LOT 5

SHEET LIST - CONSTRUCTION	
C-0	COVER PAGE
E-1	EXTERIOR ELEVATIONS
E-2	EXTERIOR ELEVATIONS
E-3	ROOF PLAN
F-1	FIRST FLOOR PLAN
F-2	SECOND FLOOR PLAN
H-0	MECHANICAL NOTES
H-1	ELEC & HVAC
S-1	DETAILS, SECTIONS & GLAZING SHED.

PAPER SIZE: 22"x34"

SCALE:

SOLD BY:

REVISED BY:

DRAFTER:

REVIEWED BY:

AREAS:	
FIRST FLOOR	2380.9 SF
SECOND FLOOR	541.6 SF
TOTAL HEATED	2922.5 SF
GARAGE	589.0 SF
FRONT PORCH	253.8 SF
OPEN DECK	248.7 SF
DRIVE / WALKWAY	
TOTAL UNDER ROOF	4014.0 SF

PROJECT FOR: Brian Wilson

NORTH:

SITE ADDRESS: 129 Zachariah Rd
Nashville NC 27856

PROPERTY OF : BUILDING VIRTUALLY

PAGE: C-0

COVER PAGE

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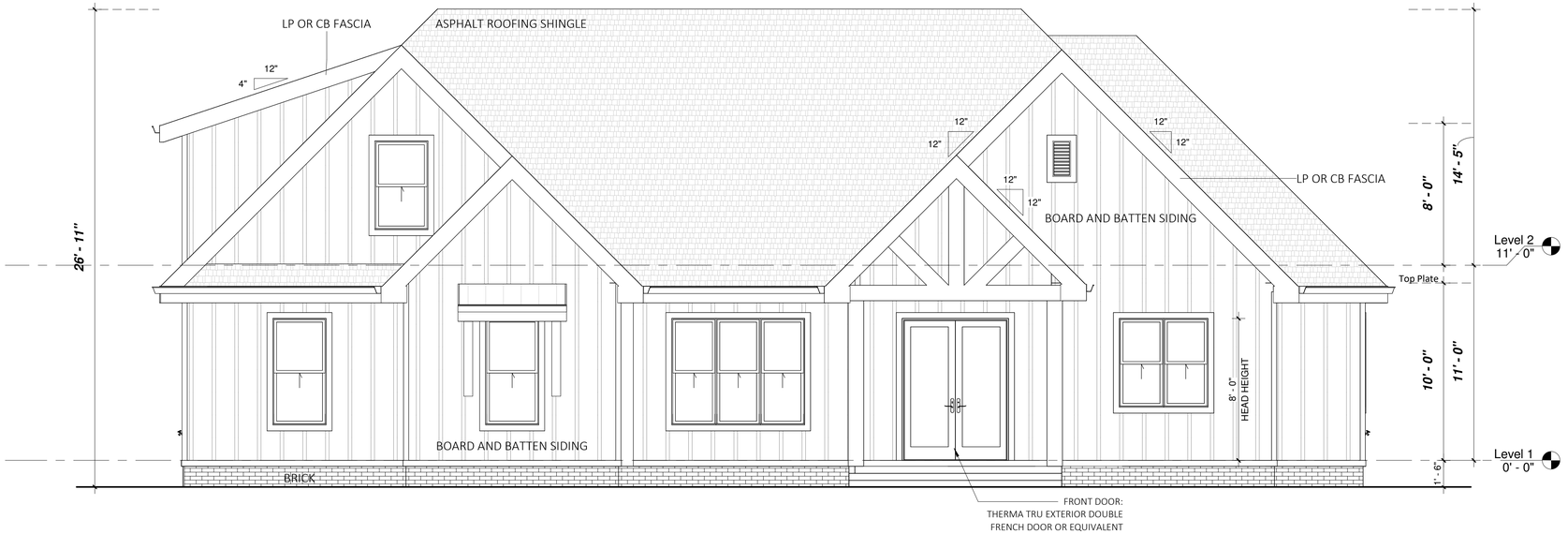
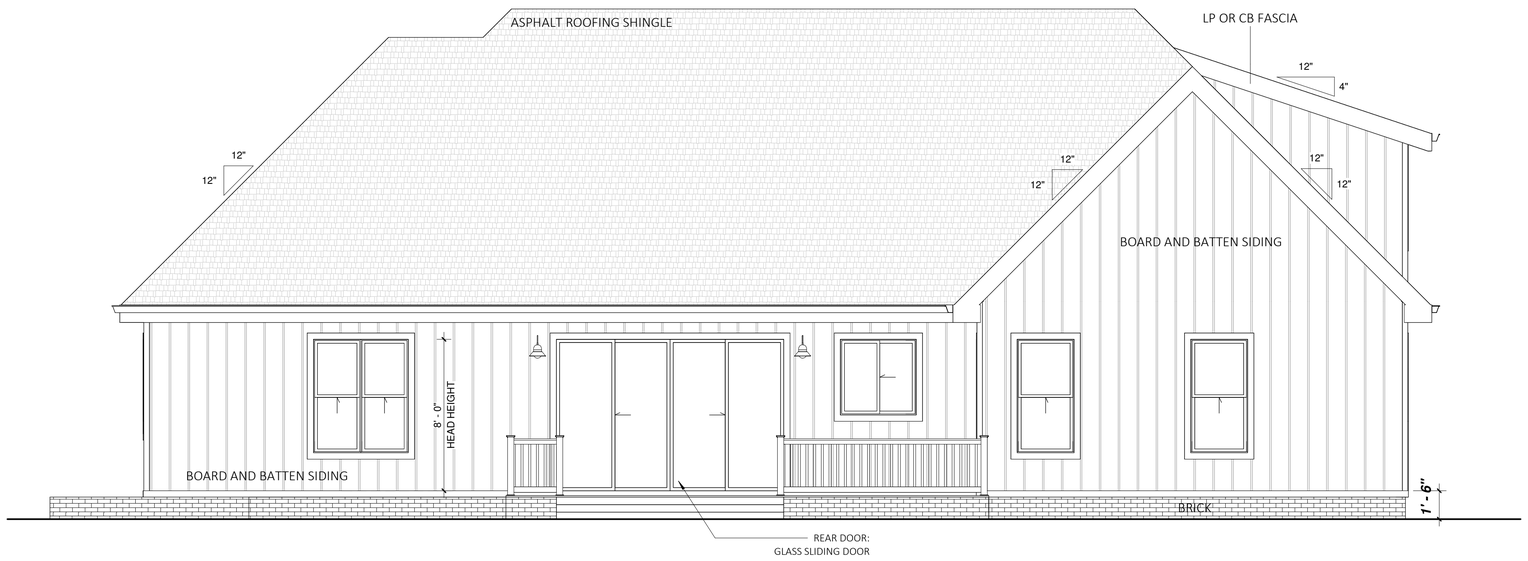


1 Front Elevation
1/4" = 1'-0"



2 Rear Elevation
1/4" = 1'-0"

- VERİFY SHEAR WALL NAİLİNG AND HOLDOWNS ARE PER PLAN AND SCHEDULE PRİOR TO İNSTALLİNG SİDİNG.
- MASONRY AND WOOD FRAME CHİMNEYS ARE TO BE CONSTRUCTED PER I.R.C.
- PROVİDE GALVANİZED SHEET METAL FLASHİNG AND COUNTER FLASHİNG AT ALL ROOF/ WALL İNTERSECTİONS, CHİMNEYS AND SKYLİGHTS.
- PROVİDE WEATHER-STRİPPİNG AND FLASHİNG AT ALL DOORS AND WİNDOWS AS REQUİRED.
- CAULK ALL EXTERİOR JOİNTS AND PENETRATİONS.
- POST ADDRESS ON THE BLDG. PRİOR TO FİNAL İNSPECTİON.
- SLOPE SHALL BE GRADED AS TO DRAİN SURFACE WATER AWAY FROM FOUNDATİON WALL. SLOPE SHALL BE 6 İN FİRST 10FT OR DRAİNS OR SWALES SHALL BE PROVİDED TO ENSURE DRAİNAGE AWAY FROM STRUCTURE.
- FASTENER TO BE HOT DİPPED GALV. STEEL, STAİNLESS OR ALUM. (CORROSİON RESİSTANT).

NOTE: APPROVED NUMBERS OR ADDRESSES SHALL BE PROVIDED FOR ALL NEW BUILDINGS IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.

NOTE: PROVIDE CONTINUOUS PRE-PAINTED G.I. "Z" FLASHING AT ALL EXT. DOOR & WINDOW HEADERS.

MATERIAL LEGEND	
	BOARD AND BATTEN SIDING
	BRICKS

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EXTERIOR ELEVATIONS

PAGE: E-1

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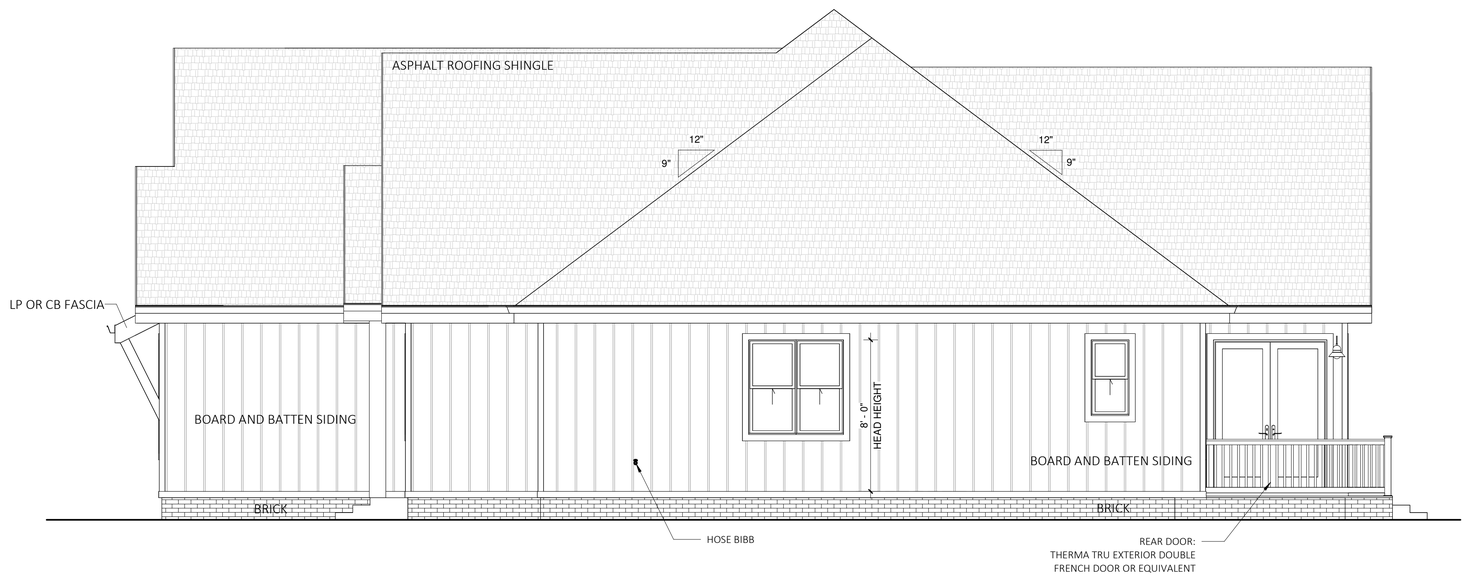

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	BOARD AND BATTEN SIDING
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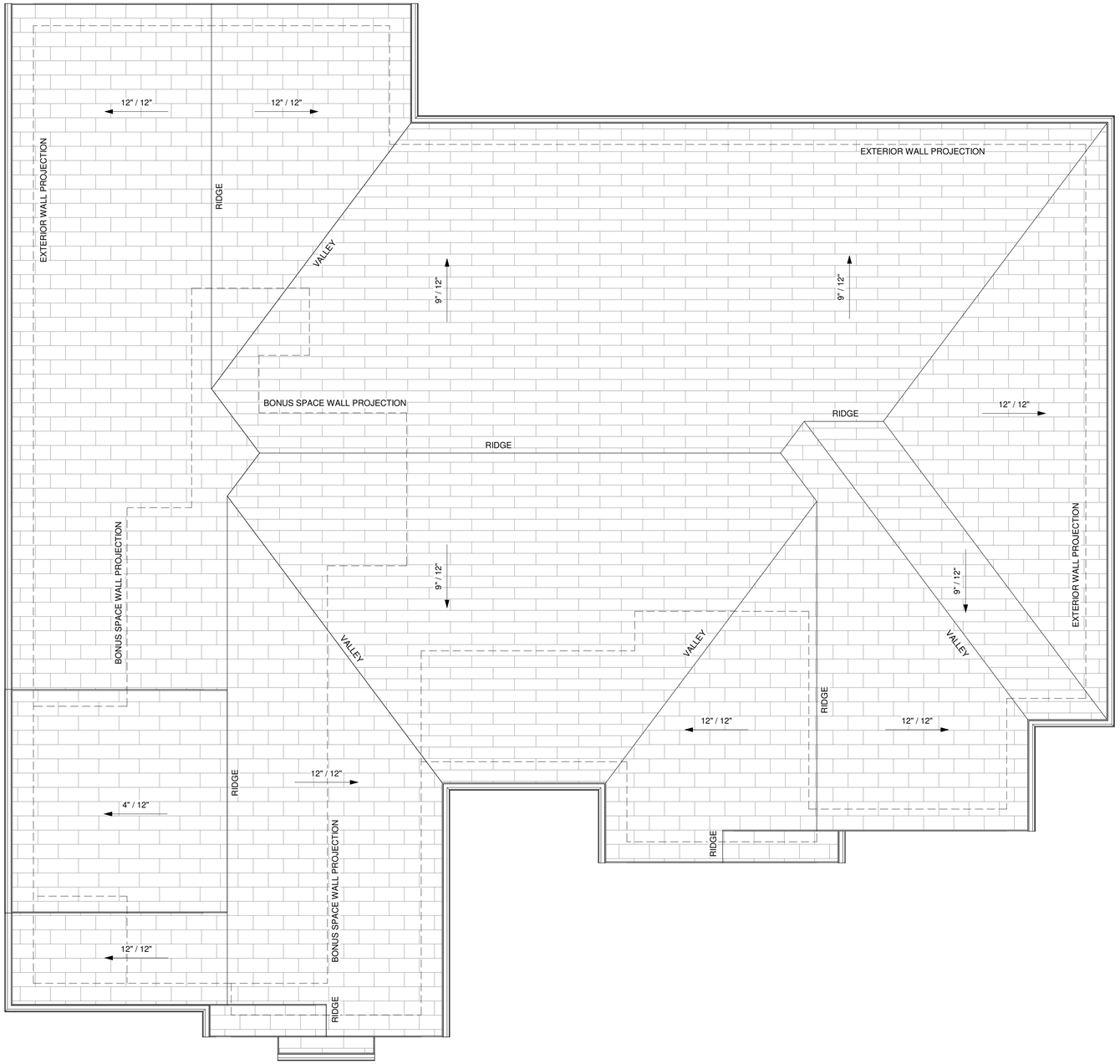

1 Roof
1/4" = 1'-0"

ROOF PLANS SYMBOLS	
Slope	INDICATE ROOF SLOPE
	EXTERIOR WALL PROJECTION

- ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF 2"/12" OR GREATER. FOR ROOF SLOPES FROM 2"/12" UP TO 4"/12" , DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.1.1.
- BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30" OR GREATER OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET. THE VERTICAL HEIGHT SHALL BE MEASURED FROM THE TOP OF THE CEILING FRAMING MEMBERS TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS.
- THE ROUGH-FRAMED OPENING SHALL BE NOT LESS THAN 22" BY 30" AND SHALL BE LOCATED IN A HALLWAY OR OTHER LOCATION WITH READY ACCESS.

TYPICAL ROOF CONSTRUCTION
- COMPOSITION OF ROOF SHINGLES
- 15# ROOF FELT OR APPROVED SYNTHETIC
- 7/16" SHEATHING RATED 24/16
- STRUCTURAL SYSTEM AS NOTED ON STRUCTURAL PLANS
- R-49 INSULATION
- 1/2" GWB. CEILING
- 1/8" TO ¼" MESH SCREEN OVER OPENING
- NET OPENING AREA MINIMUM 1/150 OF VENTED AREA OR 1/300 IF 50%-80% OF VENTING NEAR TOP OR VAPOR RETARDER.
- PROVIDED 1" MINIMUM CLEARANCE BETWEEN INSULATION AND SHEATHING AT VENTS PER IRC SECTION R806.3

ALL MANUFACTURED TRUSSES:
- SHALL NOT BE FIELD ALTERED WITHOUT ENGINEER'S APPROVAL
- SHALL HAVE DESIGN DETAILS AND DRAWINGS ON THE SITE FOR FRAMING INSPECTION
- SHALL BE INSTALLED AND BRACED TO MANUFACTURE‧ S SPECIFICATION
- SHALL CARRY MANUFACTURE‧ S STAMP ON EACH TRUSS
- IF AN ENGINEERED ROOF FRAMING LAYOUT IS PROVIDED BY THE TRUSS SUPPLIER, THAT TRUSS LAYOUT SHALL SUPERSEDE THE TRUSS LAYOUT INDICATED IN THE PLANS. PROVIDE THE TRUSS LAYOUT AND SPECS ON THE SITE FOR INSPECTION.

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ROOF PLAN
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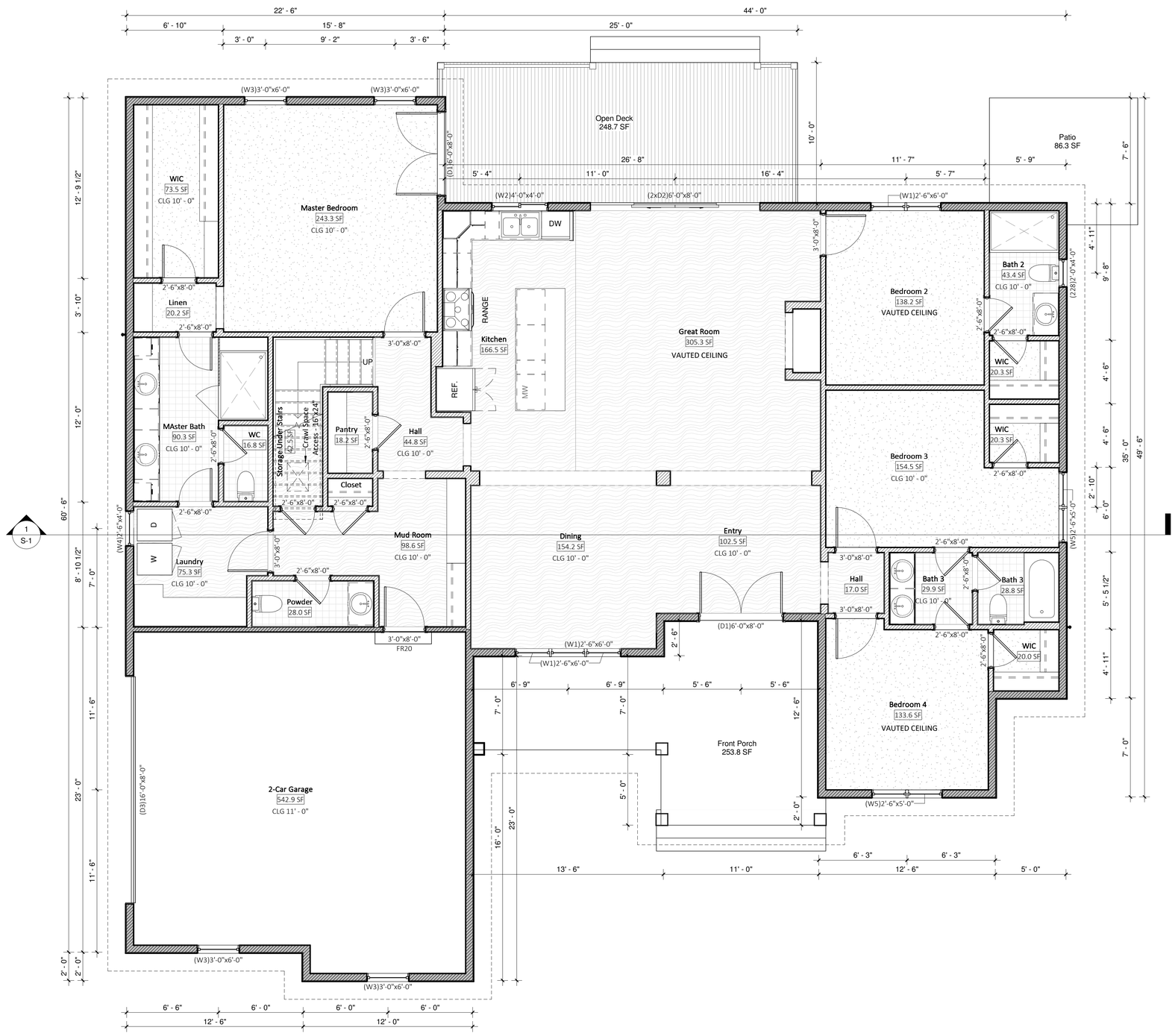

1 Level 1
1/4" = 1'-0"

FLOOR PLAN NOTES

- WINDOWS HEADERS AT 8-0 ABOVE THE FLOOR U.N.O.
- PROVIDED FIRE BLOCKING AS REQUIRED PER IRC.
- EXTERIOR WALLS TO BE 2X6 AT 16 (MAX) O.C U.N.O.
- INTERIOR PARTITIONS TO BE 2X4 AT 16 O.C (2X6 @ PLUMBING WALLS, U.N.O.)
- DUCTS THROUGH WALL OR CELLING COMMON TO HOUSE MIN. 26 GAGE STEEL.
- NO DUCT OPENING IN GARAGE.
- PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- FLOOR ELEVATIONS AT THE REQUIRED EGRESS DOORS. LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL NOT BE MORE THAN 1 ½ LOWER THE TOP OF THE THRESHOLD. PROVIDED THE DOOR DOES NOR SWING OVER THE LANDING OR THE FLOOR IRC R311.3.1.
- EXCEPTION: THE LANDING OR THE FLOOR ON THE EXTERIOR SIDE SHALL NOT BE MORE THAN 7 ¾ BELOW THE TOP OF THE THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR IRC R311.3.2.
- OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8" IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 3/8" THICK, OR 20-MINUTE FIRE-RATED DOORS, EQUIPPED WITH SELF-CLOSING OR AUTOMATIC-CLOSING AND SELF-LATCHING DEVICE.
- EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OF THE OPENING SHALL BE NOT LESS THAN 24" AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20"

TYPICAL WALL CONSTRUCTION

- SIDING AND/OR VENEER PER ELEVATION
- 7/16" PLY OR OBS SHTG. (U.N.O.)
- TYVEK BUILDING WRAP OR EQ.
- 2X6 STUDS @ 16" O.C. EXTERIOR WALLS U.N.O.
  EXTERIOR WALL NOTCH 25%, BORING 40%, 60% BORING IF DOUBLED & NOT MORE THAN TWO SUCCESSIVE STUDS.
- 2X4 STUDS @ 16" O.C., INTERIOR PARTITIONS.
  (2X6 @ PLUMBING WALLS)
  NON-BEARING WALL MAXIMUM NOTCH 40%, BORING 60%
  HOLES NO CLOSER THE 5/8 INCH TO FACE OF STUD
- R-21 INSULATION WITH VAPOR BARRIER.
- GWB INTERIOR SHEATHING.

VENTILATION RATE FOR THE WHOLE HOUSE FAN TO BE 60 AIRFLOW IN CFM PER TABLE M1505.4.3(1) HVAC CONTACTOR TO SPECIFY LOCATION.

CARBON MONOXIDE

INSTALL SMOKE DETECTOR/ CARBON MONOXIDE ALARM PER CODE
COMBINATION SMOKE ALARM & CARBON MONOXIDE ALARMS:
SMOKE ALARM REQUIREMENTS AS LISTED ABOVE. INSTALL ON EACH FLOOR AND OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. CARBON MONOXIDE ALARMS LISTED AS COMPLYING WITH UL 2075 AND INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTION.

SMOKE DETECTORS

INSTALL SMOKE DETECTORS PER CODE
110V INTERCONNECTED W/ BATTERY BACKUP
INSTALLED ON EACH FLOOR, IN EACH SLEEPING AREA, AND OUTSIDE EACH SEPARATE SLEEPING AREA LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED PER THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72

VENTILATION SCHEDULE

SYMBOLS		
1	Kitchens	100 CFM intermittent or 25 CFM continuous.
2	Bathrooms ,Toilet rooms & Laundry rooms	Mechanical Exhaust capacity of 50 CFM intermittent or 20 CFM continuous.
3 Whole House Fan	THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY OR EXHAUST FANS, OR A COMBINATION OF SUCH. SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE. PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE OF NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(1)	
Exception: The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25-percent of each 4-hour segment and the ventilation rate prescribed in table M1505.4.3(1) is multiplied by the factor determined in accordance with table M1505.4.3(2).		

FLOORING LEGEND

	TRADITIONAL ENGINEERED HARDWOOD FLOORING
	TEXTURED INDOOR CARPET
	TEXTURED INDOOR CARPET

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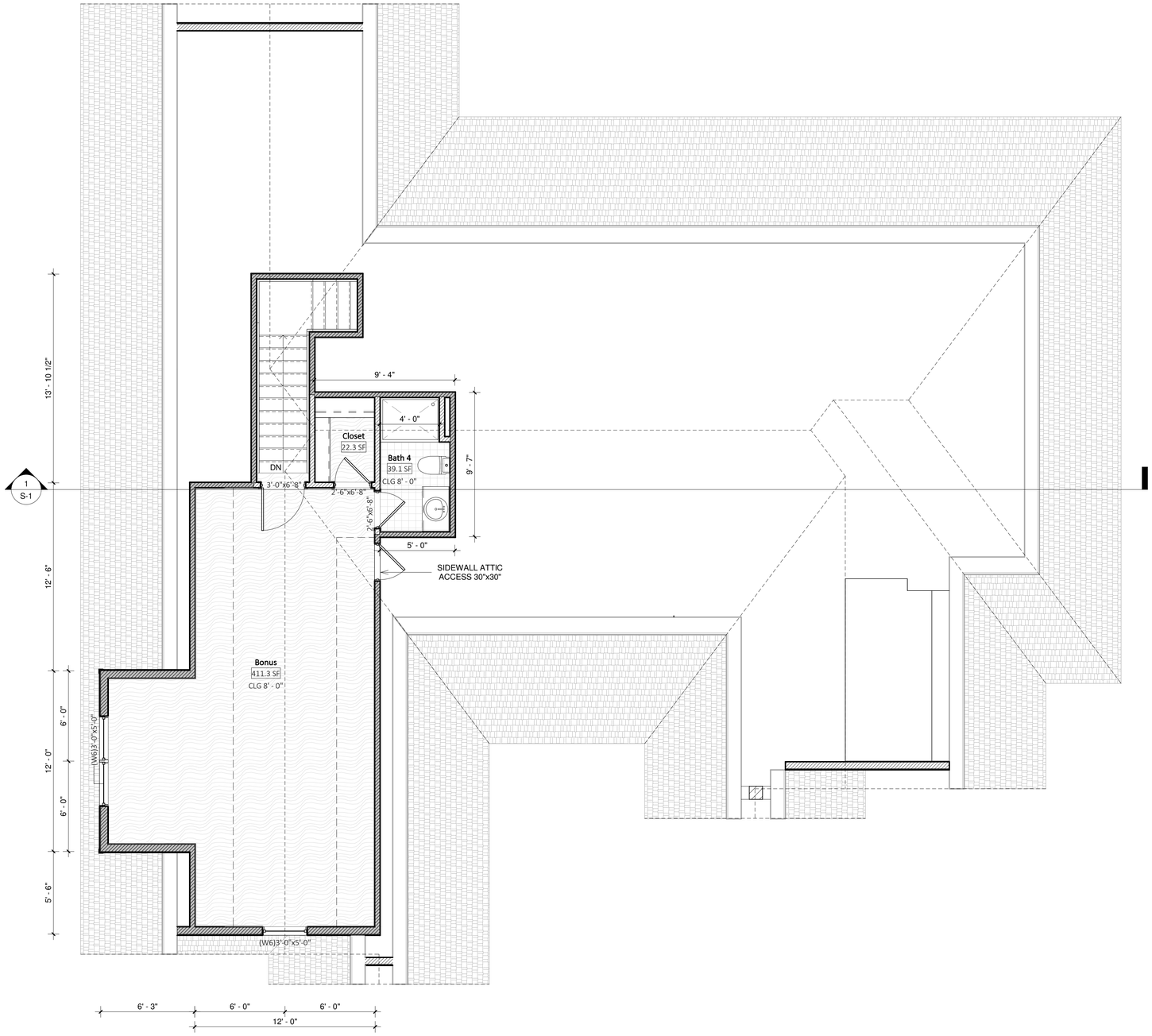
FIRST FLOOR PLAN



1 Level 2
1/4" = 1'-0"

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EXTERIOR WALL NOTCH 25%, BORING 40%, 60% BORING IF DOUBLED & NOT MORE THAN TWO SUCCESSIVE STUDS.
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	TEXTURED INDOOR CARPET
	TEXTURED INDOOR CARPET

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SECOND FLOOR PLAN

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MECHANICAL HEATING & COOLING EQUIPMENT

M1411.2 REFRIGERATION COILS IN WARM-AIR FURNACES
WHEN A COOLING COIL IS LOCATED IN THE SUPPLY PLENUM OF A WARM-AIR FURNACE, THE FURNACE BLOWER SHALL BE RATED AT NOT LESS THAN 0.5-INCH WATER COLUMN (124 PA) STATIC PRESSURE UNLESS THE FURNACE IS LISTED AND LABELED FOR USE WITH A COOLING COIL. COOLING COILS SHALL NOT BE LOCATED UPSTREAM FROM HEAT EXCHANGERS UNLESS LISTED AND LABELED FOR SUCH USE. CONVERSION OF EXISTING FURNACES FOR USE WITH COOLING COILS SHALL BE PERMITTED PROVIDED THAT THE FURNACE WILL OPERATE WITHIN THE TEMPERATURE RISE SPECIFIED FOR THE FURNACE.

M1411.3 CONDENSATE DISPOSAL
CONDENSATE FROM COOLING COILS AND EVAPORATORS SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO AN APPROVED PLACE OF DISPOSAL. SUCH PIPING SHALL MAINTAIN A MINIMUM HORIZONTAL SLOPE IN THE DIRECTION OF DISCHARGE OF NOT LESS THAN 1/8 UNIT VERTICAL IN 12 UNITS HORIZONTAL (1-PERCENT SLOPE). CONDENSATE SHALL NOT DISCHARGE INTO A STREET, ALLEY OR OTHER AREA WHERE IT WOULD CAUSE A NUISANCE.

TABLE M1505.4.4
MINIMUM REQUIRED LOCAL EXHAUST RATES FOR ONE-AND TWO-FAMILY DWELLINGS

AREA TO BE EXHAUSTED	EXHAUSTED RATES
KITCHENS	100 CFM INTERMITTENT OR 25 CFM CONTINUOUS.
BATHROOMS - TOILET, ROOMS LAUNDRY ROOMS INDOOR SWIMMING POOLS & SPAS	MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS.

FOR S1: 1 CUBIC FOOT PER MINUTE=0.0004719 M/S^3

R403.6.1 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY
FANS SHALL MEET THE EFFICACY REQUIREMENTS OF TABLE R403.6.1 AT ONE OR MORE RATING POINTS. FANS SHALL BE TESTED IN ACCORDANCE WITH HVI 916 AND LISTED. THE AIRFLOW SHALL BE REPORTED IN THE PRODUCT LISTING OR ON THE LABEL. FAN EFFICACY SHALL BE REPORTED IN THE PRODUCT LISTING OR SHALL BE DERIVED FROM THE INPUT POWER AND AIRFLOW VALUES REPORTED IN THE PRODUCT LISTING ON THE LABEL. FAN EFFICACY FOR FULLY DUCTED HRV, ERV, BALANCED, AND IN-LINE FANS SHALL BE DETERMINED AT A STATIC PRESSURE OF NOT LESS THAN 0.2 INCH W.C. (49.85 PA). FAN EFFICACY FOR DUCTED RANGE HOODS, BATHROOM AND UTILITY ROOM FANS SHALL BE DETERMINED AT A STATIC PRESSURE OF NOT LESS THAN 0.1 INCH W.C. (24.91 PA).

TABLE R403.6.1
WHOLE-DWELLING MECHANICAL VENTILATION SYSTEM FAN EFFICACY

SYSTEM TYPE	AIR FLOW RATE (CFM)	MINIMUM EFFICACY (CFM/WATT)
HRV, ERV OR BALANCED	ANY	1.2 CFM/WATT
RANGE HOODS	ANY	2.8 CFM/WATT
IN-LINE SUPPLY OR EXHAUST FAN	ANY	3.8 CFM/WATT
OTHER EXHAUST FAN	<90	2.8 CFM/WATT
	≥90	3.5 CFM/WATT

M1507.3.3 MECHANICAL VENTILATION RATE
THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR TO EACH HABITABLE SPACE AT A CONTINUOUS RATE OF NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH TABLE M1507.4.3(1)

EXCEPTION:
THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS PERMITTED TO OPERATE INTERMITTENTLY WHERE THE SYSTEM HAS CONTROLS THAT ENABLE OPERATION FOR NOT LESS THAN 25 PERCENT OF EACH 4-HOUR SEGMENT AND THE VENTILATION RATE PRESCRIBED IN TABLE M1505.4.3(1) IS MULTIPLIED BY THE FACTOR DETERMINED IN ACCORDANCE WITH TABLE M1507.3.3(2)

TABLE M1505.4.3(1)
CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (SQUARE FEET)	NUMBER OF BEDROOMS				
	0 - 1	2-3	4-5	6-7	>7
	AIRFLOW IN CFM				
<1 500	30	45	60	75	90
1 501 - 3 000	45	60	75	90	105
3 001 - 4 500	60	75	90	105	120
4 501 - 6 000	75	90	105	120	135
6 001 - 7 500	90	105	120	135	150
>7 500	105	120	135	150	165

TABLE M1505.4.3(2)
INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS A, B

RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
FACTOR	4	3	2	1.5	1.3	1.0

R403.3.5 DUCT TESTING
DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH WSU RS-33, USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED.

SECTION R402.4—AIR LEAKAGE
R402.4.1.2 TESTING
THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). FOR THIS TEST ONLY, THE VOLUME OF THE HOME SHALL BE THE CONDITIONED FLOOR AREA IN FT2 (M2) MULTIPLIED BY 8.5 FEET (2.6 M). WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE. ONCE VISUAL INSPECTION HAS CONFIRMED SEALING (SEE TABLE R402.4.1.1), OPERABLE WINDOWS AND DOORS MANUFACTURED BY SMALL BUSINESS SHALL BE PERMITTED TO BE SEALED OFF AT THE FRAME PRIOR TO THE TEST.

TEMPERATURE CONTROL
AT LEAST ONE THERMOSTAT SHALL BE PROVIDED FOR EACH SEPARATE HEATING AND COOLING SYSTEM R403.1.

2018 NORTH CAROLINA STATE ENERGY CODE- TABLE R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT A

CLIMATE ZONE 4	FENESTRATION			CEILING W / ATTIC	WOOD FRAMED WALL	FLOOR	BELOW GRADE WALL	SLAB ON GRADE
	VERTICAL	SKYLIGHT	GLAZED					
R - VALUE	N / A	N / A	N / A	R-38	R-15	R-19	R-5	R-10
U FACTOR	0.35	0.55	0.30	0.030	0.077	0.047	N / A	N / A

a. FOR VENTILATION SYSTEM RUN TIME VALUES BETWEEN THOSE GIVEN, THE FACTORS ARE PERMITTED TO BE DETERMINED BY INTERPOLATION.
b. EXTRAPOLATION BEYOND THE TABLE IS PROHIBITED.

VENTILATION SCHEDULE		
SYMBOLS		
$_1$	Kitchens	100 CFM intermittent or 25 CFM continuous.
$_2$	Bathrooms- Toilet rooms & Laundry rooms	Mechanical Exhaust capacity of 50 CFM intermittent or 20 CFM continuous.
$_3$ Whole House Fan	THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY OR EXHAUST FANS, OR A COMBINATION OF SUCH. SYSTEM SHALL BE PROVIDED WITH CONTROLS THAT ENABLE MANUAL OVERRIDE. PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE OF NOT LESS THAN THAT DETERMINED IN ACCORDANCE WITH TABLE M1507.4.3(1)	
Exception: The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25-percent of each 4-hour segment and the ventilation rate prescribed in table M1505.4.3(1) is multiplied by the factor determined in accordance with table M1505.4.3(2).		

WHOLE HOUSE VENTILATION (PRESCRIPTIVE WHV)	
	1. INTERMITTENT WHV USING EXHAUST FANS AND FRESH AIR INLETS (IRC M1507.3.4)
	2. INTERMITTENT WHV USING INTEGRATED WITH A FORCED AIR SYSTEM (IRC 1507.3.5)
X	3. INTERMITTENT WHV USING A SUPPLY FAN (IRC M1507.3.6)
	4. INTERMITTENT WHV USING A HEAT RECOVERY VENTILATION SYSTEM (IRC M1507.3.7)
	5. CONTINUOUS HV SYSTEM AIRFLOW

ENERGY NOTES:

WATER HEATER	GAS HIGH EFFICIENCY	MIN. 0.91 EF
HEATING	GAS FURNACE HEAT PUMP	90% AFUE U.N.O MIN. 9.5 HSPF

WATER HEATER	ELECTRIC HIGH EFFICIENCY	MIN 2.0 EF
HEATING	ELECTRIC FURNACE HEAT PUMP	90% U.N.O MIN 9.5 HSPF

DUCT TESTING
BASED ON THE PROTOCOL FOR TOTAL LEAKAGE TESTING, OR "LEAKAGE TO OUTDOORS" DUCT.

LEAKAGE IN NEW CONSTRUCTION SHALL NOT EXCEED 0.04 CFM25 X FLOOR AREA (IN SQ. FEET) SERVED BY THE SYSTEM FOR LEAKAGE TO OUTDOORS OR FOR TOTAL LEAKAGE WHEN TESTS POST CONSTRUCTION. WHEN TESTING AT A ROUGH- IN, TARGET SHOULD NOT EXCEED 0.04CFM25 X FLOOR AREA IN (SQ. FEET) FOR TOTAL LEAKAGE OR 0.03 CFM 25 X FLOOR AREA IN (SQ. FEET) IF THE AIR HANDLER IS NOT INSTALLED.

EXCEPTION:
THE TOTAL LEAKAGE TEST IS NOT REQUIRED FOR DUCTS AND AIR HANDLERS LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE. DUCTS LOCATED IN CRAWL SPACE DO NOT QUALIFY FOR THIS EXCEPTION.
PROVIDE A COPY OF THE DUCT LEAKAGE AFFIDAVIT FOR NEW CONSTRUCTION TO THE BUILDING INSPECTOR PRIOR TO AN APPROVED FINAL INSPECTION.

BLOWER DOOR TESTING
PROVIDE A WRITTEN REPORT OF THE BLOWER DOOR TEST RESULTS, SIGNED BY THE TESTING PARTY. TO THE BUILDING INSPECTOR, PRIOR TO THE APPROVED FINAL INSPECTION.

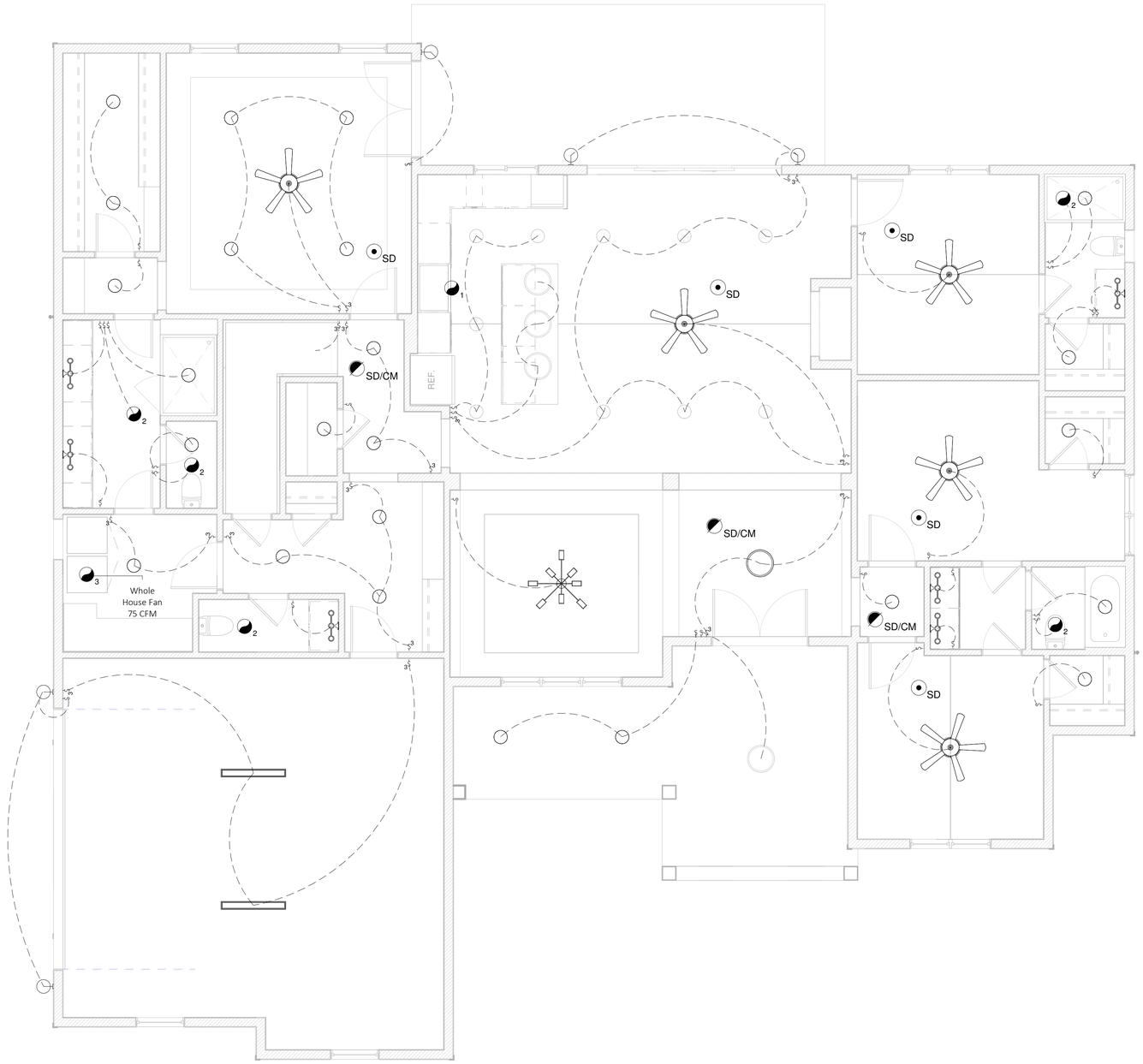
INSULATION CERTIFICATE
THE DESIGN PROFESSIONAL OR BUILDER SHALL COMPLETE AND POST AN INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITH 3' OF THE ELECTRICAL PANEL PRIOR TO THE FINAL INSPECTION.

PAPER SIZE: 22"x34"
SCALE:
SOLD BY:
REVISED BY:
DRAFTER:
REVIEWED BY:

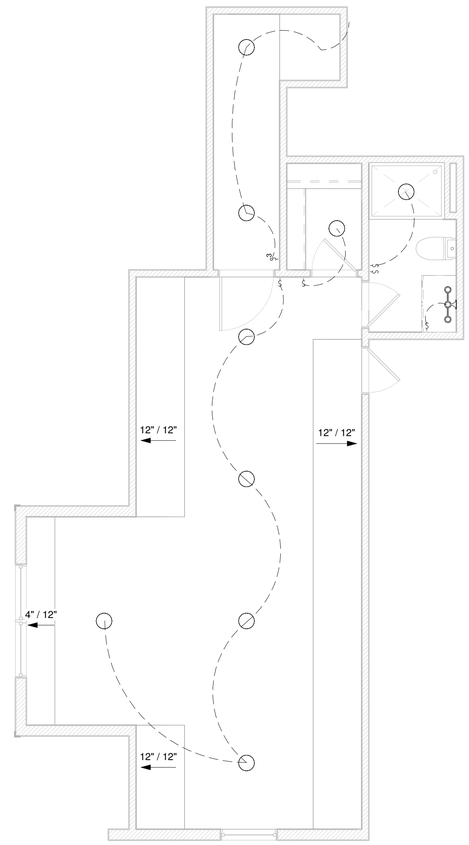
AREAS:

FIRST FLOOR	2380.9 SF
SECOND FLOOR	541.6 SF
TOTAL HEATED	2922.5 SF
GARAGE	589.0 SF
FRONT PORCH	253.8 SF
OPEN DECK	248.7 SF
DRIVE / WALKWAY	
TOTAL UNDER ROOF	4014.0 SF

PROJECT FOR: Brian Wilson
NORTH:
SITE ADDRESS: 129 Zachariah Rd Nashville NC 27856
MECHANICAL NOTES
PROPERTY OF : BUILDING VIRTUALLY
PAGE: H-0
PRINT DATE: 11/1/2025 12:24:23 AM



1 Level 1
1/4" = 1'-0"



2 Level 2
1/4" = 1'-0"

ELECTRICAL LEGEND	
$	SWITCH
$3	THREE WAY SWITCH
	CEILING FAN
	CHANDELIER
	CAN LIGHT
	PENDANT LIGHT
	UNDER CAB. LED LIGHT
	SCONCE LIGHT
	EXT. WALL MOUNTED LIGHT
T.V.	CABLE / T.V. OUTLET
WP	WP. OUTLET
1	EXHAUST FAN - Kitchen 100 CFM intermittent or 25 CFM continuous
2	EXHAUST FAN - Baths and Laundry 50 CFM intermittent or 20 CFM continuous
3	WHOLE HOUSE FAN SEE MECHANICAL NOTES
	FLOURESCENT LIGHT
	GARAGE DOOR OPENER
SD/CM	CM. DETECTOR
SD	SMOKE DETECTOR
HD	HEAT DETECTOR
	220V FOR HEAT PUMP

SMOKE ALARMS
SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
- IN EACH SLEEPING ROOM.
- OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
- ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS AND NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.
- SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3 FEET HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY THIS SECTION.

INSTALLATION NEAR COOKING
SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING LOCATIONS UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM IN A LOCATION REQUIRED BY SECTION R314.3.
- IONIZATION SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 20 FEET HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
- IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH SHALL NOT BE INSTALLED LESS THAN 10 FEET HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
- PHOTOELECTRIC SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 6 FEET HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

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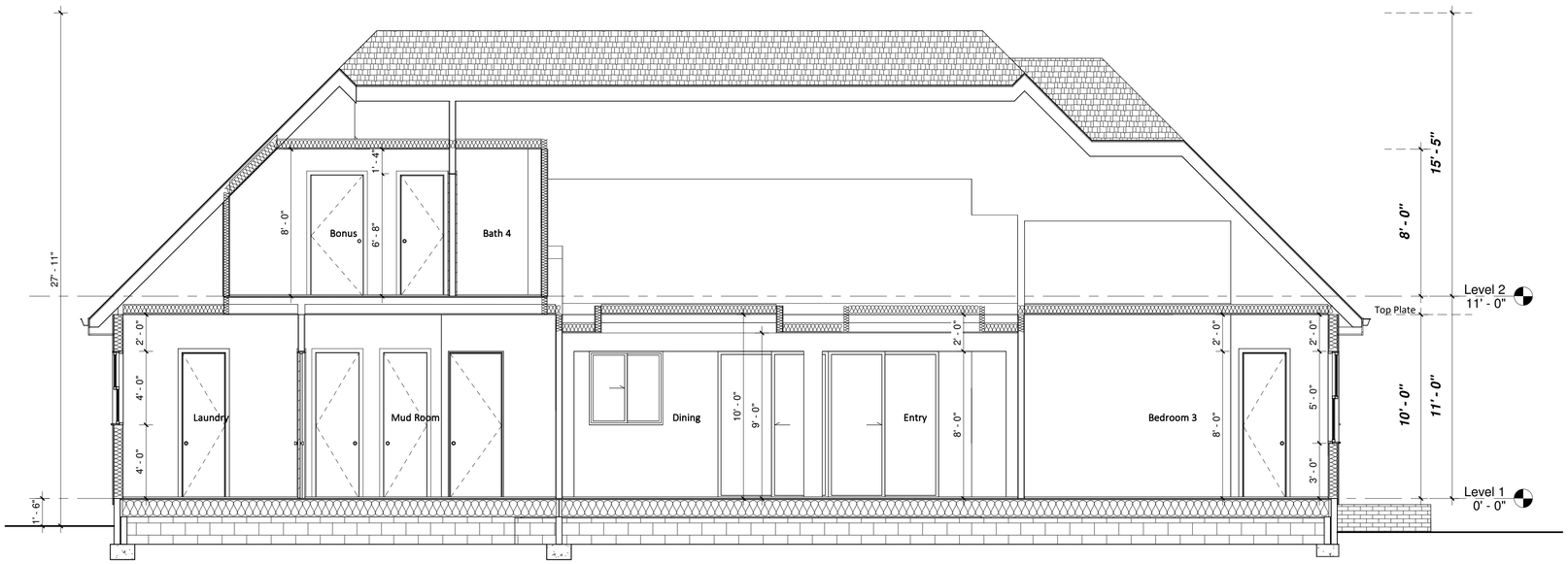


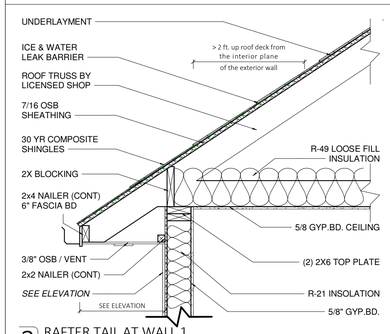
1 Section A
1/4" = 1'-0"

GLAZING SCHEDULE

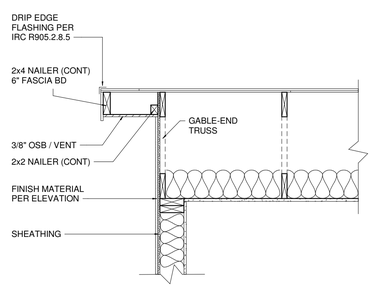
MARK	TYPE	U - FACTOR	WIDTH	HEIGHT	QTY	TOTAL AREA
2xD2	Exterior Patio Door - Two Panel	0.30	72"	96"	2	96.0 SF
228	Hung Single	0.30	24"	48"	1	8.0 SF
W4	Hung Single	0.30	30"	48"	1	10.0 SF
W5	Hung Single	0.30	30"	60"	4	50.0 SF
W6	Hung Single	0.30	36"	60"	3	45.0 SF
W1	Hung Single	0.30	30"	72"	5	75.0 SF
W3	Hung Single	0.30	36"	72"	4	72.0 SF
W2	Slider Single	0.30	48"	48"	1	16.0 SF
					21	372.0 SF

EXTERIOR DOORS SCHEDULE

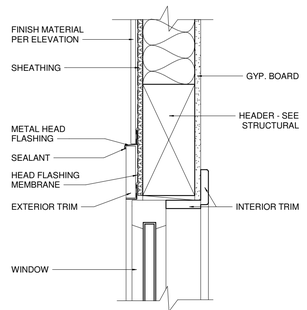
MARK	TYPE	WIDTH	HEIGHT	QTY	TOTAL AREA
D1	EXTERIOR DOOR DOUBLE - FRENCH	72"	96"	2	96.0 SF
D3	GARAGE DOOR - Serie 730_730I - Ranch Panel - Clear Glass	192"	96"	1	128.0 SF
				3	224.0 SF



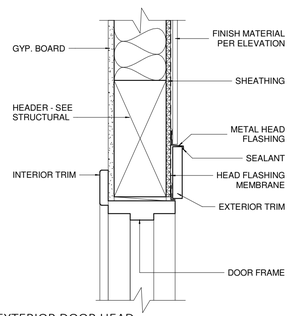
3 RAFTER TAIL AT WALL 1
3/4" = 1'-0"



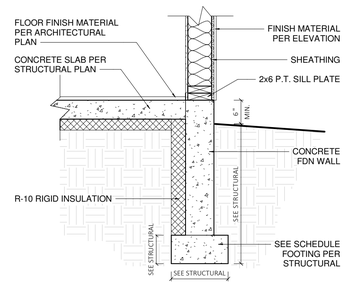
2 GABLE END TRUSS W/ SOFFIT EAVE
3/4" = 1'-0"



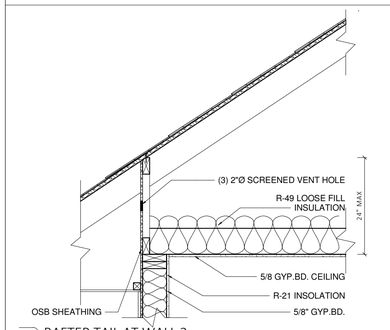
6 EXTERIOR WINDOW HEAD
1 1/2" = 1'-0"



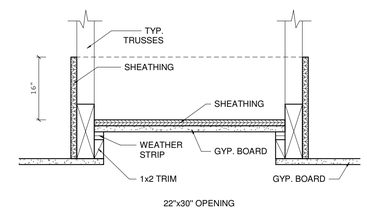
8 EXTERIOR DOOR HEAD
1 1/2" = 1'-0"



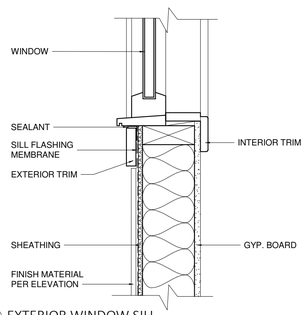
10 STEM WALL FOUNDATION - LIVING AREA
3/4" = 1'-0"



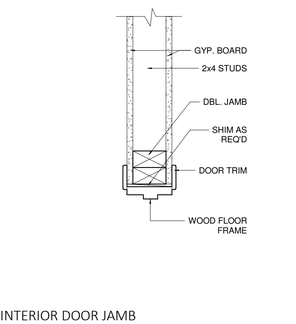
4 RAFTER TAIL AT WALL 2
3/4" = 1'-0"



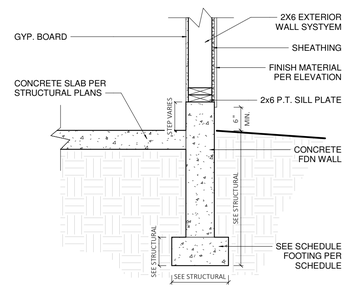
5 ATTIC ACCESS
1 1/2" = 1'-0"



7 EXTERIOR WINDOW SILL
1 1/2" = 1'-0"



9 INTERIOR DOOR JAMB
1 1/2" = 1'-0"



11 STEM WALL FOUNDATION - GARAGE
3/4" = 1'-0"

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SCALE: As indicated
SOLD BY:
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DETAILS, SECTIONS & GLAZING SHED.
PROPERTY OF : BUILDING VIRTUALLY
PAGE: S-1
PRINT DATE: 11/1/2025 12:24:26 AM

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

2. IN NO CASE SHALL DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THESE DRAWINGS. SCALES SHOWN HEREIN ARE FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND / OR CIVIL DRAWINGS FOR DIMENSIONS NOT SHOWN HEREIN.

3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THESE DRAWINGS WITH EXISTING CONDITIONS AND ALL OTHER DISCIPLINES. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF RECORD OF ANY AND ALL OMISSIONS AND / OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DRAWINGS, EXISTING CONDITIONS, AND PROJECT SPECIFICATIONS PRIOR TO PROCEEDING WITH WORK.

4. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC., UNLESS SPECIFICALLY DETAILED AND / OR NOTED BY THE ENGINEER OF RECORD. STRUCTURAL FRAMING FOR MECHANICAL OPENINGS THROUGH ROOFS, FLOORS, WALLS, ETC., SHALL BE COORDINATED WITH THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH WORK. REFER TO MECHANICAL DRAWINGS FOR SIZES AND LOCATIONS OF PROPOSED MECHANICAL OPENINGS.

5. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE STRUCTURE SHOWN HEREIN HAS BEEN DESIGNED ONLY TO RESIST DESIGN-LOADING AS A FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ALL THE TEMPORARY BRACING, SHORING, AND TEMPORARY SUPPORT NECESSARY TO ACHIEVE THE FINISHED STRUCTURE.

6. THESE STRUCTURAL DRAWINGS ARE NOT INTENDED TO SERVE AS SHOP ERECTION DRAWINGS. REPRODUCTION OF THESE DRAWINGS IN LIEU OF PREPARATION OF SHOP ERECTION DRAWINGS IS PROHIBITED. SHOP DRAWINGS, WHEN REQUIRED, SHALL BE THOROUGHLY DETAILED AND CLEARLY INDICATE ALL CONDITIONS. DESIGN CALCULATIONS INCLUDED IN SHOP DRAWING SUBMITTALS, WHEN REQUIRED, SHALL BE SEALED BY AN ENGINEER LICENSED IN THE PROJECT STATE.

7. MATERIAL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR ARE NOT ACCEPTABLE UNLESS APPROVED BY THE ARCHITECT AND THE ENGINEER OF RECORD, IN WRITING, PRIOR TO PROCEEDING WITH WORK. PROPOSED SUBSTITUTIONS OF "EQUIVALENT" MATERIALS SHALL INCLUDE MATERIAL TECHNICAL SPECIFICATIONS AND / OR PRODUCT DATA INDICATING THE RELEVANT EQUIVALENT PROPERTIES OF THE MATERIAL SPECIFIED IN THESE DRAWINGS.

STRUCTURAL DESIGN CRITERIA:

1. APPLICABLE CODES:

NORTH CAROLINA RESIDENTIAL CODE (NCRC)	2018 EDITION
INTERNATIONAL RESIDENTIAL CODE (IRC)	2015 EDITION

2. FLOOR LIVE LOADS:

UNINHABITABLE ATTIC WITHOUT STORAGE	10 PSF
UNINHABITABLE ATTIC WITH LIMITED STORAGE	20 PSF
SLEEPING ROOMS & HABITABLE ATTICS	30 PSF
ROOMS OTHER THAN SLEEPING ROOMS	40 PSF
DECKS / BALCONIES	40 PSF
STAIRS / FIRE ESCAPES	40 PSF
GARAGE FLOORS	50 PSF

3. CLIMATE AND GEOGRAPHIC DESIGN CRITERIA:

ROOF LOAD (NON-REDUCIBLE)	20 PSF
SNOW LOAD	15 PSF
WIND SPEED (MPH)	115 (ULT) / 89 (ASD)
EXPOSURE CATEGORY	B
TOPOGRAPHIC EFFECTS	N/A
WIND-BORNE DEBRIS	NO
SEISMIC DESIGN CATEGORY	B
WEATHERING RISK	MODERATE
FROST LINE DEPTH	12 INCHES
TERMITE RISK	MODERATE / HEAVY
WINTER DESIGN TEMPERATURE	PER LOCAL JURISDICTION
ICE BARRIER	PER LOCAL JURISDICTION
FLOOR HAZARDS	PER LOCAL JURISDICTION
AIR FREEZING INDEX	PER LOCAL JURISDICTION
MEAN ANNUAL TEMPERATURE	PER LOCAL JURISDICTION

FOUNDATIONS AND EARTHWORK:

1. DESIGN BEARING PRESSURE: 2000 PSF (ALLOWABLE 2018 RESIDENTIAL)

2. EXTERIOR FOOTINGS SHALL BEAR 18" (MINIMUM) BELOW FINISHED GRADE U.N.O. FOOTINGS SHOULD BE KEPT FREE OF LOOSE MATERIAL AND STANDING WATER AND PLACED SAME DAY (IF POSSIBLE) AS EXCAVATION. FOOTING BOTTOMS AND BEARING CAPACITY SHALL BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.

3. SITE PREPARATION, FILL MATERIALS, AND / OR NATIVE SOIL SHALL BE COMPACTED TO 98% STANDARD PROCTOR MODIFIED DRY DENSITY (SPMDD). CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL COMPACTION AND BEARING CAPACITY WITH A LICENSED GEOTECHNICAL ENGINEER.

4. SURFACE GRADING SHALL FALL A MINIMUM OF 6" WITHIN 10'-0" OF THE BUILDING FOOTPRINT FOR POSITIVE DRAINAGE. ALTERNATIVE DRAINAGE DEVICES SHALL BE REQUIRED WHERE GRADING DOES NOT ALLOW FOR POSITIVE DRAINAGE AWAY FROM THE BUILDING. DESIGN OF THESE ALTERNATIVE DRAINAGE DEVICES IS BY OTHERS.

5. CONTRACTOR SHALL PROTECT ALL EXISTING OR NEW UTILITY LINES, ETC. ENCOUNTERED DURING EXCAVATION AND BACKFILLING.

6. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING OR OTHERWISE BRACE ALL RETAINING AND / OR BASEMENT WALLS FROM LATERAL LOADS UNTIL SUPPORTING FLOORS, WALLS, AND / OR SLABS ARE PLACED, CURED AND / OR SHEATHED PER THE CONSTRUCTION DRAWINGS.

7. RETAINING AND / OR BASEMENT WALLS SHALL BE CONSTRUCTED WITH DRAINAGE DEVICES TO LIMIT HYDROSTATIC PRESSURE ON WALLS. DESIGN OF THESE DRAINAGE DEVICES IS BY OTHERS. BACKFILL AGAINST RETAINING AND / OR BASEMENT WALLS SHALL BE No.57 STONE U.N.O.

CONCRETE AND REINFORCING:

1. USE OF DIFFERENT CLASSES OF CONCRETE SHALL BE AS SHOWN BELOW. CONCRETE BATCH DESIGN(S) SHALL BE PORTIONED AND PRODUCED IN ACCORDANCE WITH ACI 318 AND ACI 301. SEE CONCRETE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, MATERIAL PROPERTIES, AND NECESSARY INSPECTIONS / TESTING. CONCRETE SHALL BE READY MIXED CONFORMING TO ASTM C94.

   F'c = 3000 PSI MINIMUM - FOOTINGS AND FOUNDATION WALLS
   F'c = 4000 PSI MINIMUM - COLUMNS, WALLS, SLABS, AND ELEVATED SLABS

2. CONCRETE PRODUCTS SHALL CONSIST OF THE FOLLOWING:

   PORTLAND CEMENT COMPLYING WITH ASTM C150
   AGGREGATES COMPLYING WITH ASTM C33
   POTABLE WATER
   WATER REDUCING ADMIX. COMPLYING WITH ASTM C494, TYPE A
   AIR ENTRAINMENT ADMIX. COMPLYING WITH ASTM C260
   ACCELERATOR ADMIX. COMPLYING WITH ASTM C494, TYPE C OR E
   FLYASH LIMITED TO 100 LBS MAX. PER CUBIC YARD OF CONCRETE
   CALCIUM CHLORIDE NOT ALLOWED

3. CONCRETE SLUMP SHALL BE BETWEEN 3" AND 5" MEASURED AT THE POINT OF DISCHARGE. CONCRETE SLUMP SHALL NOT EXCEED 5" WITHOUT THE ADDITION OF A SUPER-PLASTICIZER.

4. REINFORCING BARS SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS,

A-615, GRADE 60	ALL REINFORCING BARS, U.N.O.
A-706, GRADE 80	WELDABLE REBAR (WHERE NOTED)
A-185	WELDED WIRE FABRIC

5. WELDING OF REINFORCING BARS SHALL NOT BE PERMITTED UNLESS EXPLICITLY NOTED ON PLANS. TORCHING OF BARS TO FIELD BEND IS NOT PERMITTED. BARS SHALL BE COLD-BENT WITH BEND RADIUS PER ACI 318.

6. MINIMUM CONCRETE CLEAR COVER TO REINFORCEMENT SHALL CONFORM WITH ACI 318, SECTION 20 U.N.O. CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:

SLAB ON GRADE	TOP	1-1/2"
	BOTTOM	2"
FOOTINGS	TOP	2"
	BOTTOM	3"
WALLS	FACE ADJACENT TO SOIL	1-1/2"
	NOT ADJACENT TO SOIL	3/4"
ELEVATED SLAB		3/4"
COLUMNS		1-1/2"

7. REINFORCING BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAIRED ON THE BOTTOM AND / OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN (4) FEET ON CENTER. BAR SUPPORTS FOR CONCRETE EXPOSED TO VIEW SHALL HAVE PLASTIC COATED LEGS. BAR SUPPORTS SHALL BE LOCATED AGAINST THE OUTERMOST BAR.

8. ALL ITEMS EMBEDDED IN CONCRETE MUST BE TIED AND SECURED PRIOR TO PLACEMENT OF CONCRETE. "WET STICKING" IS NOT PERMITTED. THOROUGHLY VIBRATE CONCRETE TO ENSURE ADEQUATE BOND TO CAST-IN EMBEDDED ITEMS.

9. ALL CONCRETE WORK SHALL CONFORM WITH THE FOLLOWING:

ACI 318	"BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
ACI 302	"GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION"
ACI 301	"SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
CRSI	"MANUAL OF STANDARD PRACTICE"
ACI 305	IN HOT WEATHER
ACI 306	IN COLD WEATHER
ACI 347	FOR FORMWORK

10. MINIMUM BAR LAP SPLICE SHALL BE 48 BAR DIAMETERS U.N.O. TYPICAL BAR LAPS SHALL BE CLASS B U.N.O.

11. EXTERIOR, EXPOSED CONCRETE SHALL HAVE AIR ENTRAINMENT BETWEEN 4 AND 7 PERCENT.

12. FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN CHAPTER 3 OF THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES ON THE MESH GRID. NO ROCKS, CMU, CLAY TILE, OR BRICK SHALL BE USED TO SUPPORT REINFORCING.

13. A 10MIL (MINIMUM) POLYETHYLENE VAPOR BARRIER SHALL BE PLACED DIRECTLY BELOW GRADE SUPPORTED SLABS. LAP (12) INCHES AND TAPE ALL JOINTS AND HOLES.

14. DRAIN GRAVEL SHALL BE PLACED UNDER ALL GRADE SUPPORTED SLABS. DRAIN GRAVEL SHALL BE PLACED ON SUB-GRADE THAT HAS BEEN COMPACTED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER. DRAIN GRAVEL SHALL BE No. 57 STONE AND 4" THICK (MINIMUM).

15. PROVIDE TROWEL FINISH FOR INTERIOR SLABS AND BROOM FINISH FOR EXTERIOR SLABS. U.N.O. APPLY LIQUID MEMBRANE CURING COMPOUND AT INTERIOR SLABS CONFORMING TO ASTM C309 (COORDINATE WITH FLOOR FINISHES). APPLY CURING COMPOUND WITHIN 6 HOURS OF POUR.

16. INSTALL CORNER BARS AT JUNCTION OF ALL FOUNDATION WALLS, GRADE BEAMS, AND FOOTINGS MATCHING TYPICAL REINFORCING WITH LAP LENGTHS AS INDICATED IN THIS SECTION.

MASONRY AND GROUT:

1. THE CONSTRUCTION OF MASONRY ELEMENTS SHALL CONFORM TO THE REQUIREMENTS OUTLINED IN TMS 402 "BUILDING CODE FOR MASONRY STRUCTURES" AND TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES". (PREVIOUSLY REFERENCED AS ACI 530 AND ACI 530.1)

2. CONCRETE MASONRY UNITS (CMU), SHALL CONFORM TO THE LATEST EDITION OF ASTM C90. CMU SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS:

   LOAD BEARING BLOCK MASONRY UNITS AND BLOCK MASONRY UNITS AT EXTERIOR WALLS SHALL BE NORMAL WEIGHT WITH A MINIMUM UNIT COMPRESSIVE STRENGTH OF 2800 PSI. USING TYPE "M" OR "S" MORTAR, MASONRY ASSEMBLY SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF MASONRY (F'm) OF 2000 PSI.

3. UNLESS NOTED OTHERWISE ON THESE DRAWINGS, MORTAR SHALL BE TYPE "S" WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 1900 PSI. MORTAR SHALL BE PROPORTIONED IN ACCORDANCE WITH ASTM C270.

4. GROUT FOR MASONRY SHALL CONFORM TO ASTM C476. SPECIFICALLY, GROUT SHALL BE DESIGNED IN ACCORDANCE WITH TABLE 1 OF ASTM C476 (GROUT PROPORTIONS BY VOLUME). AGGREGATE FOR GROUT SHALL CONFORM TO ASTM C404. GROUT MIX SHALL BE (1) PART PORTLAND CEMENT TO (2.5) PARTS SAND WITH ENOUGH WATER TO PRODUCE SLUMP BETWEEN (7) AND (9) INCHES PRIOR TO THE ADDITION OF A CHEMICAL WATER REDUCER AND / OR PLASTICIZER (ADDITIONAL COURSE AGGREGATE MAY BE ADDED WHEN USING COARSE GROUT).

   CONTRACTOR SHALL VERIFY SLUMP PRIOR TO THE ADDITION OF A CHEMICAL WATER REDUCER AND / OR PLASTICIZER. DURING GROUT PLACEMENT, THE GROUT MIX SHALL HAVE A SLUMP BETWEEN (9) AND (11) INCHES. SLUMP SHALL BE MEASURED AT THE POINT OF DISCHARGE.

   PLACE GROUT WITHIN (1-1/2) HOURS FROM INTRODUCING WATER IN THE MIXTURE AND PRIOR TO INITIAL SET.

5. PLACE REINFORCING BARS IN WALLS AND FLEXURAL MEMBERS WITHIN A TOLERANCE OF +/- (1/2) INCH WHEN THE DISTANCE FROM THE CENTER LINE OF REINFORCING BARS TO THE OPPOSITE FACE OF THE MASONRY ("D") IS EQUAL TO (8) INCHES OF LESS, +/- (1) INCH FOR "D" BETWEEN (8) INCHES AND (24) INCHES, AND +/- (1 1/4) INCH FOR "D" GREATER THAN (24) INCHES.

6. REINFORCING BARS SHALL BE DEFORMED STEEL BARS CONFORMING TO ASTM A615 (GRADE 60). ALL VERTICAL BARS SHALL BE INSTALLED USING BAR POSITIONERS. (HOHMANN & BARNARD OR APPROVED EQUAL) INSTALL POSITIONERS PER MANUFACTURER'S RECOMMENDATIONS.

7. UNLESS NOTED OTHERWISE, CONSTRUCT MASONRY WALLS WITH 9 GAGE, LADDER TYPE, GALVANIZED WIRE JOINT REINFORCEMENT AT EVERY OTHER COURSE.

8. REINFORCEMENT EMBEDDED IN GROUT SHALL HAVE A THICKNESS OF GROUT BETWEEN THE REINFORCEMENT AND THE MASONRY UNITS NOT LESS THAN (1/4) INCH FOR FINE GROUT AND (1/2) INCH FOR COURSE GROUT.

9. REINFORCING BARS SHALL HAVE A MASONRY COVER NOT LESS THAN THE FOLLOWING:

   MASONRY FACE EXPOSED TO EARTH OR WEATHER:
   2" FOR BARS LARGER THAT #5
   1-1/2" FOR #5 BARS AND SMALLER

   MASONRY NOT EXPOSED TO EARTH OR WEATHER:
   1-1/2" FOR ALL BARS

10. GROUT POURS IN EXCESS OF (12) INCHES IN HEIGHT SHALL BE CONSOLIDATED BY MEANS OF A MECHANICAL VIBRATOR. GROUT SHALL BE RECONSOLIDATED AFTER THE EXCESS WATER IS ABSORBED BY THE MASONRY UNITS (3 TO 5 MINUTES) TO CLOSE VOIDS CAUSED BY THE WATER LOST.

11. GROUT LIFTS GREATER THAN (5) FEET (4) INCHES SHALL BE CONSTRUCTED USING THE HIGH LIFT GROUT PROCEDURE PER TMS 402/602 CODE REQUIREMENTS AND SPECIFICATIONS.

    PROVIDE CLEANOUTS IN THE BOTTOM COURSE OF MASONRY FOR EACH GROUT POUR WHEN THE GROUT POUR HEIGHT EXCEEDS (5) FEET (4) INCHES. CONSTRUCT CLEANOUTS SO THAT THE SPACE TO BE GROUTED CAN BE CLEANED AND INSPECTED. IN SOLID GROUTED MASONRY, SPACE CLEANOUTS HORIZONTALLY A MAXIMUM OF (32) INCHES O.C.

    CONSTRUCT CLEANOUTS WITH AN OPENING SIZE OF SUFFICIENT SIZE TO PERMIT REMOVAL OF DEBRIS. THE MINIMUM OPENING DIMENSION SHALL BE (3) INCHES. AFTER CLEANING, CLOSE CLEANOUTS WITH CLOSURE BRACED TO RESIST GROUT PRESSURE. GROUT SHALL BE FLUSH WITH FACE OF CMU ONCE FORMS ARE REMOVED.

12. IF PLACEMENT OF GROUT IS STOPPED FOR ONE HOUR OR LONGER, PROVIDE HORIZONTAL CONSTRUCTION JOINTS BY STOPPING GROUT A MINIMUM OF (1-1/2) INCHES BELOW TOP OF BLOCK.

13. REINFORCE CMU WALLS AS SHOWN ON THESE DRAWINGS. GROUT FILL ALL REINFORCED CELLS, REINFORCED CORES, AND CMU BELOW GRADE. DO NOT SUBSTITUTE MORTAR FOR GROUT. DO NOT SUBSTITUTE CONCRETE FOR GROUT. GROUT FILL ALL CELLS BELOW GRADE.

14. TEMPORARY BRACE ALL WALLS UNTIL THE STRUCTURE AND THE PERMANENT BRACING IS COMPLETED. DESIGN OF BRACING AND / OR SHORING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

15. UNLESS NOTE OTHERWISE, SPLICE REBAR WITH LAP LENGTH OF 48 BAR DIAMETERS.

WOOD FRAMING:

1. SAWN LUMBER USED FOR STRUCTURAL FRAMING SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR OTHER INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS-20.

2. PLYWOOD AND OSB SHALL BE IDENTIFIED BY A GRADE STAMP OF AN ACCREDITED GRADING OR TESTING AGENCY AND SHALL COMPLY WITH THE PERFORMANCE STANDARDS OF DOC PS-1 OR PS-2

3. STRUCTURAL GLUED LAMINATED TIMBERS OR ENGINEERED WOOD PRODUCTS ("EWP") (GLULAMS, LVL'S, PSL'S LSL'S, ETC) SHALL BE IDENTIFIED BY A GRADE STAMP OF AN ACCREDITED GRADING OR TESTING AGENCY AND SHALL COMPLY WITH THE REQUIREMENTS OF ANSI A190.1. MINIMUM BENDING STRENGTH (Fb) AND MODULUS OF ELASTICITY (E) FOR EWP SHALL BE AS FOLLOWS (U.N.O.):

GLULAM	Fb = 2,400 PSI	E = 1,800,000 PSI
LVL	Fb = 2,600 PSI	E = 2,000,000 PSI
PSL	Fb = 2,900 PSI	E = 2,000,000 PSI
LSL	Fb = 1,700 PSI	E = 1,300,000 PSI

4. TYPICAL WOOD FRAMING MEMBERS SHALL CONSIST OF SOUTHERN YELLOW PINE (SYP) AND SPRUCE-PINE FIR (SPF). SPECIES AND GRADES FOR TYPICAL FRAMIMG MEMBERS SHALL BE AS FOLLOWS (U.N.O.):

RAFTERS, PURLINS, AND CEILING JOISTS	NO.1 / NO.2 SPF
FLOOR JOISTS	NO.2 SYP
BEAMS & STRINGERS	NO. 2 SYP
LEDGERS & NAILERS	NO. 2 SYP
STUDS, HEADERS, & PLATES	NO. 1/ NO. 2 SPF
POSTS AND TIMBERS	NO. 2 SYP

   MOISTURE CONTENT OF TYPICAL WOOD FRAMING MEMBERS SHALL NOT EXCEED 19%.

5. SAWN LUMBER FRAMING MEMBERS IN CONTACT WITH CONCRETE OR MASONRY OR EXPOSED TO WEATHER SHALL BE NO.2 SYP PRESSURE PRESERVATIVE TREATED IN ACCORDANCE WITH AWPA U1. EWP FRAMING MEMBERS IN CONTACT WITH CONCRETE OR MASONRY OR EXPOSED TO WEATHER SHALL BE PRESSURE PRESERVATIVE TREATED PER MANUFACTURER'S SPECIFICATIONS.

6. ALL NAILS SHALL BE COMMON NAILS U.N.O. ALL BOLTS SHALL BE A307 CARBON STEEL U.N.O. WOOD SCREWS SHALL BE DRIVEN WITH EMBEDMENT EQUAL TO (10) SCREW DIAMETERS U.N.O. LAG SCREWS SHALL BE DRIVEN WITH EMBEDMENT EQUAL TO (8) SCREW DIAMETERS U.N.O. LAG SCREWS LARGER THAN 3/8" DIAMETER SHALL BE INSTALLED IN PILOT HOLES 75% OF THE NOMINAL SCREW DIAMETER.

7. ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL HAVE WASHERS. ALL BOLT HOLES IN WOOD SHALL BE DRILLED 1/16" (MAXIMUM) LARGER THAN THE NOMINAL BOLT DIAMETER. BOLTS AT SILL PLATES AND LEDGERS SHALL BE PLACED A MAXIMUM OF 12 INCHES AND NOT LESS THAN (7) BOLT DIAMETERS FROM THE END OF THE MEMBER. BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE MEMBER WIDTH U.N.O.

8. FASTENERS, INCLUDING NUTS AND WASHERS, USED IN EXTERIOR CONDITIONS OR IN CONTACT WITH PRESSURE PRESERVATIVE TREATED WOOD SHALL BE HOT-DIPPED, ZINC COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER, COATING TYPES AND WEIGHTS SHALL BE IN ACCORDANCE WITH ASTM A153. COATING TYPES AND WEIGHTS FOR FRAMING CONNECTORS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED SPECIFICATIONS.

9. PROPRIETARY FRAMING CONNECTORS (ANCHORS, HOLDOWNS, POST BASES, POST CAPS, STRAP TIES, ETC) SHALL BE MANUFACTURED BY "SIMPSON STRONG TIE" OR APPROVED EQUAL. INSTALL FRAMING CONNECTORS WITH THE MAXIMUM QUANTITY OF MANUFACTURER'S SPECIFIED FASTENERS, U.N.O.

10. SHEATHING NAILS OR OTHER APPROVED SHEATHING FASTENERS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING. NAILS SHALL BE CONSIDERED "OVER DRIVEN" IF THE HEAD OR CROWN IS EMBEDDED MORE THAN 1/8" INTO THE SURFACE OF THE SHEATHING. IF MORE THAN 20% OF FASTENERS AT THE PERIMETER OF A SHEATHING PANEL ARE OVER DRIVEN, THAT PANEL AND IT'S SUPPORTING PANEL EDGE FRAMING (STUDS, PLATES, AND / OR BLOCKING) SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

11. PLYWOOD FLOOR SHEATHING SHALL BE GLUED TO THE FLOOR JOISTS WITH ONE CONTINUOUS BEAD OF AN ADHESIVE COMPLYING CONFORMING TO ASTM D 3024 AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. AT THE CONTRACTOR'S OPTION, SIMPSON WSV SUBFLOOR SCREWS (OR APPROVED EQUAL) MAY BE USED IN LIEU OF FLOOR SHEATHING NAILS SPECIFIED HEREIN AT THE SAME FASTENER SPACING AND EMBEDMENT.

12. CUTTING, NOTCHING, OR DRILLING OF FRAMING MEMBERS SHALL BE PERMITTED ONLY AS DETAILED OR APPROVED BY STONEWALL EXCEPTION: SMALL DIAMETER HOLES AND IN CONVENTIONAL SAWN LUMBER COMPLYING WITH THE REQUIREMENTS OF THE ADOPTED BUILDING CODE OR IN EWP COMPLYING WITH THE MANUFACTURER'S RECOMMENDATIONS.

13. PROVIDE SOLID SQUASH BLOCKING BELOW POINT LOADS (POSTS, STUD PACKS, BEAMS, ETC) TO SOLID STRUCTURE BELOW (WALL PLATES, FOUNDATION WALLS, DROPPED BEAMS, ETC.) SQUASH BLOCKING SHALL MATCH THE SIZE OF THE MEMBER BEARING ABOVE.

14. PROVIDE ADDITIONAL JOIST(S) UNDER ALL PARALLEL NON-BEARING PARTITIONS AND SOLID BLOCKING UNDER ALL PERPENDICULAR NON-BEARING PARTITIONS. INSTALL DOUBLE JOISTS WITH 2x SPACER PLATES AT PLUMBING WALLS TO ACCOMMODATE PIPING.

15. ALL MULTI-PLY JOISTS AND BEAMS SHALL BE SUPPORTED BY HANGERS AT FLUSH CONNECTIONS. ALL MULTI-PLY JOISTS AND BEAMS SHALL BE GANG NAILED WITH (3) 10d NAILS AT EACH END AND (3) ROWS OF 10d NAILS AT 16" O.C. (PER PLY) U.N.O.

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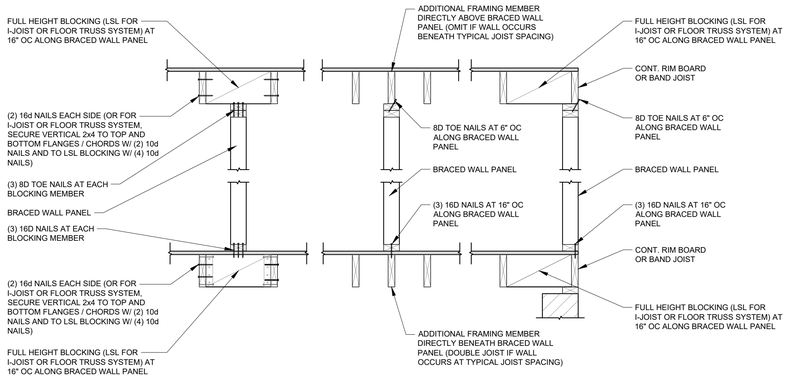
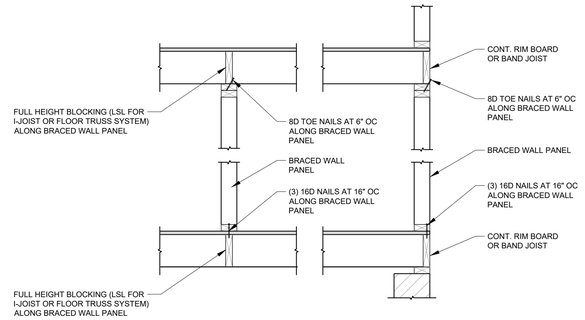
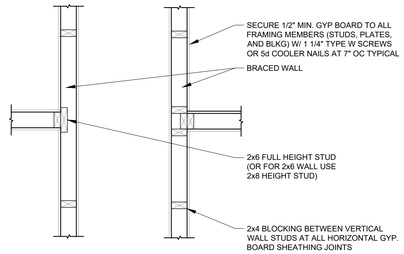
DATE 11.03.2025
SCALE AS SHOWN
DRAWN CTG
JOB 25-2474
SHEET S0.0



BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR / CEILING FRAMING 2



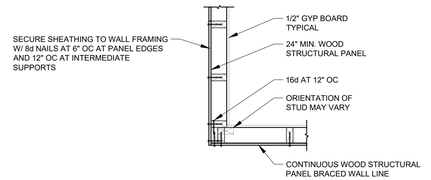
BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR / CEILING FRAMING 3



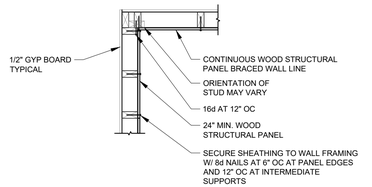
T-PLATE WALL INTERSECTION

3-STUD WALL INTERSECTION

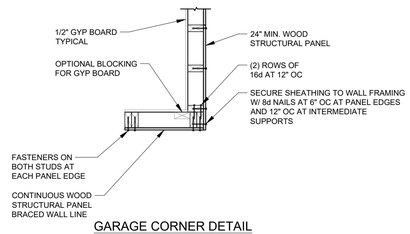
METHOD "GB" INTERSECTION DETAILS 4



OUTSIDE CORNER DETAIL



INSIDE CORNER DETAIL



GARAGE CORNER DETAIL

TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING 12

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 054655 WILLIAM M MCDONALD
11/03/2025

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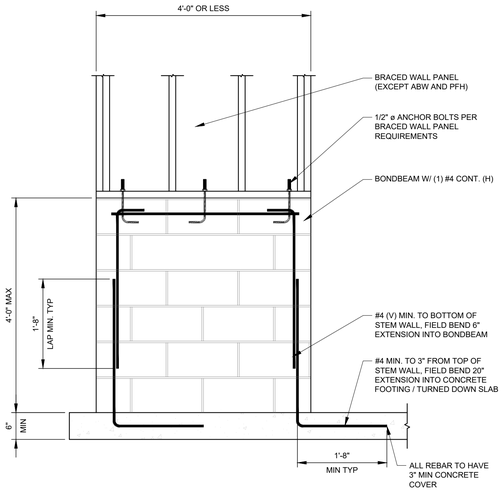
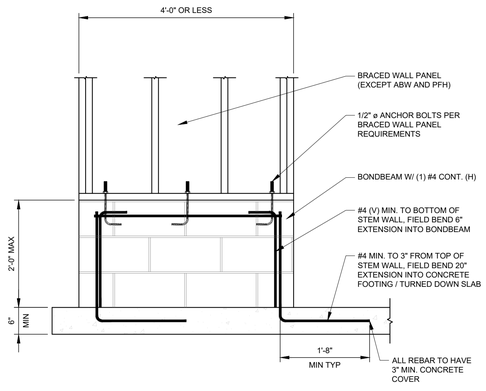
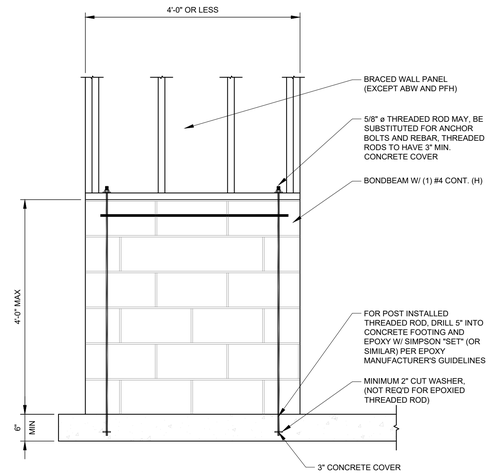
DATE	11.03.2025
SCALE	AS SHOWN
DRAWN	CTG
JOB	25-2474
SHEET	S0.1



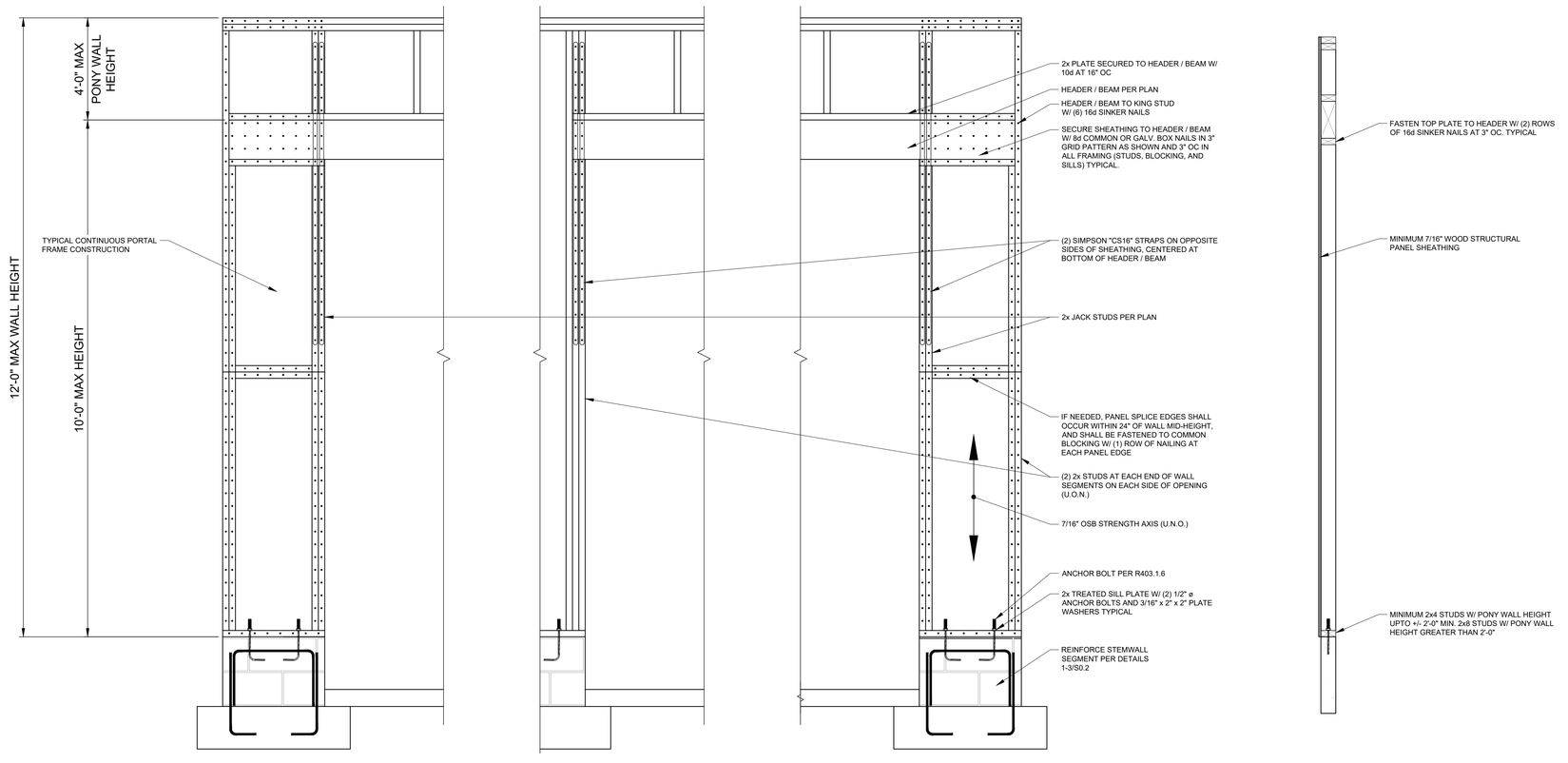
TALL STEM WALL REINFORCEMENT 1



SHORT STEM WALL REINFORCEMENT 2



OPTIONAL STEM WALL REINFORCEMENT 3



OVER STEMWALL OR CRAWLSPACE FOUNDATION

METHOD PF: PORTAL FRAME PANEL CONSTRUCTION

METHOD PF: PORTAL FRAME PANEL CONSTRUCTION 12

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FOUNDATION NOTES:

1. SEE GENERAL NOTES ON S0.0 SHEET SERIES AND FOUNDATION DETAILS ON S2.0 SHEET SERIES FOR ADDITIONAL INFORMATION
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND COORDINATING DIMENSIONS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STONEWALL OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
3. TOP OF FOOTING ELEVATIONS SHOWN ON THIS PLAN ARE MEASURED RELATIVE TO FINISH FLOOR AT FIRST FLOOR. ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ASSUME A FINISH FLOOR ELEVATION OF (0'-0") AT THE FIRST FLOOR . ELEVATION (0'-0") IS A REFERENCE FLOOR ELEVATION ONLY. SEE CIVIL AND / OR ARCHITECTURAL DRAWINGS FOR ACTUAL FLOOR ELEVATIONS.
4. CONTRACTOR SHALL COORDINATE ELEVATIONS SHOWN ON THIS PLAN WITH FINAL CIVIL DRAWINGS. CONTRACTOR SHALL NOTIFY STONEWALL OF ANY DISCREPANCIES BETWEEN THESE FOUNDATION DRAWINGS AND THE FINAL CIVIL DRAWINGS PRIOR TO EXCAVATION FOR FOUNDATIONS.

LEGEND:

INDICATES 8" CMU FOUNDATION WALL AND CONCRETE FOOTING

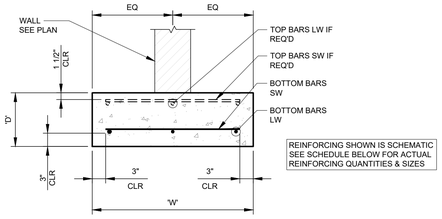
INDICATES 16" x 16" CMU PIER AND CONCRETE FOOTING

INDICATES 8" x 16" CMU PIER AND CONCRETE FOOTING

POST SCHEDULE				
MARK	PLAN VIEW	POST	BASE	ANCHORAGE
P1		P.T. 6x6	ABU66Z	(1) 5/8" ø x 10" LONG THREADED ROD EPOXY ANCHOR
P2		5 1/4" x 5 1/4" PARALLAM		
P3		P.T. 6x6	ABA66Z	(1) 5/8" ø x 6" LONG TITEN HD SCREW ANCHOR

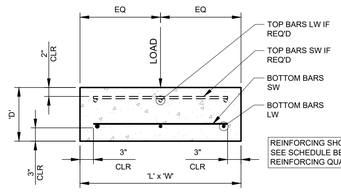
NOTES:

1. GANG STUD PACKS TOGETHER PER DETAIL 3/S2.2 WHERE NOTED
2. PROVIDE SOLID SQUASH BLOCKS IN FLOOR BELOW POSTS / STUD PACKS
3. AT MARKED SHEAR WALLS, NAIL SHEATHING TO EACH PLY WITH TYPICAL EDGE NAILING



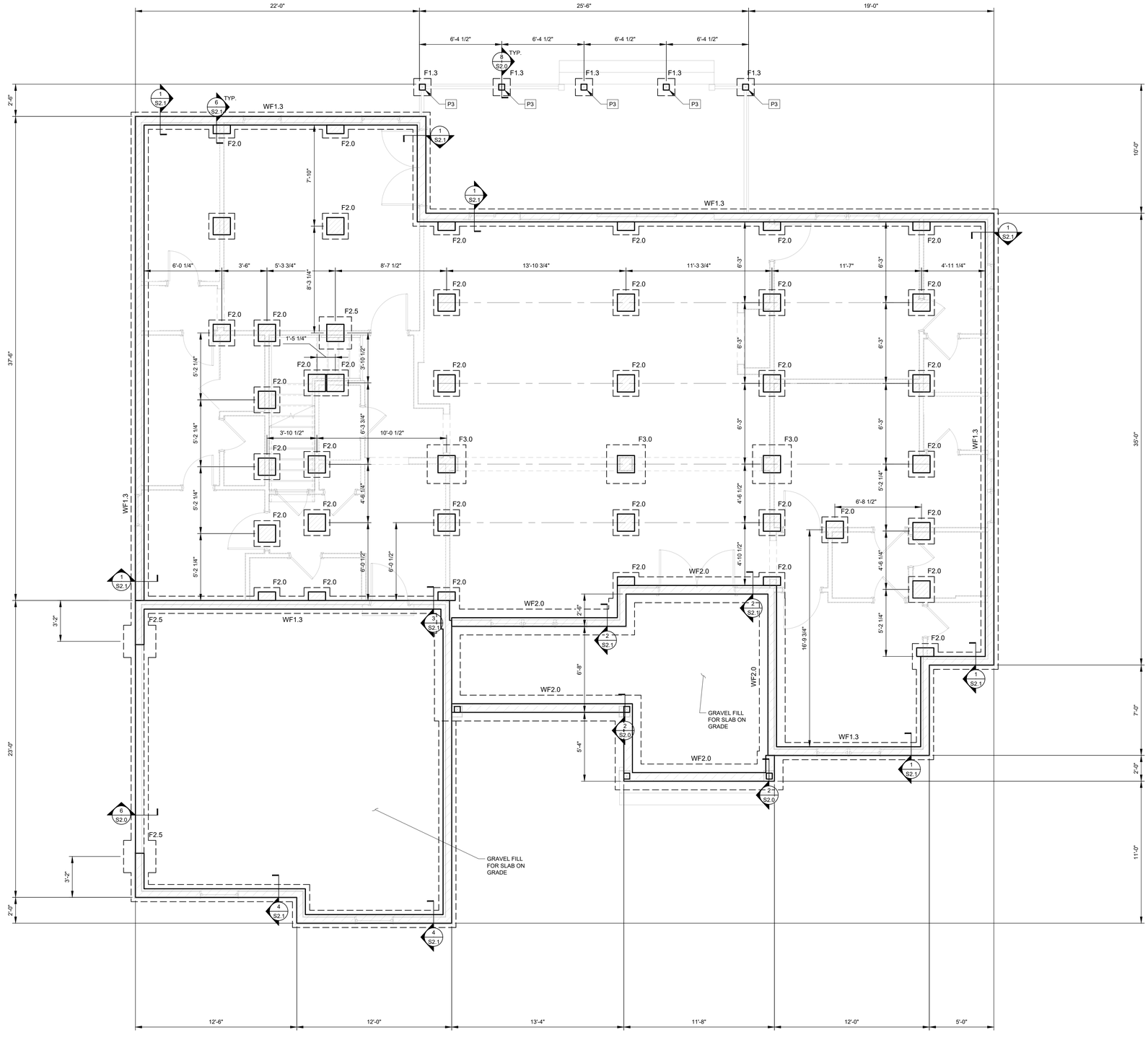
WALL FOOTING SCHEDULE						
FOOTING		REINFORCING				REMARKS
MARK	SIZE W x D	BOTTOM BARS		TOP BARS		
		LONG WAY (LW)	SHORT WAY (SW)	LONG WAY (LW)	SHORT WAY (SW)	
WF1.3	1'-4" x 1'-0"	(3) #4 CONT.	#4 x 0'-10" AT 16" OC	N/A	N/A	
WF2.0	2'-0" x 1'-0"	(3) #4 CONT.	#4 x 1'-6" AT 16" OC	N/A	N/A	

1. "WFX.X" DENOTES CONT. WALL FOOTING (POURED SEPARATE FROM SLAB ON GRADE)
2. "E.W." DENOTES EACH WAY
3. "LW" DENOTES LONG WAY
4. "SW" DENOTES SHORT WAY



ISOLATED FOOTING SCHEDULE						
FOOTING		REINFORCING				REMARKS
MARK	SIZE L x W x D	BOTTOM BARS		TOP BARS		
		LONG WAY (LW)	SHORT WAY (SW)	LONG WAY (LW)	SHORT WAY (SW)	
F1.3	1'-4" x 1'-4" x 1'-3"	N/A	N/A	N/A	N/A	
F2.0	2'-0" x 2'-0" x 1'-0"	(3) #4 x 1'-6" LONG	(3) #4 x 1'-6" LONG	N/A	N/A	
F2.5	2'-6" x 2'-6" x 1'-0"	(4) #4 x 2'-0" LONG	(4) #4 x 2'-6" LONG	N/A	N/A	
F3.0	3'-0" x 3'-0" x 1'-0"	(4) #4 x 2'-6" LONG	(4) #4 x 2'-6" LONG	N/A	N/A	

1. "F.X.X" DENOTES ISOLATED FOOTING (POURED SEPARATE FROM SLAB ON GRADE)
2. "E.W." DENOTES EACH WAY
3. "LW" DENOTES LONG WAY
4. "SW" DENOTES SHORT WAY



FOUNDATION PLAN

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

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Lic. # P-0951

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 054655 11/03/2025 SCOTT M. MCDONALD

REVISIONS	BY

Wilson Residence
Building Virtually
129 Zachariah Rd.
Nashville, North Carolina 27586

DATE	11.03.2025
SCALE	AS SHOWN
DRAWN	CTG
JOB	25-2474
SHEET	S1.0

FLOOR FRAMING/SLAB NOTES:

1. SEE GENERAL NOTES ON S0.0 SHEET SERIES AND FRAMING DETAILS ON S2.0 SHEET SERIES FOR ADDITIONAL INFORMATION.
2. FRAMING MEMBER LOCATIONS ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR EXACT LOCATIONS AND FOR COORDINATING LOCATIONS WITH FLOOR RECESSES, MECHANICAL CHASES, PIPING ETC.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STONEWALL OF DISCREPANCIES PRIOR TO STARTING WORK.
4. FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) CD EXPOSURE 1 PLYWOOD OR EQUIVALENT OSB. ORIENT SHEATHING WITH LONG DIRECTION PERPENDICULAR TO FRAMING. ATTACH SHEATHING TO FRAMING WITH 10d NAILS @ 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING. (GLUE AND NAIL FLOOR SHEATHING.)
5. SEE WALL FRAMING PLAN FOR HEADERS AND POSTS BELOW. USE THIS PLAN IN CONJUNCTION WITH WALL FRAMING PLAN TO LOCATE FRAMING MEMBERS AND HARDWARE.
6. INSTALL SOLID SQUASH BLOCKS MATCHING POST/STUDPACK SIZE ABOVE IN FLOOR FRAMING BELOW. SEE WALL FRAMING PLAN ABOVE FOR POSTS/STUDPACKS.
7. ALL GIRDERS SHALL BE INSTALLED DROPPED U.N.O. ATTACH JOISTS AT FLUSH GIRDERS/BEAMS USING LUS28 (2x8) OR LUS210 (2x10) HANGERS.
8. PROVIDE ADDITIONAL JOIST(S) UNDER ALL PARALLEL NON-BEARING PARTITIONS AND SOLID BLOCKING UNDER ALL PERPENDICULAR NON-BEARING PARTITIONS. INSTALL DOUBLE JOISTS WITH 2x SPACER PLATES AT PLUMBING WALLS TO ACCOMMODATE PIPING.
9. TYPICAL FLOOR SLAB SHALL BE 4" THICK CONCRETE SLAB-ON-GRADE OVER VAPOR BARRIER OVER 4" (MIN.) CRUSHED STONE BASE. REINFORCE SLAB WITH 6x6-W2.1xW2.1 W.W.M. CENTERED IN SLAB DEPTH.
10. "C.J." INDICATES SLAB JOINT. SEE SHEET SERIES S2.0 FOR TYPICAL JOINT DETAILS.

DECK FRAMING NOTES:

1. INSTALL DOUBLE JOISTS TIGHT TO BUILDING AND AT FREE EDGES OF DECK U.N.O.
2. DECKING SHALL BE 5/4 x 6 S4S (NOMINAL) INSTALLED PERPENDICULAR OR DIAGONAL TO JOISTS. EACH DECK BOARD SHALL BE CONTINUOUS ACROSS (3) JOISTS (MINIMUM) AND ATTACH TO EACH WITH (2) #10 x 3" LONG WOOD SCREWS. ATTACH DECKING TO ALL RIMS AND BEAMS WITH TYPICAL FASTENERS AT 6" OC. CONTRACTOR/OWNER OPTION TO UTILIZE COMPOSITE ALTERNATIVE CONFORMING TO SECTION AM107 IN THE 2018 NC RESIDENTIAL CODE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
3. BEAMS SHALL BE INSTALLED FLUSH U.N.O. ATTACH EACH JOIST TO FLUSH BEAMS/LEDGERS LUS210 FACE MOUNT HANGERS.
4. LEDGERS SHALL BE INSTALLED FLUSH U.N.O. LEDGERS SHALL BE CONTINUOUS OVER OPENINGS AND 12" BEYOND OPENINGS. ATTACH EACH JOIST TO LEDGER WITH LUS28 FACE MOUNT HANGERS.
5. ALL HARDWARE (BOLTS, NAILS, CONNECTORS, ETC.) SHALL BE HOT DIPPED ZINC COATED GALVANIZED ("GALV") . ALL FRAMING MEMBERS SHALL BE PRESSURE TREATED ("P.T.") AND CUT ENDS SHALL BE PRESERVATIVE SEALED.
6. STAIRS AND GUARDRAILS (BY OTHERS) SHALL COMPLY WITH "APPENDIX M" OF THE NORTH CAROLINA RESIDENTIAL CODE OR DCA6 BY THE AMERICAN WOOD COUNCIL.

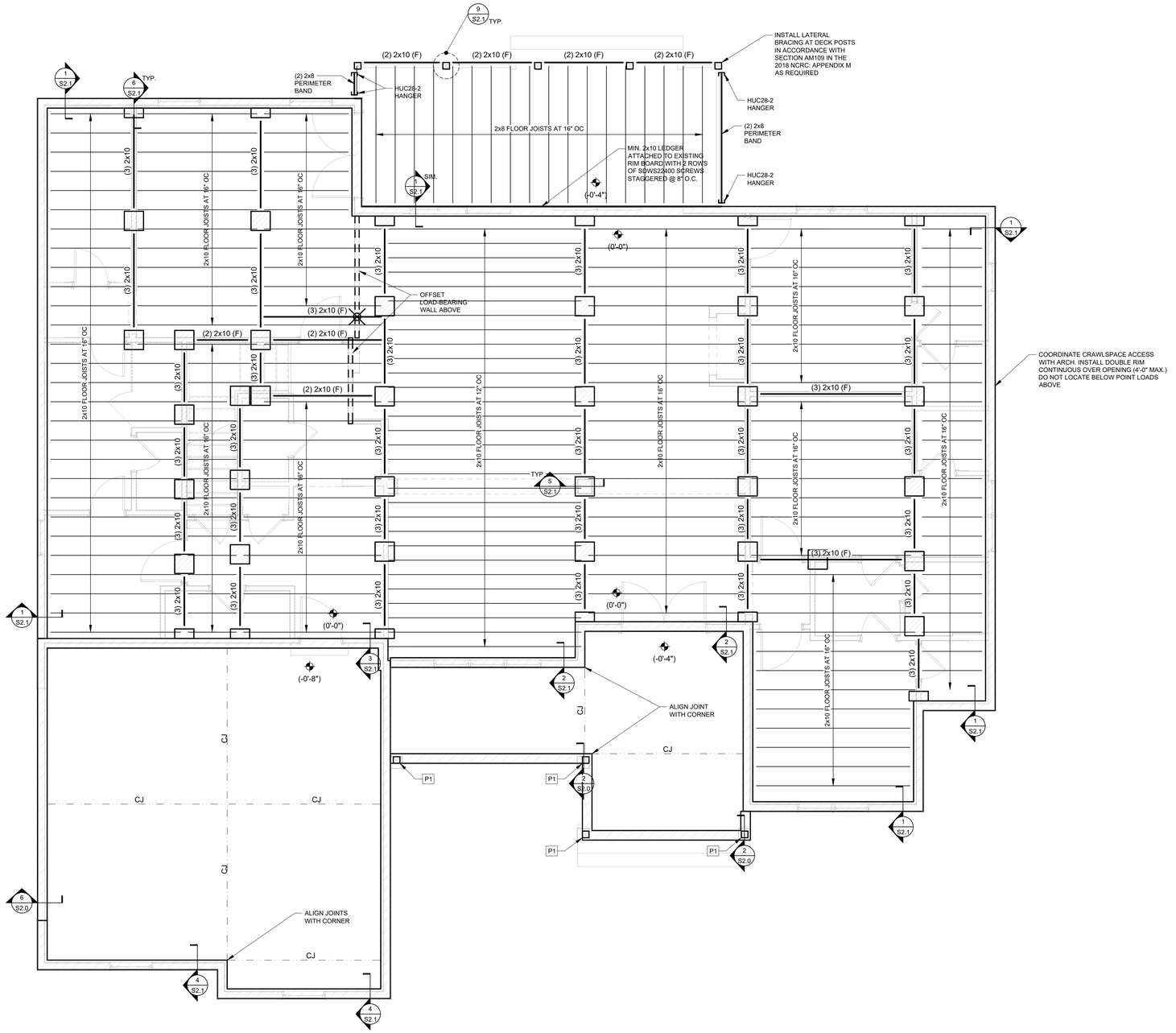
LEGEND:

INDICATES 8" CMU FOUNDATION WALL

INDICATES 16" x 16" CMU PIER

INDICATES 8" x 16" CMU PIER

(0'-0") INDICATES ASSUMED FLOOR ELEVATION (+ OR -) RELATIVE TO REFERENCE FLOOR ELEVATION (0'-0")



FIRST FLOOR FRAMING PLAN

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

POST SCHEDULE				
MARK	PLAN VIEW	POST	BASE	ANCHORAGE
P1		P.T. 6x6	ABU66Z	(1) 5/8" ø x 10" LONG THREADED ROD EPOXY ANCHOR
P2		5 1/4" x 5 1/4" PARALLAM		
P3		P.T. 6x6	ABA66Z	(1) 5/8" ø x 6" LONG TITEN HD SCREW ANCHOR

NOTES:

1. GANG STUD PACKS TOGETHER PER DETAIL 3/S2.2 WHERE NOTED
2. PROVIDE SOLID SQUASH BLOCKS IN FLOOR BELOW POSTS / STUD PACKS
3. AT MARKED SHEAR WALLS, NAIL SHEATHING TO EACH PLY WITH TYPICAL EDGE NAILING

REVISIONS	BY

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 054655 WILLIAM M MCDONALD 11/03/2025

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Nashville, North Carolina 27586

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DRAWN	CTG
JOB	25-2474
SHEET	S1.1

CEILING/FLOOR FRAMING NOTES:

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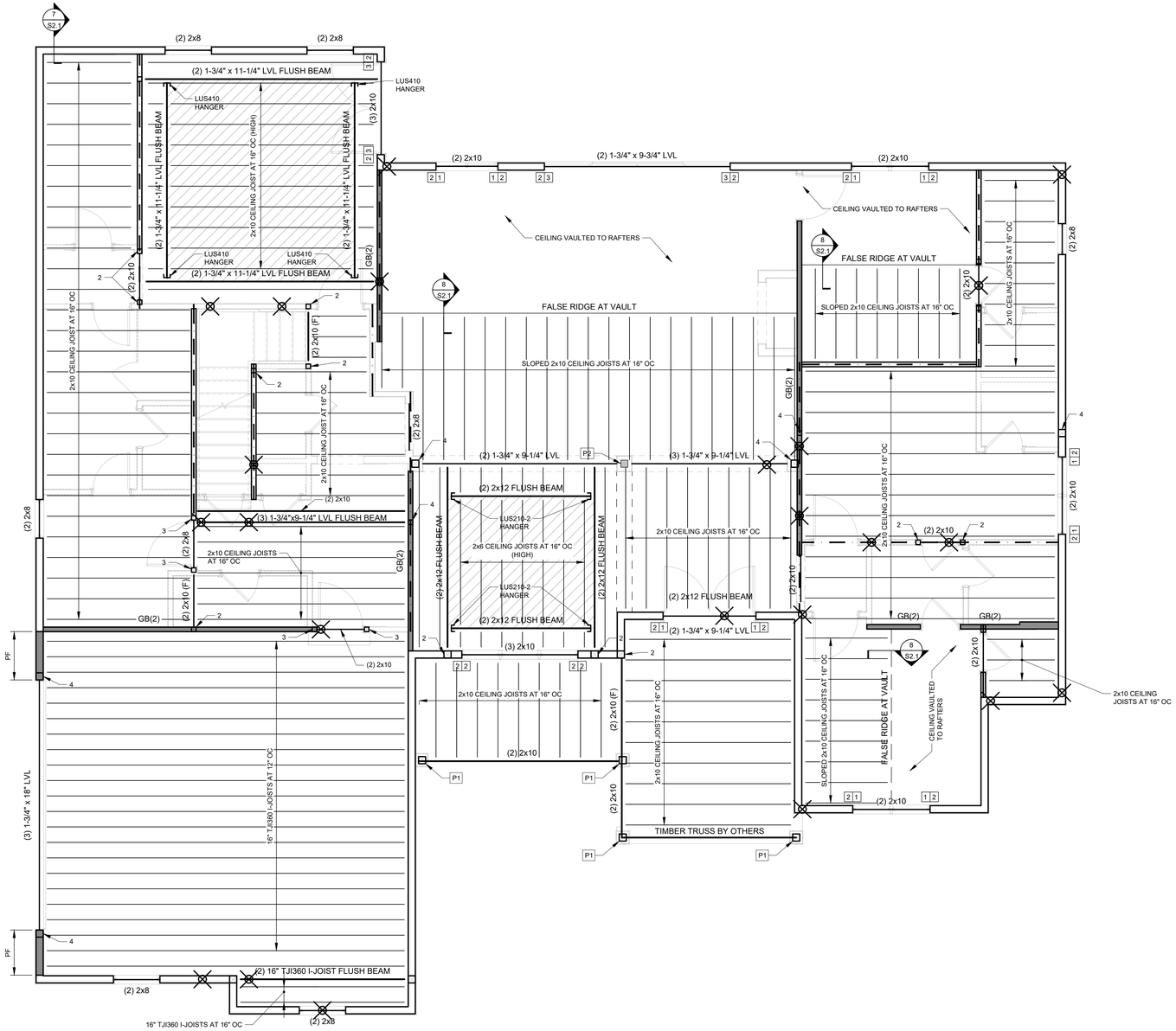
2. FRAMING MEMBER LOCATIONS ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR EXACT LOCATIONS AND FOR COORDINATING LOCATIONS WITH FLOOR RECESSES, MECHANICAL CHASES, PIPING ETC.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STONEWALL OF DISCREPANCIES PRIOR TO STARTING WORK.
4. FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) CD EXPOSURE 1 PLYWOOD OR EQUIVALENT OSB. ORIENT SHEATHING WITH LONG DIRECTION PERPENDICULAR TO FRAMING. ATTACH SHEATHING TO FRAMING WITH 10d NAILS @ 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING. (GLUE AND NAIL FLOOR SHEATHING.)
5. ALL GIRDERS AND BEAMS SHALL BE INSTALLED DROPPED U.N.O. ATTACH FLOOR FRAMING AT FLUSH BEAMS USING LUS210 HANGERS U.N.O.
6. PROVIDE ADDITIONAL JOIST(S) UNDER ALL PARALLEL NON-BEARING PARTITIONS AND SOLID BLOCKING UNDER ALL PERPENDICULAR NON-BEARING PARTITIONS. INSTALL DOUBLE JOISTS WITH 2x SPACER PLATES AT PLUMBING WALLS TO ACCOMMODATE PIPING.
7. INSTALL SOLID SQUASH BLOCKS MATCHING POST/STUDPACK SIZE ABOVE IN FLOOR FRAMING BELOW. SEE LOFT CEILING AND ROOF FRAMING PLANS FOR ABOVE POSTS/STUDPACKS.
8. EXTERIOR LOAD BEARING WALLS SHALL CONSIST OF SPF NO.2 2x6 STUDS AT 16" OC (U.N.O.) INTERIOR LOAD BEARING WALLS SHALL CONSIST OF SPF NO.2 2x STUDS (WIDTH PER ARCH. AT 16" OC (U.N.O.). COORDINATE PARTITION WALLS WITH ARCHITECTURAL DRAWINGS.
9. EXTERIOR WALLS SHALL BE CONTINUOUSLY SHEATHED WITH 7/16" CD EXPOSURE 1 PLYWOOD OR EQUIVALENT OSB. BLOCK ALL SHEATHING PANEL EDGES. ATTACH SHEATHING TO FRAMING WITH 10d NAILS AT 6" OC EDGE NAILING AND 12" OC FIELD NAILING.
10. LAP SPLICE TOP PLATES WITH (10) 10d NAILS. STAGGER TOP PLATE SPLICES.
11. TYPICAL INTERIOR NON-LOAD BEARING HEADERS SHALL BE AS FOLLOWS:
    LESS THAN 4'-0" = (2) 2x4
    LESS THAN 6'-0" = (2) 2x6
    LESS THAN 8'-0" = (2) 2x8
    BEAR NON-LOAD BEARING HEADERS ON SINGLE 2x JACK STUD AND SINGLE 2x KING STUD EACH END.

LEGEND:

- INDICATES 2x (WIDTH PER ARCH.) AT 16" OC NEW STUD WALL
- INDICATES INTERIOR LOAD BEARING WALL BELOW
- PF — INDICATES PORTAL FRAME PER DETAIL 12/S0.2
- HEADER (4 4 / 4 4) — NO. OF KINGS, NO. OF JACKS — INDICATES NUMBER OF JACK STUDS AND KING STUDS INSTALL (1) JACK AND (1) KING STUD U.N.O.
- 4 — INDICATES NUMBER OF 2x STUDS BENEATH BEAM. INSTALL MINIMUM (3) STUDS BELOW GIRDER, FLUSH BEAMS, INTERIOR HEADERS U.N.O.
- INDICATES POINT LOAD FROM LOCATION ABOVE.
- GB (2) — INDICATES BRACED WALL PANEL. "GB (2)" INDICATES 1/2" -THICK GYPSUM BOARD ON BOTH SIDES OF THE WALL IN ACCORDANCE WITH R602.10.3 OF THE NCRC WITH PRESCRIPTIVE FASTENERS
- INDICATES TRAY CEILING PER ARCH.



POST SCHEDULE

MARK	PLAN VIEW	POST	BASE	ANCHORAGE
P1		P.T. 6x6	ABU66Z	(1) 5/8" ø x 10" LONG THREADED ROD EPOXY ANCHOR
P2		5 1/4" x 5 1/4" PARALLAM		
P3		P.T. 6x6	ABA66Z	(1) 5/8" ø x 6" LONG TITEN HD SCREW ANCHOR

NOTES:

1. GANG STUD PACKS TOGETHER PER DETAIL 3/S2.2 WHERE NOTED
2. PROVIDE SOLID SQUASH BLOCKS IN FLOOR BELOW POSTS / STUD PACKS
3. AT MARKED SHEAR WALLS, NAIL SHEATHING TO EACH PLY WITH TYPICAL EDGE NAILING

SECOND FLOOR/ATTIC FRAMING PLAN

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

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SHEET	S1.2

ATTIC FRAMING NOTES:

1. SEE GENERAL NOTES ON S0.0 SHEET SERIES AND FRAMING DETAILS ON S2.0 SHEET SERIES FOR ADDITIONAL INFORMATION.
2. FRAMING MEMBER LOCATIONS ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR EXACT LOCATIONS AND FOR COORDINATING LOCATIONS WITH FLOOR RECESSES, MECHANICAL CHASES, PIPING ETC.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STONEWALL OF DISCREPANCIES PRIOR TO STARTING WORK.
4. ATTIC SHEATHING SHALL BE 3/4" (NOMINAL) CD EXPOSURE 1 PLYWOOD OR EQUIVALENT OSB, ORIENT SHEATHING WITH LONG DIRECTION PERPENDICULAR TO FRAMING. ATTACH SHEATHING TO FRAMING WITH 10d NAILS @ 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING. (GLUE AND NAIL FLOOR SHEATHING.)
5. SEE SECOND FLOOR/ATTIC FRAMING PLAN FOR HEADERS AND POSTS BELOW. USE THIS PLAN IN CONJUNCTION WITH SECOND FLOOR/ATTIC FRAMING PLAN TO LOCATE FRAMING MEMBERS AND HARDWARE.
6. INSTALL SOLID SQUASH BLOCKS MATCHING POST/STUDPACK SIZE ABOVE IN FLOOR FRAMING BELOW. SEE ROOF FRAMING PLAN ABOVE FOR POSTS/STUDPACKS.

LEGEND:

INDICATES 2x (WIDTH PER ARCH.) AT 16" OC NEW STUD WALL

INDICATES INTERIOR LOAD BEARING WALL BELOW

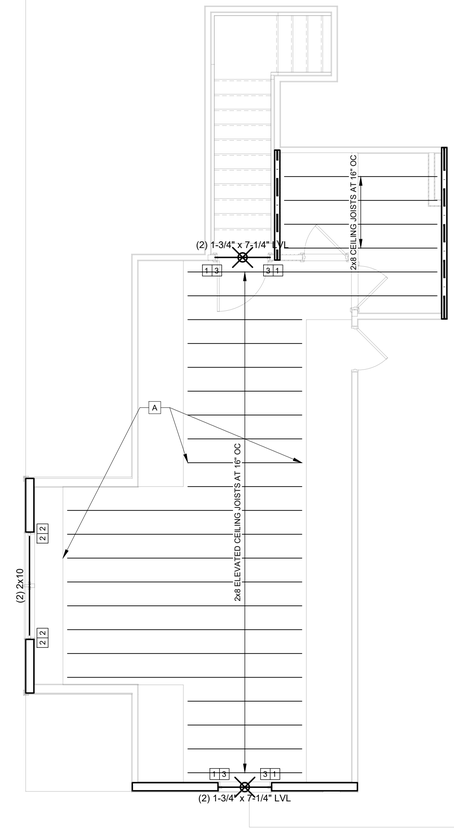
HEADER
4 4 4 4
NO. OF KINGS
NO. OF JACKS
NO. OF KINGS
NO. OF JACKS

INDICATES NUMBER OF JACK STUDS AND KING STUDS
INSTALL (1) JACK AND (1) KING STUD U.N.O.

INDICATES POINT LOAD FROM LOCATION ABOVE

A

ATTACH ELEVATED RAFTER TIES AT HEEL JOINT USING MIN. (5) 16d NAILS (TYP.)



LOFT CEILING FRAMING PLAN

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

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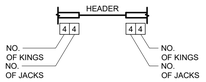
SHEET	S1.3

ROOF FRAMING NOTES:

1. SEE GENERAL NOTES ON S0.0 SHEET SERIES AND FRAMING DETAILS ON S2.0 SHEET SERIES FOR ADDITIONAL INFORMATION.
2. FRAMING MEMBER LOCATIONS ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR EXACT LOCATIONS AND FOR COORDINATING LOCATIONS WITH ATTIC ACCESS, MECHANICAL UNITS, PIPING ETC.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STONEWALL OF DISCREPANCIES PRIOR TO STARTING WORK.
4. TYPICAL ROOF FRAMING SHALL CONSIST OF 2x8 RAFTERS AT 16" OC U.N.O. COORDINATE PLATE HEIGHT, ROOF SLOPE, SOFFIT, EAVE, AND HEEL DETAILING WITH ARCHITECT.
5. COLLAR TIES SHALL BE 2x4 AT 48" OC AT ALL RIDGES U.N.O.
6. ALL "TEE" BRACES ARE (2) 2x6 (MINIMUM) NAILED WITH 16d NAILS AT 6" OC VERTICALLY FROM TOP TO BOTTOM. BRACES LONGER THAN 10'-0" MUST BE BRACED HORIZONTALLY IN (2) DIRECTIONS AT MID-HEIGHT.
7. ALL HOGS-TROUGHS OR STRONG BACKS ON CEILING JOISTS OR RAFTERS ARE (2) 2x8's (MINIMUM) U.N.O.
8. GABLE END ROOF FRAMING MUST HAVE GABLE ENDS BRACED PARALLEL TO RIDGES WITH MINIMUM OF 2x6 DIAGONAL BRACES AT 48" OC. SEE DETAIL 12/S2.2.
9. ROOF SHEATHING SHALL BE 1/2" (NOMINAL) CD EXPOSURE 1 PLYWOOD OR EQUIVALENT OSB. ORIENT SHEATHING WITH LONG DIRECTION PERPENDICULAR TO FRAMING. FASTEN SHEATHING TO FRAMING WITH 10d NAILS @ 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING. SEE DETAIL 1/S2.2 FOR WOOD ROOF SHEATHING ATTACHMENT.
10. SEE ARCHITECTURAL DRAWINGS FOR ROOF VENT LOCATIONS. U.N.O., RIDGE VENTS SHALL BE CONTINUOUS ALONG ALL RIDGE LINES.
11. ALL ROOF FRAMING SHALL BE TIED TO WALLS BELOW WITH H2.5A HURRICANE TIES AT EACH END U.N.O. SEE PLAN FOR NON-TYPICAL TIEDOWNS AT BEAMS AND OTHER FRAMING MEMBERS.
12. SEE LOFT ATTIC AND SECOND FLOOR FRAMING PLANS FOR HEADERS AND POSTS BELOW. USE THIS PLAN IN CONJUNCTION WITH LOFT CEILING AND SECOND FLOOR/ATTIC FRAMING PLANS TO LOCATE FRAMING MEMBERS AND HARDWARE.

LEGEND:

INDICATES 2x (WIDTH PER ARCH.) AT 16" OC NEW STUD WALL



INDICATES NUMBER OF JACK STUDS AND KING STUDS
INSTALL (1) JACK AND (1) KING STUD U.N.O.

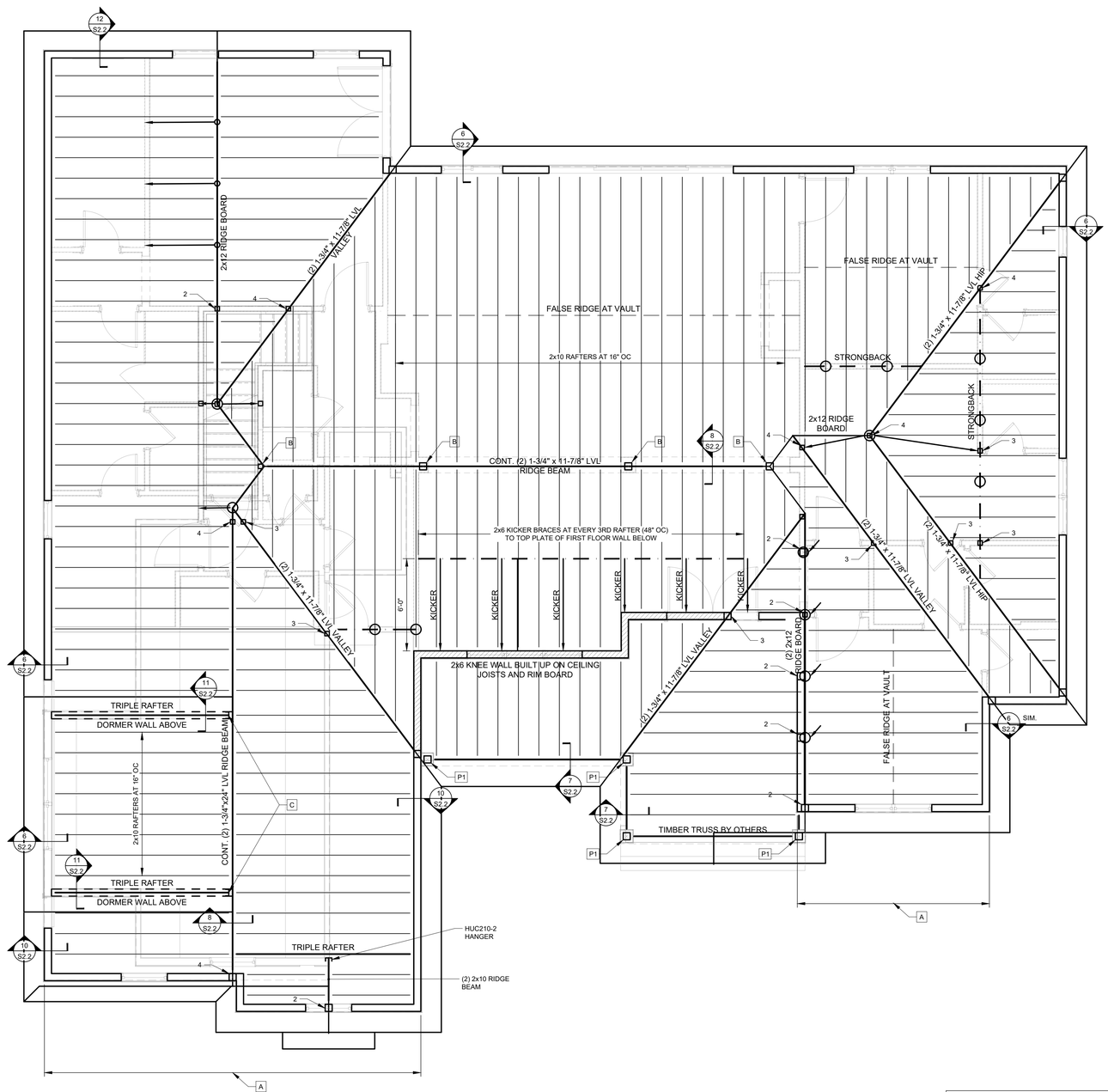
4 — INDICATES NUMBER OF 2x STUDS BENEATH BEAM. INSTALL MINIMUM (3) STUDS BELOW RIDGE, VALLEY, AND HIP BEAMS U.N.O.

INDICATES LOCATION AND DIRECTION OF BRACE AT RAFTER LEVEL. BRACES SHALL BE MINIMUM (2) 2x6 STUDS FORMING A "TEE" SHAPE GANG NAILED WITH 16d NAILS AT 6" OC (2x6 AT 10'-0" OR LESS, 2x8 AT 16'-0" OR LESS)

A — BALLOON FRAME GABLE ENDWALL USING 2x6 STUDS AT 16" OC. INSTALL HEADERS/JACK STUDS TO INTERRUPTS BALLOON FRAMING. INSTALL BLOCKING AT SHEATHING PANEL SPLICES AND ATTACH USING TYPICAL FASTENERS

B — (4) 2x6 RIDGE BEAM COLUMN (MAX. HEIGHT = 14'-0") GANG NAILED PER DETAIL 3/S2.2

C — ATTACH TRIMMER RAFTERS AT RIDGE BEAM USING (2) L70 CLIP ANGLES WITH SD CONNECTORS SCREWS (ONE ON EACH SIDE OF TRIMMER RAFTER)



ROOF FRAMING PLAN

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

POST SCHEDULE

MARK	PLAN VIEW	POST	BASE	ANCHORAGE
P1	□	P.T. 6x6	ABU66Z	(1) 5/8" ø x 10" LONG THREADED ROD EPOXY ANCHOR
P2	▨	5 1/4" x 5 1/4" PARALLAM		
P3	□	P.T. 6x6	ABA66Z	(1) 5/8" ø x 6" LONG TITEN HD SCREW ANCHOR

NOTES:

1. GANG STUD PACKS TOGETHER PER DETAIL 3/S2.2 WHERE NOTED
2. PROVIDE SOLID SQUASH BLOCKS IN FLOOR BELOW POSTS / STUD PACKS
3. AT MARKED SHEAR WALLS, NAIL SHEATHING TO EACH PLY WITH TYPICAL EDGE NAILING

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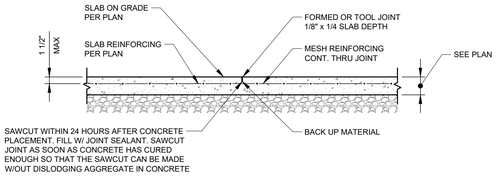
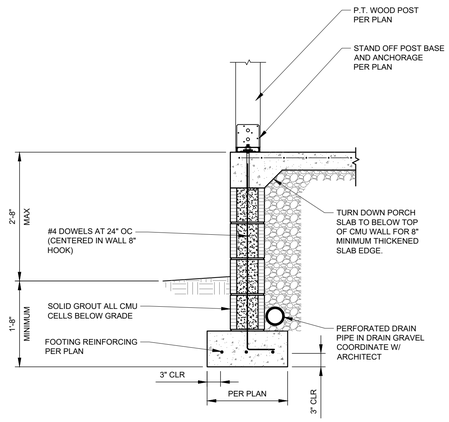


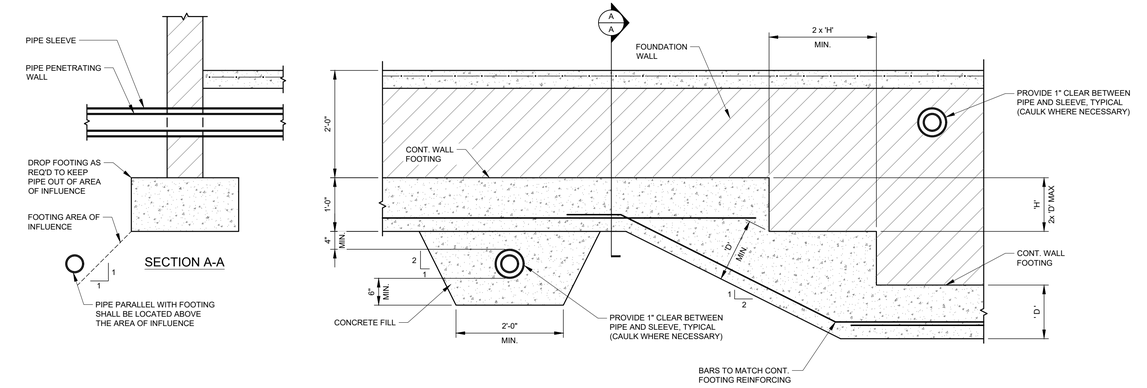
SCALE: 3/4" = 1'-0"

SAWCUT CONTRACTION JOINT 1



SCALE: 3/4" = 1'-0"

POST BEARING AT STEMWALL 2



SCALE: N.T.S.

STEPPED FOOTING AND PIPING INTERACTION DETAIL 4

NOTE:
BROOM FINISH. SLOPE TO DRAIN AWAY FROM THE BUILDING

SCALE: 3/4" = 1'-0"

TURNDOWN SLAB AT EXTERIOR OVERHEAD DOORS 5

NOTE: 1
CLASS "B" TENSION LAP SPLICE
OR 24", WHICHEVER IS GREATER

SCALE: 3/4" = 1'-0"

REINFORCING AT FOOTING TEE INTERSECTIONS 6

NOTE: 1
CLASS "B" TENSION LAP SPLICE
OR 24", WHICHEVER IS GREATER

SCALE: 3/4" = 1'-0"

REINFORCING AT FOOTING CORNER INTERSECTIONS 7

SCALE: 3/4" = 1'-0"

DECK POST FOOTING 8

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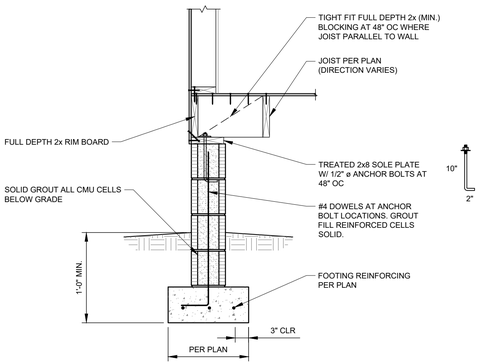
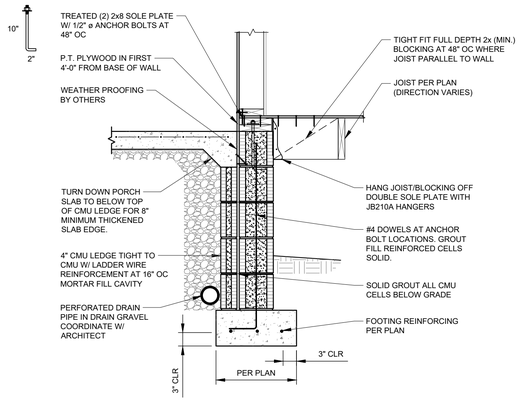


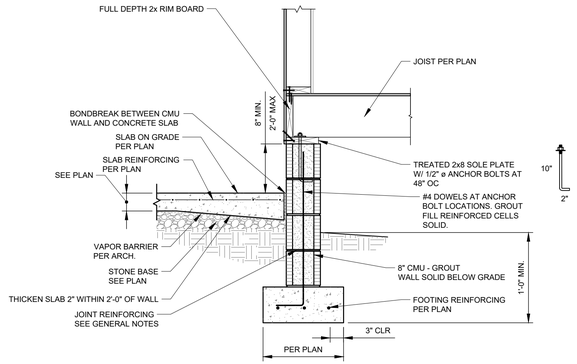
SCALE: 3/4" = 1'-0"

TYPICAL FOUNDATION AT EXTERIOR WALL (1)



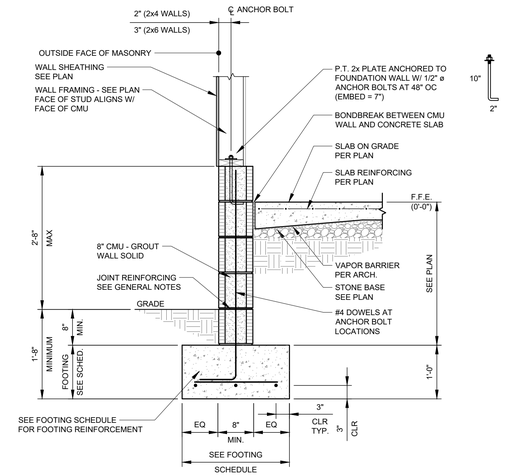
SCALE: 3/4" = 1'-0"

EXTERIOR FOUNDATION WALL AT PORCH (2)



SCALE: 3/4" = 1'-0"

FOUNDATION AT GARAGE SLAB TRANSITION (3)



SCALE: 3/4" = 1'-0"

FOUNDATION AT GARAGE (4)

SCALE: 3/4" = 1'-0"

INTERIOR CMU PIER AT DROPPED GIRDER (5)

SCALE: 3/4" = 1'-0"

EXTERIOR CMU PIER AT DROPPED GIRDER (6)

SCALE: 3/4" = 1'-0"

FLOOR JOISTS PARALLEL TO EXTERIOR WALL (7)

SCALE: 3/4" = 1'-0"

VAULTED CEILING JOIST ATTACHMENT (8)

SCALE: 3/4" = 1'-0"

POST TO BEAM CONNECTIONS (9)

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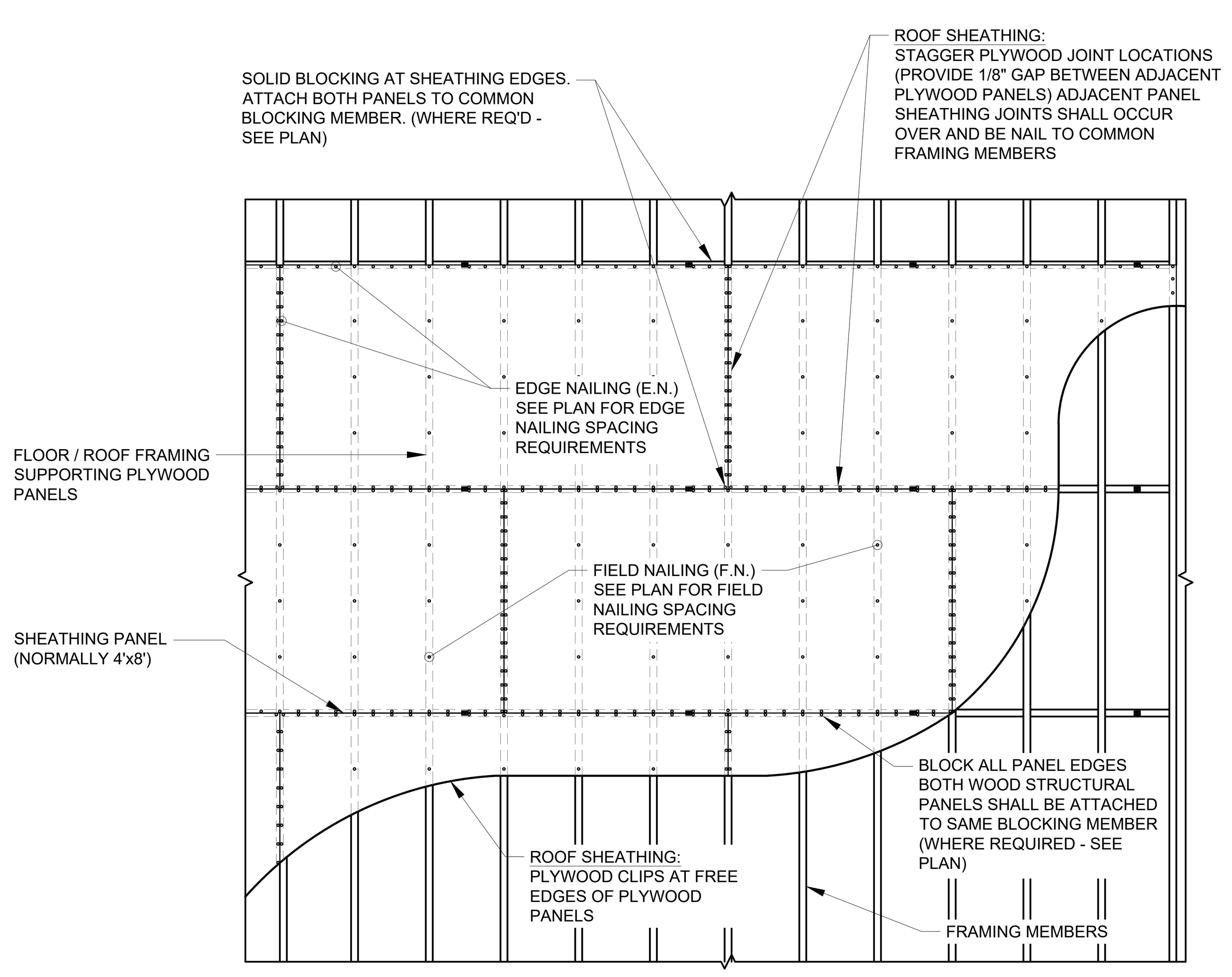
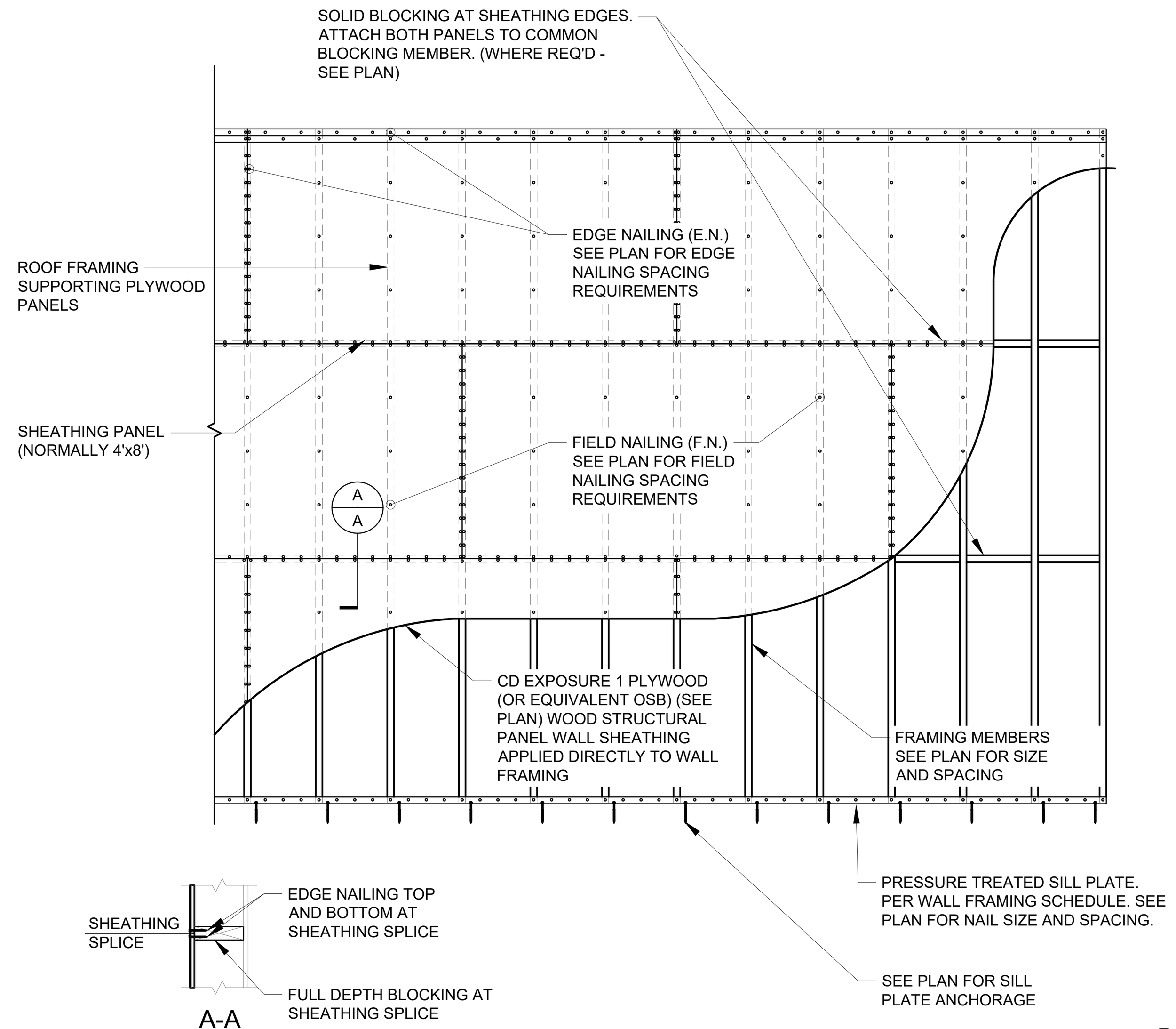


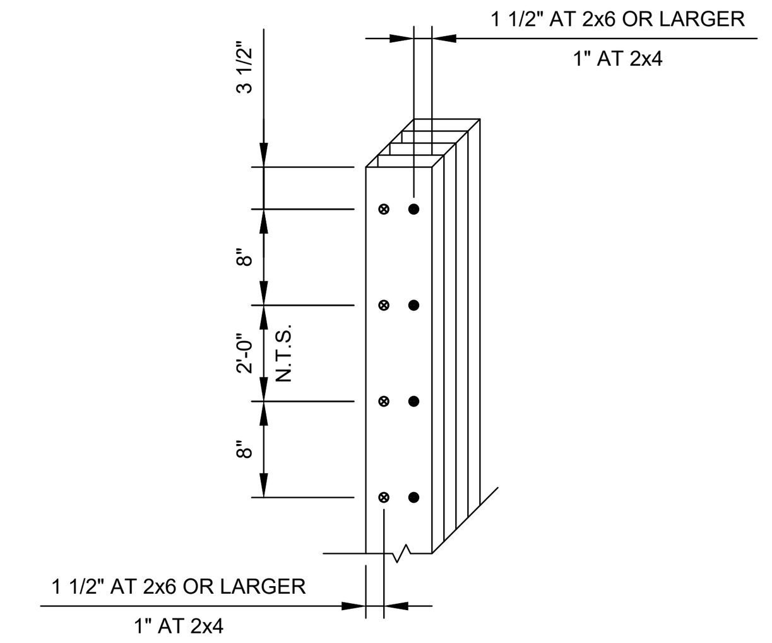
SCALE: N.T.S.

ROOF SHEATHING ATTACHMENT PATTERN (1)



SCALE: N.T.S.

WALL SHEATHING ATTACHMENT PATTERN (2)



NOTES:

(3) 2x STUDS:
GANG TOGETHER WITH (2) ROWS OF SIMPSON SDW TRUSS-PLY SCREWS (4 3/8" LONG)

(4) 2x STUDS:
GANG TOGETHER WITH (2) ROWS OF SIMPSON SDW TRUSS-PLY SCREWS (6" LONG)

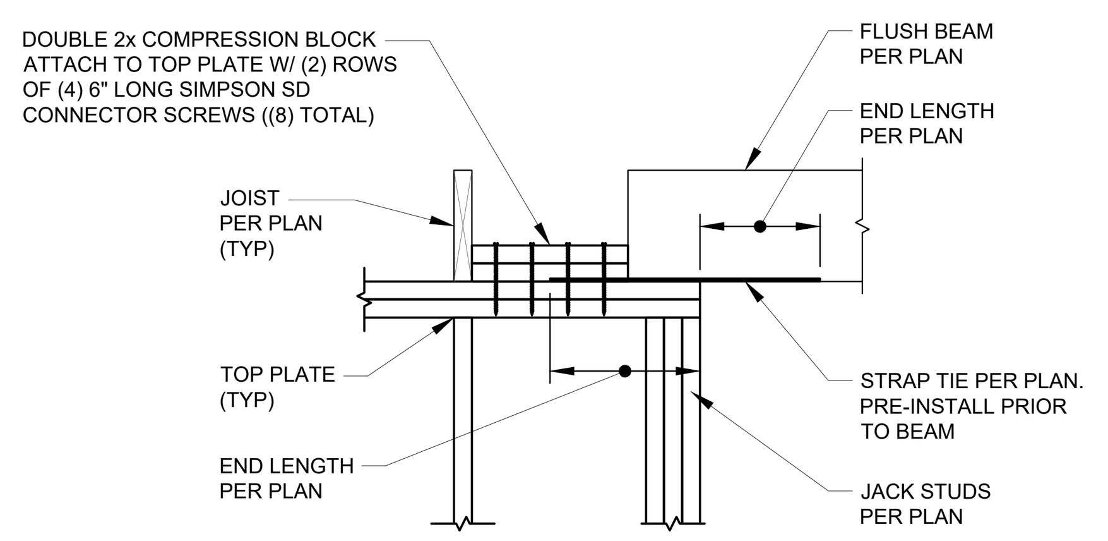
(5) 2x STUDS:
GANG TOGETHER WITH (2) ROWS OF SIMPSON SDW TRUSS-PLY SCREWS (6 3/4" LONG)

NOTE: (2) ROWS OF 1/2" Ø A307 THRU BOLTS MAY BE USED IN LIEU OF SCREWS AT SAME PATTERN AT 2x6 STUDS OR LARGER (DO NOT COUNTERSINK)

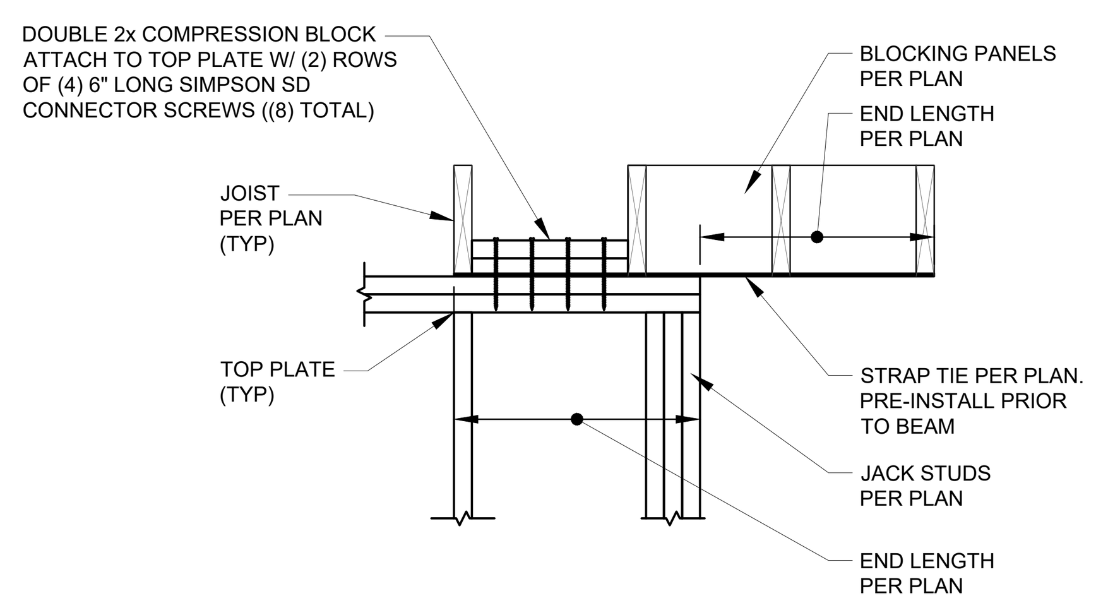
(6) 2x STUDS (OR MORE):
GANG TOGETHER WITH (2) ROWS OF 1/2" Ø A307 THRU BOLTS (DO NOT COUNTER SINK)

SCALE: N.T.S.

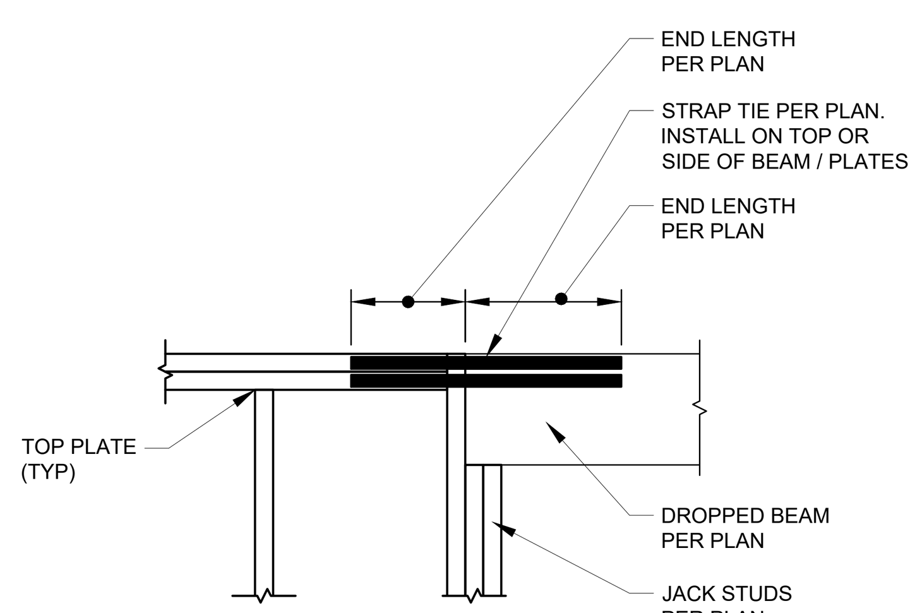
TYPICAL BUILT-UP WOOD STUD PACK (3)



STRAPPING FLUSH BEAM AT TOP PLATE



BLOCKING AT TOP PLATE



STRAPPING DROPPED BEAM AT TOP PLATE

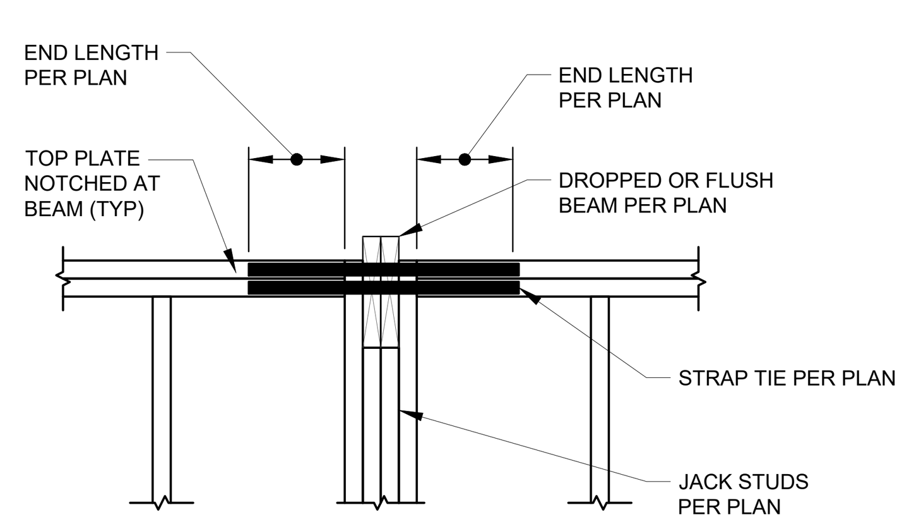
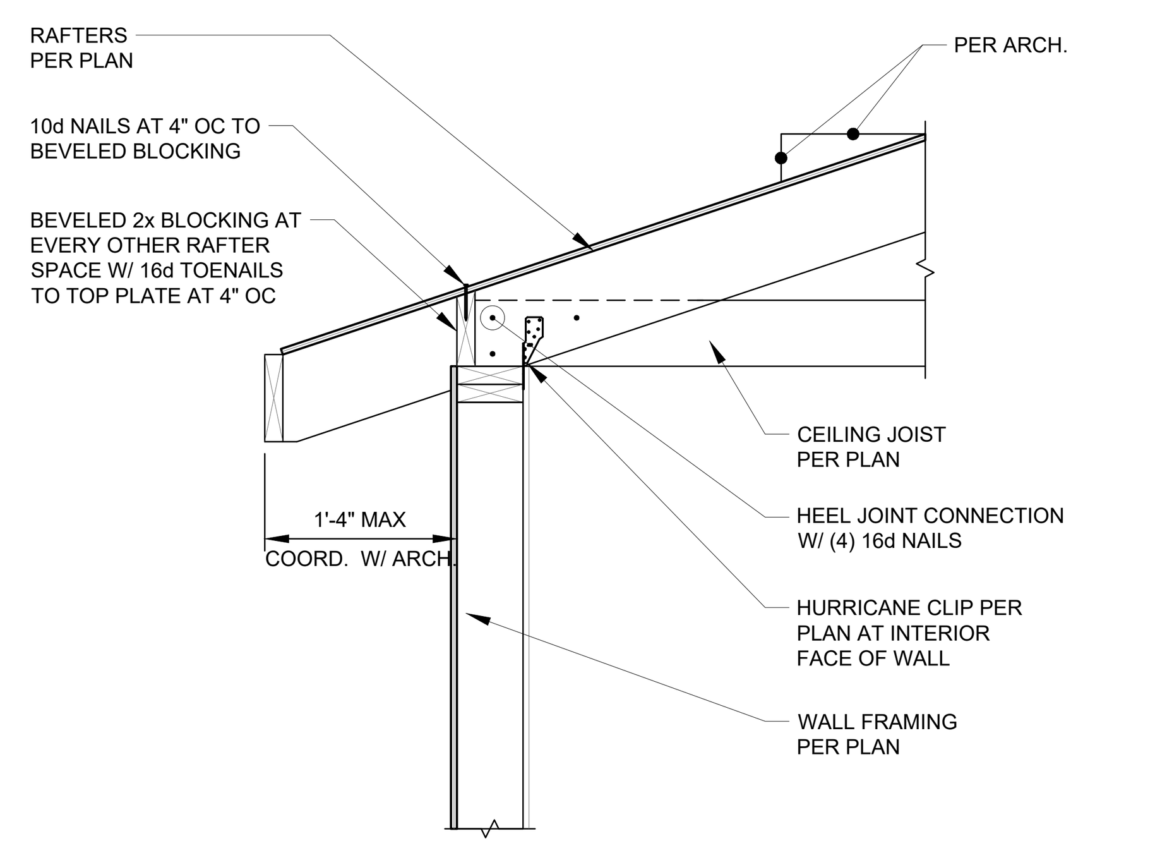


PLATE SPLICE AT BEAM

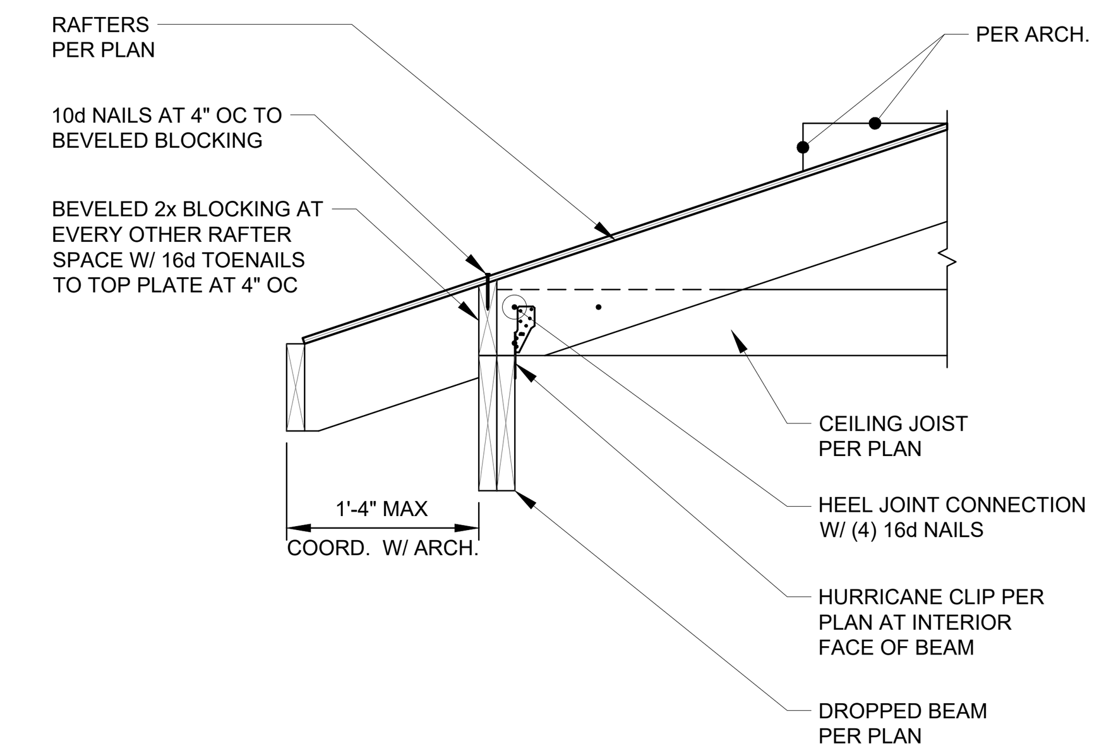
SCALE: N.T.S.

CONTINUITY STRAPPING DETAIL (9)



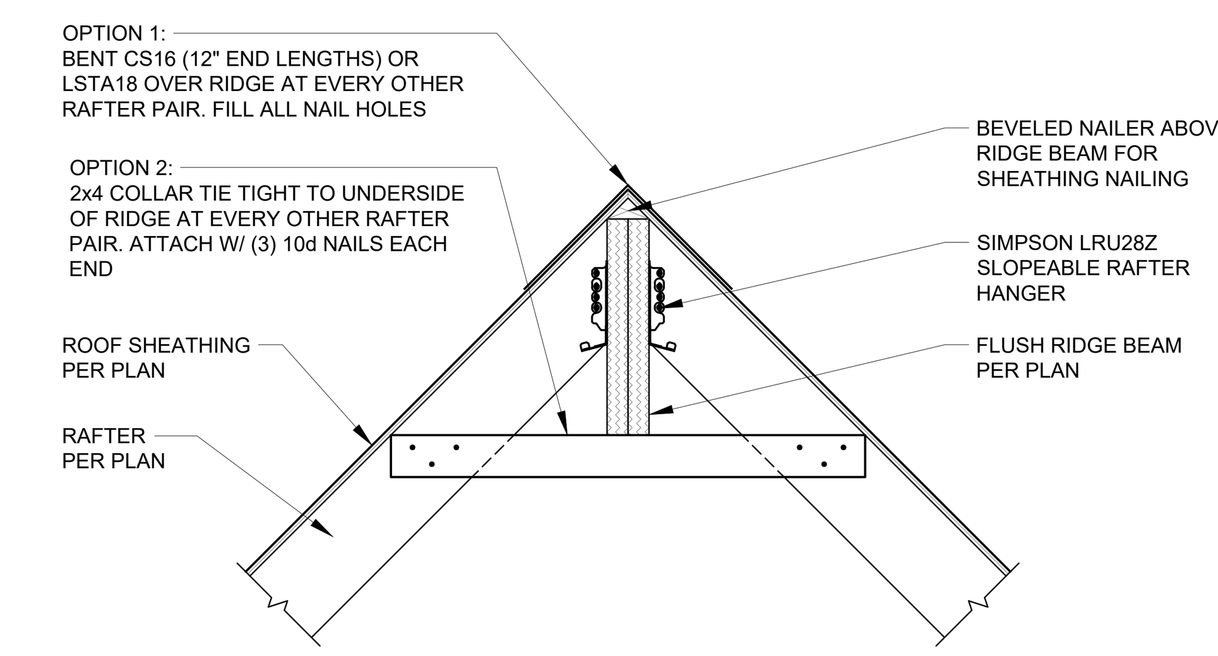
SCALE: 3/4" = 1'-0"

RAFTER BEARING AT EXTERIOR WALL (6)



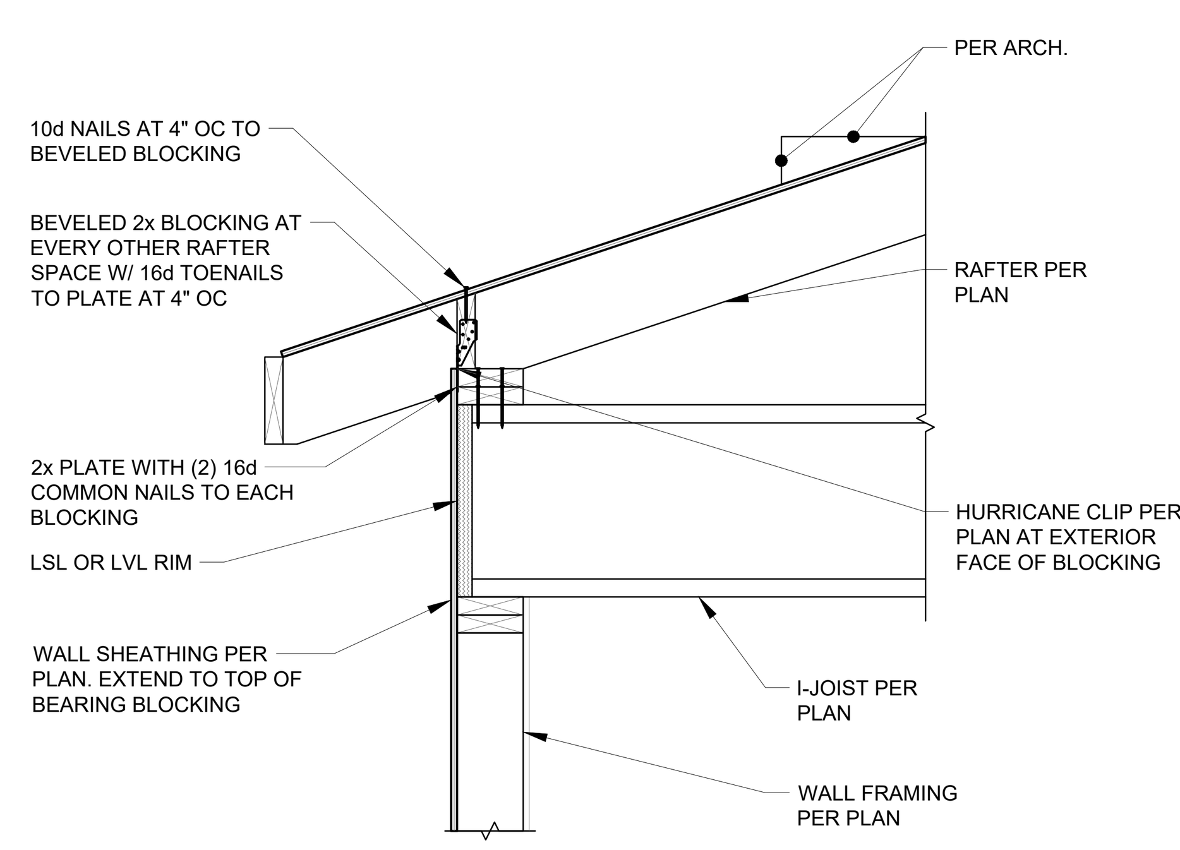
SCALE: 3/4" = 1'-0"

RAFTER BEARING AT BEAM (7)



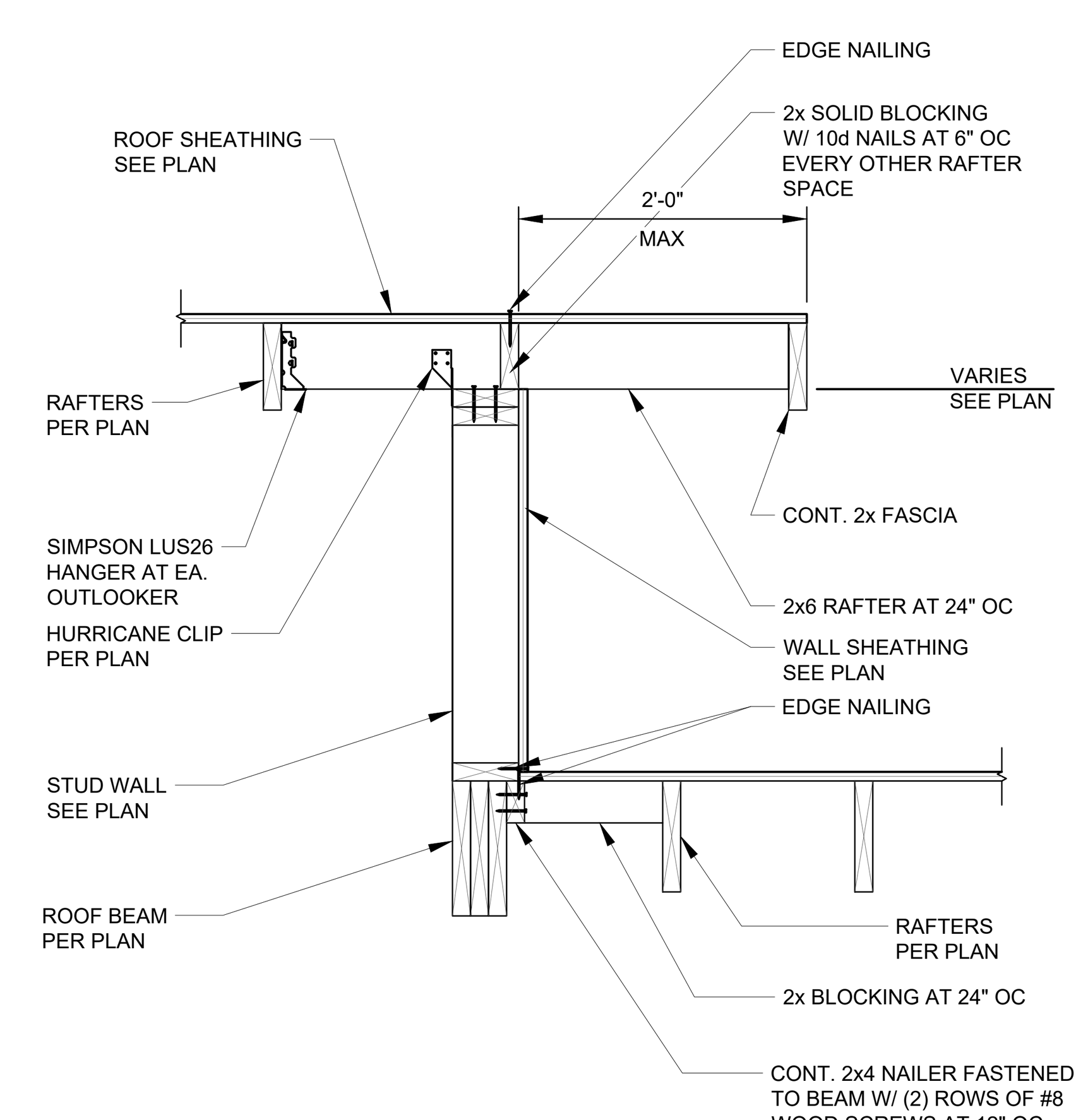
SCALE: 3/4" = 1'-0"

VAULTED ROOF FRAMING AT RIDGE (8)



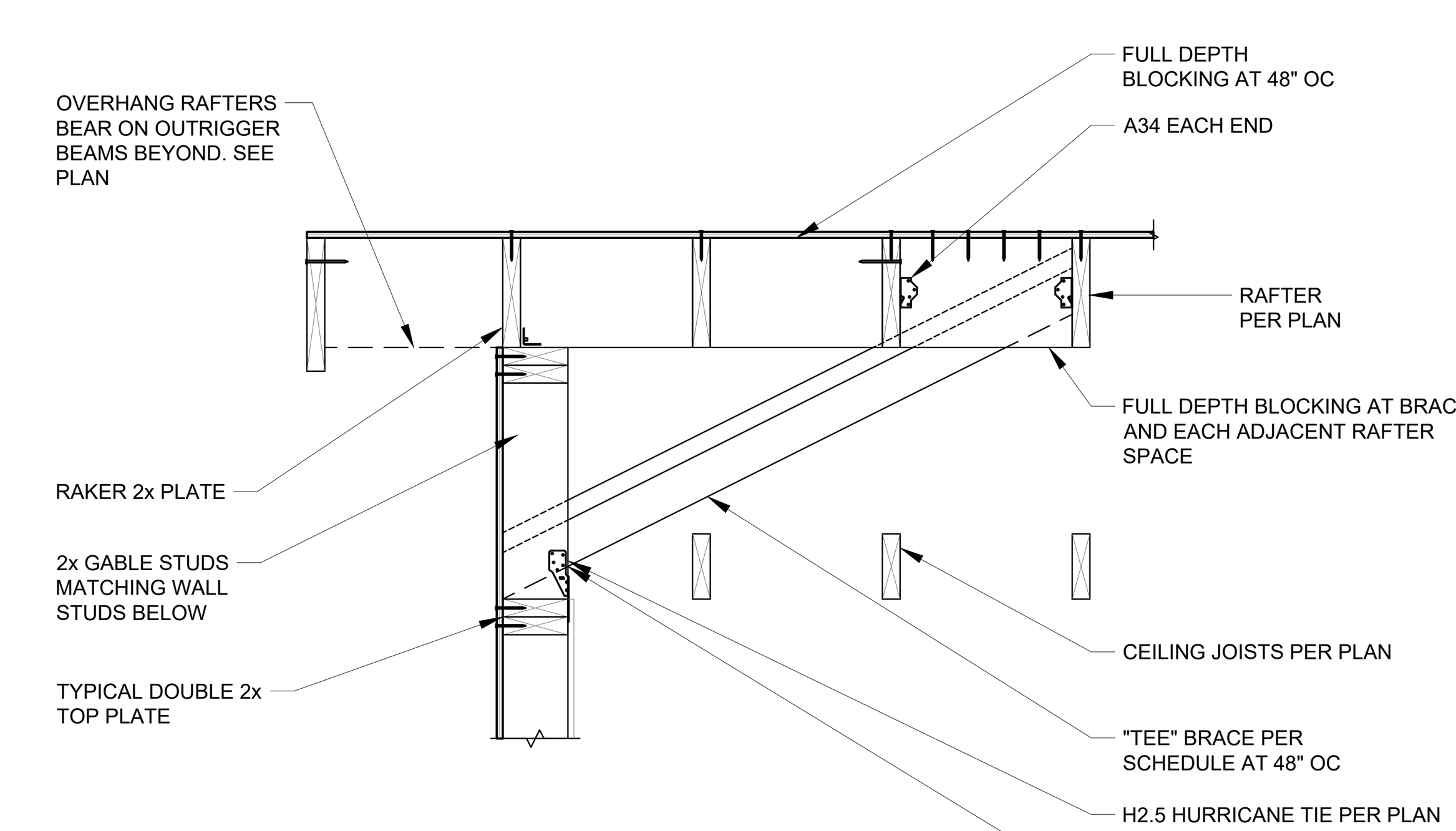
SCALE: 3/4" = 1'-0"

RAFTER BEARING AT EXTERIOR WALL (10)



SCALE: 3/4" = 1'-0"

DORMER ROOF PARALLEL TO SIDE WALL (11)



* BRACE	MAX LENGTH
(2) 2x6	10'-0"
(2) 2x8	16'-0"

(BRACES LONGER THAN 10'-0" SHALL BE BRACED HORIZONTALLY AT (2) DIRECTIONS AT MID-HEIGHT)

SCALE: 3/4" = 1'-0"

STICK FRAMED ENDWALL (12)

REVISIONS	BY

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 054655 SEAN M MCDONALD 11/03/2025

Wilson Residence
Building Virtually
129 Zachariah Rd.
Nashville, North Carolina 27586

DATE	11.03.2025
SCALE	AS SHOWN
DRAWN	CTG
JOB	25-2474
SHEET	S2.2