



**GENERAL NOTES**

1. PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED BASED UPON THE UNIT BID PRICE FOR THE WORK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 1-800-892-0123. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF JULIE:  
  
NONE  
  
IDOT IS NOT A MEMBER OF JULIE. IF YOU ARE NEAR ANY OVERHEAD LIGHTING, INTERSECTION LIGHTING, FIBER OPTIC OR TRAFFIC SIGNALS, CONTACT THE IDOT TRAFFIC OFFIC AT 1-815-284-5469 AT LEAST 48 HOURS PRIOR TO WORK.
3. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
4. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
5. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR 60. SEE SPECIAL PROVISIONS.
6. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.
7. ALL DISTURBED AREAS DUE TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE GRADED AND SEEDED AS DIRECTED BY THE ENGINEER. NOMINAL QUANTITIES FOR SEEDING, EROSION CONTROL BLANKET, AND FERTILIZERS HAVE BEEN PROVIDED.
8. CONTRACTOR SHALL COORDINATE WORK ON THIS PROJECT WITH WORK ACTIVITIES ON ADJACENT PROJECTS.

**COMMITMENTS**

ALL EXISTING SOILS OR EMBANKMENTS DISTURBED OR EXCAVATED DUE TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL REMAIN ON SITE AND SHALL BE DISPOSED OF WITHIN THE LIMITS OF THE STATE RIGHT OF WAY AS DIRECTED BY THE ENGINEER.

**LIST OF STATE STANDARDS**

STD. NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
630001-10	STEEL PLATE BEAM GUARDRAIL
631011-09	TRAFFIC BARRIER TERMINAL, TYPE 2
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
637001-05	CONCRETE BARRIER DOUBLE FACE 32" (815 mm) HEIGHT
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701101-04	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM EDGE OF PAVEMENT
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701400-07	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-08	LANE CLOSURE, FREEWAY/ EXPRESSWAY
701406-08	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-08	LANE CLOSURE, MULTILANE, AT ENTRANCE RAMP OR EXIT RAMP, FOR SPEEDS >= 45 MPH
701421-06	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > 45 MPH TO 55 MPH
701422-06	LANE CLOSURE, MULTILANE, FOR SPEEDS >= 45 MPH TO 55 MPH
701428	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701456-03	PARTIAL EXIT RAMP CLOSURE FREEWAY / EXPRESSWAY
701901-03	TRAFFIC CONTROL DEVICES

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	PLOT DATE *	CHECKED - MAI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES  
Sheet No. 1 of 1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	ROCK ISLAND	45	2
* D-2 DVD SIM STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY	MINOR STRUCTURES
				0021	0040
25000300	SEEDING, CLASS 3	ACRE	0.50	0.50	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45	
25100630	EROSION CONTROL BLANKET	SQ YD	2420	2420	
28000305	TEMPORARY DITCH CHECKS	FOOT	185	185	
28000400	PERIMETER EROSION BARRIER	FOOT	533	533	
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
28000510	INLET FILTERS	EACH	2	2	
44001980	CONCRETE BARRIER REMOVAL	FOOT	74	74	
* 50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	6.2		6.2
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	537.5	537.5	
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	3	3	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	600	600	
63700255	CONCRETE BARRIER, DOUBLE FACE, 32 INCH HEIGHT	FOOT	75	75	
67100100	MOBILIZATION	L SUM	1	1	
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	10	10	
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1	
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	4	4	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1	
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	1	
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	13000	13000	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4335	4335	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	900	900	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	462.5	462.5	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	4	4	
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
72000200	SIGN PANEL - TYPE 2	SQ FT	24	24	

URBAN

29  
\* Specialty Items

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STATE OF ILLINOIS  
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SIGN STRUCTURE REPLACEMENT  
SUMMARY OF QUANTITIES I OF II

Sheet No. 1 of 2

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	3
D-2 OVD SIN STR REPL 14-25			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY	MINOR STRUCTURES
				0021	0040
	<i>LIRBAN</i>				
72000300	SIGN PANEL - TYPE 3	SO FT	2148	2148	
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	269		269
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	101		101
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	229.8		229.8
73302170	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE II-C-A (36" X 5'-6")	FOOT	60.0		60.0
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	130.1		130.1
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	4		4
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	2		2
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	10		10
78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	1625	1625	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	165	165	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	20	20	
* 78200510	BARRIER WALL MARKERS, TYPE A	EACH	72	72	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3	
78300100	PAVEMENT MARKING REMOVAL	SO FT	545	545	
X7010410	SPEED DISPLAY TRAILER	CAL MO	1	1	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	165	165	
X0325265	REMOVE ELECTRIC SERVICE	EACH	6	6	
X0325969	PORTABLE, VEHICLE MOUNTED, CHANGEABLE MESSAGE BOARD	CAL DA	6	6	
X0326880	MESSAGE BOARD VEHICLE DRIVER	HOUR	48	48	
X2800315	REMOVE INLET FILTERS	EACH	2	2	

\* Specialty Items Rev.

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PLDT SCALE *	DRAWN - AJ	REVISIONS -
PLDT DATE *	CHECKED - MAI	REVISIONS -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT  
SUMMARY OF QUANTITIES II OF II**

Sheet No. 2 of 2

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	ROCK ISLAND	45	4
* D-2 OVD SIGN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	LOCATION					
				SN-098	SN-101	SN-104	SN-126	SN-141	SN-147
				2C081I080L003.3	2S081I088R015.3	2S081I088L016.0	2S081S005R011.2	2C081S092R029.3	2S081S092L028.0
25000300	SEEDING, CLASS 3	ACRE	.5	0.05	0.10	0.10	0.10	0.05	0.10
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	4.5	9	9	9	4.5	9
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	4.5	9	9	9	4.5	9
25100630	EROSION CONTROL BLANKET	SQ YD	2420	242	484	484	484	242	484
28000305	TEMPORARY DITCH CHECKS	FOOT	185		21	134			30
28000400	PERIMETER EROSION BARRIER	FOOT	533	156			173	70	134
28000500	INLET AND PIPE PROTECTION	EACH	1						1.0
28000510	INLET FILTERS	EACH	2						2.0
44001980	CONCRETE BARRIER REMOVAL	FOOT	74				74		
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	6.2			3.6		2.6	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	537.5		212.5			37.5	287.5
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	3		2.0				1.0
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4		2.0			2.0	
63200310	GUARDRAIL REMOVAL	FOOT	600		250.0			50.0	300.0
63700255	CONCRETE BARRIER, DOUBLE FACE, 32 INCH HEIGHT	FOOT	75				75		
67100100	MOBILIZATION	L SUM	1	0.17	0.16	0.17	0.17	0.17	0.17
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	10		2	3	2	1	2
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	0.16	0.16	0.17	0.17	0.17	0.17
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	4	1	1		1		1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	0.17	0.17	0.17	0.17	0.17	0.17
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	0.16	0.16	0.17	0.17	0.17	0.17
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	0.16	0.16	0.17	0.17	0.17	0.17
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	13000		2600	3900	2600	1300	2600
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4335		867	1300	867	434	867
70400100	TEMPORARY CONCRETE BARRIER	FOOT	900				300		600
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	462.5		462.5				
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	4				2		2
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2		2				
72000200	SIGN PANEL - TYPE 2	SQ FT	24		24				
72000300	SIGN PANEL - TYPE 3	SQ FT	2148	215.75	506.25	393.75	506.25	104.0	421.25
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	269			97	90		82
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	101		101				
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	229.8	20.3	54.4	39.7	45.3	18.1	52

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**SCHEDULE OF QUANTITIES (SHEET 1 OF 2)**

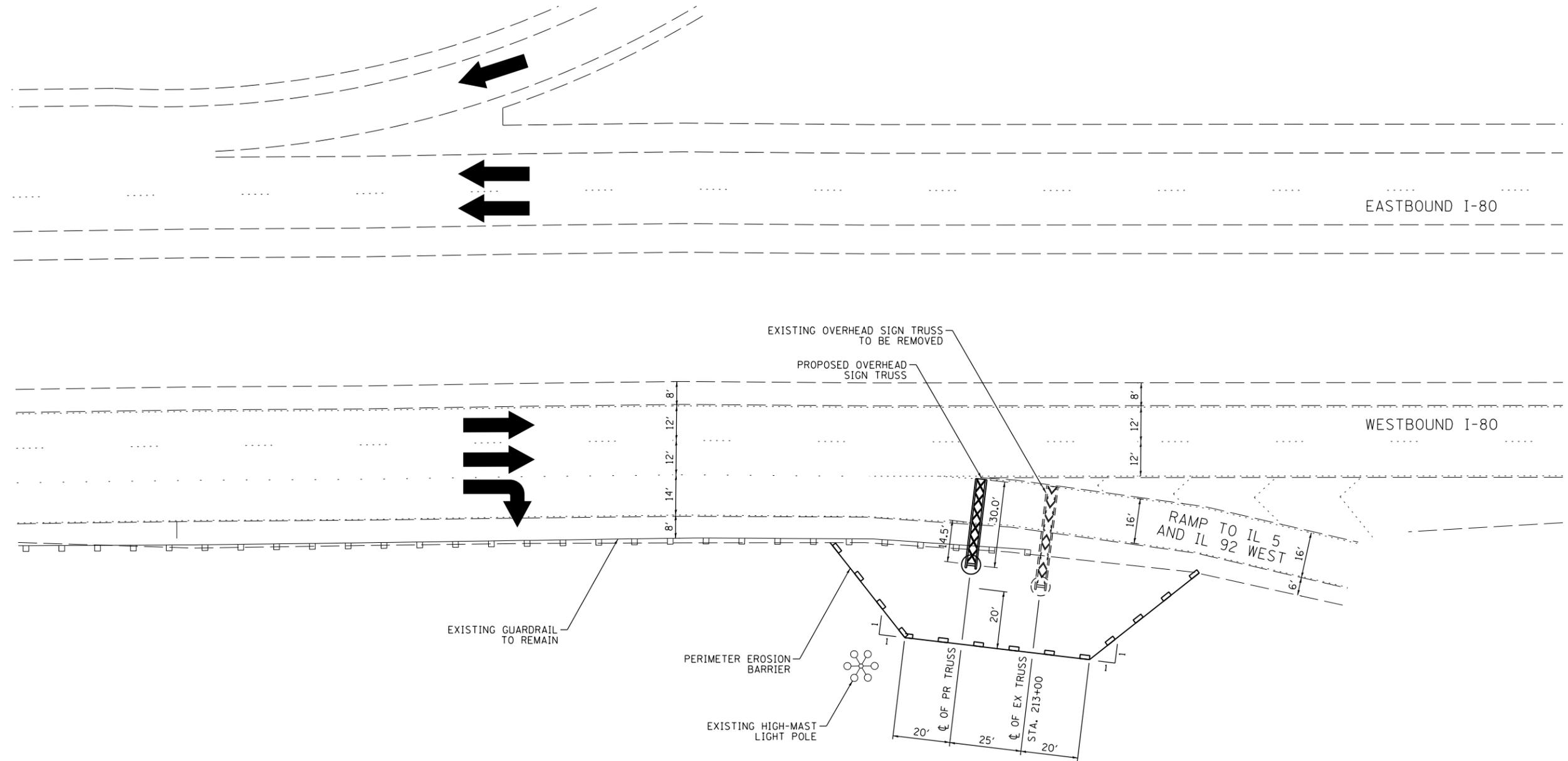
Sheet No. 1 of 2

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	ROCK ISLAND	45	5
* D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	LOCATION					
				SN-098	SN-101	SN-104	SN-126	SN-141	SN-147
				2C081I080L003.3	2S081I088R015.3	2S081I088L016.0	2S081S005R011.2	2C081S092R029.3	2S081S092L028.0
73302170	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE II-C-A (36" X 5' -6")	FOOT	60.0	30.0				30.0	
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	130.1	8.6	24.3	20	49.1	8.7	19.4
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	4		1	1		1	1
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	2	1			1		
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	10	1	2	2	1	2	2
78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	1625		325	325	325	325	325
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	165		33	33	33	33	33
78200410	GUARDRAIL MARKERS, TYPE A	EACH	20		8			4	8
78200510	BARRIER WALL MARKERS, TYPE A	EACH	72				24		48
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3		1			1	1
78300100	PAVEMENT MARKING REMOVAL	SO FT	545		109	109	109	109	109
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	165		33	33	33	33	33
X0325265	REMOVE ELECTRIC SERVICE	EACH	6	1	1	1	1	1	1
X0325969	PORTABLE, VEHICLE MOUNTED, CHANGEABLE MESSAGE BOARD	CAL DA	6	1	1	1	1	1	1
X0326880	MESSAGE BOARD VEHICLE DRIVER	HOUR	48	8	8	8	8	8	8
X2800315	REMOVE INLET FILTERS	EACH	2					2	

**NOTES:**

- 1) INSTALL PERIMETER EROSION BARRIER AS DIRECTED BY THE ENGINEER.
- 2) EXISTING GUARDRAIL TO REMAIN.



GRAPHIC SCALE

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PLOT DATE = 3/12/2014	CHECKED - MJL	REVISED -
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DATE -	REVISED -

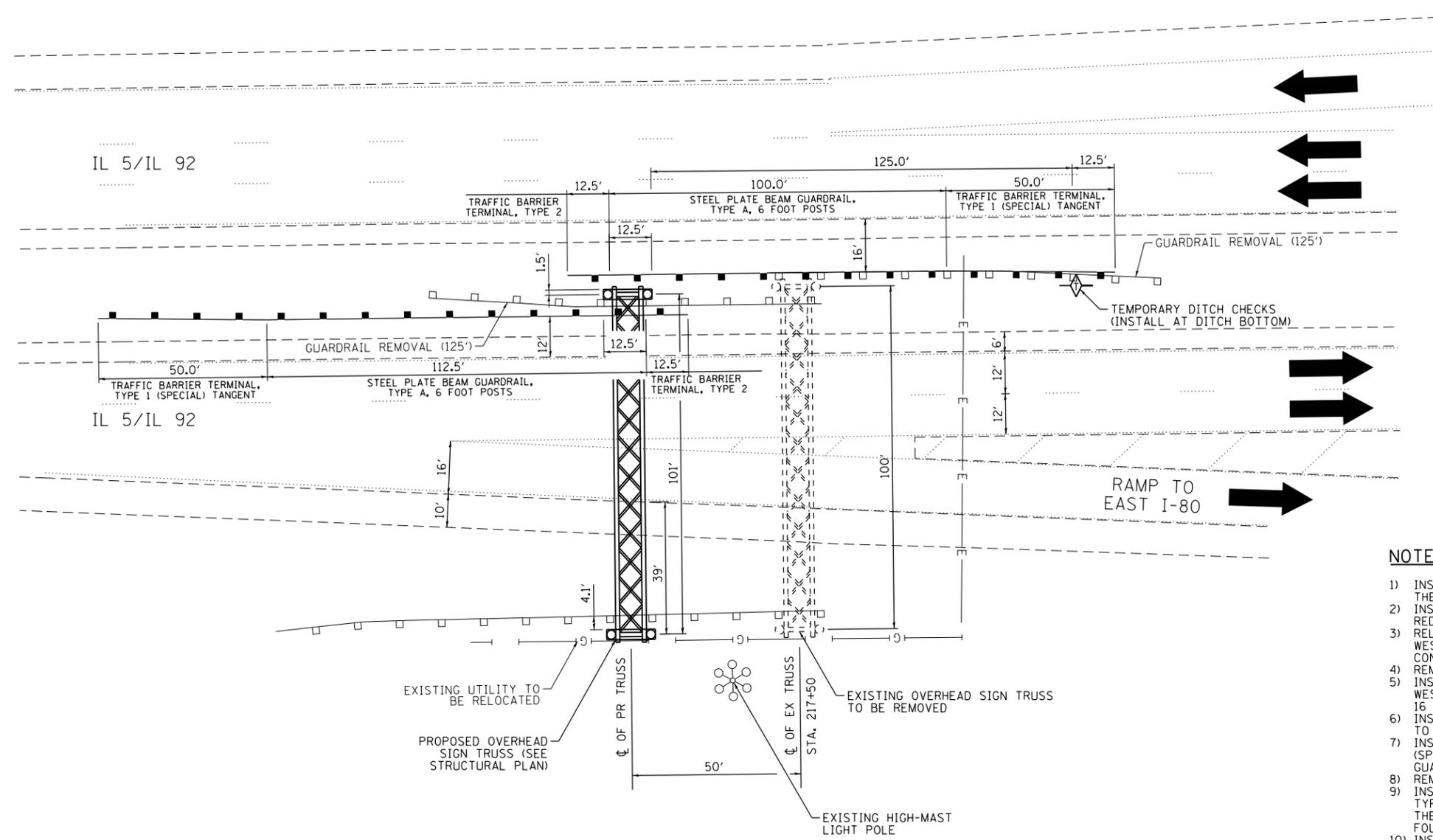
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT  
 ROADWAY PLAN DETAIL - SN-098**

SCALE: 1" = 20'    SHEET NO. 1 OF 6 SHEETS    STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	**	45	7
* D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

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**NOTES:**

- 1) INSTALL TEMPORARY DITCH CHECKS AS DIRECTED BY THE ENGINEER.
- 2) INSTALL IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3.
- 3) RELOCATE 212.5' OF TEMPORARY CONCRETE BARRIER TO WESTBOUND IL 5/IL 92 AND RELOCATE 250' OF TEMPORARY CONCRETE BARRIER TO EASTBOUND IL 5/IL 92.
- 4) REMOVE EXISTING WESTBOUND MEDIAN GUARDRAIL.
- 5) INSTALL 100 FT OF GUARDRAIL STARTING 12.5 FT WEST OF THE EAST END OF SIGN FOUNDATION AND 16 FT FROM THE EDGE OF PAVEMENT.
- 6) INSTALL TRAFFIC BARRIER TERMINAL, TYPE 2 TO PROPOSED WESTBOUND MEDIAN GUARDRAIL.
- 7) INSTALL TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT TO PROPOSED WESTBOUND MEDIAN GUARDRAIL.
- 8) REMOVE EXISTING EASTBOUND MEDIAN GUARDRAIL.
- 9) INSTALL 112.5 FT OF STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS ENDING 12.5 FT EAST OF THE WESTERN EDGE OF THE SIGN STRUCTURE FOUNDATION AND 12 FT FROM THE EDGE OF PAVEMENT.
- 10) INSTALL TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT TO PROPOSED EASTBOUND MEDIAN GUARDRAIL.
- 11) INSTALL TRAFFIC BARRIER TERMINAL, TYPE 2 TO PROPOSED EASTBOUND MEDIAN GUARDRAIL.
- 12) REMOVE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS ONCE STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINALS ARE INSTALLED AND ACCEPTED BY THE ENGINEER.



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT  
 ROADWAY PLAN DETAIL - SN-101**

SCALE: 1" = 20'    SHEET NO. 2 OF 6 SHEETS    STA.    TO STA.

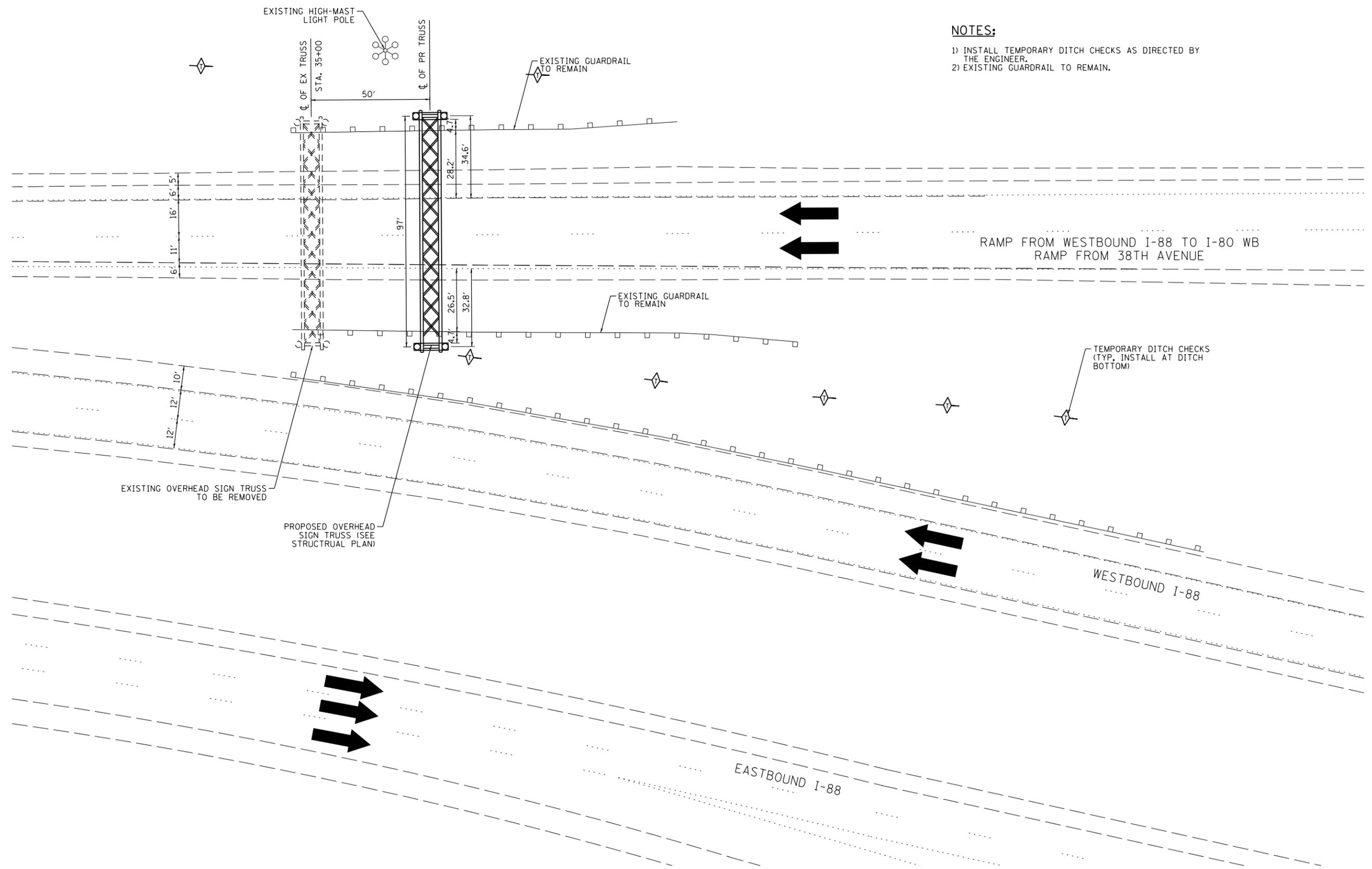
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	8
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

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**NOTES:**

- 1) INSTALL TEMPORARY DITCH CHECKS AS DIRECTED BY THE ENGINEER.
- 2) EXISTING GUARDRAIL TO REMAIN.



GRAPHIC SCALE

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PLOT DATE = 3/12/2014

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DRAWN - JPA
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DATE -

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**STATE OF ILLINOIS  
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**SIGN STRUCTURE REPLACEMENT  
 ROADWAY PLAN DETAIL - SN-104**

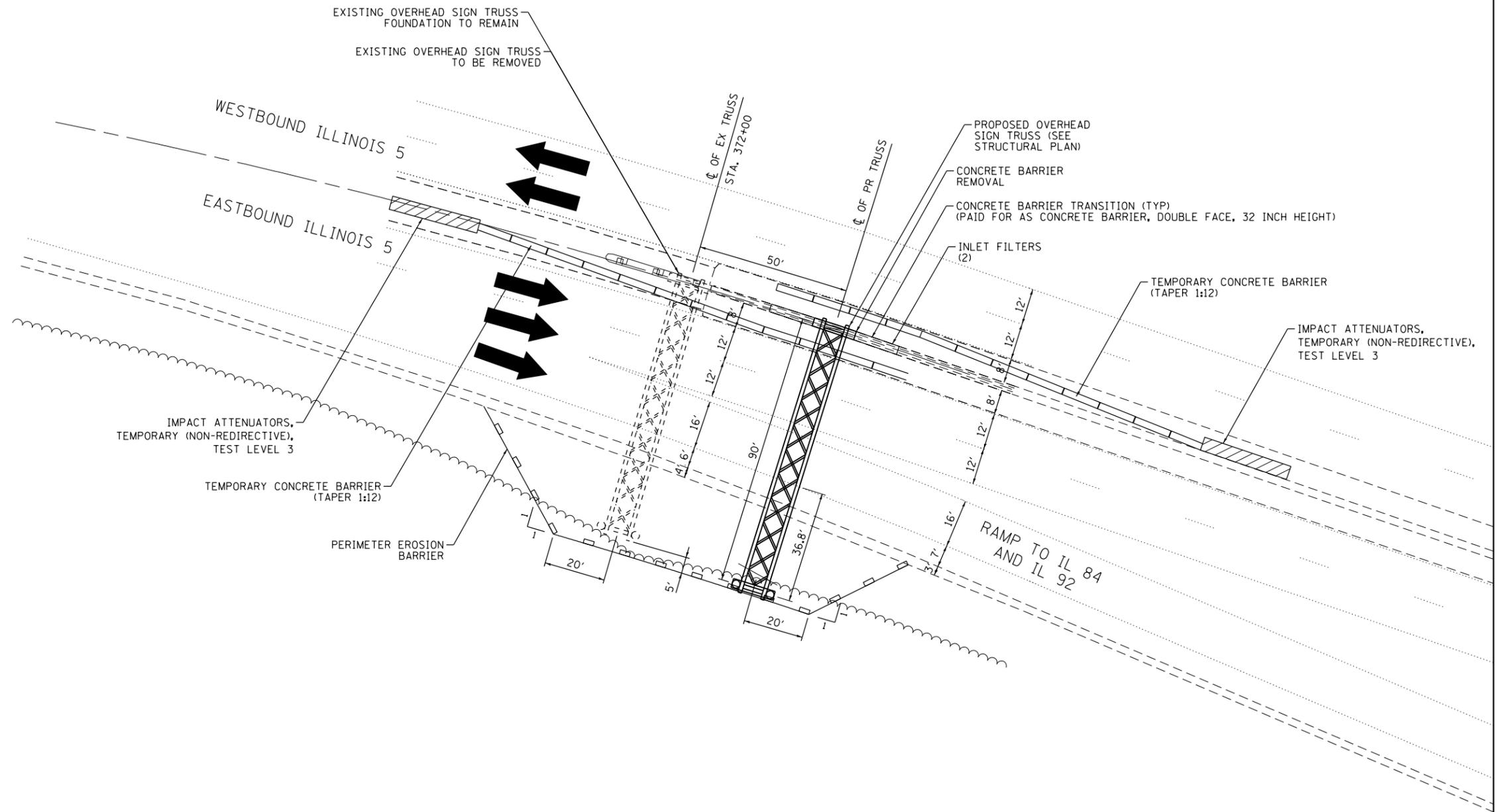
SCALE: 1" = 20'    SHEET NO. 3 OF 6 SHEETS    STA.                    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	9
• D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

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**NOTES:**

- 1) INSTALL PERIMETER EROSION BARRIER AS DIRECTED BY THE ENGINEER.
- 2) INSTALL IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3.
- 3) INSTALL TEMPORARY CONCRETE BARRIER.
- 4) REMOVE EXISTING CONCRETE BARRIER 50 FT NORTH OF EXISTING OVERHEAD SIGN.
- 5) INSTALL PROPOSED FOUNDATION FOR OVERHEAD SIGN.
- 6) EXISTING SIGN FOUNDATION IN BARRIER WALL TO REMAIN.



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**Ciorba Group, Inc.**  
 CONSULTING ENGINEERS  
 8007 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60625  
 Tel. 773.775.4009 Fax 773.775.4014  
 Email: cgr@cgiciorba.com

USER NAME = untitled	DESIGNED - JPA	REVISED -
	DRAWN - JPA	REVISED -
PLOT SCALE = 40.0000' / 1"	CHECKED - MJL	REVISED -
PLOT DATE = 3/12/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT  
 ROADWAY PLAN DETAIL - SN-126**

SCALE: 1" = 20'    SHEET NO. 4 OF 6 SHEETS    STA.                      TO STA.

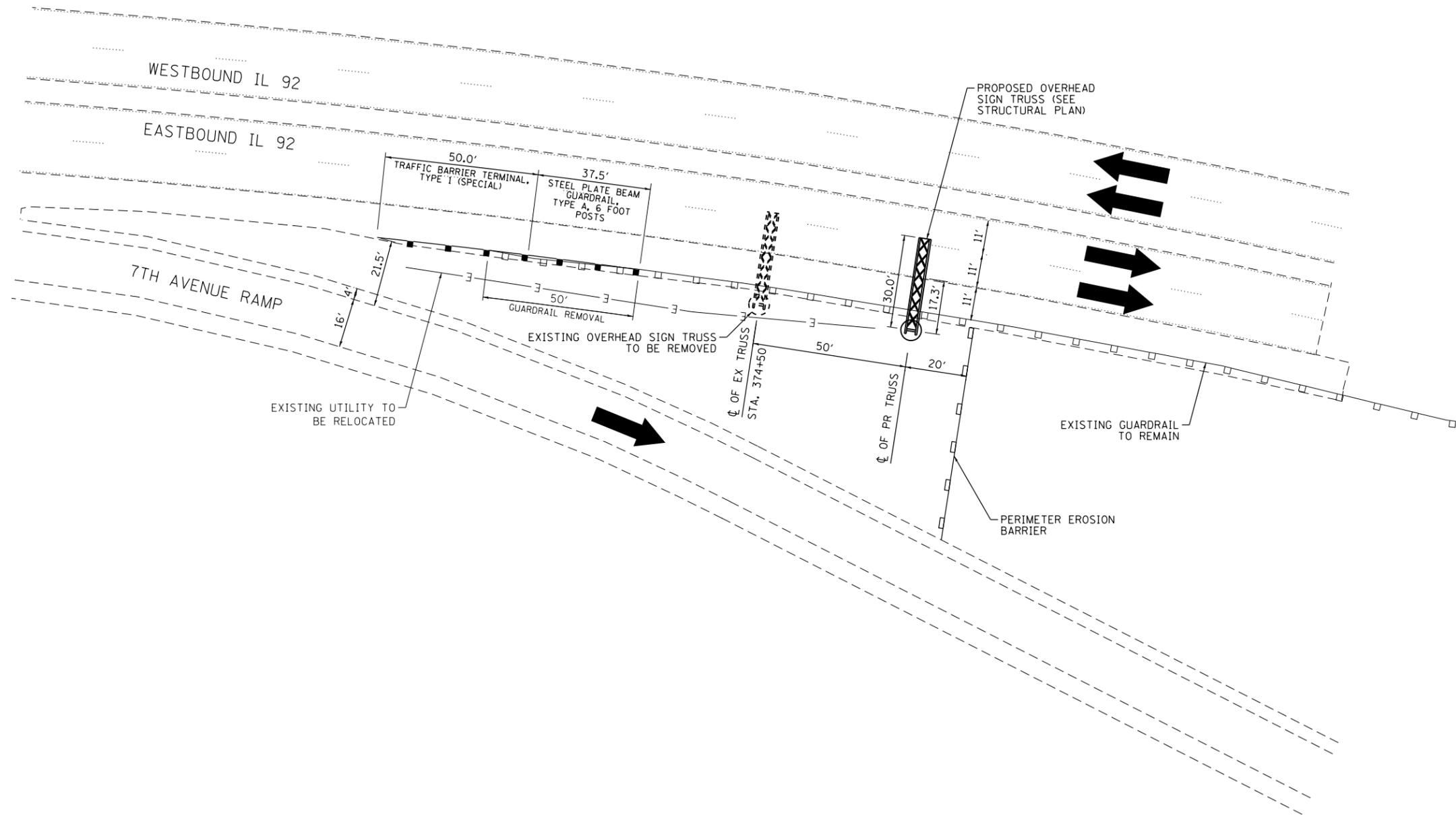
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	10
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

\*\*ROCK ISLAND & HENRY

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**NOTES:**

- 1) INSTALL PERIMETER EROSION BARRIER AS DIRECTED BY THE ENGINEER.
- 2) REMOVE EXISTING NORTHBOUND TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT.
- 3) INSTALL 37.5 FT OF GUARDRAIL ATTACHING TO EXISTING NORTHBOUND GUARDRAIL.
- 4) INSTALL TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT ON UPSTREAM END OF NORTHBOUND GUARDRAIL.



**ENGINEERING CONSULTANT**  
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 Chicago, Illinois 60625  
 Tel. 773.775.4009 Fax 773.775.4014  
 Email: chicago@ciorba.com

USER NAME = untitled	DESIGNED - JPA	REVISED -
	DRAWN - JPA	REVISED -
PLOT SCALE = 40,0000' / 1"	CHECKED - MJL	REVISED -
PLOT DATE = 3/12/2014	DATE -	REVISED -

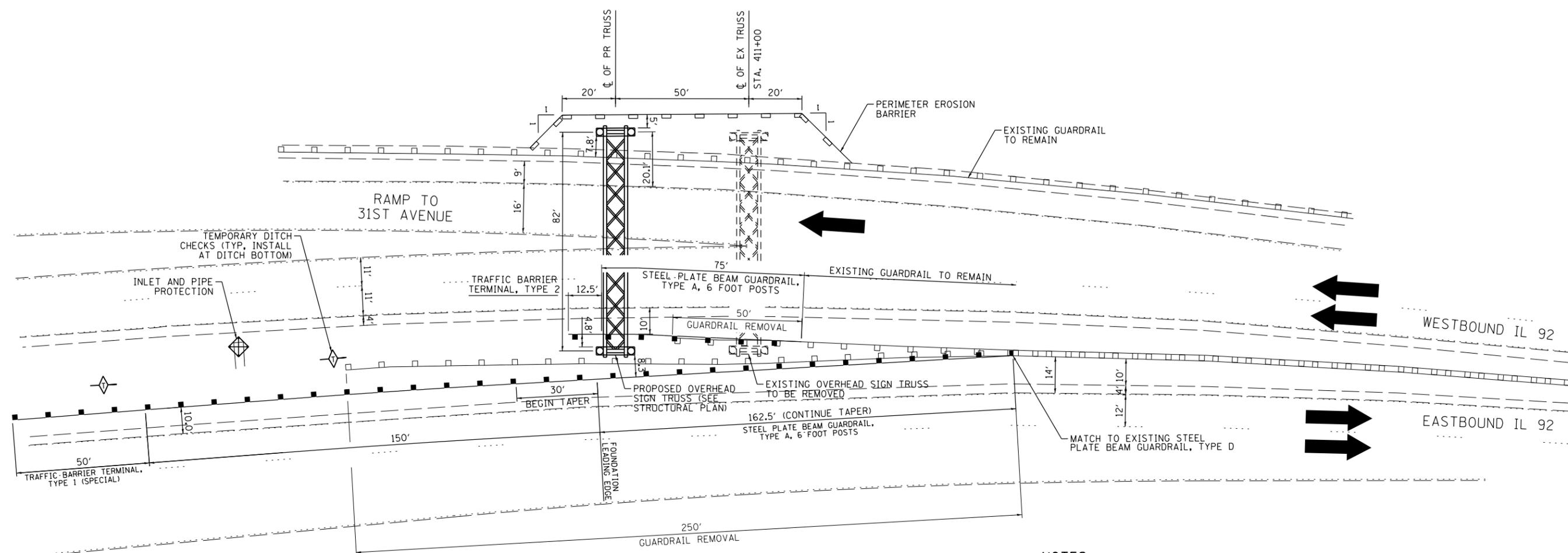
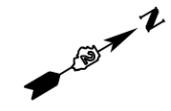
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT  
 ROADWAY PLAN DETAIL - SN-141**

SCALE: 1" = 20'    SHEET NO. 5 OF 6 SHEETS    STA.                      TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	11
• D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

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**NOTES:**

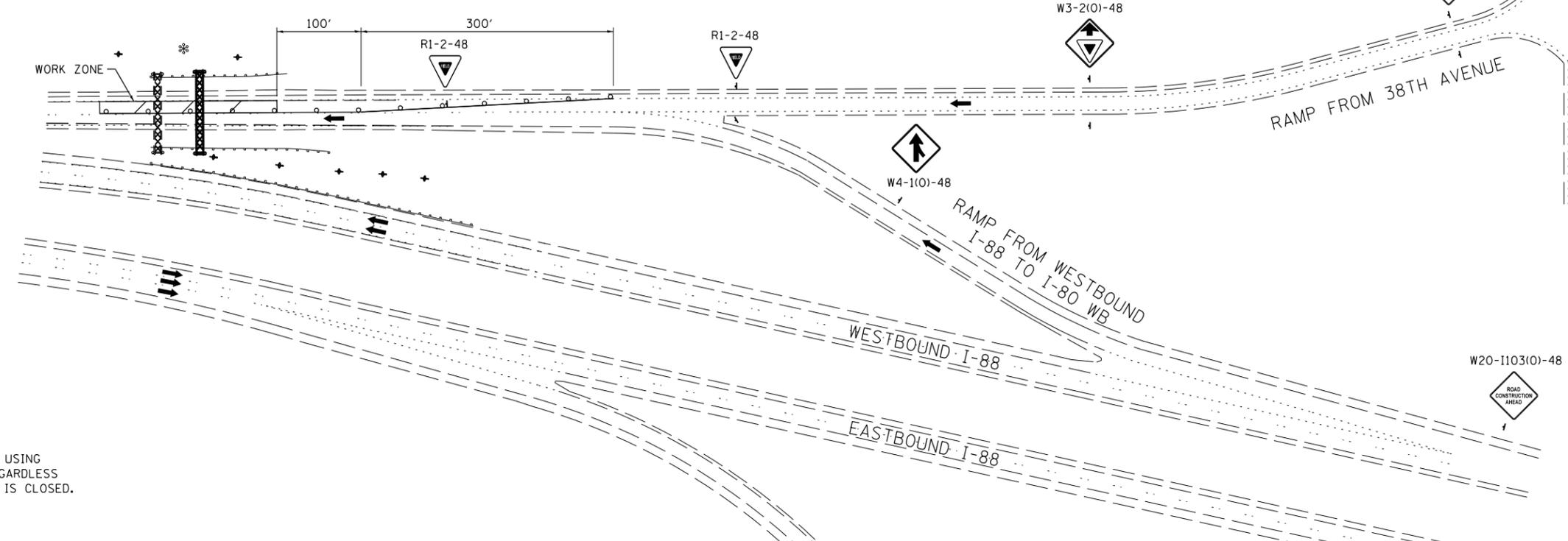
- 1) INSTALL TEMPORARY DITCH CHECKS, PERIMETER EROSION BARRIER, INLET AND PIPE PROTECTION AS DIRECTED BY THE ENGINEER.
- 2) INSTALL IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3.
- 3) INSTALL 300' OF TEMPORARY CONCRETE BARRIER ON WESTBOUND IL 92 AND 300' OF TEMPORARY CONCRETE BARRIER ON EASTBOUND IL 92.
- 4) REMOVE EXISTING WESTBOUND TRAFFIC BARRIER TERMINAL, TYPE 2 ALONG MEDIAN.
- 5) INSTALL 75 FT OF GUARDRAIL ATTACHING TO EXISTING WESTBOUND MEDIAN GUARDRAIL. MAINTAIN EXISTING TAPER UNTIL 10 FT FROM EDGE OF PAVEMENT.
- 6) INSTALL TRAFFIC BARRIER TERMINAL, TYPE 2, TO PROPOSED SOUTHBOUND MEDIAN GUARDRAIL.
- 7) EXISTING WESTBOUND OUTSIDE GUARDRAIL TO REMAIN
- 8) REMOVE EXISTING EASTBOUND MEDIAN GUARDRAIL.
- 9) INSTALL 312.5 FT OF GUARDRAIL ATTACHING TO EXISTING GUARDRAIL, TYPE D.
- 10) TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT TO PROPOSED EASTBOUND MEDIAN GUARDRAIL.
- 11) RELOCATE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS ONCE STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINALS ARE INSTALLED AND ACCEPTED BY THE ENGINEER.



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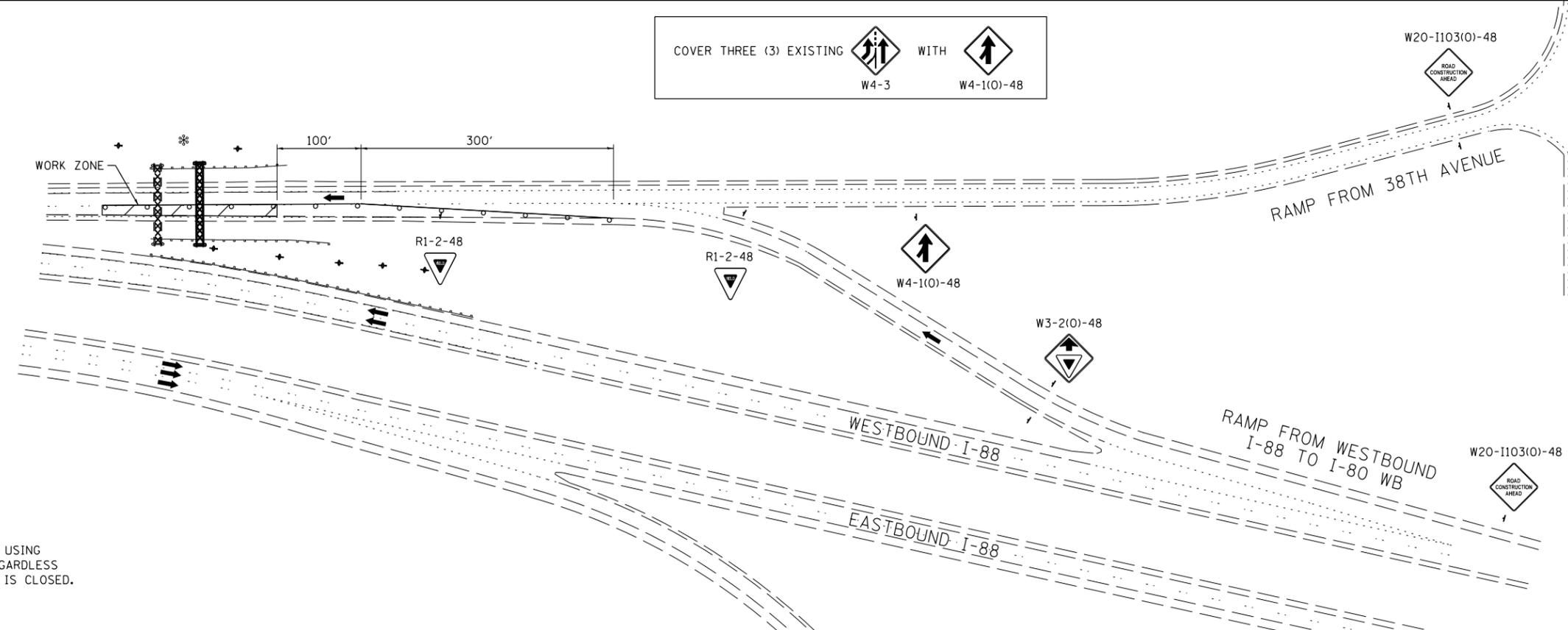
	ENGINEERING CONSULTANT	USER NAME = untitled	DESIGNED - JPA	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SIGN STRUCTURE REPLACEMENT ROADWAY PLAN DETAIL - SN-147</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONSULTING ENGINEERS	3007 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656 Tel. 773.775.4009 Fax 773.775.4014 Email: cigrpa@ciorba.com	DRAWN - JPA			REVISED -	VAR.	.	..	45
	PLOT SCALE = 40,0000' / in.	CHECKED - MJL	REVISIED -	REVISIED -	SCALE: 1" = 20'	SHEET NO. 6 OF 6 SHEETS	STA.	TO STA.	D-2 OVD SIN STR REPL 14-26 CONTRACT NO. 46287 ILLINOIS FED. AID PROJECT		
	PLOT DATE = 3/12/2014	DATE -	REVISIED -	REVISIED -	**ROCK ISLAND & HENRY						

COVER THREE (3) EXISTING  WITH   
W4-3 W4-1(O)-48



**NOTE:**  
TRAFFIC CONTROL TO BE PAID FOR USING  
IDOT HIGHWAY STANDARD 701411 REGARDLESS  
OF WHICH RAMP AT THIS LOCATION IS CLOSED.

COVER THREE (3) EXISTING  WITH   
W4-3 W4-1(O)-48



**NOTE:**  
TRAFFIC CONTROL TO BE PAID FOR USING  
IDOT HIGHWAY STANDARD 701411 REGARDLESS  
OF WHICH RAMP AT THIS LOCATION IS CLOSED.

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**ENGINEERING CONSULTANT**  
  
Ciorba Group, Inc.  
CONSULTING ENGINEERS  
8007 North Cumberland Avenue, Suite 402  
Chicago, Illinois 60656  
Tel. 773.775.4009 Fax 773.775.4014  
Email: chris@ciorba.com

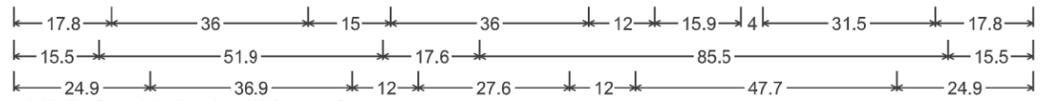
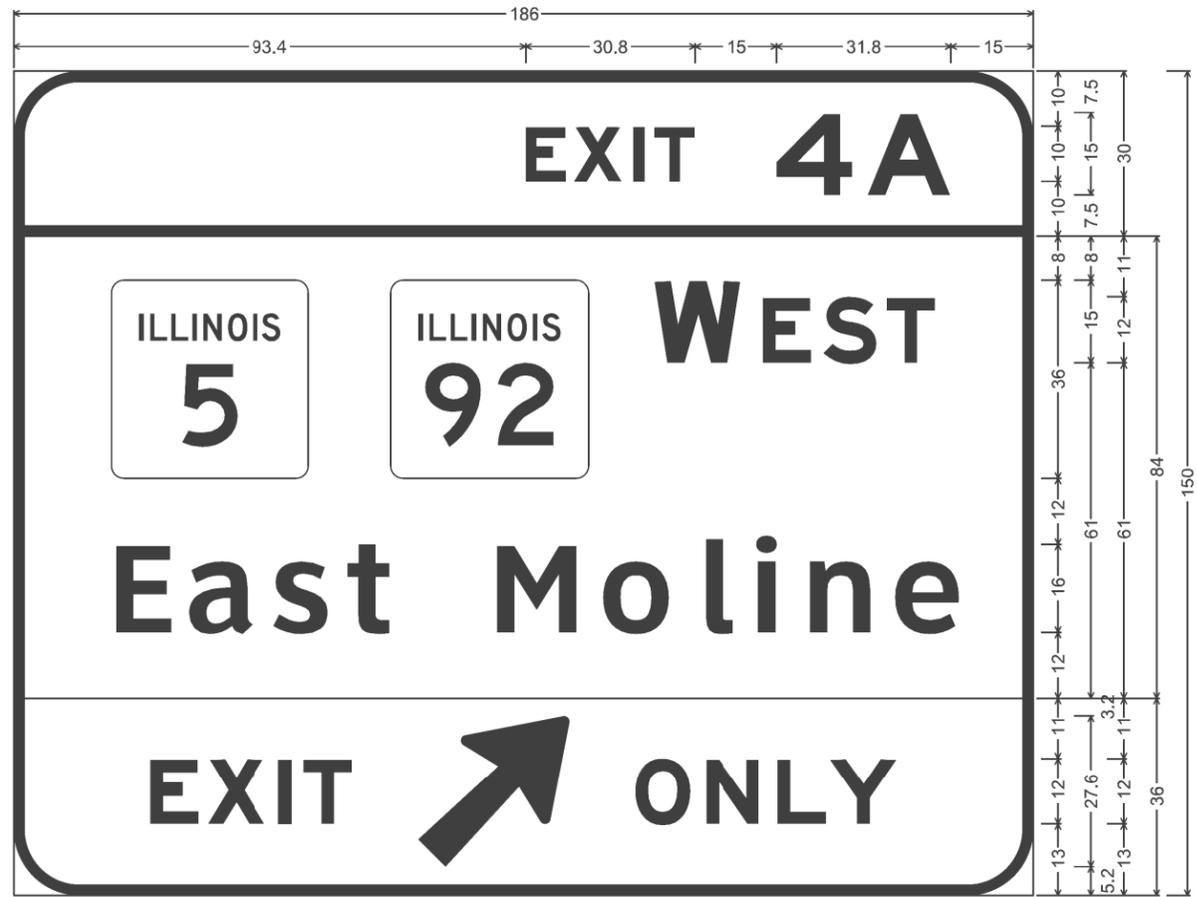
USER NAME = untitled  
DESIGNED - JPA  
DRAWN - JPA  
CHECKED - MJL  
DATE -  
PLOT SCALE = 40,0000' / 1" =  
PLOT DATE = 3/12/2014

DESIGNED - JPA  
DRAWN - JPA  
CHECKED - MJL  
DATE -  
REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT  
MAINTENANCE OF TRAFFIC DETAIL**  
SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

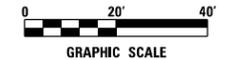
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	13
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				



12.0" Radius, 2.0" Border, White on Green;  
 [EXIT 4A] E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 [W EST] E Mod 2K; [East Moline] ClearviewHwy-5-W;  
 12.0" Radius, 2.0" Border, Black on Yellow;  
 [EXIT] E Mod 2K; Arrow 160 - 35.0" 45°; [ONLY] E Mod 2K;  
 Table of distances between letter and object lefts.

93.4	E	X	I	T	4	A	15.0				
8.8	10.8	3.8	22.4	16.6	15.2						
17.8	E	W	E	S	T	17.8					
51.0	48.0	19.9	11.1	11.5	8.9						
15.5	E	a	s	t	M	o	l	i	n	e	15.5
14.6	15.6	13.8	25.5	20.3	17.8	9.6	9.5	16.4	11.9		
24.9	E	X	I	T	↗	O	N	L	Y	24.9	
10.5	13.0	4.6	20.8	39.6	12.9	13.1	9.6	12.1			

SN-098  
 2C081I080L003.3



**ENGINEERING CONSULTANT**  
**Ciorba Group, Inc.**  
 CONSULTING ENGINEERS  
 8007 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60625  
 Tel. 773.775.4009 Fax 773.775.4014  
 Email: cigrp@ciorba.com

USER NAME = untitled	DESIGNED - JPA	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN - JPA	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MJL	REVISED -
	DATE -	REVISED -

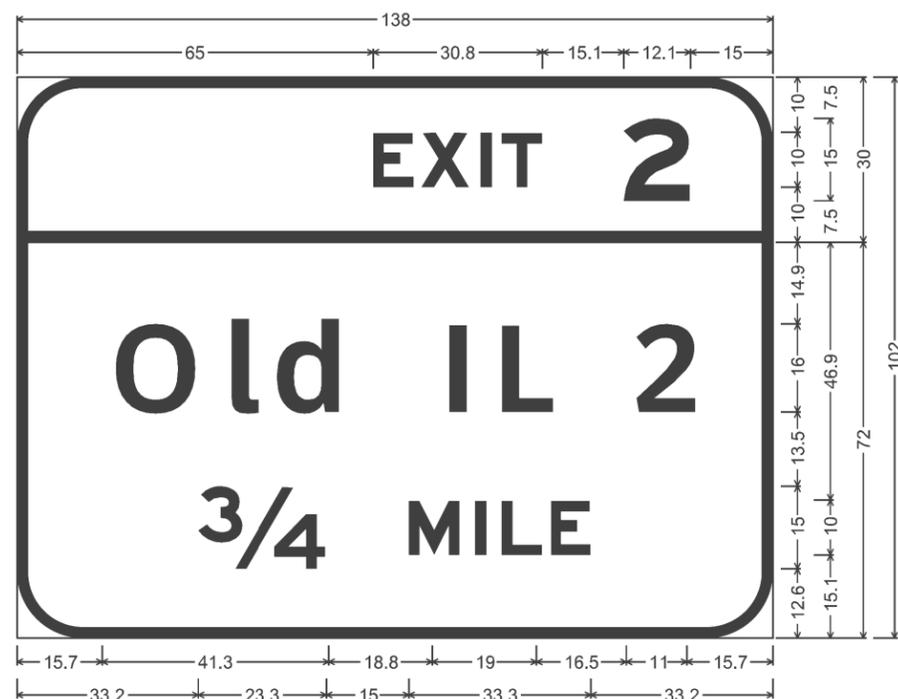
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SIGN STRUCTURE REPLACEMENT**  
**SIGN PANEL REPORT - SN-098**

SCALE: 1" = 20' SHEET NO. 1 OF 7 SHEETS STA. TO STA.

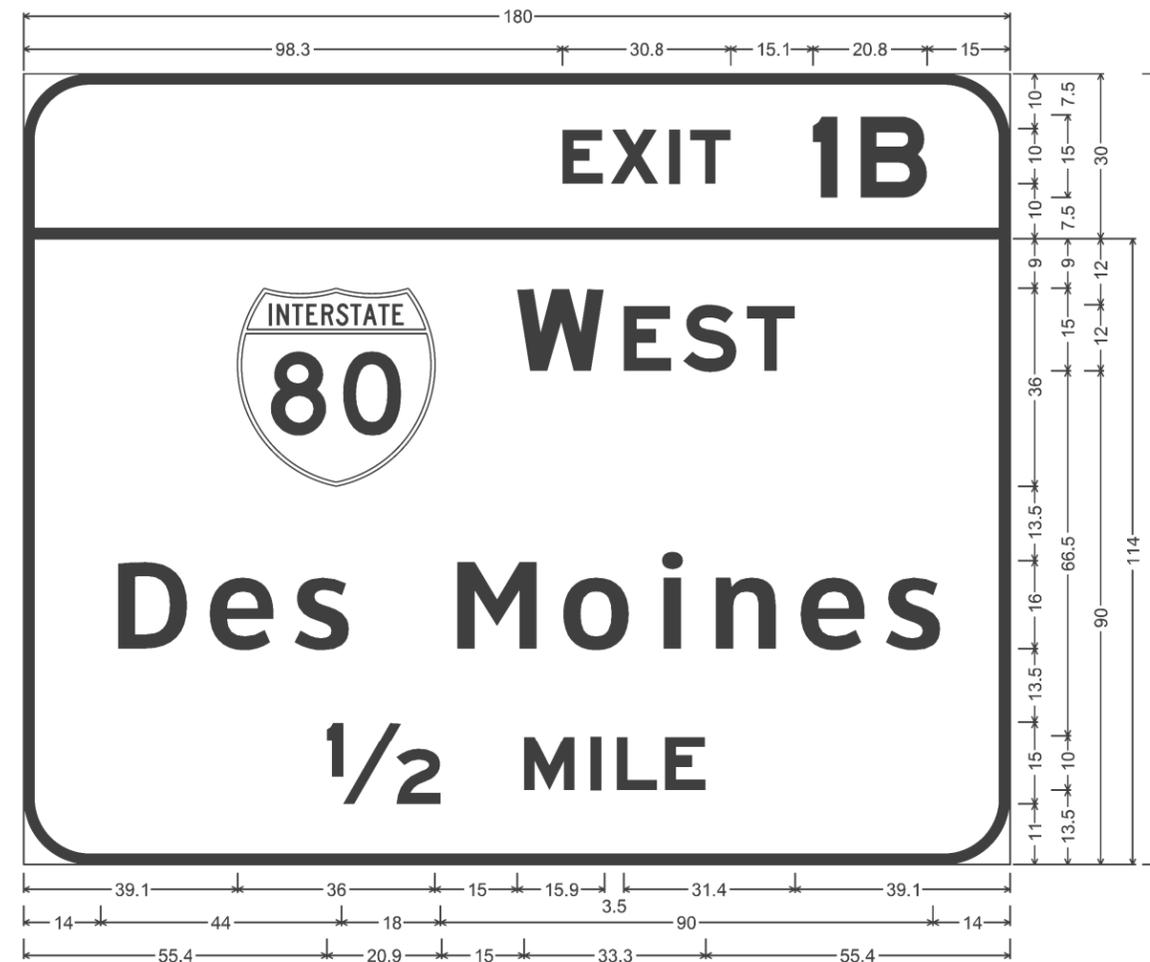
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	14
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

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12.0" Radius, 2.0" Border, White on Green;  
 [EXIT 2] E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 [Old IL 2] ClearviewHwy-5-W; [3/4 MILE] E Mod 2K;  
 Table of distances between letter and object lefts.

65.0	E	8.8	X	10.8	I	3.8	T	22.5	2	12.1	15.0
15.7	O	20.4	I	9.2	d	30.5	I	9.6	L	25.9	11.0
33.2	3/4	M	38.3	I	12.1	L	4.8	E	9.0	7.4	33.2



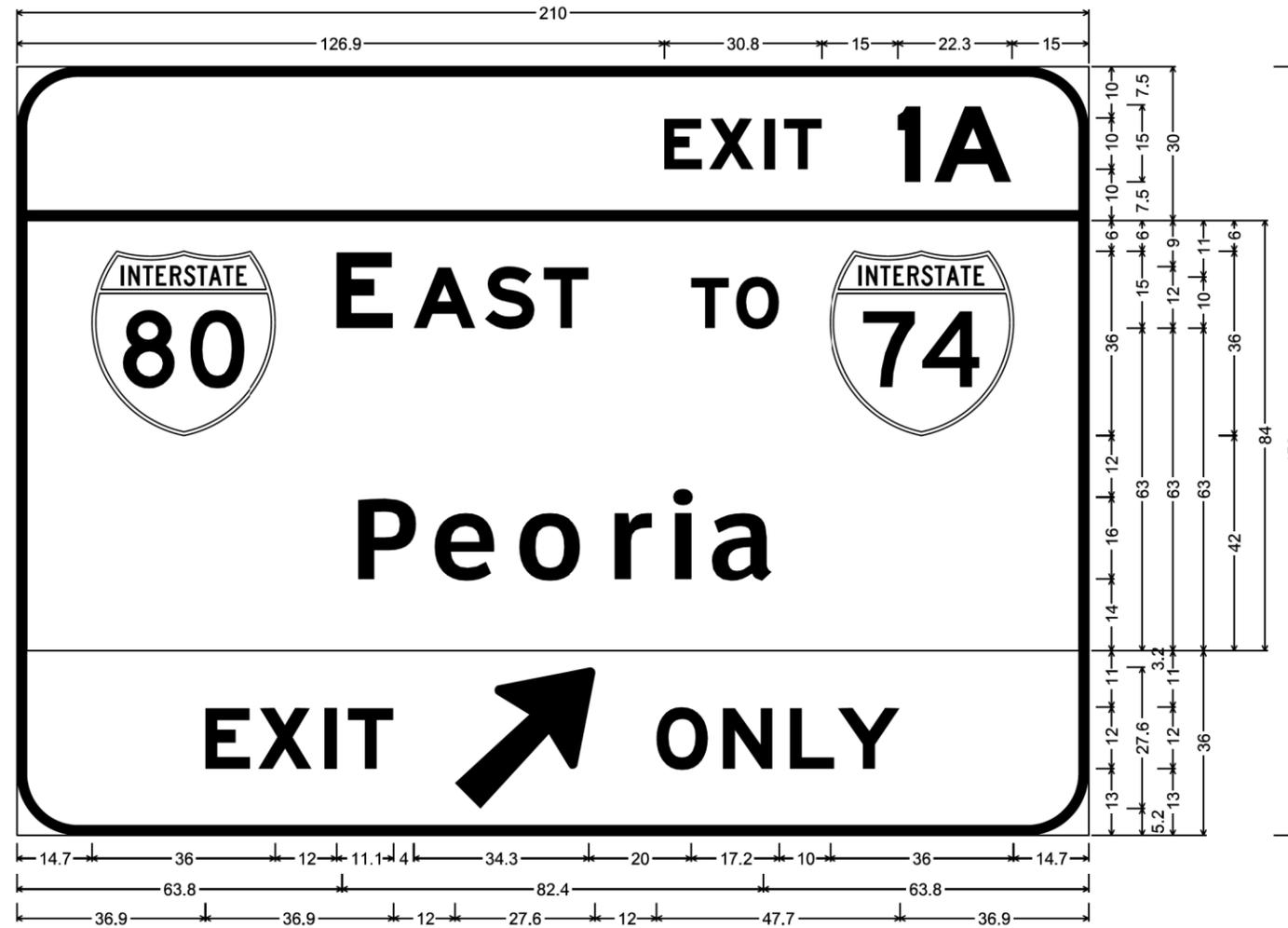
12.0" Radius, 2.0" Border, White on Green;  
 [EXIT 1B] E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 [W EST] E Mod 2K; [Des Moines] ClearviewHwy-5-W; [1/2 MILE] E Mod 2K;  
 Table of distances between letter and object lefts.

98.3	E	8.8	X	10.8	I	3.8	T	22.5	8.7	12.1	15.0
39.1	80	W	51.0	E	19.4	S	11.0	T	11.5	8.9	39.1
14.0	1/2	D	17.8	e	15.9	s	28.3	M	20.3	17.5	9.5
55.4	1/2	M	35.9	I	12.1	L	4.8	E	9.0	7.4	55.4

SN-101  
 2S081I088R015.3

	USER NAME = untitled	DESIGNED - JPA	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SIGN STRUCTURE REPLACEMENT</b> <b>SIGN PANEL REPORT - SN-101</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 10,0000' / 1" =	DRAWN - JPA	REVISED -			VAR.	•	••	45	15
	PLOT DATE = 3/12/2014	CHECKED - MJL	REVISED -			• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

••ROCK ISLAND & HENRY



12.0" Radius, 2.0" Border, White on Green;  
 [EXIT 1A] E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 [E AST TO] E Mod 2K; [Peoria] ClearviewHwy-5-W;  
 12.0" Radius, 2.0" Border, Black on Yellow;  
 [EXIT] E Mod 2K; Arrow 160 - 35.0" 45°; [ONLY] E Mod 2K;  
 Table of letter and object lefts.

E	X	I	T	I	A			
126.9	135.7	146.5	150.3	172.6	179.9			
80	E	A	S	T	T	O	74	
14.7	62.7	77.8	91.7	103.2	132.1	140.9	159.3	
P	e	o	r	i	a			
63.8	79.7	96.2	114.0	125.8	134.3			
E	X	I	T	↗	O	N	L	Y
36.9	47.4	60.4	65.0	85.8	125.4	138.3	151.4	161.0

SN-101  
 2S081I088R015.3



USER NAME = untitled	DESIGNED - JPA	REVISED -
	DRAWN - JPA	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED - MJL	REVISED -
PLOT DATE = 3/12/2014	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

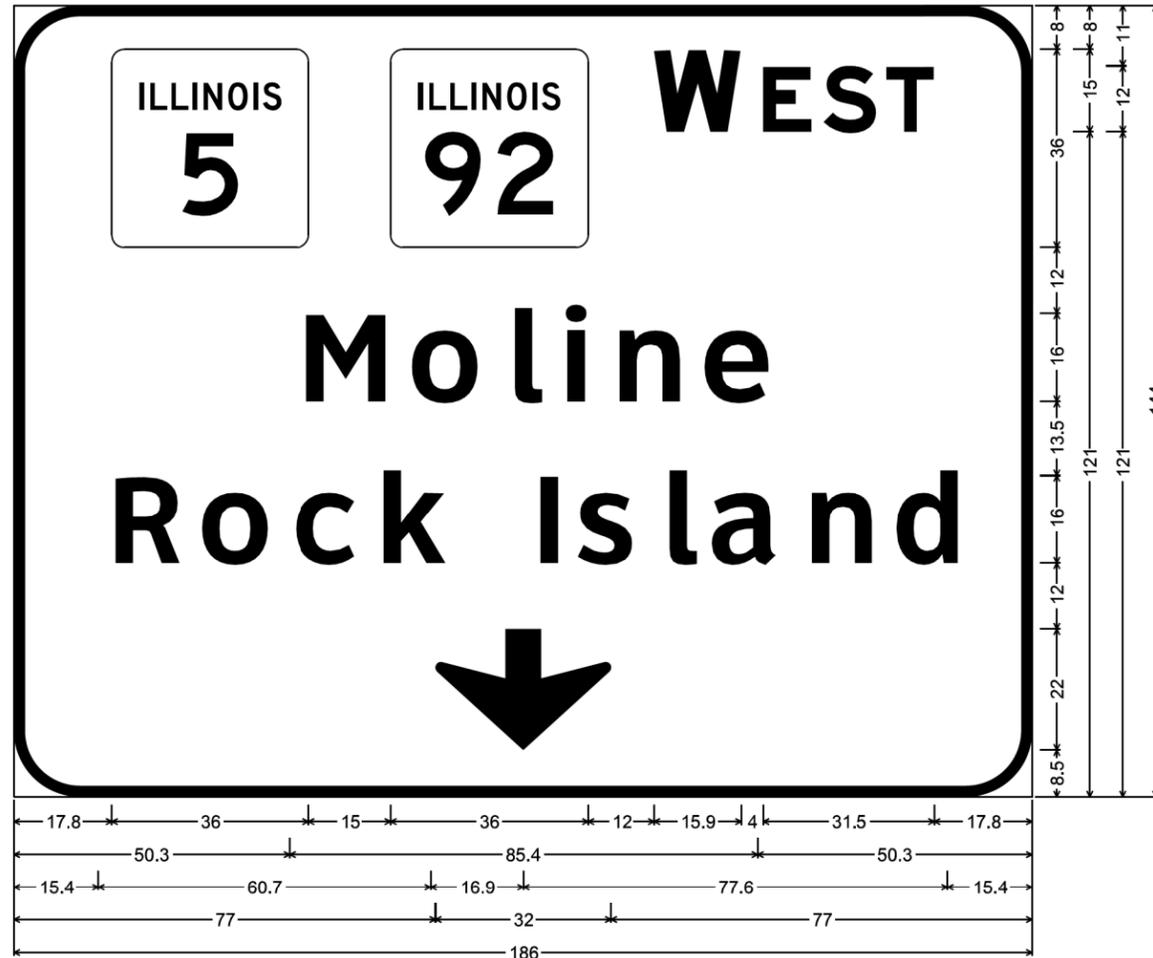
SIGN STRUCTURE REPLACEMENT  
 SIGN PANEL REPORT - SN-101

SCALE: N.T.S. SHEET NO. 3 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	16
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

\*\*ROCK ISLAND & HENRY

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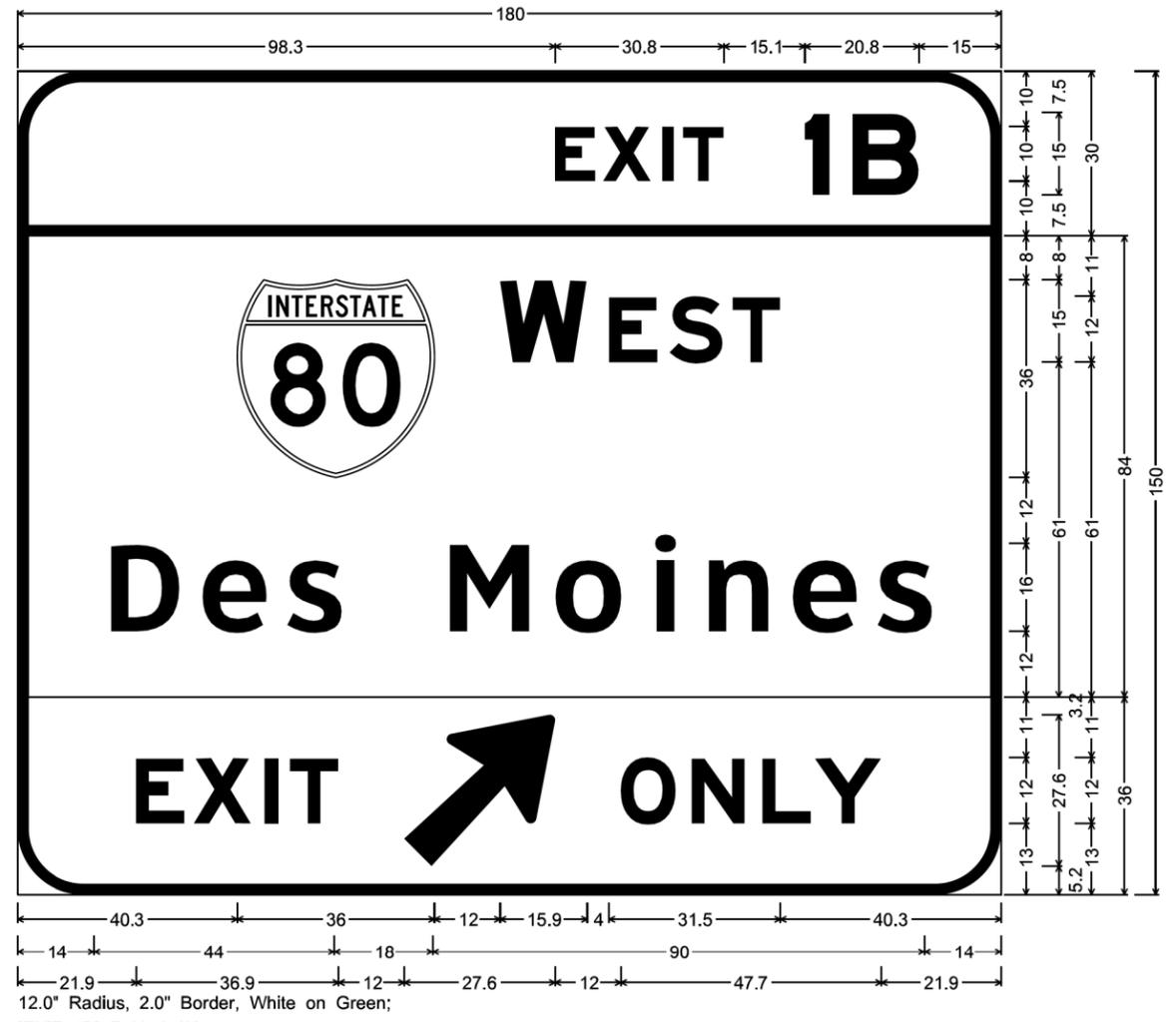


12.0" Radius, 2.0" Border, White on Green;

[W EST] E Mod 2K; [Moline] ClearviewHwy-5-W; [Rock Island] ClearviewHwy-5-W; Down Arrow 22.0" 270°;

Table of distances between letter and object lefts.

17.8	51.0	48.0	19.9	11.1	11.5	8.9	17.8
50.3	M	o	l	i	n	e	50.3
15.4	R	o	c	k	I	s	l
77.0	↓	32.0	77.0				



12.0" Radius, 2.0" Border, White on Green;

[EXIT 1B] E Mod 2K;

12.0" Radius, 2.0" Border, White on Green;

[W EST] E Mod 2K; [Des Moines] ClearviewHwy-5-W;

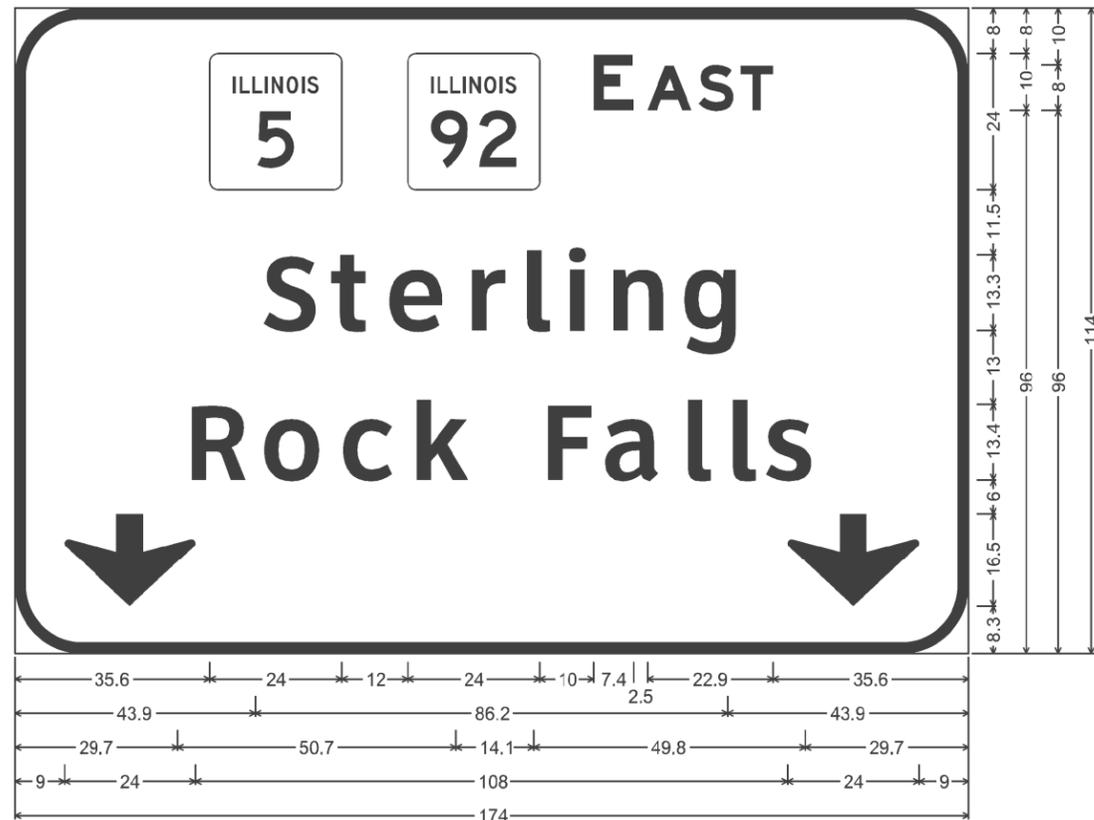
12.0" Radius, 2.0" Border, Black on Yellow;

[EXIT] E Mod 2K; Arrow 160 - 35.0" 45°; [ONLY] E Mod 2K;

Table of letter and object lefts.

98.3	X	107.2	I	117.9	T	121.8	I	144.1	B	152.9
40.3	88.3	108.2	119.3	130.8						
14.0	31.8	47.7	76.0	96.3	113.8	123.3	139.8	155.7		
21.9	32.4	45.4	50.0	70.8	110.4	123.3	136.4	146.0		

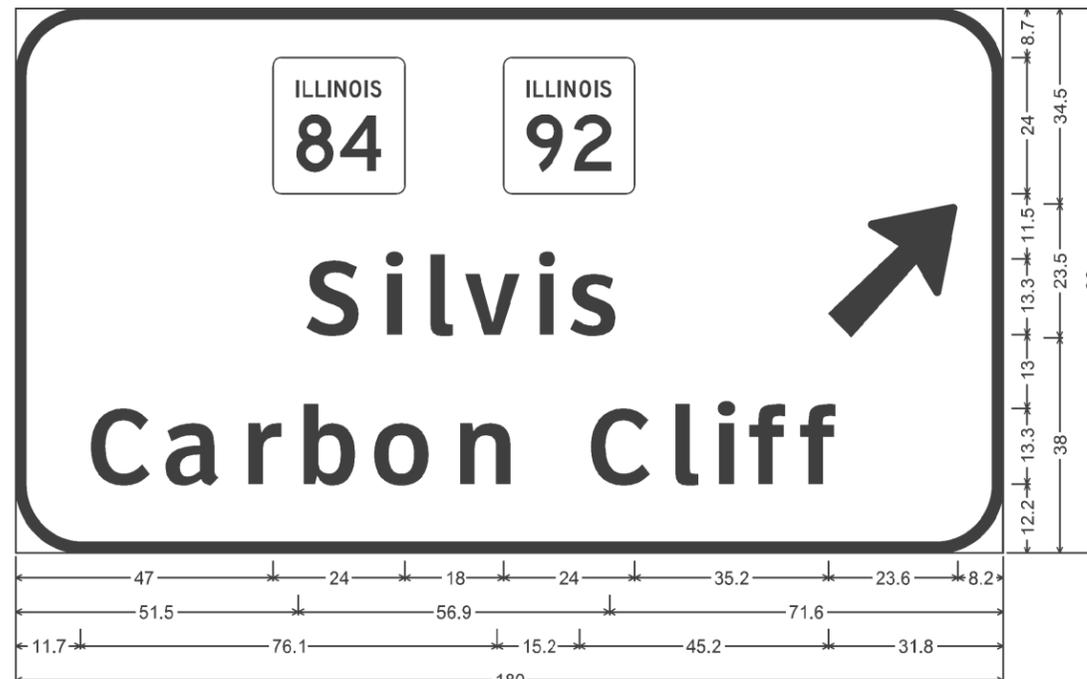
SN-104  
2S081I088L016.0



12.0" Radius, 2.0" Border, White on Green;  
 [E AST] E Mod 2K; [Sterling] ClearviewHwy-5-W; [Rock Falls] ClearviewHwy-5-W;  
 Down Arrow Custom - 16.5" 270°; Down Arrow Custom - 16.5" 270°;

Table of distances between letter and object lefts.

35.6	36.0	34.0	9.9	9.3	7.7	5.9	35.6			
43.9	S	t	e	r	l	i	n	g	43.9	
29.7	R	o	c	k	F	a	l	l	s	29.7
9.0	↓	↓	9.0							



12.0" Radius, 2.0" Border, White on Green;  
 [Silvis] ClearviewHwy-5-W; [Carbon Cliff] ClearviewHwy-5-W; Arrow 133 - 30.0" 45°;

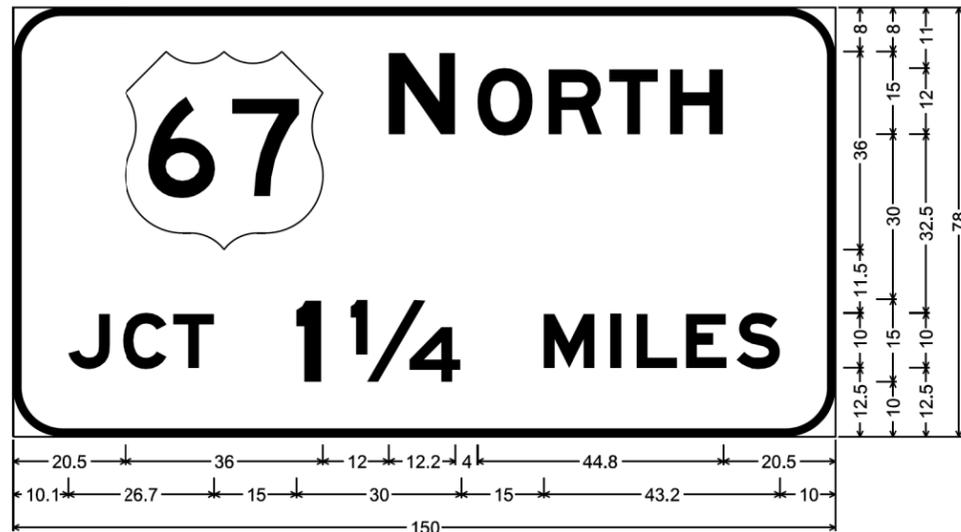
Table of distances between letter and object lefts.

47.0	42.0	59.2	23.6	8.2								
51.5	S	i	l	v	i	s	71.6					
11.7	C	a	r	b	o	n	C	l	i	f	f	31.8

SN-126  
 2S081S005R011.2

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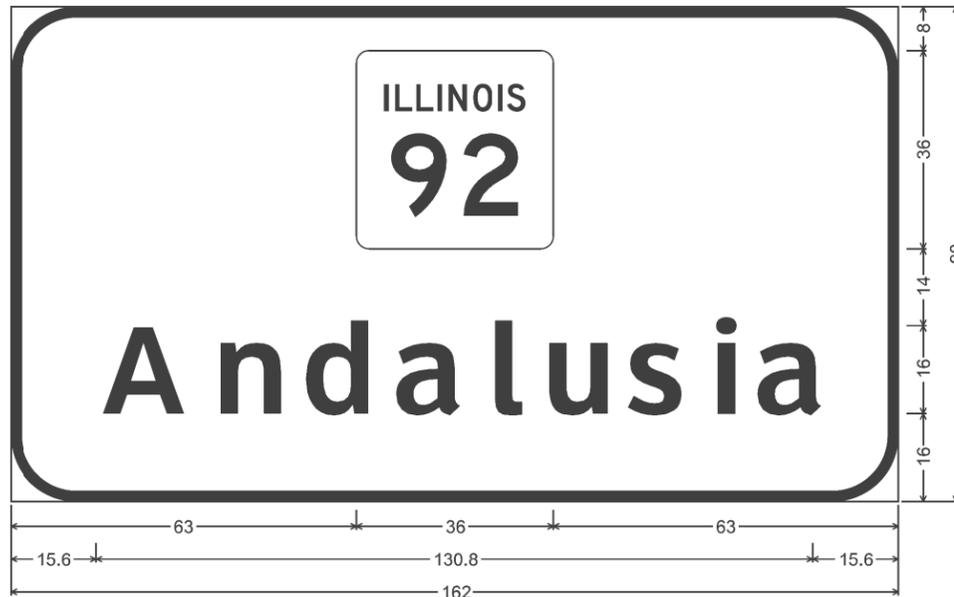


9.0" Radius, 1.5" Border, White on Green;  
 [N ORTH] E Mod 2K; [JCT 1 1/4 MILES] E Mod 2K;  
 Table of distances between letter and object lefts.

20.5	67	N	O	R	T	H	20.5				
48.0	16.2	13.0	11.0	11.0	9.8						
10.1	J	C	T	1	1/4	M	I	L	E	S	10.1
10.0	9.3	22.4	9.8	35.2	12.1	4.7	9.1	9.2	8.0		

SN-141  
 2C081S092R029.3

 <b>Ciorba Group, Inc.</b> CONSULTING ENGINEERS <small>8007 North Cumberland Avenue, Suite 402          Chicago, Illinois 60625          Tel. 773.775.4009 Fax 773.775.4014          Email: chicago@ciorba.com</small>	USER NAME = untitled	DESIGNED - JPA	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SIGN STRUCTURE REPLACEMENT</b> <b>SIGN PANEL REPORT - SN-141</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 10.0000' / in.	DRAWN - JPA	REVISED -			VAR.	.	**	45	19
PLOT DATE = 3/12/2014	CHECKED - MJL	REVISIED -	REVISIED -	SCALE: N.T.S.	SHEET NO. 6 OF 7 SHEETS	STA.	TO STA.	• D-2 OVD SIN STR REPL 14-26 ILLINOIS FED. AID PROJECT		
	DATE -	REVISIED -	REVISIED -				CONTRACT NO. 46287 **ROCK ISLAND & HENRY			



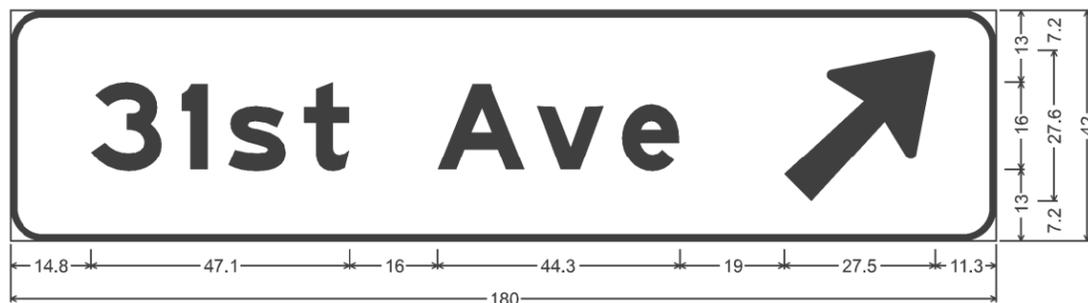
12.0" Radius, 2.0" Border, White on Green;  
 [Andalusia] ClearviewHwy-5-W;  
 Table of distances between letter and object lefts.

63.0		63.0								
15.6	A	n	d	a	l	u	s	i	a	15.6
19.6	16.4	16.7	16.9	9.9	15.7	15.1	8.5	12.0	15.6	



12.0" Radius, 2.0" Border, White on Green;  
 [Chicago] ClearviewHwy-5-W; [Des Moines] ClearviewHwy-5-W; [JCT 1/2 MILES] E Mod 2K;  
 Table of distances between letter and object lefts.

67.5		67.5									
38.1	C	h	i	c	a	g	o	38.1			
17.9	16.8	8.7	14.6	16.3	17.1	12.4	14.0	14.0			
14.0	D	e	s	M	o	i	n	e	s	14.0	
17.8	15.9	28.3	20.3	17.5	9.5	16.5	15.9	10.3	14.0		
24.6	J	C	T	1	1/2	M	I	L	E	S	24.6
10.0	9.3	22.4	9.9	36.0	12.1	4.8	9.0	9.2	8.1	24.6	



6.0" Radius, 1.3" Border, White on Green;  
 [31st Ave] E Mod 2K; Arrow 160 - 35.0" 45°;  
 Table of distances between letter and object lefts.

14.8	3	1	s	t	A	v	e		11.3
16.5	8.5	13.7	24.4	18.2	15.5	29.6	27.5	11.3	

SN-147  
 2S081S092L028.0



USER NAME = untitled	DESIGNED - JPA	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN - JPA	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MJL	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SIGN STRUCTURE REPLACEMENT  
 SIGN PANEL REPORT - SN-147

SCALE: N.T.S. SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	.	**	45	20
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
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  
 $f_c = 3,500$  p.s.i.  
 $f_y = 60,000$  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 Concrete Sealer in accordance with the Standard Specifications.

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

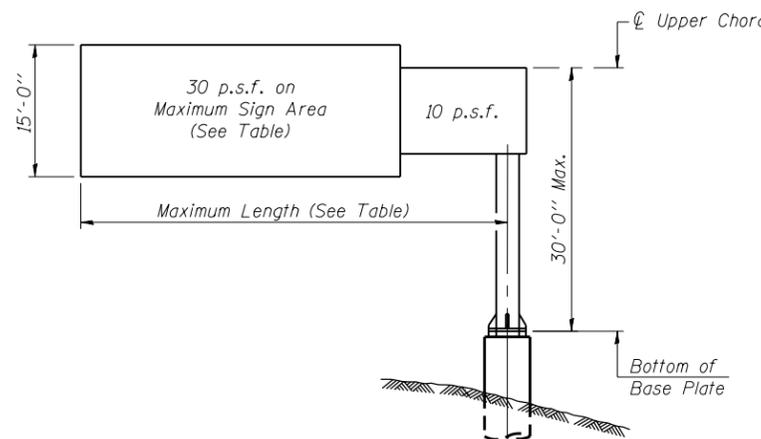
FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	60.0
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	38.4
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	17.3
ROCK EXCAVATION FOR STRUCTURE	Cu. Yds.	2.6

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D <sub>s</sub>	Total Sign Area
2C0811080L003.3		II-C-A	30'-0"	625.43	14'-6"	12'-6"	193.75
2C081S092R029.3		II-C-A	30'-0"	568.58	17'-4"	6'-6"	81.25

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



**DESIGN WIND LOADING DIAGRAM**

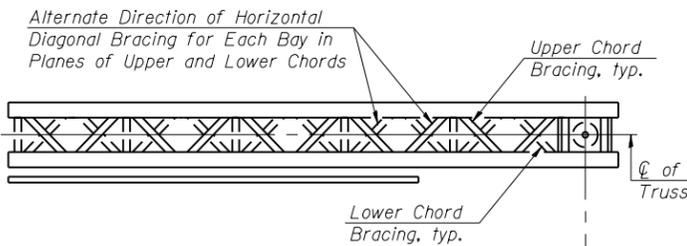
Parameters shown are basis for I.D.O.T. Standards. Installations not within dimensional limits shown require special analysis for all components.

Note:

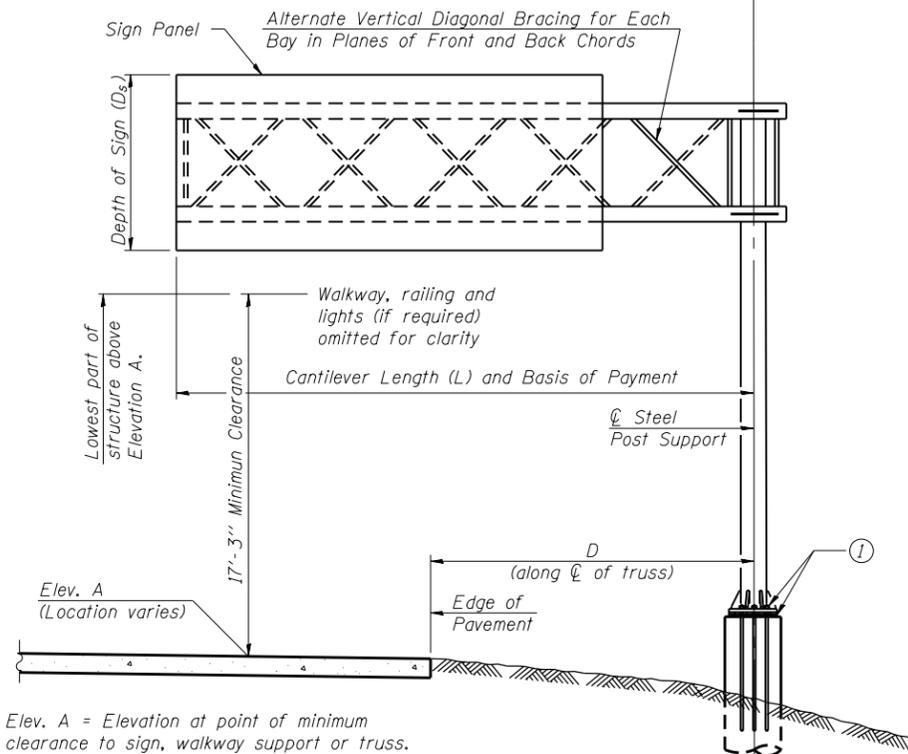
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of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

① After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

\* 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.



**TYPICAL PLAN**  
(Walkway not shown)



**TYPICAL ELEVATION**

Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

D-2  
Inventory #  
SN-098  
SN-141

OSC-A-1

8-21-13

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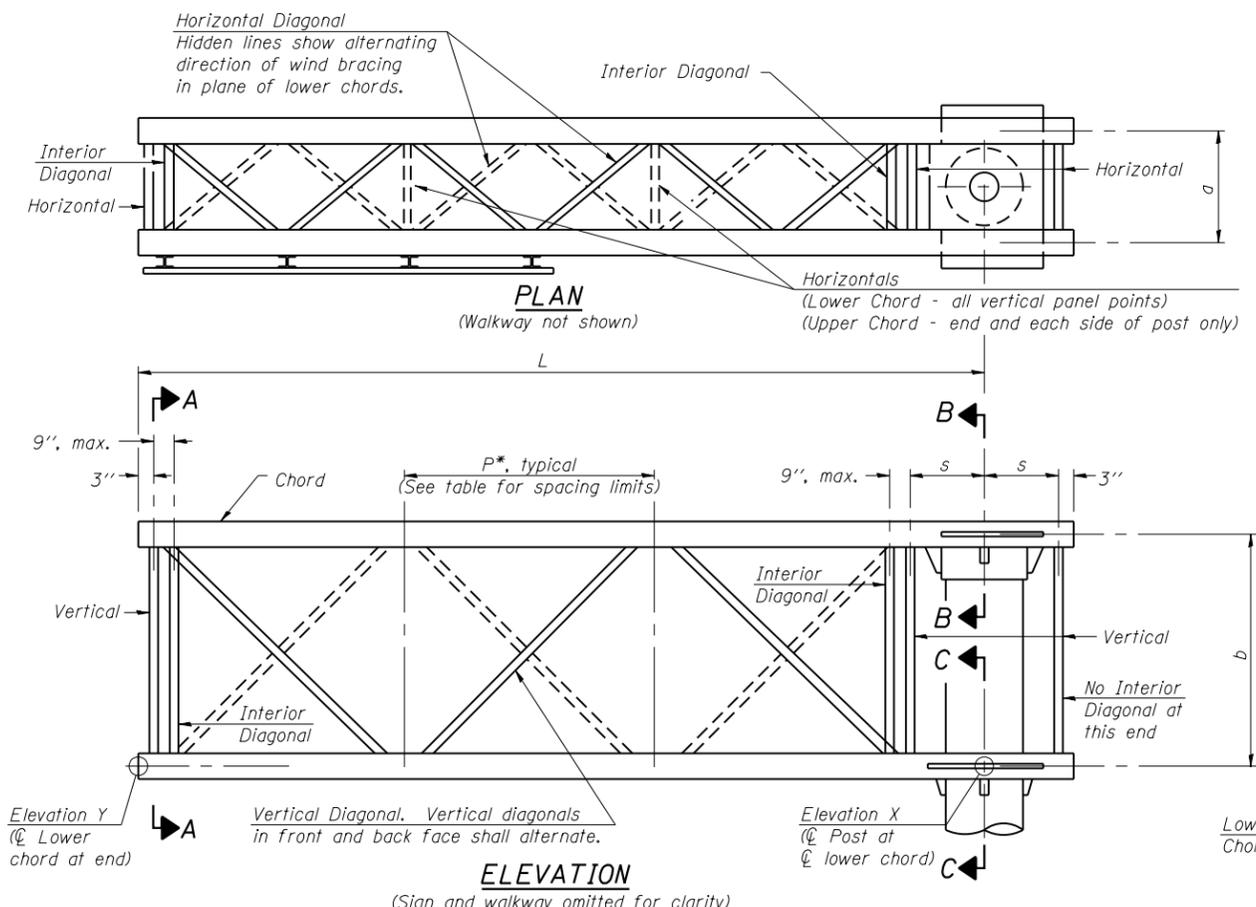
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	CHECKED - JJS	REVISED -
PLOT SCALE =	DRAWN - AI	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MAI	REVISED -

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CANTILEVER SIGN STRUCTURES - GENERAL PLAN & ELEVATION  
ALUMINUM TRUSS & STEEL POST

Sheet No. 1 of 9

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	21
• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				



**TYPICAL TRUSS UNIT**

Note: For Section B-B and Section C-C, see Base Sheet OSC-A-3.

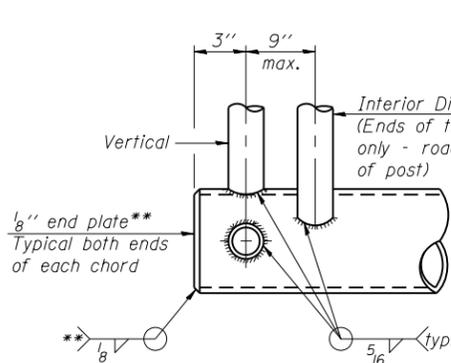
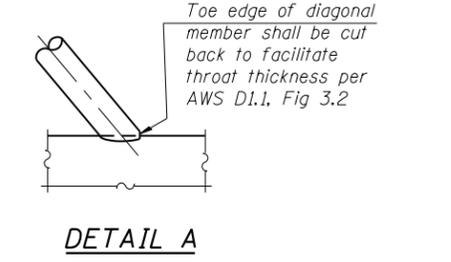
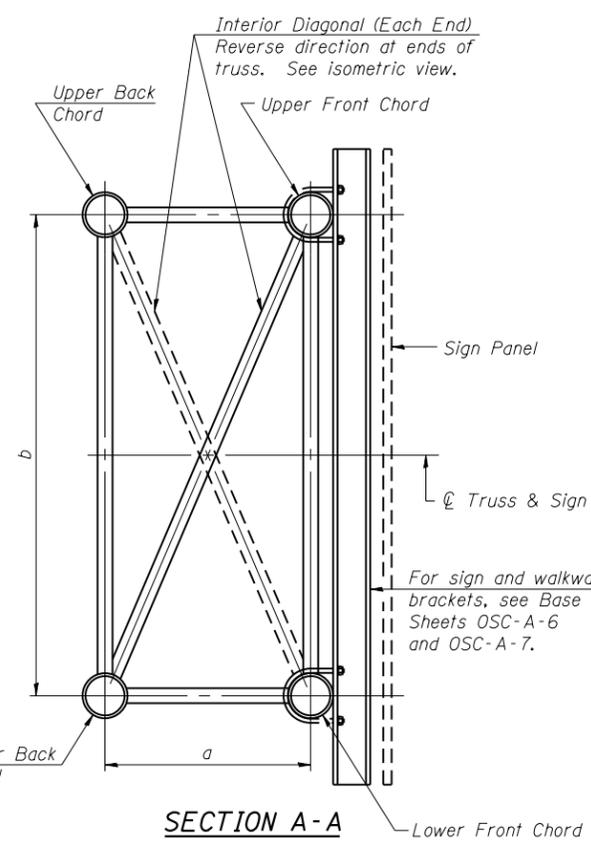
There are twice as many horizontal diagonals as there are vertical diagonals.

**TRUSS UNIT TABLE**

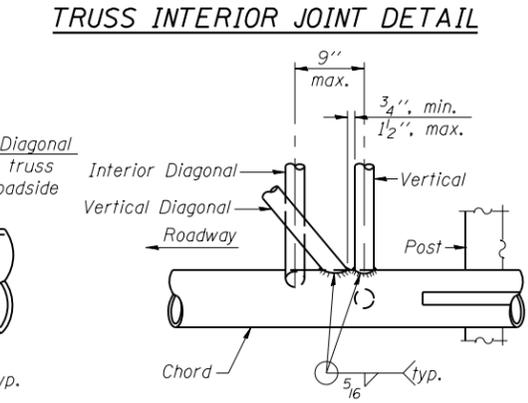
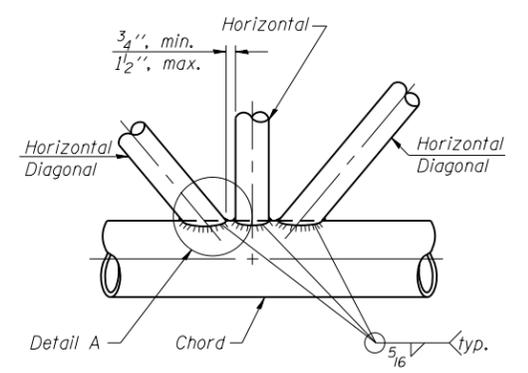
Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals	
					O.D.	Wall	O.D.	Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

\*P = (L - s - 3") / # Panels

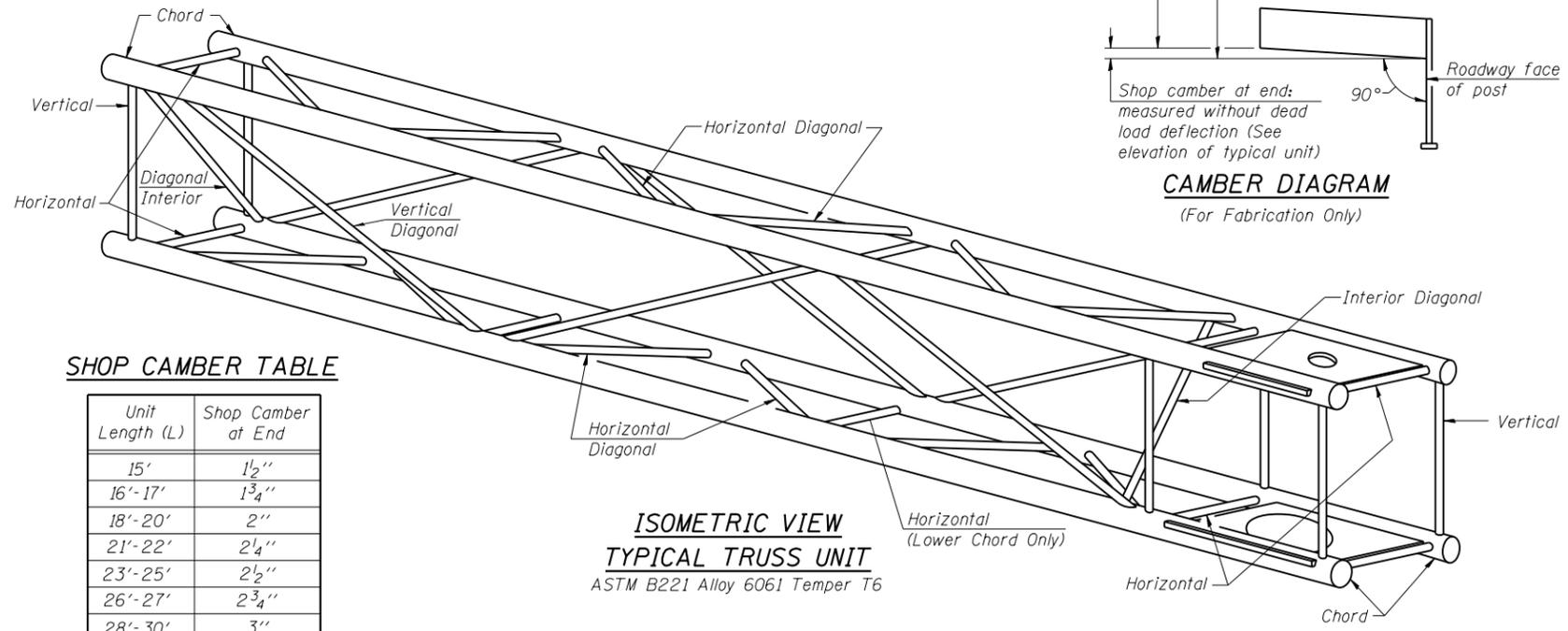
D-2 Inventory #	Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
SN-098	2C0811080L003.3		II-C-A	30'-0"	7	4'-0"
SN-141	2C081S092R029.3		II-C-A	30'-0"	7	4'-0"



\*\* Contractor may alternatively use standard aluminum drive-fit cap to close ends. 1/2" φ Drain hole in end plate / drive-fit cap.

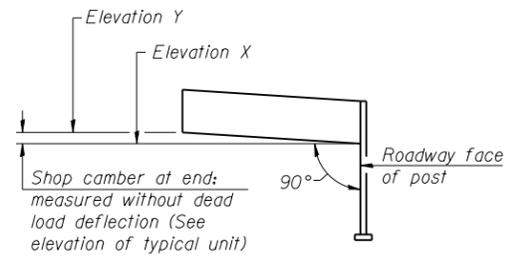


**POST END JOINT DETAIL**



**SHOP CAMBER TABLE**

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"



OSC-A-2 6-1-12

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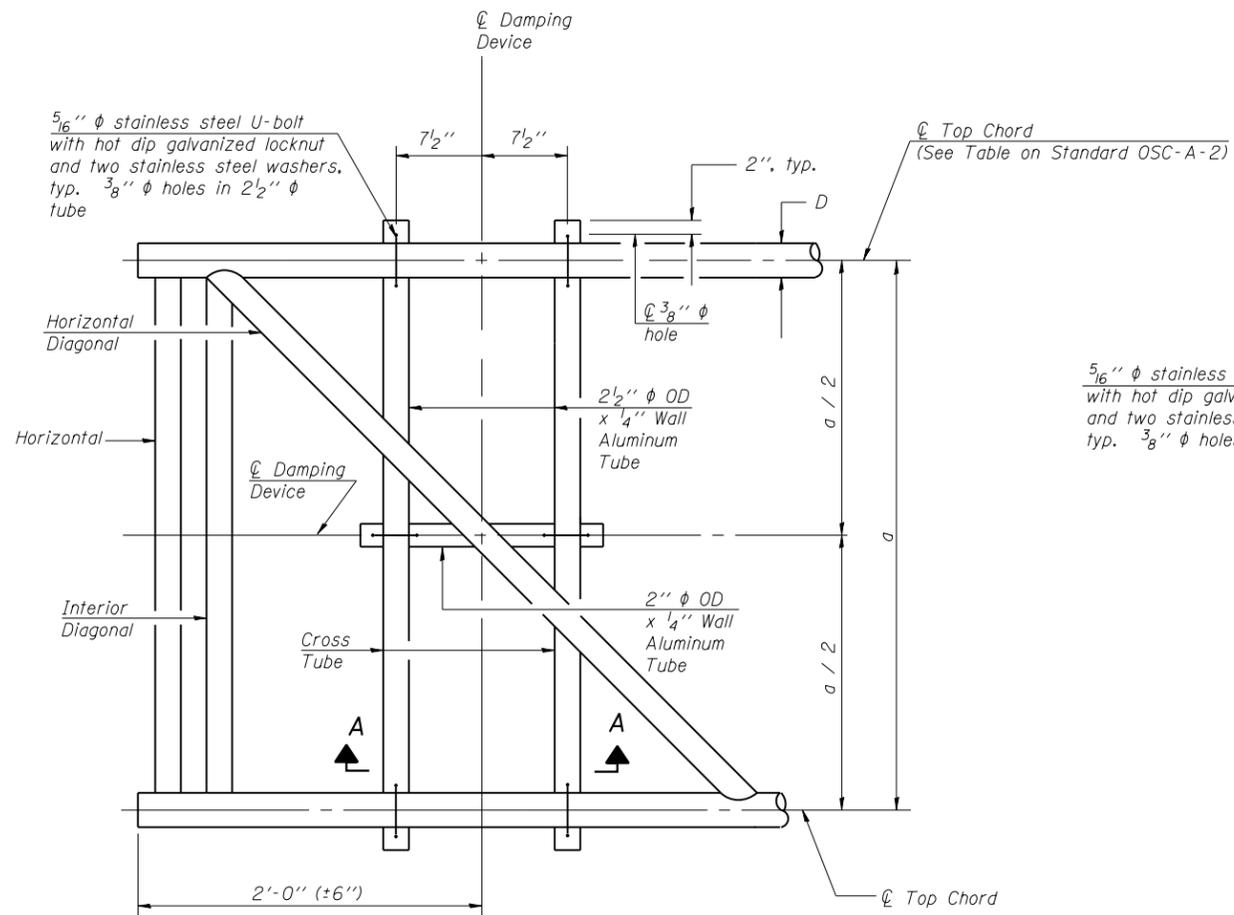
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DESIGNED - JMG  
CHECKED - JJS  
PLOT SCALE =  
PLOT DATE = 3/12/2014  
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

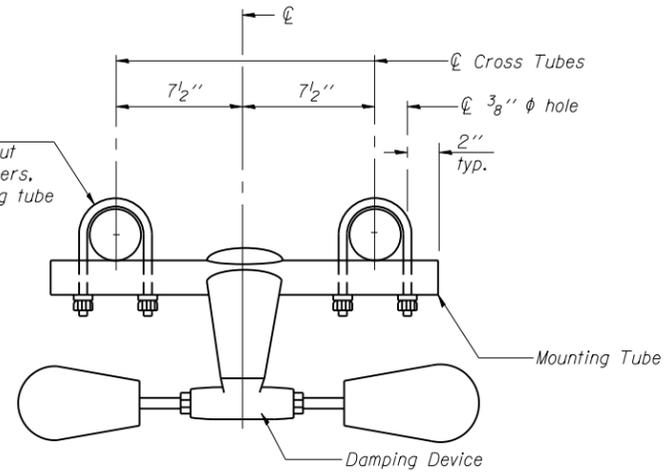
CANTILEVER SIGN STRUCTURES - TRUSS DETAILS  
ALUMINUM TRUSS & STEEL POST

Sheet No. 2 of 9

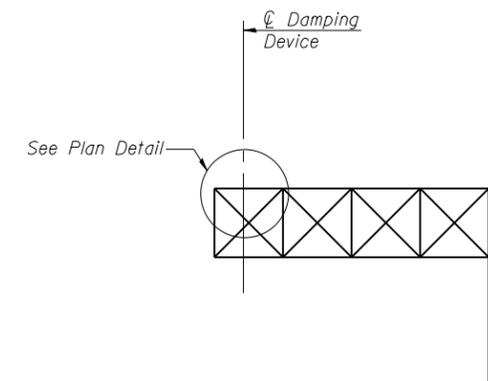
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	22
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				



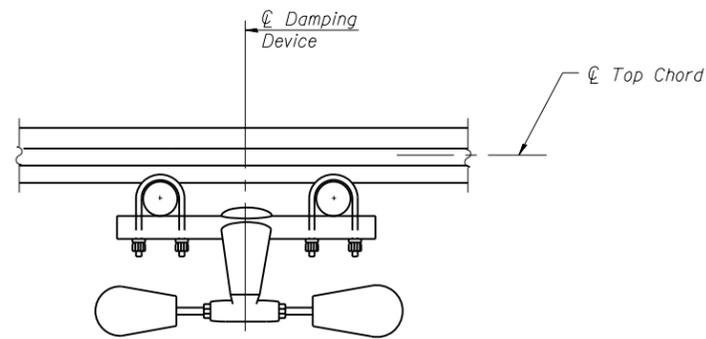
**PLAN DETAIL**



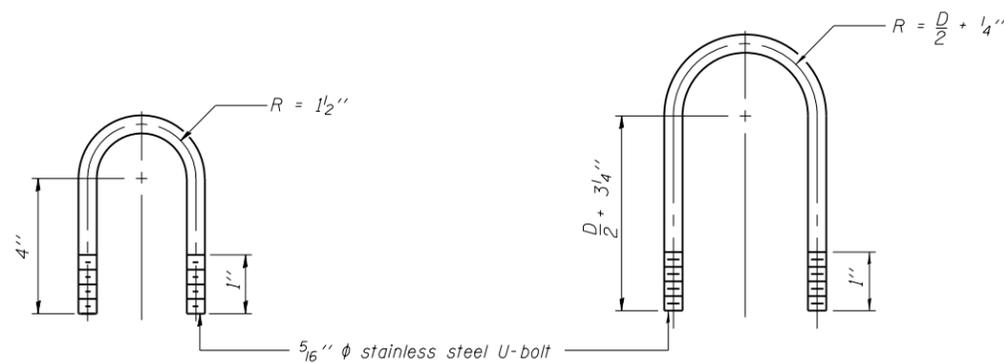
**TRUSS DAMPING DEVICE CONNECTION DETAIL**



**ELEVATION**  
Aluminum Cantilever Sign Structure



**SECTION A-A**



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

**TOP CHORD TO CROSS TUBE U-BOLT DETAIL**  
(Typical)

**GENERAL NOTES**

- Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum-29" minimum between ends of weights)
- Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6

OSC-A-D

6-1-12

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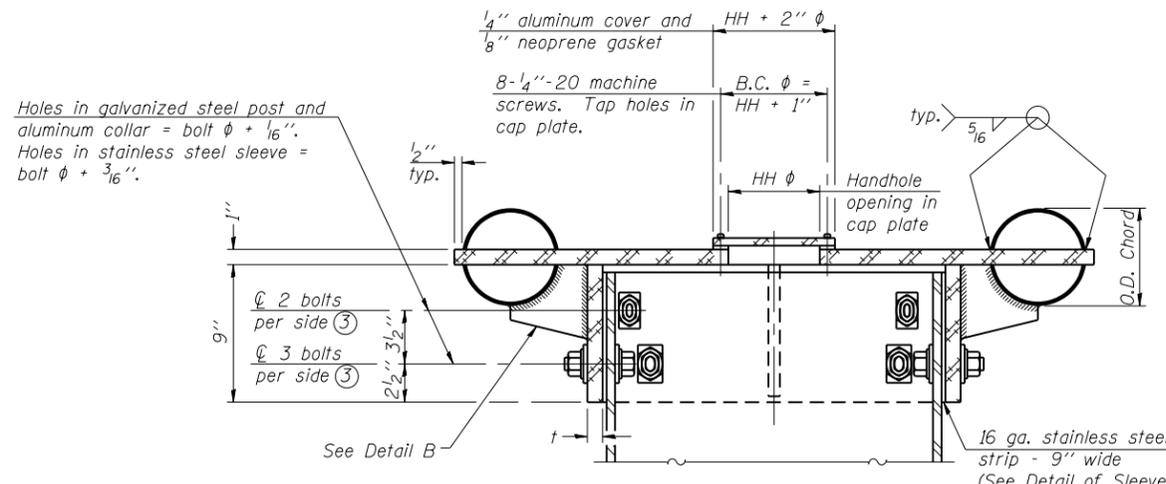
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	CHECKED - JJS	REVISED -
PLOT SCALE =	DRAWN - AI	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MAI	REVISED -

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DEPARTMENT OF TRANSPORTATION**

**CANTILEVER SIGN STRUCTURE  
DAMPING DEVICE**

Sheet No. 3 of 9

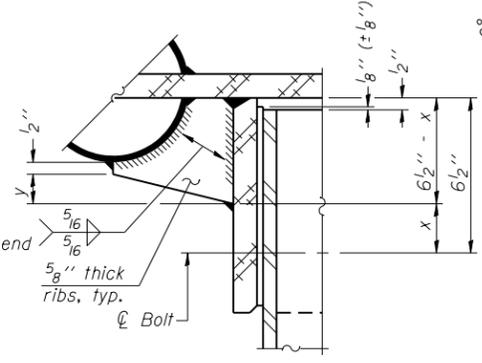
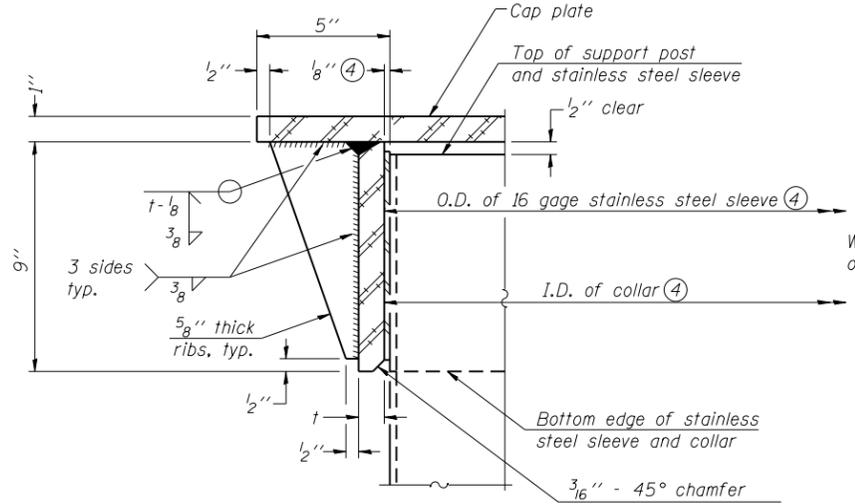
F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	23
• D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				



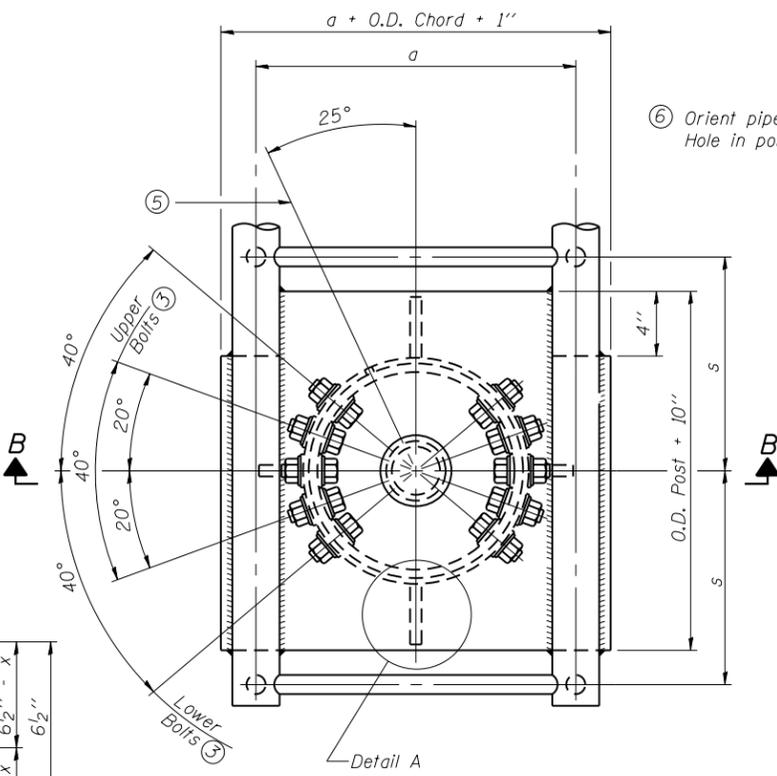
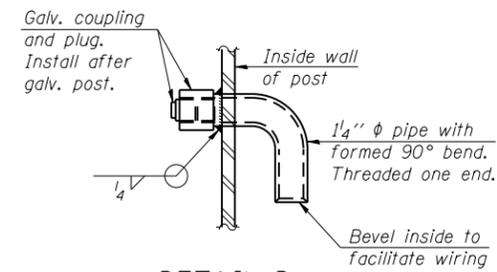
4 Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" ( $\pm 1/16"$ ). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.

**SECTION B-B**

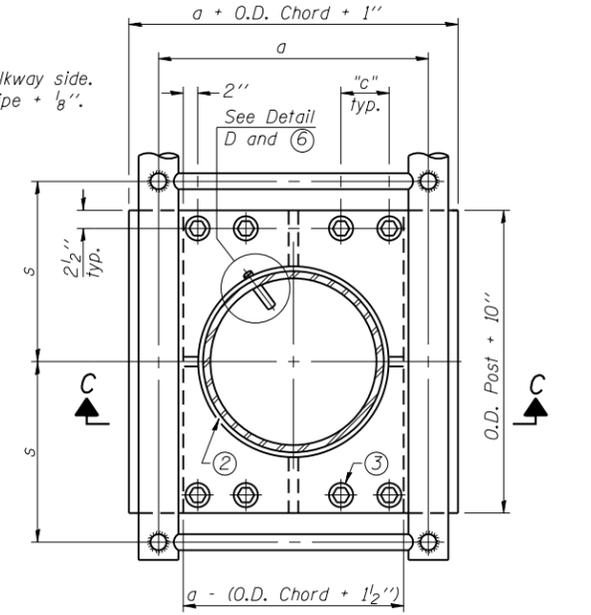
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.



Two locations (For details not shown, see Detail C)

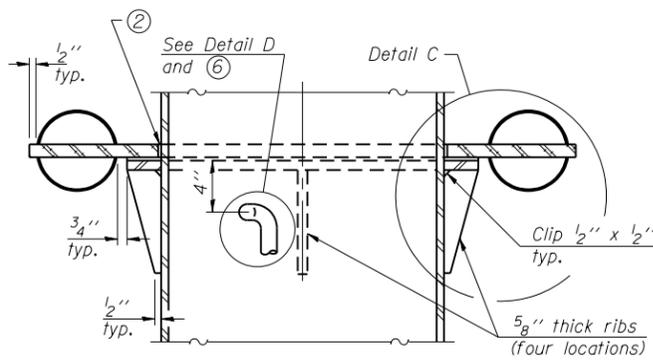


Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)

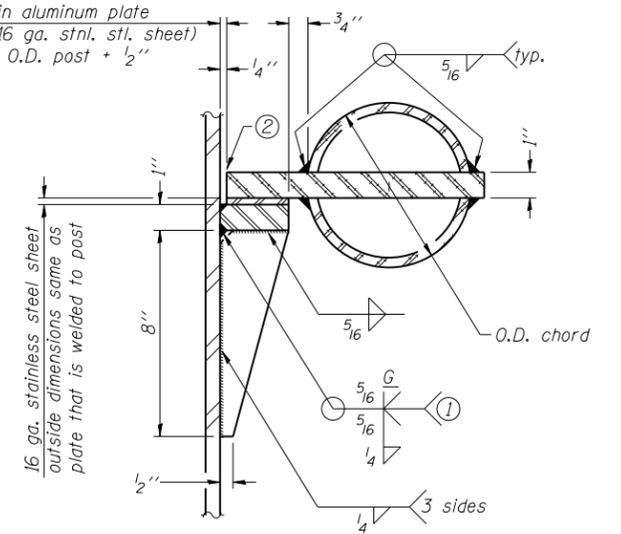


**SECTION THRU POST ABOVE LOWER CHORDS**

Hole in aluminum plate (and 16 ga. stnl. stl. sheet) to be O.D. post + 1/2"



**SECTION C-C**



- 1 Grind top if required to fully seat aluminum plate and stainless steel sheet.
- 2 After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.
- 3 Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

**CONTOURED WASHERS**

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8"	1"	2 1/2"
1"	1 1/8"	3"
1 1/4"	1 3/8"	3 1/4"

**DETAIL OF STAINLESS STEEL SLEEVE**

Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1/2" long at 6" cts. along top edge and at 1/4" opening.

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter (3)	Lower Juncture Bolt Spacing Dimension "c" (3)	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16" $\phi$ (83#/' )	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" $\phi$ (125#/' )	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" $\phi$ (125#/' )	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" $\phi$ (171#/' )	1 1/4"	3 1/2"	12"	7/8"	2"	1"

OSC-A-3

6-1-12

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CHECKED - JJS  
PLOT SCALE =  
DRAWN - AI  
PLOT DATE = 3/12/2014

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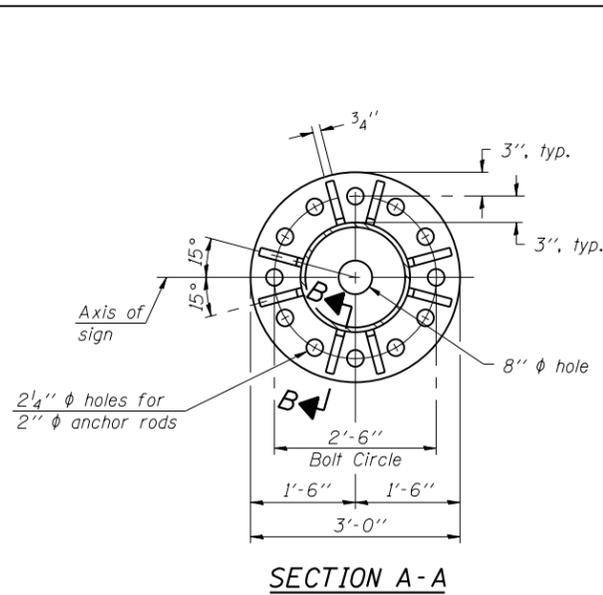
DESIGNED - JMG  
CHECKED - MAI

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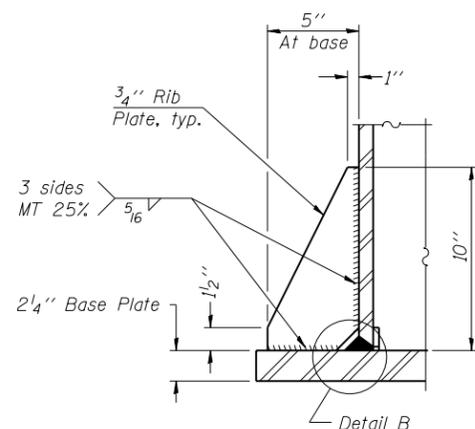
CANTILEVER SIGN STRUCTURES - JUNCTURE DETAILS  
ALUMINUM TRUSS & STEEL POST

Sheet No. 4 of 9

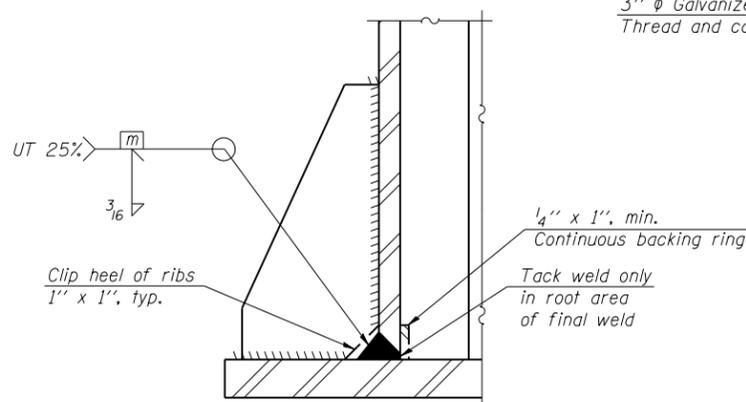
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D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				



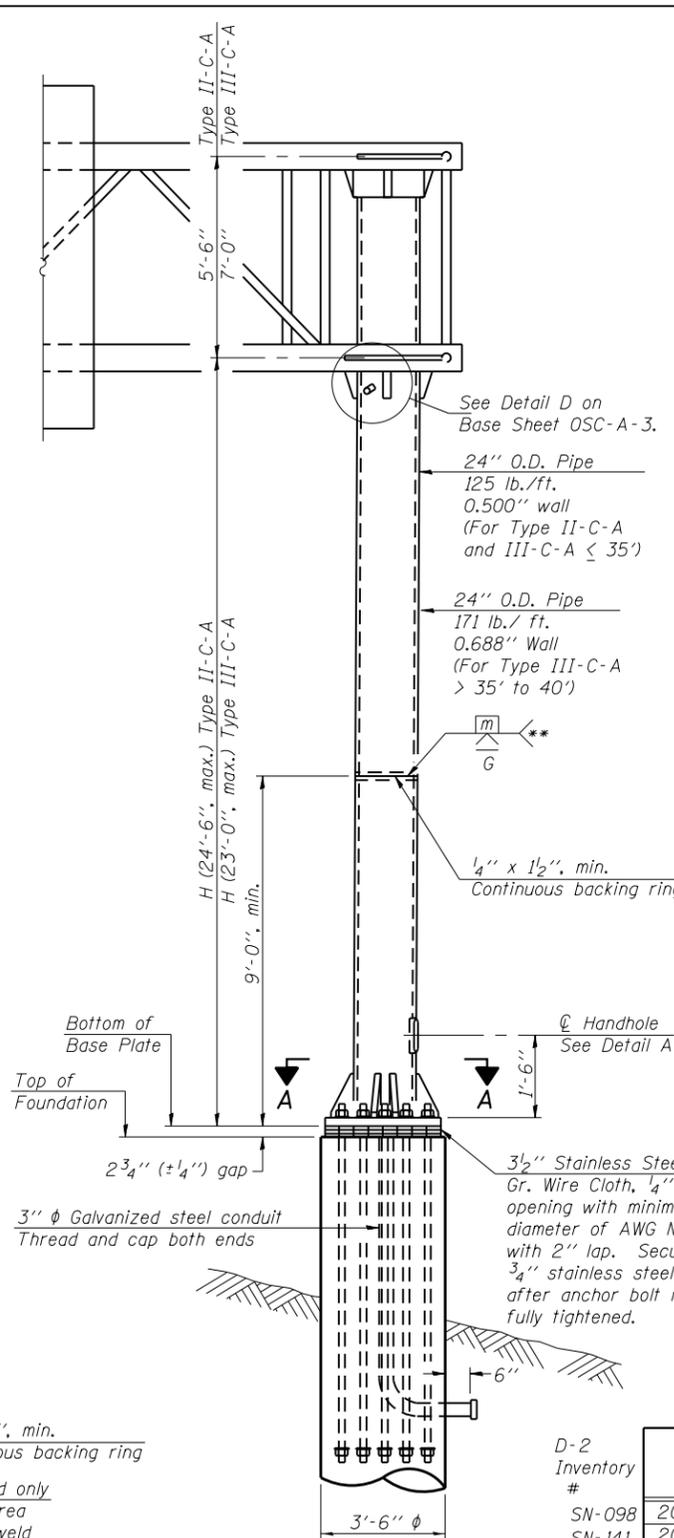
**SECTION A-A**



**SECTION B-B**



**DETAIL B**  
(Typical rib)

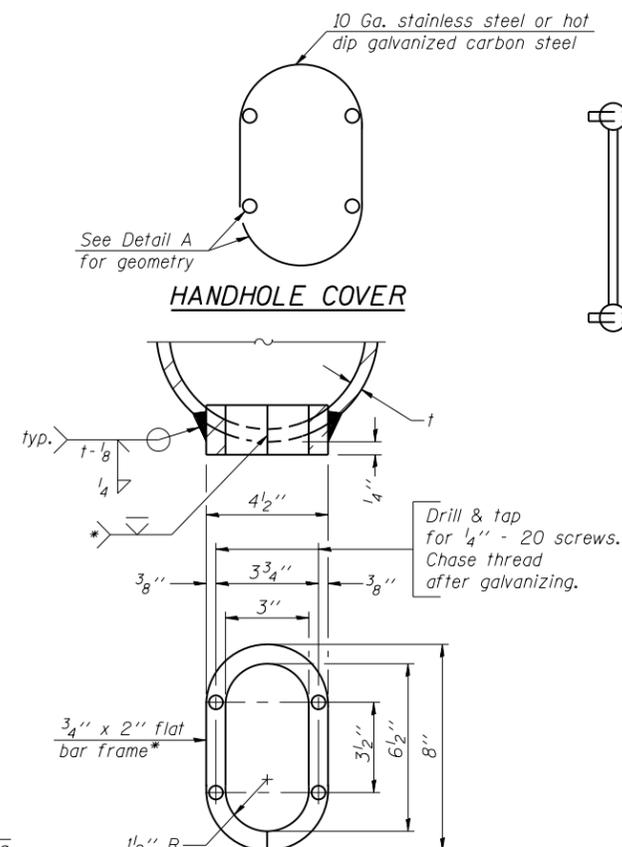


**FRONT ELEVATION**  
For Foundation Details  
see Base Sheet OSC-A-9.

D-2  
Inventory #  
SN-098  
SN-141

Structure Number	Station	H
2C0811080L003.3		23'-0"
2C081S092R029.3		22'-3"

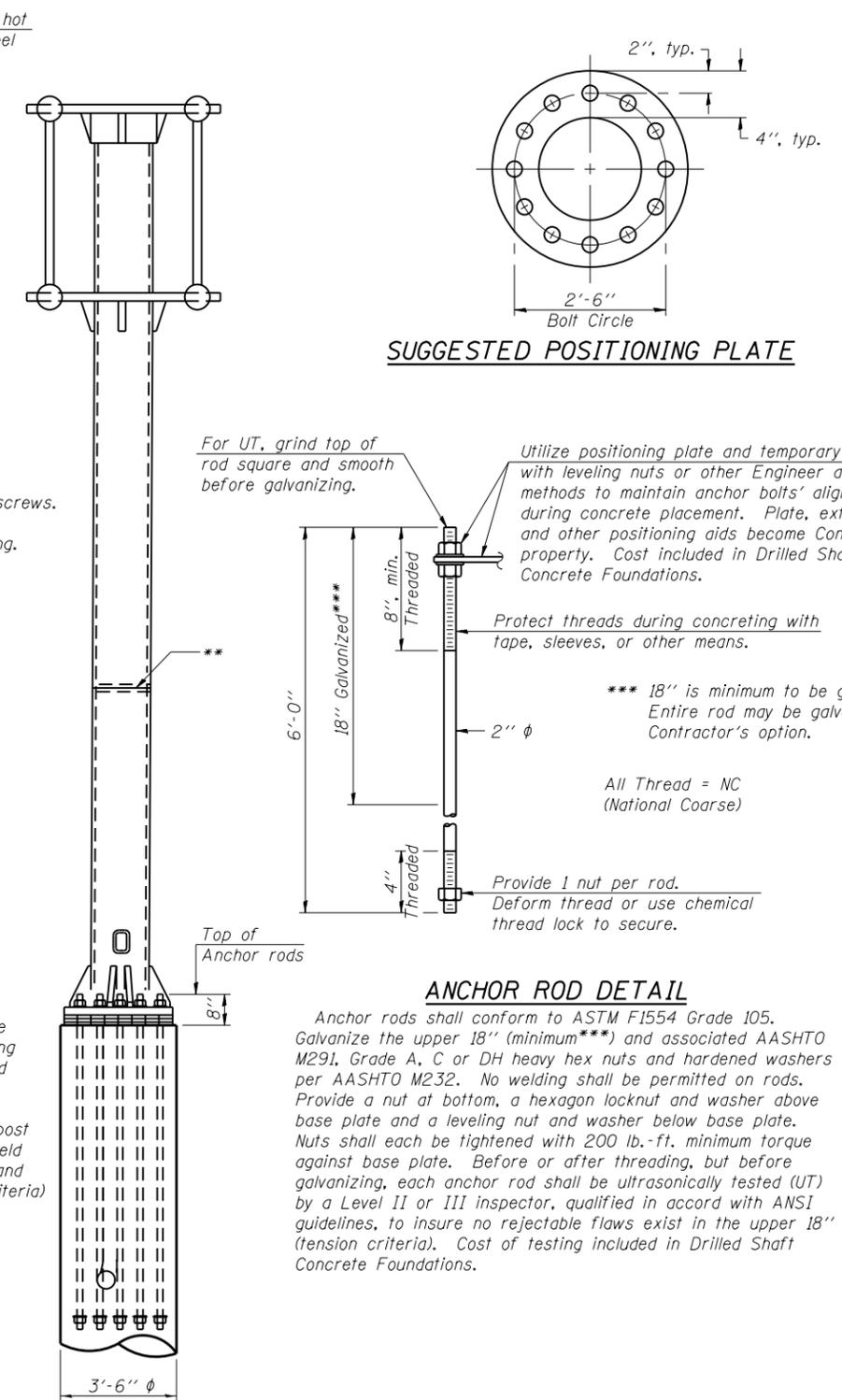
Note: "H" based on 15'-0" or actual sign height, whichever is greater.



**DETAIL A**

\* Bent bars may be butt welded top and bottom or bottom only. 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.

\*\* Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



**ANCHOR ROD DETAIL**

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize the upper 18" (minimum\*\*\*) and associated AASHTO M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide a nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III Inspector, qualified in accord with ANSI guidelines, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

OSC-A-5

6-1-12

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DRAWN - AI  
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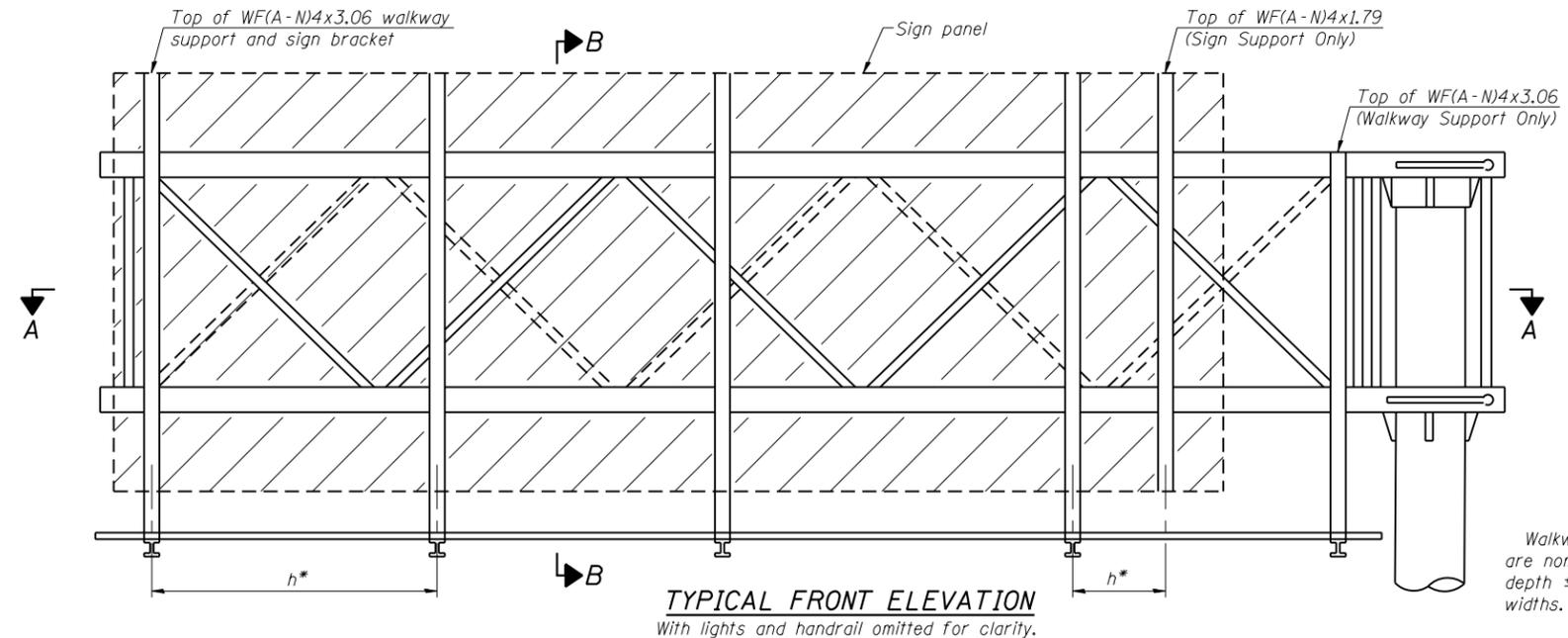
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CANTILEVER SIGN STRUCTURES - TYPE II-C-A & III-C-A  
TRUSS SUPPORT POST - ALUMINUM TRUSS & STEEL POST

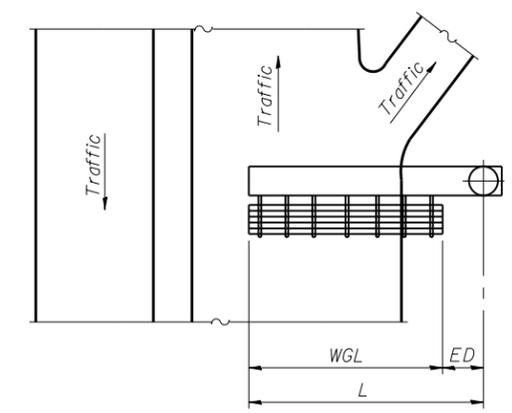
Sheet No. 5 of 9

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				

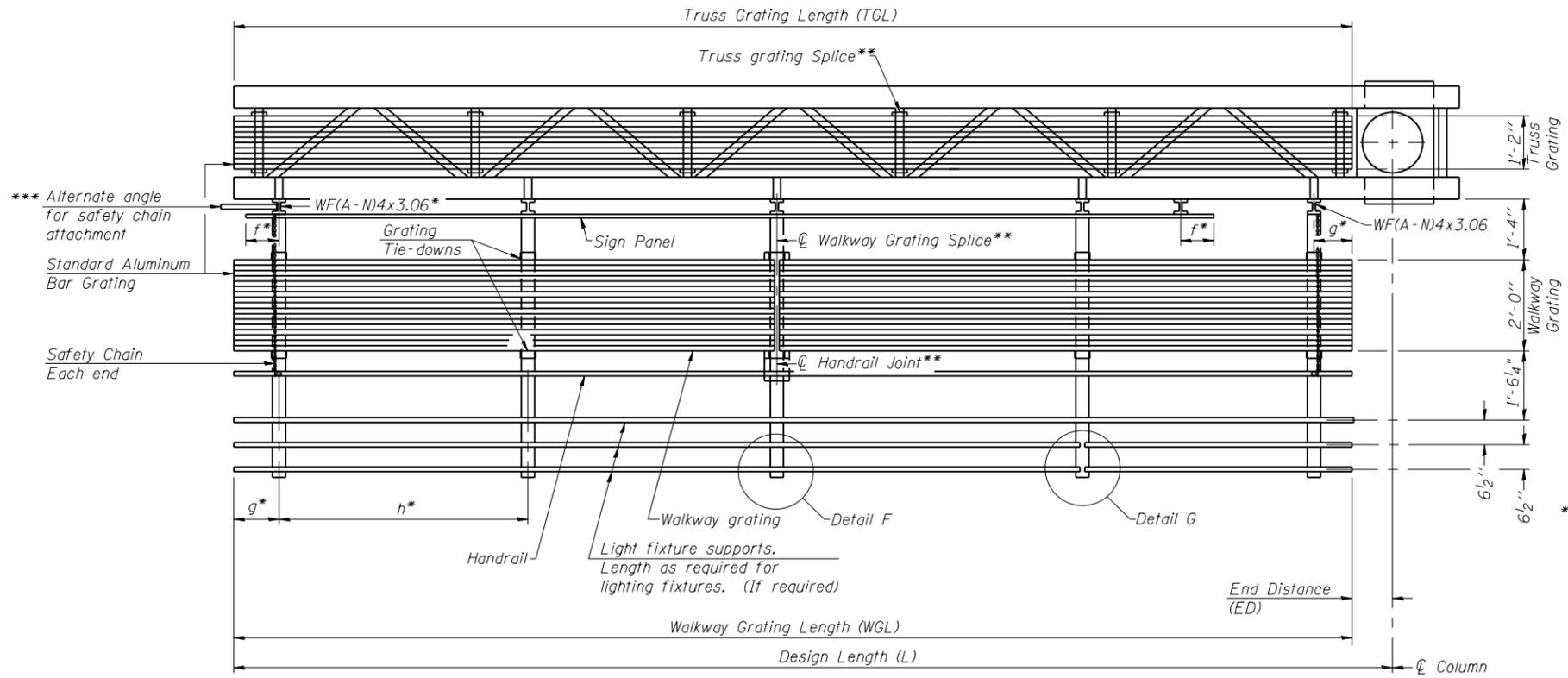


**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ±1/2", depth ±1/2") based on available standard widths.



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



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\* Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left( \frac{\text{Post O.D.}}{2} + 6'' \right)$$

D-2 Inventory #  
SN-098  
SN-141

Structure Number	Station	WGL	ED	TGL see note below
2C0811080L003.3		20'-4"	9'-8"	28'-6"
2C0815092R029.3		18'-1"	11'-11"	28'-6"

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 center of nearest bracket)  
g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)  
h = 6'-0" maximum (center to center sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)  
\*\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8.  
For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.  
For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

**BRACKET TABLE**

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

OSC-A-6

6-1-12

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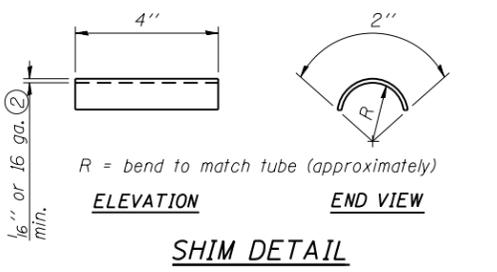
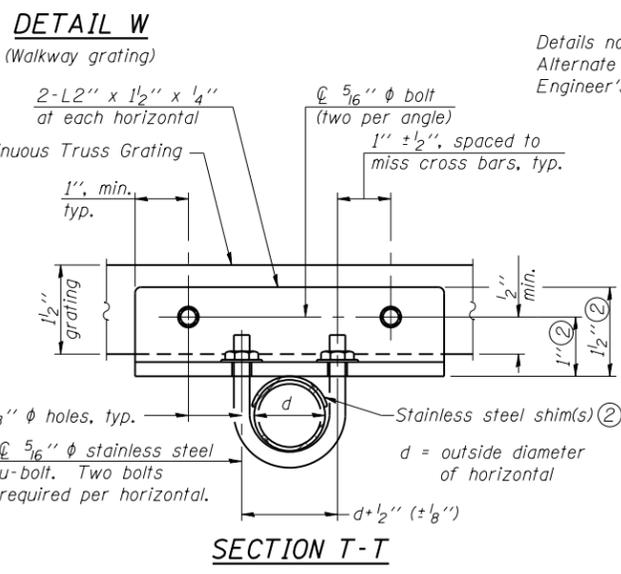
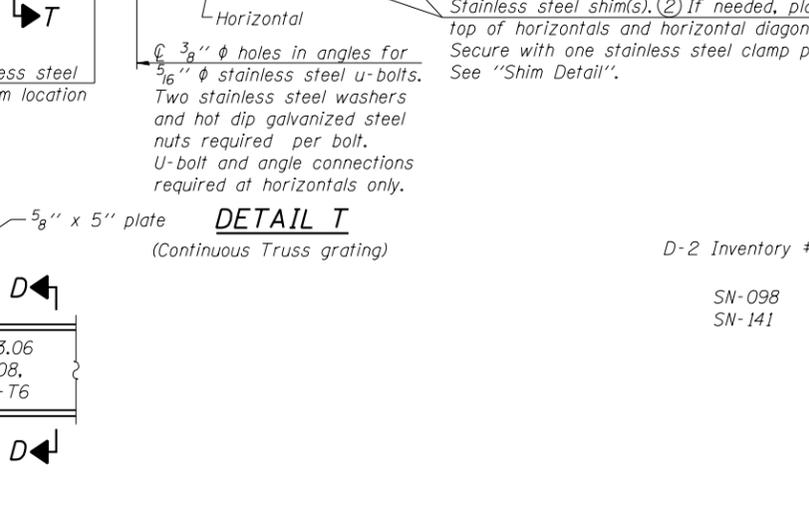
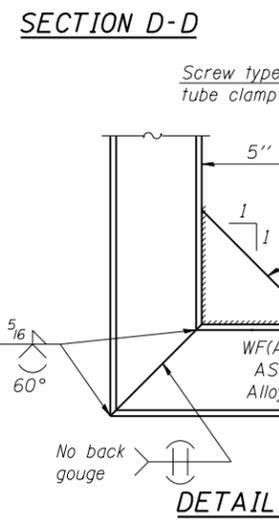
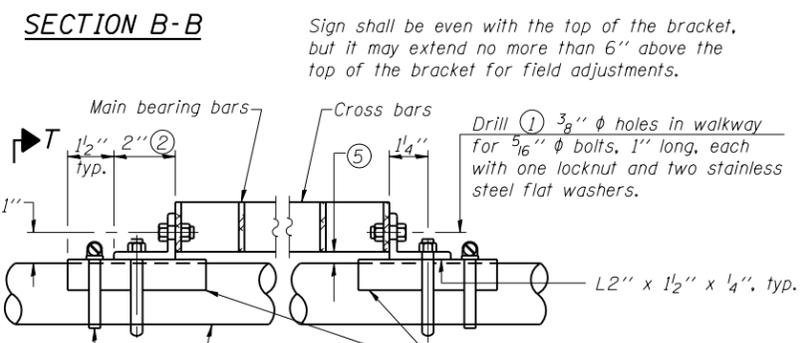
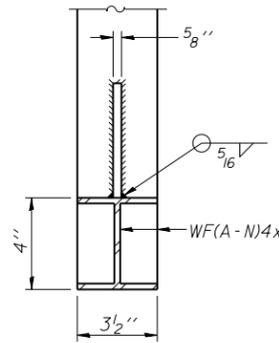
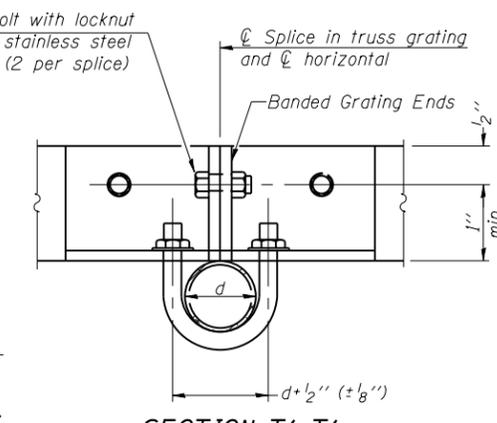
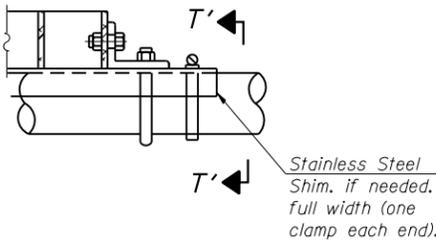
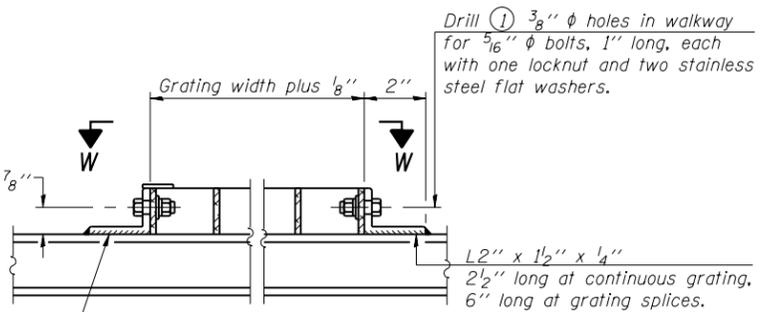
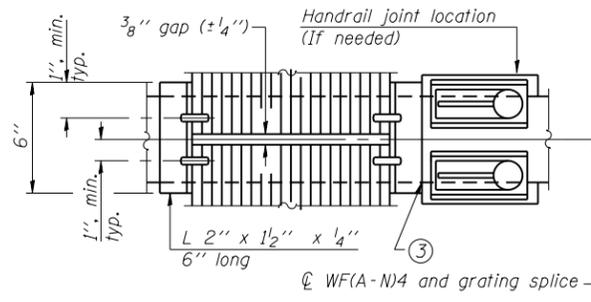
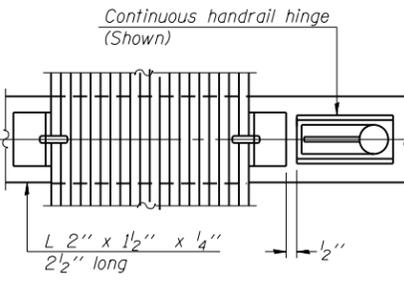
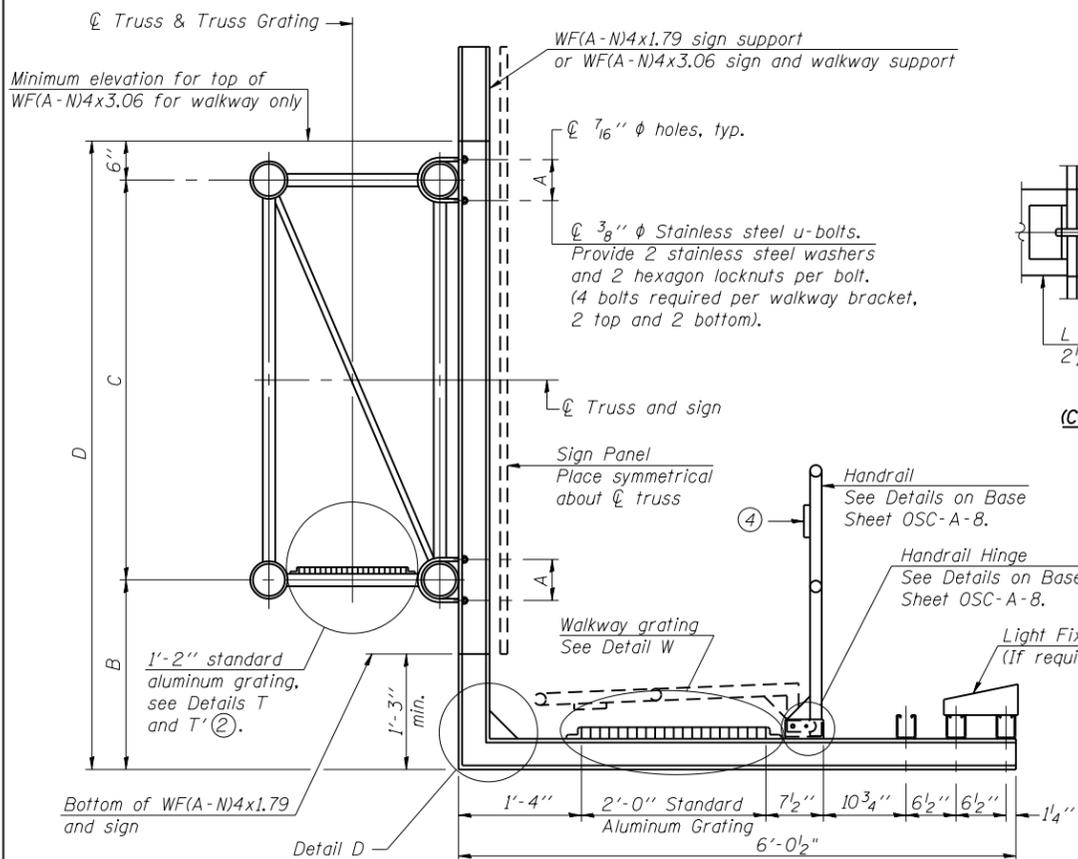
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**STATE OF ILLINOIS  
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**CANTILEVER SIGN STRUCTURES - ALUMINUM WALKWAY  
DETAILS - ALUMINUM TRUSS & STEEL POST**

Sheet No. 6 of 9

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	26
D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				



**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**  
 Main Bearing Bars (MBB) shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.  
 Cross bars (CB) shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

**OR**  
 Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:  
 Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.<sup>3</sup> per bar, a depth of 1 1/2", spaced on 1 3/16" centers.  
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)
- ④ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑤ Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- ⑥ Based on actual sign height, D<sub>s</sub>, given on OSC-A-1.

D-2 Inventory #  
 SN-098  
 SN-141

Structure Number	Station	A	⑥ B	C	⑥ D
2C0811080L003.3	7"	4'-9"	5'-6"	10'-9"	
2C081S092R029.3	7"	1'-9"	5'-6"	7'-9"	

OSC-A-7 6-1-12

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PLOT DATE = 3/12/2014	

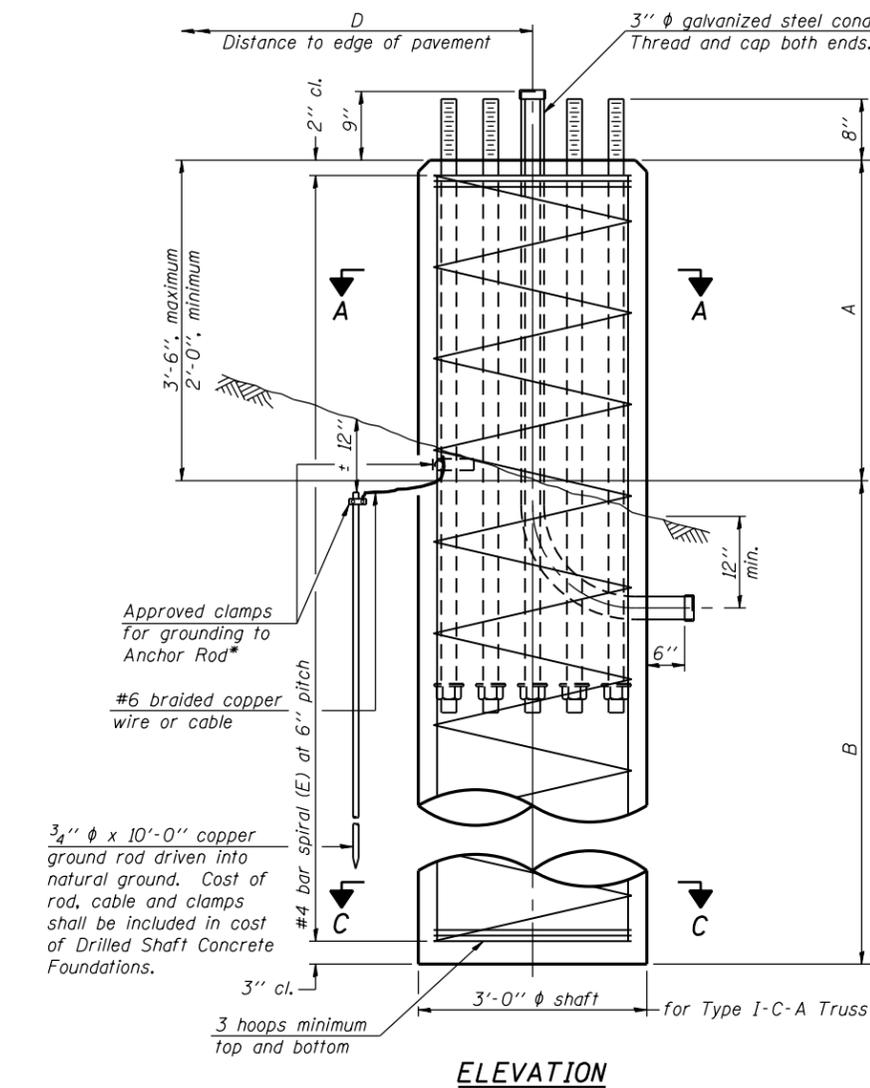
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 DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - WALKWAY DETAILS  
 ALUMINUM TRUSS & STEEL POST

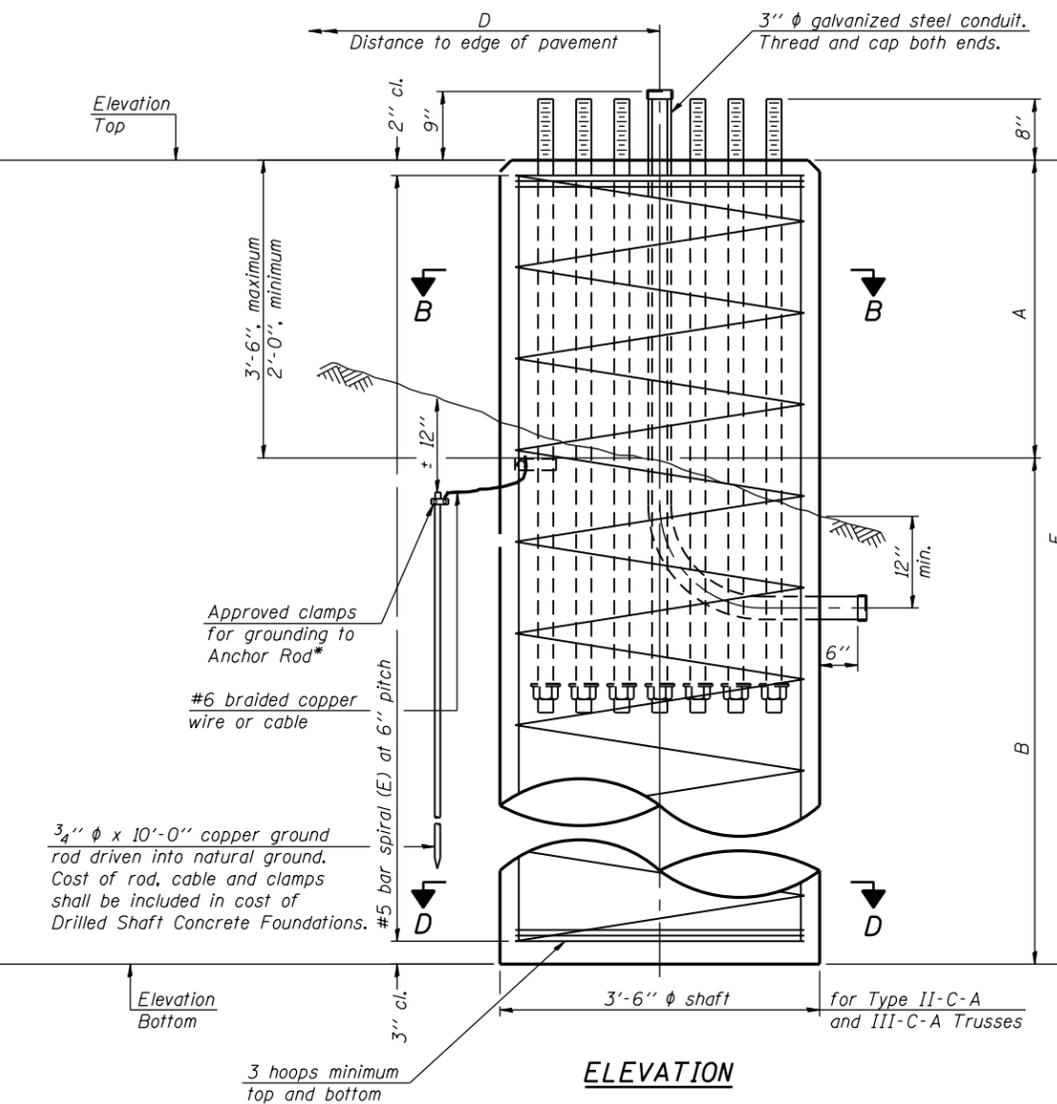
F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	27
D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
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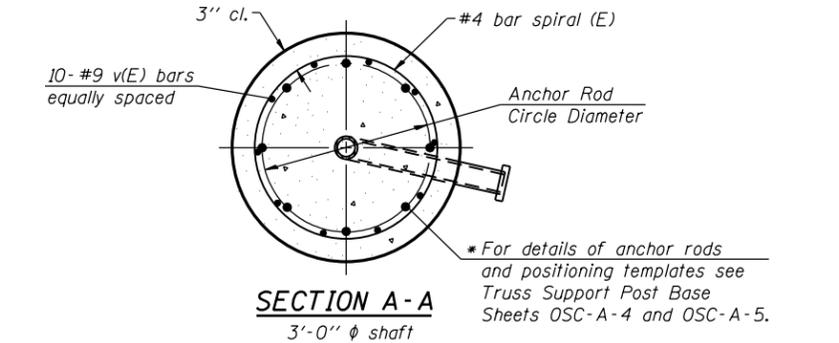
\* Grind anchor rod to bright finish at ground clamp location before installing clamp.



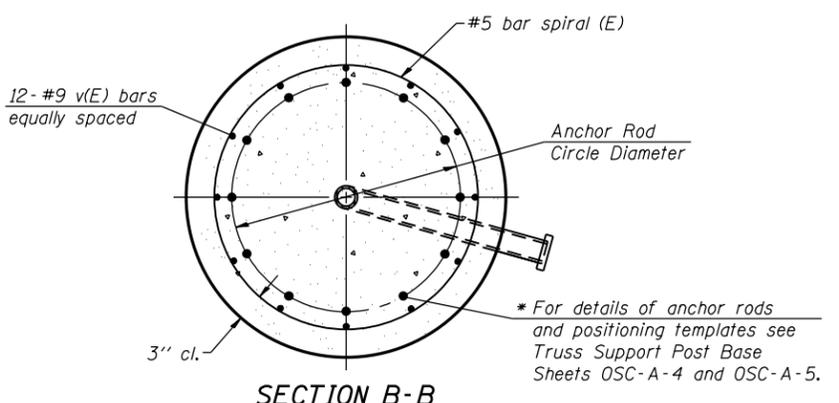
**ELEVATION**



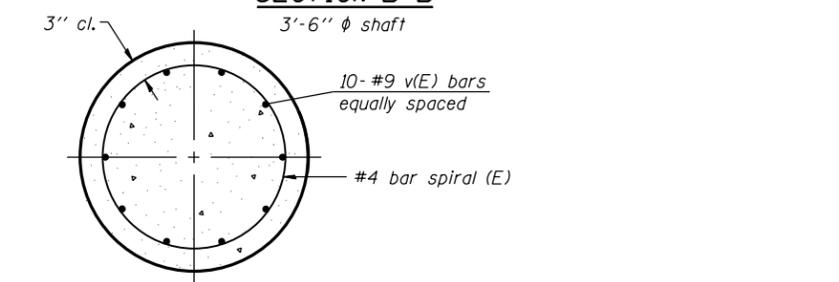
**ELEVATION**



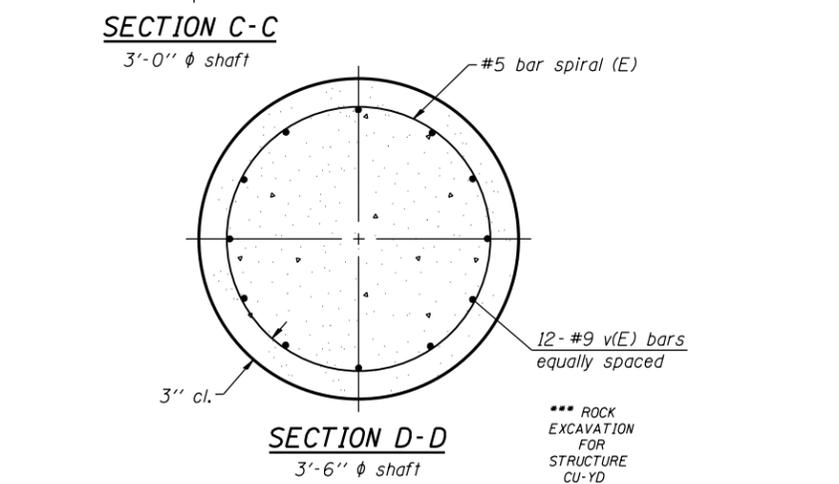
**SECTION A-A**  
3'-0" φ shaft



**SECTION B-B**  
3'-6" φ shaft



**SECTION C-C**  
3'-0" φ shaft



**SECTION D-D**  
3'-6" φ shaft

**NOTES:**  
 The foundation dimensions shown in the Foundation Design Table 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 in the Foundation Data Table 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 Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

FOUNDATION DESIGN TABLE								
Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

FOUNDATION DATA TABLE												
D-2 Inventory #	Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	$Q_u$	A	B	F	Class DS Concrete Cubic Yards	***
SN-098	2C0811080L003.3		II-C-A	3'-6"	625.45	601.45	*	2'-6"	21'-6"	24'-0"	8.6	
SN-141	2C081S092R029.3		II-C-A	3'-6"	569.35	544.97	**	2'-10 1/2"	21'-6"	24'-4 1/2"	8.7	2.6

\* Soil Data Not Available; Use of Drilled Shafts based on Foundation type presented in Existing Plans  
 \*\*  $Q_u$  Varies > 1.25 tsf  
 Note: Provide Temporary Casing as required include Costs in Drilled Shaft Concrete Foundations

OSC-A-9 8-21-13

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

**CANTILEVER SIGN STRUCTURES - DRILLED SHAFT**  
**ALUMINUM TRUSS & STEEL POST**

Sheet No. 9 of 9

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	29
* 0-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
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.

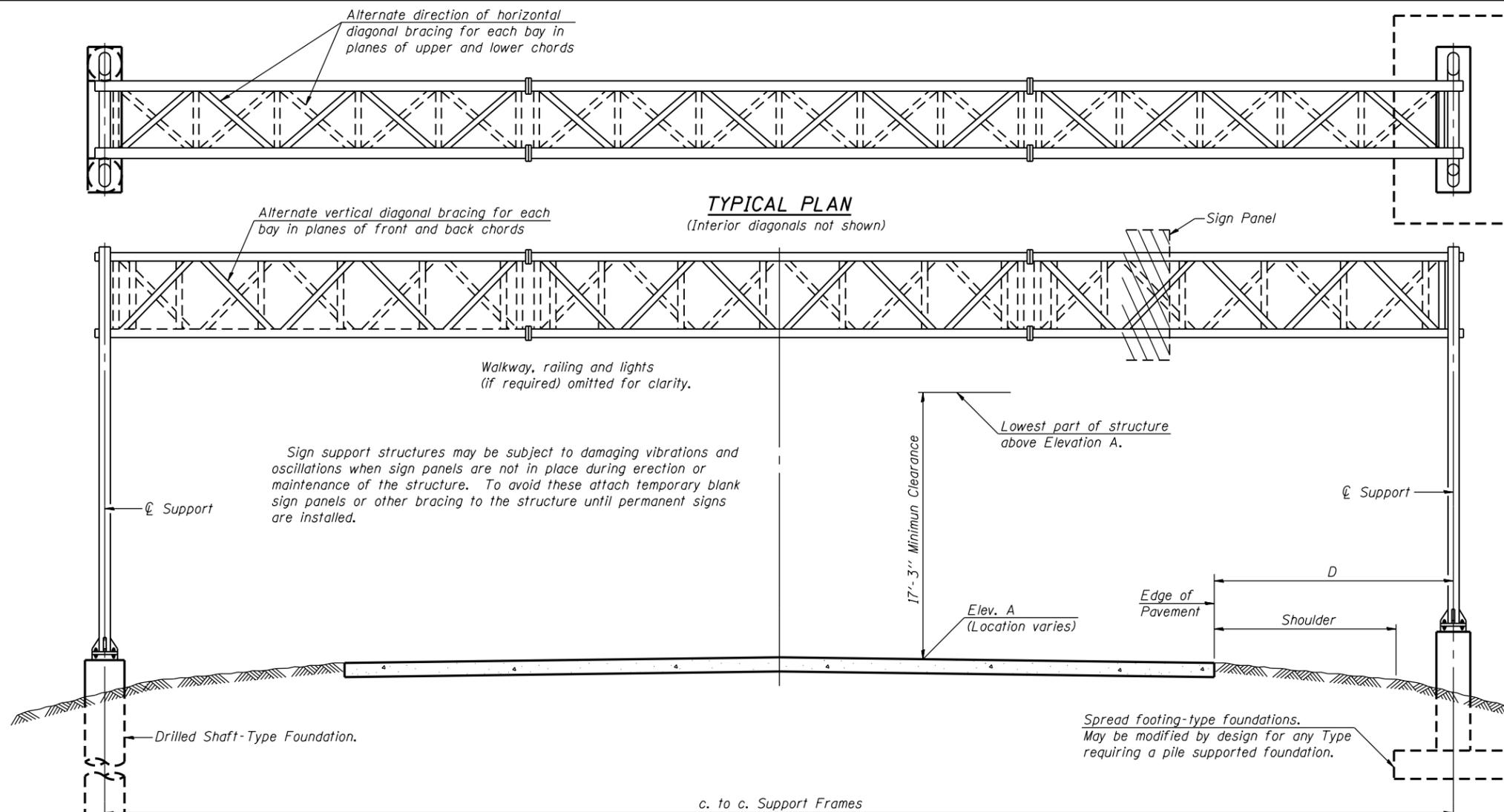
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

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.

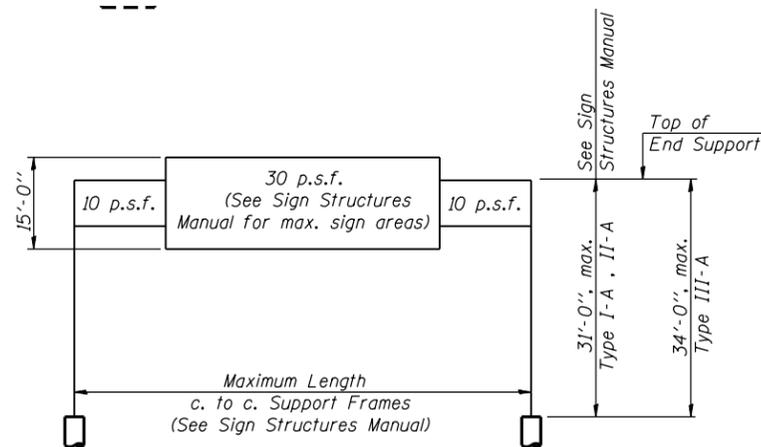
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	269
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	101
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	
OVERHEAD WALKWAY, TYPE A	Foot	191.4
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	112.8
ROCK EXCAVATION FOR STRUCTURE	Cu. Yds.	3.6



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

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



D-2 Inventory #	Structure Number	Station	Design Truss Type	c-c Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
SN-101	2S0811088R015.3		II-A	101'-0"	591.00	39'-0"	12'-6"	496.50
SN-104	2S0811088L016.0		I-A	97'-0"	586.00	34'-7 1/4"	12'-6"	373.50
SN-126	2S081S005R011.2		I-A	90'-0"	677.50	36'-9 5/8"	9'-6"	257.75
SN-147	2S081S092L028.0		I-A	82'-0"	567.00	20'-1 1/4"	12'-0"	333.75

\*\*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

8-21-13

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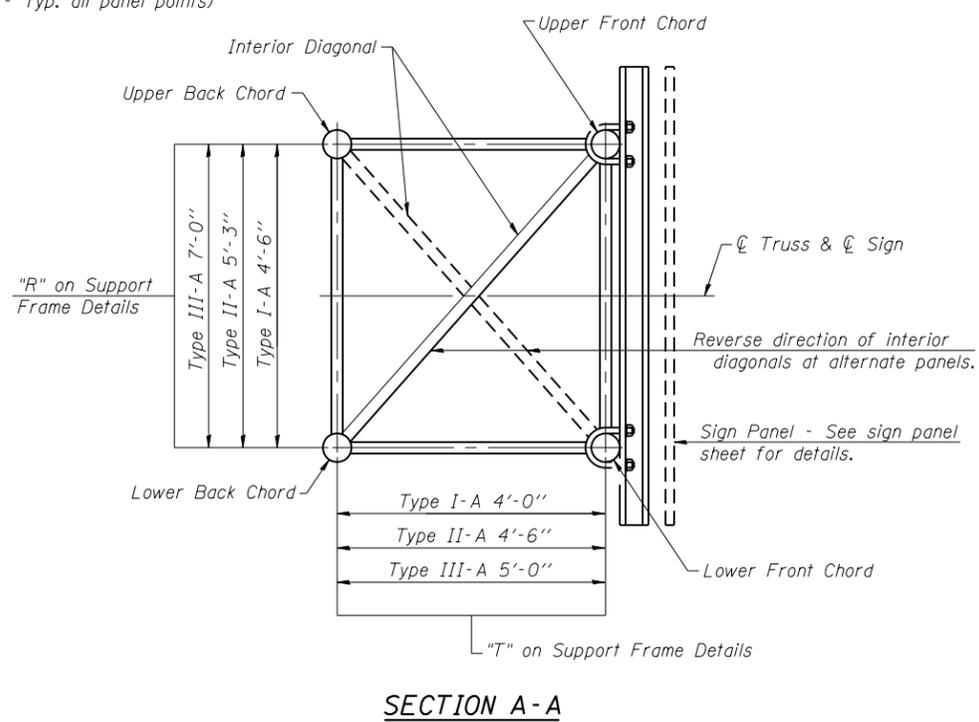
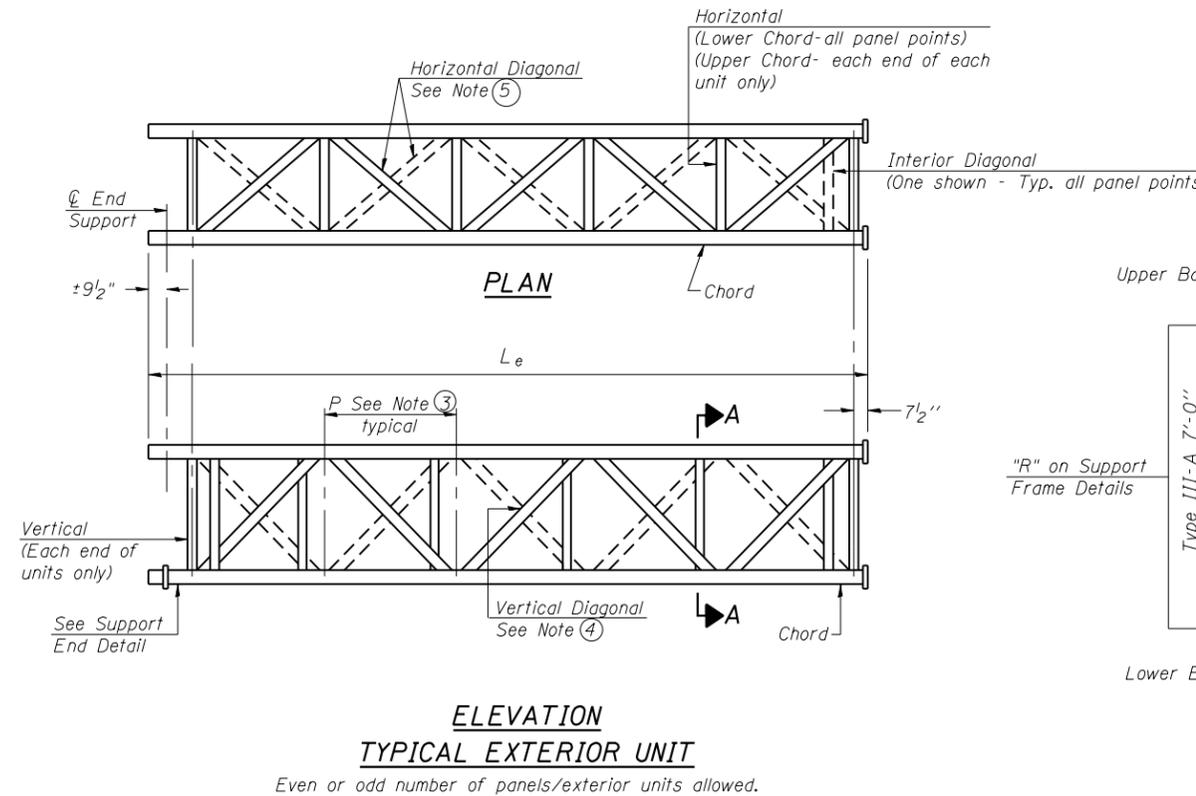
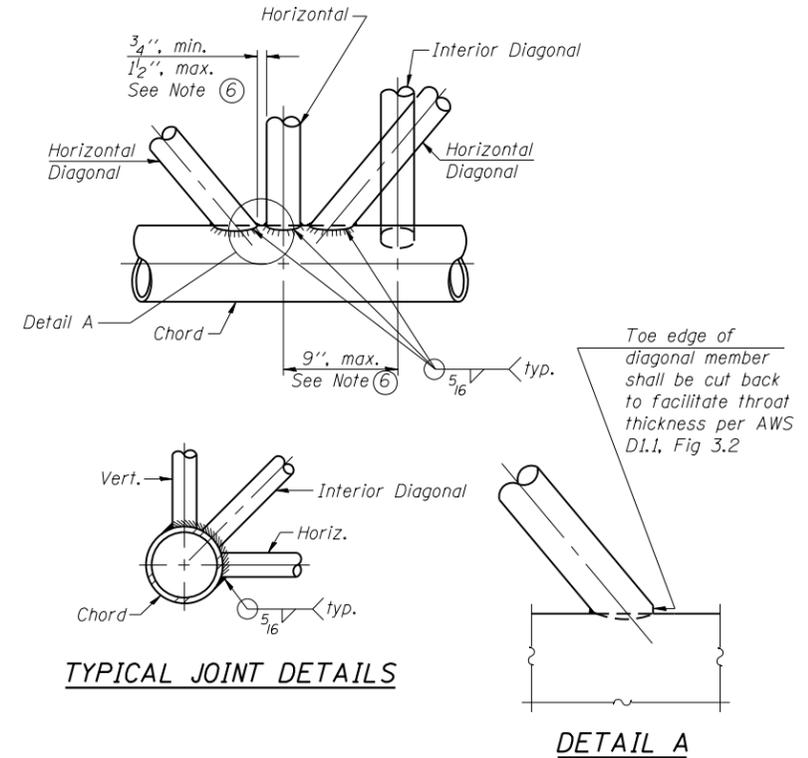
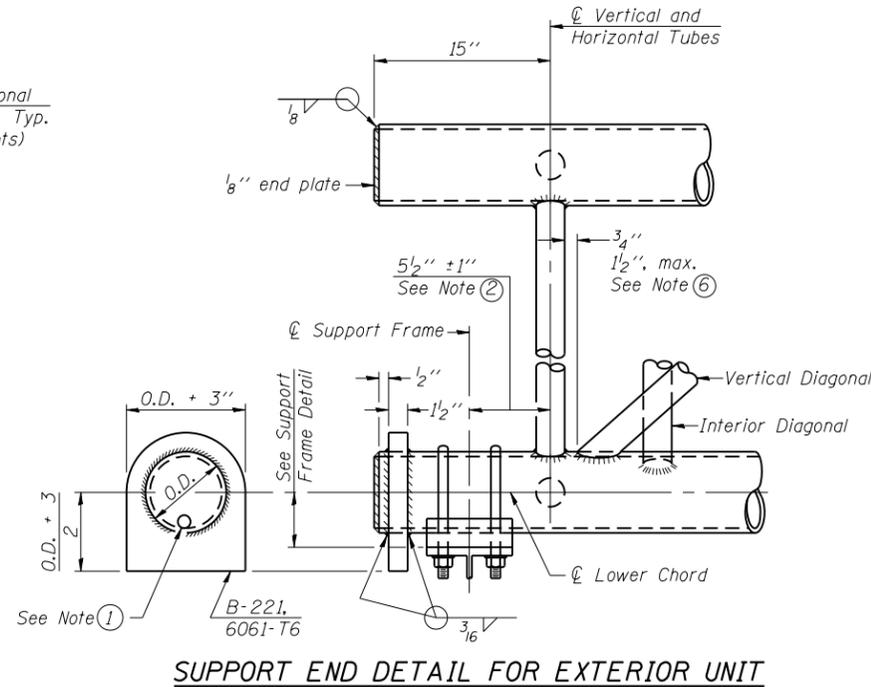
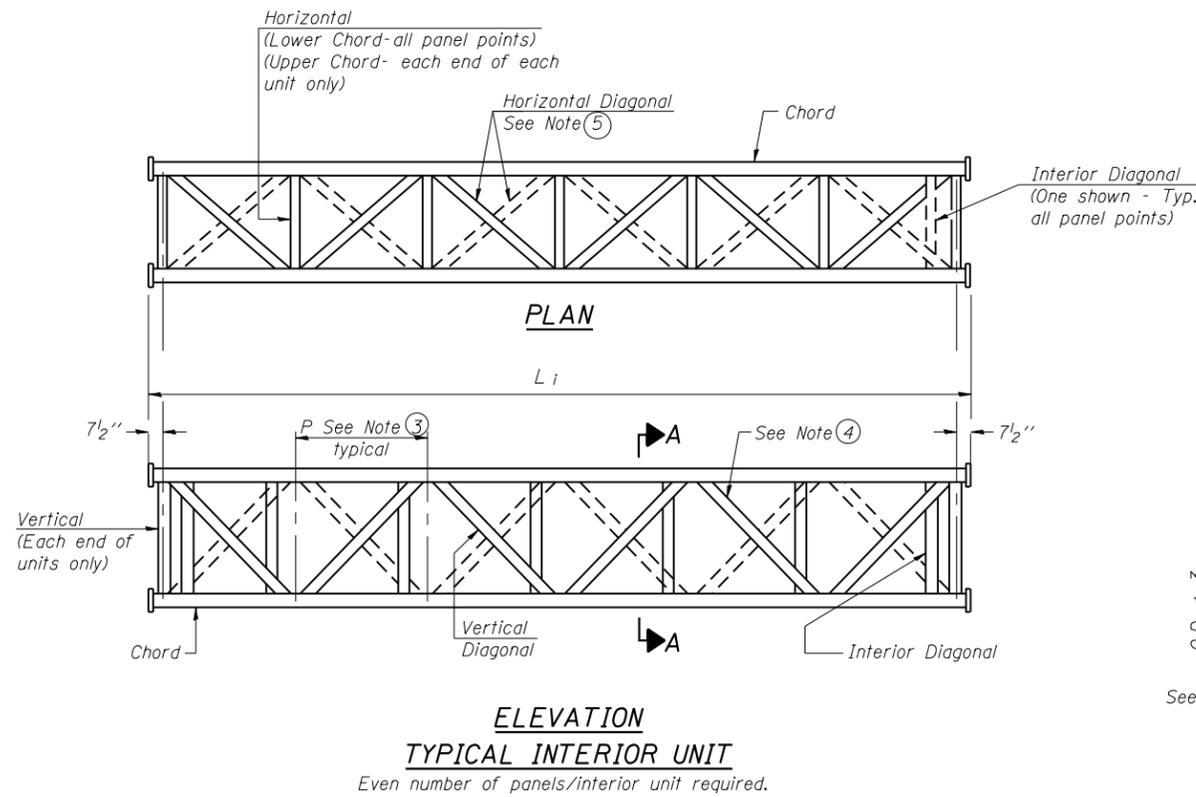
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**OVERHEAD SIGN STRUCTURES - GENERAL PLAN &  
ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS**

Sheet No. 1 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	ROCK ISLAND	45	30
* D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				



- 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.

0S-A-2

6-1-12

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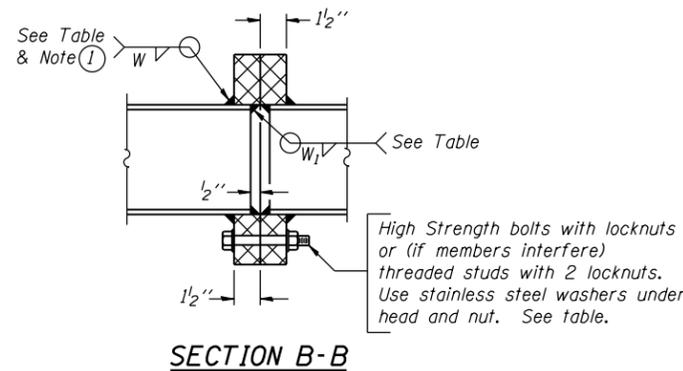
**STATE OF ILLINOIS  
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**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS  
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A**

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	31
• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				

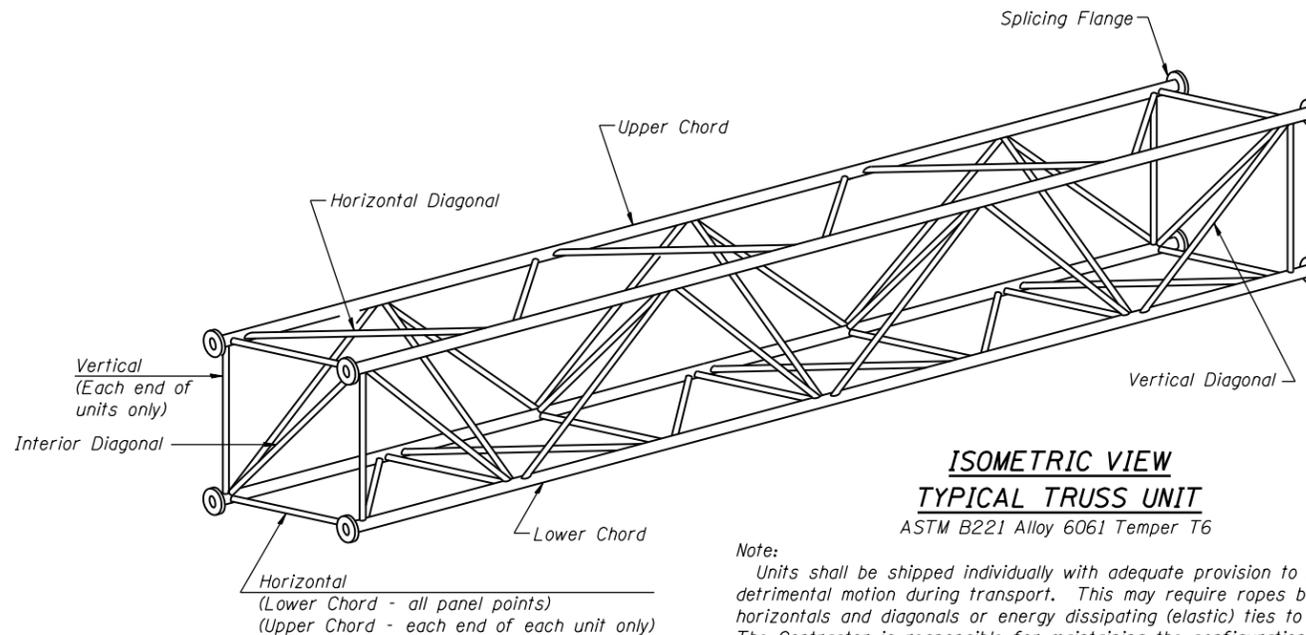
**TRUSS UNIT TABLE**

D-2 Inventory #	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>				
SN-101	2S0811088R015.3		II-A	6	34'-4 1/2"	5'-5"	1	6	33'-9"	5'-5"	6 1/2"	5/16"	3"	5/16"	3 1/8"	6	1"	3/8"	1/4"	11"	14 1/2"		
SN-104	2S0811088L016.0		I-A	7	34'-8 1/4"	4'-8 1/4"	1	6	29'-4 1/2"	4'-8 1/4"	5 1/2"	5/16"	2 1/2"	5/16"	3 1/8"	6	7/8"	3/8"	1/4"	9 1/4"	12 1/4"		
SN-126	2S081S005R011.2		I-A	6	30'-9"	4'-9 3/4"	1	6	30'-9"	4'-9 3/4"	5"	5/16"	2 1/2"	5/16"	2 3/4"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"		
SN-147	2S081S092L028.0		I-A	5	26'-5 1/2"	4'-11"	1	6	30'-9"	4'-11"	5"	5/16"	2 1/2"	5/16"	2 3/8"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"		

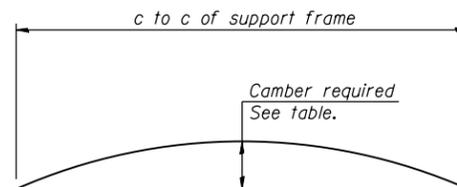


**SECTION B-B**

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.



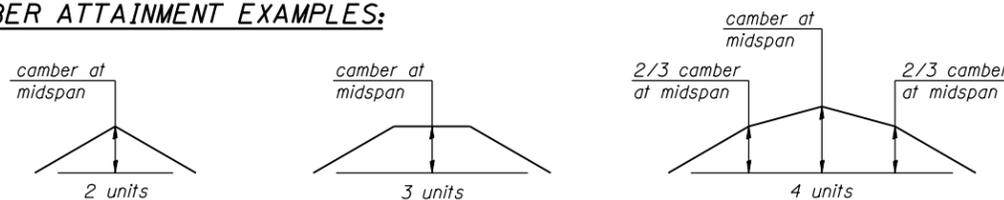
Note:  
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection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



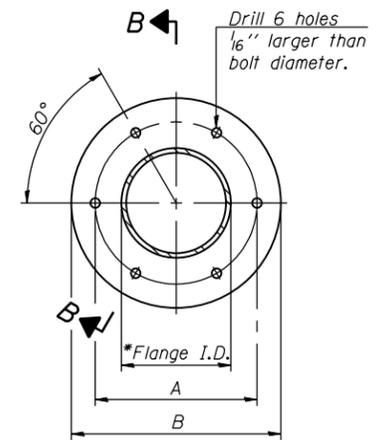
**CAMBER DIAGRAM**

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

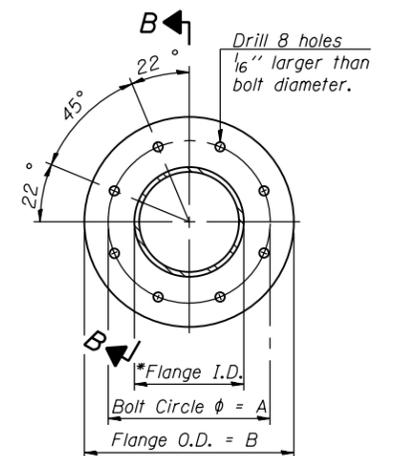
**CAMBER ATTAINMENT EXAMPLES:**



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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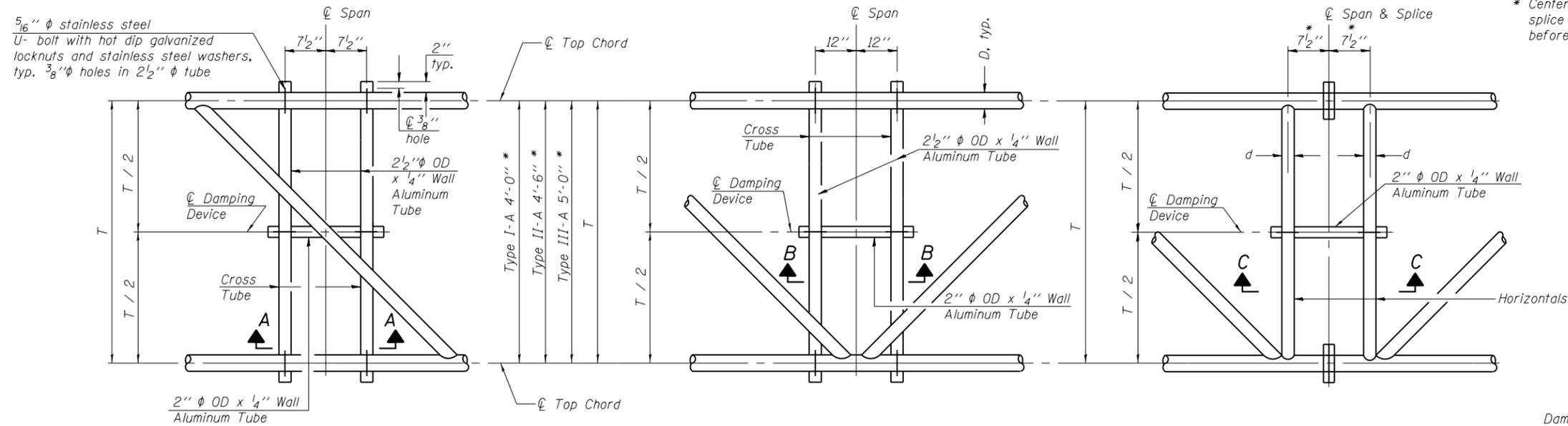
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	CHECKED - JJS	REVISED -
PLOT SCALE =	DRAWN - AI	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MAI	REVISED -

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

Sheet No. 3 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	ROCK ISLAND	45	32
* D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				



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

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

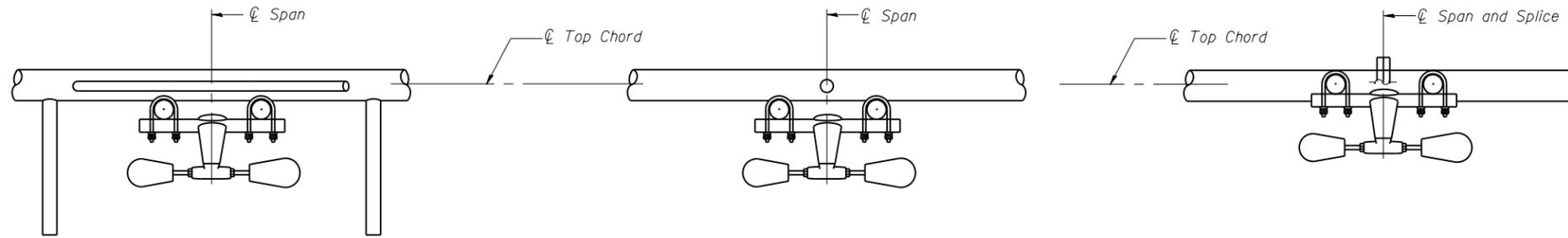
**PLAN DETAIL "C"**  
 ☉ Span at ☉ Chord Splice

\* 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...

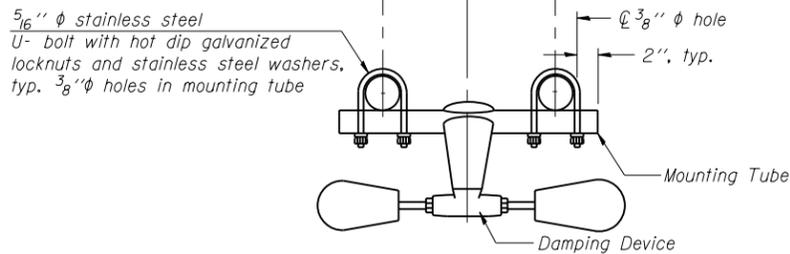
**Materials:** Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



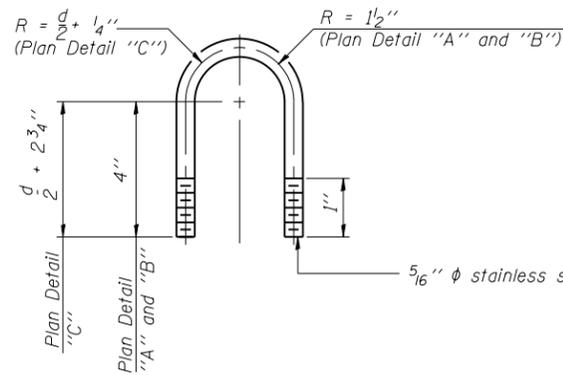
**SECTION A-A**

**SECTION B-B**

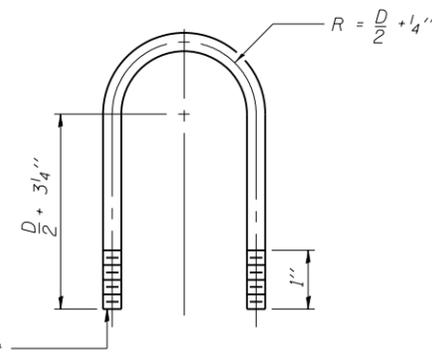
**SECTION C-C**



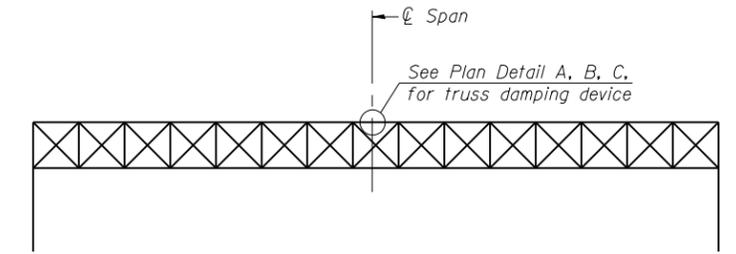
**TRUSS DAMPING DEVICE CONNECTION DETAIL**  
 (Typical)



**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

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PLOT DATE = 3/12/2014	DRAWN - AI	REVISED -
	CHECKED - MAI	REVISED -

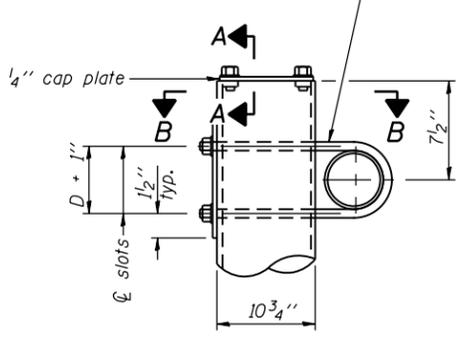
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURE**  
**DAMPING DEVICE**

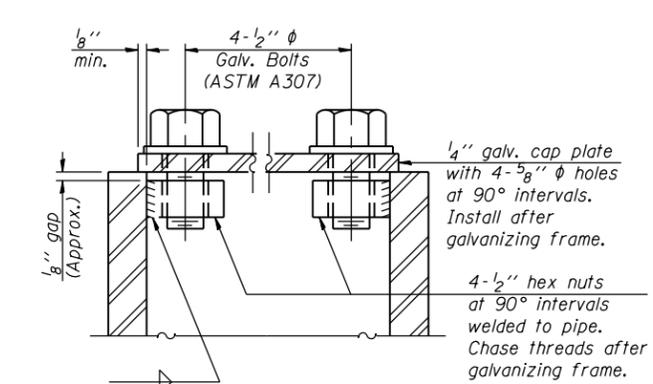
Sheet No. 4 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	33
• D-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				

$\frac{3}{4}$ "  $\phi$  stainless steel U-bolt.  
Provide two washers and two hexagon locknuts. (4)  
 $\frac{13}{16}$ " x 2" slots on  $\phi$  10"  $\phi$  pipe.  
(4 slots required per pipe)

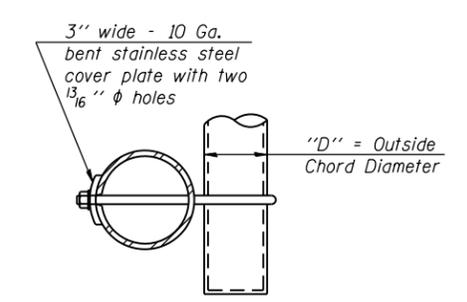


**DETAIL A**

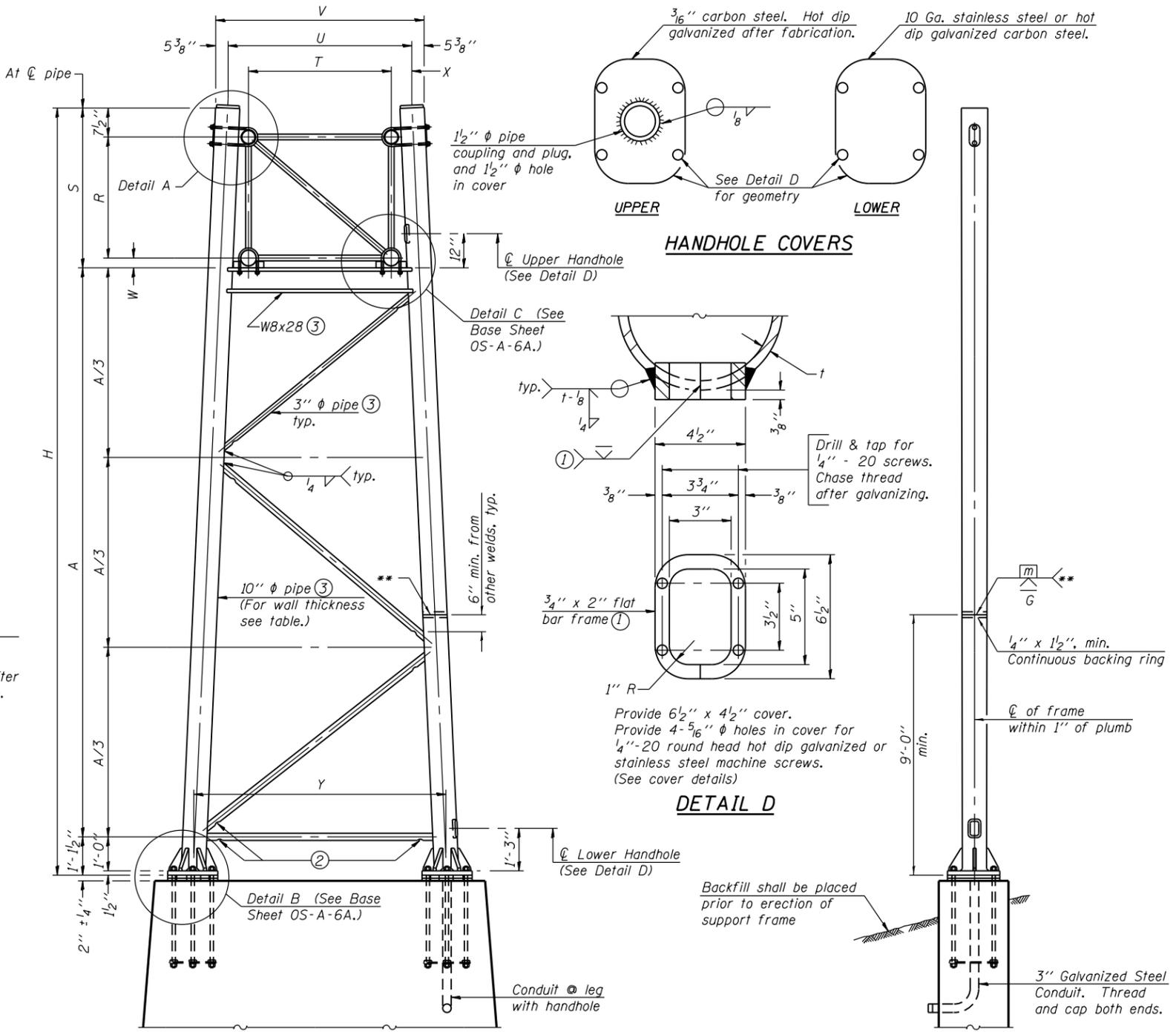


**SECTION A-A**

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



**SECTION B-B**



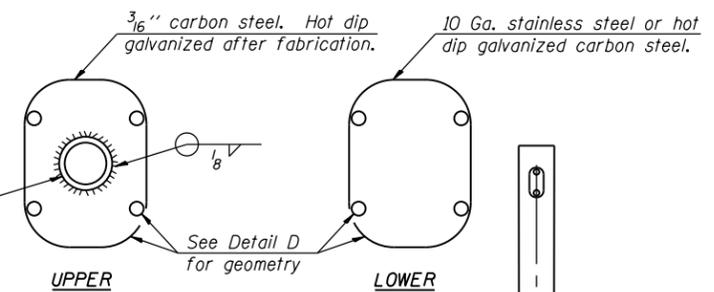
**SIDE ELEVATION**

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

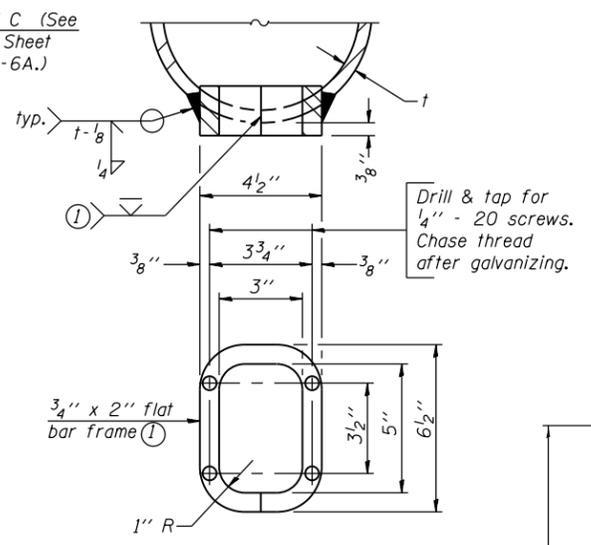
Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6"	5'-5 1/2"	4'-0"	5'-6"	6'-4 3/4"	4"	9"	8'-3"
II-A (5)	5'-3"	6'-3 1/4"	4'-6"	6'-1"	6'-11 3/4"	4 3/4"	9 1/2"	8'-3"

**10"  $\phi$  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.



**HANDHOLE COVERS**



**DETAIL D**

**END ELEVATION**

D-2 Inventory #	Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H (6)	A
			Left	Right				
SN-101	2S0811088R015.3		x		II-A	0.365" (std)	29'-0"	21'-7 1/4"
SN-101	2S0811088R015.3			x	II-A	0.5"	33'-10"	26'-5 1/4"
SN-104	2S0811088L016.0		x		I-A	0.365"	31'-8"	25'-1"
SN-104	2S0811088L016.0			x	I-A	0.279"	30'-5"	23'-10"
SN-126	2S08IS005R011.2		x		I-A	0.279"	26'-8"	20'-1"
SN-126	2S08IS005R011.2			x	I-A	0.365"	33'-0"	26'-5"
SN-147	2S08IS092L028.0		x		I-A	0.365"	31'-6"	24'-11"
SN-147	2S08IS092L028.0			x	I-A	0.279"	29'-3"	22'-8"

- 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
- 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  $\mu$ m or less.
  - 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.
  - 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.
  - See General Notes for fasteners.
  - Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
  - "H" based on 15'-0" or actual sign height, whichever is greater.

OS-A-6

6-1-12

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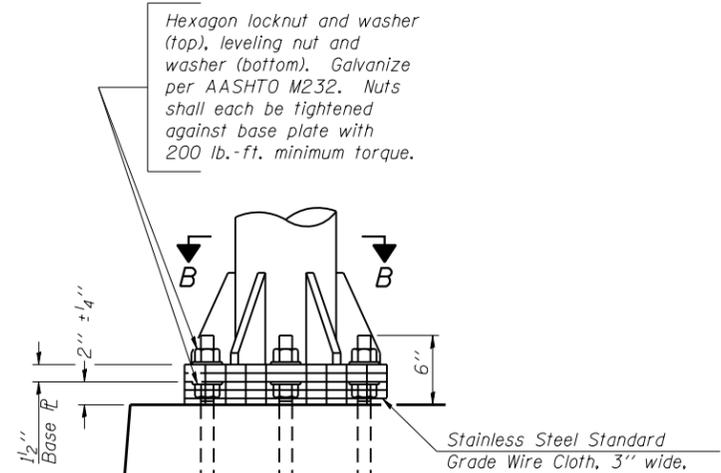
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OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME FOR ALUMINUM TRUSS

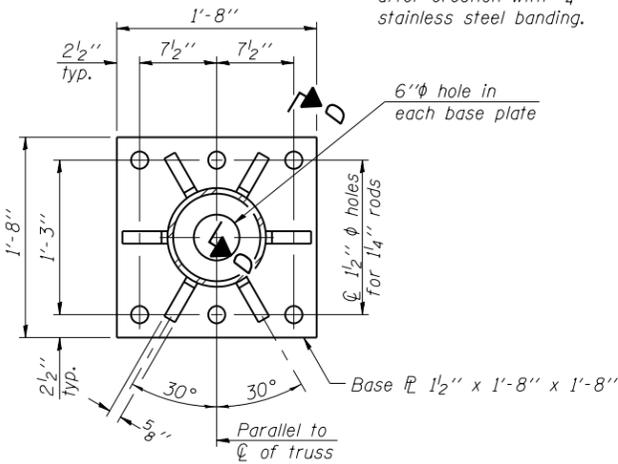
Sheet No. 5 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	34
* 0-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				

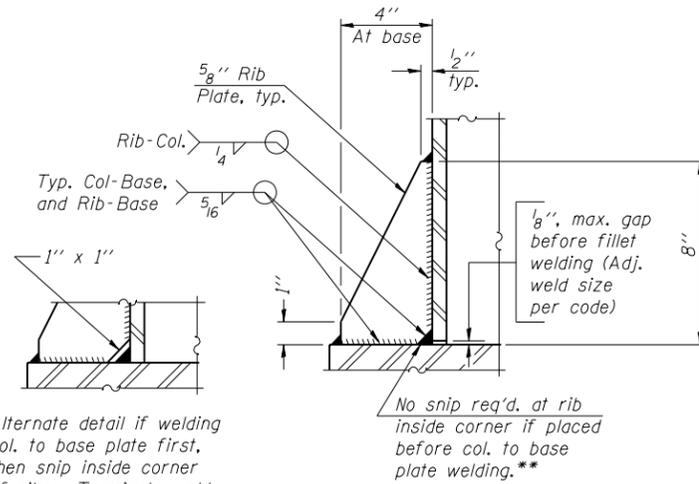


**DETAIL B**

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.

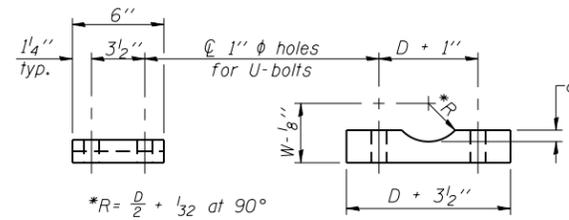


**SECTION B-B**



**SECTION D-D**

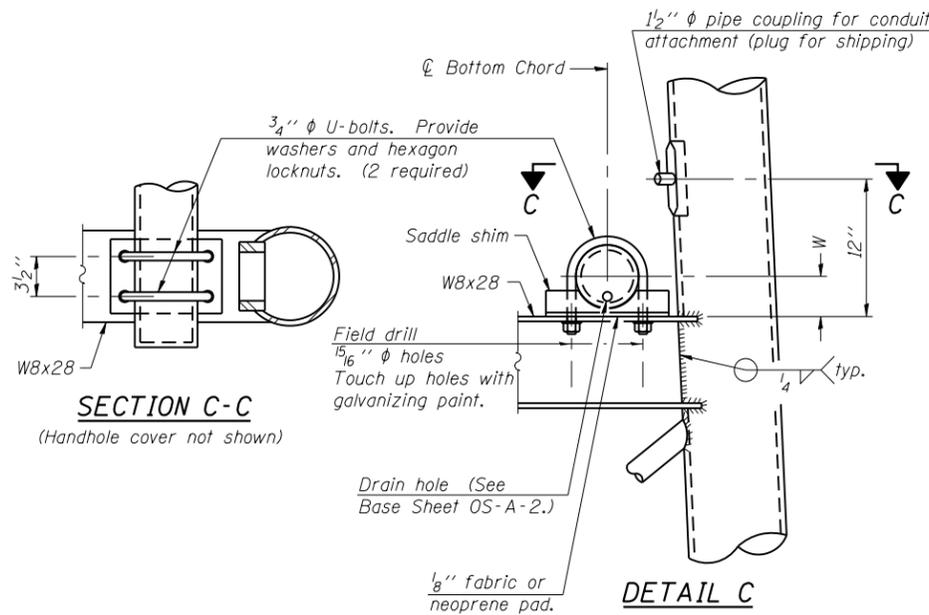
\*\* Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.



**SADDLE SHIM DETAIL**

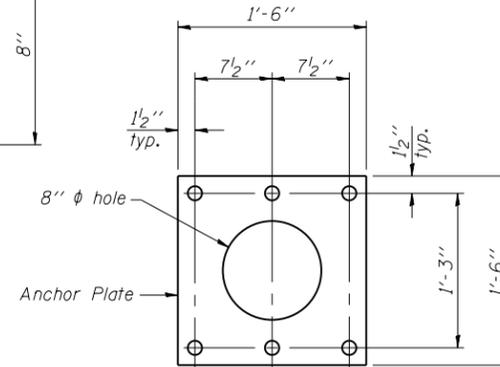
ASTM B26 Alloy 356-F  
or  
ASTM B209 Alloy 6061-T651  
(4 required per sign truss)

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

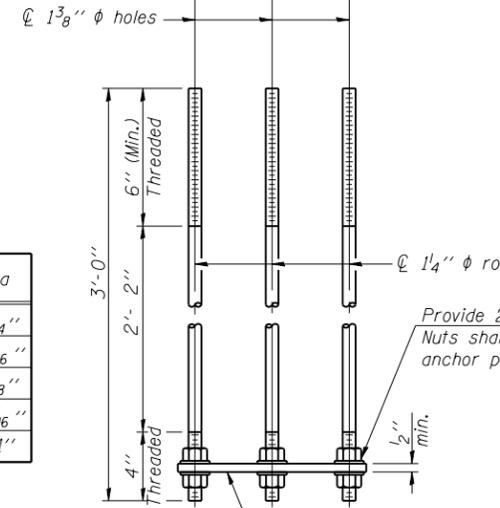


**SECTION C-C**

**DETAIL C**



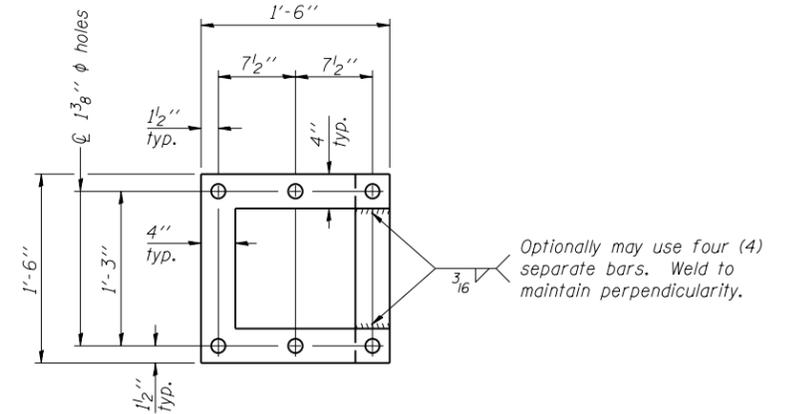
**Anchor Plate**



**ANCHOR ROD DETAIL**  
Spread Footing Foundation

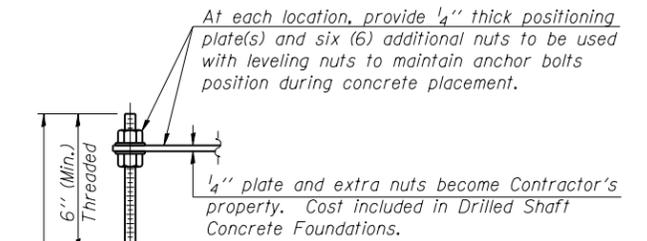
All Thread = NC (National Coarse)

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



**POSITIONING PLATE(S)**

Optionally may use four (4) separate bars. Weld to maintain perpendicularity.



**ANCHOR ROD DETAIL**  
Drilled Shaft Foundation

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

1/4" plate and extra nuts become Contractor's property. Cost included in Drilled Shaft Concrete Foundations.

All Thread = NC (National Coarse)

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

**10" Ø PIPE SUPPORT FRAME DETAILS**

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

OS-A-6A

6-1-12

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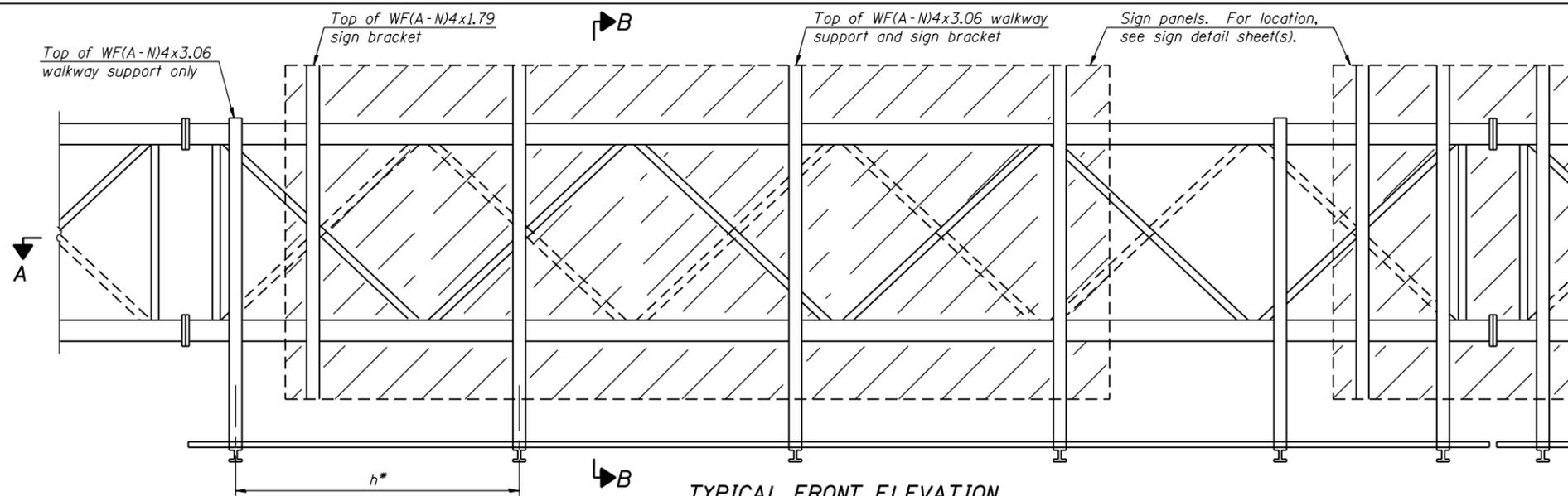
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CHECKED - JJS <td>REVISIONS -</td> <td></td>	REVISIONS -	
PLOT SCALE =	DRAWN - AI	REVISIONS -
PLOT DATE = 3/12/2014	CHECKED - MAI	REVISIONS -

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OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

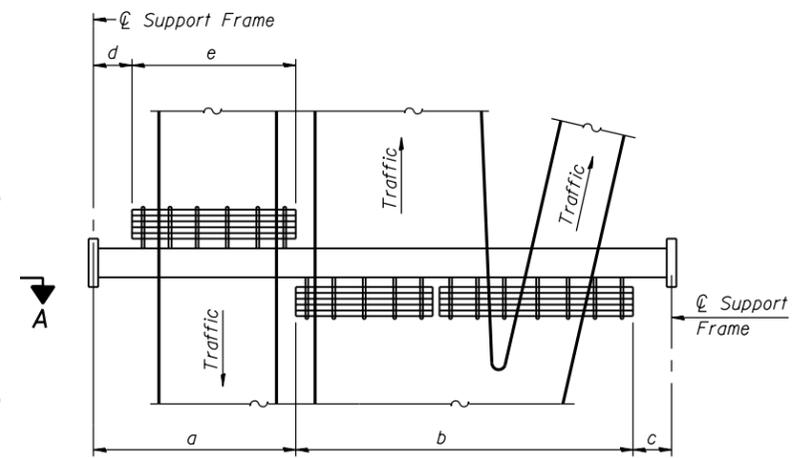
Sheet No. 6 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	35
• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				



**TYPICAL FRONT ELEVATION**

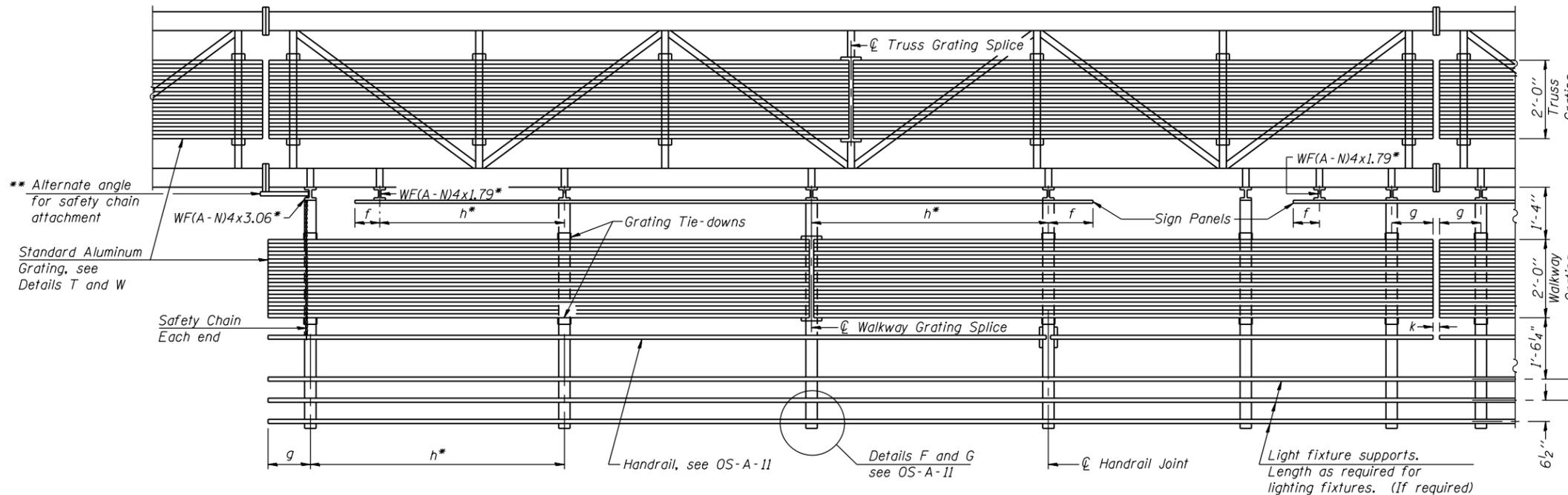
With lights and handrail omitted for clarity.  
For Section B-B, see Base Sheet OS-A-10.



**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.

**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.

District 2 Inventory No.	Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
SN-101	2S0811088R015.3		13'-6 <sup>7</sup> / <sub>8</sub> "	54'-4 <sup>7</sup> / <sub>8</sub> "	33'-0 <sup>1</sup> / <sub>4</sub> "	n/a	n/a	54'-4 <sup>7</sup> / <sub>8</sub> "
SN-104	2S0811088L016.0		30'-9 <sup>1</sup> / <sub>2</sub> "	39'-7 <sup>7</sup> / <sub>8</sub> "	26'-6 <sup>5</sup> / <sub>8</sub> "	n/a	n/a	39'-7 <sup>7</sup> / <sub>8</sub> "
SN-126	2S08IS005R011.2		15'-11"	45'-3 <sup>3</sup> / <sub>4</sub> "	28'-9 <sup>1</sup> / <sub>4</sub> "	n/a	n/a	45'-3 <sup>3</sup> / <sub>4</sub> "
SN-147	2S08IS092L028.0		14'-1 <sup>7</sup> / <sub>8</sub> "	51'-11 <sup>7</sup> / <sub>8</sub> "	15'-10 <sup>1</sup> / <sub>4</sub> "	n/a	n/a	51'-11 <sup>7</sup> / <sub>8</sub> "

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

Walkway and Truss Grating width dimensions are nominal and may vary  $\pm 1/2''$  based on available standard widths.

OS-A-9

6-1-12

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DESIGNED - JMG  
CHECKED - JJS  
PLOT SCALE =  
DRAWN - AI  
PLOT DATE = 3/12/2014  
CHECKED - MAI

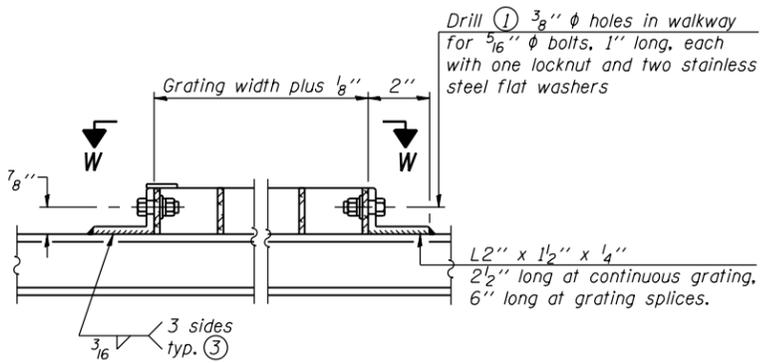
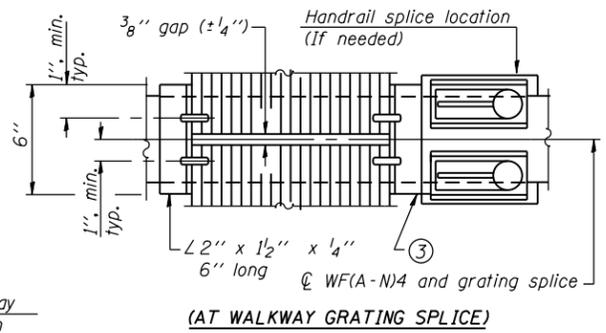
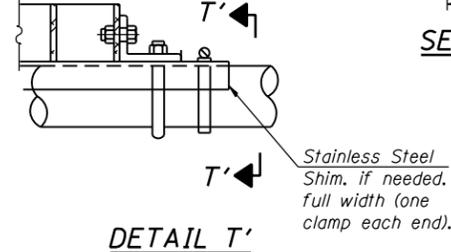
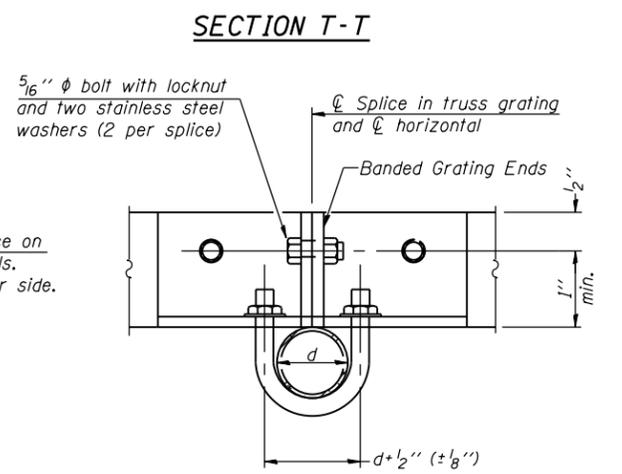
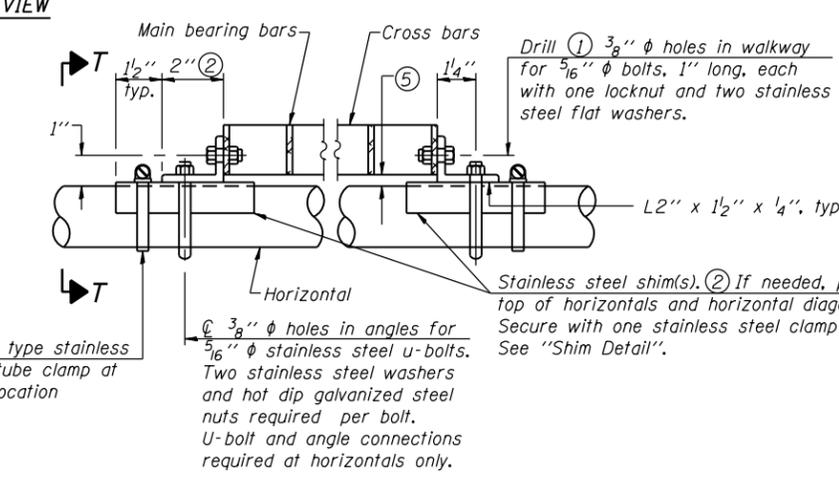
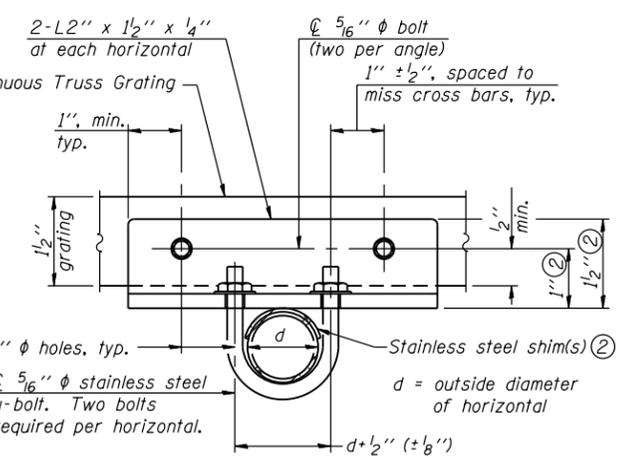
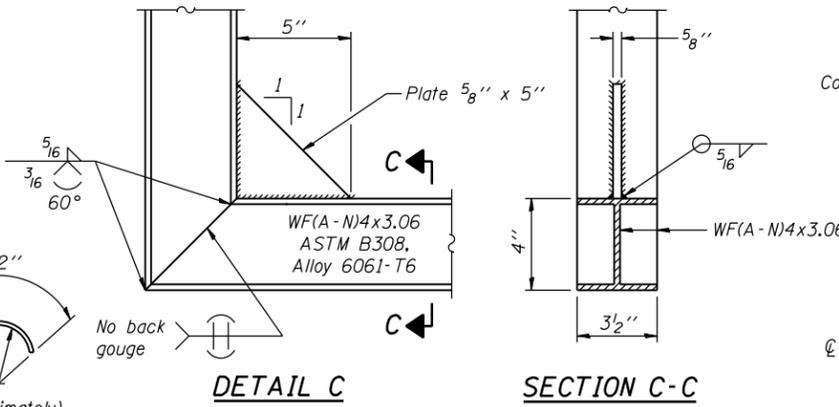
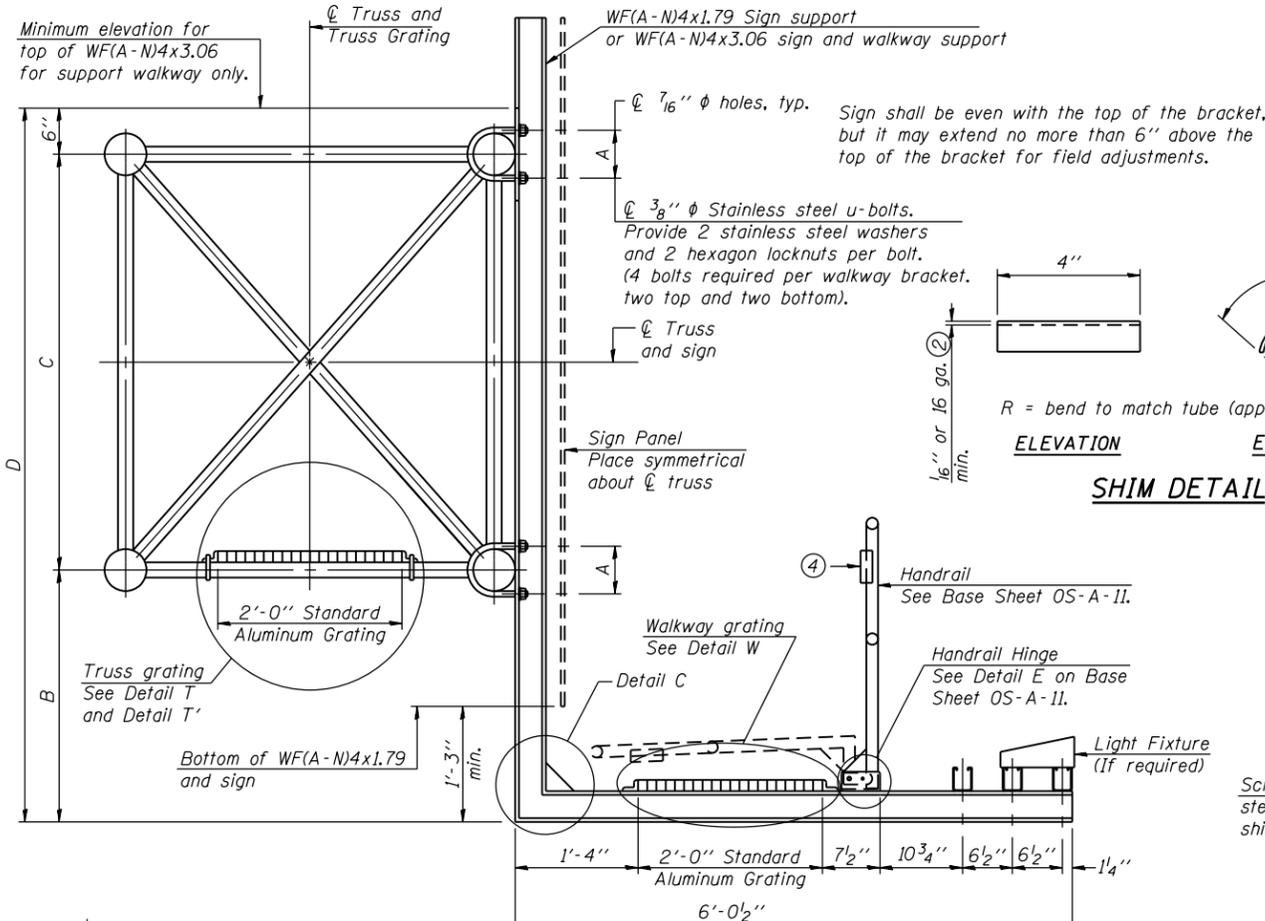
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**OVERHEAD SIGN STRUCTURES  
ALUMINUM WALKWAY DETAILS**

Sheet No. 7 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		ROCK ISLAND	45	36
* 0-2 OVD SIN STR REPL 14-26			CONTRACT NO. 46287	
ILLINOIS FED. AID PROJECT				



**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

Main Bearing Bars shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.  
 Cross bars shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

**OR**

Aluminum Grating with modified "I" sections for main bearing bars shall meet the following requirements:  
 Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.<sup>3</sup> per bar, a depth of 1 1/2", spaced on 1 3/16" centers.  
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-II.)
- ④ R 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑤ Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- ⑥ Based on actual height of tallest sign given on OS-A-1.

D2 INV. NO.	Structure Number	Station	A	⑥ B	C	⑥ D
SN-101	2S0811088R015.3		7 "	4'-10 1/2"	5'-3"	10'-7 1/2"
SN-104	2S0811088L016.0		6 "	5'-3"	4'-6"	10'-3"
SN-126	2S081S005R011.2		5 1/2"	3'-9"	4'-6"	8'-9"
SN-147	2S081S092L028.0		5 1/2"	5'-0"	4'-6"	10'-0"

OS-A-10

6-1-12

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USER NAME =  
 DESIGNED - JMG  
 CHECKED - JJS  
 PLOT SCALE =  
 DRAWN - AI  
 PLOT DATE = 3/12/2014  
 CHECKED - MAI

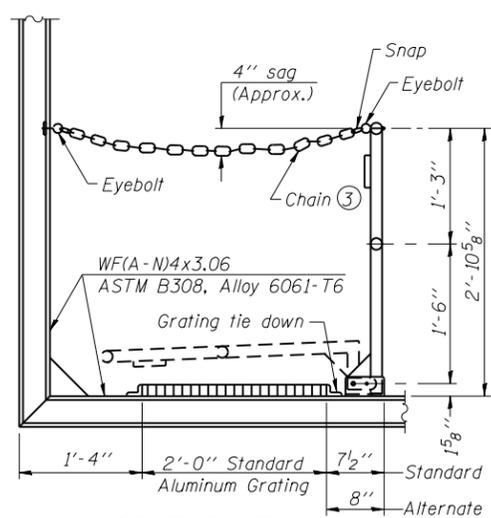
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 DEPARTMENT OF TRANSPORTATION

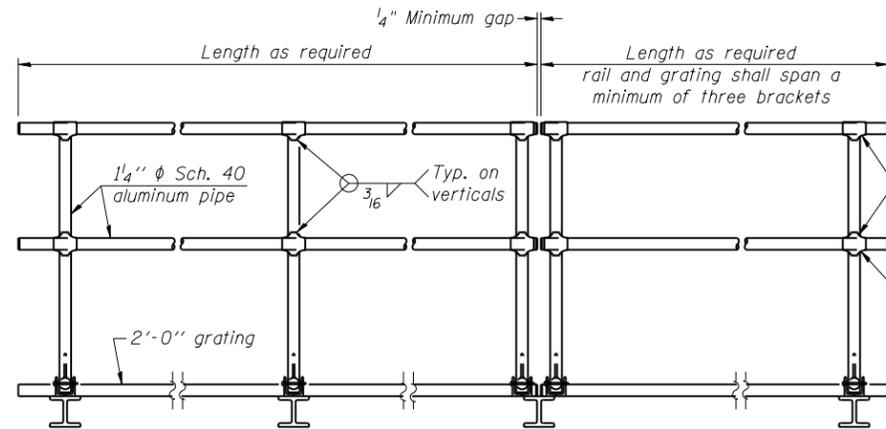
OVERHEAD SIGN STRUCTURES  
 ALUMINUM WALKWAY DETAILS

Sheet No. 8 of 11

F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 VAR. • ROCK ISLAND 45 37  
 • 0-2 OVD SIN STR REPL 14-26 CONTRACT NO. 46287  
 ILLINOIS FED. AID PROJECT



**SIDE ELEVATION**  
(Showing safety chain w/o sign)

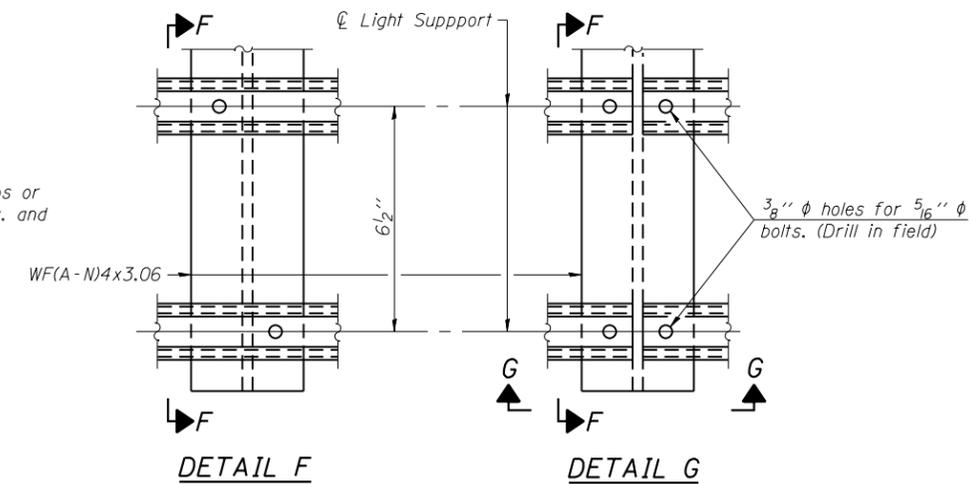


**FRONT ELEVATION**

**HANDRAIL DETAILS**

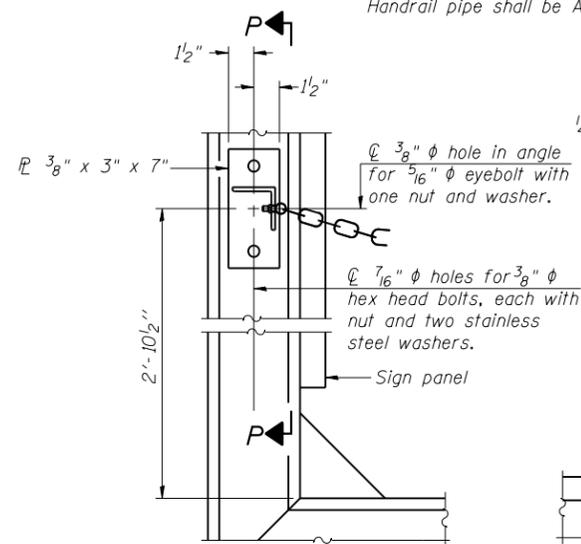
Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

- 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**

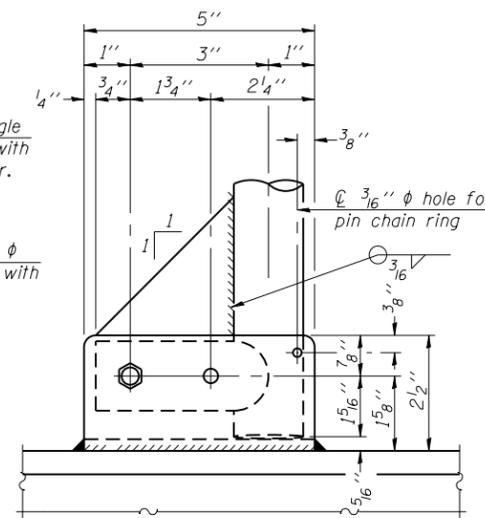
**DETAIL G**



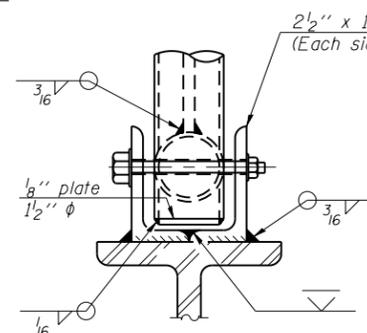
**ALTERNATE SAFETY CHAIN ATTACHMENT**

(With Sign Present)

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

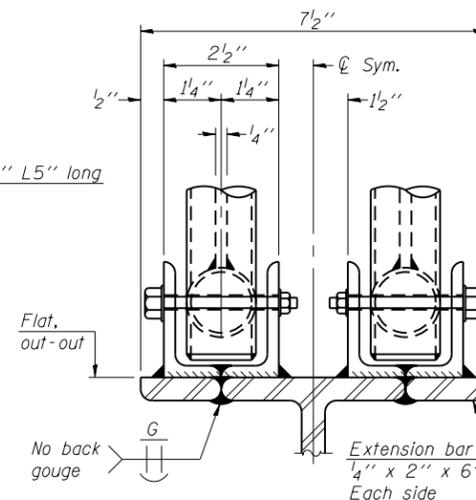


**SIDE ELEVATION**

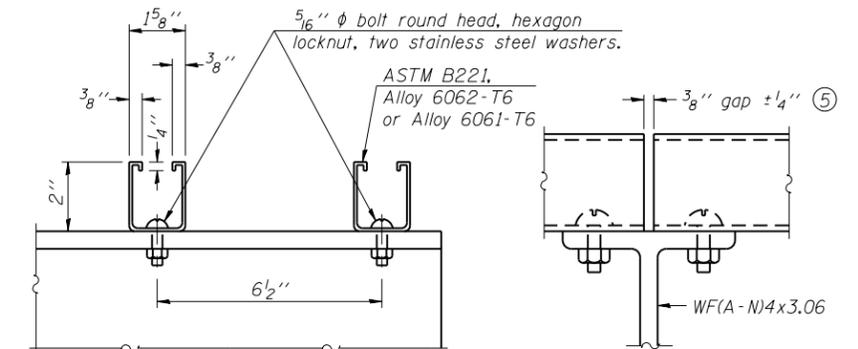


**FRONT ELEVATION**

See "Elevation" at right for dimensions.



**ELEVATION AT HANDRAIL JOINT** ④

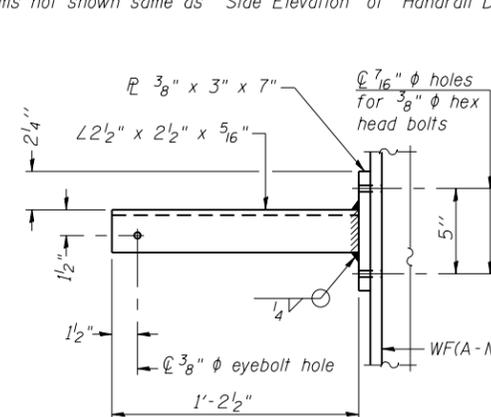


**SECTION F-F**

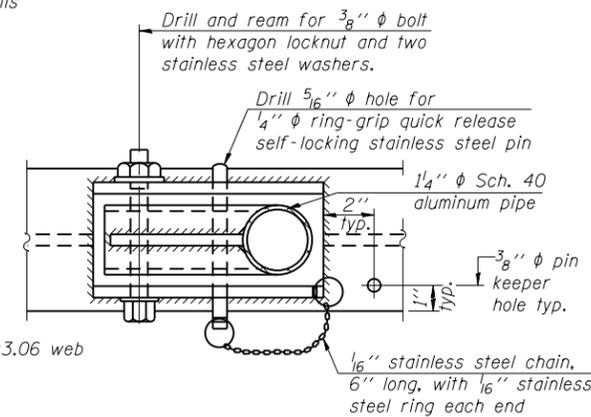
**SECTION G-G**

**LIGHTING FIXTURE MOUNTS (IF REQUIRED)**

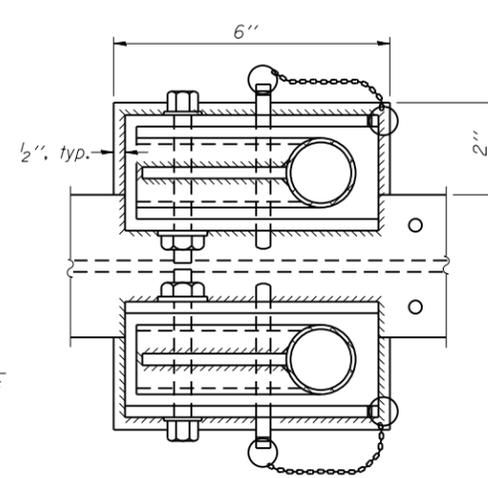
- ⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



**SECTION P-P**

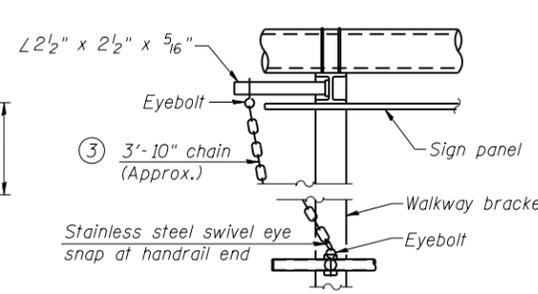


**PLAN DETAIL E HANDRAIL HINGE**



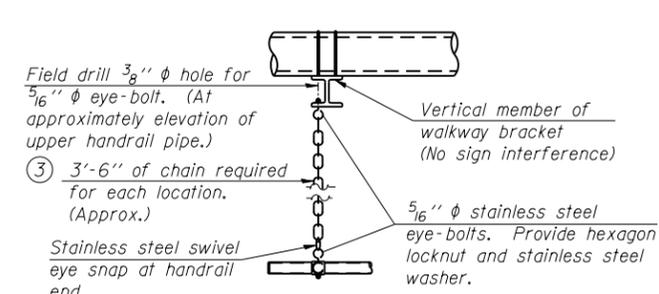
**PLAN AT HANDRAIL JOINT**

Details not shown same as "PLAN"



**ALTERNATE SAFETY CHAIN ATTACHMENT**

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



**SAFETY CHAIN**

One required for each end of each walkway.

- 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.

OS-A-11

6-1-12

**HBM**  
ENGINEERING GROUP, LLC  
CONSULTING & DESIGN  
INSPECTION & RATING  
RESEARCH & TESTING

4415 WEST HARRISON ST.  
SUITE 231  
HILLSDALE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

DESIGNED - JMG	REVISIONS -
CHECKED - JJS	REVISIONS -
DRAWN - AI	REVISIONS -
CHECKED - MAI	REVISIONS -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
ALUMINUM HANDRAIL DETAILS

Sheet No. 9 of 11

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	•	ROCK ISLAND	45	38
• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				

**NOTES:**

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) 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 Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.

**BAR LIST - EACH FOUNDATION**

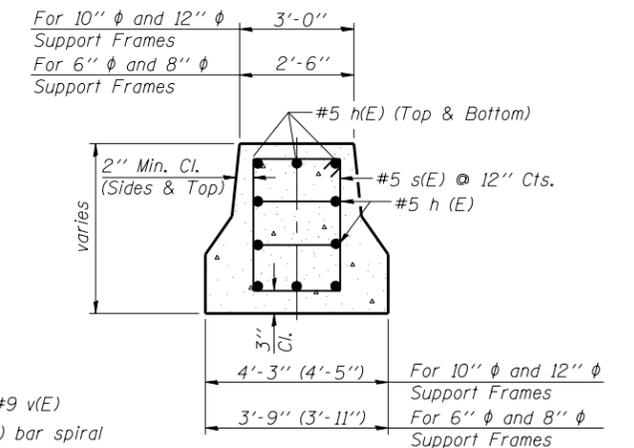
Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4"	—
s(E)	Varies	#5	Varies	□
v(E)	16	#9	F less 0'-5"	—
v(E)	24	#9	F less 0'-5"	—

#4(E) bar spiral - see Side Elevation

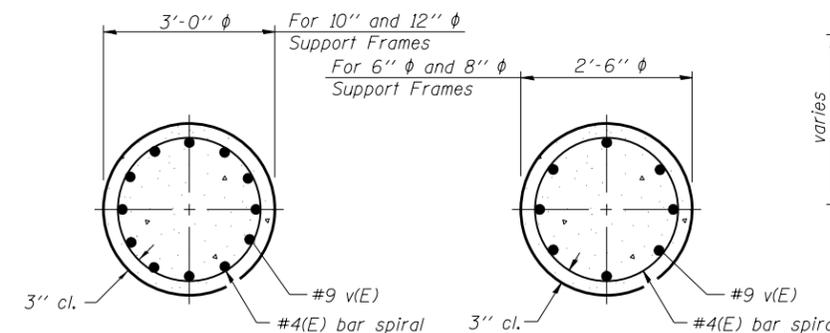
6" φ and 8" φ Support Frame  
10" φ and 12" φ Support Frame

Pipe Support Frames	cc	M	a	a/2
6" φ	7'-0"	9'-6"	0'-11"	5 1/2"
8" φ	7'-6"	10'-0"	1'-1 1/2"	6 3/4"
10" φ	8'-3"	11'-3"	1'-3"	7 1/2"
12" φ	9'-0"	12'-0"	1'-6"	9"

All dimensions in parenthesis are for 42" high barrier.

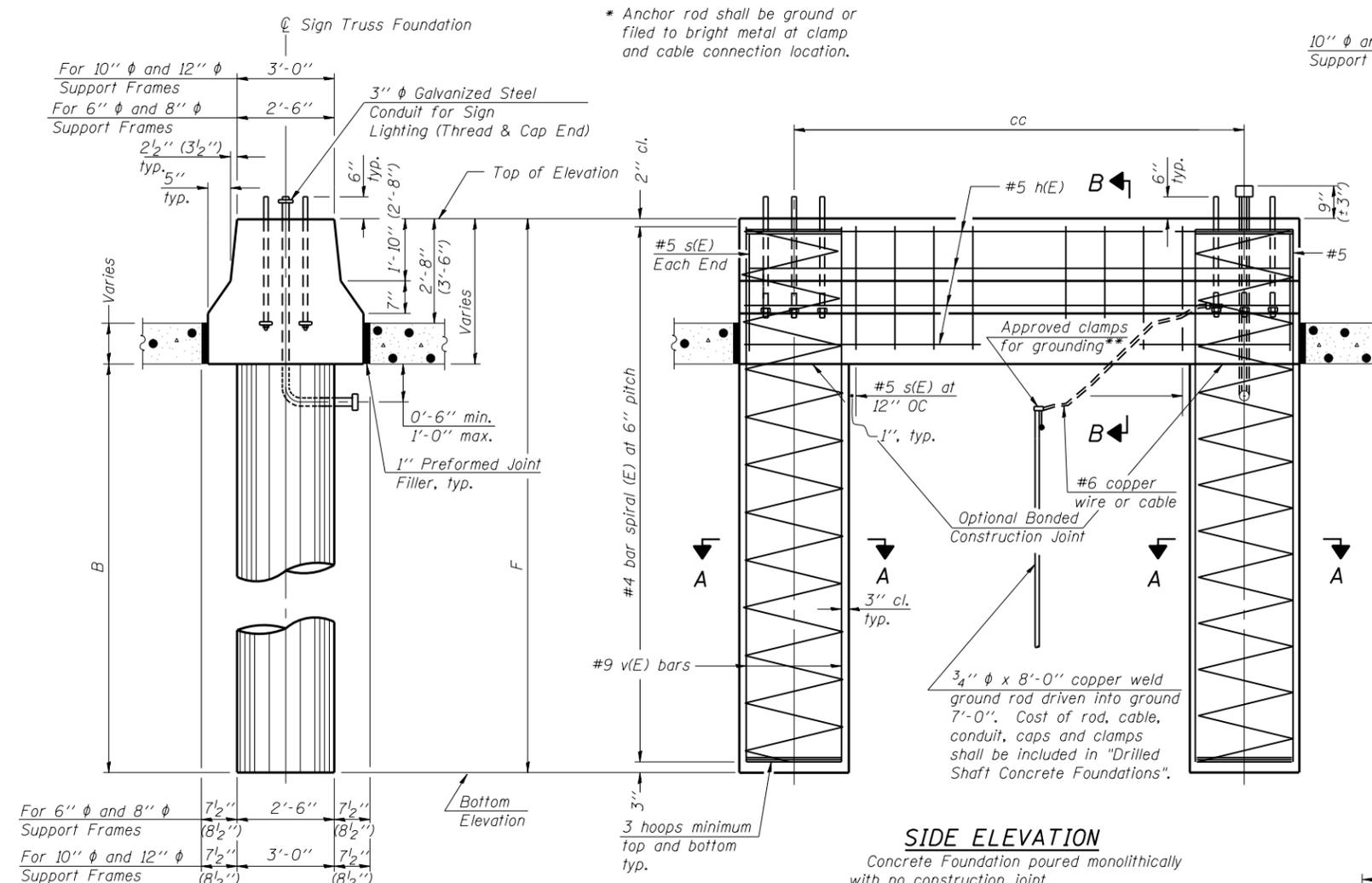


**SECTION B-B**

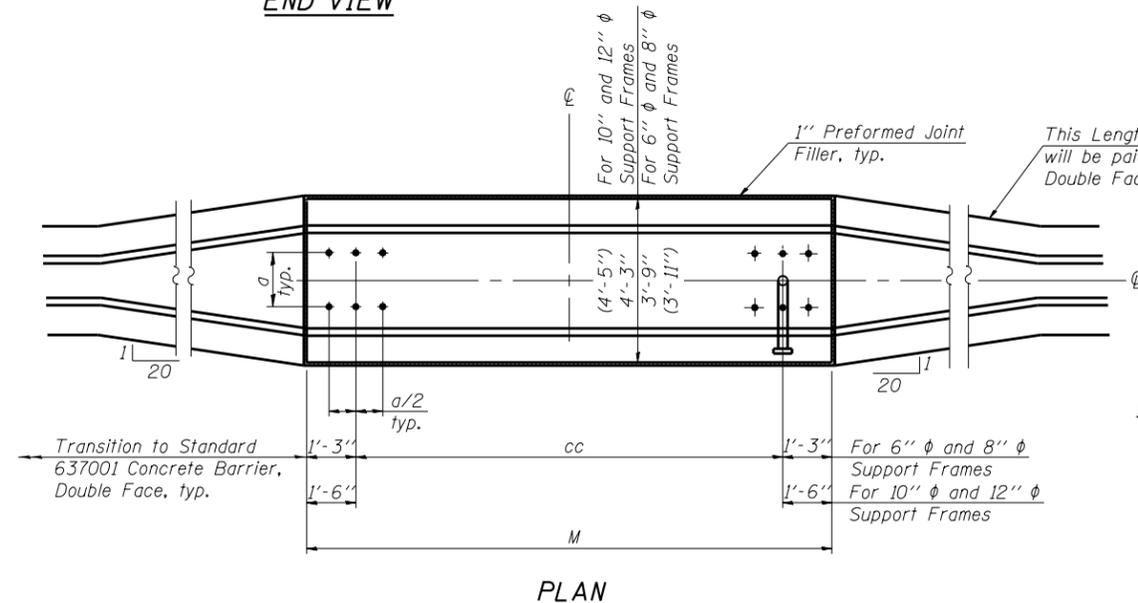


**SECTION A-A**

**SIDE ELEVATION**  
Concrete Foundation poured monolithically with no construction joint.



**END VIEW**



**PLAN**

District 2 Inventory No.

SN-126

Structure Number	Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
2S081S005R011.2		679.54	635.88	40'-0"	43'-8"					26.5

OS4-MED

8-21-13

**HBM**  
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FAX: (708) 236-0901

USER NAME =	DESIGNED - JMG	REVISED -
PLOT SCALE =	CHECKED - JJS	REVISED -
PLOT DATE = 3/12/2014	DRAWN - AI	REVISED -
	CHECKED - MAI	REVISED -

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

**OVERHEAD SIGN STRUCTURES**  
**MEDIAN SUPPORT FOUNDATION DETAILS**

Sheet No. 10 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	39
• 0-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				

**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 (Qu) 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.

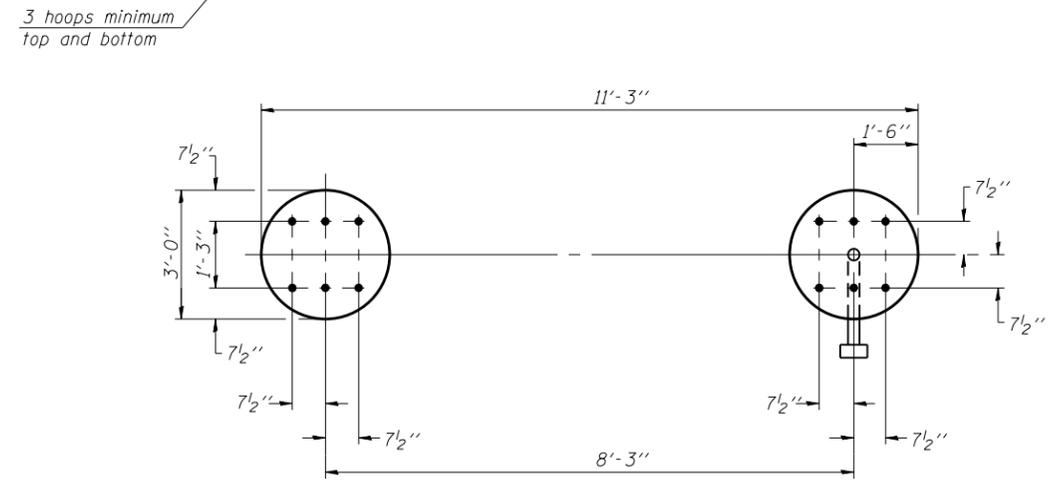
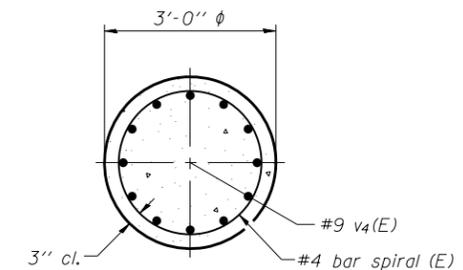
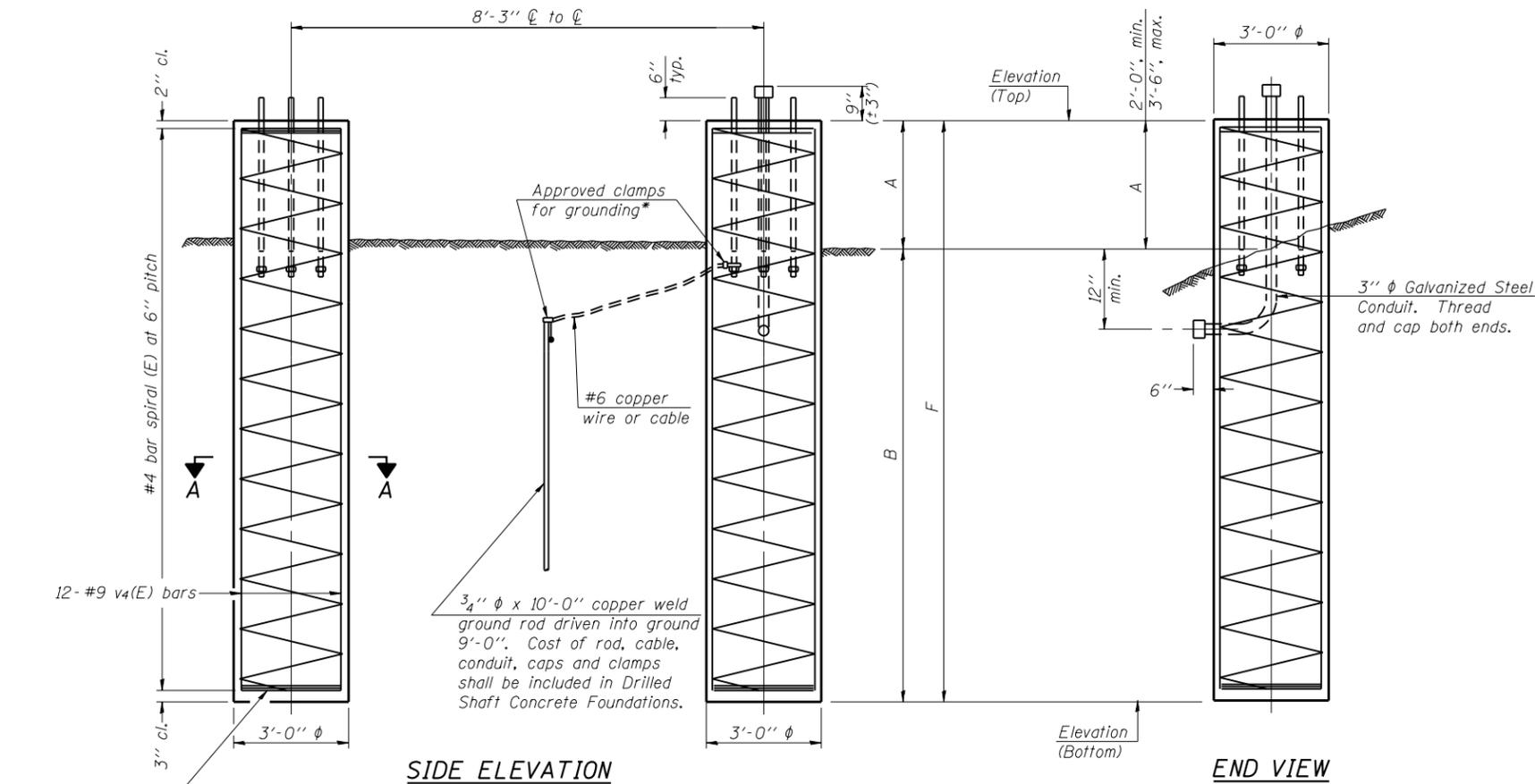
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District 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 Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



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" Ø SUPPORT FRAME  
TYPE I-A or II-A TRUSS**

**PLAN**

DISTRICT 2  
INVENTORY  
NO.

Structure Number	Station	Left Foundation			Right Foundation			Class DS Concrete (Cu. Yds.)	Rock Excavation (Cu. Yds.)				
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top			Elevation Bottom	A	B	F
2S0811088R015.3	SN-101	591.08	568.32	2'-3 3/8"	20'-6"	22'-9 1/8"	586.25	562.66	3'-1 1/8"	20'-6"	23'-7 1/8"	24.3	
2S0811088L016.0	SN-104	583.04	564.03	2'-6 1/8"	16'-6"	19'-0 1/8"	584.29	565.19	2'-7 1/4"	16'-6"	19'-1 1/4"	20	3.6
2S081S005R011.2	SN-126						673.21	630.0	3'-2 1/2"	40'-0"	43'-2 1/2"	22.6	
2S081S092L028.0	SN-147	564.21	545.67	2'-0 1/2"	16'-6"	18'-6 1/2"	566.46	547.93	2'-0 3/8"	16'-6"	18'-6 3/8"	19.4	

OS4-F3

8-21-13

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FAX: (708) 236-0901

USER NAME =	DESIGNED - JMG	REVISED -
PLOT SCALE =	CHECKED - JJS	REVISED -
PLOT DATE = 3/12/2014	DRAWN - AI	REVISED -
	CHECKED - MAI	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS**

Sheet No. 11 of 11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	•	ROCK ISLAND	45	40
• D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				



# SOIL BORING LOG

Date 9/12/13

ROUTE FAI Various DESCRIPTION 101 C-60-026-14, I-88 EB Sign Truss @ I-80 EB Ramp, .3 m. W. of I-80 LOGGED BY W. Garza

SECTION D-20VD SIN STR REPL 14-26 LOCATION Hampton Twp. - 23NW, SEC., TWP. 18N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. <u>101</u>	D E P T H  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)	Surface Water Elev. _____ ft	D E P T H  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)
Station <u>217+50</u>					Stream Bed Elev. _____ ft				
BORING NO. <u>B-1</u>					Groundwater Elev.:				
Station <u>217+12</u>					First Encounter <u>68.4</u> ft ▼				
Offset <u>0.00ft at CL</u>					Upon Completion <u>71.4</u> ft ▼				
Ground Surface Elev. <u>97.9</u> ft					After _____ Hrs.				

STIFF brown SILTY CLAY LOAM	95.90	3	3	1.3	22	VERY STIFF gray CLAY LOAM TILL (continued)	76.90	5	3.1	15
		3						9	B	
	94.40	5		P		HARD gray CLAY LOAM	74.40	11		18
								12	5.9	S
VERY SOFT brown SILTY CLAY LOAM	91.90	1	2	0.2	27	HARD gray CLAY LOAM	71.40	9		15
		3		P				11	5.7	S
								18	S	
VERY SOFT light brown SILTY LOAM	89.40	0	1	0.1	29	HARD olive-green/gray SILTY CLAY with SAND lens	68.90	7		16
		1		P				9	4.8	S
								13	S	
VERY SOFT tan SILTY LOAM	86.90	0	0	0.1	26	MEDIUM olive-green fine SAND	66.40	5		
		0		P				5		
		1						9		
VERY SOFT tan SILTY LOAM with SAND lens	84.40	0	0	0.2	25	VERY STIFF gray LOAM with SAND lens	63.90	5		16
		0		P				11	2.0	S
		1						16	S	
STIFF redish brown CLAY LOAM	81.90	0	2	1.2	53	VERY DENSE light gray DOLOMITE	61.90	8		
		2		S				15		
		3						85		
STIFF light gray LOAM with SAND lens	79.40	2	4	1.5	17	End of Boring				
		6		P						
		2								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

# SOIL BORING LOG

Date 9/13/13

ROUTE FAI Various DESCRIPTION 101 C-60-026-14, I-88 EB Sign Truss @ I-80 EB Ramp, .3 m. W. of I-80 LOGGED BY W. Garza

SECTION D-20VD SIN STR REPL 14-26 LOCATION Hampton Twp. - 23NW, SEC., TWP. 18N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. <u>101</u>	D E P T H  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)	Surface Water Elev. _____ ft	D E P T H  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)
Station <u>217+50</u>					Stream Bed Elev. _____ ft				
BORING NO. <u>B-2</u>					Groundwater Elev.:				
Station <u>217+31</u>					First Encounter <u>63.9</u> ft ▼				
Offset <u>90.00ft Rt CL</u>					Upon Completion <u>73.4</u> ft ▼				
Ground Surface Elev. <u>95.9</u> ft					After _____ Hrs.				

VERY STIFF gray SILTY LOAM	93.90	7	6	3.5	20	MEDIUM gray SILTY LOAM (continued)	74.90	2	0.5	28
		6						3	B	
	92.40	9		P		HARD gray CLAY LOAM	72.40	8		19
								11	6.2	B
VERY STIFF gray SILTY LOAM	89.90	6	9	3.1	13	HARD gray SANDY CLAY	69.90	7		15
		9		S				11	5.0	S
		11						14	S	
STIFF gray SILTY CLAY LOAM	87.40	3	5	1.7	22	VERY STIFF gray SANDY LOAM with SAND lens	67.40	7		17
		5		B				9	2.1	S
		7						10	S	
MEDIUM light gray SILTY CLAY LOAM	84.90	2	3	0.5	25	STIFF gray/black SANDY LOAM with moist SAND lens	64.40	4		30
		3		B				6	1.3	P
		4						7	P	
MEDIUM tan SILTY LOAM	82.40	0	2	0.8	28	MEDIUM tan dirty medium SAND	61.90	11		16
		2		B				11		
		2						12		
MEDIUM gray SILT LOAM	79.90	1	2	0.5	30	VERY DENSE light gray weathered DOLOMITE	59.90	100/4'		
		3		B						
STIFF redish brown CLAY LOAM	77.40	1	2	1.1	40	End of Boring				
		2		S						
		2								
MEDIUM gray SILTY LOAM		1								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Date 8/22/13

ROUTE FAI Various DESCRIPTION 104 C-60-026-14 I-88 WB Ramp to I-80 WB Sign Truss LOGGED BY W. Garza

SECTION LOCATION Hampton Twp. - 24NW, SEC. , TWP. 18N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 104	D	B	U	M	Surface Water Elev. _____ ft	D	B	U	M
Station 35+00	E	L	C	O	Stream Bed Elev. _____ ft	E	L	C	O
BORING NO. B-1	P	O	S	I	Groundwater Elev.:	P	O	S	I
Station 35+15	T	W	Qu	T	First Encounter _____ ft	T	W	Qu	T
Offset 34.00ft Lt CL	H	S			Upon Completion 564.0 ft ▽	H	S		
Ground Surface Elev. 583.0 ft	(ft)	(/6")	(tsf)	(%)	After _____ Hrs. _____ ft	(ft)	(/6")	(tsf)	(%)

					VERY DENSE gray SHALE (continued)				
					562.00				
					End of Boring				
HARD light gray SILTY LOAM	581.00								
		10							
		13	4.5+	13					
	579.50	16	P						
VERY STIFF dark gray SILTY CLAY LOAM									
		3							
		6	3.1	20					
	577.00	8	B						
MEDIUM gray SILTY CLAY LOAM									
		1							
		2	0.9	23					
	574.50	4	B						
STIFF redish brown SILTY CLAY									
		0							
		2	1.2	28					
	572.00	3	B						
MEDIUM light gray SHALE									
		2							
		4		15					
	569.00	8							
VERY DENSE gray moist SHALE									
		15							
		100/10"							
	567.00								
VERY DENSE gray SHALE with SANDSTONE lens									
		100/7"							
	564.50								
VERY DENSE gray SHALE									
		100/4"							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Date 8/23/13

ROUTE FAI Various DESCRIPTION 104 C-60-026-14 I-88 WB Ramp to I-80 WB Sign Truss LOGGED BY W. Garza

SECTION LOCATION Hampton Twp. - 24NW, SEC. , TWP. 18N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 104	D	B	U	M	Surface Water Elev. _____ ft	D	B	U	M
Station 35+00	E	L	C	O	Stream Bed Elev. _____ ft	E	L	C	O
BORING NO. B-2	P	O	S	I	Groundwater Elev.:	P	O	S	I
Station 34+83	T	W	Qu	T	First Encounter 570.6 ft ▽	T	W	Qu	T
Offset 46.00ft Rt CL	H	S			Upon Completion 567.6 ft ▽	H	S		
Ground Surface Elev. 582.6 ft	(ft)	(/6")	(tsf)	(%)	After _____ Hrs. _____ ft	(ft)	(/6")	(tsf)	(%)

MEDIUM brown SILTY CLAY LOAM			0.8	18					
			P						
VERY STIFF black SILTY CLAY	580.60								
		5							
		7	2.9	22					
	579.10	8	P						
STIFF gray SILTY CLAY LOAM									
		2							
		4	1.9	26					
	576.60	5	B						
STIFF gray/tan SILTY CLAY LOAM									
		2							
		2	1.2	27					
	574.10	4	B						
MEDIUM light gray SILTY CLAY									
		1							
		2	0.9	34					
	571.10	4	B						
MEDIUM light gray SHALE with SANDSTONE lens									
		4							
		9							
	569.10	19							
VERY DENSE gray SHALE with SANDSTONE									
		100/4"							
Auger Refusal at 16'	566.60								
End of Boring									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Date 9/9/13

ROUTE IL 5 (John Deere Road) DESCRIPTION 126 C60-026-14 Sign Truss @ Ramp to IL 84, .3 mi. S. of IL 84 LOGGED BY W. Garza

SECTION 5 SG LOCATION Hampton Twp. - 32SE, SEC. , TWP. 18N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 126	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	Surface Water Elev. ft	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
Station 372+00					Stream Bed Elev. ft				
BORING NO. B-1					Groundwater Elev.: None ft				
Station 372+21					First Encounter Upon Completion Dry ft				
Offset 48.00ft Rt CL					After Hrs. ft				
Ground Surface Elev. 675.2 ft									

Shoulder Rock					SOFT gray SILT (continued)	654.20	2	0.4	25
							4	B	
HARD light gray SILTY LOAM	673.20	5			SOFT gray SILT		1		
		7	4.5+	17			3	0.3	28
	671.70	11	P			651.70	4	P	
VERY STIFF tan SILT		8			MEDIUM gray SILTY CLAY		0		
		8	2.5	18			1	0.7	27
	669.20	7	P			649.20	3	B	
SOFT tan SILT		1			STIFF gray SILTY CLAY		0		
		1	0.4	24			3	1.1	25
	666.70	4	B			646.70	4	B	
SOFT tan SILTY LOAM		0			VERY STIFF gray CLAY LOAM		3		
		0	0.3	27			5	3.1	24
	664.20	1	B			644.20	8	B	
SOFT gray SILT		2			VERY SOFT gray SANDY LOAM		2		
		3	0.5	27			2	0.2	19
	661.70	4	B			641.20	5	P	
VERY SOFT gray SILT		1			VERY STIFF light gray SANDY LOAM TILL		7		
		3	0.2	27			10	3.3	12
	659.20	4	B			639.20	12	P	
VERY SOFT gray SILT		1			End of Boring				
		2	0.2	29					
	656.70	4	B						
SOFT gray SILT		1							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Date 9/11/13

ROUTE IL 5 (John Deere Road) DESCRIPTION 126 C60-026-14 Sign Truss @ Ramp to IL 84, .3 mi. S. of IL 84 LOGGED BY W. Garza

SECTION 5 SG LOCATION Hampton Twp. - 32SE, SEC. , TWP. 18N, RNG. 1E

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 126	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	Surface Water Elev. ft	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)
Station 372+00					Stream Bed Elev. ft				
BORING NO. B-2					Groundwater Elev.: 650.1 ft				
Station 372+16					First Encounter Upon Completion Dry ft				
Offset 7.00ft Rt CL					After Hrs. ft				
Ground Surface Elev. 677.1 ft									

Asphalt 1.8", Concrete 8"					SOFT gray SILT (continued)	656.10	3	0.3	29
							4	B	
VERY STIFF gray SILTY LOAM	675.10	5			VERY SOFT gray SILT		1		
		6	3.8	19			2	0.2	27
	673.60	6	P			653.60	4	B	
STIFF light gray SILTY LOAM		12			MEDIUM gray SILT		1		
		11	1.1	24			2	0.5	32
	671.10	10	P			651.10	4	B	
MEDIUM light gray SILT		1			MEDIUM gray SILTY CLAY		0		
		2	0.8	25			2	0.6	27
	668.60	4	B			648.60	3	B	
SOFT tan SILTY LOAM		2			MEDIUM gray SILTY CLAY		2		
		3	0.4	25			3	0.9	25
	666.10	5	B			645.60	4	B	
VERY SOFT light gray SILT		0			VERY STIFF dark gray CLAY LOAM TILL		5		
		1	0.2	26			8	3.1	24
	663.60	2	B			643.10	9	B	
SOFT gray SILT		1			SOFT gray LOAM		3		
		4	0.4	27			3	0.4	19
	661.10	5	B			641.10	5	B	
MEDIUM gray SILT		1			End of Boring				
		3	0.5	24					
	658.60	5	B						
SOFT gray SILT		1							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



USER NAME =	DESIGNED - JMG	REVISED -
CHECKED - JJS	REVISED -	
PLOT SCALE =	DRAWN - AI	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MAI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
BORING LOG IV

Sheet No. 4 of 5

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	44
D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				



# SOIL BORING LOG

Date 9/17/13

ROUTE FA 599 DESCRIPTION 147 C60-026-14 Sign Truss on IL 92 SB (Centennial Expressway), .1 m. N. of 31st Avenue LOGGED BY W. Garza

SECTION (1 & 2) SG LOCATION S. Rock Island Twp. - 10NW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D E P T H  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	H S T  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)
	411+20	B-1	411+29	0.00ft on CL	564.6			0.5 P	14										
MEDIUM brown SANDY LOAM												LOOSE gray dirty fine SAND (continued)					0 6		26
											543.10								
MEDIUM tan fine SAND	562.10						8 11 16					VERY LOOSE gray medium SANDY GRAVEL					2 2 2		
											541.10								
VERY DENSE tan fine SAND							14 25 26					Wash MEDIUM gray clean medium coarse SAND					6 6 9		
											538.60								
VERY DENSE tan fine SAND with SILT lens							15 23 34					LOOSE gray clean medium coarse SAND					11 5 5		
											535.60								
DENSE tan fine SAND							18 25 24					Wash MEDIUM gray CLAY					2 4 5	0.9 P	36
											533.60								
STIFF tan SILT with fine SAND							13 16 22	1.3 P	15			Wash STIFF gray CLAY					3 3 6	1.3 S	33
											531.10								
DENSE light gray fine SAND							16 18 16					STIFF gray CLAY					3 3 6	1.2 S	34
											528.60								
STIFF gray LOAM							1 2 3	1.2 B	27			End of Boring							
											546.10								
LOOSE gray dirty fine SAND							0												
											-20								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Date 9/19/13

ROUTE FA 599 DESCRIPTION 147 C60-026-14 Sign Truss on IL 92 SB (Centennial Expressway), .1 m. N. of 31st Avenue LOGGED BY W. Garza

SECTION (1 & 2) SG LOCATION S. Rock Island Twp. - 10NW, SEC. , TWP. 17N, RNG. 2W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D E P T H  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	H S T  (ft)	B L O W S  (/6")	U C S  (tsf)	M O I S T  (%)	
	411+00	B-2	411+16	65.00ft Rt CL	566.1															
12" Asphalt Shoulder												STIFF dark gray CLAY LOAM (continued)						2 3	1.2 B	30
											545.10									
MEDIUM tan fine SAND	564.10						5 6 13					Wash MEDIUM gray SANDY LOAM					0 4 7	0.6 P	16	
											542.60									
DENSE tan fine SAND							10 12 20					Wash No Recovery					0 0 2			
											539.60									
MEDIUM tan fine SAND							12 14 9					LOOSE/MEDIUM light gray SANDY GRAVEL					3 3 7			
											537.10									
MEDIUM tan fine SAND							10 15 10					Wash STIFF gray CLAY with 11% ORGANICS					2 2 3	1.1 P	45	
											535.10									
MEDIUM tan fine SAND							10 15 14					STIFF gray CLAY					1 2 3	1.1 S	34	
											532.60									
DENSE tan clean medium coarse moist SAND							9 13 18					STIFF gray CLAY with 12% ORGANICS					1 2 3	1.2 S	43	
											530.10									
MEDIUM light gray clean medium coarse SAND							8 8 10					End of Boring								
											547.10									
STIFF dark gray CLAY LOAM							2													
											-20									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

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PLOT SCALE =	DRAWN - AI	REVISED -
PLOT DATE = 3/12/2014	CHECKED - MAI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
BORING LOG V

Sheet No. 5 of 5

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.		ROCK ISLAND	45	45
D-2 OVD SIN STR REPL 14-26		CONTRACT NO. 46287		
ILLINOIS FED. AID PROJECT				