

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

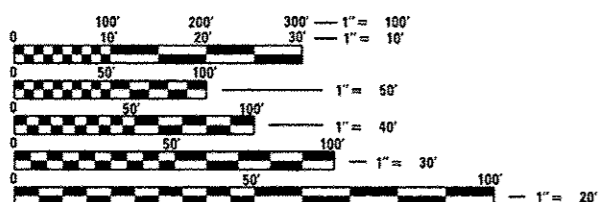
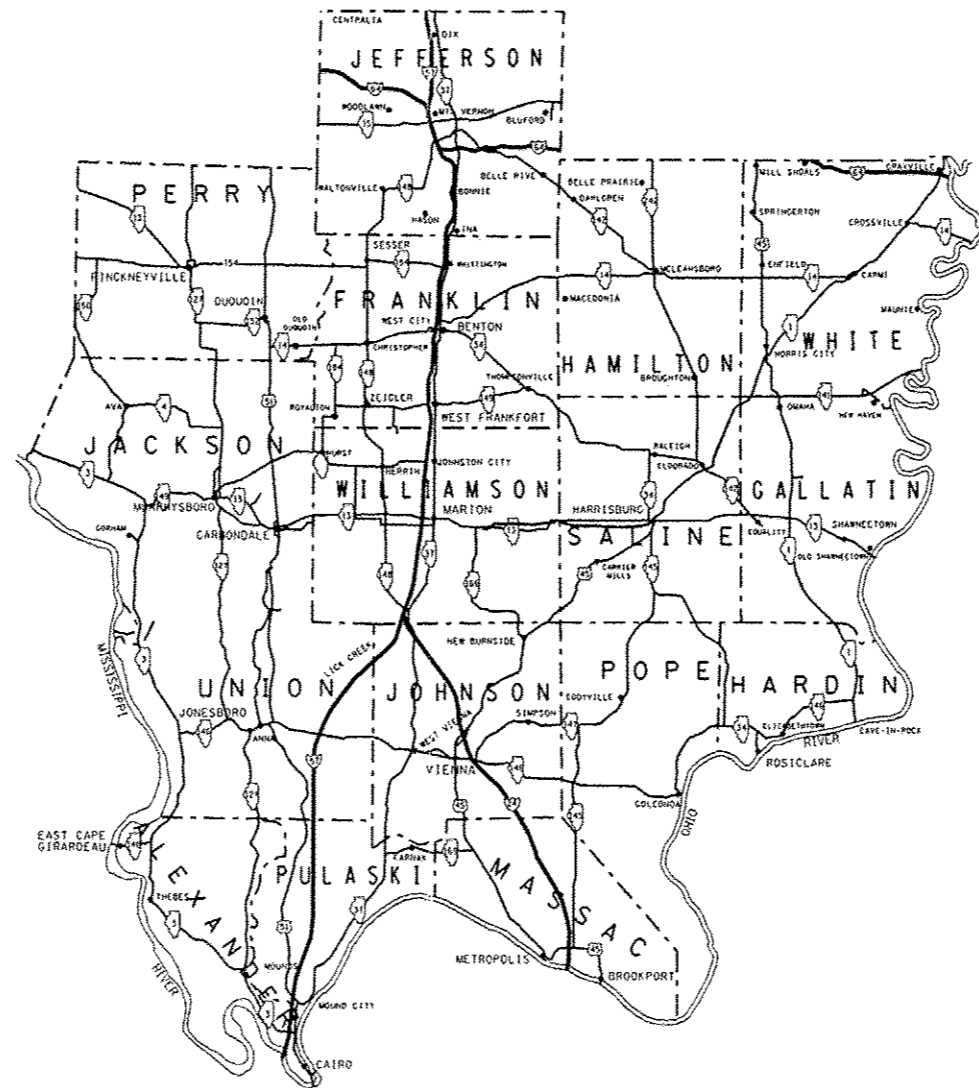
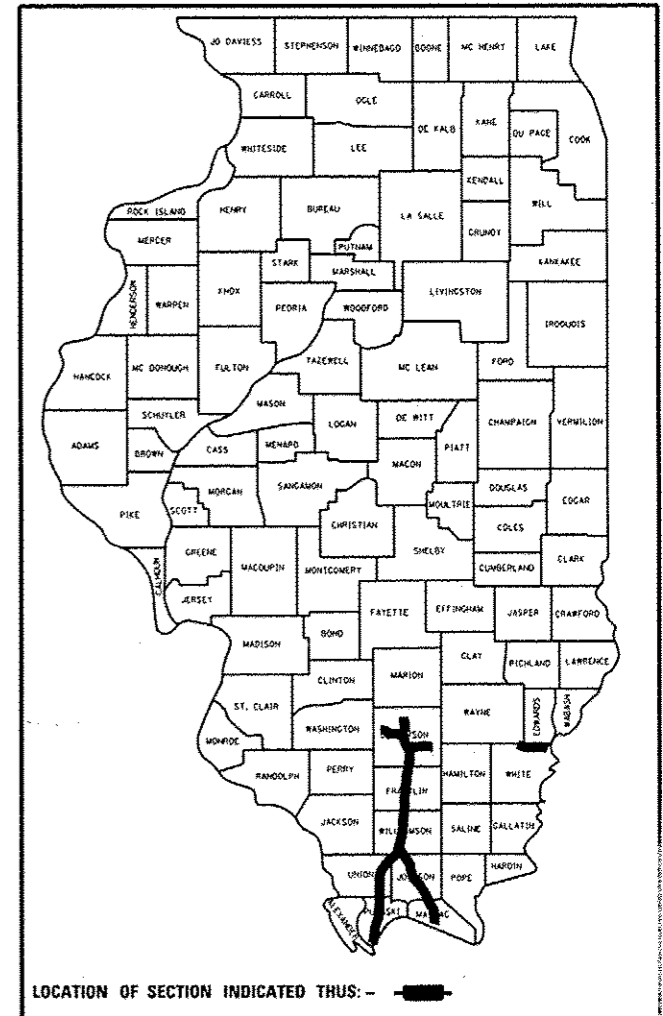
VARIOUS ROUTES  
SECTION D9 SAFETY SIGNAGE 2013-1  
PROJECT HSIP-0005(936)  
VARIOUS COUNTIES

C-99-032-13

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	1
ILLINOIS CONTRACT NO. 78362				

\*VARIOUS ROUTES

D-99-030-13



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: MELISSA COLE  
PROJECT MANAGER: CHARLES STEIN

CONTRACT NO. 78362

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED April 4 2013  
Jeffrey L. Keam  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 10 2013  
John D. Baranzelli, PE, Jr.  
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 10 2013  
Omer Osman, PE/Jr.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

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DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *Neil Kelly*  
DISTRICT OPERATIONS ENGINEER

Examined By: *Keith Roberts*  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: *Douglas J. Murphy*  
DISTRICT CONSTRUCTION ENGINEER

Examined By: *Bruce W. Smith*  
DISTRICT MATERIALS ENGINEER

FILE NAME :	USER NAME * USER#	DESIGNED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SIGNATURE SHEET			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	2
ILLINOIS FED. AID PROJECT				

# INDEX OF SHEETS

# STANDARDS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	SIGNATURE SHEET
3	INDEX OF SHEETS AND STANDARDS
4-6	SUMMARY OF QUANTITIES
7	SIGN SCHEDULE
8	PAVEMENT MARKING SCHEDULE
9-17	LOCATION MAPS
18-20	SIGN DETAILS
21	PAVEMENT MARKING DETAIL OLD US 51/I-57
22	SOIL BORINGS
23-32	OVERHEAD SIGN STRUCTURE DETAILS
33-34	SIGN PANEL DETAILS

- 701006-04
- 701101-03
- 701201-04
- 701301-04
- 701456-02
- 701601-08
- 701606-08
- 701701-08
- 701901-02
- 720001-01
- 720006-03
- 720011-01
- 720021-02
- 728001-01
- 729001-01
- 720021-02
- 731001-01
- 780001-03
- 781001-03

FILE NAME :	USER NAME : colemm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS AND STANDARDS</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwid\colemm\d0339264\78362	shst.pln.dgn	DRAWN -	REVISED -			*	D9 SAFETY SIGNAGE, 2013	VARIOUS	34	3
Default	PLOT SCALE : 100.0000' / 1" =	CHECKED -	REVISED -			CONTRACT NO. 78362				
	PLOT DATE : 4/3/2013	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.

\* VARIOUS ROUTES

# SUMMARY OF QUANTITIES

FUNDING:	HSIP 90% FED 10% STATE
LOCATION:	RURAL
ROUTE:	VARIOUS VARIOUS
	SAFETY 0021

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	SAFETY 0021
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
72000100	SIGN PANEL - TYPE 1	SO FT	4,958	4,958
72000200	SIGN PANEL - TYPE 2	SO FT	2,324	2,324
72000300	SIGN PANEL - TYPE 3	SO FT	641	641
72400310	REMOVE SIGN PANEL - TYPE 1	SO FT	1,318	1,318
72400320	REMOVE SIGN PANEL - TYPE 2	SO FT	1,680	1,680
72900100	METAL POST - TYPE A	FOOT	1,087	1,087
73000100	WOOD SIGN SUPPORT	FOOT	7,506	7,506

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# SUMMARY OF QUANTITIES - CONT

FUNDING:	HSIP 90% FED 10% STATE
LOCATION:	RURAL
ROUTE:	VARIOUS VARIOUS

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	SAFETY 0021
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4' -6" X 5' -3")	FOOT	108	108
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	48	48
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	24	24
* 78004200	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LETTERS AND SYMBOLS	SO FT	2,738	2,738
* 78004210	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 4"	FOOT	3,814	3,814
* 78004230	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6"	FOOT	1,091	1,091
* 78004240	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 8"	FOOT	1,710	1,710
* 78004250	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 12"	FOOT	972	972
* 78004280	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 24"	FOOT	2,540	2,540
78300100	PAVEMENT MARKING REMOVAL	SO FT	10	10
80300100	LOCATING UNDERGROUND CABLE	FOOT	2,000	2,000
* X783006B	GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS AND SYMBOLS	SO FT	2,738	2,738
* X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	3,814	3,814

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\*SPECIALTY ITEM

# SUMMARY OF QUANTITIES - CONT

FUNDING:	HSIP 90% FED 10% STATE
LOCATION:	RURAL
ROUTE:	VARIOUS VARIOUS
	SAFETY
	0021

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	SAFETY
* X7830074	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	1,091	1,091
* X7830076	GROOVING FOR RECESSED PAVEMENT MARKING 9"	FOOT	1,710	1,710
* X7830078	GROOVING FOR RECESSED PAVEMENT MARKING 13"	FOOT	972	972
* X7830090	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	2,540	2,540

\*SPECIALTY ITEM

## SIGN SCHEDULE

LOCATION	COUNTY	INTERCHANGE TYPE	DESCRIPTION	SIGN PANEL REMOVAL, TYPE 1	SIGN PANEL REMOVAL, TYPE 2	METAL SIGN SUPPORT, TYPE A	WOOD SIGN SUPPORT	SIGN PANEL, TYPE 1	SIGN PANEL, TYPE 2	SIGN PANEL, TYPE 3
				SQ FT	SQ FT	FOOT	FOOT	SQ FT	SQ FT	SQ FT
#1	FRANKLIN	DIAMOND	I-57 & IL 154	52	64	50	248	194	64	
#2	FRANKLIN	DIAMOND	I-57 & IL 14	52	64	50	248	194	64	
#3	FRANKLIN	DIAMOND	I-57 & IL 149	52	64	50	248	194	64	
#4	JEFFERSON	DIAMOND	I-57/64 and IL 15/Broadway St	35	64	50	248	194	64	
#5	JEFFERSON	DIAMOND	I-57/64 and IL 142/Veterans Memorial Dr	35	64	50	248	194	64	
#6	JEFFERSON	DIAMOND	I-57 and Co Rd 200 N	52	64	50	248	194	64	
#7	JEFFERSON	DIAMOND	I-64 and N Birch Ln	52	64	50	248	194	64	
#8	JEFFERSON	PARTIAL CLOVER W/ ISLAND	I-57 and Co Hwy 39	54	64		408	164	168	81
#9	JEFFERSON	PARTIAL CLOVER W/ ISLAND	I-64 and IL 37/S 10th St	54	64		408	164	168	81
#10	JOHNSON	DIAMOND	I-57 and Co Hwy 13	52	64	50	248	194	64	
#11	JOHNSON	DIAMOND	I-24 and Co Hwy 12	52	64	50	248	194	64	
#12	JOHNSON	DIAMOND	I-24 and US 45	52	64	50	248	194	64	
#13	JOHNSON	DIAMOND	I-24 and IL 146	52	64	50	248	194	64	
#14	MASSAC	DIAMOND	I-24 and Co Hwy 10	52	64	50	248	194	64	
#15	MASSAC	DIAMOND	I-24 and E 5th St/US 45	52	64	50	248	194	64	
#16	PULASKI	DIAMOND	I-57 and Co Rd 7	52	64	50	248	194	64	
#17	PULASKI	DIAMOND	I-57 and Co Rd 8	52	64	50	248	194	64	
#18	UNION	DIAMOND	I-57 and Lick Creek Rd	52	64	50	248	194	64	
#19	UNION	DIAMOND	I-57 and IL 146	52	64	50	248	194	64	
#20	UNION	DIAMOND	I-57 and Cypress Rd/Co Hwy 14	52	64	50	248	194	64	
#21	UNION	SPECIAL	OLD US 51		16		220	108	36	155
#22	WHITE	DIAMOND	I-64 and Co Rd 20	52	64	50	248	194	64	
#23	WHITE	PARTIAL CLOVER W/ ISLAND	I-64 and S Cross St/IL 1	54	64		408	164	168	81
#24	WILLIAMSON	DIAMOND	I-57 and Co Rd 2	52	64	50	248	194	64	
#25	WILLIAMSON	PARTIAL CLOVER W/ ISLAND	I-57 and Old State Route 13		64	60	286	146	168	81
#26	WILLIAMSON	PARTIAL CLOVER W/ ISLAND	I-57 and IL 148/N Refuge RD	71	64		408	164	168	81
#27	ALEXANDER	PARTIAL CLOVER W/ ISLAND	I-57 and IL 3	79	64	27	408	168	168	81
<b>TOTAL =</b>				<b>1318</b>	<b>1680</b>	<b>1087</b>	<b>7506</b>	<b>4958</b>	<b>2324</b>	<b>641</b>

FILE NAME =	USER NAME = colemm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SIGN SCHEDULE</b>	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
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	PLOT DATE = 4/3/2013	DATE -	REVISED -			ILLINOIS FED. AID PROJECT • VARIOUS ROUTES						

## PAVEMENT MARKING SCHEDULE

LOCATION	COUNTY	DESCRIPTION	PAVEMENT MARKING REMOVAL	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -INLAID -LETTERS & SYMBOLS	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -INLAID -LINE 4"	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -INLAID -LINE 6"	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -INLAID -LINE 8"	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -INLAID -LINE 12"	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -INLAID -LINE 24"	GROOVING FOR RECESSED PAVEMENT MARKING LETTERS, NUMBERS & SYMBOLS	GROOVING FOR RECESSED PAVEMENT MARKING 5"	GROOVING FOR RECESSED PAVEMENT MARKING 7"	GROOVING FOR RECESSED PAVEMENT MARKING 9"	GROOVING FOR RECESSED PAVEMENT MARKING 13"	GROOVING FOR RECESSED PAVEMENT MARKING 25"
			SQ FT	SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT
# 1	FRANKLIN	I-57 & IL 154		48.6					93	48.6					93
# 2	FRANKLIN	I-57 & IL 14		131.8			50		72	131.8			50		72
# 3	FRANKLIN	I-57 & IL 149		131.8			50		71	131.8			50		71
# 4	JEFFERSON	I-57/64 and IL 15/Broadway St		131.8		960	960		106	131.8		960	960		106
# 5	JEFFERSON	I-57/64 and IL 142/Veterans Memorial Dr		131.8	290	131	50	106	76	131.8	290	131	50	106	76
# 6	JEFFERSON	I-57 and Co Rd 200 N		131.8	274		50	200	101	131.8	274		50	200	101
# 7	JEFFERSON	I-64 and N Birch Ln		131.8			50		99	131.8			50		99
# 8	JEFFERSON	I-57 and Co Hwy 39		134	50		50		88	134	50		50		88
# 9	JEFFERSON	I-64 and IL 37/S 10th St		134	50		50		99	134	50		50		99
# 10	JOHNSON	I-57 and Co Hwy 13		131.8			50		83	131.8			50		83
# 11	JOHNSON	I-24 and Co Hwy 12		131.8	271		50	189	79	131.8	271		50	189	79
# 12	JOHNSON	I-24 and US 45		48.6					139	48.6					139
# 13	JOHNSON	I-24 and IL 146		131.8	314		50	211	80	131.8	314		50	211	80
# 14	MASSAC	I-24 and Co Hwy 10		48.6					130	48.6					130
# 15	MASSAC	I-24 and E 5th St/US 45		48.6			50		81	48.6			50		81
# 16	PULASKI	I-57 and Co Rd 7		48.6					153	48.6					153
# 17	PULASKI	I-57 and Co Rd 8		48.6					107	48.6					107
# 18	UNION	I-57 and Lick Creek Rd		48.6					108	48.6					108
# 19	UNION	I-57 and IL 146		48.6					117	48.6					117
# 20	UNION	I-57 and Cypress Rd/Co Hwy 14		48.6					122	48.6					122
# 21	UNION	OLD US 51	10	121	162					121	162				
# 22	WHITE	I-64 and Co Rd 20		48.6			50		95	48.6			50		95
# 23	WHITE	I-64 and S Cross St/IL 1		134	50		50		101	134	50		50		101
# 24	WILLIAMSON	I-57 and Co Rd 2		48.6					110	48.6					110
# 25	WILLIAMSON	I-57 and Old State Route 13		226.5	2303			266	80	226.5	2303			266	80
# 26	WILLIAMSON	I-57 and IL 148/N Refuge RD		134	50		50		76	134	50		50		76
# 27	ALEXANDER	I-57 and IL 3		134	50		50		74	134	50		50		74
<b>TOTAL =</b>			<b>10</b>	<b>2738</b>	<b>3814</b>	<b>1091</b>	<b>1710</b>	<b>972</b>	<b>2540</b>	<b>2738</b>	<b>3814</b>	<b>1091</b>	<b>1710</b>	<b>972</b>	<b>2540</b>

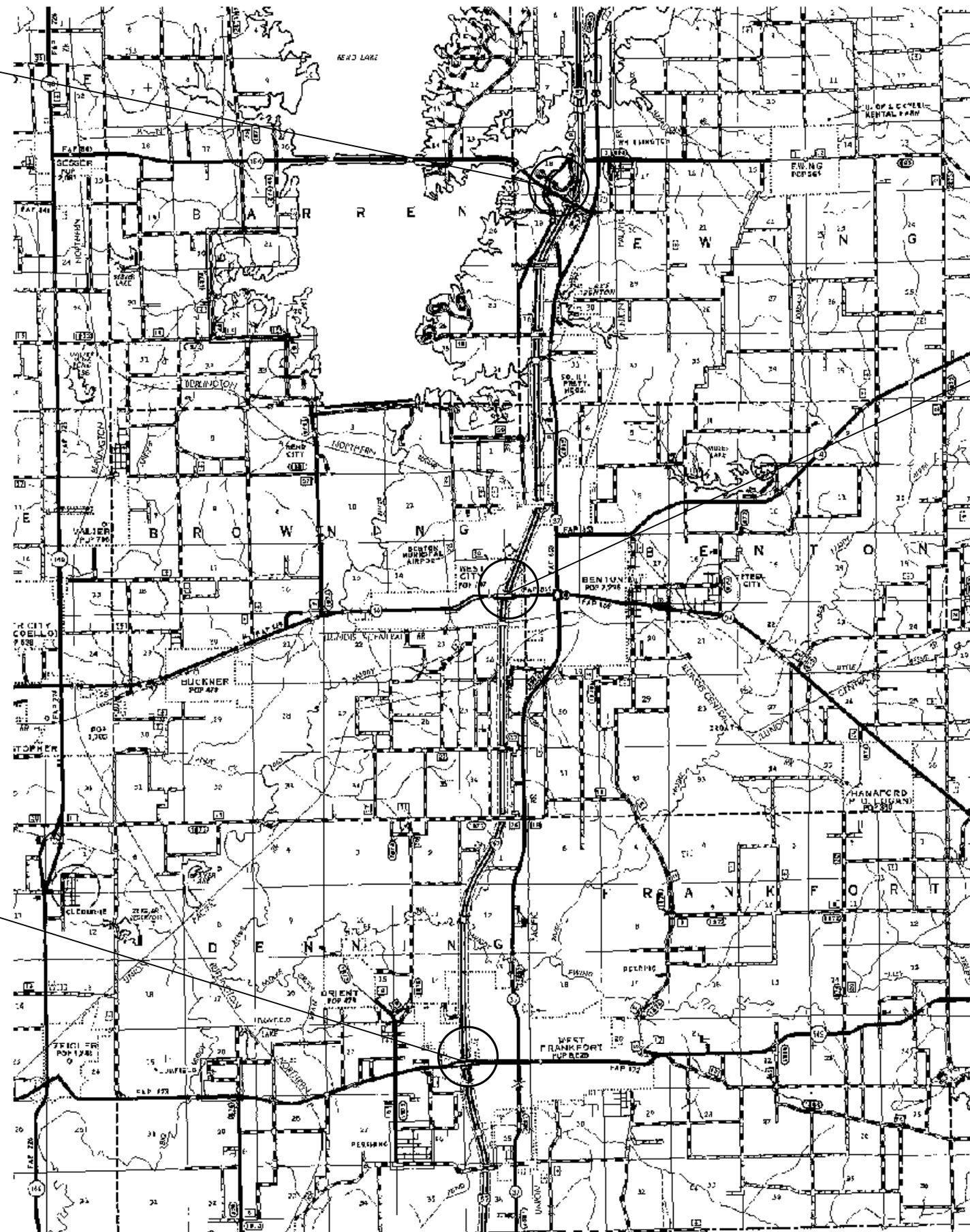
• VARIOUS ROUTES



LOCATION #1 I-57 & IL 154 (SESSER)

LOCATION #2 I-57 & IL 14 (BENTON)

LOCATION #3 I-57 & IL 149  
(WEST FRANKFORT)



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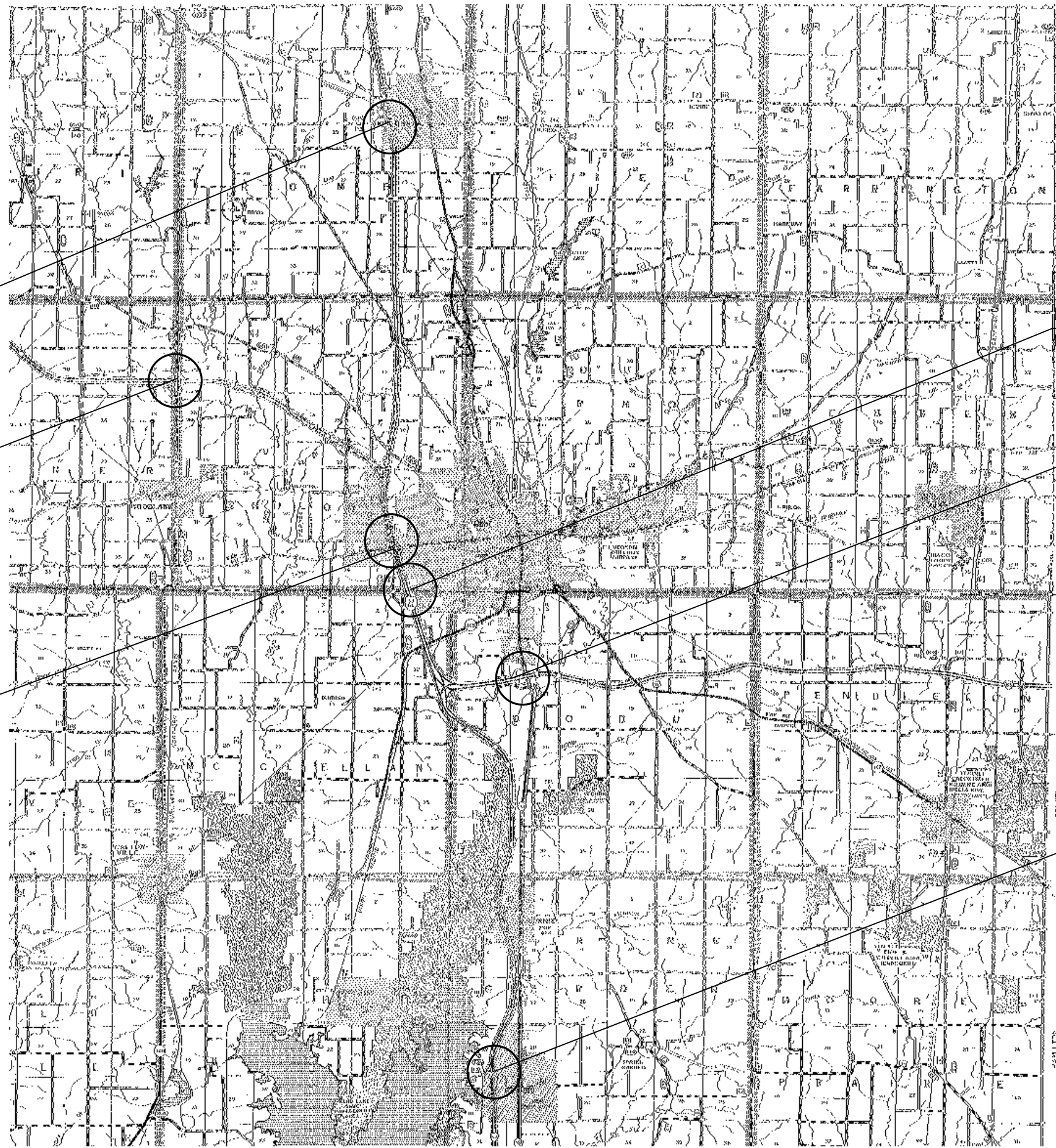
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FRANKLIN COUNTY  
LOCATION MAP

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	D9 SAFETY SIGNAGE 2013	VARIOUS	34	9
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

• VARIOUS ROUTES



LOCATION #8 I-57 & CO HWY 39  
(DIX)

LOCATION #5 I-57/64 & IL 142/VETERAN'S  
MEMORIAL DR (MT VERNON)

LOCATION #7 I-64 W & N BIRCH LANE  
(WOODLAWN)

LOCATION #9 I-64 E &  
IL 37/SOUTH 10TH ST

LOCATION #4 I-57 & IL 15  
(MT. VERNON)

LOCATION #6 I-57 & CO RD 200 N  
(INA)

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**JEFFERSON COUNTY  
LOCATION MAP**

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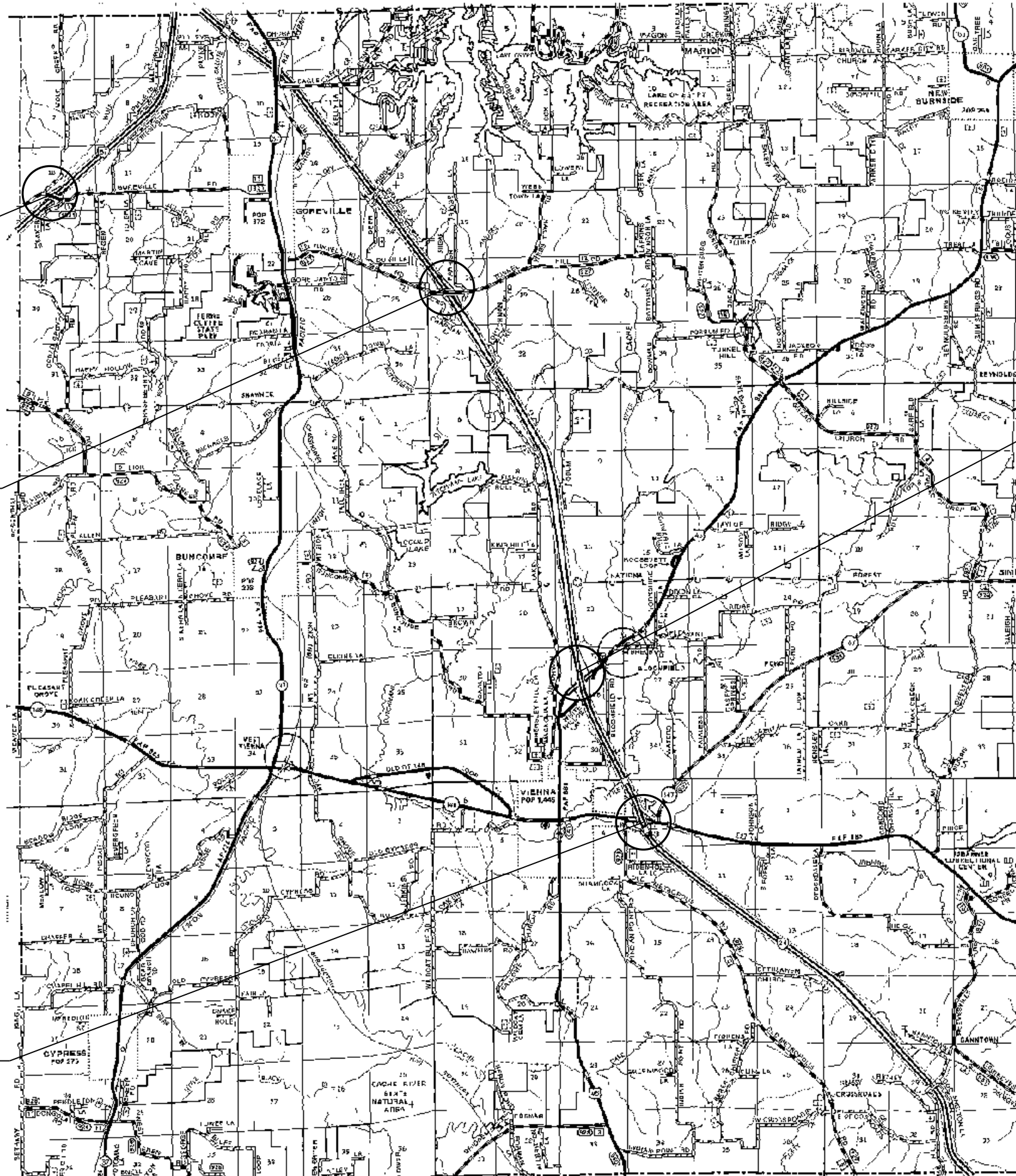
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*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	10
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

\* VARIOUS ROUTES

LOCATION #10 I-57 & CO HWY 13  
(GOREVILLE RD)

LOCATION #11 I-24 & CO HWY 12  
(GOREVILLE)

LOCATION #13 I-24 & IL 146



LOCATION #12 I-24 & US 45

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**JOHNSON COUNTY  
LOCATION MAP**

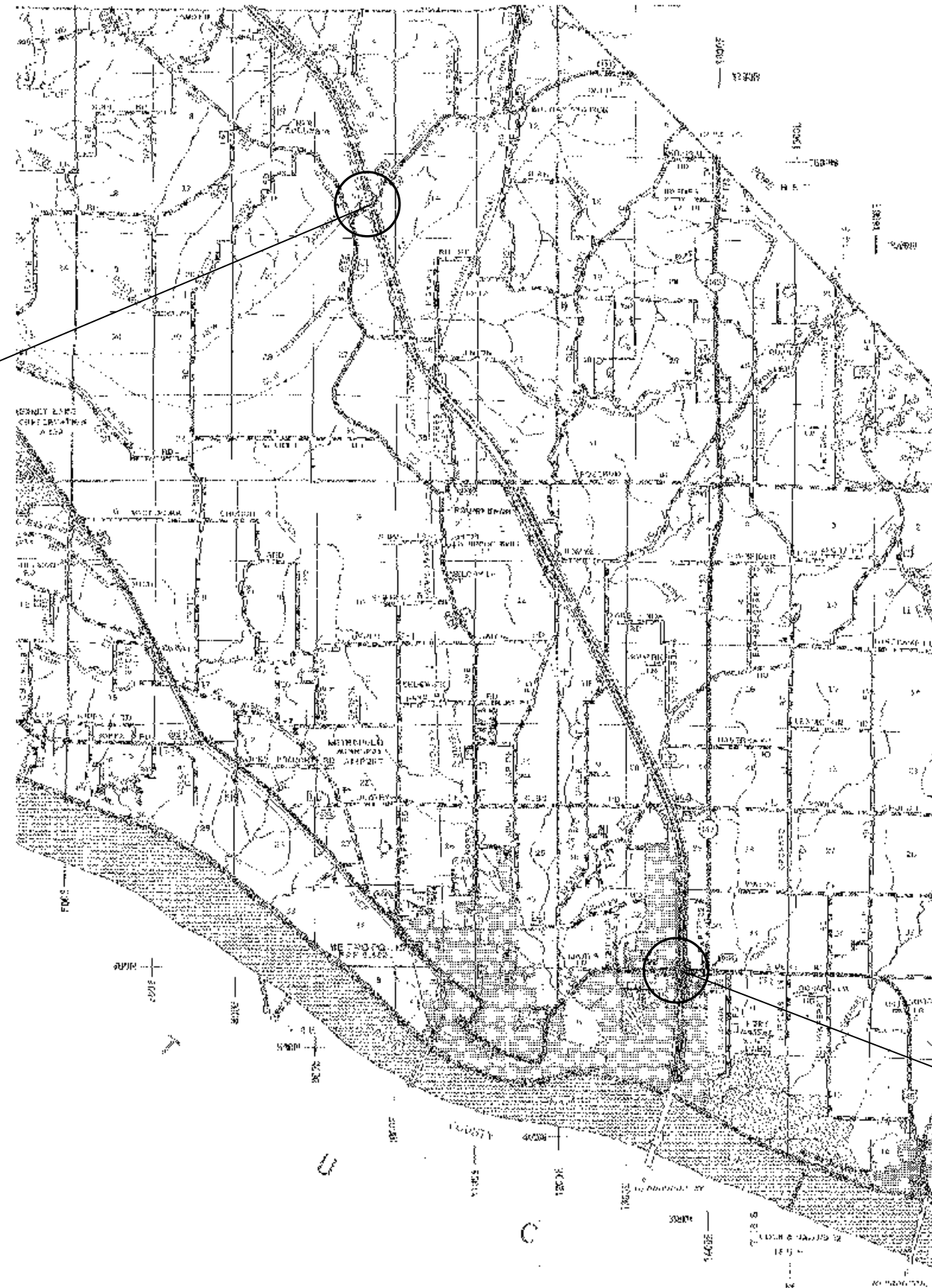
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D9 SAFETY SIGNAGE 2013	VARIOUS	34	11
			CONTRACT NO. 78362	

ILLINOIS FED. AID PROJECT

\* VARIOUS ROUTES

LOCATION #14 I-24 & CO RD 10  
(NEW COLUMBIA/BIG BAY)



LOCATION #15 I-24 & US 45  
(METROPOLIS)

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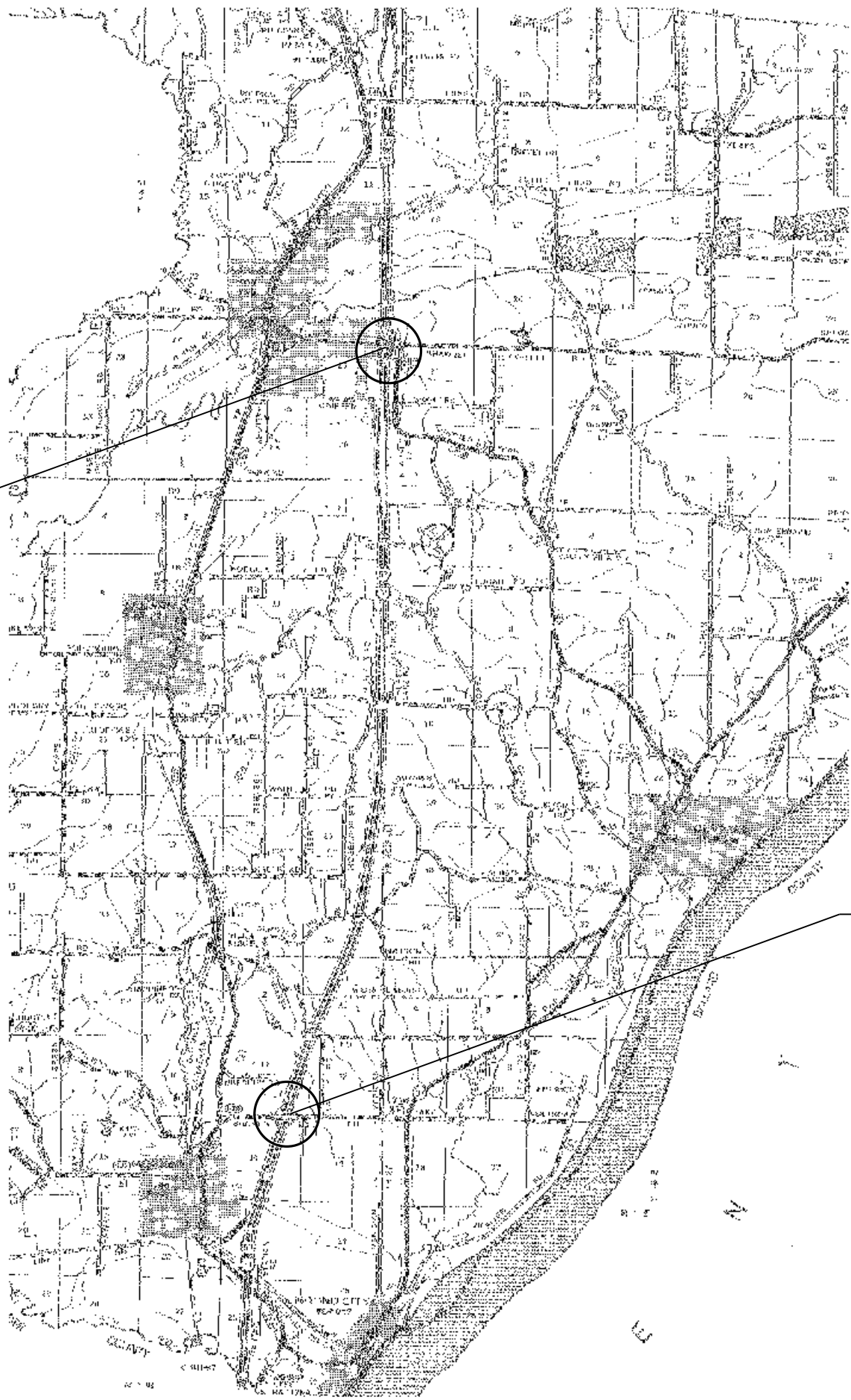
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MASSAC COUNTY  
LOCATION MAP**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	12
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78362	

\* VARIOUS ROUTES



LOCATION #16 I-57 & CO RD 7  
(ULLIN)

LOCATION #17 I-57 & CO RD 8  
(MOUNDS)

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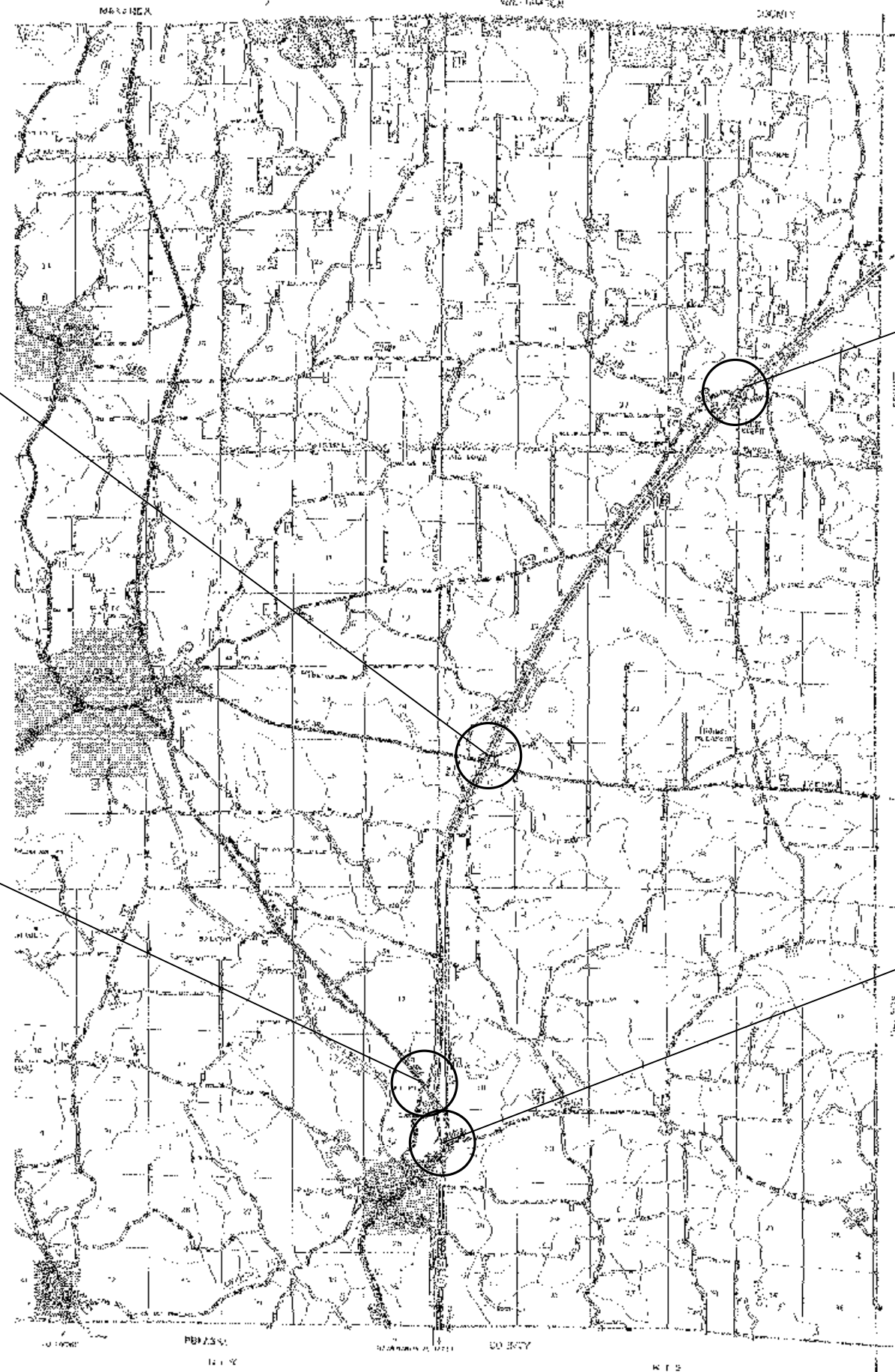
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PULASKI COUNTY  
LOCATION MAP**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	13
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

\* VARIOUS ROUTES



LOCATION #19 I-57 & IL 146

LOCATION #18 I-57 & LICK CREEK RD

LOCATION #21 I-57 & OLD US 51

LOCATION #20 I-57 & CYPRESS RD/CO HWY 14  
(DONGOLA)

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	PLOT DATE = 3/29/2013	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**UNION COUNTY  
LOCATION MAP**

SCALE: SHEET OF SHEETS STA. TO STA.

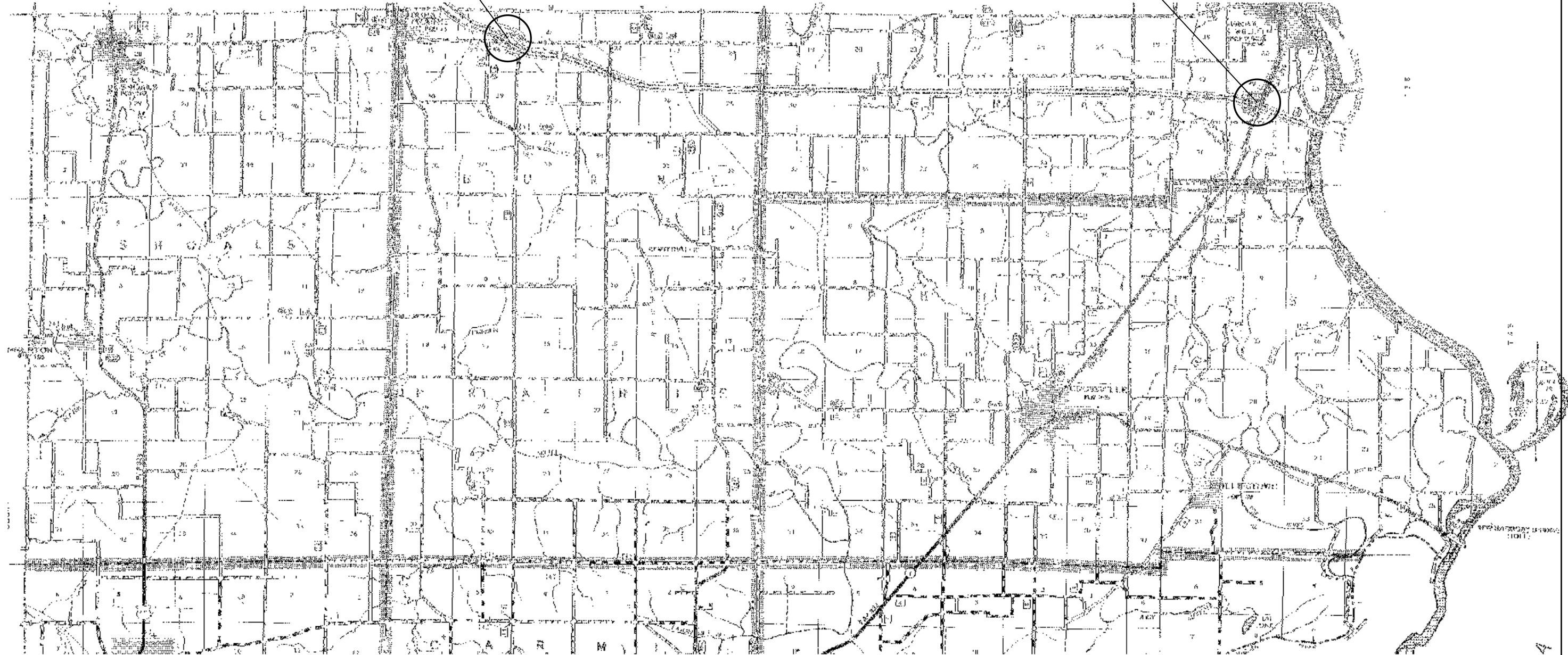
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	14
			CONTRACT NO. 78362	

ILLINOIS FED. AID PROJECT

\* VARIOUS ROUTES

LOCATION #22 I-64 & CO RD 20  
(BURNT PRAIRIE)

LOCATION #23 I-64 & S CROSS ST/IL 1  
(GRAYVILLE)



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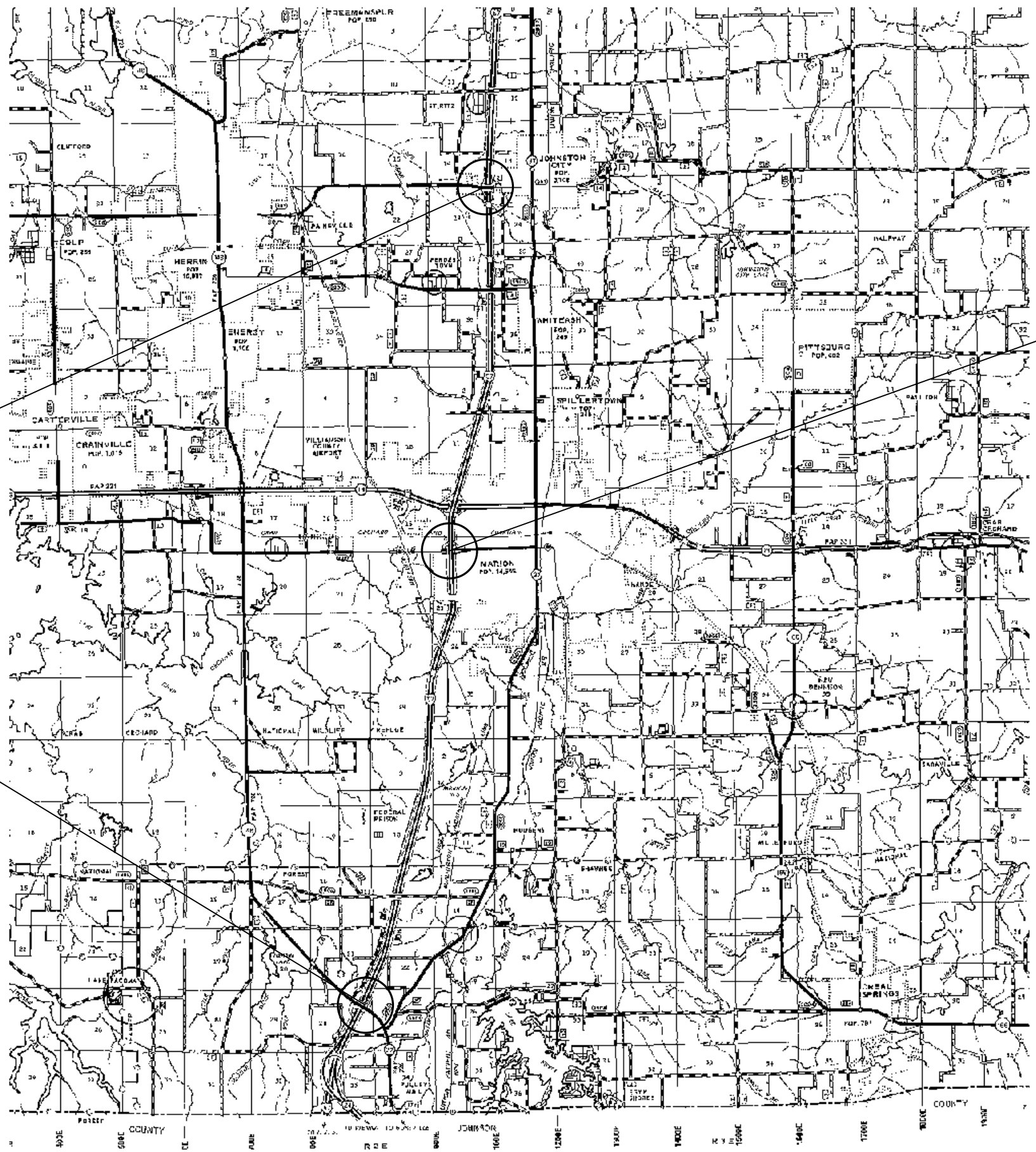
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WHITE COUNTY  
LOCATION MAP**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D9 SAFETY SIGNAGE 2013	VARIOUS	VARIOUS	34	15
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

\* VARIOUS ROUTES



LOCATION #24 I-57 & CO RD 2  
(JOHNSTON CITY)

LOCATION #25 I-57 & OLD ST RT 13  
(MARION)

LOCATION #26 I-57 & IL 148/REFUGE RD

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

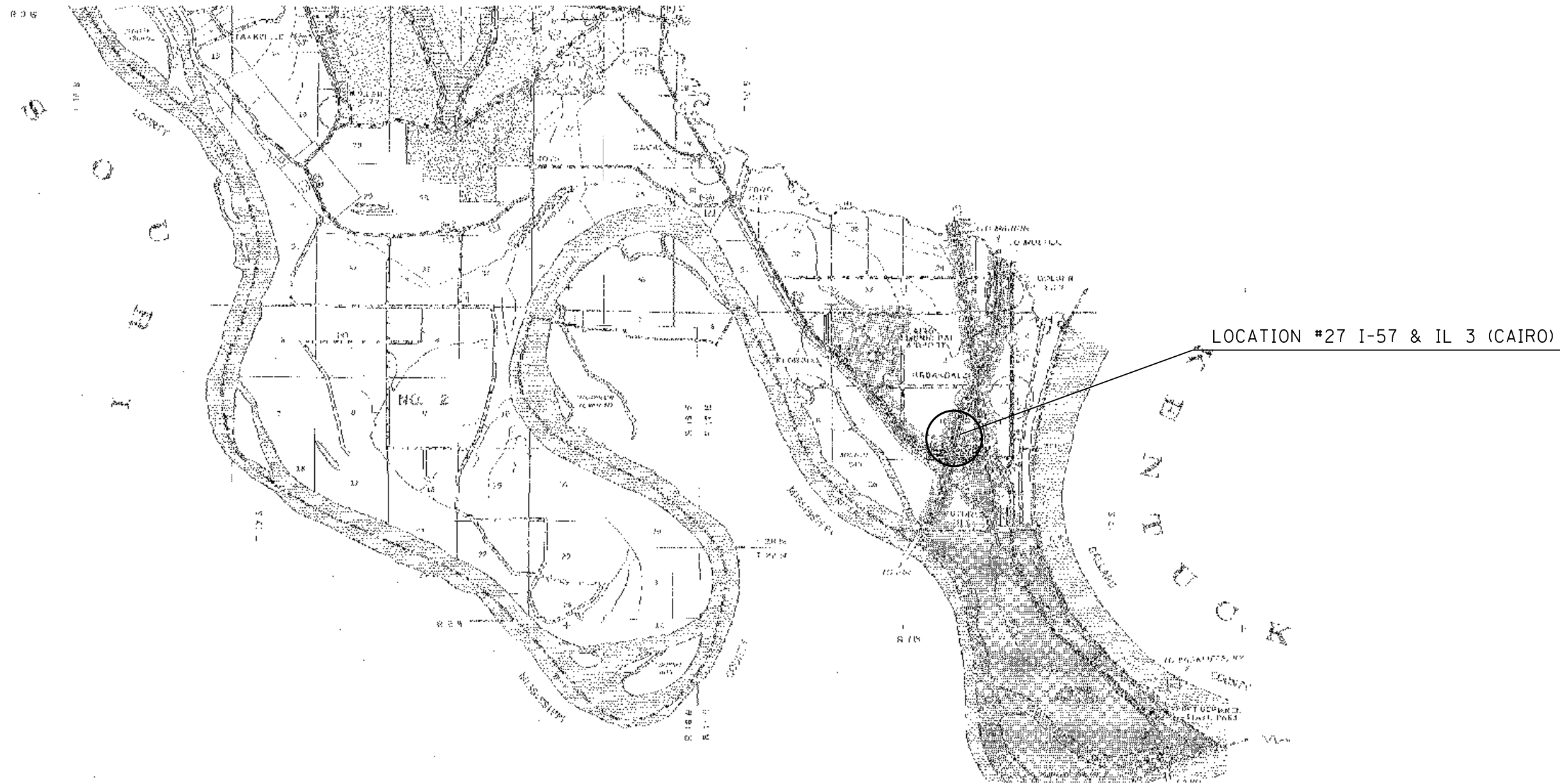
**WILLIAMSON COUNTY  
LOCATION MAP**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	16
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

\* VARIOUS ROUTES





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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

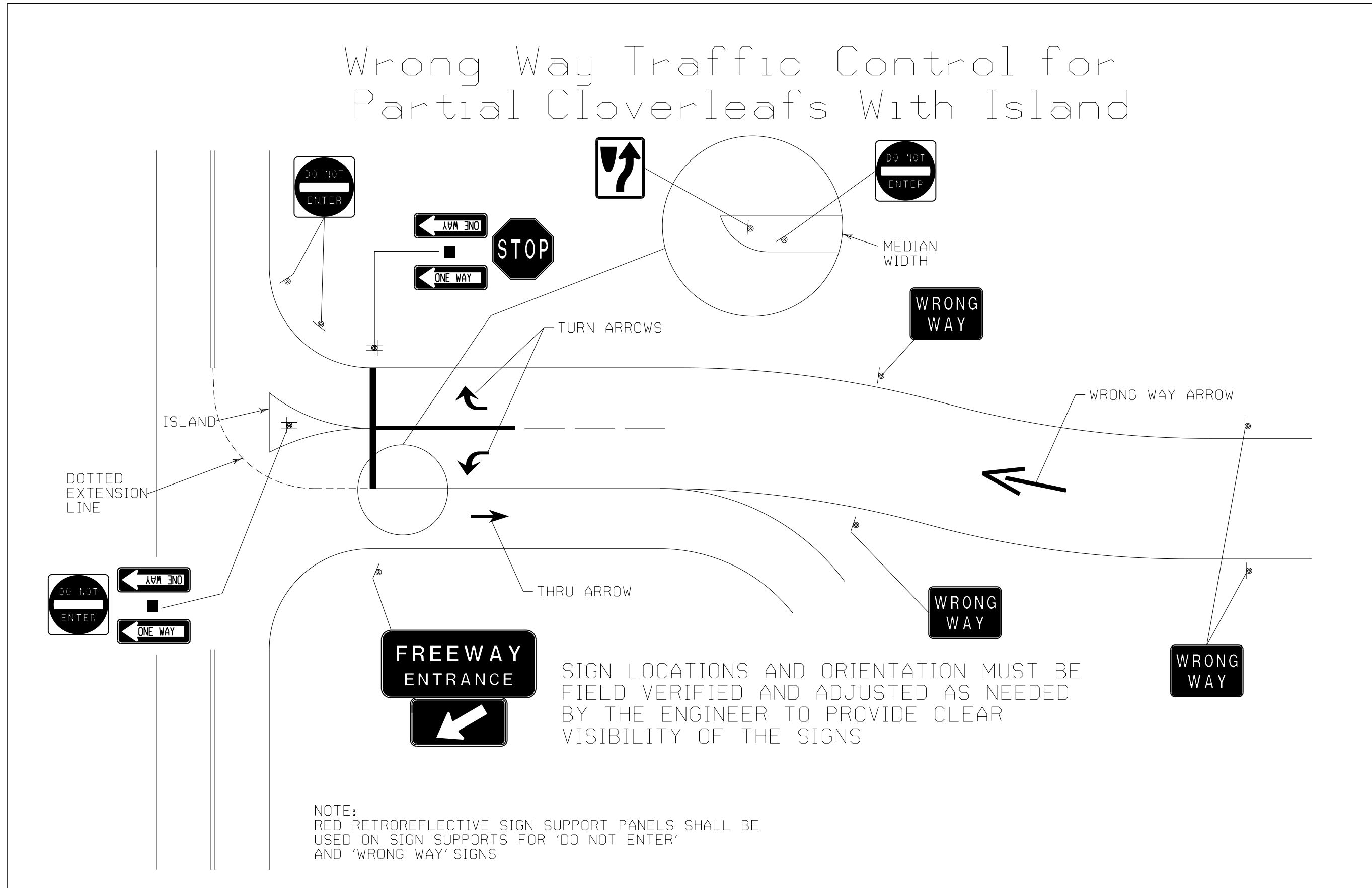
**ALEXANDER COUNTY  
LOCATION MAP**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	17
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

\* VARIOUS ROUTES

# Wrong Way Traffic Control for Partial Cloverleafs With Island



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	PLOT DATE = 4/3/2013	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PARTIAL CLOVERLEAF WITH  
ISLAND SIGN DETAIL

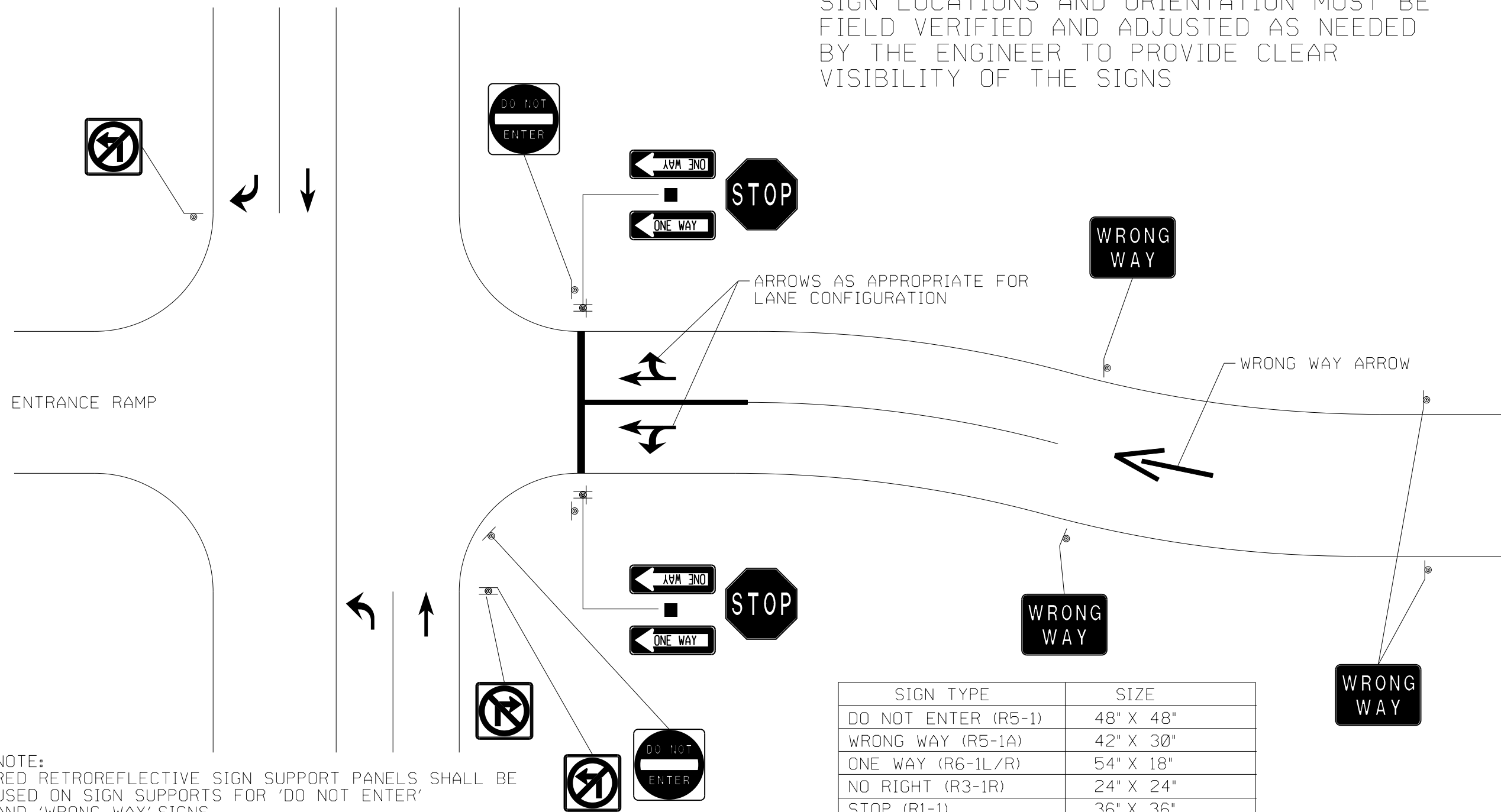
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D9 SAFETY SIGNAGE 2013		VARIOUS	34	18
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78362	

VARIOUS ROUTES

# Wrong Way Traffic Control for Diamond Interchange Exit Ramp

SIGN LOCATIONS AND ORIENTATION MUST BE FIELD VERIFIED AND ADJUSTED AS NEEDED BY THE ENGINEER TO PROVIDE CLEAR VISIBILITY OF THE SIGNS



SIGN TYPE	SIZE
DO NOT ENTER (R5-1)	48" X 48"
WRONG WAY (R5-1A)	42" X 30"
ONE WAY (R6-1L/R)	54" X 18"
NO RIGHT (R3-1R)	24" X 24"
STOP (R1-1)	36" X 36"
NO LEFT (R3-2L)	24" X 24"

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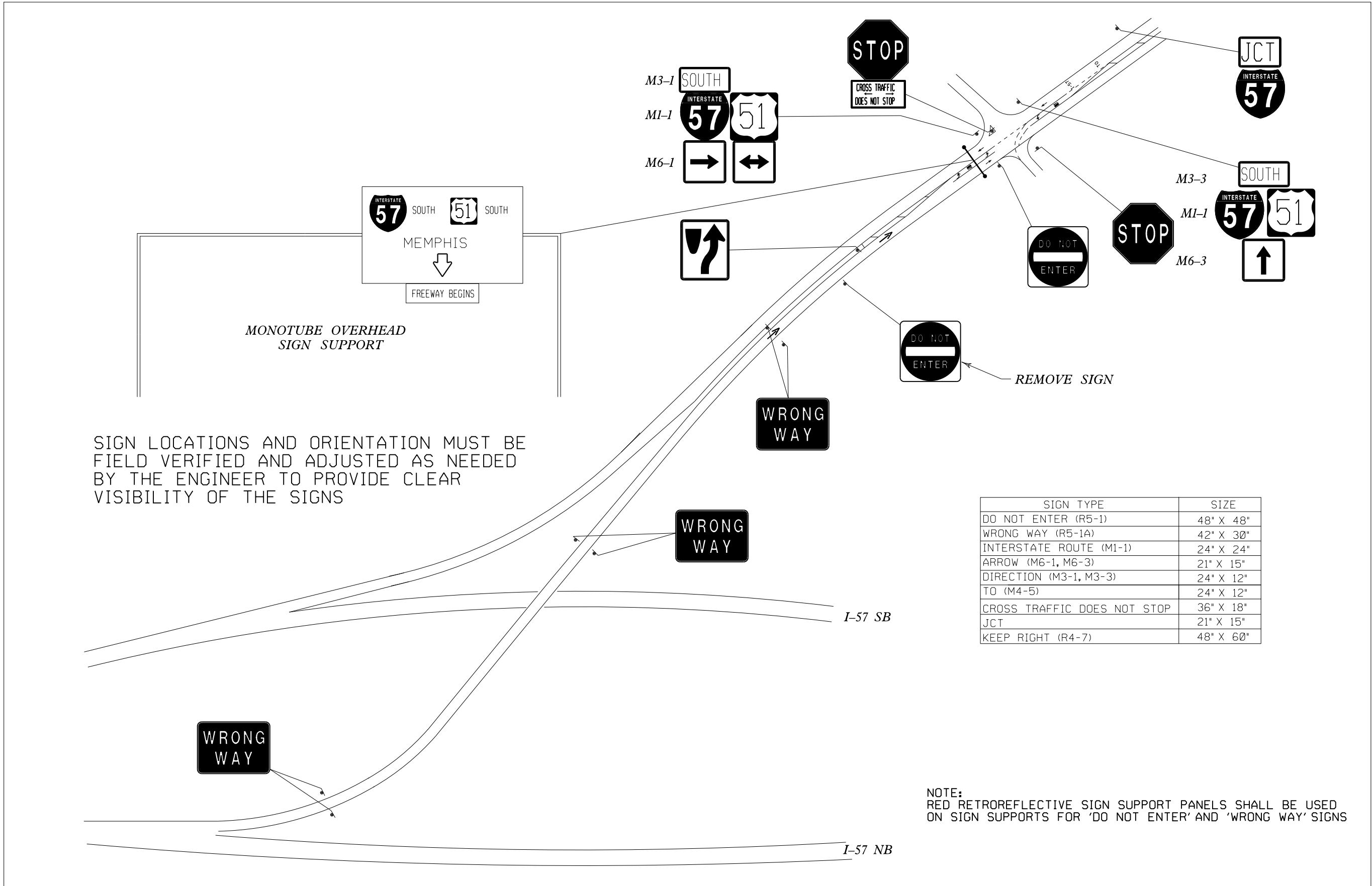
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DIAMOND INTERCHANGE  
SIGN DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D9 SAFETY SIGNAGE 2013			34	19
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78362	

• VARIOUS ROUTES



SIGN LOCATIONS AND ORIENTATION MUST BE FIELD VERIFIED AND ADJUSTED AS NEEDED BY THE ENGINEER TO PROVIDE CLEAR VISIBILITY OF THE SIGNS

SIGN TYPE	SIZE
DO NOT ENTER (R5-1)	48" X 48"
WRONG WAY (R5-1A)	42" X 30"
INTERSTATE ROUTE (M1-1)	24" X 24"
ARROW (M6-1, M6-3)	21" X 15"
DIRECTION (M3-1, M3-3)	24" X 12"
TO (M4-5)	24" X 12"
CROSS TRAFFIC DOES NOT STOP	36" X 18"
JCT	21" X 15"
KEEP RIGHT (R4-7)	48" X 60"

NOTE:  
RED RETROREFLECTIVE SIGN SUPPORT PANELS SHALL BE USED ON SIGN SUPPORTS FOR 'DO NOT ENTER' AND 'WRONG WAY' SIGNS

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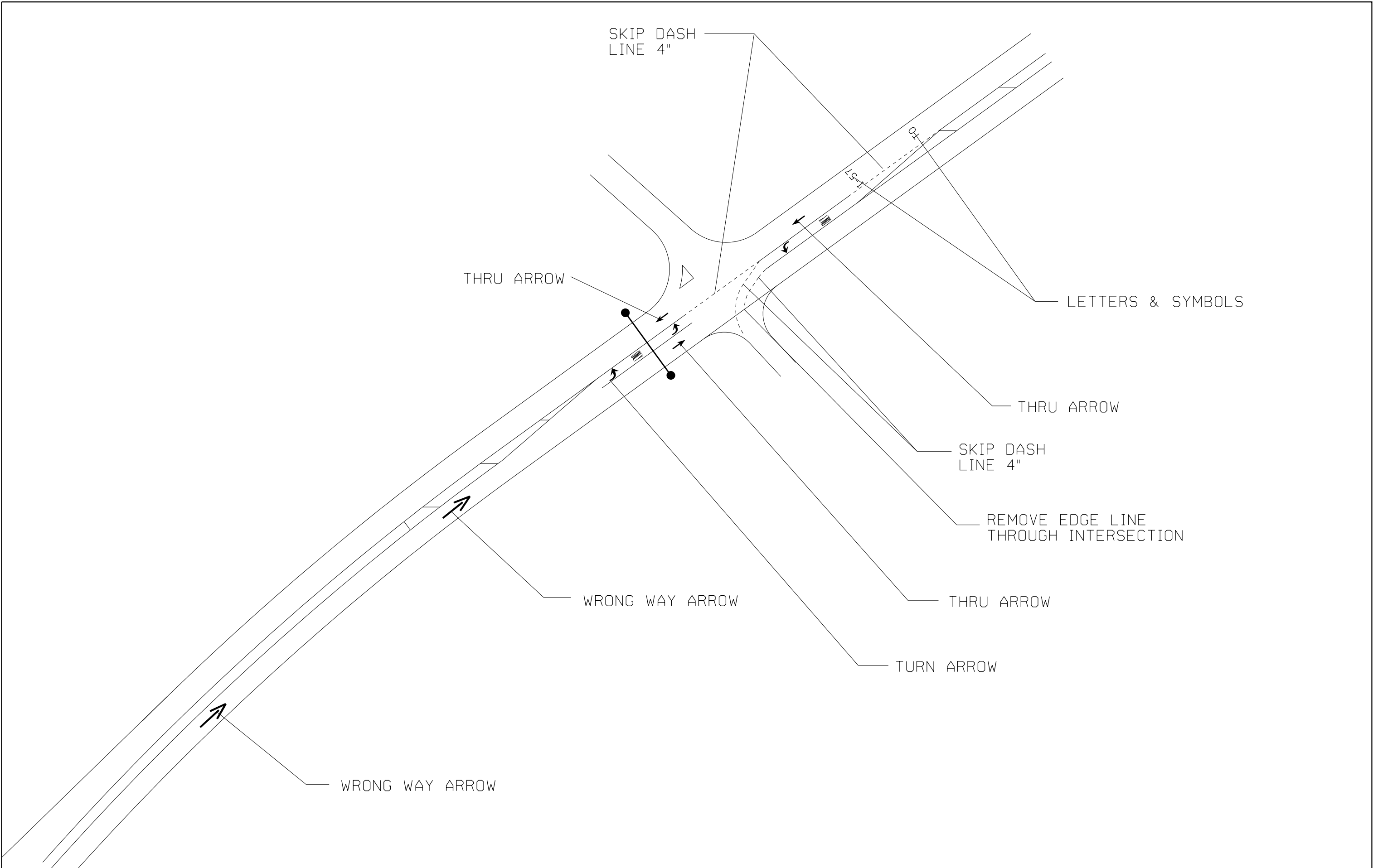
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SIGNING DETAIL AT  
OLD US 51 / I-57

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D9 SAFETY SIGNAGE 2013	VARIOUS	VARIOUS	34	20
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78362	

VARIOUS ROUTES



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT MARKING DETAIL</b>			
<b>AT OLD US 51-57</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D9 SAFETY SIGNAGE 2013	VARIOUS	ILLINOIS	34	21
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78362	

• VARIOUS ROUTES

ILLINOIS DEPARTMENT OF TRANSPORTATION  
District Nine Materials

Bridge Foundation  
Boring Log

Sheet 1 of 1

Sign Truss Foundation

Route: Various Structure Number: \_\_\_\_\_ Date: 3/28/2013  
Section D9 Safety Signage 2 Bored By: R Moberly  
County: Union Location: US 51 at Old US 51 N of Dongola Checked By: R Graeff

Boring No	Station	Offset	Ground Surface	DEPTH	BLOW	Qu tsf	W%	Surf Wat Elev:	DEPTH	BLOW	Qu tsf	W%
								0.0				
1-ST	376+75	24' Lt CL	99.2 Ft									
								Stiff, moist to very moist, brown, Silt Loam to Silty Clay Loam		1	1.2B	24
					2			Bottom of hole = 26.0 Feet				
					3	2.1B	23	No free water observed				
					4							
			94.7					Elevation referenced to CL US Rte 51 @ Station 376+75; Assumed elevation= 100.0 ft		30.0		
					5	1.8B	23	Borehole advanced with hollow stem auger (8" O.D, 3.25" I.D.)				
					5			To convert "N" values to "N60" multiply by 1.25				
					1							
					3	1.7B	23					
					4							
					10.0					35.0		
					3	1.5B	22					
					3							
			87.2									
					1							
					2	1.4B	28					
					3							
					1							
					4	2.1B	23					
					5							
					1							
					4	2.3B	25					
					4							
			79.7									
					1							
					3	1.1B	24					
					3							
					20.0					45.0		
					1							
					1	0.8B	29					
					1							
			74.7									
					25.0					50.0		

N-Std Pentr Test: 2" OD Sampler, 140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

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	PLOT DATE = 4/3/2013	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE:				SHEET OF SHEETS				STA. TO STA.			
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*VARIOUS ROUTES				
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D9 SAFETY SIGNAGE 2013-1		VARIOUS	34	22
CONTRACT NO. 78362				
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:  
Field Units  
F<sub>c</sub> = 3,500 p.s.i.  
f<sub>y</sub> = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W\*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.

The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316, or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

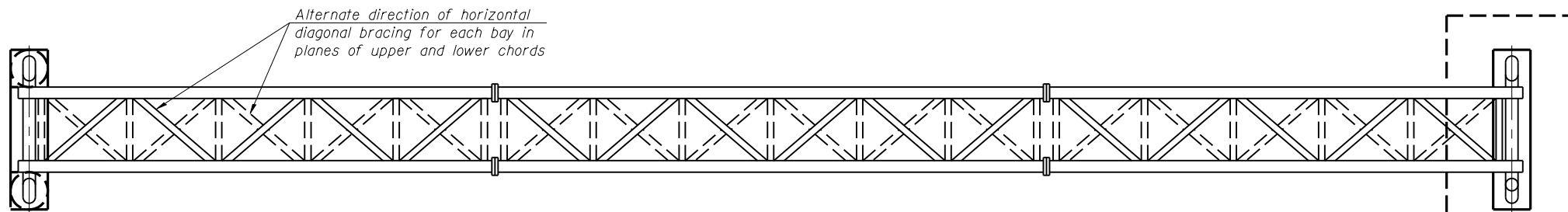
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

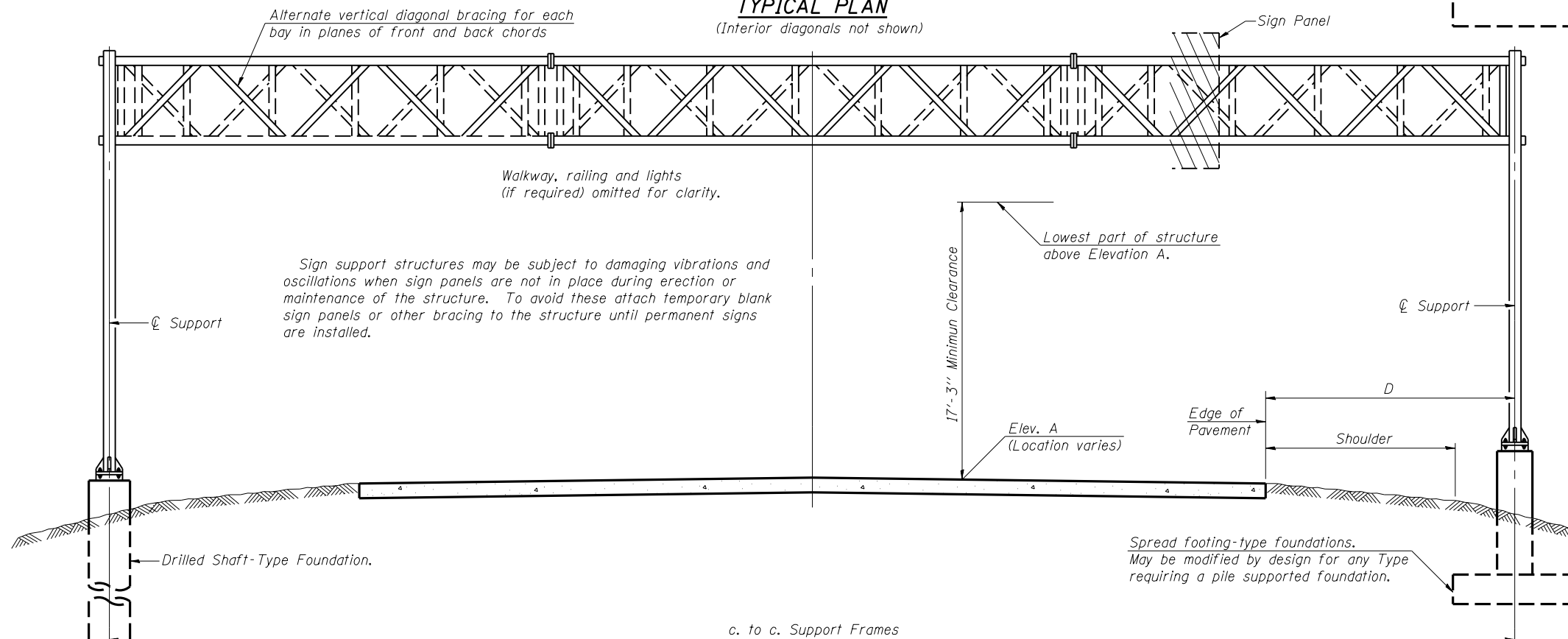
FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	108
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	48
CONCRETE FOUNDATIONS	Cu. Yds.	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	24.0



**TYPICAL PLAN**  
(Interior diagonals not shown)



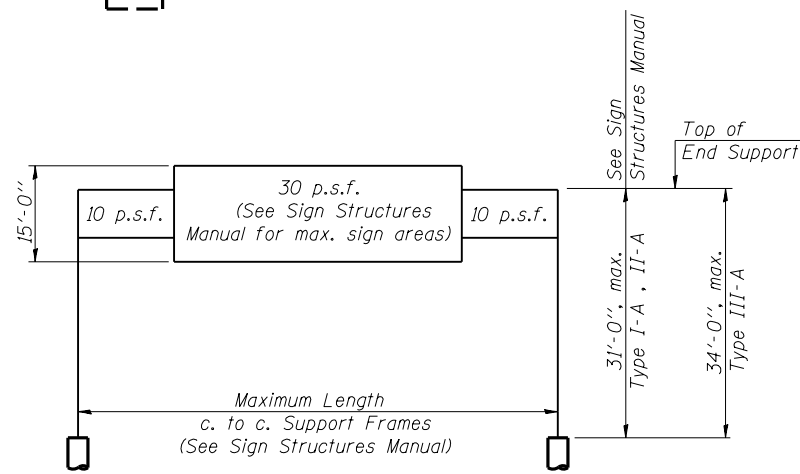
**TYPICAL ELEVATION**  
(Looking at Face of Signs)\*\*)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
9S091U051R003.7	376+75	II-A	108'	99.66	30'	8.5'	175.5

\*\*Looking upstation for structures with signs both sides.

\* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.



**DESIGN WIND LOADING DIAGRAM**

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

OS-A-1 6-1-12

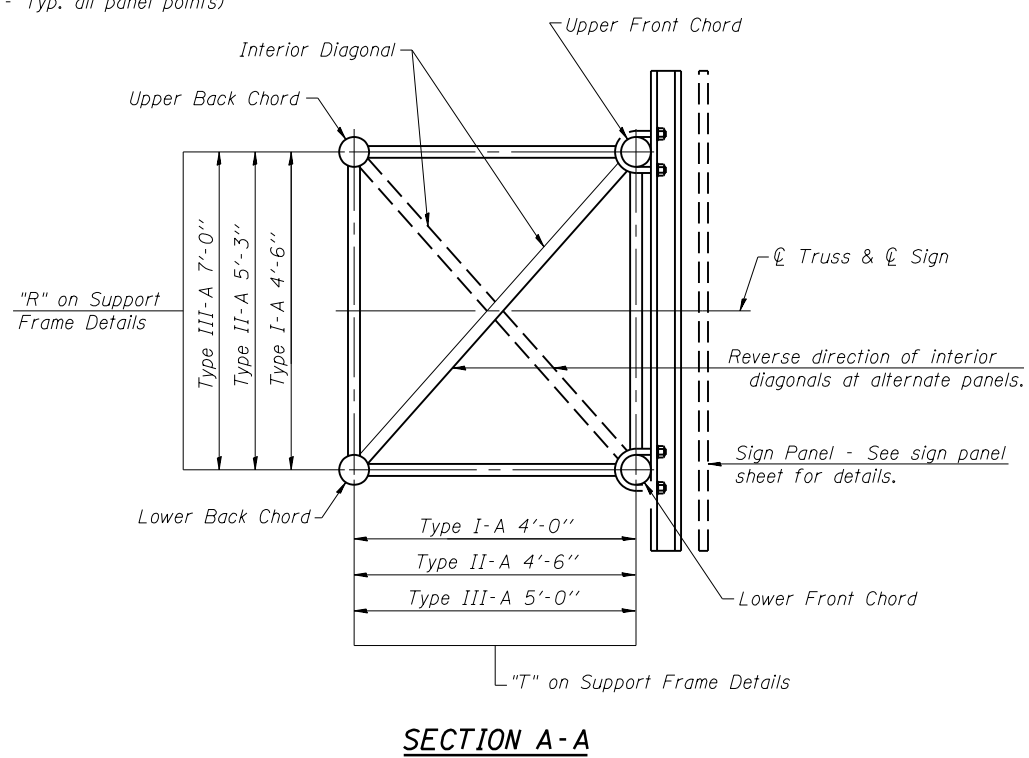
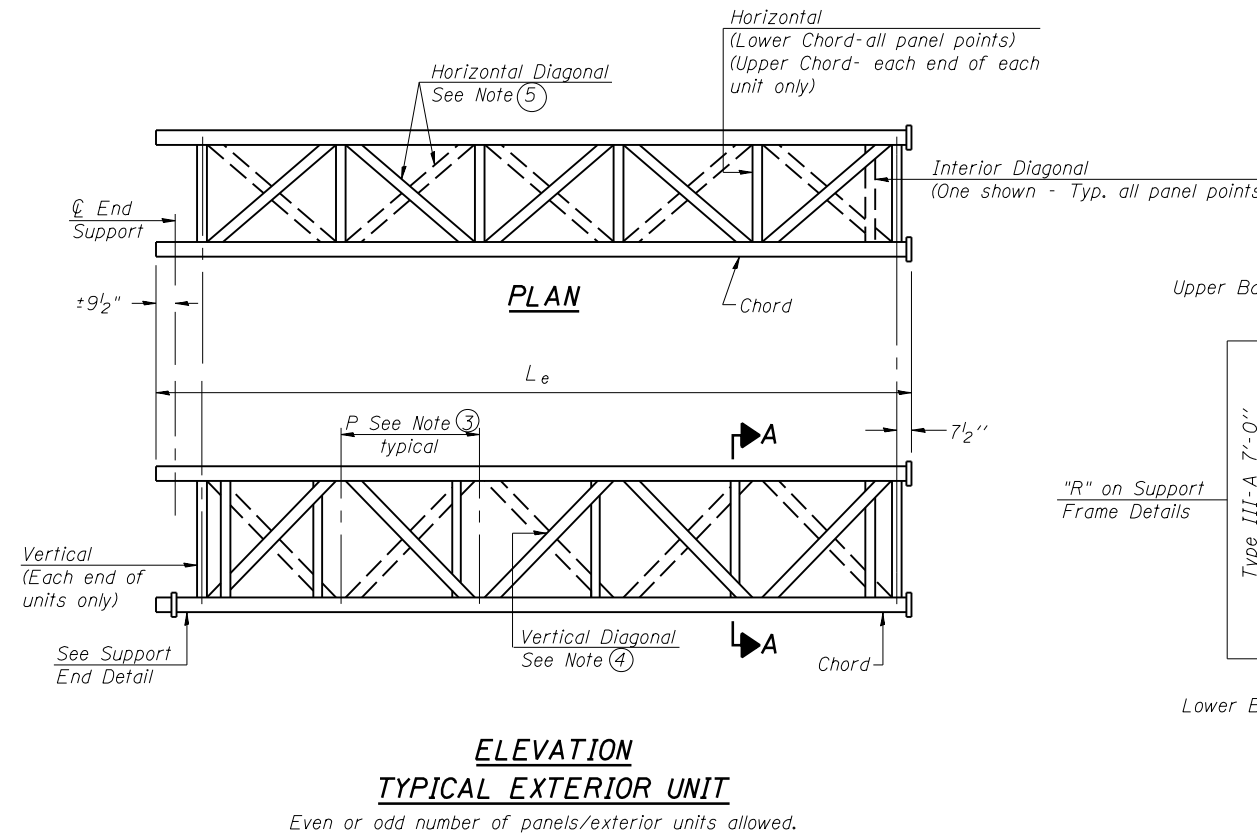
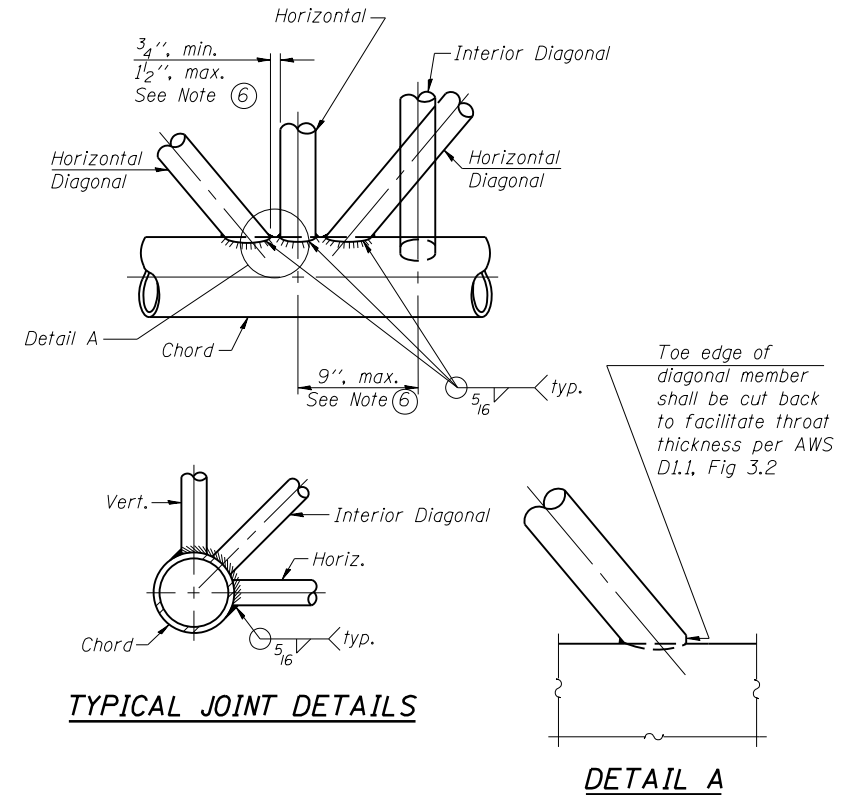
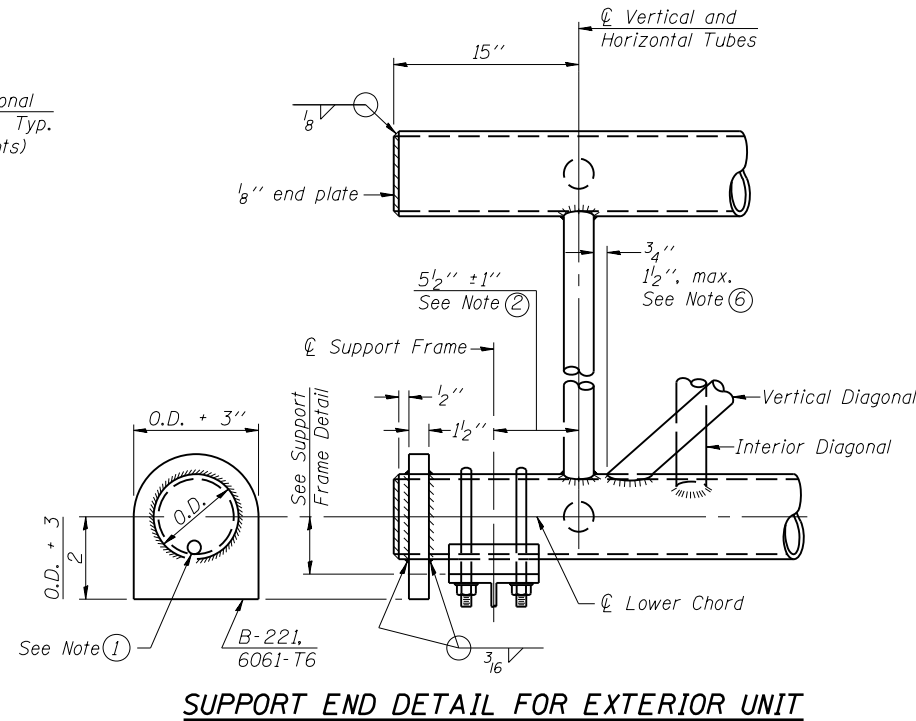
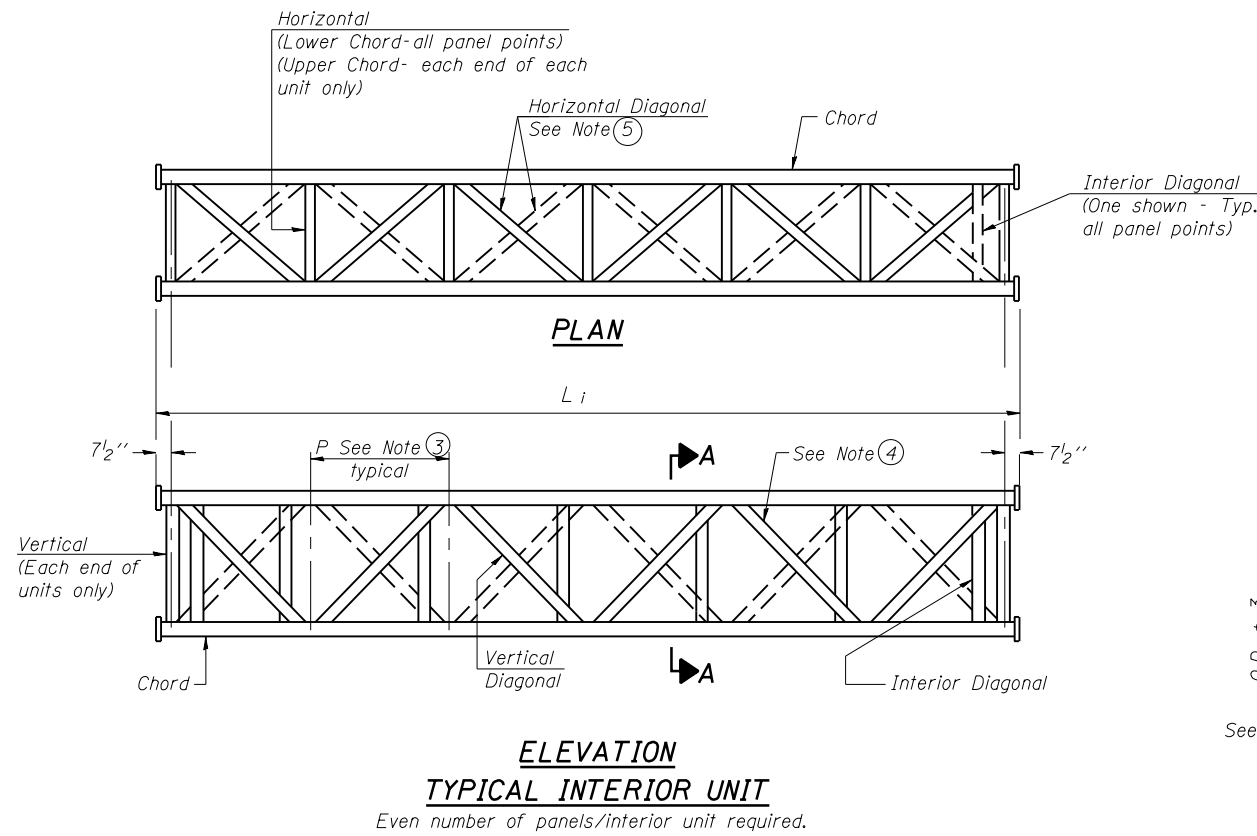
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - GENERAL PLAN &  
ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

F.A.I. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•		D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	23
				CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT					

SCALE: SHEET OF SHEETS STA. TO STA.



- ① Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2" φ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
- ② 5 1/2" end dimension may vary by ± 1" to provide uniform panel spacing (P).
- ③ Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
- ④ Vertical Diagonals in front and back face shall alternate.
- ⑤ Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
- ⑥ All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2

6-1-12

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		DATE -	REVISED -
\$MODELNAME\$	PLOT DATE = 3/29/2013		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS  
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

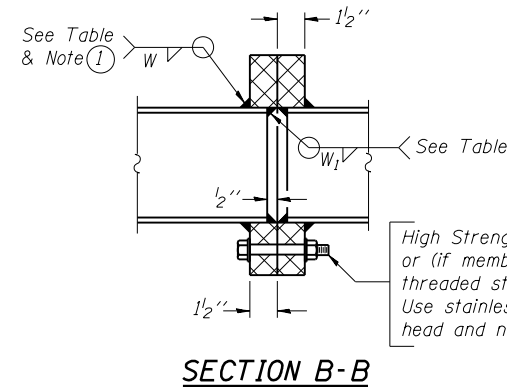
SCALE: SHEET OF SHEETS STA. TO STA.

*VARIOUS ROUTES			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
			SHEET NO.
	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34 24
			CONTRACT NO. 78362
ILLINOIS FED. AID PROJECT			



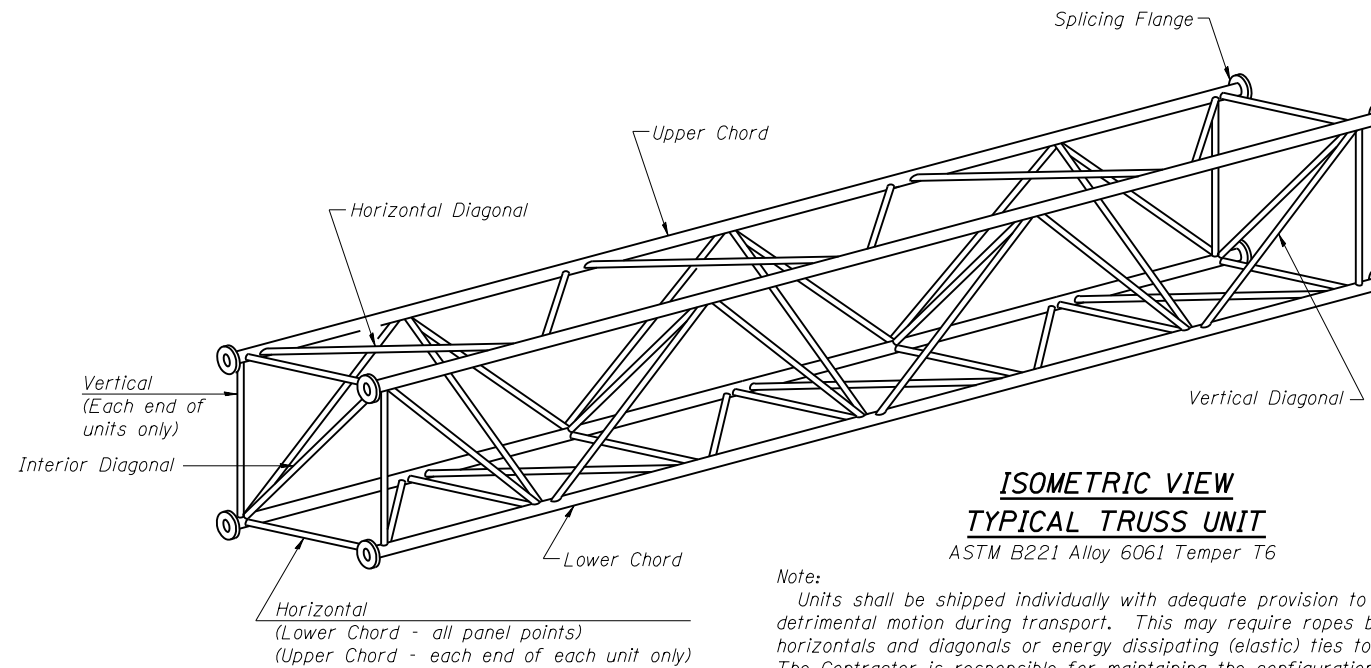
**TRUSS UNIT TABLE**

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(L <sub>e</sub> )	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L <sub>i</sub> )	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W <sub>1</sub>		
9S09IU051R003.7	376+75	II-A	7	38'-5 3/4"	5'-2 3/4"	1	6	32'-7 1/2"	5'-2 3/4"	6 1/2"	5/16"	3"	5/16"	3.52"	6	1"	3/8"	1/4"	11"	14 1/2"



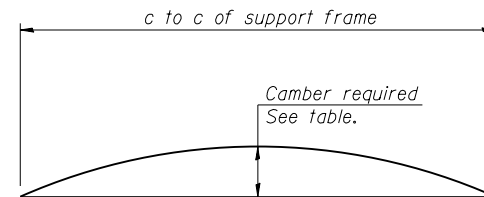
High Strength bolts with locknuts or (if members interfere) threaded studs with 2 locknuts. Use stainless steel washers under head and nut. See table.

① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



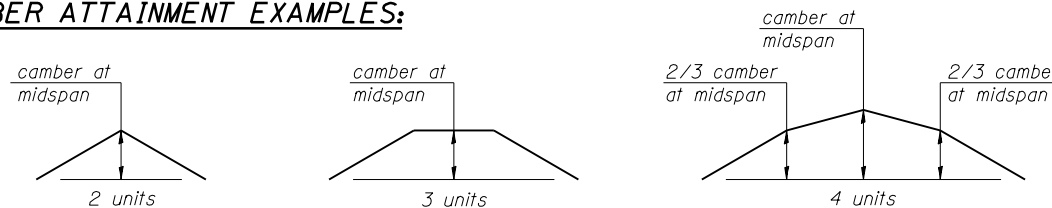
**ISOMETRIC VIEW  
TYPICAL TRUSS UNIT**  
ASTM B221 Alloy 6061 Temper T6

Note:  
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.

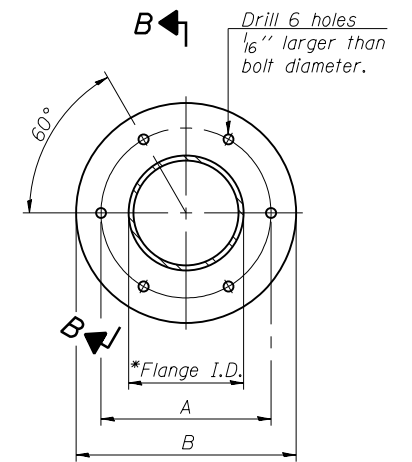


**CAMBER DIAGRAM**  
Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

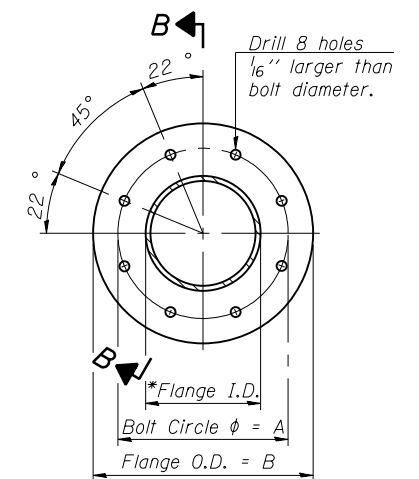
**CAMBER ATTAINMENT EXAMPLES:**



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



**TRUSS TYPES I-A, II-A, & III-A**



**TRUSS TYPES II-A & III-A  
SPlicing FLANGES**

ASTM B221, Alloy 6061-T6 or ASTM B209, Alloy 6061-T651  
\*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2 6-1-12

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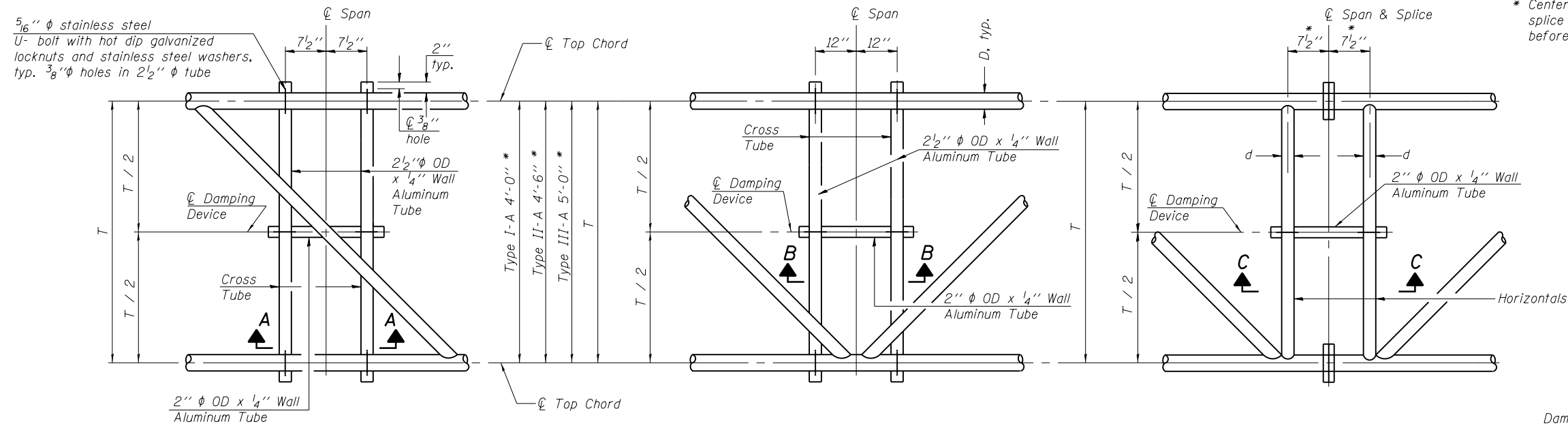
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS  
FOR TRUSS TYPES I-A, II-A AND III-A**

SCALE: SHEET OF SHEETS STA. TO STA.

•VARIOUS ROUTES

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	25
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				



**PLAN DETAIL "A"**  
 ☐ Span between Panel Points

**PLAN DETAIL "B"**  
 ☐ Span at Panel Point

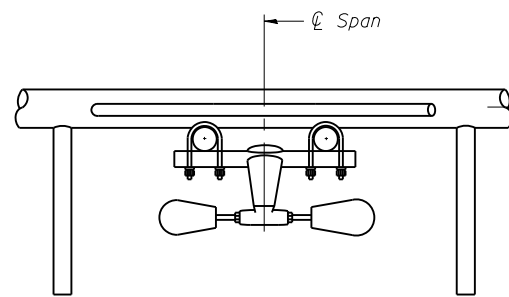
**PLAN DETAIL "C"**  
 ☐ Span at ☐ Chord Splice

\* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

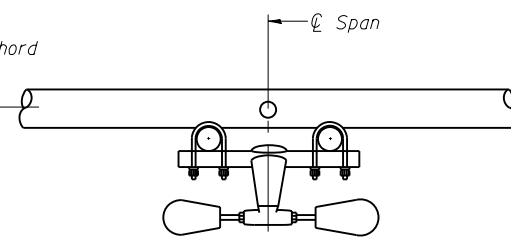
**NOTES**

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

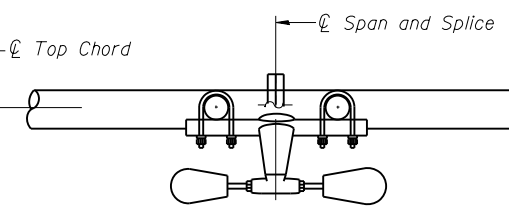
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



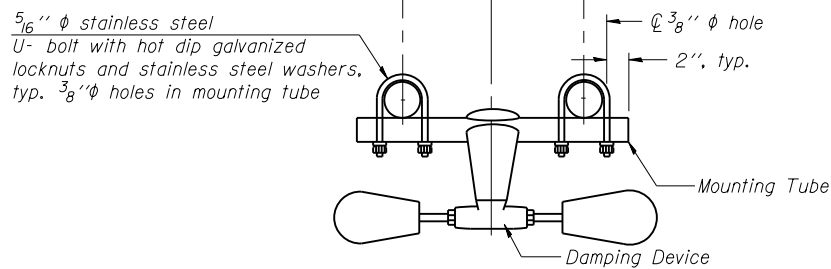
**SECTION A-A**



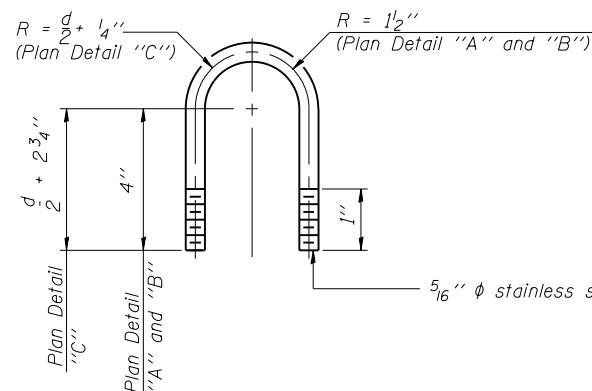
**SECTION B-B**



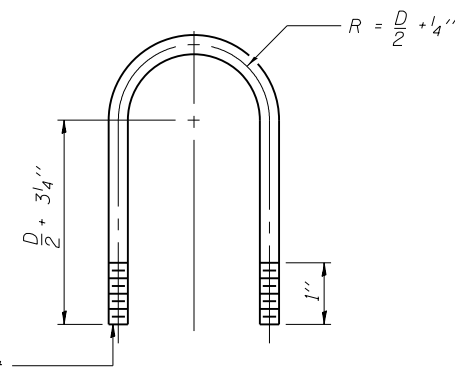
**SECTION C-C**



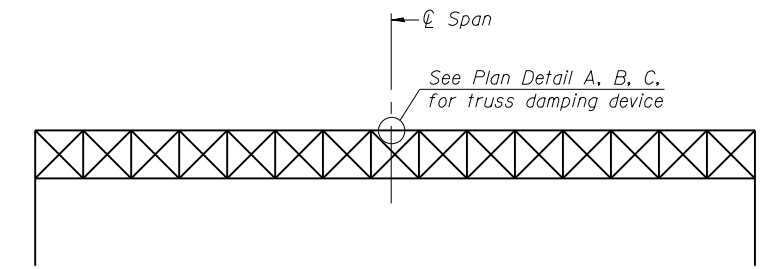
**TRUSS DAMPING DEVICE CONNECTION DETAIL**  
 (Typical)



**DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL**  
 (Typical)



**TOP CHORD TO CROSS TUBE U-BOLT DETAIL**  
 (Typical - Detail "A" and "B")



**ELEVATION**  
 Aluminum Overhead Sign Truss

OS-A-D

6-1-12

FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -
c:\pwork\work\pwork\collem\0339264\78362-sh-t-sgnstr.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

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 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE  
 DAMPING DEVICE

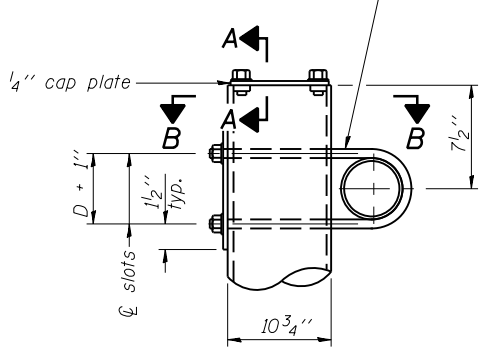
SCALE: SHEET OF SHEETS STA. TO STA.

\*VARIOUS ROUTES

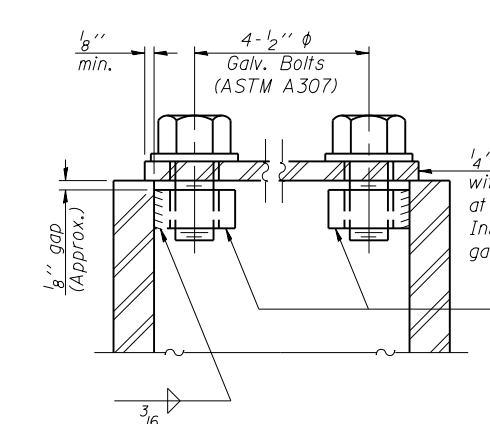
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	26
			CONTRACT NO. 78362	

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3/4" φ stainless steel U-bolt.  
Provide two washers and two hexagon locknuts. (4)  
13/16" x 2" slots on 10" φ pipe.  
(4 slots required per pipe)

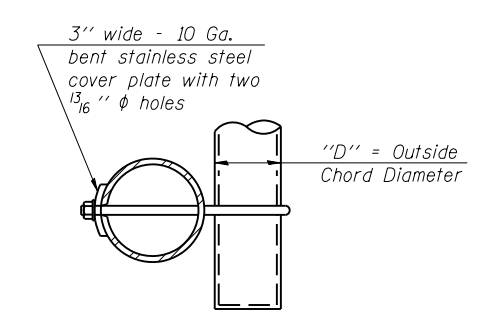


**DETAIL A**

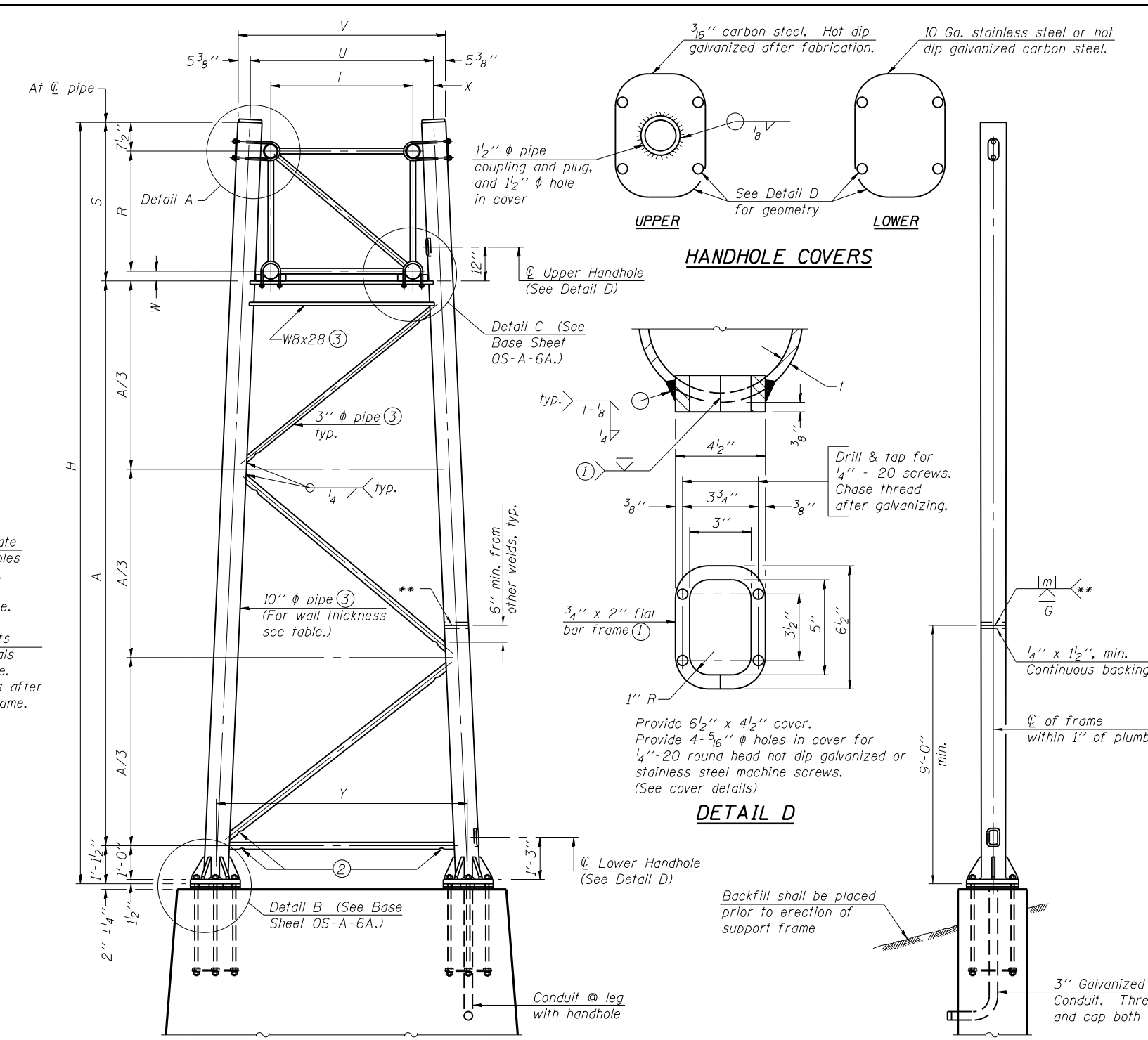


**SECTION A-A**

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

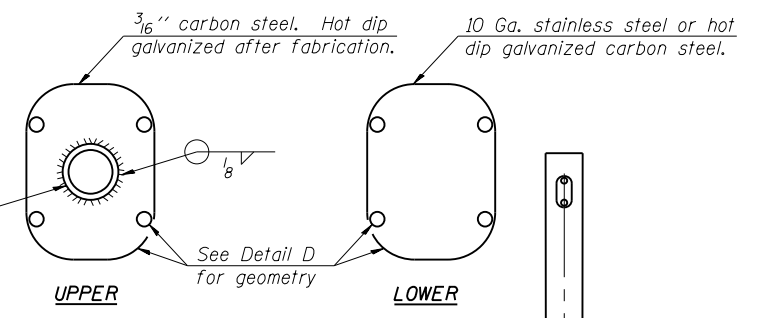


**SECTION B-B**

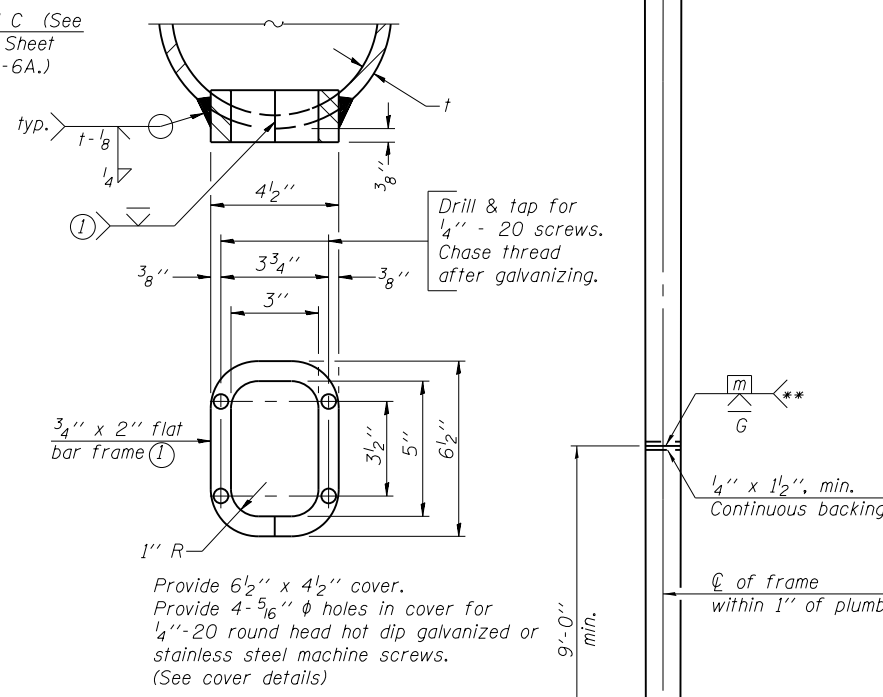


For Foundation Details, see base sheet OS-F3 (Spread Footing) or OS4-F3 (Drilled Shaft).

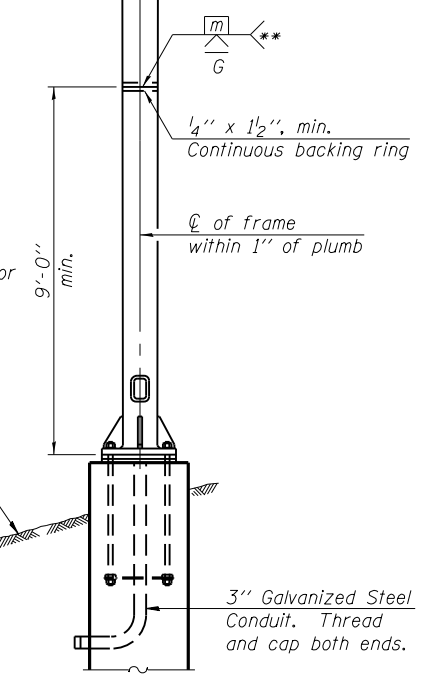
**SIDE ELEVATION**



**HANDHOLE COVERS**



**DETAIL D**



**END ELEVATION**

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.  
Load combinations checked include deadload plus:  
a) 100% wind normal to sign, 20% parallel to sign  
b) 60% wind normal to sign, 30% parallel to sign

- ① In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.
- ② Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
- ③ Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- ④ See General Notes for fasteners.
- ⑤ Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
- ⑥ "H" based on 15'-0" or actual sign height, whichever is greater.

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6"	5'-5 1/2"	4'-0"	5'-6"	6'-4 3/4"	4"	9"	8'-3"
II-A ⑤	5'-3"	6'-3 1/4"	4'-6"	6'-1"	6'-11 3/4"	4 3/4"	9 1/2"	8'-3"

**10" φ PIPE TRUSS SUPPORT FRAME**  
\*\* One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

OS-A-6

6-1-12

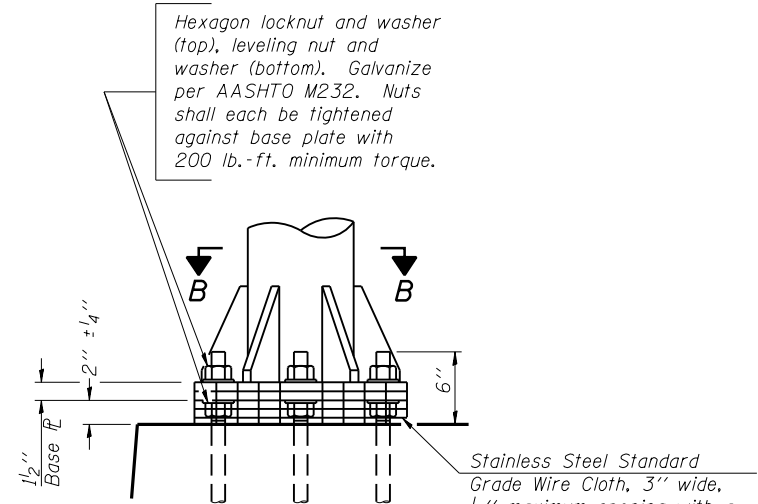
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\$MODELNAME\$	PLOT DATE = 3/29/2013	CHECKED -	REVISED -
		DATE -	REVISED -

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OVERHEAD SIGN STRUCTURES SUPPORT FRAME FOR ALUMINUM TRUSS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

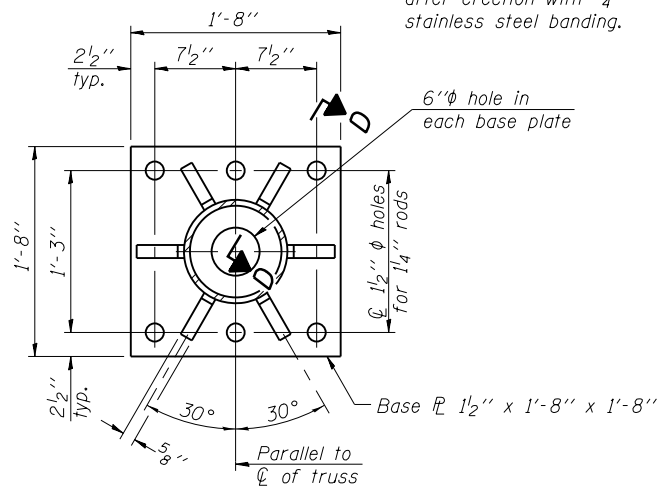
Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H ⑥	A
		Left	Right				
9S091U051R003.7	376+75		X	II-A	0.365	27.44'	20.04'
9S091U051R003.7	376+75	X		II-A	0.365	27.20'	19.80'

• VARIOUS ROUTES			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34
			SHEET NO. 27
CONTRACT NO. 78362			
ILLINOIS FED. AID PROJECT			

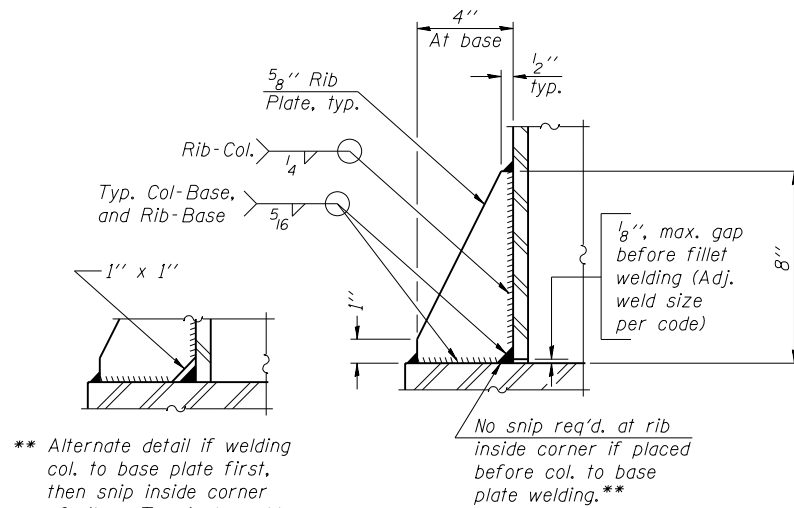


**DETAIL B**

Ribs shall be cut to fit slope of pipe.  
 Stainless Steel Standard Grade Wire Cloth, 3" wide, 1/4" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with 3/4" stainless steel banding.

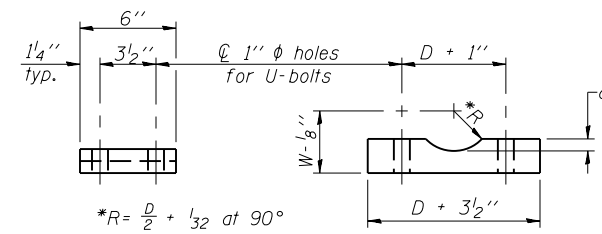


**SECTION B-B**



**SECTION D-D**

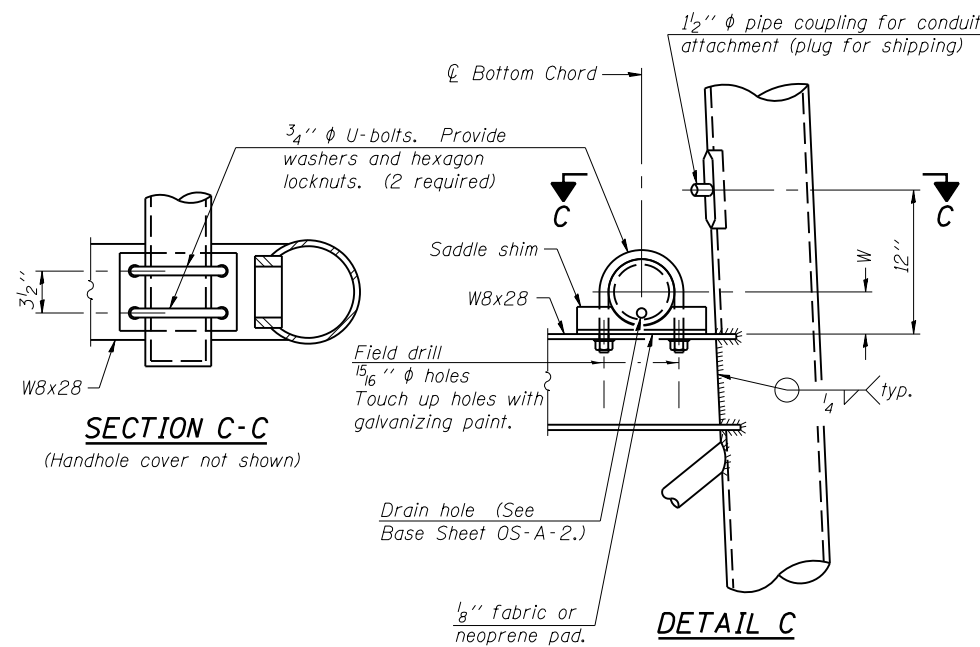
\*\* Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.



**SADDLE SHIM DETAIL**

ASTM B26 Alloy 356-F  
 or  
 ASTM B209 Alloy 6061-T651  
 (4 required per sign truss)

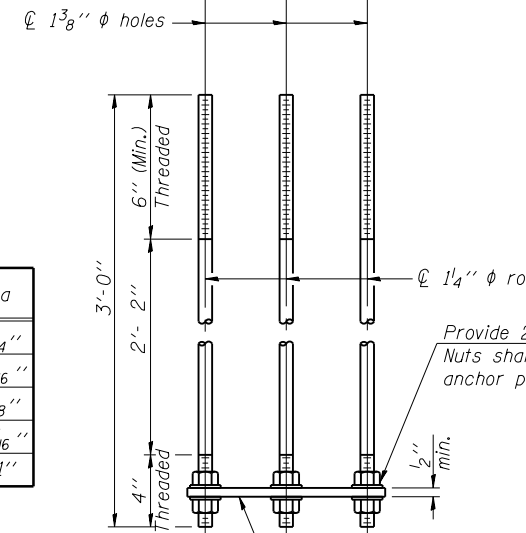
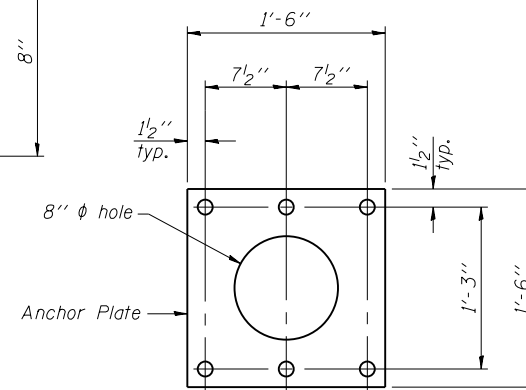
Truss Chord Nominal Dia.	a
5"	3/4"
5 1/2"	13/16"
6"	7/8"
6 1/2"	15/16"
7"	1"



**SECTION C-C**

(Handhole cover not shown)

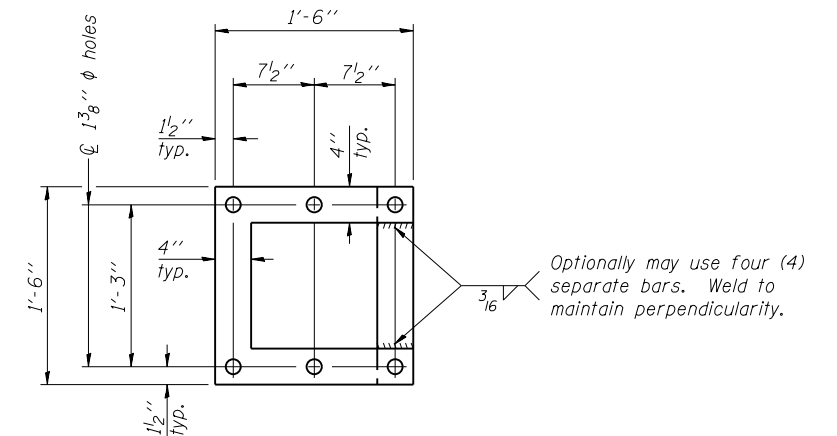
**DETAIL C**



**ANCHOR ROD DETAIL**  
 Spread Footing Foundation

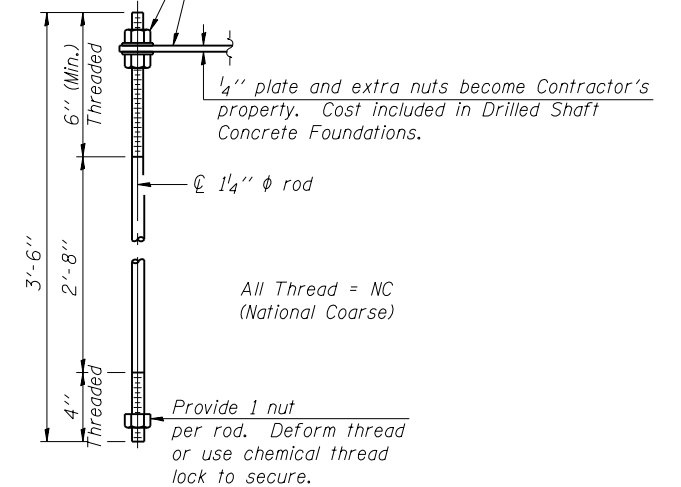
Provide 2 uncoated nuts per rod. Nuts shall be "snug tight" against anchor plate.

All Thread = NC (National Coarse)



**POSITIONING PLATE(S)**

At each location, provide 1/4 inch thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.



**ANCHOR ROD DETAIL**  
 Drilled Shaft Foundation

All Thread = NC (National Coarse)

Provide 1 nut per rod. Deform thread or use chemical thread lock to secure.

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

**10" PIPE SUPPORT FRAME DETAILS**

OS-A-6A

6-1-12

FILE NAME	USER NAME	DESIGNED	REVISED
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		DATE	REVISED

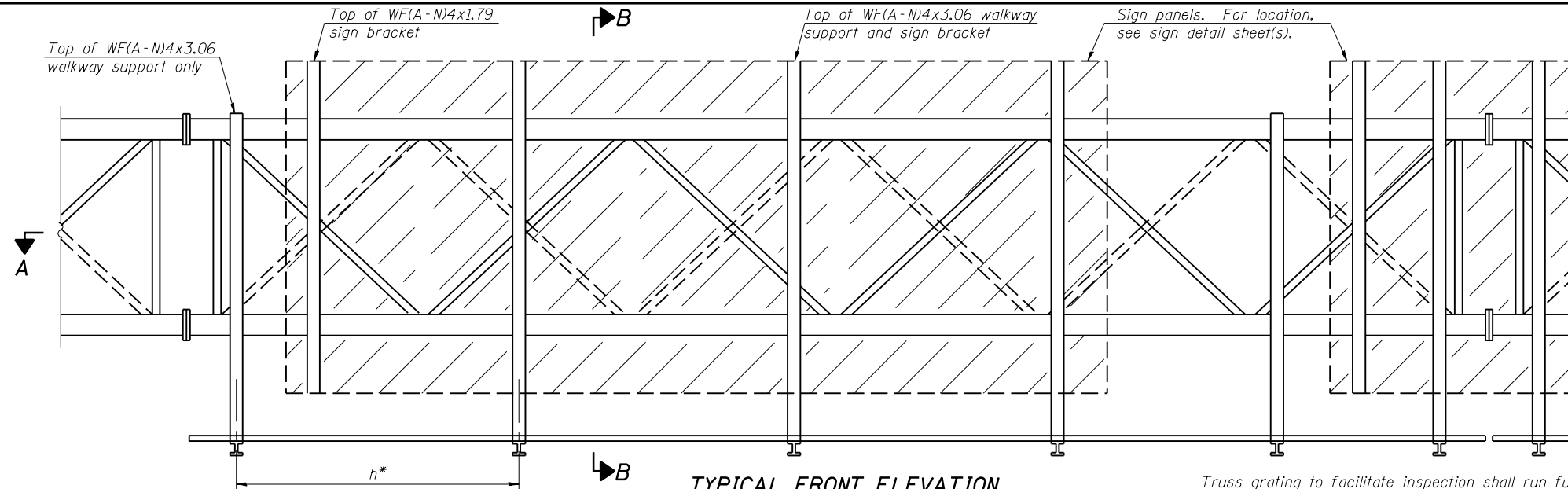
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
 SUPPORT FRAME DETAILS - ALUMINUM TRUSS

SCALE: SHEET OF SHEETS STA. TO STA.

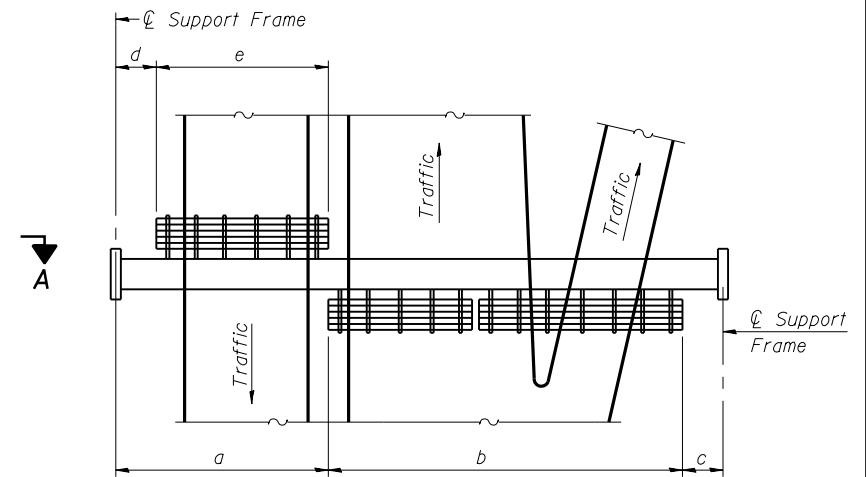
VARIOUS ROUTES			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
•	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34
			SHEET NO. 28
CONTRACT NO. 78362			

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**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.  
For Section B-B, see Base Sheet OS-A-10.

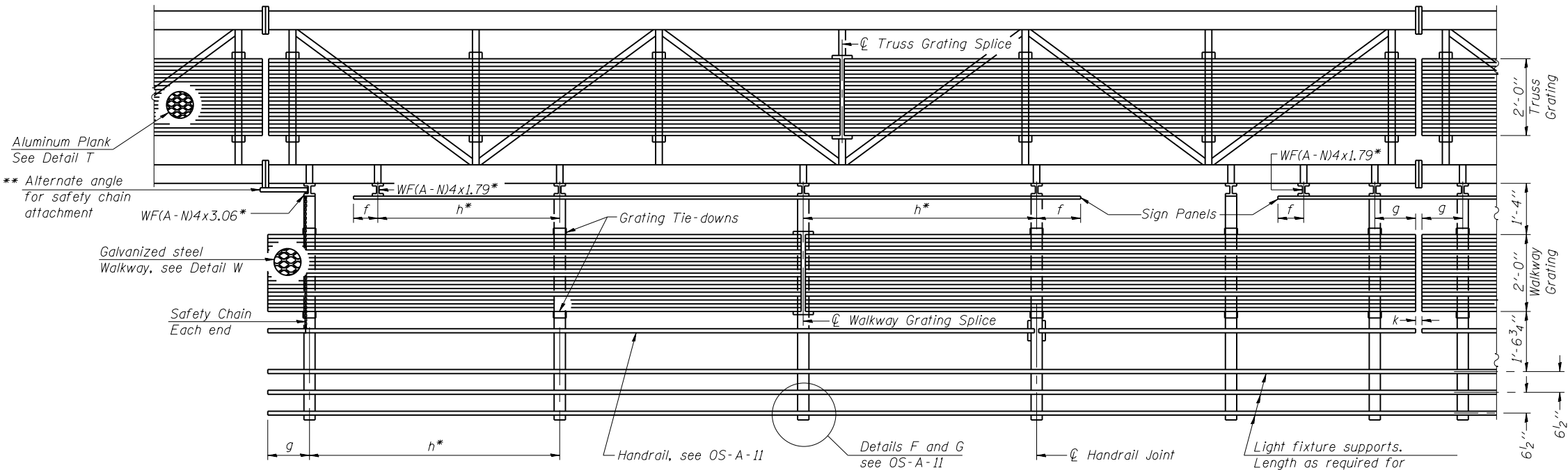
Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".



**PLAN WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)

**BRACKET TABLE**

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6



**SECTION A-A**

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints. Place all sign and walkway brackets as close to panel points as practical. Handrail joints, grating, and light support splices placed as needed.

Note:  
Details shown are considered equal alternatives to the Aluminum Walkway on Base Sheet OS-A-9, and may be substituted by Contractor at no change in contract cost.

Walkway and Truss Grating width dimensions are nominal and may vary ±1/2" based on available standard widths.

Notes:  
\* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:  
 $f = 12''$  maximum,  $4''$  minimum (End of sign to  $\phi$  of nearest bracket)  
 $g = 12''$  maximum,  $4''$  minimum (End of walkway grating to  $\phi$  of nearest support bracket)  
 $h = 6'-0''$  maximum ( $\phi$  to  $\phi$  sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)  
 $k = 2''$  maximum gap between adjacent walkway grating sections and handrail ends  
\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.  
For Details T and W, Section B-B and Grating Splice Details see Base Sheet OS-A-10.  
For handrail details see base sheet OS-A-11.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
9S091U051R003.7	376+75	30'	48'	30'	X	X	48'

OS-A-9S

6-1-12

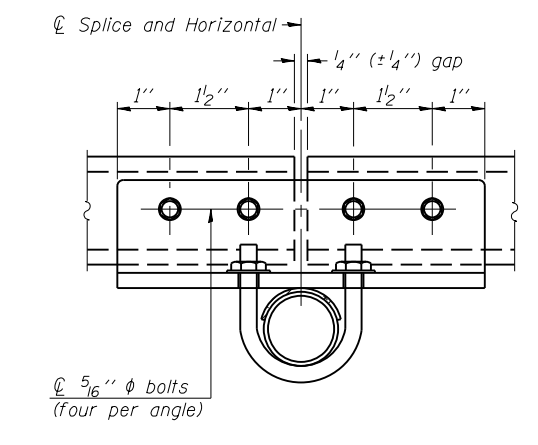
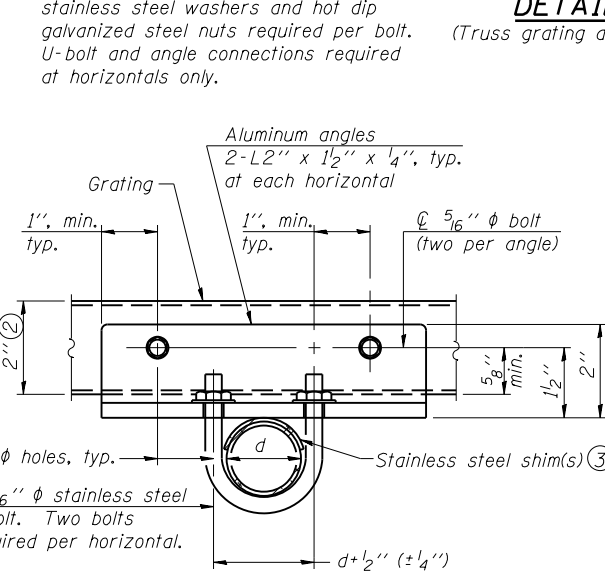
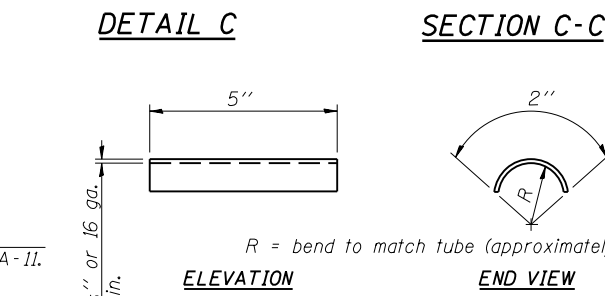
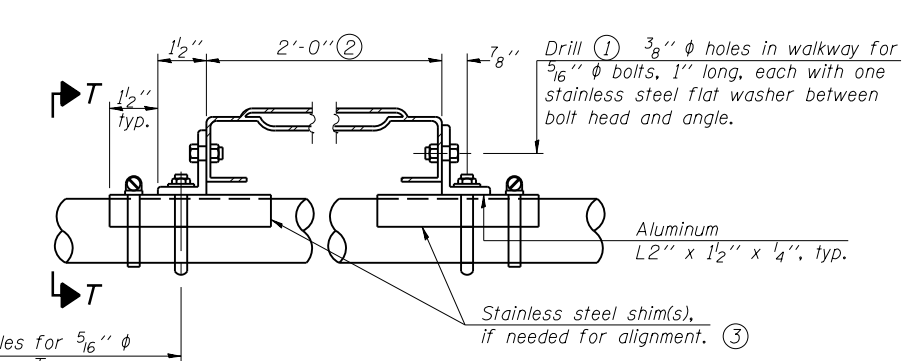
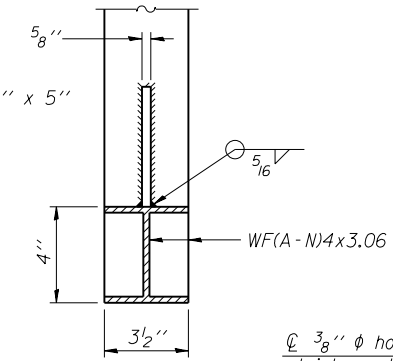
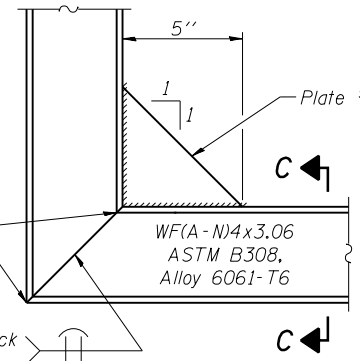
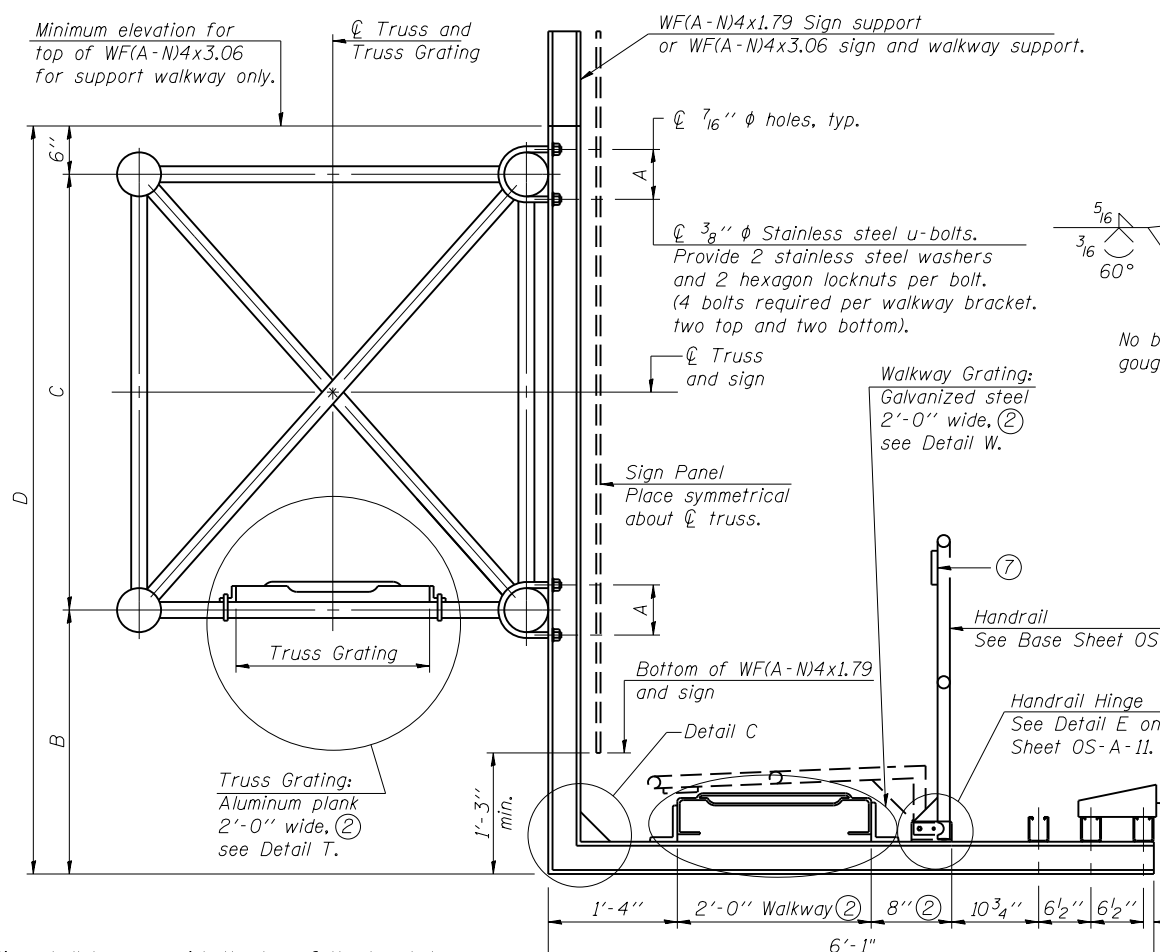
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		CHECKED -	REVISED -
		DATE -	REVISED -
\$MODELNAME\$	PLOT DATE = 3/29/2013		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
ALTERNATE WALKWAY DETAILS

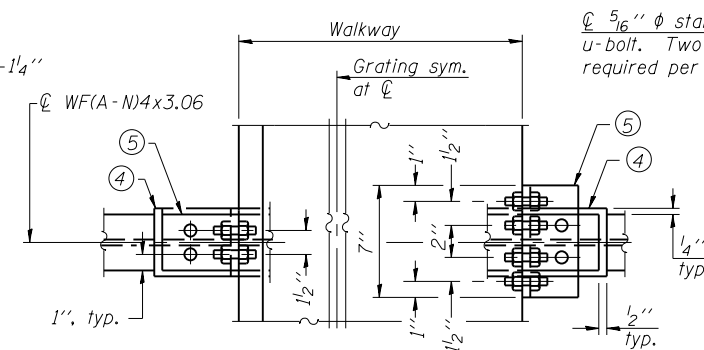
SCALE: SHEET OF SHEETS STA. TO STA.

*VARIOUS ROUTES				
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	29
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				

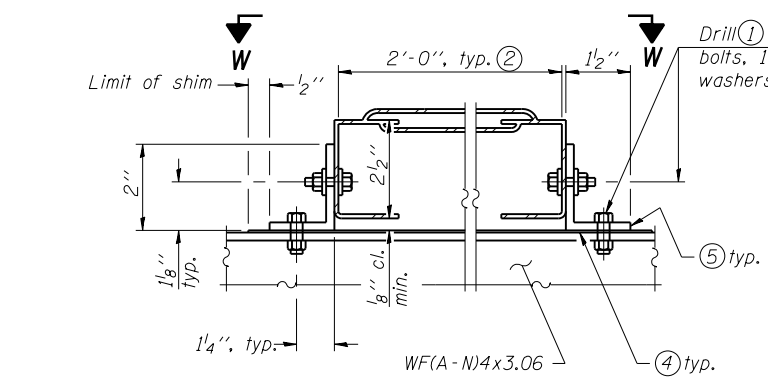


Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.

**SECTION B-B**



**SECTION W-W**  
WALKWAY GRATING CONTINUOUS AT WALKWAY GRATING SPLICE



**DETAIL W**  
GALVANIZED STEEL WALKWAY GRATING

- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 500 pound concentrated load with a 6'-0" clear span. Walkway and truss grating dimensions are nominal and may vary (width ± 1/2", depth ± 2") based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.
- ③ Stainless steel shims shall be placed under angles at horizontals and horizontal diagonals if needed to compensate for alignment variations and differences in horizontal diagonal pipe sizes beyond adjustment provided by angles. Secure with one stainless steel clamp per location, see "Shim Detail". Thicker shim plates may be used when needed subject to shims performing properly.
- ④ 1/16" (or 16 ga.) x 2 1/2" x 4" stainless steel shim adhered to top of WF(A-N)4x3.06 beneath each galvanized angle. Adhesives for shims shall be suitable for materials joined and full exposure conditions.
- ⑤ Galvanized steel L2" x 2" x 1/4", 3 1/2" long with continuous grating, 7" long at grating splice.
- ⑥ Details shown are considered equal alternatives to the Aluminum Walkway on Base Sheet OS-A-10 and may be substituted by Contractor at no change in contract cost.
- ⑦ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑧ Based on actual height of tallest sign given on OS-A-1.

**ALUMINUM TRUSS GRATING**

Structure Number	Station	A	⑧ B	C	⑧ D
9S091U051R003.7	376+75	7"	6'-1 1/2"	5'-3"	11'-10 1/2"

OS-A-10S

6-1-12

FILE NAME =	USER NAME = \$USER\$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

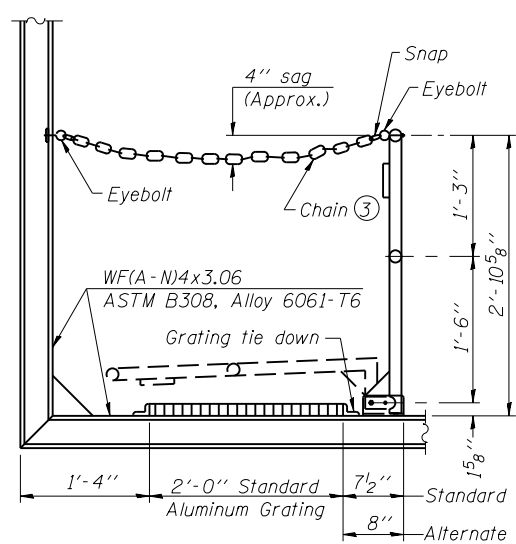
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES**  
**ALTERNATE WALKWAY DETAILS**

SCALE: SHEET OF SHEETS STA. TO STA.

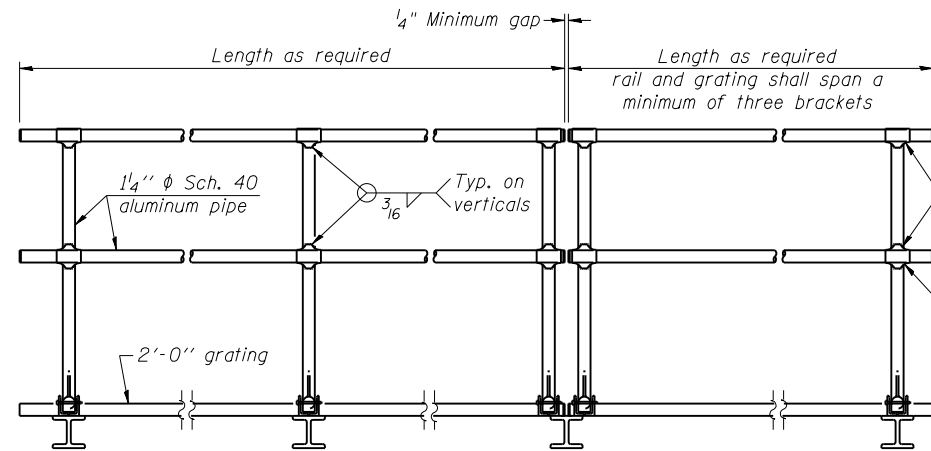
VARIOUS ROUTES			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
•	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34
CONTRACT NO. 78362			SHEET NO. 30

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**SIDE ELEVATION**

(Showing safety chain w/o sign)

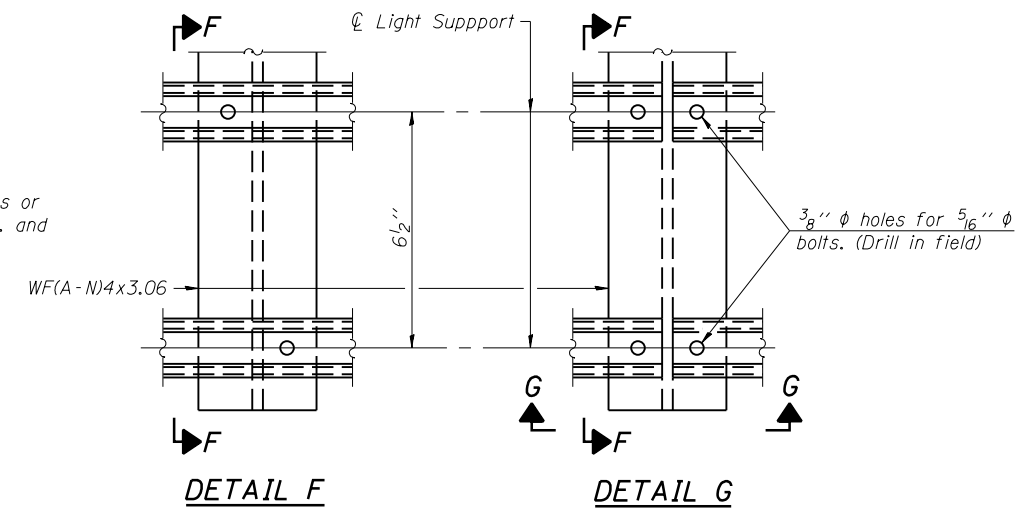


**FRONT ELEVATION**

**HANDRAIL DETAILS**

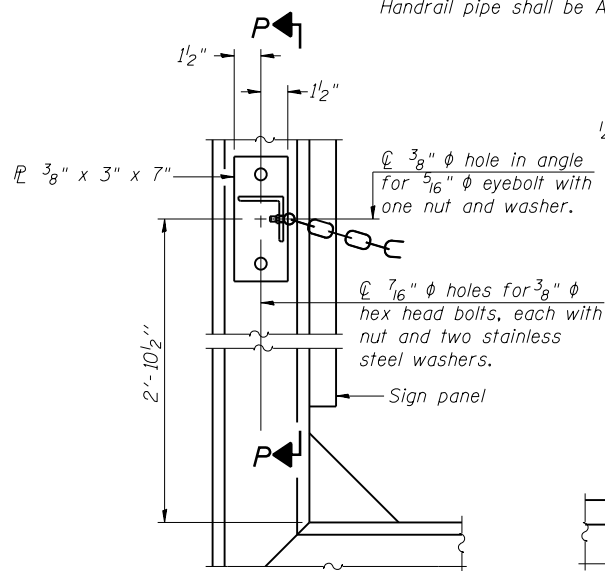
Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

- ① Install standard force-fit end caps or weld 3/8" end plates with 3/8" c.f.w. and grind smooth. (All rail ends)
- ② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" φ hole in fitting for 3/8" φ bolt. Field drill 7/16" φ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16" φ holes on top rail at ends only.)



**DETAIL F**

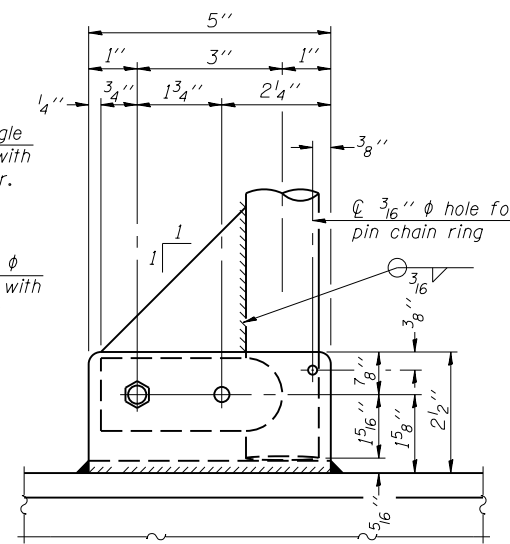
**DETAIL G**



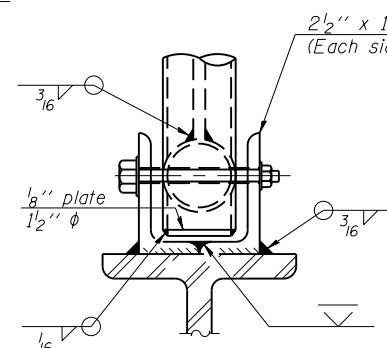
**ALTERNATE SAFETY CHAIN ATTACHMENT**

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

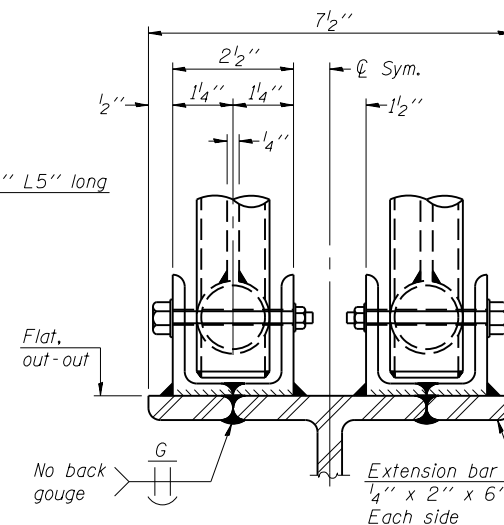


**SIDE ELEVATION**

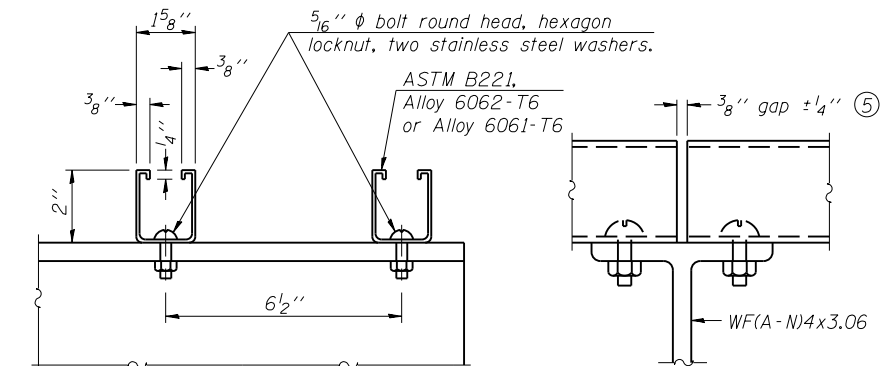


**FRONT ELEVATION**

See "Elevation" at right for dimensions.



**ELEVATION AT HANDRAIL JOINT**

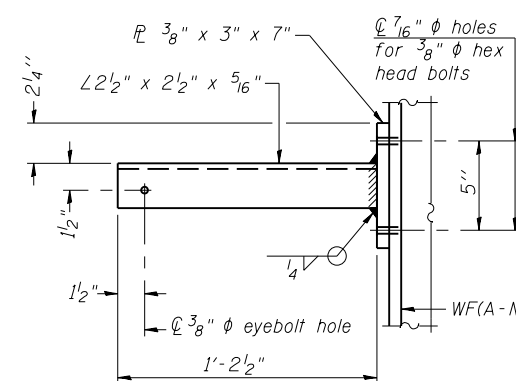


**SECTION F-F**

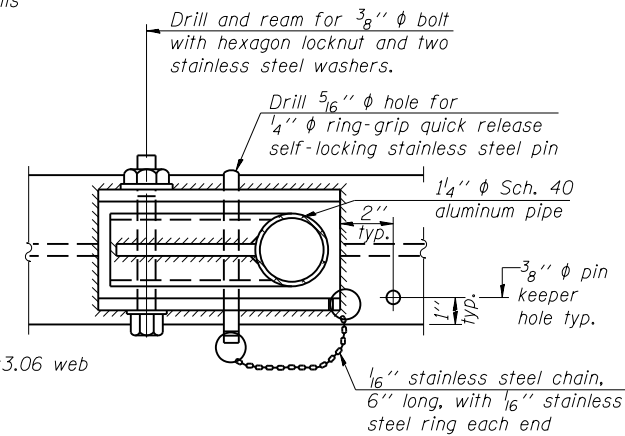
**SECTION G-G**

**LIGHTING FIXTURE MOUNTS (IF REQUIRED)**

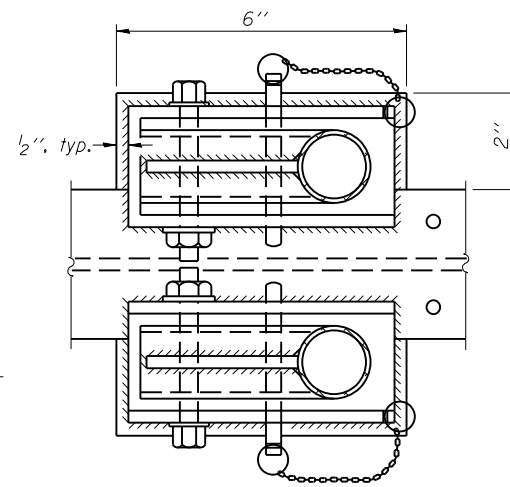
- ⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



**SECTION P-P**

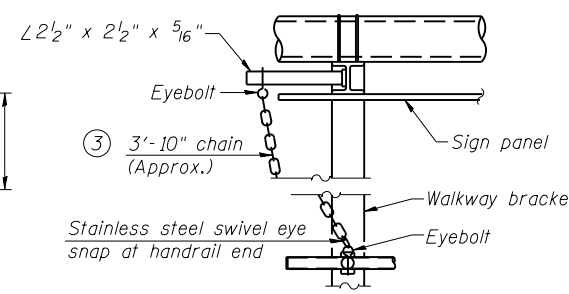


**PLAN  
DETAIL E HANDRAIL HINGE**



**PLAN AT HANDRAIL JOINT**

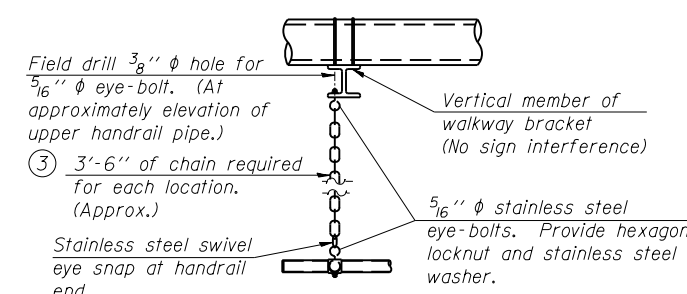
Details not shown same as "PLAN"



**ALTERNATE SAFETY CHAIN ATTACHMENT**

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

- ③ 3/16" Type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



**SAFETY CHAIN**

One required for each end of each walkway.

OS-A-11

6-1-12

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
ALUMINUM HANDRAIL DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

VARIOUS ROUTES

F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	31
			CONTRACT NO. 78362	
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**BAR LIST - EACH FOUNDATION**

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

**NOTES:**

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength ( $Q_u$ ) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

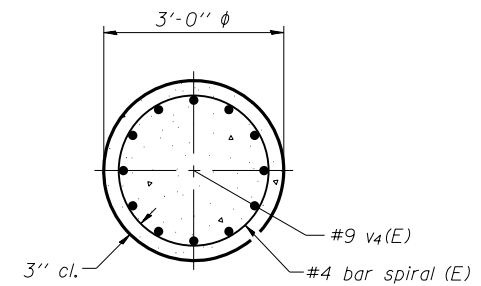
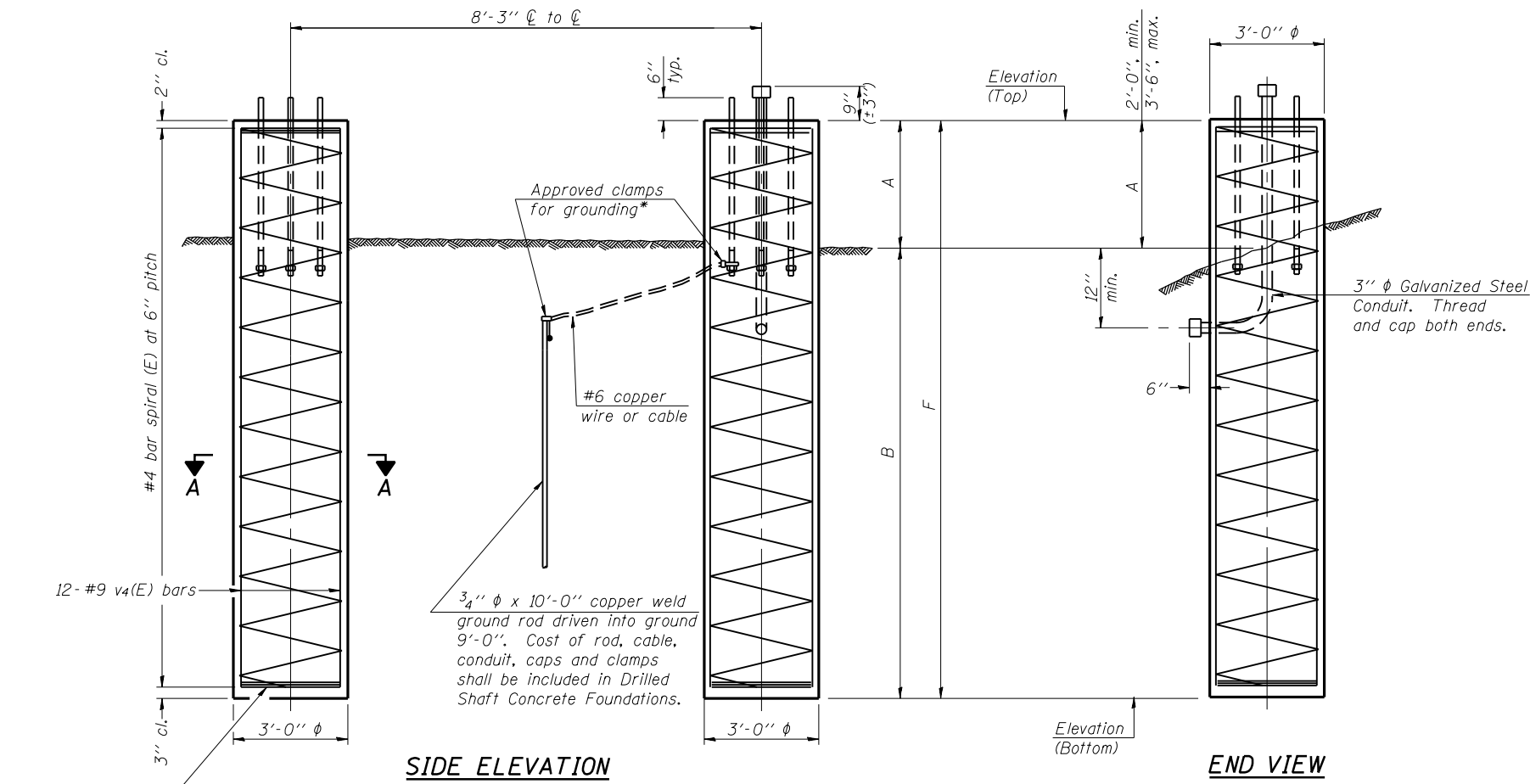
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

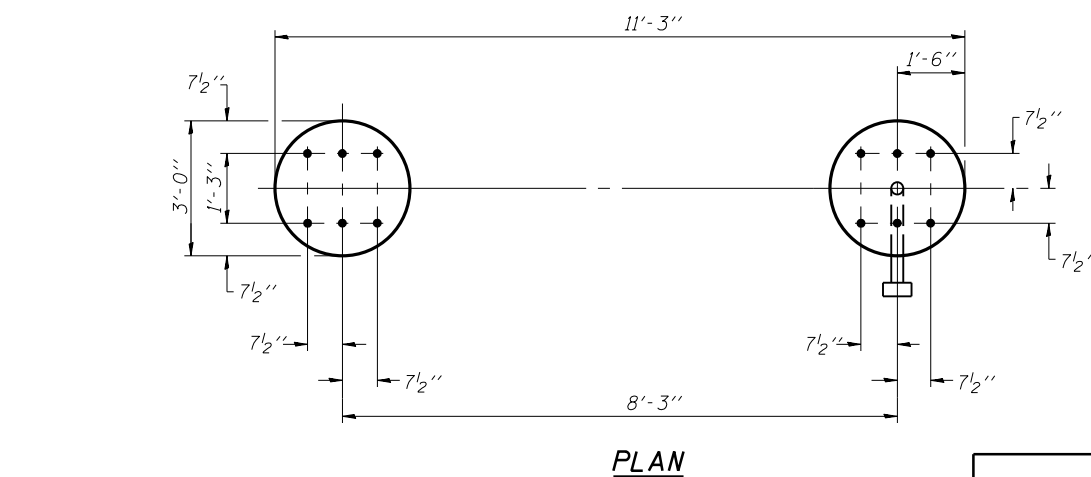
Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



**SECTION A-A**



**PLAN**

For anchor rod size and placement, see Support Frame Detail Sheet.

\* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

**DETAILS FOR 10"  $\phi$  SUPPORT FRAME  
TYPE I-A or II-A TRUSS**

Structure Number	Station	Left Foundation			Right Foundation			Class DS Concrete (Cu. Yds.)					
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top		Elevation Bottom	A	B	F	
9S091U051R003.7	376+75	101.54	78.54	2.5'	20.5'	23.0'	101.3	78.3	2.5'	20.5'	23.0'	24.0'	

OS4-F3

6-1-12

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS**

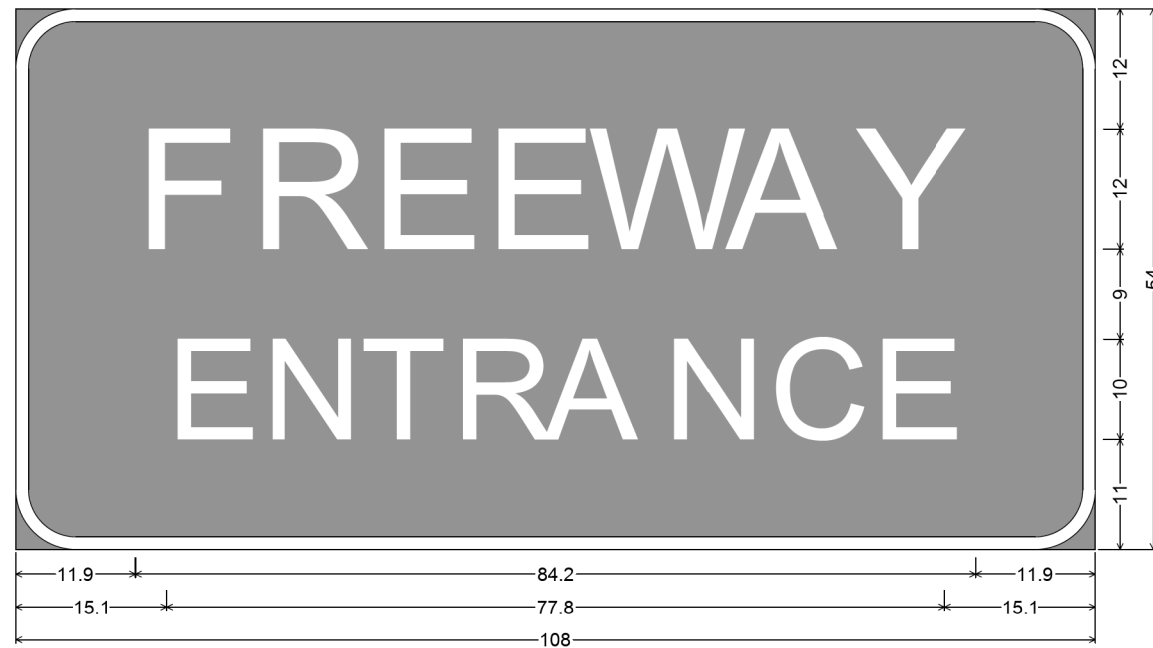
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•VARIOUS ROUTES

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	32
CONTRACT NO. 78362				

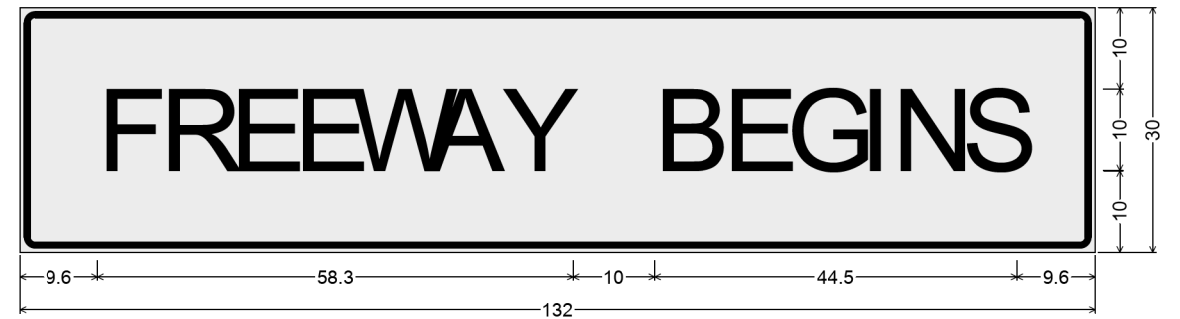
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6.0" Radius, 1.3" Border, White on Green;  
 "FREEWAY" E Mod 2K; "ENTRANCE" E Mod 2K;  
 Table of letter and object lefts.

F	R	E	E	W	A	Y	
11.9	23.3	35.6	47.0	57.2	70.9	83.9	
E	N	T	R	A	N	C	E
15.1	24.6	34.5	43.7	52.8	64.8	75.3	85.5



1.9" Radius, 0.8" Border, 0.5" Indent, Black on Yellow;  
 "FREEWAY BEGINS" D 2K;  
 Table of letter and object lefts.

F	R	E	E	W	A	Y	B	E	G	I	N	S
9.6	17.3	25.8	33.7	40.7	50.2	59.3	77.9	86.4	94.1	103.1	107.1	115.6

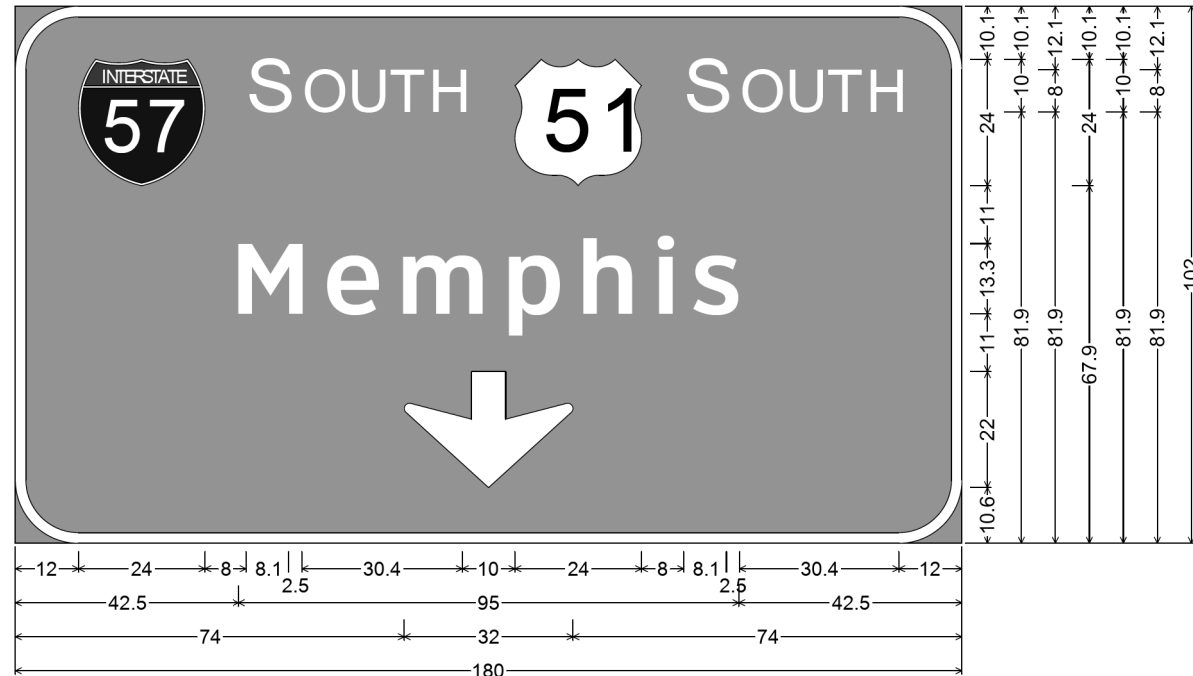
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>FREEWAY ENTRANCE/FREEWAY BEGINS SIGN PANEL DETAILS</b>			
SCALE:	SHEET	OF	SHEETS
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F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	D9 SAFETY SIGNAGE 2013	VARIOUS	34	33
			CONTRACT NO.	78362
ILLINOIS FED. AID PROJECT				

\* VARIOUS ROUTES



12.0" Radius, 2.0" Border, White on Green;  
 "S OUTH" E Mod 2K; "S OUTH" E Mod 2K; "Memphis" ClearviewHwy-5-W; Down Arrow 22.0" 270°;

Table of letter and object lefts.

	S	O	U	T	H		S	O	U	T	H
12.0	44.0	54.6	63.2	71.2	78.5	95.0	127.0	137.6	146.2	154.2	161.5
<b>M</b>	<b>e</b>	<b>m</b>	<b>p</b>	<b>h</b>	<b>i</b>	<b>s</b>					
42.5	59.5	73.8	93.9	108.1	122.1	128.9					
74.0											

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	PLOT DATE = 4/3/2013	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

•VARIOUS ROUTES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	D9 SAFETY SIGNAGE 2013-1	VARIOUS	34	34
			CONTRACT NO. 78362	
ILLINOIS FED. AID PROJECT				