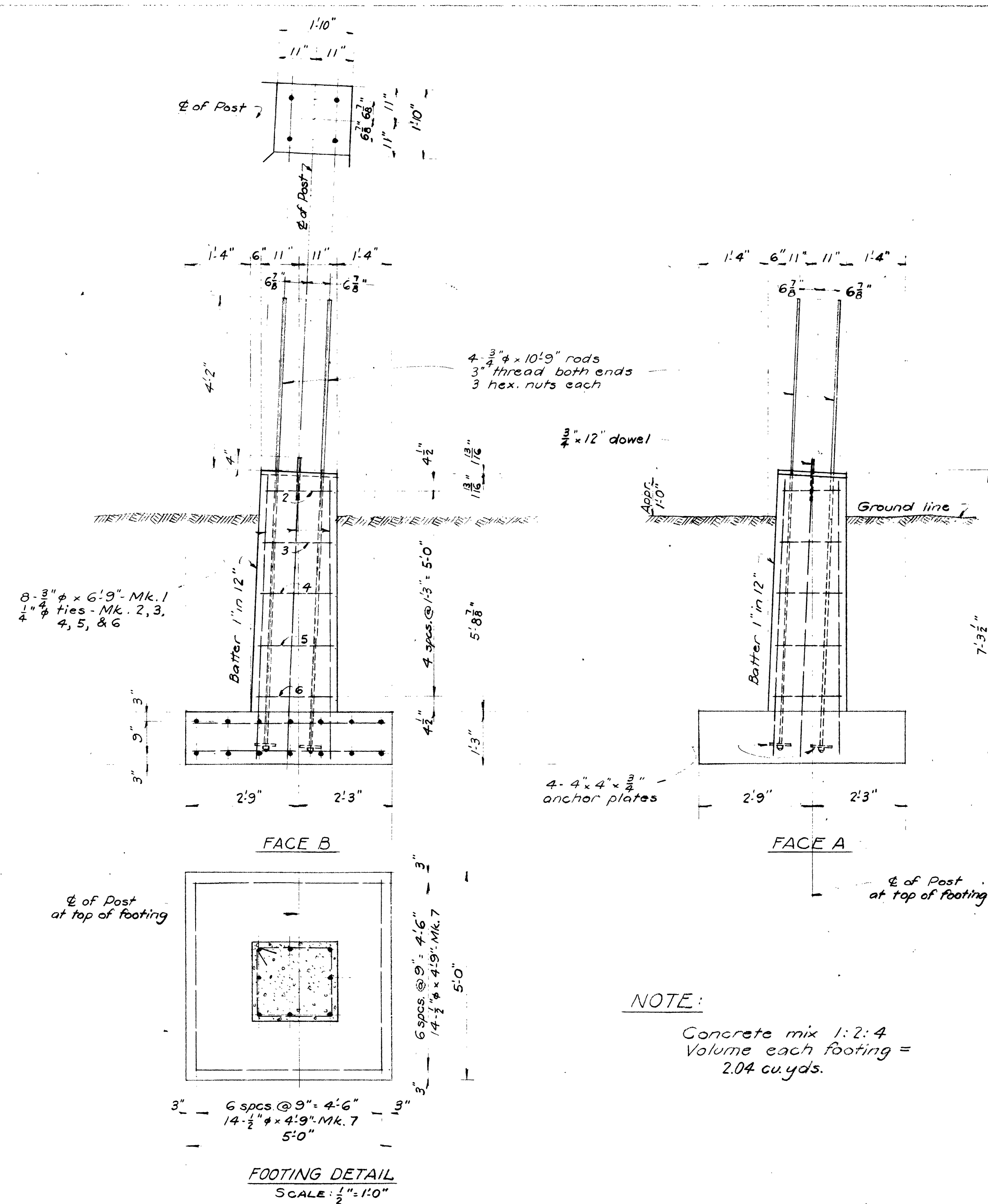
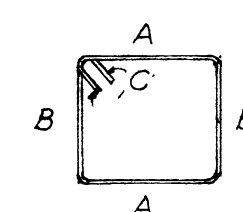


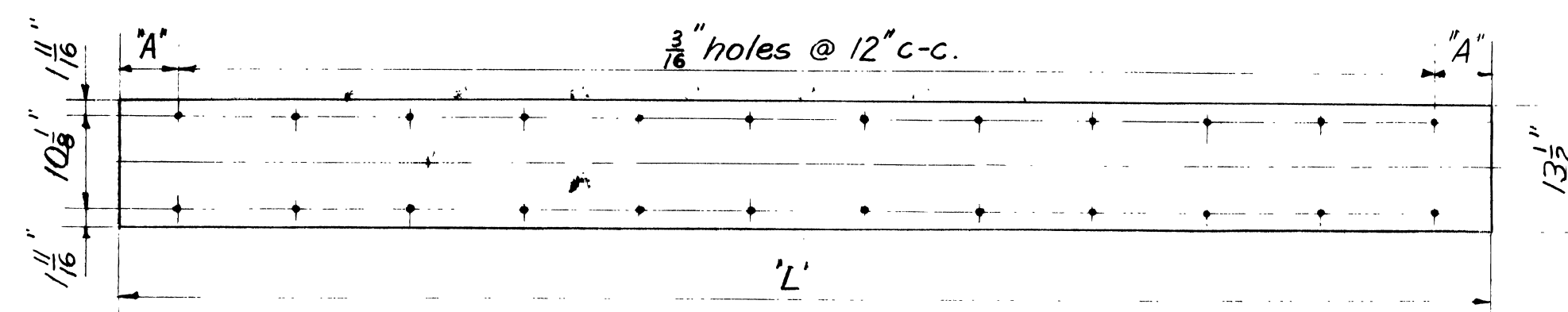
GENERAL PLAN
SCALE: $\frac{3}{8}$ " = 1'-0"



BILL OF REINFORCING STEEL								
ITEM	NO.	SIZE	LENGTH	MARK	TYPE	DIMENSIONS		
						A	B	C
1	32	$\frac{3}{4}$ " ϕ	6'-9"	1	Strght.			
2	4	$\frac{1}{4}$ " ϕ		2	"A"	18 $\frac{3}{8}$ "	10 $\frac{3}{8}$ "	3"
3	4	$\frac{1}{4}$ " ϕ		3	"A"	19 $\frac{5}{8}$ "	19 $\frac{3}{8}$ "	3"
4	4	$\frac{1}{4}$ " ϕ		4	"A"	20 $\frac{7}{8}$ "	20 $\frac{3}{8}$ "	3"
5	4	$\frac{1}{4}$ " ϕ		5	"A"	22 $\frac{1}{8}$ "	22 $\frac{1}{8}$ "	3"
6	4	$\frac{1}{4}$ " ϕ		6	"A"	23 $\frac{3}{8}$ "	23 $\frac{3}{8}$ "	3"
7	112	$\frac{1}{2}$ " ϕ	4'-9"	7	Strght.			

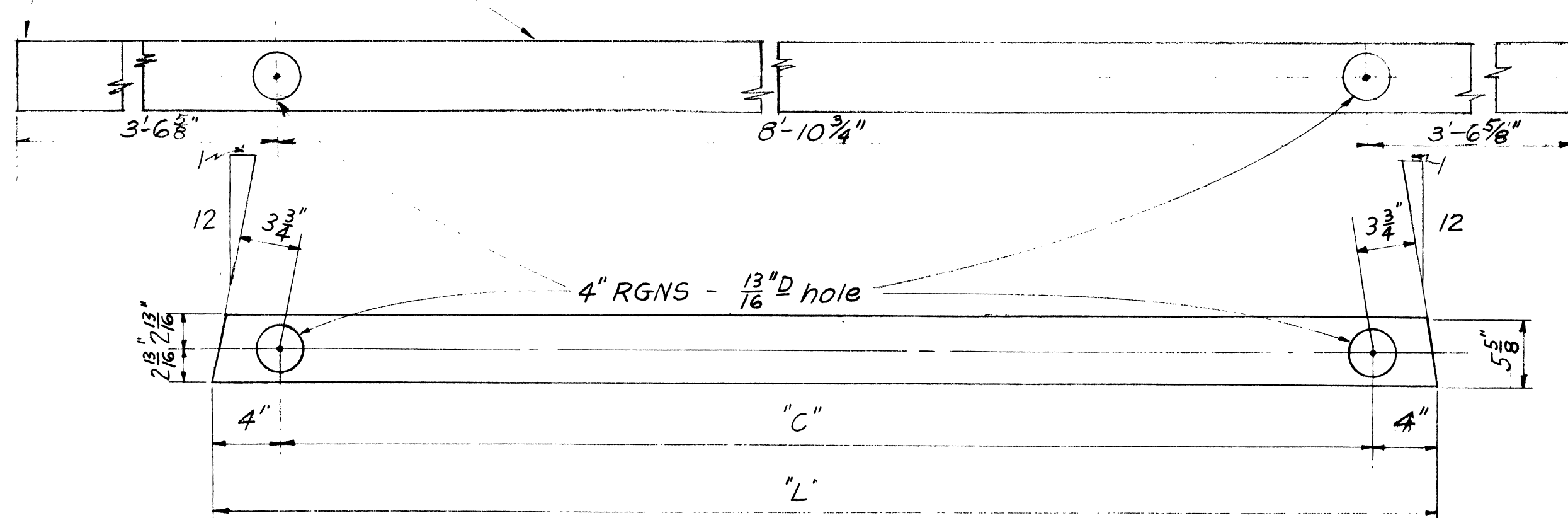


TYPE "A" BARS
All dimensions are out to out



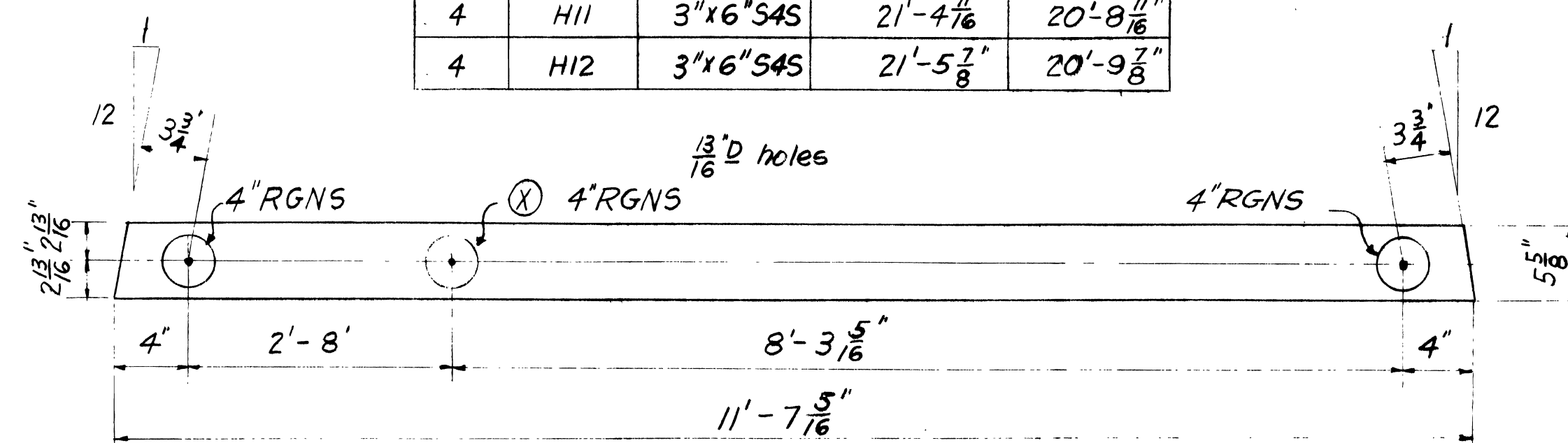
NO REQ'D	MEMBER	SIZE	LENGTH "L"	"A"
2	H2A	2"x14"S4S	8'-0"	6'
2	H3A	2"x14"S4S	9'-10"	5'
1	H4A	2"x14"S4S	9'-11"	5 1/2'
2	H5A	2"x14"S4S	12'-0"	6'
2	H6A	2"x14"S4S	12'-1"	6 1/2'
2	H7A	2"x14"S4S	14'-4"	2"
2	H8A	2"x14"S4S	14'-5"	2 1/2"
2	H9A	2"x14"S4S	16'-11"	5 1/2"
2	H10A	2"x14"S4S	17'-0"	6"
2	H11A	2"x14"S4S	19'-8"	4"
2	H12A	2"x14"S4S	19'-9"	4 1/2"
1	H4B	2"x14"S4S	7'-9"	4 1/2"

H1- MAKE 4 AS SHOWN

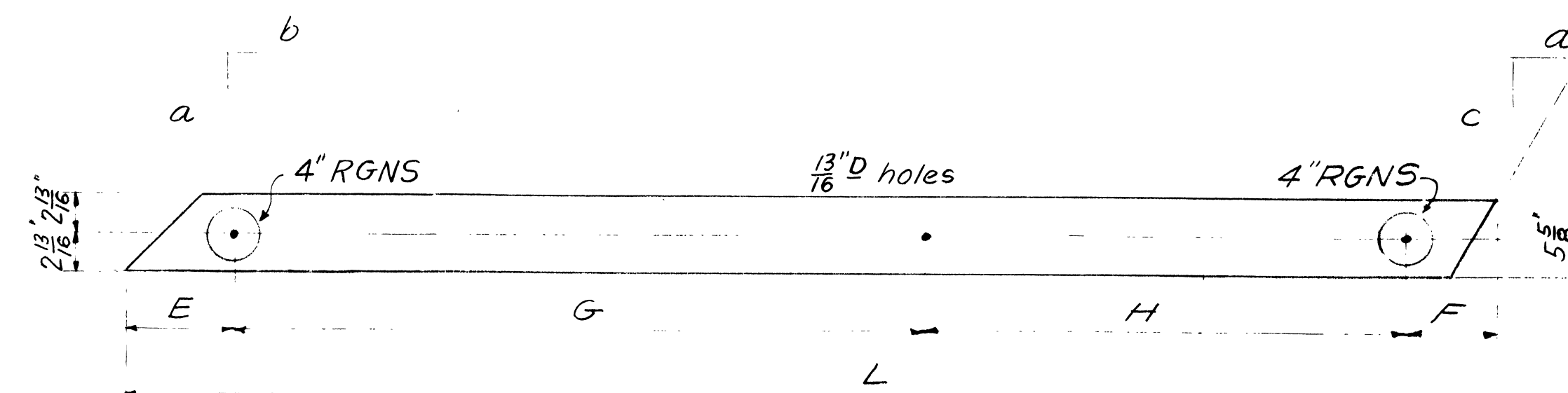


HORIZONTALS

NO REQ'D	MEMBER	SIZE	LENGTH "L"	"C"
4	H2	3"x6"S4S	9'-8 1/4"	9'-0 1/4"
4	H3	3"x6"S4S	11'-6 1/8"	10'-10 1/8"
2	H4	3"x6"S4S	11'-7 1/8"	10'-11 1/8"
4	H5	3"x6"S4S	13'-8 1/8"	13'-0 1/8"
4	H6	3"x6"S4S	13'-9 1/4"	13'-1 1/4"
4	H7	3"x6"S4S	16'-0 1/8"	15'-4 1/8"
4	H8	3"x6"S4S	16'-1 5/8"	15'-5 5/8"
4	H9	3"x6"S4S	18'-7 1/8"	17'-11 1/8"
4	H10	3"x6"S4S	18'-8 1/2"	18'-0 1/2"
4	H11	3"x6"S4S	21'-4 1/8"	20'-8 1/8"
4	H12	3"x6"S4S	21'-5 1/8"	20'-9 1/8"

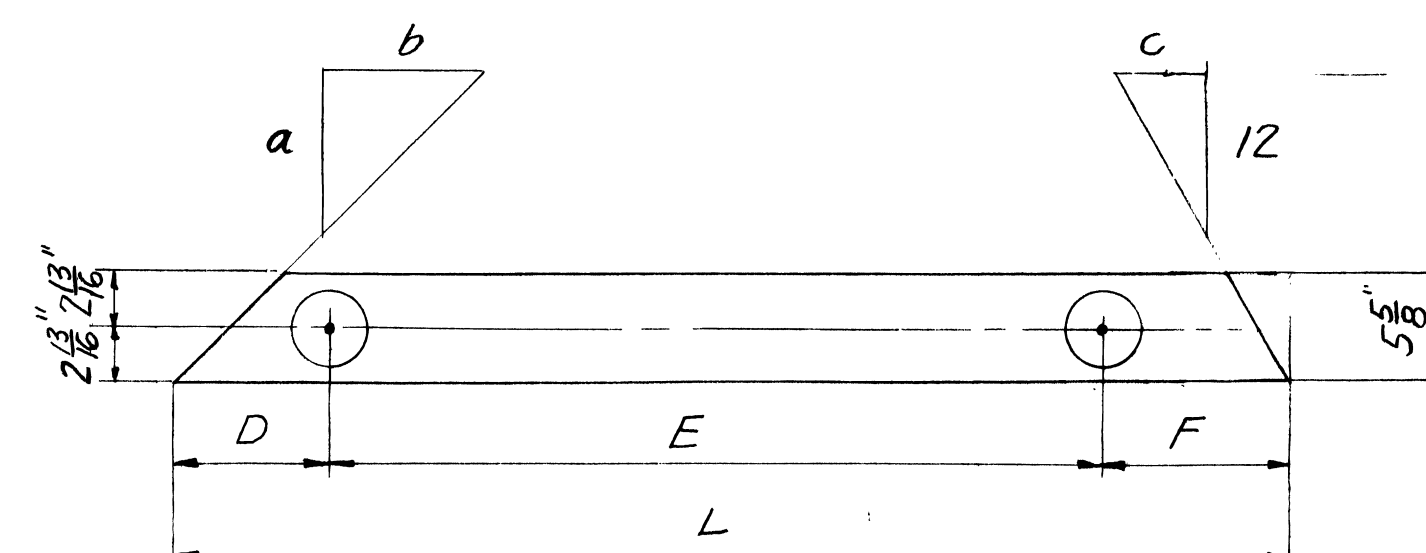


HORIZONTAL H4B
MAKE 1 AS SHOWN OMITTING
RING GROOVE
MAKE 1 OPPOSITE HAND



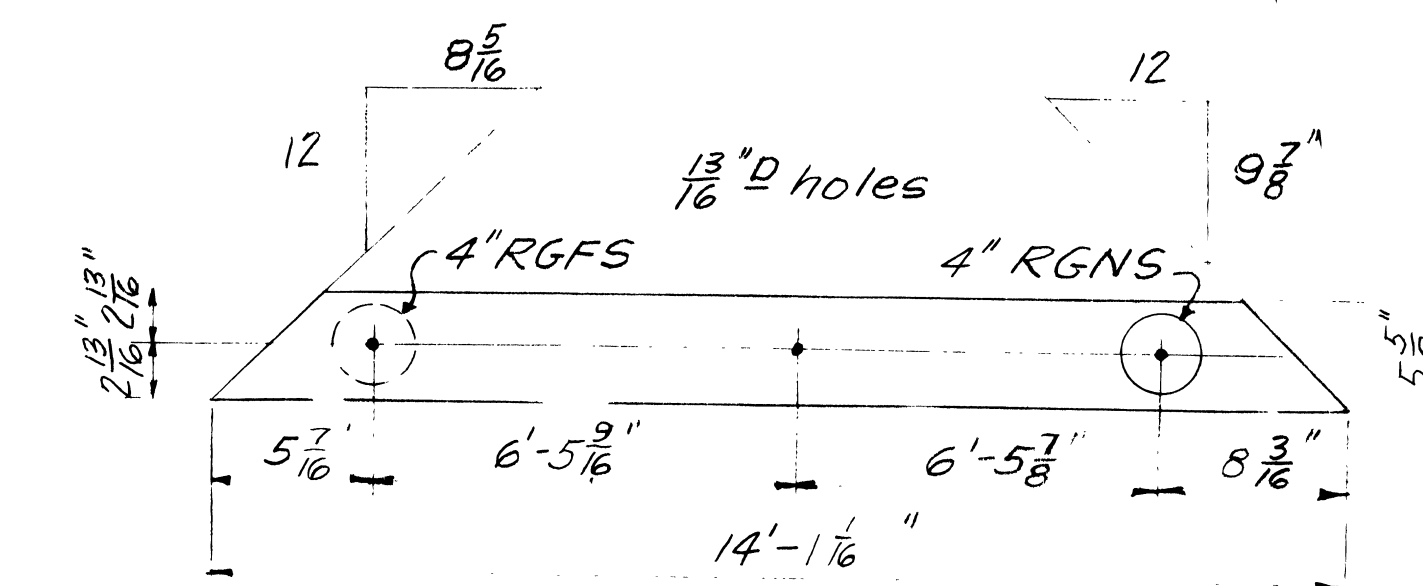
DIAGONALS

FRAME	NO REQ'D	MEMBER	SIZE	LENGTH "L"	a	b	c	d	E	F	G	H
As shown	4	D1	2"x6"S4S	15'-2 1/8"	10 7/16	12	12	9 7/8	10"	7 1/8	7'-5 3/8"	6'-4 1/8"
As shown	2	D2	2"x6"S4S	15'-4 5/8"	10 7/16	12	12	9 7/8	10"	7 1/8	7'-6 3/8"	6'-4 1/8"
As shown	2	D3 ^L	2"x6"S4S	17'-7 5/8"	10 15/16	12	12	9 3/8	9 3/4"	6 15/16	8'-9"	7'-5 1/8"
Opp hand	2	D3 ^R	2"x6"S4S	17'-7 5/8"	10 15/16	12	12	9 3/8	9 3/4"	6 15/16	8'-9"	7'-5 1/8"
As shown	2	D4 ^L	2"x6"S4S	17'-9 1/4"	10 15/16	12	12	9 3/8	9 3/4"	6 15/16	8'-9 3/8"	7'-6 1/8"
Opp hand	2	D4 ^R	2"x6"S4S	17'-9 1/4"	10 15/16	12	12	9 3/8	9 3/4"	6 15/16	8'-9 3/8"	7'-6 1/8"
As shown	2	D5 ^L	2"x6"S4S	20'-2"	11 1/16	12	12	8 13/16	9 3/8"	6 11/16	10'-1 3/8"	8'-8 3/8"
Opp hand	2	D5 ^R	2"x6"S4S	20'-2"	11 1/16	12	12	8 13/16	9 3/8"	6 11/16	10'-1 3/8"	8'-8 3/8"
As shown	2	D6 ^L	2"x6"S4S	20'-3 1/2"	11 1/16	12	12	8 13/16	9 3/8"	6 11/16	10'-2"	8'-9 1/8"
Opp hand	2	D6 ^R	2"x6"S4S	20'-3 1/2"	11 1/16	12	12	8 13/16	9 3/8"	6 11/16	10'-2"	8'-9 1/8"
As shown	2	D7 ^L	2"x6"S4S	22'-8"	12	11 9/16	12	8 3/16	7 15/16"	6 7/16"	11'-5 1/2"	10'-0 5/8"
Opp hand	2	D7 ^R	2"x6"S4S	22'-8"	12	11 9/16	12	8 3/16	7 15/16"	6 7/16"	11'-5 1/2"	10'-0 5/8"
As shown	2	D8 ^L	2"x6"S4S	22'-10 1/8"	12	11 9/16	12	8 3/16	7 15/16"	6 7/16"	11'-6 1/8"	10'-1"
Opp hand	2	D8 ^R	2"x6"S4S	22'-10 1/8"	12	11 9/16	12	8 3/16	7 15/16"	6 7/16"	11'-6 1/8"	10'-1"
As shown	2	D9 ^L	2"x6"S4S	25'-6"	12	10 7/8	12	7 1/4	7 3/8"	6 1/4"	12'-4 3/8"	11'-4 3/8"
Opp hand	2	D9 ^R	2"x6"S4S	25'-6"	12	10 7/8	12	7 1/4	7 3/8"	6 1/4"	12'-4 3/8"	11'-4 3/8"
As shown	2	D10 ^L	2"x6"S4S	25'-8 1/2"	12	11	12	7 13/16	7 5/8"	6 5/16"	13'-0 1/8"	11'-5 1/16"
Opp hand	2	D10 ^R	2"x6"S4S	25'-8 1/2"	12	11	12	7 13/16	7 5/8"	6 5/16"	13'-0 1/8"	11'-5 1/16"
As shown	1	D2B	2"x6"S4S	15'-4 5/8"	10 7/16	12	12	9 7/8	10"	7 1/8	6'-3 1/2"	7'-7 1/8"

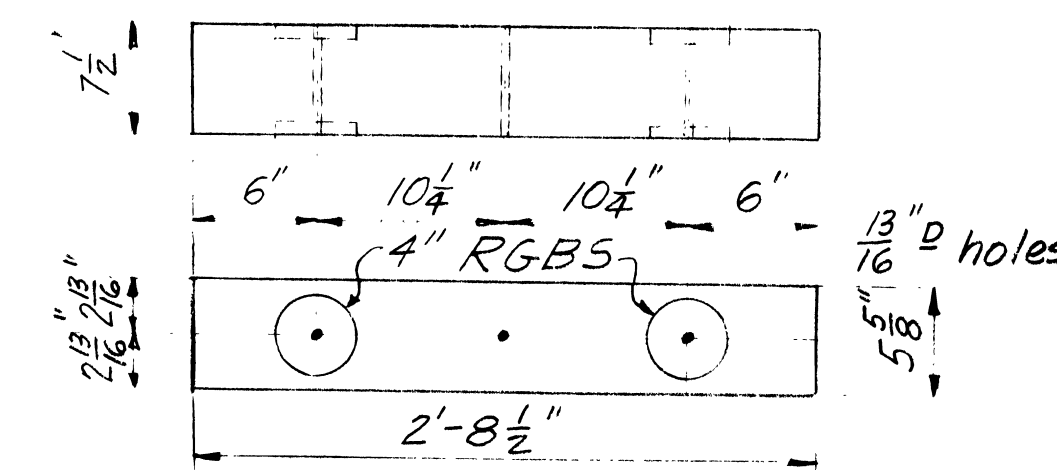


SUB DIAGONALS

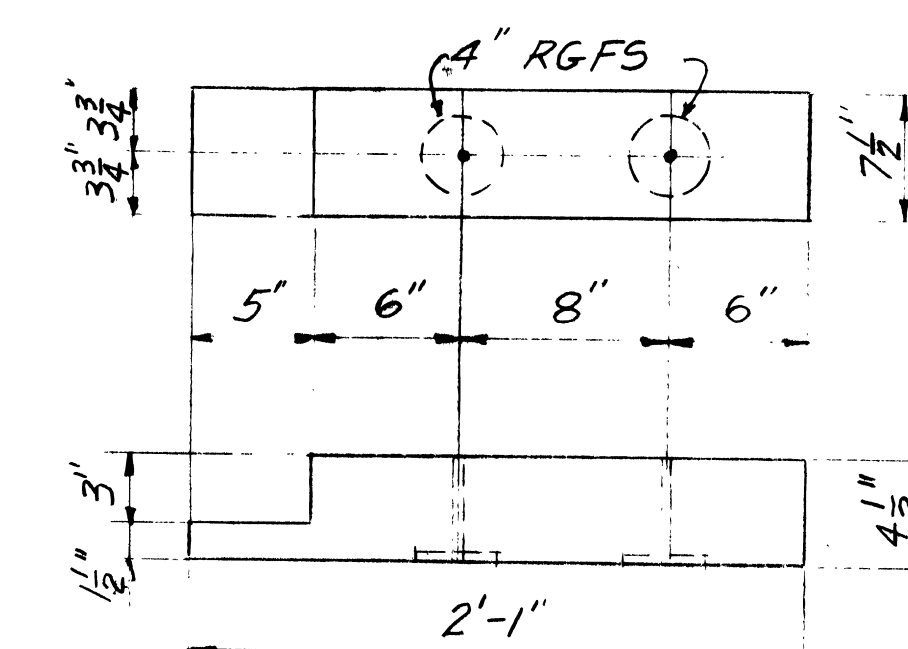
FRAME	NO REQ'D	MEMBER	SIZE	LENGTH "L"	a	b	c	D	E	F
As shown	2	D3A ^L	2"x6"S4S	7'-10 3/4"	12	9 3/8	0 15/16	6 15/16"	6'-7 1/8"	7 1/8"
Opp hand	2	D3A ^R	2"x6"S4S	7'-10 3/4"	12	9 3/8	0 15/16	6 15/16"	6'-7 1/8"	7 1/8"
As shown	2	D3B ^L	2"x6"S4S	9'-3 5/8"	10 15/16	12	0 15/16	9 3/8"	7'-10 3/4"	7 1/8"
Opp hand	2	D3B ^R	2"x6"S4S	9'-3 5/8"	10 15/16	12	0 15/16	9 3/8"	7'-10 3/4"	7 1/8"
As shown	2	D4A ^L	2"x6"S4S	7'-10 1/2"	12	9 3/8	0 15/16	6 15/16"	6'-8 1/2"	7 1/8"
Opp hand	2	D4A ^R	2"x6"S4S	7'-10 1/2"	12	9 3/8	0 15/16	6 15/16"	6'-8 1/2"	7 1/8"
As shown	2	D4B ^L	2"x6"S4S	9'-4 1/2"	10 15/16	12	0 15/16	9 3/8"	7'-11 5/8"	7 1/8"
Opp hand	2	D4B ^R	2"x6"S4S	9'-4 1/2"	10 15/16	12	0 15/16	9 3/8"	7'-11 5/8"	7 1/8"
As shown	2	D5A ^L	2"x6"S4S	9'-0 1/8"	12	8 13/16	1 1/16	6 1/16"	7'-10 1/2"	7 1/8"
Opp hand	2	D5A ^R	2"x6"S4S	9'-0 1/8"	12	8 13/16	1 1/16	6 1/16"	7'-10 1/2"	7 1/8"
As shown	2	D5B ^L	2"x6"S4S	10'-7 3/4"	11 1/16	12	1 1/16	9 3/8"	9'-2 1/4"	7 1/8"
Opp hand	2	D5B ^R	2"x6"S4S	10'-7 3/4"	11 1/16	12	1 1/16	9 3/8"	9'-2 1/4"	7 1/8"
As shown	2	D6A ^L	2"x6"S4S	9'-1 1/8"	12	8 13/16	1 1/16	6 1/16"	7'-11 3/8"	7 1/8"
Opp hand	2	D6A ^R	2"x6"S4S	9'-1 1/8"	12	8 13/16	1 1/16	6 1/16"	7'-11 3/8"	7 1/8"
As shown	2	D6B ^L	2"x6"S4S	10'-6 3/8"	11 1/16	12	1 1/16	9 3/8"	9'-1 3/4"	7 1/8"
Opp hand	2	D6B ^R	2"x6"S4S	10'-6 3/8"	11 1/16	12	1 1/16	9 3/8"	9'-1 3/4"	7 1/8"
As shown	2	D7A ^L	2"x6"S4S	10'-3 13/16"	12	8 3/16	2 1/2	6 7/16"	9'-1 7/8"	7 1/2"
Opp hand	2	D7A ^R	2"x6"S4S	10'-3 13/16"	12	8 3/16	2 1/2	6 7/16"	9'-1 7/8"	7 1/2"
As shown	2	D7B ^L	2"x6"S4S	11'-11 3/8"	12	11 9/16	2 1/2	9 3/8"	10'-7 1/4"	7 1/2"
Opp hand	2	D7B ^R	2"x6"S4S	11'-11 3/8"	12	11 9/16	2 1/2	9 3/8"	10'-7 1/4"	7 1/2"
As shown	2	D8A ^L	2"x6"S4S	10'-4 1/16"	12	8 3/16	2 1/2	6 7/16"	9'-2 3/8"	7 1/2"
Opp hand	2	D8A ^R	2"x6"S4S	10'-4 1/16"	12	8 3/16	2 1/2	6 7/16"	9'-2 3/8"	7 1/2"
As shown	2	D8B ^L	2"x6"S4S	12'-0 1/16"	12	11 9/16	2 1/2	9 3/8"	10'-7 1/4"	7 1/2"



D2A
2"x6"x14'-1 1/8" S4S
MAKE 1

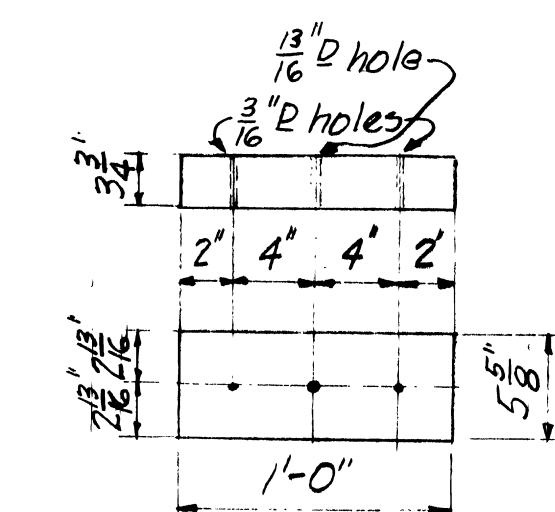


FILL BLOCKS
5 5/8" x 7 1/2" x 2'-8 1/2"
MARK F-2 MAKE 16



ANCHOR BLOCKS
4 1/2" x 7 1/2" x 2'-1"
MARK PAI MAKE 8

FRAME	NO REQ'D	MEMBER	SIZE	LENGTH "L"	a	b	c	D	E	F
Opp hand	2	D8B ^R	2"x6"S4S	12'-0 1/8"	12	11 9/16	2 1/2	9 3/8"	10'-7 1/4"	7 1/2"
As shown	2	D9A ^L	2"x6"S4S	11'-8 5/8"	12	7 1/16	3 1/4	6 1/4"	10'-6 1/2"	7 1/8"
Opp hand	2	D9A ^R	2"x6"S4S	11'-8 5/8"	12	7 1/16	3 1/4	6 1/4"	10'-6 1/2"	7 1/8"
As shown	2	D9B ^L	2"x6"S4S	13'-4 5/8"	12	10 3/8	3 1/4	7 3/8"	12'-1 1/8"	7 1/8"
Opp hand	2	D9B ^R	2"x6"S4S	13'-4 5/8"	12	10 3/8	3 1/4	7 3/8"	12'-1 1/8"	7 1/8"
As shown	2	D10A ^L	2"x6"S4S	11'-9 5/8"	12	7 13/16	3 1/6	6 5/16"	10'-7 1/4"	7 1/8"
Opp hand	2	D10A ^R	2"x6"S4S	11'-9 5/8"	12	7 13/16	3 1/6	6 5/16"	10'-7 1/4"	7 1/8"
As shown	2	D10B ^L	2"x6"S4S	13'-5 13/16"	12	11	3 1/6	7 3/8"	12'-2 3/8"	7 1/8"
Opp hand	2	D10B ^R	2"x6"S4S	13'-5 13/16"	12	11	3 1/6	7 3/8"	12'-2 3/8"	7 1/8"

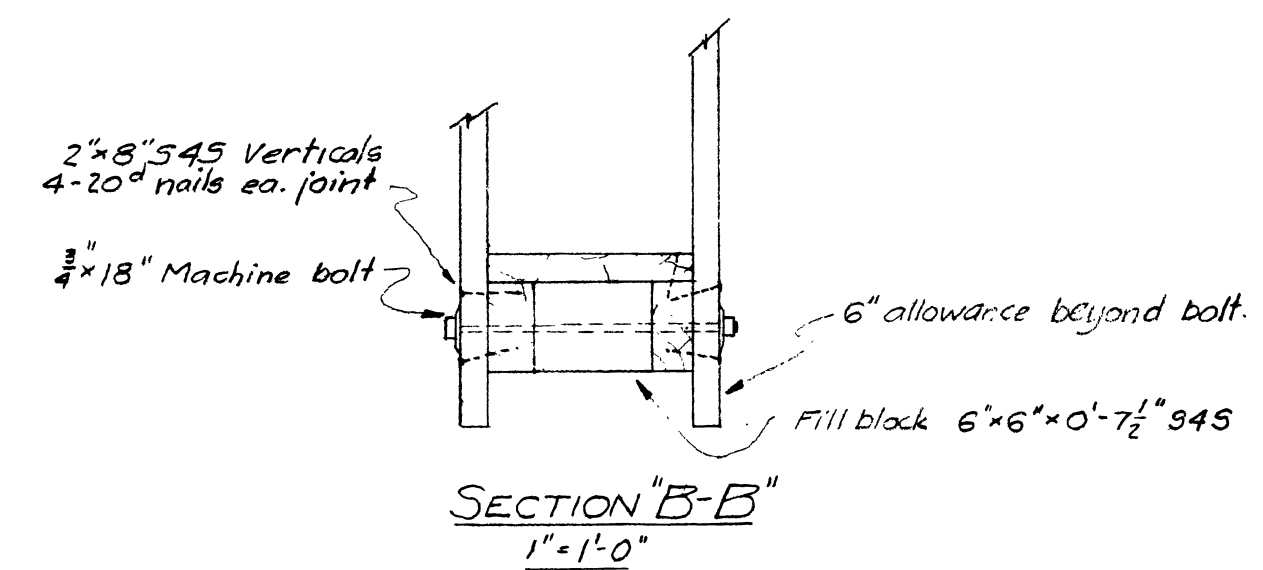
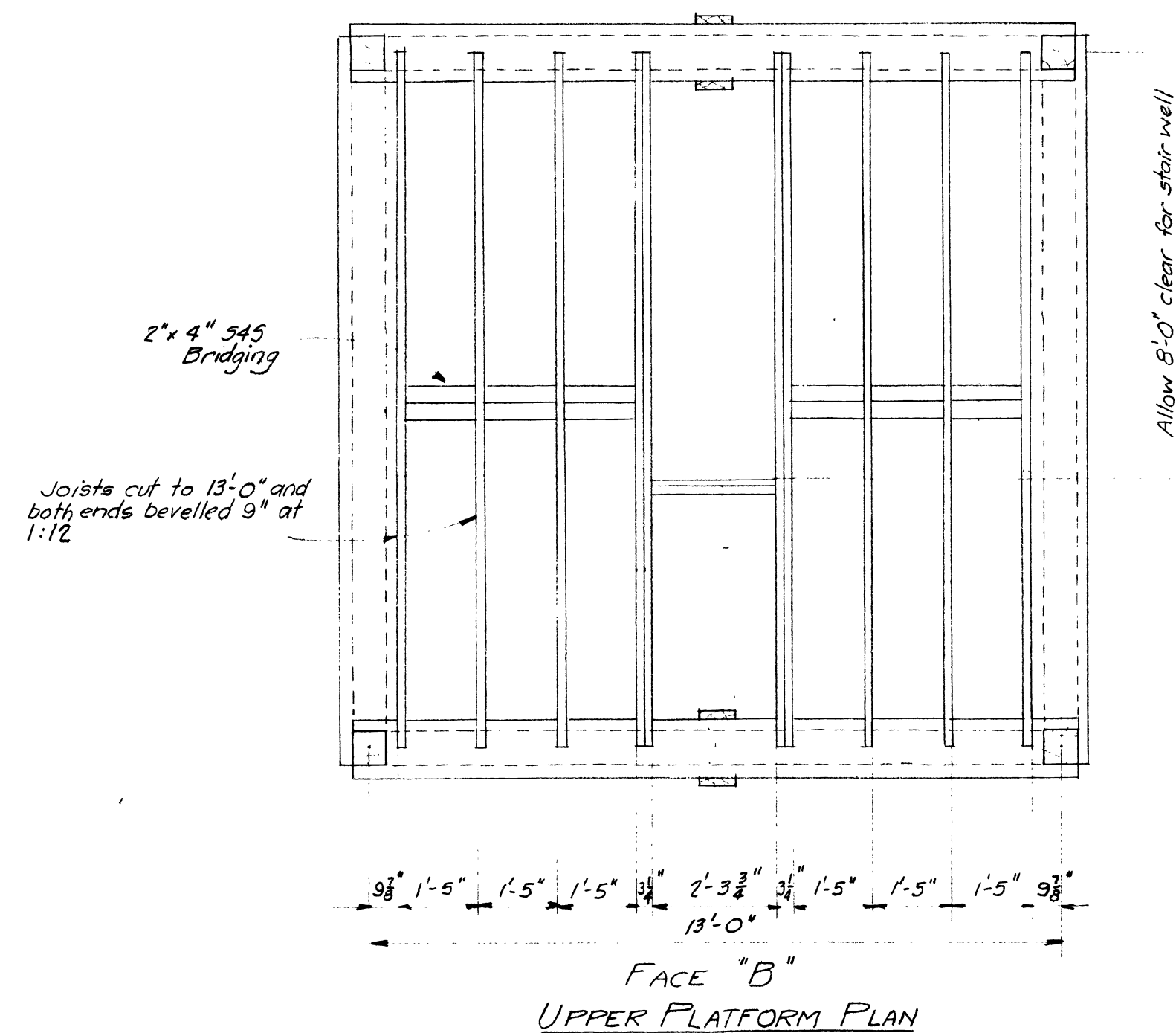
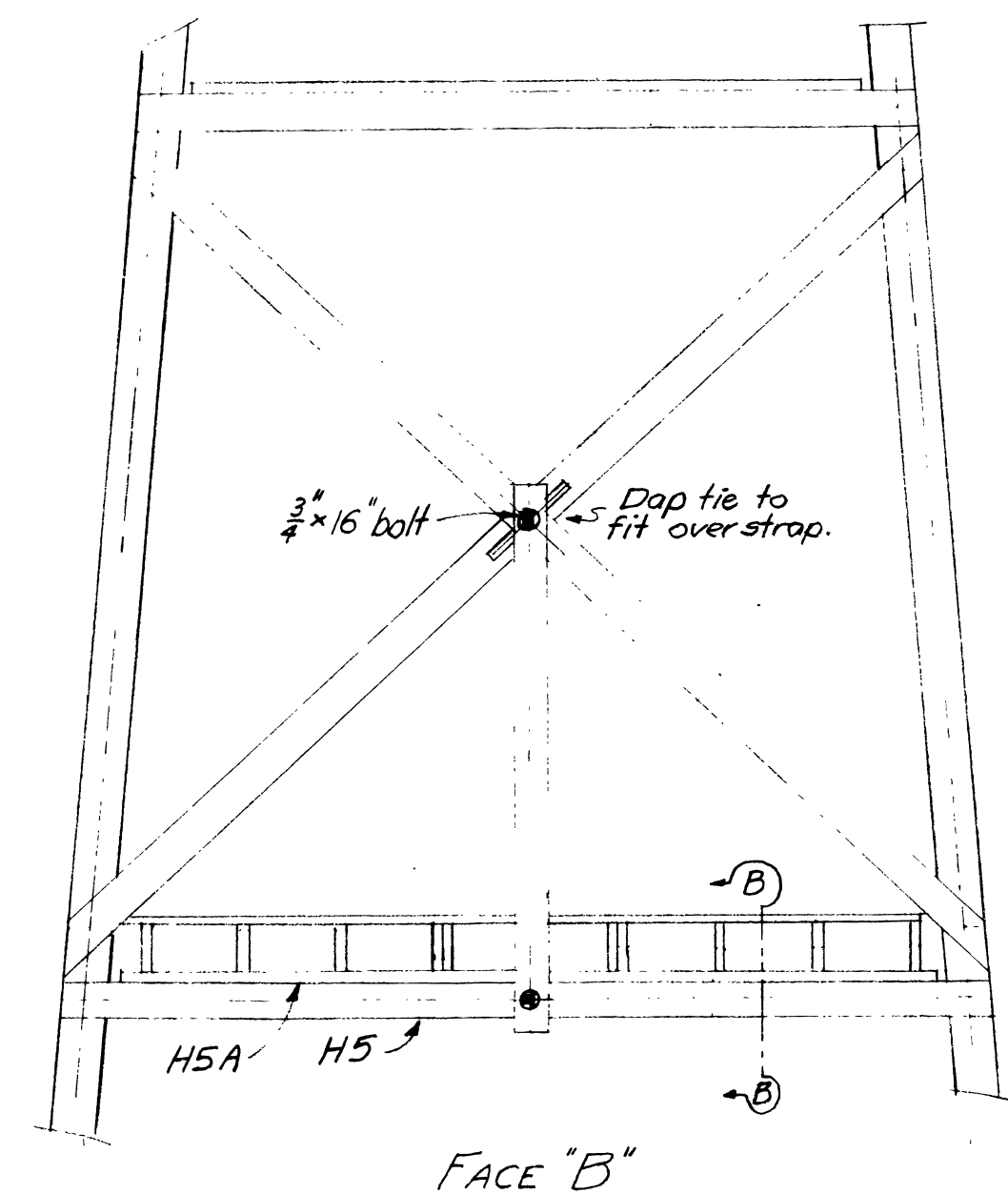


FILL BLOCK
3 3/4" x 5 5/8" x 1'-0"
MARK F-1, MAKE 8

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION SIX - JAMES FRANKLAND, ASST. REG. FORESTER

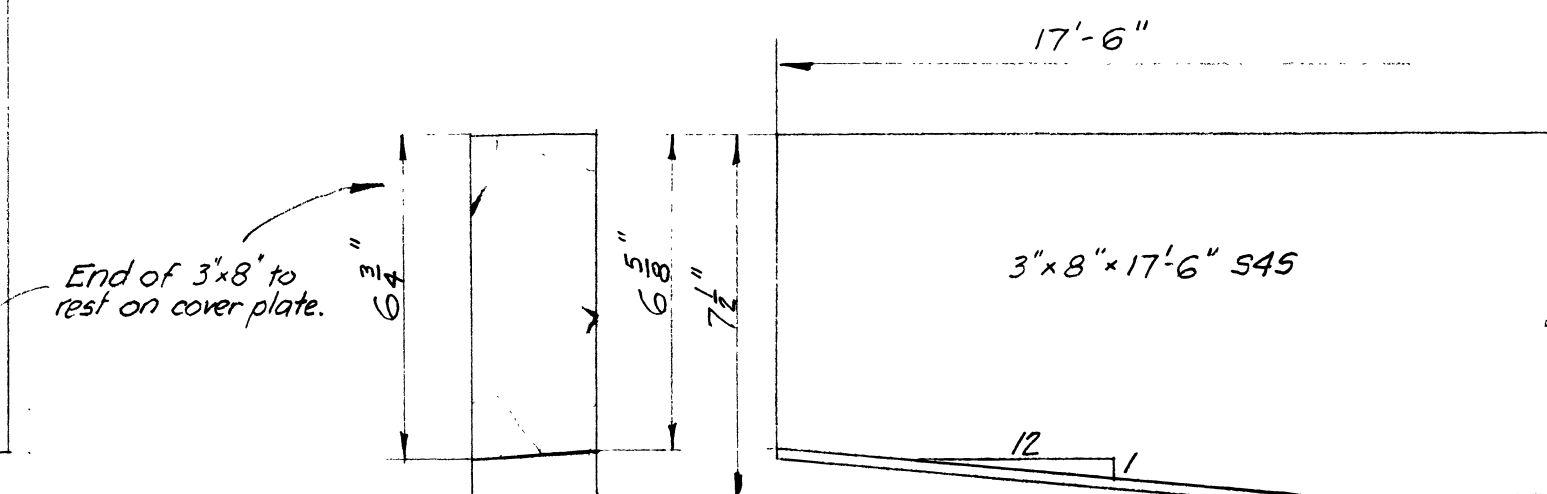
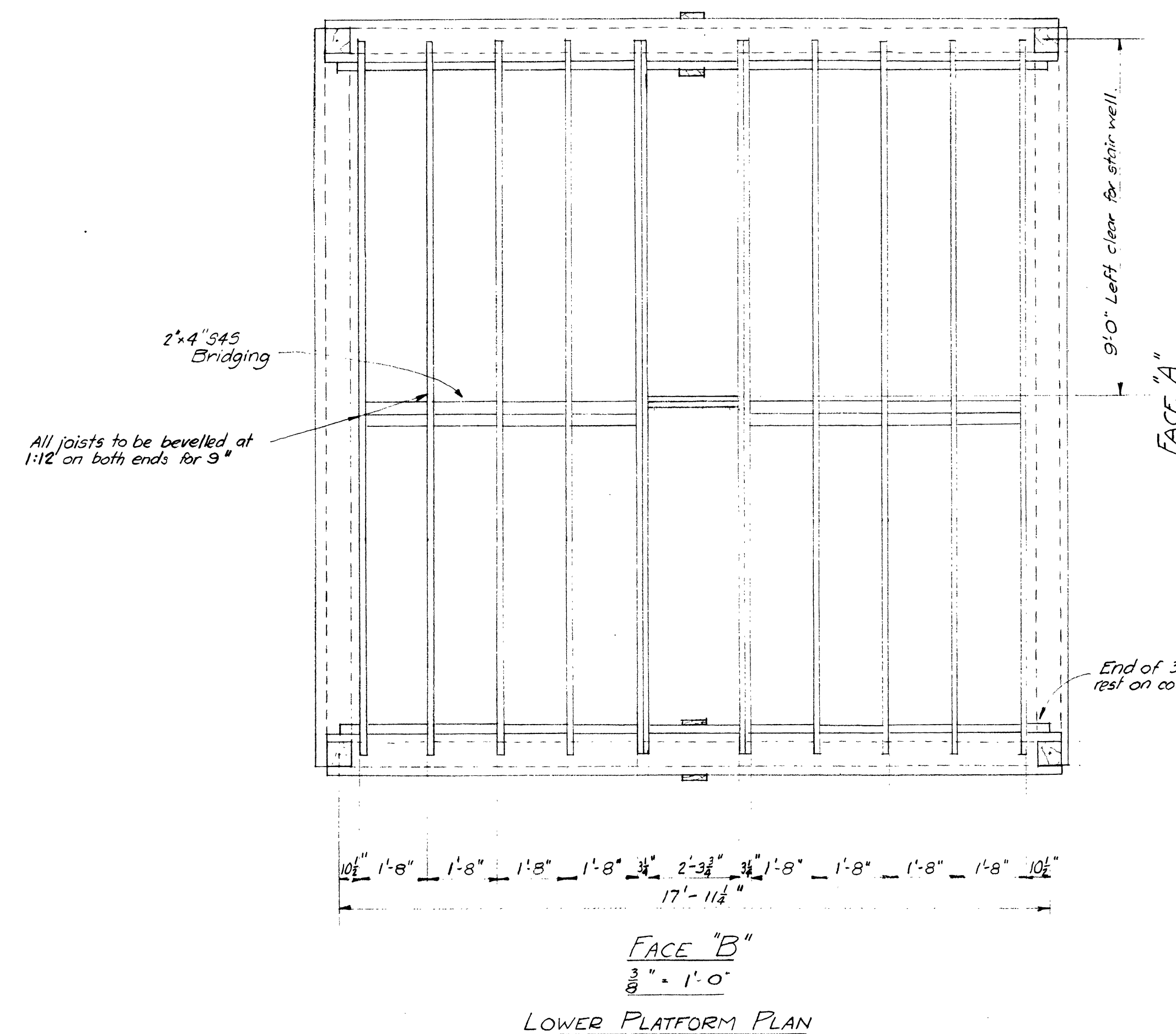
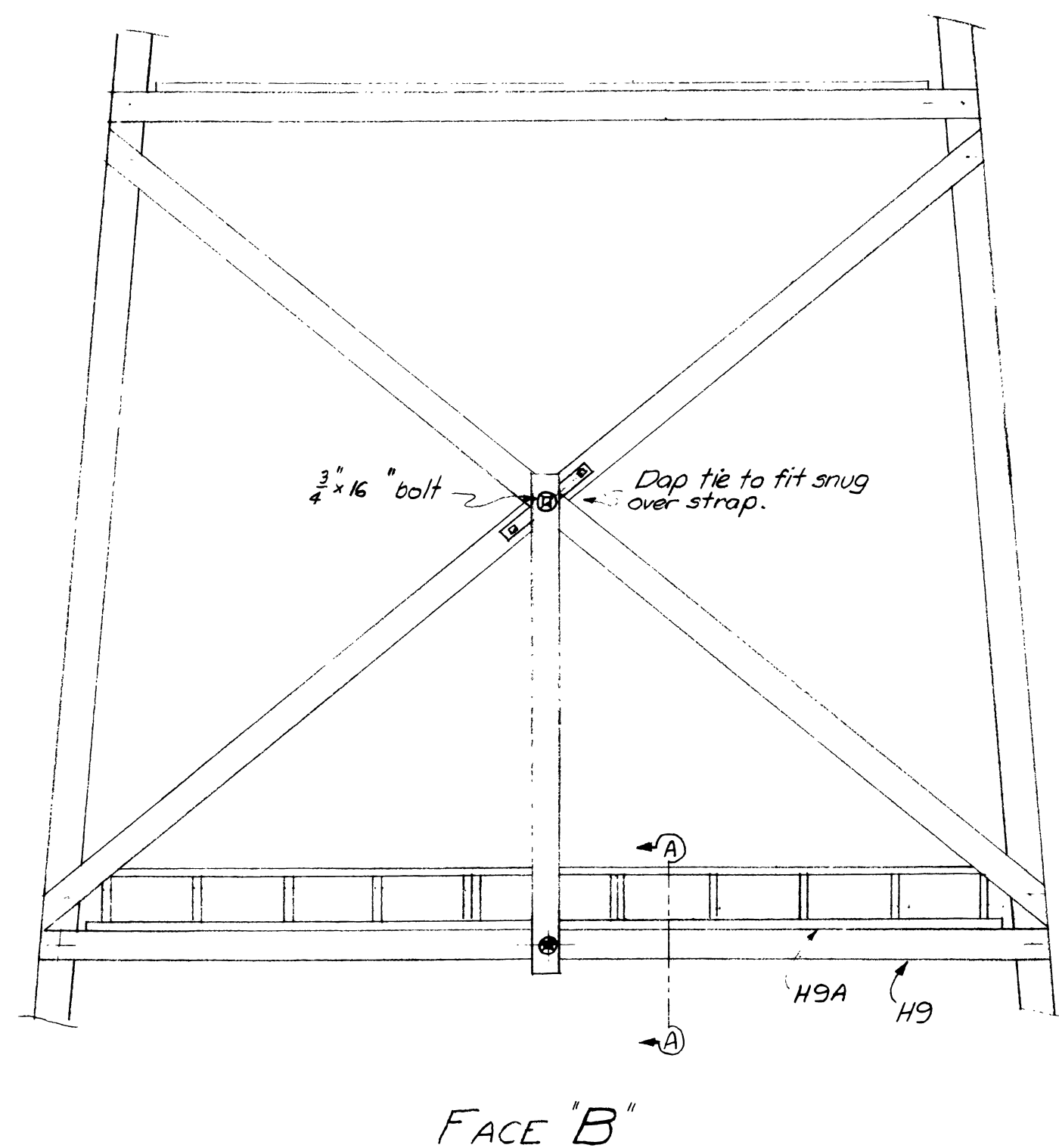
SHOP DETAILS
72'-3" TOWER
RADIO LABORATORY

DESIGNED - R.W.S. - DRAWN - R.W.S. - TRACED - R.W.S.
SCALE - NONE - CHECKED - R.W.S.
APPROVED - DATE - MAY 1937

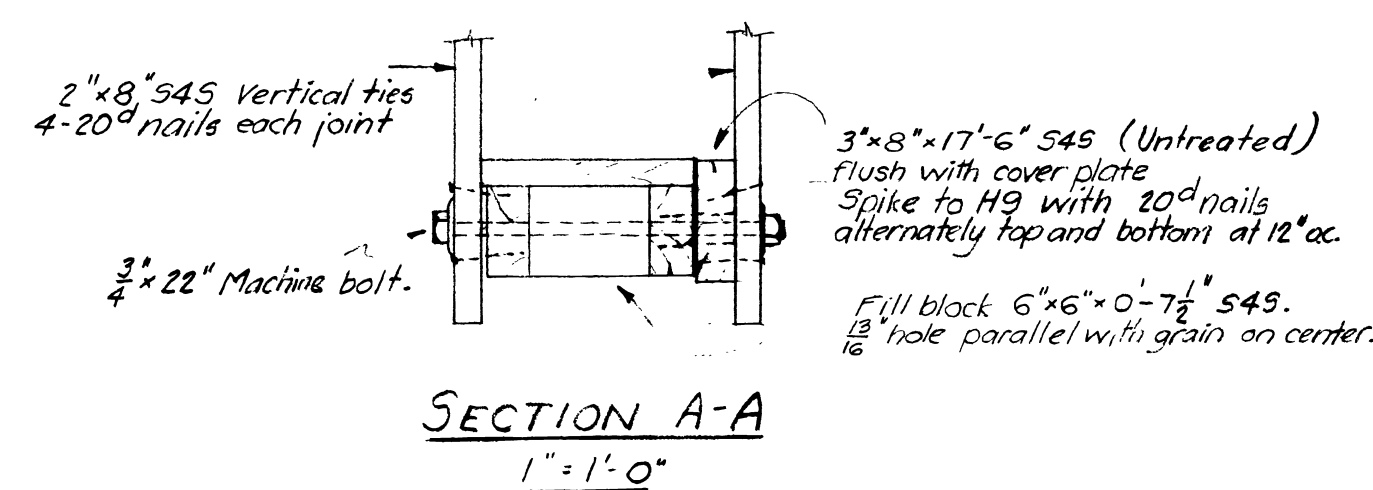


STRUCTURAL NOTES

1. The location of the third flight of stairs will be changed to bring the stair well in the center of the Upper Platform.
2. The Vertical Ties for both platforms must be set under initial compression. To do this the horizontals (H5, H9) must be deflected by means of block and tackle to $\frac{3}{8}$ ". Exact size ($\frac{3}{8}$ ") hole will be bored through ties and horizontals and swaged with hot creosote. Bolt then driven home and joint nailed. (See that nails are used at intersection of diagonals). Block and tackle released.
3. In constructing stairs, treads should be nailed from outside and toe-nailed from inside. In addition, a form wire under every fourth step will assist in preventing loosening by shrinkage.



Two pieces are required with ends cut as shown. These will rest on cover plate of lower horizontal and attach to H9 with 20" nails. (at 12" alternate top & bot). Top of piece to be flush with coverplate H9A.



U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION SIX J. FRANKLAND, REGIONAL ENGINEER

RADIO LABORATORY TOWER

DESIGNED B.C.O. DRAWN B.C.O. TRACED B.C.O.
SCALE Noted CHECKED Noted
APPROVED Noted DATE SEPT. 1937.
ASSISTANT REGIONAL FORESTER