 5.7	o 4.1	o 4.1	d 4.4	s 4.0	o 4.5	n 9.0	S 4.3	t 3.4	a 4.3	t 3.4	e 3.0	8.9
8.9	F 4.3	i 2.2	s 4.5	h 4.8	i 2.7	n 4.5	g 8.9	L 4.0	a 4.8	k 4.0	e 3.0	15.4	
8.9	W 5.8	i 2.8	l 2.3	d 4.0	l 2.7	i 2.3	f 3.0	e 2.9	36.4				
8.9	A 5.1	r 3.0	e 4.0	a 9.0	→ 9.0	33.0							



KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Coyville 4] C;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

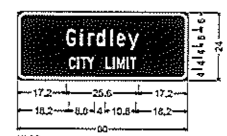
4.7	↑ 12.0	C 4.6	o 4.0	y 4.7	v 4.9	i 2.7	l 2.8	l 2.3	e 8.9	4 3.7	4.7			
8.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.7	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	8.6

KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[State Park Office] C; [Holiday Hill] C; [Area] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.8	S 4.3	t 3.4	a 4.3	t 3.4	e 9.0	P 4.4	a 4.0	r 3.3	k 9.0	O 4.7	f 2.9	f 3.4	i 2.4	c 4.1	e 2.0	8.8
19.6	H 5.0	o 4.5	l 2.8	l 2.3	d 4.5	a 4.3	y 9.8	H 5.3	i 2.7	l 2.8	l 0.8	19.6				
27.5	A 5.0	r 3.0	e 4.1	a 7.9	→ 9.0	27.5										

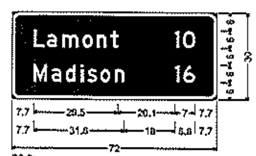
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[State Park Office] C; [Holiday Hill] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Area] C;
Table of distances between letter and object lefts.

8.8	S 4.3	t 3.4	a 4.3	t 3.4	e 9.0	P 4.4	a 4.0	r 3.3	k 9.0	O 4.7	f 2.9	f 3.4	i 2.4	c 4.1	e 2.0	8.8
19.6	H 5.0	o 4.5	l 2.8	l 2.3	d 4.5	a 4.3	y 9.8	H 5.3	i 2.7	l 2.8	l 9.8	19.6				
27.5	← 14.0	A 5.0	r 3.0	e 4.1	a 2.9	27.5										



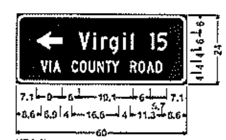
KI-92;
3.0" Radius, 1.0" Border, White on Green;
[Girdley] C; [CITY LIMIT] C;
Table of distances between letter and object lefts.

17.2	G 4.9	i 2.7	r 3.0	d 4.8	l 2.4	e 4.0	y 3.8	17.2		
18.2	C 2.9	I 1.2	T 2.2	Y 6.5	L 2.7	I 1.4	M 3.5	I 1.2	T 2.0	18.2



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Lamont] D; [10] D; [Madison] D; [16] D;
Table of distances between letter and object lefts.

7.7	L 4.6	a 5.3	m 7.2	o 5.1	n 4.7	t 22.7	1 2.8	0 4.2	7.7	
7.7	M 6.3	a 5.0	d 5.2	i 2.4	s 4.5	o 5.0	n 21.4	1 2.8	6 4.0	7.7



KD1-1b;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Virgil 15] C;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

7.1	← 15.0	V 5.0	i 2.7	r 3.0	g 4.8	i 2.7	l 6.9	1 2.5	5 3.2	7.1				
8.6	V 3.2	I 1.2	A 6.5	C 2.9	O 3.1	U 3.0	N 2.9	T 2.2	Y 6.5	R 2.9	O 3.0	A 3.2	D 2.2	8.6

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

DESIGN DETAILS
FOR GUIDE SIGNS

FHWA APPROVAL | APP'D
DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN CK. | DETAIL CK. | QUAN. CK. | TRACE CK.

Sh. No. 106

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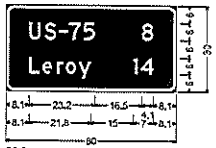
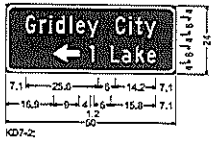
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	107	121



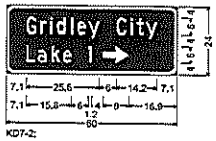
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[US-75] D; [8] D; [Leroy] D;
[14] D;
Table of distances between letter and object lefts.

	U	S	-	7	5		8							
8.1	8.5	5.1	3.4	6.2	20.5		4.1	8.1						
8.1	L	e	r	o	Y		1	4						
8.1	4.7	5.0	3.3	4.4	19.4		2.6	4.4	8.1					



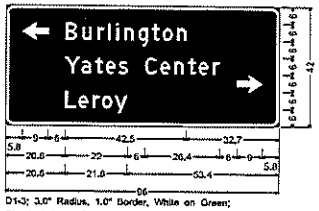
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Gridley City] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[1 Lake] C;
Table of distances between letter and object lefts.

	G	r	i	d		e	Y		C		t		Y	
7.1	4.9	3.4	2.3	4.8	2.4	4.0	9.8	4.0	2.2	1	3.3	3.8	7.1	
	←		L		e			→						
16.9	13.0	1	7.2	4.0	4.9	k	e	2.9	7.1					



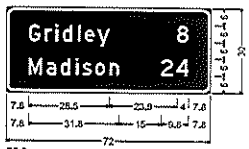
KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Gridley City] C; [Lake 1] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	G	r	i	d		e	Y		C		t		Y	
7.1	4.9	3.4	2.3	4.8	2.4	4.0	9.8	4.0	2.2	1	3.3	3.8	7.1	
	L	e	k	e			→							
7.1	4.0	4.8	4.0	9.0	5.2	1	9.0	16.9						



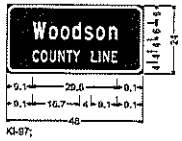
D1-3; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Burlington] D; [Yates Center] D; [Leroy] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

5.8	←	B	u	r	l	i	n	g	t	o	n			
	15.0	5.9	5.3	3.7	2.9	2.9	4.0	4.8	3.7	5.1	3.3	32.7		
20.8	Y	a	t	e	s	C	e	n	t	e	r	→	5.8	
	5.7	4.8	3.6	4.4	9.3	5.4	5.0	4.7	3.8	4.9	8.6	9.0		
20.8	L	e	r	o	Y									
	4.7	5.0	3.3	4.4	4.4	53.4								



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Gridley] D; [8] D; [Madison] D; [24] D;
Table of distances between letter and object lefts.

	G	r	i	d		e	Y		8					
7.6	5.7	3.7	2.5	5.3	2.5	4.5	20.2		4.0	7.6				
	M	a	d	i		s	o		n		2		4	
7.6	6.4	4.9	5.3	2.4	4.4	5.1	18.3		5.2	4.4	7.6			

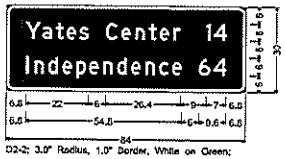


KI-87;
3.0" Radius, 1.0" Border, White on Green;
[Woodson] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

	W	o	o	d	s	o	n							
9.1	5.7	4.1	4.1	4.4	4.0	4.5	3.0	9.1						
	C	O	U	N	T	Y	L	I	N	E				
9.1	2.8	3.1	3.1	2.8	2.3	6.5	2.6	1.4	3.1	2.0	9.1			

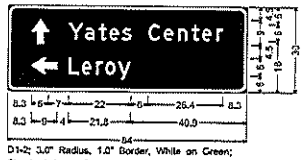
D1-3;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Burlington] D; [Madison] D; [Leroy] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

8.8	↑	B	u	r	l	i	n	g	t	o	n			
	12.0	5.8	5.3	3.7	2.9	2.9	4.0	4.8	3.8	5.0	3.3	8.8		
20.8	M	a	d	i	s	o	n							
	6.3	5.0	5.3	2.3	4.5	5.0	3.4	19.4						
20.8	L	e	r	o	Y									
	4.6	5.0	3.3	4.5	10.3	9.0	14.5							



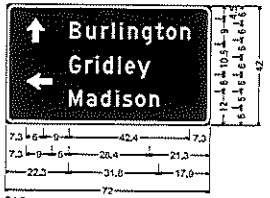
D2-2; 3.0" Radius, 1.0" Border, White on Green;
[Yates Center] D; [14] D; [Independence] D;
[64] D;
Table of distances between letter and object lefts.

	Y	a	t	e	s	C	e	n	t	e	r			
6.8	5.7	4.8	3.6	4.4	9.3	5.4	5.0	4.7	3.8	4.9	8.6	6.8		
	i	n	d	e	p	e	n	d	e	n	c	e		
6.8	3.6	5.0	4.8	4.9	4.5	4.9	4.9	4.9	5.0	4.9	4.5	8.4	5.2	4	4.4	6.8



D1-2; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Yates Center] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Leroy] D;
Table of distances between letter and object lefts.

	↑	Y	a	t	e	s	C	e	n	t	e	r		
8.3	12.0	5.7	4.8	3.6	4.4	9.3	5.4	5.0	4.7	3.8	4.9	8.6	8.3	
	←		L		e		r		o		Y			
8.3	13.0	4.7	5.0	3.3	4.4	4.4	40.9							



D1-3;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Burlington] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Gridley] D; [Madison] D;
Table of distances between letter and object lefts.

	B	u	r	l	i	n	g	t	o	n				
7.3	15.0	5.8	5.3	3.7	2.9	2.9	4.0	4.8	3.8	5.0	3.3	7.3		
	←		G		r		d		e		Y			
7.3	16.0	5.7	3.7	2.5	5.3	2.5	4.4	4.3	21.3					
	M	a	d	i	s	o	n							
22.3	6.3	5.0	5.3	2.3	4.5	5.0	3.4	17.9						

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

DESIGN DETAILS
FOR GUIDE SIGNS

FINAL APPROVAL
DESIGNED | DETAILED | APP'D
DESIGN EN. | DETAIL EN. | SUBMITTED | CHIEF ENG. | TRAFFIC ENG.

Sh. No. 107

Drawn By : drp
Plotted : 01-JUN-2016 09:36
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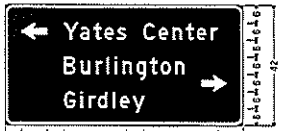
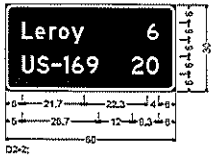
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	108	121



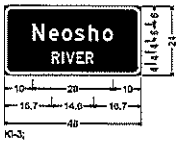
D1-3; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180";
[Yates Center] D; [Burlington] D; [Girdley] D;
Standard Arrow Custom 9.0" X 6.0" 0";
Table of distances between letter and object lefts.

5.8	15.0	5.7	4.7	3.8	4.4	3.8	9.3	5.4	5.8	4.8	3.7	5.0	2.5	6.9				
20.8	5.8	5.3	3.7	2.9	2.9	4.0	4.8	3.8	5.0	9.3	9.0	5.8						
20.8	5.7	2.8	3.3	6.3	2.5	4.5	4.3	34.8										



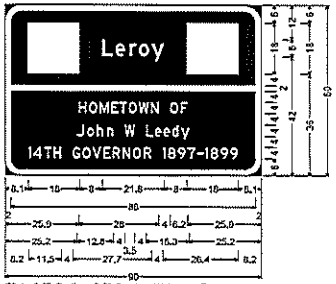
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Leroy] D; [6] D; [US-169] D;
[20] D;
Table of distances between letter and object lefts.

6.0	4.6	5.0	3.3	4.5	3.8	4.5	4.7	28.5	4.0	8.0								
6.0	5.4	5.1	4.7	2.8	6.2	16.0	5.1	4.2	6.0									



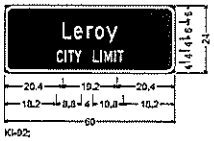
KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Neosho] D; [RIVER] D;
Table of distances between letter and object lefts.

10.0	5.7	4.5	4.4	5.0	4.8	3.4	10.0											
16.7	3.5	1.4	3.7	3.2	2.7	16.7												



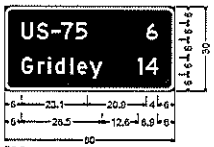
CD-1; 6.0" Radius, 2.0" Border, White on Green;
[Leroy] D; [HOMETOWN OF] D; [John W Leedy] D;
[14TH GOVERNOR 1897-1899] D;
Table of distances between letter and object lefts.

8.1	26.0	4.7	5.0	3.3	4.4	12.4	18.0	8.1										
2.0	86.0	2.0																
25.9	3.6	3.8	4.0	3.9	3.2	3.8	4.2	6.7	3.8	2.4	25.9							
25.2	3.7	3.3	3.6	6.2	7.5	3.1	3.1	3.0	3.2	2.9	25.2							
8.2	1.7	4.0	3.1	6.7	3.5	3.5	3.8	3.2	3.6	3.5	3.8	6.7	1.9	3.4	3.4	3.5	2.7	1.9	3.5	3.4	2.7	8.7



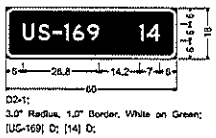
KI-02;
3.0" Radius, 1.0" Border, White on Green;
[Leroy] C; [CITY LIMIT] C;
Table of distances between letter and object lefts.

20.4	4.0	4.4	3.0	4.0	3.8	20.4												
18.2	2.9	1.2	2.2	6.5	2.7	1.4	3.5	1.2	2.0	18.2								



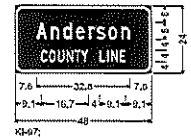
D2-2;
3.0" Radius, 1.0" Border, White on Green;
[US-75] D; [6] D; [Gridley] D;
[14] D;
Table of distances between letter and object lefts.

6.0	5.4	5.2	3.3	5.7	24.9	4.0	6.0											
6.0	5.7	3.7	2.5	5.3	2.5	4.4	17.0	2.5	4.4	6.0								



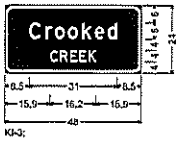
D2-1;
3.0" Radius, 1.0" Border, White on Green;
[US-169] D; [14] D;
Table of distances between letter and object lefts.

6.0	5.5	5.1	4.1	2.9	5.2	9.2	18.2	2.6	4.4	6.0								



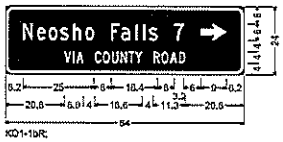
KI-07;
3.0" Radius, 1.0" Border, White on Green;
[Anderson] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

7.6	5.0	4.5	4.4	4.5	2.9	4.0	4.6	2.9	7.6									
9.1	2.9	3.1	3.1	2.8	2.3	6.5	2.6	1.4	3.1	2.0	9.1							



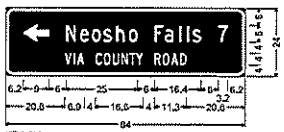
KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Crooked] D; [CREEK] D;
Table of distances between letter and object lefts.

8.5	5.7	3.3	4.8	5.0	4.5	4.5	3.4	8.5										
15.9	5.4	3.7	3.2	3.1	2.8	15.9												



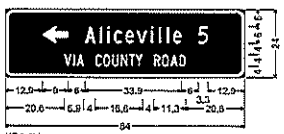
KD1-1bR;
3.0" Radius, 1.0" Border, White on Green;
[Neosho Falls 7] C;
Standard Arrow Custom 9.0" X 6.0" 0";
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

6.2	4.9	4.1	4.0	4.5	4.4	9.1	3.6	4.0	2.7	2.2	9.0	6.2	9.0	6.2				
20.6	3.2	1.2	6.5	2.9	3.1	3.0	2.9	7.2	6.5	2.9	3.0	3.2	2.2	20.6				



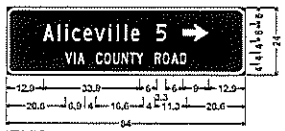
KD1-1bL;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180";
[Neosho Falls 7] C; [VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

6.2	15.0	4.9	4.1	4.0	4.5	4.4	9.1	3.6	4.0	2.7	2.2	9.0	3.2	6.2				
20.6	3.2	1.2	6.5	2.9	3.1	3.0	2.9	7.2	6.5	2.9	3.0	3.2	2.2	20.6				



KD1-1bL;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180";
[Aliceville 5] C; [VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

12.9	15.0	5.1	2.7	2.4	4.1	3.9	4.0	2.8	2.7	2.4	6.5	3.3	12.9					
20.6	3.2	1.2	6.5	2.9	3.1	3.0	2.9	7.2	6.5	2.9	3.0	3.2	2.2	20.6				



KD1-1bR;
3.0" Radius, 1.0" Border, White on Green;
[Aliceville 5] C;
Standard Arrow Custom 9.0" X 6.0" 0";
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

12.9	5.1	2.7	2.4	4.1	3.9	4.0	2.8	2.7	2.4	6.5	3.3	12.9						
20.6	3.2	1.2	6.5	2.9	3.1	3.0	2.9	7.2	6.5	2.9	3.0	3.2	2.2	20.6				

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

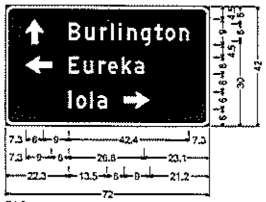
DESIGN DETAILS
FOR GUIDE SIGNS

FHWA APPROVAL		DATE	
DESIGNED	DETAILED	CHECKED	
PLANS CK.	DETAIL CK.	SIGN. CK.	

SR. No. 108

Drawn By: drp
File: U:\projects\Ch(2013)\3031\002\Trans\Traffic\Signing\Signs\Sign Layouts\KA-4113-02psl05.dgn
Plotted: 01-JUN-2016 09:38

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	109	121

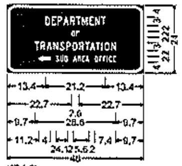


D1-3;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Burlington] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Eureka] D; [Iola] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	↑	B	u	r	l	i	n	g	t	o	n	
7.3	15.0	5.8	5.3	3.7	2.9	2.9	4.0	4.8	3.8	5.0	3.3	7.3

	←	E	u	r	e	k	a	
7.3	15.0	5.3	5.3	3.3	4.9	4.5	3.3	23.1

	I	o	l	a	→	
22.3	2.6	5.1	2.5	9.3	9.0	21.2



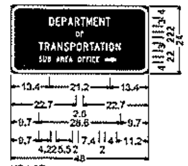
KD4-5L;
3.0" Radius, 1.0" Border, White on Green;
[DEPARTMENT] C;
[OF] C;
[TRANSPORTATION] C;
Standard Arrow Custom 4.0" X 2.0" 180°;
[SUB AREA OFFICE] C;
Table of distances between letter and object lefts.

	D	E	P	A	R	T	M	E	N	T	
13.4	2.3	2.0	2.1	2.4	2.2	2.0	2.5	2.0	2.2	1.5	13.4

	O	F	
22.7	1.6	1.0	22.7

	T	R	A	N	S	P	O	R	T	A	T	I	O	N	
9.7	2.0	2.2	2.4	2.2	2.3	2.2	2.3	2.2	1.6	2.1	2.0	1.1	2.3	1.7	9.7

	←	S	U	B	A	R	E	A	O	F	F	I	C	E	
11.2	6.0	1.5	1.5	3.1	1.6	1.5	1.2	3.3	1.6	1.3	1.3	0.7	1.5	1.0	9.7



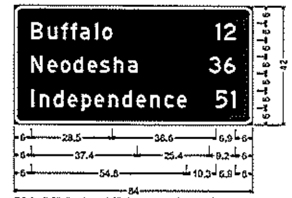
KD4-5R;
3.0" Radius, 1.0" Border, White on Green;
[DEPARTMENT] C;
[OF] C;
[TRANSPORTATION] C;
[SUB AREA OFFICE] C;
Standard Arrow Custom 4.0" X 2.0" 0°;
Table of distances between letter and object lefts.

	D	E	P	A	R	T	M	E	N	T	
13.4	2.3	2.0	2.1	2.4	2.2	2.0	2.5	2.0	2.2	1.5	13.4

	O	F	
22.7	1.6	1.0	22.7

	T	R	A	N	S	P	O	R	T	A	T	I	O	N	
9.7	2.0	2.2	2.4	2.2	2.3	2.2	2.3	2.2	1.6	2.1	2.0	1.1	2.3	1.7	9.7

	S	U	B	A	R	E	A	O	F	F	I	C	E	→	
9.7	1.6	1.5	3.1	1.5	1.6	1.2	3.2	1.6	1.4	1.3	0.7	1.4	3.0	4.0	11.2

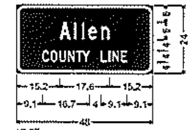


D2-3; 3.0" Radius, 1.0" Border, White on Green;
[Buffalo] D; [12] D; [Neodesha] D; [36] D;
[Independence] D; [51] D;
Table of distances between letter and object lefts.

	B	u	f	f	a	l	o	1	2	
6.0	5.9	4.8	3.2	3.3	5.3	2.5	40.1	2.8	4.1	6.0

	N	e	o	d	e	s	h	a	3	6	
6.0	5.8	4.6	4.5	5.0	4.4	4.9	4.9	28.7	5.1	4.1	6.0

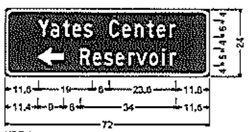
	I	n	d	e	p	e	n	d	e	n	c	e	5	1	
6.0	3.1	4.9	4.9	4.9	4.6	4.9	4.9	4.9	5.0	4.9	4.5	13.7	5.4	1.5	6.0



KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Allen] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

	A	l	l	e	n	
15.2	5.1	2.7	2.4	4.4	3.0	15.2

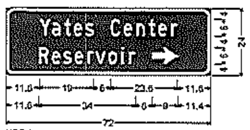
	C	O	U	N	T	Y	L	I	N	E	
9.1	2.9	3.1	3.1	2.8	2.3	8.5	2.6	1.4	3.1	2.0	9.1



KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Yates Center] C;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Reservoir] C;
Table of distances between letter and object lefts.

	Y	a	t	e	s	C	e	n	t	e	r	
11.8	4.4	4.3	3.4	4.0	8.9	4.6	4.5	4.3	3.4	4.5	2.3	11.8

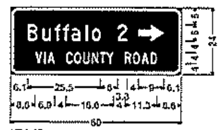
	←	R	e	s	e	r	v	o	i	r	
11.4	15.0	4.6	4.0	4.0	4.5	2.6	4.5	4.6	2.7	2.3	11.6



KD7-2;
3.0" Radius, 1.0" Border, White on Brown;
[Yates Center] C; [Reservoir] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	Y	a	t	e	s	C	e	n	t	e	r	
11.8	4.4	4.3	3.4	4.0	8.9	4.6	4.5	4.3	3.4	4.5	2.3	11.6

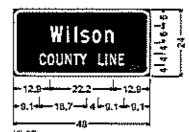
	R	e	s	e	r	v	o	i	r	→	
11.6	4.6	4.0	4.0	4.5	2.6	4.5	4.6	2.7	8.3	9.0	11.4



KD1-1B;
3.0" Radius, 1.0" Border, White on Green;
[Buffalo 2] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
[VIA COUNTY ROAD] C;
Table of distances between letter and object lefts.

	B	u	f	f	a	l	o	2	→	
6.1	5.0	4.4	2.9	3.0	4.8	2.4	9.0	7.3	9.0	6.1

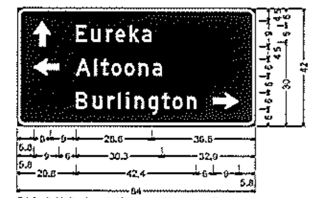
	V	I	A	C	O	U	N	T	Y	R	O	A	D	
8.6	3.2	1.2	6.5	2.9	3.1	3.0	2.9	2.2	6.5	2.9	3.0	3.2	2.2	8.6



KI-97;
3.0" Radius, 1.0" Border, White on Green;
[Wilson] C;
[COUNTY LINE] C;
Table of distances between letter and object lefts.

	W	i	l	s	o	n	
12.9	5.8	2.7	2.2	4.0	4.6	2.9	12.9

	C	O	U	N	T	Y	L	I	N	E	
9.1	2.9	3.1	3.1	2.8	2.3	6.6	2.6	1.4	3.1	2.0	9.1

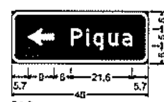


D1-3; 3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 90°;
[Eureka] D;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Altoona] D; [Burlington] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	↑	E	u	r	e	k	a	
5.8	15.0	5.3	5.3	3.3	4.9	4.5	3.3	36.6

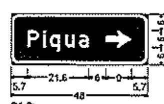
	←	A	l	t	o	o	n	a	
5.8	15.0	6.3	2.4	3.7	4.6	5.1	4.9	3.3	32.9

	B	u	r	l	i	n	g	t	o	n	→	
20.8	5.8	5.3	3.7	2.9	2.9	4.9	4.8	3.8	5.0	9.3	9.0	5.8



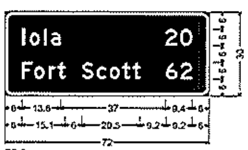
D1-2;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.0" X 6.0" 180°;
[Piqua] D;
Table of distances between letter and object lefts.

	←	P	i	q	u	a	
5.7	15.0	5.5	2.5	5.3	4.9	3.4	5.7



D1-2;
3.0" Radius, 1.0" Border, White on Green;
[Piqua] D;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

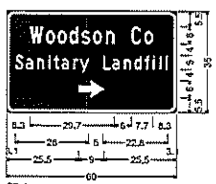
	P	i	q	u	a	→	
5.7	5.5	2.5	5.3	4.9	9.4	9.0	5.7



D2-2;
3.0" Radius, 1.0" Border, White on Green;
[Iola] D; [20] D; [Fort Scott] D; [62] D;
Table of distances between letter and object lefts.

	I	o	l	a	2	0	
6.0	2.7	5.0	2.5	40.4	5.2	4.2	6.0

	F	o	r	t	S	c	o	t	t	6	2	
6.0	4.3	5.0	3.2	8.6	5.3	4.5	4.5	3.6	11.8	5.2	4.0	6.0

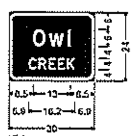


SP-1;
3.0" Radius, 1.0" Border, White on Green;
[Woodson Co] C;
[Sanitary Landfill] C;
Standard Arrow Custom 9.0" X 6.0" 0°;
Table of distances between letter and object lefts.

	W	o	o	d	s	o	n	C	o	
8.3	5.7	4.1	4.1	4.3	4.0	4.6	6.9	4.0	3.1	8.3

	S	a	n	i	t	a	r	y	L	a	n	d	f	i	l	l	
3.1	3.7	4.0	4.0	1.9	2.8	4.0	2.4	8.2	3.3	4.1	3.7	3.6	2.9	2.2	2.3	0.7	3.1

	→	
25.5	9.0	25.5



KI-3;
3.0" Radius, 1.0" Border, White on Green;
[Owl] D;
[CREEK] D;
Table of distances between letter and object lefts.

	O	w	l	
8.5	5.5	6.8	0.9	8.5

	C	R	E	E	K	
6.9	3.4	3.7	3.2	3.1	2.8	6.9

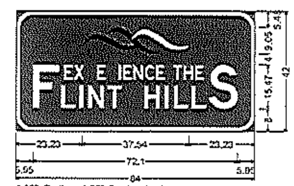
KD12-5; 1.9" Radius, 0.0" Border, White on Blue;
511 logo;
[TRAVEL] D;
[INFO] D;
[CALL 511] D;
Table of distances between letter and object lefts.

	511	
9.0	12.0	9.0

	T	R	A	V	E	L	
5.2	3.2	3.4	3.6	3.8	3.2	2.4	5.2

	I	N	F	O	
9.4	1.8	3.8	3.2	2.8	9.4

	C	A	L	L	5	1	1	
3.3	3.2	4.1	3.2	6.4	3.6	1.9	1.0	3.3



6.00" Radius, 1.25" Border, White on Brown;
Flint Hills;
Table of letter and object lefts.

23.23

5.95

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

DESIGN DETAILS
FOR GUIDE SIGNS

FHWA APPROVAL | APP'D
DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN CK. | DETAIL CK. | QUAN. CK. | TRACE CK.

Drawn By : dlp
Plotted : 01-JUN-2016 09:36
File : U:\Wichita-Civil\2013\13081002\Trans\Traffic\Signing\Signs\Sign Layouts\KA-4113-02psl-06.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	110	121

DETAILED SPECIFICATIONS FOR FLAT SHEET SIGNS

ALL NEW FLAT SHEET SIGN BLANKS SHALL BE OF THE ALUMINUM ALLOY AND THICKNESS SHOWN ON THE FLAT SHEET BLANK DETAIL SHEETS.

FLAT SHEET BLANKS SHALL BE USED FOR SIGNS THAT ARE LESS THAN OR EQUAL TO 7'-0" IN LENGTH AND/OR LESS THAN OR EQUAL TO 4'-0" IN HEIGHT. FLAT SHEET BLANKS SHALL ALSO BE USED FOR SIGNS THAT ARE 4'-0" IN LENGTH AND LESS THAN OR EQUAL TO 8'-0" IN HEIGHT.

THE DESIGN DETAILS FOR SIGNS (COLOR, LETTER HEIGHT, AND LETTER SERIES) SHALL BE AS SHOWN IN THE 'STANDARD HIGHWAY SIGNS' MANUAL (2004 EDITION), UNLESS OTHER DETAILS ARE SHOWN IN THE PLANS.

ALL SIGN FACES WITH BLUE, GREEN, RED, YELLOW, FLUORESCENT YELLOW GREEN, BROWN, OR WHITE BACKGROUND SHALL BE COVERED WITH TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE TYPE OF ADHESIVE USED FOR RETROREFLECTIVE SHEETING OR LETTERING FILM SHALL BE HEAT ACTIVATED OR PRESSURE SENSITIVE.

THE SIGN FACES SHALL BE DIRECT SCREEN PROCESS, REVERSE SCREEN PROCESS, OR DIRECT APPLIED LEGEND.

DETAILED SPECIFICATIONS FOR STRUCTURAL EXTRUDED PANEL SIGNS

ALL NEW REINFORCED SIGN PANELS SHALL BE OF THE FABRICATION, ALUMINUM ALLOY, AND THICKNESS SHOWN ON THE REINFORCED PANEL DETAIL SHEETS. IF EXTRUSHEET FABRICATED SIGN PANELS ARE USED, THEY SHALL BE OF THE LENGTH, WIDTH AND IN THE POSITION SHOWN. IF EXTRUSHEET FABRICATED PANEL DIMENSIONS ARE NOT SHOWN, A LINE OF LEGEND SHOULD BE PLACED ENTIRELY ON ONE PANEL. IF EXTRUDED FABRICATED SIGN PANELS ARE USED, EITHER 1'-0" OR 6" PANELS SHALL BE USED. THE 1'-0" PANELS SHALL BE USED ONLY AT THE TOP OR BOTTOM OF SIGNS.

REINFORCED PANELS SHALL BE USED FOR SIGNS THAT ARE GREATER THAN 7'-0" IN LENGTH OR GREATER THAN 4'-0" IN HEIGHT.

ALL SIGN FACES SHALL BE COVERED WITH TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE RETROREFLECTIVE SHEETING USED FOR THE DIRECT APPLIED LEGEND, AND DIRECT APPLIED BORDERS SHALL BE TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE TYPE OF ADHESIVE USED FOR RETROREFLECTIVE SHEETING OR LETTERING FILM SHALL BE HEAT ACTIVATED OR PRESSURE SENSITIVE.

LETTERS AND NUMBERS ON REINFORCED PANEL SIGNS ARE MODIFIED SERIES "E" UNLESS OTHERWISE SHOWN.

SPACING TABLE DIMENSIONS ARE IN INCHES.

NO.	DATE	REVISIONS	BY	APPD
1	1/23/06	Changed Notes and Sheeting Type	D.D.C.	D.L.

KANSAS DEPARTMENT OF TRANSPORTATION

DETAILS SPECIFICATIONS
FOR REINFORCED SIGN PANELS
AND FLAT SHEET SIGNS

TE590 7/1/03

FINAL APPROVAL 1/23/2006 APPD. STANDARD A. RUNYAN
DESIGNED R.W.R. DETAILED K.R.S. QUANTITIES TRACED
DESIGN CK. S.A.MELTON, CK. DETAIL CK. QUANT. CK. TRACE CK.

Sh. No. 110

Plotted: 01-JUN-2016 09:38
Drawn By: drp
File: U:\Wichita-Civil\2013\13208\02\Transit\Traffic-Signing\Standards\KA-4113-02pss590.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	111	121

1) Design Speed: Those items delegated to temporary traffic control should be designed and installed using the posted/legal speed of the roadway prior to work starting.

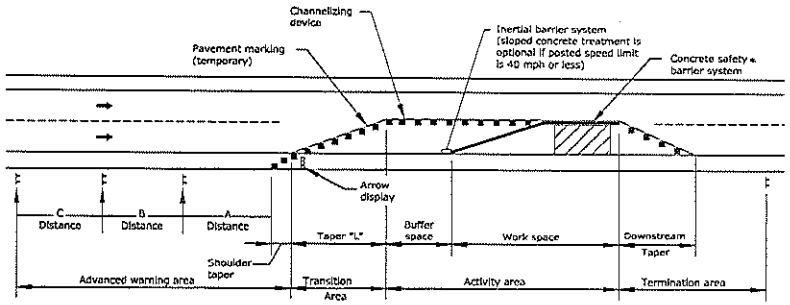
2) Minimum lane width: Lane widths shall be a minimum of 11' (measured between centerlines of pavement markings) or as shown on the plans, or as directed by the engineer. A lane width less than 11' may require restricted roadway width signing.

3) Consideration should be made to seperate pedestrian and, if needed, bicycle movements from both work site activity and vehicular traffic. Unless a reasonable safe route that does not involve crossing the roadway can be provided, pedestrians should be appropriately directed with advance signing that encourages them to cross to the opposite side of the roadway. In urban and suburban areas with high vehicular traffic volumes, these signs should be placed at intersections (rather than midblock locations) so that pedestrians are not confronted with midblock work sites that will induce them to attempt skirting the work site or making a midblock crossing.

4) When existing pedestrian facilities are disrupted, closed, or relocated, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.

5) When the driving surface open to traffic is milled, is a temporary surface made of loose material, or when directed by the engineer use the W8-15 (Grooved Pavement) or W8-7(Loose Gravel) a "C" distance after the W20-1 (Road Work Ahead) on mainline approaches. Signs may be used with the W8-15p motorcycle plaque as directed by the engineer. Display signs in advance of the condition as long as the condition is present.

6) Alternative temporary rumble strip options may be available. Please contact the Temporary Traffic Control Unit for more information at 785-296-0355 or 785-296-1183.



TYPICAL WORK ZONE COMPONENTS

* When concrete barrier system is used, portable channelizing devices are not needed along the tangent barrier section.

Minimum advance warning sign spacing (in feet):

SPEED (MPH) *	A	B	C
URBAN (40 MPH OR LOWER)	100	100	100
URBAN (45 MPH OR HIGHER)	350	350	350
RURAL (55 MPH OR LOWER)	500	500	500
RURAL (60 MPH OR HIGHER)	750	750	750
EXPRESSWAY/FREEWAY	1000	1500	2640

* Posted speed prior to work starting

The minimum spacing between signs shall be no less than 100', unless directed by the engineer.

The spacing between any signs may be increased beyond the minimum values in the table above as approved by the engineer in order to maximize visibility.

Taper Formulas:

L = WS for speeds of 45 MPH or more

L = $WS^2/60$ for speeds of 40 MPH or less

Where: L =Minimum length of taper in feet
S =Numericial value of posted speed prior to work starting in MPH
W =Width in offset feet

Shifting taper=1/2 L
Shoulder taper=1/3 L

Channelizer placement:

(1) The spacing between devices in transition area (taper) should not exceed a distance in feet equal to 1/2 the posted speed limit in mph prior to work starting.

(2) The spacing between devices in the advanced warning area and the activity area should not exceed a distance in feet equal to two times the posted speed limit in mph prior to work starting.

(3) Channelizing devices shall be placed for optimum visibility, normally at right angles to the traffic flow.

(4) Place directional indicator barricades in series to direct traffic onto the new path. The arrow sign should not be visible to opposing traffic.

(5) Alternating diagonal orange and white striping must slope downward in the direction traffic is expected to pass.

Buffer Space

SPEED (MPH) *	20	25	30	35	40	45	50	55	60	65	70	75
LENGTH (ft)	115	155	200	250	305	360	425	495	570	645	730	820

* Posted speed prior to work starting

Neither work activity nor storage of equipment, vehicles, or material should occur in the buffer space. When a protection vehicle is placed in advance of the work space, only the space upstream of the vehicle constitutes the buffer space.

If temporary concrete safety barrier system is used to seperate approaching traffic from the work space, the barrier system shall be considered part of the activity area. A full lane width should be available throughout the length of the buffer space. See typical work zone components above.

NO.	DATE	REVISION	BY	APP'D
3				
2				
1	06/08/15	Channelizer spacing info	R.K.R.	K.F.

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
GENERAL NOTES

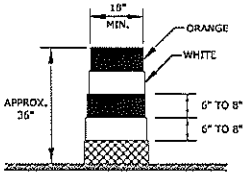
TE700

FINAL APPROVAL 06/08/15 APP'D Kristina Erickson
DESIGNED R.A.R. DETAILED R.K.R. QUANTITIES TRACED
DESIGN CK. DETAIL CK. QUAN. CK. TRACE CK.

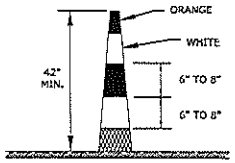
Sh. No. 111

Drawn By: dlp Plotted: 01-JUN-2016 09:36
File: U:\Wichita-Civil\2013\13081\002\Trans\TrafficSigning\Standards\KA-4113-02css700.dgn

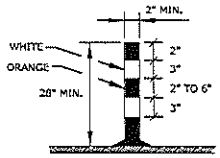
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	112	121



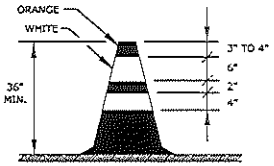
DRUM



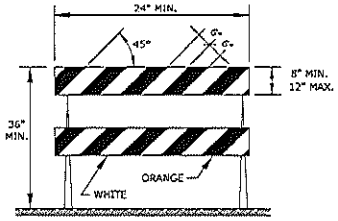
CONICAL DELINEATOR



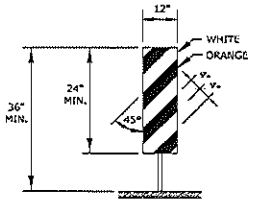
TUBULAR MARKER
Striping as shown for up to 42".



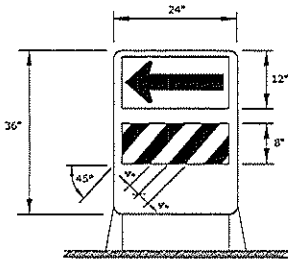
TRAFFIC CONE



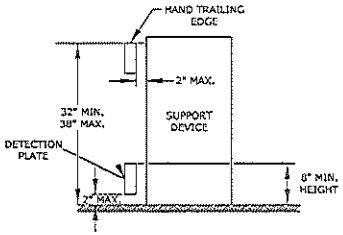
TYPE 2 BARRICADE
For rails less than 36" long, 4" wide stripes may be used. All stripes shall slope downward to the traffic side for channelization.



VERTICAL PANEL
The stripes shall slope downward to the traffic side for channelization.



DIRECTION INDICATOR BARRICADE
The stripes shall slope downward in the direction traffic is to pass. The direction indicator barricade shall be used in series to direct the motorist into the intended lane of travel.



PEDESTRIAN CHANNELIZER
1. Support device shall not project beyond the detection plate into the pathway.
2. Hand trailing edges and detection plates are optional for continuous walls.
3. Interconnect pedestrian channelizers to prevent displacement and to provide continuous guidance through or around work.
4. Alternate pathways shall be firm, stable, and slip resistant.
5. Treat height differentials > 1/2" in the surfaces of alternate paths with a firm, stable, and slip resistant temporary ramp having a slope of 12:1 or flatter and having a width equal to the alternate path.
6. Use alternating orange/white on interconnected devices.

ITEM	LOCATION	Cross-overs	Shoofly Diversions	Tangents	Tapers	Ramps	Head to Head	Object Identifier	Lead-in Devices	Gores
PORTABLE										
	Drums	Yes	Yes	Yes	Yes	Yes	(1)	Yes	Yes	Yes
	Conical Delineators	Yes	Yes	Yes	Yes	Yes	(1)	Yes	Yes	Yes
	Vertical Panels	(2)	(2)	(2)	(2)	(2)	(1,2)	YES	(2)	(2)
	Direction Indicator Barricade	NO	NO	NO	Yes	NO	NO	NO	NO	NO
	Type 2 Barricade	(2)	(2)	(2)	(2)	NO	NO	Yes	NO	NO
	Traffic Cones	NO	NO	(4)	(4)	(4)	NO	(4)	(4)	(4)
FIXED										
	Tubular Markers	(3)	(3)	(3)	NO	(3)	Yes	NO	Yes	Yes
	Vertical Panels	(3)	(3)	(3)	(3)	(3)	(3)	Yes	(2,3)	(2)

(1) Not allowed on centerline delineation along freeways or expressways.
(2) The stripes shall slope downward to the traffic side for channelization.
(3) May be used upon the approval of the engineer.
(4) Daytime operations only.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
CHANNELIZING DEVICES

TE702

FHWA APPROVAL 06/16/16 APP'D Kristina Ericksen
DESIGNED L.A.R. DETAILED M.R.B. COMPUTED TRACED
DESIGN CK. DETAIL CK. DRAW CK. TRACE CK.

Sh. No. 112

Drawn By : dfp Plotted : 01-JUN-2016 09:37
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02css702.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	113	121

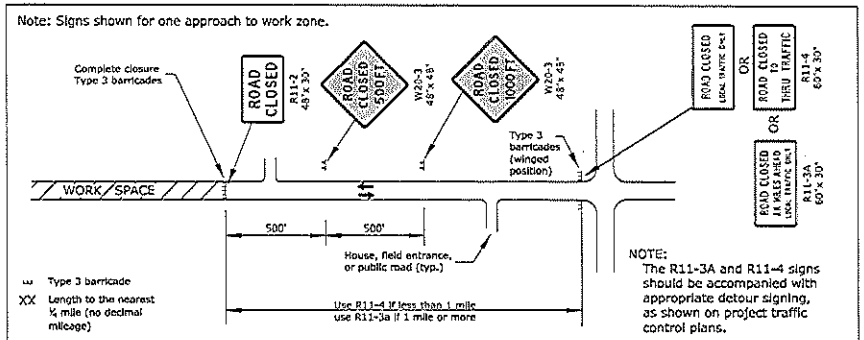


FIGURE 1: TYPICAL SIGNING FOR ROAD CLOSURE (MAINLINE OR SIDE ROAD)

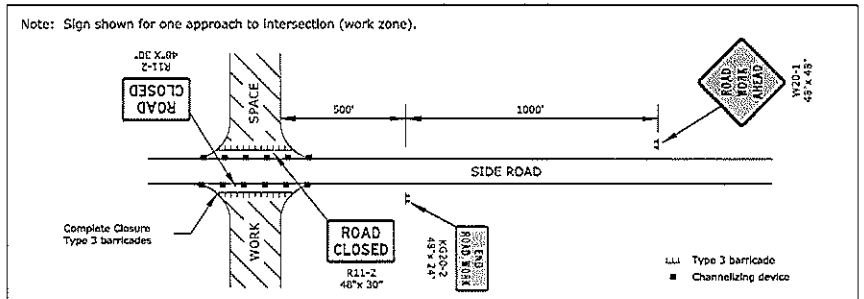


FIGURE 2: TYPICAL SIGNING FOR SIDE ROAD OPEN

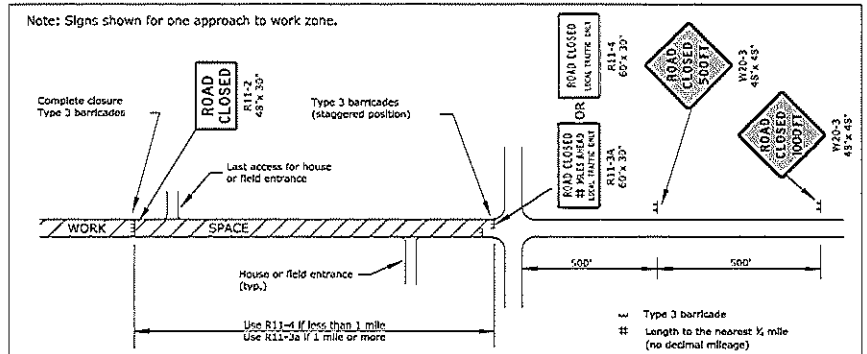


FIGURE 3: TYPICAL SIGNING FOR ROAD CLOSURE - LOCAL TRAFFIC ACCESS

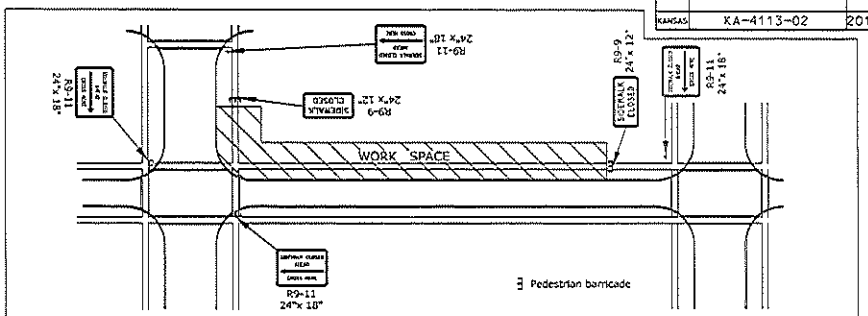
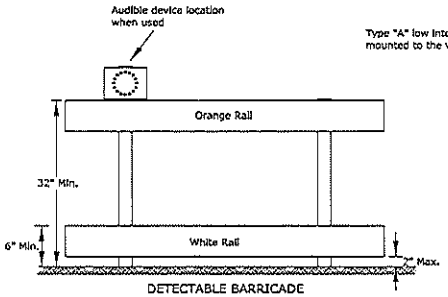
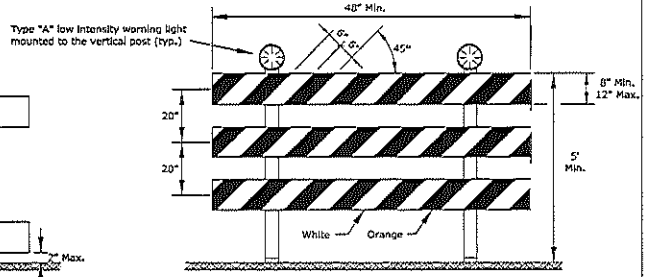


FIGURE 4: TYPICAL SIGNING FOR SIDEWALK CLOSED WITH OPPOSITE SIDEWALK AVAILABLE



DETECTABLE BARRICADE

1. Support device shall not project beyond the detection plate into the pathway.
2. Barricades shall be used to close the entire width of the pathway.
3. Do not use warning lights on pedestrian barricades.
4. Do not use warning lights on audible devices.



TYPE 3 BARRICADE WITH LIGHTS

Approved signs mounted on Type 3 barricades should not cover more than 50% of the top two rails or 33% of the total area of the three rails.

When barricades are placed end-to-end or staggered, a Type "A" low intensity warning light shall be mounted to the vertical post near each outside corner of the end barricades.

ROAD CLOSED GENERAL NOTES

As shown in Figure 1, at the point where thru traffic must detour and local traffic can proceed to the location where the roadway is completely closed, the R11-3a (ROAD CLOSED # MILES AHEAD LOCAL TRAFFIC ONLY) or R11-4 (ROAD CLOSED LOCAL TRAFFIC ONLY or ROAD CLOSED TO THRU TRAFFIC) sign shall be used with Type 3 barricades (winged position), placed on the shoulders of roadway.

As shown in Figure 3, when local traffic must be allowed access into the work zone, Type 3 barricades shall be longitudinally staggered to maintain the appearance of a closed roadway. A second line of end-to-end Type 3 barricades shall be placed just beyond the last access point in the work zone, to completely close the roadway.

The R11-4 (ROAD CLOSED TO THRU TRAFFIC or ROAD CLOSED LOCAL TRAFFIC ONLY) sign shall be used when the distance to the point of complete closure of the roadway is less than 1 mile.

The R11-3a (ROAD CLOSED # MILES AHEAD LOCAL TRAFFIC ONLY) sign shall be used when the distance to the point of complete closure of the roadway is 1 mile or greater.

The words "BRIDGE OUT" (or BRIDGE CLOSED) may be substituted for the words "ROAD CLOSED" on the R11-3a or R11-4 sign where applicable.

NO.	DATE	REVISIONS	BY	APPD
1				
2				
3				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL CLOSURES

TE704

Sh. No. 113

Plotted : 01-JUN-2016 09:37
Drawn By : drp
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02css704.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	114	121

SIGN LAYOUT INFORMATION

END ROAD WORK — KG20-2
STD. SIZE EXPWY/FREEWAY: 6" C, 48"x 24"

WAIT FOR PILOT CAR — KG20-5
STD. SIZE EXPWY/FREEWAY: 6" C, 48"x 24"

WORK ZONE — KM4-20
STD. SIZE: 3" C, 24"x 6"; EXPWY/FREEWAY: 6" C, 48"x 12"

NEXT X MILES — W7-3a
Mileage to be determined by the engineer.

W8-17
STD. SIZE EXPWY/FREEWAY: 48"x 48"

SHOULDER DROP-OFF — W8-17P (OPTIONAL)
STD. SIZE EXPWY/FREEWAY: 30"x 24"

GROOVED PAVEMENT — W8-15
STD. SIZE EXPWY/FREEWAY: 8" D, 48"x 48"

LOOSE GRAVEL — W8-7
STD. SIZE EXPWY/FREEWAY: 8" D, 48"x 48"

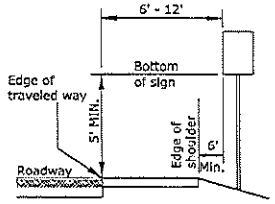
W8-15p
STD. SIZE EXPWY/FREEWAY: 30"x 24"

UNEVEN LANES — W8-11
STD. SIZE EXPWY/FREEWAY: 8" D, 48"x 48"

NB US-75 CLOSED FOLLOW DETOUR — SP-01 (SPECIAL SIGN)
STD. SIZE: 6" C; EXPWY/FREEWAY: 10" D

US-75 CLOSED NORTH OF Topeka FOLLOW DETOUR — SP-02 (SPECIAL SIGN)
STD. SIZE: UPPERCASE: 6" C, LOWERCASE: 4.5" C
EXPWY/FREEWAY: UPPERCASE: 10" D, LOWERCASE: 8" D

ALL CITY NAMES AND STREET NAMES ON SPECIAL SIGNS AND DESTINATION SIGNS MUST HAVE UPPER AND LOWER CASE LETTERS.

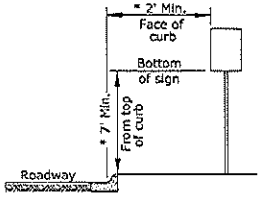


Rural

1) Ground-mounted signs shall be mounted at a minimum height of 5' measured from the bottom of sign to the near edge of the pavement.

2) Large signs having an area exceeding 50 square feet installed on multiple breakaway posts shall be mounted a minimum of 7' above the ground.

3) The height of the secondary sign mounted below another sign may be 4' measured from the bottom of the sign to the near edge of the pavement. Signs shall not overlap each other.



Urban

1) Signs shall be mounted at a minimum height of 7' measured from the bottom of sign to the near edge of the pavement.

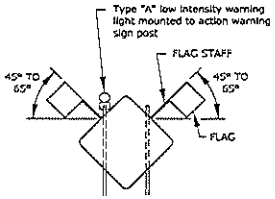
2) Neither portable nor permanent sign supports should be located on sidewalks or areas designated for pedestrian or bicycle traffic.

3) Signs mounted lower than 7' should not project more than 4" into pedestrian facilities.

4) The height from of the secondary sign mounted below another sign may be 6' measured from the bottom of sign to the near edge of the pavement. Signs shall not overlap each other.

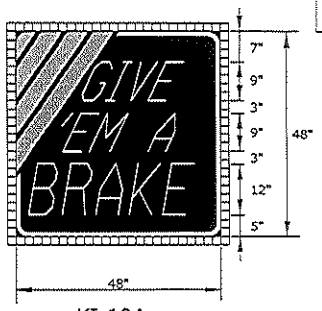
5) Large signs having an area exceeding 50 square feet installed on multiple breakaway posts shall be mounted a minimum of 7' above the ground.

* 6) Pedestrian detour signing shall be a minimum of 2' measured from the top of the pedestrian pathway to the bottom of the sign and shall not protrude into the walkway nor shall it project beyond the back of curb.



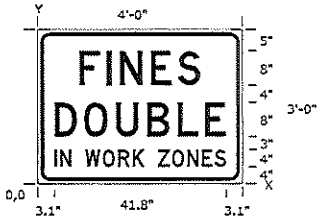
When the sign width is equal to or greater than 9', three or more wood posts may be used with a minimum of 4' between the centerline of each post. All signs less than 9' in width shall use a maximum of two wood posts.

In the case of hitting rock when driving posts
1. Shift the sign location. Do not violate minimum sign spacing.
2. With the engineer's approval, use acceptable alternative sign stands.



KI-104a

SIGN NUMBER	GIVE EM A BRAKE
WIDTH x HEIGHT	4'-0" x 4'-0"
BORDER WIDTH	1.0"
CORNER RADIUS	4.0"
STRIPE WIDTH	3.0"
MOUNTING	GROUND
BACKGROUND	TYPE: NON-REFLECTIVE
	COLOR: BLACK
LEGEND/BORDER	TYPE: REFLECTIVE
	COLOR: WHITE
LEGEND FONT	DUTCH 801 ROMAN SWC 25 DEGREE SLANT
STRIPES	TYPE: REFLECTIVE
	COLOR: ORANGE



KI-105a

SIGN NUMBER	FINES DOUBLE
WIDTH x HEIGHT	4'-0" x 3'-0"
BORDER WIDTH	0.9"
CORNER RADIUS	3.0"
MOUNTING	GROUND
BACKGROUND	TYPE: REFLECTIVE
	COLOR: WHITE
LEGEND/BORDER	TYPE: NON-REFLECTIVE
	COLOR: BLACK

DIMENSIONS IN INCHES — SPACINGS ARE TO START OF NEXT LETTER

LETTER SPACINGS

Y FONT																	HT LEN
23.0	X	F	I	N	E	S	X										8.0
D		9.7	6.4	3.2	7.3	6.4	5.4	9.7									28.6
11.0	X	D	O	U	B	L	E	X									8.0
D		3.9	6.9	7.5	7.3	7.3	6.4	4.0	3.9								40.3
4.0	X	I	N	X	W	O	R	K	X	Z	O	N	E	S	X		4.0
D		3.1	1.6	2.7	3.2	4.3	3.8	3.6	2.8	3.2	3.4	3.8	3.6	3.2	2.7	3.1	41.8

Notes:

Typically, there are two sets of informational signs installed per project: one for each direction of traffic.

Install signs a minimum of 500' in advance of the road work ahead sign. The engineer may designate a more appropriate location if conditions dictate.

The informational signs are not to interfere with the traffic control signs for the project.

NO.	DATE	REVISIONS	BY	APPD
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SIGN INFORMATION

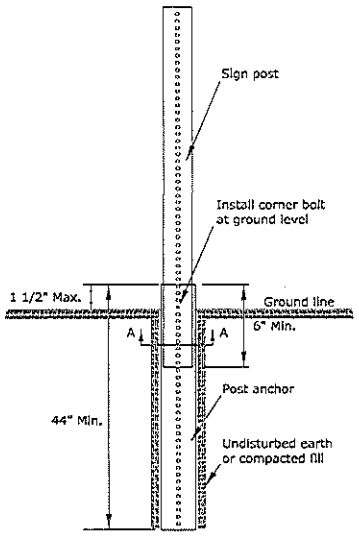
TE710

Sh. No. 114

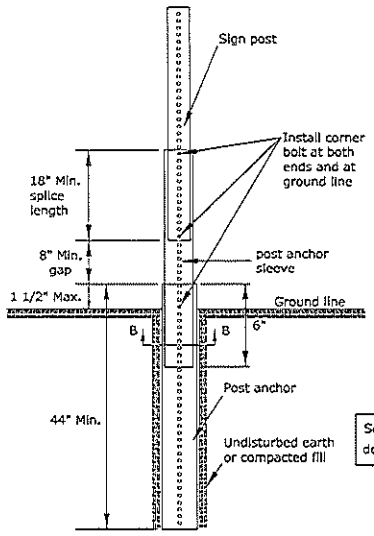
Plotted: 01-JUN-2016 09:37
Drawn By: drp
File: U:\Wichita-Civil\2013\1308\1602\Trans\Traffic\Signing\Standards\KA-4113-02ess710.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	115	121

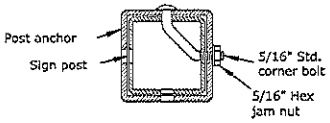
Perforated square steel tube (P.S.S.T.) post setup



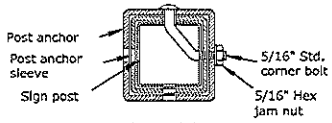
P.S.S.T. detail



Telescoping P.S.S.T. detail



Section A-A

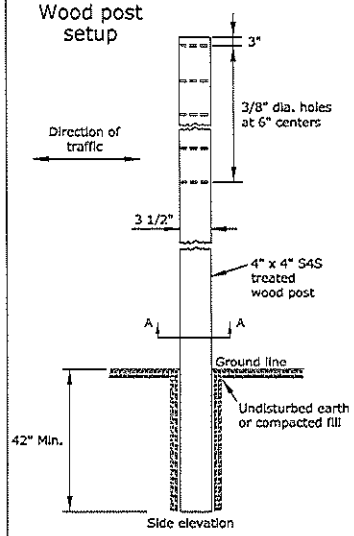


Section B-B

Details for 2", 2 1/4", or 2 1/2" sign posts

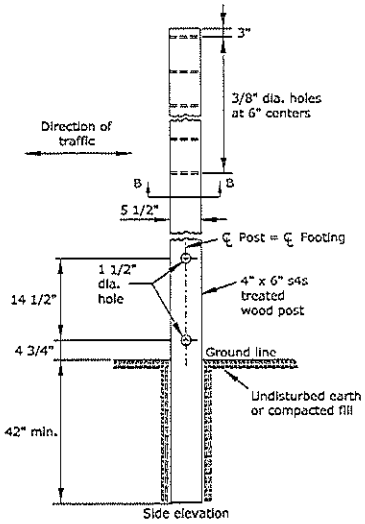
Place bolts in the same corner along each sign post.

Wood post setup



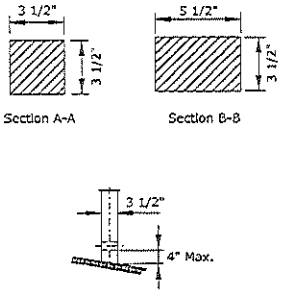
Side elevation

4" x 4" Wood post in soil



Side elevation

4" x 6" Wood post in soil



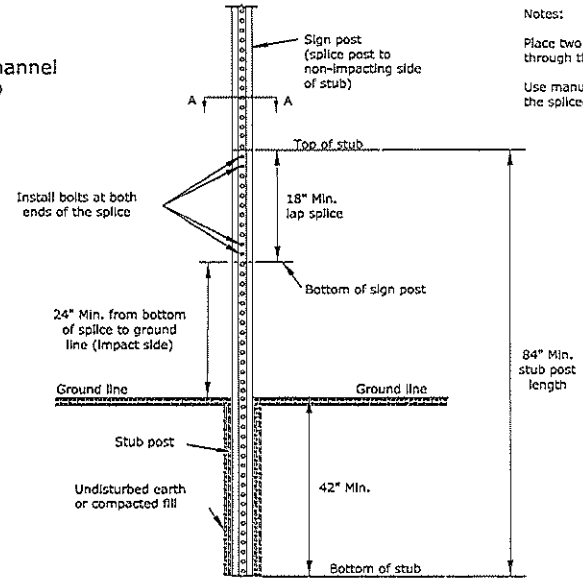
Section A-A

Section B-B

Front elevation

See TE710 for additional details and requirements

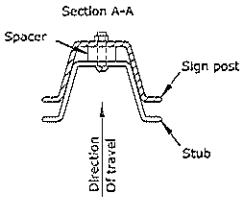
3 lb/f U-Channel setup



Notes:

Place two bolts at both ends of the splice through the holes nearest the ends of the splice.

Use manufacturer recommended spacers over the bolts between the spliced pieces of U-Channel.



NO.	DATE	REVISIONS	BY	APPD
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SIGN POSTS

TE712

FINAL APPROVAL ____ DATE ____ APPD ____ ROADWAY ____

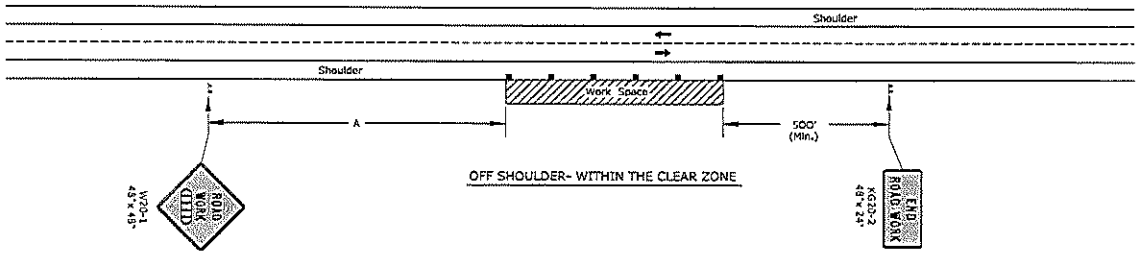
DESIGNED ____ DETAILED ____ CHECKED ____ TRACED ____

DRAWN BY ____ REVIEW BY ____ CHECKED BY ____ DATE ____

Sh. No. 115

Plotted : 01-JUN-2016 09:37
File : U:\Wichita-Civil\2013\1008\1\002\Traffic\Signing\Standards\KA-4113-02ess712.dgn
Drawn By : drp

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	116	121

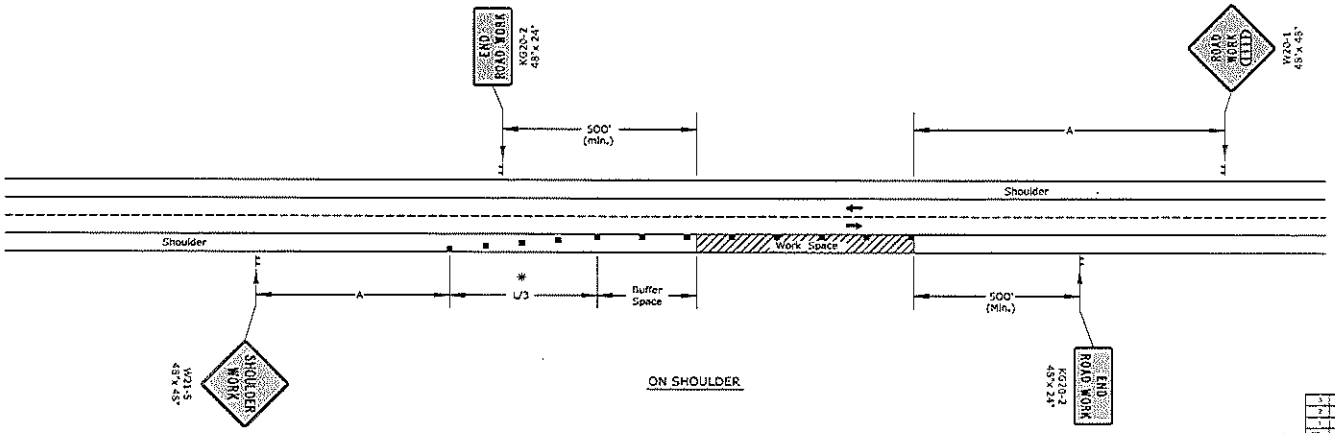


OFF SHOULDER- WITHIN THE CLEAR ZONE

Notes:

No traffic control is required if the work space is located outside of the clear zone.

For operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with high-intensity rotating, flashing, oscillating, or strobe lights is used.



ON SHOULDER

* Omit taper if paved shoulder is less than 8' wide.

■ Channelizing device

Ahead, 1500 ft, or 1 mile

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
SHOULDER WORK
UNDIVIDED ROADWAY

TE720

Drawn By : drp
Plotted : 01-JUN-2016 09:37
File : U:\Wichita-Civil\2013\1308\1002\Trans\Traffic\Signing\Standards\KA-4113-02css720.dgn

Sh. No. 116

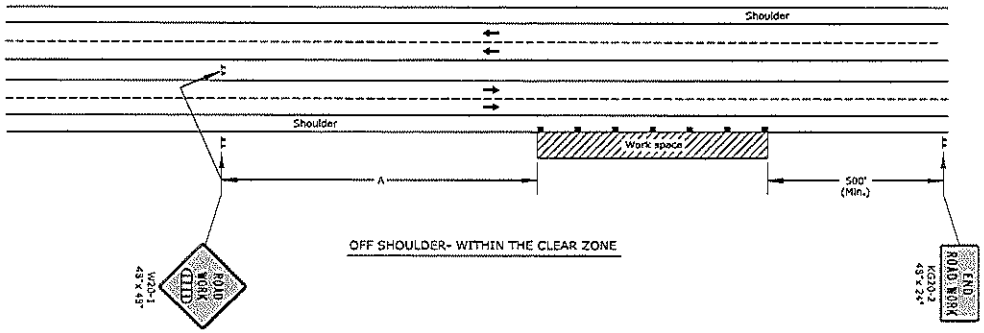
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	117	121

Notes:

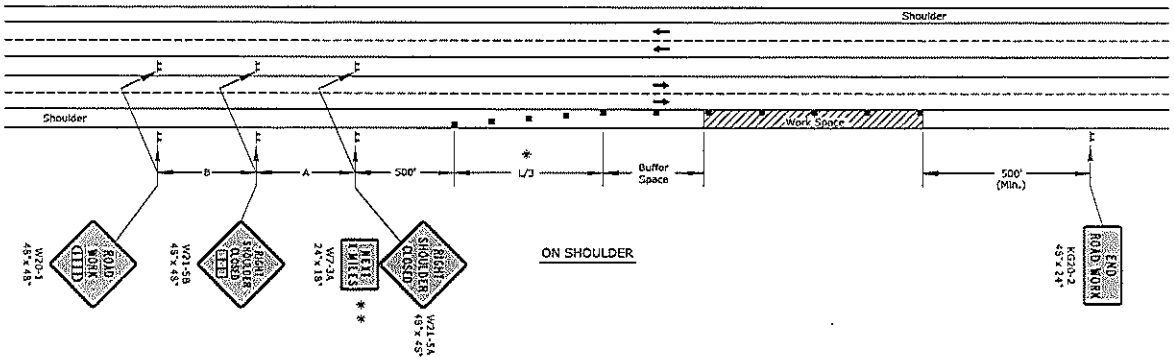
For work in the median, install signs and channelizing devices for each direction of traffic according to the applicable typical drawing.

No traffic control is required if the work space is located outside of the clear zone.

For operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with a high-intensity rotating, flashing, oscillating, or strobe light is used.



OFF SHOULDER- WITHIN THE CLEAR ZONE



ON SHOULDER

* Omit taper if paved shoulder is less than 8' wide.

** Eliminate W7-3A if shoulder is closed for less than 2 miles.

X Length to the nearest whole mile
■ Channelizing device
Ahead, 1500 ft, or 1 mile
Ahead, 1000 ft, 1500 ft or ½ mile

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
SHOULDER WORK
DIVIDED HIGHWAY

TE722

FINAL APPROVAL ____ DATE APP'D ____ EXISTING SCALE (MIN) ____
DESIGNED L.E.R. DETAILED R.W.B. QUANTITIES ____ TRACED ____
DESIGN CK. ____ DETAIL CK. ____ QUAN. CK. ____ TRACE CK. ____

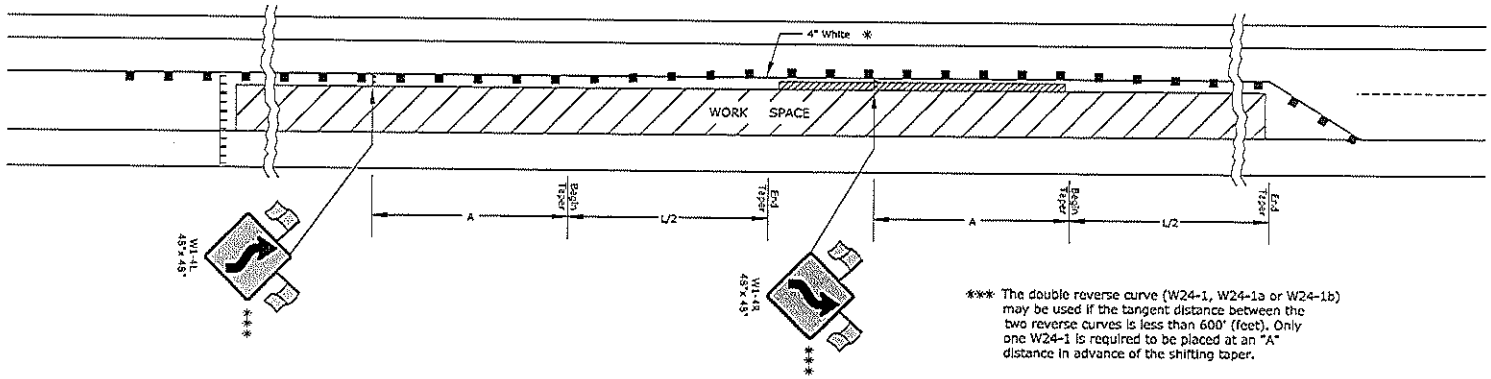
Sh. No. 117

Plotted: 01-JUN-2016 09:37
Dsgn By: drp
File: U:\Wichita-Ch\2013\130811002\Traffic\Signing Standards\KA-4113-02ss722.dgn

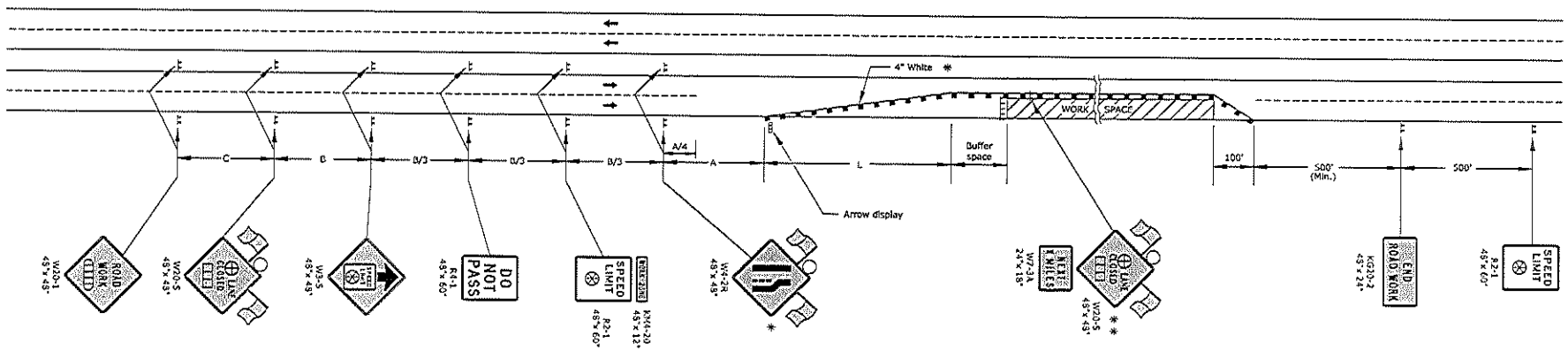
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	118	121

SHIFTING TAPER DETAIL

Add signs and devices as shown for work inside a closed lane that extends near to (or into) the open traffic lane.



*** The double reverse curve (W24-1, W24-1a or W24-1b) may be used if the tangent distance between the two reverse curves is less than 600' (feet). Only one W24-1 is required to be placed at an "A" distance in advance of the shifting taper.



- Type 3 barricades
- X Length to the nearest whole mile
- ■ Channelizing device
- Ahead, 1500 ft, or 1 mile
- Ahead, 1000 ft, 1500 ft, or ½ mile
- ⊕ Right or left
- ⊗ Speed to be determined by the Engineer
- ○ Type "A" low intensity warning light

* For left lane closures use W4-2L and yellow edge line along channelizing devices.

** The W20-5 (⊕ Lane Closed) and W7-3A (Next X Miles) signs should be placed at 2 mile increments on a project of 4 miles or longer.

Left-side signs shall be omitted for a four-lane undivided highway.

One flagger should be stationed within each multi-lane roadway activity area where work is in a closed lane adjacent to traffic and not separated by a concrete safety barrier system.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
LANE CLOSURE ON MULTILANE HWY

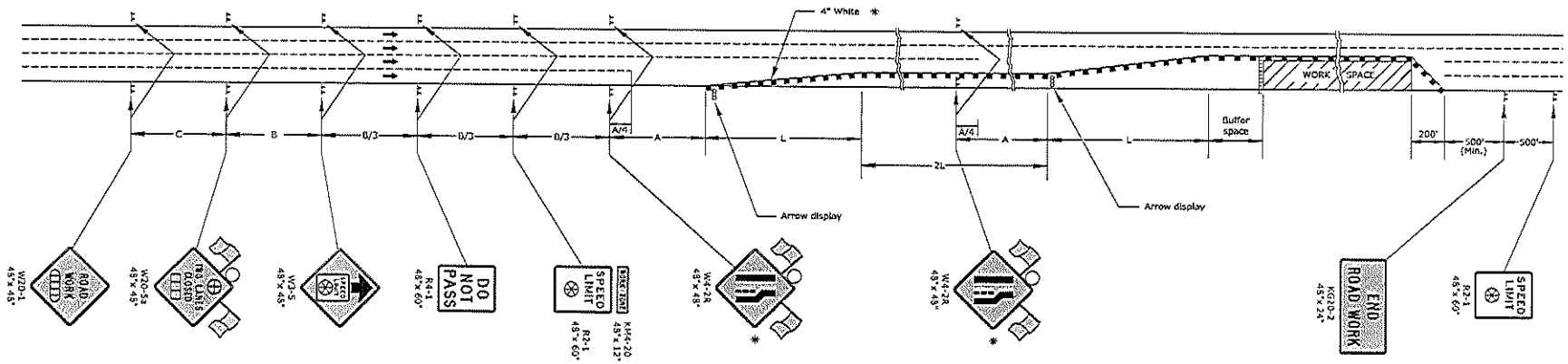
TE744

FHWA APPROVAL 06/09/16 APP'D FOR FHWA DESIGNED BUREAU DRAFTED BUREAU QUANTITIES CHECKED DESIGN CH. DETAIL CH. QUANT. CH. CHECK CH.

Sh. No. 118

Drawn By: djp
File: I:\Wichita-Civil\2013\130310021\Traffic\Signing\Standards\KA-4113-02css744.dgn
Plotted: 01-JUN-2016 09:37

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	119	121



* For left lane closures use W4-2L and yellow edge line along channelizing devices.

One flagger should be stationed within each multi-lane roadway activity area where work is in a closed lane adjacent to traffic and not separated by a concrete safety barrier system.

- Type 3 barricades
- X Length to the nearest whole mile
- ■ Channelizing device
- Ahead, 1500 ft, or 1 mile
- Ahead, 1000 ft, 1500 ft, or ½ mile
- ⊕ Right or left
- ⊗ Speed to be determined by the Engineer
- ○ Type "A" low intensity warning light

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
TWO LANES CLOSED

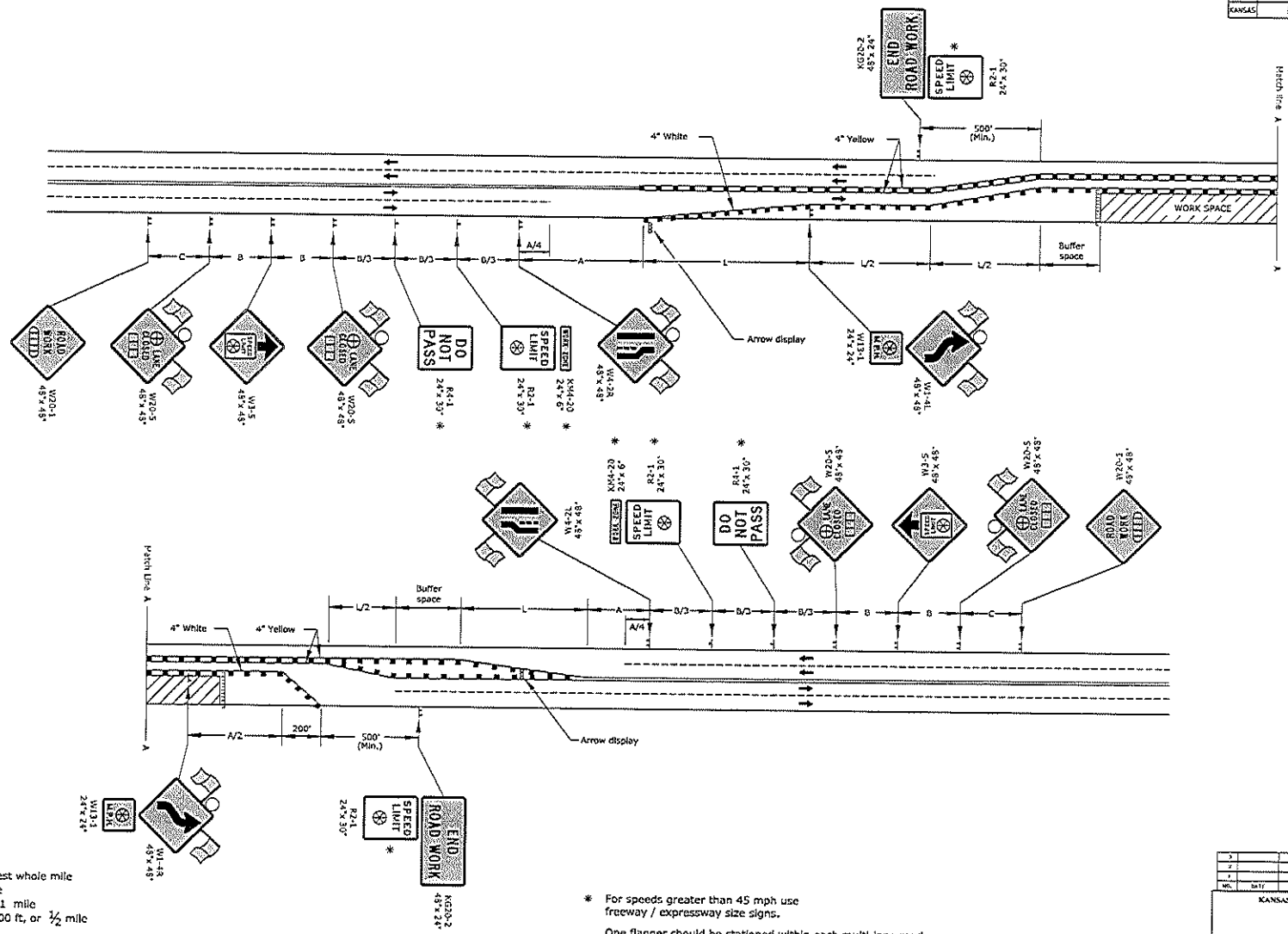
TE746

FINAL APPROVAL | DESIGNED | DETAILED | QUANTITIES | TRACED
DESIGN SK. | DETAIL EX. | QUAN. EX. | TRACE EX.

Sh. No. 119

Drawn By : drp Plotted : 01-JUN-2016 09:37
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02css746.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	120	121



LLL Type 3 barricades
X Length to the nearest whole mile
■ Channelizing device
Ahead, 1500 ft, or 1 mile
Ahead, 1000 ft, 1500 ft, or ½ mile
⊖ Right or left
⊗ Speed to be determined by the Engineer
○ Type "A" low intensity warning light

* For speeds greater than 45 mph use freeway / expressway size signs.

One flagger should be stationed within each multi-lane roadway activity area where work is in a closed lane adjacent to traffic and not separated by a concrete safety barrier system.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
CROSSOVER ON UNDIVIDED ROADWAY

TE748

FHWA APPROVAL DESIGNED R.A.R. DETAILED R.A.R. DESIGN CK. DETAIL CK. APP'D Acting Engineer QUANTITIES TRACED QUAN. CK. TRACE CK.

Sh. No. 120

Drawn By: dlp
File: U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02css748.dgn
Plotted: 01-JUN-2016 09:37

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	KA-4113-02	2016	121	121

Summary Of Traffic Control Devices (Each)

Work Zone Sign (Special)		
Sign No.	16.25 Sq.Ft. & Less	16.26 Sq.Ft. & Over

Summary Of Traffic Control Devices (Each Per Day)

* Quantity Most Used On The Project At Any One Time

Work Zone Signs *			
Sign No.	Size - Sq.Ft. 0-9.25	9.26-16.25	16.26 & Over
W20-7		2	

Barricades *		Channelizing Devices *		
Type 3 (4' To 12')	Pedestrian	Fixed	Portable	Pedestrian

Lighted Devices *	
Work Zone Warning Light (Type "A" Low Intensity)	
Work Zone Warning Light (Red Type "B" High Intensity)	
Arrow Display	
Portable Changeable Message Sign	

Recapitulation Of Quantities		
Item	Quantity	Unit
Work Zone Signs (0 To 9.25 Sq.Ft.)		Each Per Day
Work Zone Signs (9.26 To 16.25 Sq.Ft.)		Each Per Day
Work Zone Signs (16.26 Sq.Ft. & Over)		Each Per Day
Work Zone Barricades (Type 3 - 4' To 12')		Each Per Day
Work Zone Barricades (Pedestrian)		Each Per Day
Channelizer (Fixed)		Each Per Day
Channelizer (Portable)		Each Per Day
Channelizer (Pedestrian)		Each Per Day
Work Zone Warning Light (Type "A" Low Intensity)		Each Per Day
Work Zone Warning Light (Red Type "B" High Intensity)		Each Per Day
Arrow Display		Each Per Day
Portable Changeable Message Sign		Each Per Day
Pavement Marking (Temporary)		
4" Solid (Type I)		Sta./Line
4" Solid (Type II)		Sta./Line
4" Broken (8.0') (Type I)		Sta./Line
4" Broken (8.0') (Type II)		Sta./Line
4" Broken (3.0') (Type I)		Sta./Line
4" Broken (3.0') (Type II)		Sta./Line
4" Dotted Extension (Type I)		Sta./Line
4" Dotted Extension (Type II)		Sta./Line
Solid (Line Masking Tape)		Sta./Line
Broken (Line Masking Tape)		Sta./Line
Symbol (Type I)		Each
Symbol (Type II)		Each
Flexible Raised Pavement Marker (4" Broken (8.0'))		Sta./Line
Flexible Raised Pavement Marker (4" Broken (3.0'))		Sta./Line
Pavement Marking Removal		Lin. Ft.
Work Zone Sign (Special) (16.25 Sq. Ft. & Less)		Each
Work Zone Sign (Special) (16.26 Sq. Ft. & More)		Each
Rigid Raised Pavement Marker (Type I)		Each
Rigid Raised Pavement Marker (Type II)		Each
Traffic Signal Installation (Temporary)		Lump Sum
Traffic Control (Initial Set Up)	Lump Sum	Lump Sum
Traffic Control		Lump Sum
Flagger (Set Price)	1	Hour

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
SUMMARY OF DEVICES
RECAPITULATION OF QUANTITIES

TE795

Sh. No. 121

Drawn By : drp
Plotted : 01-JUN-2016 09:37
File : U:\Wichita-Civil\2013\13081\002\Trans\Traffic\Signing\Standards\KA-4113-02css795.dgn