

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

FEDERAL AID HIGHWAY
PLANS FOR PROPOSED

VARIOUS ROUTES
D-1 OVD SIN STR REPL 12-02
VARIOUS COUNTIES
C-60-002-12

INDEX OF SHEETS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED APRIL 15 2011
PASSED

[Signature]
ENGINEER OF OPERATIONS

July 1 2011
acting Scott E. Still, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

APPROVED July 1 2011
Christine M. Reed
DIRECTOR DIVISION OF HIGHWAYS

JOINT UTILITY LOCATING INFORMATION FOR
EXCAVATIONS PHONE: 800-892-0123

CONTRACT NO. 46175

* 39 + 4 = 43

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -	REVISED -		Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	1
		DRAWN -	REVISED -		CONTRACT NO. 46175				
		PLOT SCALE =	REVISED -		ILLINOIS FED. AID PROJECT				
		PLOT DATE =	CHECKED -						

CODE NUMBER	PAY ITEM	UNIT	0021 100% STATE TOTAL QUANTITY
67100100	MOBILIZATION	L SUM	1.00
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	1,353.50
73800100	STRUCTURAL STEEL SUPPORT FOR OVERHEAD SIGN STRUCTURE - SPAN	EACH	16.00
73801100	REMOVE AND REERECT OVERHEAD SIGN STRUCTURE-SPAN	EACH	17.00
73801200	REMOVE AND REERECT OVERHEAD SIGN STRUCTURE-CANTILEVER	EACH	8.00
X7380010	REMOVE AND REERECT OVERHEAD SIGN STRUCTURE-TRUSS	EACH	8.00
Z0052395	TIGHTEN U-BOLT	EACH	2.00
Z0025680	FURNISH AND INSTALL SADDLE SHIM BLOCK	EACH	40.00
X7370005	REPAIR CONCRETE FOUNDATION FOR OVERHEAD SIGN STRUCTURE	EACH	10.00
X7340105	REBUILD CONCRETE FOUNDATION FOR OVERHEAD SIGN STRUCTURE	EACH	11.00
X7330070	OVERHEAD SIGN SUPPORT GROUT REPAIR	EACH	20.00
X7330085	FURNISH AND INSTALL SAFETY CHAIN	EACH	2.00
X5090100	FURNISH AND INSTALL HANDRAIL	FOOT	296.50
X5210005	TIGHTEN SUPPORT ANCHOR BOLT	EACH	3.00
Z0025615	FURNISH AND INSTALL METAL SCREEN	EACH	5.00
Z0025620	FURNISH AND INSTALL TRUSS DAMPER	EACH	25.00
X0326714	REPLACE OVERHEAD SIGN STRUCTURE ANCHOR ROD	EACH	4.00
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1.00
Z0026346	NIGHT TIME WORK ZONE LIGHTING	L SUM	1.00
Z0030850	TEMPORARY INFORMATIONAL SIGNING	SQ FT	558.25

FILE NAME *	USER NAME *	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	<i>Summary of Quantities</i>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISED -			Various	0-1 DVD SIN STR REPL 12-02	VARIOUS	35	2	
PLOT SCALE *		DRAWN -	REVISED -			CONTRACT NO. 46175					
PLOT DATE *		CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

District 1
Schedule of Overhead Sign Structure Repair & Replacement

Location No.:	1	State I.D. No.:	1S099080L131.0				
County:	WILL	Route:	180	M.P.:	131.0	Direction:	SB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	75.5					
Structural Steel Support for Overhead Sign Structure Span	EACH	2					
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1					
Furnish and Install Saddle Shim Block	EACH	4					
Furnish and Install Internal Truss Damper	EACH	1					
<i>This work will be done during night time hours using District One "Keeping the Expressway Open to Traffic" Special Provision</i>							
<i>All electrical work will be done by using our EMC</i>							

Location No.:	5	State I.D. No.:	1S099080R132.9				
County:	WILL	Route:	180	M.P.:	132.9	Direction:	EB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	79.00					
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00					
Rebuild Concrete Foundation for Overhead Sign Structure Span	EACH	2.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
Temporary Informational Signing	SQ FT	96.00					

Location No.:	9	State I.D. No.:					
County:		Route:		M.P.:		Direction:	
Description of Work	Unit	Quantity					
Intentionally Left Blank							
There is no Location # 9							

Location No.:	2	State I.D. No.:	1S099080R133.2				
County:	Lake	Route:	180	M.P.:	133.2	Direction:	EB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	86.5					
Structural Steel Support for Overhead Sign Structure Span	EACH	2					
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1					
Furnish and Install Saddle Shim Block	EACH	4					
Furnish and Install Internal Truss Damper	EACH	1					
<i>This work will be done during night time hours using District One "Keeping the Expressway Open to Traffic" Special Provision</i>							
<i>All electrical work will be done by using our EMC</i>							

Location No.:	6	State I.D. No.:	1C099080L147.8				
County:	Will	Route:	180	M.P.:	147.8	Direction:	WB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	34.50					
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00					
Rebuild Concrete Foundation for Overhead Sign Structure Cantil	EACH	1.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
Temporary Informational Signing	SQ FT	45.50					

Location No.:	10	State I.D. No.:	1C099080L147.8				
County:	WILL	Route:	157	M.P.:	332.7	Direction:	SB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	34.50					
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00					
Repair Concrete Foundation for Overhead Sign Structure Cantile	EACH	1.00					
Overhead Sign Support Grout Repair	EACH	1.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
<i>This work will be done during night time hours using District One "Keeping the Expressway Open to Traffic" Special Provision</i>							
<i>All electrical work will be done by using our EMC</i>							

Location No.:	3	State I.D. No.:	1S099080L130.9				
County:	WILL	Route:	180	M.P.:	130.9	Direction:	SB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	53					
Structural Steel Support for Overhead Sign Structure Span	EACH	2					
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1					
Furnish and Install Saddle Shim Block	EACH	4					
Repair Concrete Foundation for Overhead Sign Structure Span	EACH	2					
Furnish and Install Internal Truss Damper	EACH	1					
Furnish and Install Safety Chain	EACH	2					
Furnish and Install Safety Metal Screen	EACH	1					
Replace Overhead Sign Structure Anchor Rods	EACH	4					
<i>This work will be done during night time hours using District One "Keeping the Expressway Open to Traffic" Special Provision</i>							
<i>All electrical work will be done by using our EMC</i>							

Location No.:	7	State I.D. No.:	1S099080R131.8				
County:	Will	Route:	180	M.P.:	131.8	Direction:	eb
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	70.00					
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00					
Rebuild Concrete Foundation for Overhead Sign Structure Span	EACH	2.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
Temporary Informational Signing	SQ FT	63.75					

Location No.:	11	State I.D. No.:	1S016057R34.4				
County:	COOK	Route:	157	M.P.:	340.4	Direction:	NB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	111.00					
Structural Steel Support for Overhead Sign Structure Span	EACH	2.00					
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1.00					
Furnish and Install Saddle Shim Block	EACH	4.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
<i>All electrical work will be done by using our EMC</i>							
<i>This work will be done during night time hours using District One "Keeping the Expressway Open to Traffic" Special Provision</i>							

Location No.:	4	State I.D. No.:	1S099080L133.7				
County:	WILL	Route:	180	M.P.:	133.7	Direction:	WB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	66.5					
Structural Steel Support for Overhead Sign Structure Span	EACH	2					
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1					
Furnish and Install Saddle Shim Block	EACH	4					
Furnish and Install Internal Truss Damper	EACH	1					
<i>This work will be done during night time hours using District One "Keeping the Expressway Open to Traffic" Special Provision</i>							
<i>All electrical work will be done by using our EMC</i>							

Location No.:	8	State I.D. No.:	1S099080L132.2				
County:	Will	Route:	180	M.P.:	132.2	Direction:	WB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	96.00					
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00					
Repair Concrete Foundation for Overhead Sign Structure (RT)	EACH	1.00					
Rebuild Concrete Foundation for Overhead Sign Structure (LT)	EACH	1.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
Temporary Informational Signing	SQ FT	71.25					

Location No.:	12	State I.D. No.:					
County:		Route:		M.P.:		Direction:	
Description of Work	Unit	Quantity					
Intentionally Left Blank							
There is no Location # 12							

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIN STR REPL 12-02		VARIOUS	39	3
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

District 1
Schedule of Overhead Sign Structure Repair & Replacement

Location No.:	13	State I.D. No.:	1C099057R332.2
County:	WILL	Route:	157 M.P.: 332.2 Direction: NB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	34.50	
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00	
Repair Concrete Foundation for Overhead Sign Structure Cantile	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	1.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

Location No.:	17	State I.D. No.:	1S099055R266.8
County:	WILL	Route:	155 M.P.: 266.8 Direction: NB
Description of Work	Unit	Quantity	
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	2.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
Furnish and Install Handrail (Aluminum)	FOOT	59.50	
<i>All electrical work will be done by using our EMC</i>			
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			

Location No.:	21	State I.D. No.:	1S0221055R271.1
County:	DU PAGE	Route:	155 M.P.: 271.1 Direction: SB
Description of Work	Unit	Quantity	
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00	
Repair Concrete Foundation for Overhead Sign Structure Span	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	2.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
Furnish and Install Handrail (Aluminum)	FOOT	65.00	
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

Location No.:	14	State I.D. No.:	1C099057R329.6
County:	Will	Route:	157 M.P.: 329.6 Direction: NB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	34.50	
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00	
Rebuild Concrete Foundation for Overhead Sign Structure Cantile	EACH	1.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
Temporary Informational Signing	SQ FT	45.50	

Location No.:	18	State I.D. No.:	1S0221055R270.7
County:	DU PAGE	Route:	155 M.P.: 270.7 Direction: NB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	91	
Structural Steel Support for Overhead Sign Structure Span	EACH	2	
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1	
Furnish and Install Saddle Shim Block	EACH	4	
Furnish and Install Internal Truss Damper	EACH	1	
<i>All electrical work will be done by using our EMC</i>			
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			

Location No.:	22	State I.D. No.:	1C0221055R272.9
County:	DU PAGE	Route:	155 M.P.: 272.9 Direction: SB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	34.50	
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00	
Repair Concrete Foundation for Overhead Sign Structure Cantile	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	1.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

Location No.:	15	State I.D. No.:	1C099057R330.5
County:	Will	Route:	157 M.P.: 330.5 Direction: SB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	34.50	
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00	
Rebuild Concrete Foundation for Overhead Sign Structure	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	1.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
Temporary Informational Signing	SQ FT	45.50	

Location No.:	19	State I.D. No.:	1S099055R269.2
County:	WILL	Route:	155 M.P.: 269.2 Direction: SB
Description of Work	Unit	Quantity	
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00	
Repair Concrete Foundation for Overhead Sign Structure Span	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	2.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

Location No.:	23	State I.D. No.:	1S0221055R274.8
County:	DU PAGE	Route:	155 M.P.: 274.8 Direction: SB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	52.50	
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00	
Repair Concrete Foundation for Overhead Sign Structure Span	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	4.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

Location No.:	16	State I.D. No.:	1C099057R327.4
County:	Will	Route:	157 M.P.: 327.4 Direction: SB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	21.50	
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00	
Rebuild Concrete Foundation for Overhead Sign Structure	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	1.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
Temporary Informational Signing	SQ FT	93.50	

Location No.:	20	State I.D. No.:	1C0221055R270.8
County:	DU PAGE	Route:	155 M.P.: 270.8 Direction: SB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	34.50	
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00	
Repair Concrete Foundation for Overhead Sign Structure Cantile	EACH	1.00	
Overhead Sign Support Grout Repair	EACH	1.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

Location No.:	24	State I.D. No.:	1S0221055R272.9
County:	DU PAGE	Route:	155 M.P.: 274.9 Direction: SB
Description of Work	Unit	Quantity	
Overhead Sign Structure Walkway	FOOT	93.00	
Structural Steel Support for Overhead Sign Structure Span	EACH	2.00	
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1.00	
Tighten U-Bolts (at Left Sign)	EACH	2.00	
Furnish and Install Saddle Shim Block	EACH	4.00	
Furnish and Install Internal Truss Damper	EACH	1.00	
<i>This work will be done during night time hours using District One</i>			
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>			
<i>All electrical work will be done by using our EMC</i>			

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
PLOT SCALE =		DRAWN -	REVISED -
PLOT DATE =		CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Voritus D-1	0VD SIN STR REFL 12-02	VARIOUS	39	4
				CONTRACT NO. 46175
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

District 1
Schedule of Overhead Sign Structure Repair & Replacement

Location No.:	25	State I.D. No.:	1S016055L276.5				
County:	Cook	Route:	155	M.P.:	276.5	Direction:	SB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	90.50					
Structural Steel Support for Overhead Sign Structure Span	EACH	2.00					
Remove and Re-erect Overhead Sign Structure-Truss	EACH	1.00					
Furnish and Install Saddle Shim Block	EACH	4.00					
Rebuild Concrete Foundation for Overhead Sign Structure	EACH	2.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
Temporary Informational Signing	EACH	97.75					

Location No.:	29	State I.D. No.:	1S016094R039.1				
County:	COOK	Route:	IL 94	M.P.:	39.1	Direction:	SB
Description of Work	Unit	Quantity					
Furnish and Install Handrail (Aluminum)	FOOT	43.00					
Tighten Support Anchor Bolt	EACH	1.00					
Furnish and Install Metal Screen	EACH	2.00					
<i>All electrical work will be done by using our EMC</i>							
<i>This work will be done during night time hours using District One</i>							
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>							

Location No.:	26	State I.D. No.:					
County:		Route:		M.P.:		Direction:	
Description of Work	Unit	Quantity					
Intentionally Left Blank							
There is no Location # 26							

Location No.:	1-30	State I.D. No.:	1S016090R080.3				
County:	Cook	Route:	190	M.P.:	80.3	Direction:	SB
Description of Work	Unit	Quantity					
Furnish and Install Handrail (Aluminum)	FOOT	43.00					
Tighten Support Anchor Bolt	EACH	2.00					
Furnish and Install Metal Screen (LT)	EACH	1.00					
<i>All electrical work will be done by using our EMC</i>							
<i>This work will be done during night time hours using District One</i>							
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>							

Location No.:	27	State I.D. No.:	1S022055R274.6				
County:	DU PAGE	Route:	155	M.P.:	274.6	Direction:	NB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	92.50					
Remove and Re-erect Overhead Sign Structure-Span	EACH	1.00					
Overhead Sign Support Grout Repair	EACH	2.00					
Furnish and Install Saddle Shim Block	EACH	4.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
<i>All electrical work will be done by using our EMC</i>							
<i>This work will be done during night time hours using District One</i>							
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>							

Location No.:	31	State I.D. No.:	1S016094L052.1				
County:	COOK	Route:	194	M.P.:	52.1	Direction:	NB
Description of Work	Unit	Quantity					
Furnish and Install Handrail (Aluminum)	FOOT	43.00					
Furnish and Install Metal Screen	EACH	1.00					
<i>This work will be done during night time hours using District One</i>							
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>							

Location No.:	28	State I.D. No.:	1C022055L274.5				
County:	DU PAGE	Route:	155	M.P.:	274.5	Direction:	NB
Description of Work	Unit	Quantity					
Overhead Sign Structure Walkway	FOOT	34.50					
Remove and Re-erect Overhead Sign Structure-Cantilever	EACH	1.00					
Overhead Sign Support Grout Repair	EACH	1.00					
Furnish and Install Internal Truss Damper	EACH	1.00					
<i>All electrical work will be done by using our EMC</i>							
<i>This work will be done during night time hours using District One</i>							
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>							

Location No.:	32	State I.D. No.:	1S016094R032.2				
County:	COOK	Route:	194	M.P.:	32.2	Direction:	SB
Description of Work	Unit	Quantity					
Furnish and Install Handrail (Aluminum)	FOOT	43.00					
<i>This work will be done during night time hours using District One</i>							
<i>"Keeping the Expressway Open to Traffic" Special Provision</i>							

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1	OWD SIM STR REPL 12-02	VARIOUS	39	5
CONTRACT NO. 46175				
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.

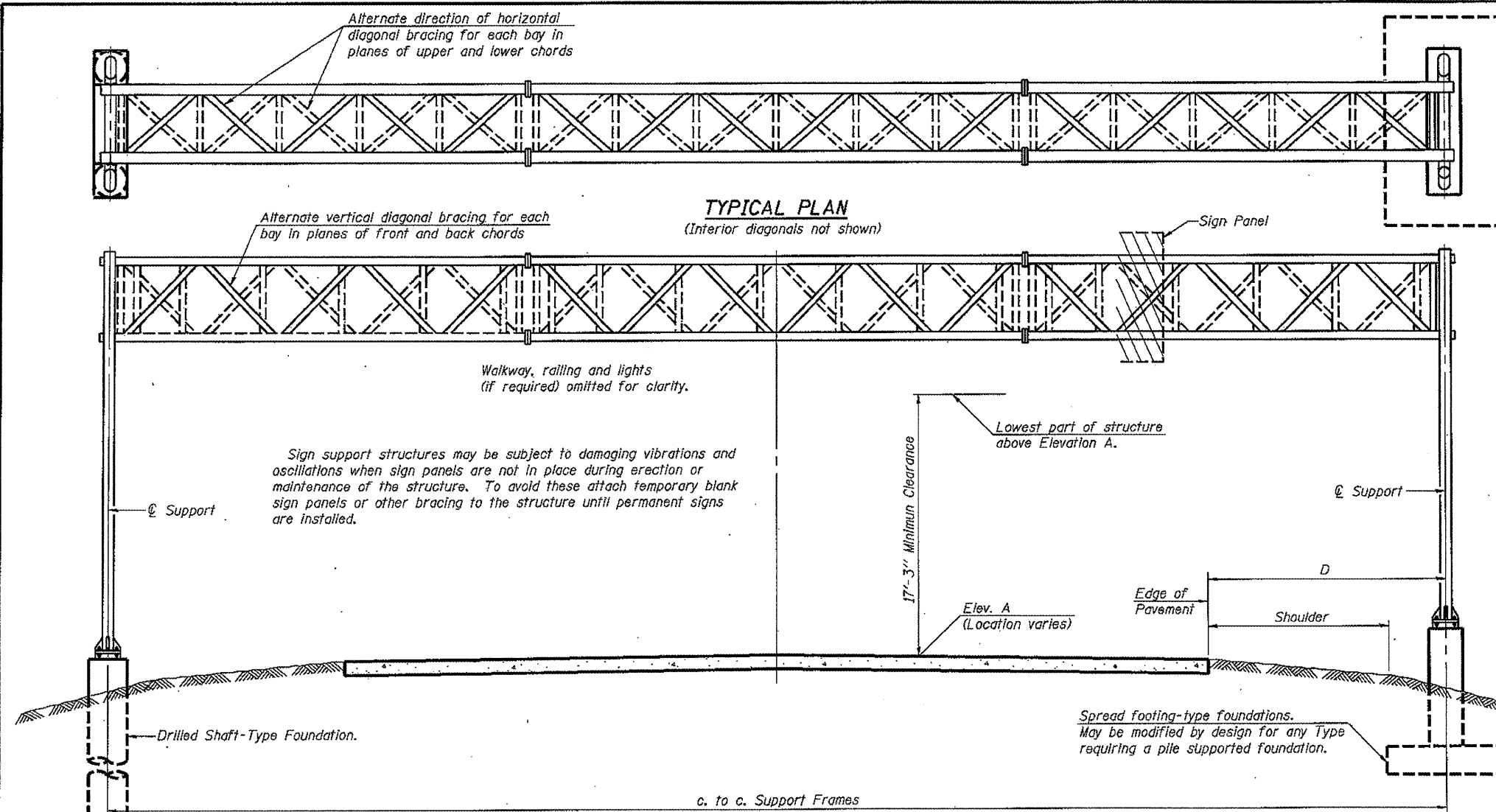
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

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

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

TOTAL BILL OF MATERIAL

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

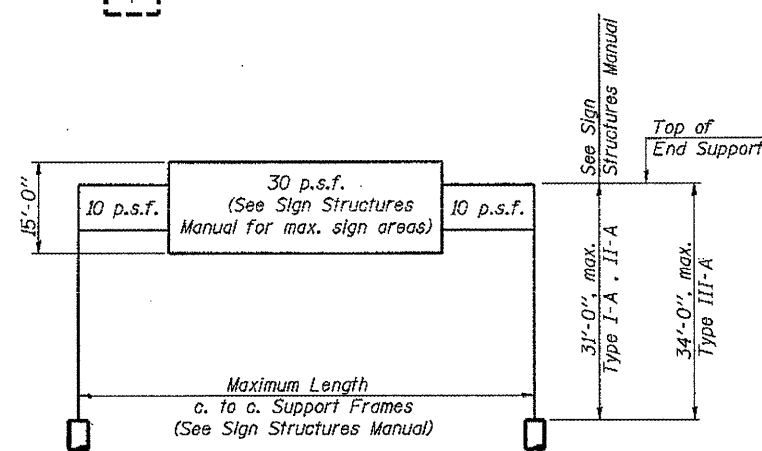


TYPICAL ELEVATION
(Looking at Face of Signs)**

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
IS0991080L131.0	22 + 00	II-A	74'-0"	607.79	13'-0"		463
IS0991080R133.2	432 + 75	II-A	86'-0"	102.42	15'-0"		319.75
IS0991080L130.9	28 + 25	II-A	58'-0"	607.89	13'-1"		283
IS0991080L133.7	464 + 00	III-A	65'-0"	105	15'-0"		328
IS0991080R132.9	417 + 50	II-A	78'-6"	574.27	13'-0"		527.25
IS0991080R131.8	359 + 00	III-A	69'-6"	617.29	14'-5"		243.5

**Looking upstation for structures with signs both sides.

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



DESIGN WIND LOADING DIAGRAM

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

OS-A-1

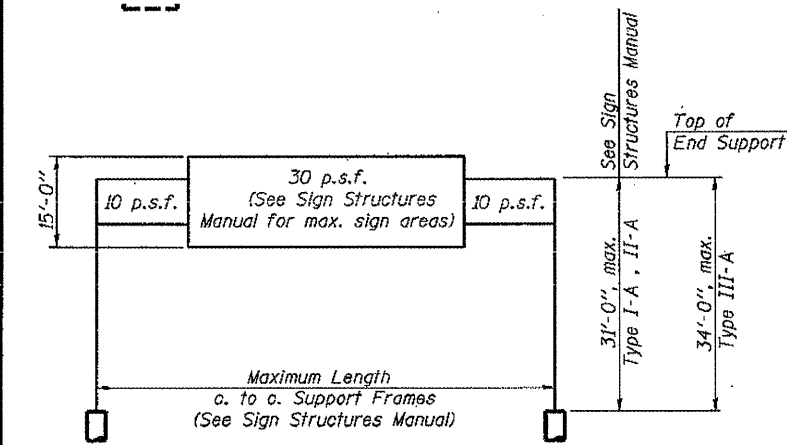
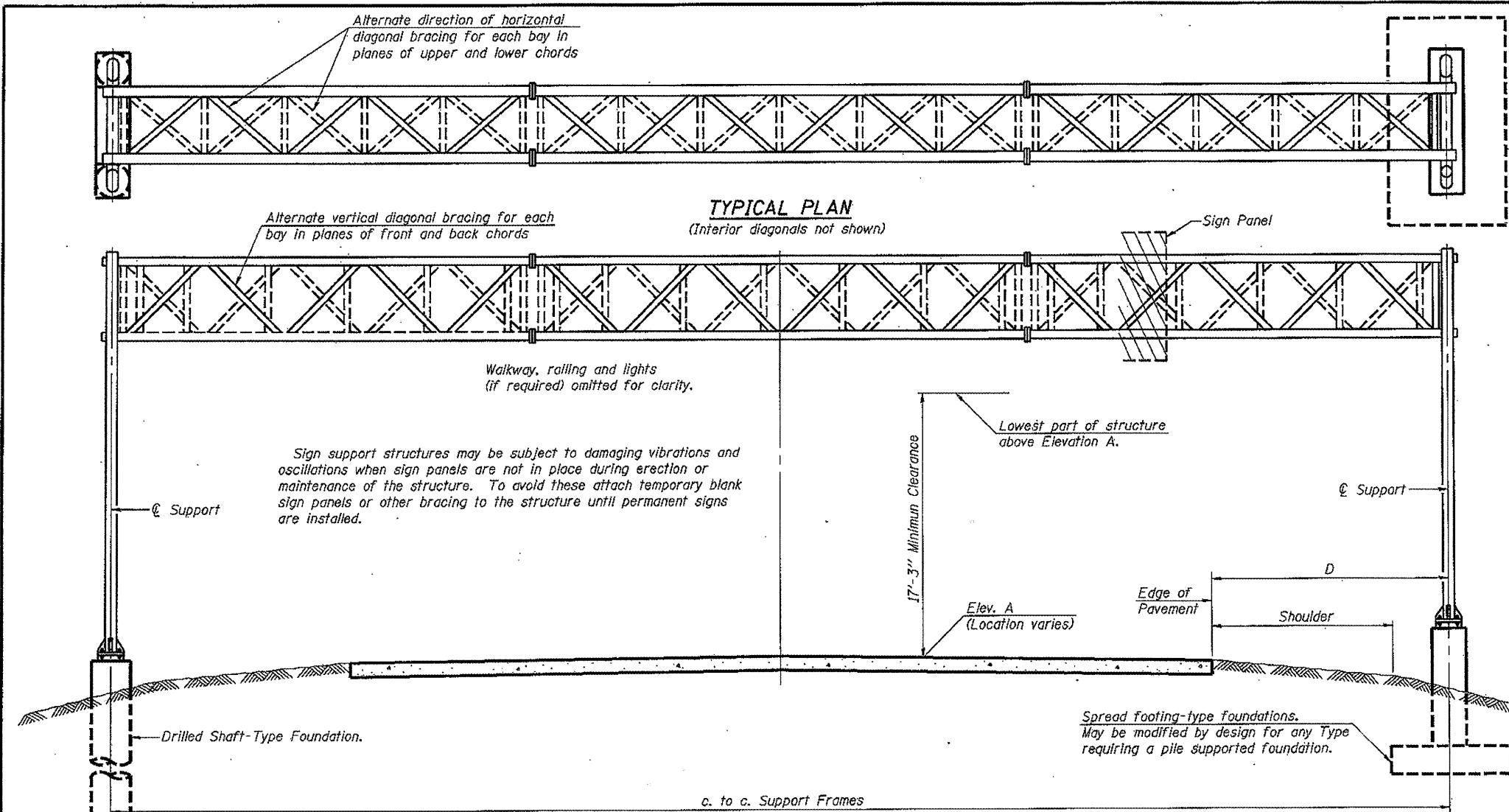
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		CHECKED -	REVISOR -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	6
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				



TYPICAL ELEVATION
(Looking at Face of Signs)**

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
ISO991080L132.2	379 + 00	II-A	95'-6"	577.47	17'-7"		388
ISO161057R340.4	150 + 50	II-A	110'-0"	738.35	33'-0"		260.5
ISO221055R270.7	784 + 00	II-A	90'-0"	763.98	15'-0"		423
ISO221055L274.8	1000 + 40	I	52'-0"				284
ISO221055L274.9	1006 + 60	III-A					325
ISO161055L276.5	1098 + 50	II	90'-0"				605
ISO221055R274.6	625 + 00	II-A	91'-6"	100	17'-6"		294.5

**Looking upstation for structures with signs both sides.

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

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

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 Bridge Seat Sealer in accordance with the Standard Specifications.

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

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

TOTAL BILL OF MATERIAL

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

OS-A-1

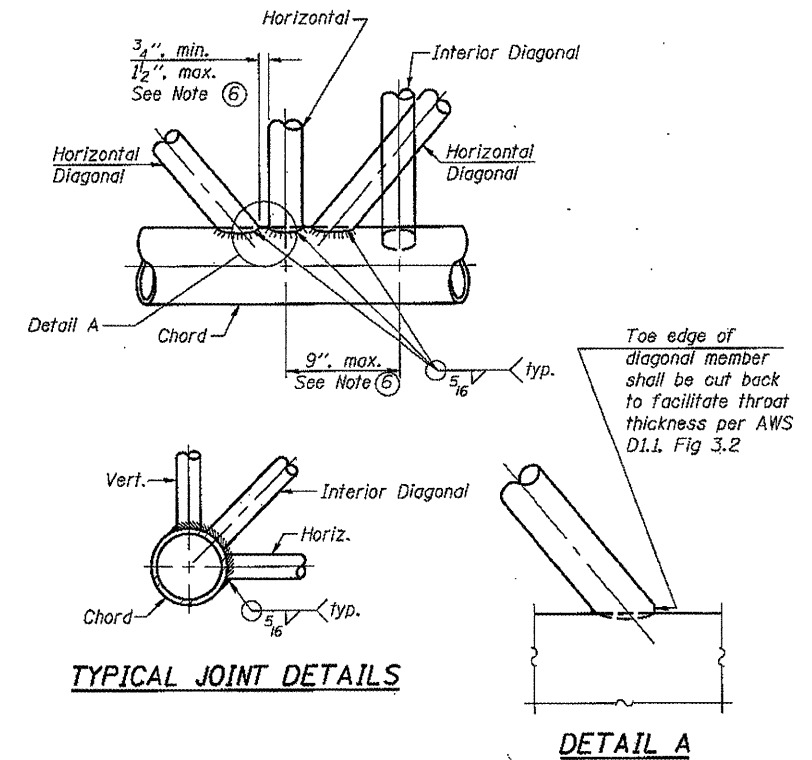
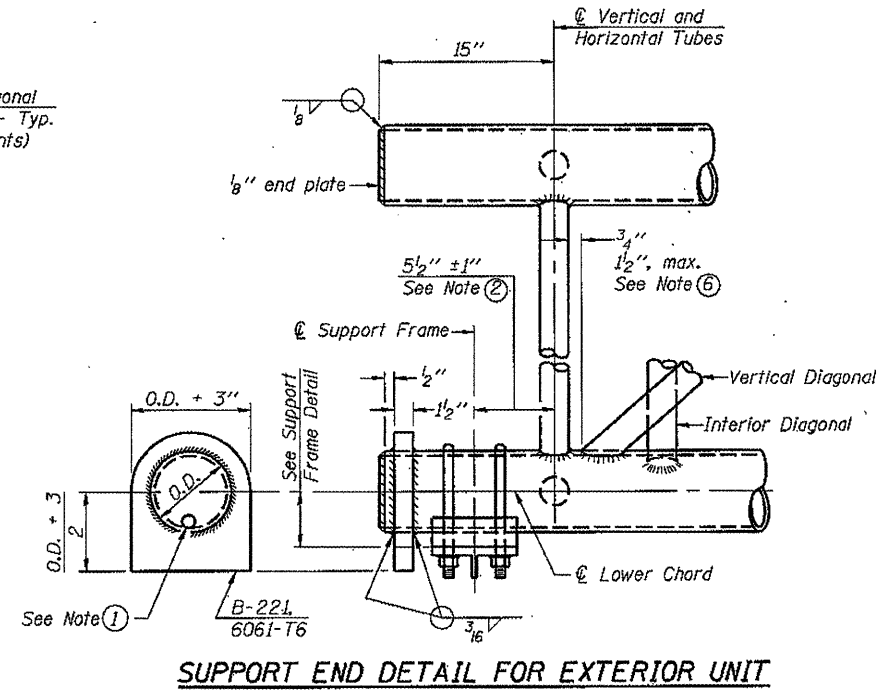
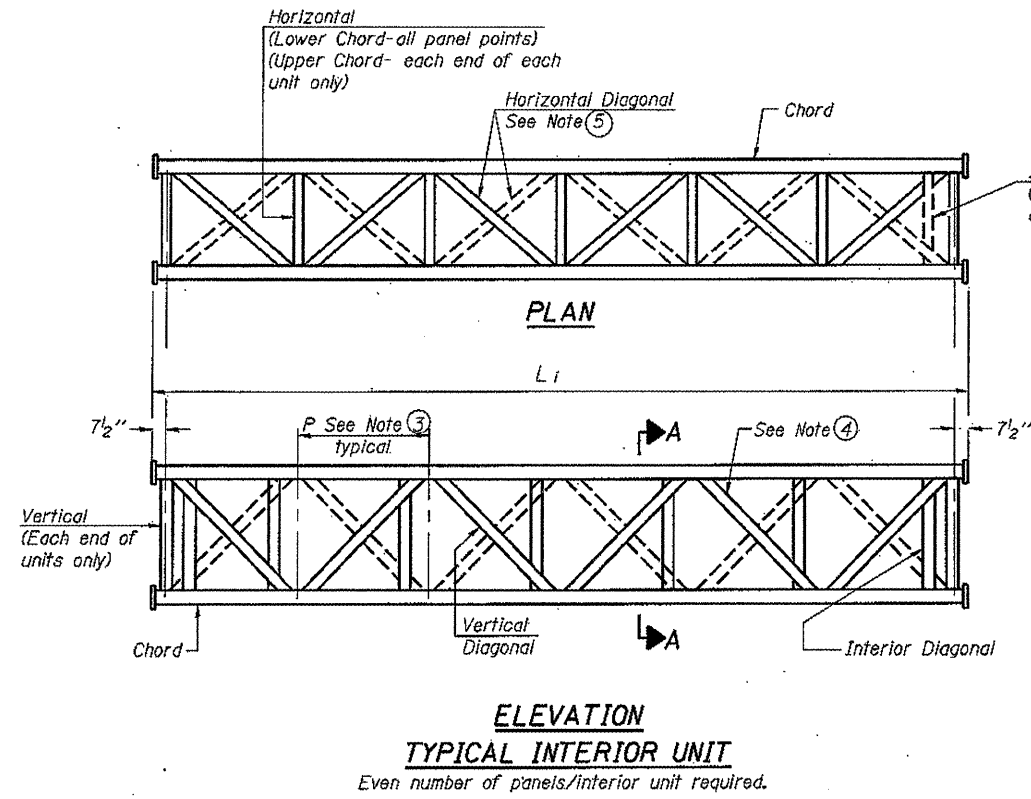
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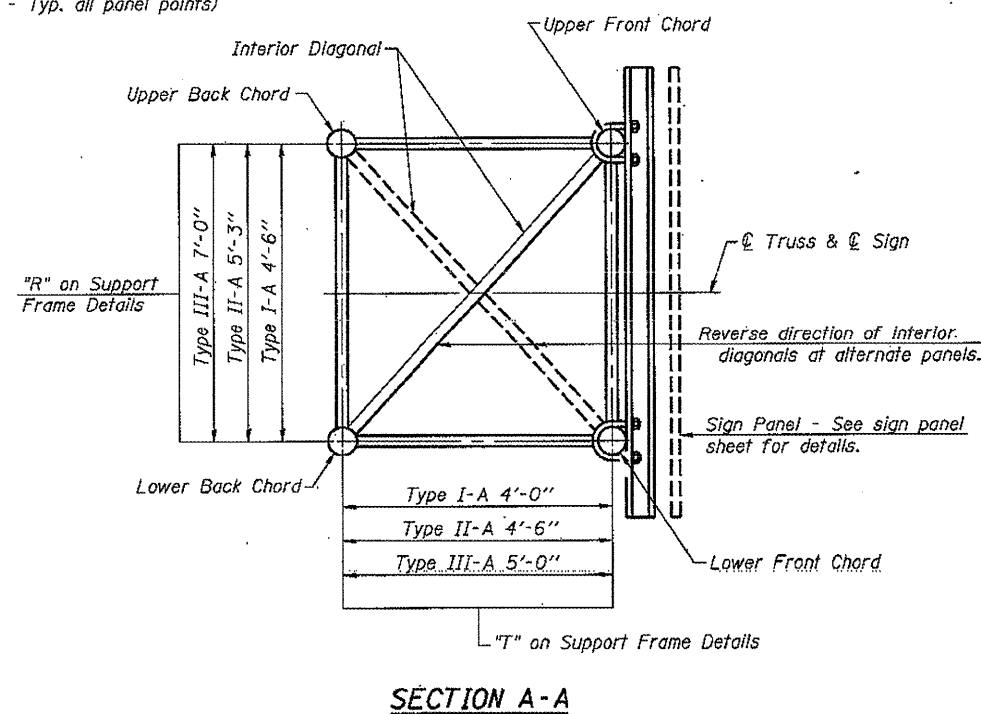
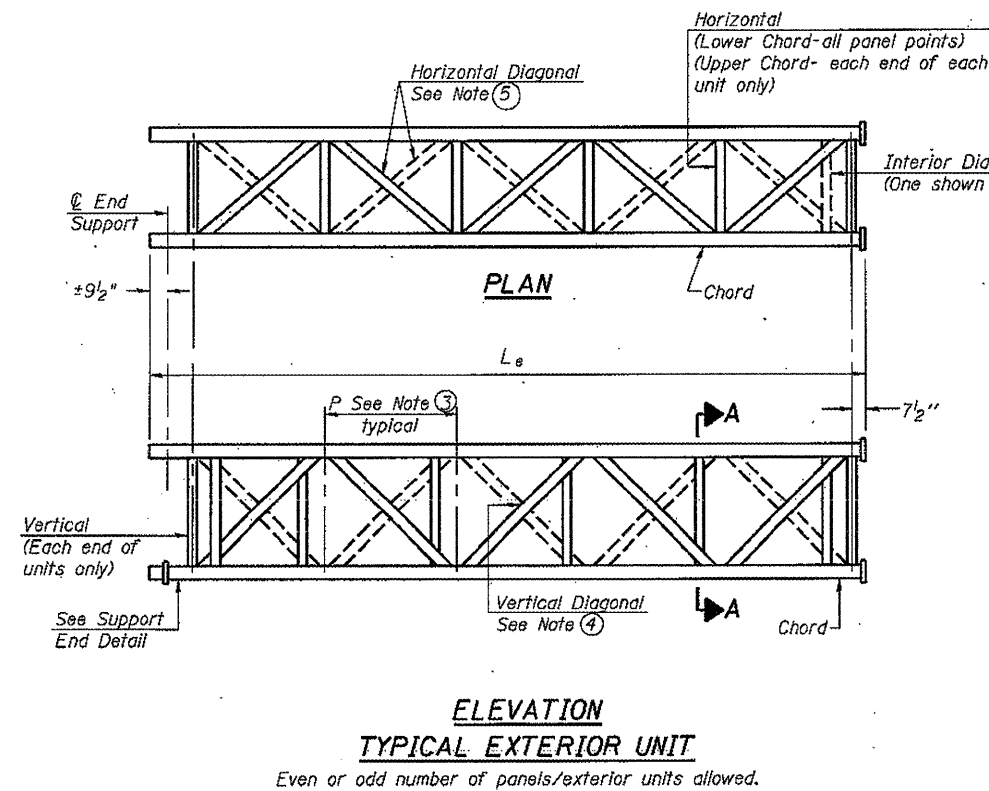
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various 0-1	0VD SIN STR REPL 12-02	VARIOUS	39	7
CONTRACT NO. 46175				
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 $\pm 1"$ to provide uniform panel spacing (P).
- ③ Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
- ④ Vertical Diagonals in front and back face shall alternate.
- ⑤ Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
- ⑥ All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.



OS-A-2

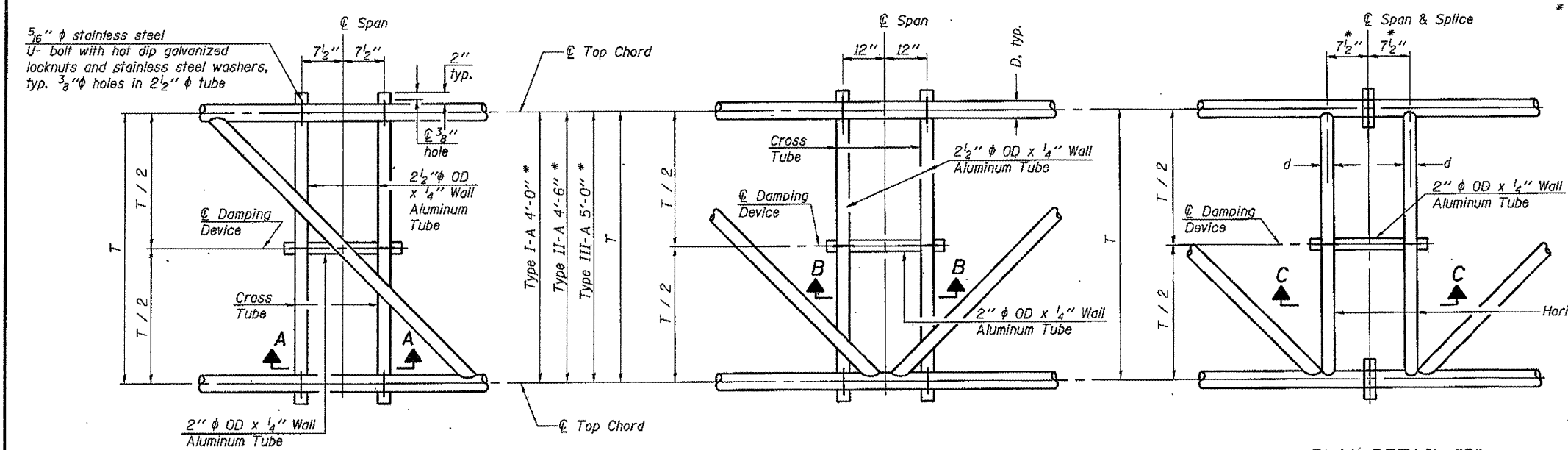
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 DVD SIN STR REPL 12-02		VARIOUS	39	8
CONTRACT NO. 46175				
[ILLINOIS] FED. AID PROJECT				



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

PLAN DETAIL "A"
Span between Panel Points

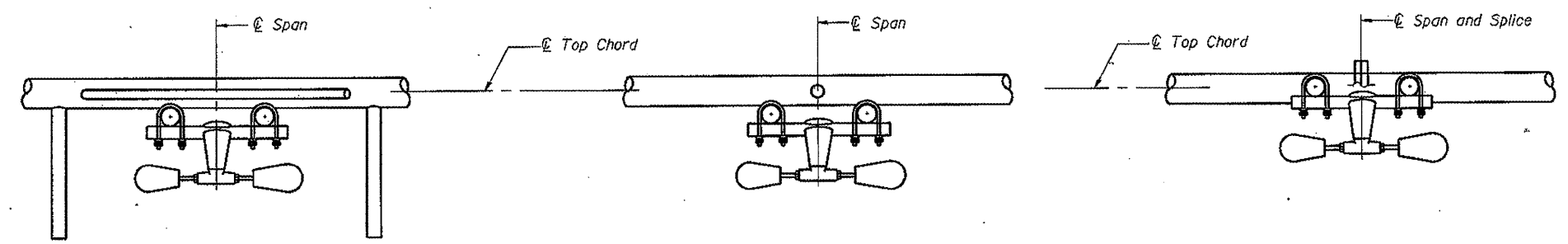
PLAN DETAIL "B"
Span at Panel Point

PLAN DETAIL "C"
Span at Chord Splice

NOTES

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

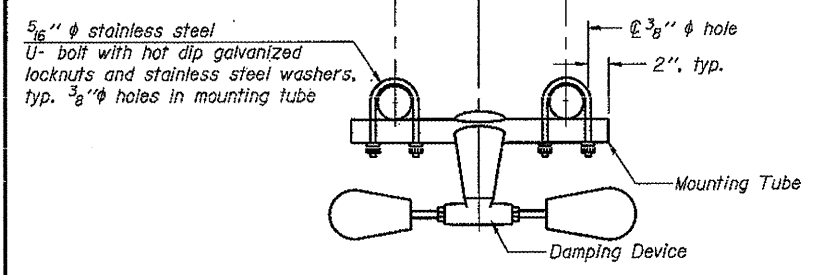
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



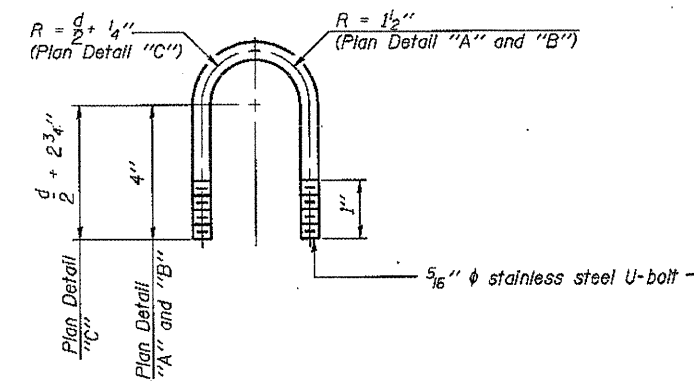
SECTION A-A

SECTION B-B

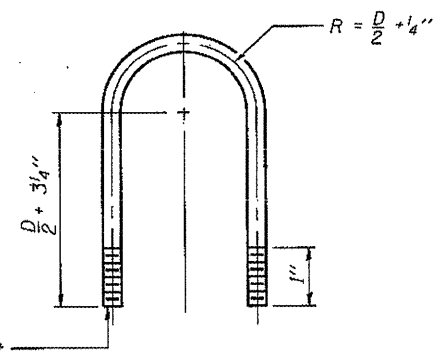
SECTION C-C



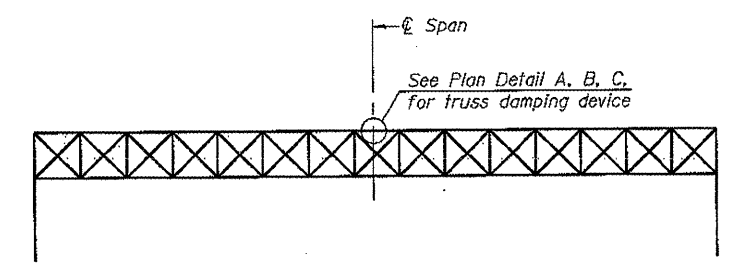
TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



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

1-20-11

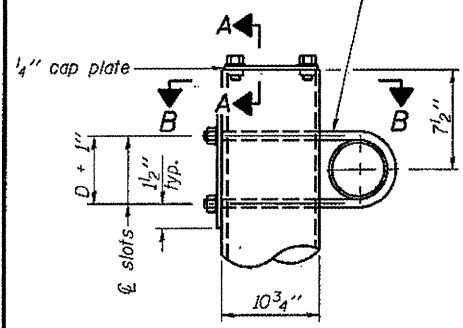
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STATE OF ILLINOIS
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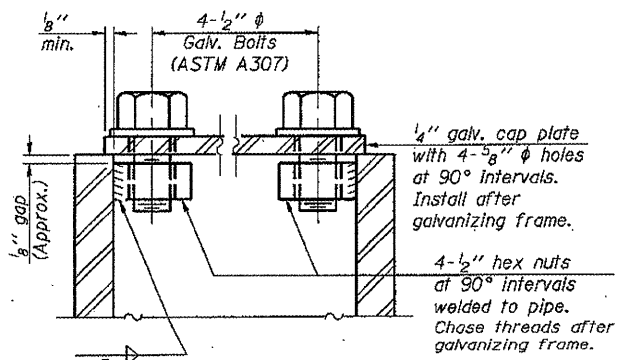
OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	9
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

3/4" φ stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
1 5/16" x 2" slots on 10" φ pipe.
(4 slots required per pipe)

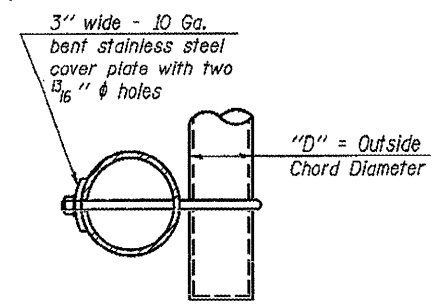


DETAIL A

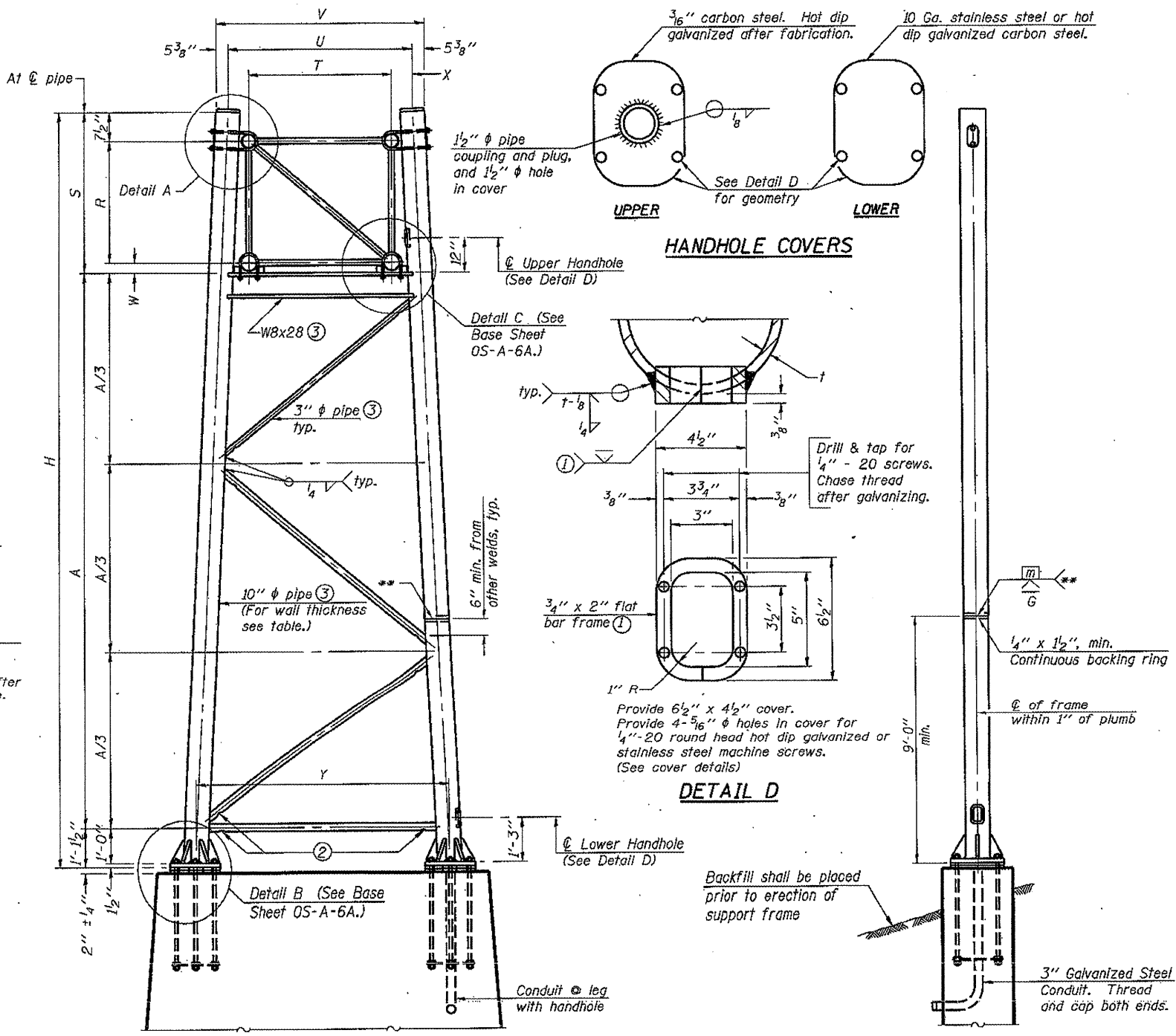


SECTION A-A

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



SECTION B-B



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

SIDE ELEVATION

10" φ PIPE TRUSS SUPPORT FRAME

** One buff 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.

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"

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 μin 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.

END ELEVATION

Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H (6)	A
		Left	Right				
IS0991080R133.2	432 + 75	X	X	II-A	0.365(Std)	26'-6 3/4"	18'-11"
IS0161057R340.4	150 + 50	X		II-A	0.365(Std)	26'-0 1/4"	18'-4 1/2"
IS0161055L276.5	1098 + 50	X		II-A	0.365(Std)	23'-10 1/4"	18'-11"

OS-A-6

1-20-11

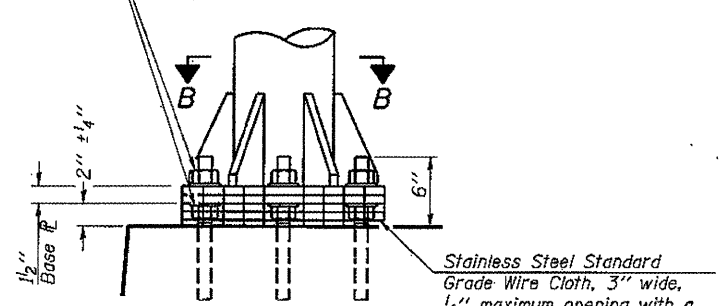
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS

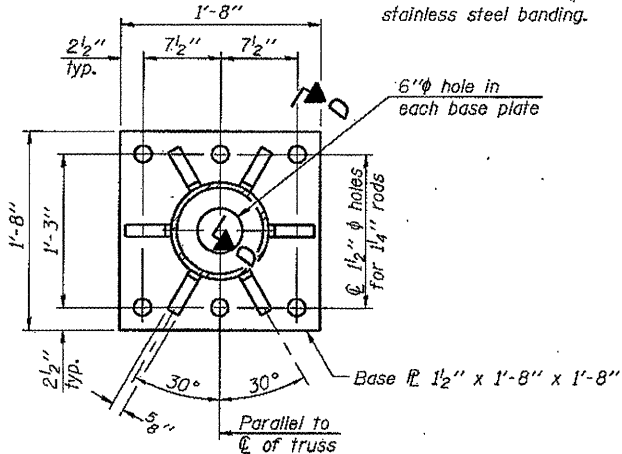
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIN STR REPL 12-02		VARIOUS	39	10
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.

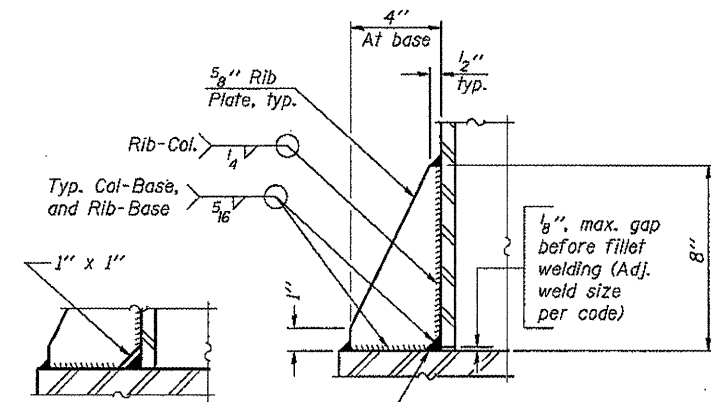


DETAIL B

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.

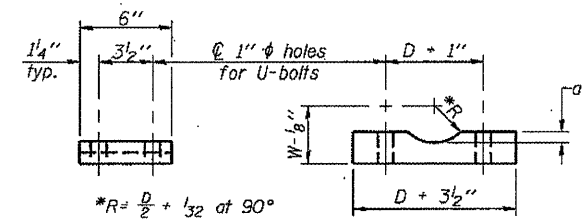


SECTION B-B



SECTION D-D

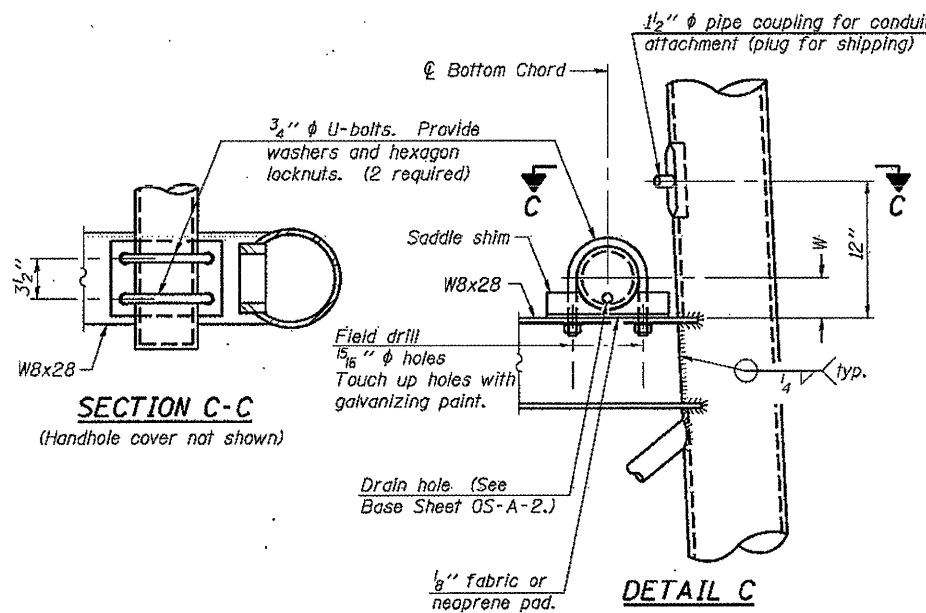
** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.
No snip req'd. at rib inside corner if placed before col. to base plate welding.



SADDLE SHIM DETAIL

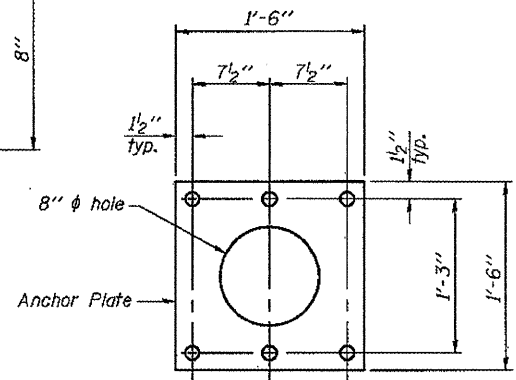
ASTM B26 Alloy 356-F or ASTM B209 Alloy 6061-T651 (4 required per sign truss)

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

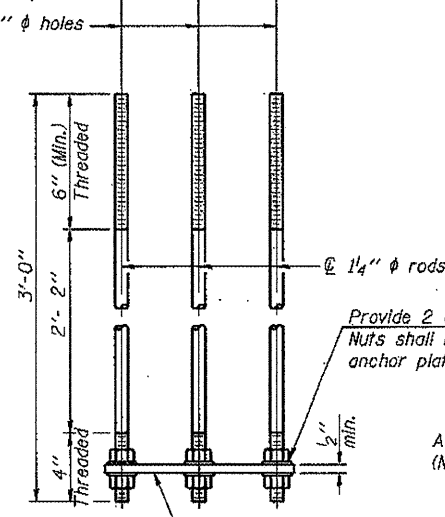


SECTION C-C
(Handhole cover not shown)

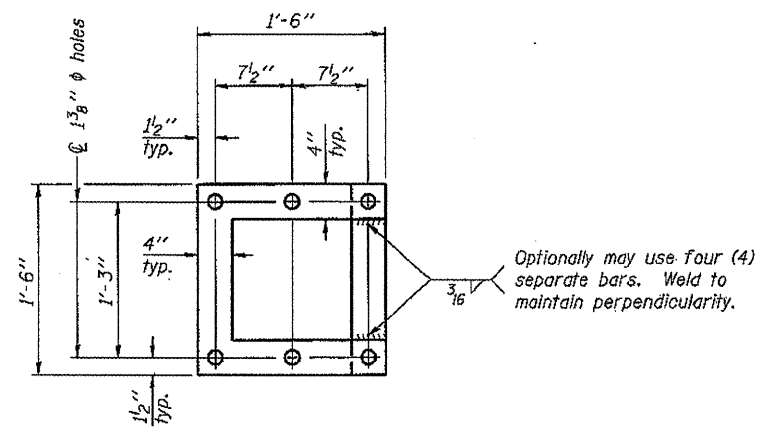
DETAIL C



Anchor Plate

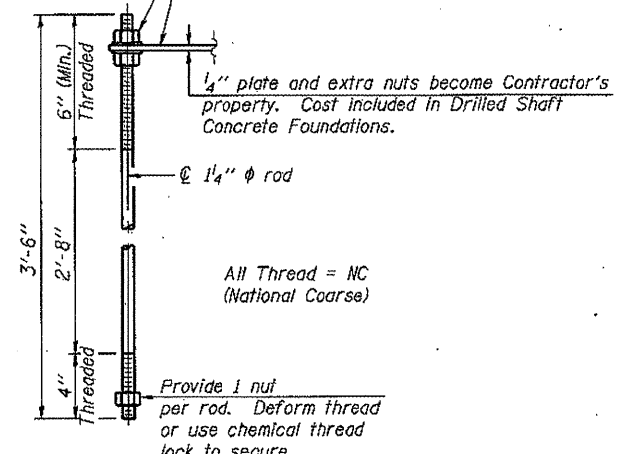


ANCHOR ROD DETAIL
Spread Footing Foundation



POSITIONING PLATE(S)

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.



ANCHOR ROD DETAIL
Drilled Shaft Foundation

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

10" Ø PIPE SUPPORT FRAME DETAILS

OS-A-6A

1-20-11

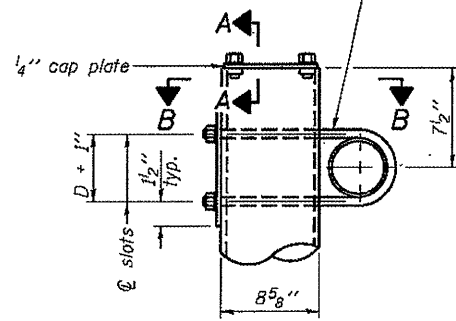
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

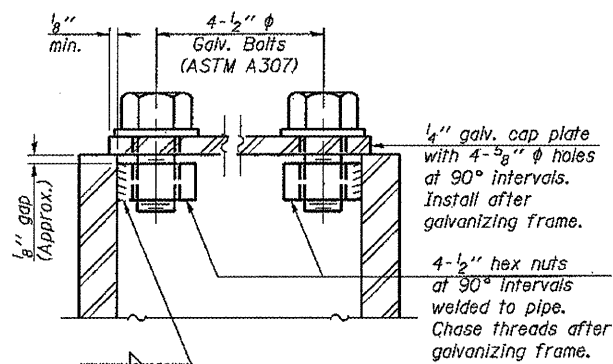
OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 DVD SIGN STR REPL 12-02	VARIOUS	39	11
CONTRACT NO. 46175			ILLINOIS FED. AID PROJECT	

3/4" ϕ stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
1/16" x 2" slots on ϕ 8" ϕ pipe.
(4 slots required per pipe)

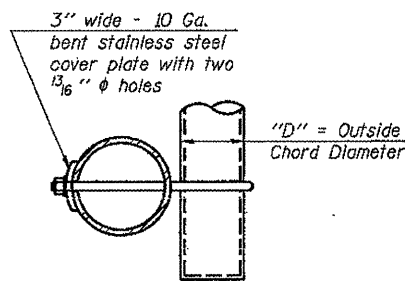


DETAIL A

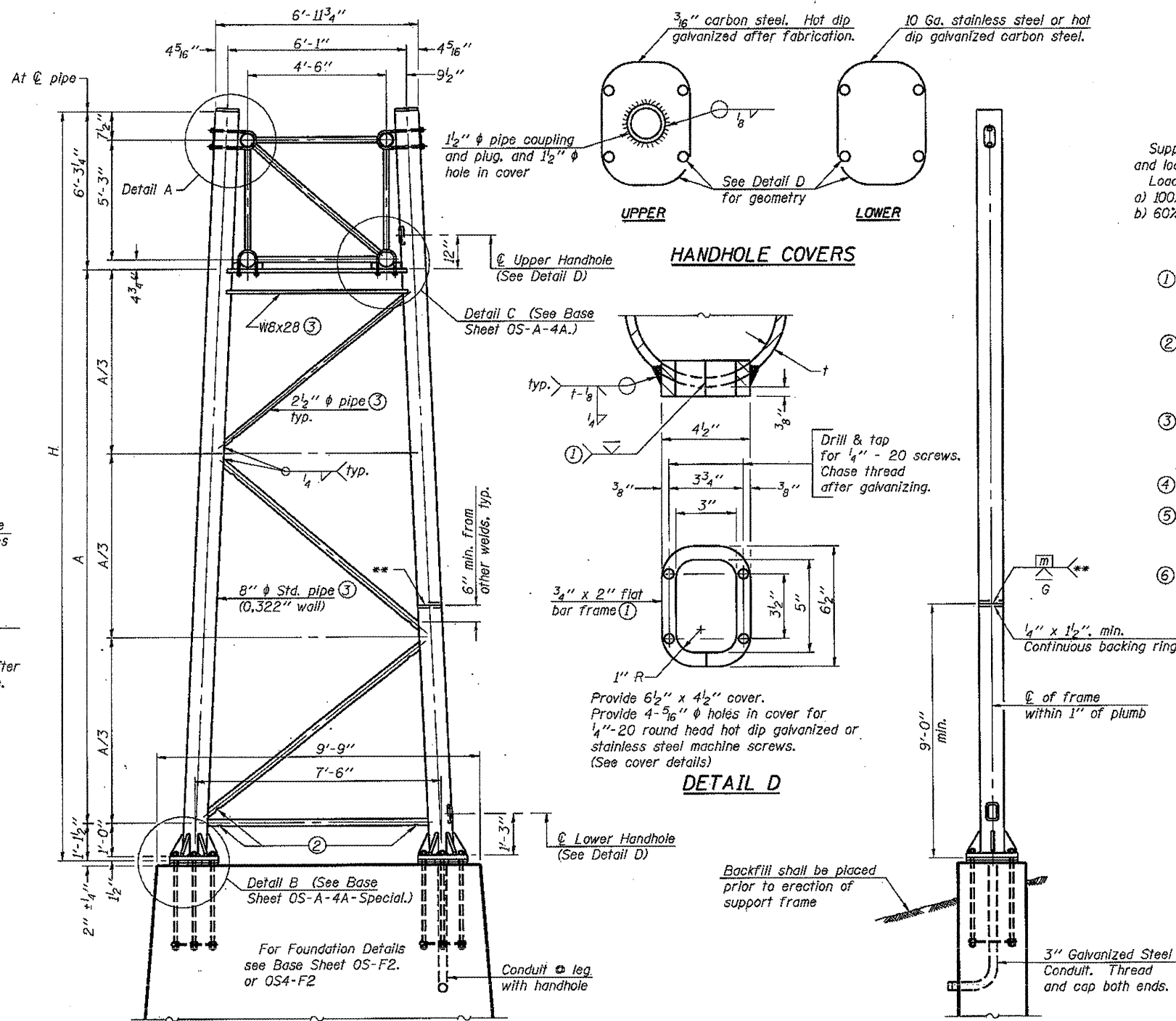


SECTION A-A

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



SECTION B-B



SIDE ELEVATION

END ELEVATION

8" ϕ PIPE TRUSS SUPPORT FRAME

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

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.

Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

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

Structure Number	Station	Support		H ⑥	A
		Left	Right		
IS0991080L131.0	0022 + 00	X	X	23'-0"	15'-6"
IS0991080L130.9	0028 + 25	X		23'-0"	15'-6"
IS0991080L130.9	0028 + 25		X	22'-6"	15'-0"
IS0221055R270.7	0784 + 00	X		23'-11"	16'-5"

OS-A-4-Special 1-20-11

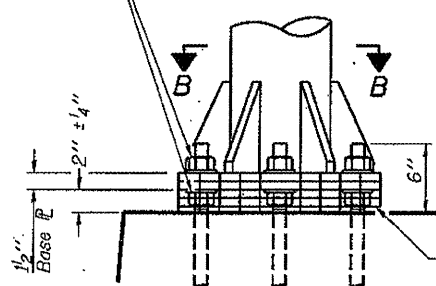
FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE II-A ALUMINUM TRUSS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIN STR REPL 12-02		VARIOUS	39	12
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

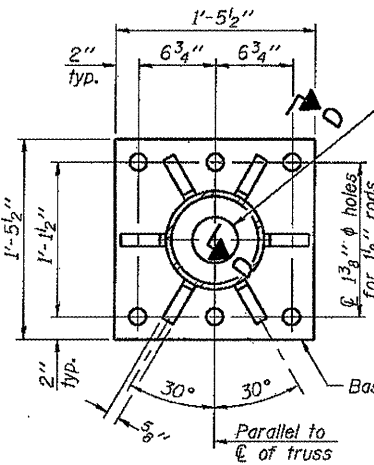
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



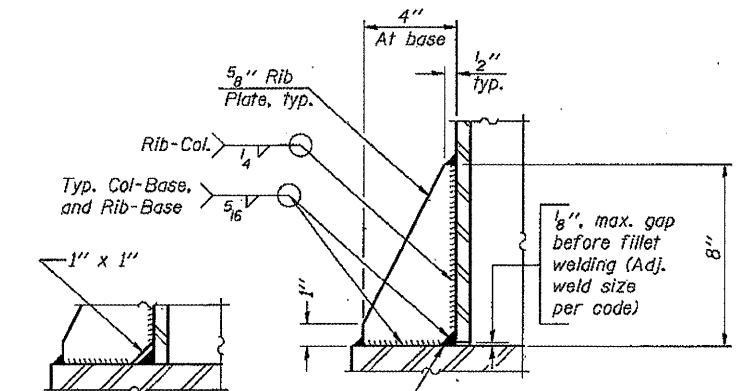
DETAIL B

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 AWC. No. 16 with a minimum 2" iap. Secure to base plate after erection with 3/4" stainless steel banding.



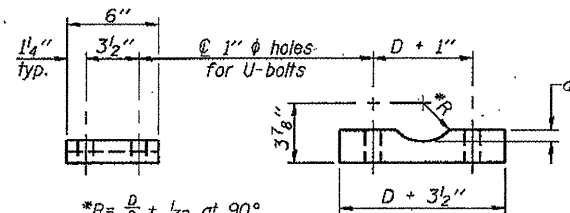
SECTION B-B



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.

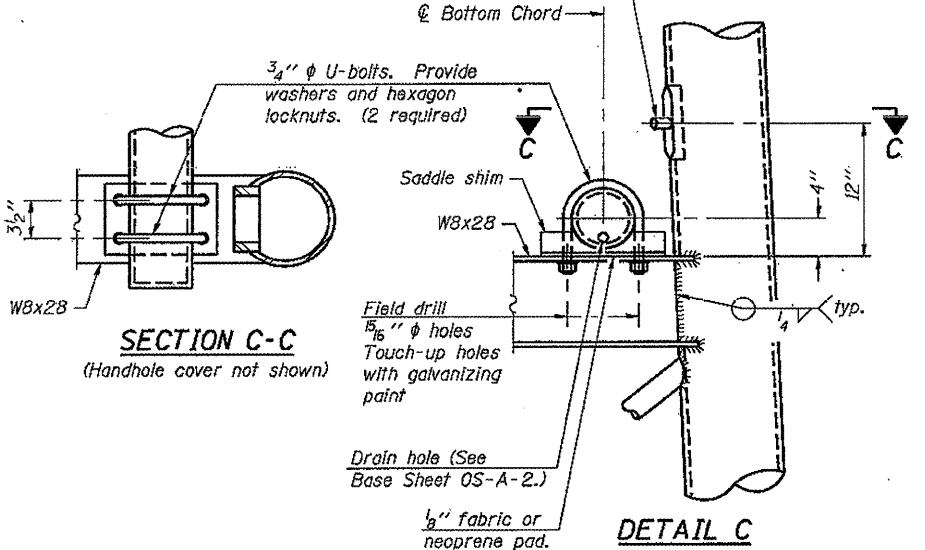
No snip req'd. at rib inside corner if placed before col. to base plate welding.



SADDLE SHIM DETAIL

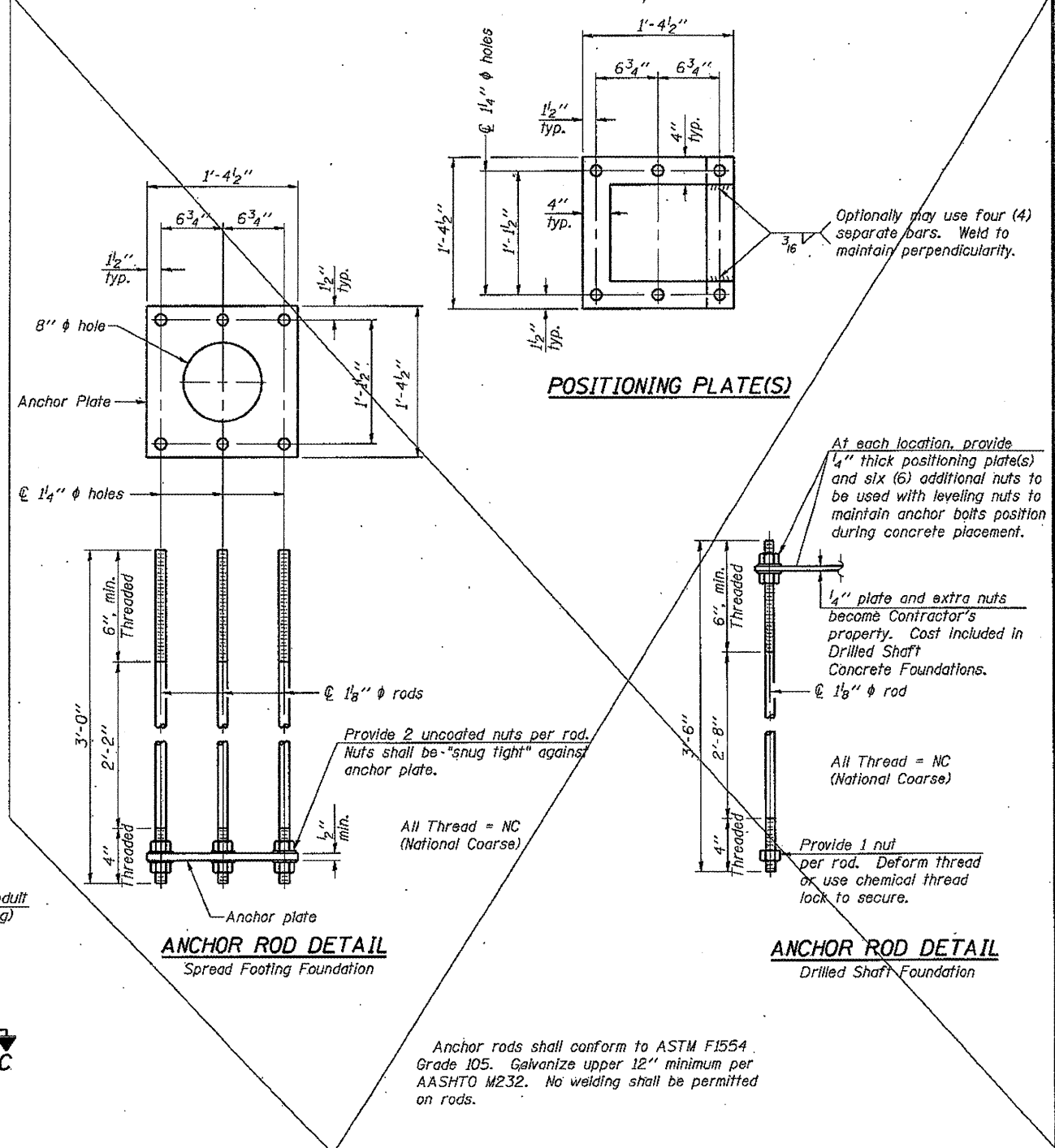
ASTM B26 Alloy 356-F or ASTM B209 Alloy 6061-T651 (4 required per sign truss)

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



SECTION C-C

DETAIL C



ANCHOR ROD DETAIL

ANCHOR ROD DETAIL

TYPE II-A TRUSS
8" 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-4A-Special 1-20-11

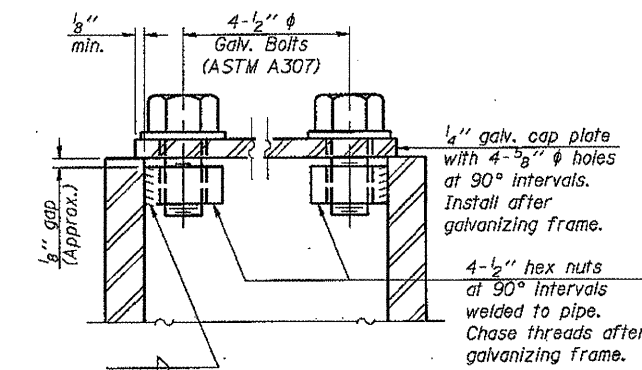
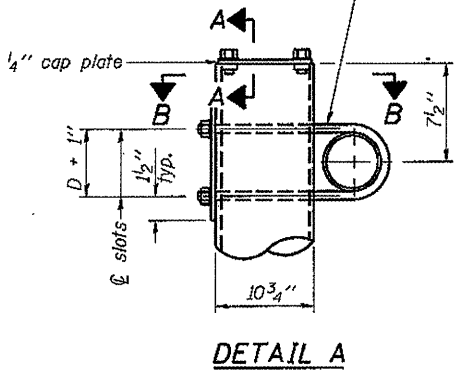
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

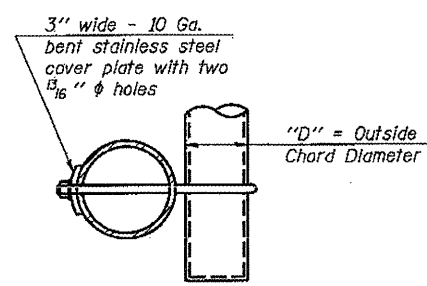
OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 DVD	SIN STR REPL 12-02	VARIOUS	39	13
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				

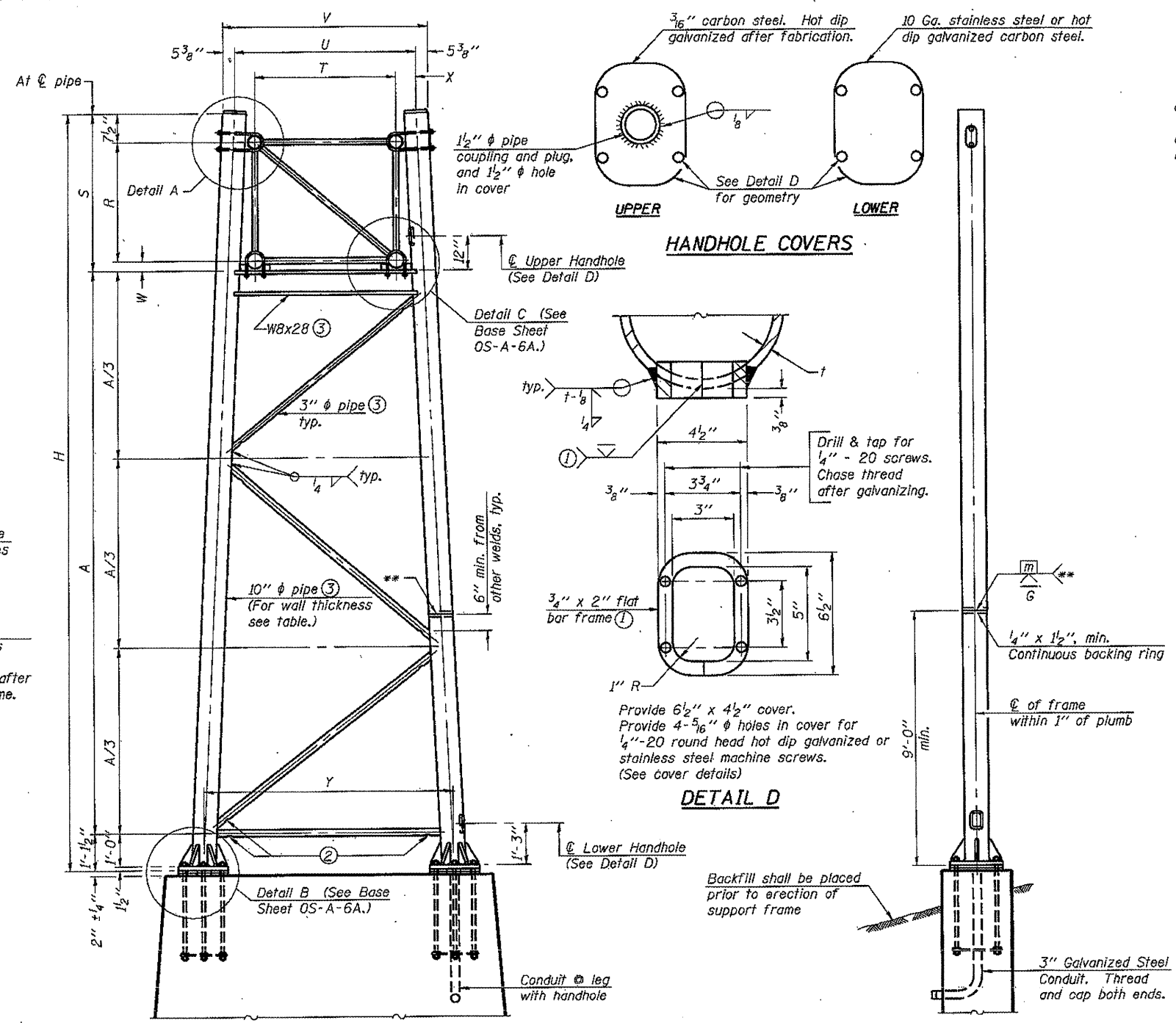
3/4" φ stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
13/16" x 2" slots on 10" φ pipe.
(4 slots required per pipe)



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



SECTION B-B



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

SIDE ELEVATION

10" φ PIPE TRUSS SUPPORT FRAME

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

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
III-A	7'-0"	8'-5"	5'-0"	7'-1"	8'-1 3/4"	5 1/4"	1'-1/2"	8'-3"
○								

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 μin 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.

Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H (6)	A
		Left	Right				
IS02210551274.9	1006 + 60	X	X	III-A	0.279"	25'-10 1/4"	16'-3 3/4"
IS0991080L133.7	464 + 00	X		III-A	0.279"	32'-4 1/4"	22'-10 1/4"
IS0991080L133.7	464 + 00		X	III-A	0.279"	28'-3 1/4"	18'-8 3/4"

OS-A-6-Special 1-20-11

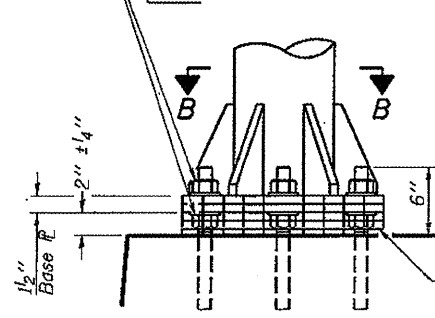
FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS

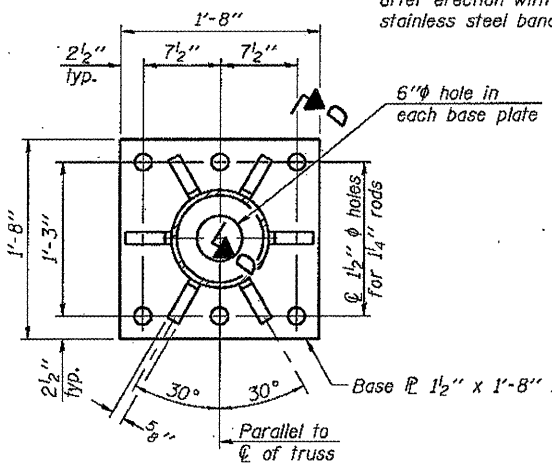
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	14
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				

Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.

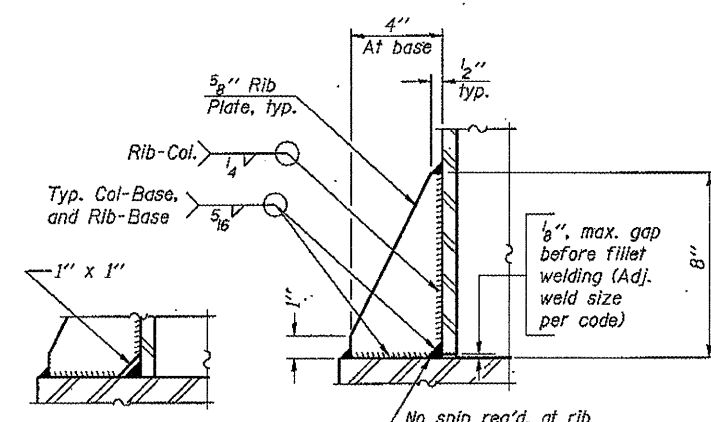


DETAIL B

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.

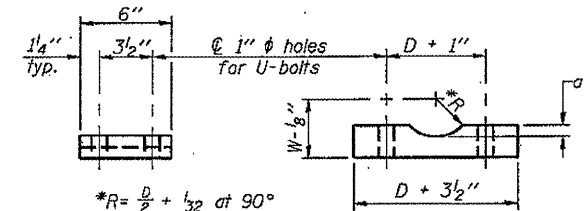


SECTION B-B



SECTION D-D

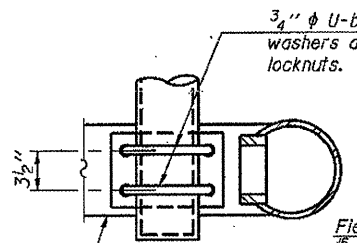
1/8" max. gap before filler welding (Adj. weld size per code)
No ship req'd. at rib inside corner if placed before col. to base plate welding.
** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.



SADDLE SHIM DETAIL

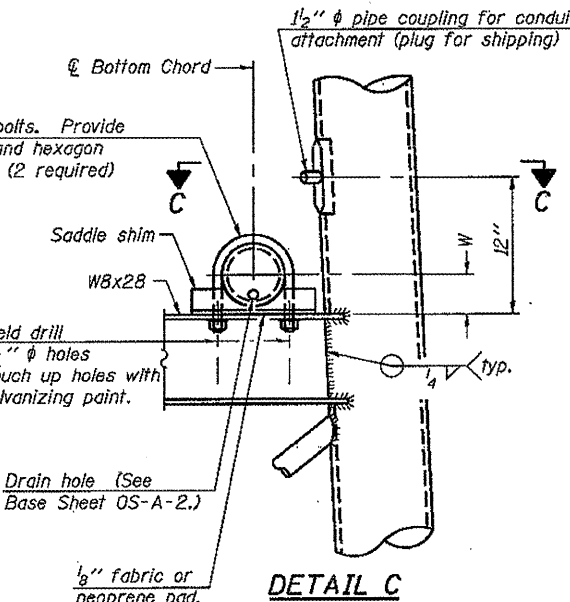
ASTM B26 Alloy 356-F or ASTM B209 Alloy 6061-T651 (4 required per sign truss)

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

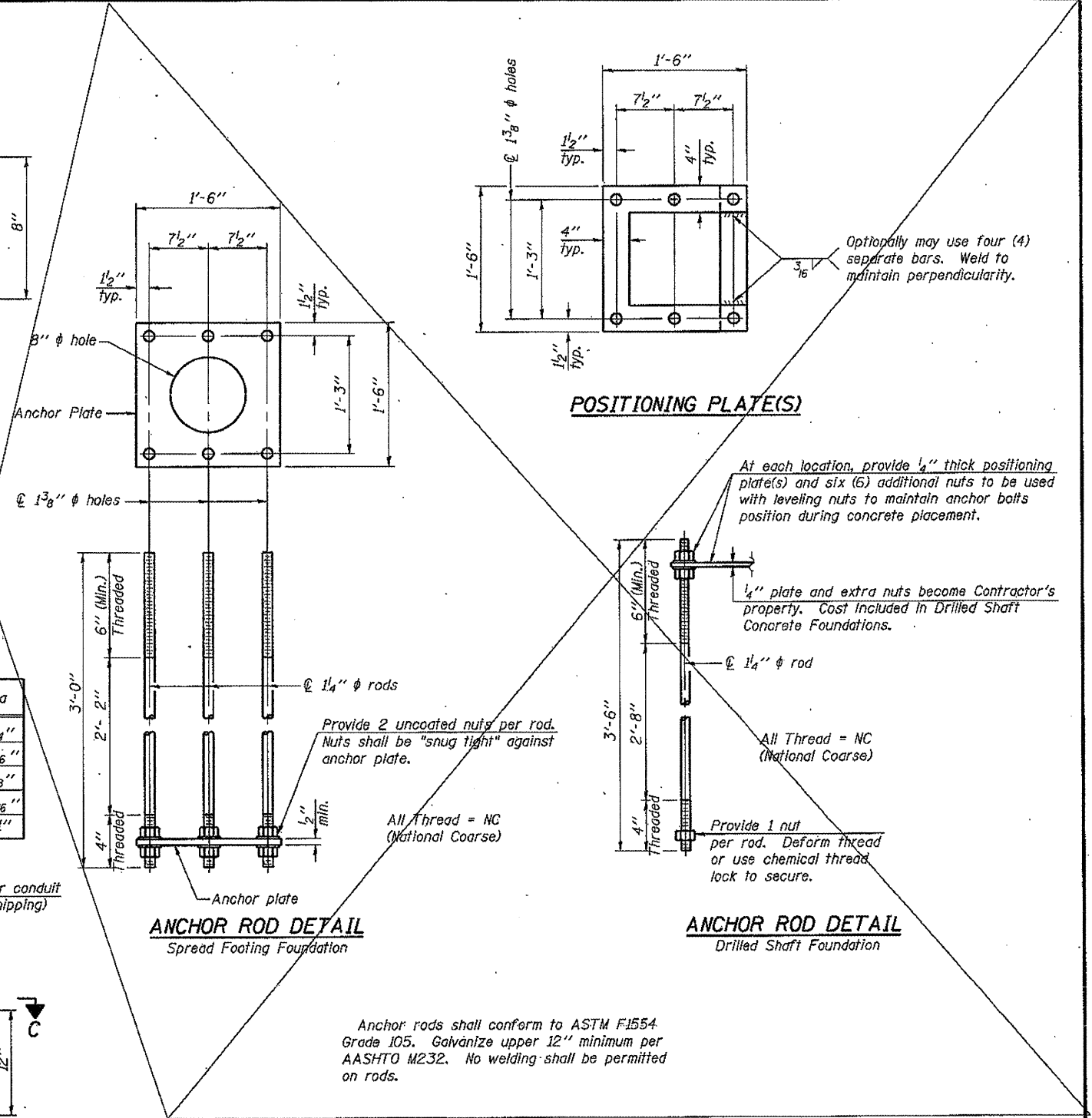


SECTION C-C

(Handhole cover not shown)



DETAIL C



TYPE III-A TRUSS

10" φ PIPE SUPPORT FRAME DETAILS

POSITIONING PLATE(S)

ANCHOR ROD DETAIL

Drilled Shaft Foundation

ANCHOR ROD DETAIL

Spread Footing Foundation

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

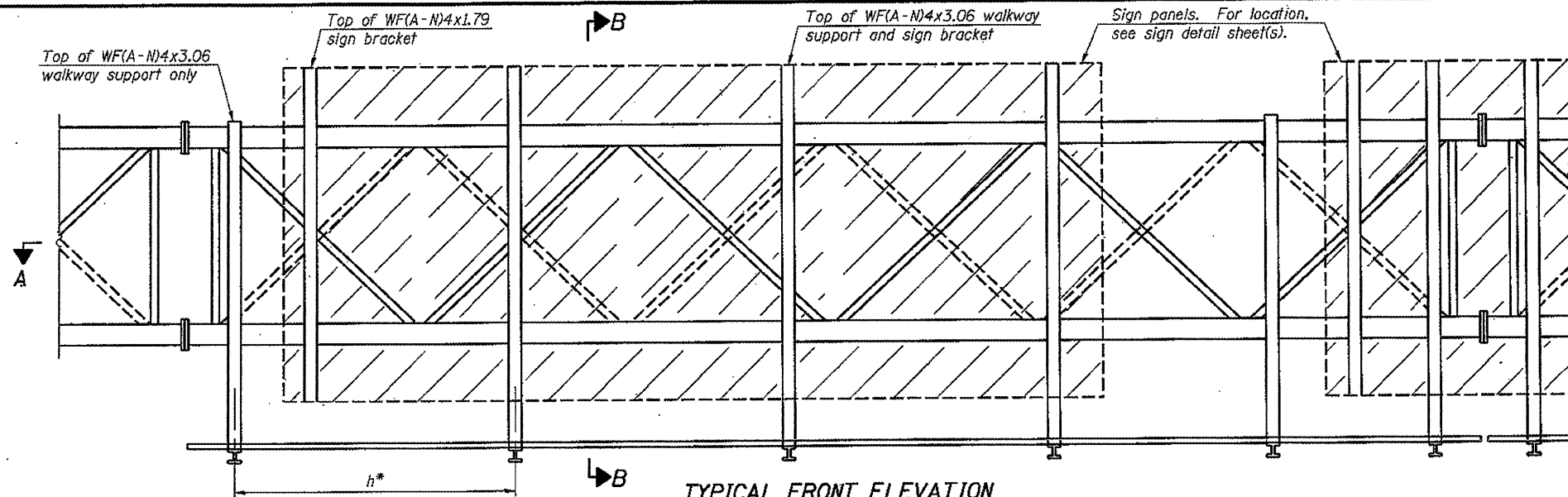
OS-A-6A-Special 1-20-11

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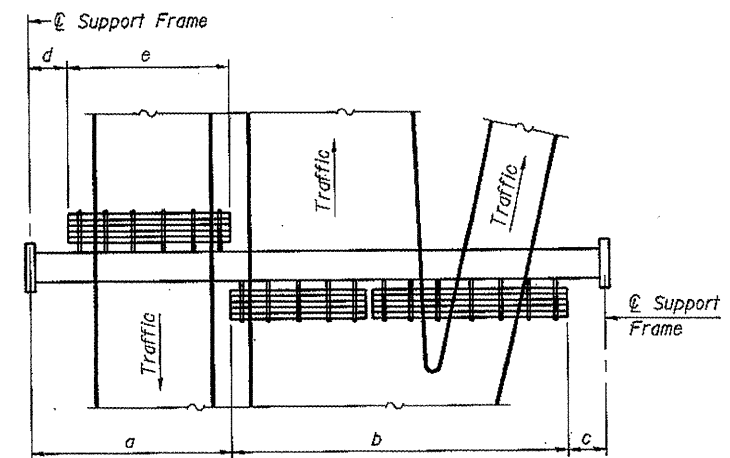
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIN STR REPL 12-02		VARIOUS	39	15
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				



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



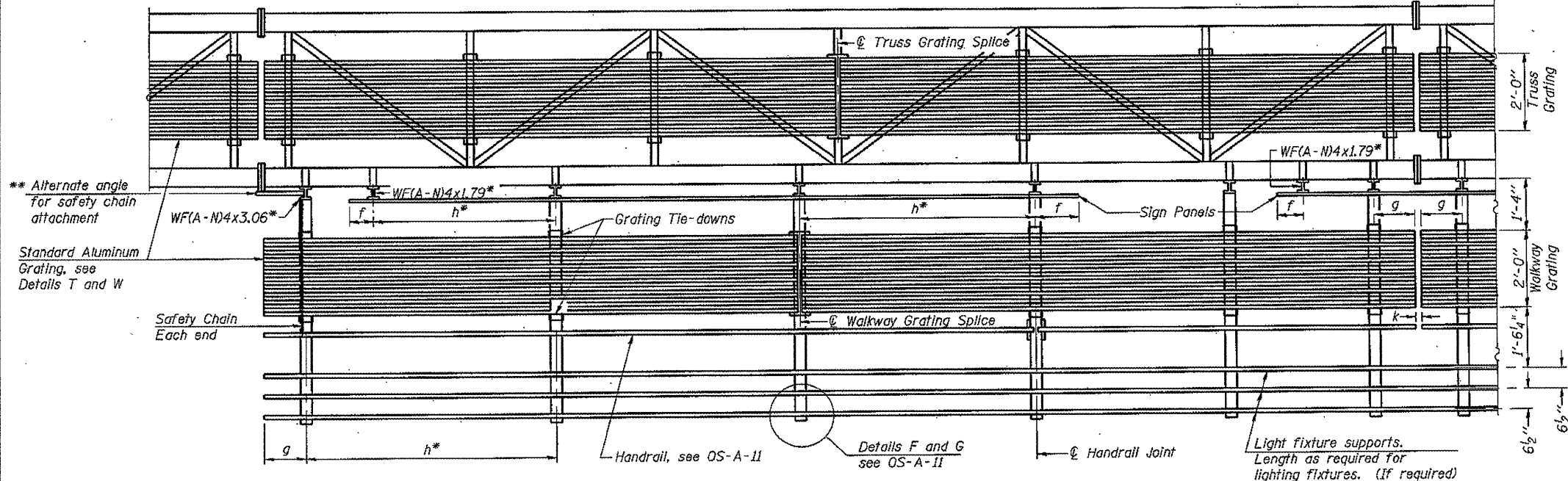
PLAN WALKWAY AND HANDRAIL SKETCH
 (Road plan beneath truss varies)

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

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 \mathcal{C} of nearest bracket)
 g = 12" maximum, 4" minimum (End of walkway grating to \mathcal{C} of nearest support bracket)
 h = 6'-0" maximum (\mathcal{C} to \mathcal{C} 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.



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.

Structure Number	Station	a	b	c	d	c	Walkway Grating and Handrail Lengths
IS0991080L131.0	22 + 00	16'-0"	50'-0"	8'-0"	N/A	N/A	50' - 0"
IS0991080R133.2	432 + 75	18'-0"	58'-0"	10'-0"	N/A	N/A	58' - 0"
IS0991080L130.9	28 + 25	8'-4"	36'-0"	7'-8"	N/A	N/A	36' - 0"
IS0991080L133.7	464 + 00	12'-0"	51'-0"	1'-6"	N/A	N/A	51' - 6"
IS0991080R132.9	417 + 50	13'-6"	57'-0"	8'-0"	N/A	N/A	57' - 0"
IS0991080R131.8	359 + 00	11'-0"	50'-0"	8'-6"	N/A	N/A	50' - 0"

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

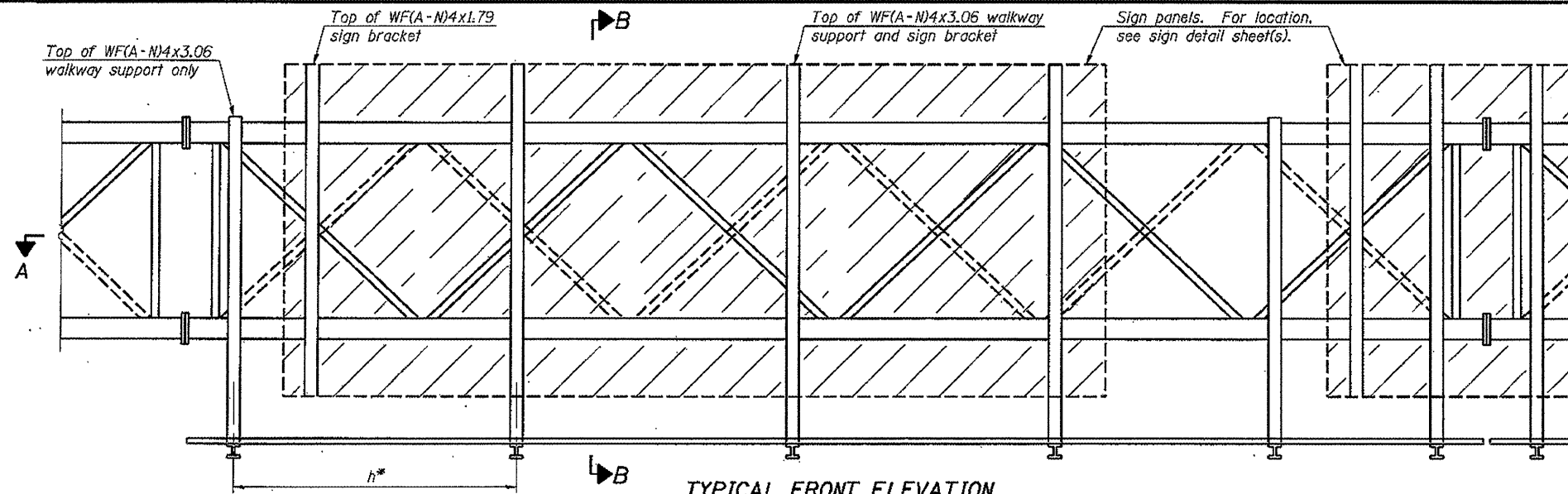
1-20-11

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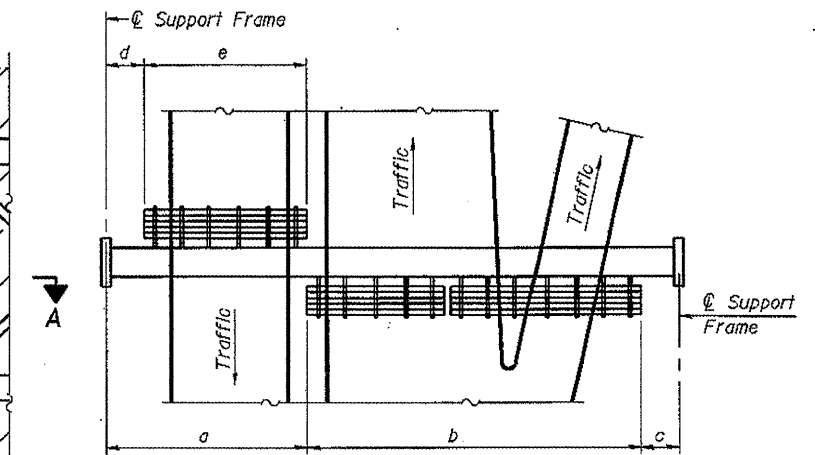
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
 ALUMINUM WALKWAY DETAILS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIN STR REPL 12-02		VARIOUS	39	16
CONTRACT NO. 46175				
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

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 ϕ of nearest bracket)
 g = 12" maximum, 4" minimum (End of walkway grating to ϕ of nearest support bracket)

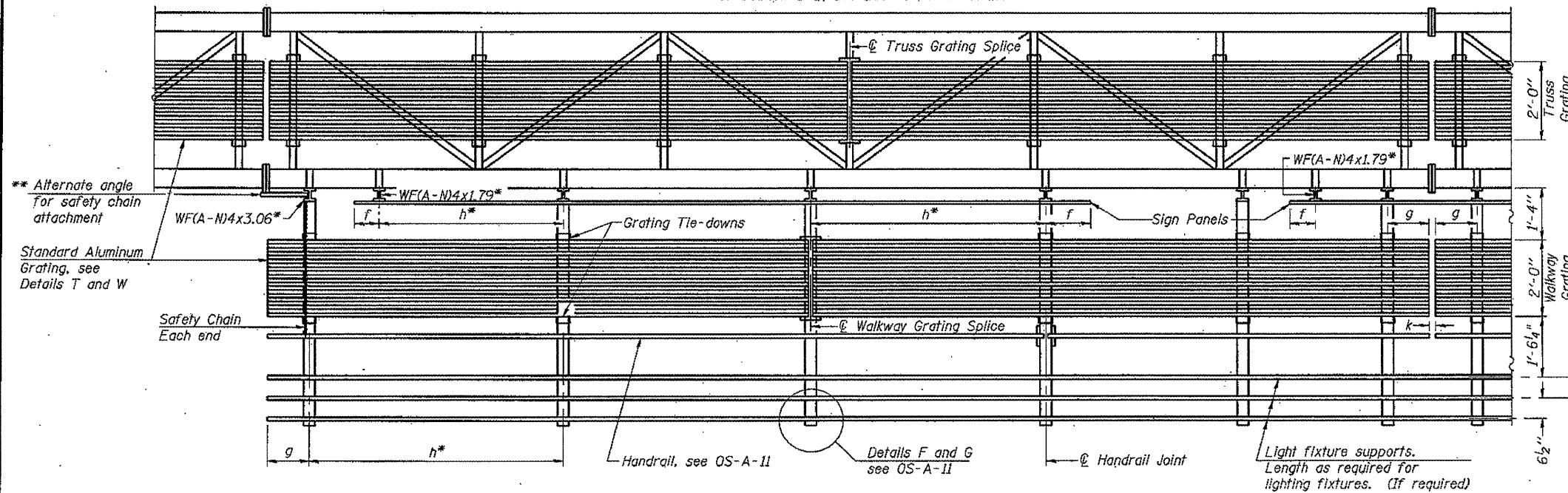
h = 6'-0" maximum (ϕ to ϕ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

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.



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.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
IS0991080L132.2	379 + 00	14'-0"	69'-0"	12'-6"	N/A	N/A	69' - 0"
IS0161057R340.4	150 + 50	33'-0"	49'-0"	28'-0"	N/A	N/A	49' - 0"
IS0221055R270.7	784 + 00	18'-0"	62'-0"	10'-0"	N/A	N/A	62' - 0"
IS0221055L274.8	1000 + 40				N/A	N/A	
IS0221055L274.9	1006 + 60	36'-0"	47'-0"	9'-0"	N/A	N/A	47' - 0"
IS0161055L276.5	1098 + 50	15'-0"	68'-6"	6'-6"	N/A	N/A	68' - 6"
IS0221055R274.6	625 + 00	41'-0"	37'-0"	13'-6"	N/A	N/A	37' - 0"

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

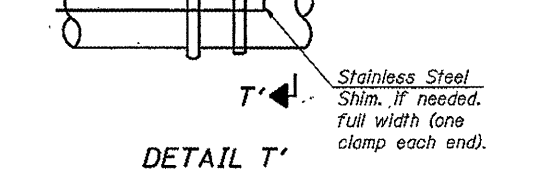
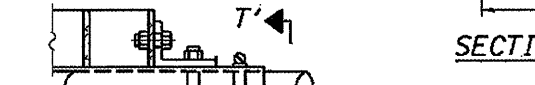
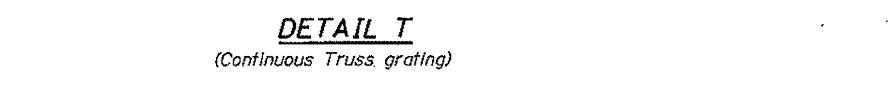
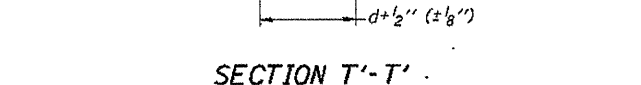
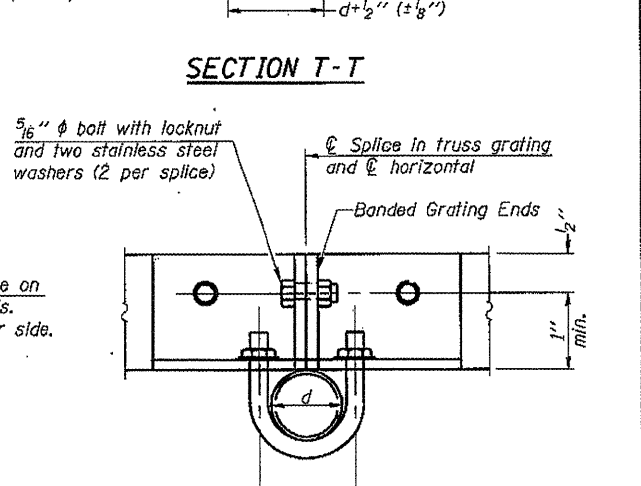
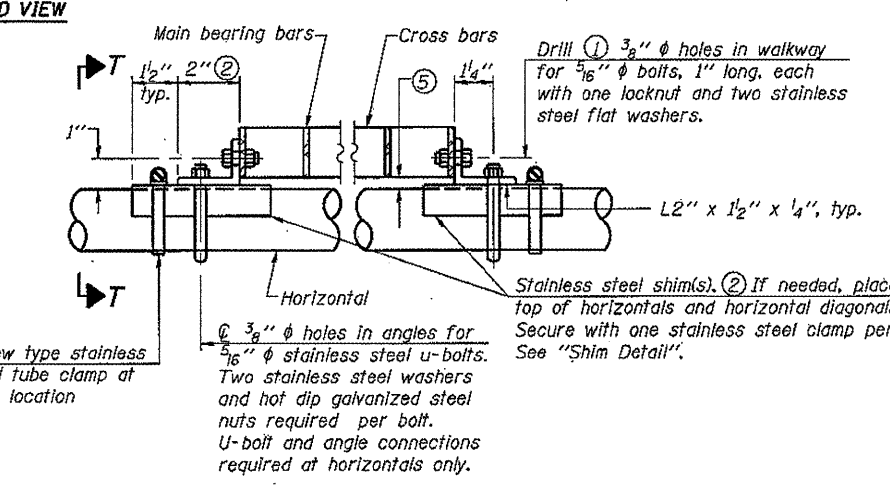
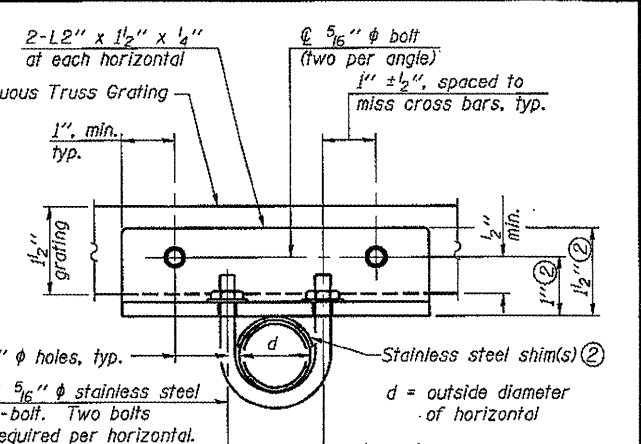
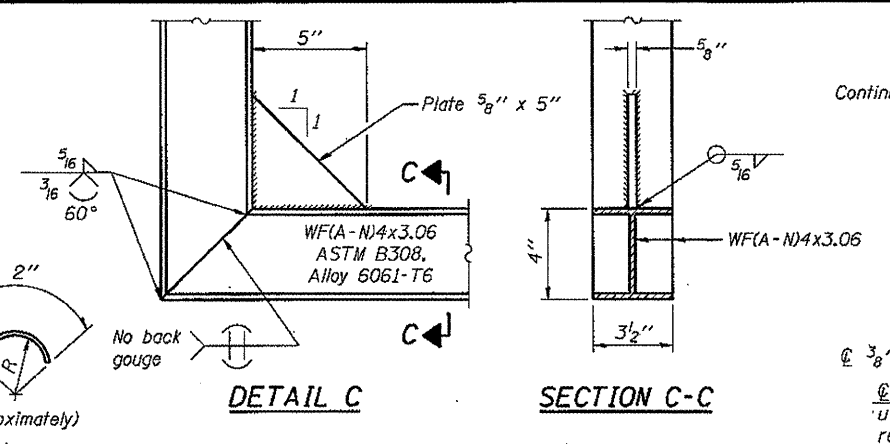
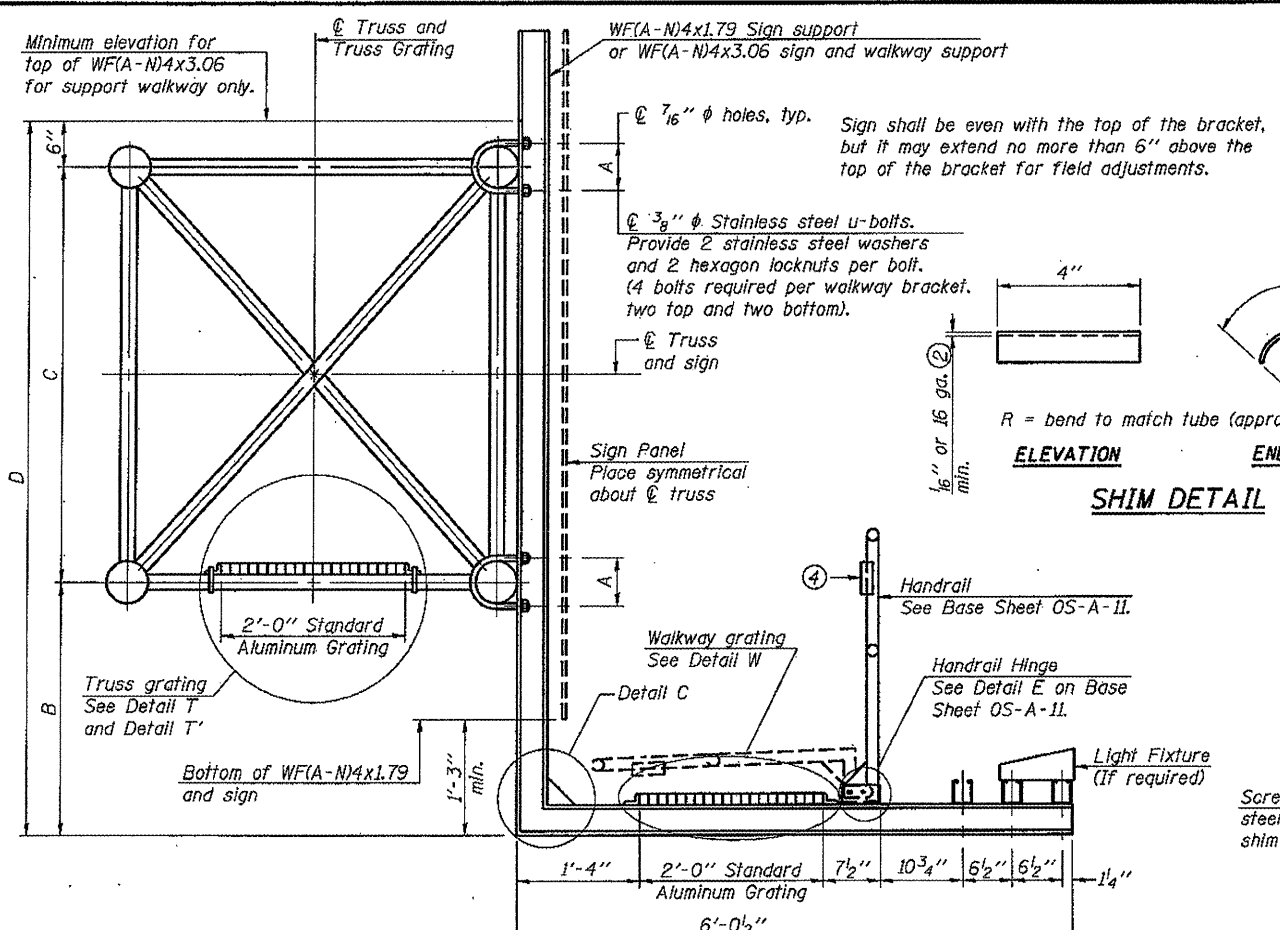
1-20-11

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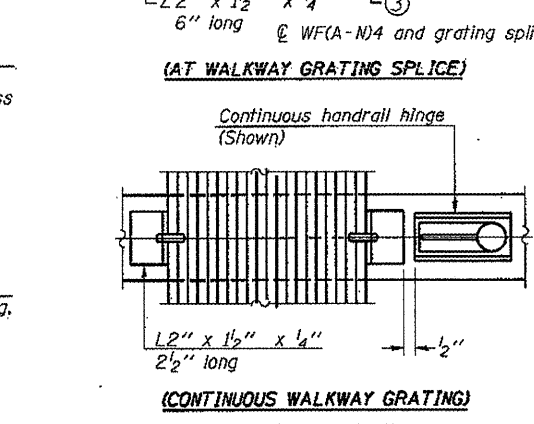
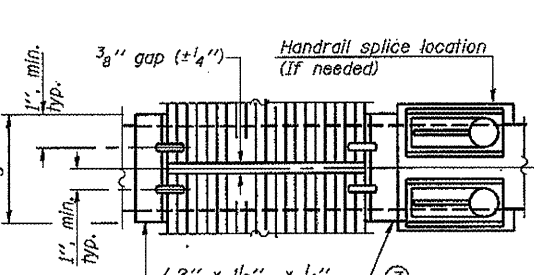
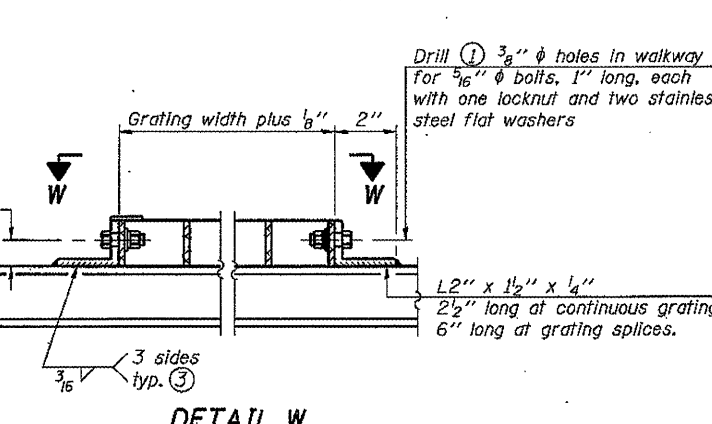
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
 ALUMINUM WALKWAY DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIN STR REPL 12-02		VARIOUS	39	17
CONTRACT NO. 46175			ILLINOIS FED. AID PROJECT	



DETAIL T'
(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.



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.³ 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.

Structure Number	Station	A	B	C	D
IS0991080L131.0	22+00	5 3/16"	3'-4 1/2"	5'-3"	9'-1 1/2"
IS0991080R133.2	432+75	5 7/16"	3'-4 1/2"	5'-3"	9'-1 1/2"
IS0991080L130.9	28+25	5 3/16"	3'-4 1/2"	5'-3"	9'-1 1/2"
IS0991080L133.7	464+00	5 15/16"	4'-3"	7'-0"	11'-9"
IS0991080R132.9	417+50	5 3/16"	3'-4 1/2"	5'-3"	9'-1 1/2"
IS0991080R131.8	359+00	5 15/16"	4'-6"	7'-0"	12'-0"

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- 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.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-11.)
- 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- Based on actual height of tallest sign given on OS-A-1.

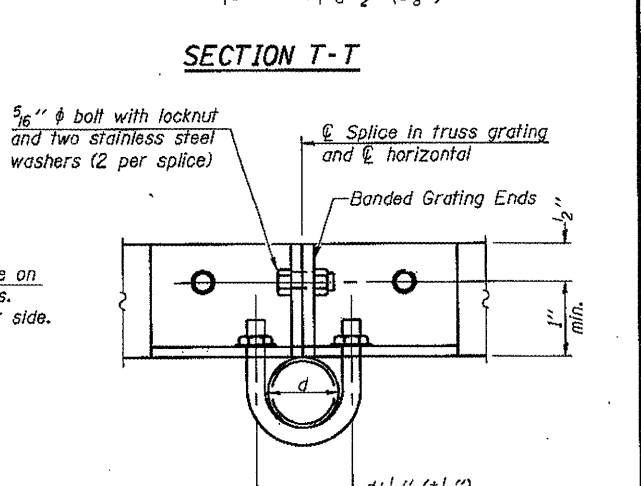
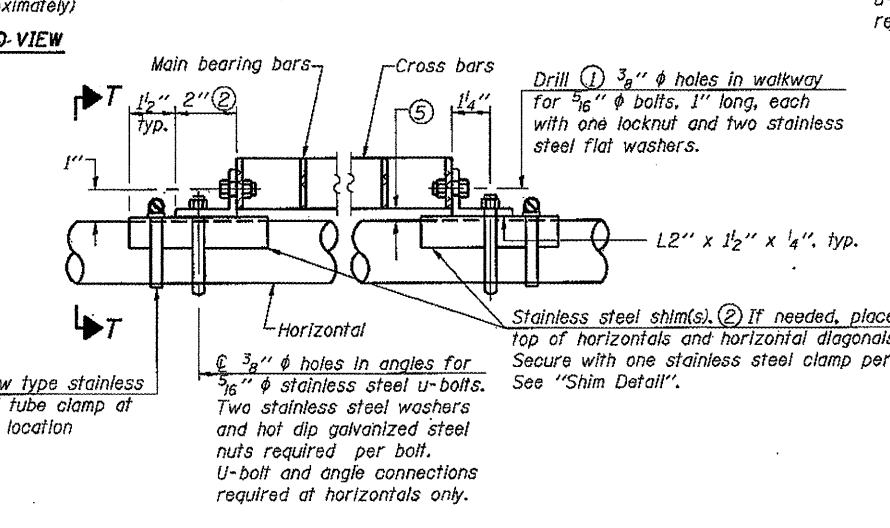
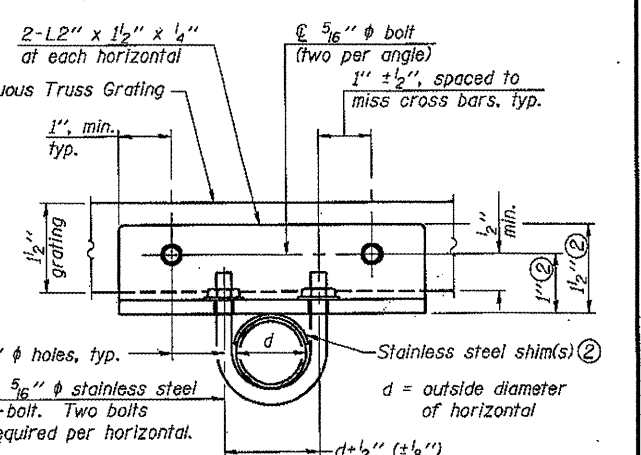
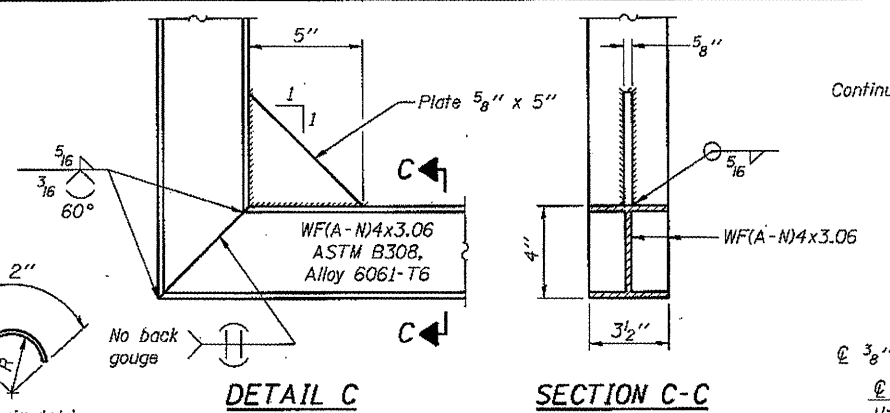
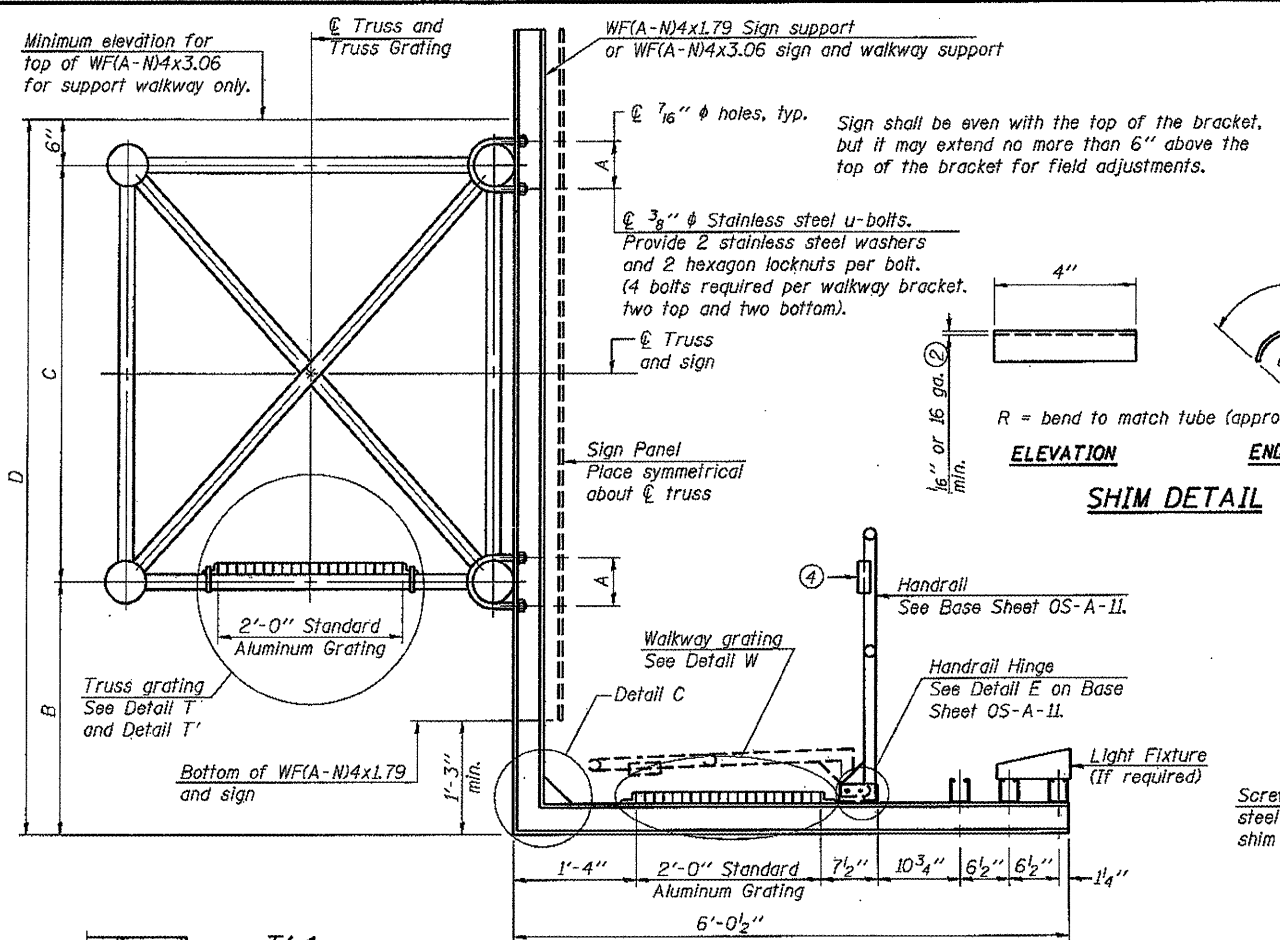
OS-A-10 1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =		CHECKED -	REVISED -
PLOT DATE =		DRAWN -	REVISED -
		CHECKED -	REVISED -

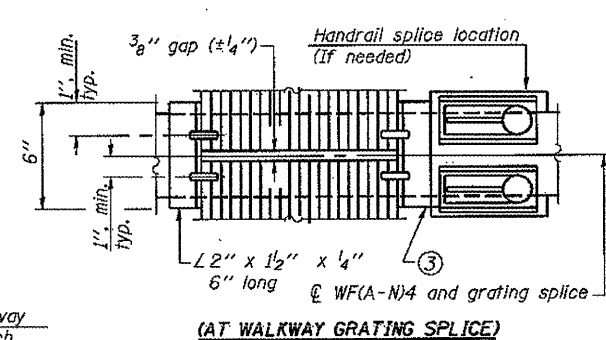
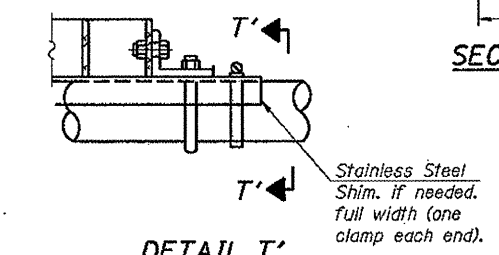
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	18
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				



SECTION B-B



SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

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

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

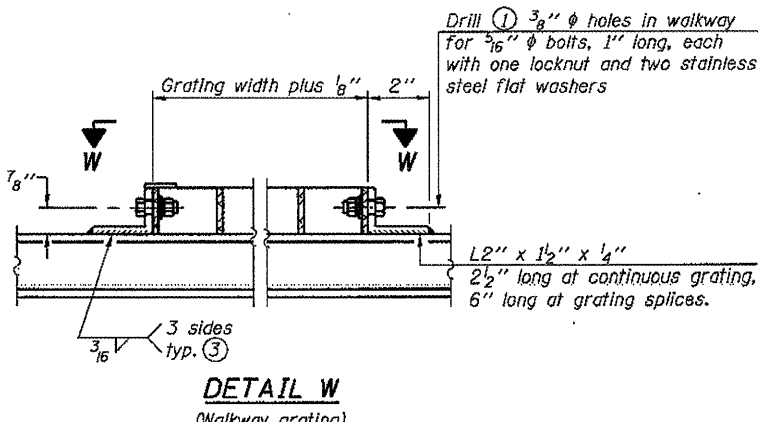
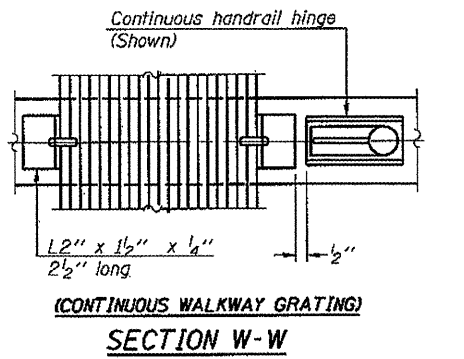
OR

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.³ per bar, a depth of 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.

Structure Number	Station	A	⑥ B	C	⑥ D
IS0991080L132.2	379+00	5 15/16"	3'-4 1/2"	5'-3"	9'-1 1/2"
IS0161057R340.4	150+50	6 15/16"	3'-1 1/2"	5'-3"	8'-10 1/2"
IS0221055R270.7	784+00	5 7/16"	2'-4 1/2"	5'-3"	8'-1 1/2"
IS0221055L274.8	1000+40				
IS0221055L274.9	1006+60	6 15/16"	2'-9"	7'-0"	10'-3"
IS0161055L276.5	1098+50	6 5/16"	4'-6"	5'-3"	12'-0"
IS0221055R274.6	625+00	6 7/16"	3'-7 1/2"	5'-3"	9'-4 1/2"



- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- 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.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-11.)
- 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- Based on actual height of tallest sign given on OS-A-1.

OS-A-10

I-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

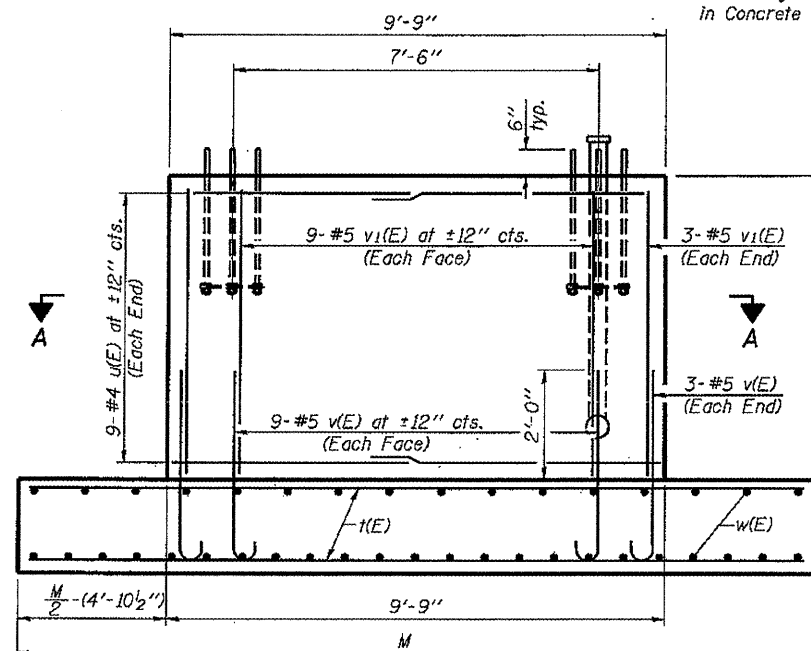
OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	19
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				

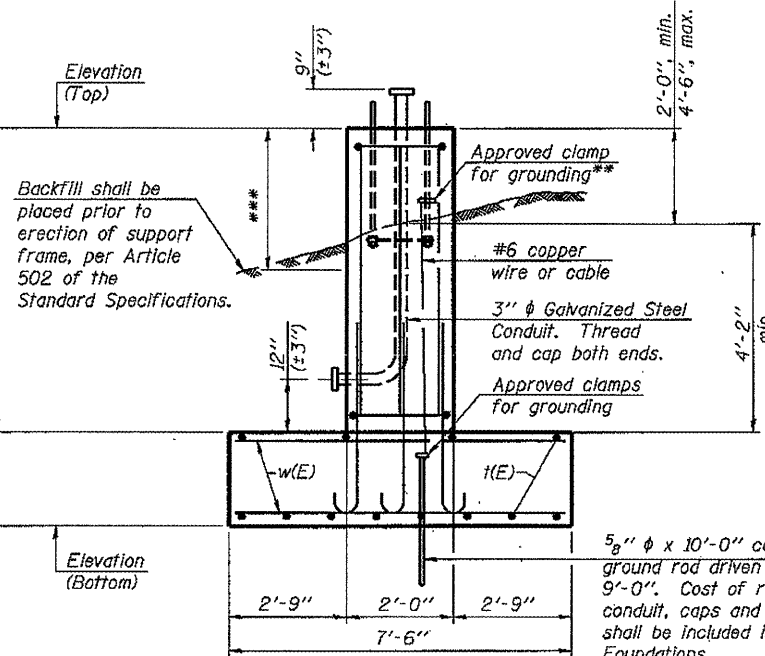
For anchor rod size and placement, see Support Frame Detail Sheet.

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

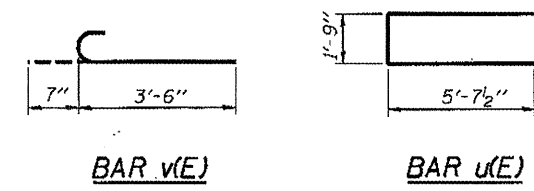
*** A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Concrete Foundations.



SIDE ELEVATION



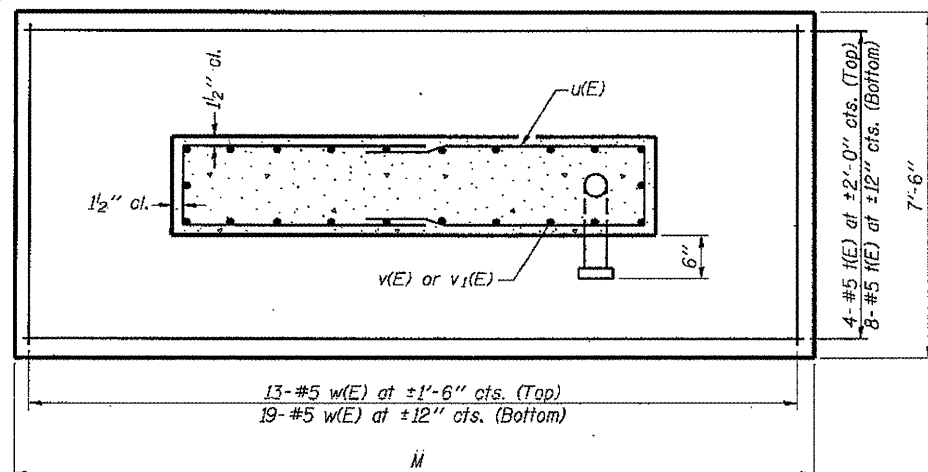
END ELEVATION



BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
i(E)	12	#5	*	—
u(E)	18	#4	13'-0"	⊔
v(E)	24	#5	4'-1"	⊔
v1(E)	24	#5	*	—
w(E)	32	#5	7'-3"	—

*Length of i(E) bar = (Dim. M) - 6"
v1(E) bar = (Dim. N) - 3"



SECTION A-A

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	N	M	Elevation Top	Elevation Bottom	N	M	
IS0221055L274.8	1000 + 40	709.65	701.65	6' - 3"	16' - 6'	709.65	701.65	6' - 3"	16' - 6'	24.3

Note:
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.0 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.
During construction, if footing length or width or wall height change by more than 12", or if reinforcement is changed, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

DETAILS FOR 8" φ SUPPORT FRAME

OS-F2

1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISD -
		CHECKED -	REVISD -
		DRAWN -	REVISD -
		CHECKED -	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

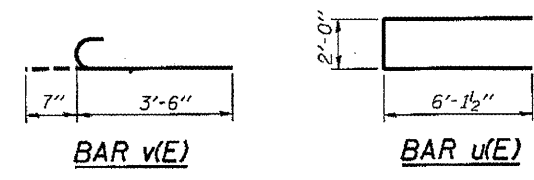
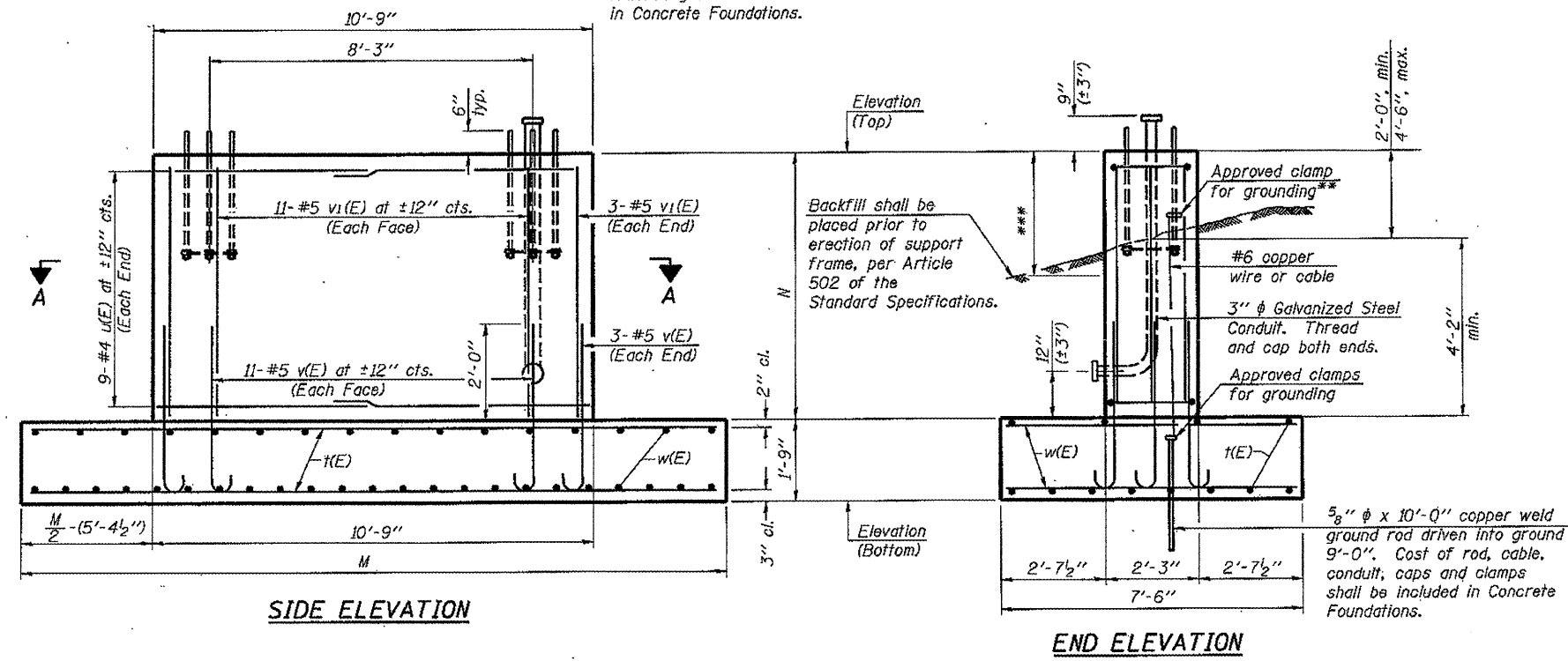
OVERHEAD SIGN STRUCTURES
SPREAD FOOTING DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	20
CONTRACT NO. 46175			ILLINOIS FED. AID PROJECT	

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.

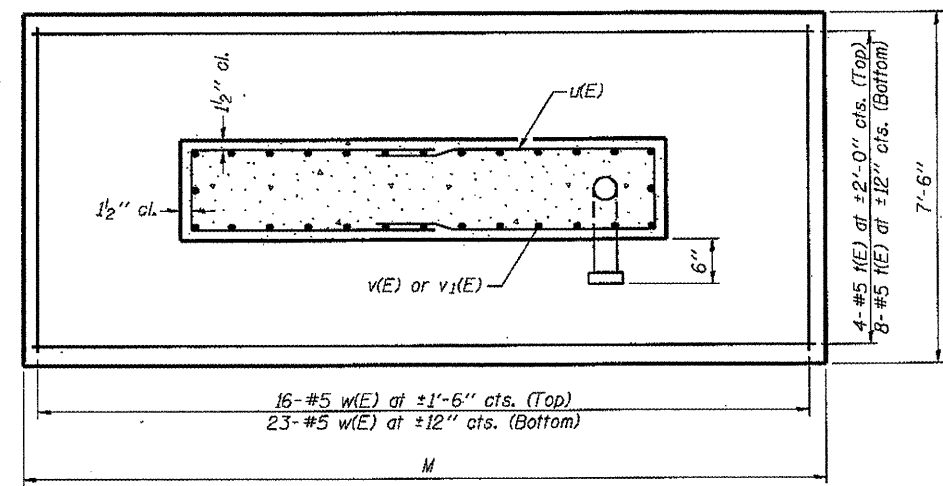
*** A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Concrete Foundations.



BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v(E)	12	#5	*	—
u(E)	18	#4	14'-3"	—
v(E)	28	#5	4'-1"	—
v1(E)	28	#5	*	—
w(E)	39	#5	7'-3"	—

*Length of v(E) bar = (Dim. M) - 6"
 v1(E) bar = (Dim. N) - 3"



SECTION A-A

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	N	M	Elevation Top	Elevation Bottom	N	M	
IS0991080R132.9	417 + 50	576.58	566.83	8' - 0"	18' - 9'	576.58	564.25	10' - 7"	18' - 9'	35.5
IS0991080L132.2	379 + 00	579.78	570.11	7' - 11"	20' - 6'	579.78	568.86	9' - 2"	20' - 6'	35.8
IS0161055L276.5	1098 + 50	698.45	690.20	6' - 6"	19' - 6'	698.45	687.95	8' - 9"	8' - 9'	33.1

Note:
 The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.0 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.
 During construction, if footing length or width or wall height change by more than 12", or if reinforcement is changed, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

DETAILS FOR 10" Ø SUPPORT FRAME

OS-F3

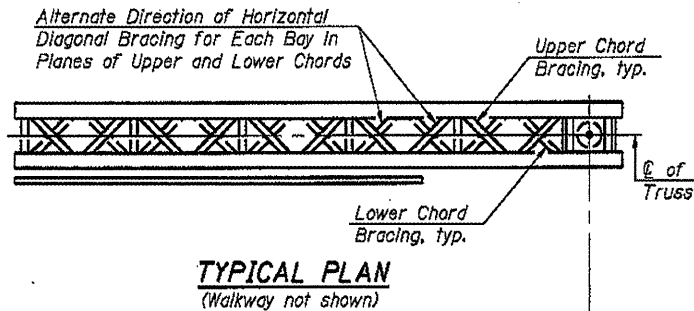
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FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
PLOT SCALE =		DRAWN -	REVISED -
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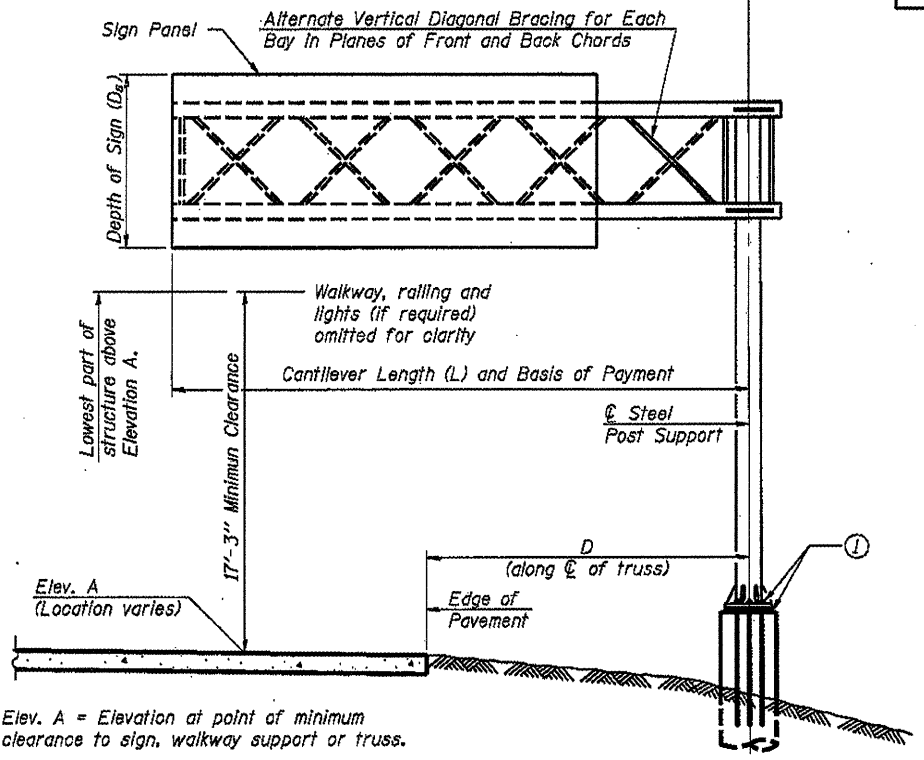
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
 SPREAD FOOTING DETAILS
 SHEET NO. OF SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1	OVD SIN STR REPL 12-02	VARIOUS	39	21
CONTRACT NO. 46175			ILLINOIS FED. AID PROJECT	



TYPICAL PLAN
(Walkway not shown)

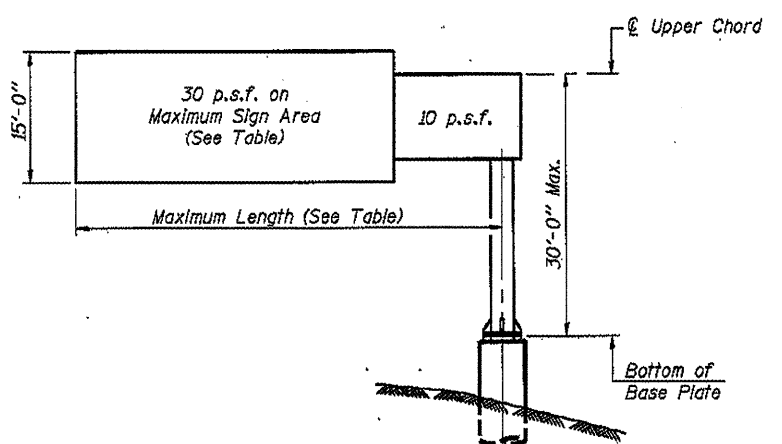


TYPICAL ELEVATION
Looking in Direction of Traffic

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.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D _s	Total Sign Area
IC09910801.147.8	1228 + 78	III-C-A	35'-0"	694.94	20'-0"	-	97.5
IC09910571.332.7	1220 + 00	III-C-A	30'-0"	100-0	23'-0"	-	78
IC0991057R322.2	1193 + 50	III-C-A	30'-0"	100-0	23'-0"	-	78
IC0991057R329.6	1056 + 25	III-C-A	30'-0"	100-0	20'-0"	-	97.5
IC0991057L.330.5	1108 + 50	III-C-A	30'-0"	100-0	20'-0"	-	97.5
IC0991057L.327.4	940 + 50	I-C-A	30'-0"	100-0	14'-0"	-	137

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.

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 Bridge Seat Sealer in accordance with the Standard Specifications.

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

FOUNDATIONS: The contract unit price for 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	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	

OSC-A-1

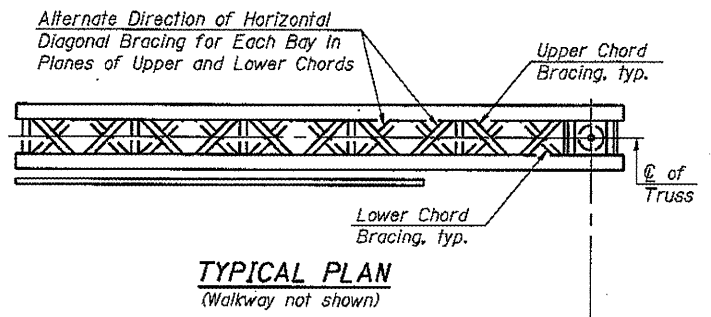
1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

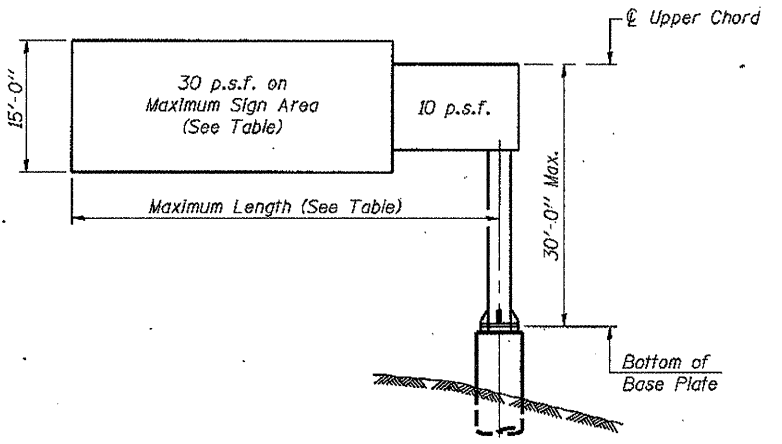
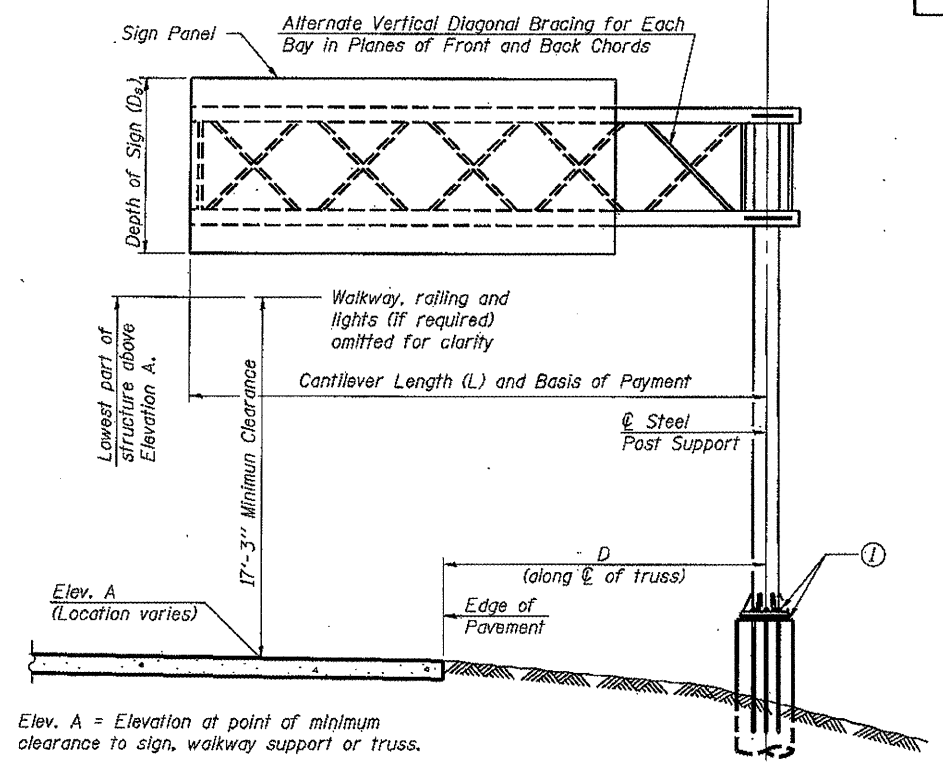
CANTILEVER SIGN STRUCTURES - GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL POST

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD SIM STR REPL 12-02		VARIOUS	39	22
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				



Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D _s	Total Sign Area
1C0221055L270.8	793 + 40	III-C-A	35'-0"	100-0	19'-6"	-	146
1C0221055L272.9	904 + 40	III-C-A	35'-0"	100-0	20'-0"	-	120
1C0221055L274.5	633 + 00	III-C-A	35'-0"	100-0	19'-6"	-	116

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.

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.
fy = 60,000 p.s.i. (reinforcement)

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

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

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

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

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

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

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seal 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	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	

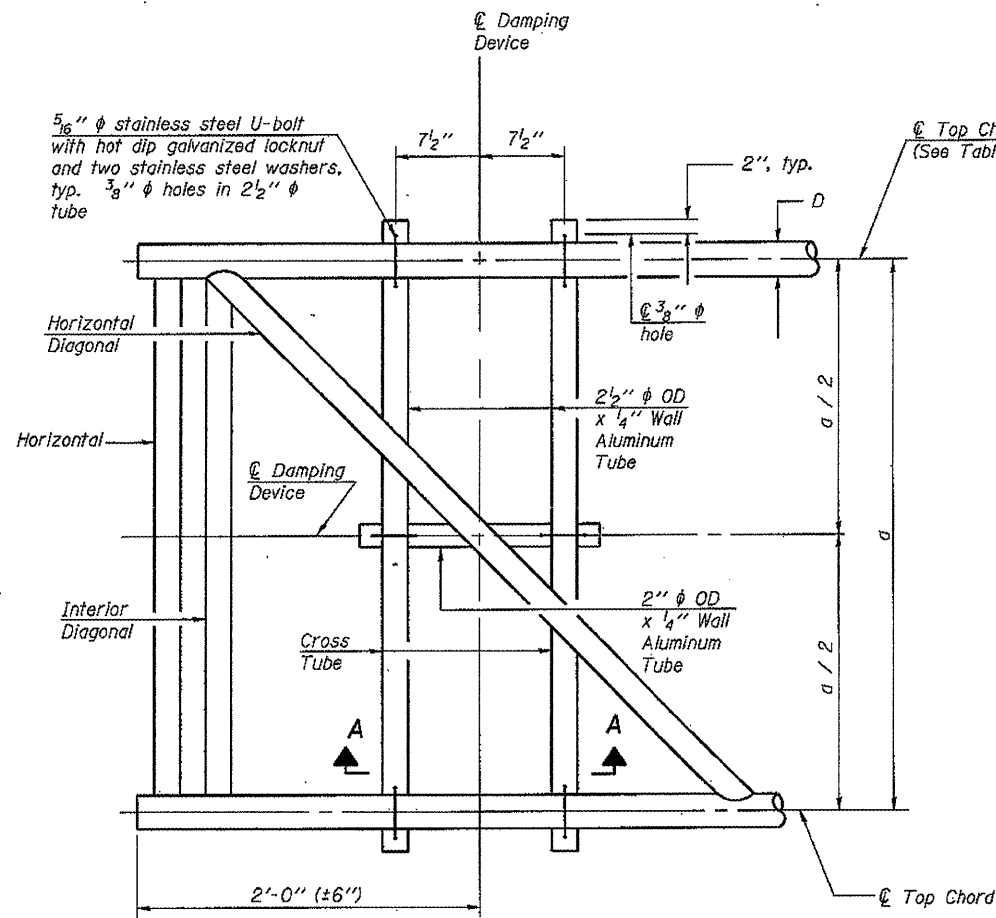
OSC-A-1 1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
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		DRAWN -	REVISED -
		CHECKED -	REVISED -
PLOT SCALE =			
PLOT DATE =			

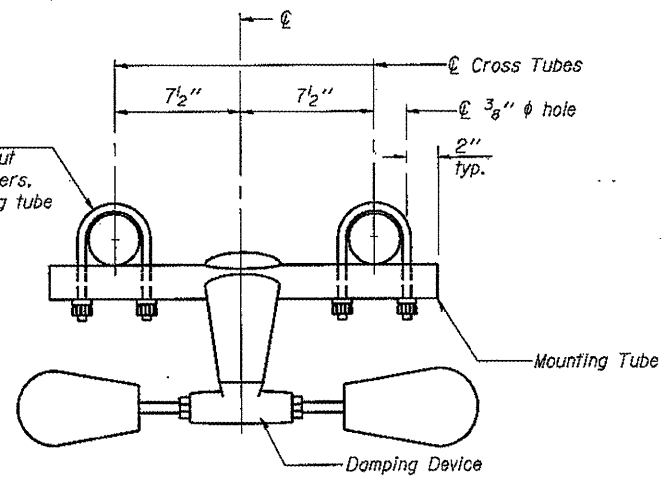
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

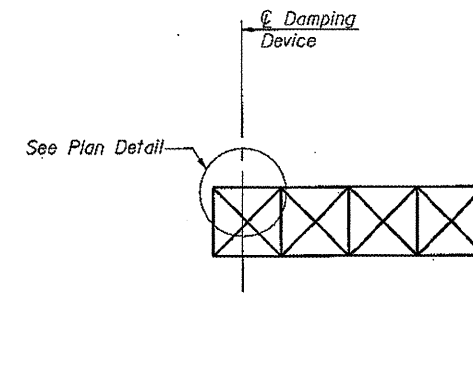
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 DVD SIN STR REPL 12-02	VARIOUS	39	23
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				



PLAN DETAIL



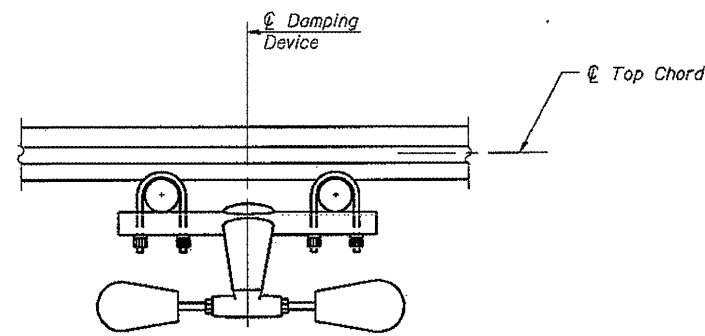
TRUSS DAMPING DEVICE CONNECTION DETAIL



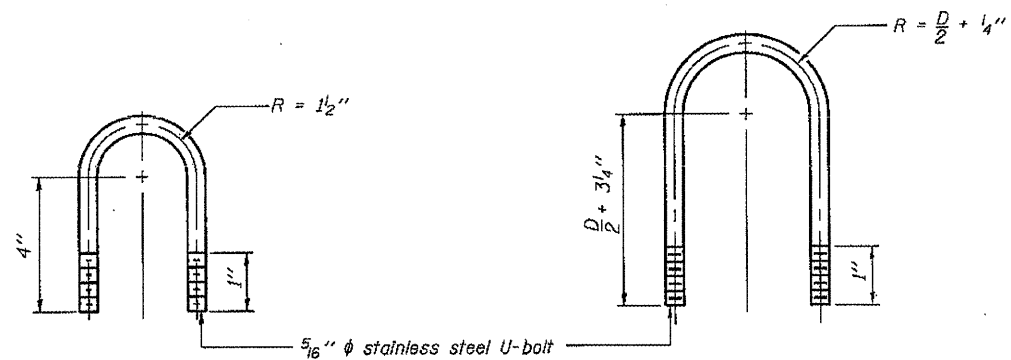
ELEVATION
Aluminum Cantilever Sign Structure

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



SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)

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

OSC-A-D

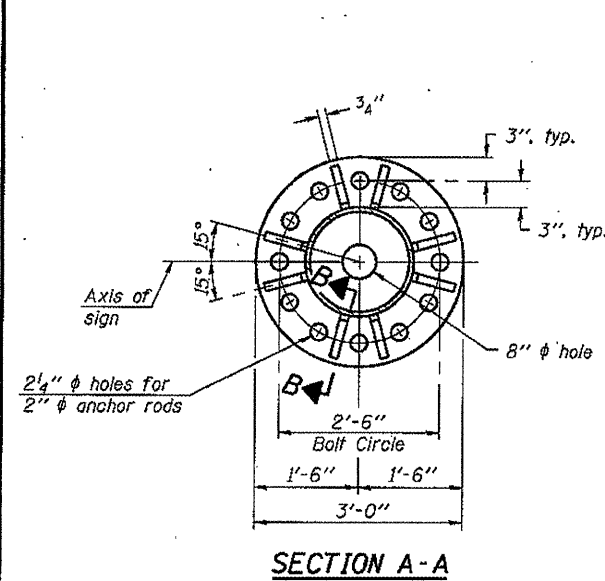
1-20-11

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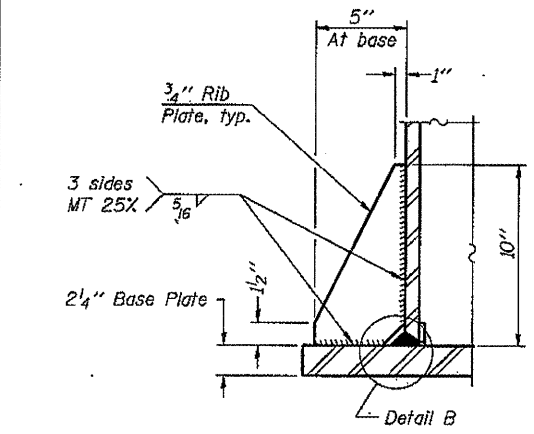
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURE
DAMPING DEVICE

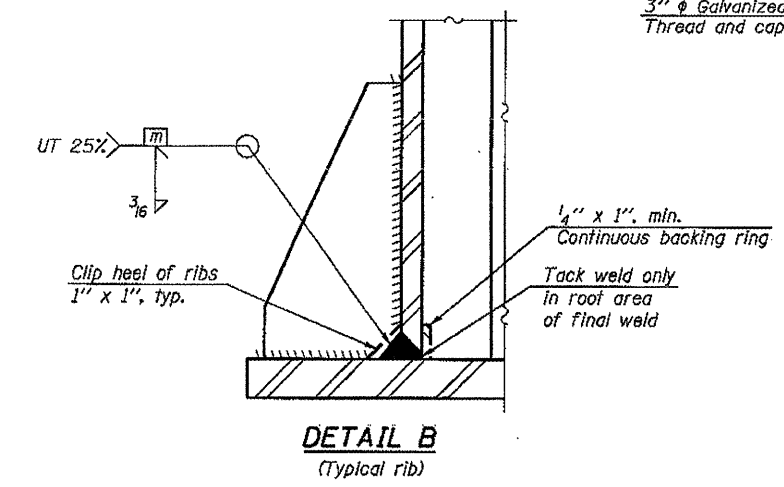
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1 OVD	SIN STR REPL 12-02	VARIOUS	39	24
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				



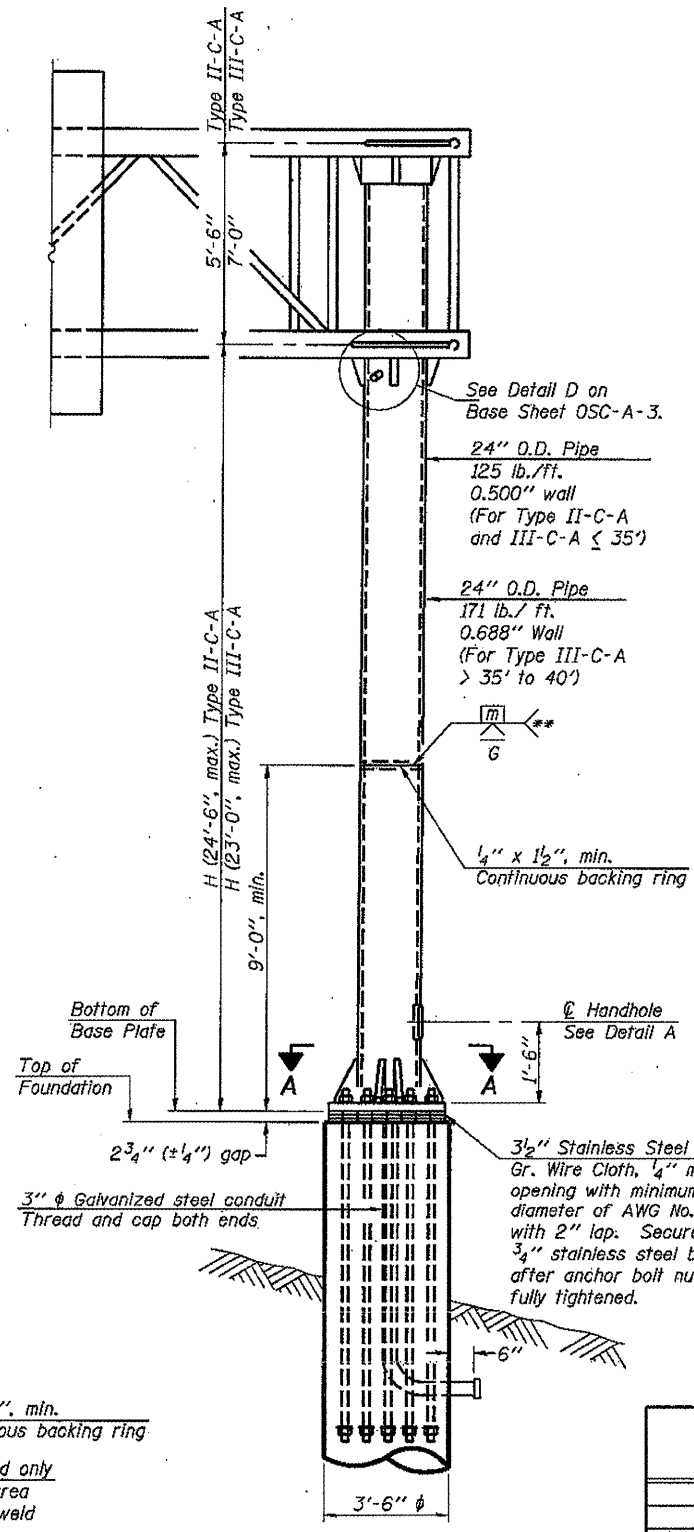
SECTION A-A



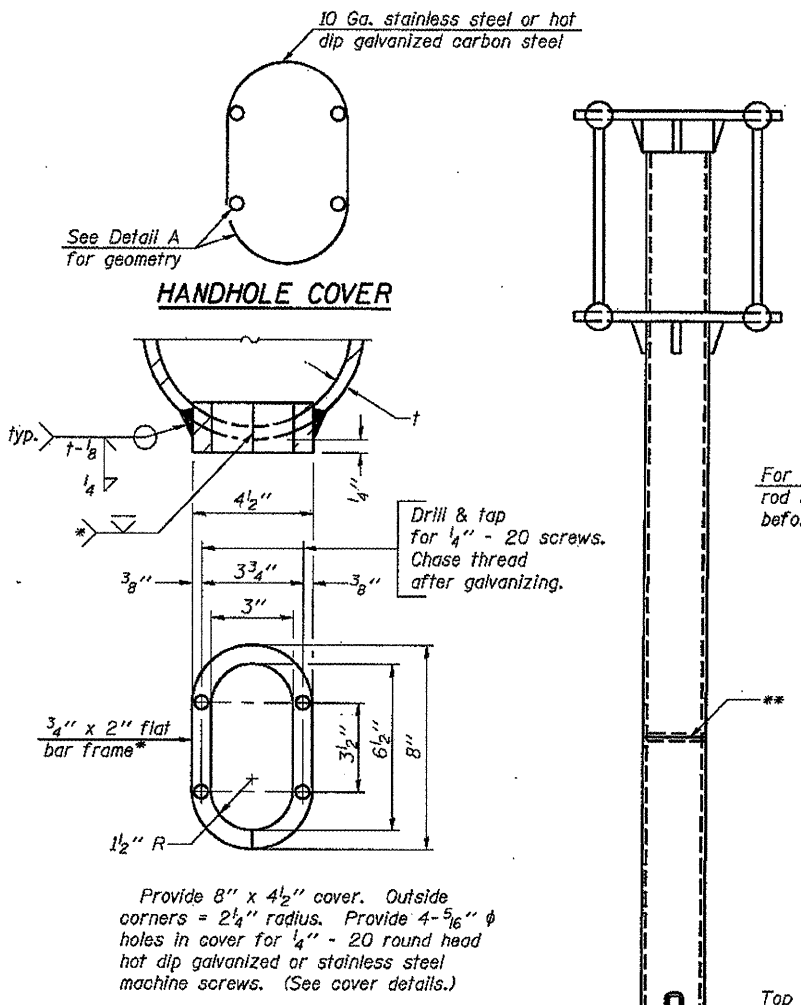
SECTION B-B



DETAIL B
(Typical rib)



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



DETAIL A

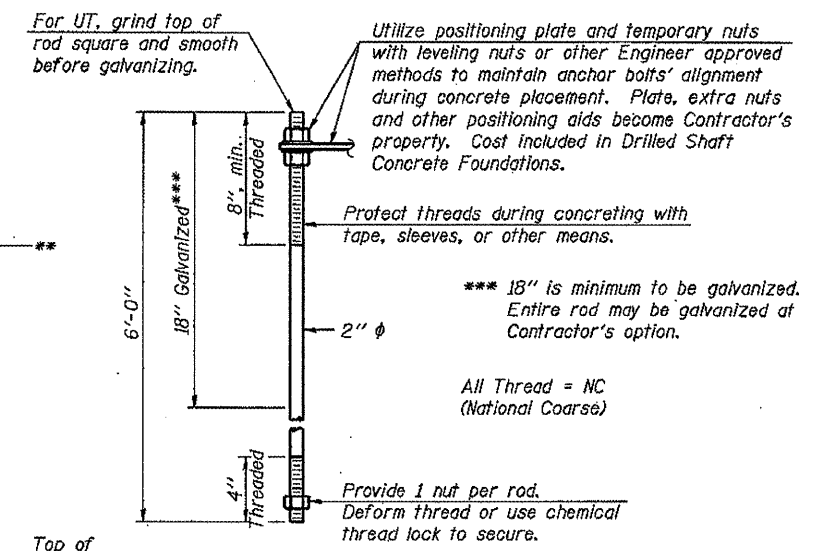
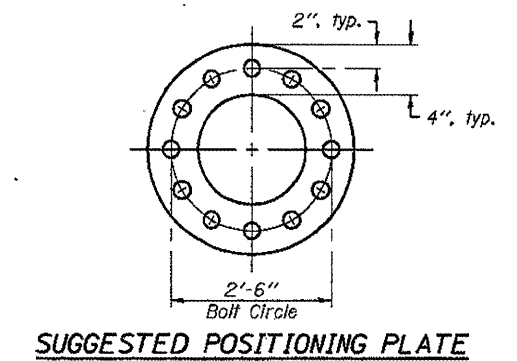
Provide 8" x 4 1/2" cover. Outside corners = 2 1/4" radius. Provide 4-5/16" φ holes in cover for 1/4" - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

* 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.

Structure Number	Station	H
1C0221055L274.5	633 + 00	22'-4"

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



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, using a straight beam, 1/2" φ 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

Utilize positioning plate and temporary nuts with leveling nuts or other Engineer approved methods to maintain anchor bolts' alignment during concrete placement. Plate, extra nuts and other positioning aids become Contractor's property. Cost included in Drilled Shaft Concrete Foundations.

Protect threads during concreting with tape, sleeves, or other means.

*** 18" is minimum to be galvanized. Entire rod may be galvanized at Contractor's option.

All Thread = NC (National Coarse)

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

OSC-A-5

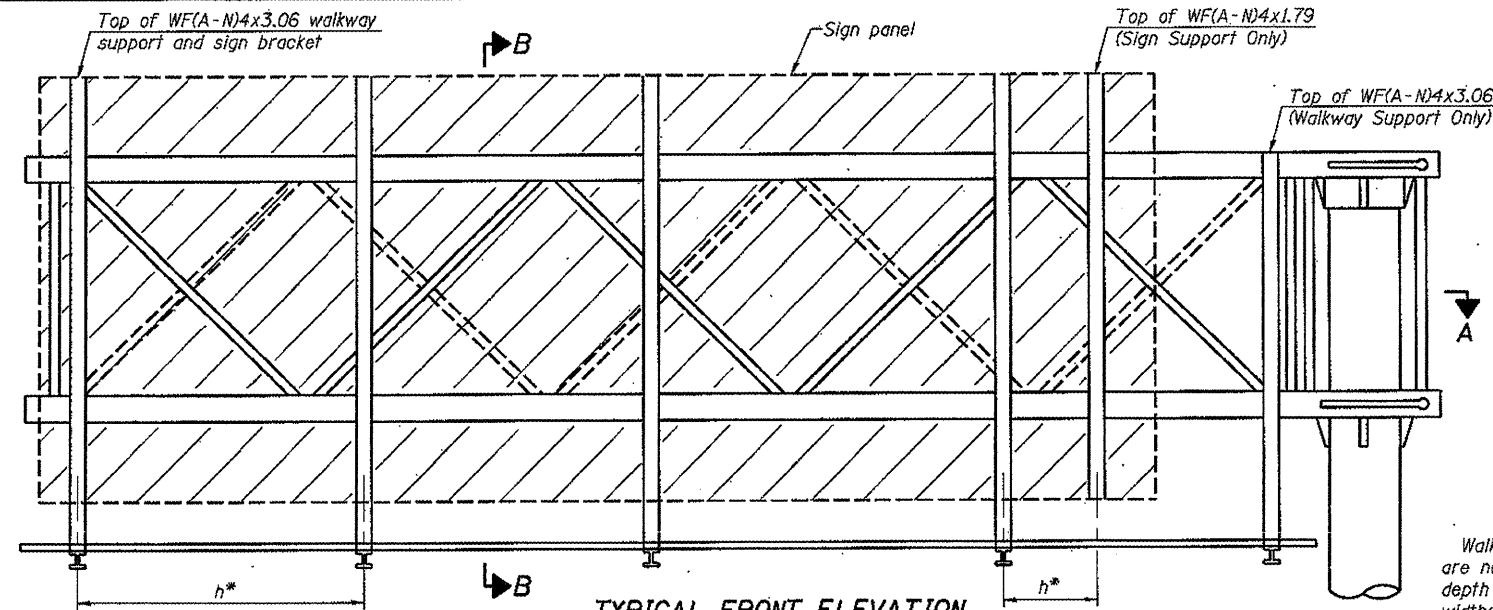
1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISD -
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		DRAWN -	REVISD -
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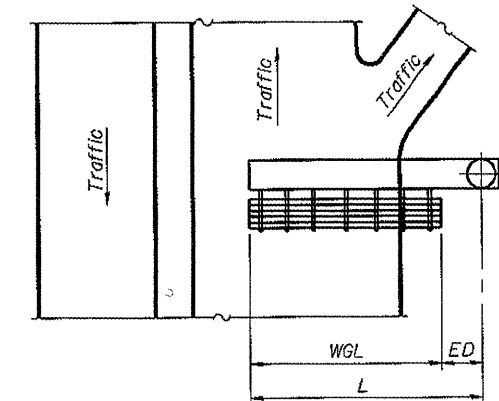
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	25
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

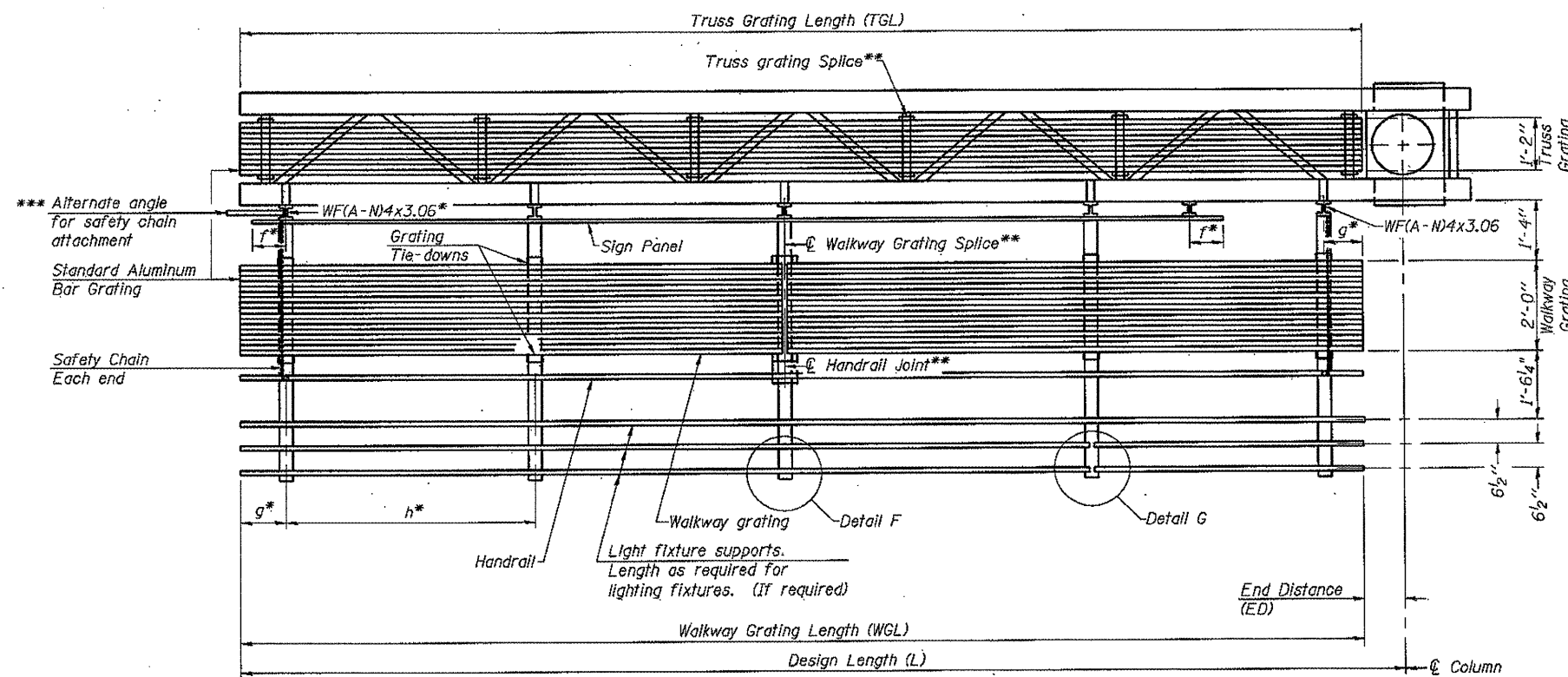


TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



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

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



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.

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

Structure Number	Station	WGL	ED	TGL
1C0991080L147.8	1228 + 78	20'-0"	15'-0"	
1C0991057L332.7	1220 + 00	17'-0"	18'-0"	33'-8"
1C0991057R322.2	1193 + 50	17'-0"	18'-0"	33'-8"
1C0991057R329.6	1056 + 25	20'-0"	15'-0"	33'-8"
1C0991057L330.5	1108 + 50	20'-0"	15'-0"	33'-8"
1C0991057L327.4	940 + 50	20'-6"	1'-6"	20'-9"

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

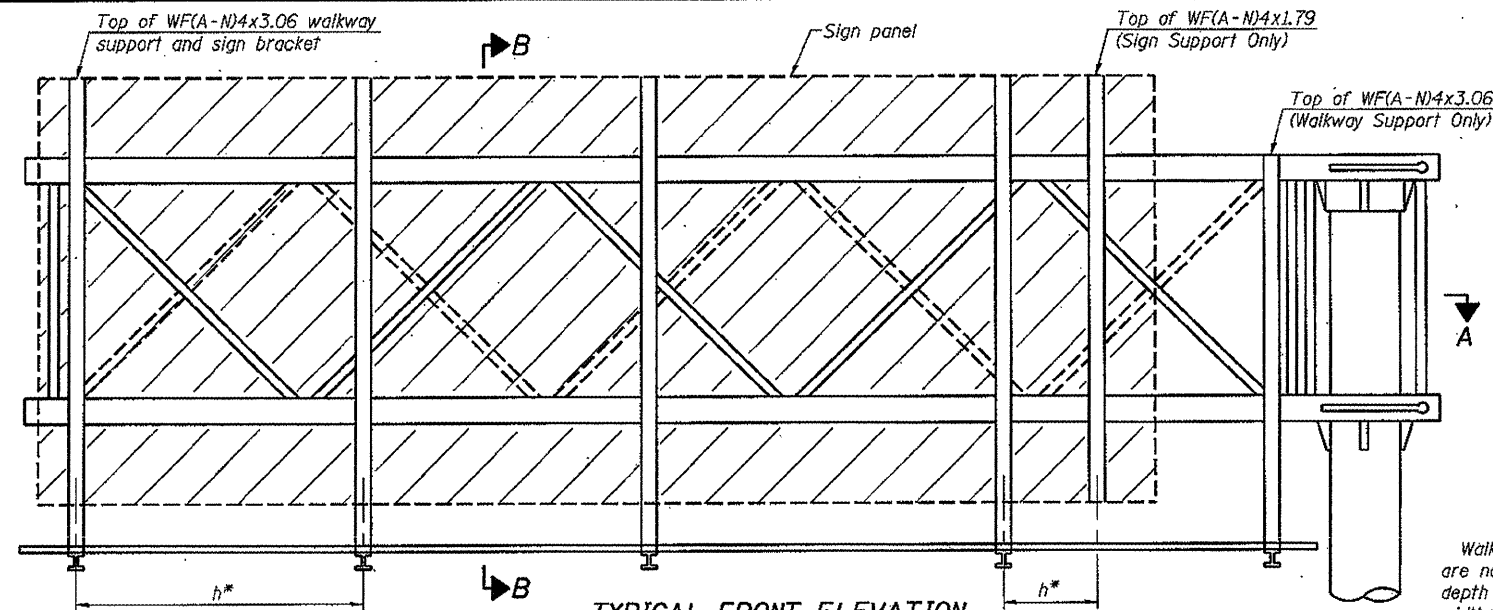
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FILE NAME =	USER NAME =	DESIGNED -	REVISED -
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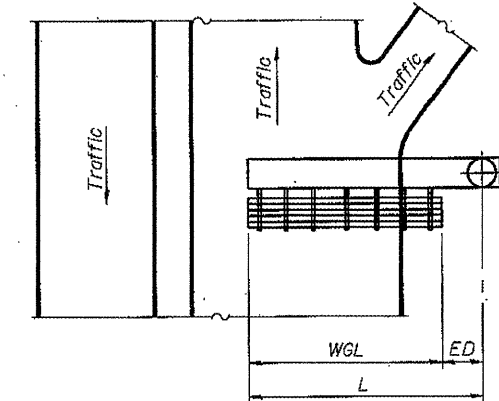
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - ALUMINUM WALKWAY
DETAILS - ALUMINUM TRUSS & STEEL POST

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	26
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

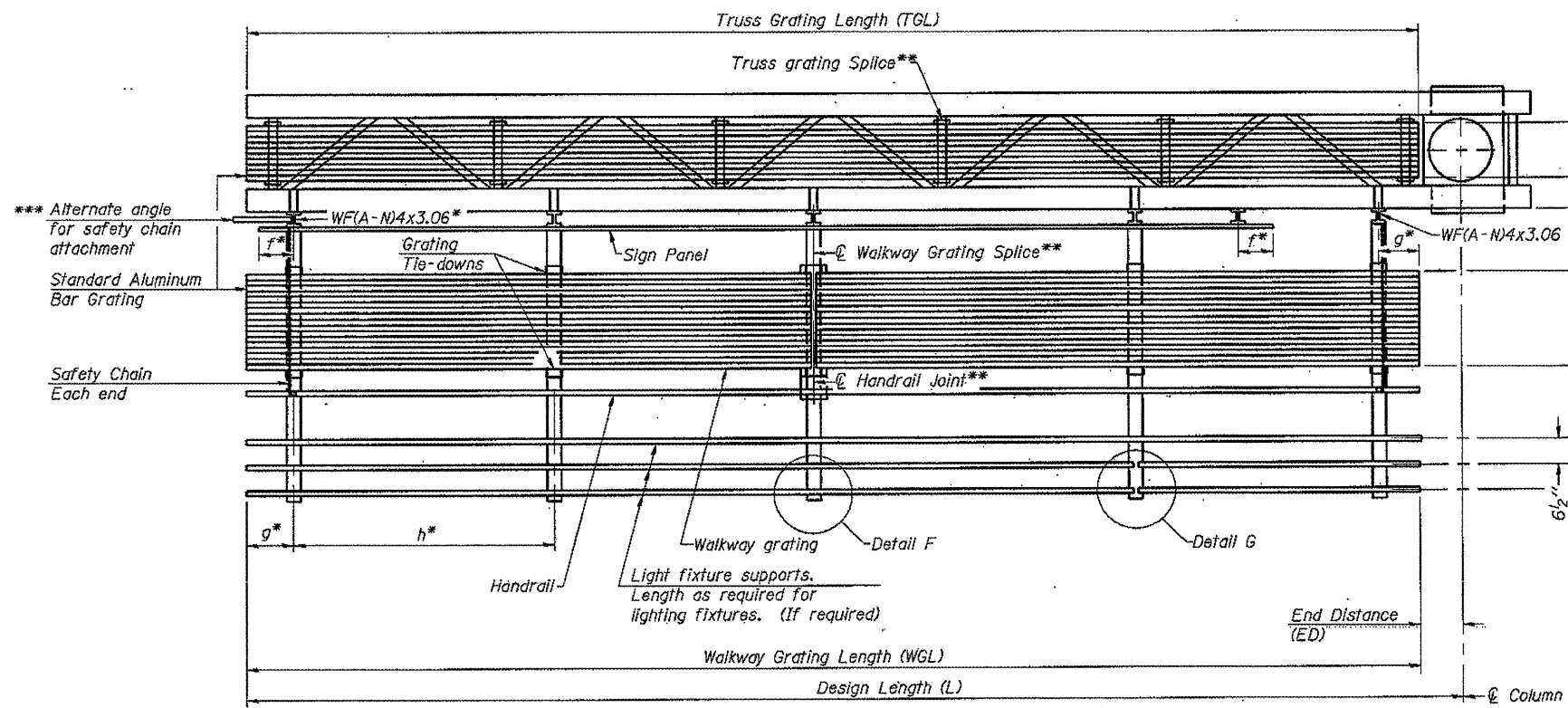


TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



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

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



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.

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

Structure Number	Station	WGL	ED	TGL
1C0221055L270.8	793 + 40	23'-6"	11'-6"	33'-6"
1C0221055L272.9	904 + 40	20'-0"	15'-0"	33'-6"
1C0221055L274.5	633 + 00			

Notes:
Space walkway brackets WFA(N)4x3.06 and sign brackets WFA(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, WFA(N)4x1.79 or WFA(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

WFA(N)4x1.79 or WFA(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

OSC-A-6

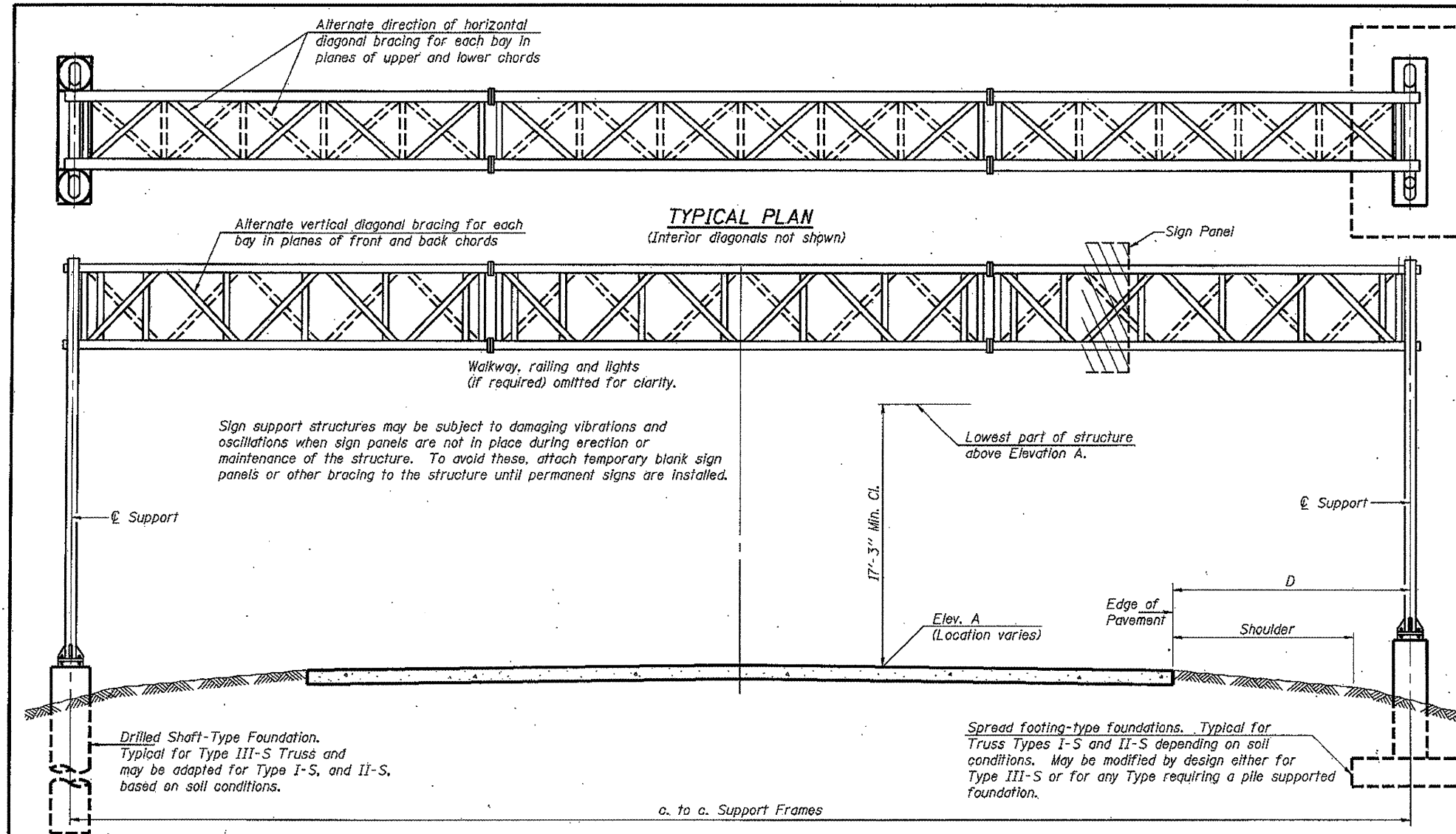
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		DRAWN -	REVISD -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - ALUMINUM WALKWAY
DETAILS - ALUMINUM TRUSS & STEEL POST

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	27
CONTRACT NO. 46175				
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.

ALLOWABLE UNIT STRESSES:
 Structural Steel - 20,000 p.s.i.
 Reinforcing Steel - 20,000 p.s.i.
 Class SI Concrete - 1,400 p.s.i.
 Allowable unit stresses due to wind load in combination with other forces, are increased 1.33

MINIMUM CLEARANCE: Vertical Roadway Clearance = 17'-3" (All Obstructions)

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

MATERIALS: 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* (M183, M223 Gr. 50 or M222). Stainless steel for 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 STEEL TRUSSES: All bolts noted as "high strength" (HS) must satisfy the requirements of AASHTO M164 (ASTM A325), ASTM A449, or an Engineer approved alternate, and must have matching lock nuts and washers. All bolts, u-bolts, eye bolts, lock nuts and washers not specified to be "high strength" must satisfy the requirements of ASTM A307 Gr. B. All lock nuts must have nylon or steel inserts. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the Standard Specifications. Rotational capacity ("ROCAP") testing will not be required. All bolts, locknuts and washers must be hot dip galvanized per AASHTO M232.

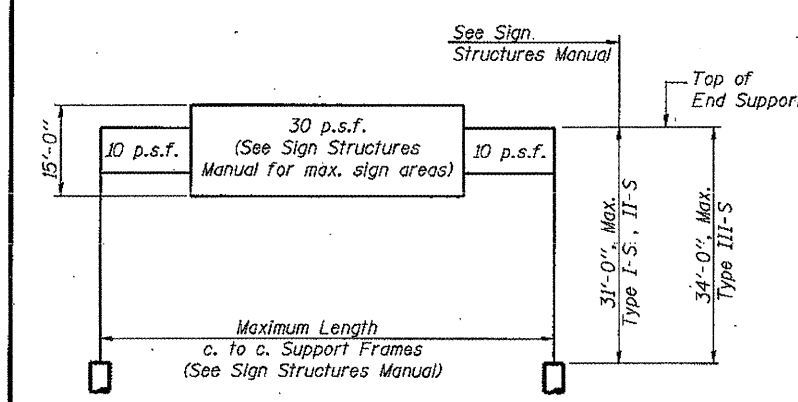
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot-Dip Galvanized after fabrication in accordance with AASHTO M111.

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

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

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

FOUNDATIONS: The contract unit price for "Concrete Foundations" or "Drilled Shaft Concrete Foundations" shall include: All necessary excavation or drilling (except in rock); backfilling with excavated material; disposal of unsuitable or surplus material; formwork; and furnishing and placing the Concrete, reinforcement bars, conduit, anchor bolts, nuts, washers and ground rods complete in place.



TYPICAL ELEVATION
(Looking at Face of Signs)**

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

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
IS0991055R266.8	1582 + 50	II-A	75'-0"	95.39	14'-1"		234
IS0991055L269.2	2705 + 50	II-A	70'-0"	763.25	16'-0"		310
IS0221055L271.1	1810 + 16	II-A	85'-0"	97.81	17'-0"		554

TOTAL BILL OF MATERIAL

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

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.

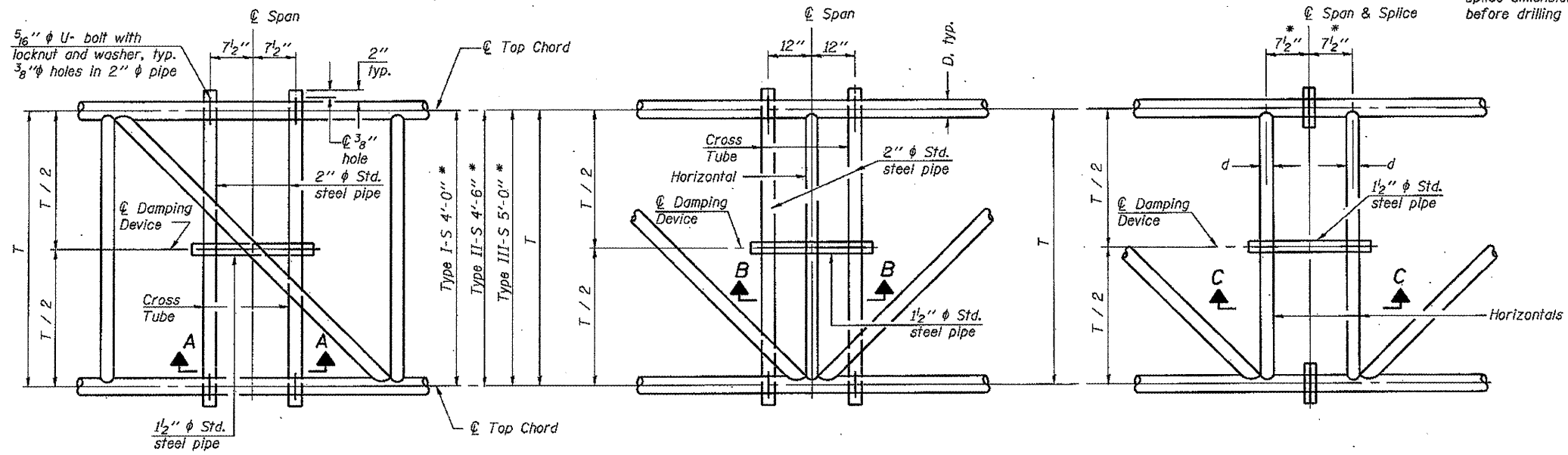
OS-S-1 1-20-11

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		CHECKED -	REVISED -
		PLOT SCALE =	REVISED -
		PLOT DATE =	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIGN STR REPL 12-02	VARIOUS	39	28
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

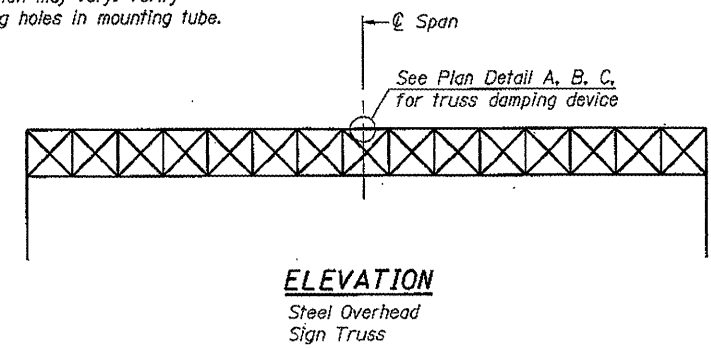


PLAN DETAIL "A"
 @ Span between panel points

PLAN DETAIL "B"
 @ Span at panel point

PLAN DETAIL "C"
 @ Span at @ chord splice

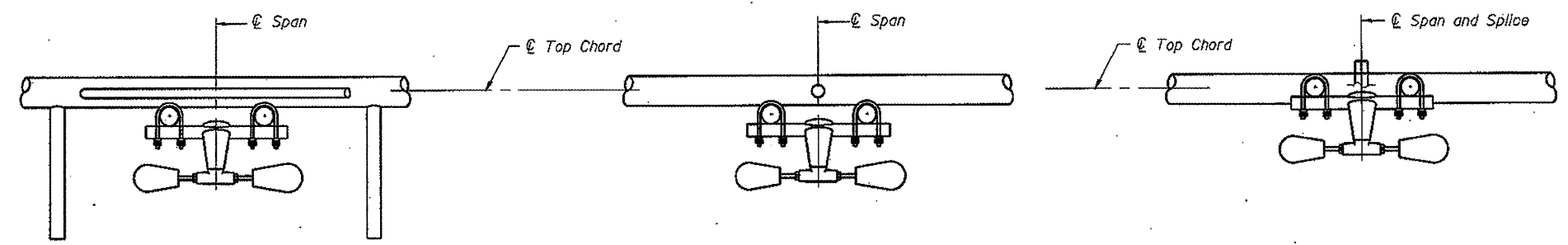
Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.



ELEVATION
 Steel Overhead Sign Truss

NOTES

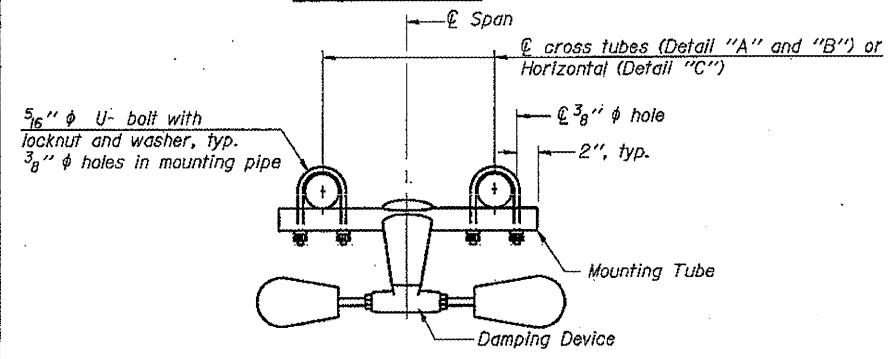
Damper: One damper per truss. (31 Lbs. Stockbridge-Type - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...



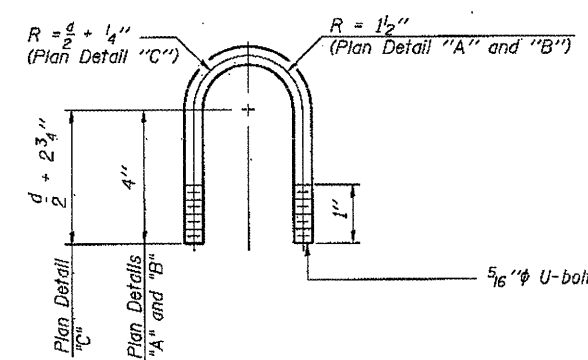
SECTION A-A

SECTION B-B

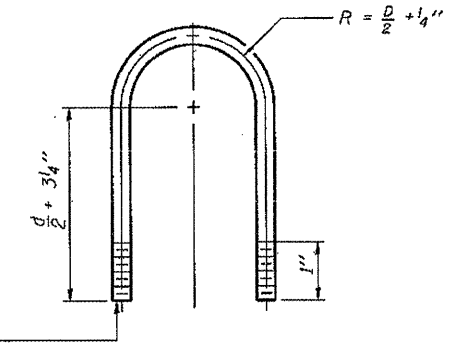
SECTION C-C



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")

OS-S-D

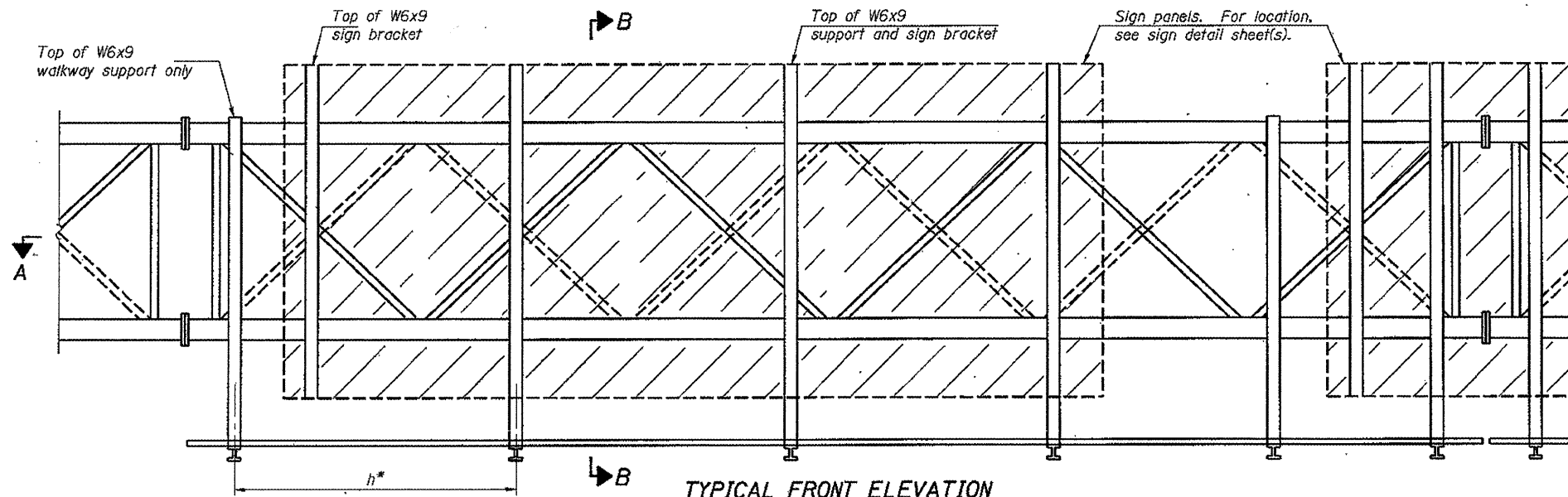
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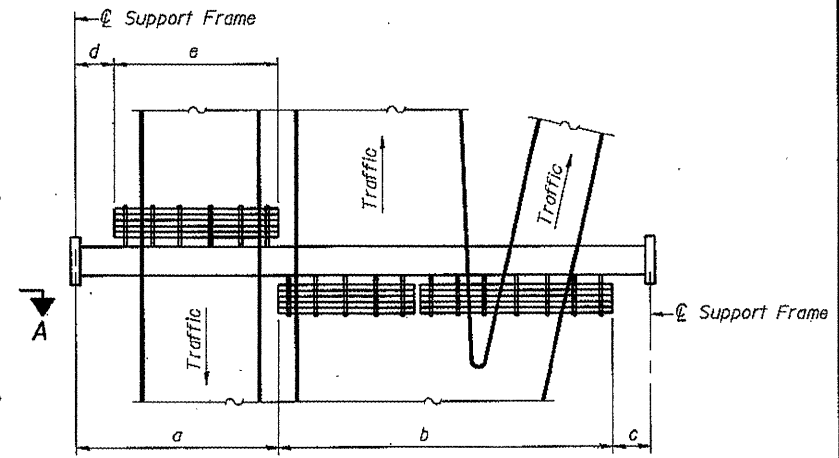
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
 DAMPING DEVICE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1	0VD SIN STR REPL 12-02	VARIOUS	39	29
			CONTRACT NO. 46175	
ILLINOIS FED. AID PROJECT				



TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



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

Walkway and Truss Grating width dimensions are nominal and may vary $\pm \frac{1}{2}$ " based on available standard widths.

BRACKET TABLE

W6x9		
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

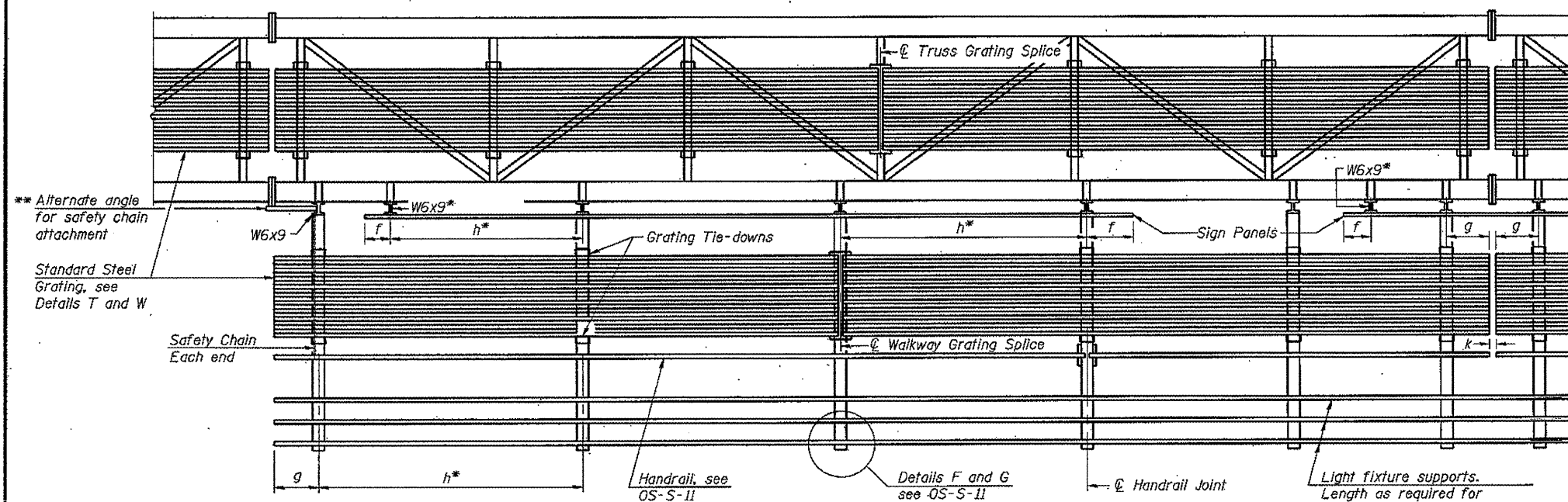
Notes:

* Space W6x9 walkway brackets and sign brackets W6x9 for efficiency and within limits shown:

- f = 12" maximum, 4" minimum (End of sign to ϕ of nearest bracket)
- g = 12" maximum, 4" minimum (End of walkway grating to ϕ of nearest support bracket)
- h = 6'-0" maximum (ϕ to ϕ sign and/or walkway support brackets, W6x9)
- 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-S-11

For Details T and W, Section B-B and Grating Splice Details, see Base Sheet OS-S-10.
For Handrail Details, see Base Sheet OS-S-11.



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.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
IS0991055R266.8	1582 + 50	6'-5"	59'-6"	9'-1"	N/A	N/A	59' - 60"
IS0991055L269.2	2705 + 50	12'-0"	47'-0"	11'-0"	N/A	N/A	47' - 0"
IS0221055L271.1	1810 + 16	11'-0"	65'-0"	9'-0"	N/A	N/A	65' - 0"

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

OS-S-9

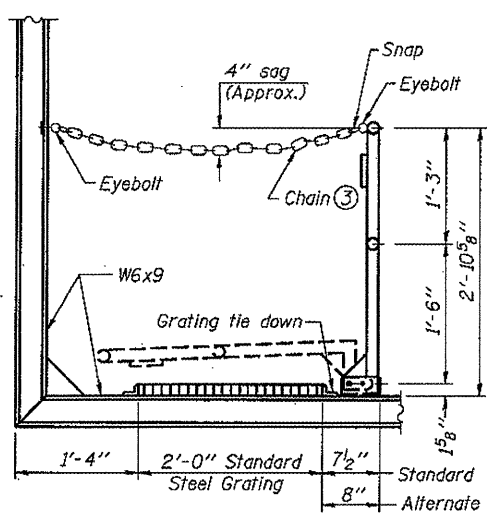
1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

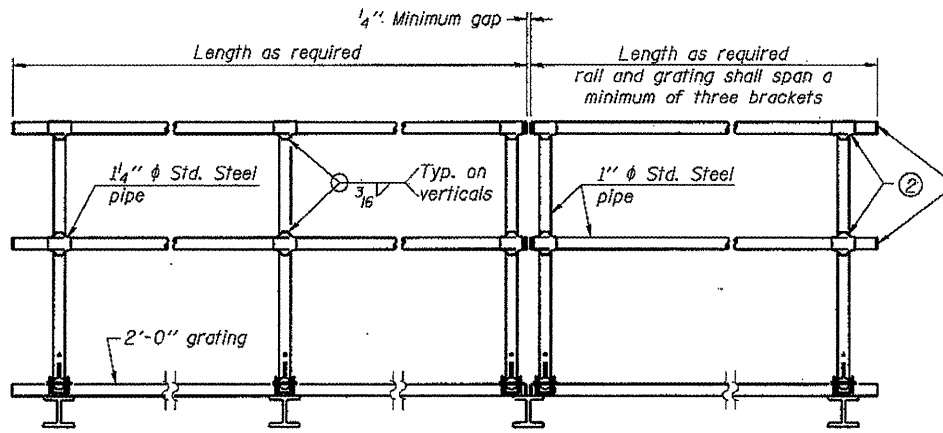
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
STEEL WALKWAY DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
Various	D-1 DVD SIN STR REPL 12-02	VARIOUS	39
			SHEET NO. 30
CONTRACT NO. 46175			
ILLINOIS FED. AID PROJECT			



SIDE ELEVATION
(Showing safety chain w/o sign)

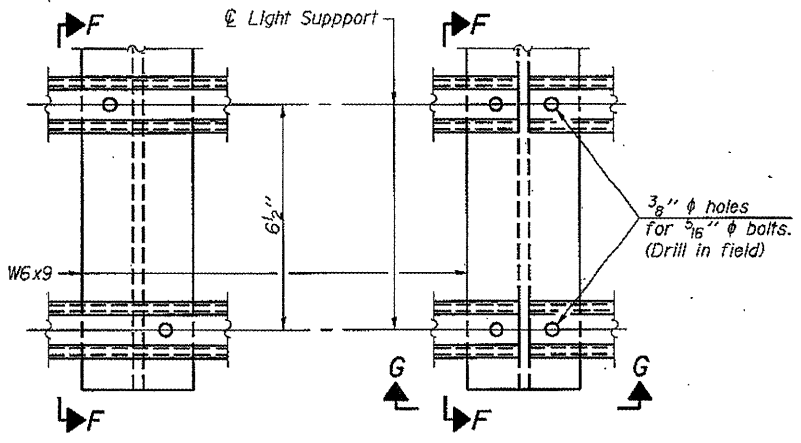


FRONT ELEVATION

HANDRAIL DETAILS

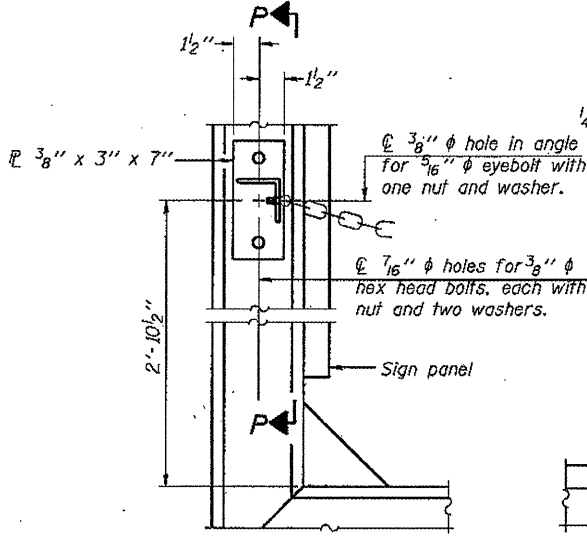
① Install standard force-fit end caps or weld $\frac{1}{8}$ " end plates with $\frac{1}{8}$ " c.f.w. and grind smooth. (All rail ends).

② Horizontal handrail member shall be continuous thru $1\frac{1}{4}$ " pipe. Provide $\frac{7}{16}$ " hole in $1\frac{1}{4}$ " pipe for $\frac{3}{8}$ " bolt. Field drill $\frac{1}{16}$ " hole in horizontal rail member. Provide washer and locknut for bolt. (Use $\frac{5}{16}$ " eyebolts in $\frac{7}{16}$ " holes on top rail at ends only.)



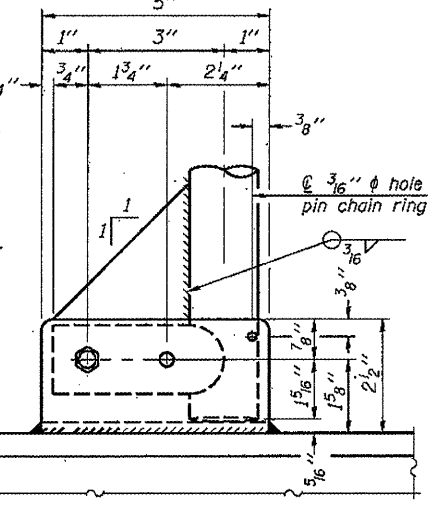
DETAIL F

DETAIL G

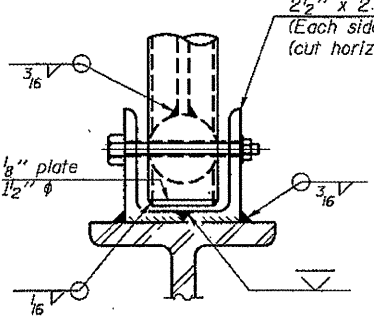


ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"

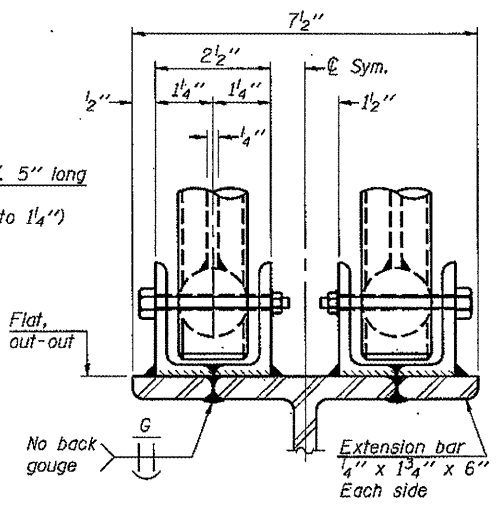


SIDE ELEVATION

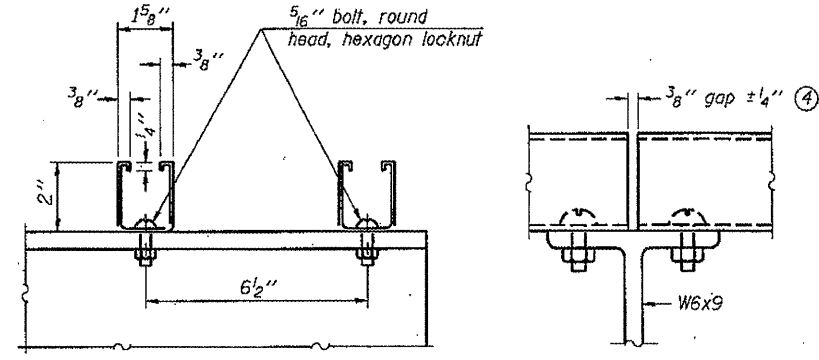


FRONT ELEVATION

See "ELEVATION" at right for dimensions.



ELEVATION AT HANDRAIL JOINT

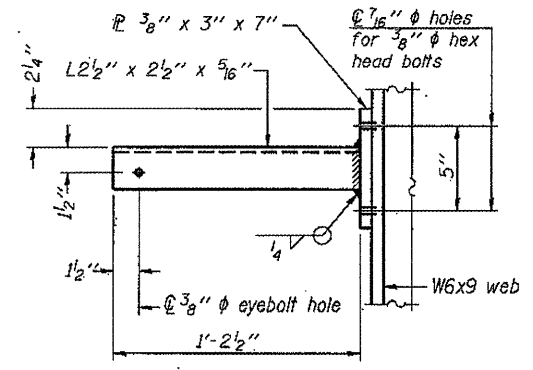


SECTION F-F

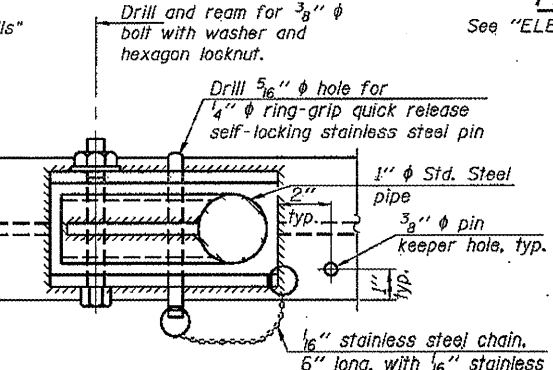
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

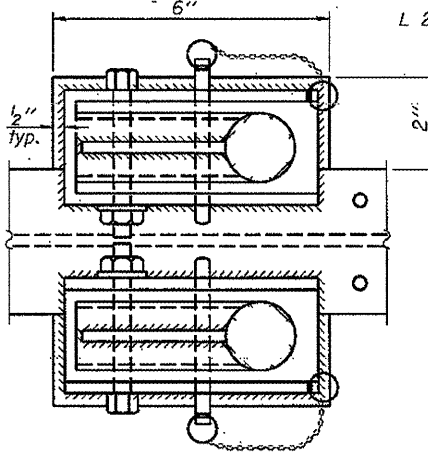
④ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



SECTION P-P

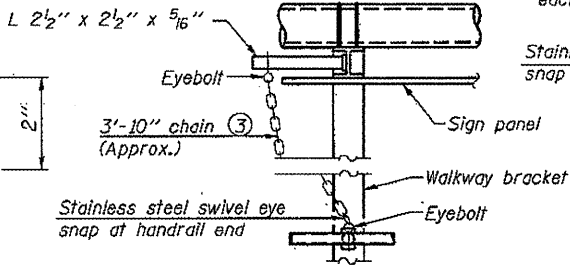


DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

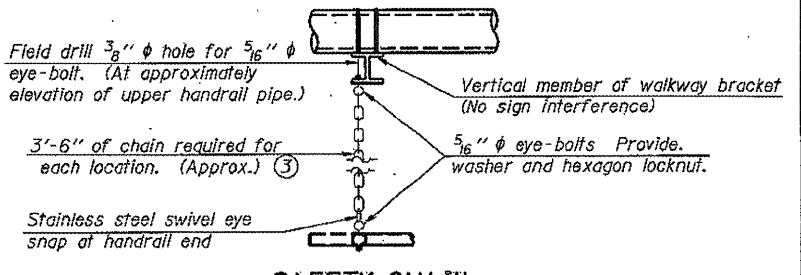
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

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

③ $\frac{3}{16}$ " Type 304L stainless steel chain, approximately 12 links per foot.



SAFETY CHAIN

One required for each end of each walkway.

OS-S-11

1-20-11

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
PLOT SCALE =			
PLOT DATE =			

DESIGNED -	REVISED -
CHECKED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

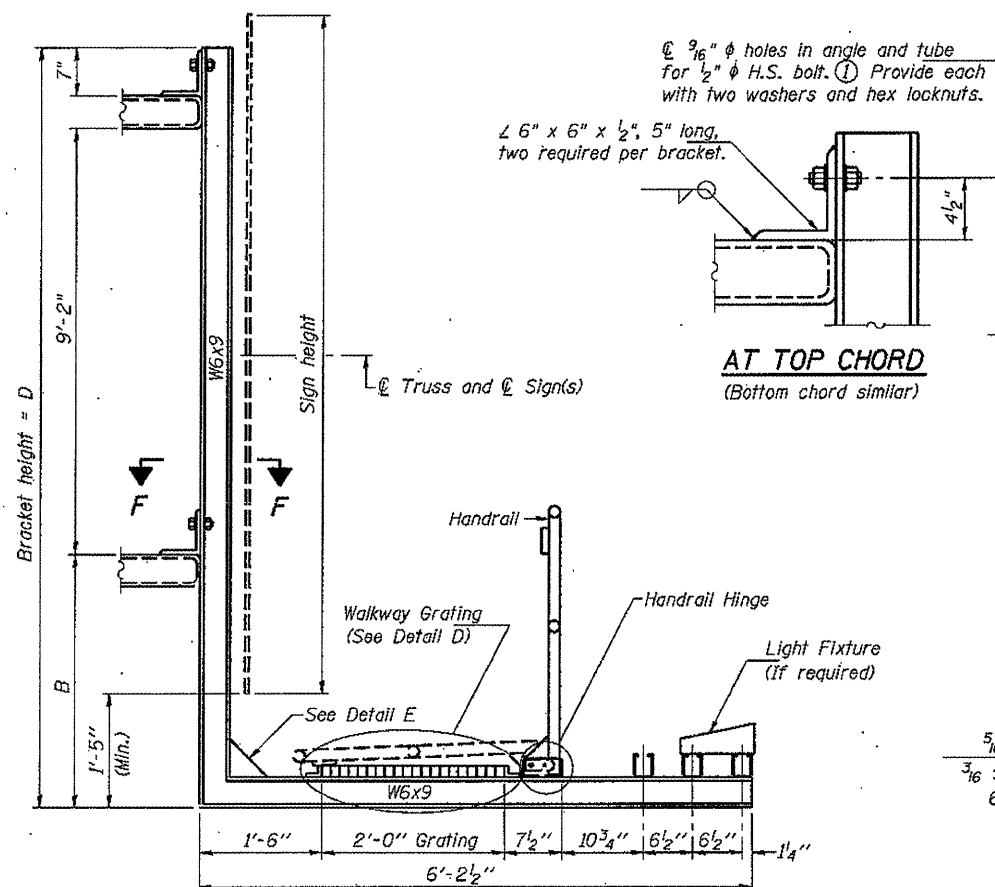
OVERHEAD SIGN STRUCTURES
STEEL HANDRAIL DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	31
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

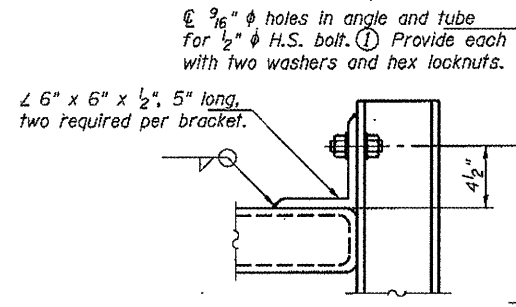
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		SHEETS

Contract #

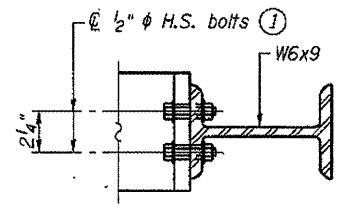


SECTION A-A

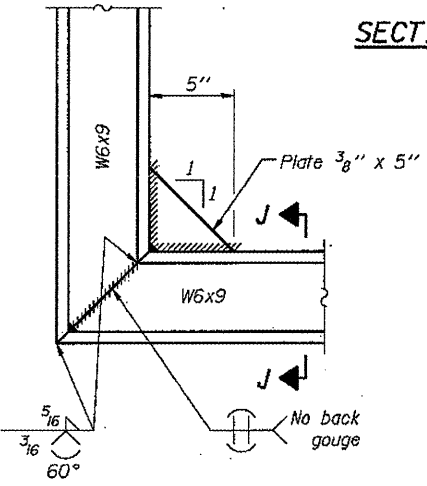
Sign panel shall be placed symmetrical about \mathcal{C} of frame.



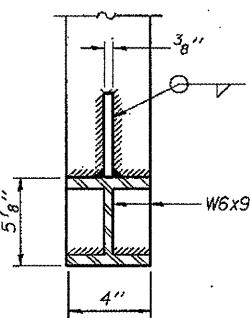
AT TOP CHORD
(Bottom chord similar)



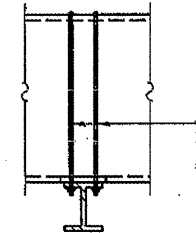
SECTION F-F



DETAIL E

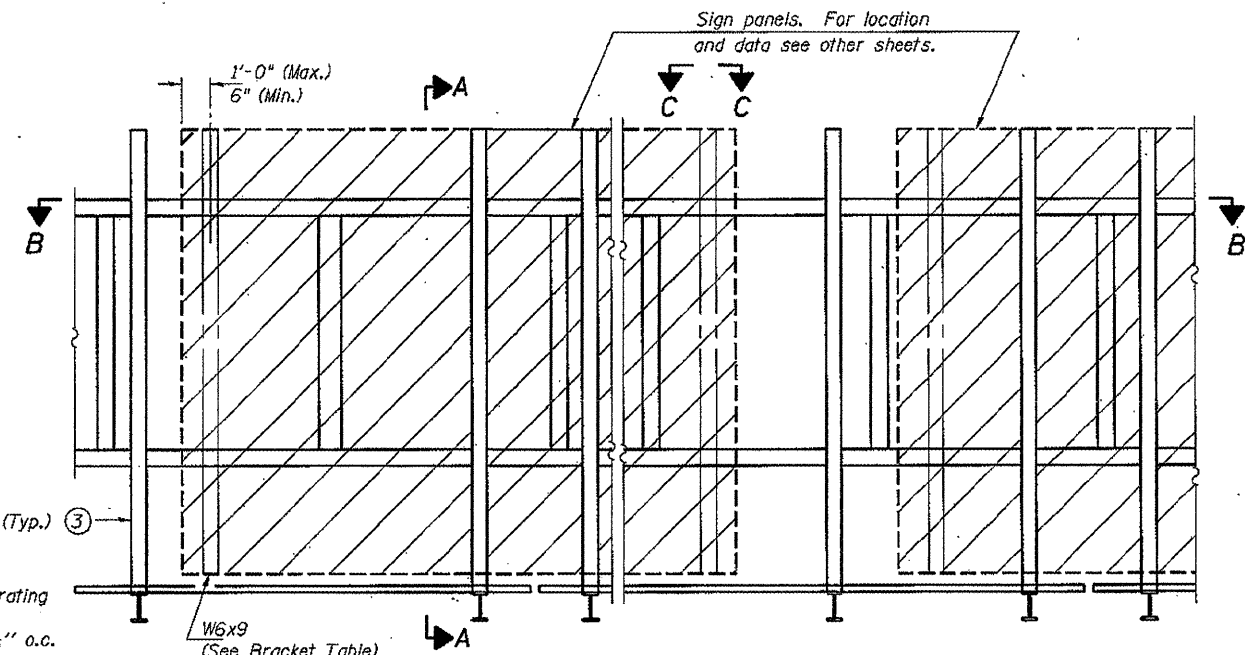


SECTION J-J



SECTION C-C

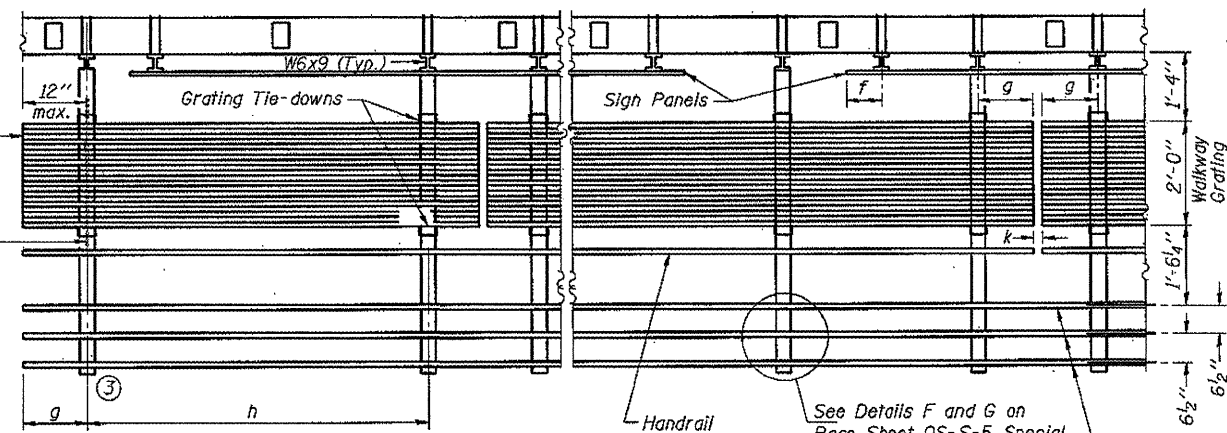
Standard Steel Grating
Bars $3/16$ " x $1 1/2$ "
Bearing Bars $1 3/16$ " o.c.
Cross Bars 4" o.c.
Steel shall conform to:
ASTM A-569 with a
minimum yield of 30,000 p.s.i.;
or AASHTO M 270 Gr. 36,
M 270 Gr. 50W, or M 270
Gr. 50.



TYPICAL FRONT ELEVATION

(With lights, safety chain and handrail omitted for clarity.)

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



SECTION B-B

See Details F and G on
Base Sheet OS-S-5 Special.

Light fixture supports.
Length as required for lighting
fixtures. (If required.)

f = 1'-0" maximum, 4" minimum (End of sign to \mathcal{C} of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to \mathcal{C} of nearest support bracket)
h = 6'-0" maximum (\mathcal{C} to \mathcal{C} sign and/or walkway support brackets)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

- ① M164, ASTM A325, or SAE Grade 5 bolts are acceptable alternates.
- ② Steel shapes for walkway bracket and sign panel supports, including W6x9, $1 1/2$ " x 2" x $1/4$ " and $1 1/2$ " x 6" x $1/2$ " shall be AASHTO M270 Gr. 36 or Gr. 50, or an equivalent acceptable to the Engineer.
- ③ End walkway brackets shall be spaced no more than 2'-0" from a truss vertical.
- ④ U-bolts, nuts and washers shall conform to ASTM A307, hot-dip galvanized per AASHTO M232.

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. Grating, handrail and light support splices placed as needed. Walkway grating should extend a minimum of 4'-0" past the edge of pavement into the shoulder unless the shoulder width is less than 10'-0". If shoulder width is less than 10'-0" or if the structure is on a low speed ramp, the walkway grating may begin at edge of pavement.

Sign Structure Number	Station	B	D
ISO161094R039.1	116 + 08	1'-3"	11'-5"
ISO161090R080.3	3417 + 44	1'-3"	11'-5"
ISO161094L052.1	198 + 80	1'-3"	11'-5"
ISO161094R032.2	483 + 97	1'-3"	11'-5"

BRACKET TABLE

W6x9 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	10'-0"	2
	16'-0"	3
	22'-0"	4
	28'-0"	5
	34'-0"	6

**OVERHEAD SIGN STRUCTURES
STEEL WALKWAY DETAILS**

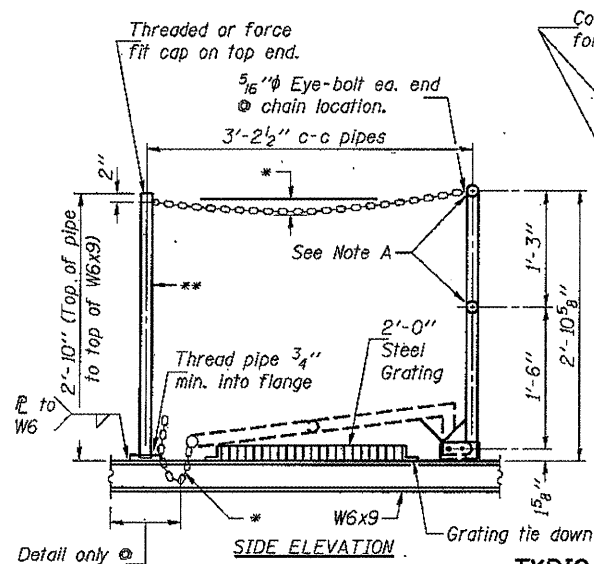
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various D-1	QVD SIN STR REPL 12-02	VARIOUS	39	32
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES

OS-S-4 SPECIAL 7/01/2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

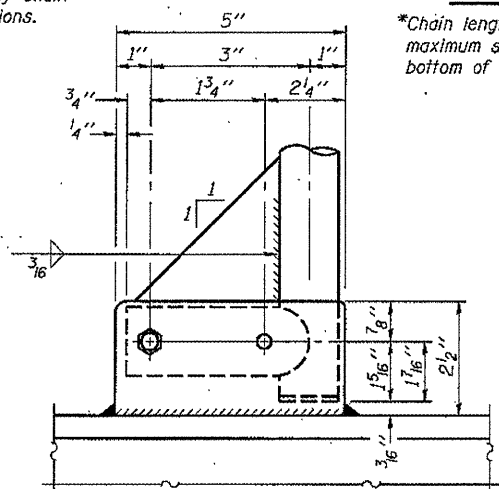
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS				



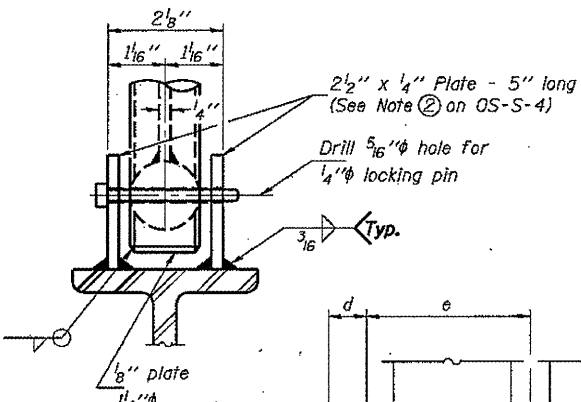
TYPICAL HANDRAIL DETAIL

*Chain length shall allow erection of handrail with maximum sag of 3" and shall not extend below bottom of W6x9 with railing lowered.

Detail only @ Safety Chain locations.



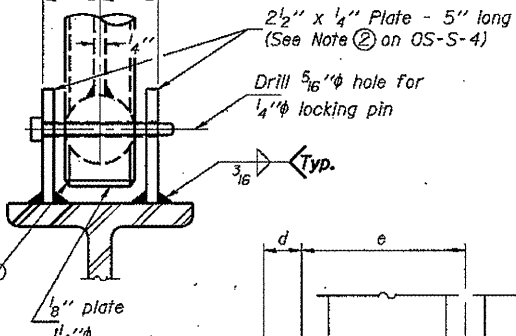
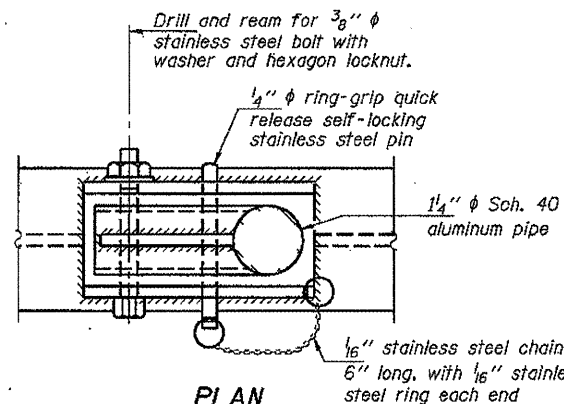
SIDE ELEVATION



FRONT ELEVATION

PLAN

DETAIL HANDRAIL HINGE



WALKWAY AND HANDRAIL SKETCH

(Road plan shown beneath truss varies.)

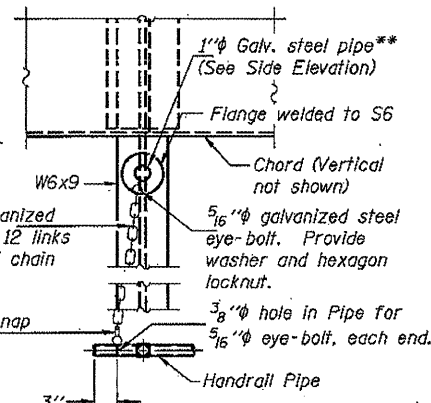
Sign Structure Number	Station	a	b	c	d	e	Grating and Handrail Lengths
ISO161094R039.1	116 + 08	10'-1"	43'-0"	12.82			43'-0"
ISO161090R080.3	3417 + 44	6'-6"	43'-0"	22'-6"			43'-0"
ISO161094L052.1	198 + 80	13'-10 1/2"	43'-0"	9'-0"			43'-0"
ISO161094R032.2	483 + 97	7'-0"	43'-0"	26'-6"			43'-0"

FRONT ELEVATION

**1" Std. galvanized steel pipe at brackets nearest ends of walkway to hold safety chain. Bottom end threaded 3/4" minimum into flange. Cap or weld plate on top of pipe.

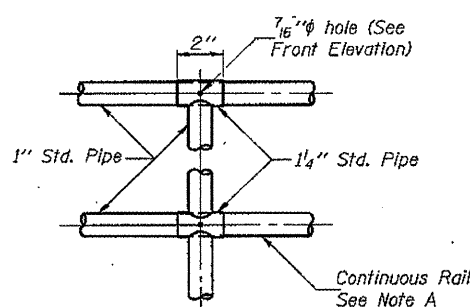
3/16" link steel chain, hot-dip galvanized after manufacture, approximately 12 links per foot. Approximately 3 ft. of chain required for each.*

Bronze swivel eye snap at handrail end

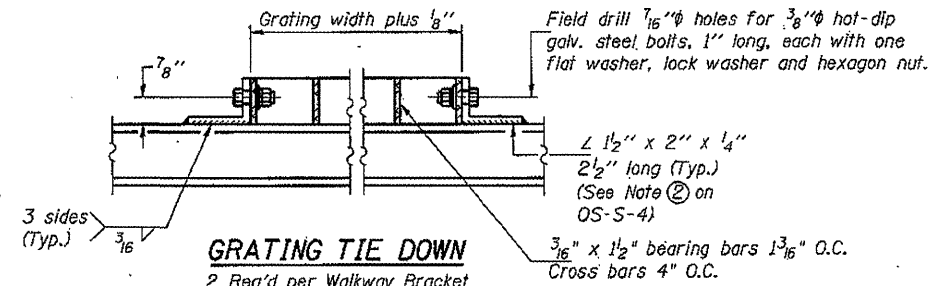


SAFETY CHAIN

One (1) required for each end of each walkway.

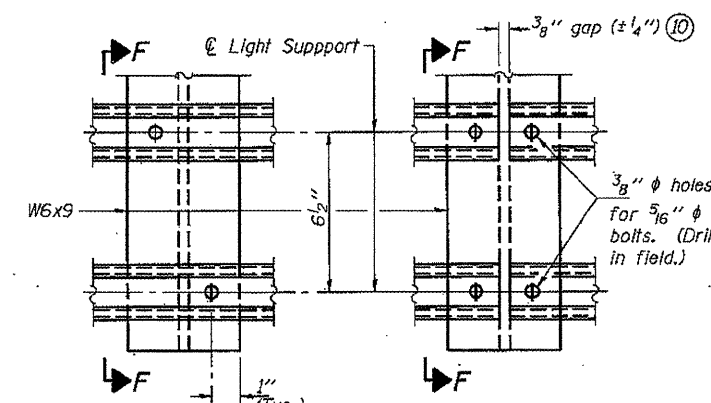


DETAIL H



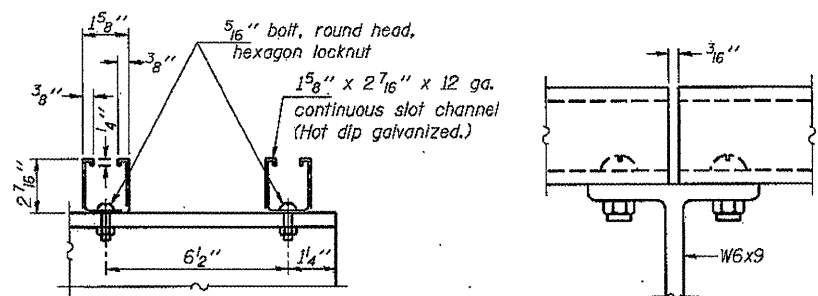
GRATING TIE DOWN

2 Req'd per Walkway Bracket



DETAIL F

DETAIL G



SECTION F-F

SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

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

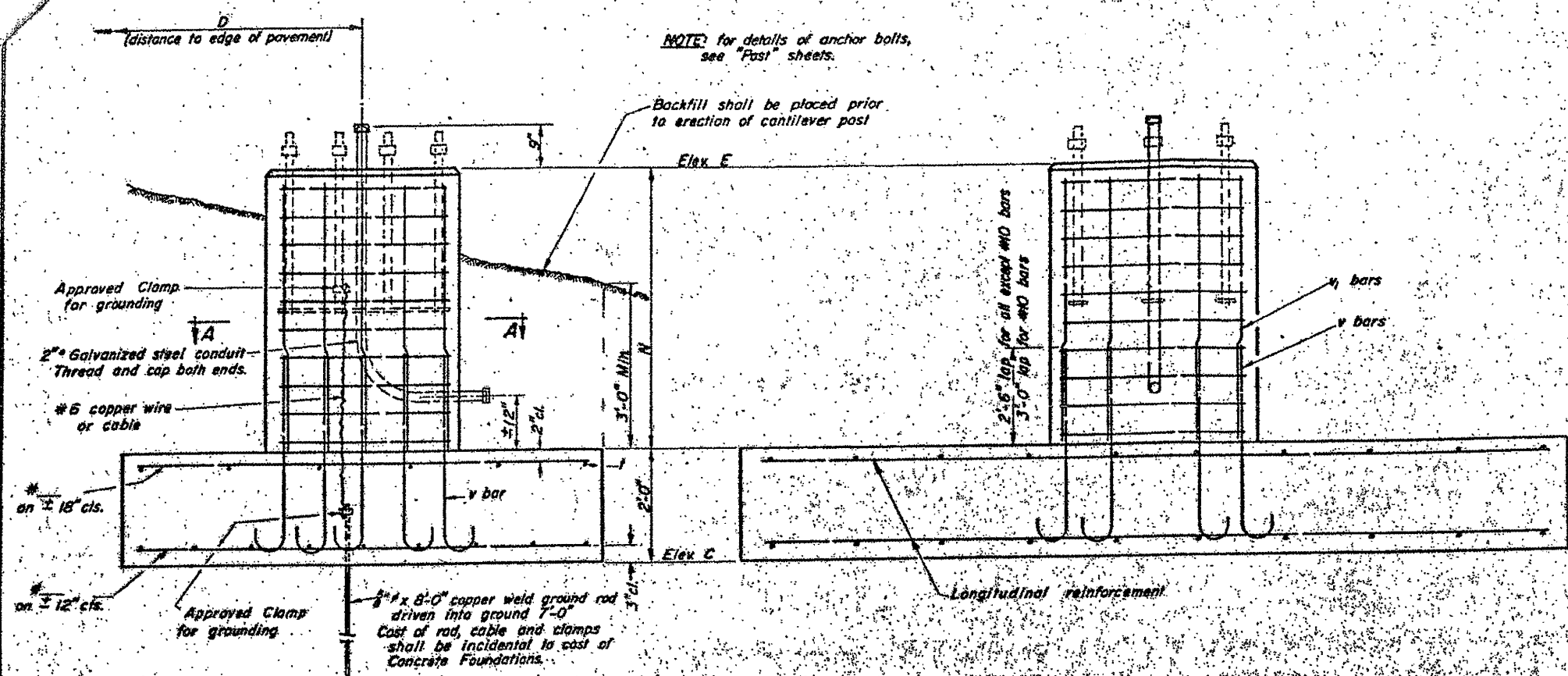
All bolts, nuts and washers shall conform to ASTM A307, hot-dip galvanized per AASHTO M232.

OVERHEAD SIGN STRUCTURES
STEEL WALKWAY DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 DVD SIN STR REPL 12-02	VARIOUS	39	33
CONTRACT NO. 46175				
ILLINOIS FED. AID PROJECT				

DESIGNED -	200
CHECKED -	EXAMINED
DRAWN -	PASSED
CHECKED -	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES

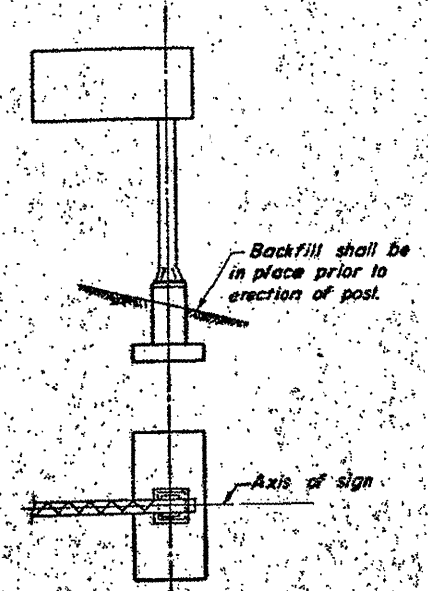
OS-S-5 SPECIAL 7/01/2006



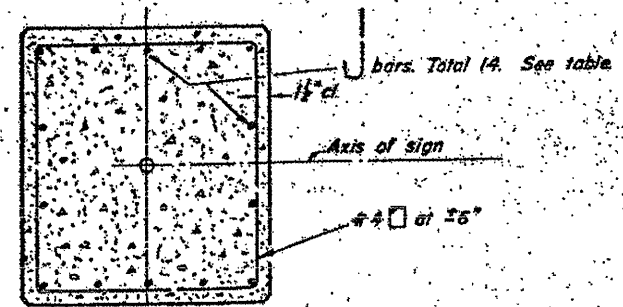
NOTE: for details of anchor bolts, see "Post" sheets.

Backfill shall be placed prior to erection of cantilever post

2-#6 lap for all except #10 bars
3-0" lap for #10 bars



FOOTING PLAN



SECTION A-A

Post Type	Pedestal Size See note	Footing Size See note	Longitudinal Footing Reinforcement		J bars	v bars
			Top	Bottom		
I	3-2' x 2-10'		-# bars	-# bars	#6	#6
II	3-5' x 3-4'		-# bars	-# bars	#6	#6
III	3-10' x 3-7'		-# bars	-# bars	#7	#7
IV	3-10' x 3-7'	8'-0" x 16'-0"	8-#7 bars	8-#9 bars	#8	#8
V	4-2' x 3-10'		-# bars	-# bars	#10	#10

Note: Pedestals & Footings, longer sides shall be normal to axis of sign. Concrete footing reinforcement shall be incidental to Concrete Foundations.

TRUSS No.	Station	Post Type	D	N	Elev E	Elev C	Class X Conc.
CTE-1	972+75	IV	20'	6'-4"	733.1	724.8	13.9
CTW-1	1228+75	IV	20	6'-4"	694.9	686.6	13.9

WD#6

OVERHEAD SIGN STRUCTURES - CANTILEVER FOUNDATION DETAILS

FOR INFORMATION ONLY

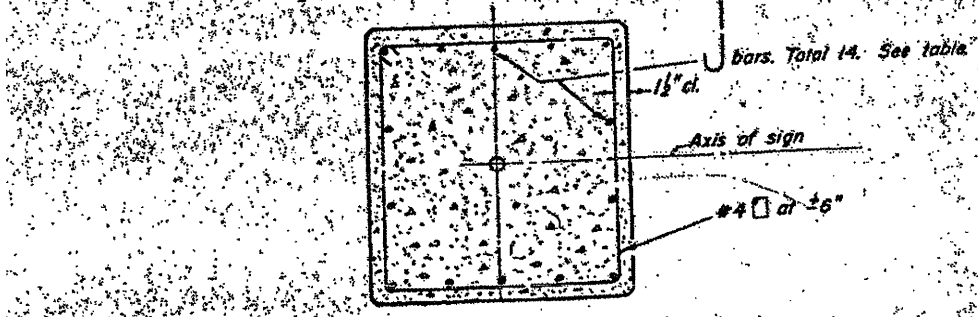
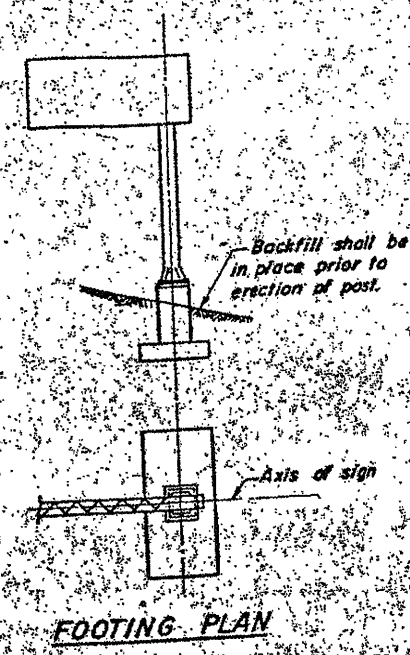
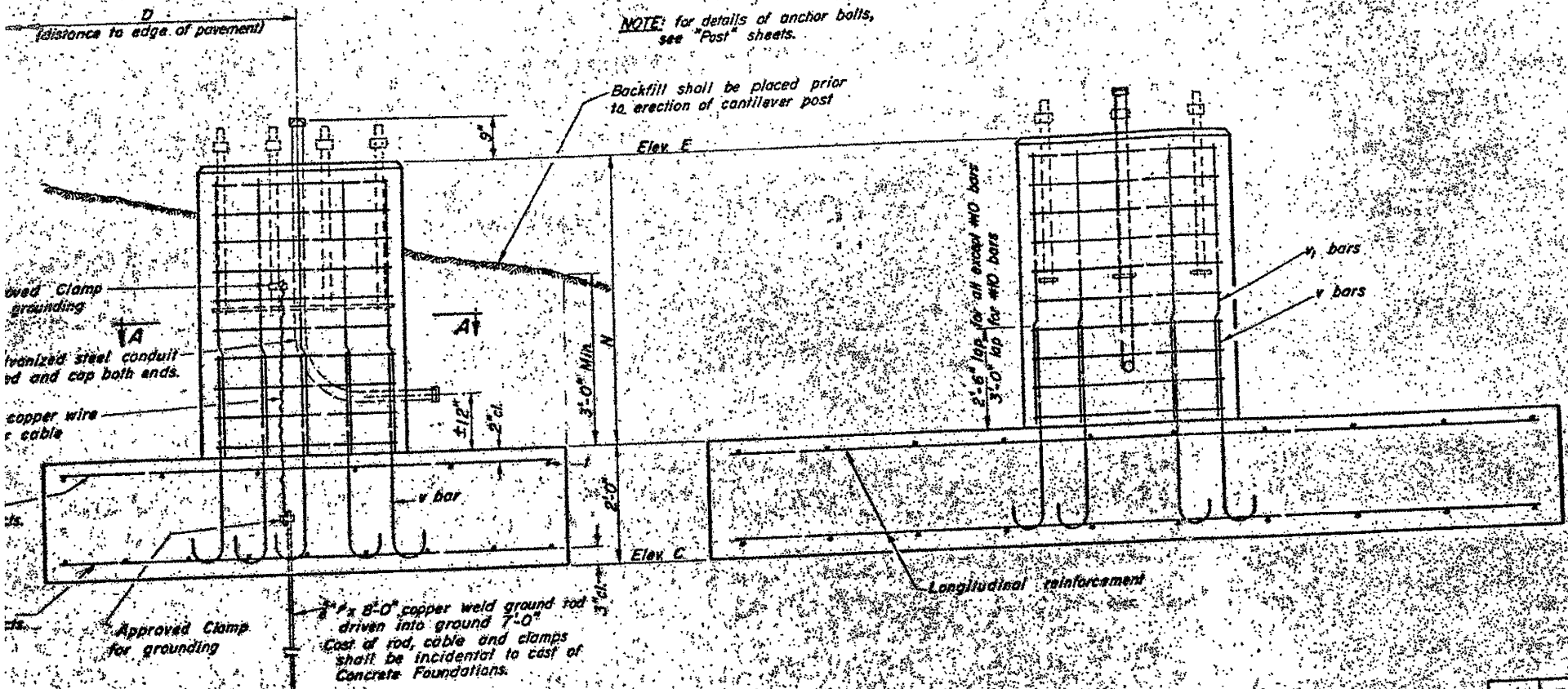
WO #6:1C099I080L147-8

SHEET 34 OF 39

DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN Wm. H. Best	APPROVED
CHECKED	

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

1-57 * WILL
(99-182) S6



Post Type	Pedestal* Size See note	Footing* Size See note	Longitudinal Footing Reinforcement		v bars	w bars
			Top	Bottom		
I	3'-2" x 2'-10"		-# bars	-# bars	#6	#6
II	3'-8" x 3'-4"		-# bars	-# bars	#6	#6
III	3'-10" x 3'-7"	9'-0" x 16'-0"	8-#7 bars	8-#9 bars	#7	#7
IV	3'-10" x 3'-7"	9'-0" x 16'-0"	8-#7 bars	8-#9 bars	#8	#8
V	4'-2" x 3'-10"		-# bars	-# bars	#10	#10

Note: Pedestals & Footings longer sides shall be normal to axis of sign.
Concrete footing reinforcement shall be incidental to Concrete Foundations.

ELEVATIONS ARE RELATIVE VALUES FOR REFERENCE ONLY.

Sign No.	Station	Post Type	D	N	Elev E	Elev C	Class X Concr.
WO # 16 CLS-1	940+50	III	14'-0"	7'-3"	100.0	90.75	14.4
WO # 14 CLN-1	1056+25	IV	20'-0"	6'-2"	99.5	91.33	13.8
WO # 15 CLS-2	1108+50	IV	20'-0"	6'-2"	98.17	90.00	13.8
WO # 13 CLN-2	1193+50	IV	23'-0"	6'-2"	98.92	90.75	13.8
WO # 10 CLS-3	1220+00	IV	23'-0"	6'-2"	97.5	89.33	13.8

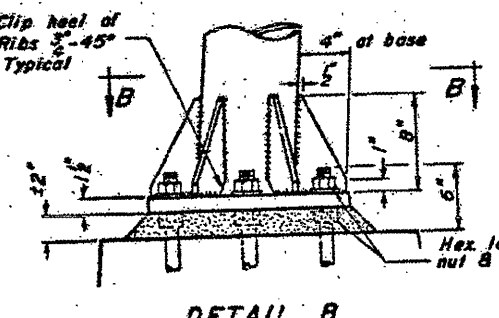
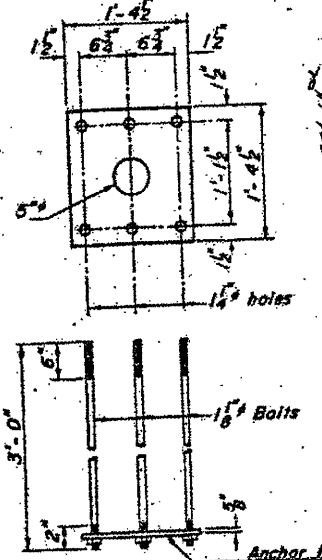
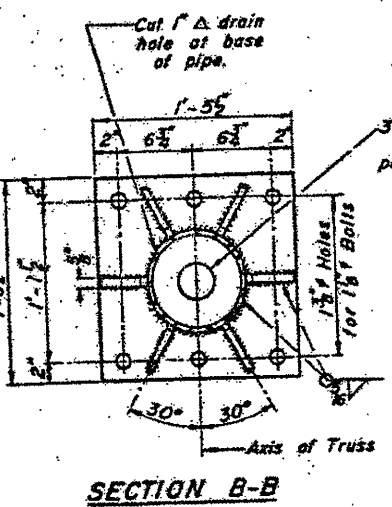
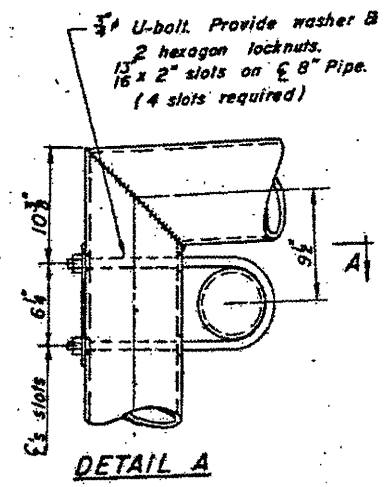
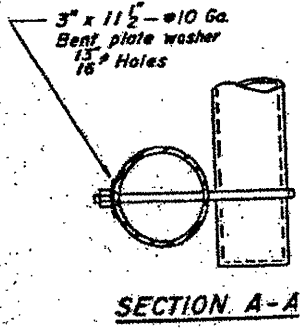
OVERHEAD SIGN STRUCTURES - CANTILEVER FOUNDATION DETAILS -
FOR INFORMATION ONLY
 WO # 10: 1C099I057L332.7
 WO # 13: 1C099I057R332.2
 WO # 14: 1C099I057R329.6
 WO # 15: 1C099I057L330.5
 WO # 16: 1C099I057L327.4
 SHEET 35 OF 39

19

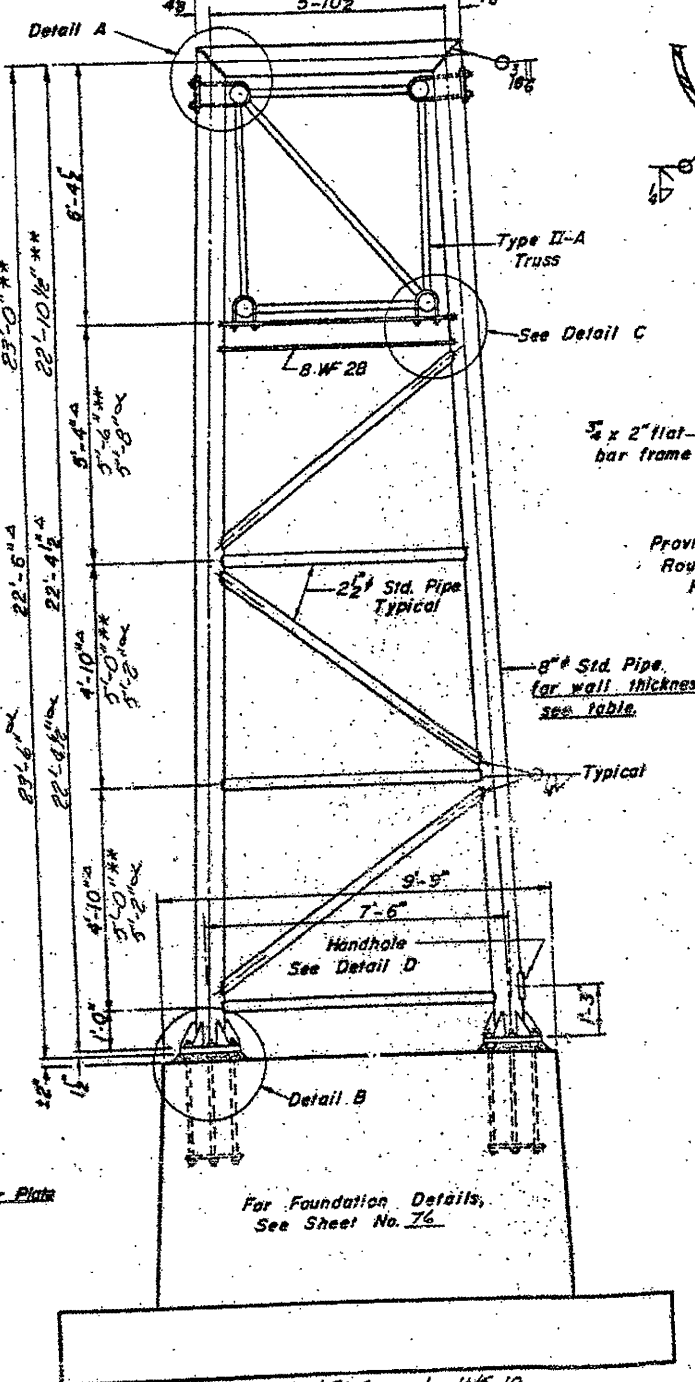
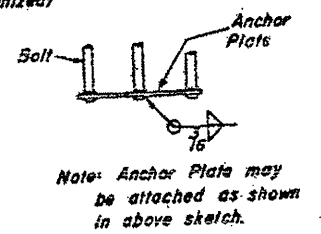
DESIGNED _____ EXAMINED _____
 CHECKED _____ PASSED _____
 APPROVED _____

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

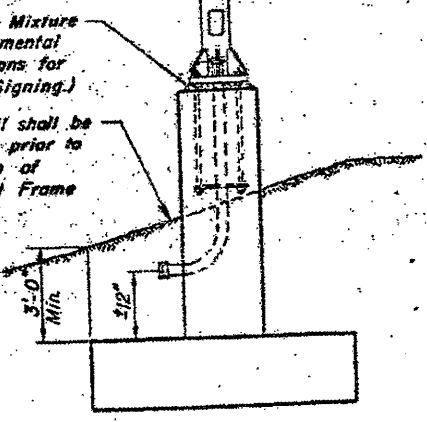
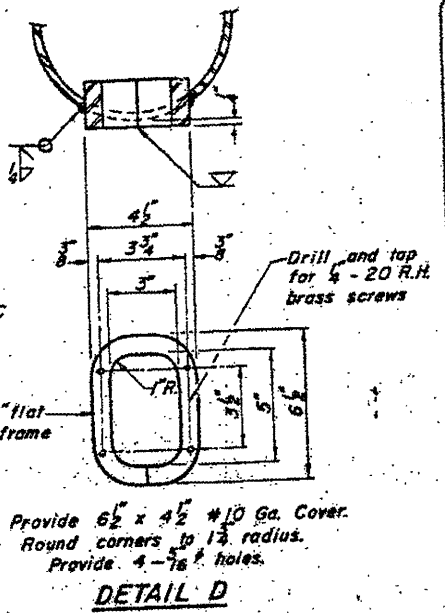
DATE	BY	NO.	REV.	SHEETS
10/30	WILL	103	36	



Note: Ribs shall be cut to fit slope of Pipe. Weld to Pipe and to Base Plate with 1/8" c.t.w.

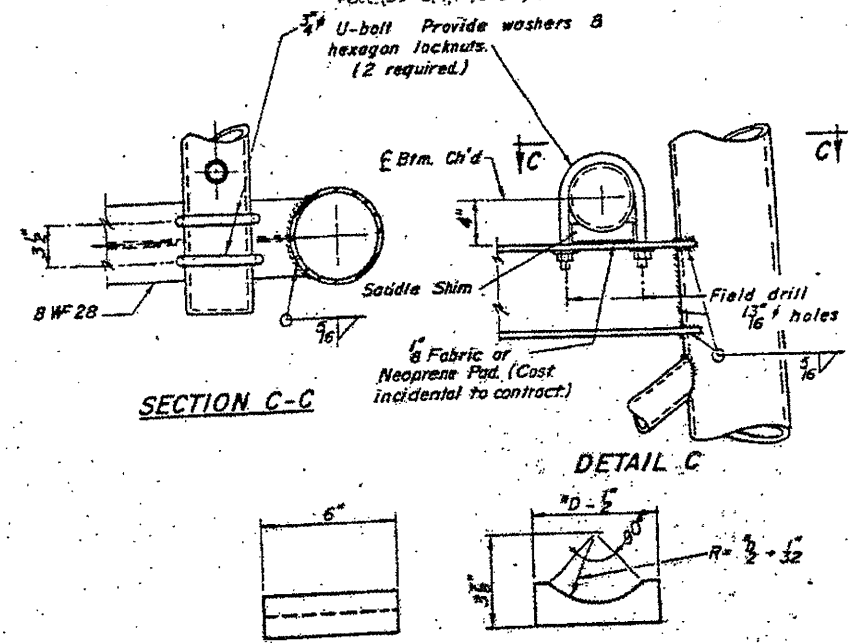


** Lt. & Rt. Support JMS-10
Lt. Support JMS-11
Rt. Support JMS-11
Rt. Support JPL-14
Rt. Support JPS-15
SIDE ELEVATION



REAR ELEVATION

TRUSS SUPPORT DETAILS
(8" Std. Pipe - Type II-A Truss)



SADDLE SHIM DETAIL
ASTM B-26 Alloy 56-70A (As Cast)
or ASTM B-209 Alloy 6061-T6
4 required per sign truss.
D = Outside Diameter of Chord

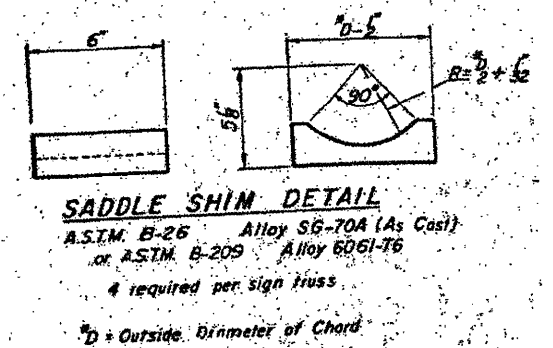
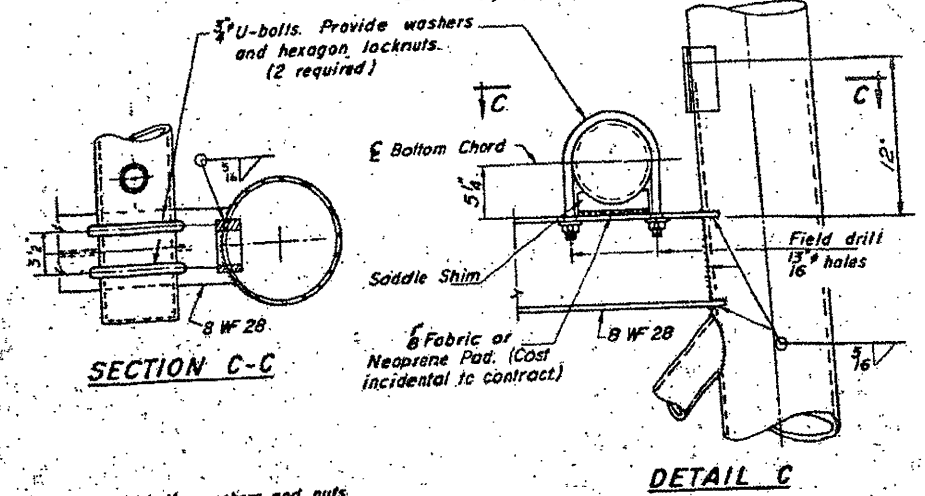
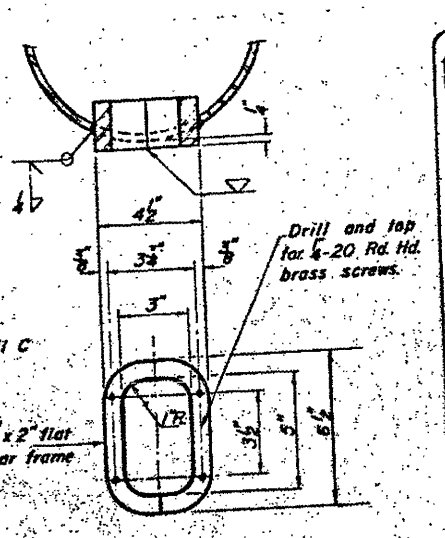
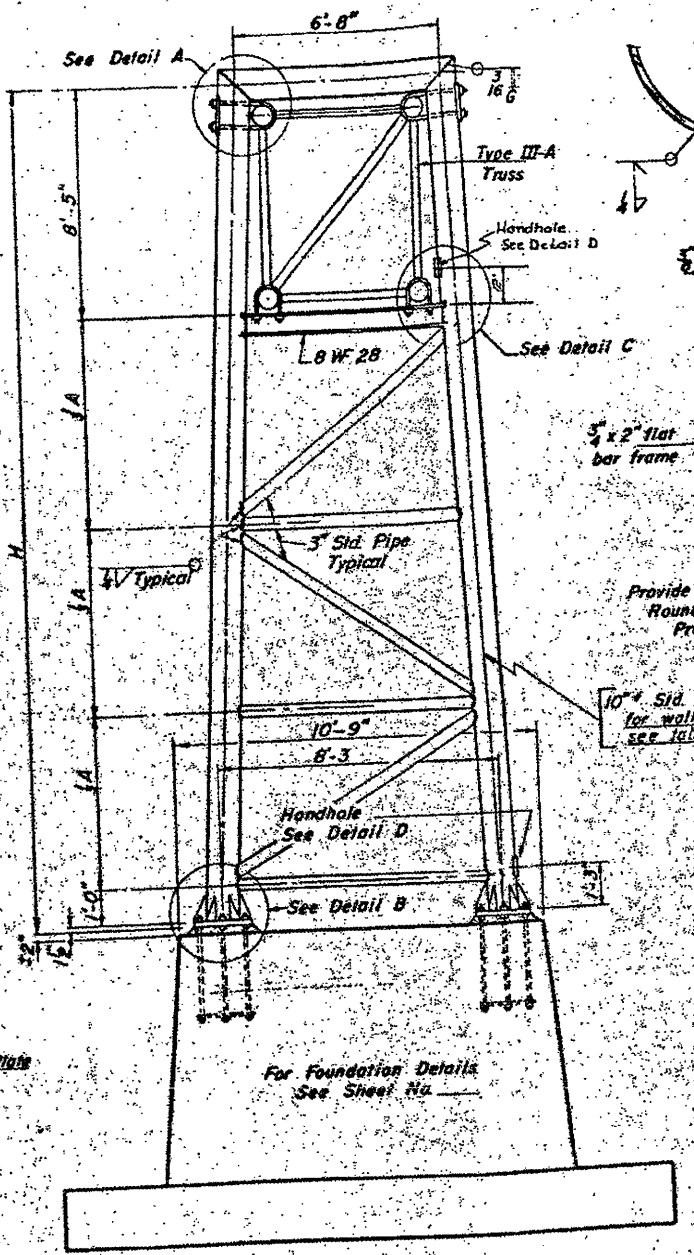
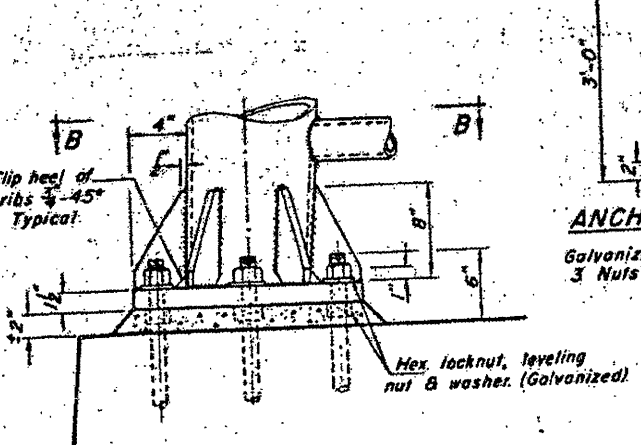
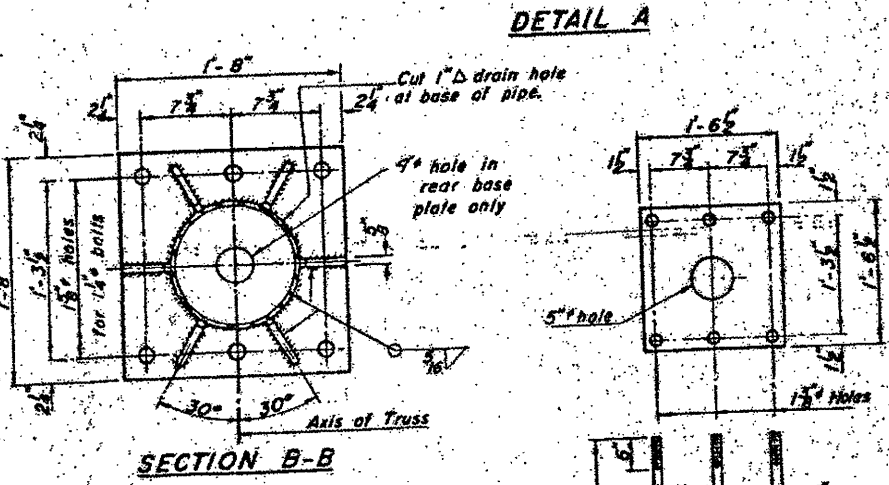
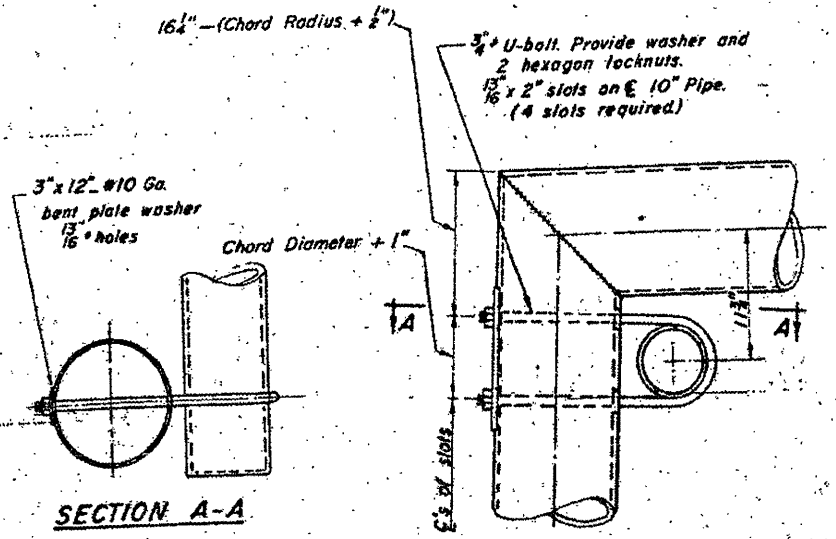
Truss No.	Station	Wall Thickness
W.O.#1 JMS-10	22+00 RD	0.382"
W.O.#3 JMS-11	28+25 RD	0.277"
JPL-14	67+30	0.322"
JPS-15	67+60	0.322"

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME for ALUMINUM TRUSS
W.O.#1) 1S099I080L131:0
W.O.#3) 1S099I080L130:9
(FOR INFORMATION ONLY)

DESIGNED	DRAWN
CHECKED	PAID
DRAWN Wm. M. Best	APPROVED
CHECKED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	SECTION	PROJECT	SHEET NO.
NOV 1 1966	#	WILL	117
PROJECT NO. 1			PER AN PROJECT
#(41-2,3,4,1,5,5-1,1213,1315)562			



Truss No.	Left Supply	Right Supply	Station	Wall Thickness	H	A
TRW-5	✓		464 + 00	.279"	32'-4 1/2"	22'-10 1/2"
TRW-5		✓	464 + 00	.279"	28'-3 1/2"	18'-8 3/4"

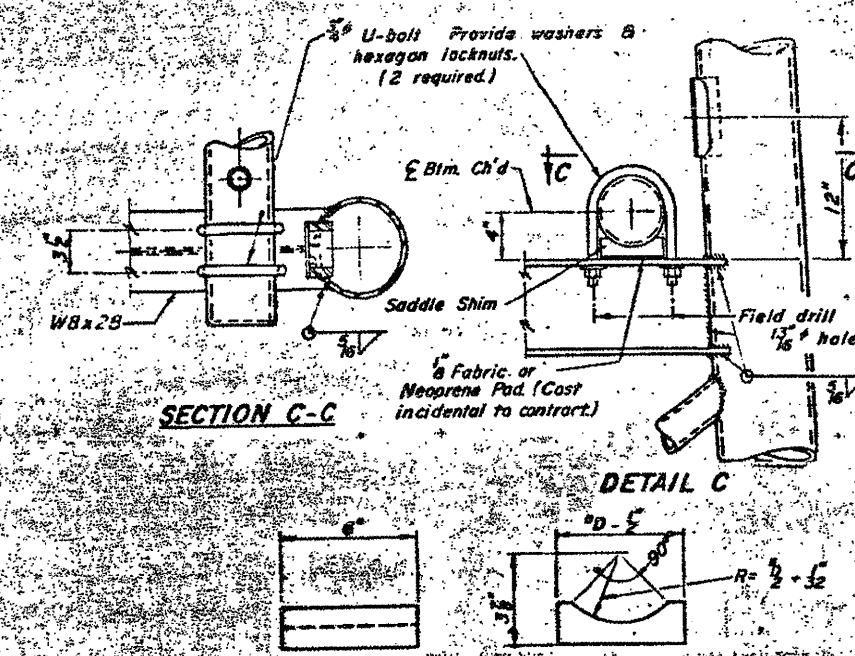
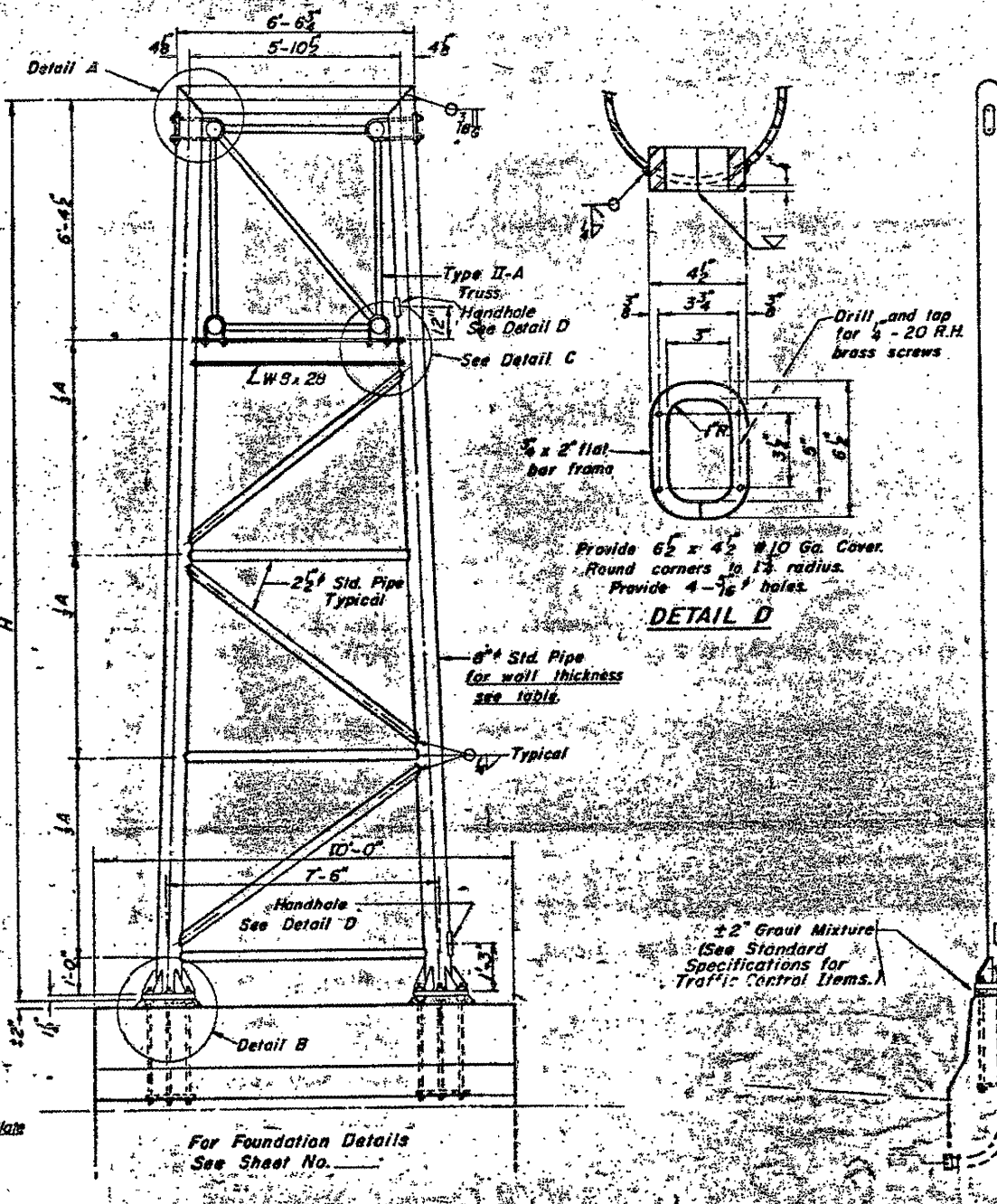
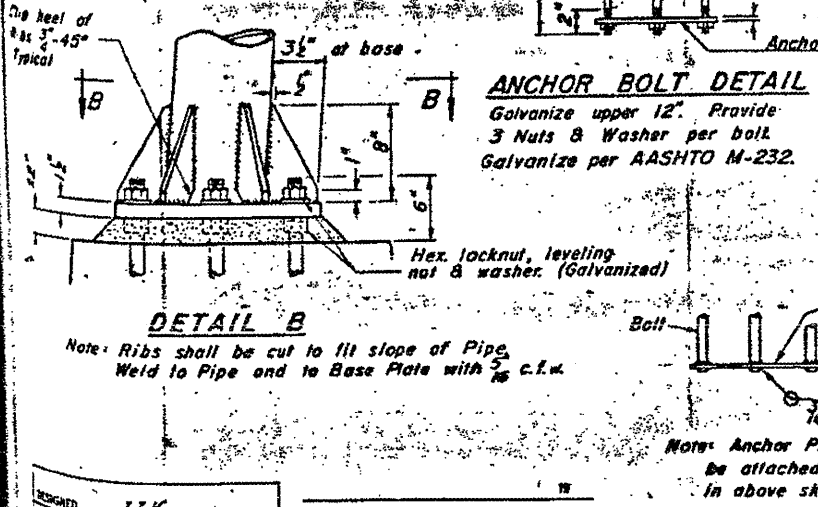
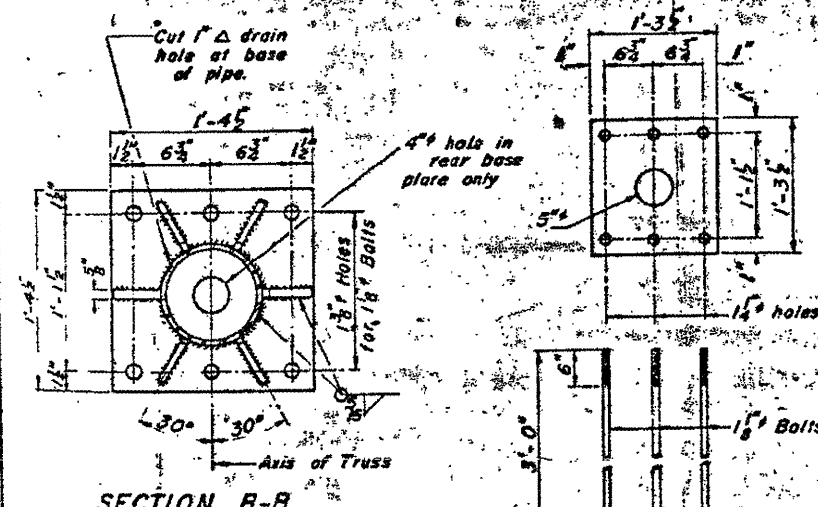
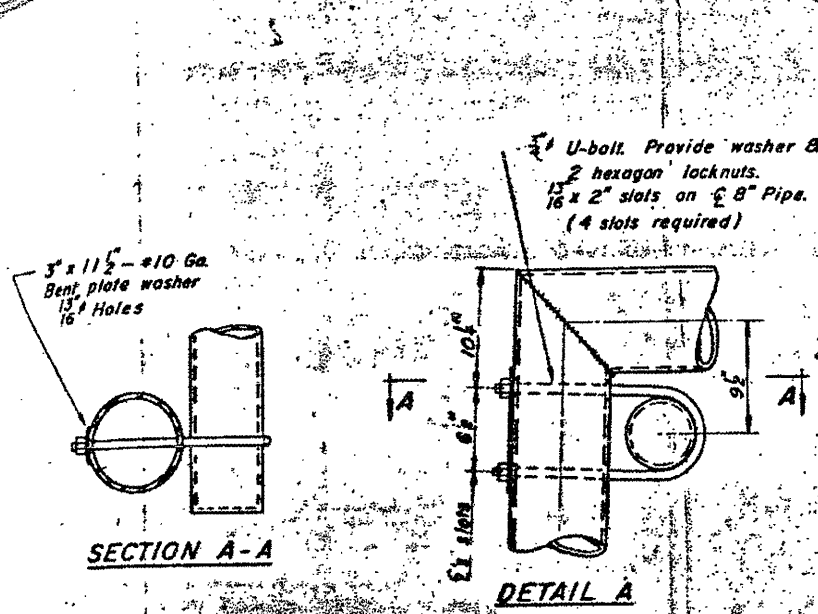
TRUSS SUPPORT DETAILS
(10" Std. Pipe - Type III-A Truss)

DESIGNED: <i>Wm M Best</i>	EXAMINED: <i>Paul C. [Signature]</i>
CHECKED: <i>IK</i>	PASSED: _____
DRAWN: <i>Wm M Best</i>	APPROVED: _____

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME for ALUMINUM TRUSS
W.O. # 4) 150991080133-7
(FOR INFORMATION ONLY)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	(22,99) R-5	WILL DU PAGE	58	51
SHEETS				



Truss No.	Left Supp't	Right Supp't	Station	Wall Thickness	H	A
TR-8	X		784+25 NB	0.322"	23'-11"	16'-5"
TR-9	X		808+55 SB	0.322"	23'-11 1/4"	16'-5 1/4"

MEDIAN SUPPORT

OVERHEAD SIGN STRUCTURES SUPPORT FRAME for ALUMINUM TRUSS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION STEVENSON EXPRESSWAY
NAME	DATE	
		SIGNING PLANS 35C. of 35 SCALE: VERT. DRAWN BY:

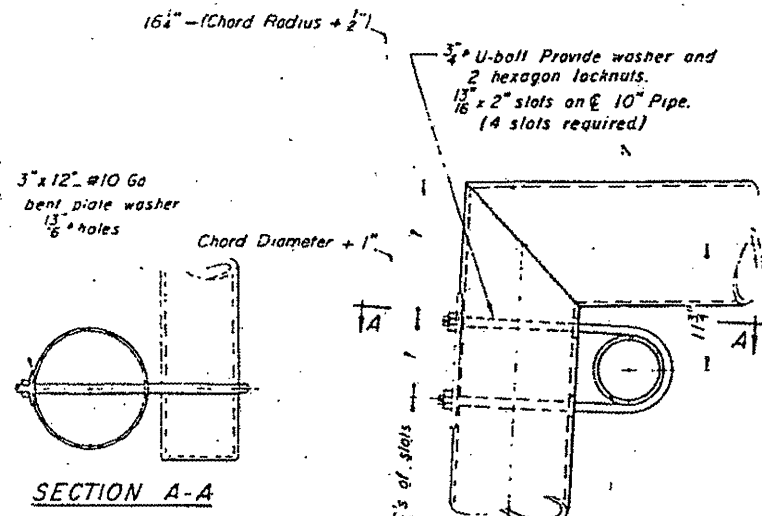
TRUSS SUPPORT DETAILS
(8" Std. Pipe - Type II-A Truss)

FOR INFORMATION ONLY
W.D. #12) 15022 J055R270-7

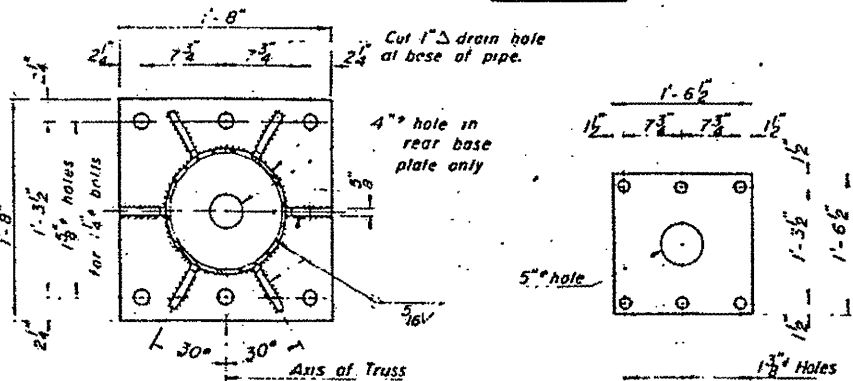
DESIGNED	JIK
CHECKED	
APPROVED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

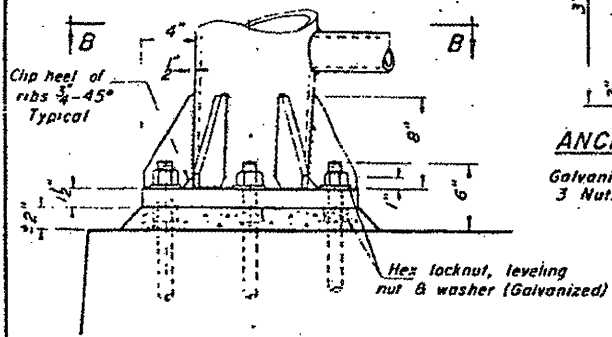
PROJECT NO.	SECTION	CONTRACT	TOTAL SHEETS	SHEET NO.
55	(22,89) R-4	WILL DU PAGE	119	105
DATE	BY	CHECKED	DATE	BY



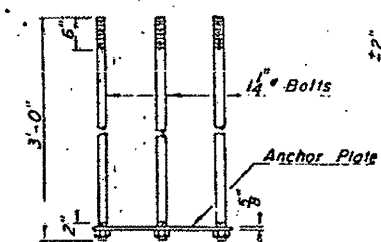
DETAIL A



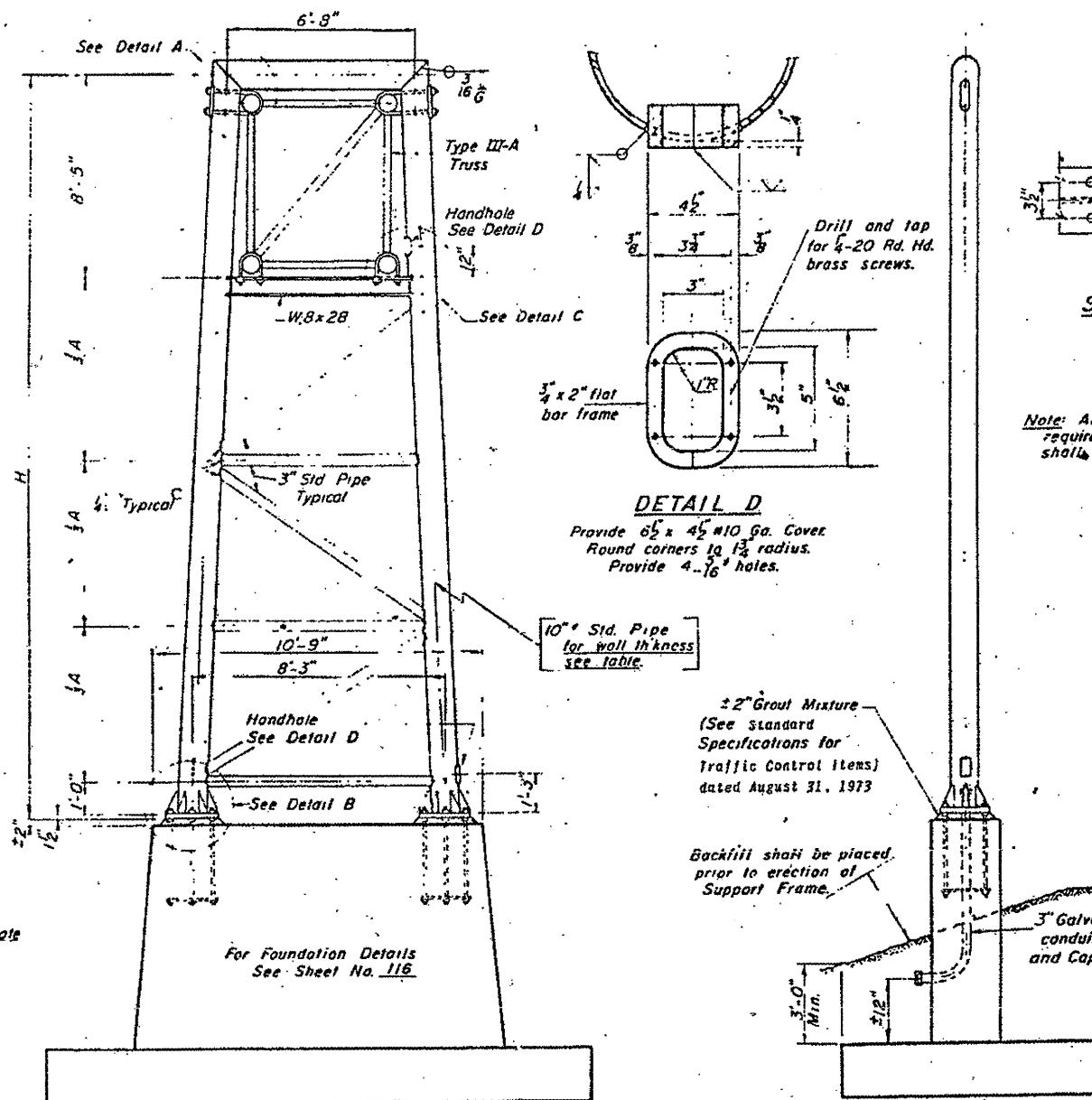
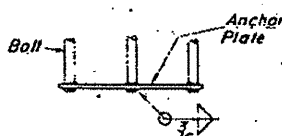
SECTION B-B



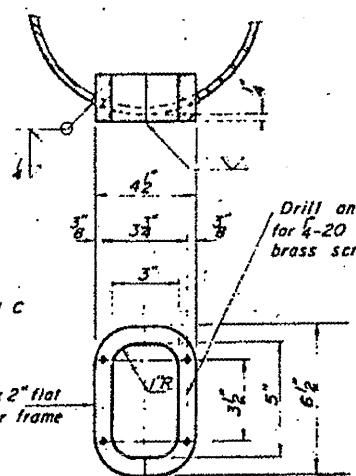
DETAIL B



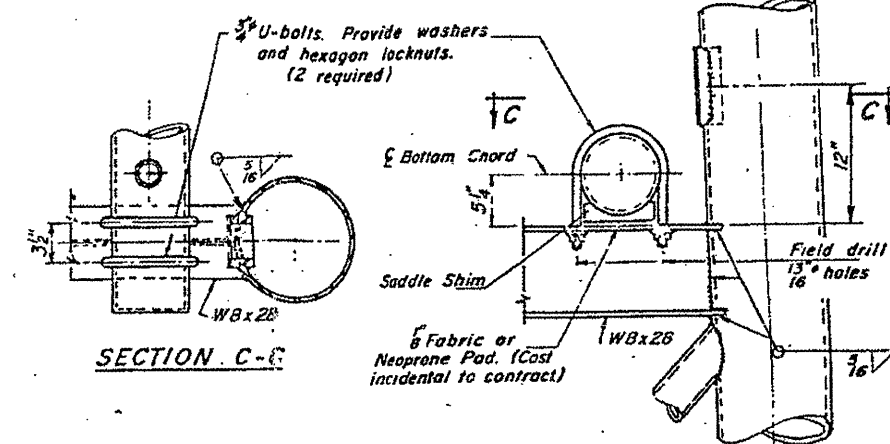
ANCHOR BOLT DETAIL



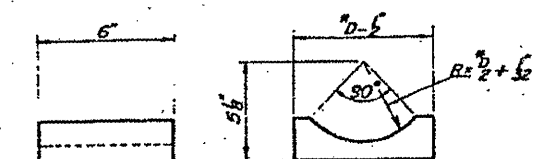
SIDE ELEVATION



DETAIL D



DETAIL C



SADDLE SHIM DETAIL

Truss No.	Left Suppt	Right Suppt	Station	Wall Thickness	H	A
TRN-8	X	X	890 + 51 NB	.279"	26'-0 1/2"	16'-6"
TRN-10	X	X	916 + 41 SB	.279"	26'-0 1/2"	16'-6"
TRN-9	X	X	973 + 80 NB	.279"	26'-3 1/2"	16'-9"
TRN-12	X	X	1006 + 63 SB	.279"	25'-10 1/2"	16'-3 1/4"
RTR-16	X	X	1069 + 75 NB	.279"	26'-0 3/4"	16'-6 1/4"

DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN Wm M Best	APPROVED
CHECKED	

TRUSS SUPPORT DETAILS
(10" Std. Pipe - Type III-A Truss)
W.O. # 24) 15022 1055L274.9
(FOR INFORMATION ONLY)

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME for ALUMINUM TRUSS

ILLINOIS DEPARTMENT OF TRANSPORTATION
STEVENSON EXPRESSWAY

REVISIONS

NAME	DATE

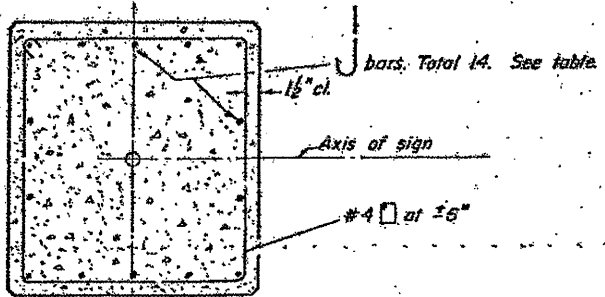
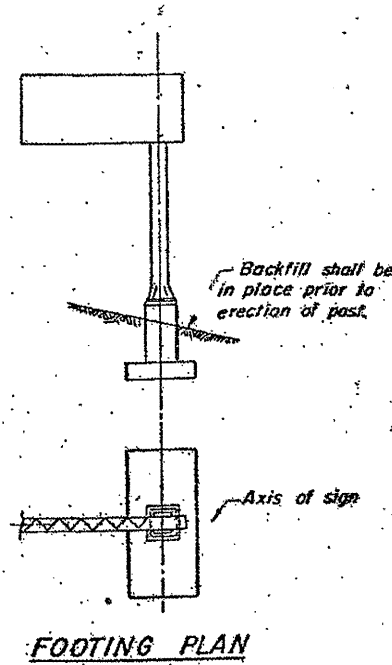
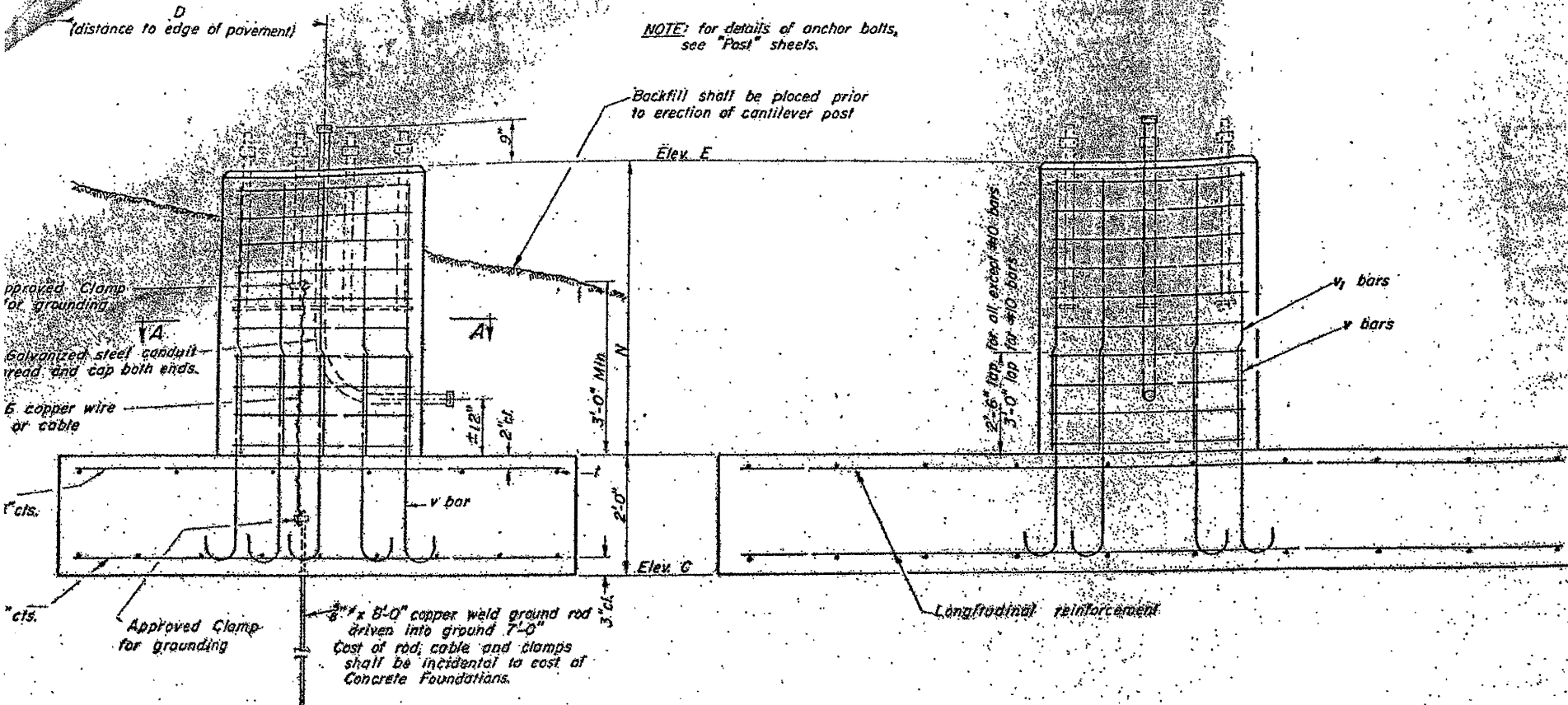
SCALE: VERT NO SCALE. DRAWN BY:

DATE: SEPTEMBER 1975 CHECKED BY:

35D. of 35

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DESIGN NO.	SECTION	DATE	NO.
11-55	212	212	180
DESIGNER	CHECKED	DATE	NO.



Post Type	Pedestal Size See note	Footing Size See note	Longitudinal Footing Reinforcement		v bars	y bars
			Top	Bottom		
I	3'-2" x 2'-10"		-# bars	-# bars	#6	#6
II	3'-8" x 3'-4"		-# bars	-# bars	#6	#6
III	3'-10" x 3'-7"		-# bars	-# bars	#7	#7
IV	3'-10" x 3'-7"		-# bars	-# bars	#8	#8
V	4'-2" x 3'-10"	9'-6" x 20'-0"	11-#8 bars	15-#9 bars	#10	#10

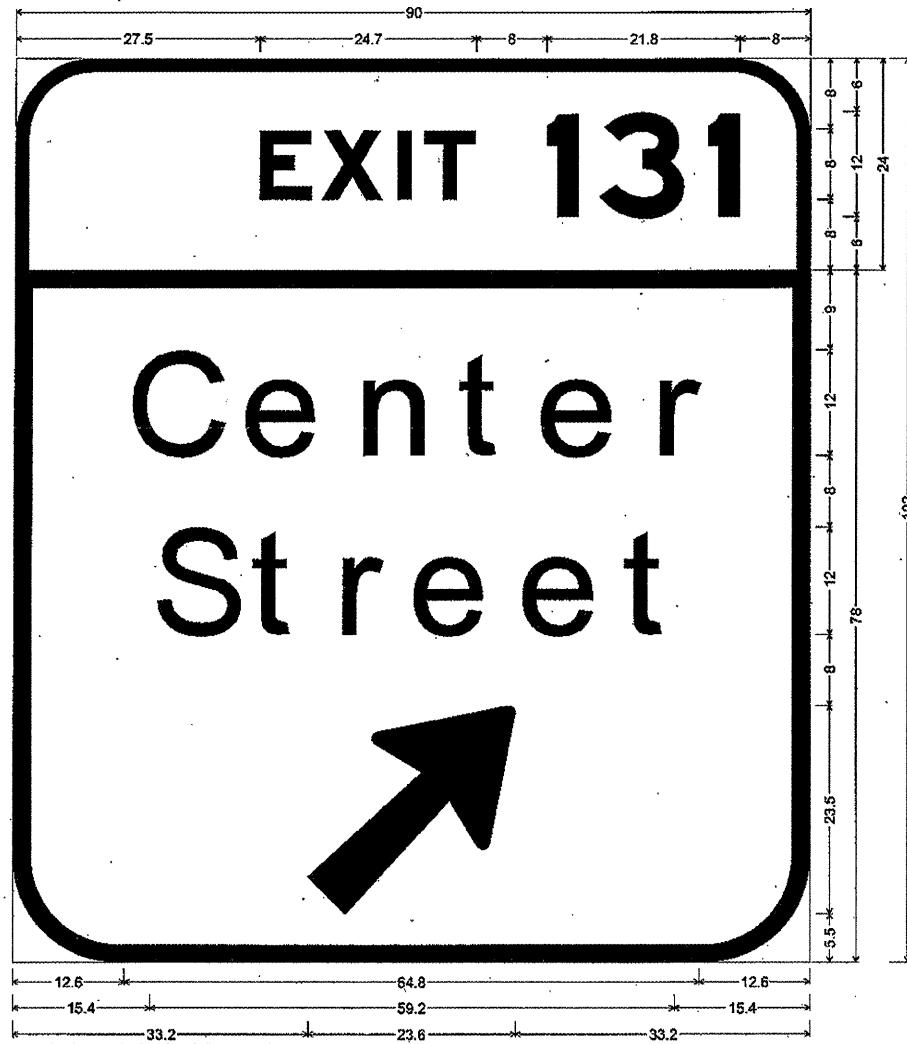
Note: Pedestals & Footings, longer sides shall be normal to axis of sign.
Concrete footing reinforcement shall be incidental to Concrete Foundations

DESIGNED	19
EXAMINED	
PASSED	
IN W/M ROST	
APPROVED	

Sign No.	Station	Post Type	D	N	Elev. E	Elev. C	Class X Concr.
CLN-1	1524+37	V	24'-10"	7'-4 1/2"	101.5	92.12	18.4
CLS-1	1281+22	V	18'-0"	6'-11"	98.50	89.58	18.2
CLS-2	188+50	V	21'-6"	7'-5"	102.17	92.75	18.4
CLN-2	187+80	V	22'-6"	7'-5"	103.42	94.00	18.4
CLS-3	445+40	V	21'-6"	7'-5"	99.00	89.58	18.4
CLS-4	458+80	V	16'-6"	6'-8"	99.67	91.00	18.0
CLN-3	614+65	V	20'-0"	6'-7"	98.33	89.75	18.0
CLS-5	793+40	V	19'-6"	6'-3"	98.67	90.42	17.8
CLN-4	799+70	V	15'-6"	6'-7"	99.50	90.92	18.0
CLN-5	902+36	V	19'-0"	7'-5"	101.67	92.25	18.4
CLS-6	904+40	V	20'-0"	6'-7"	102.42	93.84	18.0
CLN-6	988+30	V	14'-6"	6'-8"	104.25	95.58	18.0

WO # 20
WO # 22

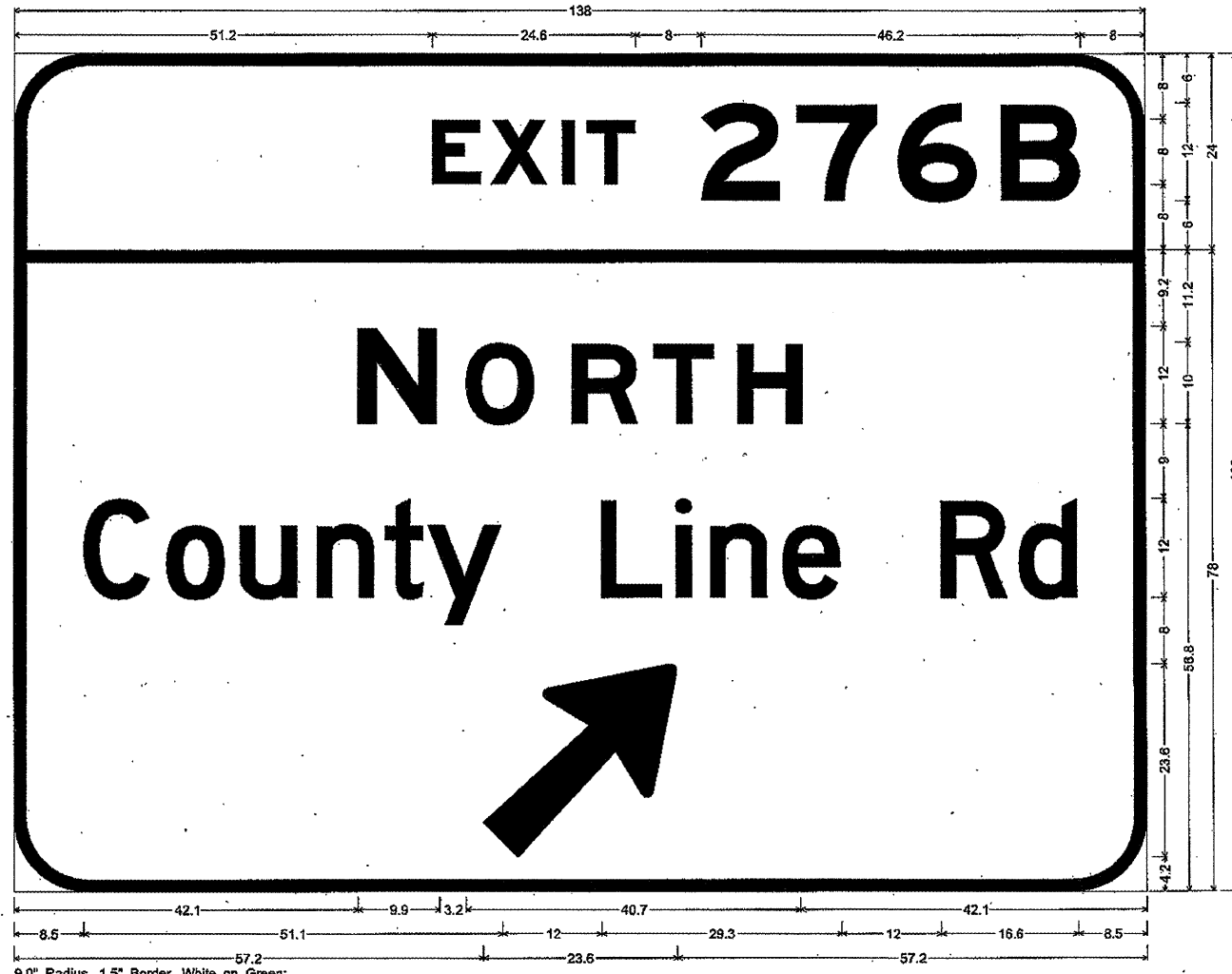
OVERHEAD SIGN STRUCTURES...CANTILEVER
FOUNDATION DETAILS
FOR INFORMATION ONLY
WO # 20: 1C022I055L270-8
22: 1C022I055L272-9
SHEET 36 OF 39



9.0" Radius, 1.5" Border, White on Green;
 [EXIT 131] E Mod 2K;
 12.0" Radius, 2.0" Border, White on Green;
 [Center] Clearview/hwy-5-W; [Street] Clearview/hwy-5-W; Arrow 133 - 30.0° 45°;
 Table of letter and object lefts.

E	X	I	T	1	3	1
27.5	34.6	43.2	46.2	60.2	66.0	78.4
C	e	n	t	e	r	
12.6	25.5	38.4	50.1	59.1	71.9	
S	t	r	e	e	t	
15.4	26.6	36.1	44.7	57.1	68.7	
↑						
33.2						

1S099I080R131.8



9.0" Radius, 1.5" Border, White on Green;
 [EXIT 276B] E Mod 2K;
 9.0" Radius, 1.5" Border, White on Green;
 [N ORTH] Clearview/hwy-5-W; [County Line Rd] D 2K; Arrow 133 - 30.0° 45°;
 Table of letter and object lefts.

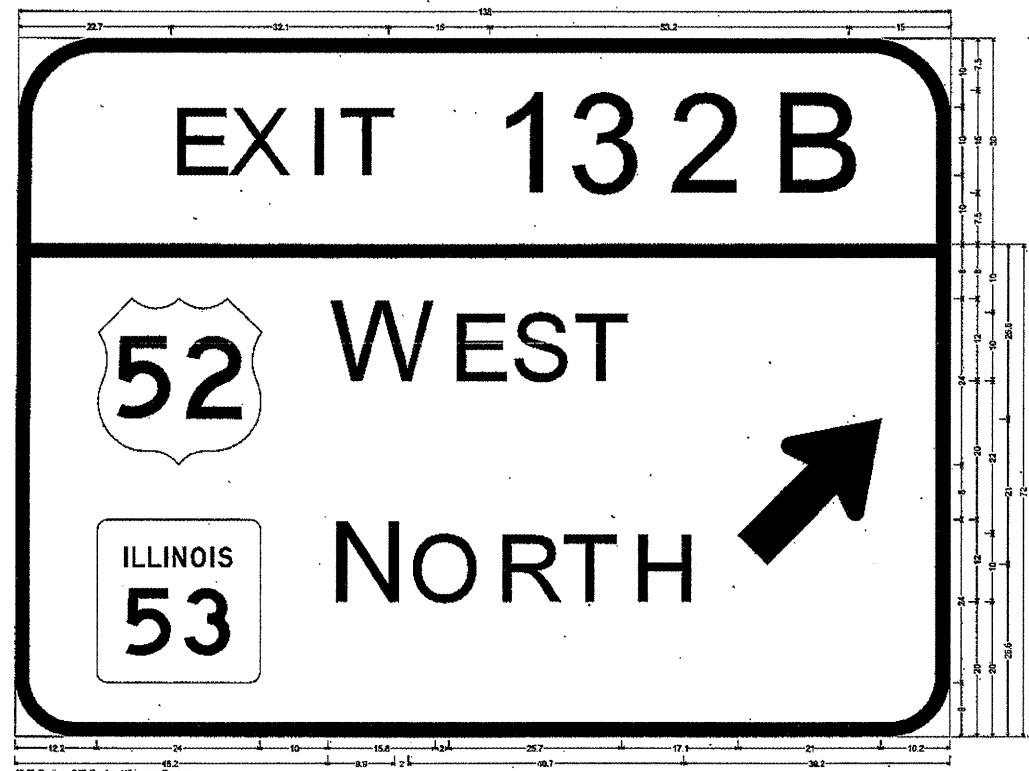
E	X	I	T	2	7	6	B				
51.2	58.2	66.8	69.9	83.8	95.6	107.7	120.3				
N	O	R	T	H							
42.1	55.2	68.1	78.0	88.2							
C	o	u	n	t	y	L	i	n	e	R	d
8.5	18.5	27.7	37.1	45.4	50.6	71.6	80.6	84.9	93.8	112.9	122.3
↑											
57.2											

1S016I055L276.5

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

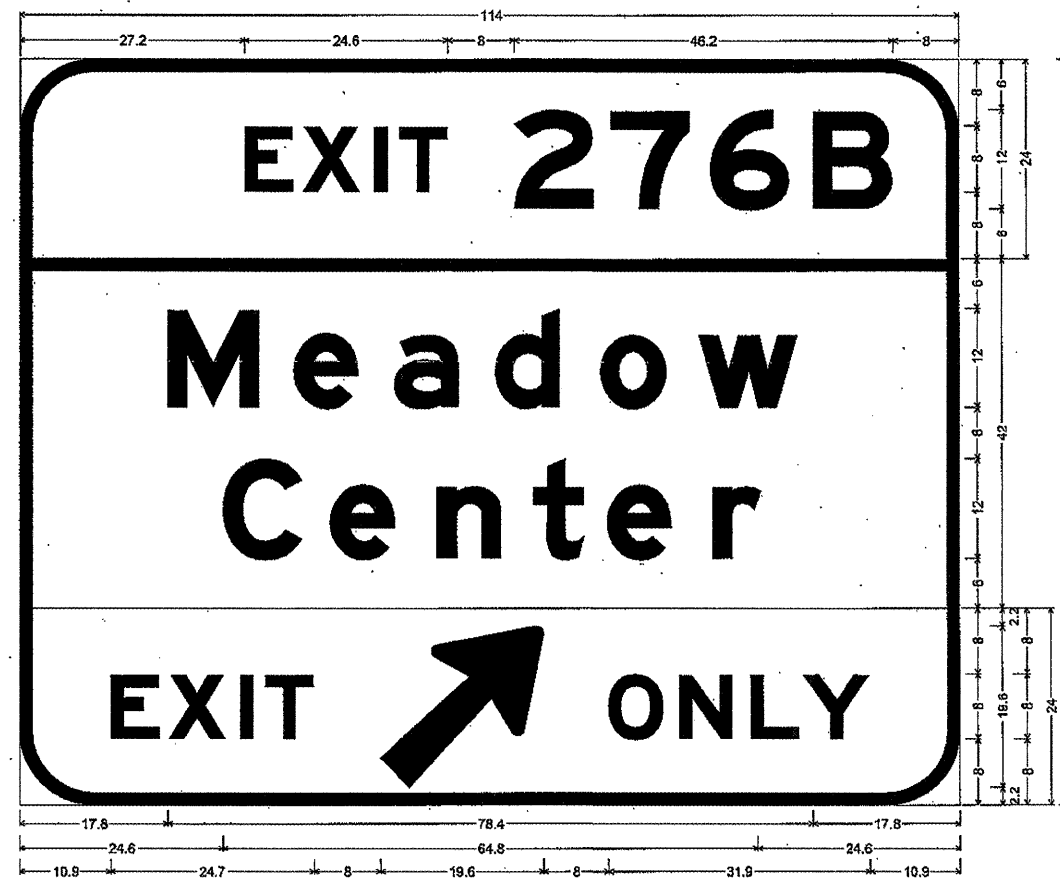
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	37
CONTRACT NO. 46175			ILLINOIS FED. AID PROJECT	



12.0" Radius, 2.0" Border, White on Green;
 [EXIT 132B] ClearviewHwy-5-W;
 9.0" Radius, 1.5" Border, White on Green;
 [W 52] ClearviewHwy-5-W; [H 53] ClearviewHwy-5-W; Standard Acorn Casem 26.0" X 15.0" 40";
 [W 53] ClearviewHwy-5-W; [H 52] ClearviewHwy-5-W; Standard Acorn Casem 26.0" X 15.0" 40";

1S099I080R132.9



9.0" Radius, 1.5" Border, White on Green;
 [EXIT 276B] E Mod 2K;
 9.0" Radius, 1.5" Border, White on Green;
 [Meadow] ClearviewHwy-5-W; [Center] ClearviewHwy-5-W;
 9.0" Radius, 1.5" Border, Black on Yellow;
 [EXIT] E Mod 2K; Arrow 80 - 25.0" 45"; [ONLY] E Mod 2K;
 Table of letter and object lefts.

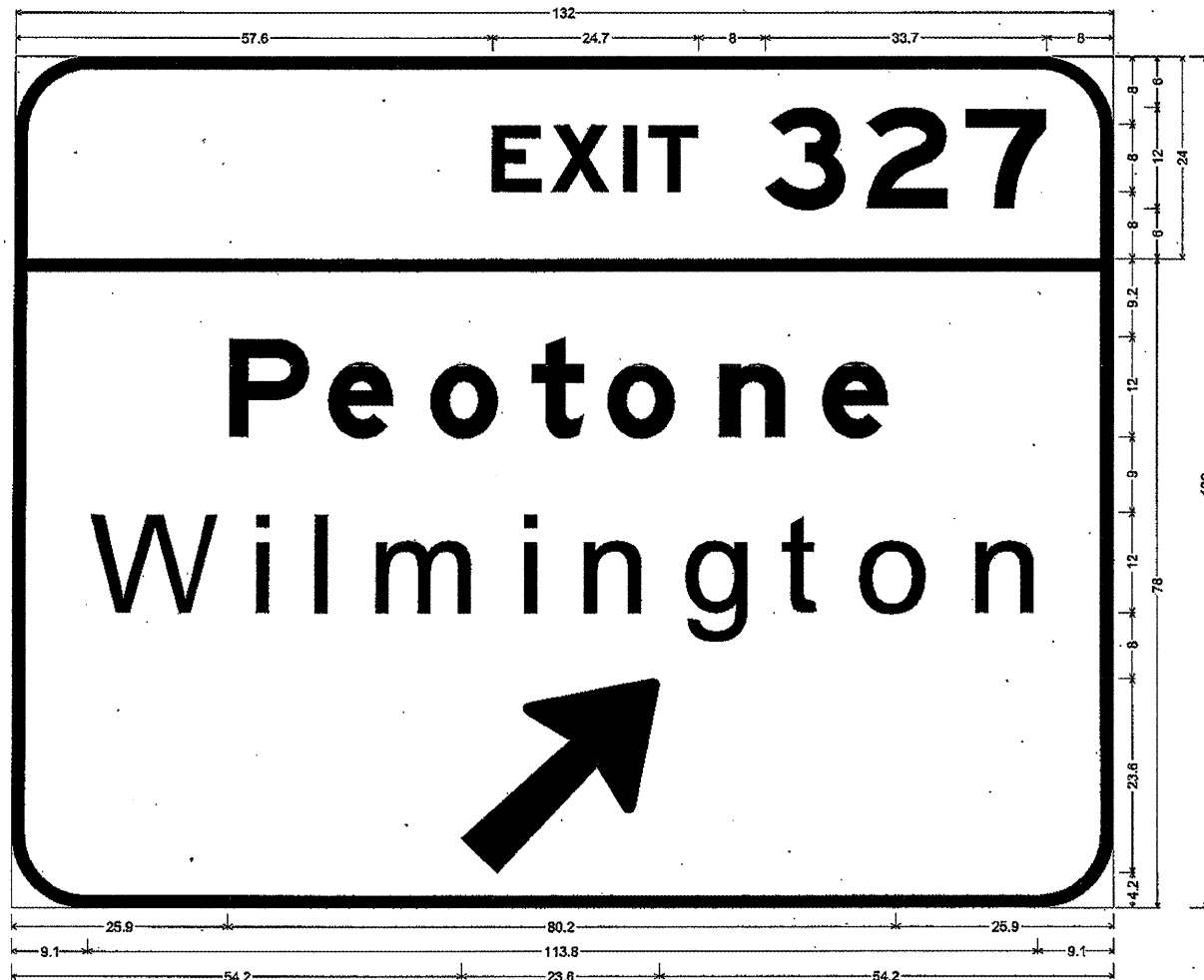
E	X	I	T	2	7	6	B	
27.2	34.2	42.8	45.9	59.8	71.6	83.7	98.3	
M	e	a	d	o	w			
17.8	33.1	45.2	57.5	70.3	82.3			
C	e	n	t	e	r			
24.6	37.5	50.4	62.1	71.1	83.9			
E	X	I	T	O	N	L	Y	
10.9	18.0	26.6	29.6	43.5	71.2	79.9	88.6	95.0

1S099I080L132.2

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	38
ILLINOIS FED. AID PROJECT			CONTRACT NO. 46175	



9.0" Radius, 1.5" Border, White on Green;
 [EXIT 327] E Mod 2K;
 9.0" Radius, 1.5" Border, White on Green;
 [Peotone] ClearviewHwy-5-W; [Wilmington] ClearviewHwy-5-W; Arrow 133 - 30.0° 45°;
 Table of letter and object lefts.

E	X	I	T	3	2	7				
57.6	54.7	73.3	76.4	90.3	102.5	114.3				
P	e	o	t	o	n	e				
25.9	37.9	50.3	62.5	71.5	84.8	97.3				
W	i	l	i	m	i	n	g	t	o	n
9.1	28.2	35.4	42.7	60.6	67.7	80.1	92.2	101.2	114.5	
↑										
54.2										

1C099I057L327.4



9.0" Radius, 1.5" Border, White on Green;
 [WEIGH] ClearviewHwy-5-W; [STATION] ClearviewHwy-5-W; Arrow 133 - 30.0° 45°;
 Table of letter and object lefts.

W	E	I	G	H		
16.3	52.5	43.3	47.8	60.1		
S	T	A	T	I	O	N
8.6	18.1	27.2	38.5	48.7	54.2	67.1
↑						
30.2						

1C099I080L147.8

1C099I057R329.6

1C099I057L330.5

FILE NAME *	USER NAME *	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -	REVISD -		Various	D-1 OVD SIN STR REPL 12-02	VARIOUS	39	39
		DRAWN -	REVISD -		CONTRACT NO. 46175				
		CHECKED -	REVISD -		ILLINOIS FED. AID PROJECT				