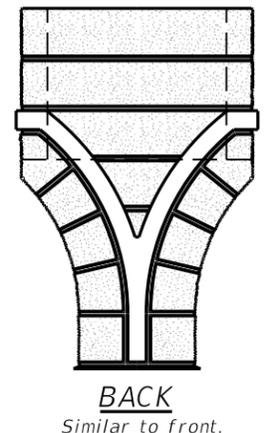


**GENERAL NOTES:**

Designed in accordance with AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals", 5th Edition and Interem Specifications.  
 Provide Class C concrete (f'c = 3600 psi).  
 Provide Grade 60 reinforcing steel.  
 Chamfer all exposed edges 3/4" unless noted otherwise.  
 Unless otherwise noted, all concrete surfaces must be smooth and finished with the following paints or approved equivalent:  
 BASE COLOR: SHERMAN WILLIAMS 6142 "MACADAMIA"  
 OSB must be paid under Item 650 "OVERHEAD SIGN SUPPORTS" or as shown in the plans.  
 All connection bolts must conform to Item 447 "Structural Bolting".  
 All structural steel connection bolts, nuts, rods and washers must be galvanized in accordance with Item 455, "Galvanizing".  
 Details called for hereon are applicable for Design Wind Heights up to 35' structure. Design wind speed 100 mph.

- ① Height "Z" is the total height of the column from the top of the drilled shaft. See quantities note on sheet 4 of 5.
- ② See Roadway plans for the height of the truss above the finished grade.
- ③ Electrical system conduit: Use 6" minimum radius sweeps for bends. No 90 degree elbows are permitted. Install pull tape in empty conduit. Pull tape must have 1250 lbs. minimum tensile strength, and foot length markings. Conduit must extend 6" beyond the concrete as shown, and must be threaded and capped. This conduit may be cut to exact dimension shown on the TMS or other electrical system detail sheet when installed.
- ④ Type DS fill must conform to Item 423, "Retaining Walls", Table 2.

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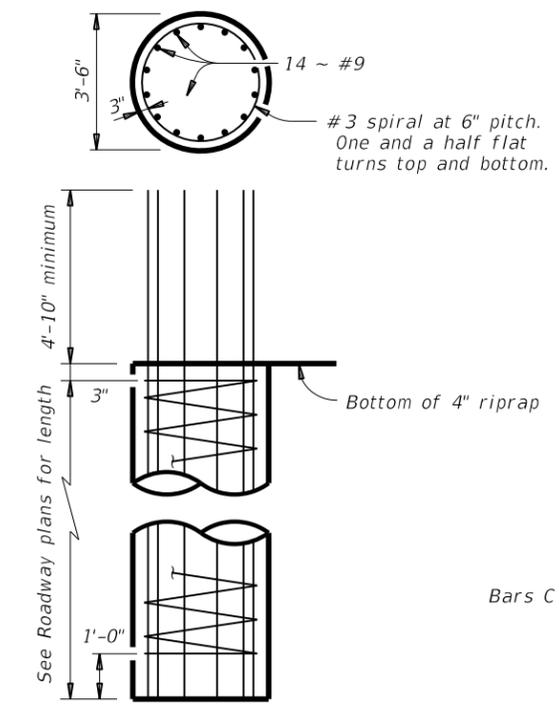
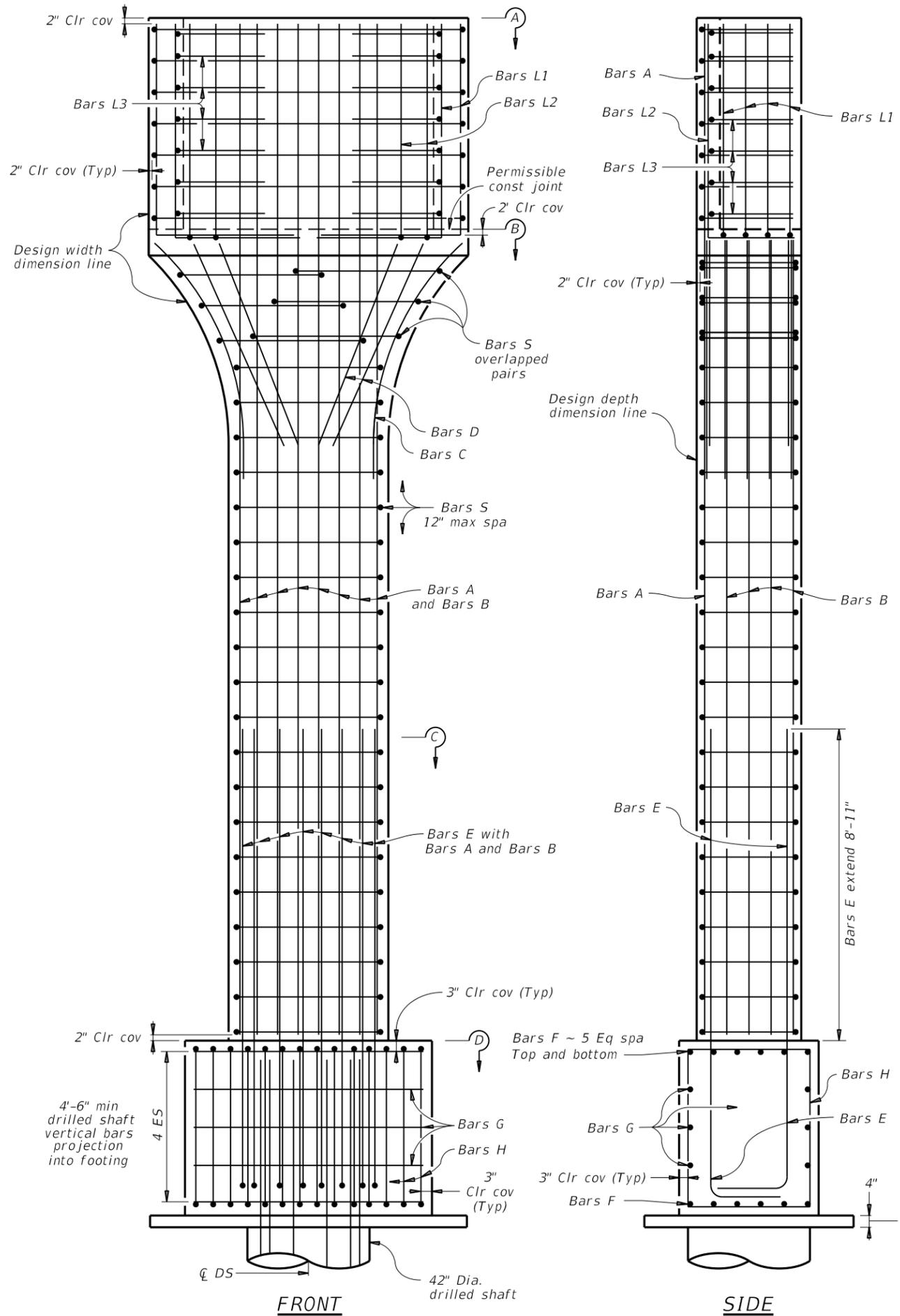


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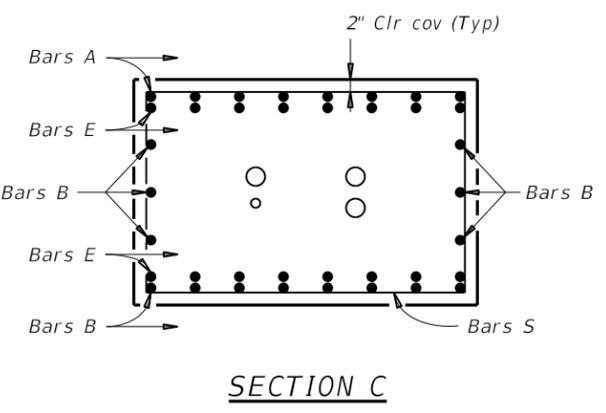
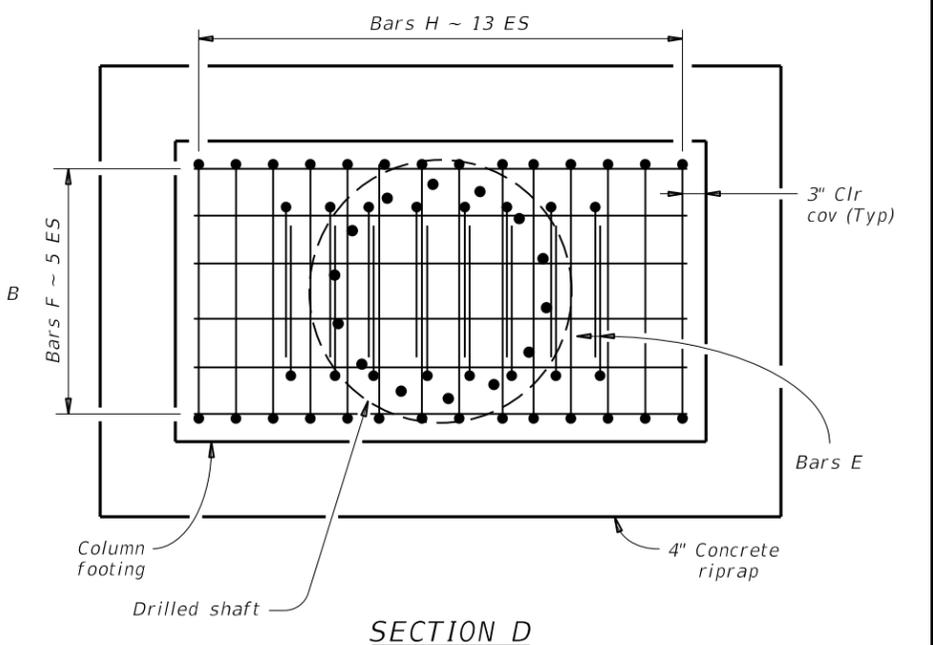
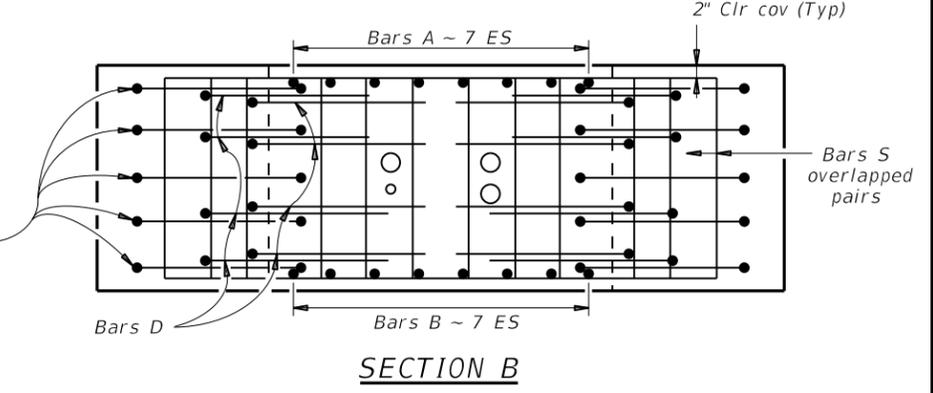
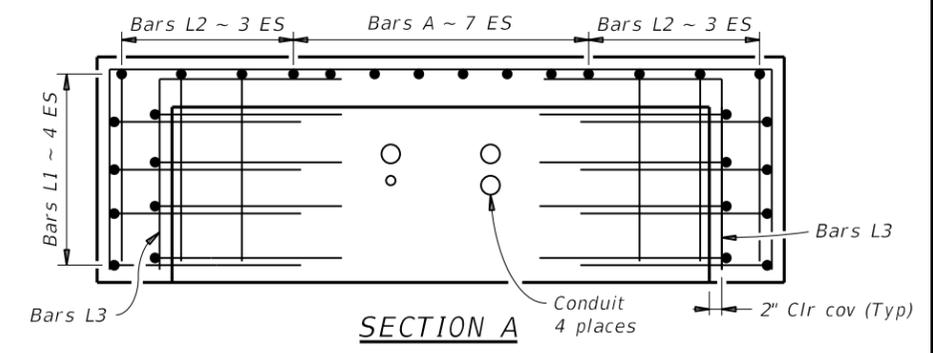
**HILL COUNTRY THEME  
 OVERHEAD SIGN COLUMN**  
 OVERHEAD SIGN BRIDGE  
 SPANS UP TO 155 FEET

DN: BCL	CK:	FILENAME: Hill Country Theme OSB.dgn		
DW: SRF	CK:	ORIGINAL DRAWING DATE: January 2020		
DIST	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	COUNTY	
SAT	6		COUNTY	
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
0000	00	000	000	ROUTE

REVISIONS:



**DRILLED SHAFT DETAIL**



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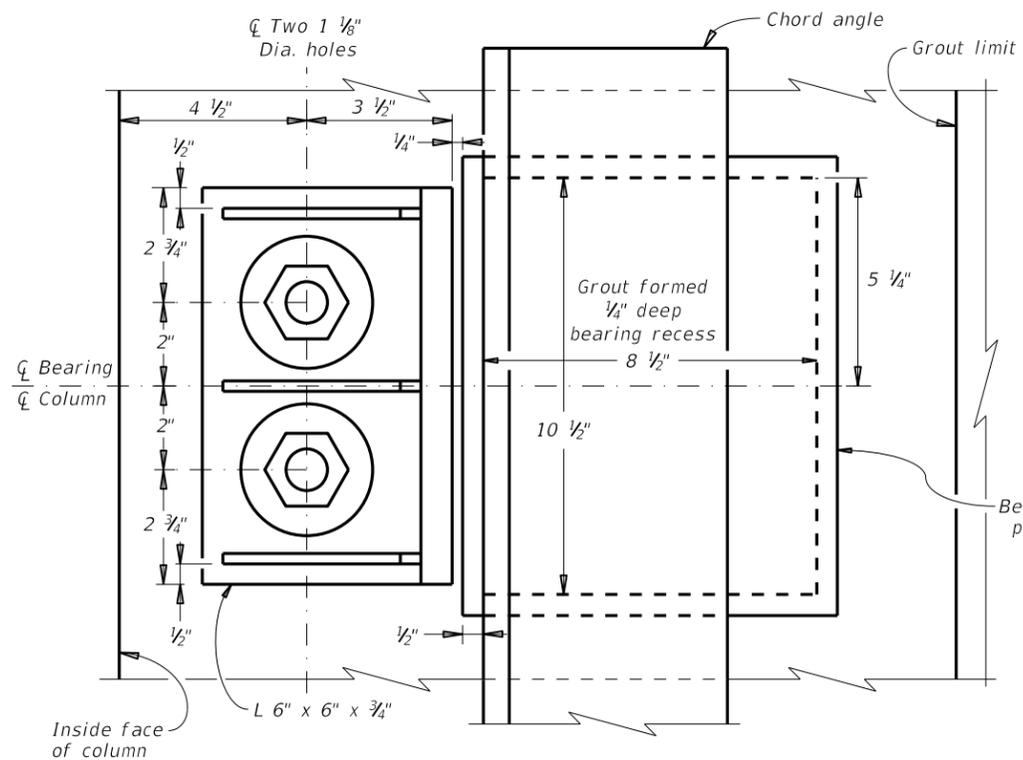
Provide #3 reinforcing bars at 18" Spa c-c. or Welded Wire Reinforcement (WWR) as 6x6-D2.9xD2.9 or D3xD3. Provide 3" clear cover at edges and minimum 1" clear cover top and bottom.

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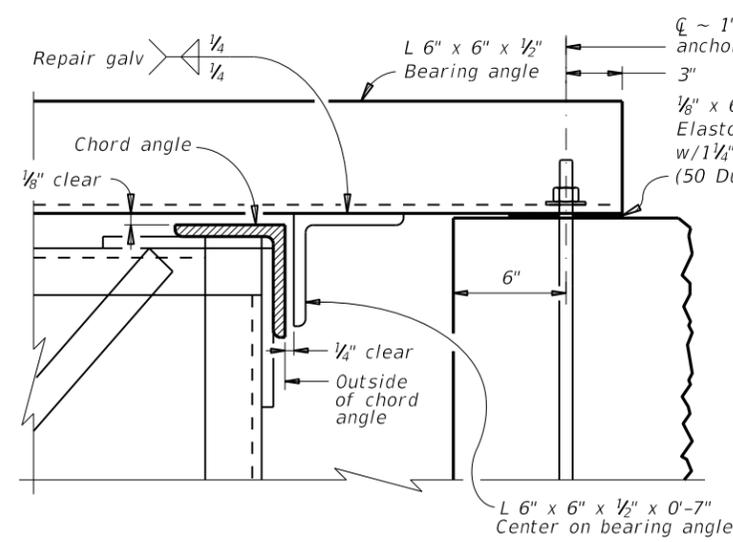
**HILL COUNTRY THEME  
OVERHEAD SIGN COLUMN**  
OVERHEAD SIGN BRIDGE  
SPANS UP TO 155 FEET

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CONTROL: 0000	SECTION: 00	JOB: 000	SHEET NO.: 000	ROUTE: ROUTE

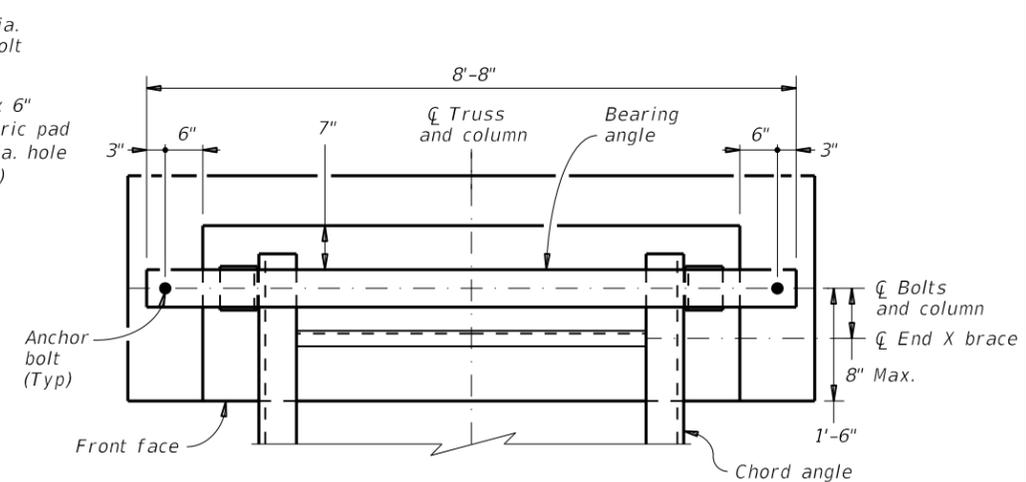
REVISIONS:



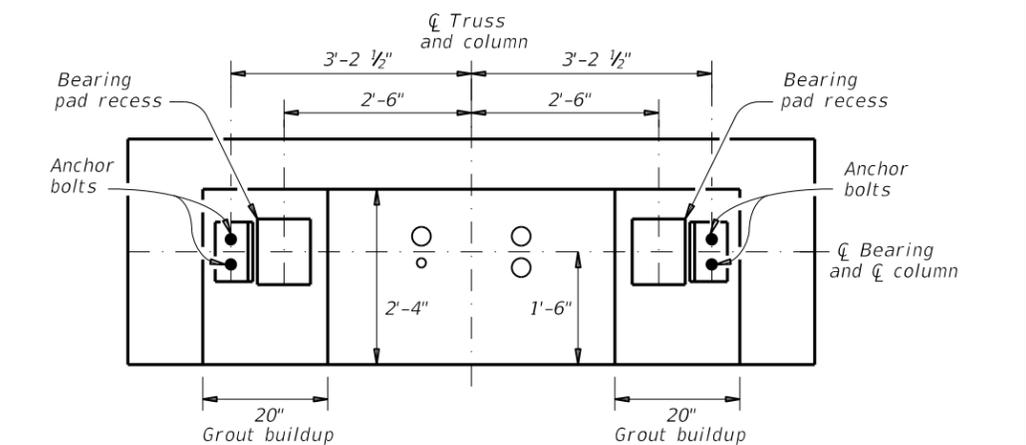
LOWER TRUSS ATTACHMENT DETAIL PLAN



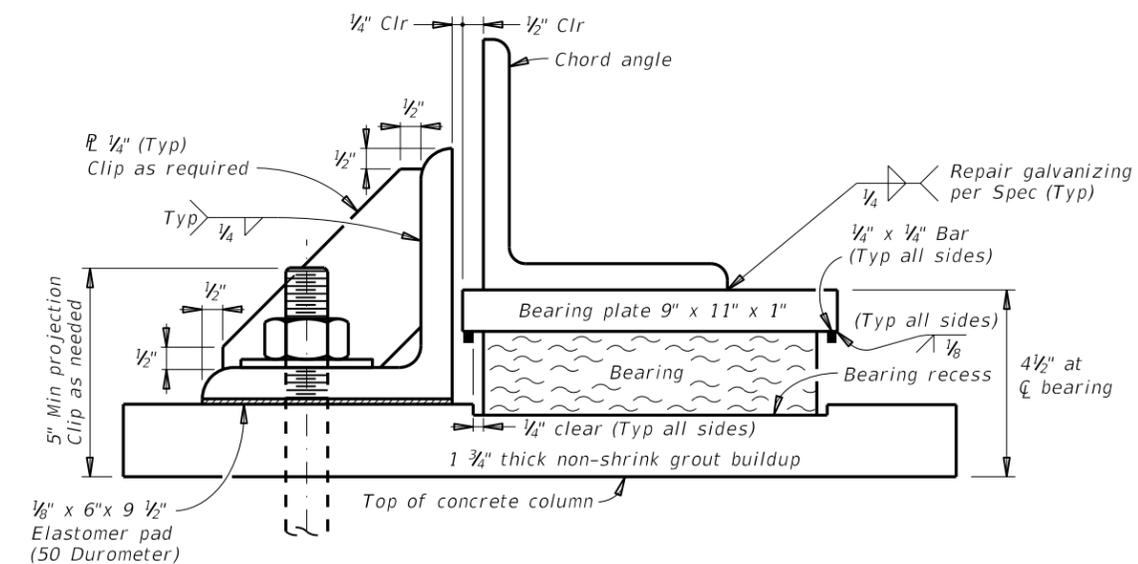
UPPER TRUSS ATTACHMENT DETAIL ELEVATION



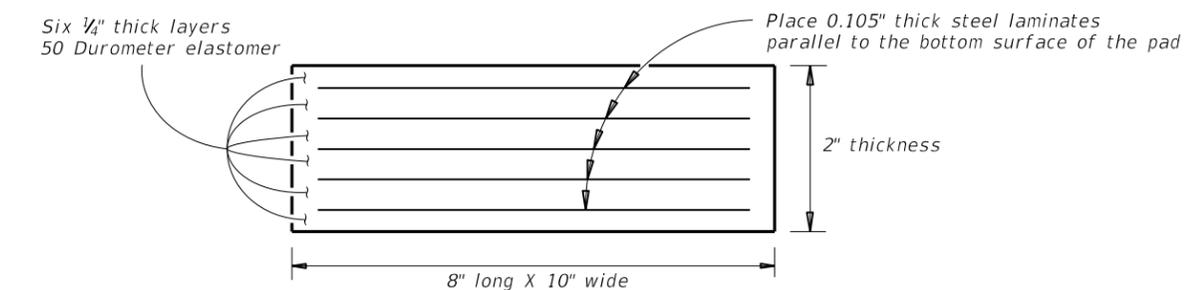
SECTION A Upper truss attachment.



SECTION B Lower truss attachment.

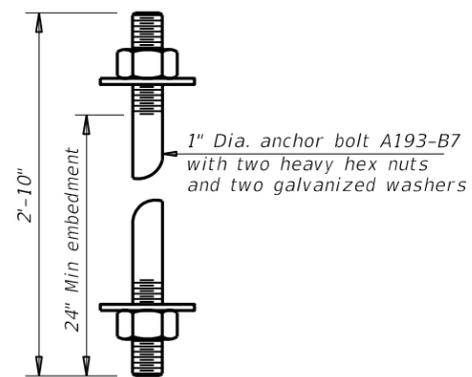


LOWER TRUSS ATTACHMENT DETAIL ELEVATION



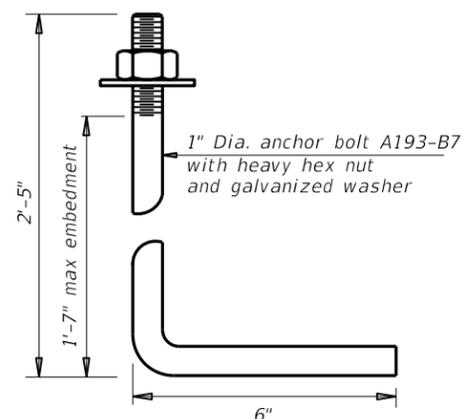
LAMINATED ELASTOMERIC BEARING DETAILS

The use of polyisoprene (natural rubber) is not allowed.



TOP ANCHOR BOLT DETAIL

Two required. Snug tighten anchor bolt nuts.



BOTTOM ANCHOR BOLT DETAIL

Four required. Snug tighten anchor bolt nuts.

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SAN ANTONIO DISTRICT STANDARD SHEET 3 OF 5

Texas Department of Transportation  
San Antonio District (Structural Design)  
Prepared by and for the use of TxDOT

HILL COUNTRY THEME  
OVERHEAD SIGN COLUMN  
OVERHEAD SIGN BRIDGE  
SPANS UP TO 155 FEET

DN: BCL	CK:	FILENAME: Hill Country Theme OSB.dgn		
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SAT	6	COUNTY		
CONTROL	SECTION	JOB	SHEET NO.	ROUTE
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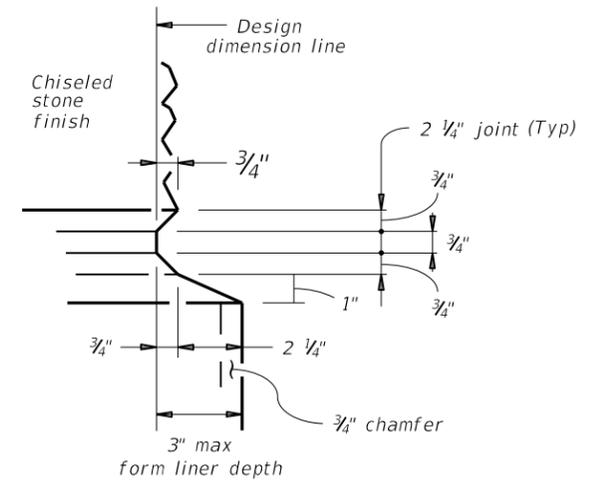
REVISIONS:

TABLE OF ESTIMATED QUANTITIES FOR ONE COLUMN "Z" = 30 FT ①

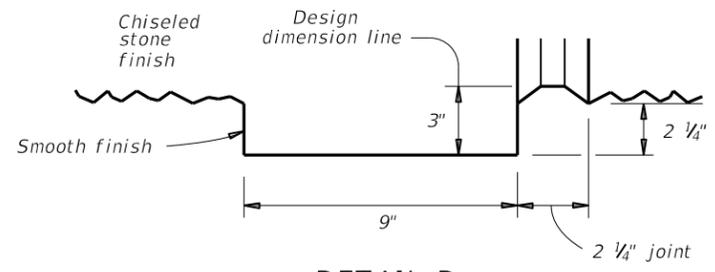
BAR	NO.	SIZE	LENGTH	WEIGHT	
A	8	#11	24'-4"	1035	
B	14	#11	18'-4"	1364	
C	10	#8	7'-2"	192	
D	16	#8	6'-4"	271	
E	16	#11	15'-3"	1297	
F	12	#11	6'-7"	420	
G	6	#6	6'-7"	60	
H	14	#5	17'-0"	249	
L1	8	#4	10'-0"	54	
L2	4	#4	8'-8"	24	
L3	14	#4	4'-10"	46	
S	26	#5	14'-10"	403	
REINFORCING STEEL				LB	5415
CLASS C CONCRETE (COLUMN)				CY	20.9
CLASS C CONCRETE (FOOTING)				CY	6.0

Quantities shown are for Contractor information only. Footing quantity includes riprap.

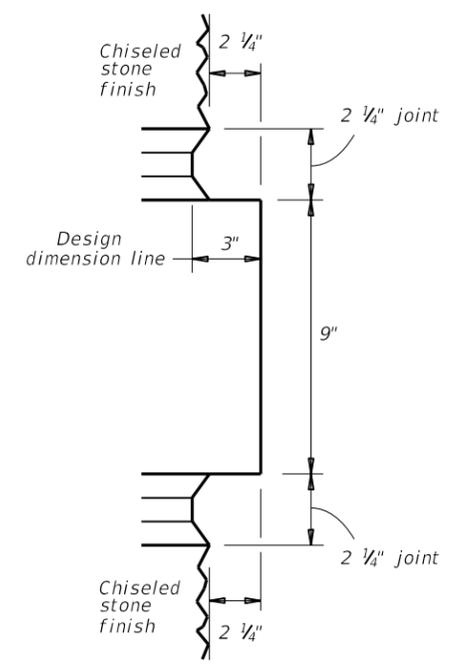
① QUANTITIES ARE BASED ON A TOTAL HEIGHT "Z" OF 30'-0". FOR EACH 1'-0" VARIATION IN "Z", ADJUST AS FOLLOWS:  
 BARS A LENGTH BY 1'-0"  
 WEIGHT BY 43 LBS  
 BARS B LENGTH BY 1'-0"  
 WEIGHT BY 43 LBS  
 BARS S COUNT BY 1  
 WEIGHT BY 16 LBS  
 CLASS C CONCRETE (COLUMN) BY 0.66 CY



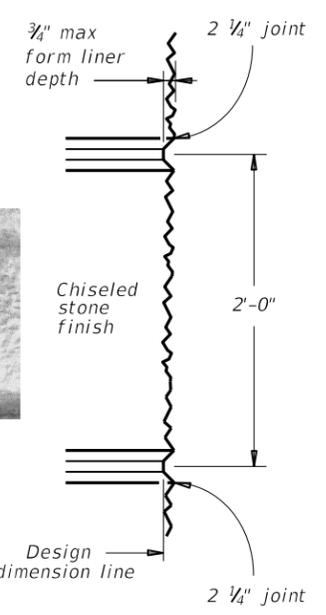
DETAIL A



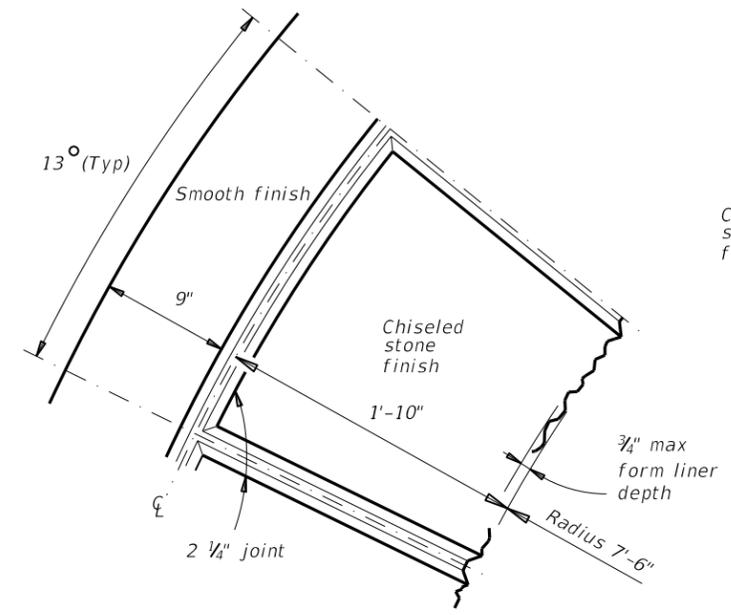
DETAIL D



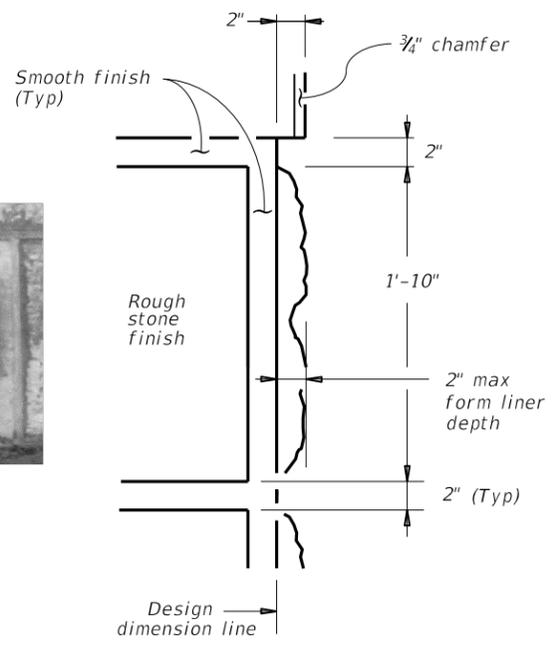
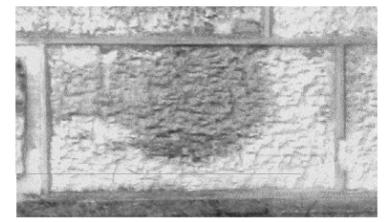
DETAIL F



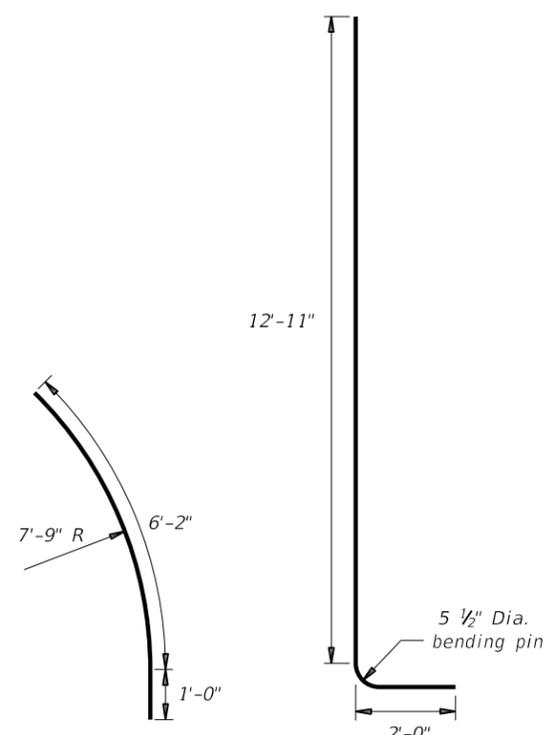
DETAIL B



DETAIL E

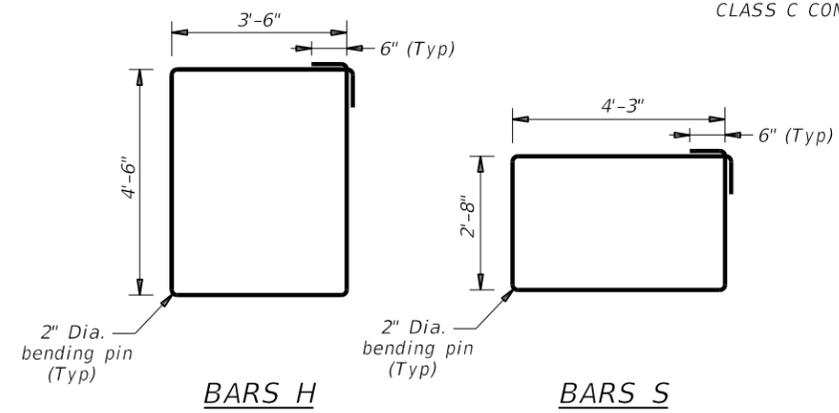


DETAIL C



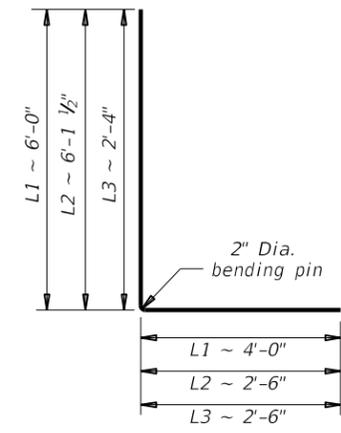
BARS C

BARS E



BARS H

BARS S



BARS L

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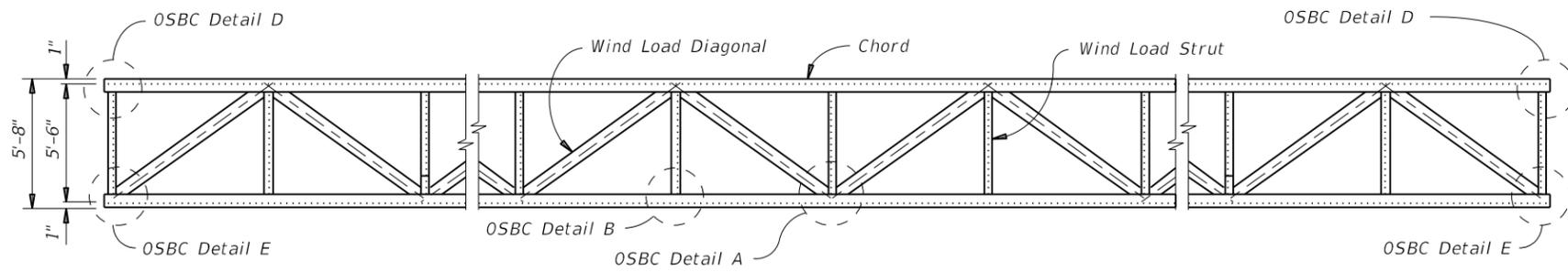
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### HILL COUNTRY THEME OVERHEAD SIGN COLUMN

OVERHEAD SIGN BRIDGE  
 SPANS UP TO 155 FEET

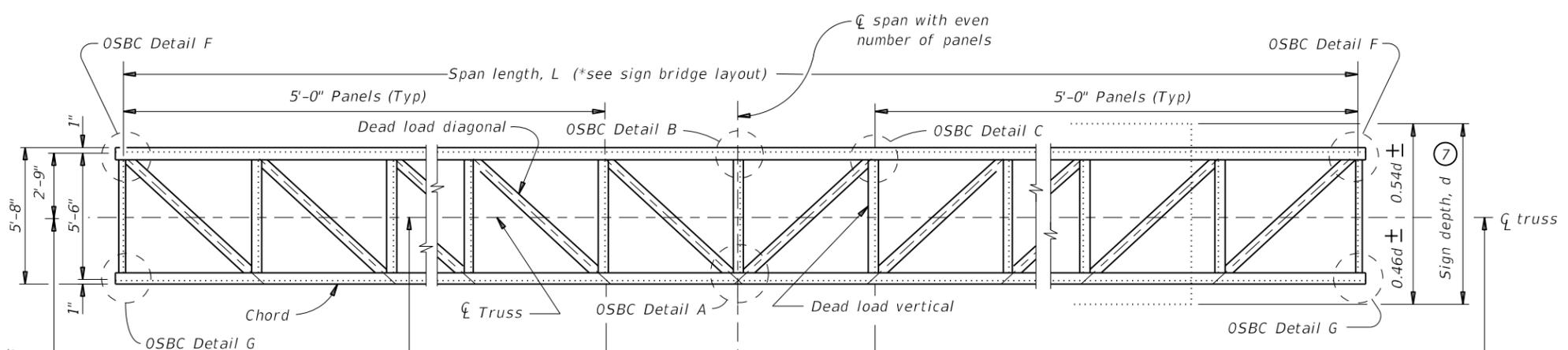
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CONTROL: 0000	SECTION: 00	JOB: 000 SHEET NO. 000 ROUTE: ROUTE

REVISIONS:



**PLAN**

See Standard Sheet OSBC for truss details not shown here.



**ELEVATION**

See Standard Sheet OSBC for truss details not shown here.

⑦ Where signs of different depths are used, the bottom edges of all signs may be placed in line. Where this is done, all signs should be so positioned that the bottom edges are approximately 0.46 of the depth of the deepest sign below the  $\bar{\bar{c}}$  of the truss.

DEAD LOAD DEFLECTIONS	
110' SPAN	1.88"
88' SPAN	1.24"

② Height from top of footing to  $\bar{\bar{c}}$  of truss See Roadway sign bridge layout

② Height from top of footing to  $\bar{\bar{c}}$  of truss See Roadway sign bridge layout



**TRUSS DETAILS**

See Standard Sheet OSBC for truss details not shown here.

**TRUSS DETAILS**

Maximum span	155'
W X D = Width X Depth	5.5' X 5.5'
Chord ⑤	L 6 X 6 X $\frac{5}{8}$ [25]
Dead load diagonal ⑥	L 3 X 3 X $\frac{1}{4}$ [3]
Wind load diagonal ⑥	L 4 X 3 $\frac{1}{2}$ X $\frac{3}{16}$ [4]
Dead load vertical ⑥	L 3 X 2 $\frac{1}{2}$ X $\frac{1}{4}$ [2]
Wind load strut ⑥	L 2 $\frac{1}{2}$ X 2 $\frac{1}{2}$ X $\frac{3}{16}$ [1]
Truss dead load	162 lb/ft
Size of HS bolts in splice connection	$\frac{3}{4}$ " diameter

Number of high strength (HS) bolts required in truss connection or splice are indicated with brackets [ ] after the member size.

- ⑤ "Low-Alloy Steel" for non-bridge structures per Item 442, "Metal For Structures".
- ⑥ "Carbon Steel" for non-bridge structures per Item 442, "Metal For Structures".

All truss members are angles. See Standard Sheet "Overhead Sign Bridge Truss Details OSBC" for details not shown here.

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SAN ANTONIO DISTRICT STANDARD SHEET 5 OF 5

Texas Department of Transportation  
San Antonio District (Structural Design)  
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**HILL COUNTRY THEME OVERHEAD SIGN COLUMN**  
OVERHEAD SIGN BRIDGE  
SPANS UP TO 155 FEET

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REVISIONS: