

FRONT VIEW OF TRUSS ASSEMBLY
 SCALE: 3/8" = 1'-0"

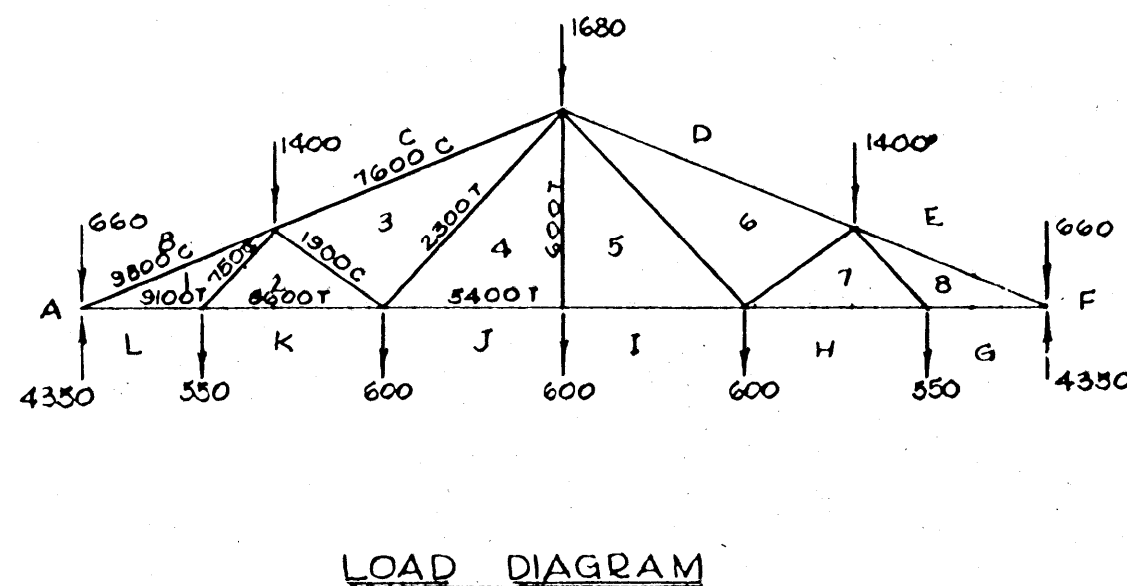
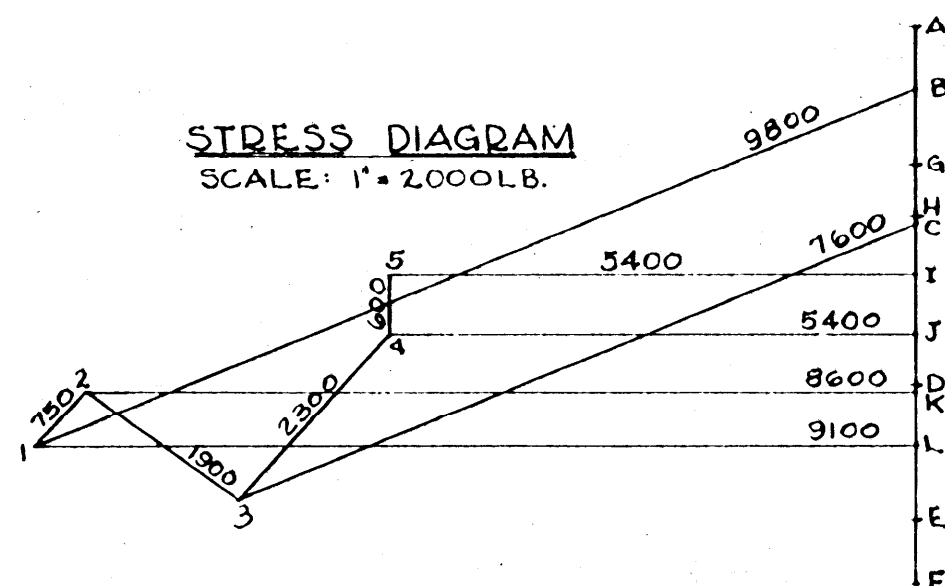
BILL OF MATERIALS FOR ONE TRUSS

PART	DESCRIPTION	SIZE	PCS	FBM
1	UPPER CHORD	2"x10"x24'-0"	2	80
2	LOWER CHORD	2"x6"x19'-3"	2	40
3	LONG TENSION DIAGONAL	1"x8"x12'-0"	2	12
4	SHORT TENSION DIAGONAL	1"x6"x6'-4"	2	6 2/3
5	COMPRESSION DIAGONAL	2"x4"x5'-0"	2	6 2/3
6	COMPRESSION DIAGONAL	1"x6"x6'-10"	2	7
8	HEEL JOINT GUSSET	1"x8"x3'-6"	4	9 1/3
9	CENTER SPLICE GUSSET	1"x8"x2'-6"	2	3 1/3
10	RIDGE JOINT GUSSET	1"x8"x3'-6"	1	2 1/3
TOTAL FBM				171
7	STEEL TENSION ROD	1/2" ϕ x 9'-6"	1	
	STEEL PLATE	4"x4"x1/4"	2	
	HELICALLY THREADED NAILS	12d	372	5.3 LB
	HELICALLY THREADED NAILS	8d	98	1.0 LB

NOTES:

- DESIGN LOADS:
 - DEAD LOAD PLUS LIVE LOAD ON ROOF: 35 LB/FT² OF HORIZONTAL PROJECTION
 - CEILING LOAD: 10 LB/FT²
 - CONCENTRATED LOADS: 300 LB. APPLIED AT EACH JOINT ALONG LOWER CHORD. 1500 LB. TOTAL. THESE LOADS MUST NOT BE APPLIED BETWEEN JOINTS.
- LUMBER: No 1 SOUTHERN PINE OR DOUGLAS FIR
 - 1200 LB/IN² COMPRESSION PARALLEL TO THE GRAIN + 15% FOR SNOW.
 - 1500 LB/IN² ALLOWABLE STRESS IN BENDING & DIRECT TENSION + 15% FOR SNOW.
 - 1,760,000 LB/IN² MODULUS OF ELASTICITY
- TRUSSES SPACED 4'-0" ON CENTERS.
- CAMBER: 1" AT CENTER SPLICE.
- NAILS: USE HELICALLY THREADED SCREWTITE NAILS OR EQUIVALENT.
 - 3/4" x 0.135" NAIL IN SINGLE SHEAR = 108 LB (12d)
 - 3/4" x 0.135" NAIL IN DOUBLE SHEAR = 216 LB (12d)
 - 2 1/2" x 0.120" NAIL IN SINGLE SHEAR = 94 LB (8d)
- DRIVE ALL NAILS FROM THE FRONT EXCEPT THOSE SHOWN AS \circ .
- USE TEMPLATE FOR LOCATING ALL NAILS
- LUMBER WIDTHS:

2"x10" = 9 1/2"	1"x8" = 7 1/2"
5"x6" = 5 1/2"	1"x6" = 5 1/2"
2"x4" = 3 5/8"	



COOPERATIVE EXTENSION WORK IN
 AGRICULTURE AND HOME ECONOMICS
 STATE OF MISSISSIPPI
 MISSISSIPPI STATE UNIVERSITY
 AND
 UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**40' NAILED TRUSS, 5 in 12 SLOPE
 FOR CAGED LAYERS**

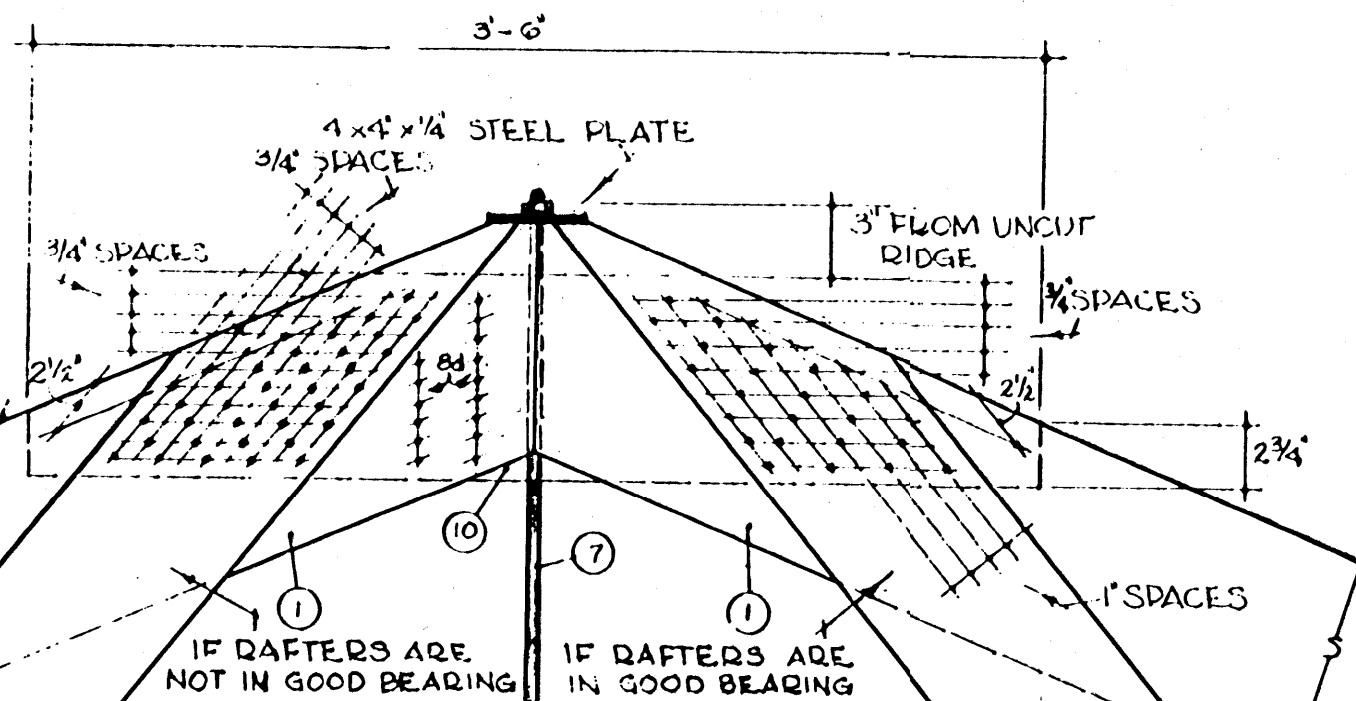
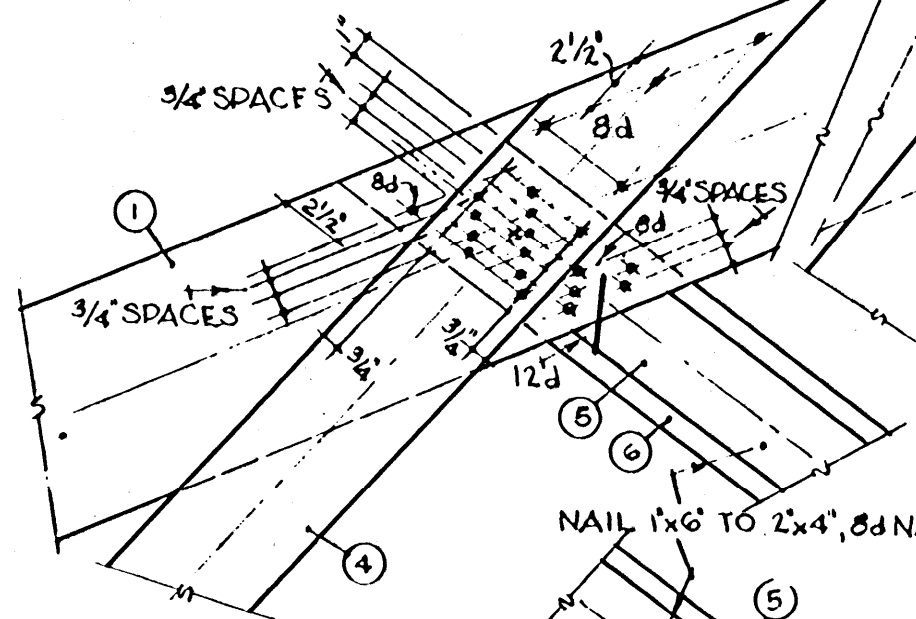
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NAILING NOTES:

1. DRIVE ALL NAILS FROM FRONT EXCEPT THOSE SHOWN AS
2. NAIL SPACING: (MINIMUM VALUES)
 END GRAIN: 2 1/2"
 EDGE GRAIN: 3/4"
 CROSS GRAIN: 3/4"
3. USE TEMPLATE TO LOCATE ALL NAILS

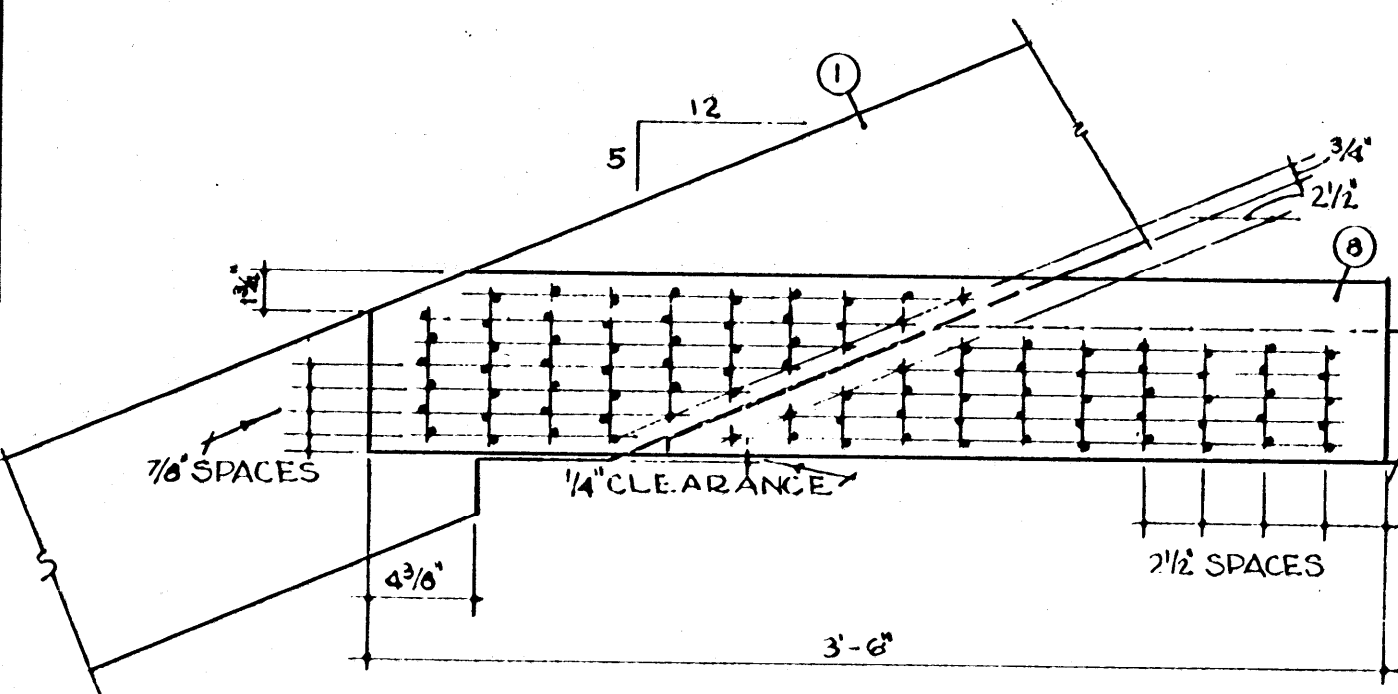
UPPER CHORD-DIAGONAL JOINT

10 8d NAILS
11 12d NAILS



RIDGE JOINT

1"x8" GUSSET, ONE SIDE
33 12d & 15 8d NAILS OR
22 12d NAILS EACH SIDE,
DEPENDING ON DAFTER FIT.
(66 12d & 30 8d OR 44 12d NAILS
TOTAL.)

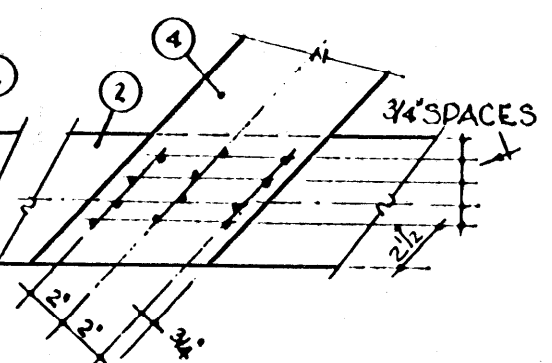


HEEL JOINT

1"x8" GUSSET PLATES, BOTH SIDES
93 12d NAILS

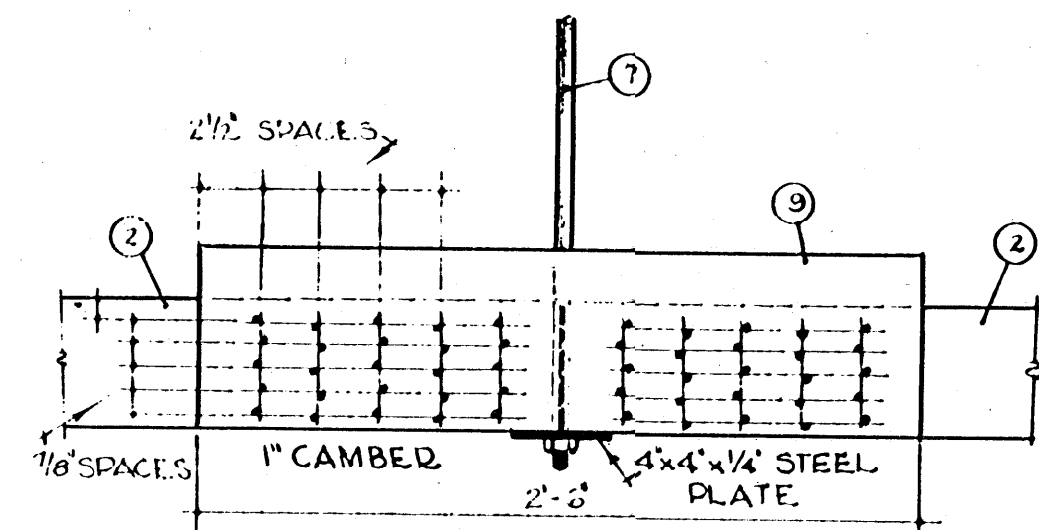
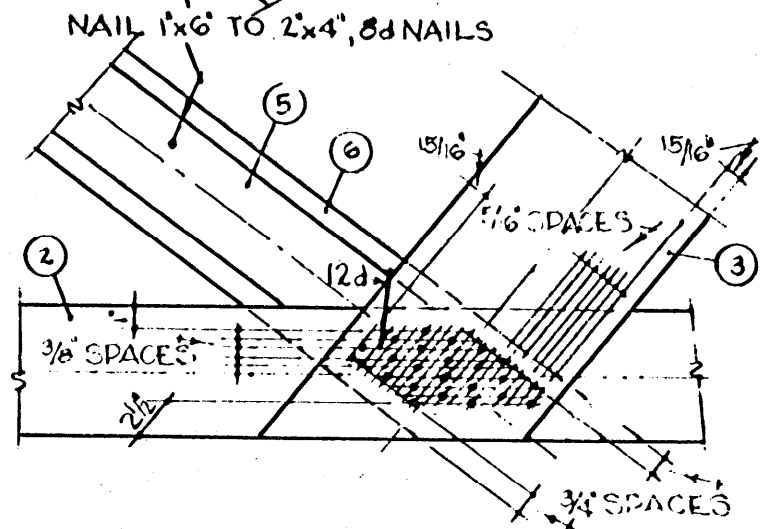
SHORT TENSION DIAGONAL TO LOWER CHORD JOINT

12 8d NAILS



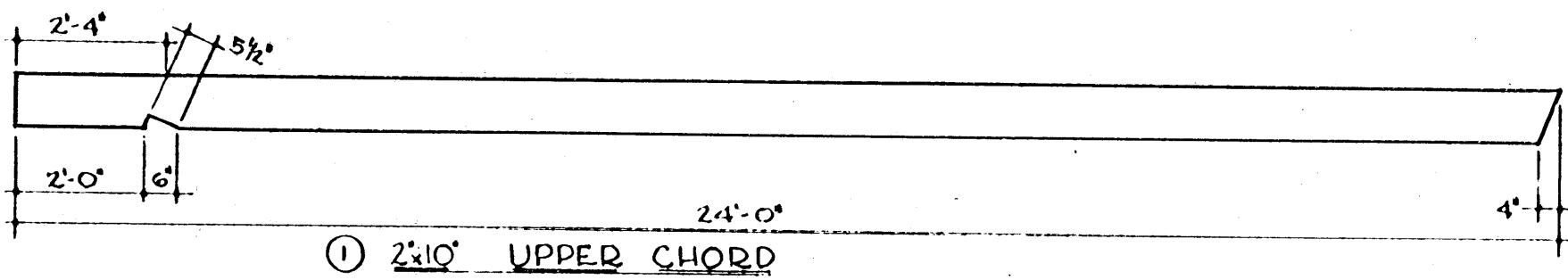
TENSION & COMPRESSION DIAGONALS TO LOWER CHORD JOINT

23 12d NAILS

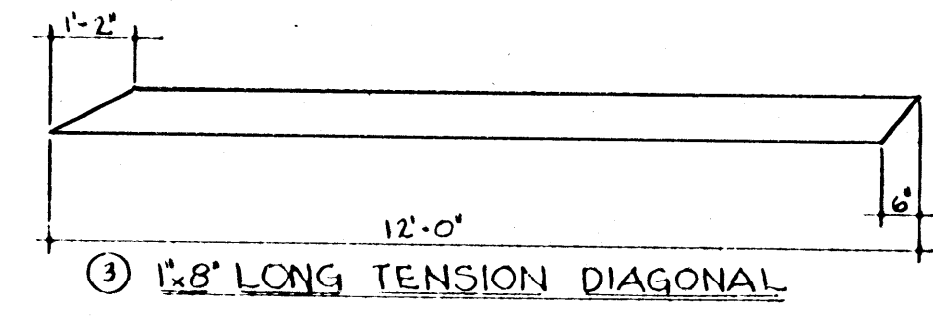


CENTER SPLICE JOINT

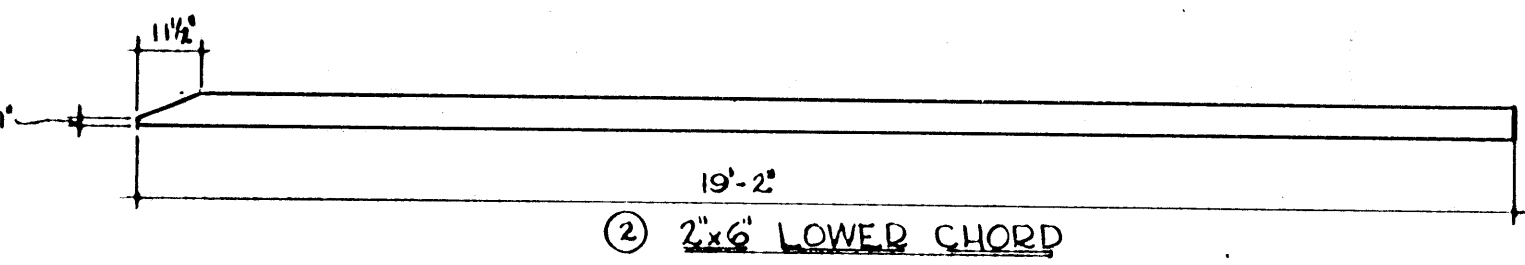
1"x8" GUSSET PLATES, BOTH SIDES
50 12d NAILS



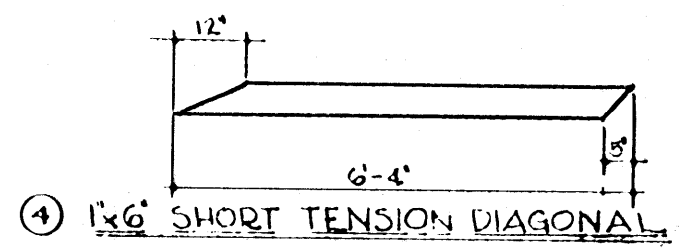
① 2x10 UPPER CHORD



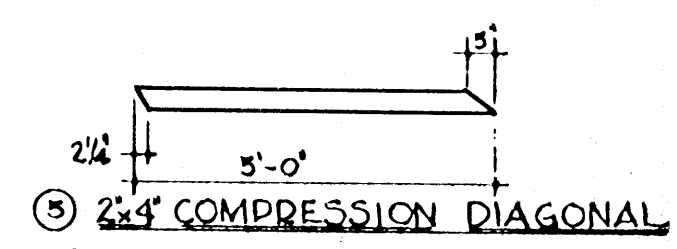
③ 1x8 LONG TENSION DIAGONAL



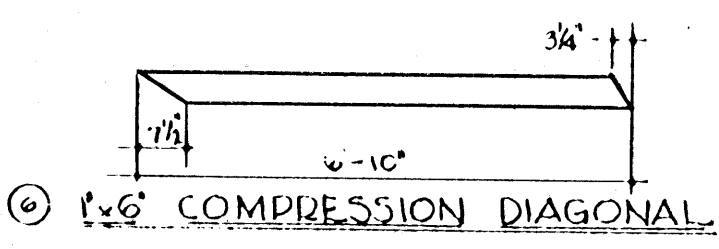
② 2x6 LOWER CHORD



④ 1x6 SHORT TENSION DIAGONAL



⑤ 2x4 COMPRESSION DIAGONAL



⑥ 1x6 COMPRESSION DIAGONAL

SCALE:
 JOINT DETAILS: 1/2" = 1'-0"
 MEMBER DETAILS: 3/8" = 1'-0"

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