

**CUNNINGHAM FARM INTERIOR TRIM PACKAGE**

**DOORS:** 1ST, 2ND FLOORS & BASEMENT - PREHUNG MASONITE, RAISED CAMDEN

**DOOR HARDWARE:** SATIN NICKEL STOPS, KNOBS, HINGES, AND HANDLES

**DOOR TRIM:** 1ST, 2ND FLOORS & BASEMENT - 3/4" BEADED EDGE CASING, FINGER JOINT

**BASE:** 1ST, 2ND FLOORS & BASEMENT - 5/4" WM-163E

**CHAIR RAIL:** TWO PIECES WM-302 W/ 4 1/4" BEADED BOTTOM BACKER IN EATING

\* WOOD EXTENSIONS & CASINGS AROUND ALL WINDOWS EXCEPT IN THE GARAGE

**CROWN MOULDING:** THREE PIECE 4 5/8" CROWN W/ BEADED BOTTOM BACKER W/ #183 TRIM IN LIVING/FAMILY, EATING, ENTRY, SECOND FLOOR HALL, AND OFFICE/BEDROOM #4

**NOTE: CARPENTER**  
ALLOW 4" FOR 3/4" CASING ON 1ST FLOOR, 2ND FLOOR & FINISHED BASEMENT

ADULT HEIGHT POWDER ROOM VANITY

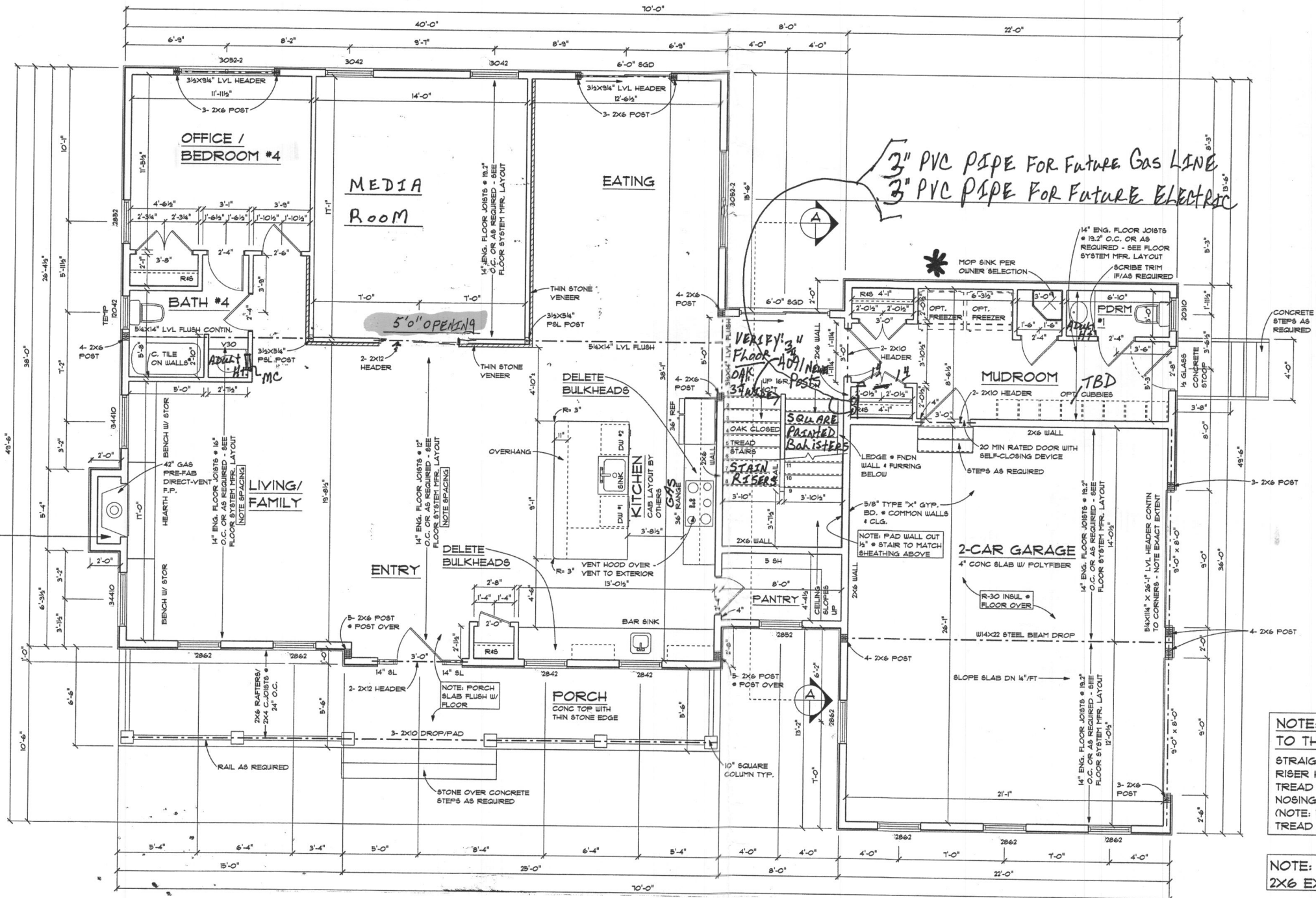
**NOTE: ELECTRICIAN:**  
HARDWARE BOX INSIDE FIREPLACE

FAMILY ROOM FIREPLACE: HEATILATOR FIREPLACES HEATILATOR CALIBER *Natural* GAS PRE ENGINEERED DIRECT VENT FIREPLACE \*

F.P. ROUGH OPENING, HEATILATOR FIREPLACES CALIBER CD4842IFTR/42" 49"W X 42 1/4"H X 22"D

CONTACT INFO:  
FIRESIDE HEARTH & HOME  
BONNIE GEYER (703) 367-9218  
CALL TO:  
1) SET/INSTALL F.P.  
2) SET MANTEL & SURROUND & START UP F.P.

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3" PVC PIPE FOR FUTURE GAS LINE  
3" PVC PIPE FOR FUTURE ELECTRIC

**NOTE: INTERIOR STAIRS SHALL CONFORM TO THE FOLLOWING GEOMETRY:**

STRAIGHT:  
RISER HEIGHT 7.75" MAX  
TREAD DEPTH 10" MIN  
NOSING .75" MIN 1.25" MAX  
(NOTE: NOSING MAY BE OMITTED \* TREAD DEPTH OF 11" OR GREATER)

**NOTE: 9' CEILINGS U.O.N.**  
2X6 EXTERIOR WALLS

**NOTE: ENGINEERED FLOOR JOISTS TO BE MINIMUM WEYERHAEUSER TJI 210 SERIES OR EQUAL UNLESS OTHERWISE NOTED. FLOOR JOISTS TO BE DESIGNED FOR L/480 MAX DEFLECTION (L/540 \* TILE/BRITTLE FINISHES) TYPICAL THROUGHOUT. INSTALLATION DETAILS, INCLUDING AT CANTILEVERED JOISTS, ARE TO BE PER JOIST MANUFACTURER'S STANDARD DETAILS. SQUASH BLOCKING AT BEARING WALLS AND POSTS OVER SHALL BE PER MANUFACTURER'S JOIST LAYOUT DRAWINGS & DETAILS.**

NOTE: 9'-1/8" WALL HGT ANGLES 45 DEGREES TYP U.O.N.

APPROX. 1,926 GSF 1ST FLOOR

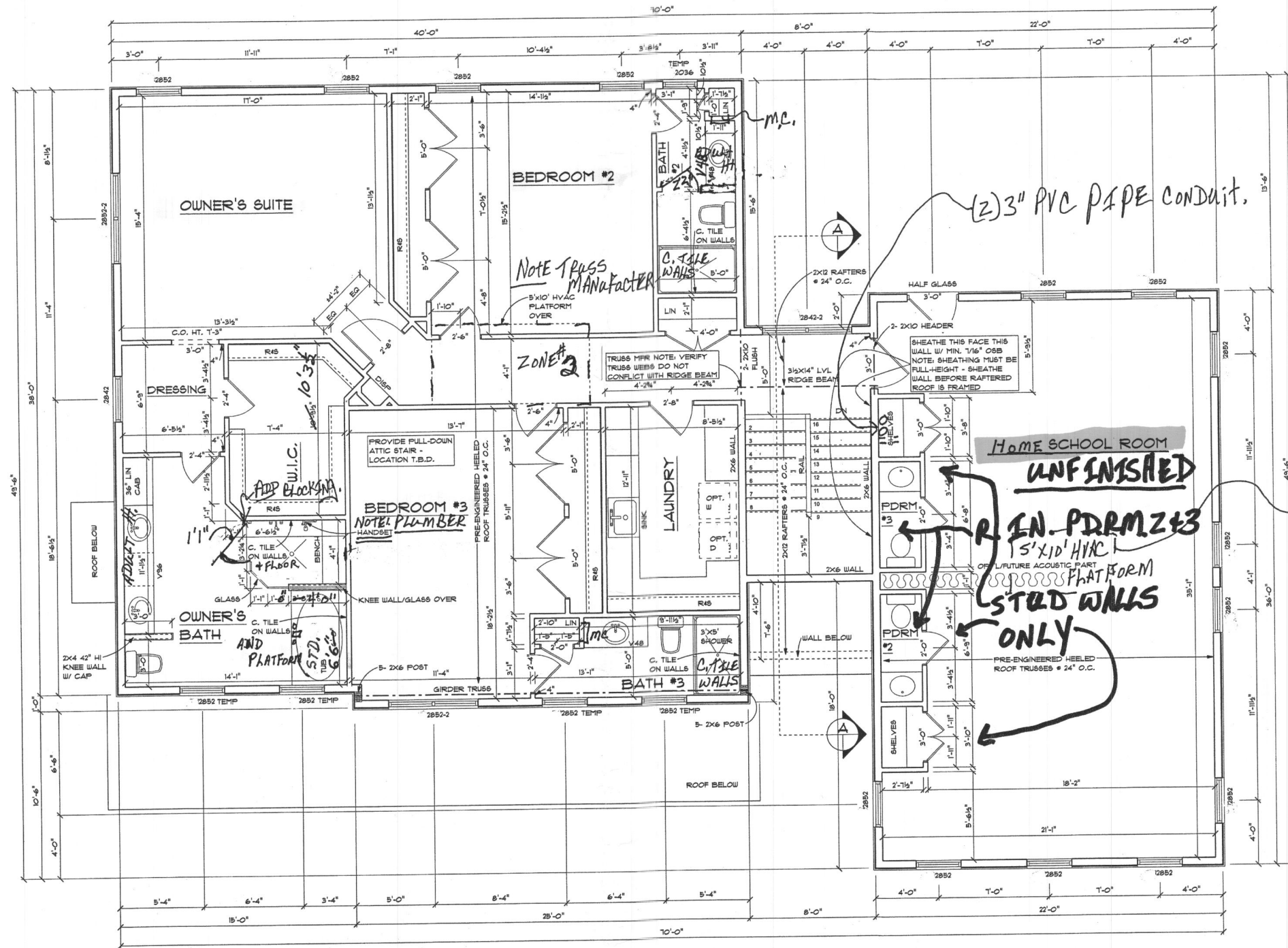
**First Floor Plan**  
SCALE: 1/4" = 1'-0"



Lot 5 Cunningham Farm

REVISIONS	
DATE	09-12-2023
SHEET NO.	A-5
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2021 CODE



ADULT HEIGHT OWNER'S BATH VANITIES

NOTE: 9'-1/8" WALL HGT  
ANGLES 45 DEGREES TYP U.O.N.

APPROX. 1673 GF&F BASE SECOND FLOOR  
APPROX. 192 GF&F SCHOOL ROOM

Second Floor Plan  
SCALE: 1/4" = 1'-0"

(2) 3" PVC PIPE CONDUIT.

HOME SCHOOL ROOM  
UNFINISHED

IN-PDRM Z13  
5'x10' HVAC  
FLAT FORM  
STUD WALLS  
ONLY

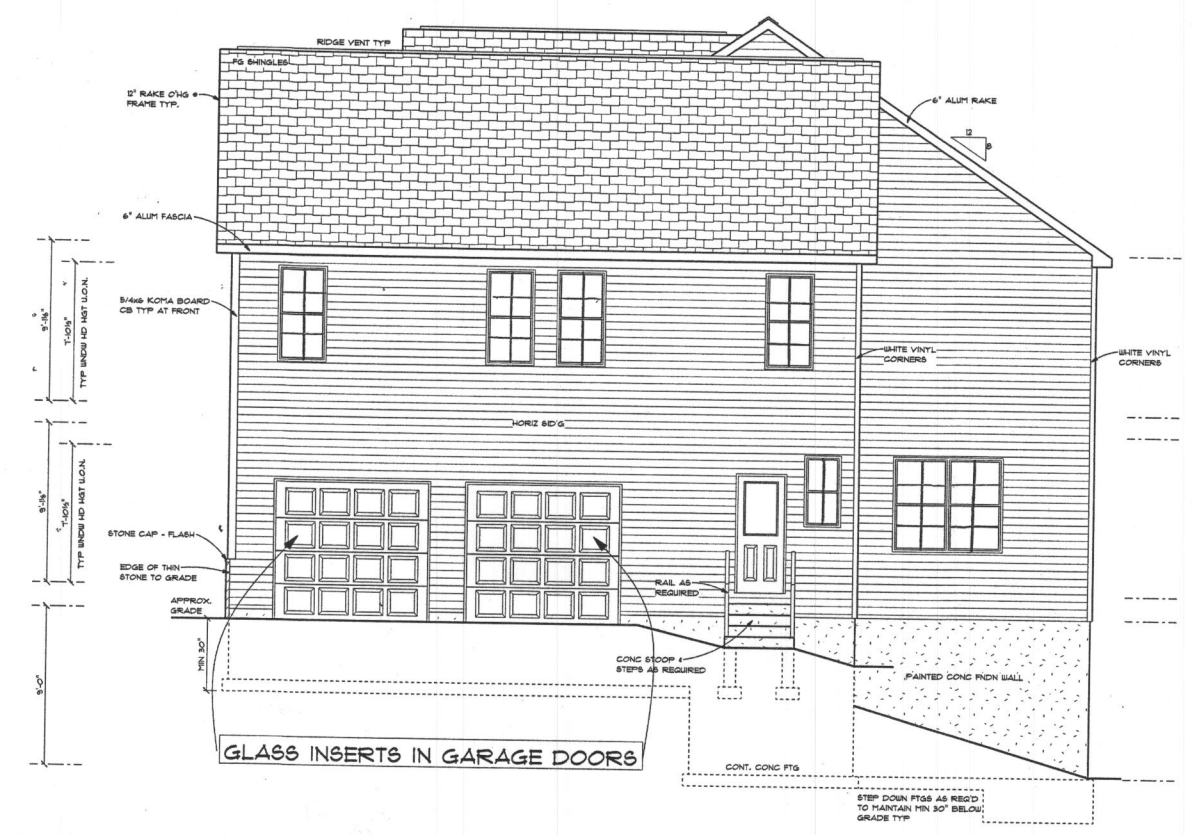
NOTE! TRASS  
MANUFACTURE  
5'x10'  
Future HVAC  
Platform,

NOTE: 9' CEILINGS  
2X6 EXTERIOR WALLS





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



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



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

2021 CODE



**Head Trim Detail**  
 SCALE: 1" = 1'-0"

NOTE: FRONT, SIDES & REAR.  
 WHITE ALUM. SOFFIT & FASCIA.

NOTE: INSULATOR  
 ANTI-AIR INFILTRATION SYSTEM:  
 CAULKING AT EXTERIOR JOINTS,  
 BEAMS, AND OPENINGS AROUND  
 DOOR AND WINDOW JAMBS, FOAM  
 SEALER AT OPENINGS ON  
 EXTERIOR WALLS.

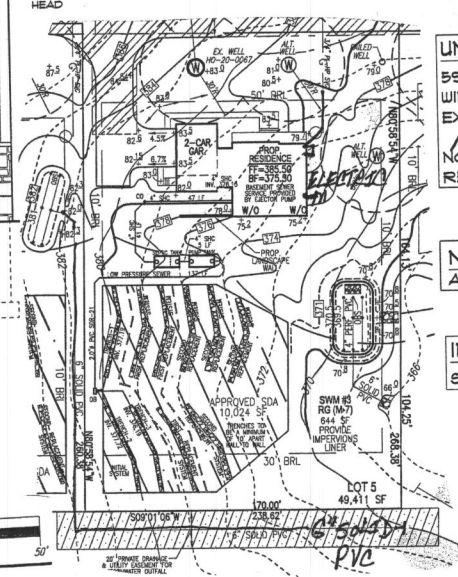
NOTE: CARPENTER  
 TYVEK HOUSE WRAP ALL 4 SIDES

UNITED DOUBLE-HUNG WINDOWS  
 5800 DOUBLE HUNG, LOW-E TILT & WASH  
 WINDOWS W/ GRILLES, SCREENS, WOOD  
 EXTENSIONS & CASINGS EXCEPT GARAGE  
 ARGON GAS 3/2  
 NOTE: USE WINDOW DEVICES WHERE  
 REQUIRED PER IRC 2021 R312.2

NOTE: HERITAGE 30 YEAR LAYERED  
 ARCHITECTURAL SHINGLE BY TAMKO

INTERIOR SPRINKLER  
 STANDARD HEADS EXPOSED

*DENNY* NOTE GRILL PATTERN  
 WINDOWS / 4 OVER 4  
**Front Elevation**  
 SCALE: 1/4" = 1'-0"



APPLICABLE CODE: 2021 IRC AND 2021 IECC AS AMENDED BY HOWARD COUNTY

**NOTES**

**1.0 GENERAL**  
 1.01 THE BUILDER SHALL BE RESPONSIBLE AND LIABLE FOR FULL COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES, REGULATIONS AND AMENDMENTS, AND ALL OTHER AUTHORITIES HAVING JURISDICTION, WHETHER OR NOT SUCH CODES AND REQUIREMENTS ARE EXPLICITLY DOCUMENTED IN THESE DRAWINGS. CONSTRUCTION SHALL COMPLY WITH THE INTERPRETATIONS OF THE LOCAL BUILDING OFFICIAL. IF THE INTERPRETATION OF THE LOCAL MORE STRINGENT SHALL APPLY USE OF THESE DRAWINGS TO OBTAIN A BUILDING PERMIT OR TO CONSTRUCT THE STRUCTURE DOCUMENTED HEREIN SHALL CONSTITUTE ACCEPTANCE OF THESE CONDITIONS BY THE BUILDER.  
 1.02 IN THE EVENT OF A DISCREPANCY BETWEEN THE ARCHITECTURAL PLANS OR SPECIFICATIONS AND THE STRUCTURAL DRAWINGS, THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE.  
 1.03 DESIGN LOADS:  

TYPE	LIVE LOAD (PSF)	DEAD LOAD (PSF)
ROOF	40	15
SLEEPING ROOMS	30	10
OTHER LIVING AREAS	40	15
GARAGE FLOORS	50	50
DECKS	40	10
EXTERIOR BALCONIES	40	10

  
 2.01 SITE WORK IS NOT ADDRESSED IN THESE DOCUMENTS. 2000 PSF SOIL BEARING CAPACITY ASSUMED.  
**3.0 CONCRETE/FOUNDATIONS**  
 3.01 ALL REINFORCED CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE AC 318, CURRENT EDITION. ALL PLAIN CONCRETE SHALL CONFORM TO ACI 318.1 AND ACI 332R GUIDE TO RESIDENTIAL CAST-IN-PLACE CONCRETE CONSTRUCTION.  
 3.02 MINIMUM SPECIFIED COMPRESSIVE STRENGTH @ 28 DAYS:  

LOCATION OF CONCRETE	FC (PSI)
BASEMENT WALLS AND FOUNDATIONS NOT EXPOSED TO WEATHER	2500
BASEMENT SLABS AND INTERIOR SLABS ON GRADE	2000
BASEMENT WALLS, EXTERIOR FOUNDATION WALLS AND OTHER WORK EXPOSED TO WEATHER	3000
DRIVEWAYS, CURBS, WALKS, PATIOS, PORCHES, STEPS/STAIRS AND UNHEATED GARAGE SLABS EXPOSED TO WEATHER	3500

  
 3.03 THICKNESS AND REINFORCING OF CONCRETE FOUNDATION WALLS SHALL CONFORM TO 2021 IRC TABLE R404.1.2(3)-(4), OR WITH SEALED STRUCTURAL DRAWINGS SPECIFIC TO THE SITE SOIL AND GRADE CONDITIONS.

**4.0 MASONRY**  
 4.01 ALL MASONRY WORK SHALL CONFORM TO THE APPLICABLE ALL STRUCTURAL STEEL WIDE-FLANGE BEAMS SHALL CONFORM TO ASTM A-992 WITH MINIMUM STRENGTH Fy = 50 KSI. ALL STRUCTURAL STEEL CHANNELS, ANGLES, RODS AND BAR STOCK SHALL CONFORM TO ASTM A-36 WITH MINIMUM STRENGTH Fy = 36 KSI.  
 4.02 BRICK VENEER WALLS SHALL HAVE NON-CORROSIVE METAL TIES AT MINIMUM 18" O.C. VERTICALLY AND HORIZONTALLY, AND WEEP HOLES AT 24" O.C. AT BASE FLASHING AND CAVITY INTERRUPTIONS.  
**5.0 METALS**  
 5.01 FOUNDATION ANCHOR BOLTS SHALL BE PROVIDED AT MAXIMUM 6'-0" O.C. AND 12" FROM THE END OF EACH PLATE SECTION, WITH MINIMUM TWO (2) ANCHORS PER SECTION OF PLATE. ANCHOR STRAPS SPACED TO ACHIEVE EQUIVALENT CAPACITY MAY BE SUBSTITUTED FOR ANCHOR BOLTS.  
 5.02 ALL METAL ANCHORS, FASTENERS, HANGERS ETC. SHALL BE GALVANIZED.  
 5.03 ADJUSTABLE STEEL COLUMNS SHALL BE MINIMUM 11 GAUGE, ASTM A513 OR BETTER, AND SHALL MEET OR EXCEED AISA PUBLISHED ALLOWABLE LOAD CAPACITY. STEEL PIPE COLUMNS SHALL CONFORM TO ASTM A53 GRADE B WITH MINIMUM STRENGTH Fy = 35 KSI. COLUMNS SHALL HAVE A MINIMUM 8"x14" BEARING PLATE. SCREW JACK SHALL BE ENCASED IN CONCRETE OR TACK WELDED AFTER INSTALLATION.  
**6.0 WOOD**  
 6.01 SILL PLATES AND ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE, AND ALL EXPOSED EXTERIOR LUMBER, SHALL BE PRESSURE TREATED TO MEET AWPI STANDARDS.  
 6.02 MOISTURE CONTENT OF ALL LUMBER SHALL NOT EXCEED 19%.  
 6.03 WOOD BEAMS, JOISTS, HEADERS AND RAFTERS SHALL BE MINIMUM 5-8" x 12" OR EQUAL UNLESS OTHERWISE NOTED.  
 6.04 LVL MEMBERS SHALL BE 1-3/4" WIDE, DEPTH PER PLANS, GANGED PER MANUFACTURER'S SPECIFICATIONS, WITH THE FOLLOWING MINIMUM PROPERTIES: Fb=2,600 PSI; FcL = +750 PSI; FcR = +2,510 PSI; Fv=285 PSI; E=2,000,000 PSI.  
 6.05 PSL MEMBERS SHALL BE SIZED PER PLANS, WITH THE FOLLOWING MINIMUM PROPERTIES: Fb=2,900 PSI; FcL = +750 PSI; FcR = +2,900 PSI; Fv=290 PSI; E=2,000,000 PSI.  
 6.06 PREFABRICATED FLOOR JOISTS OR FLOOR TRUSSES SHALL BE DESIGNED TO CARRY ALL IMPOSED LIVE AND DEAD LOADS WITH THE LIVE LOAD DEFLECTION NOT TO EXCEED L/480. ALL LAMINATED BEAMS AND BUILT-UP JOISTS TO BE DESIGNED/VERIFIED BY MFR TYPICAL THROUGHOUT. THE MANUFACTURER SHALL PROVIDE ALL REQUIRED HANGERS, SHEAR PANELS, BLOCKING/BRACS AND OTHER REQUIRED COMPONENTS. THE MANUFACTURER SHALL ALSO PROVIDE ALL DRAWINGS REQUIRED FOR PERMIT AND ERECTION PURPOSES, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE JOB IS TO BE BUILT.

6.07 PRE-ENGINEERED TRUSSES SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH TP RECOMMENDATIONS TO CARRY ALL IMPOSED LIVE AND DEAD LOADS. THE MANUFACTURER SHALL SUPPLY ALL REQUIRED HANGERS, HOLD-DOWN STRIPS, SHEAR PANELS AND OTHER REQUIRED COMPONENTS. THE MANUFACTURER SHALL ALSO PROVIDE ALL DRAWINGS REQUIRED FOR PERMIT AND ERECTION PURPOSES, SIGNED AND SEALED IF REQUIRED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE JOB IS TO BE BUILT.  
 6.08 JOISTS SHALL BE DOUBLED UNDER PARALLEL WALLS THAT EXCEED ONE-THIRD THE JOIST LENGTH. JOISTS SHALL BE SPACED CLOSER UNDER BATH TUBS, CERAMIC OR MARBLE TILE, POTENTIAL WATER BEDS AND SIMILAR ANTICIPATED LOADING CONDITIONS. JOISTS SHALL NOT BE CUT, NOTCHED OR DRILLED EXCEPT AS PERMITTED BY 2021 IRC R602.8 OR OTHER APPLICABLE CODE.  
 6.09 HEADERS OVER FRAMED OPENINGS IN BEARING WALLS SHALL BE MINIMUM 2-2X10 UNLESS OTHERWISE NOTED ON DRAWINGS, BUT SHALL IN NO EVENT BE LESS THAN SPECIFIED IN 2021 IRC TABLE R602.7 OR OTHER APPLICABLE CODE.  
 6.10 STAIR TREADS SHALL HAVE A MINIMUM DEPTH OF 10". TREADS SHALL HAVE A PROJECTING NOSING OF MINIMUM 1/2", MAXIMUM 1 1/2", UNLESS TREAD DEPTH IS 11" OR GREATER. STAIR RISERS SHALL HAVE A MAXIMUM HEIGHT OF 7 7/8".  
 6.11 STAIR HANDRAILS SHALL BE LOCATED BETWEEN 34" AND 38" ABOVE THE SLOPED PLANE CONNECTING THE NOSINGS OF THE ASSOCIATED STAIR. HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH FLIGHT OF STAIRS OF FOUR OR MORE RISERS AND SHALL BE CONTINUOUS OVER THAT FLIGHT. UNLESS OTHERWISE NOTED IN THESE PLANS, STAIR HANDRAILS SHALL HAVE A GRIP OF TYPE 1: CIRCULAR HANDRAILS SHALL HAVE A DIAMETER OF BETWEEN 1 1/4" AND 1 3/4"; NON-CIRCULAR HANDRAILS SHALL HAVE A PERIMETER OF BETWEEN 4" AND 6 1/8" AND A MAXIMUM CROSS-SECTION WIDTH OF 2 1/4".  
**7.0 THERMAL AND MOISTURE PROTECTION**  
 7.01 3/8" x 3/8" MIN COMPRESSIBLE SILL SEAL SHALL BE PROVIDED BENEATH ALL EXTERIOR SILL PLATES.  
 7.02 PROVIDE APPROVED CORROSION-RESISTIVE FLASHING AT THE INTERSECTIONS OF MASONRY AND WOOD FRAME CONSTRUCTION; OVER PROJECTING TRIM; WHERE DECKS, PORCHES, AND THE LIKE ARE ATTACHED TO WOOD FRAME CONSTRUCTION; AT ROOF TO WALL AND ROOF TO CHIMNEY INTERSECTIONS; IN ROOF WALLS; AT ALL ROOF PENETRATIONS; AT ALL WALL OPENINGS; AT ALL CAVITY INTERRUPTIONS AT MASONRY VENEER; AND ALL OTHER LOCATIONS REQUIRED TO PREVENT WATER PENETRATION OF THE STRUCTURE.  
 7.03 PROVIDE EXTERIOR FINISHES AS SHOWN ON DRAWINGS. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS OVER APPROVED WATER/WEATHER-RESISTANT BARRIER.  
 7.04 PROVIDE SOFFIT VENTS AND RIDGE VENTS AS SHOWN ON THE DRAWINGS, AND SUPPLEMENTAL ROOF VENTS IF/AS REQUIRED TO MAINTAIN MINIMUM 1/300 FREE VENTILATION FOR HORIZONTALLY PROJECTED ROOF AREA. INSTALL PLASTIC OR CARBONADO Baffles IN EACH TRUSS/RAFTER BAY TO MAINTAIN FREE AIR FLOW. ALL REVERSE GABLES SHALL BE OPEN TO MAIN ROOF ATTIC TO ALLOW FREE AIR FLOW.

**2021 IECC ENERGY CODE COMPLIANCE REQUIREMENTS**

THE BUILDING SHALL CONFORM TO THE FOLLOWING MANDATORY REQUIREMENTS PER THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE:

COMPLIANCE CERTIFICATE	DESCRIPTION
PERMANENT CERTIFICATE	A PERMANENT CERTIFICATE APPROVED BY THE LOCAL JURISDICTION DESCRIBING THE R-VALUES, U-FACTORS, AND SHGC OF THE BUILDING COMPONENTS AND BUILDING AIR LEAKAGE TEST RESULTS SHALL BE AFFIXED TO THE ELECTRICAL DISTRIBUTION PANEL OR ANOTHER LOCATION APPROVED BY THE LOCAL JURISDICTION, PER IECC R403.3.3 (IRC N1103.1.4).
MAXIMUM FENESTRATION U-FACTOR AND SHGC	THE MAXIMUM U-FACTOR ALLOWED USING EITHER THE TOTAL UA ALTERNATIVE METHOD PER IECC R402.1.5 (IRC N1102.1.5) OR THE SIMULATED PERFORMANCE ALTERNATIVE PER IECC R403 (IRC N1105) SHALL BE 0.48 FOR VERTICAL FENESTRATION AND 0.75 FOR SKYLIGHTS PER IECC R402.5 (IRC N1102.5).
HVAC CONTROLS	EACH HEATING AND COOLING SYSTEM SHALL HAVE AT LEAST ONE THERMOSTAT PER IECC R403.1 (IRC N1103.1). THE THERMOSTAT CONTROLLING THE PRIMARY HEATING AND COOLING SYSTEM SHALL BE A PROGRAMMABLE THERMOSTAT PER IECC R403.1.1 (IRC N1103.1.1).
HEAT PUMP SUPPLEMENTARY HEAT	HEAT PUMPS WITH SUPPLEMENTARY ELECTRIC RESISTANCE HEAT SHALL HAVE CONTROLS THAT EXCEPT DURING DEFOST, PREVENT SUPPLEMENTAL HEAT FROM OPERATING WHEN THE HEAT PUMP COMPRESSOR CAN MEET THE HEATING LOAD PER IECC R403.1.2 (IRC N1103.1.2).
DUCT SEALING	WHEN NEW FORCED AIR SYSTEMS ARE PROVIDED, ALL DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED PER IECC M1601.4.1. DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER A ROUGH-IN OR POSTCONSTRUCTION TEST PER IECC R403.3.3 (IRC N1103.3.3) UNLESS DUCTS AND AIR HANDLERS ARE LOCATED EXTERIOR TO THE BUILDING THERMAL ENVELOPE.
BUILDING CAVITIES AS DUCTS OR PLENUMS	BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS PER IECC R403.3.5 (IRC N1103.3.5).
MECHANICAL SYSTEM PIPING INSULATION	MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105°F OR BELOW 55°F SHALL BE INSULATED TO R-3 MINIMUM PER IECC R403.4 (IRC N1103.4). PIPING INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED FROM DEGRADATION AND DECAY PER IECC R403.4.1 (IRC N1103.4.1).
CIRCULATING HOT WATER SYSTEMS	CIRCULATING HOT WATER SYSTEMS SHALL BE PROVIDED WITH AN AUTOMATIC OR READILY ACCESSIBLE MANUAL SWITCH TO TURN OFF THE CIRCULATING PUMP WHEN THE SYSTEM IS NOT IN USE PER IECC R403.5.1 (IRC N1103.5.1).
MECHANICAL VENTILATION	THE BUILDING SHALL BE PROVIDED WITH MECHANICAL VENTILATION PER IECC TABLE R403.6.1 (IRC TABLE N1103.6.1).
EQUIPMENT SIZING	HEATING AND COOLING EQUIPMENT SHALL BE SIZED IN ACCORDANCE WITH ACCA MANUAL 1 OR OTHER APPROVED HEATING AND COOLING CALCULATION METHODOLOGIES PER IECC R403.7 (IRC N1103.7).
SYSTEMS SERVING MULTIPLE DWELLING UNITS	SYSTEMS SERVING MULTIPLE DWELLING UNITS SHALL CONFORM TO IECC SECTIONS C403 AND C404.
SNOW MELT SYSTEMS CONTROLS	SNOW AND ICE MELT SYSTEMS SUPPLIED THROUGH ENERGY SERVICE TO THE BUILDING SHALL INCLUDE AUTOMATIC CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEM WHEN THE PAVEMENT TEMPERATURE IS ABOVE 50°F AND NO PRECIPITATION IS FALLING, AND AUTOMATIC OR MANUAL CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEM WHEN THE OUTDOOR TEMPERATURE IS ABOVE 40°F PER IECC R403.9 (IRC N1103.9).
POOLS AND INGROUND PERMANENTLY INSTALLED SPAS	POOLS AND INGROUND SPA HEATERS SHALL HAVE AN ACCESSIBLE ON-OFF SWITCH MOUNTED ON THE OUTSIDE OF THE HEATER THAT ALLOWS SHUT-OFF WITHOUT AFFECTING THE THERMOSTAT SETTING PER IECC R403.10.1 (IRC N1103.10.1); GAS-FIRED HEATERS SHALL NOT HAVE CONSTANT BURNING PILOT LIGHTS. HEATERS SHALL HAVE TIME SWITCHES OR OTHER CONTROL METHODS TO AUTOMATICALLY TURN ON AND OFF PER A PRESET SCHEDULE PER IECC R403.10.2 (IRC N1103.10.2). HEATED POOLS AND INGROUND SPAS SHALL BE PROVIDED WITH A VAPOR-RETARDANT COVER PER IECC R403.10.3 (IRC N1103.10.3).
LIGHTING EQUIPMENT	A MINIMUM OF 90% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS PER IECC R404.1 (IRC N1104.1).
FUEL GAS LIGHTING EQUIPMENT	FUEL GAS SYSTEMS SHALL HAVE CONTINUOUSLY BURNING PILOT LIGHT SYSTEMS PER IECC R404.1.1 (IRC N1104.1.1).

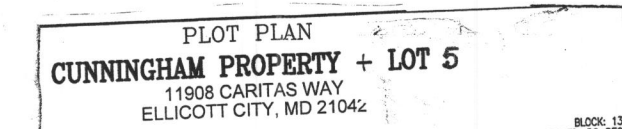
THE BUILDING SHALL ALSO CONFORM TO THE FOLLOWING PRESCRIPTIVE REQUIREMENTS:

THE BUILDING CONFORMS TO THE PRESCRIPTIVE REQUIREMENTS DETAILED IN THE CHART BELOW PER IECC R402.1.2 & R402.1.3 (IRC N1102.1.2 & N1102.1.3). EQUIVALENT U-FACTORS MAY BE SUBSTITUTED FOR REQUIRED R-VALUES PER IECC R402.1.4 (IRC N1102.1.4). THE BUILDING SHALL ALSO CONFORM TO THE DETAILED REQUIREMENTS OF IECC R402.2 (IRC N1102.2).

COMPONENT	REQUIRED VALUE
CEILING/ROOF	R-49 (COMPRESSED OVER WALL TOP PLATE AT EAVES) OR R-38 (UNCOMPRESSED OVER WALL TOP PLATE AT EAVES)
WALLS	R-20 CAVITY OR R-13 CAVITY PLUS R-5 CONTINUOUS
BASEMENT WALLS	R-10 CONTINUOUS OR R-13 CAVITY
SLAB	R-10, 2" DEPTH
CRAWL SPACE WALLS	R-10 CONTINUOUS OR R-13 CAVITY
FLOORS OVER UNCONDITIONED SPACE	R-19
DUCTS OUTSIDE CONDITIONED SPACE	R-6 FOR SUPPLY DUCTS IN ATTICS R-6 FOR ALL OTHER DUCTS
HOT WATER PIPES	R-3 UNLESS OTHERWISE ALLOWED BY IECC R403.5.3 (IRC N1103.5.3)
FENESTRATION	U-FACTOR = 0.32 MAX; SHGC = 0.40 MAX
SKYLIGHTS	U-FACTOR = 0.55 MAX; SHGC = 0.40 MAX

**ADDITIONAL ENERGY EFFICIENCY PACKAGE**

PER 2021 IECC, AS AMENDED BY MARYLAND, THE BUILDING SHALL CONFORM TO R804.3 VIA THE FOLLOWING METHOD:  
 HVAC ZONE 1: BASEMENT  
 FEATURE #6, MIN. 16 SEER & 12 EER AIR CONDITIONER, 3%  
 FEATURE #8, MIN 92% AFUE NATURAL GAS FURNACE, 4%  
 TOTAL FOR THIS ZONE: 7%  
 HVAC ZONE 2: FIRST FLOOR  
 FEATURE #6, MIN. 16 SEER & 12 EER AIR CONDITIONER, 3%  
 FEATURE #8, MIN 92% AFUE NATURAL GAS FURNACE, 4%  
 TOTAL FOR THIS ZONE: 7%  
 HVAC ZONE 3: SECOND FLOOR  
 FEATURE #10, MIN. 9 HSPF / 16 SEER HEAT PUMP, 5%  
 TOTAL FOR THIS ZONE: 5%  
 AVERAGE FOR ENTIRE BUILDING: 6.3%

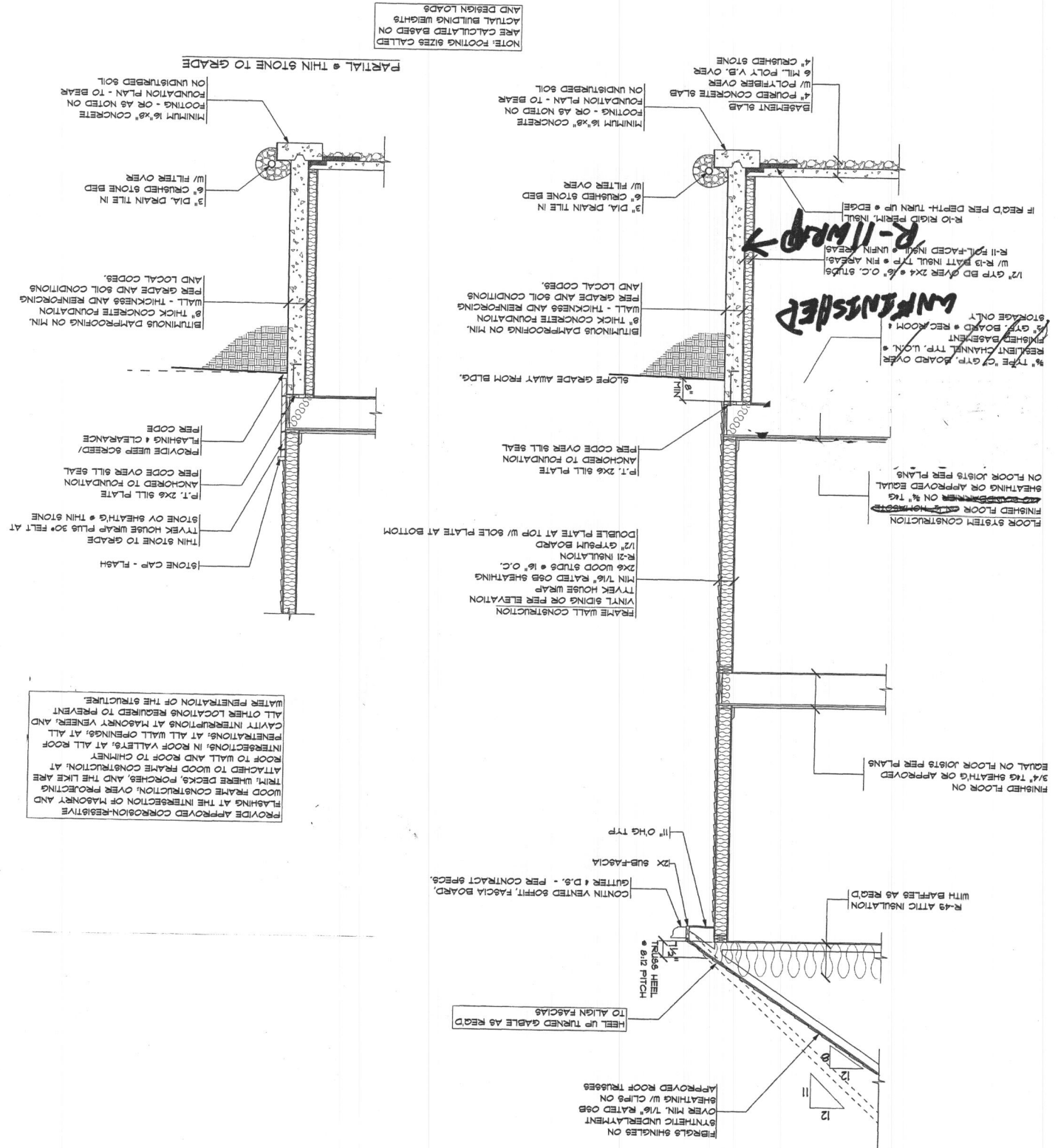


THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATING HEATING AND COOLING LOADS, EXTENDING EXISTING SYSTEMS, AND/OR SIZING NEW HVAC UNITS IN FULL COMPLIANCE WITH 2021 IRC M1401.3.

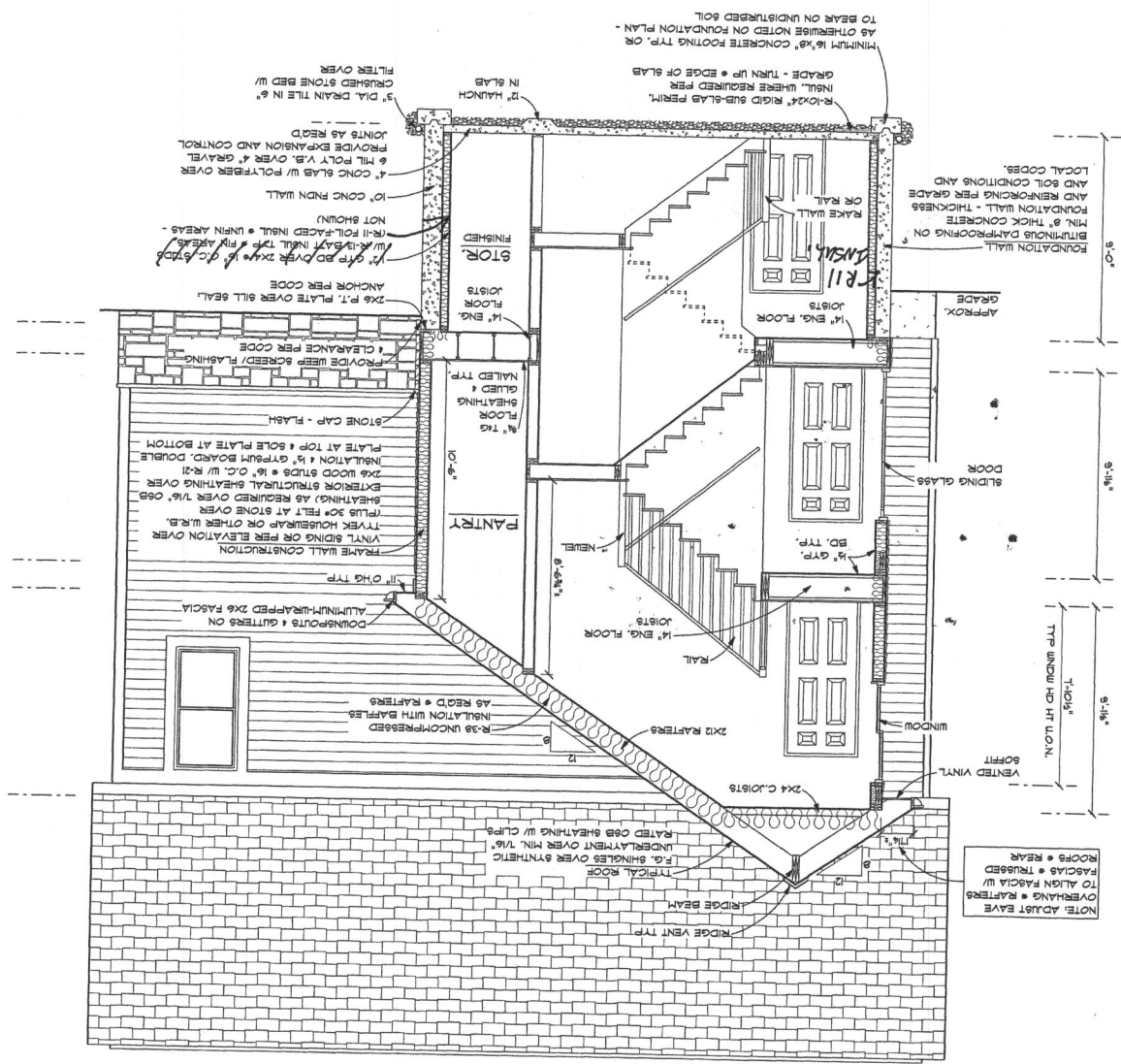
**Lot 5**  
**Cunningham Farm**

**2021 CODE**

Frame Wall Section  
SCALE: 3/8" = 1'-0"



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



Lot 5 Cunningham Farm



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SHEET NO. A-7

DATE 09-12-2023

REVISIONS

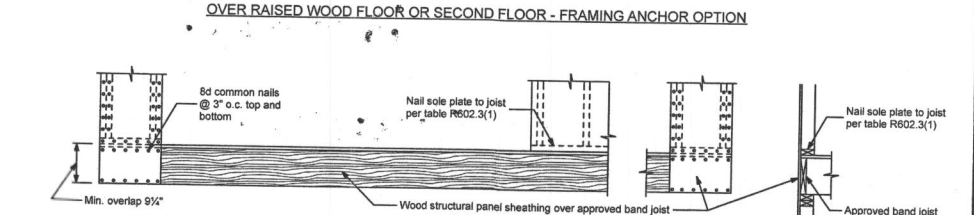
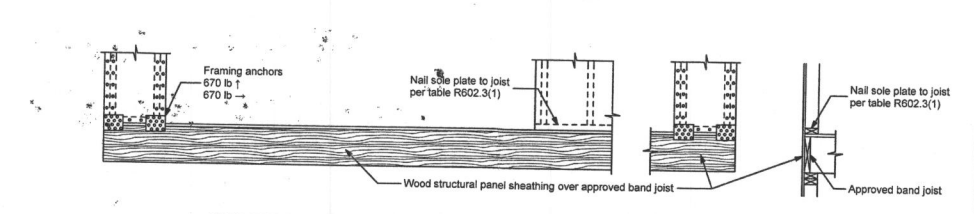
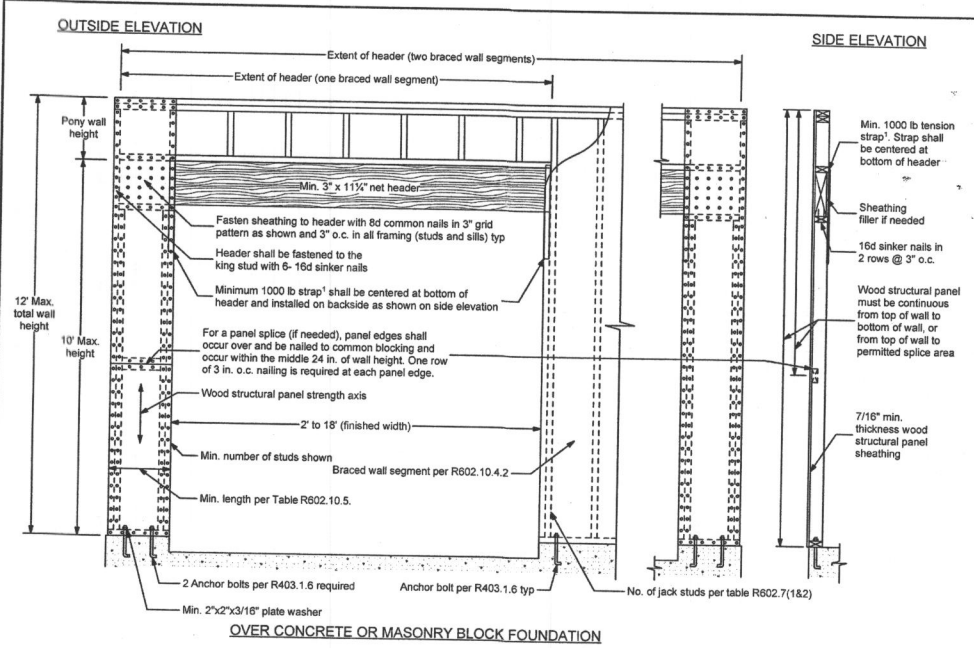
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**Methods WSP & CS-WSP:** Min. 7/16" OSB Wood Structural Panel sheathing attached to framing with 6d at 6" o.c. at panel edges and 12" o.c. at intermediate framing members.

**Note:** At Braced Wall Lines incorporating Continuously Sheathed bracing methods (CS-WSP & CS-PF), all exterior walls along the Braced Wall Line must be fully sheathed with min 7/16" OSB Wood Structural Panel sheathing fastened per IRC 2018 Tables R602.3(1), R602.3(2), and R602.3(3).

**Method GB:** Min. 1/2" gypsum board applied to each side of framing with adhesive and Type S or W screws or nails per IRC 2018 Table R702.3.5 @ 7" o.c. at panel edges and all intermediate framing members.

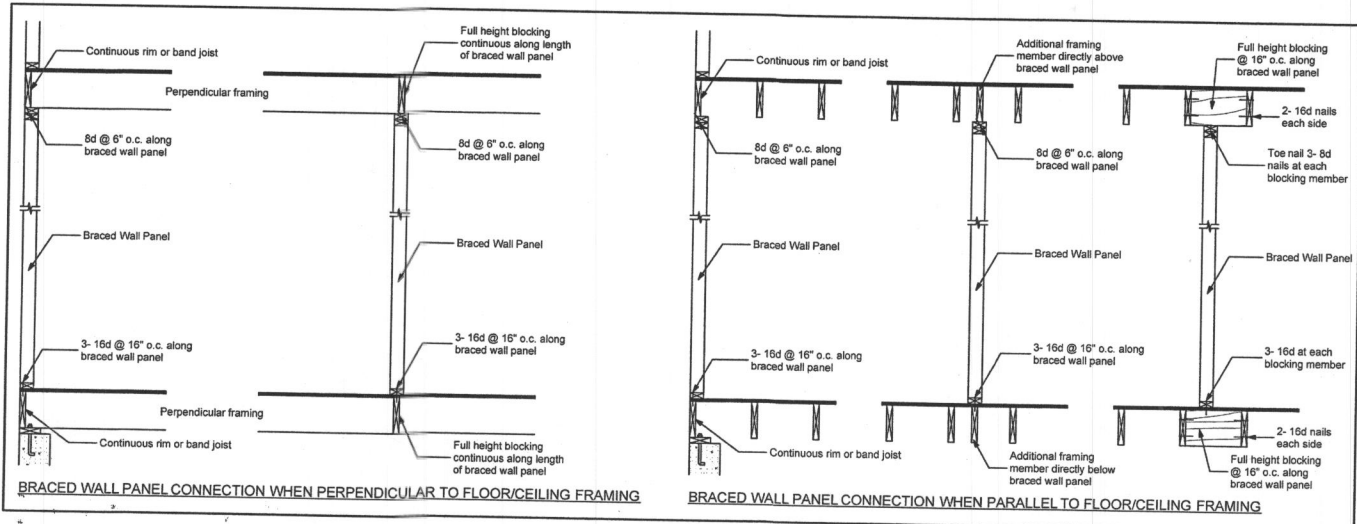
**Method LIB:** Simpson WB/WBC straps installed in an "X" pattern on one face of wall; fasten with 2- 16d nails at top and bottom plates and 1- 8d nail per stud. 8' tall walls to use either WB106/WB106C installed at 60° from horizontal (4'-8" linear wall length) or WB126/WB126C installed at 45° from horizontal (8'-1" linear wall length); 9' tall walls to use WB126/WB126C installed at 53° from horizontal (6'-10" linear wall length); 10' tall walls to use WB143C installed at 45° from horizontal (10'-1" linear wall length).



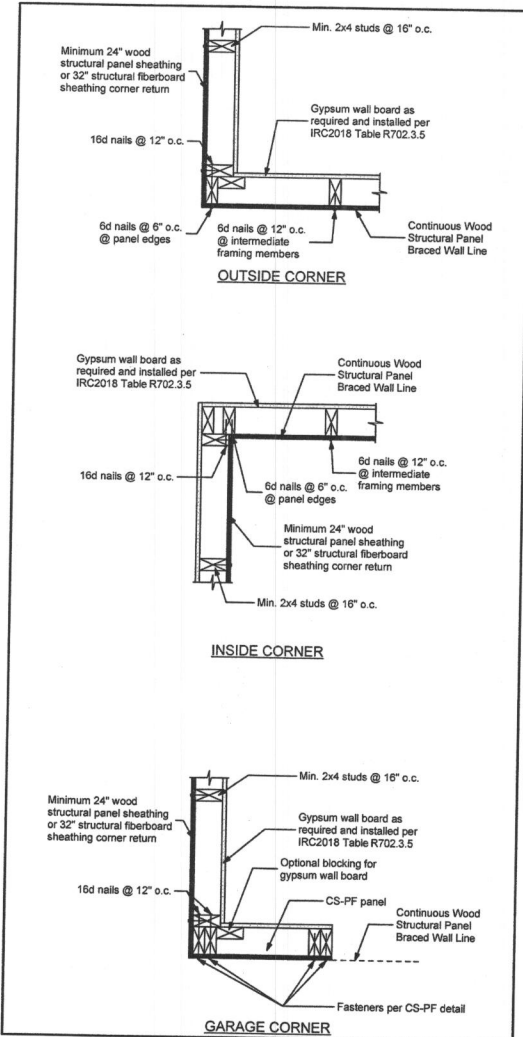
**1 Tension Strap Capacity Required for Method CS-PF**

Minimum Wall Stud Framing Nominal Size and Grade	Maximum Pony Wall Height (feet)	Maximum Total Wall Height (feet)	Maximum Opening Width (feet)	Wind Exposure	
				B	C
2x4 No. 2 Grade	0	10	18	1000	1000
				9	1000
				16	1025
				18	1275
				9	1000
				16	2175
	2	10	18	2500	DR
				9	1500
				16	3375
				18	3975
				9	2750
				12	3775
2	12	18	1000	2025	
			9	3775	
			16	2150	
			18	2550	
			9	1750	
			16	2400	
2x6 Stud Grade	2	12	18	1750	3125
				9	2400
				16	2400
				18	3800
				9	DR
				16	DR

Notes: 1. Ultimate Design Wind Speed of 115mph. For other Basic Wind Speeds, see IRC 2018 Table R602.10.6.4  
2. DR = Design Required

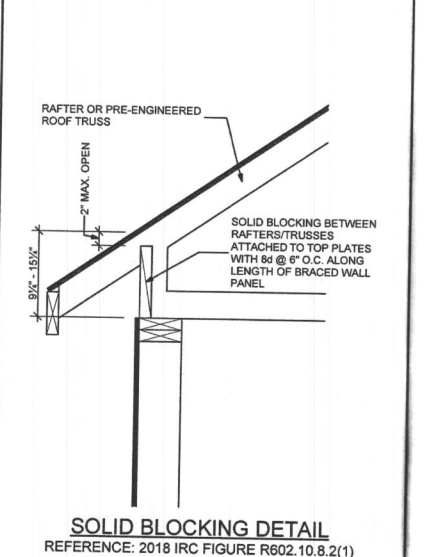
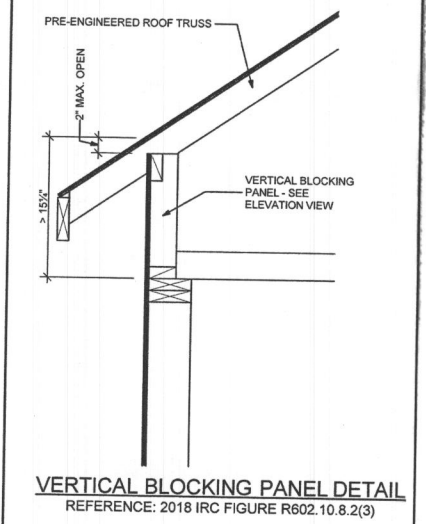
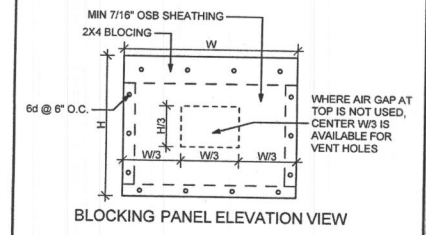


**Braced Wall Panel Connections to Floor and Ceiling Framing**  
NOT TO SCALE



**Corner Framing Details**  
NOT TO SCALE

- NOTES:**
- WHERE RAFTER OR TRUSS HEEL HEIGHT IS  $\leq 9\frac{1}{2}$ ", NO BLOCKING IS REQUIRED.
  - WHERE RAFTER OR TRUSS HEEL IS  $> 9\frac{1}{2}$ " AND  $\leq 15\frac{1}{2}$ ", BLOCKING PER SOLID BLOCKING DETAIL SHALL BE PROVIDED ABOVE ALL BRACED PANELS; SEE BRACING PLANS FOR LOCATIONS.
  - WHERE TRUSS HEEL IS  $> 15\frac{1}{2}$ ", BLOCKING PER VERTICAL BLOCKING PANEL DETAIL SHALL BE PROVIDED ABOVE ALL BRACED PANELS; SEE BRACING PLANS FOR LOCATIONS.



**Roof Blocking Details**  
NOT TO SCALE

NOTE: PLUMBER  
PASSIVE RADON SYSTEM  
3" PVC PIPE VENTED THROUGH  
ROOF (LOCATION PER PLUMBER)

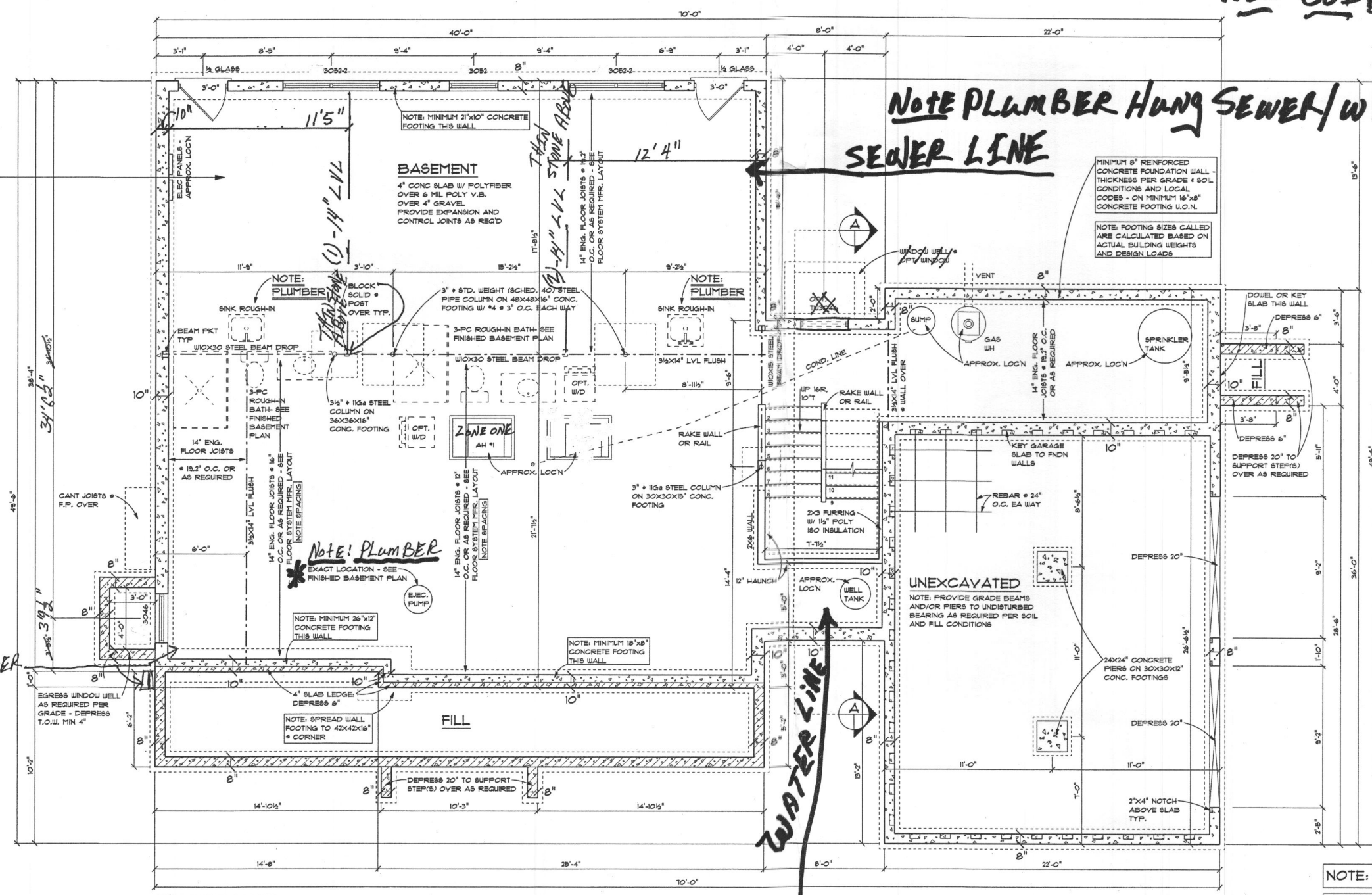
HVAC: EQUIPMENT - GOODMAN  
ZONE 1: 92% EFFICIENCY PROPANE GAS  
FURNACE WITH 16 SEER A/C UNIT 3 1/2 TON  
ZONE 2: 16 SEER HEAT PUMP 3 1/2 TON  
\* VENT RANGE HOOD TO EXTERIOR

NOTE: 16 SEER  
NEW CODE

NOTE PLUMBER HANG SEWER/WETECTOR PIT.  
SEWER LINE

GAS: <u>NATURAL</u>	
Gas Furnace Zones:	ONE
Fire Place	YES
Cook Top	YES

NOTE: WATER SOFTNER  
By NATIONAL  
Plumber WATER  
SERVICES.



NOTE:  
ELECTRIC METER

NOTE:  
Gas METER

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

HVAC  
C.F.A. = 6,121

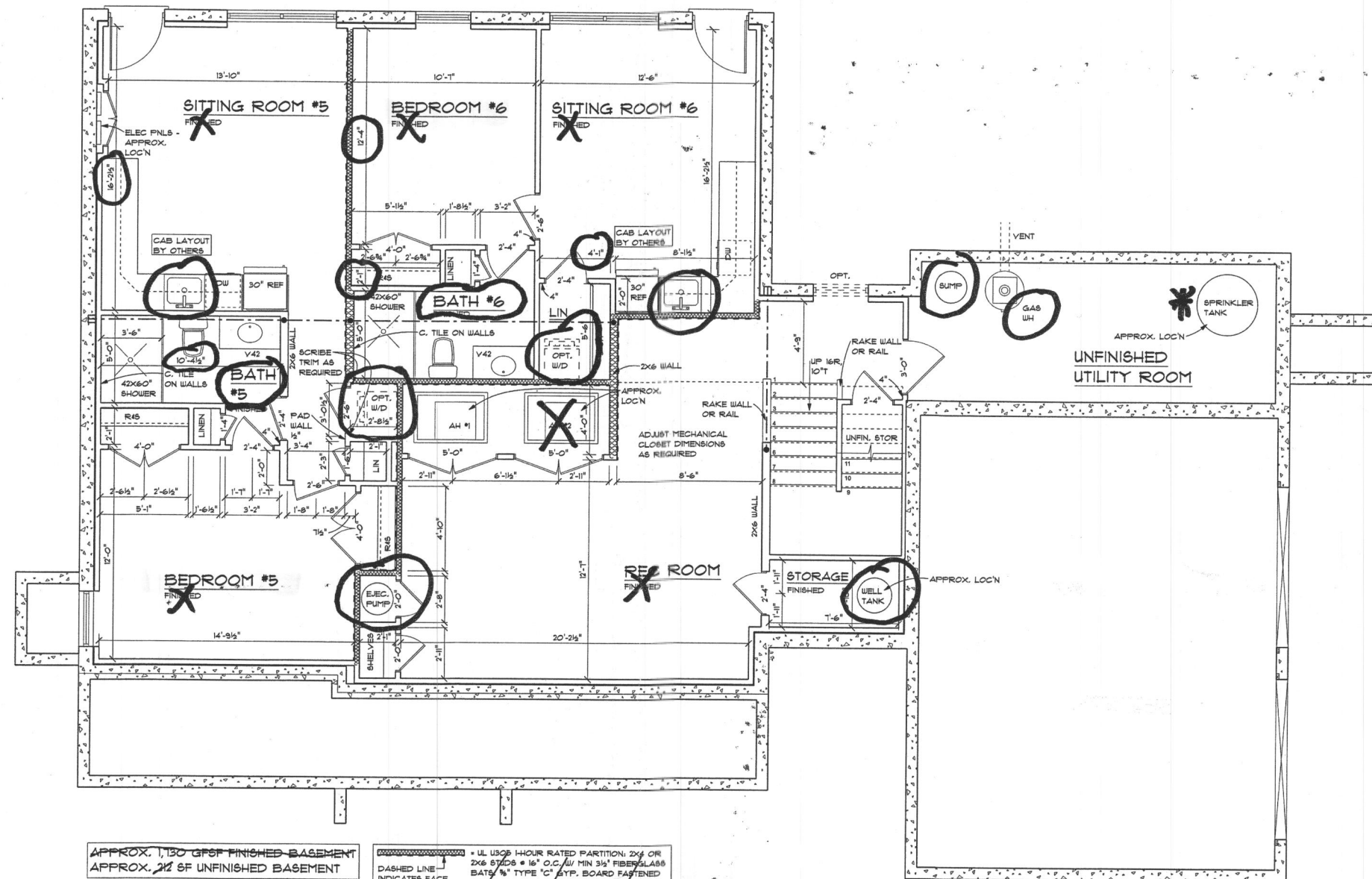
NOTE: ENGINEERED FLOOR JOISTS TO BE MINIMUM WEYERHAEUSER  
TJI 210 SERIES OR EQUAL UNLESS OTHERWISE NOTED. FLOOR JOISTS  
TO BE DESIGNED FOR L/480 MAX DEFLECTION (L/840 \*  
TELEBRITTE FINISHES) TYPICAL THROUGHOUT. INSTALLATION  
DETAILS, INCLUDING AT CANTILEVERED JOISTS, ARE TO BE PER  
JOIST MANUFACTURER'S STANDARD DETAILS. SQUASH BLOCKING AT  
BEARING WALLS AND POSTS OVER SHALL BE PER  
MANUFACTURER'S JOIST LAYOUT DRAWINGS & DETAILS.

NOTE: 9'-0" FOUNDATION WALLS

NOTE: EJECTOR PUMP AS REQUIRED -  
LOCATION PER PLUMBER

Lot 5 Cunningham Farm

2021 CODE



APPROX. 1,130 GFSF FINISHED BASEMENT  
APPROX. 212 SF UNFINISHED BASEMENT

UL US06 1-HOUR RATED PARTITION, 2x6 OR 2x6 STUDS @ 16" O.C. W/ MIN 3 1/2" FIBERGLASS BATT, 5/8" TYPE 'C' GYP. BOARD FASTENED DIRECTLY TO STUDS ONE SIDE, 1/2" HOMASOTE AND SOUND BARRIER FASTENED TO STUDS ON OPPOSITE SIDE AND 1/2" TYPE 'C' GYP. BOARD FASTENED TO HOMASOTE W/ LAMINATING SCREWS AT CENTER OF STUD BAYS ONLY. 52 STC RATING.

**FIRE SEPARATION NOTES**  
 1. AT 1-HOUR RATED PARTITIONS, GYP. BOARD MUST RUN CONTINUOUS FROM CEILING TO FLOOR SLAB.  
 2. AT BATHROOM FIXTURES ADJACENT TO 1-HOUR RATED WALLS, GYP. BOARD MUST BE INSTALLED FULL-HEIGHT BEFORE ANY TUBS OR SHOWER TRAYS ARE INSTALLED, WITH GYP. BOARD EXTENDING BEHIND FIXTURES.  
 3. ALL THROUGH AND MEMBRANE PENETRATIONS, INCLUDING AT PLUMBING AND ELECTRICAL FIXTURES, OF 1-HOUR RATED WALLS SHALL BE PROTECTED PER 2021 IBC 714.4  
 4. ALL THROUGH AND MEMBRANE PENETRATIONS OF 1-HOUR RATED FLOOR/CEILING ASSEMBLIES SHALL BE PROTECTED PER 2021 IBC 714.5. RECESSED FIXTURES SHALL BE INSTALLED SUCH THAT THE REQUIRED FIRE RESISTANCE WILL NOT BE REDUCED.

NOTE: ALL DIMENSIONS ARE TO FACE OF STUD.

**NOTE!**  
**UNFINISHED**

Finished Basement Plan  
SCALE: 1/4" = 1'-0"

**USE FOR LOCATION  
PLUMBING ROUGH INS**

2021 CODE