

LOCATION MAP

SCALE: 1" = 1,000'

LEGEND

- | | |
|--|---|
| | EX. PROPERTY LINE |
| | EX. LOT LINE |
| | EX. RIGHT OF WAY LINE |
| | EX. ADJACENT PROPERTY LINE |
| | EX. BUILDING |
| | EX. CURB & GUTTER |
| | EX. PAVEMENT |
| | EX. CONCRETE |
| | EX. METAL FENCE |
| | EX. TREE LINE |
| | EX. TREE |
| | EX. STORM DRAIN |
| | EX. WATER |
| | EX. SANITARY |
| | EX. GAS |
| | EX. UNDERGROUND ELECTRIC |
| | EX. OVERHEAD ELECTRIC |
| | EX. UTILITY POLE |
| | EX. WATER FITTINGS |
| | EX. GAS VALVE |
| | EX. 1' CONTOUR |
| | EX. 2' CONTOUR |
| | EX. 10' CONTOUR |
| | PROPOSED LIMIT OF DISTURBANCE (NOT SUBJECT TO QUALITATIVE CONTROL WAIVER) |
| | PROPOSED LIMIT OF DISTURBANCE (SUBJECT TO QUALITATIVE CONTROL WAIVER) |
| | PROPOSED LOT LINE |
| | PROPOSED BUILDING |
| | PROPOSED CURB & GUTTER |
| | PROPOSED SIDEWALK |
| | PROPOSED PAVEMENT |
| | PROPOSED RETAINING WALL |
| | PROPOSED CONCRETE |
| | PROPOSED RIPRAP |
| | PROPOSED STORM DRAIN |
| | PROPOSED DOWNSPOUT |
| | PROPOSED SWIM FILTER AREA |
| | PROPOSED R-TANK (UNDERGROUND) |
| | PROPOSED 1' CONTOUR |
| | PROPOSED 2' CONTOUR |
| | PROPOSED 10' CONTOUR |

TOTAL DISTURBED AREA:
23,050 SF OR 0.529 AC±

DESIGN AND DRAWINGS ARE BASED ON MARYLAND COORDINATE SYSTEM (MCS).
HORIZONTAL - NAD 83/(2011),
VERTICAL - NAVD 88.

DESIGN & DRAWING BASED ON THE MARYLAND COORDINATE SYSTEM (MCS)

Richardson Engineering, LLC

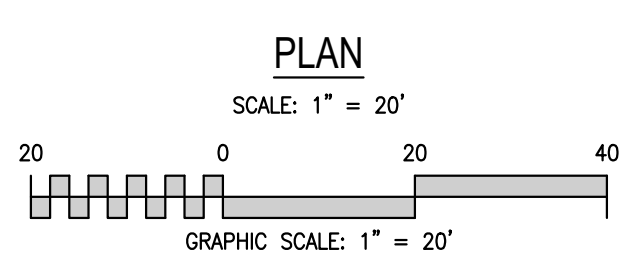
7 Deneison Street
Timonium, Maryland 21093
Phone: 410-560-1502

**SITE PLAN
TO ACCOMPANY BUILDING PERMIT
5529 RITTER AVENUE**

RESIDENTIAL ATTACHED DWELLINGS

WARD: 26 SECTION: 22 BLOCK: 6019P LOTS: 44 & 45

REVISIONS	DRAWN BY: MAV	CHECKED BY: PCR	SCALE: AS SHOWN
	DATE: 8-23-2022	JOB NO.: 19181	SHEET NO.: 03 OF 12



OWNER / DEVELOPER
SHACO PROPERTY MANAGEMENT, LLC
3311 BONNIE ROAD, UNIT 4
PARKVILLE, MARYLAND 21208
CONTACT: S. JOSEPH HAKEN
PHONE: (410) 736-8474

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 46853, EXPIRATION DATE: 06-11-2023.



ESD #7952
BCNR-10113



LEFT SIDE ELEVATION
SCALE: 3/16" = 1'-0"



FRONT ELEVATION (STREET FRONT)
SCALE: 3/16" = 1'-0"



REAR ELEVATION
SCALE: 1/4" = 1'-0"



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

5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS

SCALE: 3/16" = 1'-0"

DATE: 4/2022

SHEET NO.: 1

GBL CUSTOM HOME
DESIGN INC.

PO BOX 237 FINKSBURG, MD, 21048

PHONE 410-833-8320

WALL BRACING DESIGN INFO:

LOCATION: BALTIMORE COUNTY, MARYLAND
 SEISMIC CATEGORY: B
 WIND SPEED: 115 MPH

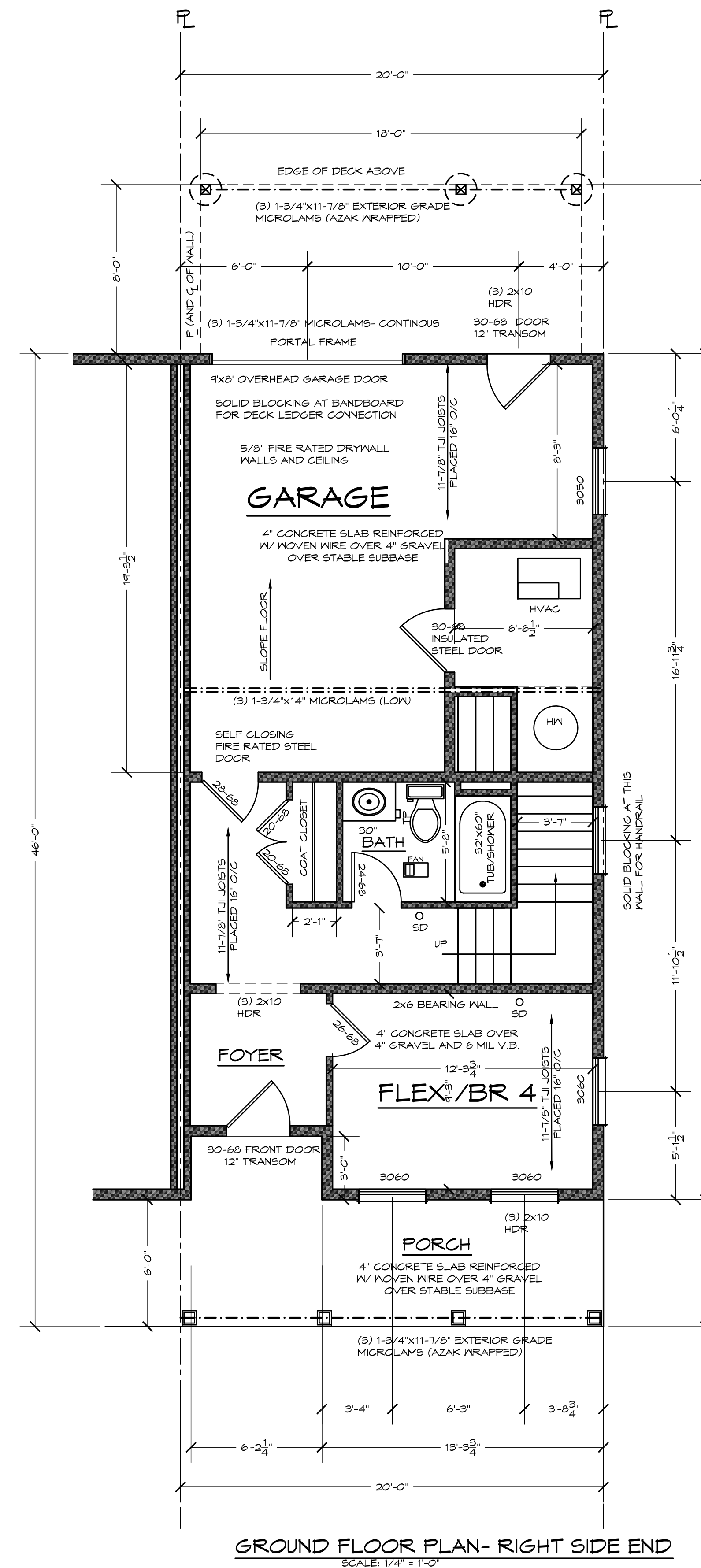
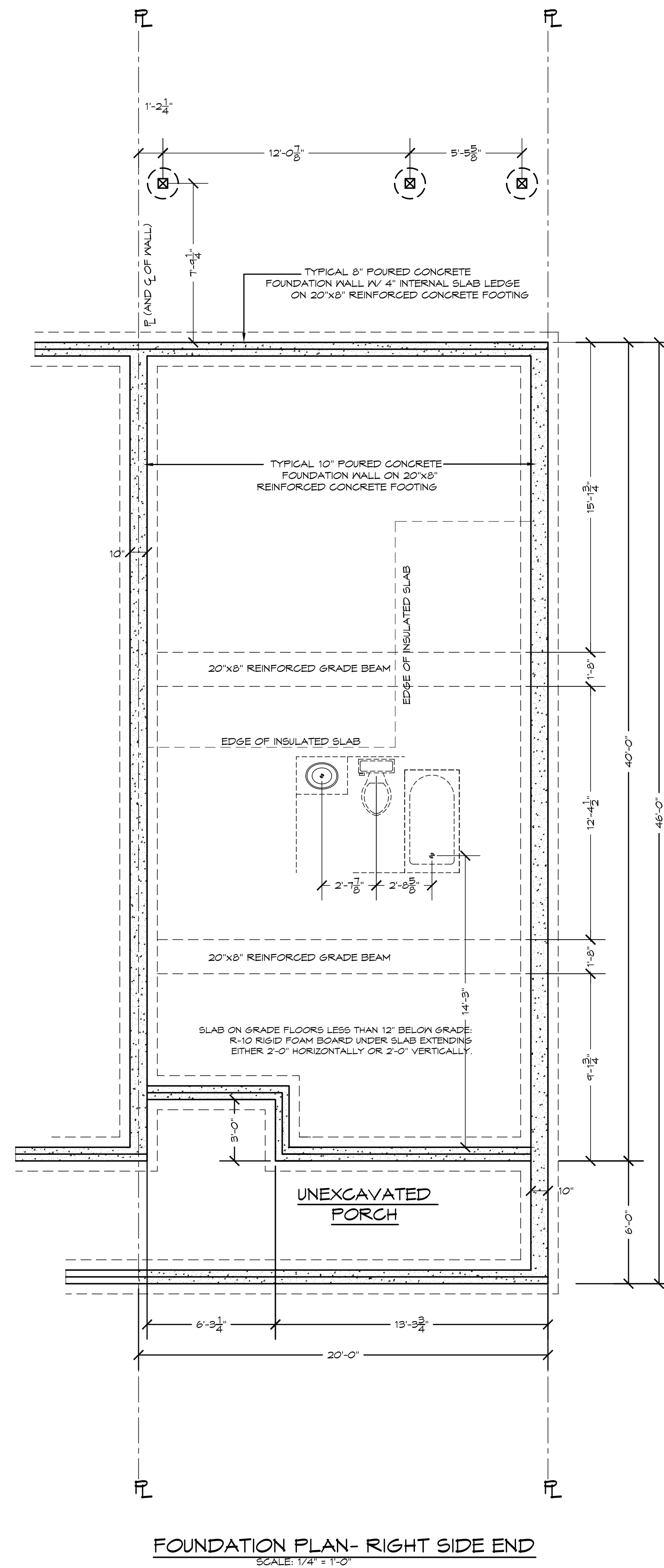
METHOD 3 (WOOD SHEATHING)/ CONTINUOUS SHEATHING
 METHOD 5 (GYPSUM BOARD)

*THESE DRAWINGS ARE LIMITED TO IRC WALL BRACING
 REQUIREMENTS ONLY.

R602.10.4 CONTINUOUS SHEATHING. BRACED WALL LINES WITH CONTINUOUS SHEATHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS SECTION. ALL BRACED WALL LINES ALONG EXTERIOR WALLS ON THE SAME STORY SHALL BE CONTINUOUSLY SHEATHED.

NOTES:

1. THE PLACEMENT OF HORIZONTAL AND VERTICAL REINFORCING STEEL SHALL BE MADE IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE INTERNATIONAL RESIDENTIAL CODE (IRC) AND AS NOTED ON THE DRAWINGS. THE PLACEMENT OF REINFORCING STEEL UNDER THE IRC SHALL CONFORM TO THE PROVISIONS AS ESTABLISHED BY THE INTERNATIONAL BUILDING CODE (IBC) IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) 318 BUILDING CODE FOR STRUCTURAL CONCRETE, LATEST EDITION.
2. REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A-615, GRADE 60.
3. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 40 BAR DIAMETERS WHEN SPLICED, EXCEPT AS NOTED ON THE DRAWINGS OR SUPERCEDED BY OTHER CODE REQUIREMENTS.
4. HORIZONTAL AND VERTICAL REINFORCEMENT AT ALL WALL CORNERS, DOORWAY AND WINDOW OPENINGS AND OTHER OPENINGS WITHIN THE FOUNDATION WALLS ARE TO BE CONSTRUCTED WITH MINIMUM 12-INCH HOOKED ENDS. THE HOOKED ENDS SHALL BE LAPPED TO THE REINFORCEMENT WITHIN THE ADJOINING WALL SECTIONS OR SURROUNDING THE OPENINGS WITHIN THE FOUNDATION WALL.
5. HORIZONTAL AND VERTICAL REINFORCEMENT AT DOORWAY, WINDOW AND OTHER OPENINGS WITHIN FOUNDATION WALLS SHALL BE CONFIGURED AS REQUIRED TO FORM LINTELS TO SUPPORT OVERLYING APPLIED LOADS.



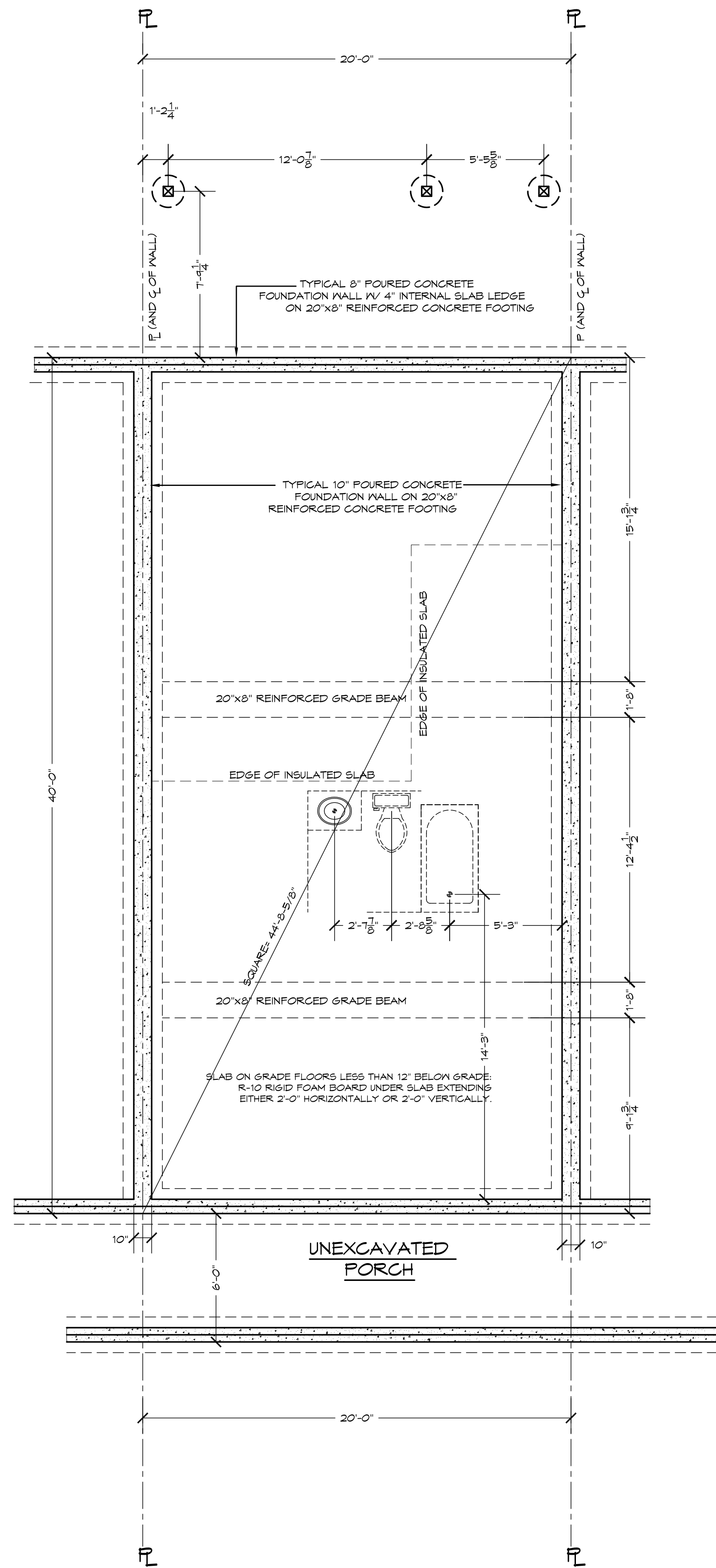
HAKEN TOWNHOUSE SPEC

SCALE: 1/4" = 1'-0"
 DATE: 4/2022
 SHEET NO.: 2

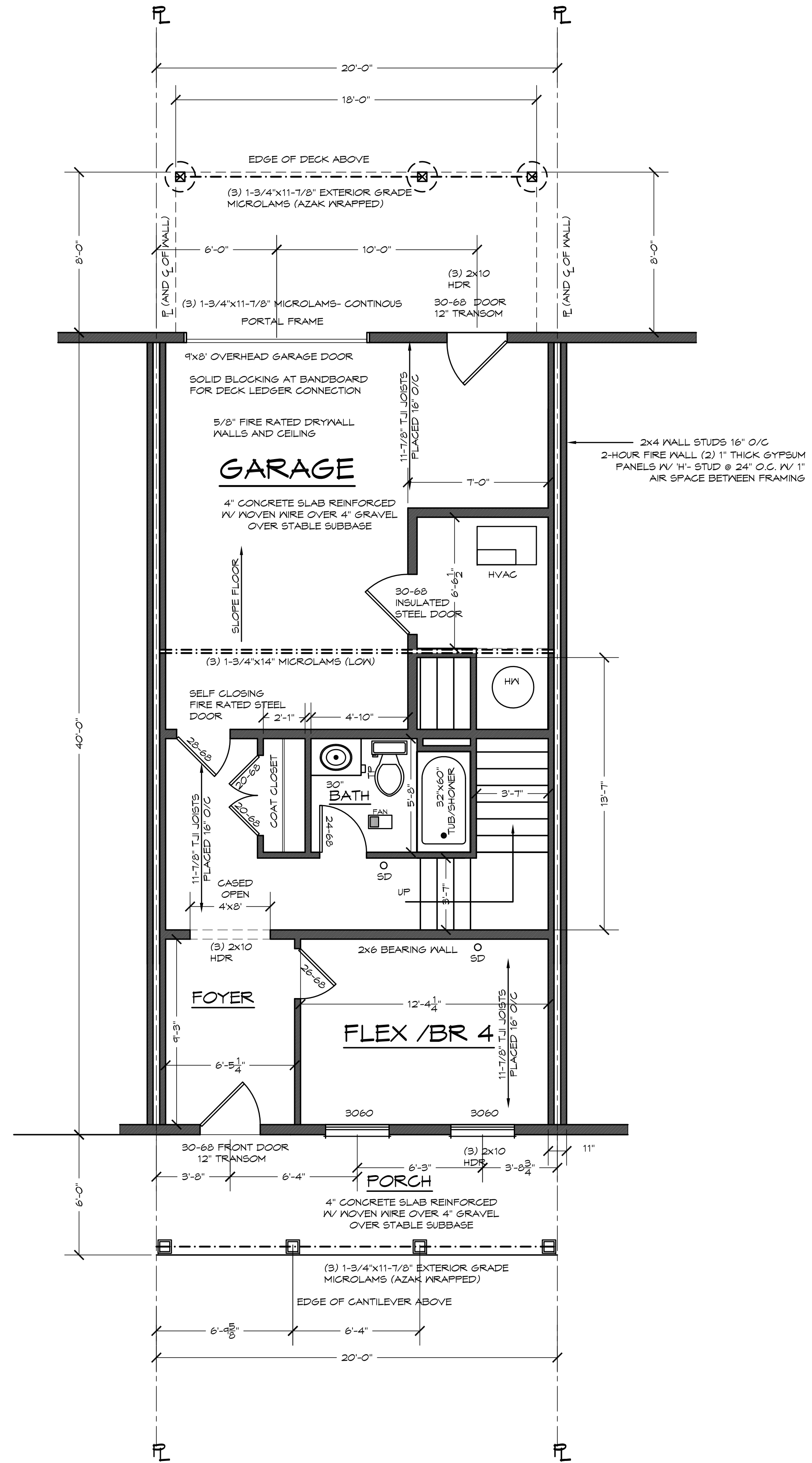
**GBL CUSTOM HOME
 DESIGN INC.**
 PO BOX 237 FINKSBURG, MD 21048
 PHONE 410-833-8320

5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS



FOUNDATION PLAN- INTERIOR UNIT
SCALE: 1/4" = 1'-0"



GROUND FLOOR PLAN- INTERIOR UNIT
SCALE: 1/4" = 1'-0"

5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS

HAKEN TOWNHOUSE SPEC

SCALE: 1/4" = 1'-0"

DATE: 4/2022

SHEET NO.: 4

GBL CUSTOM HOME

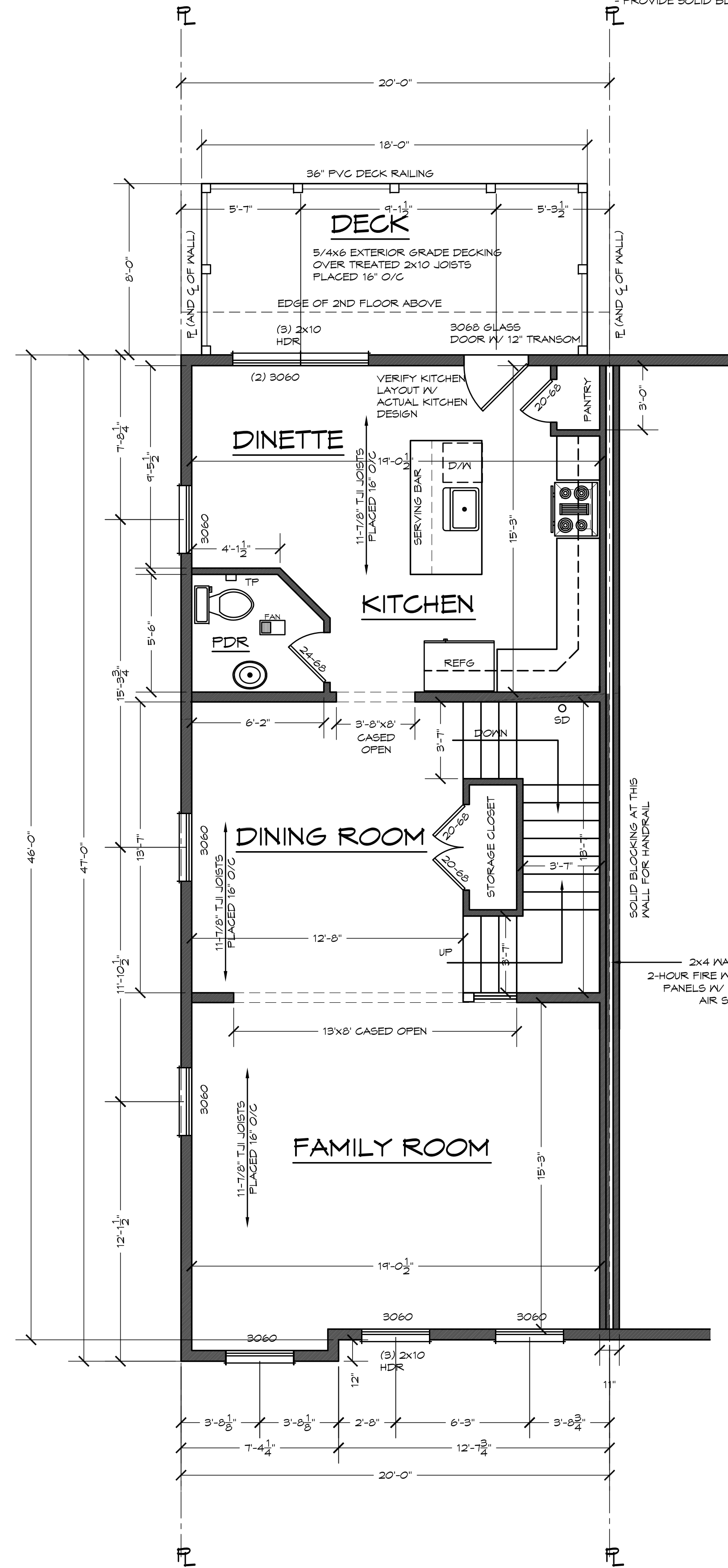
DESIGN INC.

PO BOX 237 FINNSBURG, MD 21046

PHONE 410-833-8320

GENERAL NOTES:

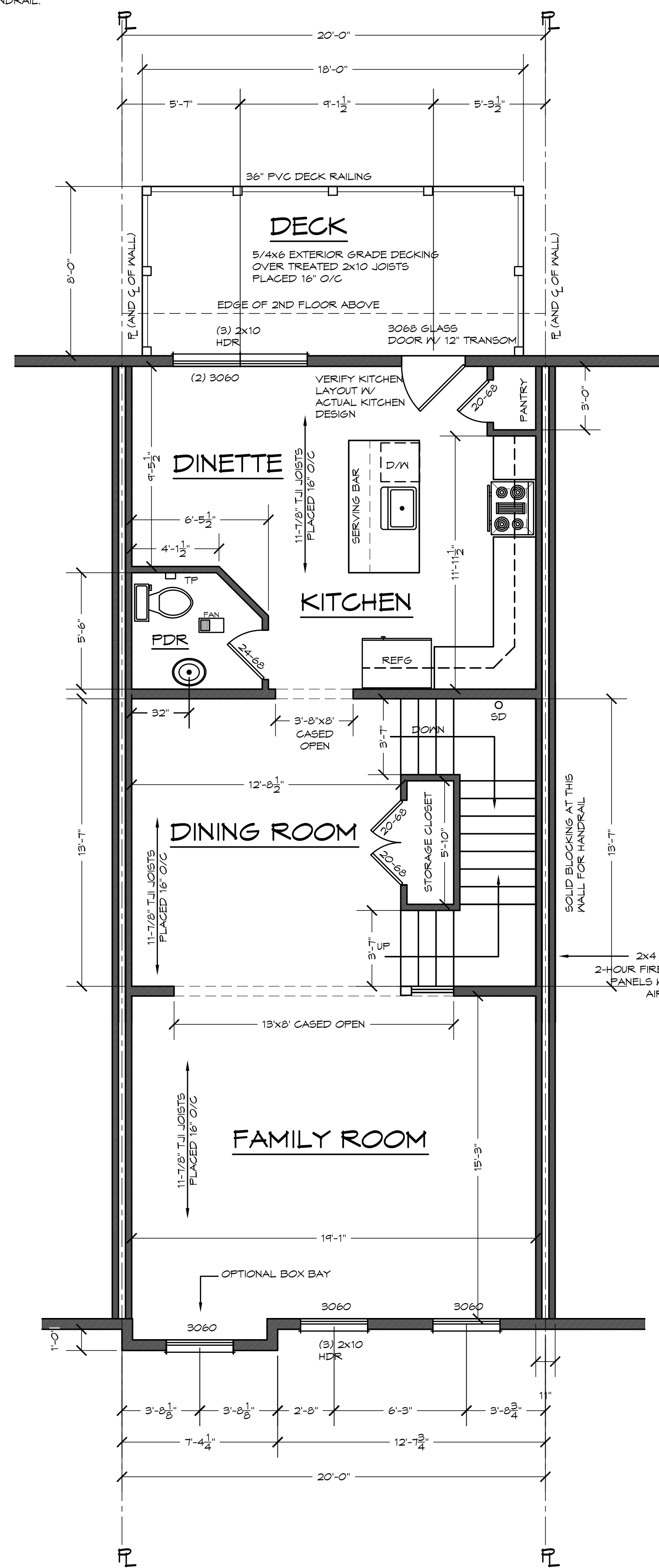
- WINDOWS SHOWN ARE ANDERSEN 200 SERIES. VERIFY WITH MANUFACTURE THAT SHOWN SIZES MEET OR EXCEED EGRESS CLEAR OPENING AREA OF 5.7 SQ.FT., CLEAR OPENING WIDTH OF 20" & CLEAR OPENING HEIGHT OF 24"
- FINAL GRADE SHOWN HEREON IS STRICTLY APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
- PROVIDE SMOKE DETECTORS TO BE HARD WIRED W/ BATTERY BACKUP.
- 1 PER BEDROOM & 1 IN CENTRAL LOCATION PER LEVEL.
- PROVIDE CARBON MONOXIDE DETECTORS TO BE HARD WIRED W/ BATTERY BACKUP.
- 1 IN CENTRAL LOCATION PER LEVEL.
- THIS HOME IS TO BE FULLY SPRINKLED PER COUNTY CODE
- PROVIDE SOLID BLOCKING AT STAIR WALLS FOR HANDRAIL.



SECOND FLOOR FRAMING PLAN- LEFT END

SCALE: 1/4"=1'-0"

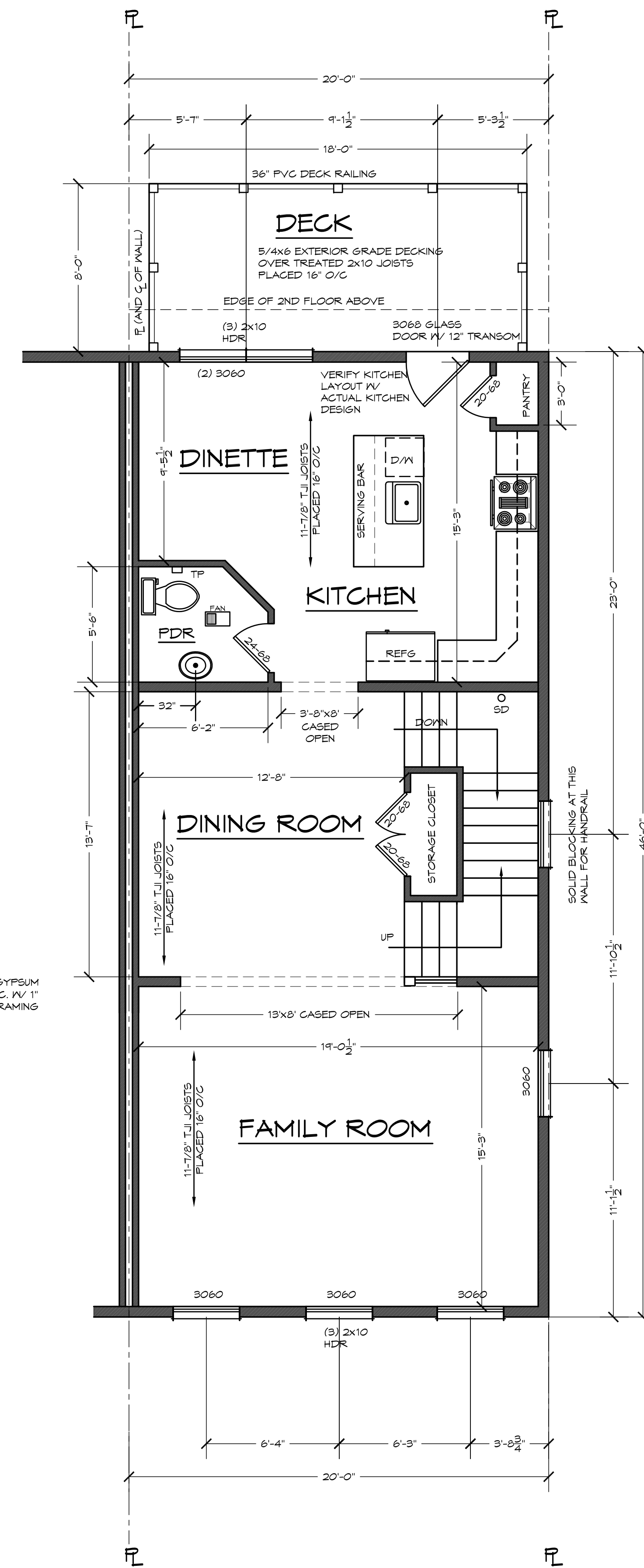
9" SECOND FLOOR CEILING HEIGHT
FLOOR JOIST- DATA: LP BRAND OR EQUAL- W/ 80 SERIES L/480



SECOND FLOOR FRAMING PLAN- INTERIOR UNIT

SCALE: 1/4"=1'-0"

9" SECOND FLOOR CEILING HEIGHT
FLOOR JOIST- DATA: LP BRAND OR EQUAL- W/ 80 SERIES L/480



SECOND FLOOR FRAMING PLAN- RIGHT END

SCALE: 1/4"=1'-0"

9" SECOND FLOOR CEILING HEIGHT
FLOOR JOIST- DATA: LP BRAND OR EQUAL- W/ 80 SERIES L/480

HAKEN TOWNHOUSE SPEC

SCALE: 1/4" = 1'-0"

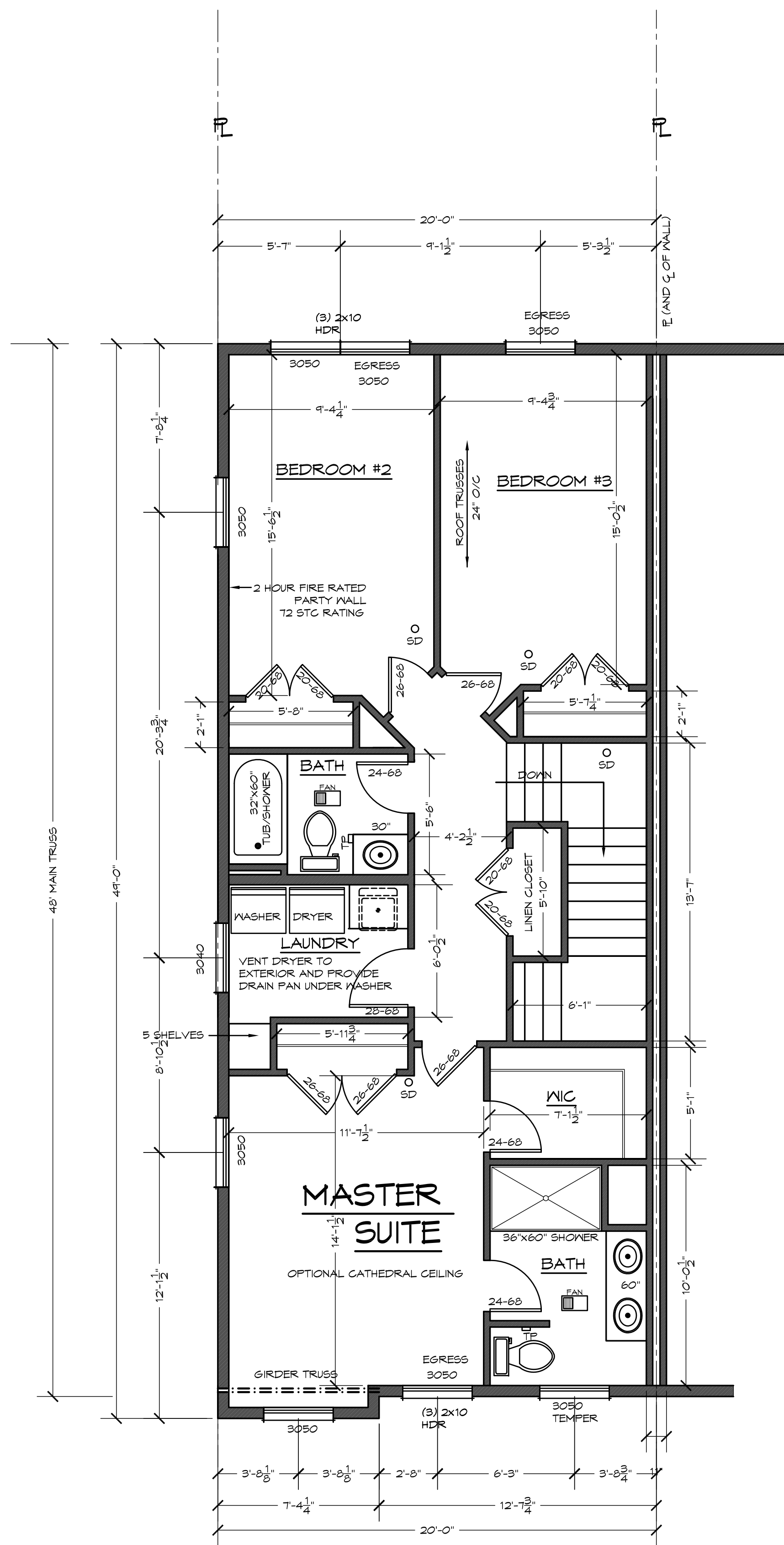
DATE: 4/2022

SHEET NO.: 5

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PO BOX 237 FINNSBURG, MD 21048
PHONE 410-833-8320

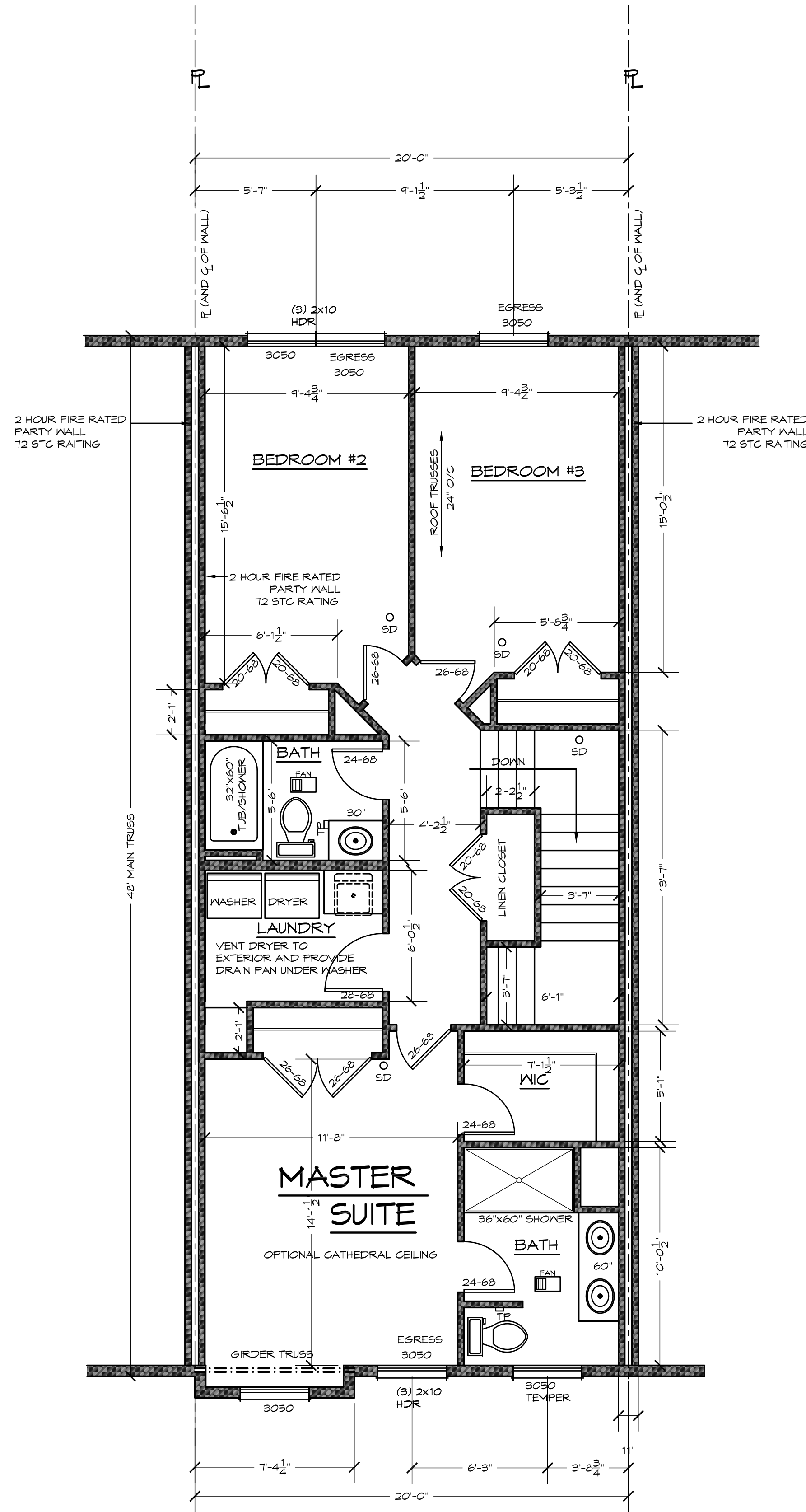
5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS



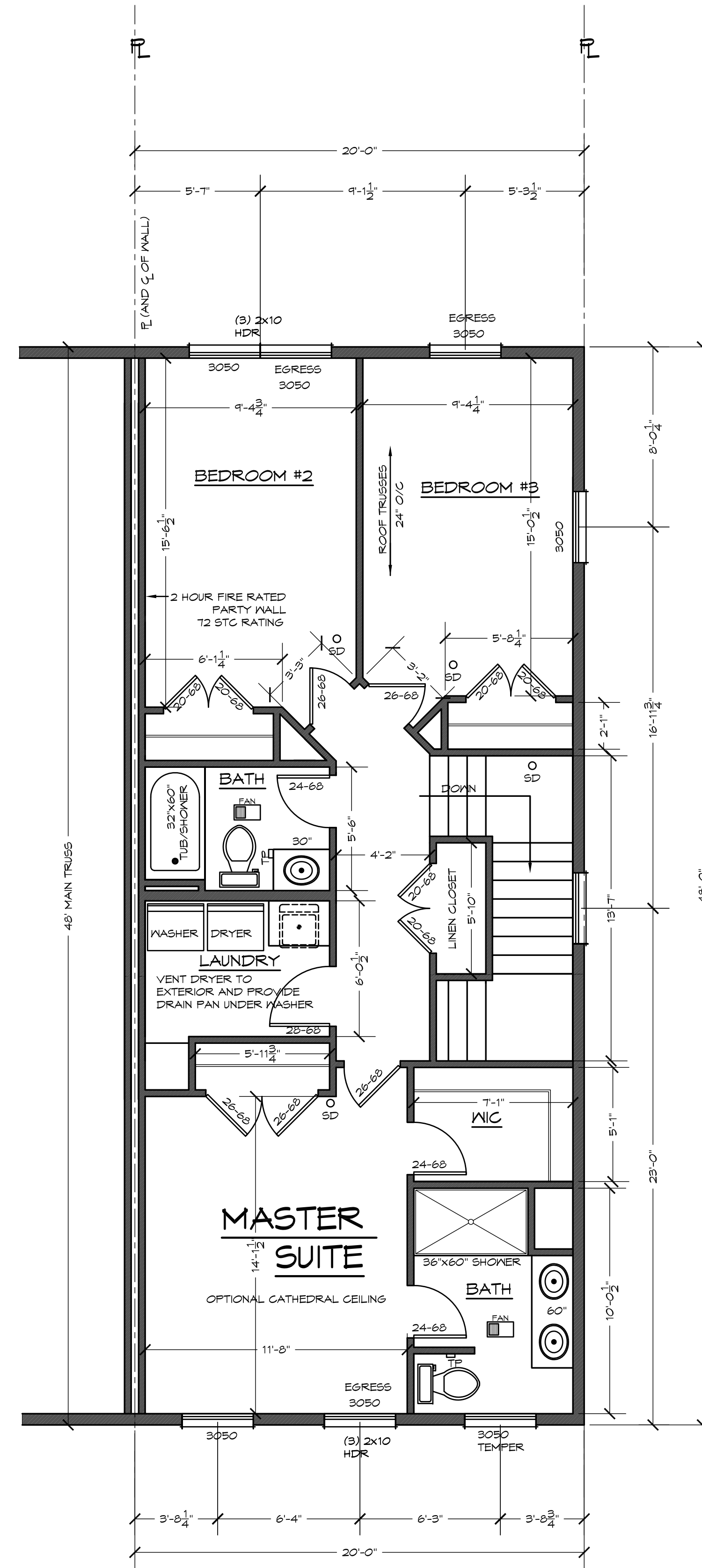
THIRD FLOOR FRAMING PLAN- LEFT END

SCALE: 1/4"=1'-0"



THIRD FLOOR FRAMING PLAN- INTERIOR UNIT

SCALE: 1/4"=1'-0"



THIRD FLOOR FRAMING PLAN- RIGHT END

SCALE: 1/4"=1'-0"

HAKEN TOWNHOUSE SPEC

SCALE: 1/4" = 1'-0"

DATE: 4/2022

SHEET NO.: 6

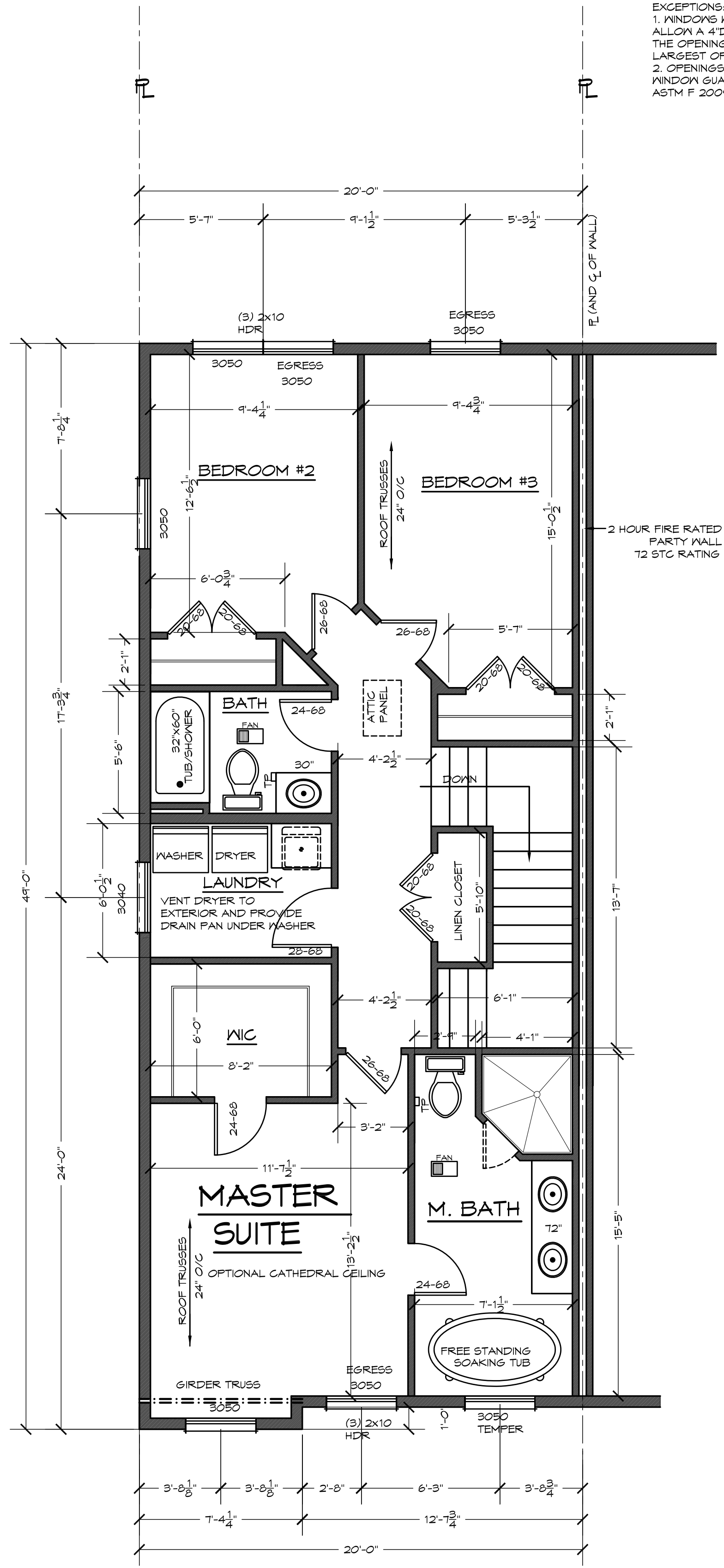
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5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS

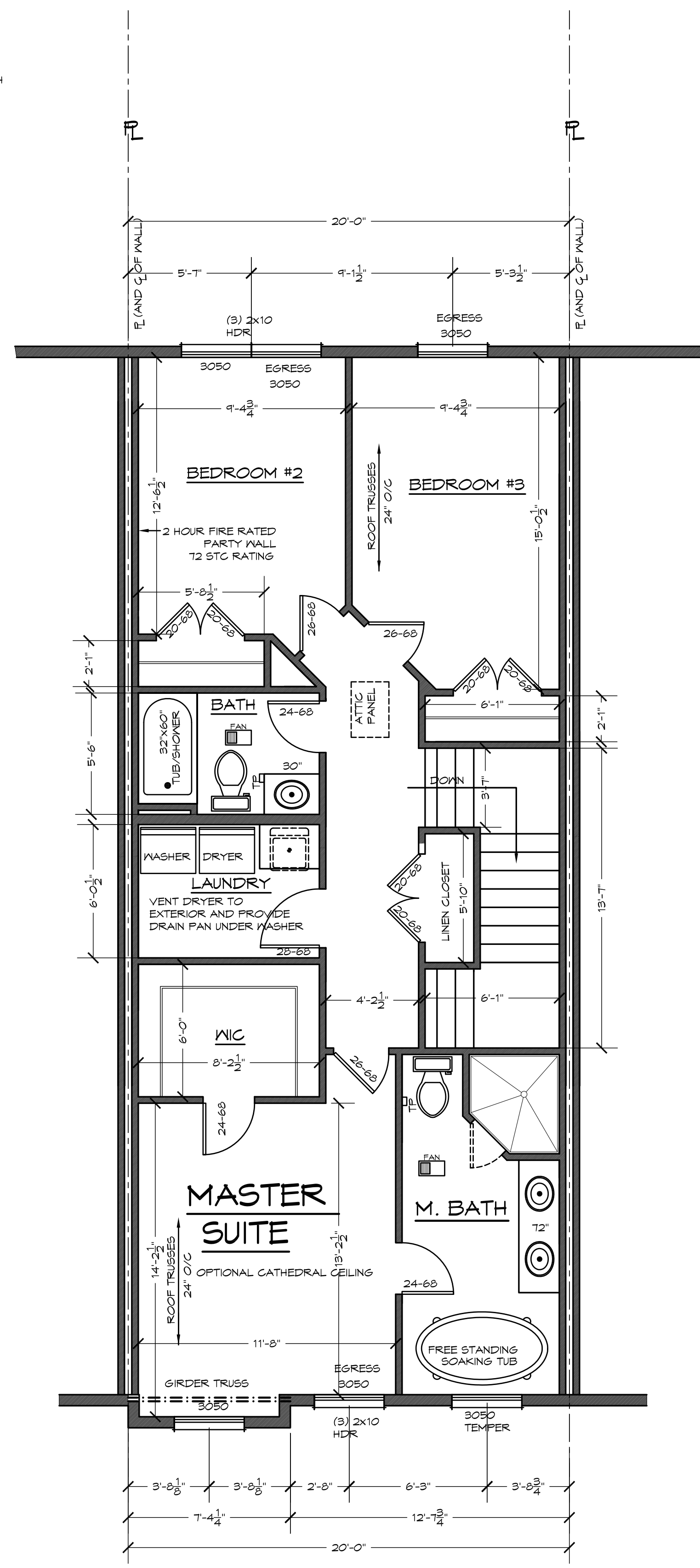
R619.2 WINDOW SILLS
 ALL WINDOWS WHERE THE OPERABLE
 OPENING IS LOCATED MORE THAN 12'
 ABOVE FINISHED GRADE OR SURFACE
 BELOW, THE LOWEST PART OF THE CLEAR
 OPENING SHALL BE A MIN. OF 24" ABOVE
 THE FINISHED FLOOR OF THE ROOM IN
 WHICH THE WINDOW IS LOCATED. GLAZING
 BETWEEN THE FLOOR AND 24" SHALL BE
 FIXED OR HAVE OPENINGS THROUGH
 WHICH A 4" DIA. SPHERE CANNOT PASS.

EXCEPTIONS:
 1. WINDOWS WHOSE OPENINGS WILL NOT
 ALLOW A 4" DIA. SPHERE TO PASS THROUGH
 THE OPENING WHEN THE OPENING IS IN ITS
 LARGEST OPENED POSITION
 2. OPENINGS THAT ARE PROVIDED WITH
 WINDOW GUARDS THAT COMPLY WITH
 ASTM F 2091 OF F 2090



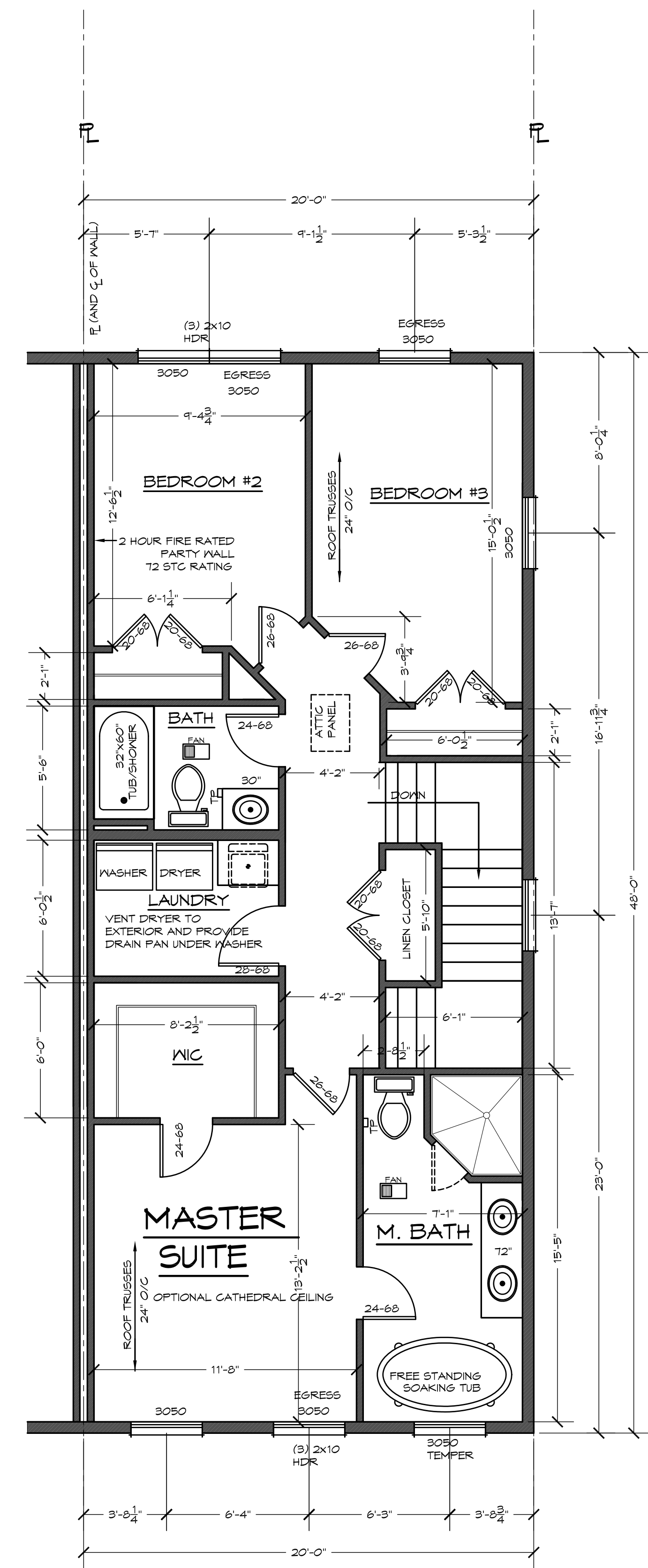
OPTIONAL THIRD FLOOR FRAMING PLAN- LEFT END

SCALE: 1/4"=1'-0"



OPTIONAL THIRD FLOOR FRAMING PLAN- INTERIOR UNIT

SCALE: 1/4"=1'-0"



OPTIONAL THIRD FLOOR FRAMING PLAN- RIGHT END

SCALE: 1/4"=1'-0"

HAKEN TOWNHOUSE SPEC

SCALE: 1/4" = 1'-0"

DATE: 4/2022

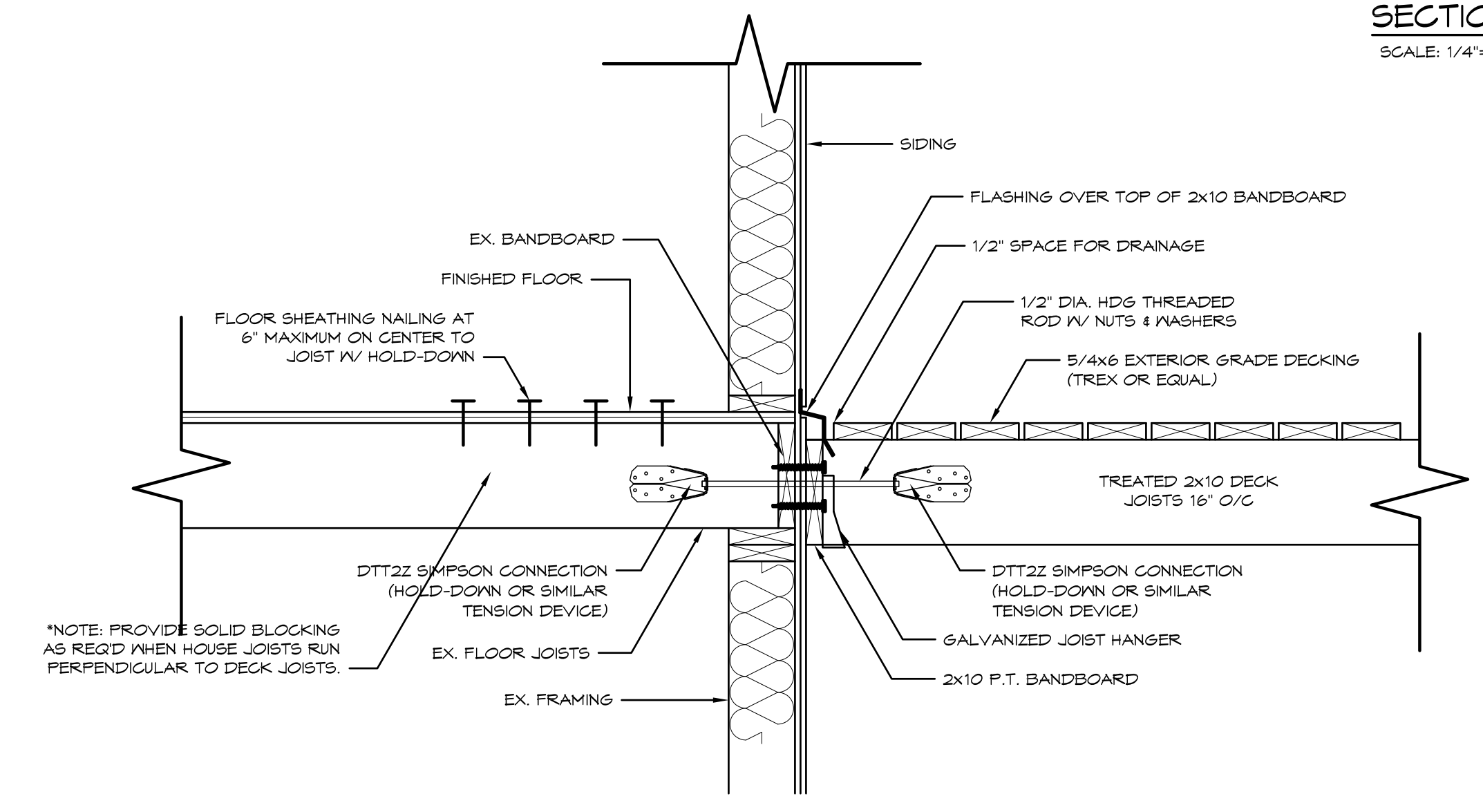
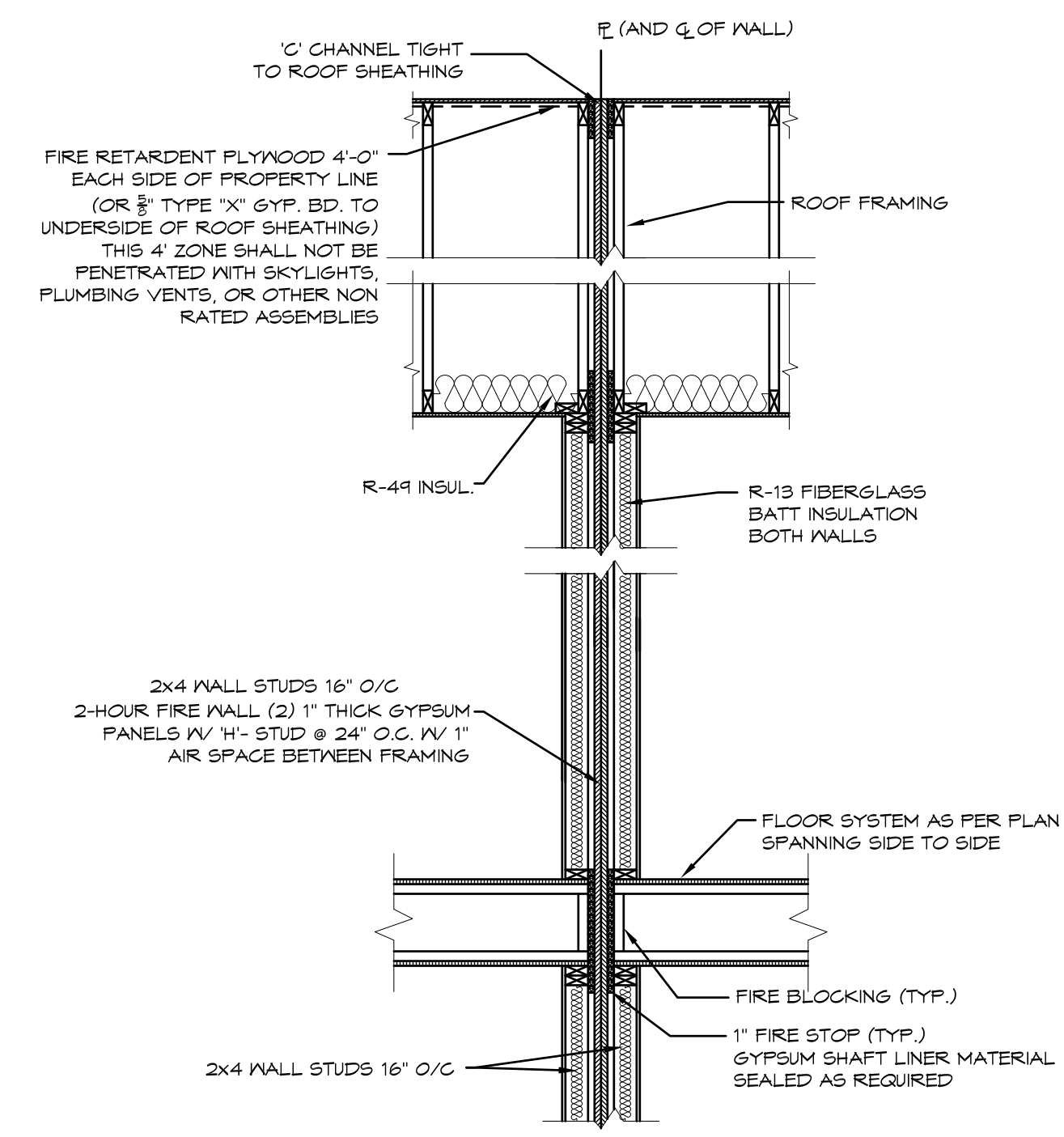
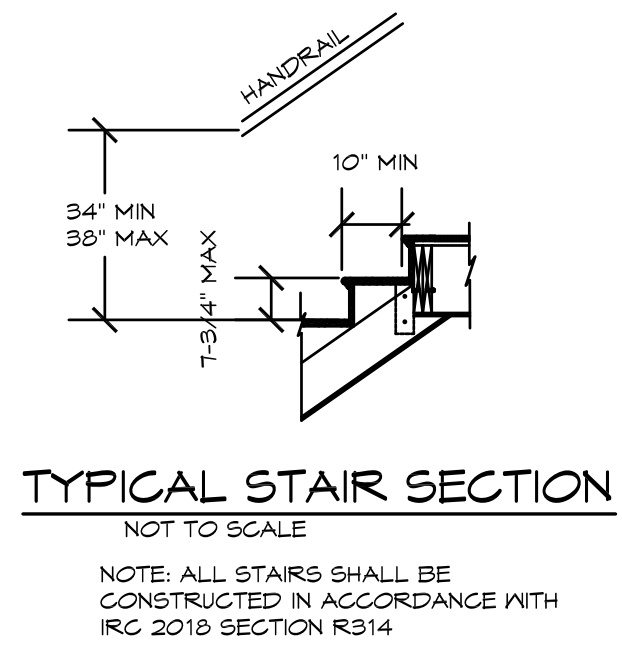
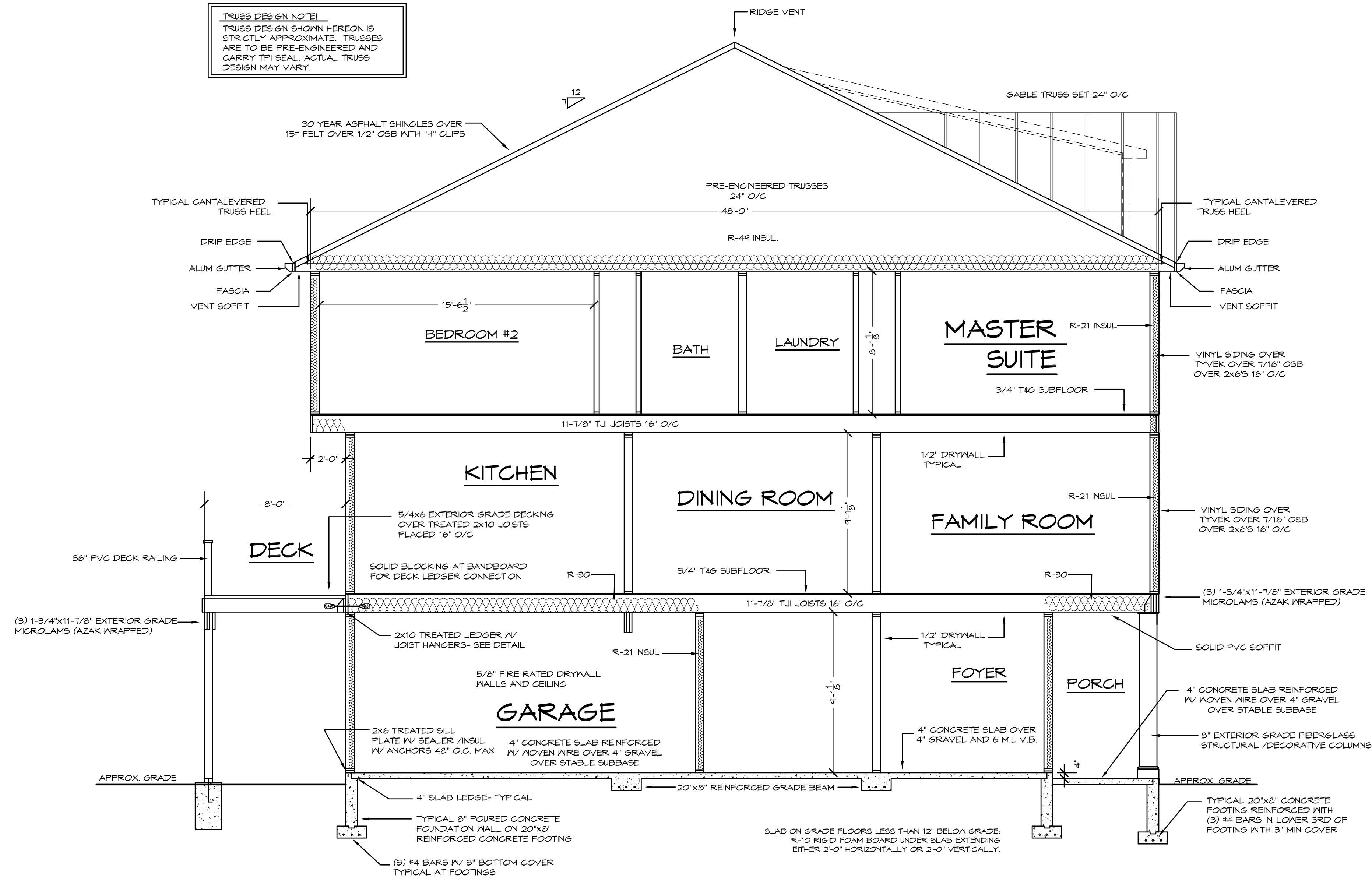
SHEET NO.: 7

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5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS

TRUSS DESIGN NOTE:
TRUSS DESIGN SHOWN HEREON IS STRICTLY APPROXIMATE. TRUSSES ARE TO BE PRE-ENGINEERED AND CARRY TPI SEAL. ACTUAL TRUSS DESIGN MAY VARY.

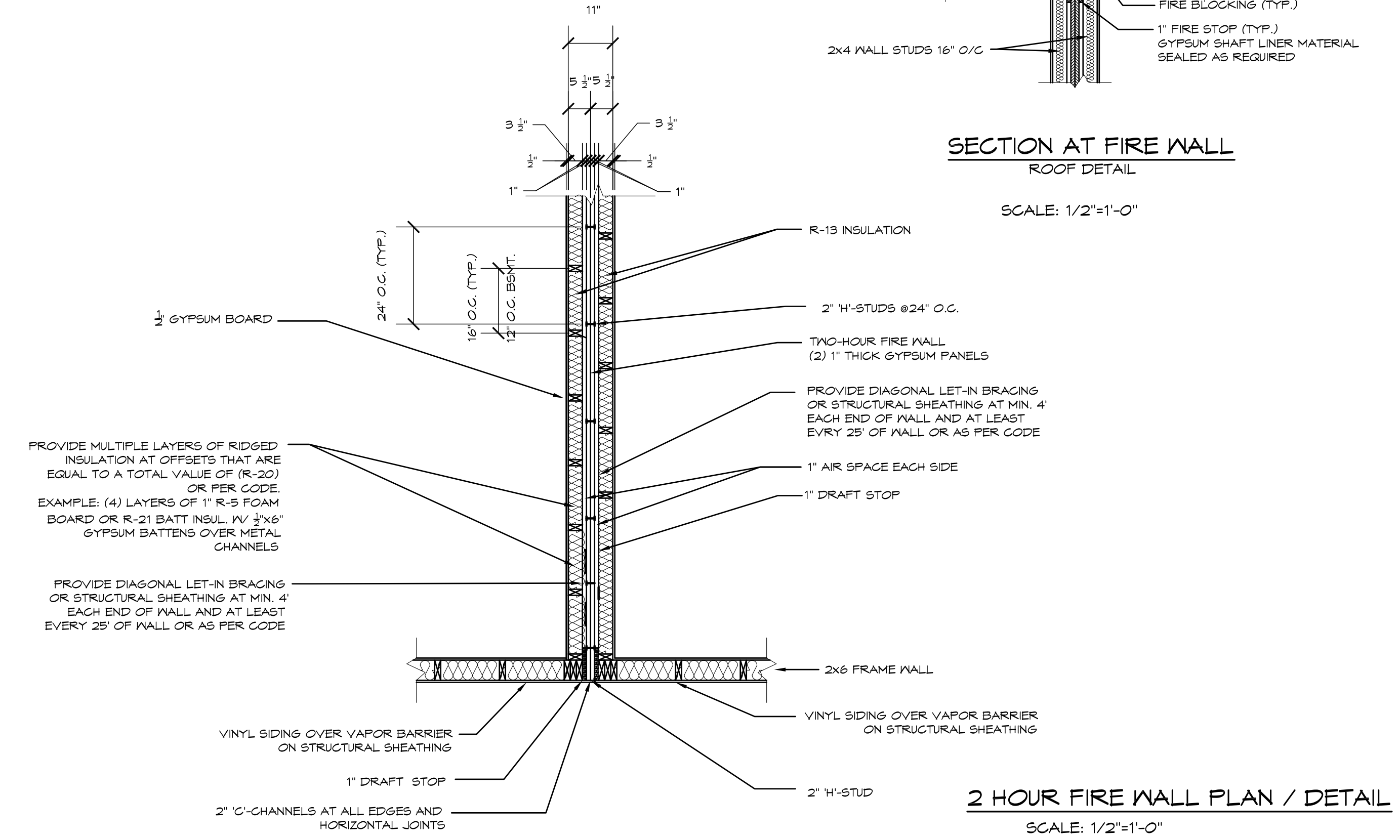


DECK ATTACHMENT FOR LATERAL LOADS
FIGURE 507.2.3(1)
SCALE: 1"=1'-0"

NOTE: PROVIDE 4 INSTALL SIMPSON HANGERS 4 CONNECTERS PER MANUFACTURER'S INSTRUCTIONS.

HOLD DOWN TENSION DEVICES SHALL BE INSTALLED IN NOT LESS THAN TWO LOCATIONS PER DECK, WITHIN 24\"/>

SECTION A-A
SCALE: 1/4"=1'-0"



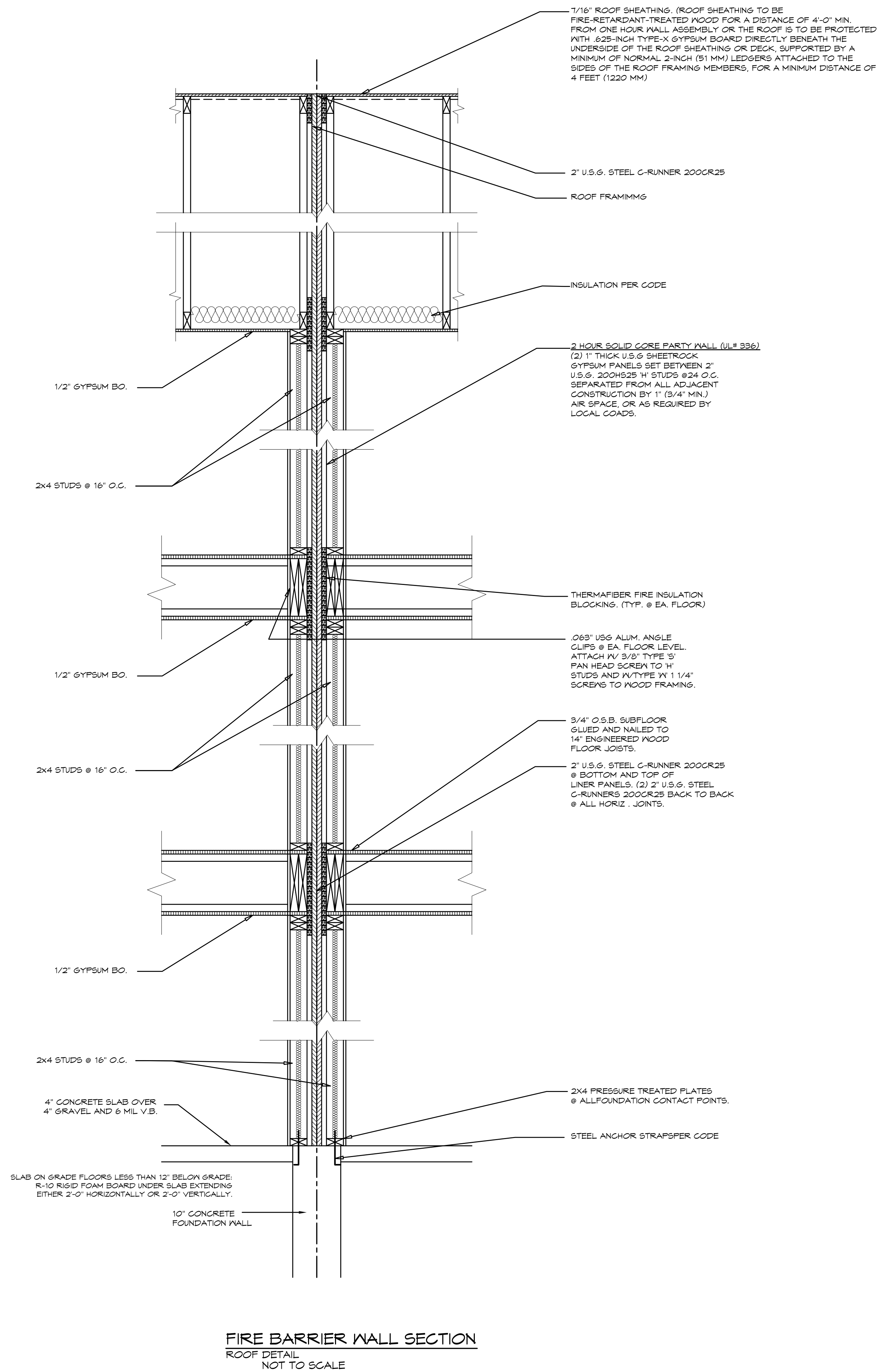
2 HOUR FIRE WALL PLAN / DETAIL
SCALE: 1/2"=1'-0"

5529 RITTER AVENUE, BALTIMORE MD

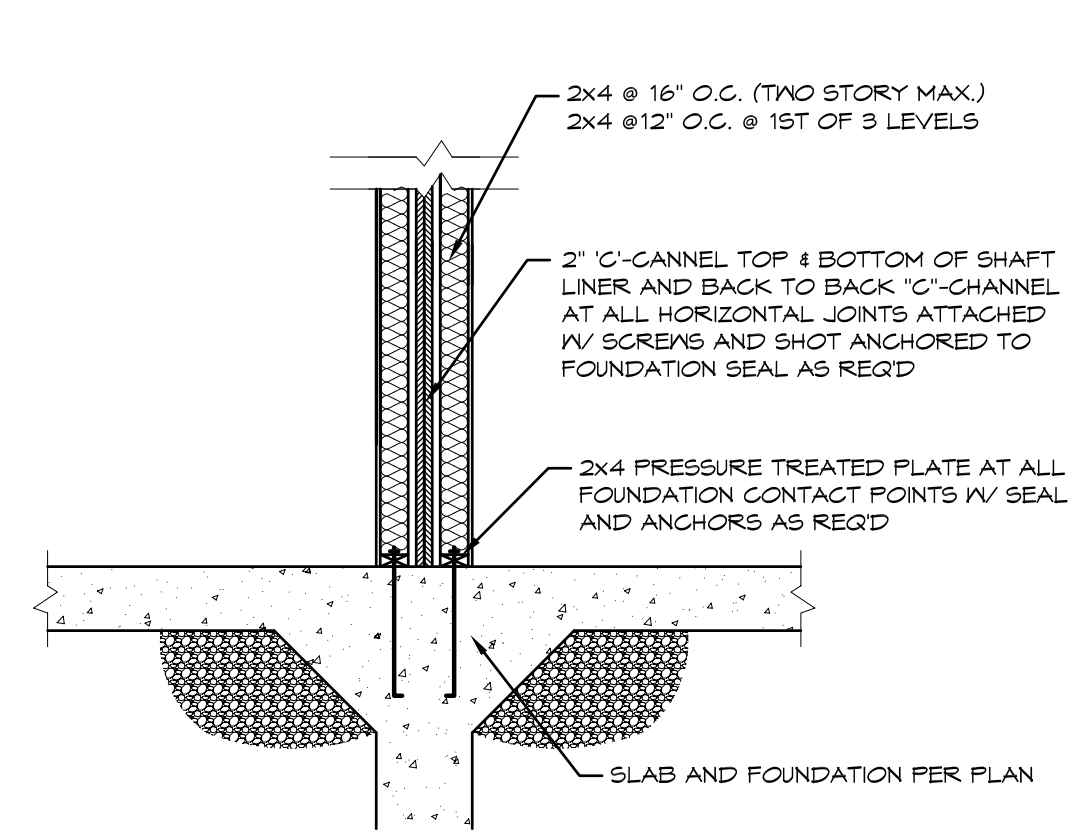
TOWNHOME MODELS

SCALE: 1/4" = 1'-0"	HAKEN TOWNHOUSE SPEC
DATE: 4/2022	
SHEET NO.: 9	

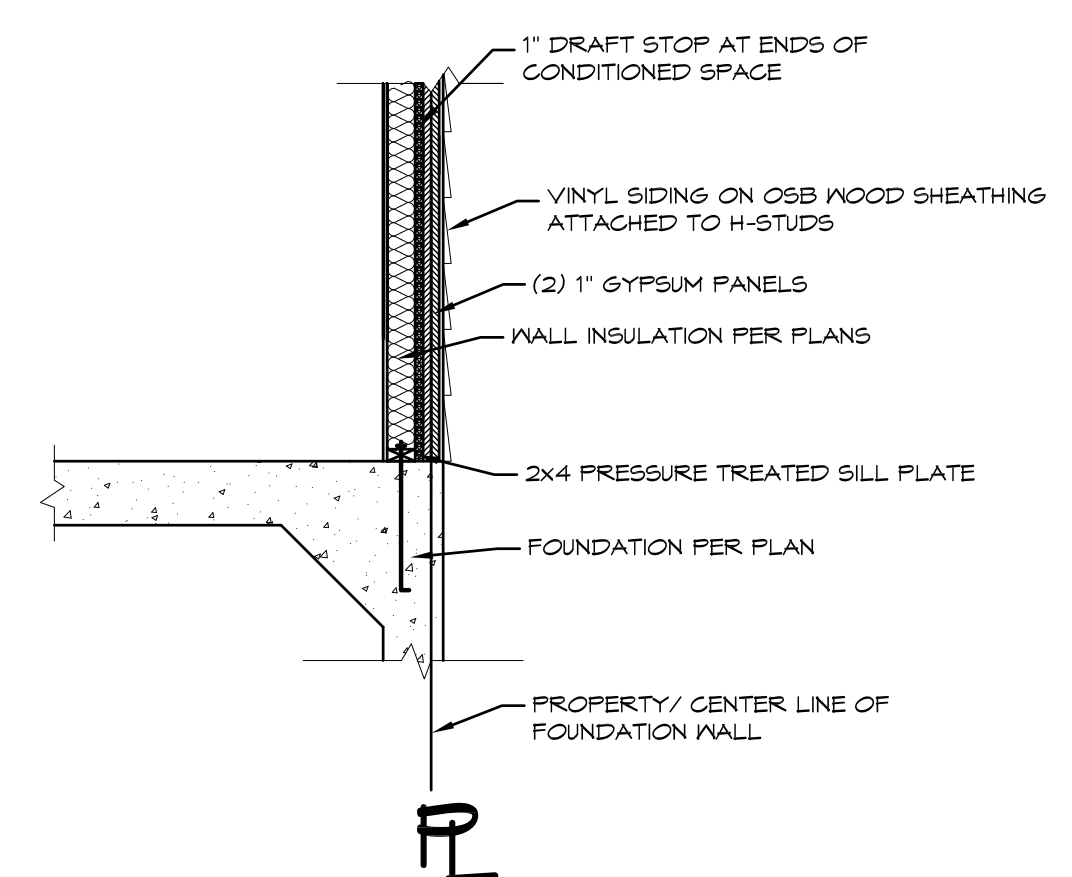
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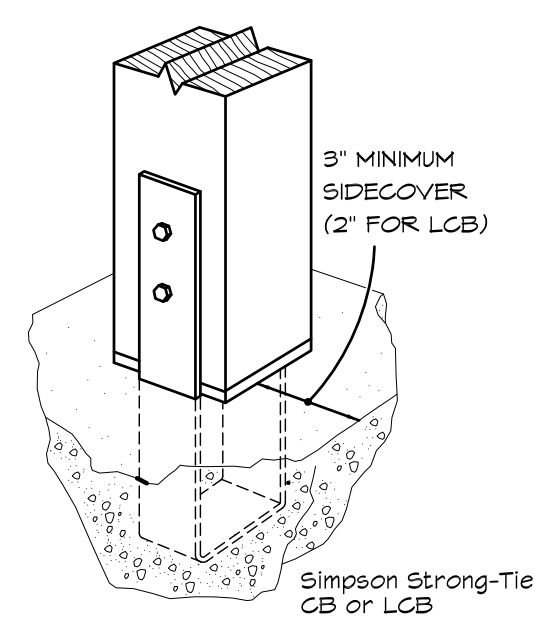
FIRE BARRIER WALL SECTION
ROOF DETAIL
NOT TO SCALE



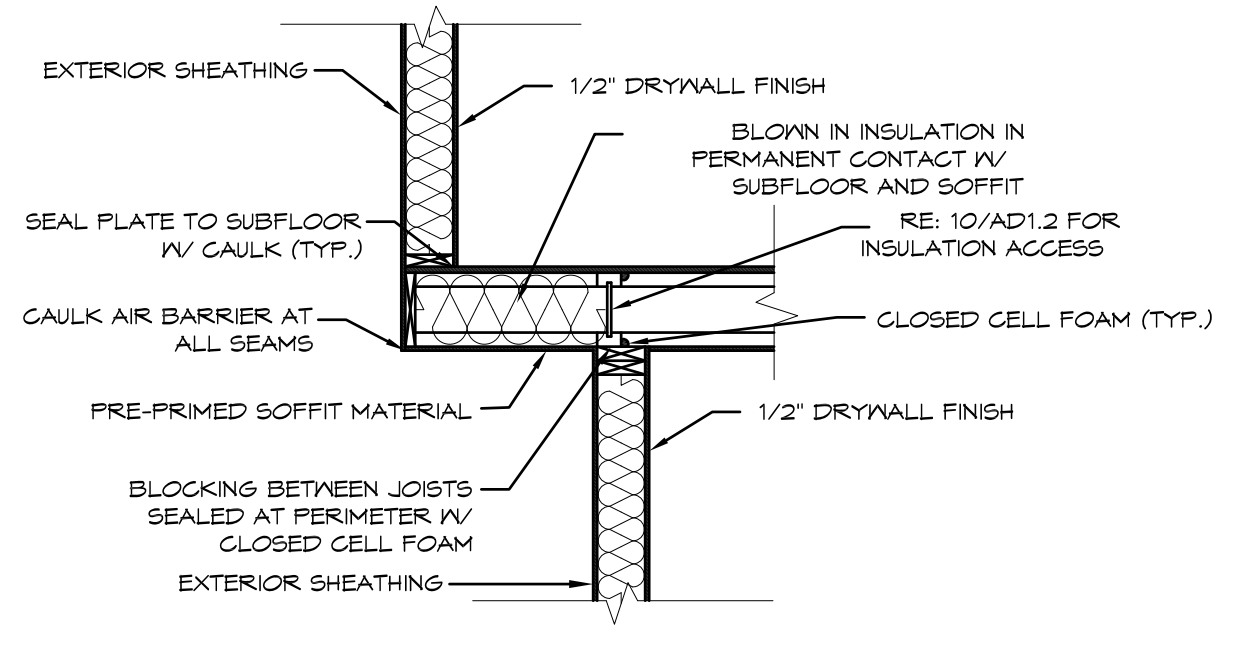
SECTION AT FIRE WALL FOUNDATION
CONC. SLAB ON GRADE
SCALE: 1/2"=1'-0"



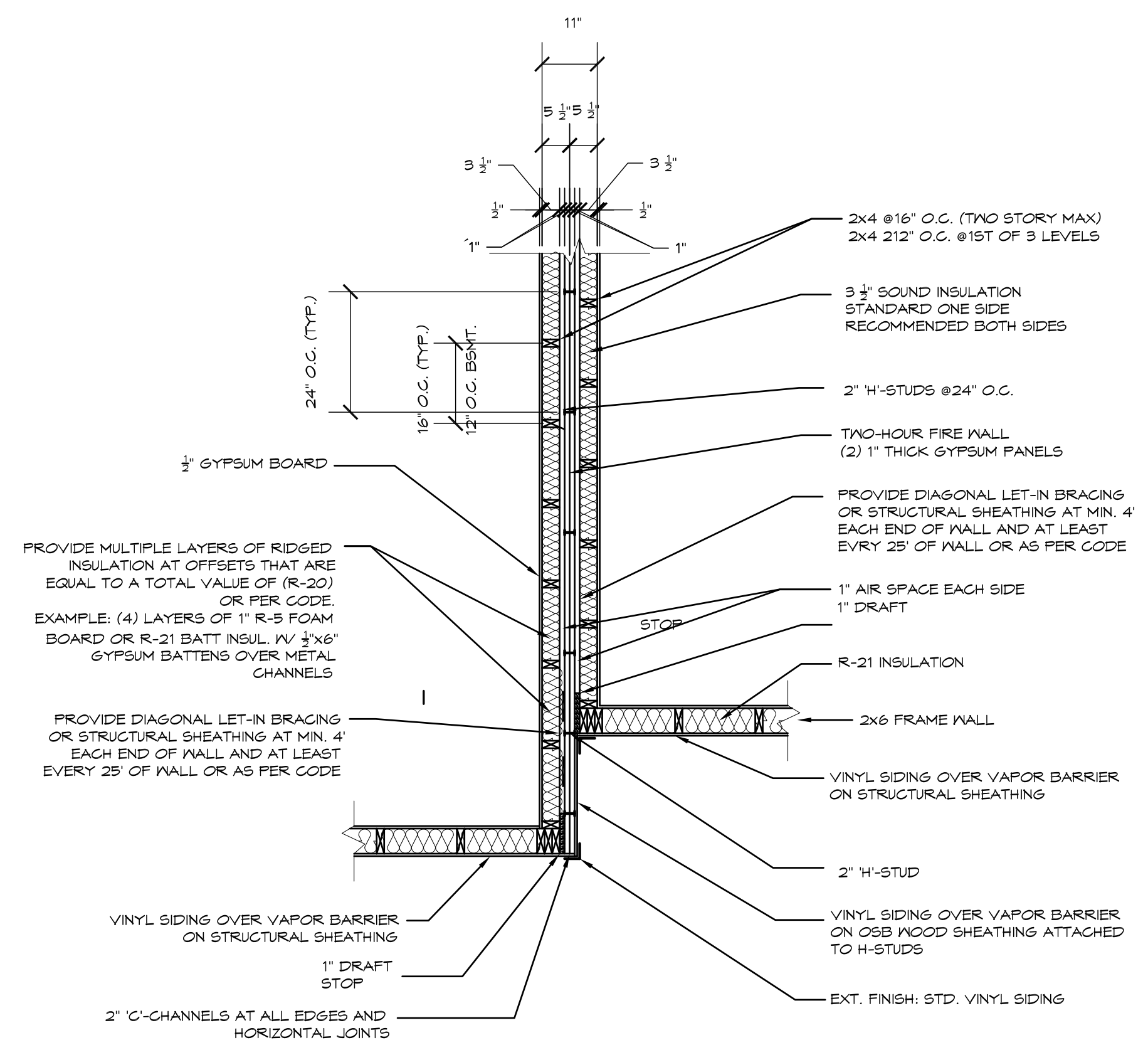
SECTION AT UNIT OFFSET
CONC. SLAB ON GRADE
SCALE: 1/2"=1'-0"



POST TO FOOTER CONNECTION DETAIL
NOT TO SCALE



CANTILEVER DETAIL
NOT TO SCALE

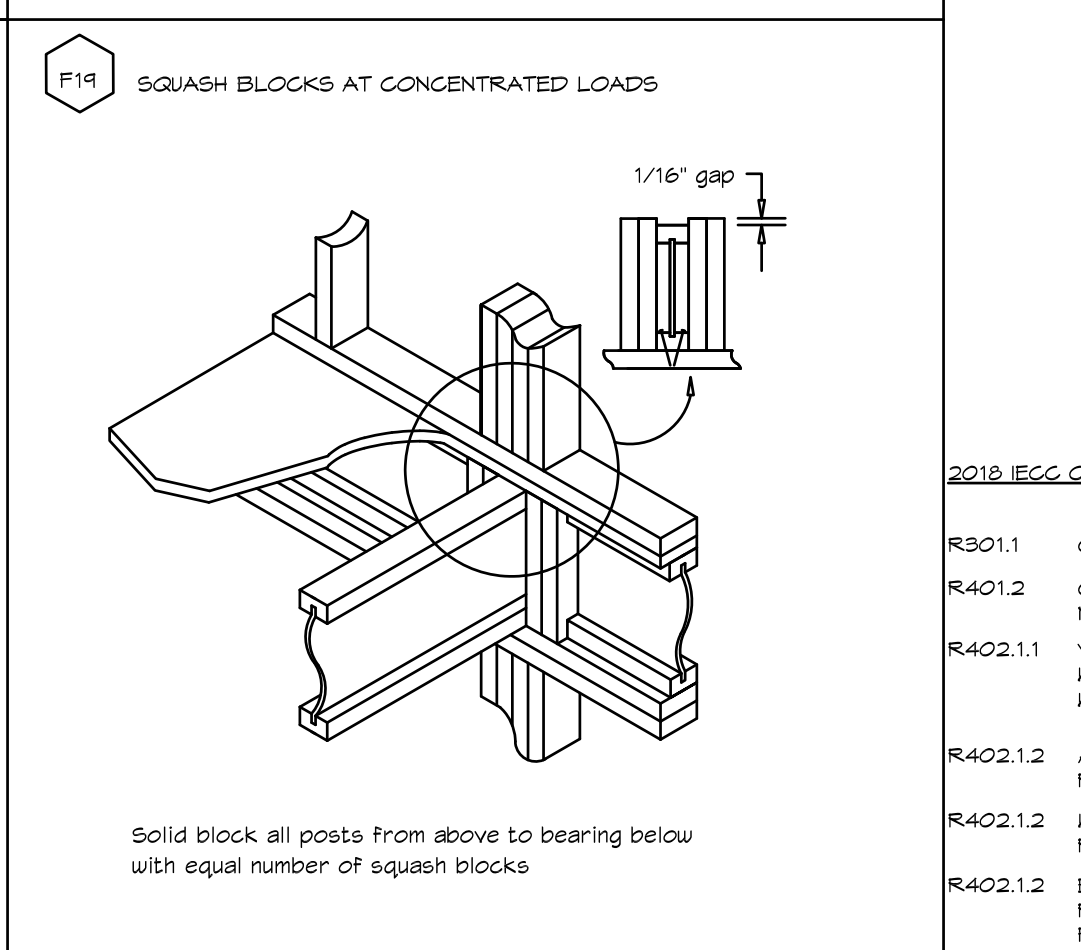
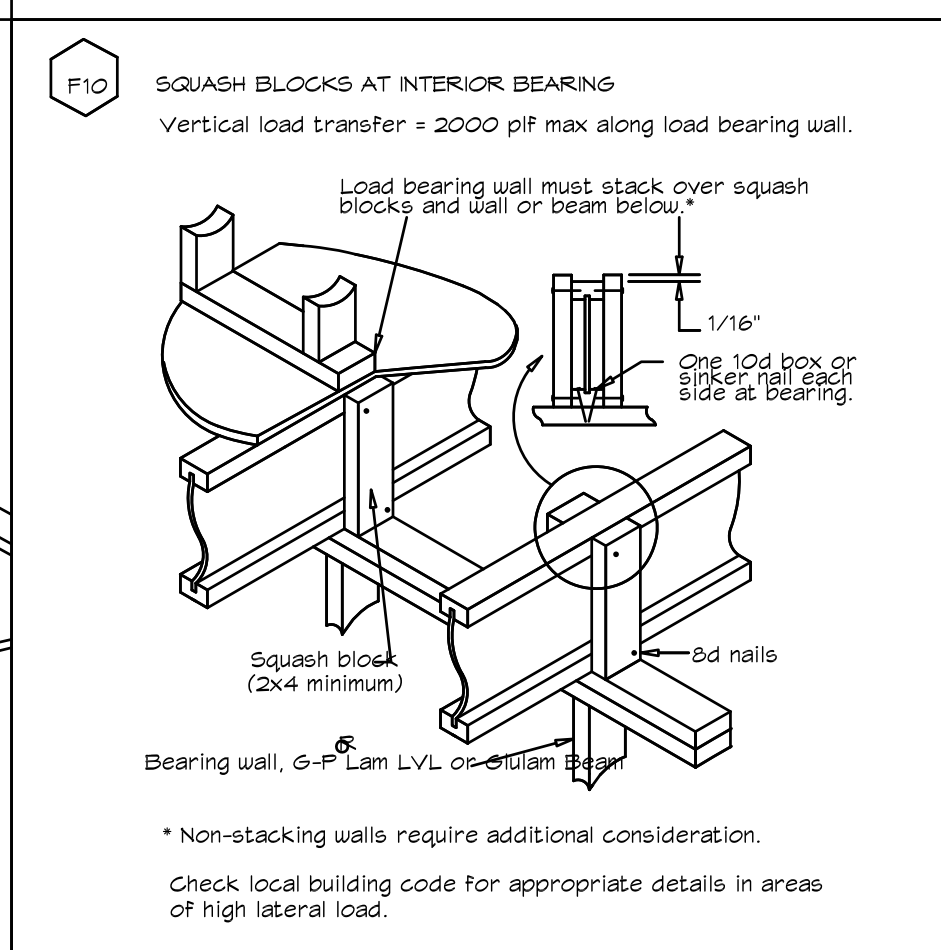
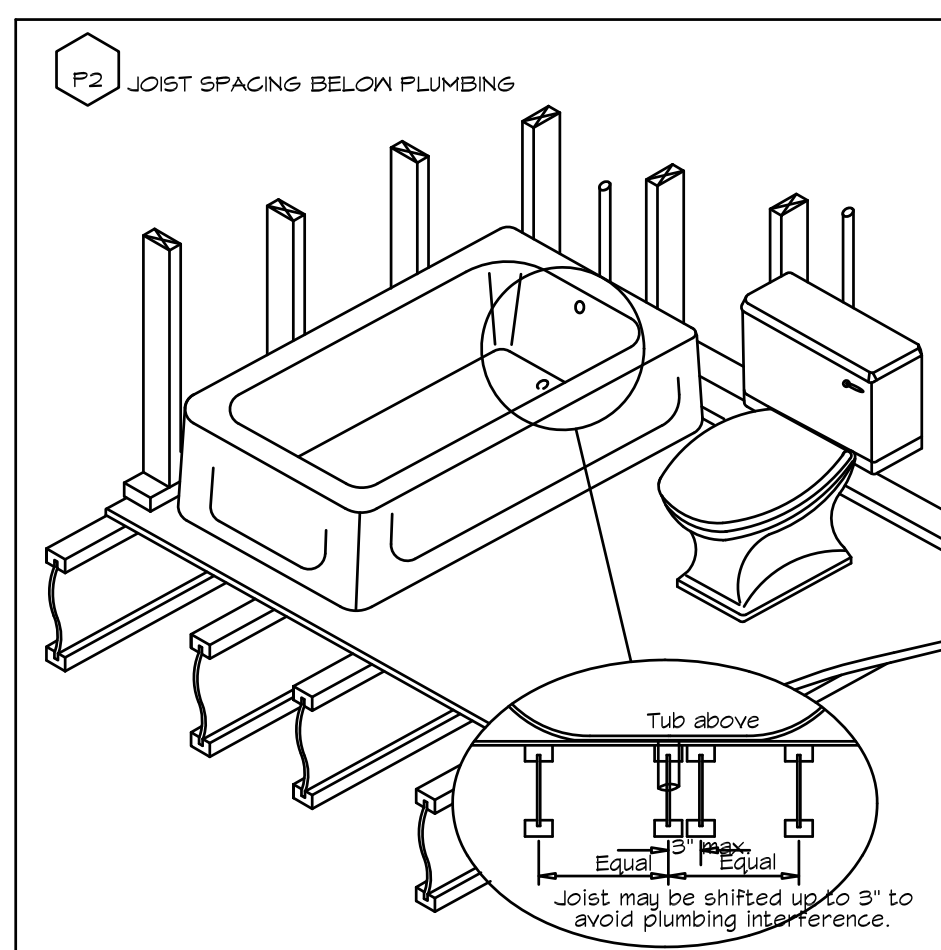
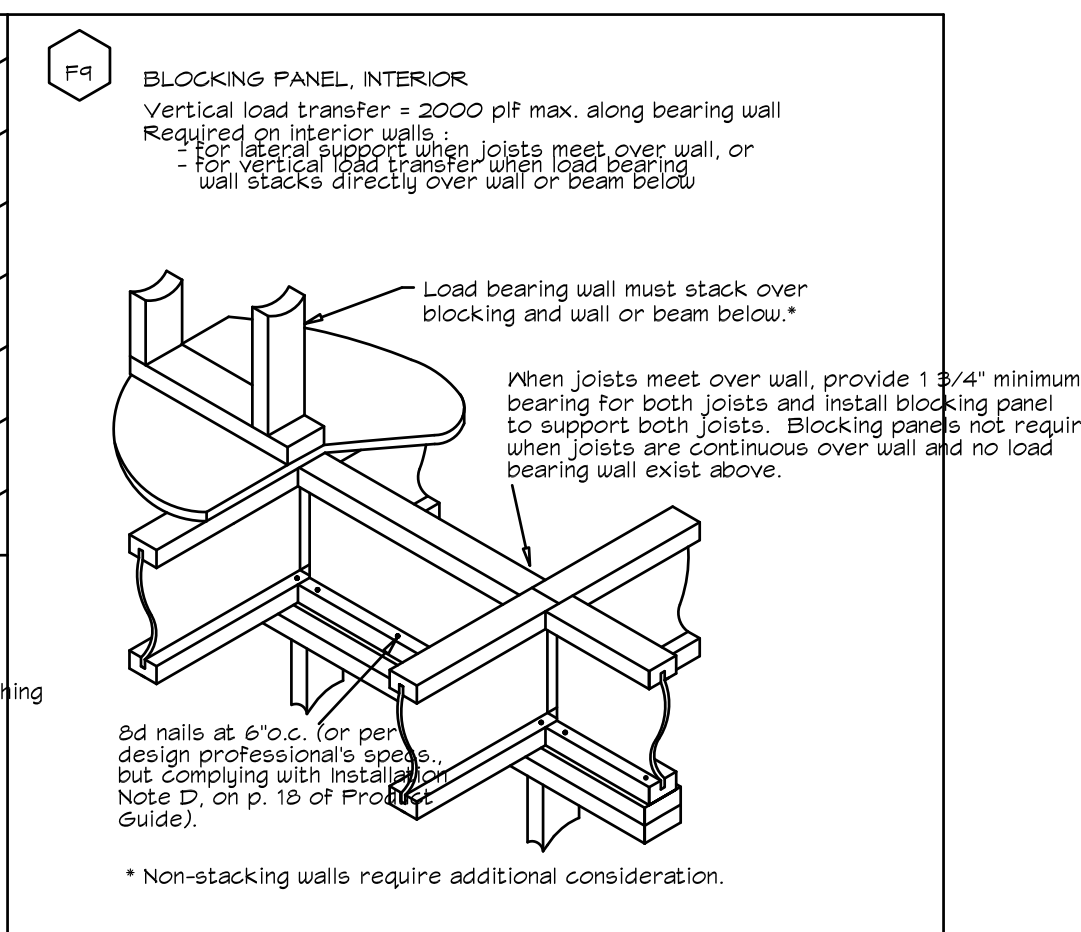
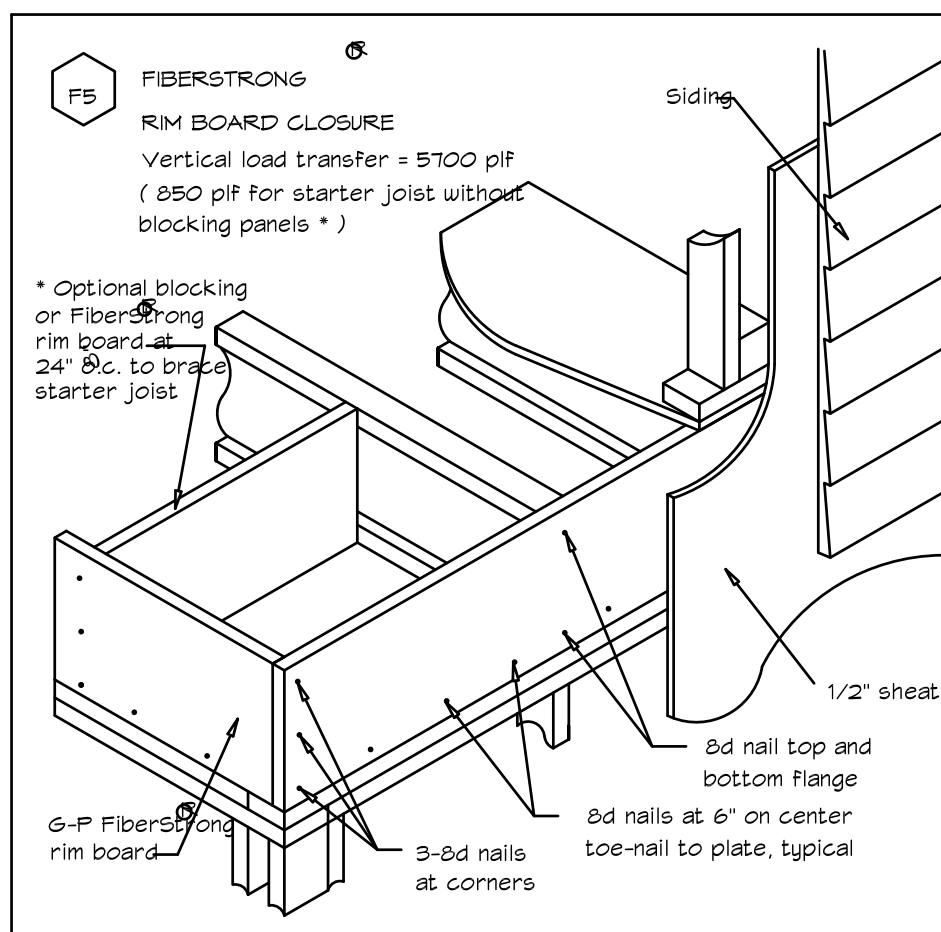


PLAN VIEW AT UNIT OFFSET
SCALE: 1/2"=1'-0"

5529 RITTER AVENUE, BALTIMORE MD

TOWNHOME MODELS

SCALE: AS SHOWN	DATE: 4/2022	SHEET NO.: 10
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Maximum Uniform Load Applied to Either or Both Outside Pieces (pounds per linear foot)

Pieces in Member	16d NAILS		1/2" BOLTS		SCREWS (Note 4)	
	A	B	C	D	E	F
2	505	760	505	1015	500	985
3	380	570	380	760	375	745
4	Not Permitted		340	675	330	665

NOTES:
 1. Confirm adequacy of the beam (depth and number of pieces) for carrying the designated load.
 2. Girth level for nail and bolt values is 100%. Increases of 15% for snow loaded or 25% for non-snow loaded roof conditions are permitted.
 3. Top and bottom row of connectors should be 2" from edge.
 4. Bolt holes are to be the same diameter as the bolt. Every bolt must extend through the full thickness of the member. Use washers under head and nut.
 5. For three-piece member, specified nailing is from the each side.
 6. To minimize rotation, four-piece members should only be used when loads are applied to both sides, or completely across the top of the member.
 7. Four-piece members must be bolted or attached with 6" screws from both sides.
 8. Floor joists must be attached with approved metal hangers.
 9. Screws are USF MS series or Simpson Strong-Tie SDS installed per manufacturer instructions.
 10. Screws for 3-ply and 4-ply members must be from both sides of beam.

1 3/4" Multiple Piles

2A Connection (3B Connection) (4C Connection) (4E Connection)

1 3/4" + 3 1/2"

3 1/2"

D (Bolts) 4 F (Screws) TWO ROWS 12" O.C.

A (Nails) 4 F (Screws) TWO ROWS 12" O.C.

B (Nails) THREE ROWS 12" O.C.

C (Bolts) 4 E (Screws) TWO ROWS 24 IN. O.C. STAGGERED

LVL FASTENING SCHEDULE

2018 IECC CODE COMPLIANCE

- R301.1 CLIMATE ZONE 4
- R401.2 COMPLIANCE METHOD: MANDATORY AND PRESCRIPTIVE PROVISIONS
- R402.1.1 VAPOR RETARDER: WALL ASSEMBLIES IN THE THERMAL BUILDING ENVELOPE SHALL COMPLY WITH THE VAPOR RETARDER REQUIREMENTS OF SECTION R702.1 OF THE IRC CODE, 2018 EDITION
- R402.1.2 ATTIC INSULATION: RAISED HEEL TRUSSES: R-49
- R402.1.2 ROOF FRAME WALLS: R-20 OR R19/8 CONTINUOUS INSULATION
- R402.1.2 BASEMENT WALL INSULATION: R-19/R-10 FOIL FACED CONTINUOUS, UNINTERRUPTED BATTS FULL HEIGHT.
- R402.1.2 CRAWL SPACE WALL INSULATION: R-19/R-10 FOIL FACED CONTINUOUS BATTS FULL HEIGHT EXTENDING FROM FLOOR ABOVE TO FINISH GRADE LEVEL AND THEN VERTICALLY OR HORIZONTALLY AN ADDITIONAL 2'-0".
- R402.1.2 FLOOR INSULATION OVER UNCONDITIONED SPACE: R-19 BATT INSULATION
- R402.1.2 WINDOW U-VALUE / SHGC: .35 (U-VALUE) .40 (SHGC)
- R402.2.10 SLAB ON GRADE FLOORS LESS THAN 12' BELOW GRADE: R-10 RIGID FOAM BOARD UNDER SLAB EXTENDING EITHER 2'-0" HORIZONTALLY OR 2'-0" VERTICALLY.
- R402.2.4 ATTIC ACCESS: ATTIC ACCESS SCUTTLE WILL BE WEATHERSTRIPPED AND INSULATED R-49.
- R402.4 BUILDING THERMAL ENVELOPE (AIR LEAKAGE): EXTERIOR WALLS AND PENETRATIONS WILL BE SEALED PER THIS SECTION OF THE 2018 IECC WITH GULK, GASKETS, WEATHERSTRIPPING OR AN AIR BARRIER OF SUITABLE MATERIAL.
- R402.4.12 BUILDING THERMAL ENVELOPE TIGHTNESS TEST: BUILDING ENVELOPE SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 3 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E 1191 OR ASTM E 1827 WITH (BLOWER DOOR) AS A PRESSURE OF 0.2 INCHES W.G. (50 PASCALES). TESTING SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING INSPECTOR.
- R402.4.2 FIREPLACES: NEW WOOD BURNING MASONRY FIREPLACES WILL HAVE TIGHT-FITTING FLUE DAMPERS AND OUTDOOR COMBUSTION AIR FIRE PLACE DOORS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 121 (FACTORY BUILT FIREPLACE) AND UL 907 (MASONRY FIREPLACE)
- R402.4.4 ROOMS CONTAINING FUEL BURNING APPLIANCES WHERE OPEN COMBUSTION AIR DUCTS PROVIDE COMBUSTION AIR TO OPEN COMBUSTION FUEL BURNING APPLIANCES, THE APPLIANCES AND COMBUSTION AIR SHALL BE LOCATED OUTSIDE THE BUILDING THERMAL ENVELOPE TO ENCLOSED IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXCEPTION: DIRECT VENT APPLIANCES WITH BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO THE OUTSIDE. FIREPLACES AND STOVES COMPLYING WITH SECTION R402.4.2 AND SECTION R1006 OF THE IRC.
- R402.4.5 RECESSED LIGHTING: RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE.
- R403.1.1 THERMOSTAT: ALL DWELLING UNITS WILL HAVE AT LEAST (1) PROGRAMMABLE THERMOSTAT FOR EACH SEPARATE HEATING AND COOLING SYSTEM PER 2018 IECC SECTION 403.1.1
- R403.1.2 WHERE A HEAT PUMP SYSTEM HAVING SUPPLEMENTARY ELECTRIC RESISTANCE HEAT IS USED THE THERMOSTAT SHALL PREVENT THE SUPPLEMENTARY HEAT FROM COMING ON WHEN HEAT PUMP CAN MEET HEATING LOAD.
- R403.3.1 MECHANICAL DUCT INSULATION: SUPPLY AND RETURN DUCTS IN ATTIC R-6 MINIMUM, R-6 WHEN LESS THAN 3' SUPPLY AND RETURN DUCTS OUTSIDE OF CONDITIONED SPACE R-8 MINIMUM ALL OTHER DUCTS EXCEPT THOSE LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE R-6 MINIMUM. DUCTS LOCATED UNDER CONCRETE SLABS MUST BE R-6 MINIMUM.
- R403.3.2 DUCT SEALING: ALL DUCTS, AIR HANDLERS, FILTER BOXES WILL BE SEALED. JOINTS AND SEAMS WILL COMPLY WITH SECTION M1601.4.1 OF THE IRC. A DUCT TIGHTNESS TEST (DUCT BLOWER) DUCT TOTAL LEAKAGE TEST) WILL BE PERFORMED ON ALL HOMES AND SHALL BE VERIFIED BY EITHER A POST CONSTRUCTION TEST OR A ROUGH-IN TEST. DUCT TIGHTNESS IS NOT REQUIRED IF THE AIR HANDLER AND ALL DUCTS ARE LOCATED WITHIN THE CONDITIONED SPACE.
- R403.6 MECHANICAL VENTILATION: OUTDOOR (MAKE UP AND EXHAUSTS) AIR DUCTS TO BE PROVIDED WITH AUTOMATIC OR GRAVITY DAMPER THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING.
- R403.6.1 WHOLE HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICIENCY TO COMPLY WITH TABLE R403.6.1
- R403.7 EQUIPMENT SIZING SHALL COMPLY WITH R403.7.
- R404.1 LIGHTING EQUIPMENT: A MINIMUM OF 75 % OF ALL LAMPS (LIGHTS) MUST BE HIGH-EFFICACY LAMPS.

THE CONTRACTOR ALSO RESPONSIBLE FOR GENERATING CERTIFICATE OF COMPLIANCE AND AFFIXING TO ELECTRICAL PANEL OR WITHIN 6' OF THE PANEL AND BE READILY VISABLE.

GENERAL STRUCTURAL NOTES

1. GENERAL
 - A. ALL CONSTRUCTION SHALL CONFORM WITH THE PROVISIONS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.
 - B. DESIGN LIVE LOADS:
 - ROOF: 30 PSF
 - FLOORS: 40 PSF
 - SLEEPING AREAS: 30 PSF
2. FOUNDATIONS
 - A. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL, 1'-0" BELOW ORIGINAL GRADE. THE BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6" BELOW FINISHED GRADE. CONTRACTOR TO VERIFY THE ALLOWABLE SOIL PRESSURE IN THE FIELD. IF FOUND TO BE LESS THAN 2000 PSF, THE FOOTINGS WILL HAVE TO BE REDESIGNED.
3. CAST IN PLACE CONCRETE
 - A. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF THE FOLLOWING A.C.I. AND A.S.T.M. DOCUMENTS:
 - ACI-301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
 - ACI-318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
 - B. ALL CONCRETE, EXCEPT AS NOTED, SHALL BE (FC=3,000 PSI) STONE AGGREGATE CONCRETE AT 28 DAYS. ALL CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR ENTRAINED.
 - C. SLABS ON GROUND SHALL BE 4" THICK CONCRETE REINFORCED WITH 6"x6" #1.4XN1.4 WAF OVER 6 MIL POLYETHYLENE VAPOR BARRIER AND 4" WASHED GRAVEL UNLESS OTHERWISE NOTED.
4. MASONRY
 - A. ALL MASONRY CONSTRUCTION AND MATERIALS USED THEREIN (CONCRETE MASONRY, CLAY MASONRY, MORTAR, GROUT AND STEEL REINFORCEMENT) SHALL CONFORM TO 'BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES' (ACI 530-12/ASCE 5-12/TMS 402-12) AND 'SPECIFICATIONS FOR MASONRY STRUCTURES' (ACI 530.1-12/ASCE 6-12/TMS 602-12) IN ALL RESPECTS.
 - B. MASONRY BEARING WALLS SHALL CONSIST OF STANDARD HOLLOW UNITS CONFORMING TO ASTM C 90 UNLESS OTHERWISE NOTED. WHERE SOLID UNITS ARE REQUIRED, PROVIDE UNITS CONFORMING TO ASTM C 145.
 - C. ALL MORTAR SHALL CONFORM TO THE REQUIREMENTS FOR PROPORTIONS, MIXING, STRENGTH AND APPLICATION FOR PORTLAND CEMENT/LIME TYPE 'S' MORTAR AS DESCRIBED IN ACI 530-12.
 - D. ALL GROUT FILL IN MASONRY WALLS SHALL CONFORM TO ASTM C 476. SLUMP RANGE 8-11". PLACE GROUT IN 3'-0" MAXIMUM POUR HEIGHTS AND CONSOLIDATE BY MECHANICAL VIBRATION.
 - E. PROVIDE 8" DEPTH OF 100 % SOLID MASONRY BELOW ALL JOIST OR SLAB BEARING LINES. PROVIDE 16" HIGH X 16" LONG 100 % SOLID MASONRY BELOW ALL LINTELS AND BEAMS UNLESS NOTED OTHERWISE.
 - F. ALL MASONRY WALLS SHALL BE REINFORCED WITH NO. 4 GAGE TRUSS TYPE GALVANIZED DUR-O-WALL SPACED VERTICALLY AT 16" O.C. U.N.O. LAP ALL DUR-O-WALL 6" MINIMUM. PROVIDE CORNER AND TEE PIECES AT ALL INTERSECTIONS.
 - G. LOOSE LINTELS FOR MASONRY WALLS SHALL BE FOR EACH 4" WIDTH OF MASONRY ONE STEEL ANGLE AS FOLLOWS:
 - 0'-0" TO 3'-0" 3-1/2" X 3-1/2" X 5/16"
 - 3'-1" TO 5'-0" 4" X 3-1/2" X 5/16"
 - 5'-1" TO 6'-6" 5" X 3-1/2" X 3/8"
 - 6'-7" TO 8'-0" 6" X 3-1/2" X 3/8"
 ALL ANGLES SHALL HAVE THEIR SHORT LEG OUTSTANDING AND 6" MINIMUM BEARING.
5. STRUCTURAL STEEL
 - A. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION A-36 (LATEST LOCAL APPROVED). ALL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC MANUAL, AISC SPECIFICATION AND AISC CODE OF STANDARD PRACTICE.
 - B. ALL WELDED CONNECTIONS SHALL BE DONE WITH E70XX ELECTRODES. SHOP AND FIELD WELDS SHALL BE APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE NOTED.
6. WOOD
 - A. STRUCTURAL SOLID WOOD RAFTERS, JOISTS, BEAMS AND STUDS SHALL BE HEV FIR #2 OR SPRUCE PINE F12 SURFACED DRY AT A MAXIMUM OF 18 % MOISTURE CONTENT. ALL LUMBER EXPOSED TO WEATHER SHALL BE PRESSURE TREATED SOUTHERN PINE #2. ALL FABRICATION, ERECTION, OTHER PROCEDURES, AND MINIMUM UNIT STRESSES SHALL CONFORM TO THE CURRENT NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
 - B. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (ANSI/TPI 1) AND COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES (HIB-91) AS PUBLISHED BY THE TRUSS PLATE INSTITUTE AND IN ACCORDANCE WITH THE 1991 EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
 - C. WOOD TRUSSES AND ENGINEERED FLOOR JOISTS ARE TO BE DESIGNED BY THE SUPPLIER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER/ARCHITECT FOR REVIEW. ALL TRUSSES AND JOISTS SHALL BE DESIGNED TO LIMIT THE BEARING STRESS TO 425 PSI WHEN MAJOR MEMBER CONNECTIONS TO STUD WALLS PROVIDE ADEQUATE WIDTH OR METAL CONNECTIONS TO LIMIT STRESSES TO THE SPECIFIED VALUE.
 - D. ALL LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fv=285psi, Fy=285psi, E=1,900,000psi, Fc=2510psi (PARALLEL), Fc=150psi (PERPENDICULAR).
 - E. ALL DOUBLE MEMBERS SHALL BE NAILED TOGETHER WITH 2 ROWS OF 16d NAILS SPACED AT 12" O.C. ALL TRIPLE MEMBERS SHALL BE NAILED TOGETHER WITH 3 ROWS OF 16d NAILS SPACED AT 12" O.C. NAILED FROM EACH SIDE.
 - F. PROVIDE DOUBLE JOISTS AT PARALLEL PARTITIONS WHERE PARTITION LENGTH EXCEEDS 1/3 JOIST SPAN.
 - G. ALL NAILS ARE TO BE COMMON WIRE NAILS. NAILING OF ALL FRAMING SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS BUT IN NO CASE SHALL BE LESS THAN THE RECOMMENDED NAILING SCHEDULE CONTAINED IN THE 2000 INTERNATIONAL RESIDENTIAL CODE. ALL MULTIPLE STUD POSTS ARE TO BE NAILED TOGETHER WITH 12d NAILS @ 6" O.C. STAGGERED.
 - H. PROVIDE BRIDGING SPACED AT 48" O.C. IN FIRST TWO JOIST, RAFTER OR TRUSS SPACES WHEN FRAMING IS PARALLEL TO EXTERIOR WALL. NAIL SHEATHING (FLOOR, CEILING OR ROOF) TO BRIDGING AND NAIL BRIDGING TO EXTERIOR WALL PLATE. PROVIDE ONE ROW OF BRIDGING BETWEEN ALL FLOOR AND ROOF JOISTS FOR EACH 8'-0" OF SPAN. PROVIDE SOLID BLOCKING OR A CONTINUOUS RIM JOIST AT THE BEARING OF JOISTS, RAFTERS OR TRUSSES ON WOOD PLATES.
 - I. PROVIDE THE FOLLOWING JAMB STUDS AT ALL BEARING WALL OPENINGS UNLESS NOTED OTHERWISE:
 - 0-3' OPENING 1 JACK STUD, 1 KING STUD
 - 3'-1" - 6'-0" OPENING 2 JACK STUDS, 1 KING STUD
 - 6'-1" - 9'-0" OPENING 2 JACK STUDS, 2 KING STUDS
 - J. PROVIDE DOUBLE STUDS AT ALL CORNERS AND BENEATH ALL GIRDER TRUSSES AND WOOD BEAMS UNLESS NOTED OTHERWISE ON PLANS. WOOD BEAMS, GIRDER TRUSSES AND HEADERS SHALL BEAR THE FULL DEPTH OF POSTS AND JACK STUDS.
 - K. ALL FLUSH JOIST TO BEAM OR BEAM TO BEAM CONNECTIONS SHALL BE MADE WITH JOIST OR BEAM HANGERS TO SUPPORT THE LOAD CAPACITY INDICATED ON THE PLANS OR THE FULL CAPACITY OF THE JOIST OR BEAM. HANGERS SHALL BE PROVIDED BY SIMPSON STRONG-TIE OR USF LUMBER CONNECTORS. THE SUPPLIER SHALL DESIGN ALL HANGERS FOR THE CAPACITY STATED. INSTALL ALL HANGERS IN STRICT CONFORMANCE TO THE MANUFACTURERS INSTRUCTIONS. FILL ALL NAIL OR BOLT HOLES USING THE SPECIFIED NAILS AND BOLTS ONLY.