

2005
NORTH CAROLINA
AFFORDABLE
PASSIVE SOLAR
PLANBOOK

THE
CATAWBA VALLEY

3 BEDROOM/ 2 BATH
1132 SQ. FT. TOTAL HEATED SPACE



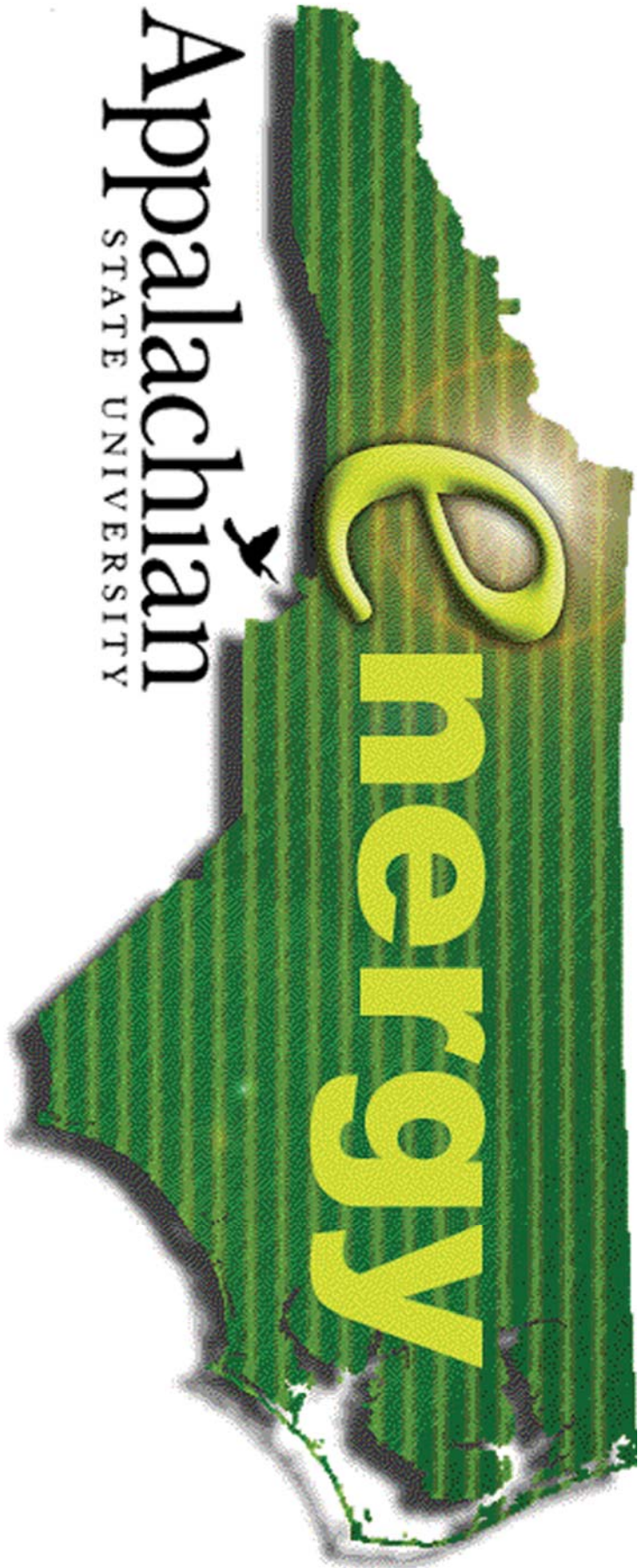
DRAWN BY: Appalachian State University Energy Center
Construction Technology Department

LEGEND:

DRAWING TITLE	
GRID LOCATION	
SHEET NUMBER	
SCALE	
NORTH	
DETAIL	
SECTION DETAIL	
EXTERIOR ELEVATION	
BUILDING SECTION	



N.C. Department of Administration "Ensuring a sustainable energy future"



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.

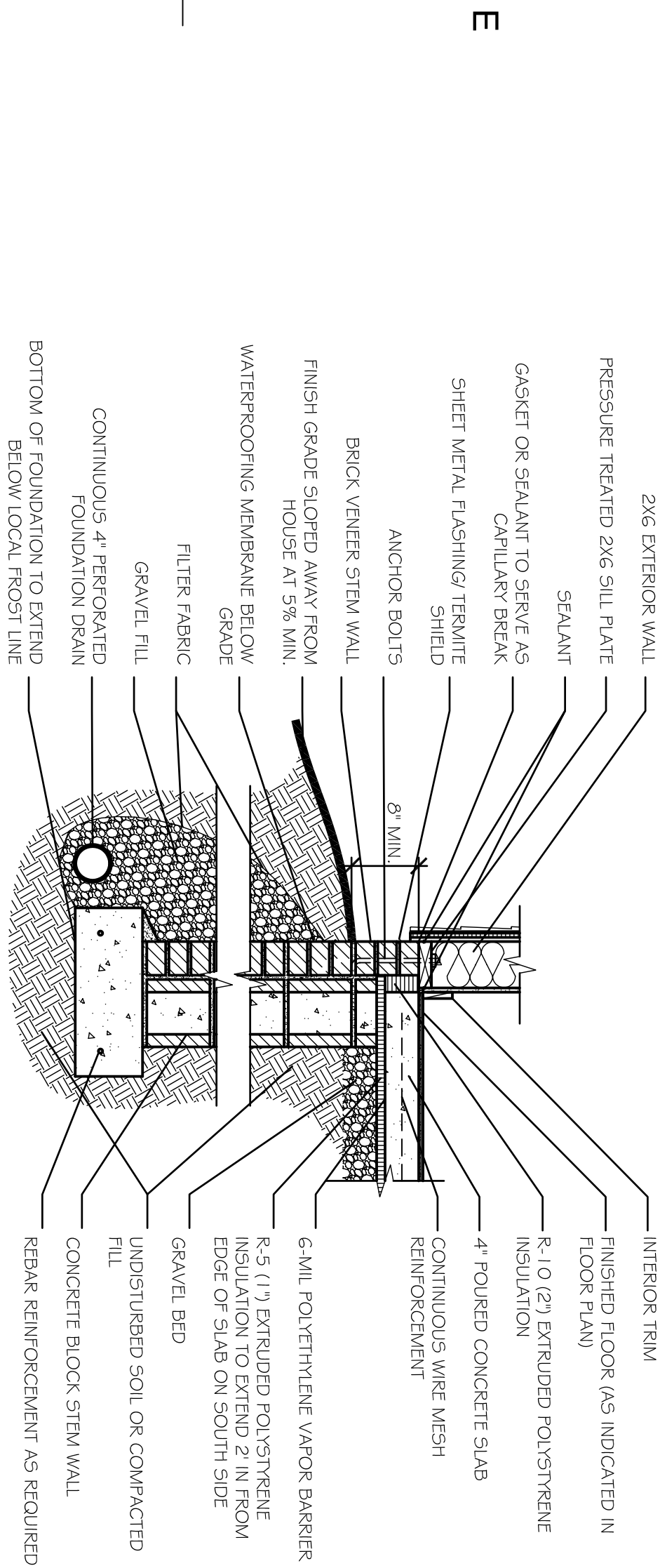
Neither the State of North Carolina, nor any agency thereof, nor any of the employees makes any warranty, express or implied, or assumes any legal liability or responsibility for any third party use or the results of such use of any information, apparatus, assembly, product, or functional efficiency 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.

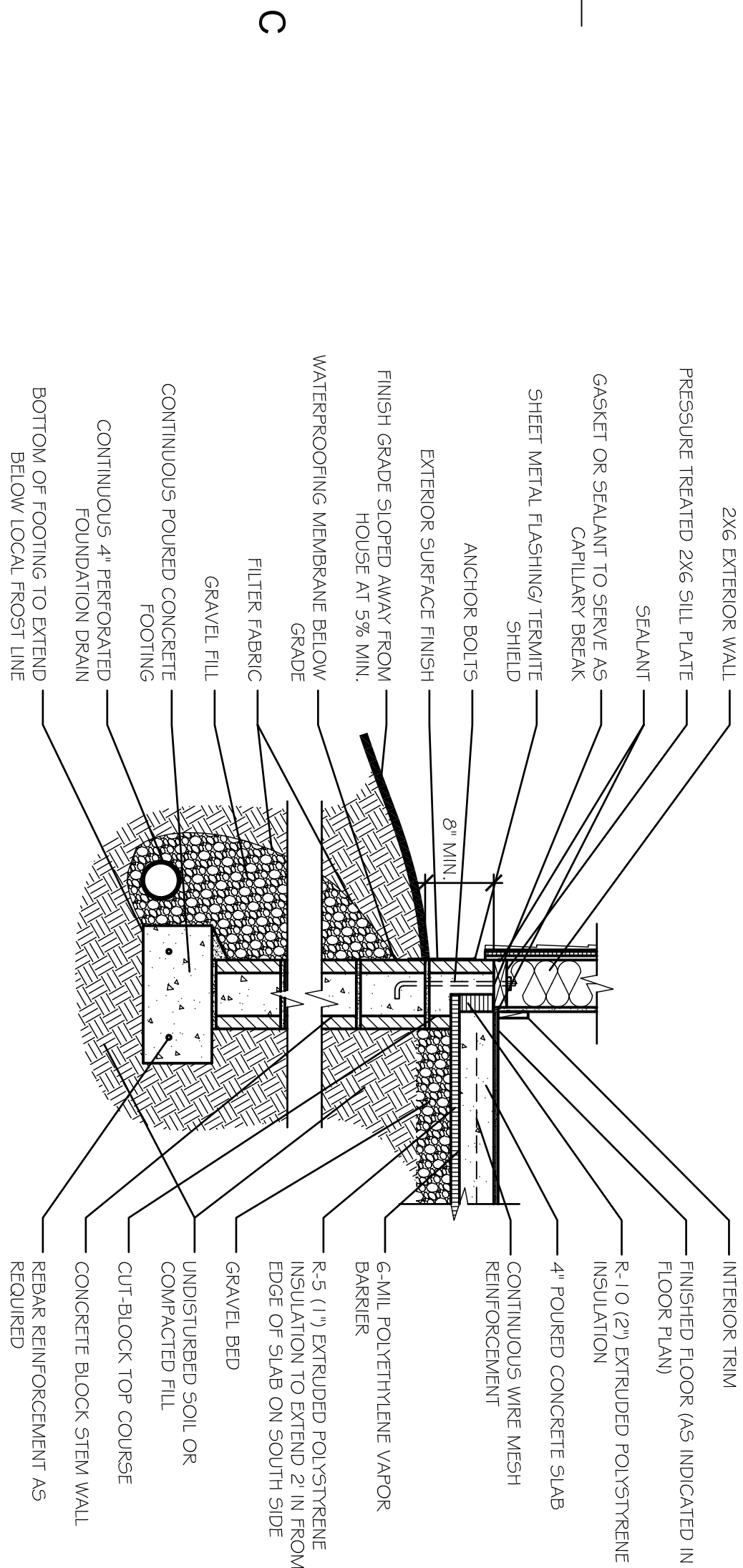
The drawings in this set have been prepared as architectural guidelines for the evaluation of a passive solar house. Items such as heating and cooling equipment, plumbing, and electrical requirements are included, though modifications may be necessary due to the location and the specific site. All modifications 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.

INDEX TO DRAWINGS:

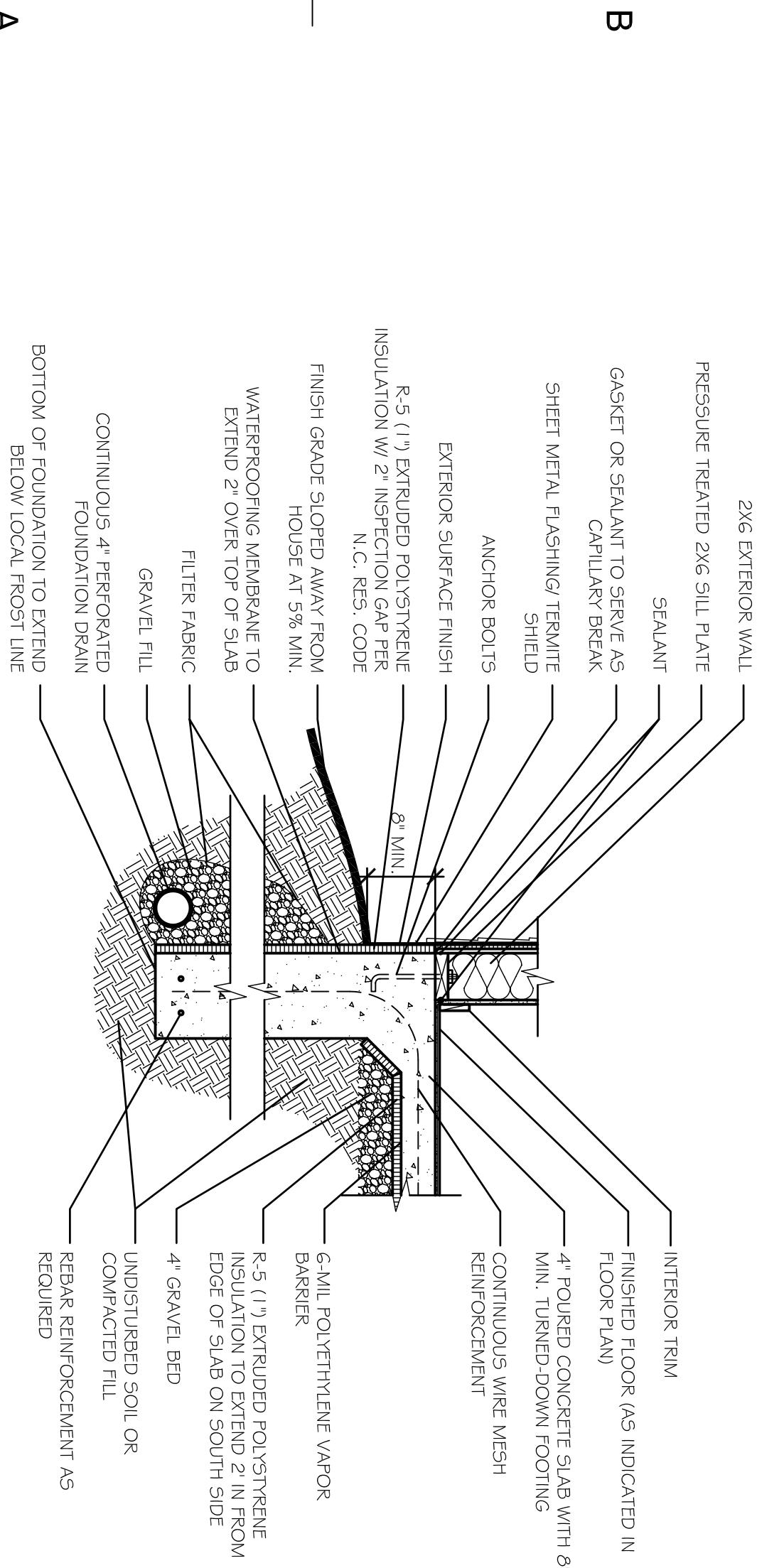
- A-101 FOUNDATION PLAN
- A-102 1ST FLOOR PLAN
- A-103 ROOF PLAN
- A-201 ELEVATIONS
- A-301 BUILDING SECTIONS
- A-401 DETAILS



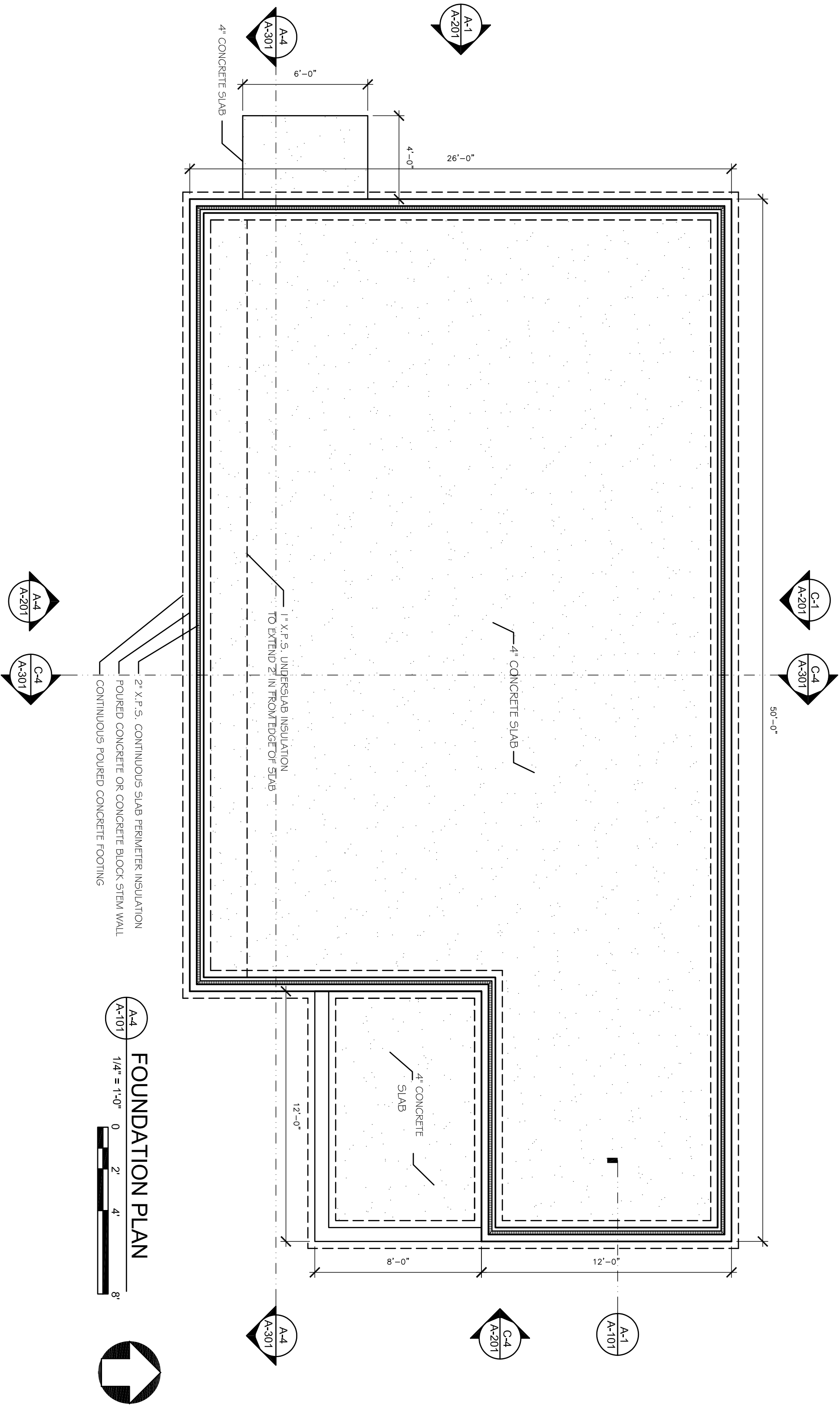
OPTION 3:
CONTAINED SLAB W/BRICK
VENEER STEM WALL



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

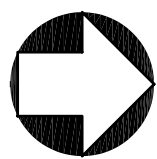


OPTION 1:
MONOLITHIC SLAB W/ TURNED
DOWN FOOTING



FOUNDATION PLAN

A-4
A-101
1/4" = 1'-0"



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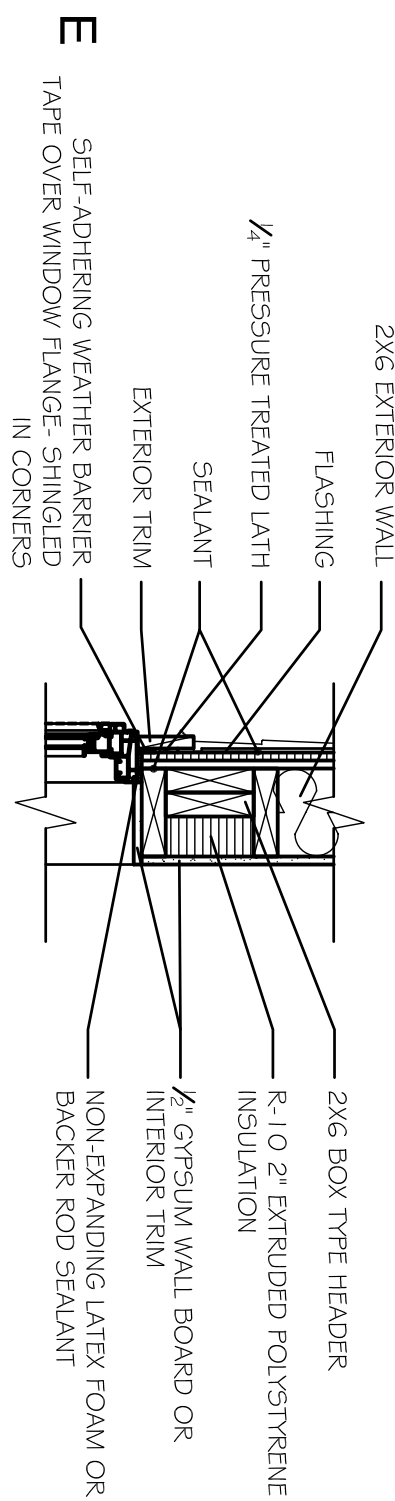
MARK	DATE	DESCRIPTION

SHEET
TITLE

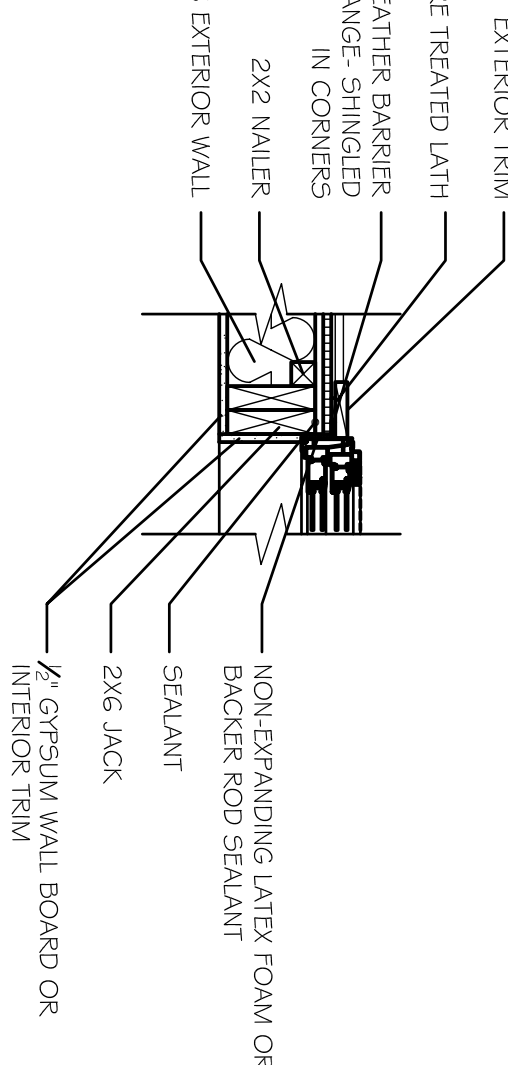
FOUNDATION
PLAN
and DETAILS

SHEET NO.

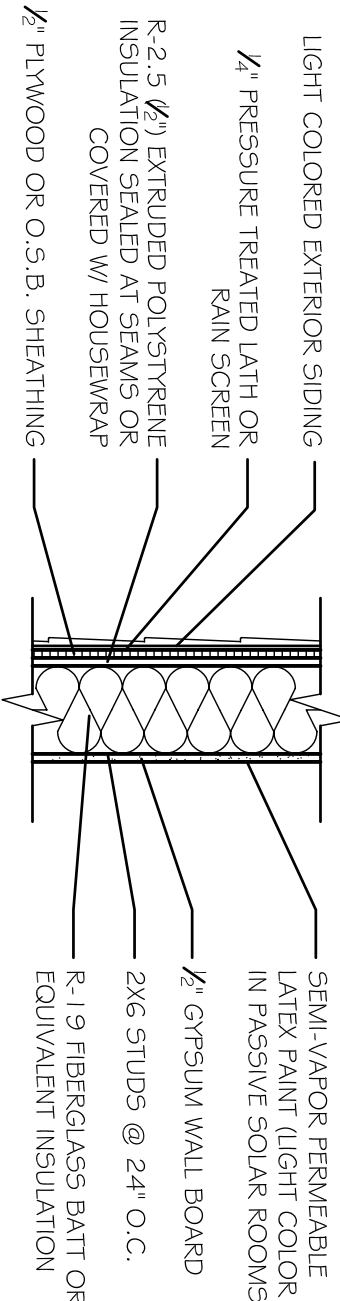
A-101



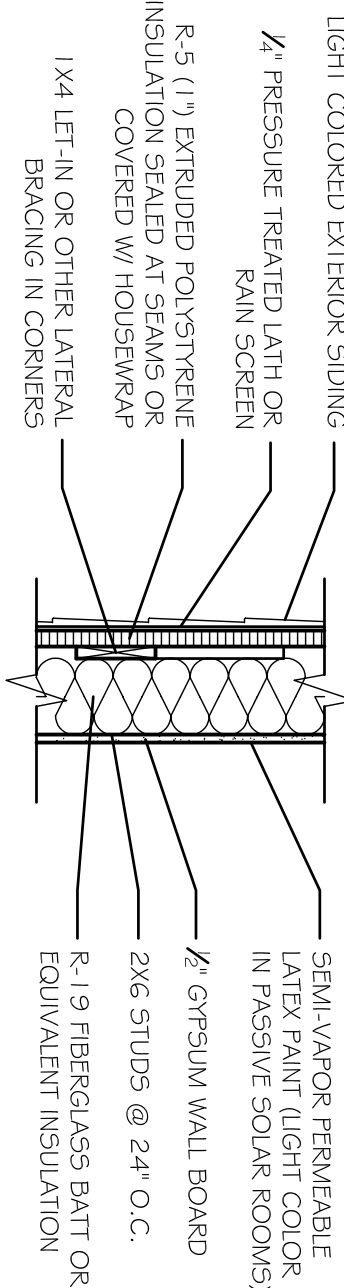
INSULATED HEADER



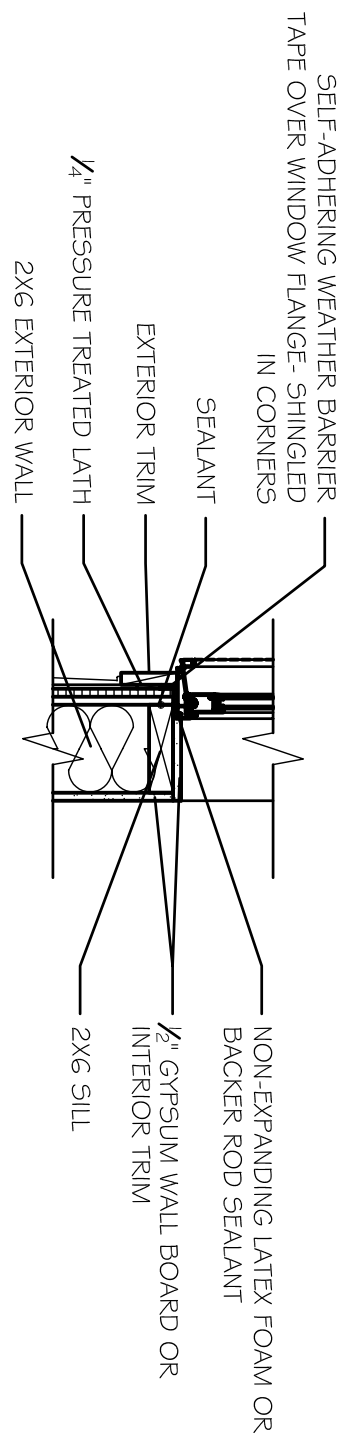
JAMB



OPTION 1:
R-21.5 W/ PLYWOOD OR
O.S.B. SHEATHING



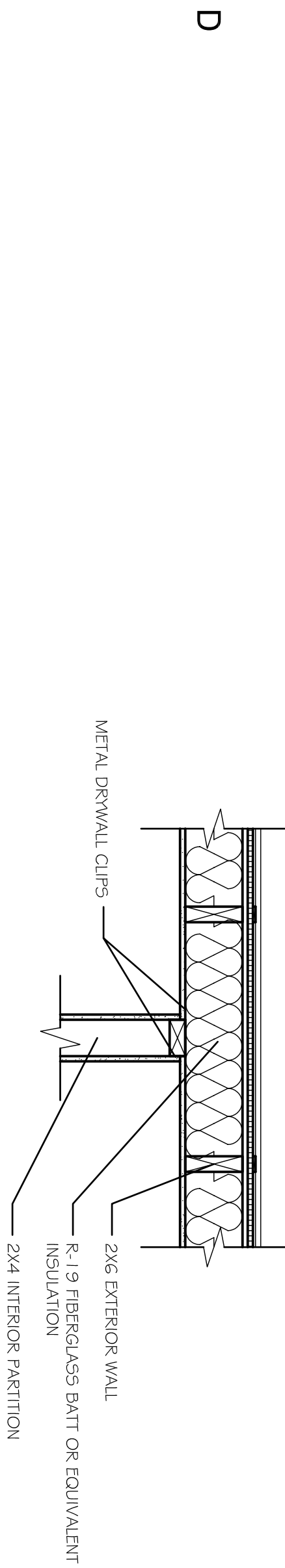
OPTION 2:
R-24 W/ LET-IN BRACING



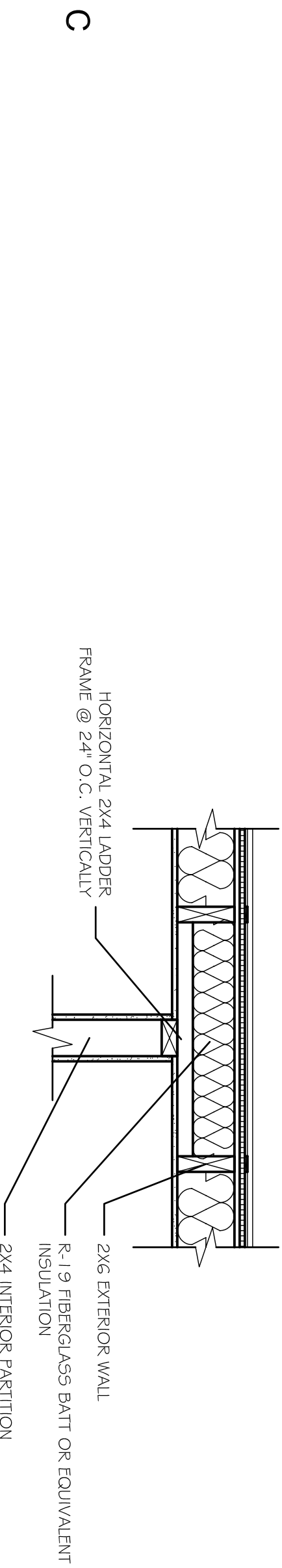
SILL

WINDOW AND DOOR DETAILS

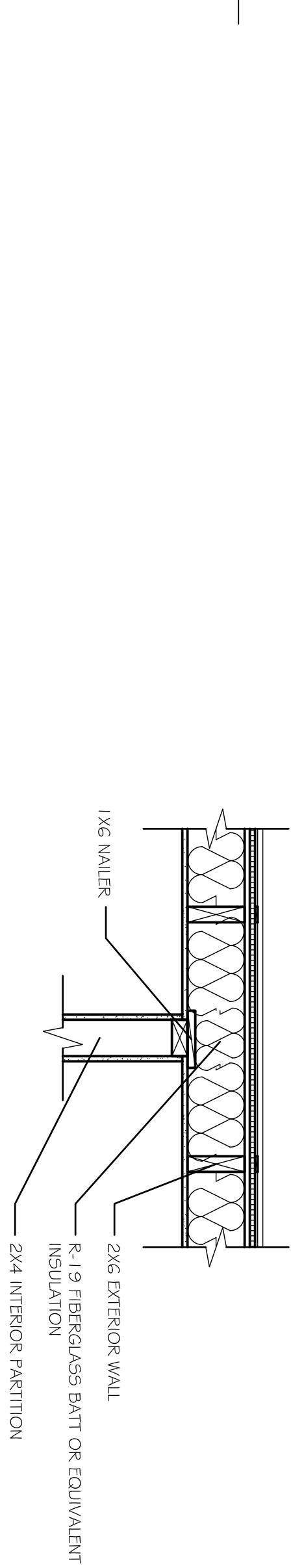
2X6 EXTERIOR WALL DETAILS



OPTION 3:
DRYWALL CLIPS

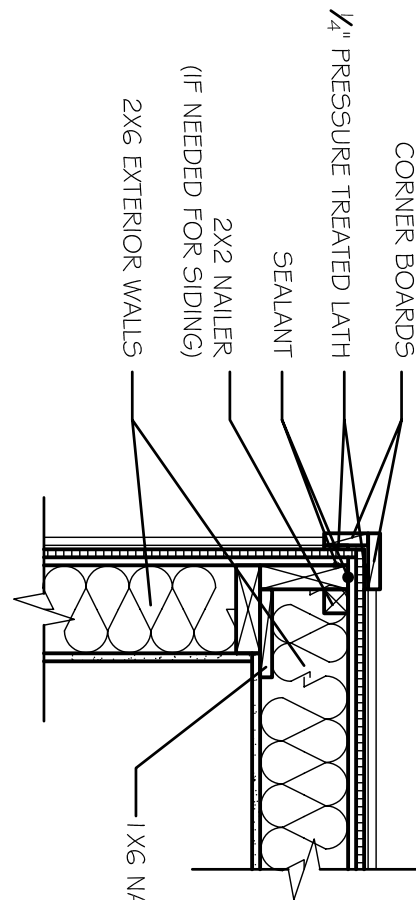


OPTION 2:
2X4 LADDER FRAME

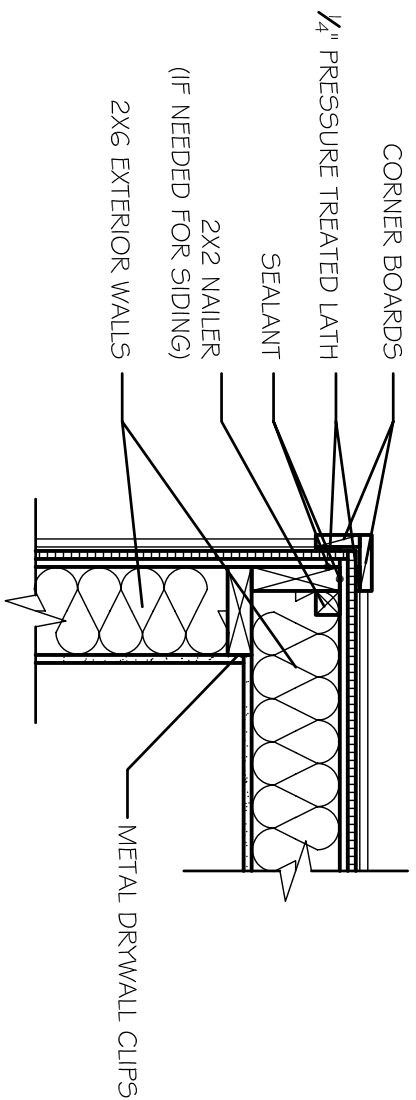


OPTION 1:
1X6 NAILER

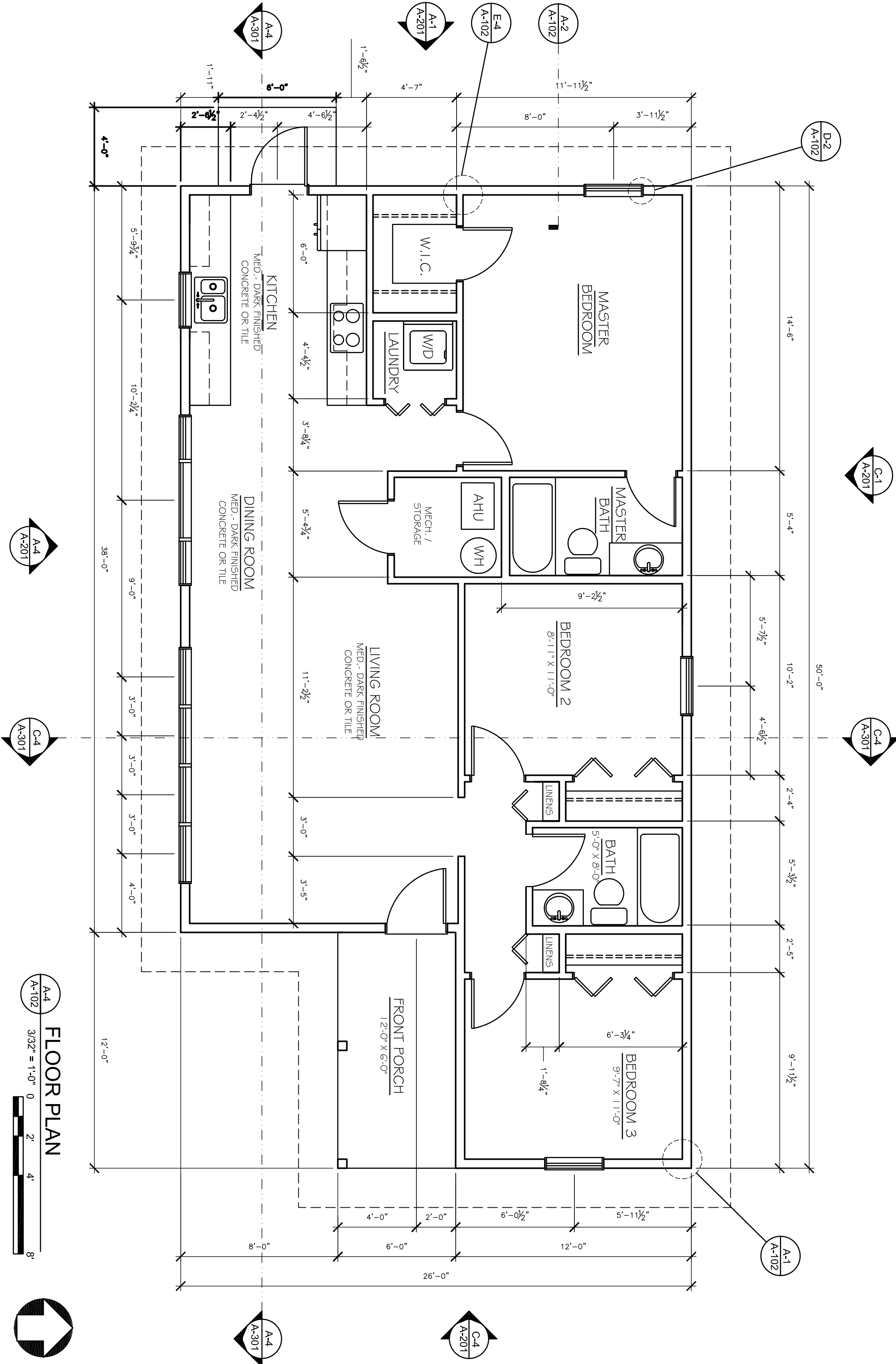
T-WALL DETAILS



OPTION 1:
3-STUD CORNER

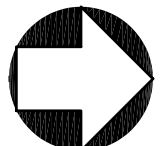
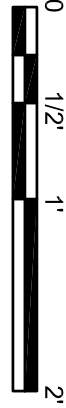
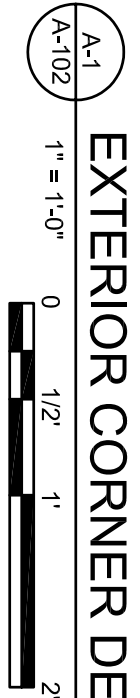


OPTION 2:
DRYWALL CLIPS

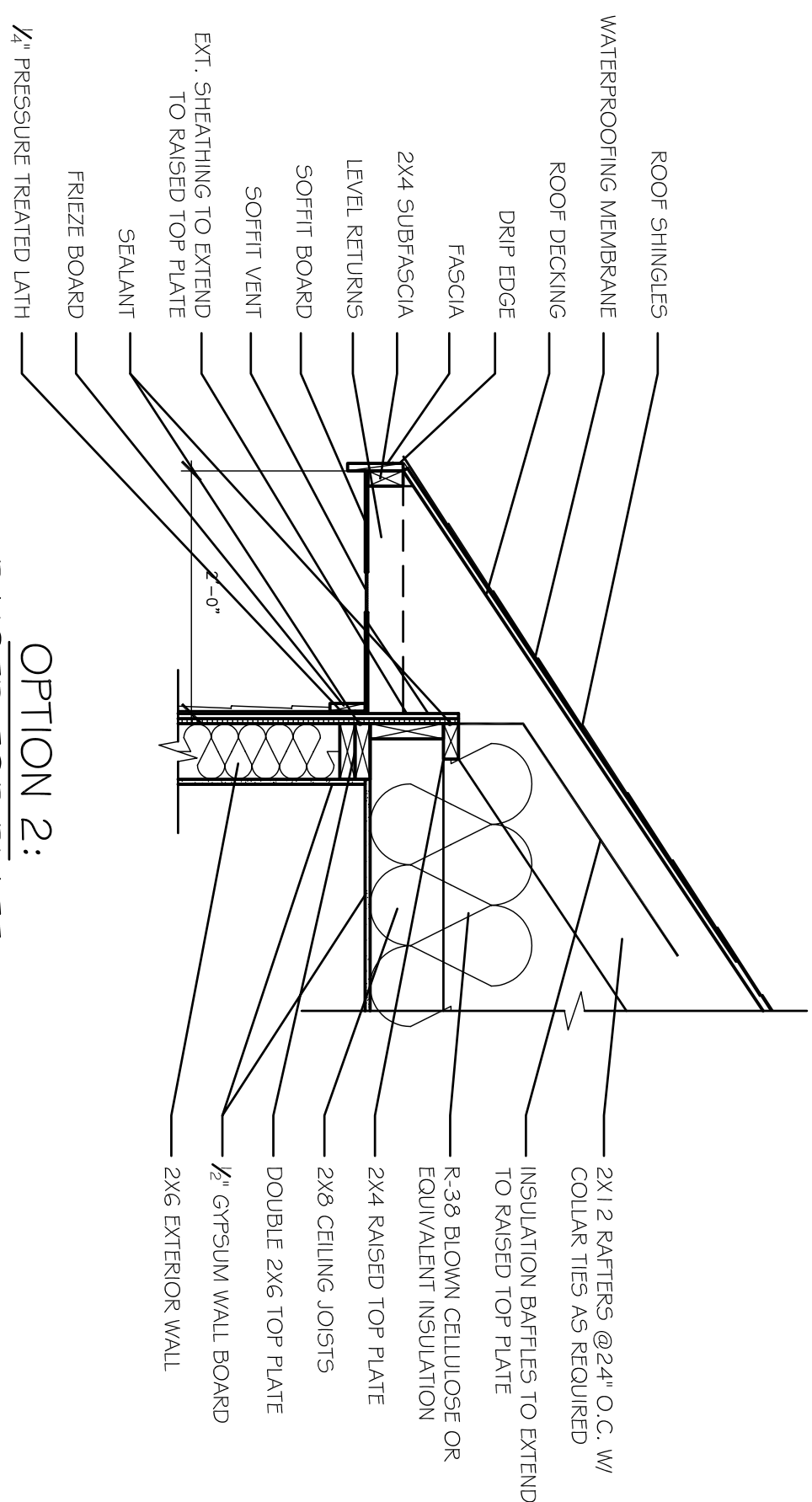


FLOOR PLAN

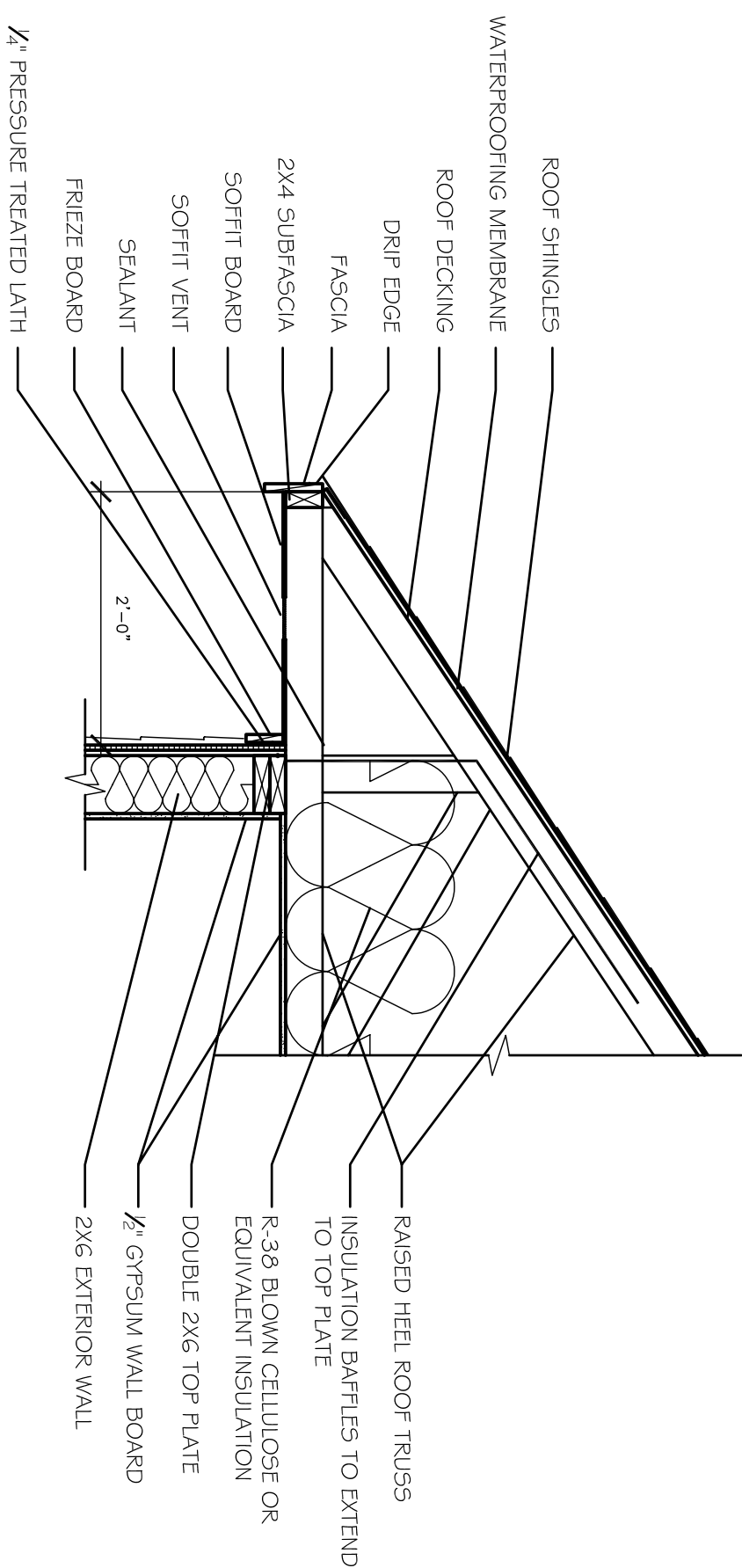
EXTERIOR CORNER DETAILS



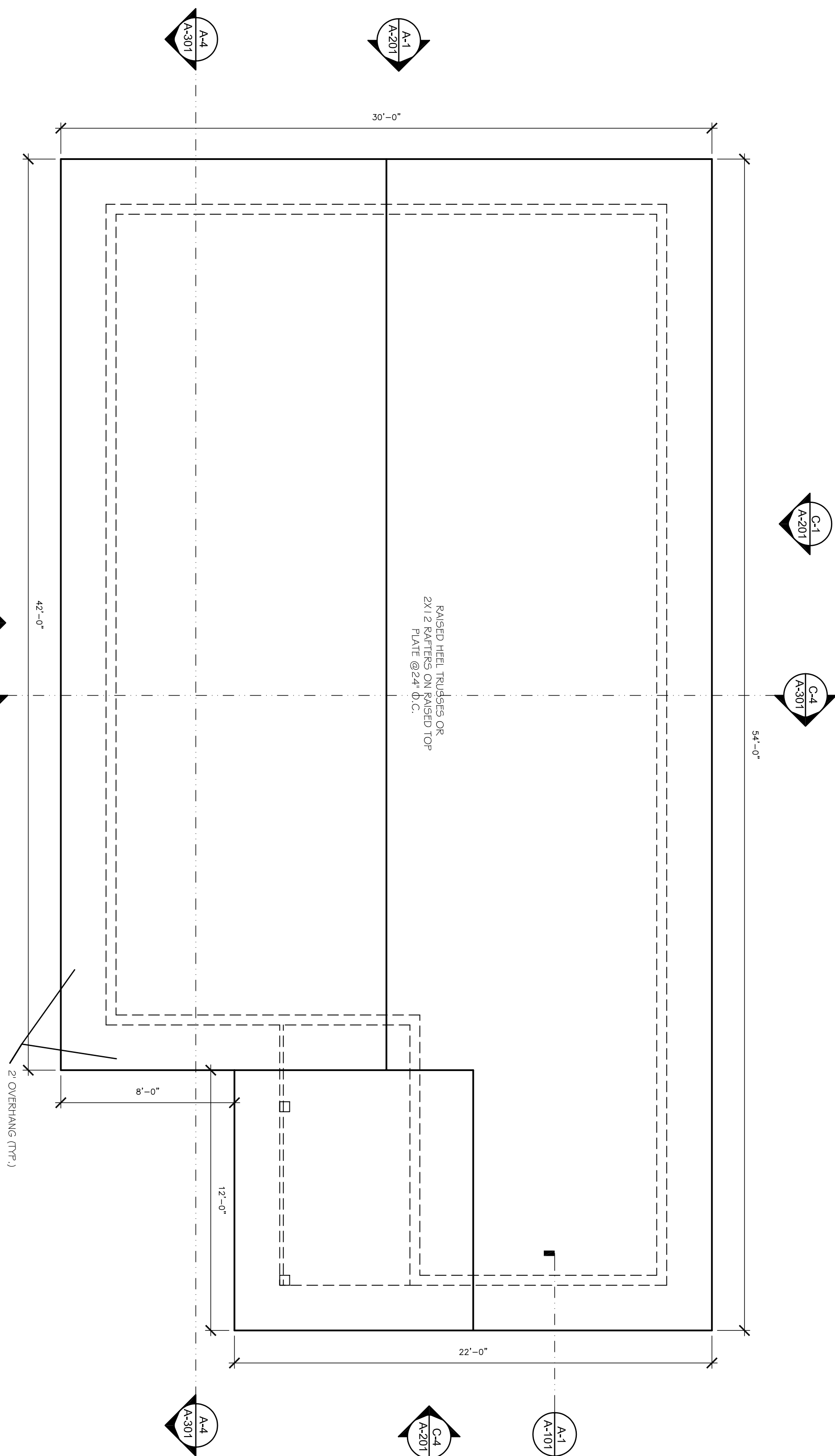
MARK	DATE	DESCRIPTION



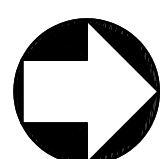
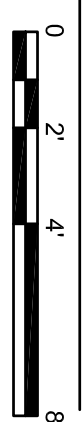
OPTION 2:
RAISED TOP PLATE



OPTION 1 :
RAISED HEEL TRUSS



ROOF PLAN



EAVE DETAILS



MARK DATE DESCRIPTION



ISSUE		
MARK	DATE	DESCRIPTION

