

Important Note About House Plans

House Plans are fully integrated sets of construction drawings created by BSC for specific locations and climates. The sets include floor plans, detailed framing plans and wall framing elevations, exterior elevations and sections, advanced framing and enclosure details, as well as mechanical and electrical plans.

Through our multi-disciplinary team approach, interior, framing and mechanical layouts are designed and coordinated well before the start of construction. Duct layouts are not only shown on the mechanical plan but on the framing plan as well. This level of coordination limits changes made in the field and helps to ensure assemblies and systems are installed as designed.

Please Note

Please note that House Plans are posted as examples of high performance housing designs and are not to be used for construction. If you wish to use these plans as a basis for a house design, you should keep the following in mind:

- Most state and local governments require that a set of drawings be stamped by an architect licensed to practice locally
- Foundation plans need to be developed for the specific site and climate
- While these drawings were developed to be compliant with the then-current IRC code, you will need to meet your local building code requirements
- Finally, since materials and products specified in the drawings may not be available in all locations, you will need to carefully research any substitutions to verify compatibility and performance.



Habitat for Humanity of Metro Denver Single Family Housing

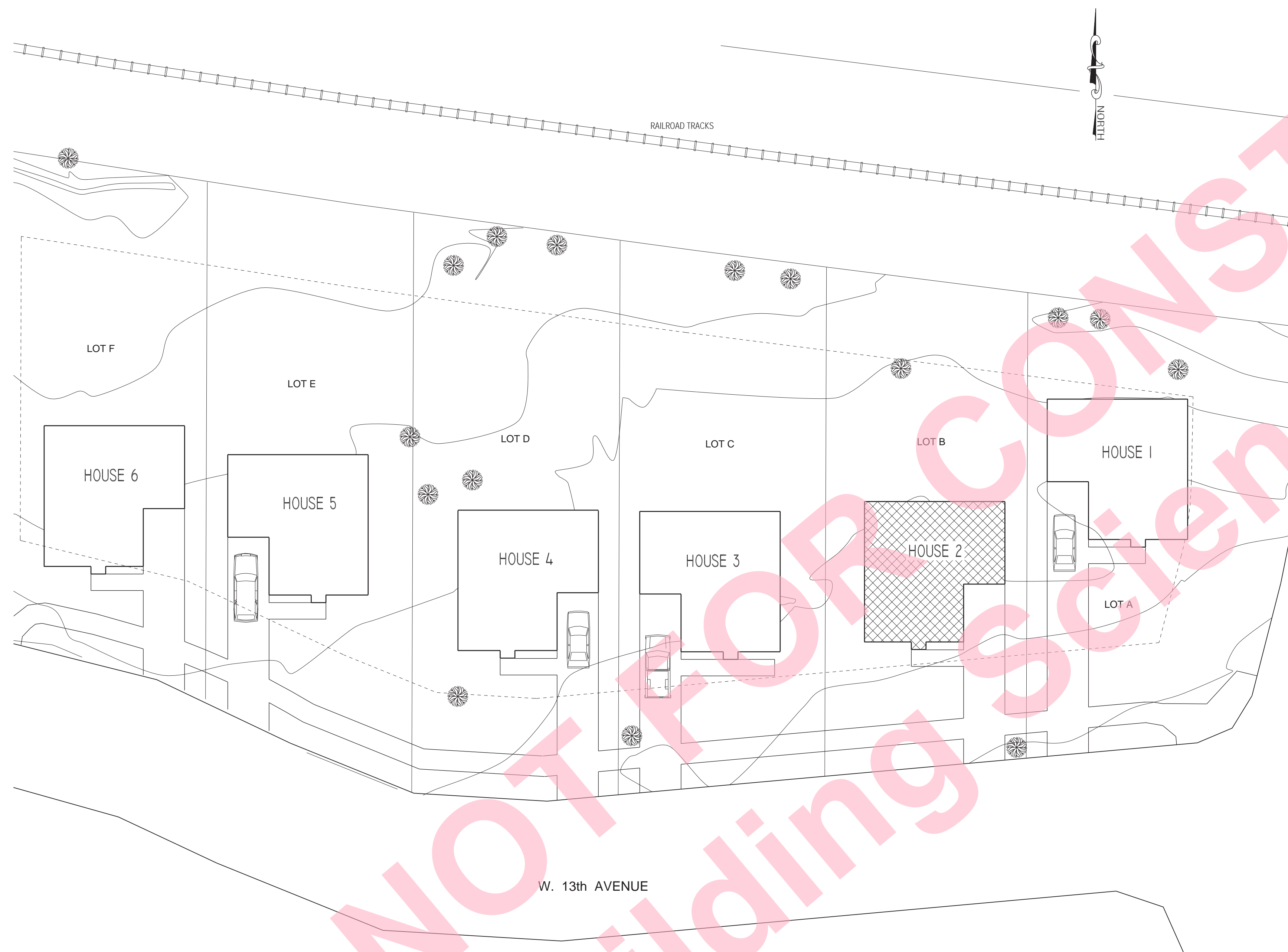
13th Avenue and Nelson Street
Lakewood, Colorado



HABITAT FOR HUMANITY SINGLE FAMILY HOUSING

13 the AVENUE AND NELSON STREET LAKE WOOD COLORADO

HOUSE 2



LIST OF DRAWINGS

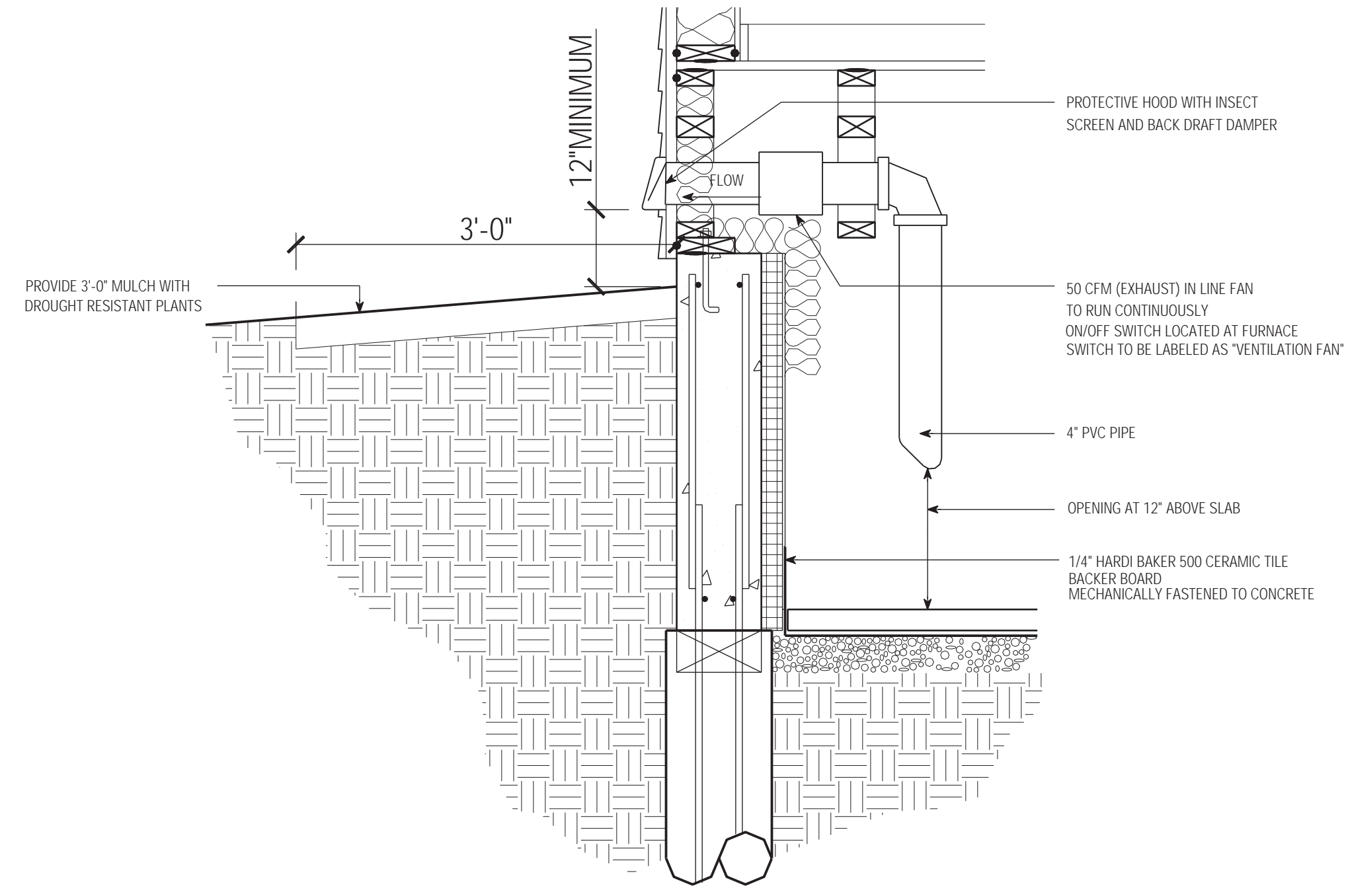
- A-1 FOUNDATION PLAN
- A-2 FIRST FLOOR FRAMING PLAN
- A-3 FIRST FLOOR PLAN
- A-4 SECOND FLOOR FRAMING PLAN
- A-5 SECOND FLOOR PLAN
- A-6 ROOF FRAMING PLAN / ROOF PLAN
- A-7 BUILDING ELEVATIONS / WINDOW SCHEDULE
- A-8 BUILDING SECTIONS
- A-9 WALL SECTION
- E-1 FIRST AND SECOND FLOOR ELECTRICAL PLANS

HABITAT FOR HUMANITY OF METRO DENVER
1500 WEST 12th AVENUE DENVER COLORADO 80204

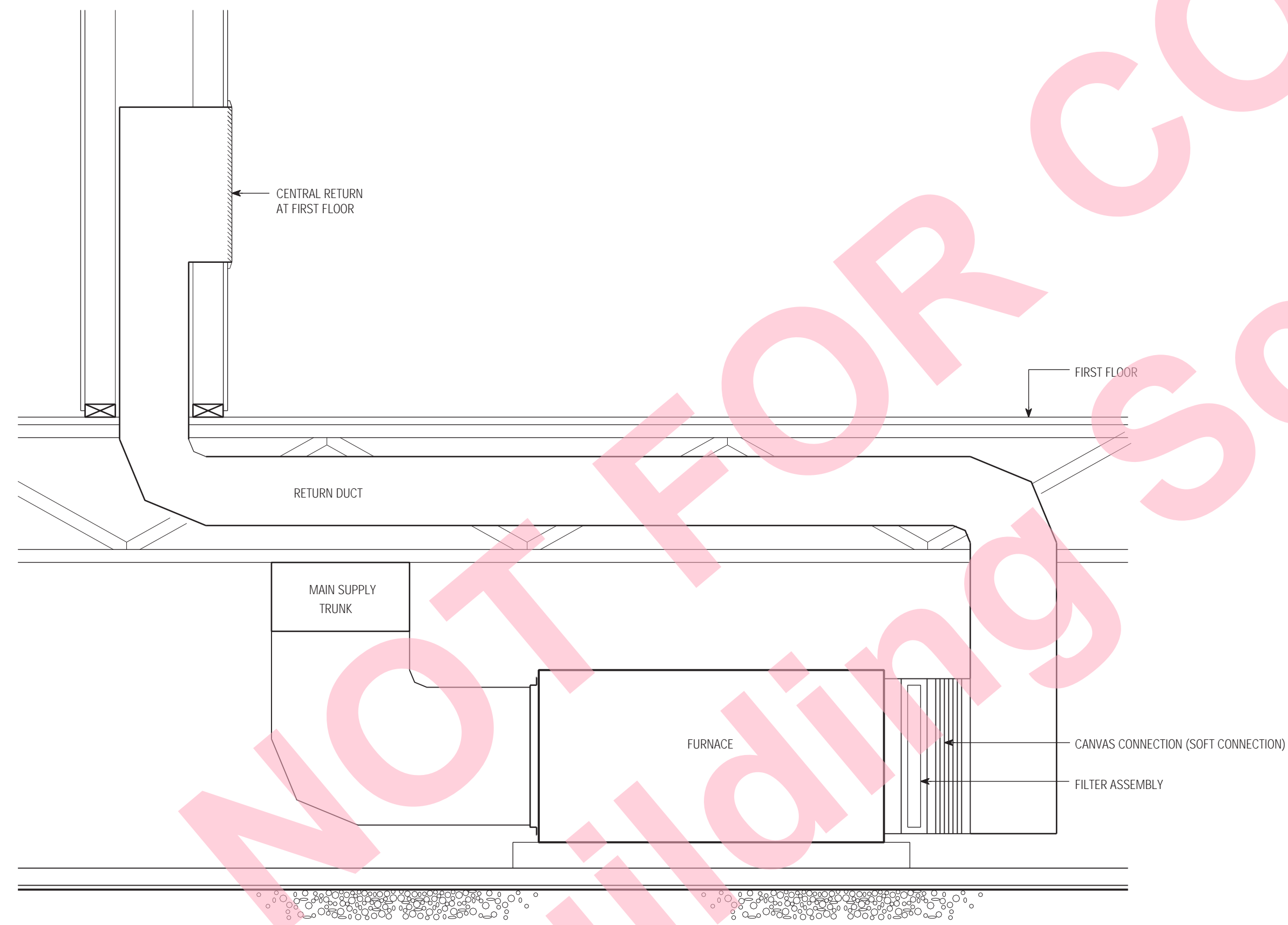
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22 JANUARY 2001

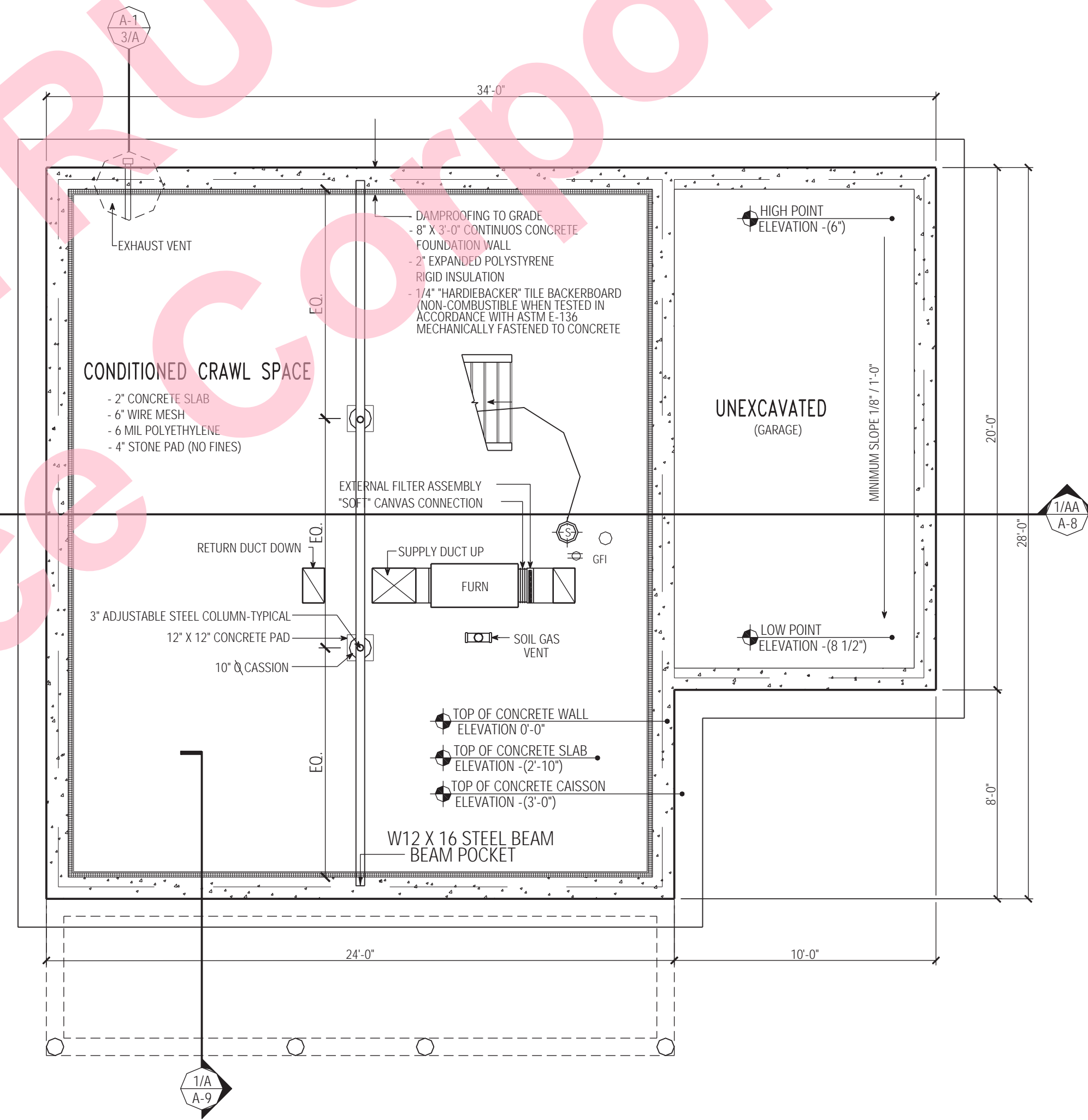




3 EXHAUST VENT
SCALE 1" = 1'-0"



2 FURNACE DETAIL
SCALE 1" = 1'-0"



1 FOUNDATION PLAN
SCALE 1/4" = 1'-0"

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FOUNDATION PLAN AND DETAILS
HOUSE 2
SCALE AS NOTED

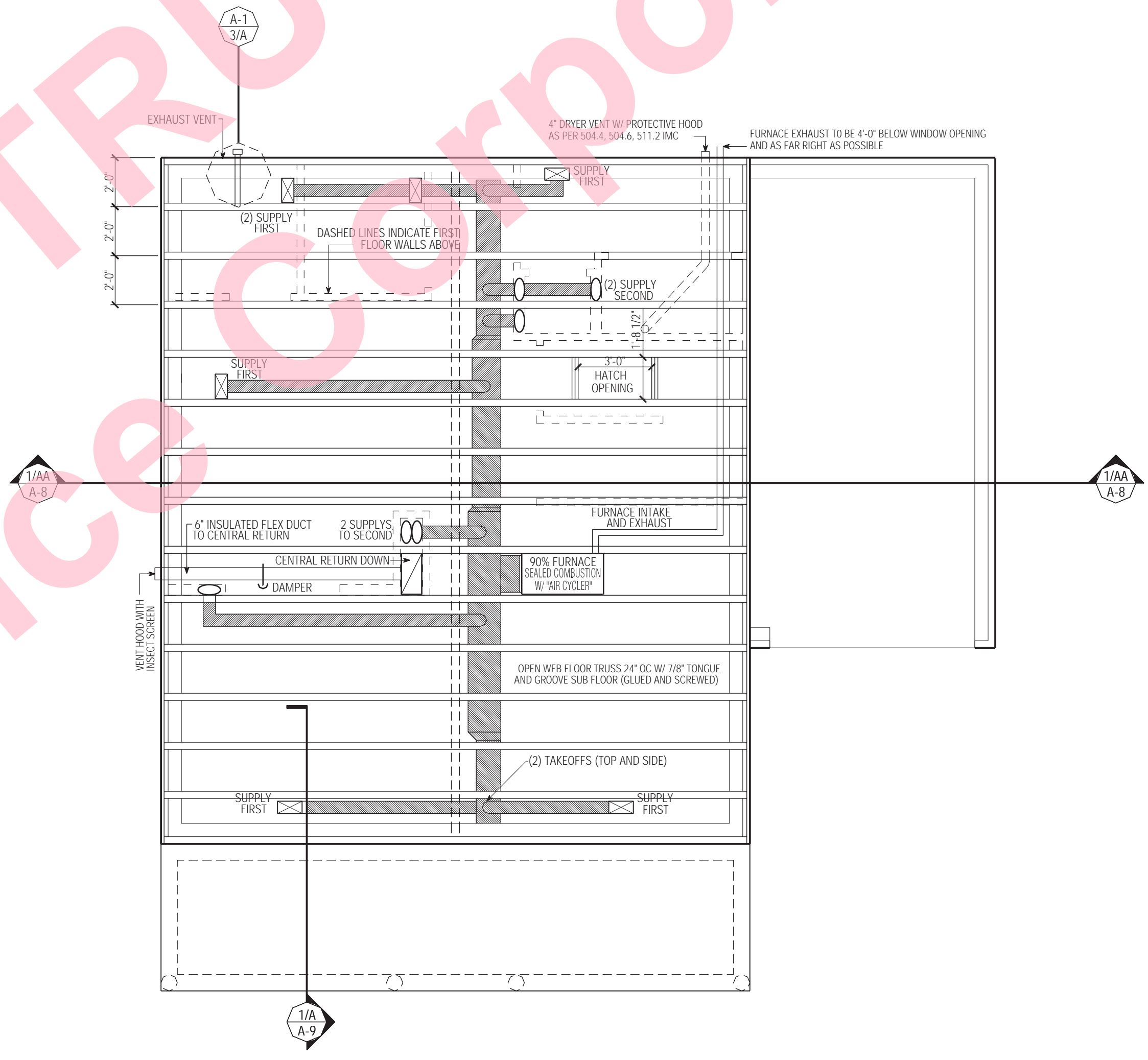
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FILE: HJ_METRO_COH_DEMONSTRATION.dwg



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1| FIRST FLOOR FRAMING PLAN
SCALE 1/4" = 1'-0"

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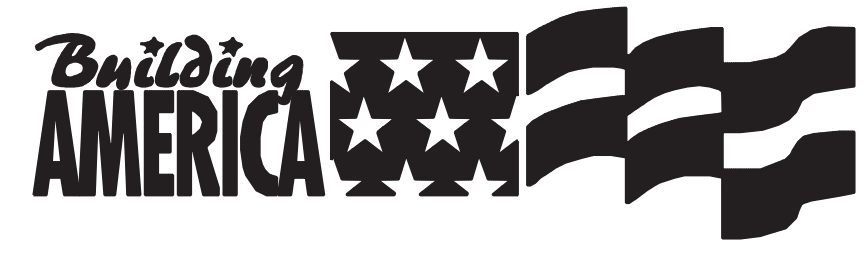
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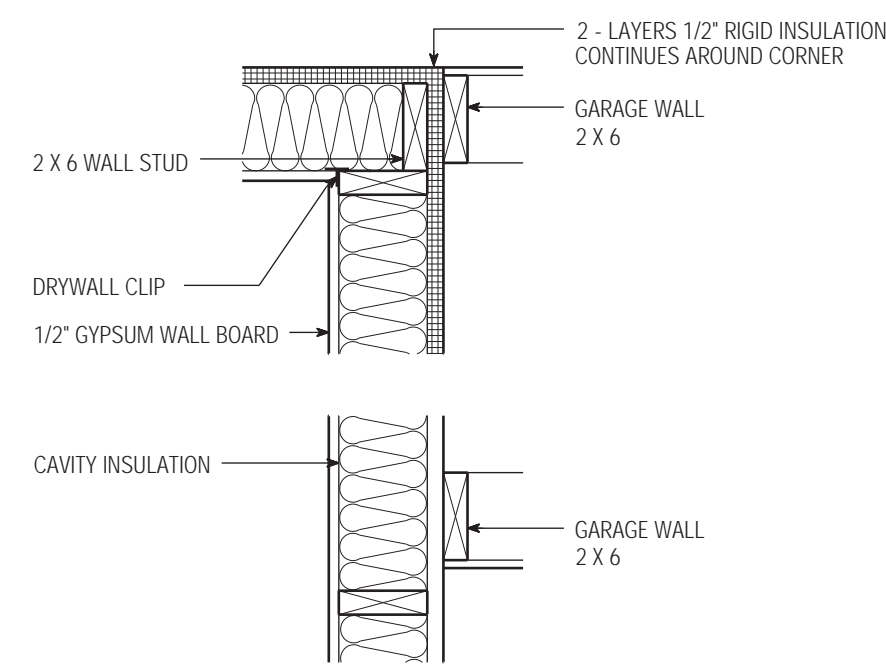
FIRST FLOOR FRAMING PLAN
HVAC DUCT / EQUIPMENT LAYOUT
HOUSE 2
SCALE AS NOTED

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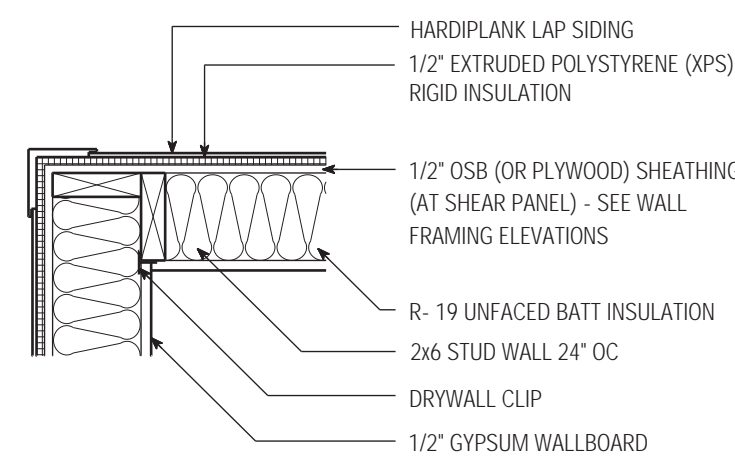
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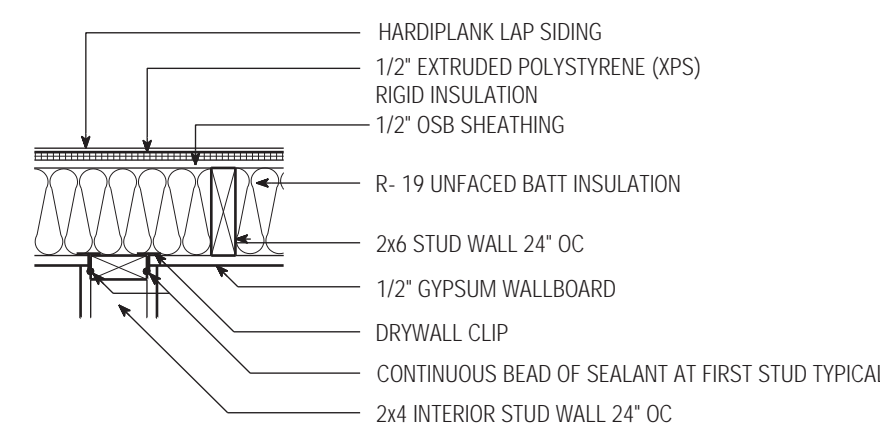




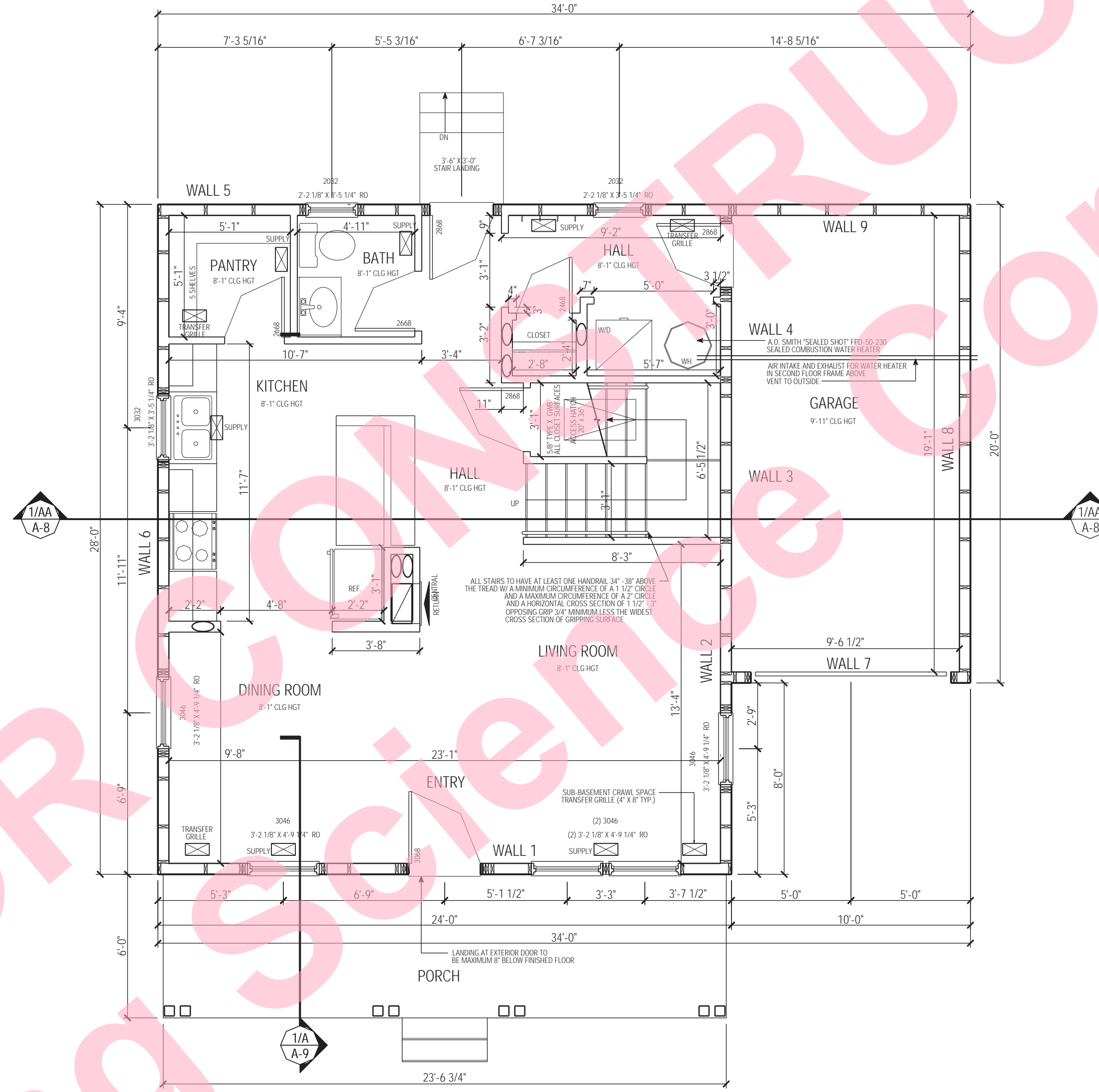
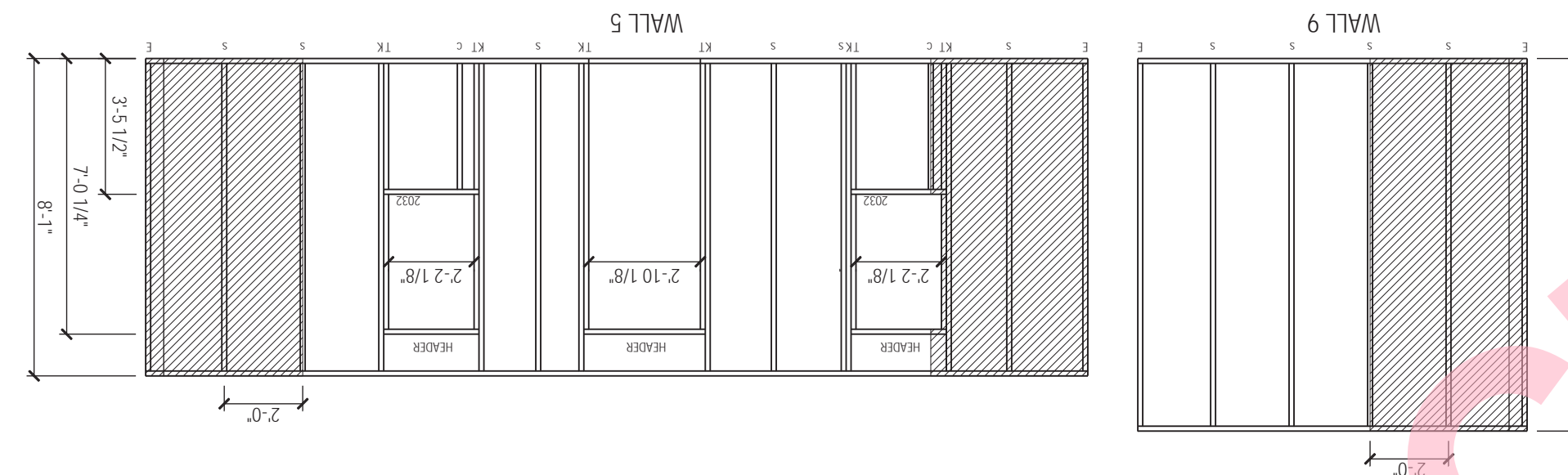
4 CORNER DETAIL
SCALE 1" = 1'-0"



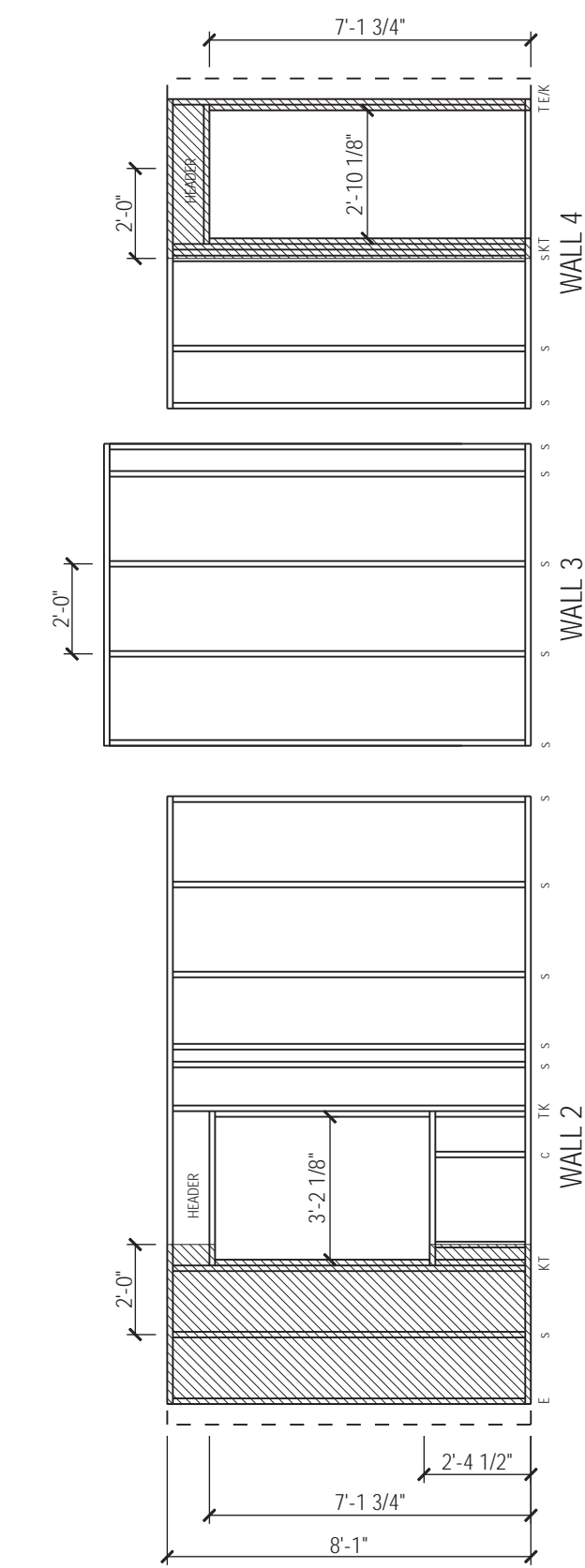
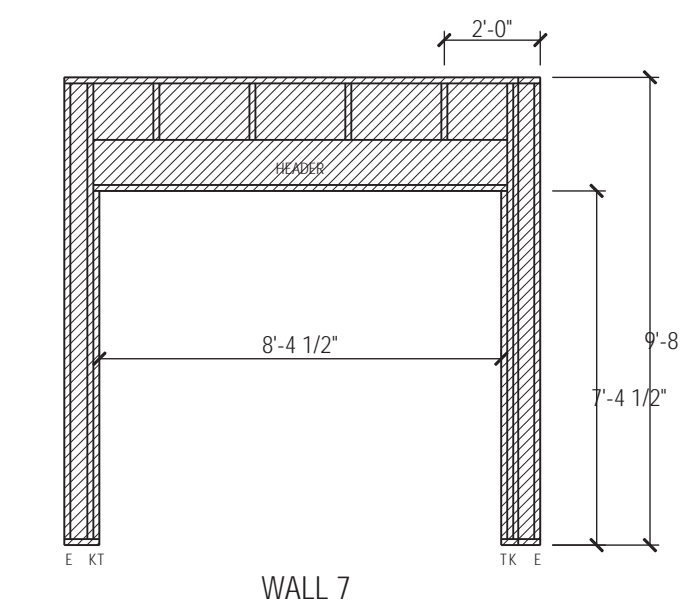
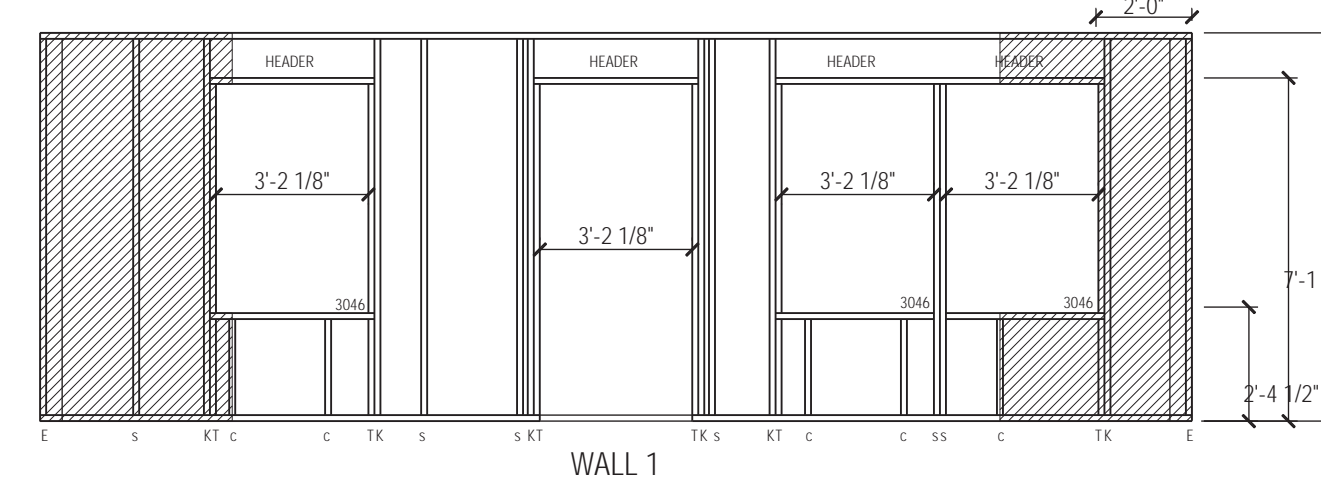
3 FRAME @ 2 STUD CORNER (plan)
SCALE 1" = 1'-0"



2 FRAME @ INTERIOR WALL (plan)
SCALE 1" = 1'-0"



1 FIRST FLOOR PLAN / FRAMING ELEVATIONS (672 SQ. FT.)
SCALE 1/4" = 1'-0"



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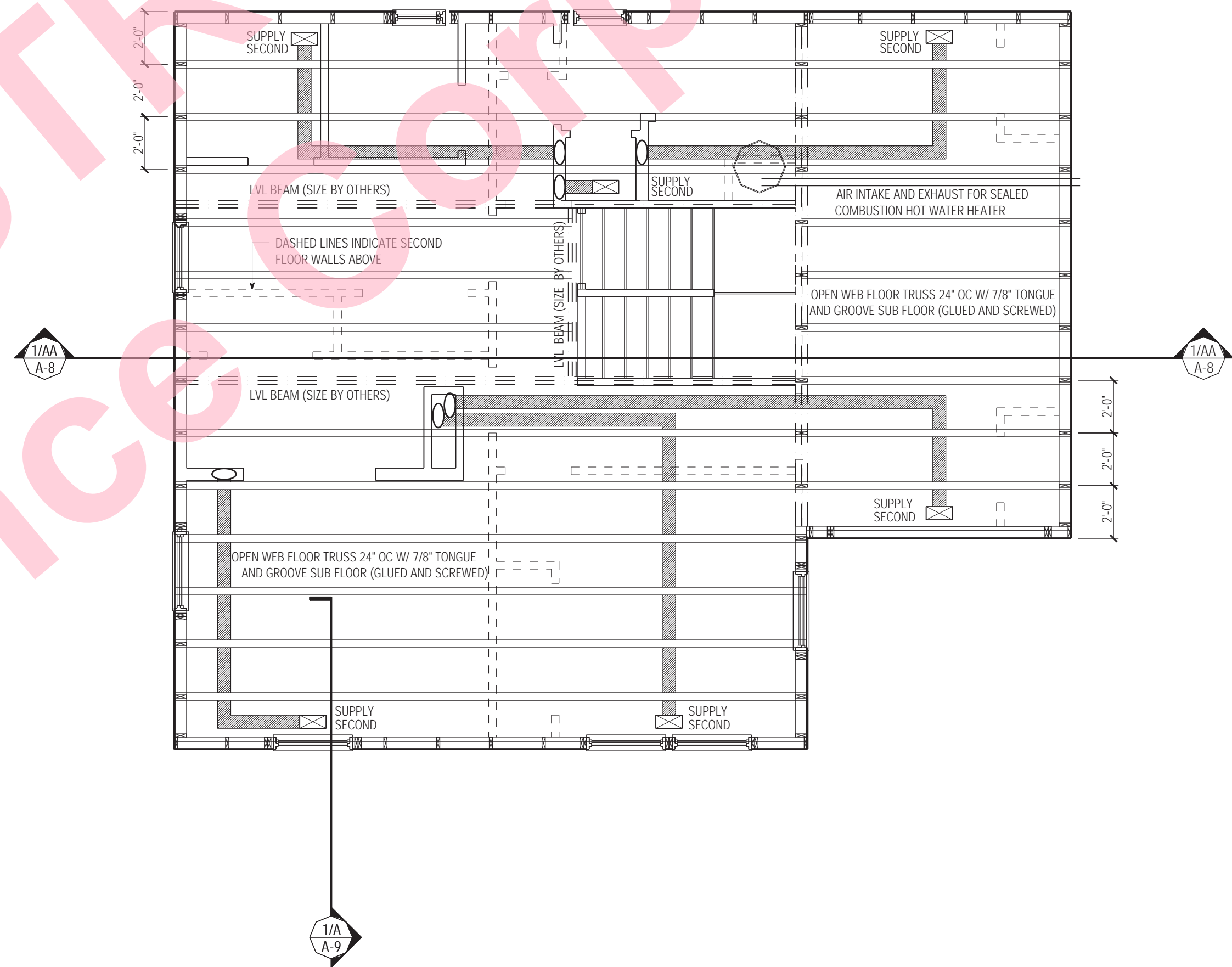
FIRST FLOOR PLAN
WALL FRAMING ELEVATIONS
HOUSE 2
SCALE AS NOTED

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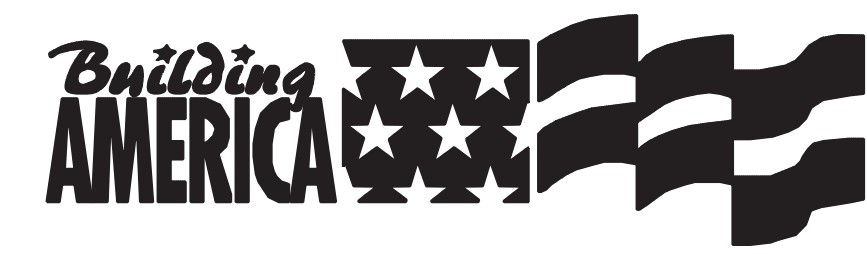
A-3

FILE: H1-METRO-CORP-DEMOS-TRUCK.DWG

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1| SECOND FLOOR FRAMING PLAN
 SCALE 1/4" = 1'-0"



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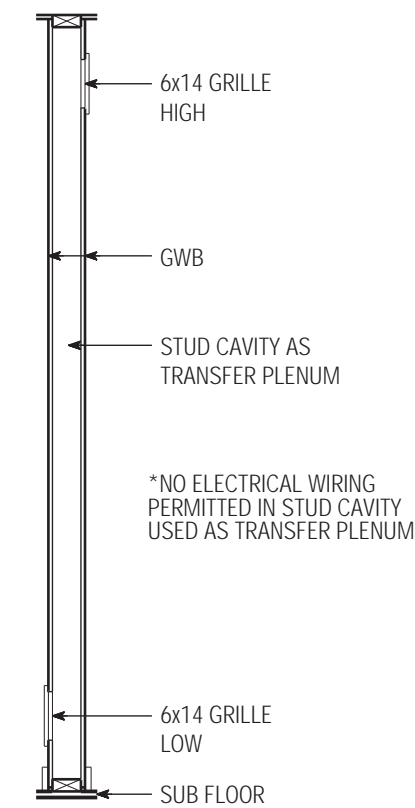
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SECOND FLOOR FRAMING PLAN
 HVAC DUCT LAYOUT
 HOUSE 2
 SCALE AS NOTED

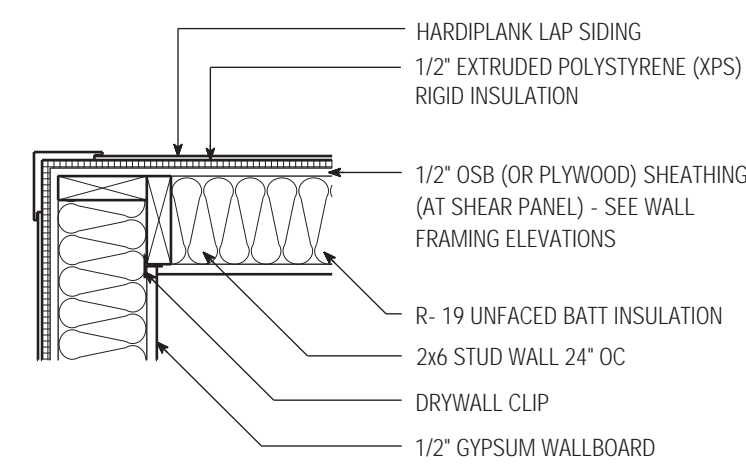
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A-4
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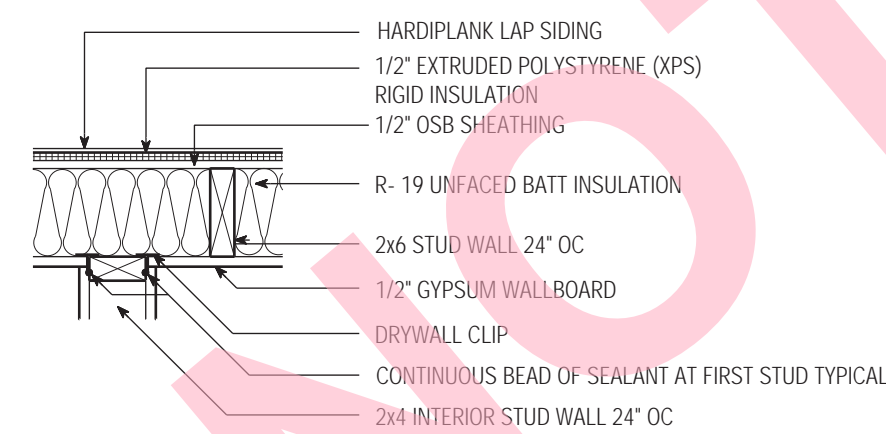


4 | DETAIL AT TRANSFER GRILLE
SCALE 1/2" = 1'-0"

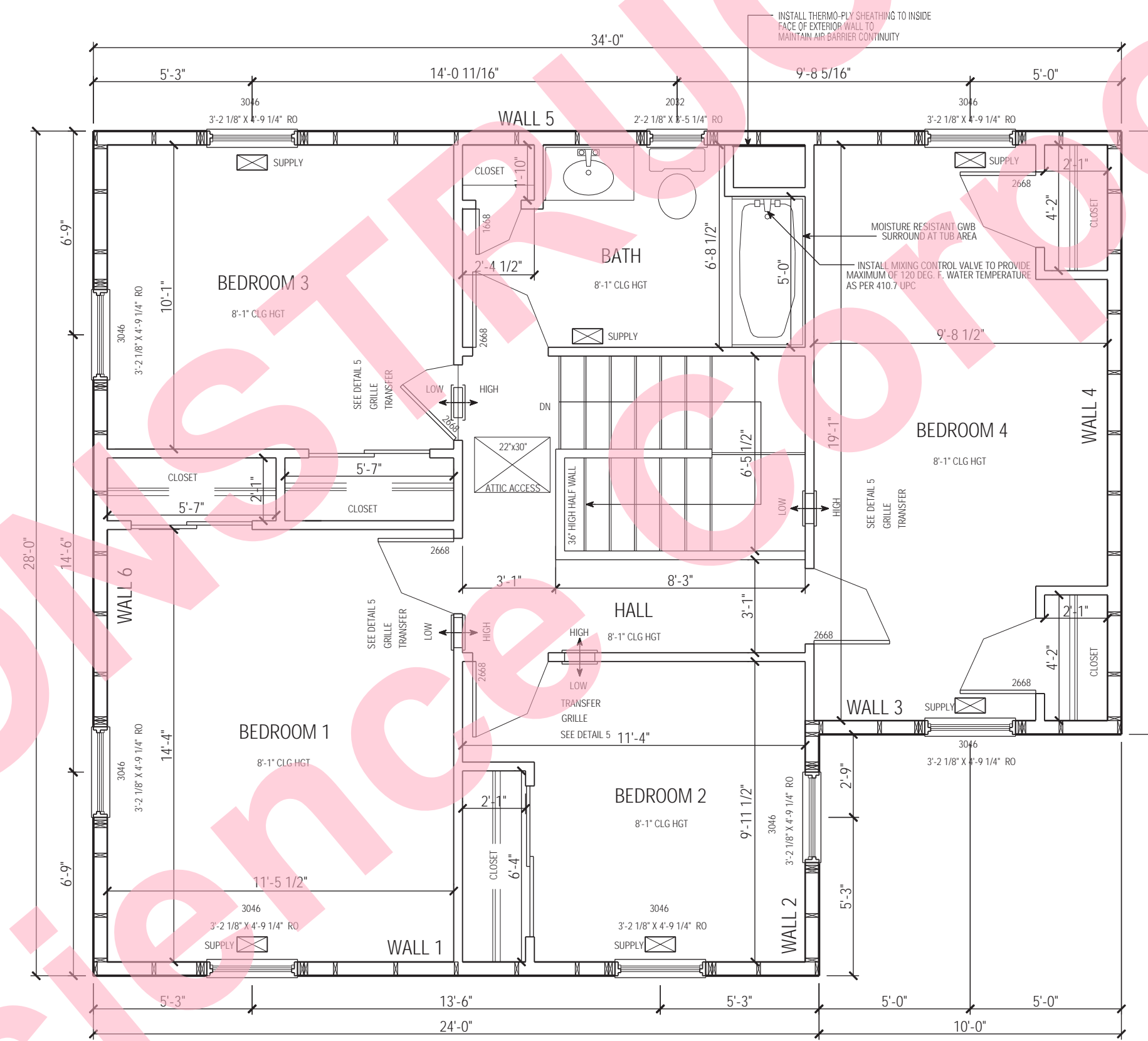
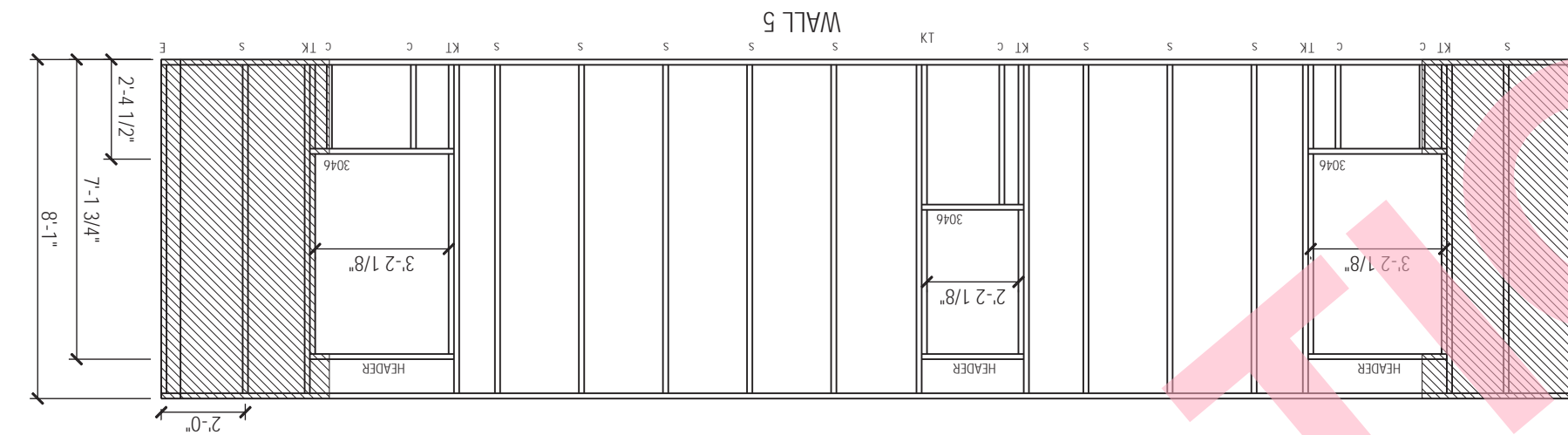
- NOTE 1: TRANSFER GRILLES PROVIDE PRESSURE RELIEF / PRESSURE EQUALIZATION BETWEEN CLOSED ROOMS AND COMMON AREAS
- NOTE 2: DOORS TO BE UNDERCUT 1/2" BETWEEN TOP OF FINISH FLOOR AND UNDERSIDE OF DOOR
- NOTE 3: USE ZENON PRESSURE RELIEF VENT (USED AS ALTERNATE TO FIELD CONSTRUCTED MODEL AS SHOWN ABOVE) 800-222-5932 FAX 508-295-8105



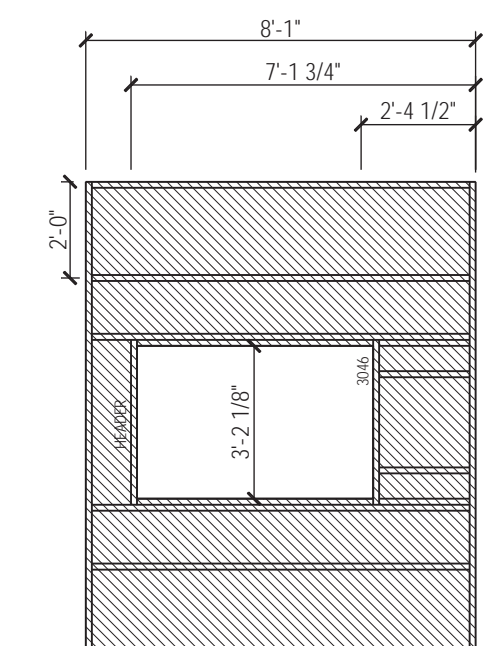
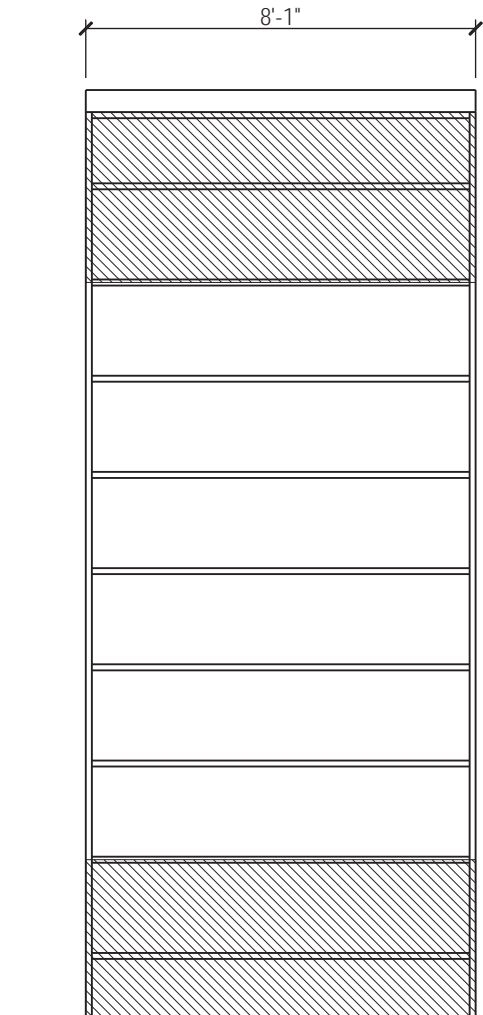
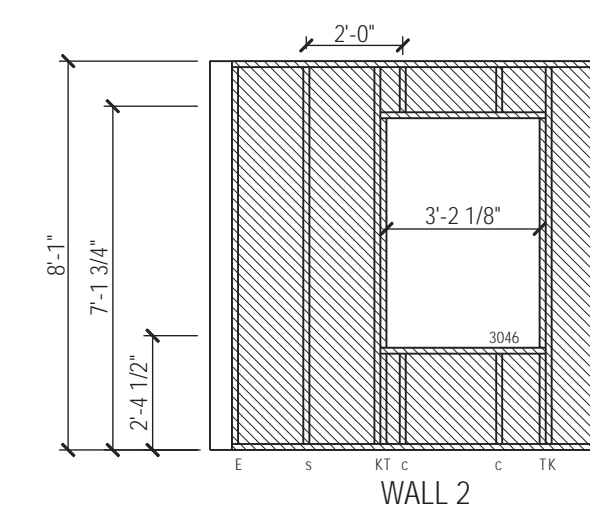
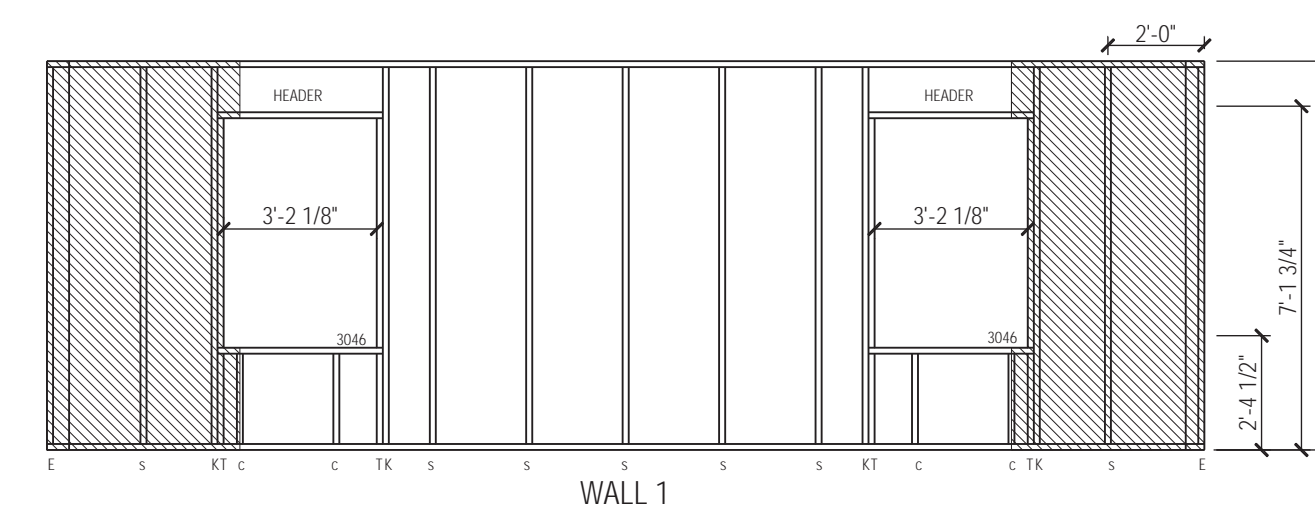
3 | FRAME @ 2 STUD CORNER (plan)
SCALE 1" = 1'-0"



2 | FRAME @ INTERIOR WALL (plan)
SCALE 1" = 1'-0"



1 | SECOND FLOOR PLAN / WALL FRAMING PLAN (752 SQ. FT.)
SCALE 1/4" = 1'-0"



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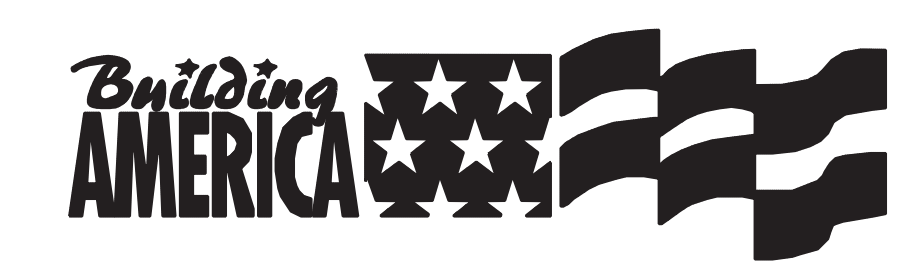
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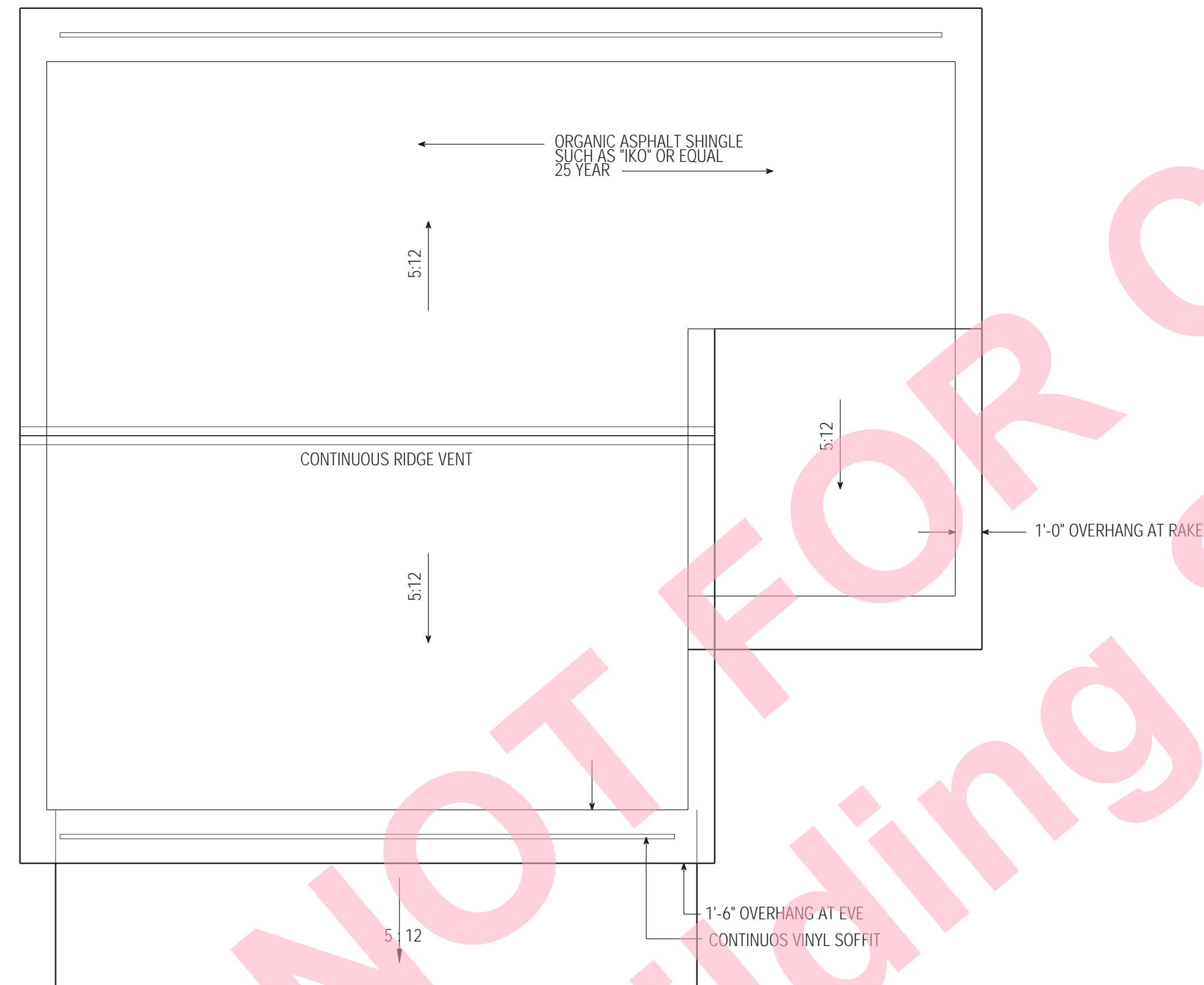
SECOND FLOOR PLAN
WALL FRAMING ELEVATIONS
HOUSE 2
SCALE AS NOTED

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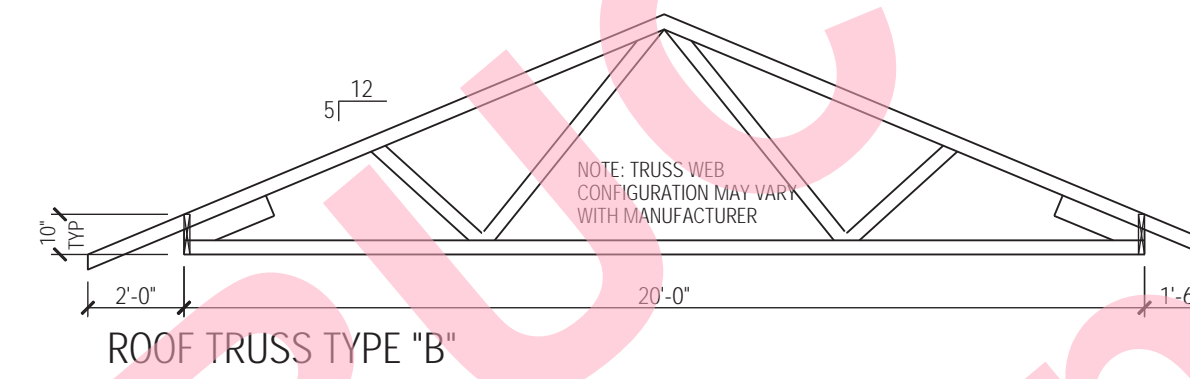
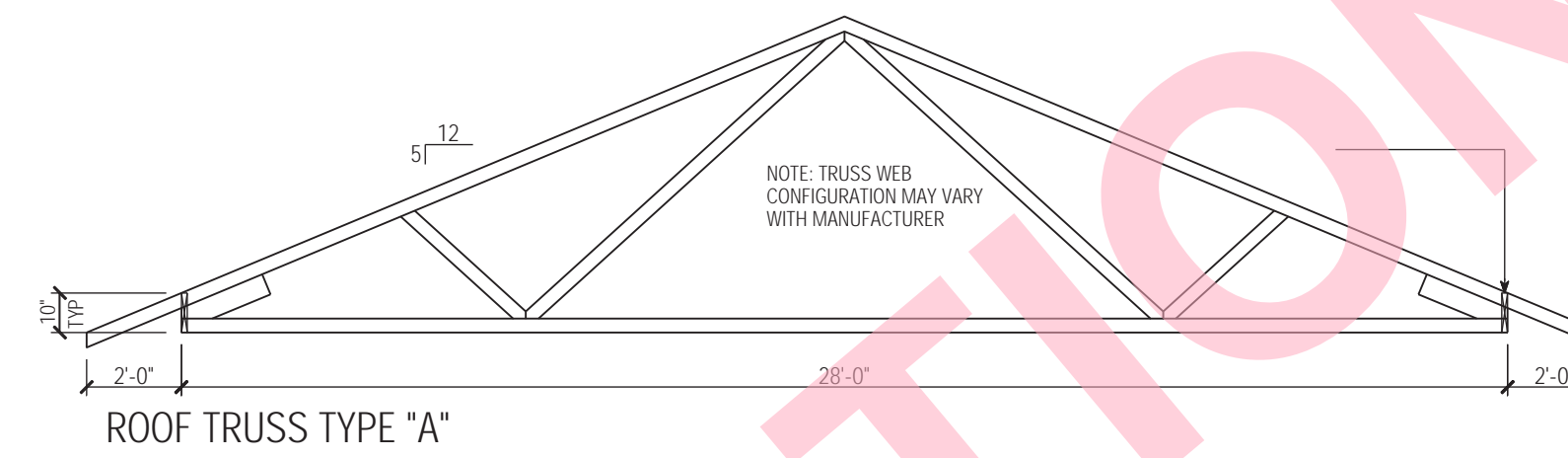
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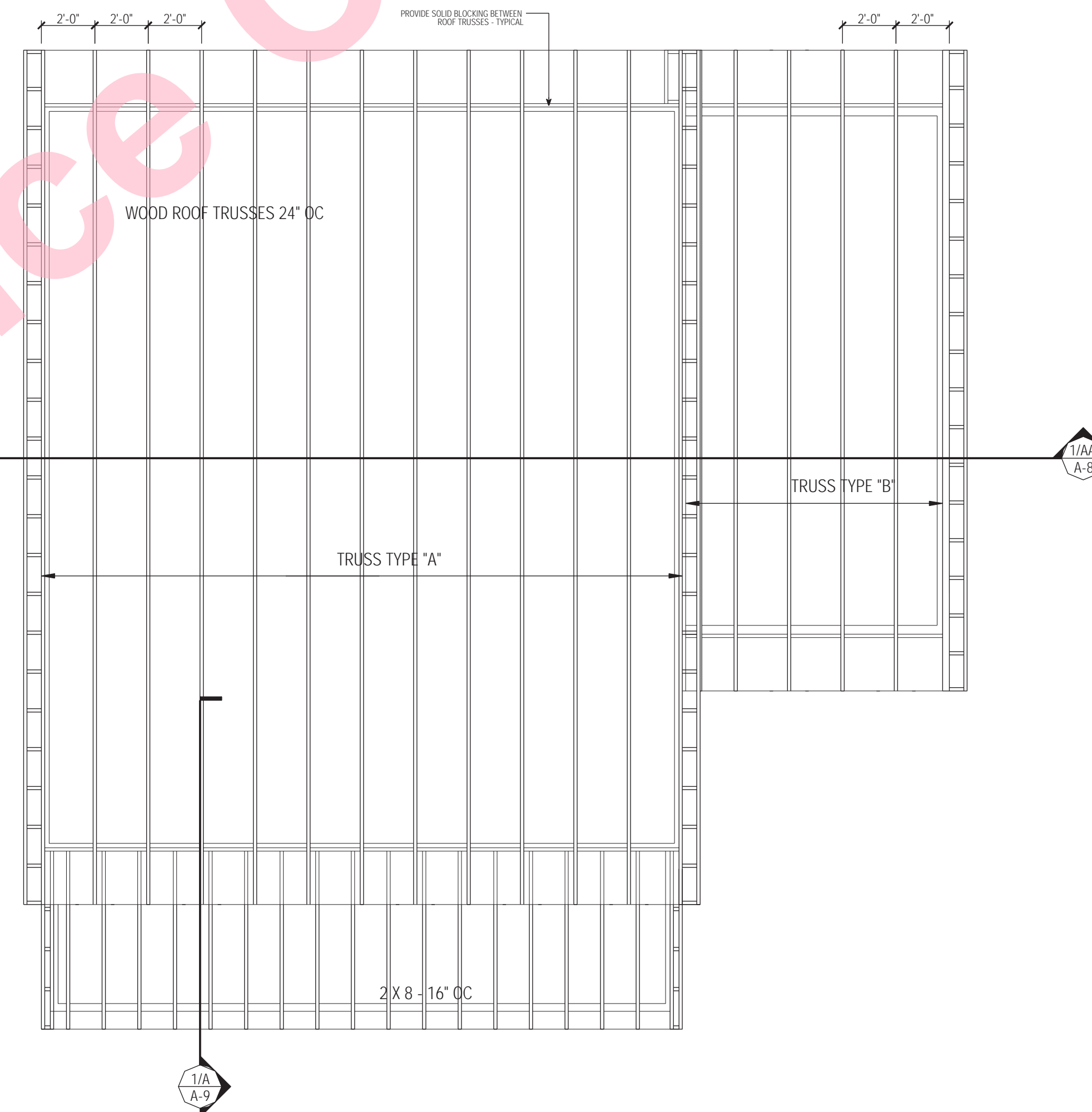
3 | ROOF PLAN
SCALE 1/4" = 1'-0"



2 | ROOF TRUSS SCHEDULE
SCALE 1/4" = 1'-0"

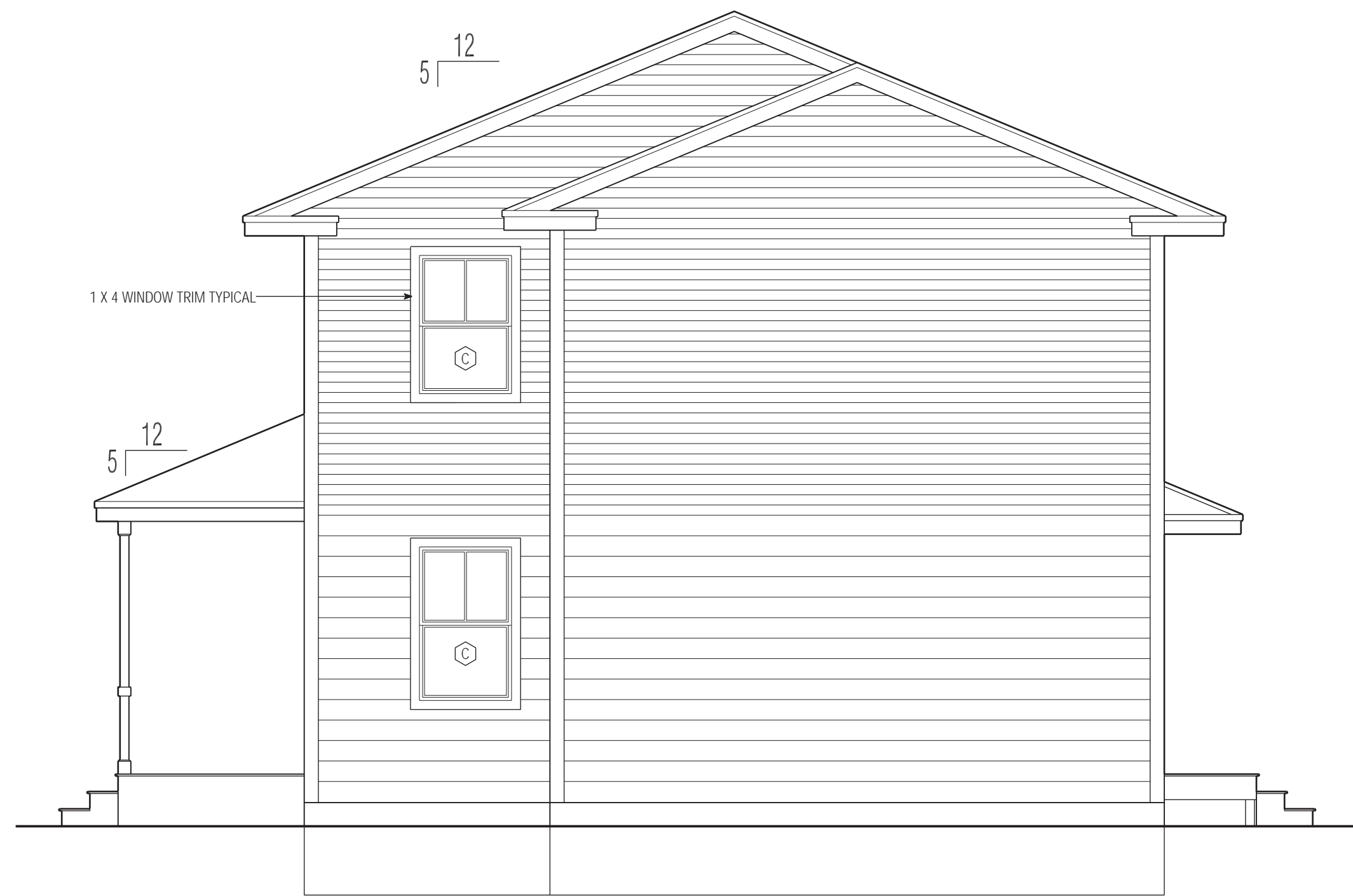
TRUSS DESIGN / INSTALLATION SPECIFICATIONS

- TRUSS SIZES TO BE VERIFIED BY TRUSS MANUFACTURER
- TRUSS SPACING 2'-0" OC
- SHOP DRAWINGS BEARING A REGISTERED ENGINEER'S CERTIFICATION SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL
- SHOP DRAWINGS SHALL INCLUDE: SPECIES, SIZE, GRADE OF LUMBER, AND CONNECTOR PLATE SIZE AND ORIENTATION FOR EACH TRUSS TYPE
- ALL LUMBER USED IN THE FABRICATION OF THE TRUSSES SHALL BE STRESS GRADED AND SHALL BE OF THE SPECIES, SIZE, AND GRADE SPECIFIED IN THE TRUSS DESIGN
- ALL CONNECTOR PLATES SHALL BE STAMPED FROM 16, 18, OR 20 GAUGE, GRADE A, GALVANIZED STRUCTURAL STEEL
- BOTH PLATE WIDTH AND LENGTH MUST EQUAL OR EXCEED THAT SPECIFIED IN THE TRUSS DESIGN
- TRUSSES SHALL BE FABRICATED IN ACCORDANCE WITH THE TRUSS DESIGN FROM ACCURATELY CUT WOOD MEMBERS CLAMPED IN RIGID FIXTURES DURING ASSEMBLY TO ENSURE TIGHT FITTING JOINTS AND UNIFORMITY IN COMPLETED TRUSS UNITS
- CONNECTOR PLATES ARE TO BE PRESSED INTO THE WOOD MEMBERS ON BOTH SIDES OF THE TRUSS AT EACH JOINT SO THAT FULL PENETRATION OF THE TEETH IS OBTAINED WITHOUT CRUSHING THE OUTER SURFACE OF THE WOOD
- EXERCISE CARE AT ALL TIMES TO AVOID DAMAGE TO TRUSSES DUE TO CARELESS HANDLING DURING STORAGE, DELIVERY, UNLOADING, AND INSTALLATION
- TRUSSES SHALL BE INSTALLED PLUMB, ADEQUATELY BRACED, IN PROPER ORIENTATION, AND AT THE SPACING SPECIFIED IN THE TRUSS DESIGN
- CUTTING OF TRUSS MEMBERS OR FIELD ALTERATIONS OF ANY TRUSS OR PART OF TRUSS IS NOT PERMITTED



1 | ROOF FRAMING PLAN
SCALE 1/4" = 1'-0"





5 | RIGHT SIDE ELEVATION
SCALE 1/4" = 1'-0"



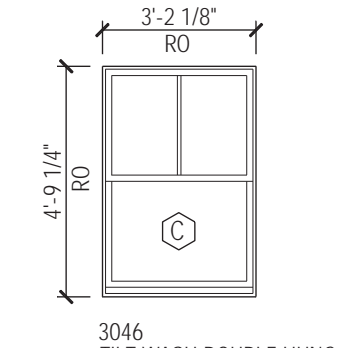
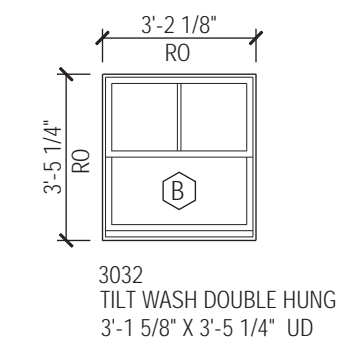
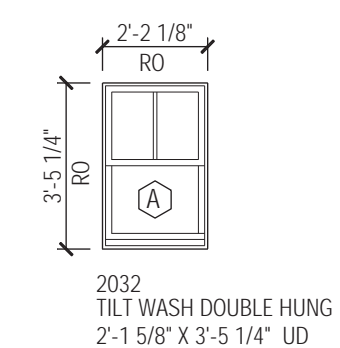
3 | REAR ELEVATION
SCALE 1/4" = 1'-0"



4 | LEFT SIDE ELEVATION
SCALE 1/4" = 1'-0"



2 | FRONT ELEVATION
SCALE 1/4" = 1'-0"



- ALL WINDOWS TO BE "ANDERSEN" (STYLES AND SIZES AS NOTED ABOVE)
- ALL WINDOWS TO BE WHITE IN COLOR
- ALL WINDOWS TO BE COMPLETE WITH WHITE GRILLES, INSECT SCREENS, AND ALL REQUIRED HARDWARE (WHITE) TO PROPERLY OPERATE AND LOCK THE UNIT
- EVERY SLEEPING ROOM TO HAVE AT LEAST ONE OPERABLE WINDOW WITH A MINIMUM NET CLEAR OPENING OF 5.7 SQ FT WITH MINIMUM HEIGHT OF 24" AND MINIMUM WIDTH OF 20" AND SILL LOCATED LESS THAN 44" ABOVE FINISHED FLOOR

1 | WINDOW SCHEDULE
SCALE 1/4" = 1'-0"

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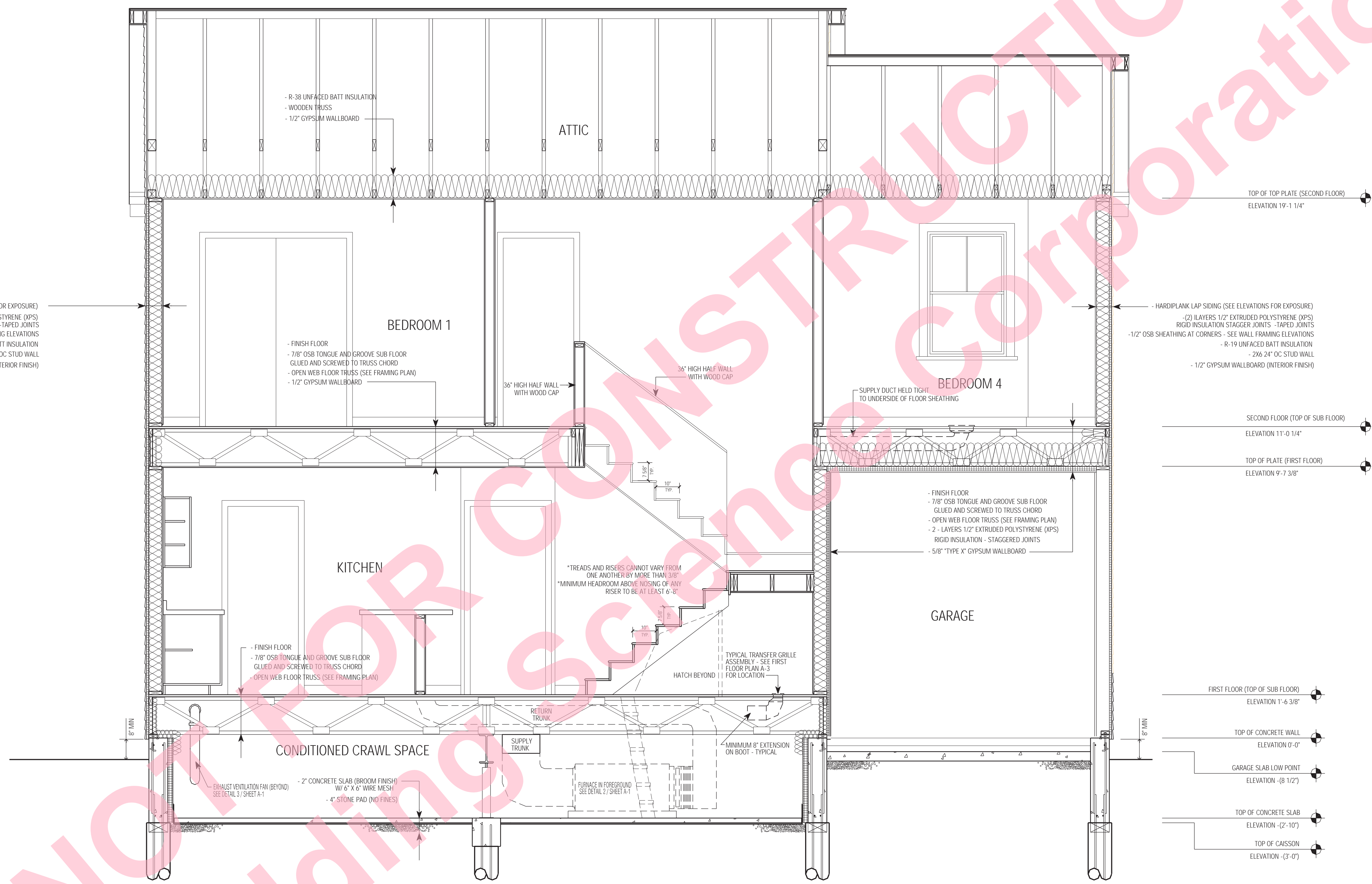
BUILDING ELEVATIONS
WINDOW SCHEDULE
HOUSE 2
SCALE AS NOTED

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A-7

FILE: HJ_METRO_D00b_DEMONSTRATION.dwg





- HARDPLANK LAP SIDING (SEE ELEVATIONS FOR EXPOSURE)
 - (2) LAYERS 1/2" EXTRUDED POLYSTYRENE (EPS)
 RIGID INSULATION STAGGER JOINTS - TAPED JOINTS
 - 1/2" OSB SHEATHING AT CORNERS - SEE WALL FRAMING ELEVATIONS
 - R-19 UNFACED BATT INSULATION
 - 2X6 24" OC STUD WALL
 - 1/2" GYPSUM WALLBOARD (INTERIOR FINISH)

- R-38 UNFACED BATT INSULATION
 - WOODEN TRUSS
 - 1/2" GYPSUM WALLBOARD

- FINISH FLOOR
 - 7/8" OSB TONGUE AND GROOVE SUB FLOOR
 GLUED AND SCREWED TO TRUSS CHORD
 - OPEN WEB FLOOR TRUSS (SEE FRAMING PLAN)
 - 1/2" GYPSUM WALLBOARD

- FINISH FLOOR
 - 7/8" OSB TONGUE AND GROOVE SUB FLOOR
 GLUED AND SCREWED TO TRUSS CHORD
 - OPEN WEB FLOOR TRUSS (SEE FRAMING PLAN)

- FINISH FLOOR
 - 7/8" OSB TONGUE AND GROOVE SUB FLOOR
 GLUED AND SCREWED TO TRUSS CHORD
 - OPEN WEB FLOOR TRUSS (SEE FRAMING PLAN)
 - 2 - LAYERS 1/2" EXTRUDED POLYSTYRENE (EPS)
 RIGID INSULATION - STAGGERED JOINTS
 - 5/8" TYPE X GYPSUM WALLBOARD

1 | SECTION AA
 SCALE 1/2" = 1'-0"

- TOP OF TOP PLATE (SECOND FLOOR)
ELEVATION 19'-1 1/4"
- SECOND FLOOR (TOP OF SUB FLOOR)
ELEVATION 11'-0 1/4"
- TOP OF PLATE (FIRST FLOOR)
ELEVATION 9'-7 3/8"
- FIRST FLOOR (TOP OF SUB FLOOR)
ELEVATION 1'-6 3/8"
- TOP OF CONCRETE WALL
ELEVATION 0'-0"
- GARAGE SLAB LOW POINT
ELEVATION -8 1/2"
- TOP OF CONCRETE SLAB
ELEVATION -2'-10"
- TOP OF CAISSON
ELEVATION -3'-0"

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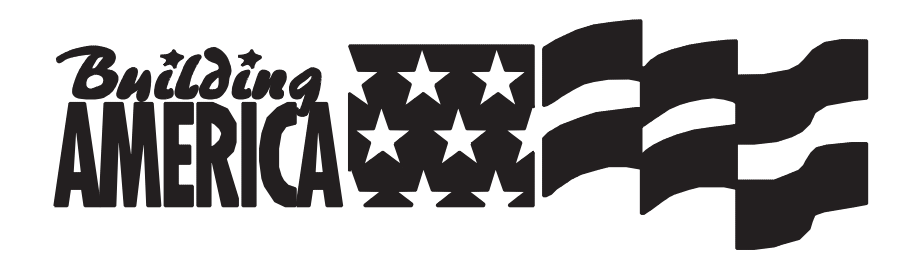
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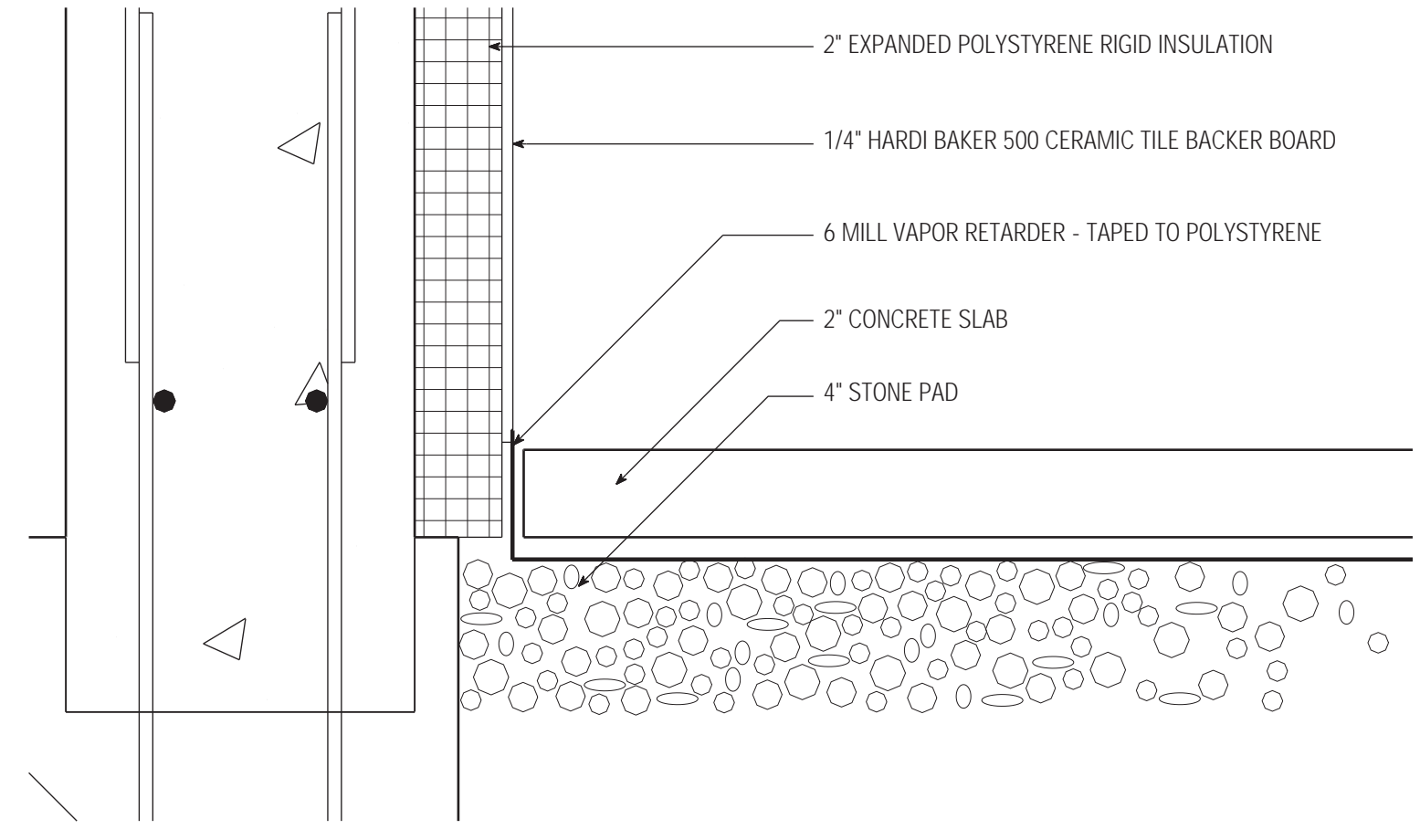
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BUILDING SECTION BB
 WALL SECTION A
 HOUSE 2
 SCALE AS NOTED

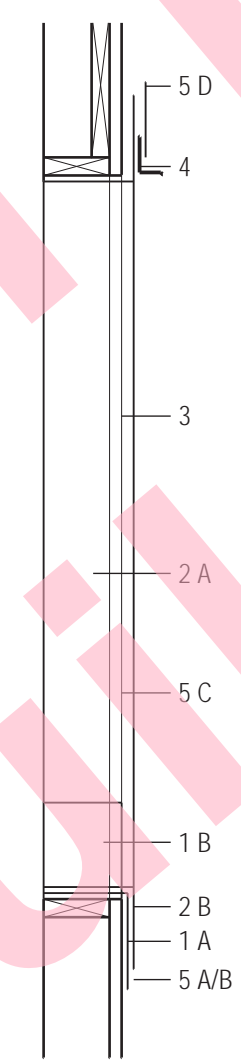
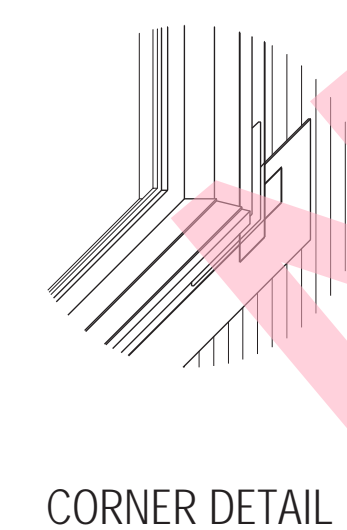
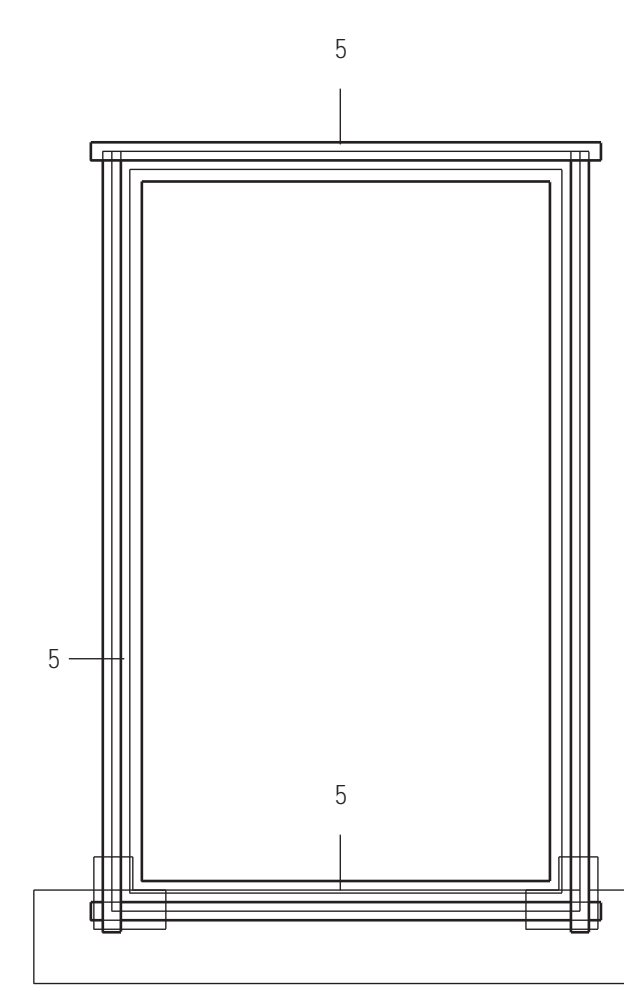
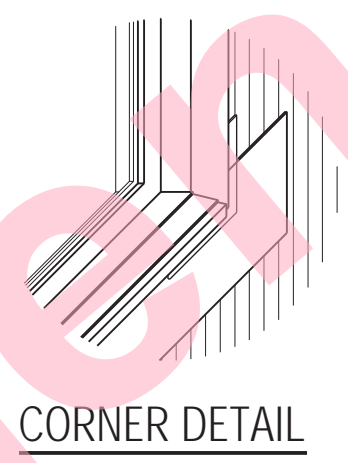
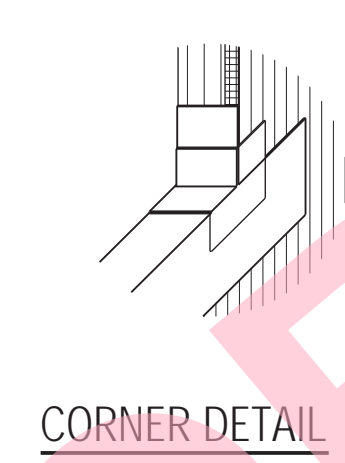
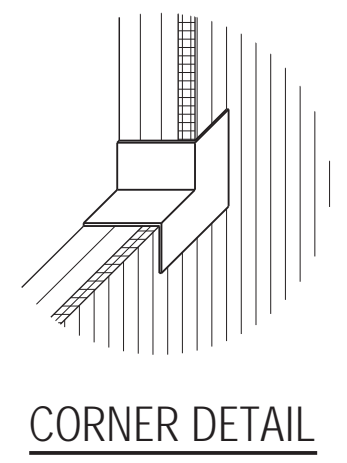
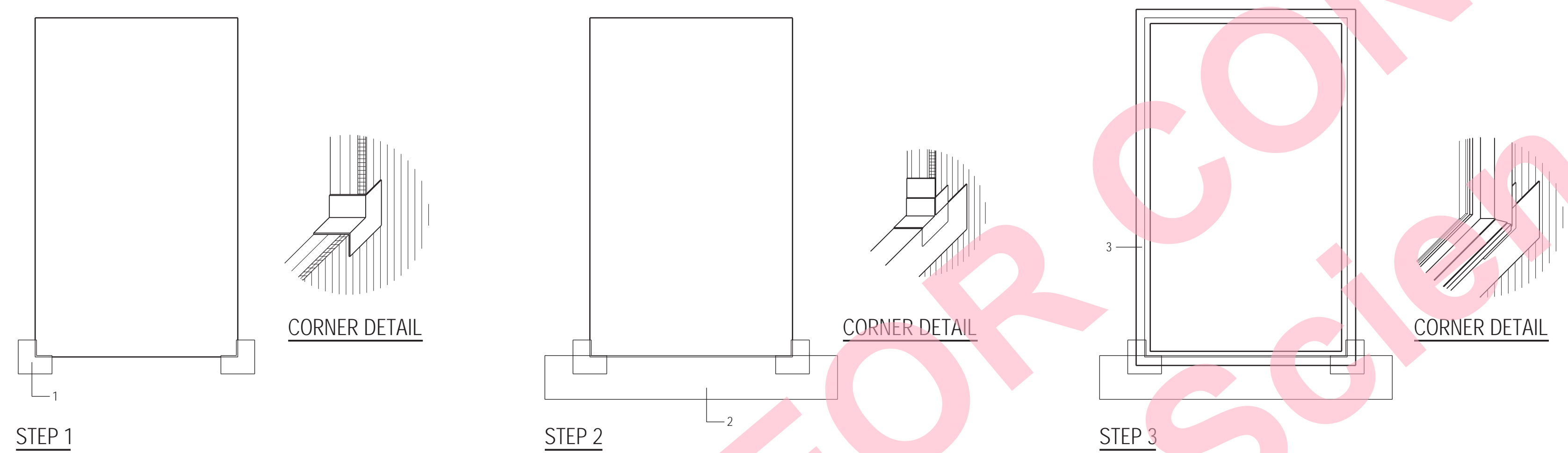
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 FILE: H1-METRO-0001-DEMOSHOWING.dwg





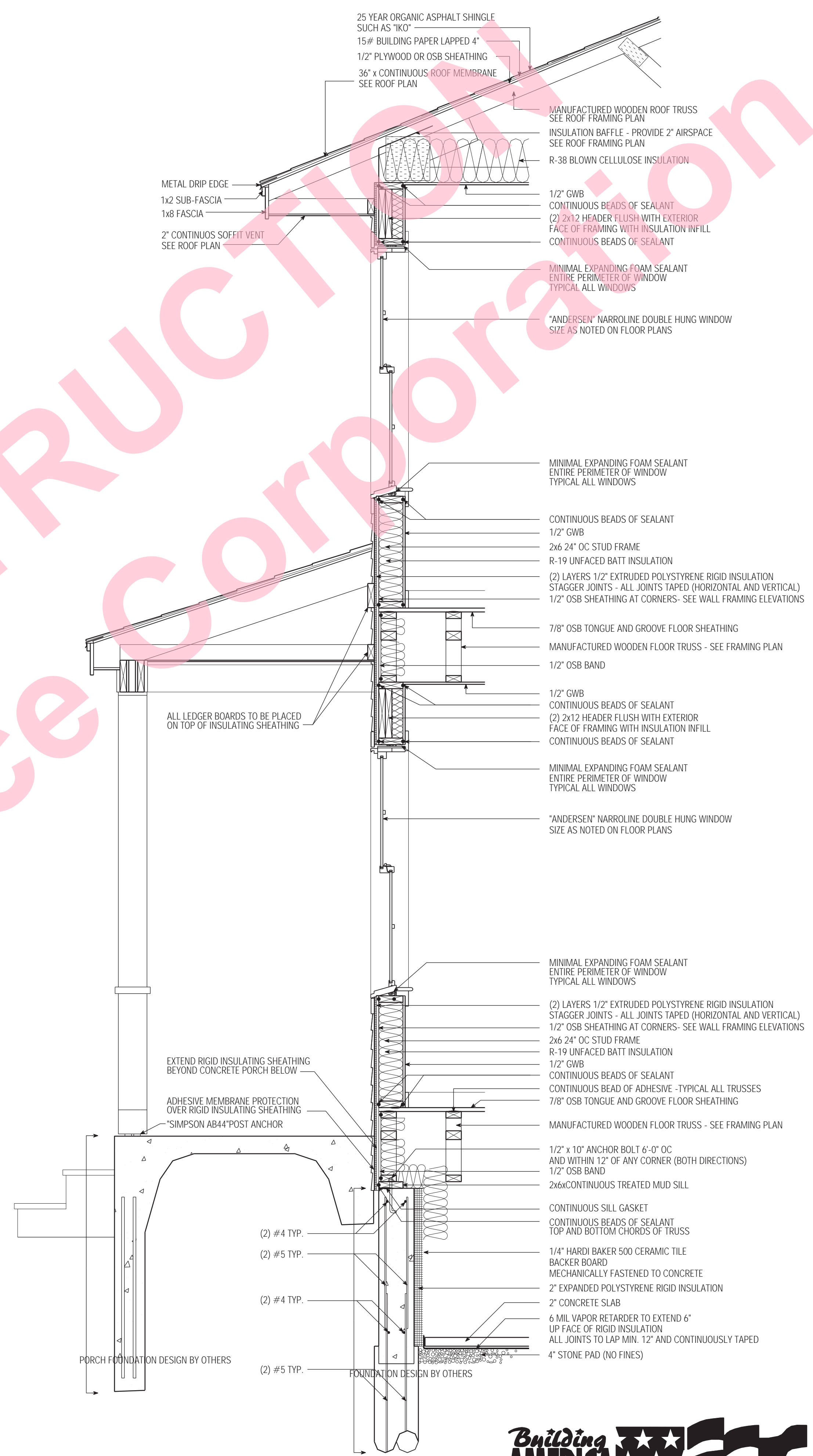
3 DETAIL AT CONCRETE SLAB / WALL
SCALE 3" = 1'-0"



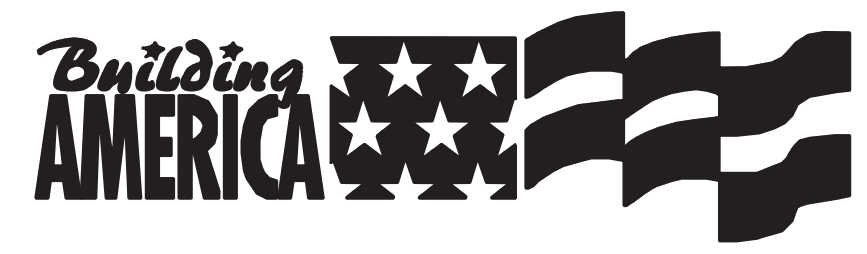
1. A - INSTALL MEMBRANE CORNER PATCHES
B - FOLD ENDS AT JAMBS
C - ENSURE MEMBRANE EXTENDS TO FULL CAPACITY ON EXTERIOR FACE OF WALL
 2. A - INSTALL ADHESIVE MEMBRANE STRIP AT WINDOW SILL
B - LAP SILL MEMBRANE OVER CORNER PATCH MEMBRANE ON EXTERIOR FACE OF WALL
C - ENSURE MEMBRANE EXTENDS MINIMUM OF 6" BEYOND SILL ON EXTERIOR FACE OF WALL
 3. A - ENSURE A CONTINUOUS BEAD OF SEALANT IS APPLIED TO BACK SIDE OF NAILING FLANGE OF WINDOW ON EXTERIOR FACE OF WALL
B - INSTALL WINDOW (ACCORDING TO MANUFACTURER SPECIFICATIONS)
 4. A - INSTALL HEAD FLASHING
B - ENSURE HEAD FLASHING IS AT LEAST AS WIDE AS WINDOW UNIT
 5. A - INSTALL ADHESIVE MEMBRANE STRIP OVER WINDOW FLANGE AND EXTERIOR FACE OF WALL IN ORDER:
B - INSTALL ADHESIVE MEMBRANE OVER BOTTOM WINDOW FLANGE AND EXTERIOR FACE OF WALL
C - INSTALL ADHESIVE MEMBRANE OVER WINDOW JAMB FLANGE AND EXTERIOR FACE OF WALL
D - INSTALL ADHESIVE MEMBRANE OVER HEAD FLASHING, JAMB MEMBRANE, AND EXTERIOR FACE OF WALL
- GENERAL NOTES
A - ENSURE ALL SURFACES TO RECEIVE MEMBRANE FLASHING ARE CLEAN AND DRY
B - ENSURE MEMBRANE IS WELL SEATED AGAINST EXTERIOR SHEATHING - EXERCISE CARE SO AS TO REDUCE ANY UNNEEDED WRINKLES IN APPLIED MEMBRANES

5 STEP 5
2 DETAILS AT WINDOW FLASHING
SCALE 3/4" = 1'-0"

SECTION



1 WALL SECTION
SCALE 3/4" = 1'-0"



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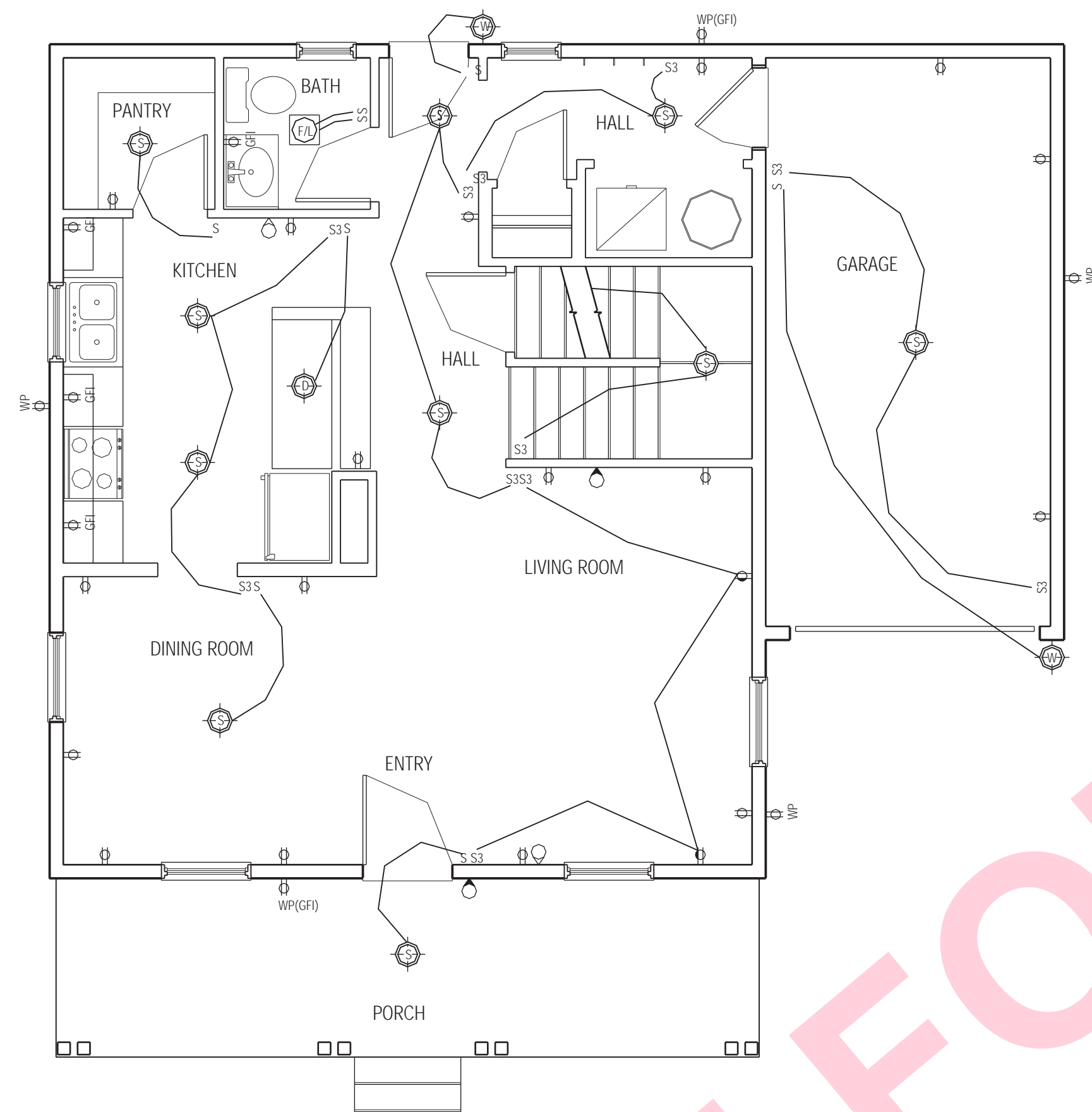
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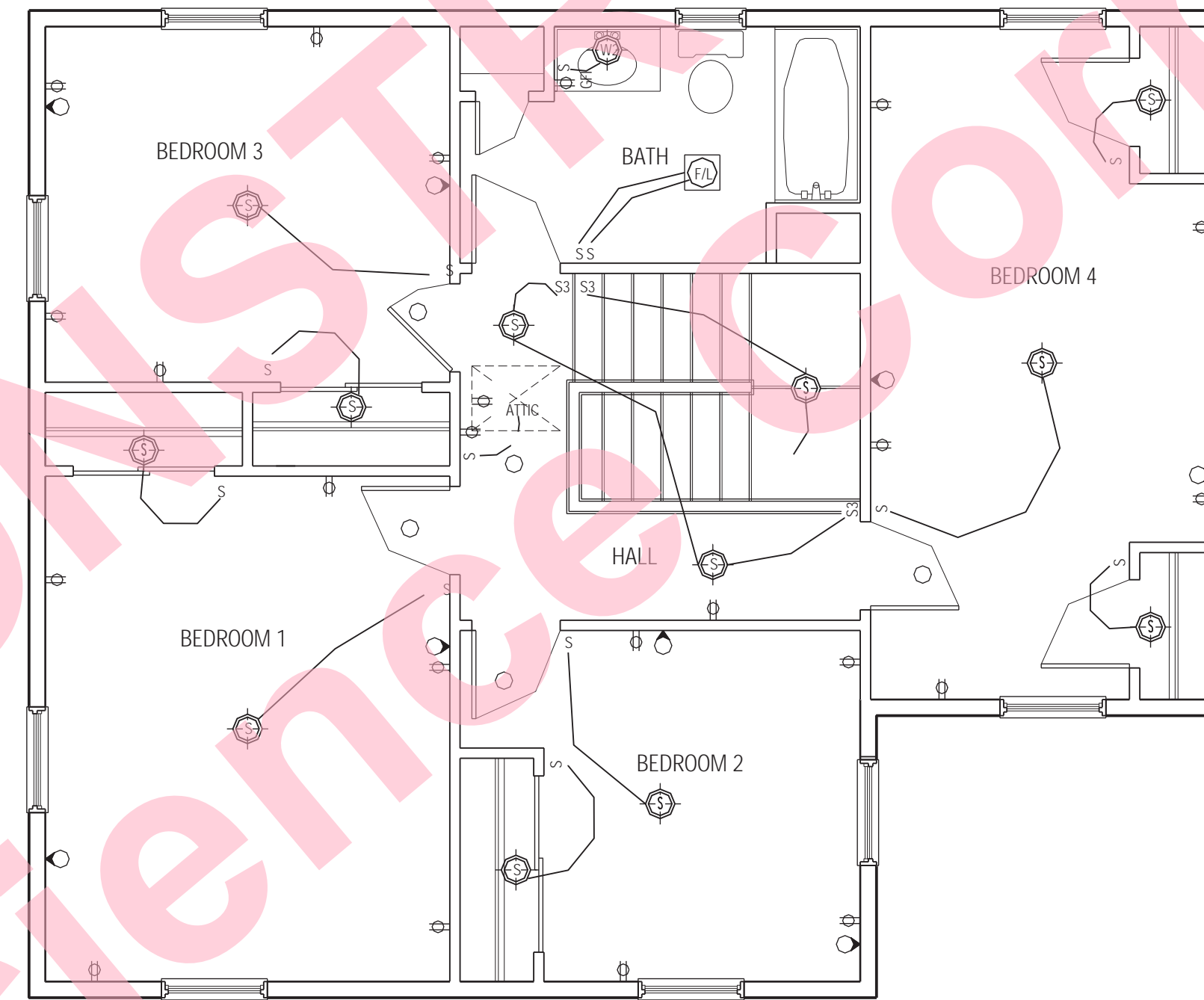
WALL SECTION
HVAC DUCT LAYOUT
HOUSE 2
SCALE AS NOTED

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2 FIRST FLOOR ELECTRICAL PLAN
SCALE 1/4" = 1'-0"



1 SECOND FLOOR ELECTRICAL PLAN
SCALE 1/4" = 1'-0"

ELECTRICAL LEGEND	
(S)	SURFACE MOUNTED LIGHT FIXTURE
(WF)	WALL MOUNTED LIGHT FIXTURE (EXTERIOR)
(WI)	WALL MOUNTED LIGHT FIXTURE (INTERIOR)
(R)	RECESSED LIGHT FIXTURE
(F)	DUAL FLOOR LIGHT W/ MOTION SENSOR
(D)	DROPPED FIXTURE
(FA)	"PANASONIC" WHISPERLITE 70FV-07VOL
(DB)	DOOR BELL
(C)	CABLE TV JACK
(T)	TELEPHONE JACK
(SD)	SMOKE DETECTOR (HARDWIRED W/ BATTERY BACKUP)
(D)	110 VAC DUPLEX
(D)	110 VAC DUPLEX (BOTTOM SWITCHED)
(GFI)	110 VAC GROUND FAULT INTERCEPT
(GFI WP)	110 VAC WEATHER PROOF (GROUND FAULT PROTECTED)
(S)	LIGHT SWITCH
(S3)	3 WAY LIGHT SWITCH

- NOTES
- ALL OUTLETS AND LIGHTS IN EXTERIOR WALLS AND THE SECOND FLOOR CEILING TO HAVE AIRTIGHT ELECTRICAL BOXES
 - ALL SWITCHED OUTLETS TO BE BOTTOM OF DUPLEX OUTLET
 - RECEPTACLE OUTLETS TO BE MINIMUM OF 12'-0" OC ALONG WALLS OF ALL HABITABLE ROOMS
 - ALL KITCHEN COUNTERTOPS WIDER THAN 12" TO HAVE PROTECTED OUTLETS A MINIMUM OF 24" OC
 - A MINIMUM OF (2) 20 AMP SMALL APPLIANCE BRANCH CIRCUITS IN KITCHEN, PANTRY, DINING ROOM, OR SIMILAR AREA (MAX 3 OUTLETS PER CIRCUIT)
 - A MAXIMUM (8) OUTLETS PER 15 AMP BRANCH CIRCUIT AND 10 OUTLETS PER 20 AMP BRANCH CIRCUIT
 - ALL LIGHT FIXTURES IN CLOSETS TO COMPLY WITH ARTICLE 410-8, NEC
 - OUTLET IS REQUIRED WITHIN 4" OF DOOR OPENING ON END OF WALL AS PER ARTICLE 210-529 NEC
 - AN "UPPER" GROUND IS REQUIRED AS A PART OF THE GROUNDING ELECTRODE SYSTEM. THIS GROUND CONSISTS OF A MINIMUM 20' LENGTH OF ELECTRICALLY CONDUCTIVE #4 REINFORCING BAR ENCASED BY AT LEAST 2" OF CONCRETE AND LOCATED NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH.

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ELECTRICAL PLAN
 FIRST & SECOND FLOOR
 HOUSE 2
 SCALE AS NOTED

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