

2005  
NORTH CAROLINA  
AFFORDABLE  
PASSIVE SOLAR  
PLANBOOK



THE  
GOTTAGE  
3 BEDROOM/ 2 BATH  
1188 SQ. FT. TOTAL HEATED SPACE

DRAWN BY: Appalachian State University Energy Center  
Construction Technology Department

State Energy Office



DISCLAIMER:  
This house plan has been developed under a contract with the North Carolina State Energy Office as part of their ongoing effort to promote energy efficient house designs.

The designs, drawings, and specifications offered are generally suitable for construction in the state of North Carolina. Changes necessary to adapt the designs to other areas should be performed by professionals experienced and competent in passive solar applications. In addition, the working drawings and specifications should be submitted for review to local building officials to insure compliance with code requirements. This review should be done prior to site selection, financial commitments, or construction permit applications.

Neither the State of North Carolina, nor any agency thereof, nor any of the employees makes any warranty, express or implied, or assumes any legal liability or responsibility for any third party use or the results of such use of any information, apparatus, assembly, product, or functional efficiency in this plan or represents that the use by such third party would not infringe upon privately owned designs or rights.

The energy use information and design criteria for energy analysis on this plan has been assumed for the climate conditions found in North Carolina. Neither ASU Energy Center, nor any of their employees or consultants, shall be responsible for variations in the actual performance of this design.

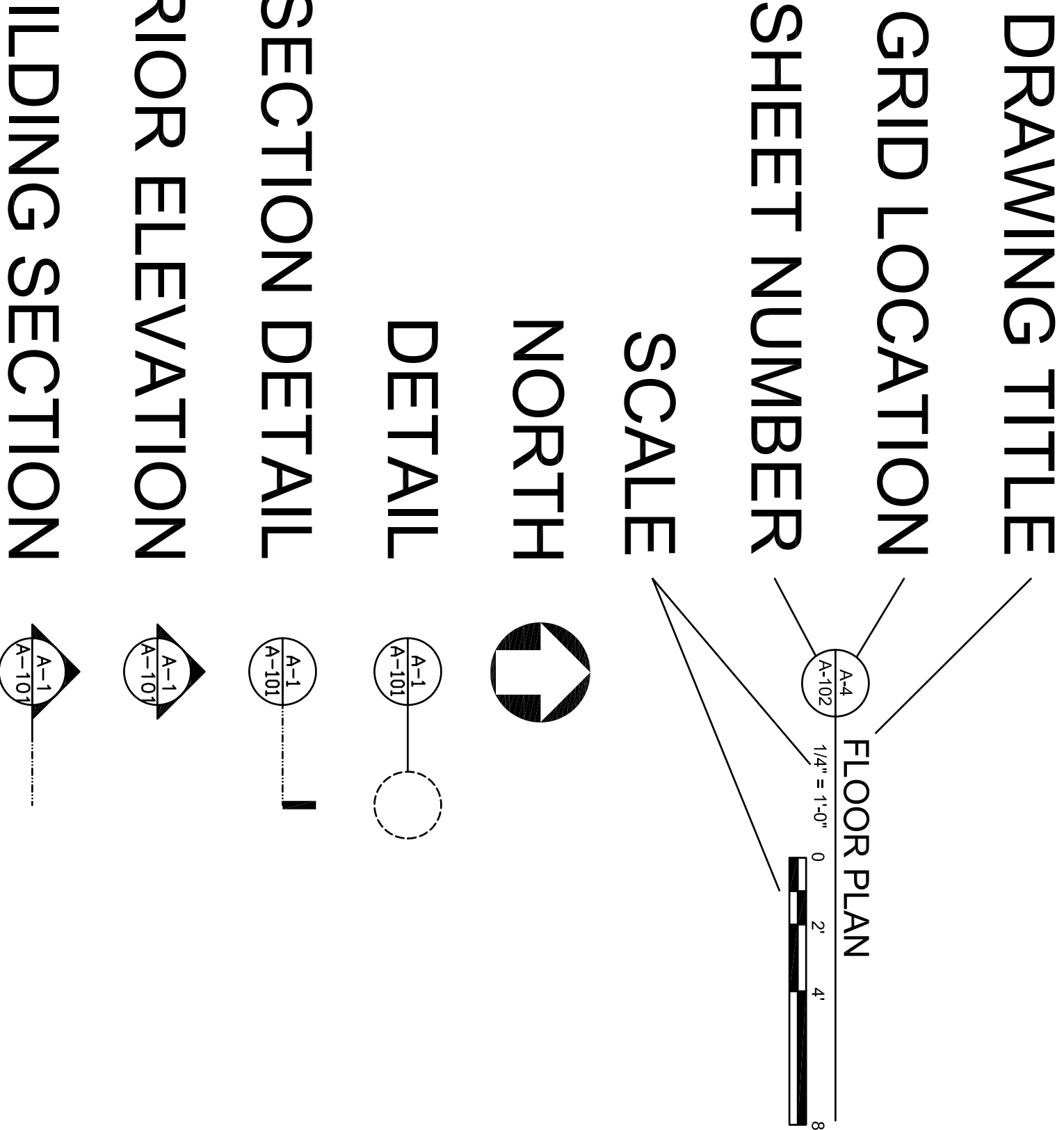
The drawings in this set have been prepared as architectural guidelines for the evaluation of a passive solar house. Items such as heating and cooling equipment, plumbing, and electrical requirements are included, though modifications may be necessary due to the location and the specific site. All modifications should follow energy efficient guidelines; provide continuous exterior insulation, seal all air leaks, create a continuous air and moisture barrier, and insulate and seal all ductwork. The contractor and owner shall follow the requirements of local codes carefully. The contractor is responsible for all fabrication processes, construction techniques, and coordination of work with all trades and subcontractors. Any dimensional errors or omissions from the drawings do not relieve the general contractor of the responsibility to provide a complete project in accordance with genuinely accepted quality standards.



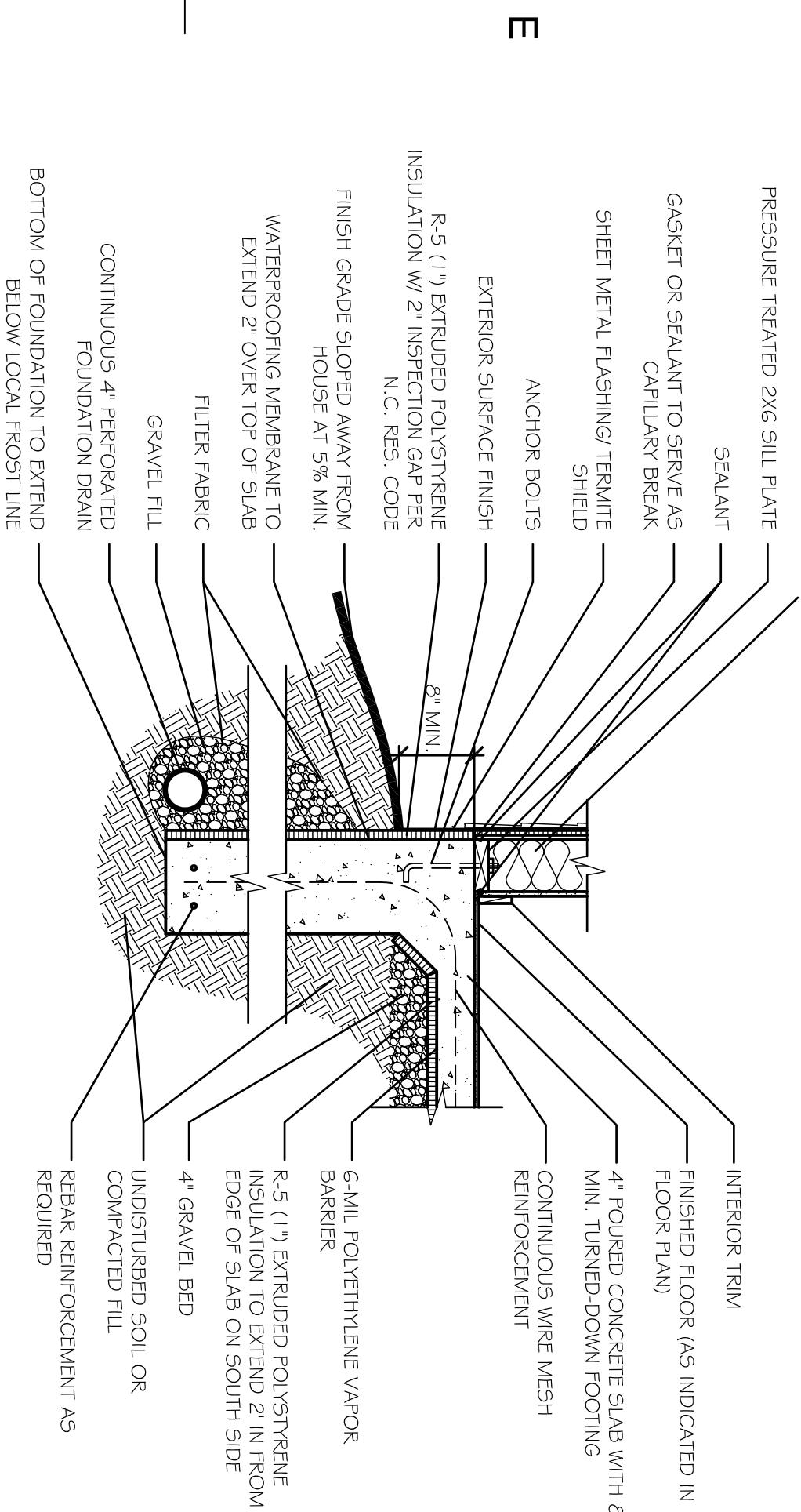
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LEGEND:

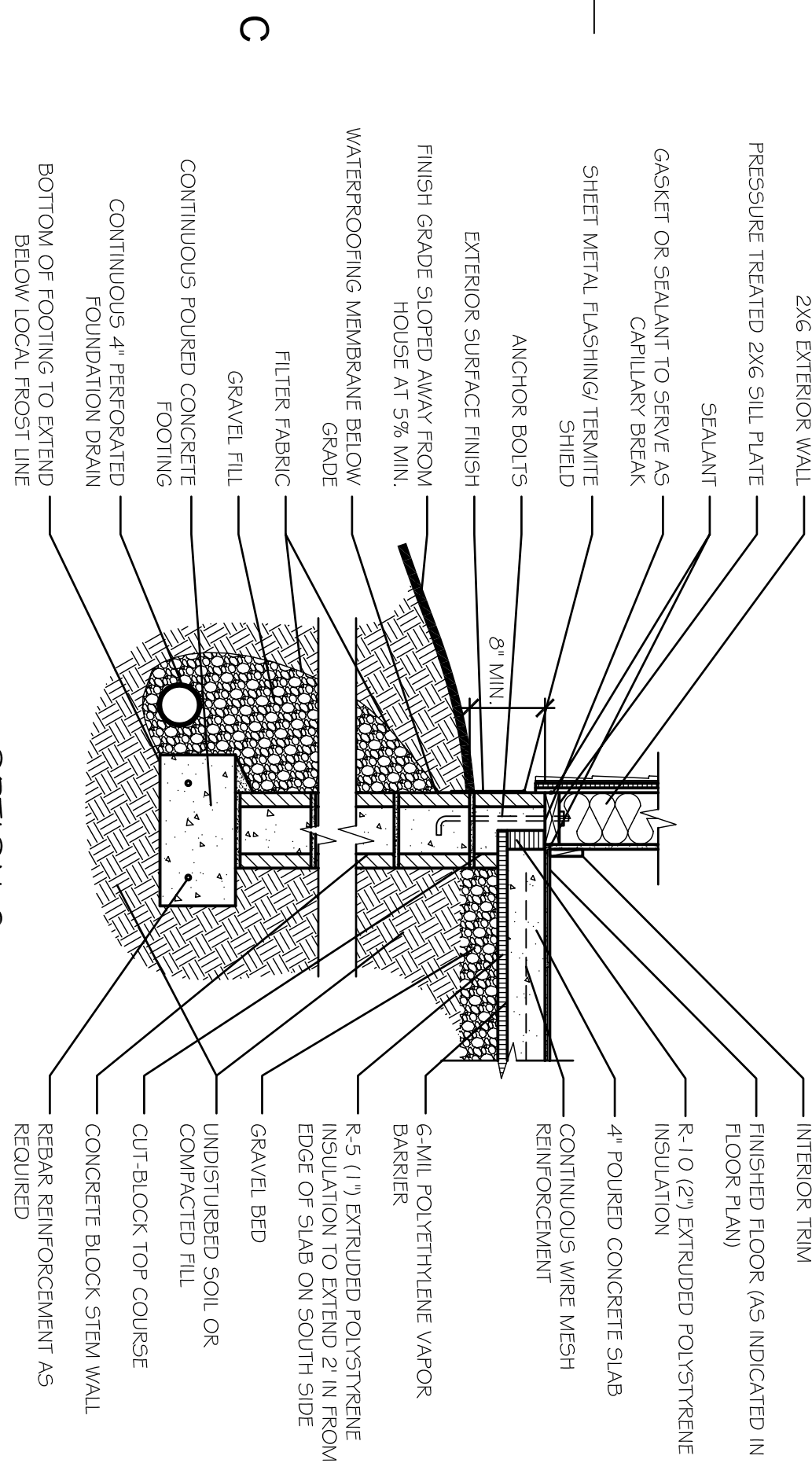






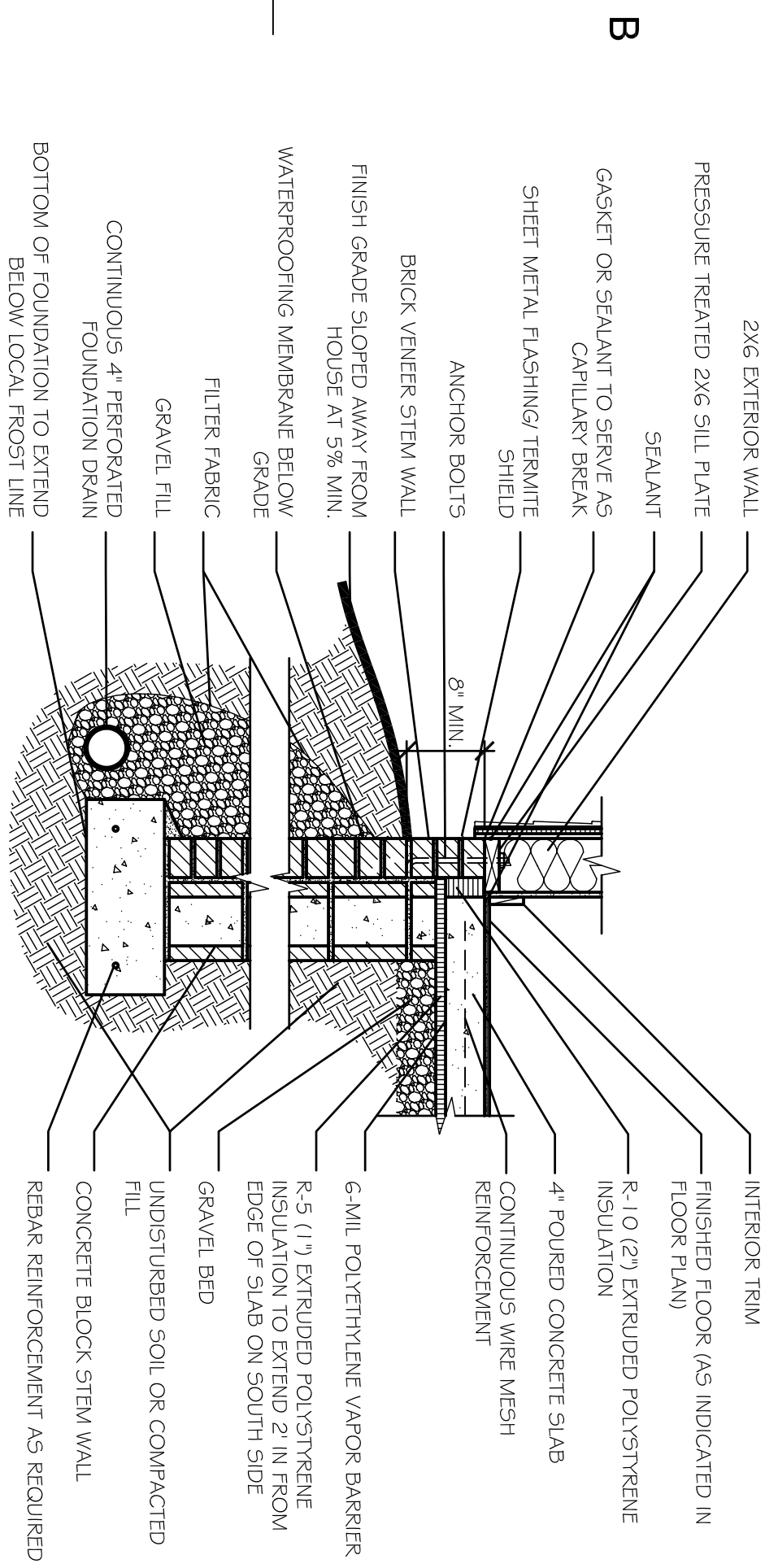
**D**

**OPTION 1 :  
MONOLITHIC SLAB W/ TURNED  
DOWN FOOTING**



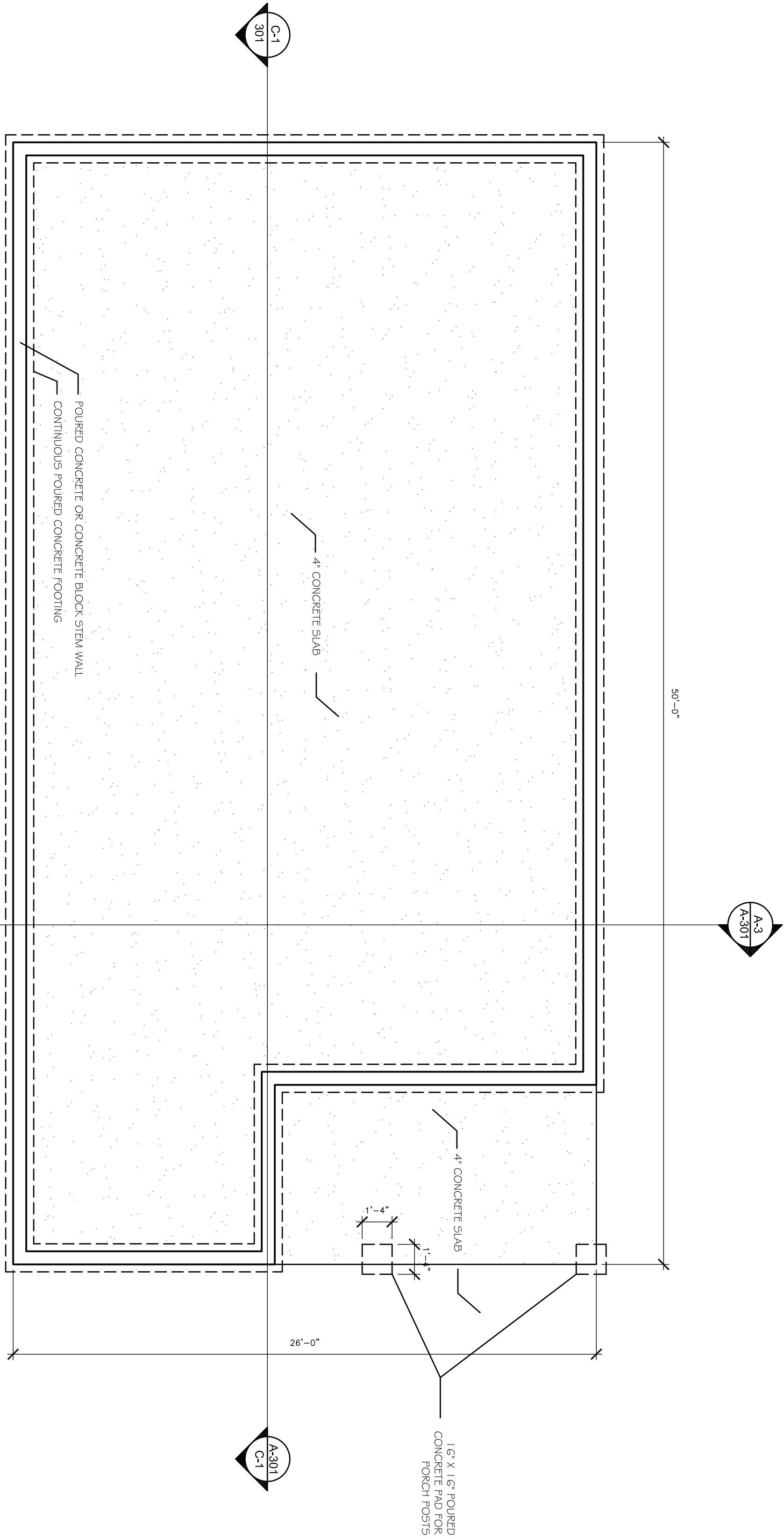
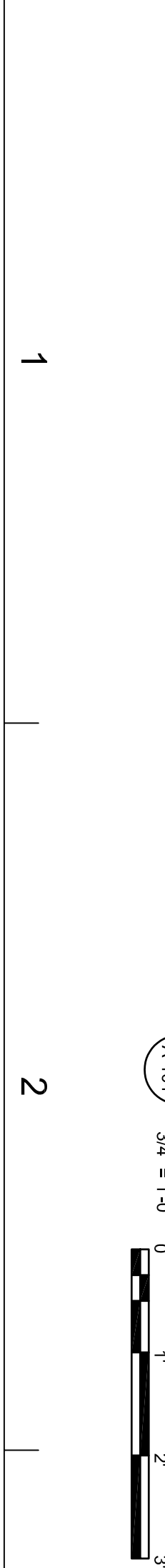
**C**

**OPTION 2:  
CONTAINED SLAB W/CONCRETE BLOCK  
OR POURED CONCRETE STEM WALL**



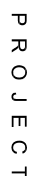
**A**

**OPTION 3:  
CONTAINED SLAB W/BRICK  
VENEER STEM WALL**



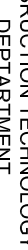
ISSUE		
MARK	DATE	DESCRIPTION





## SOURCE

DRAWN BY



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## JAMIE



## WINDOW AND DOOR DETAILS

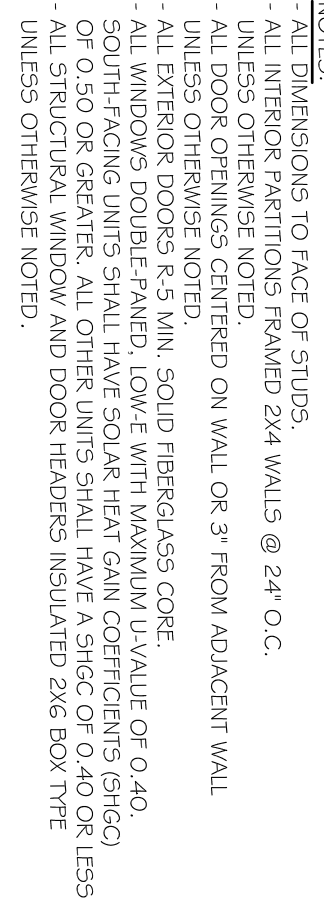
## INSULATION

— 2X4 INTERIOR PARTITION

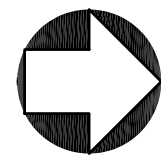
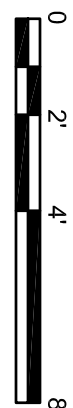
**1.**

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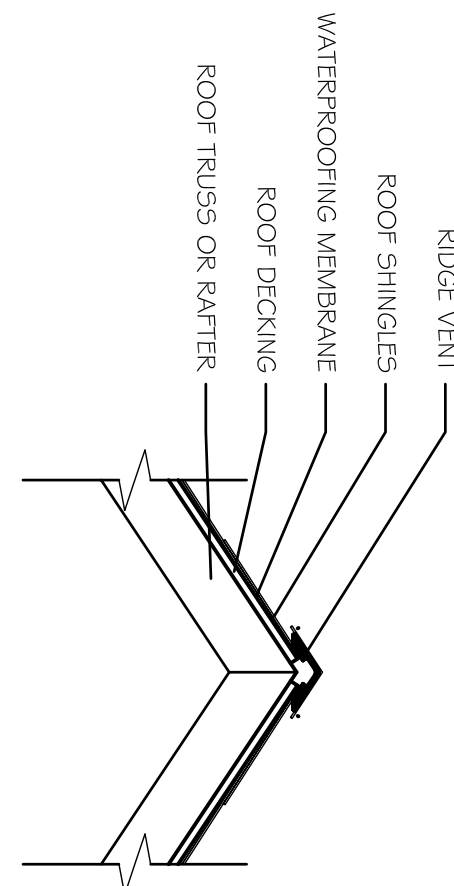
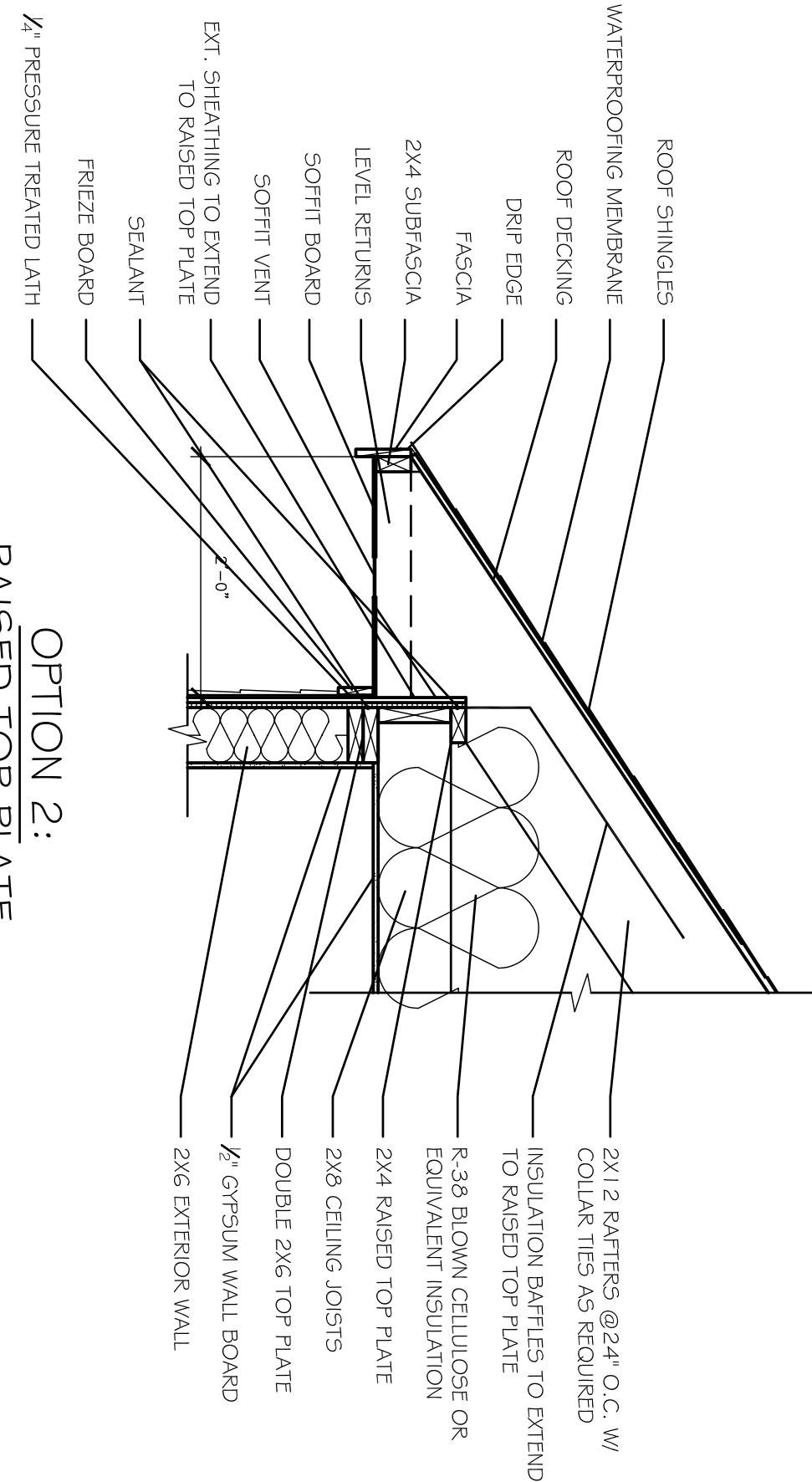
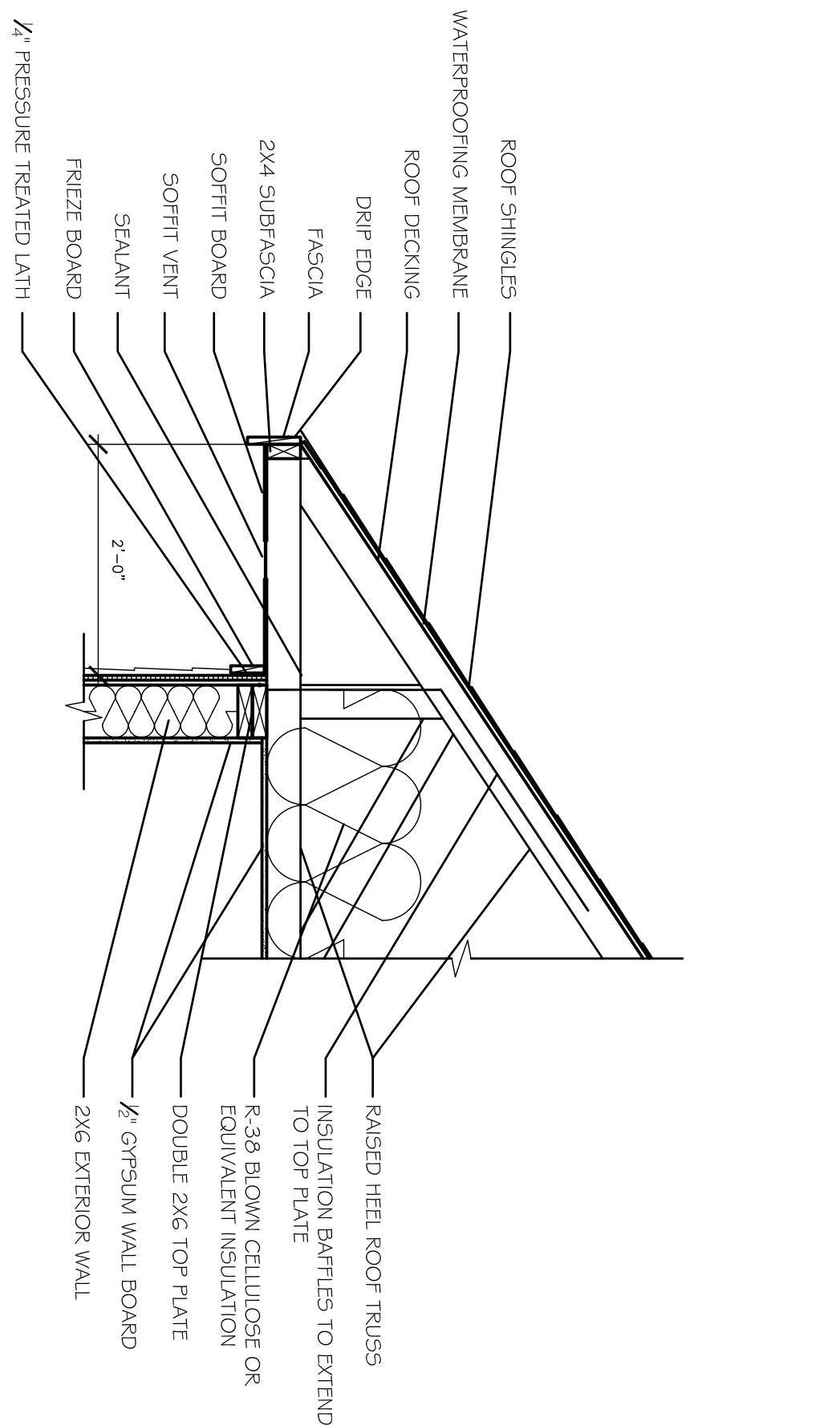
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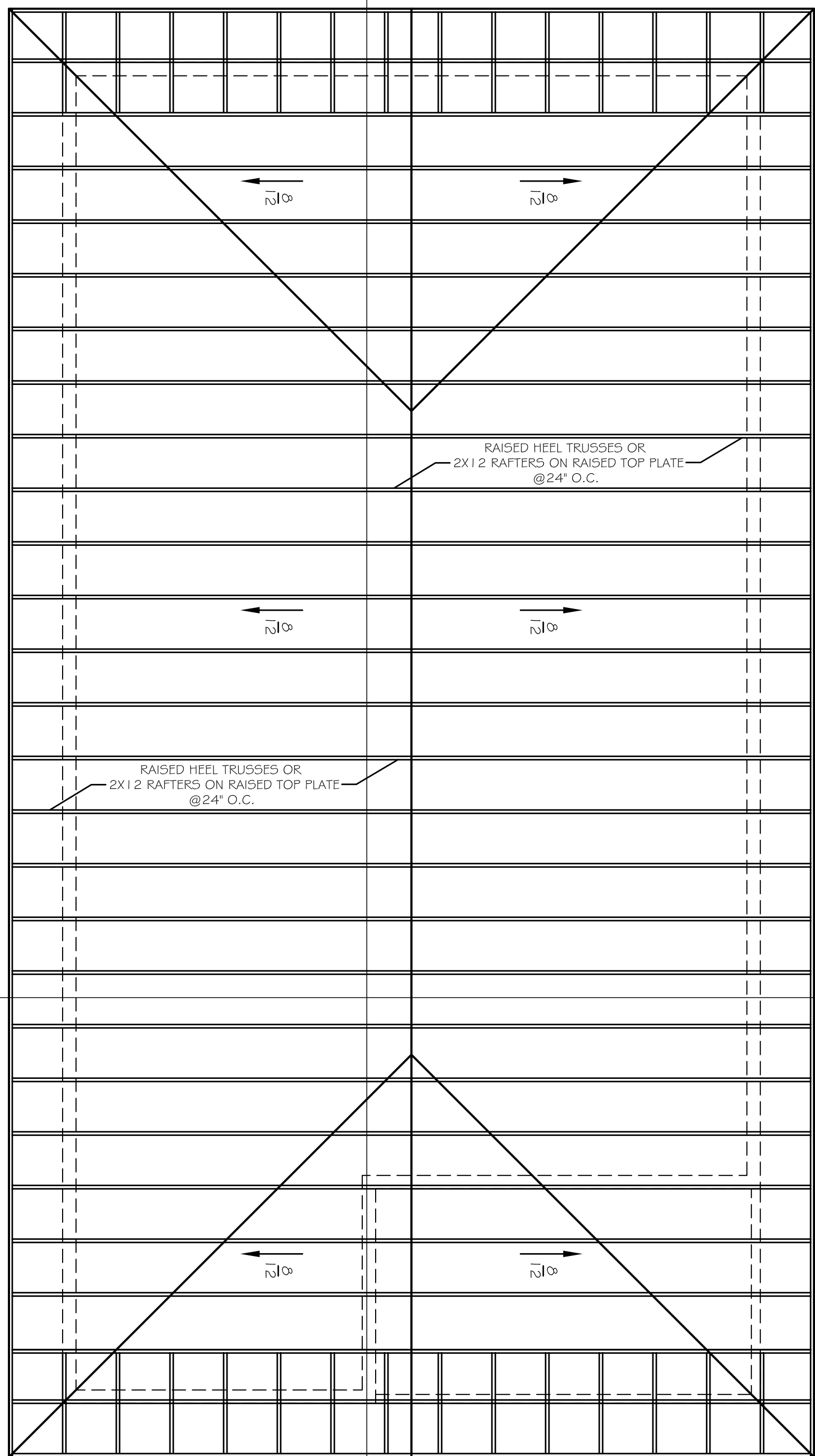
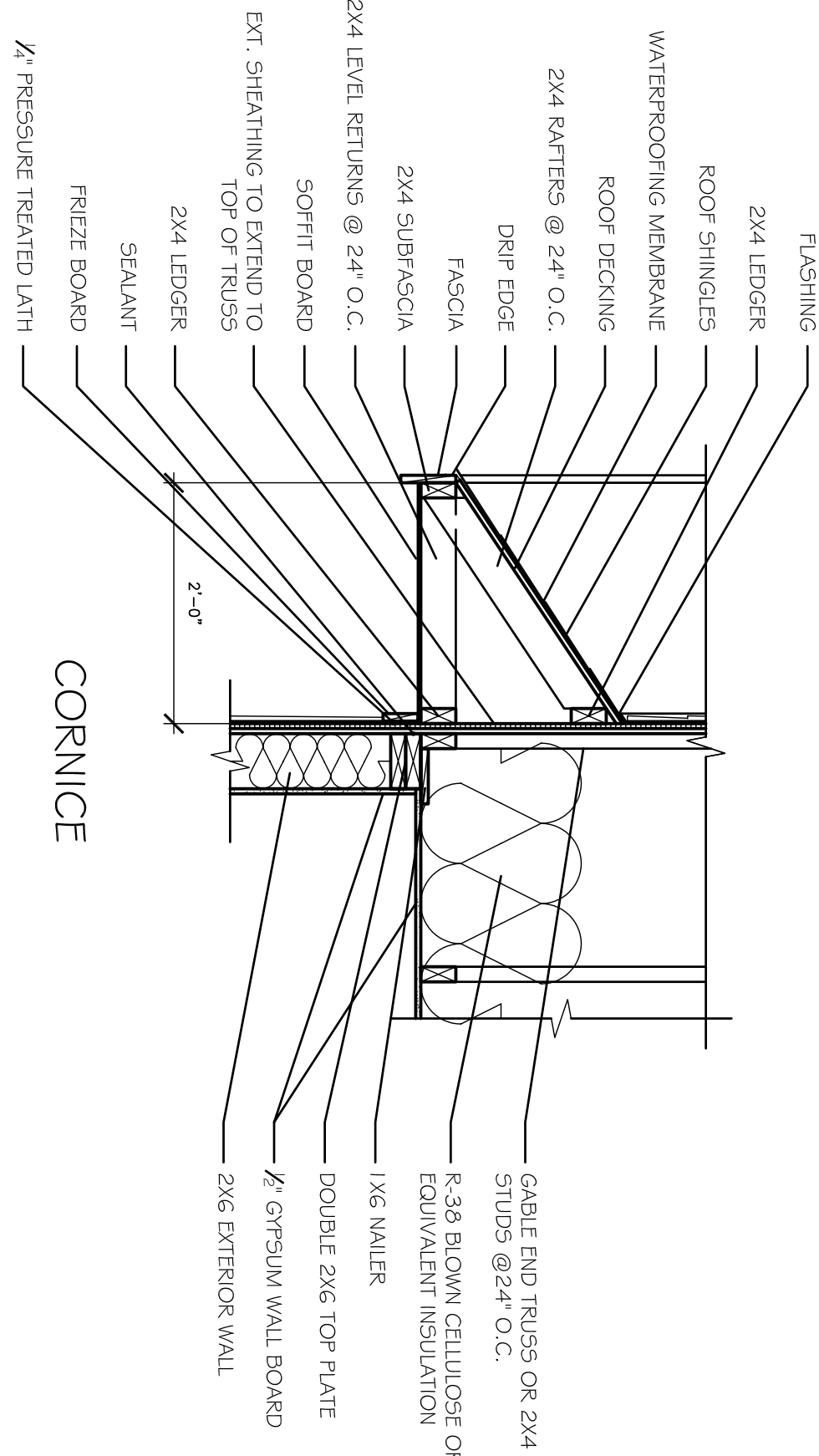
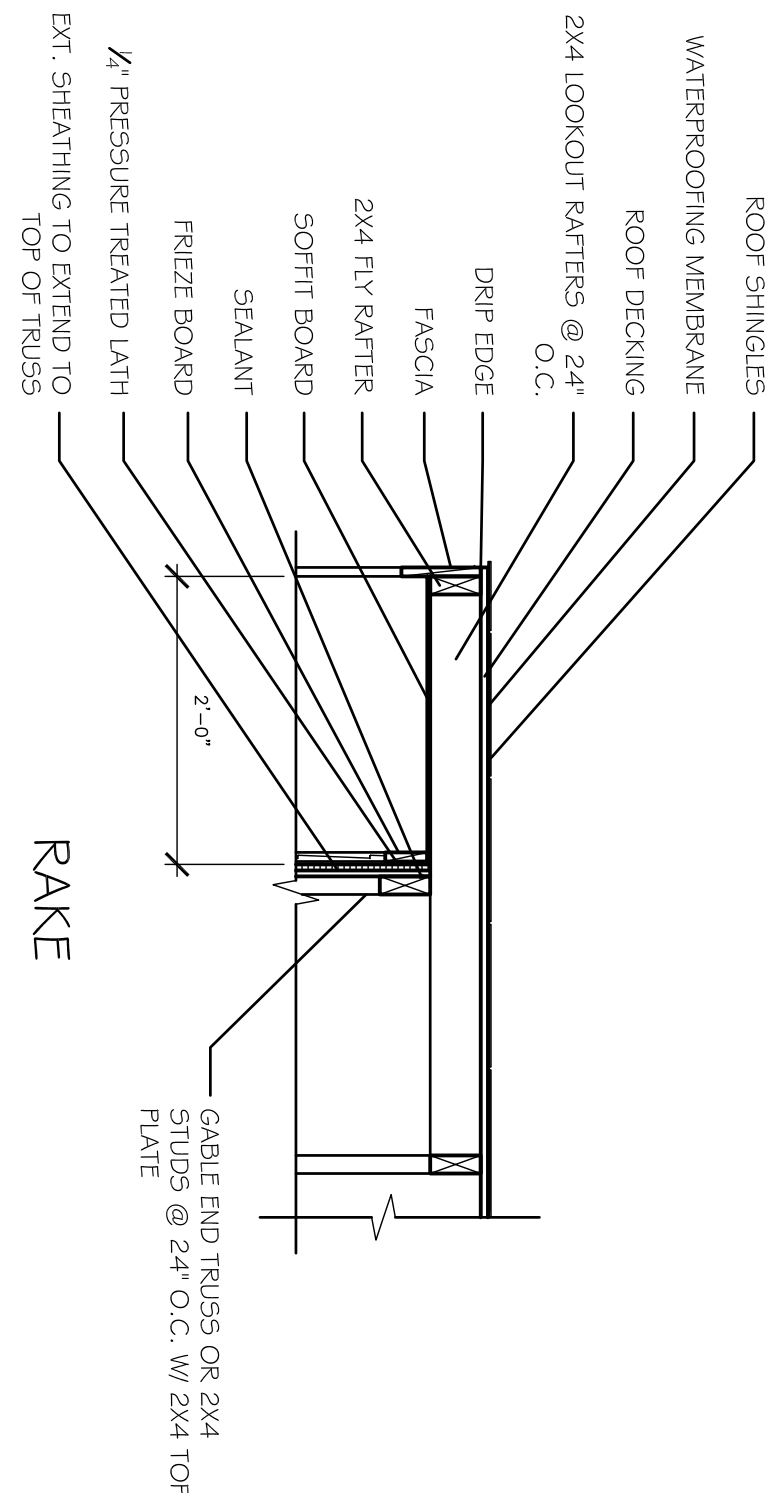




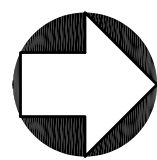


ES4  
AS103  
RIDGE DETAIL  
1" = 1'-0" 0 1/2" 1" 2"

D-1  
AS103  
EAVE DETAILS  
3/4" = 1'-0" 0 1" 2" 3"



A-4  
A-101  
ROOF FRAMING PLAN  
1/4" = 1'-0" 0 2' 4' 8'



C-1  
AS301  
C-1

ISSUE		
MARK	DATE	DESCRIPTION

PROJECT

THE  
COTTAGE

SOURCE

2005  
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PASSIVE SOLAR  
PLANBOOK



ISSUE

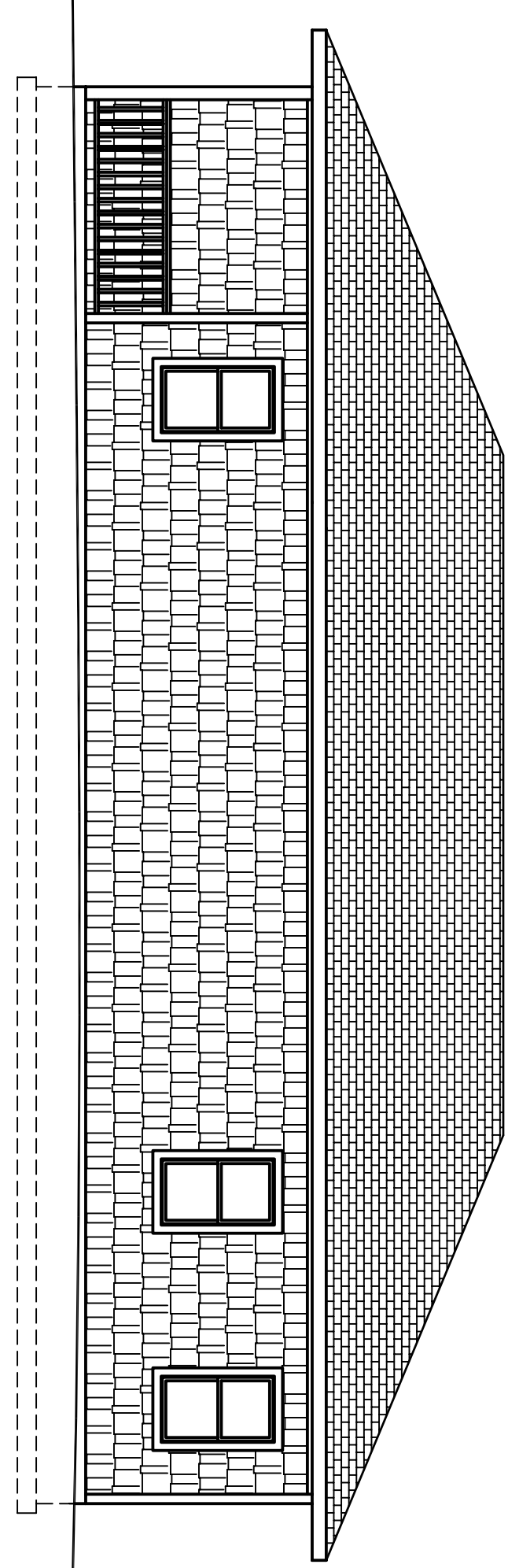
MARK	DATE	DESCRIPTION

SHEET  
TITLE

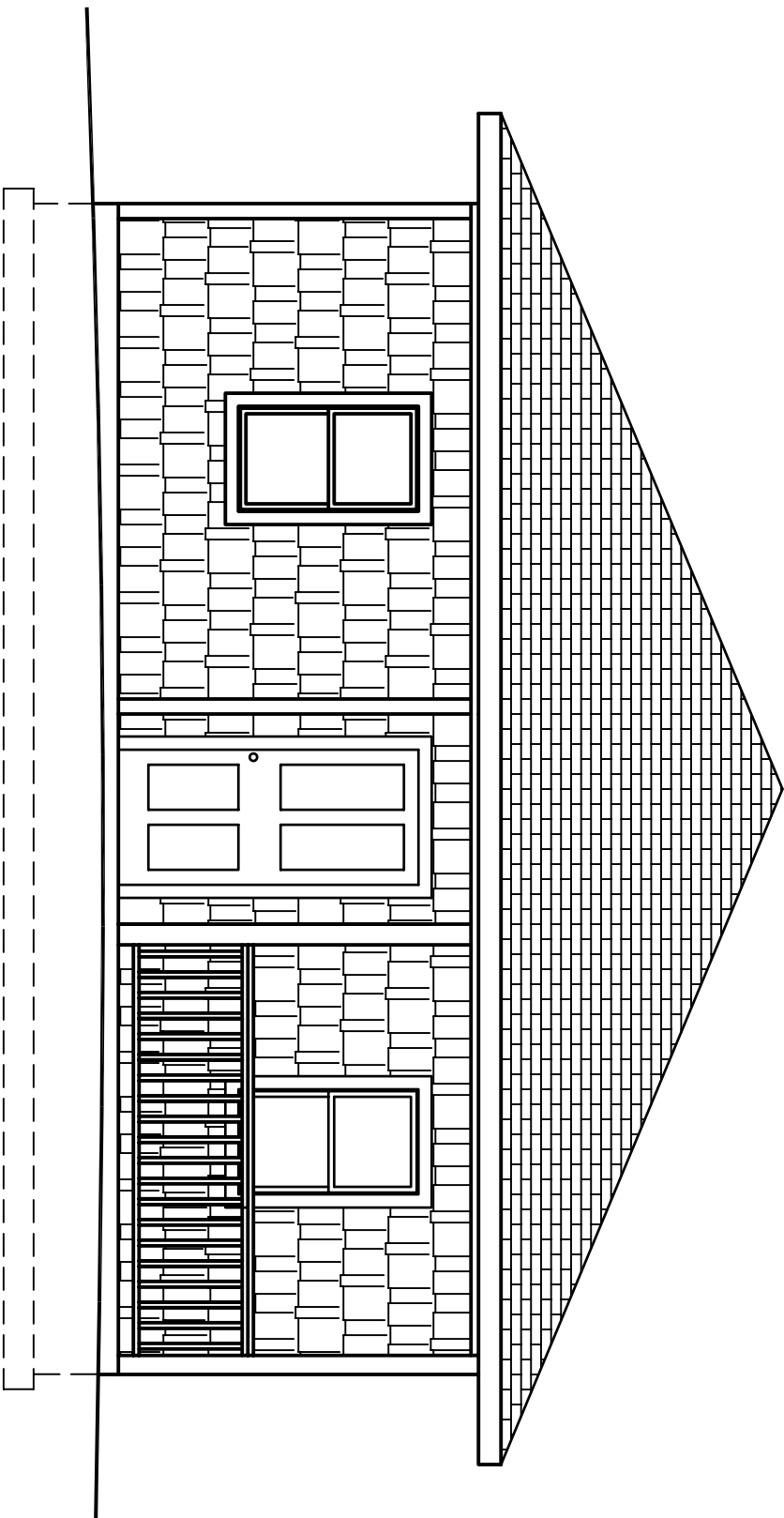
ELEVATIONS

SHEET NO.

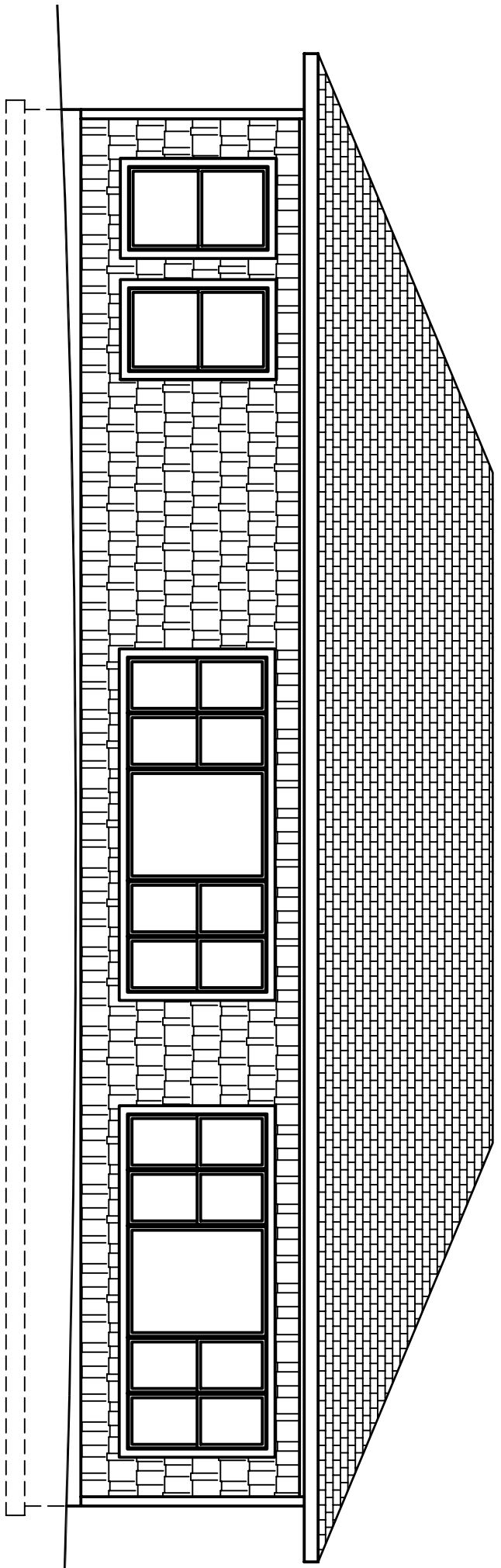
A-201



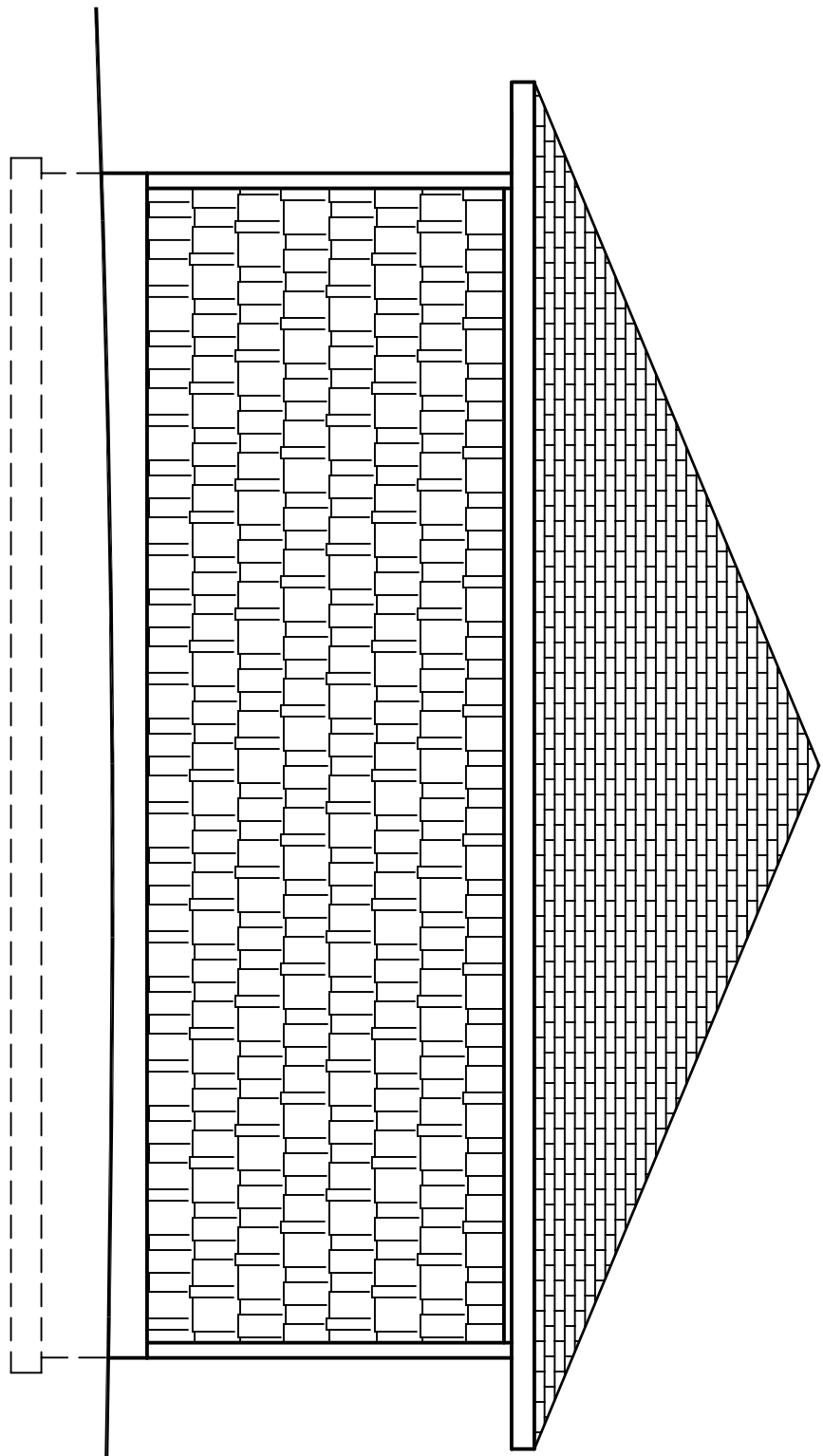
**NORTH ELEVATION**  
1/4" = 1'-0"



**EAST (FRONT) ELEVATION**  
1/4" = 1'-0"



**SOUTH ELEVATION**  
1/4" = 1'-0"



**WEST ELEVATION**  
1/4" = 1'-0"

1 2 3 4 5 6

A

B

C

D

E



