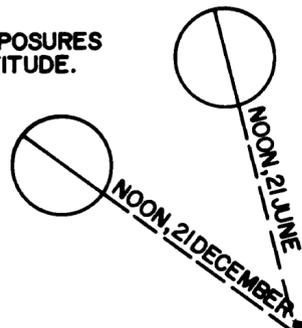
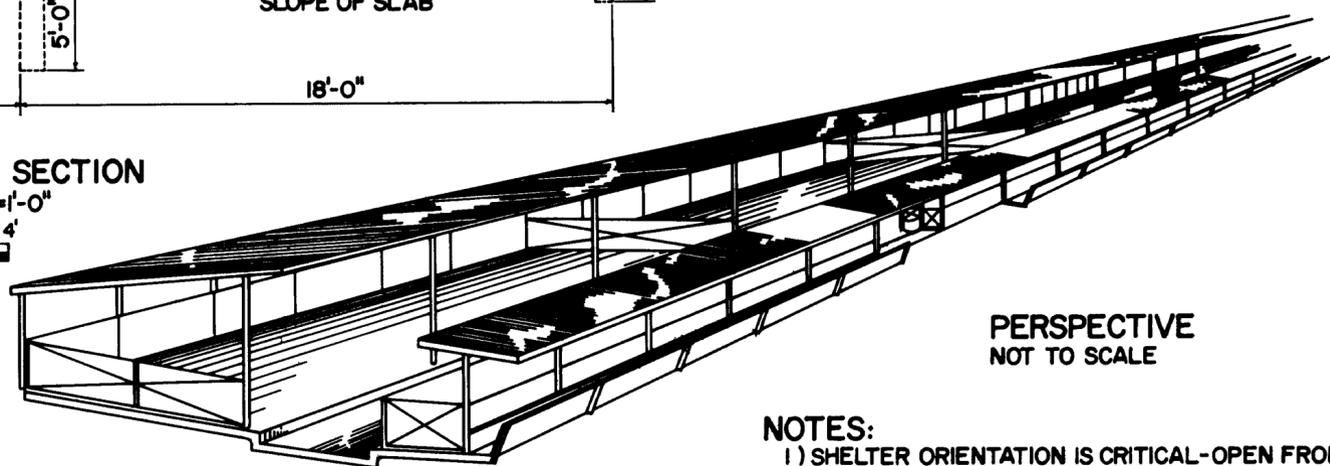


SEASONAL SUN EXPOSURES AT 40° NORTH LATITUDE.



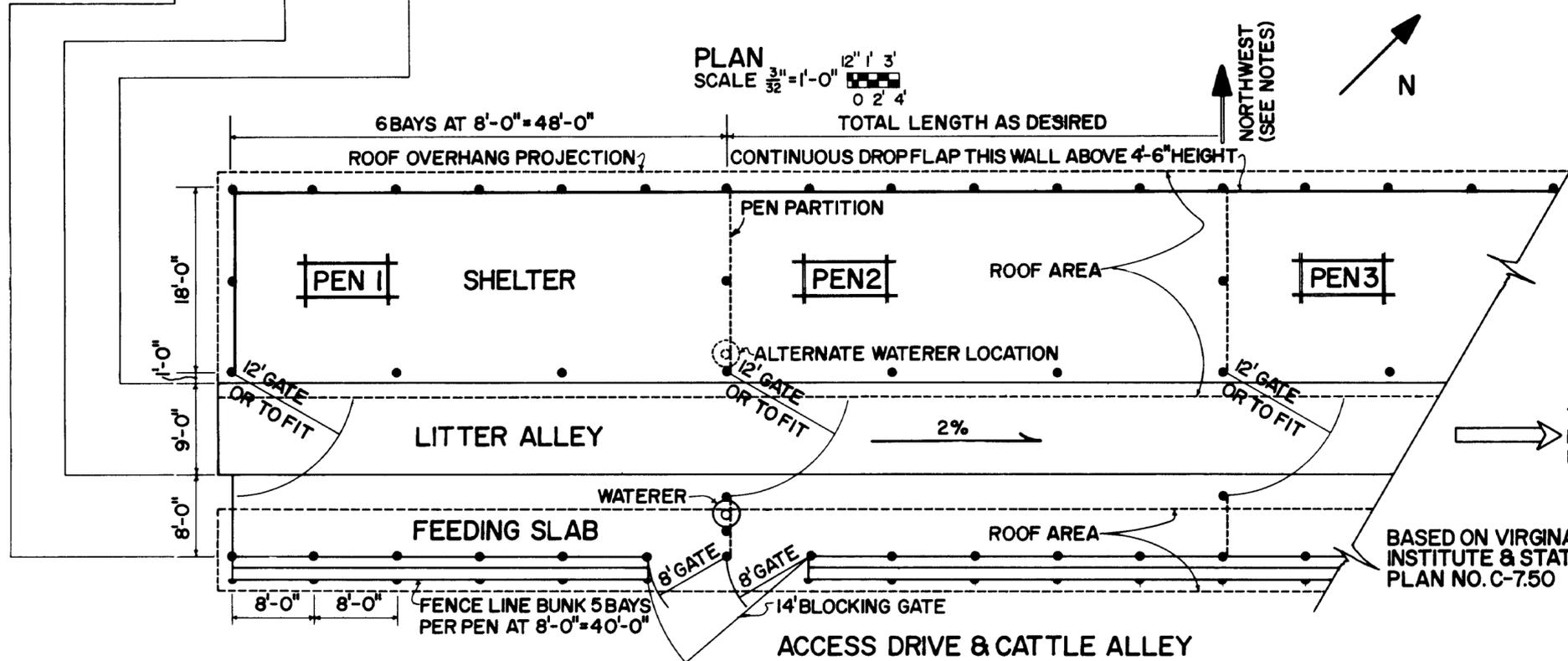
CROSS SECTION
SCALE: 1/4" = 1'-0"
12" 0 1 2 3 4
6"



PERSPECTIVE
NOT TO SCALE

NOTES:

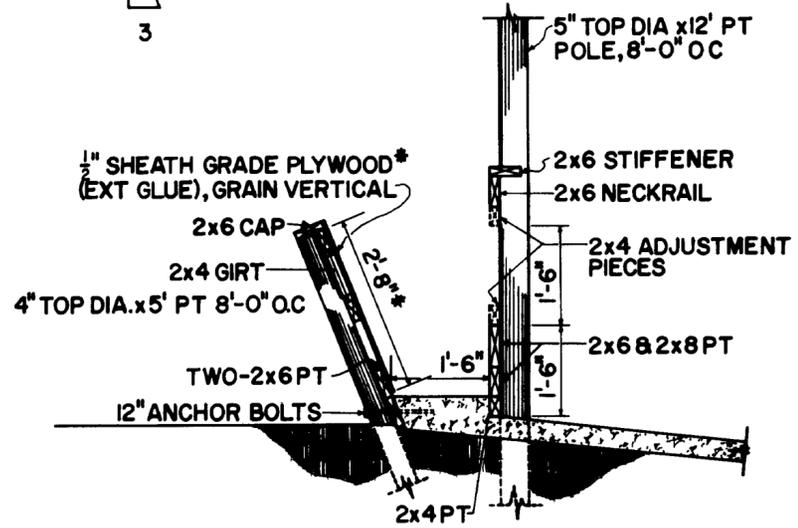
- 1) SHELTER ORIENTATION IS CRITICAL-OPEN FRONT SHOULD FACE TO SOUTHEAST
- 2) SLOPED FLOOR AREAS ARE SELF-CLEANING NO BEDDING IS REQUIRED
- 3) IT MAYBE NECESSARY TO INCREASE BUNK ROOF CLEARANCE FOR FEED WAGON PASSAGE-MEASURE EQUIPMENT TO BE USED
- 4) LITTER ALLEY WIDTH VARIABLE, DEPENDING ON MANURE HANDLING EQUIPMENT SELF-LOADING MANURE SPREADERS REQUIRE GREATER WIDTH WITH FLOATATION TIRES
- 5) LITTER ALLEY CAN BE SCRAPED BY TRACTOR OR AUTOMATIC ALLEY CLEANERS, ALLEY FLUSHING MAYBE POSSIBLE IN WARM CLIMATE ELECTRIC DRIVETHRU GATES ARE SUGGESTED ALONG LITTER ALLEY TO FACILITATE MANURE-SCRAPING TRACTOR MOVEMENT



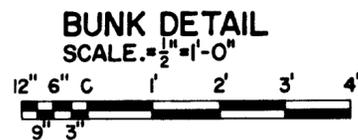
TO MANURE & RUNOFF HANDLING FACILITIES

BASED ON VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY PLAN NO. C-7.50

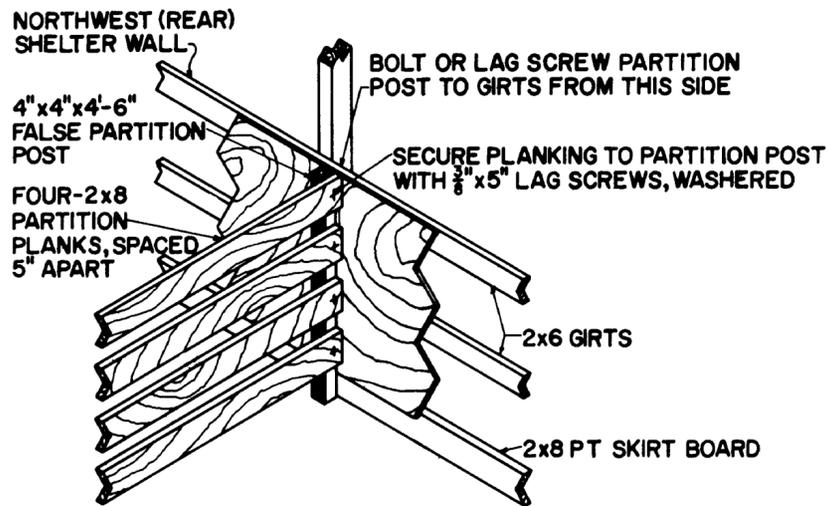
COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS			
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING			
BEEF FEEDING PENS COUNTER-SLOPED			
VA	'78	6297	SHEET 1 OF 2



*PLYWOOD BUNK LINER CUT IN 2'-8" LENGTHS FROM STANDARD SHEET (3 PIECES PER SHEET)



AREA OF ANIMAL USE	NUMBER OF HEAD PER 48' PEN	
	50*	63
RESTING SHELTER ¹	17.5	13.9
FEEDING SLAB	7.7	6.1
TOTAL SLOPED FLOOR	25.2	20.0
LITTER ALLEY	8.6	6.8
TOTAL ANIMAL AREA ²	33.8	26.8
	AVAILABLE ANIMAL AREA FT²/HD	
FEED BUNK	8.9	7.0
	AVAILABLE FEEDING SPACE IN/HD	
*50 HD/PEN RECOMMENDED HOT WEATHER PEN POPULATION UNTIL EXPERIENCE IS GAINED IN FACILITY MANAGEMENT		
1) DOES NOT INCLUDE FEED BUNK ROOF SHELTER		
2) TOTAL ANIMAL AREA IS 68% ROOFED		



PEN PARTITION DETAIL
NOT TO SCALE

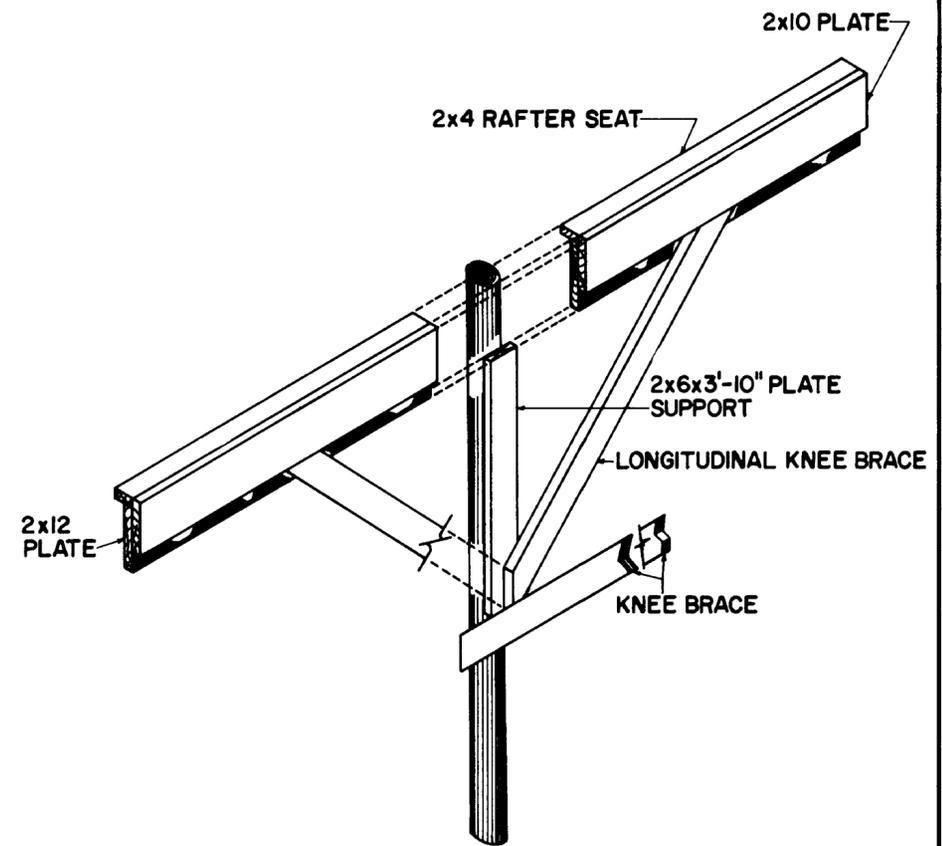
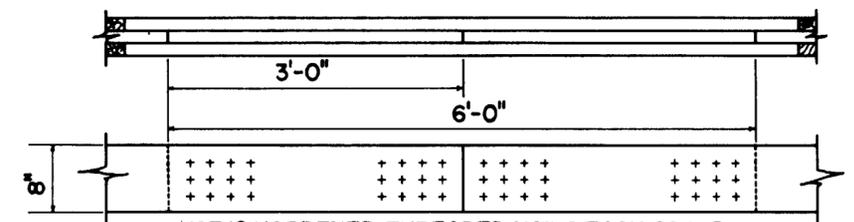
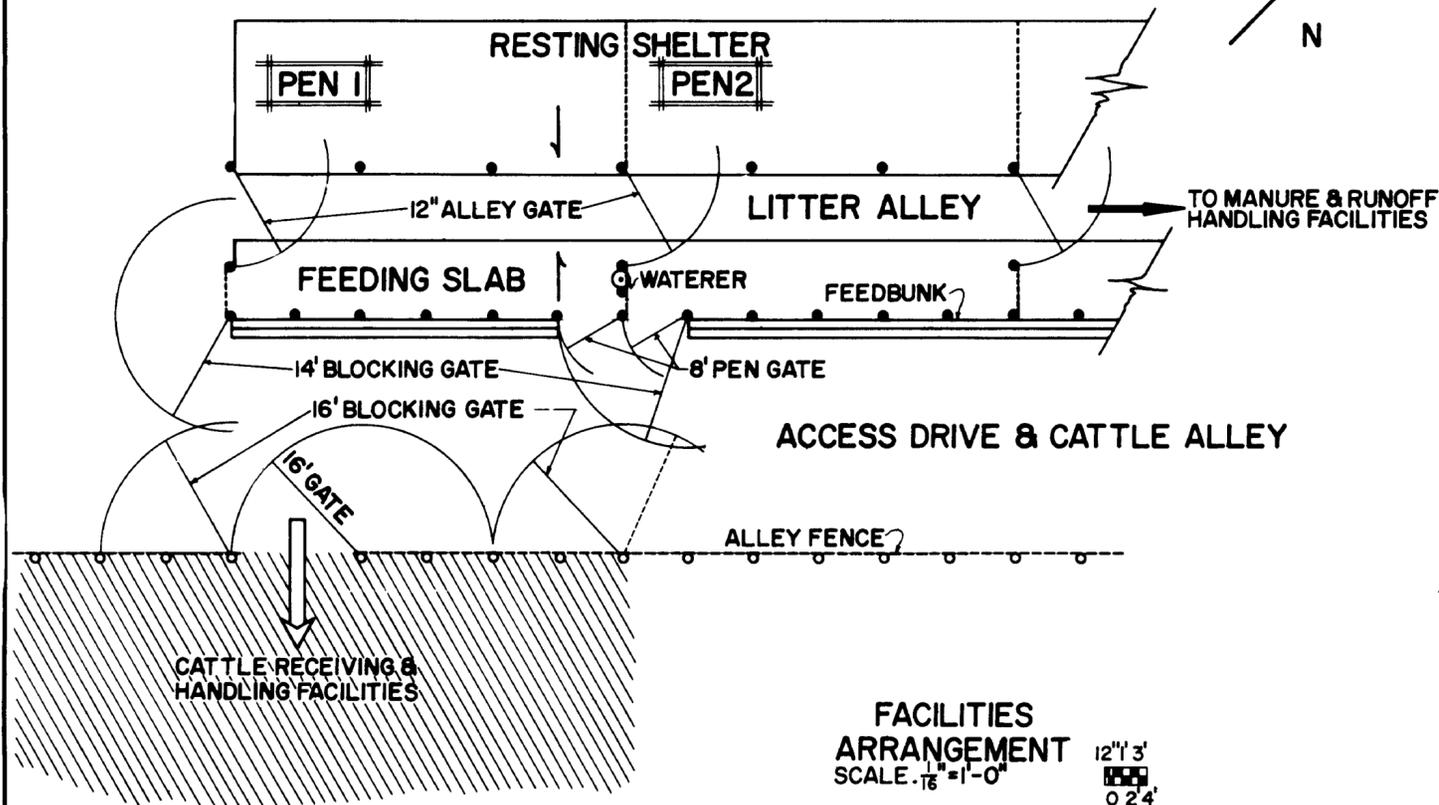


PLATE DETAIL
NOT TO SCALE

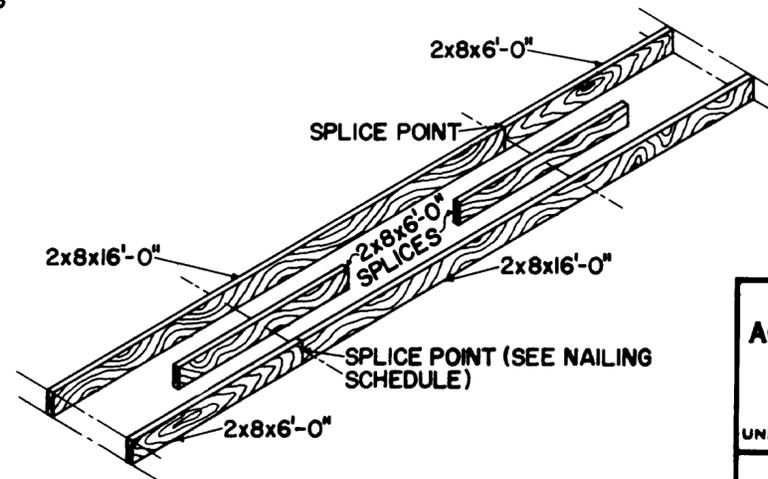


USE 12 HARDENED THREADED NAILS EACH GROUP 20D WITH LUMBER S4S, 50D WITH ROUGH LUMBER

SPliced RAFTER NAILING SCHEDULE
NOT TO SCALE



FACILITIES
ARRANGEMENT
SCALE: 1/16" = 1'-0"
12' 3"
0 24'



ALTERNATE RAFTER DESIGN
NOT TO SCALE