

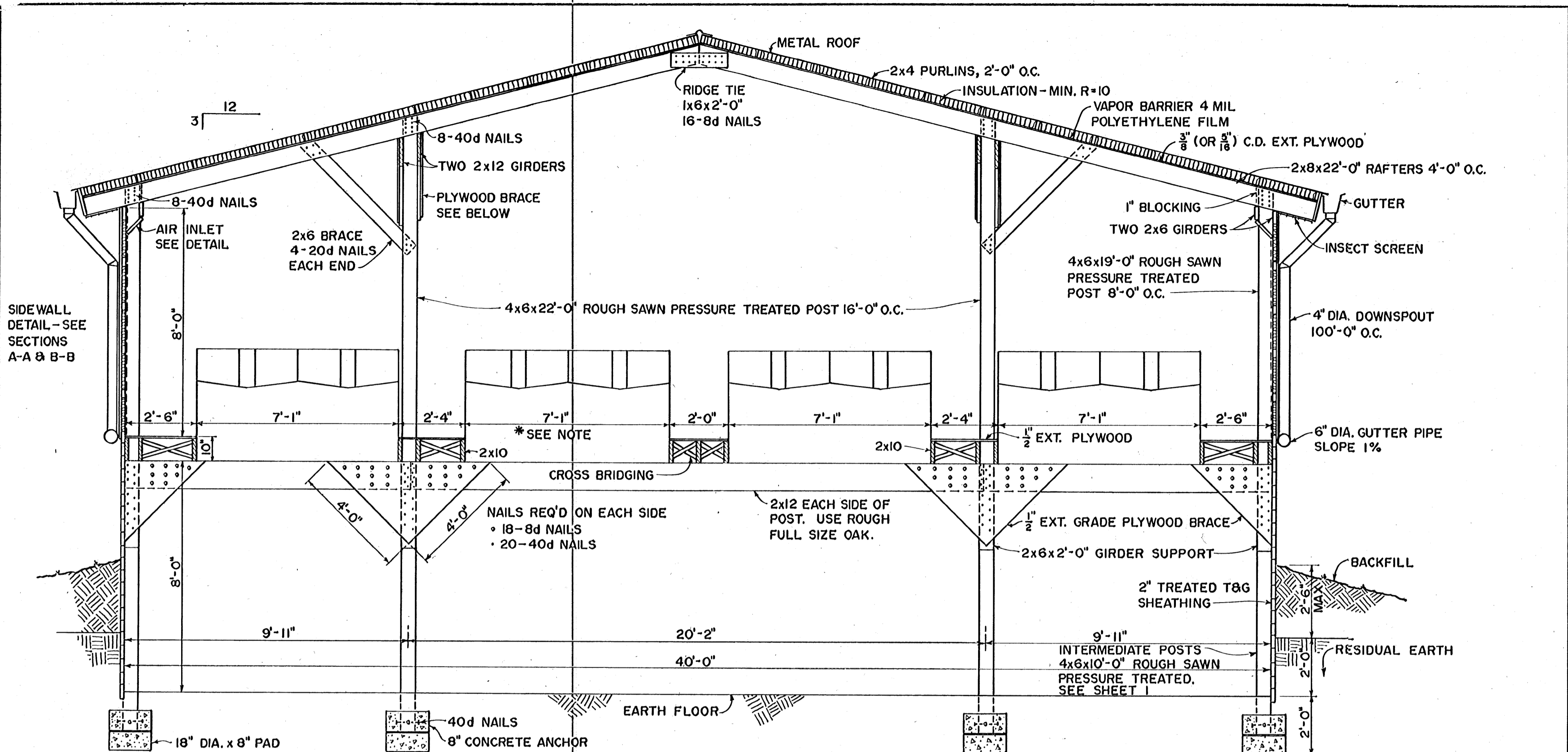
NOTE:
CONSULT LOCAL AND STATE ZONING,
HEALTH AND POLLUTION AUTHORITIES
BEFORE STARTING CONSTRUCTION

BASED ON: VPI PLAN F-1.50

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

POULTRY HOUSE
CAGED LAYERS - DEEP PIT

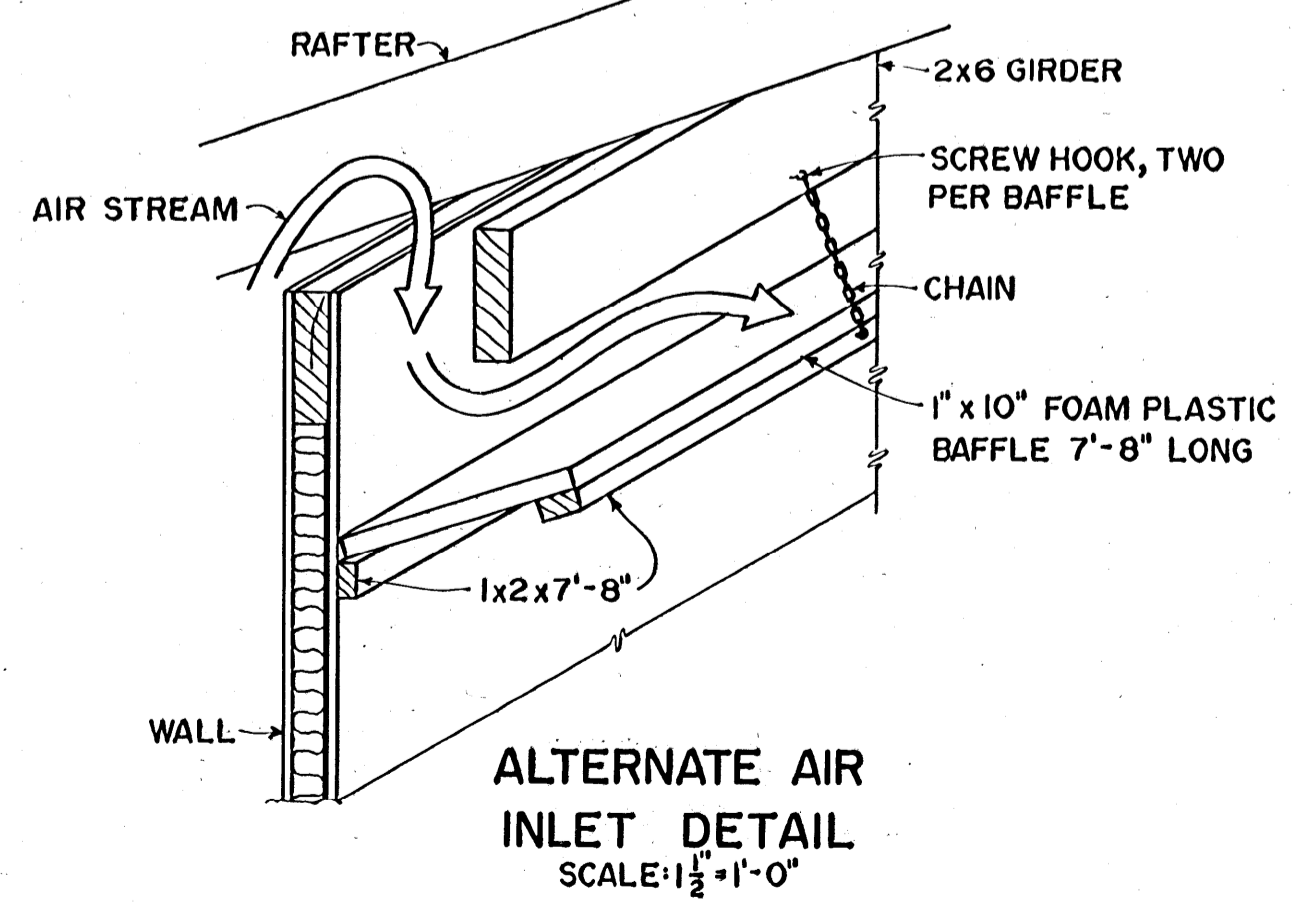
VA. '72 EX. 6140 SHEET 1 OF 3



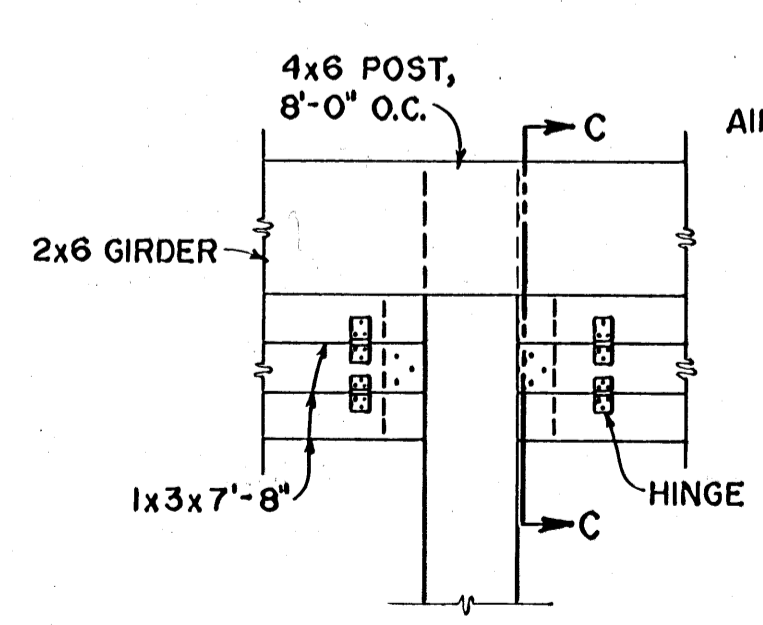
SIDE WALL
DETAIL - SEE
SECTIONS
A-A & B-B

TYPICAL CROSS SECTION
FLAT DECK-FULLY AUTOMATED
CAGED LAYER HOUSE WITH
DEEP PIT
 SCALE: $\frac{3}{8}'' = 1'-0''$

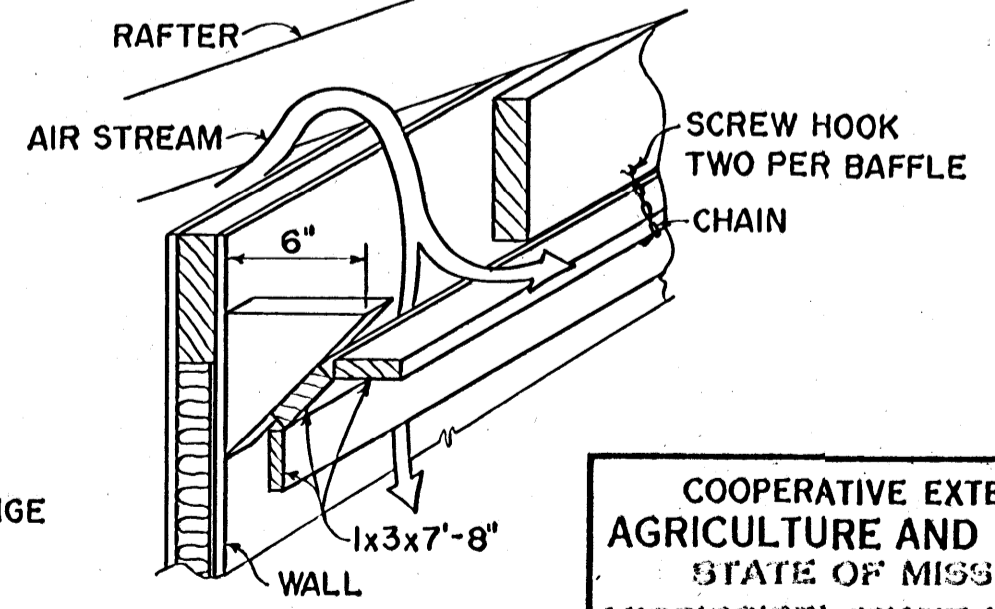
*NOTE:
 WIDTH MAY BE VARIED TO FIT DIFFERENT
 MANUFACTURERS EQUIPMENT. FOLLOW
 MANUFACTURERS RECOMMENDATIONS.



ALTERNATE AIR
INLET DETAIL
 SCALE: $1\frac{1}{2}'' = 1'-0''$



AIR INLET DETAIL
 SCALE: $1\frac{1}{2}'' = 1'-0''$

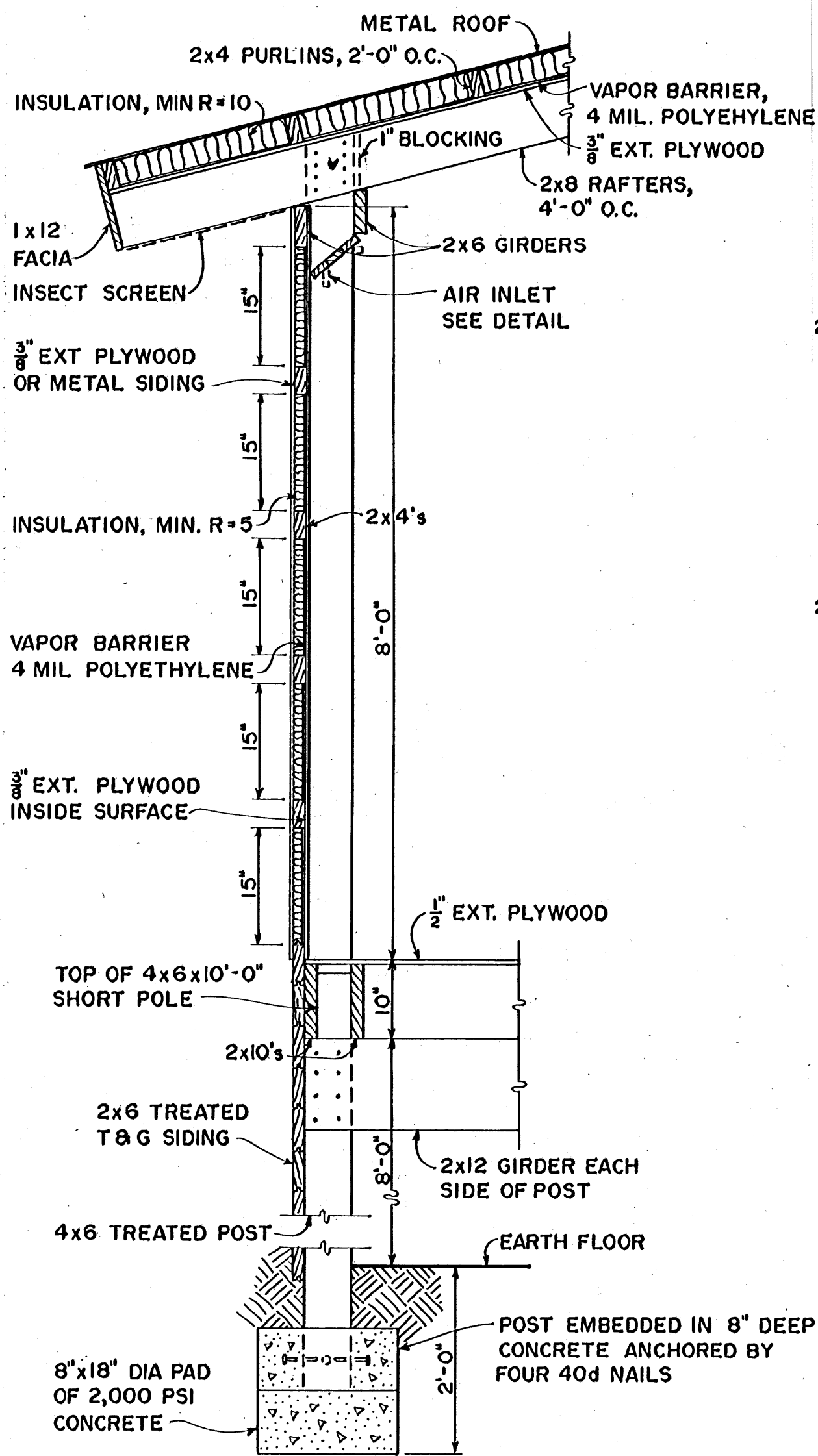


SECTION C-C

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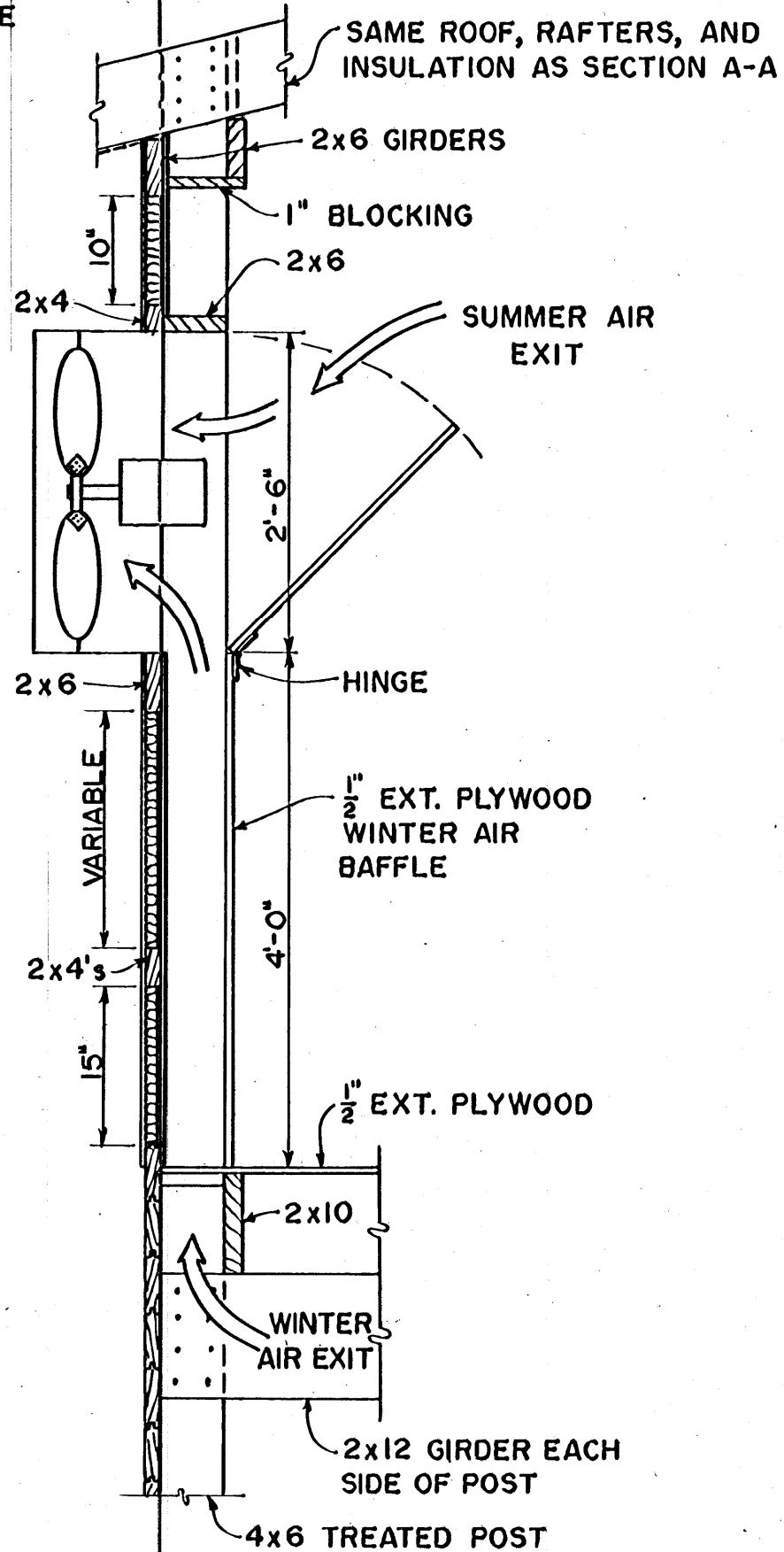
POULTRY HOUSE
CAGED LAYERS - DEEP PIT

VA. '72	EX. 6140	SHEET 2 OF 3
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WALL SECTION A-A

SCALE: $\frac{3}{4}$ " = 1'-0"



WALL SECTION B-B OF FAN DETAIL

SCALE: $\frac{3}{4}$ " = 1'-0"

INSULATION

THE INSULATION IS INSTALLED IN THE SIDEWALLS BETWEEN THE GIRTS AND IN THE CEILING BETWEEN THE PURLINS. A 4-MIL. POLYETHYLENE FILM VAPOR BARRIER IS INSTALLED ON THE WARM SIDE OF THE INSULATION. THE MINIMUM INSULATION VALUES RECOMMENDED FOR VA. ARE: R=10 IN THE CEILING AND R=5 IN THE SIDEWALLS.

VENTILATION

WINTER: FOR LIGHT BREEDS, 4.5 CU. FT. OF AIR PER MINUTE PER BIRD AT $\frac{1}{8}$ " STATIC PRESSURE IS SUGGESTED. THE TABLE ON THIS SHEET SHOWS THE SIZE AND NUMBER OF FANS REQUIRED FOR DIFFERENT LENGTH HOUSES.

SUMMER: FOR LIGHT BREEDS, 6.0 CU. FT. OF AIR PER MINUTE PER BIRD AT $\frac{1}{8}$ " STATIC PRESSURE IS SUGGESTED. THE TABLE ON THIS SHEET LISTS THE SIZES AND NUMBERS OF FANS REQUIRED FOR DIFFERENT LENGTH HOUSES.

ALL FANS ARE LOCATED ON THE NORTH OR WEST SIDE OF THE BUILDING. ABOUT EVERY THIRD FAN SHOULD BE INSTALLED AS SHOWN IN SECTION B-B. THESE FANS ARE TO BE EQUIPPED WITH THERMOSTATS AND RECYCLING TIMERS. THE REMAINING FANS SHOULD BE EQUIPPED WITH THERMOSTATS ONLY AND SHOULD NOT RUN UNTIL ALL FANS WITH THE DUCTS ARE IN OPERATION. FOR WARM WEATHER OPERATION, THE DUCT IN SECTION B-B SHOULD BE OPENED UP TO ALLOW THE FAN TO OPERATE WITH GREATER EFFICIENCY.

AIR INLET

A PERIMETER TYPE AIR INLET SHOWN IN SECTION A-A IS RECOMMENDED. THE INLET SHOULD BE BLOCKED OUT, HOWEVER, FOR 10'-0" ON EACH SIDE OF THE FANS AS SHOWN IN SECTION B-B.

PROVIDE 25 SQ. IN. OF INLET AREA FOR EACH 100 C.F.M. EXHAUSTED BY THE FANS.

WINTER VENTILATION FAN SELECTION (4.5 CFM/BIRD)

* CAGE ROW LENGTH	** NO. OF LAYERS	CFM AT $\frac{1}{8}$ " SP TOTAL CAPACITY	CFM AT $\frac{1}{8}$ " SP APPROX. CAP. EACH FAN BANK 48' O.C.
40' x 96'	4,600	20,700	10,350
40' x 144'	6,900	31,000	"
40' x 192'	9,200	41,300	"
40' x 240'	11,500	51,800	"
40' x 288'	13,800	62,000	"
40' x 384'	18,400	82,800	"
40' x 480'	23,000	103,500	"

SUMMER VENTILATION FAN SELECTION (6 CFM/BIRD)

40' x 96'	4,600	27,500	13,800
40' x 144'	6,900	41,400	"
40' x 192'	9,200	55,100	"
40' x 240'	11,500	69,000	"
40' x 288'	13,800	82,800	"
40' x 384'	18,400	101,000	"
40' x 480'	23,000	138,000	"

* EXCLUDES EGG ROOM AND SUPPLY STORAGE + END AISLE

** BASED ON FLAT DECK OR STAIR STEP CAGES WITH TWO BIRDS PER 8" x 16" CAGE

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