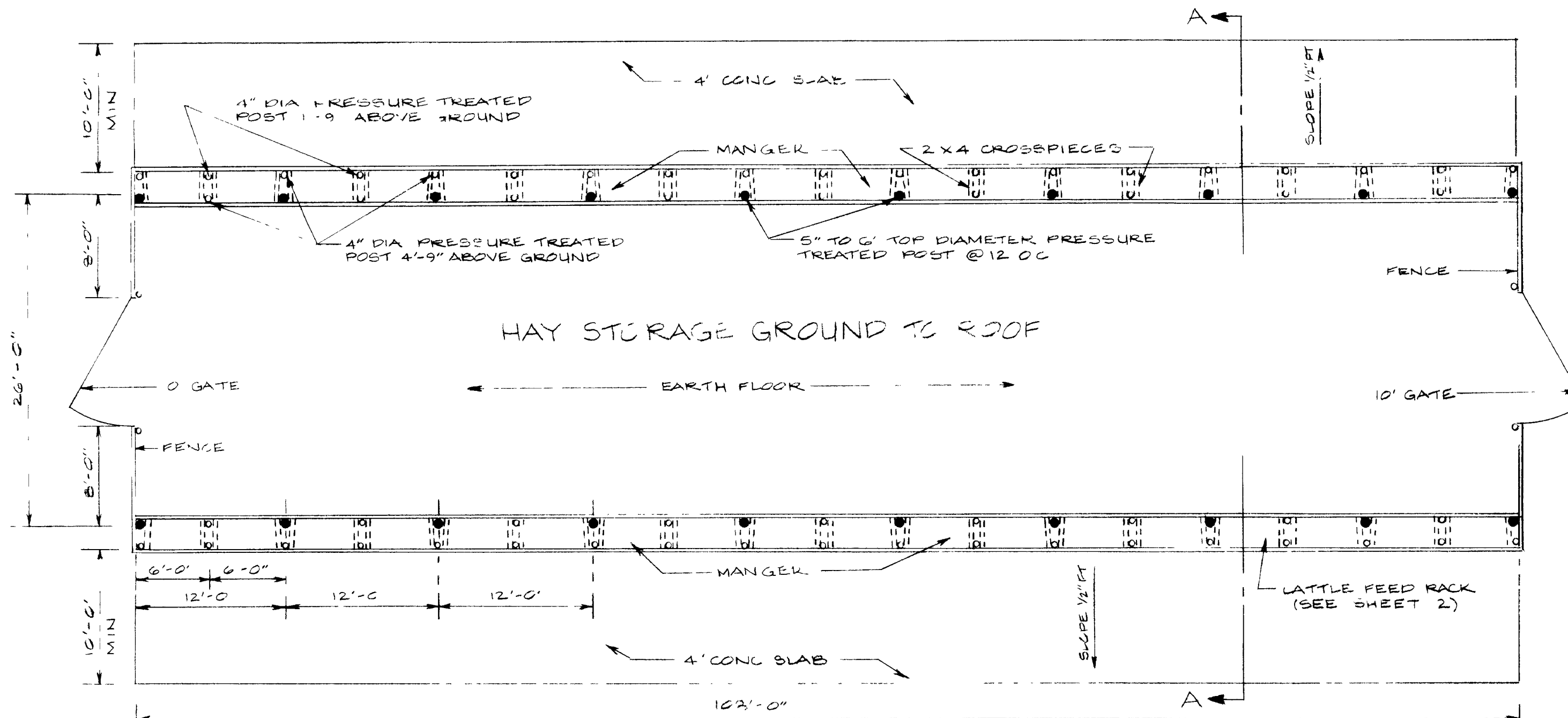


Important: Warranty Disclaimer for Plans

For the convenience of our clientele, this website makes available conceptual plans that can be helpful in planning buildings, facilities, or other structures. They were developed over many years by engineers at Land Grant universities through the former USDA Cooperative Farm Buildings Plan Exchange. *Regardless of the original intent, these are older plans that provide conceptual information only, and are not to be considered or used as construction plans.*

These plans do not claim to represent the most current technology or the most recent construction techniques, standards, or codes. For example, over the years there have been changes in the National Design Specifications for Wood Construction, changes in the strengths and types of building materials, and changes in fasteners, among other things. Those changes, along with variations in climate, building codes, and other factors, make it imperative that professional services be utilized for your specific project. Suggested services include, but are not limited to, structural design, assurance of compliance with codes and regulations, site selection, construction supervision, and provision for utilities, waste management, and access. *These plans do not replace the need for competent design assistance in developing safe, legal, and well-functioning agricultural buildings and systems.*

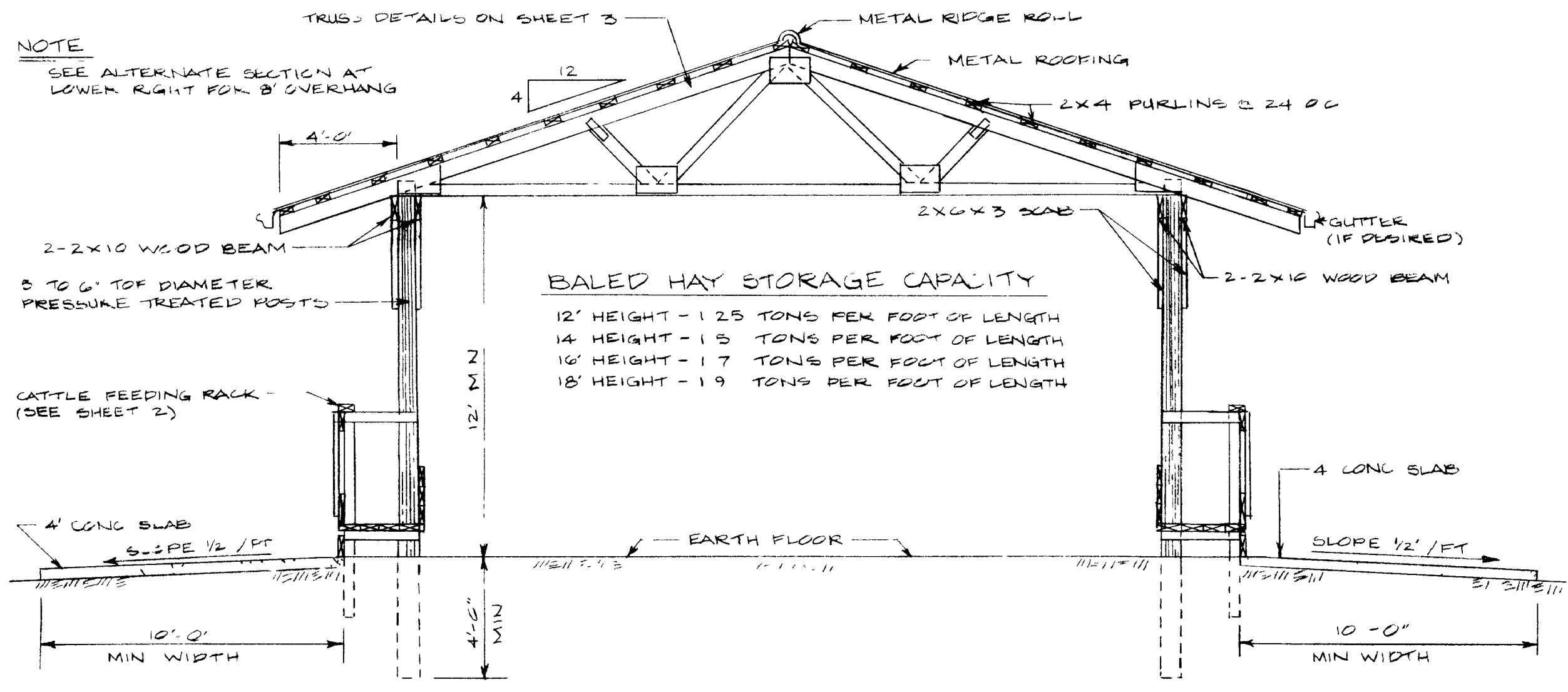
Neither the University of Kentucky, the Midwest Plan Service, the United States Department of Agriculture, nor any of the cooperating Land Grant universities, warranty these plans. They are for conceptual use only and are not for use as construction plans.



FLOOR PLAN

SCALE: 1/8" = 1'-0"

NOTE: ADJUST LENGTH TO ACCOMMODATE TOTAL HERD, PROVIDING 24" EACH SIDE PER COW FOR "LIMITED QUANTITY" FEEDING OR 6" ON EACH IF FREE CHOICE FEEDING

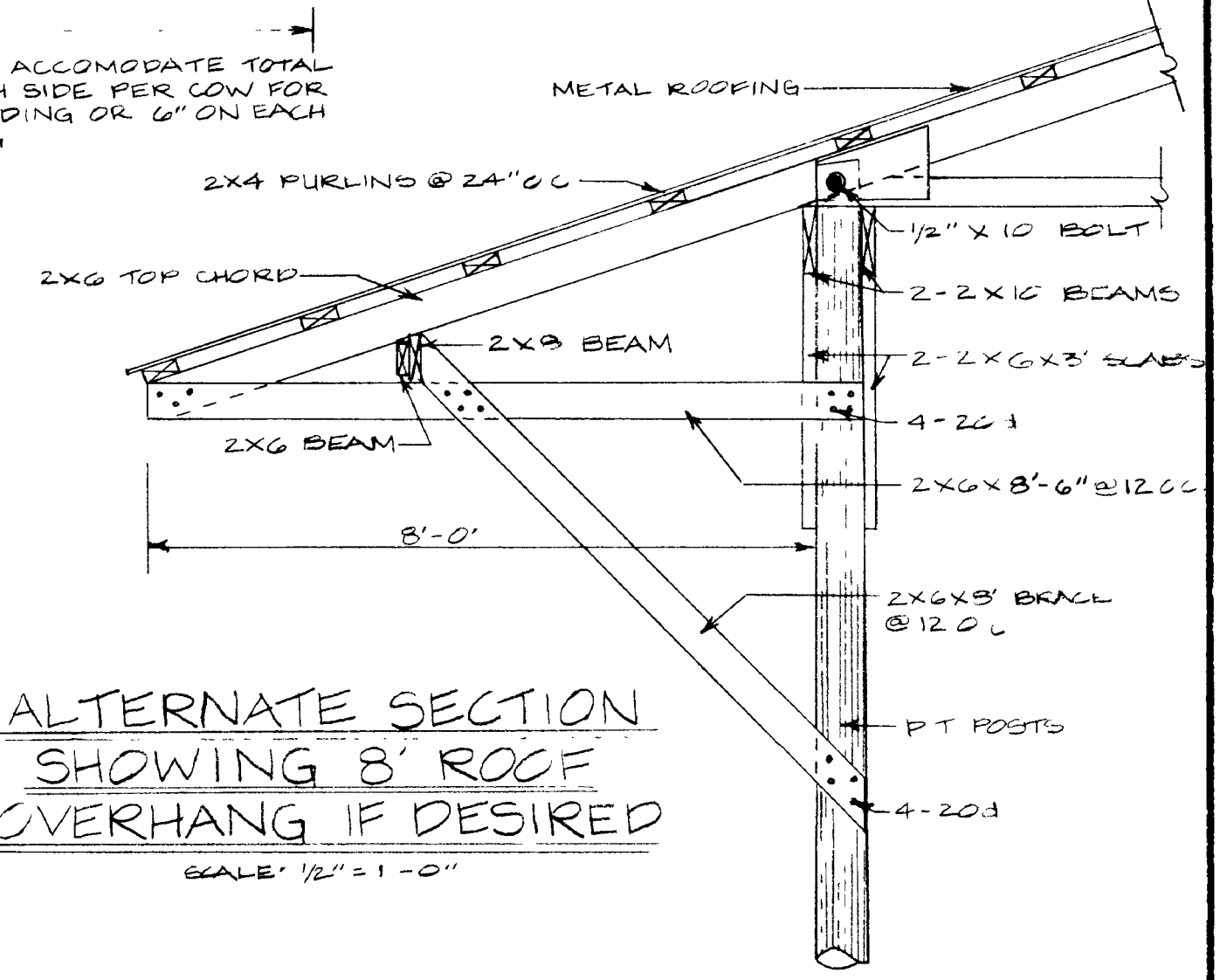


BALED HAY STORAGE CAPACITY

12' HEIGHT	- 1.25 TONS PER FOOT OF LENGTH
14' HEIGHT	- 1.5 TONS PER FOOT OF LENGTH
16' HEIGHT	- 1.7 TONS PER FOOT OF LENGTH
18' HEIGHT	- 1.9 TONS PER FOOT OF LENGTH

CROSS SECTION A-A

SCALE: 1/4" = 1'-0"



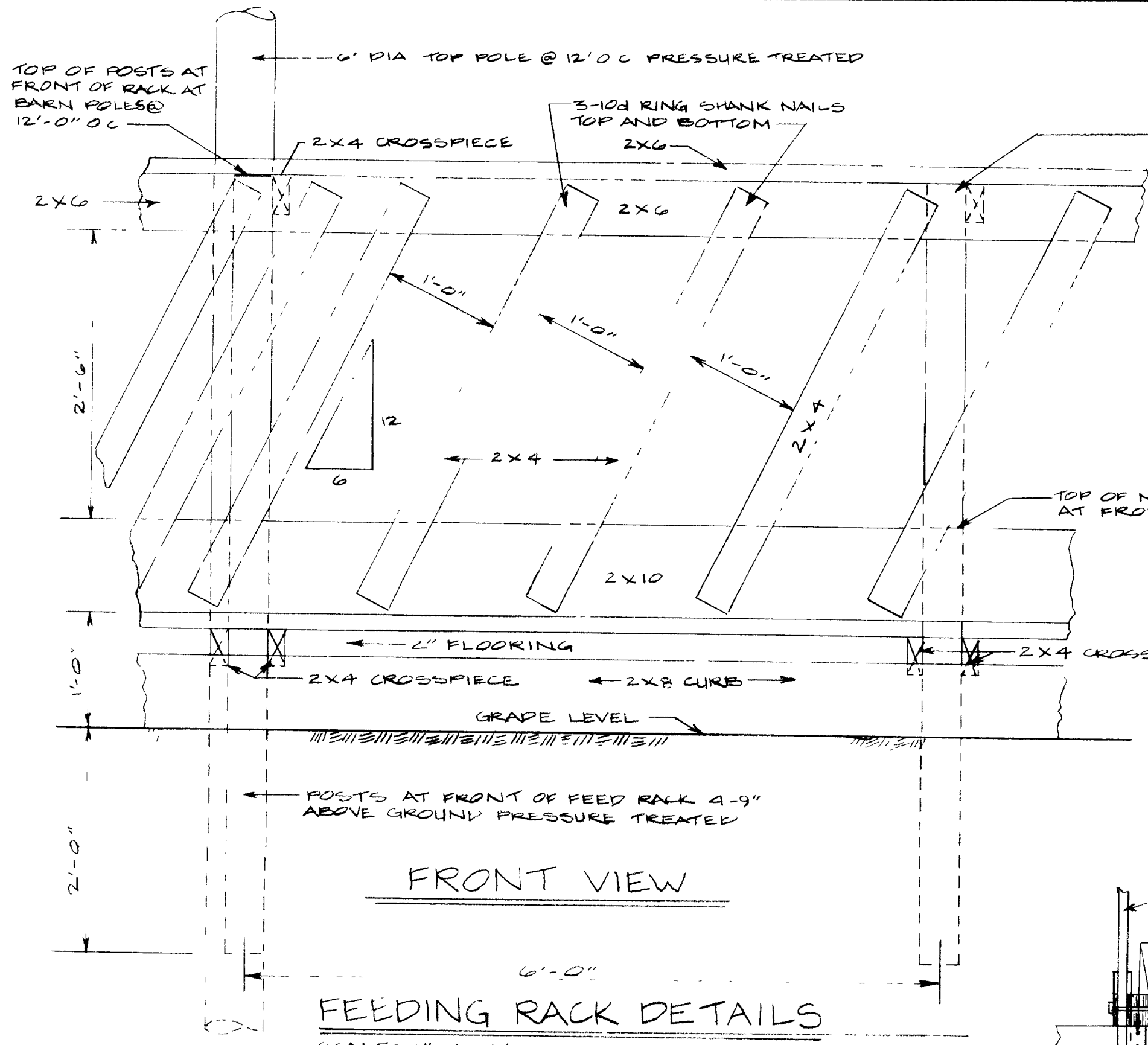
ALTERNATE SECTION SHOWING 8' ROOF OVERHANG IF DESIRED

SCALE: 1/2" = 1'-0"

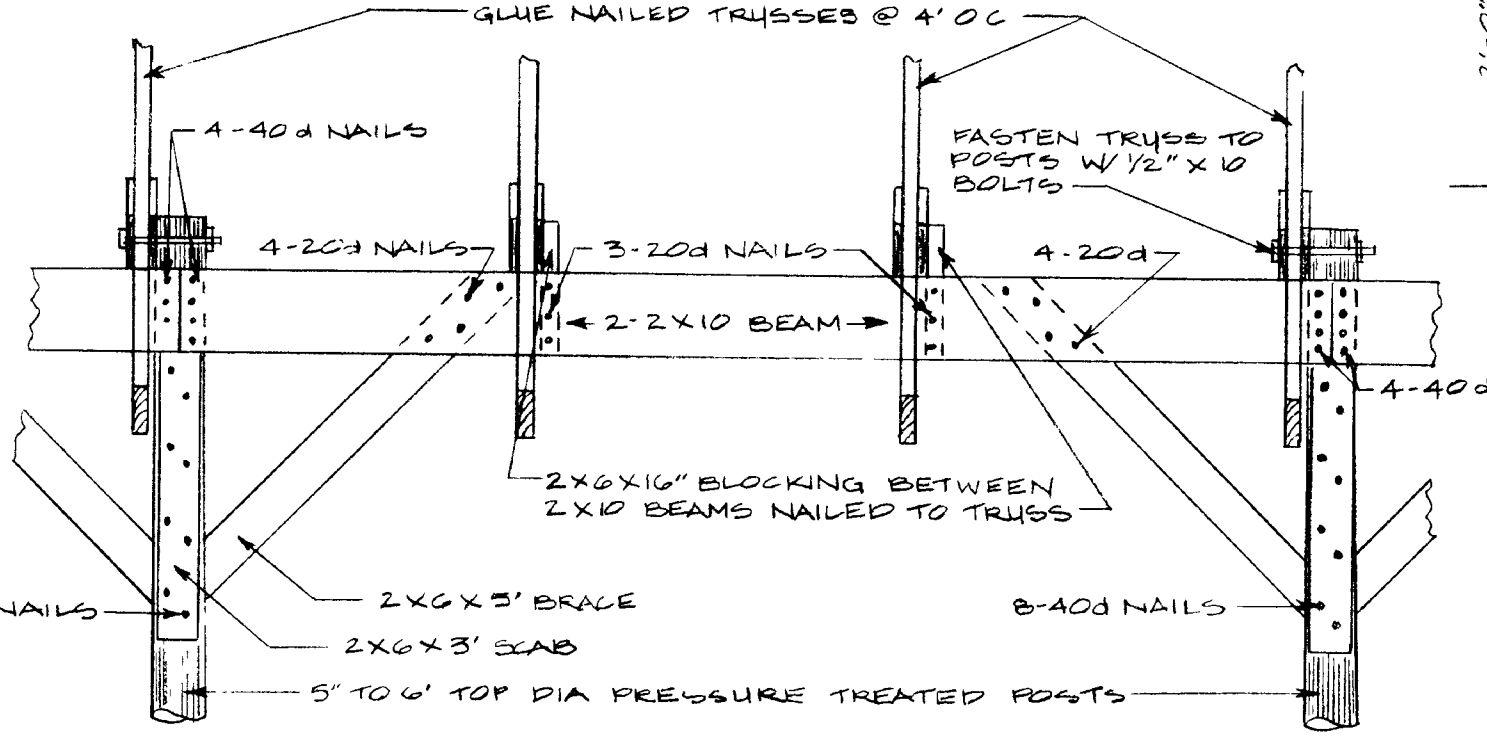
HAY STORAGE AND FEEDING BARN

COOPERATIVE EXTENSION SERVICE
 AGRICULTURE AND HOME ECONOMICS
 DEPARTMENT OF AGRICULTURAL ENGINEERING
 COLLEGE OF AGRICULTURE
 UNIVERSITY OF KENTUCKY
 AND
 U.S. DEPARTMENT OF AGRICULTURE COOPERATING

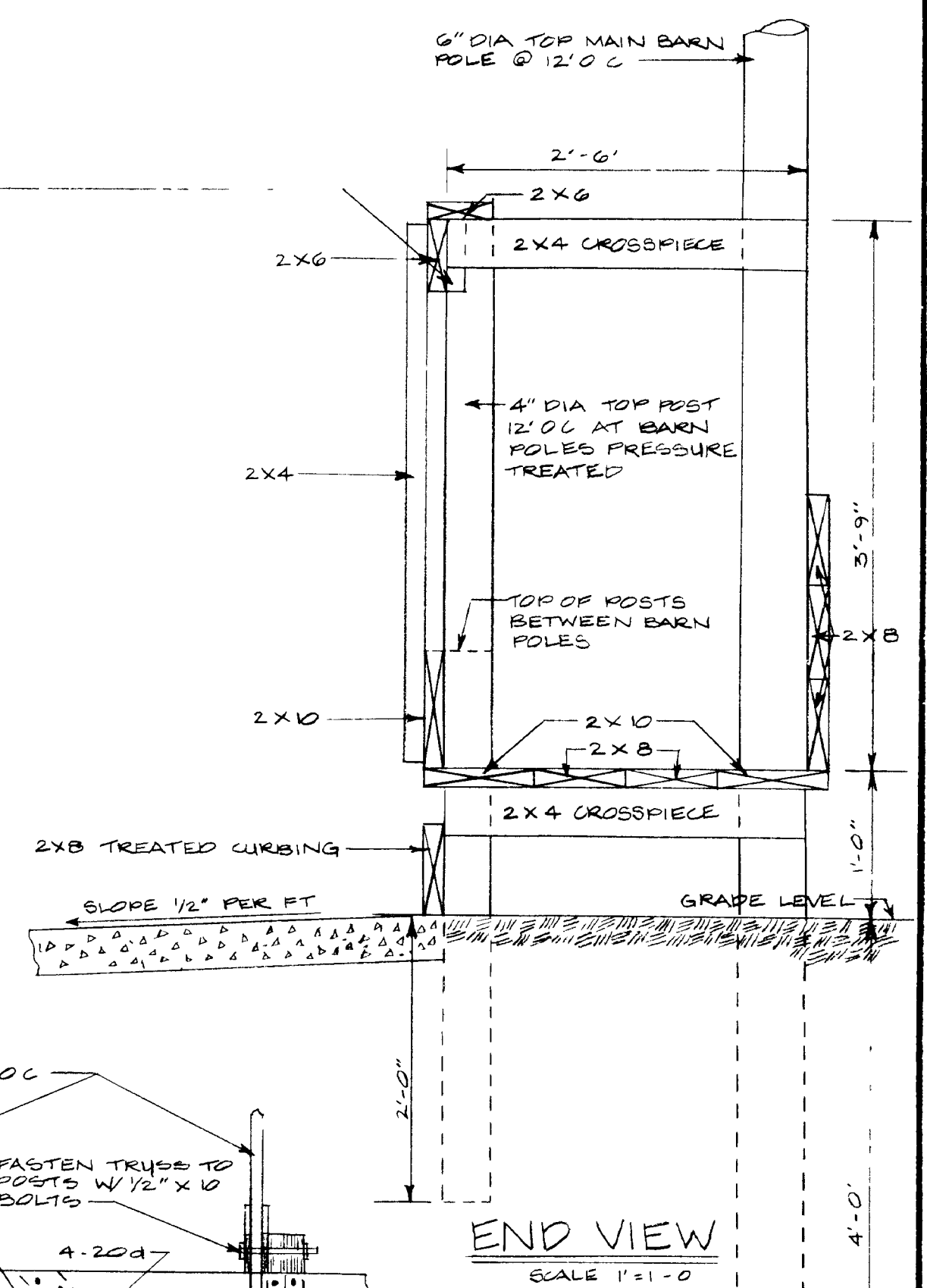
DESIGNED BY GT JBB CHECKED BY DRAWN BY S ELLIOTT DATE OCT 1976 REVISIONS JAN 1986	SHEET 1 OF 3 PLAN NUMBER KY.II.731-2
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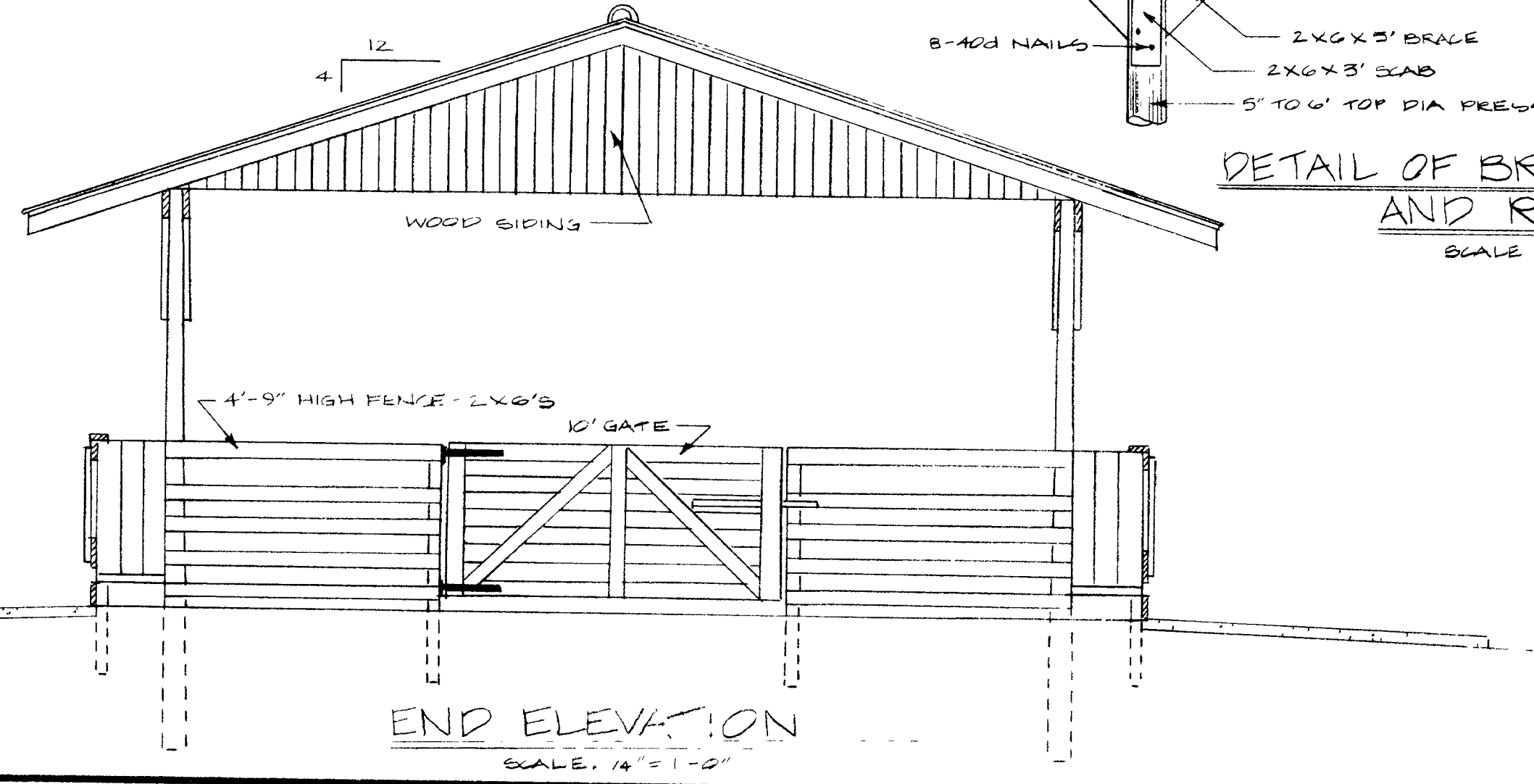
FRONT VIEW
FEEDING RACK DETAILS
 SCALE: 1" = 1'-0"



DETAIL OF BRACING AT POST AND RAFTERS
 SCALE 1/2" = 1'-0"

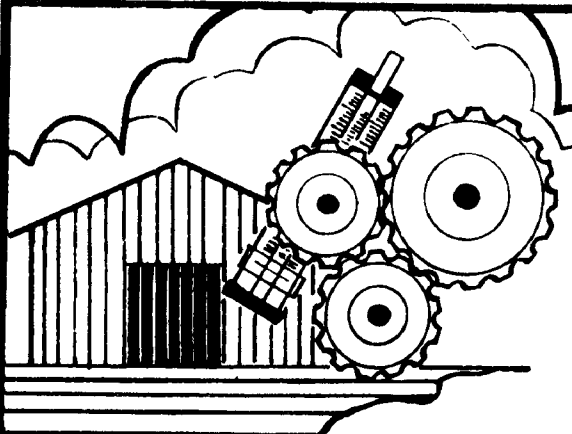


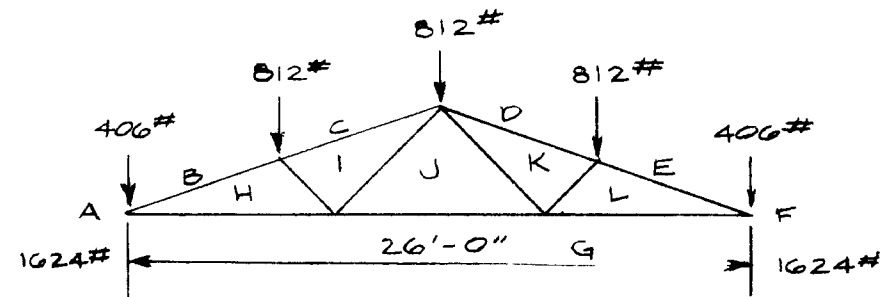
END VIEW
 SCALE 1" = 1'-0"



END ELEVATION
 SCALE: 1/4" = 1'-0"

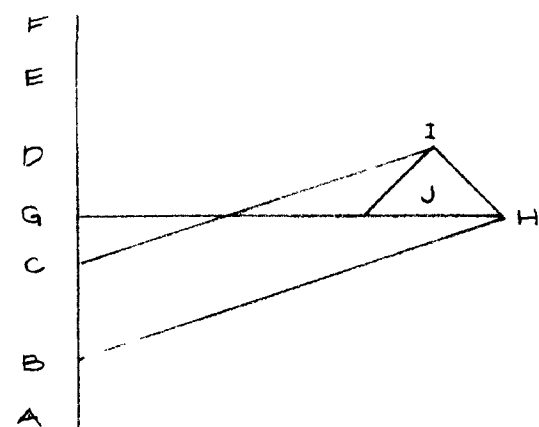
NOTE
 FOR OTHER TYPES OF FEEDING RACKS SEE PLAN NO 5837

HAY STORAGE AND FEEDING BARN	
	
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DESIGNED BY GT & JBB	SHEET 2 OF 3
CHECKED BY	PLAN NUMBER
DRAWN BY S ELLIOTT	KY. 11.731-2
DATE JUNE 1962	REVISIONS JAN 1936



LOADING DIAGRAM

SCALE: 1/8" = 1'-0"

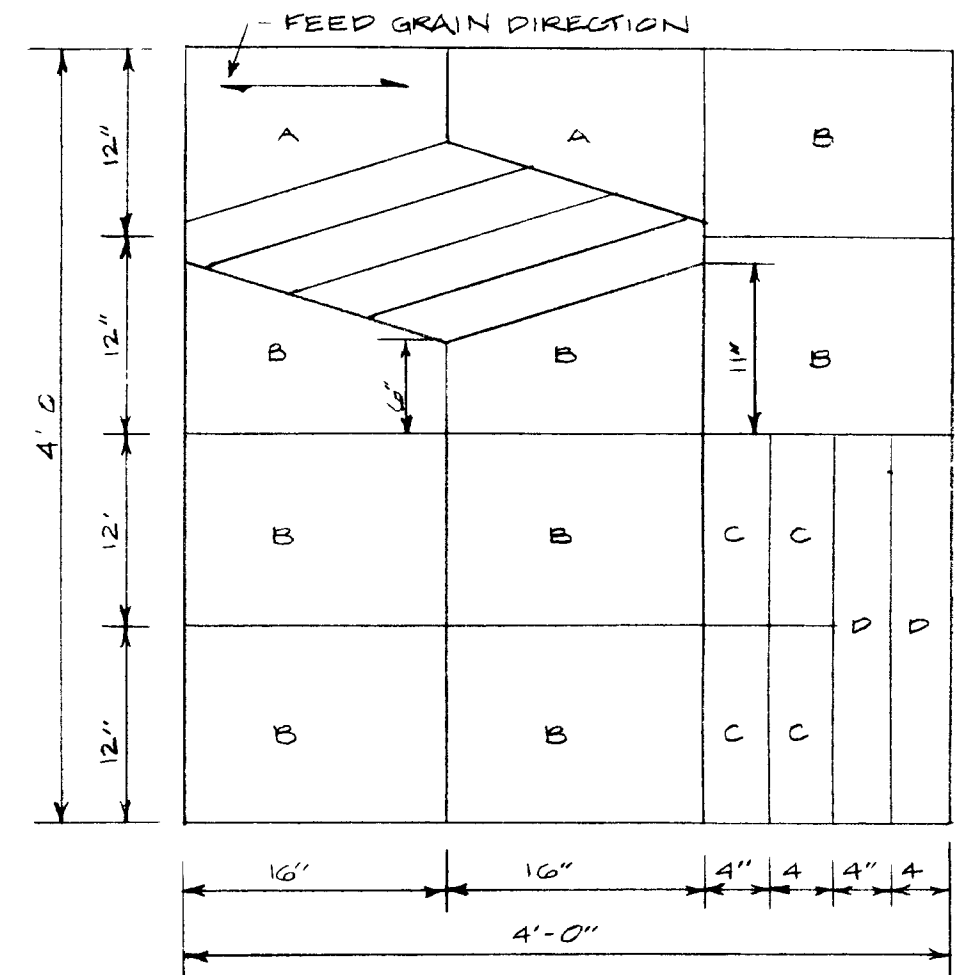


STRESS DIAGRAM

SCALE: 1/16" = 100#

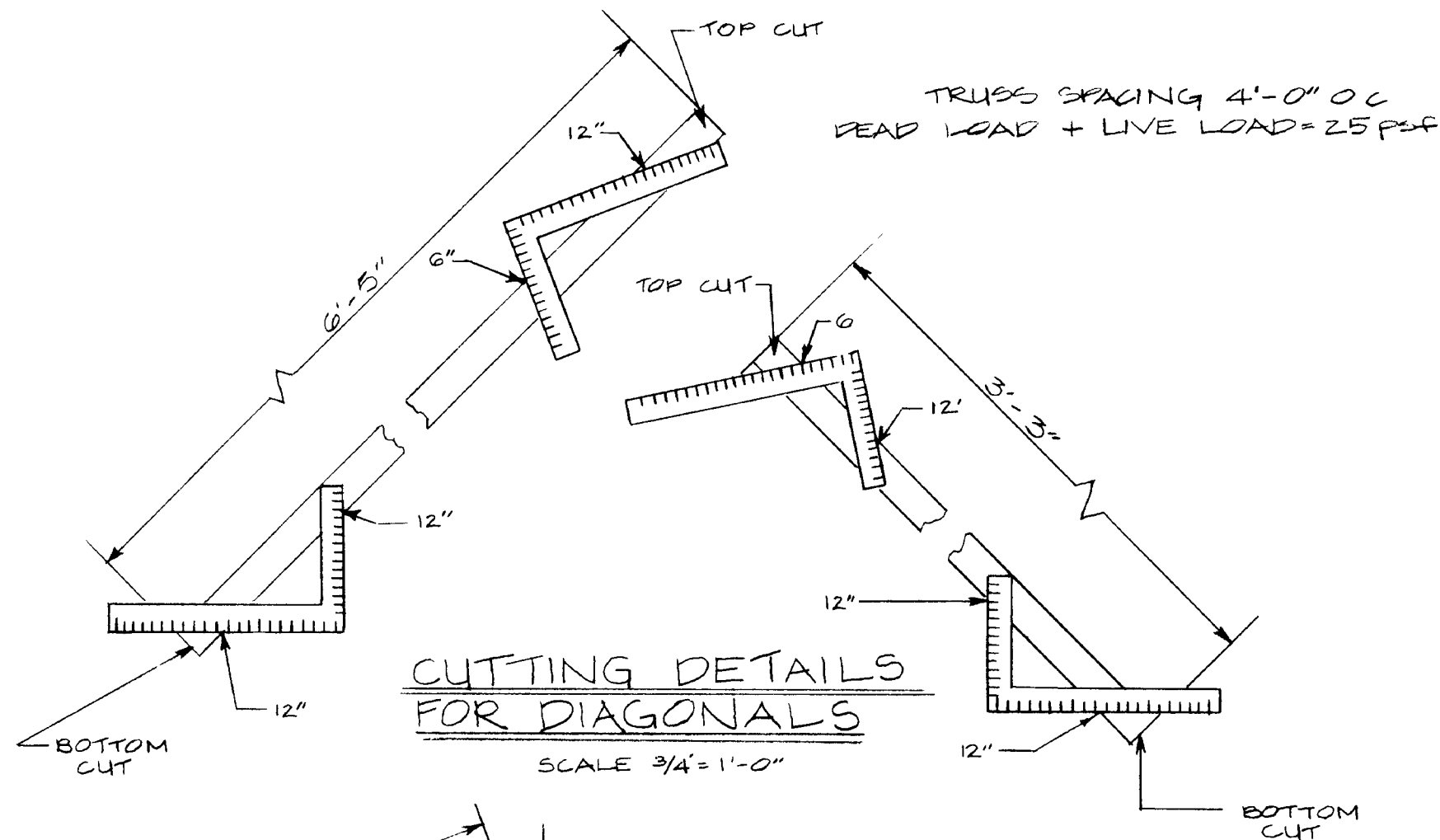
STRESS TABLE	
MEMBER	DEAD LOAD + LIVE LOAD
BH	+3800
CI	-3160
DI	+2400
EH	+2800
FI	-240
GI	+240

LIST OF MATERIALS			
MEMBER	NO.	SIZE	BD FT
TOP CHORD	2	2" X 6" X 13'-0"	36
LOWER CHORD	1	2" X 4" X 12'-0"	17
LONG DIAGONAL	2	2" X 4" X 6'-0"	9
SHORT DIAGONAL	2	2" X 4" X 3'-3"	6
6d BOX NAILS	1#		608
PLYWOOD GUSSETS	1#	5/8" X 4' X 4'	16 SQ FT
CASEIN OR RESORCINOL RESIN GLUE	1#		



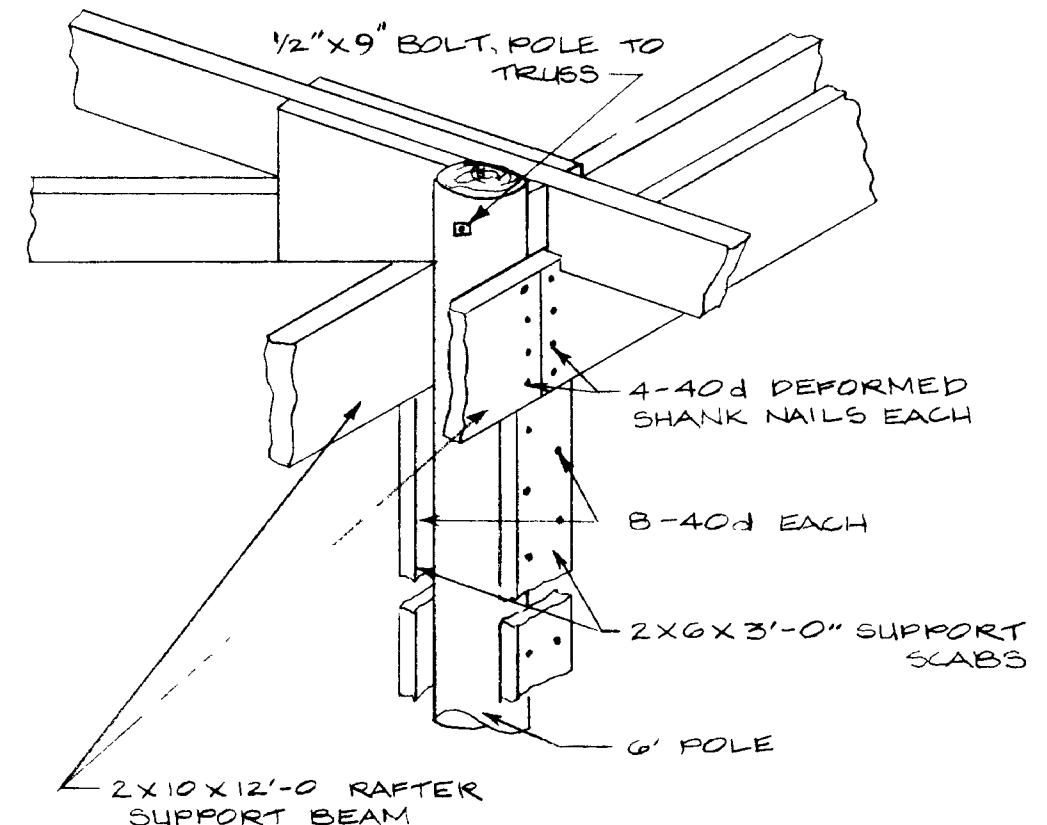
CUTTING DIAGRAM FOR GUSSET PLATES

SCALE: 1" = 1'-0"



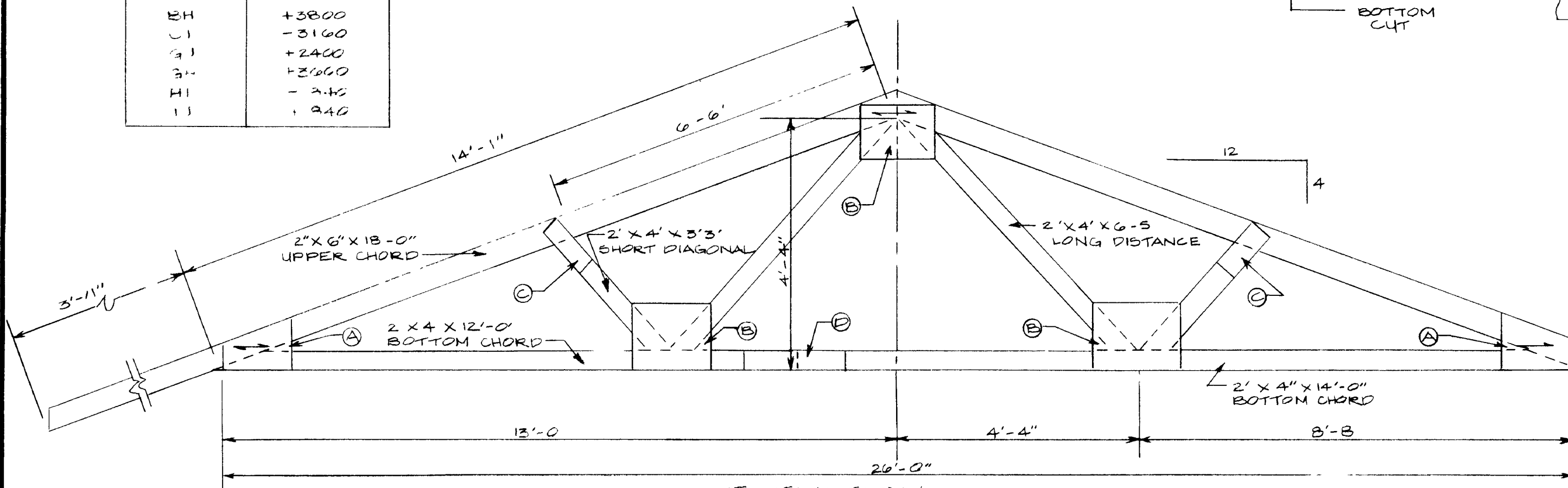
CUTTING DETAILS FOR DIAGONALS

SCALE 3/4" = 1'-0"



POLE FRAMING DETAIL

SCALE: 1" = 1'-0"



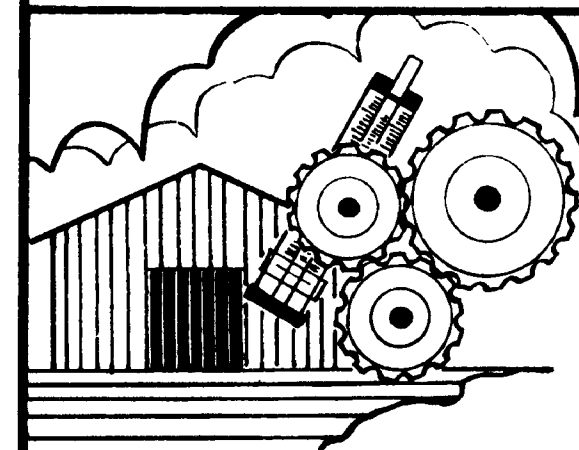
ELEVATION

SCALE 1/2" = 1'-0"

GENERAL NOTES

- 1 USE 5/8" EXTERIOR PLYWOOD FOR GUSSET PLATES ON BOTH SIDES OF ALL JOINTS
- 2 ALL GUSSET PLATES ARE GLUED AND NAILED
- 3 USE CASEIN OR RESORCINOL RESIN GLUE AND 6d NAILS
- 4 MIX GLUE ACCORDING TO MANUFACTURERS SPECIFICATIONS AND APPLY TO ALL SURFACES TO BE JOINED
- 5 ALL TRUSS MEMBERS ARE IN THE SAME PLANE AND ALL JOINTS ARE BUTT JOINTS.
- 6 TRUSS MEMBERS ARE CUT TO LENGTH AND THE TRUSS IS ASSEMBLED IN A JIG IN A HORIZONTAL POSITION
- 7 THE ASSEMBLED TRUSS MAY BE MOVED CAREFULLY FROM THE JIG IMMEDIATELY AFTER GUSSET PLATES HAVE BEEN APPLIED
- 8 LEAVE TRUSSES STACKED IN A HORIZONTAL POSITION FOR 24 HOURS AFTER ASSEMBLY
- 9 TRUSSES MAY BE PLACED ON FRAME WALLS OR POLE CONSTRUCTIONS
- 10 PROPER ANCHORAGE OF TRUSSES TO WALLS IS IMPORTANT
- 11 USE CONSTRUCTION GRADE DOUGLAS FIR OR EQUIVALENT

HAY STORAGE AND FEEDING BARN



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DESIGNED BY	SHEET 3 OF 3
CHECKED BY	
DRAWN BY S ELLIOTT	PLAN NUMBER
DATE NOV 1958	KY. II. 731-2
REVISIONS JAN 1960	