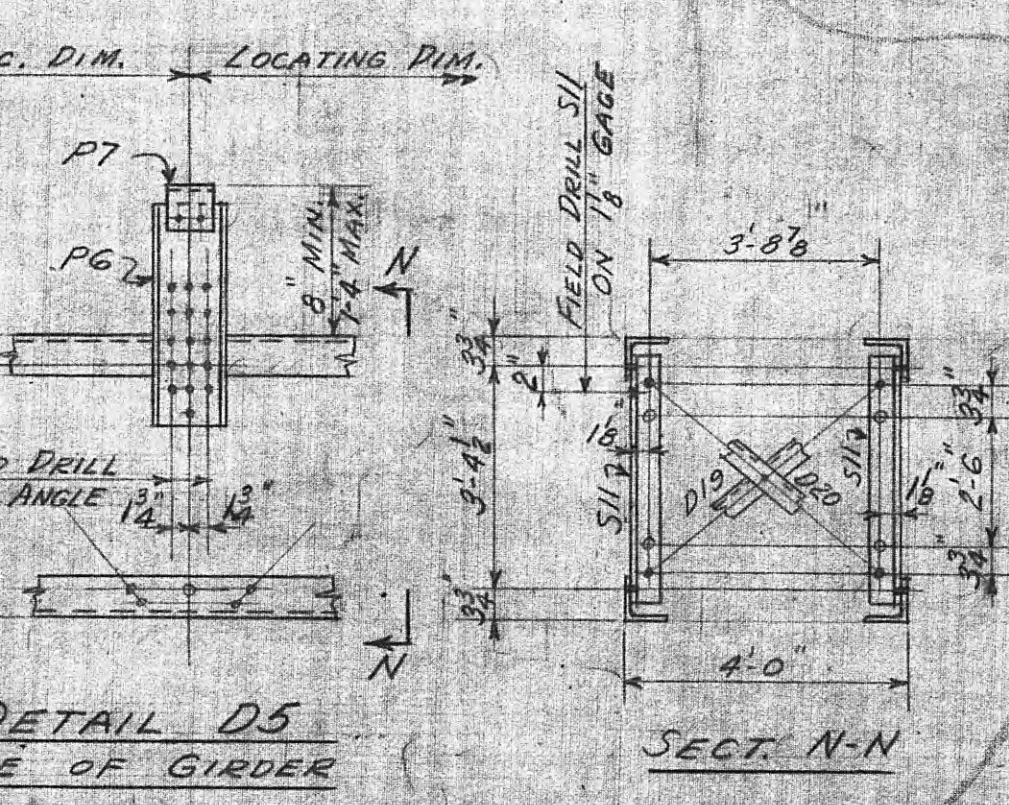
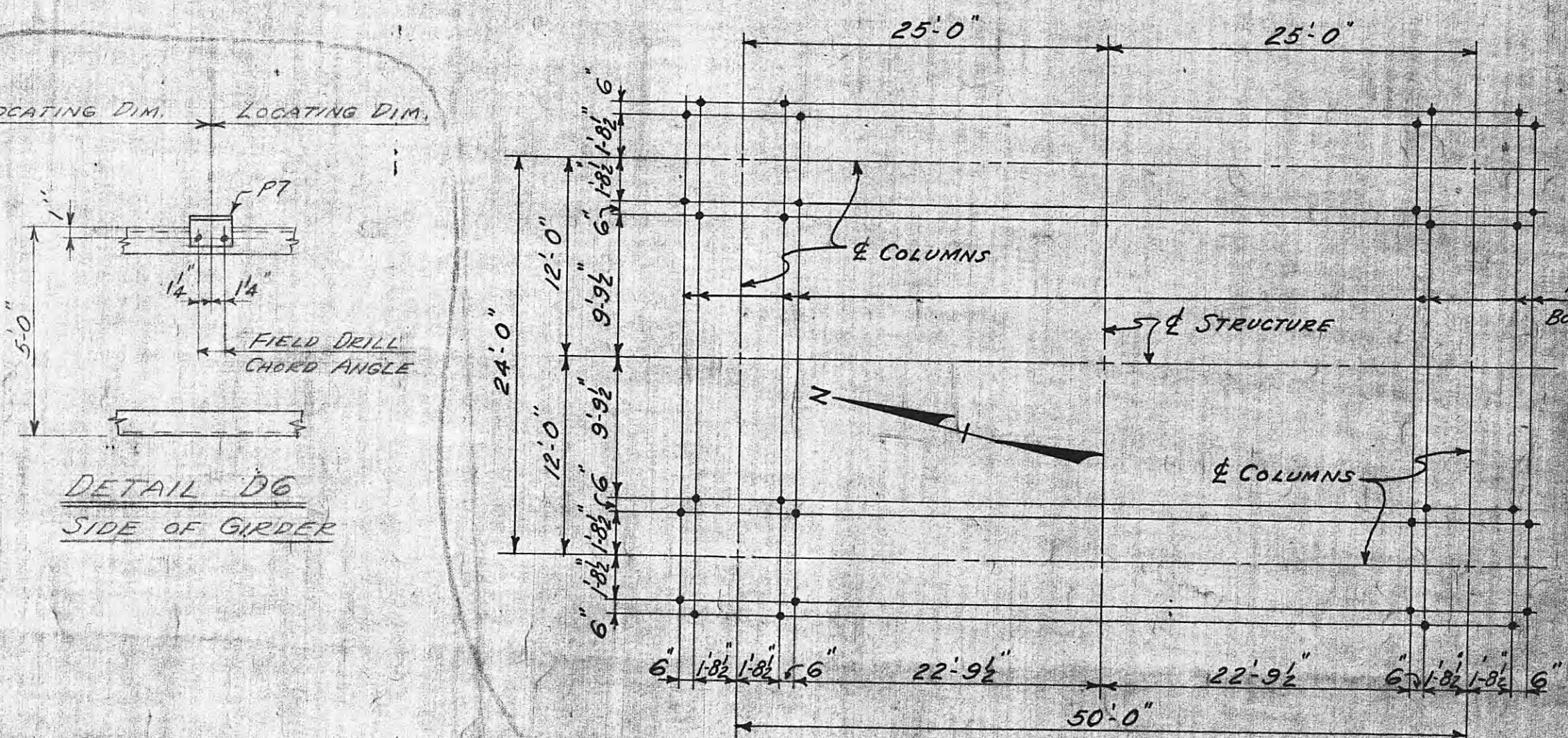
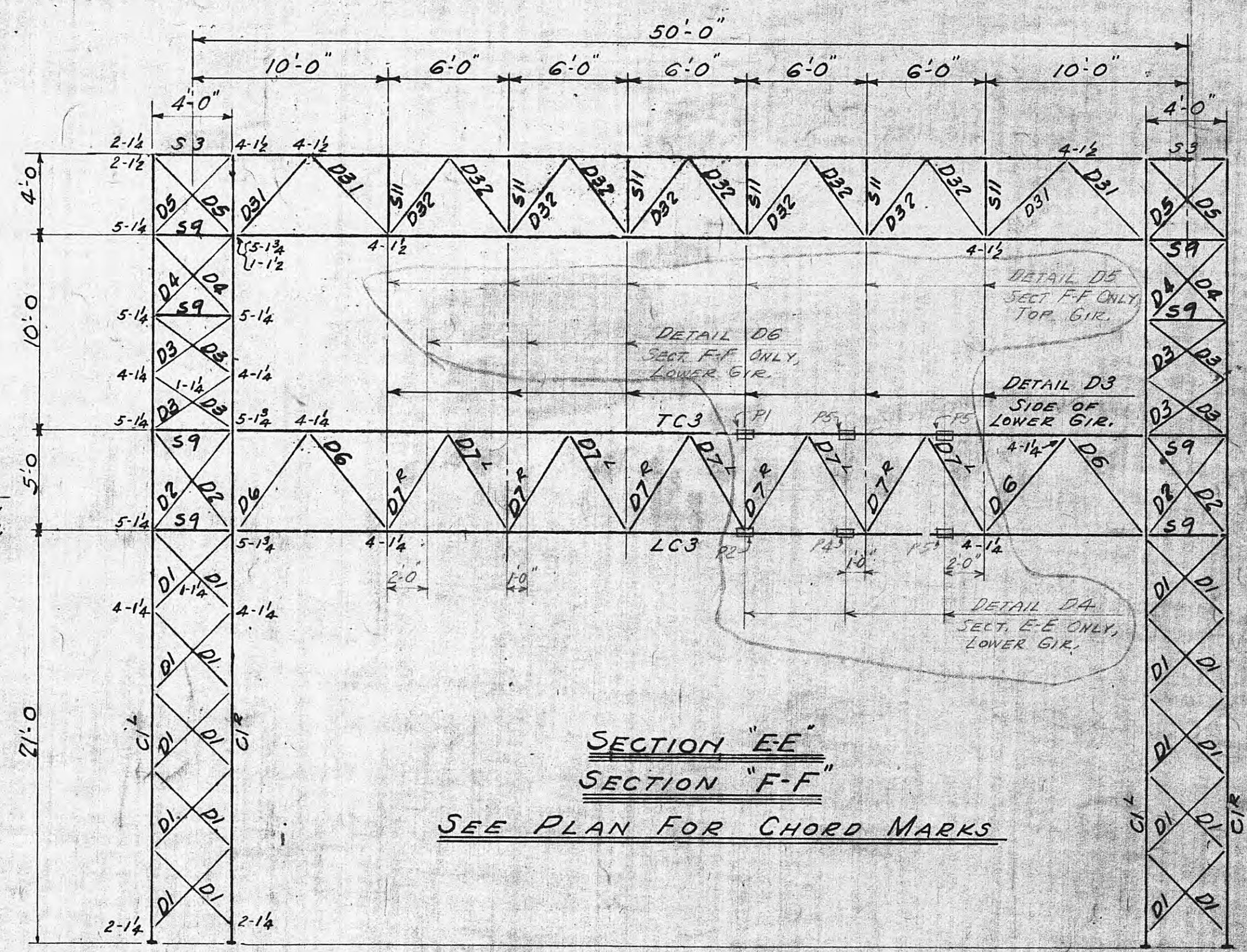
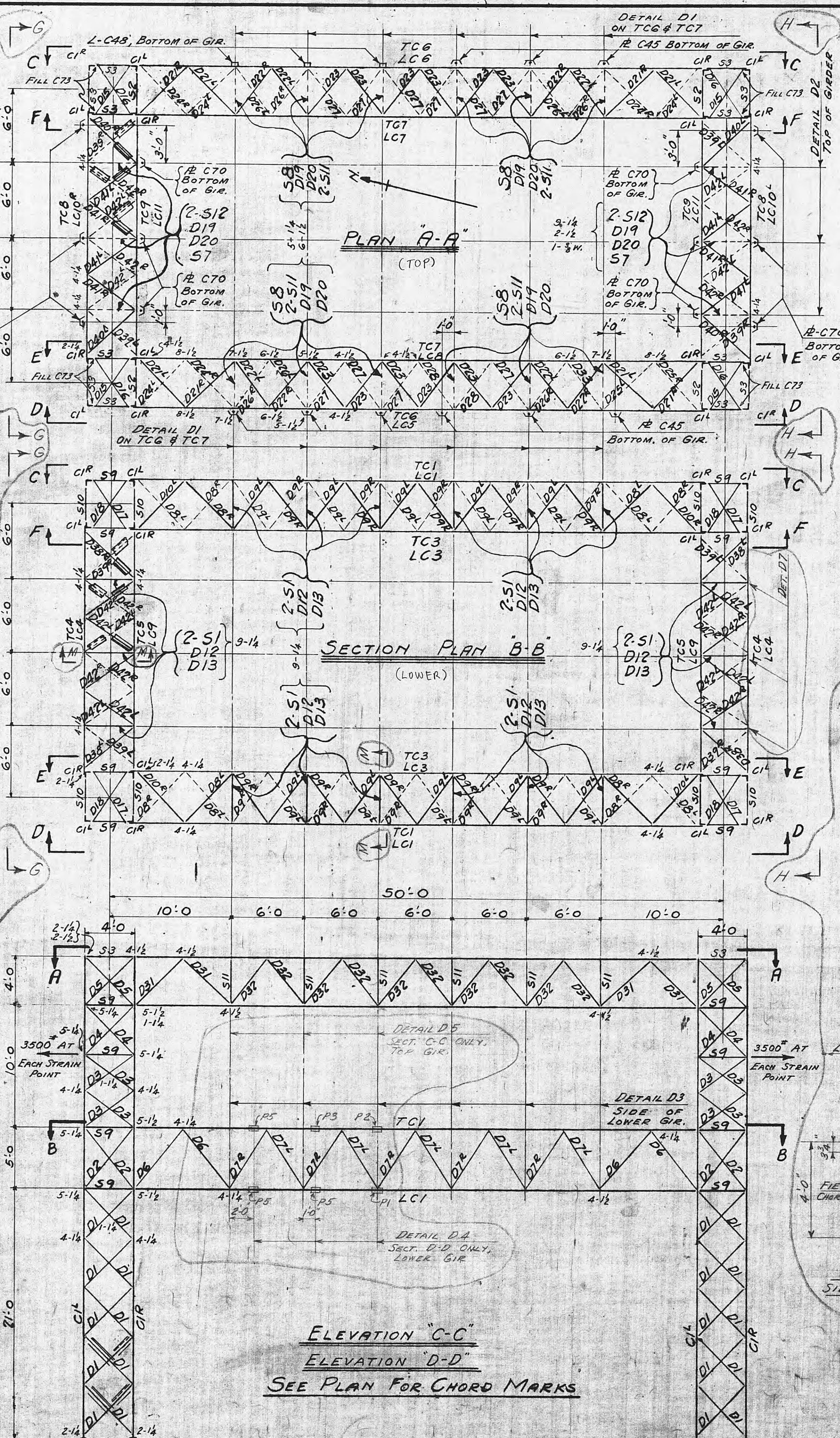
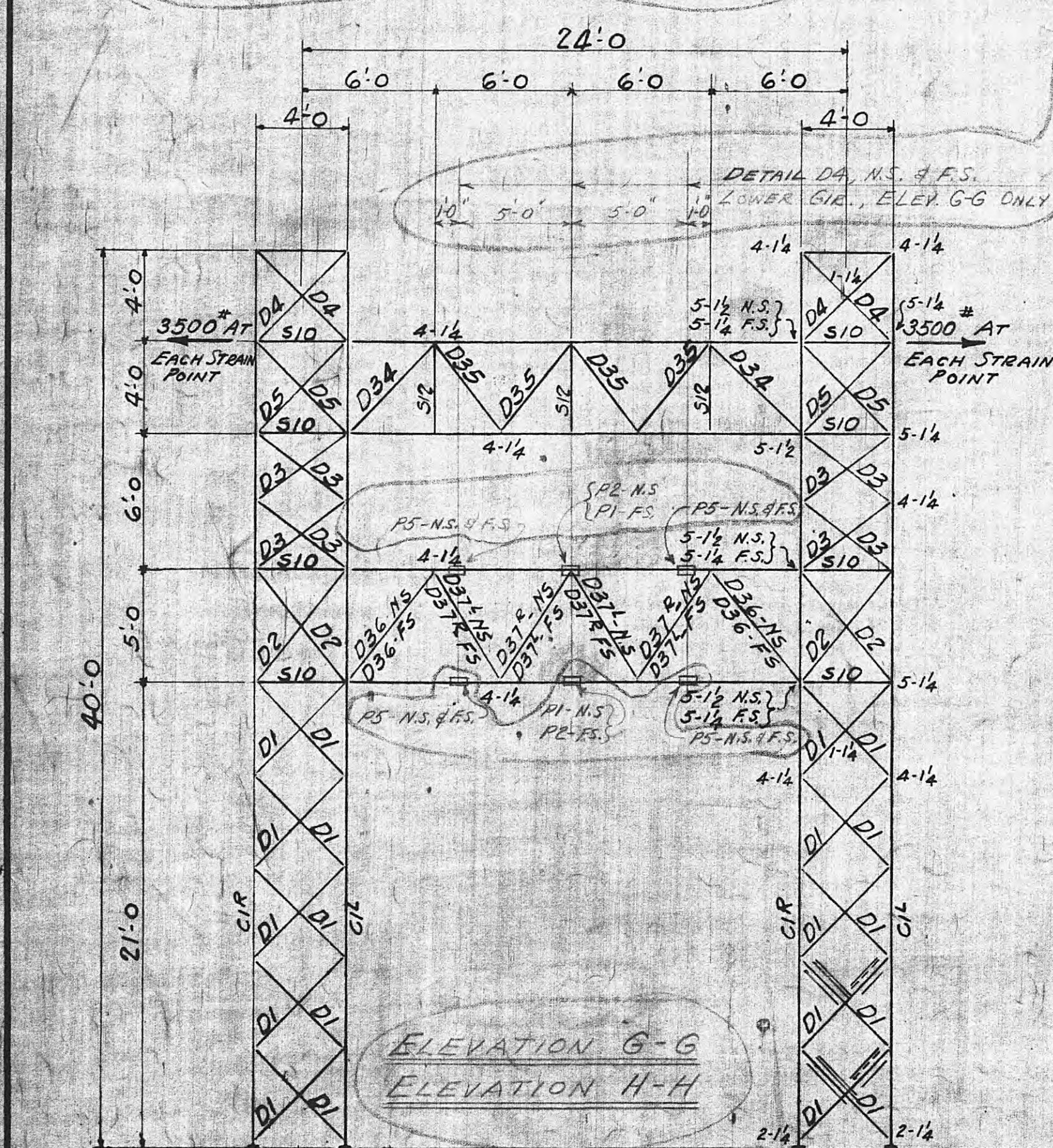
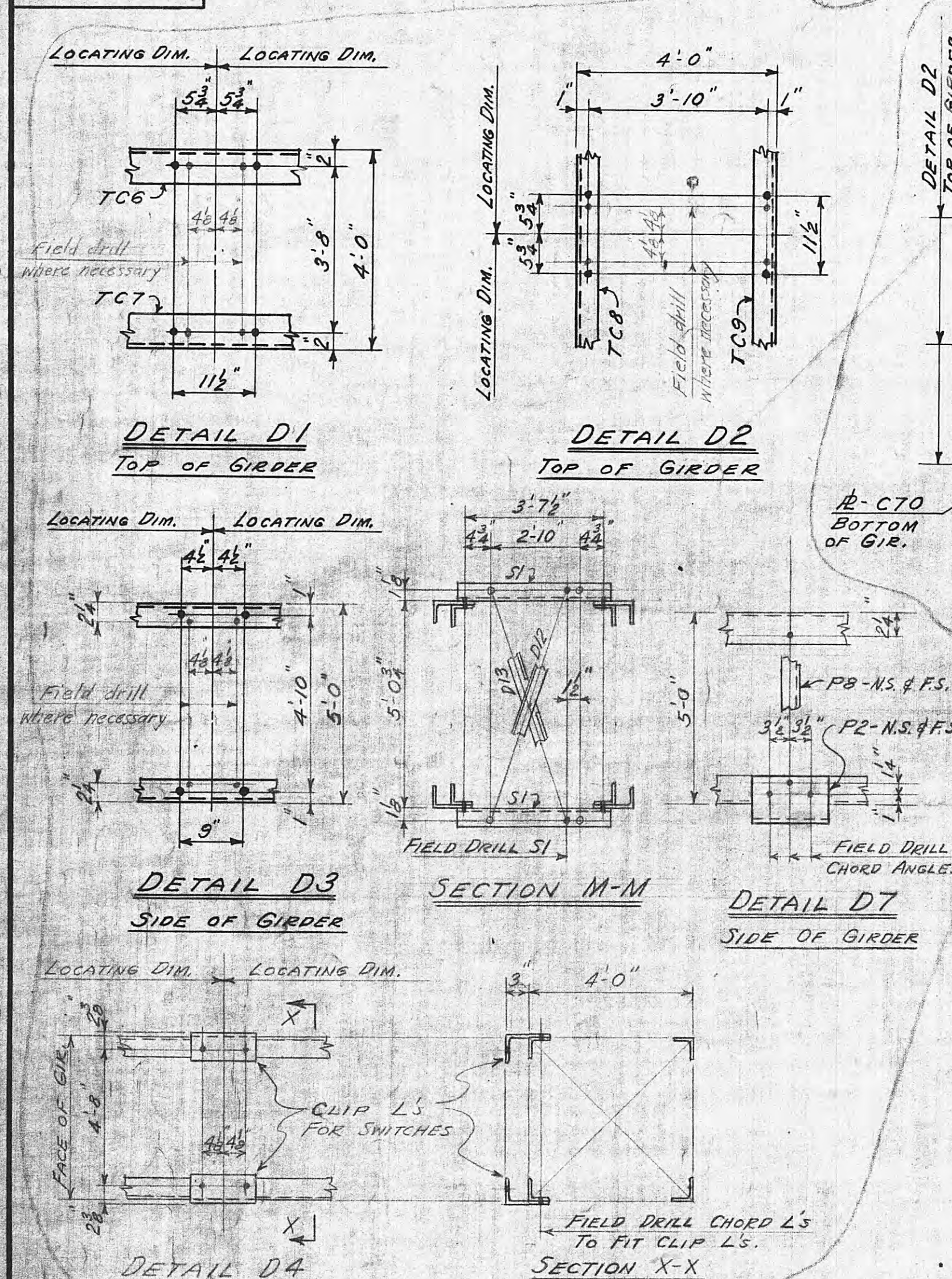




NOTE:-
All holes $\frac{1}{8}$ " unless noted
Bolts $\frac{5}{16}$ " sq. hd., hex. nut, 12" thread unless noted.
Place marks to be die stamped before galvanizing.
Material to be hot-dip galvanized after fabrication.
B/M includes excess bolts.

REFERENCE

Design drawing.....TEPCO - 64362
Details of original structure.....TEPCO - 50412
Foundation dwg.....SC-27676

W.O. 45117

TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER ENGINEERING AND CONSTRUCTION
HARRIMAN, TENN. SUBSTATION
66 KV. BUS & SWITCH STRUCTURE
ERECTION DIAGRAM

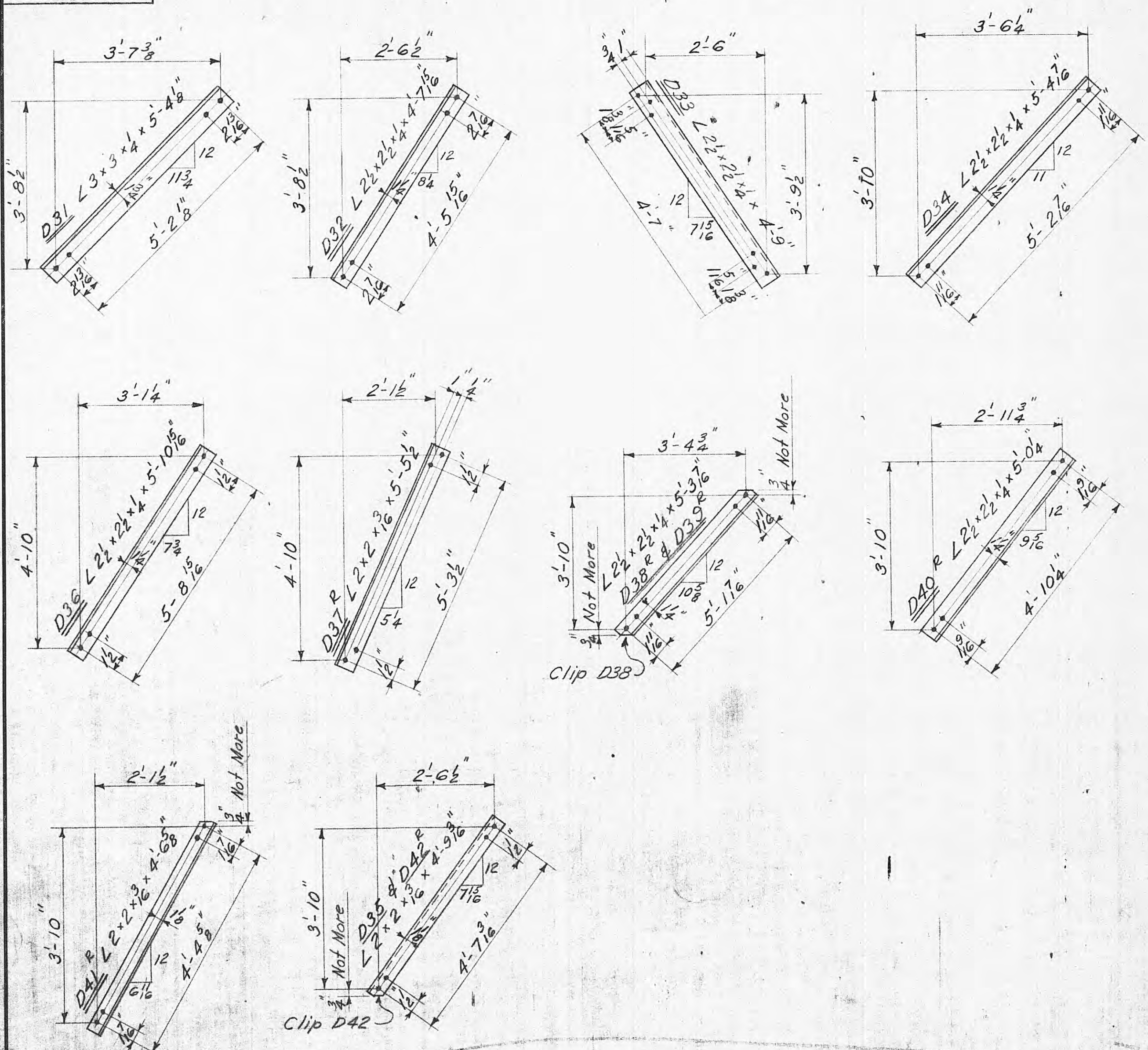
ERECTOR NOTE
SEE DETAIL SHEETS FOR ASSEMBLY
OF TRUSS CHORDS

Return to Engineering Flat File Drawer 7

W.O. 45117 →		Altered Dets. D1, D2 & D3			
	1	Added Dets. D4, D5, D6 D7 and Sect. M-M.			8-22-50 T.T.
	SWP	REVISION		DATE	SIG.

SCALE: $\frac{3}{4}$ " = 1'-0"	SUBMITTED	APPROVED	DATE: 5/14/51
DRAWN: <i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	SHEET 1 OF 6 SHEETS
TRACED: <i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	LC-27635
CHECKED: W	<i>[Signature]</i>	<i>[Signature]</i>	
CORRECT: <i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	

589L2-77



BILL OF MATERIAL FOR ONE STRUCTURE																											
NO. REQD.	MARK	DESCRIPTION	LENGTH FT.	IN.	WT. EACH SHEET	NO. REQD.	MARK	DESCRIPTION	LENGTH FT.	IN.	WT. EACH SHEET	NO. REQD.	MARK	DESCRIPTION	LENGTH FT.	IN.	WT. EACH SHEET	NO. REQD.	MARK	DESCRIPTION	LENGTH FT.	IN.	WT. EACH SHEET				
24	S11	L 2 x 2 x 3/8	3	6 1/2	9	6	20	D9R	L 2 1/2 x 2 1/2 x 1/4	4	9 3/4	20	6	ONE LC5	30	1 1/2	444	5	8	C2	EIGHT C1R						
12	S12	do.	3	9 1/2	10	6	20	D9L	do.	4	9 3/4	20	6	1	C41	L 5 x 5 x 1/2	30	1 1/2	444	5	8	C2	L 3 1/2 x 3 1/2 x 1/4	27	6	164	3
32	C80	Anchor bolts, 1 1/2 hex. nuts	3	0	9	2	2	D10R	do.	5	4 1/2	23	6	1	C42	do.	15	9	232	5	8	C3	do.	12	5	74	3
							2	D10L	do.	5	4 1/2	23	6	1	C44	do.	15	9	232	5	8	C4	do.	1	3	7	3
3015		5/8 Bolts, sq. hd., hex. nut	0	1 1/4	0.27		18	D12	L 2 x 2 x 1/2	6	0 3/4	15	6	6	C45	R 6 x 3/8	0	7 1/2	5	5	8	C5	L 6 x 4 x 3/8	0	5 1/4	6	3
1180		do.	0	1 1/2	0.29		18	D13	do.	6	0 3/4	15	6	2	C46	R 1 1/2 x 1/2	1	0	13	5	8	C6	do.	0	9 1/2	10	3
314		do.	0	1 3/4	0.31		4	D15	do.	5	6 3/4	14	6							8	C7	R 9 1/2 x 1/2	0	9 1/2	13	3	
							4	D16	do.	5	6 3/4	14	6	ONE LC6													
6		Wash. 5/16 th, 1 1/4 O.D., 1 1/2 hole			0.15		16	D17	do.	5	0 3/4	13	6	1	C42	L 5 x 5 x 1/2	1	1 1/2	17	5			EIGHT C1L				
							16	D18	do.	5	0 3/4	13	6	1	C43	do.	30	1 1/2	444	5	8	C8	L 3 1/2 x 3 1/2 x 1/4	27	6	164	3
							18	D19	do.	5	0 1/2	13	6	1	C47	do.	15	9	232	5	8	C9	do.	12	5	74	3
							18	D20	do.	5	0 1/2	13	6	3	C45	R 6 x 3/8	0	7 1/2	5	5	8	C4	do.	1	3	7	3
							4	D21R	L 3 x 3 x 1/4	5	2 1/2	26	6	2	C46	R 1 1/2 x 1/2	1	0	13	5	8	C10	L 6 x 4 x 3/8	0	5 1/4	6	3
							4	D21L	do.	5	2 1/2	26	6	3	C48	L 5 x 3 x 1/2	0	6	4	5	8	C11	do.	0	9 1/2	10	3
							4	D22R	L 2 1/2 x 2 1/2 x 1/4	4	6 1/2	19	6							8	C7	R 9 1/2 x 1/2	0	9 1/2	13	3	
							4	D22L	do.	4	6 1/2	19	6	ONE LC7													
							12	D23	do.	4	6 1/2	19	6	1	C42	L 5 x 5 x 1/2	1	1 1/2	17	5			TWO TC1				
							3	D24R	L 3 x 3 x 1/4	5	3 3/4	27	6	1	C49	do.	30	1 1/2	444	5	2	C12	L 3 x 3 x 1/4	15	9	80	3
							3	D24L	do.	5	3 3/4	27	6	1	C50	do.	15	9	232	5	2	C13	do.	30	1 1/2	152	3
							1	D25R	do.	5	4 1/4	27	6	2	C46	R 1 1/2 x 1/2	1	0	13	5	2	C14	do.	1	3	6	3
							1	D25L	do.	5	4 1/4	27	6							4	C15	R 11 x 1/4	1	1	10	3	
							4	D26R	L 2 1/2 x 2 1/2 x 1/4	4	7 1/2	20	6	ONE LC8													
							3	D26L	do.	4	7 1/2	20	6	1	C42	L 5 x 5 x 1/2	1	1 1/2	17	5							
							10	D27	do.	4	7 1/2	20	6	1	C51	do.	30	1 1/2	444	5							
							2	D28	do.	4	8 3/4	20	6	1	C52	do.	15	9	232	5							
													2	C46	R 1 1/2 x 1/2	1	0	13	5								
							16	D31	L 3 x 3 x 1/4	5	4 1/4	27	2	TWO TC4													
							40	D32	L 2 1/2 x 2 1/2 x 1/4	4	7 1/2	20	2	2	C53	L 3 x 3 x 1/4	19	11	101	4							
							1	D33	do.	4	9	20	2	4	C29	R 11 x 1/4	1	1	10	4							
							8	D34	do.	5	4 1/4	23	2							2	C19	L 3 x 3 x 1/4	30	1 1/2	152	3	
							16	D35	L 2 x 2 x 1/2	4	9 1/2	12	2	TWO LC4						2	C20	do.	15	9	80	3	
							8	D36	L 2 1/2 x 2 1/2 x 1/4	5	10 1/2	25	2	2	C54	L 3 x 3 x 1/4	19	11	101	4	2	C21	do.	1	1 1/2	6	3
							8	D37R	L 2 x 2 x 1/2	5	5 1/2	14	2	4	C55	R 11 x 1/4	1	1	10	4	4	C22	R 11 x 1/4	1	1	10	3
							8	D37L	do.	5	5 1/2	14	2														
							2	D38R	L 2 1/2 x 2 1/2 x 1/4	5	3 1/2	22	2	TWO TC5													
							2	D38L	do.	5	3 1/2	22	2	2	C56	L 3 x 3 x 1/4	19	9 3/4	100	4							
							4	D39R	do.	5	3 1/2	22	2	2	C57	L 6 x 4 x 3/8	1	0	13	4							
							4	D39L	do.	5	3 1/2	22	2	2	C58	do.	1	0	13	4							
							2	D40R	do.	5	0 1/2	21	2														
							2	D40L	do.	5	0 1/2	21	2	TWO LC9													
							4	D41R	L 2 x 2 x 1/2	4	6 3/4	11	2	2	C59	L 3 x 3 x 1/4	19	9 3/4	100	5							
							4	D41L	do.	4	6 3/4	11	2	2	C60	L 6 x 4 x 3/8	1	0 1/2	13	5							
							12	D42R	do.	4	9 1/2	12	2	2	C61	do.	1	0 1/2	13	5	2	C14	L 3 x 3 x 1/4	30	1 1/2	152	4
							12	D42L	do.	4	9 1/2	12	2	2	C61	do.	1	0 1/2	13	5	2	C26	do.	15	9	80	4
							8	C73	Fill R 2 x 1/2	0	3 1/2	1	6	TWO TC8						2	C27	do.	15	9	80	4	
							36	S1	L 2 x 2 x 1/2	3	11 1/2	10	6	2	C62	L 3 x 3 x 1/4	19	11	101	5	4	C29	R 11 x 1/4	1	1	10	4
							4	S2	L 3 x 2 x 1/2	3	8	12	6	4	C63	R 11 x 1/4	1	1	10	5							
														TWO TC9													
							12	S3	L 3 x 2 x 1/2	3	11 1/2	13	6	2	C64	L 3 x 3 x 1/4	19	9 3/4	100	5							
							6	S7	L 2 x 2 x 1/2	4	0	10	6	2	C65	L 6 x 4 x 3/8	1	0 1/2	13	5							
							12	S8	do.	3	5 1/2	9	6	2	C66	do.	1	0 1/2	13	5							
							32	S9	do.	3	8 1/2	9	6	ONE LC10R													
							32	S10	do.	3	8 1/2	9	6	1	C67	L 3 x 3 x 1/4	19	11	101	5	2	C21	L 3 x 3 x 1/4	1	1 1/2	6	4
														2	C69	R 11 x 1/4	1	1	13	5	2	C30	do.	15	9	80	4
														3	C70	R 6 x 3/8	0	7 1/2	5	5	2	C31	do.	30	1 1/2	152	4
																					4	C32	R 11 x 1/4	1	1	10	4
														ONE LC10L													
														1	C67	L 3 x 3 x 1/4	19	11	101	5	2	C21	L 3 x 3 x 1/4	1	1 1/2	6	4
														2	C69	R 11 x 1/4	1	1	13	5	2	C30	do.	15	9	80	4
														3	C70	R 6 x 3/8	0	7 1/2	5	5	2	C31	do.	30	1 1/2	152	4
																					4	C32	R 11 x 1/4	1	1	10	4

2'-9"

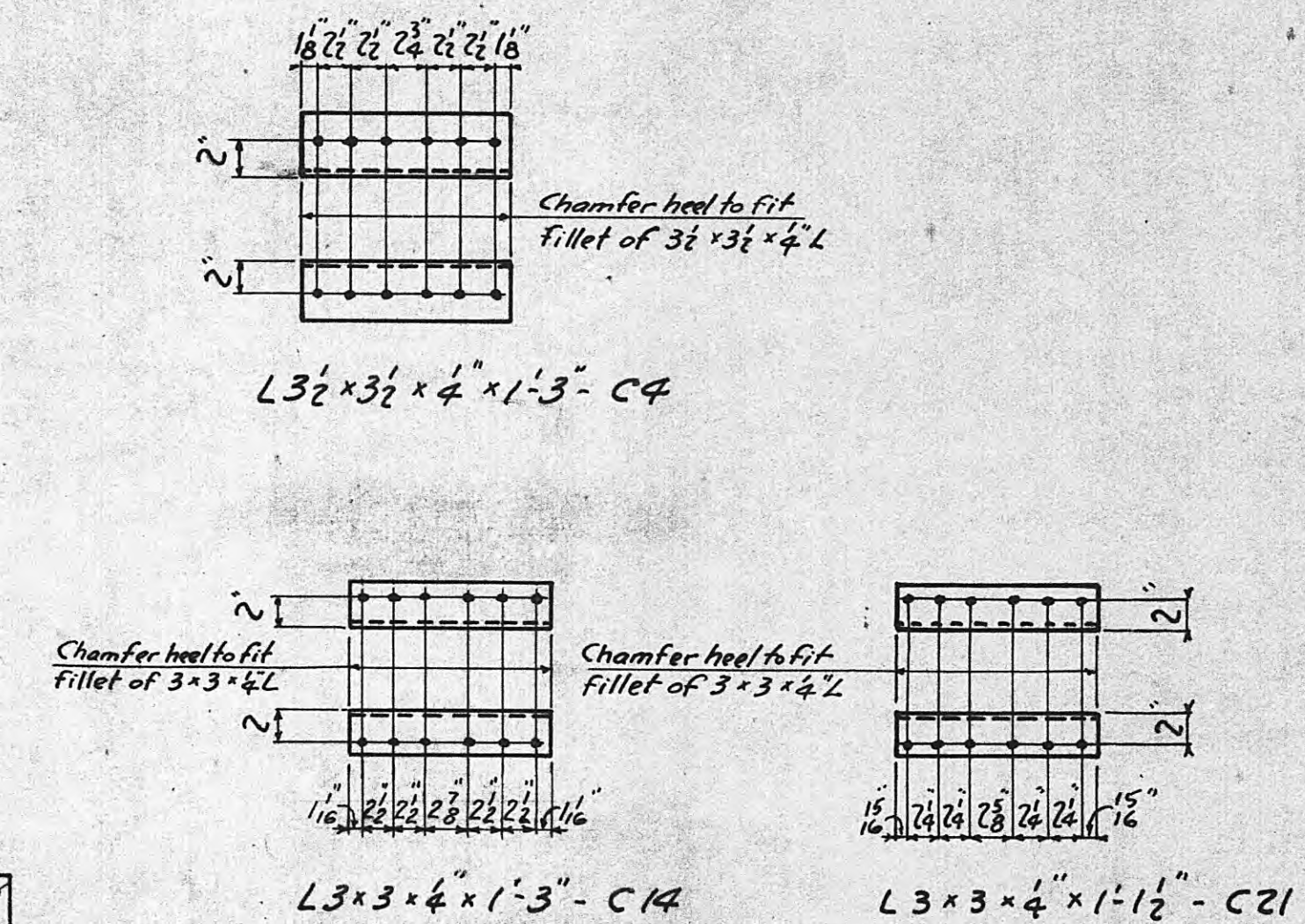
hex nuts

5" Thread

Bar 1"x3'-0"

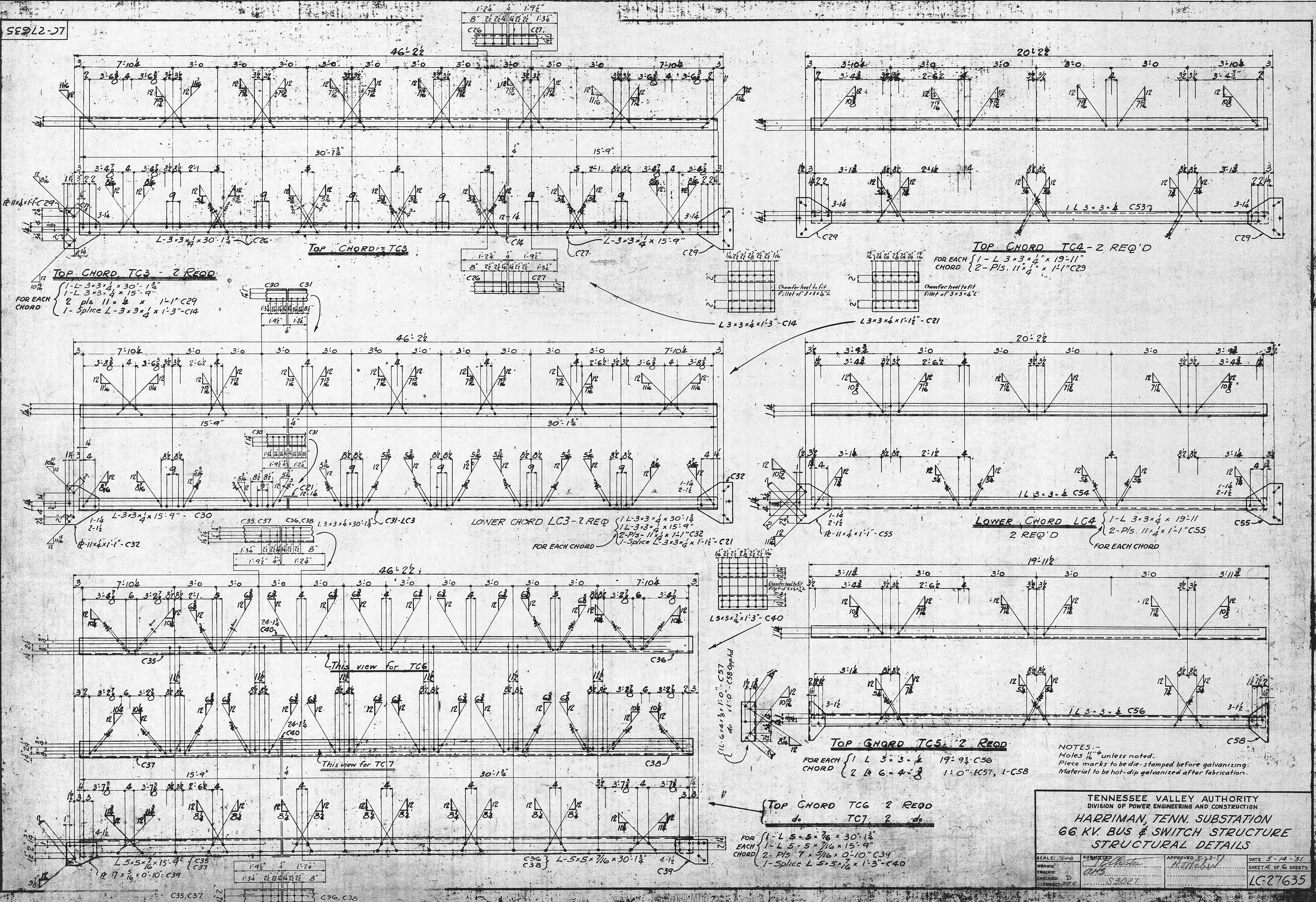
ANCHOR BOLT C80

Total Weight = 32550*



TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER ENGINEERING AND CONSTRUCTION
HARRIMAN, TENN. SUBSTATION
66 KV. BUS & SWITCH STRUCTURE
STRUCTURAL DETAILS

SCALE: None	SUBMITTED	APPROVED: <i>S-20-71</i>	DATE: <i>5-14-51</i>
DRAWN: <i>Shenker</i>		<i>Heard</i>	SHEET 3 OF 6 SHEETS
TRACED: <i>25</i>			
CHECKED: D	<i>S3021</i>		<i>LC-27635</i>
CORRECT: R.F.S.			



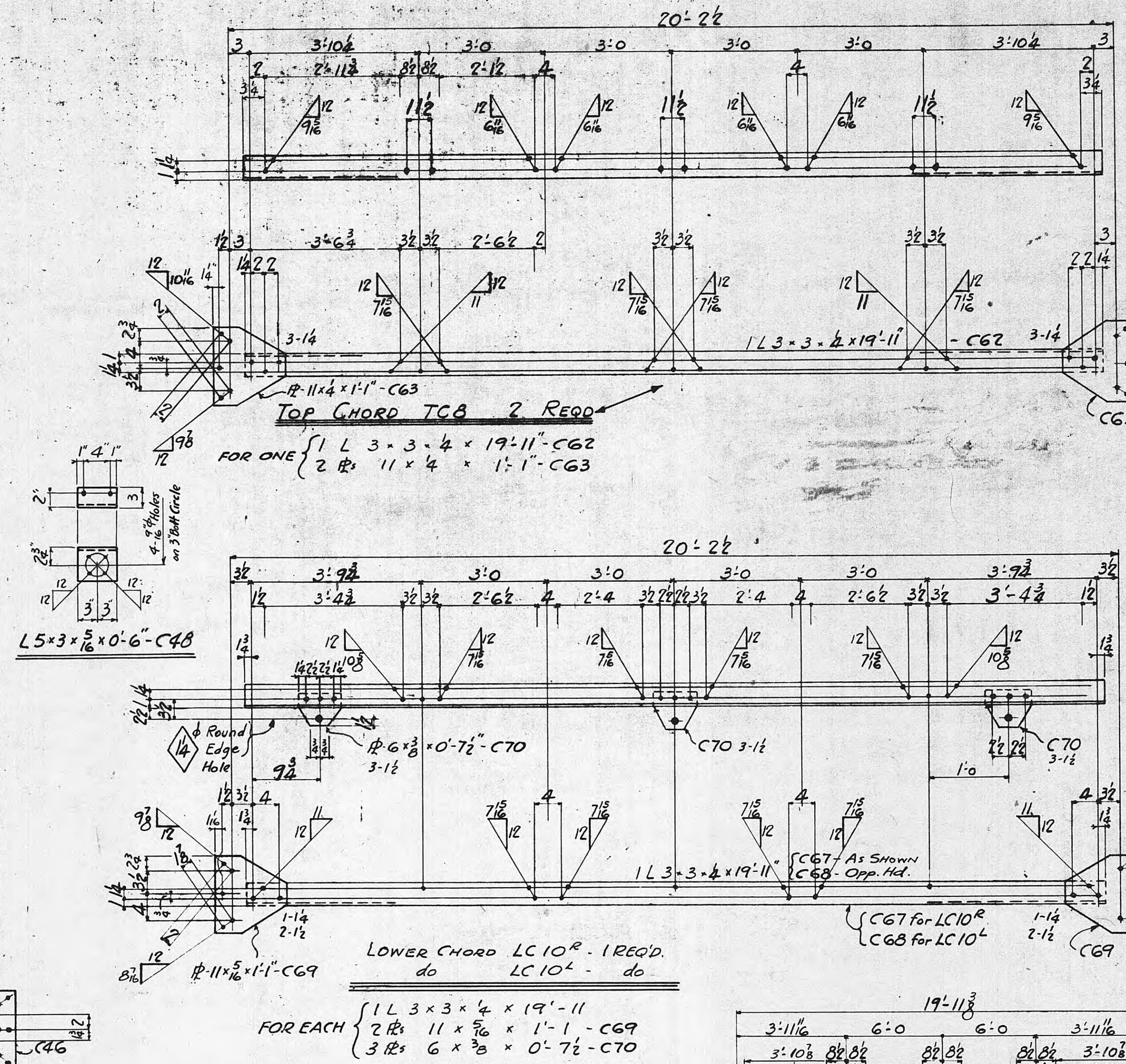
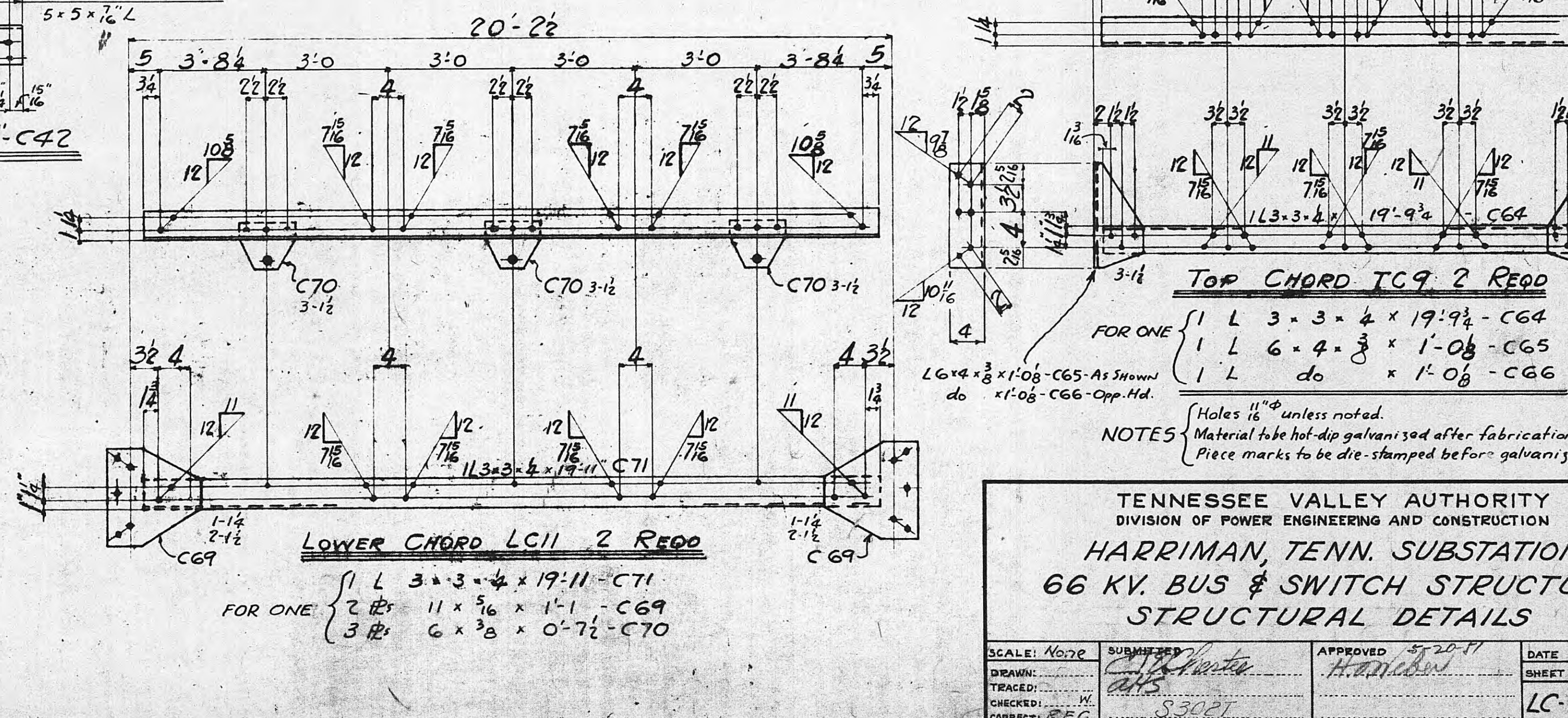


Diagram illustrating the layout of a 5x5 grid of reinforcement bars (rebar) for a concrete slab. The grid is labeled "Chan 5x". Dimensions are given in feet and inches:

- Overall width: $15' \frac{1}{16}"$
- Overall height: $24' \frac{11}{16}"$
- Bar spacing (center-to-center): $24' \frac{1}{16}"$ (horizontal) and $24' \frac{1}{16}"$ (vertical)
- Bar diameter: $\frac{1}{16}"$

The diagram shows a 5x5 grid of bars, with dimensions indicating the spacing and overall size of the slab.

$15' \times 5' \times \frac{7}{16}" \times 1' \frac{1}{16}" - C42$



TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER ENGINEERING AND CONSTRUCTION

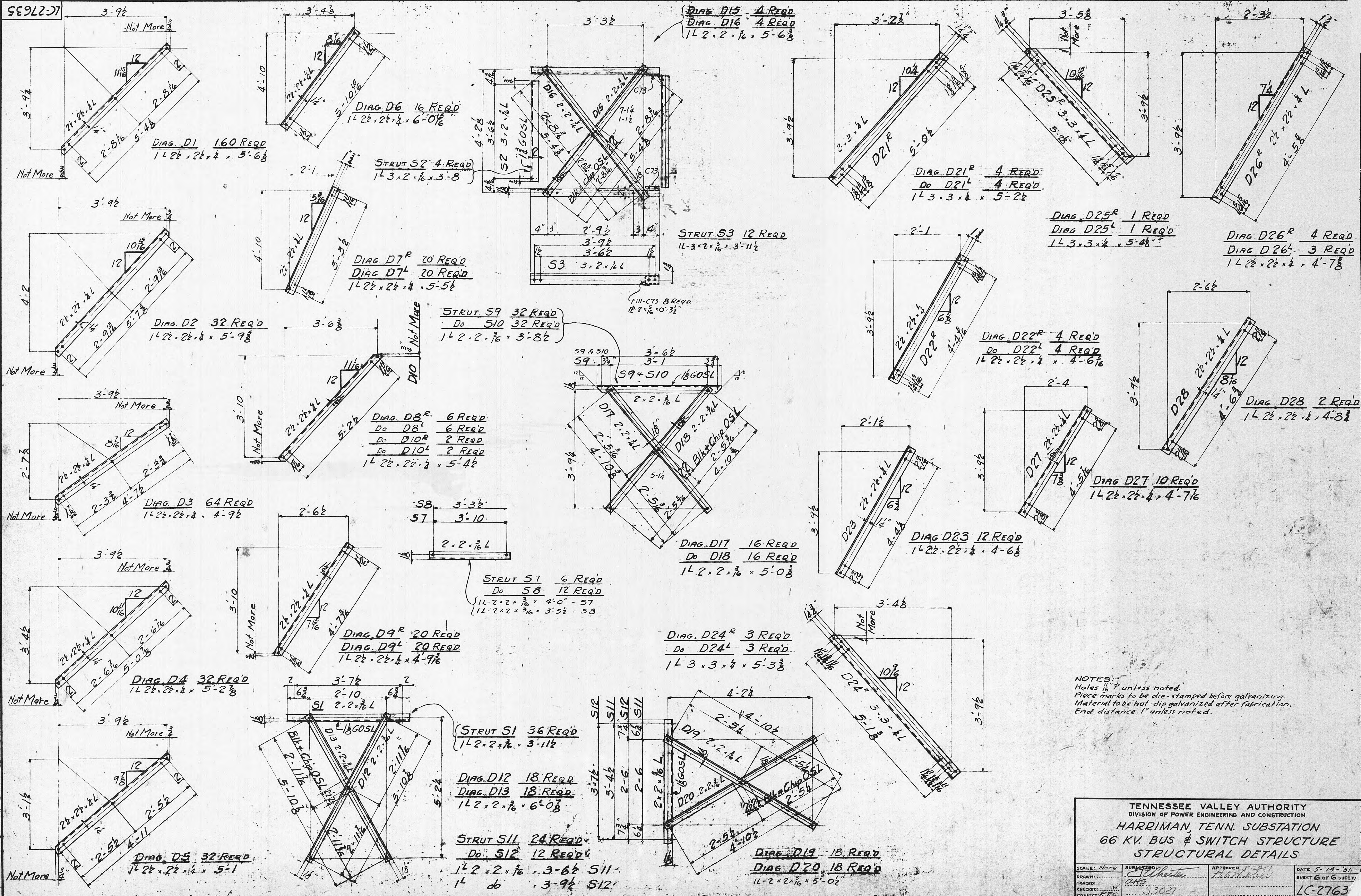
HARRIMAN, TENN. SUBSTATION

66 KV. BUS & SWITCH STRUCTURE

STRUCTURAL DETAILS

SCALE: <i>NOTED</i>	SUBMITTED: <i>5-20-71</i>	APPROVED: <i>5-20-71</i>	DATE: <i>5-14-71</i>
DRAWING: <i>10/10</i>			SHEET 5 OF 6 SHEETS
TRACED: <i>10/10</i>			
CHECKED: <i>10/10</i>			<i>LC-27635</i>

LC-27635



NOTES:-
Holes $\frac{1}{16}$ " ϕ unless noted.
Pierce marks to be die-stamped before galvanizing.
Material to be hot-dip galvanized after fabrication
End distance 1" unless noted.

TENNESSEE VALLEY AUTHORITY DIVISION OF POWER ENGINEERING AND CONSTRUCTION HARRIMAN, TENN. SUBSTATION 66 KV. BUS & SWITCH STRUCTURE STRUCTURAL DETAILS			
SCALE: None	SUBMITTED BY: <i>J. Hester</i>	APPROVED: <i>J. Hester</i>	DATE: 5-14-57
DRAWN: <i>AMS</i>			SHEET 6 OF 6 SHEETS
TRACED: _____			
CHECKED: <i>N</i>			
CORRECT: <i>AMS</i>	<i>\$302T</i>		LC-2763