

- Sizing: See adjacent table to size the drywell(s) based on
- 2. Siting Criteria: The base of the drywell must be at least 5' above seasonal high groundwater.
- 3. Setbacks: Measured from the center, the drywell must be 10' from foundations and 5' from property lines except next to the right-of-way where no setback is required between the edge of the drywell drain rock and the property line. The foundation setback is 8" for plastic mini-drywells.
- 4. Piping: Conform with Oregon Plumbing Specialty Code (OPSC)
- 5. Access: In residential settings, an access cleanout is optional but
- 6. Pre-Treatment: A trapped silt basin such as a sumped catch basin is required except for drywells managing roof runoff and runoff from pedestrian—only areas.
- 7. The top of the perforated drywell sections must be lower than neighboring foundations.
- 8. Inspections: Call BDS IVR inspection line, (503) 823-7000. Request 487.3 inspections required.

Drywell Depth	Maximum Catchment Area Managed by One Drywell		
	28" diameter	48" diameter	
5′	1000 sf	2500 sf	
10'	2500 sf	4500 sf	
15′	3500 sf	5000 sf	
2x2 plastic mini- drywell (maximum of 2 drywells per catchment)	50	0 sf	

CONSTRUCTION REQUIREMENTS

DRYWELL

Smearing the soil surface during excavation can limit infiltration rates. If smooth excavation tools are used, roughen the sides and bottom of the excavation with a sharp pointed tool. Remove loose material from the bottom of the excavation.





STORMWATER MANAGEMENT TYPICAL DETAILS FOR PRIVATE PROPERTY

SIMPLIFIED - DRAWING NOT TO SCALE

BES STORMWATER FACILITY INSPECTION REQUIRED AT TIME OF CONSTRUCTION. SEE BES INSPECTION CARD. To schedule, contact the automated inspection request (IVR) system at 503-823-7000 and request inspection #487 BES Onsite Stormwater Facility Eval – OR- contact BES at 503-823-7761 for assistance. Note: Required Inspections Prior to Cover Inspection #1: Location, Size, Depth, Rock -SEPARATE PLUMBING PERMIT REQUIRED FOR INSPECTION OF DOWNSPOUTS AND PRIVATE STORMWATER PIPING OUTSIDE OF - SEPARATE BES SEWER CONNECTION UC PERMIT REQUIRED WORK IN THE PUBLIC RIGHT OF WAY Email URUCpermits@portlandoregon.gov or CALL 503-823-1026 https://www.portland.gov/ppd/publicworks/ur-uc-permit-guide

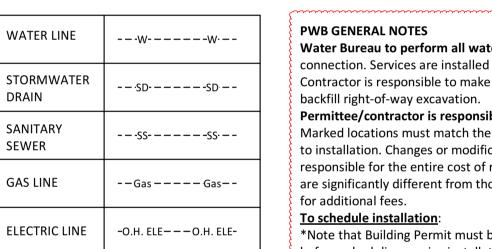
2505 W/ N WINCHELL ST PORTLAND, OR 97217 Block-**PORTLAND** R241534 Property ID-PENINSULAR ADD, BLOCK 3, LOT 19&20 Tax Roll-VACANT LAND Use-19&20 Multnomah County-1N1E09CA 19800 State ID-New State ID-1N1E09CA -19800 Alt Account Number-R655101070

2,500 ft² LOT AREA -**BUILDING COVERAGE-**28.44% LANDSCAPING-LANDSCAPE REQUIRED (40%)- 1,000 ft² EXISTING TREE- COUNTS AS 8 MEDIUM TREES (4,000ft²) FAR RATIO - MAX ALLOWED = 0.5:1 RATIO PROPOSED S.F. = 1,247 S.F. = 0.49:1 RATIO - STANDARD MET **IMPERVIOUS AREA-**WALKWAY-807 ft² ROOF AREA (INCL. EAVES)-TOTAL -840 ft²

LANDSCAPING IS TO BE MANUALLY IRRIGATED 1 SITE PLAN |0.0 - SP| 1" = 10'-0"

Map Number-

2515 N WINCHELL STREET CONNECT DOWNSPOUTS



-SEPARATION BETWEEN SANITARY SEWER AND WATER LINE SHOULD BE 5' MIN. SKIN TO SKIN.

-SEPARATION BETWEEN MULTIPLE WATER SERVICES ON ONE TAX LOT SHOULD BE 3' MIN.

-ALL OTHER UNDERGROUND UTILITIES NEED TO HAVE 3' MIN. SEPARATION FROM WATER LINE.

-WATER LINES ARE TO BE SHOWN IN THE PUBLIC RIGHT-OF-WAY, NOT ON PRIVATE PROPERTY.

-SEPARATION BETWEEN WATER SERVICE AND PROPERTY LINES SHOULD BE 1.5' MIN.

-SEPARATION BETWEEN UNDERGROUND ELECTRICAL SERVICE LINE AND WATER LINE SHOULD BE 4' MIN.

UTILITY LINE LEGEND

WEST PROPERTY

(EX) UTILITY POLE (10" Ø)

7' TALL AREA ABOVE METER

-TO BE APPROVED UNDER -

A DESIGN EXCEPTION

(N) __" WATER METER

-UNDER SEPARATE PERMIT

ROW ELEVATION (GUY WIRE

2 | INFO)

|0.0 - SP| 1/8" = 1'-0"

INSTALLED BY PWB

P.L. TO CENTER OF POLE

[N] GAS LATERAL

9' - 0"

4' - 0" 5' - 0" 3' - 0"

18' - 6"

25' - 0"

LOT 19

POLE #: 10 2525 PGE

Drawing List

ELEVATIONS

FLOOR PLANS

ROOF PLAN

SHEAR PLANS

WALL DETAILS

1/4" = 1'-0"

1/4" = 1'-0"

UTILITY NOTES

SHEAR DETAILS

FOUNDATION PLAN

FRAMING PLAN. SECTIONS

GENERAL NOTES AND DETAIL

UTILITY SEPARATION NOTES

Sheet Name

EROSION & SEDIMENT CONTROL

Sheet

Number

Water Bureau to perform all water work in the public right-of-way up to the point of connection. Services are installed at a depth of 3' - 4' with a short stub for private connection. Contractor is responsible to make private connection and backfill to property. Water Bureau will

Permittee/contractor is responsible for marking location, finished grade and curb alignment. Marked locations must match the issued Building Permit and approved Public Works plans prior to installation. Changes or modifications require a revision to the permit. The applicant is responsible for the entire cost of relocating any installation marked in error. If site conditions are significantly different from those shown on approved plans, applicant may be responsible

*Note that Building Permit must be issued, and any related 90% Public Works plans approved before scheduling service installation.

For 2" and smaller services please wait 2 business days after payment before contacting wbistateshed@portlandoregon.gov or 503-823-1526. Normal installation time is 3 weeks. For 3" and larger services and hydrants contact waterservice@portlandoregon.gov or 503-823-7368 at least 4-7 weeks in advance of desired installation date to allow time for securing a PBOT Street Opening Permit (SOP) and scheduling installation.

Option #1)

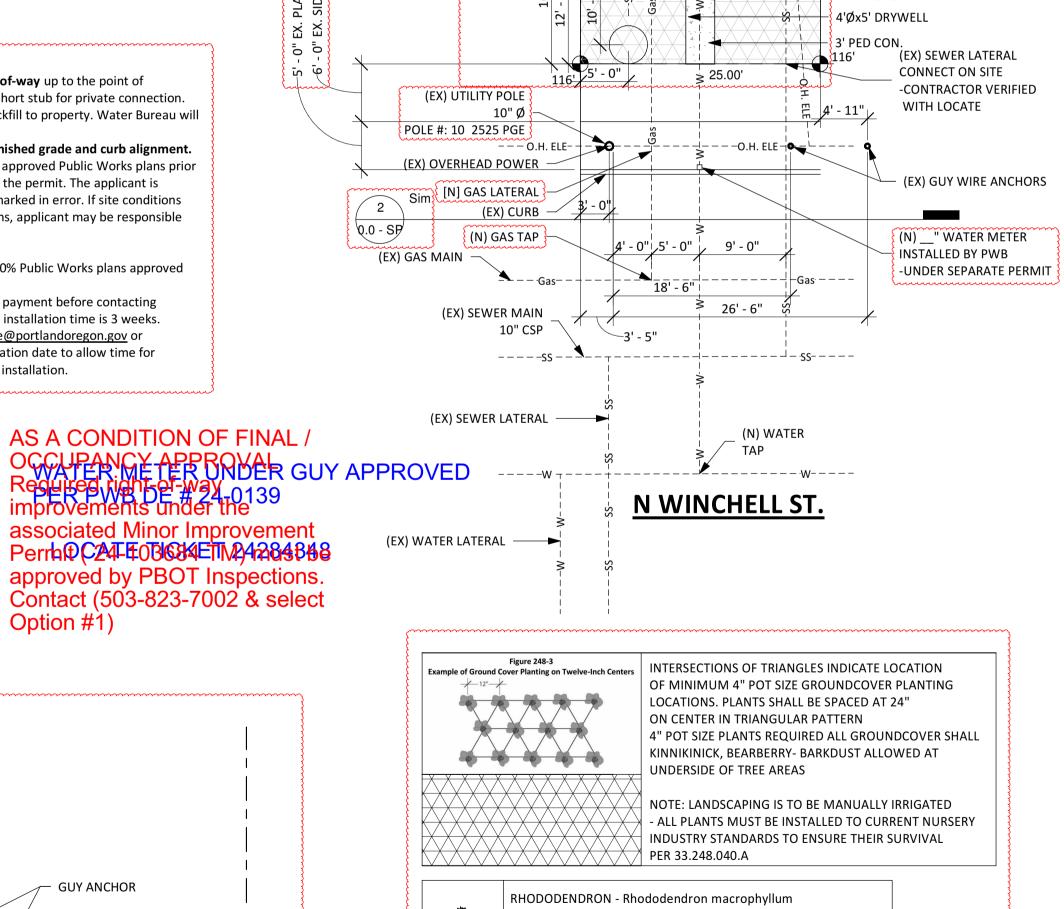
GUY ANCHOR

(EX) SEWER LATERAL CONNECT ON SITE

LOT 20

WITH LOCATE

-CONTRACTOR VERIFIED



-SYMBOL INDICATES LOCATION OF SHRUB SHRUB MUST BE 3 GALLON SIZE AT TIME OF PLANTING REQUIRED 60% OF FRONT AREA REQUIRED - MET 300 SQ. FT. PROPOSED GROUND COVER - 180 SQ FT. (60%)

CONSTRUCTION SITE SENTA

19

Permit #: 24-089091-000-00

ROOT PROTECTION FENCING (RPZ)

-MINIMUM OF 6-FOOT HIGH CHAIN

LINK FENCE SECURED WITH 8-FOOT

METAL POSTS, AT THE EDGE OF THE

PER ARBORIST REPORT

ROOT PROTECTION ZONE.

DETAILS

- (N) ELEC. METER

(N) OVERHEAD POWER

4" PVC

PROPOSED SFR

FOOTPRINT LOT 19

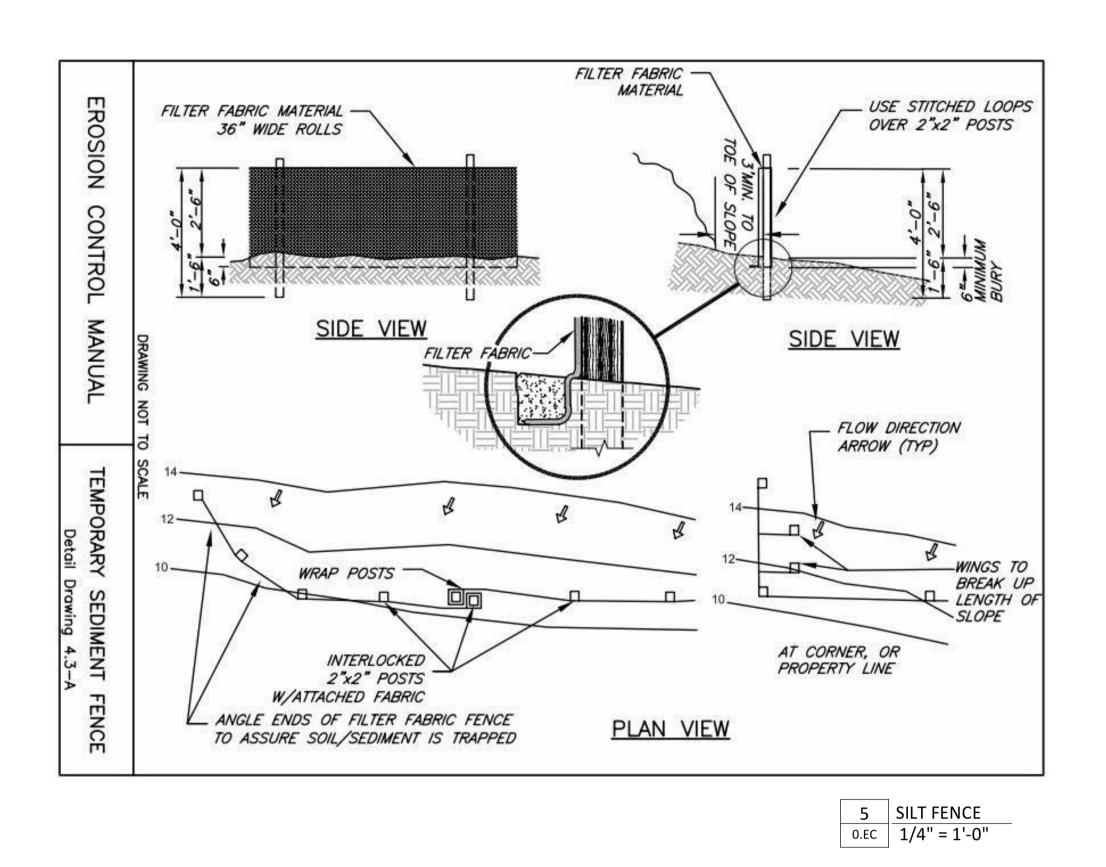
F.F.E. - 115.875'

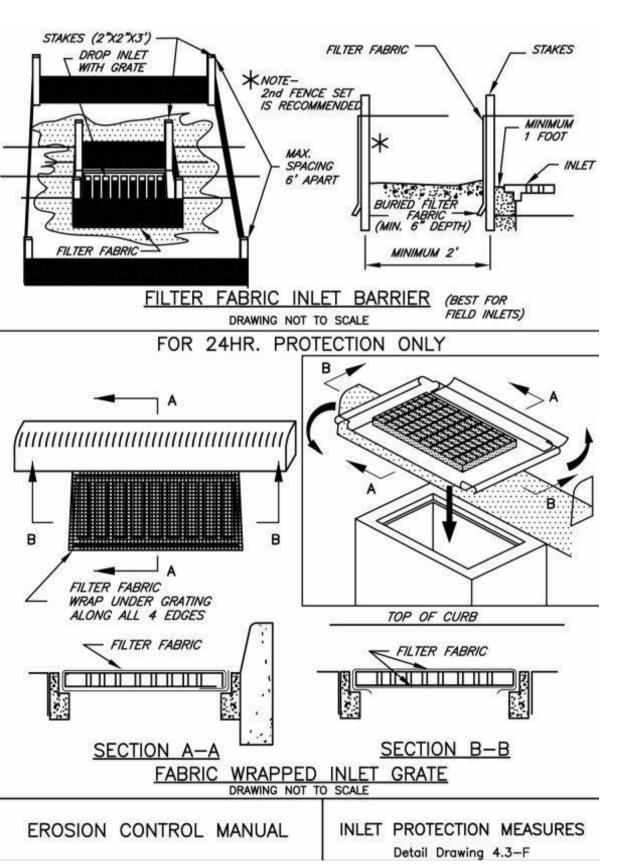
-SEE ARBORISRT REPORT FOR

-TO REMAIN

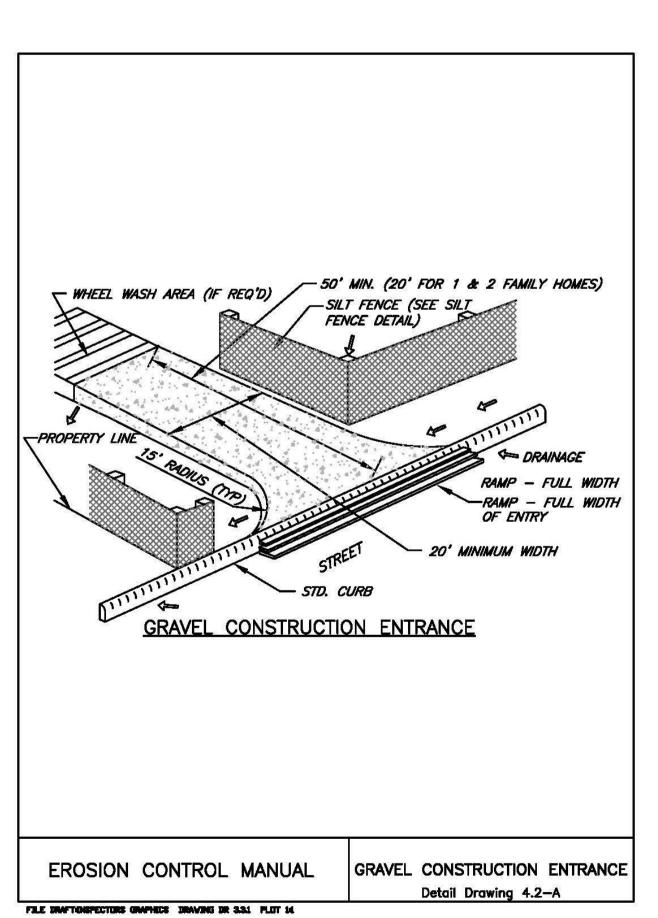
No. Date Issued by Date 2 Project number:

Date: 11/25/2024 1:50:22 PM Drawn by: 1,247 S.F. As indicated

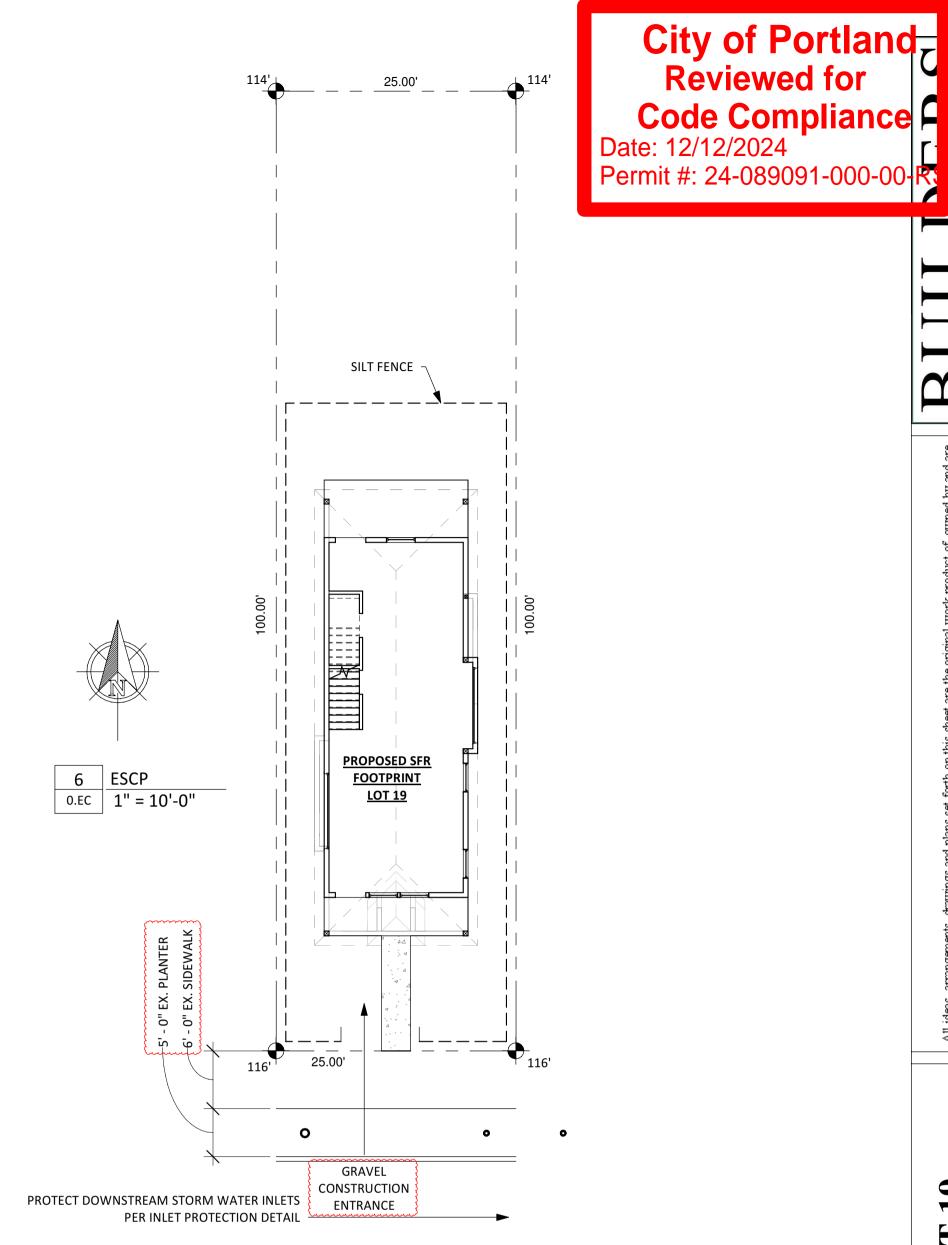








2 CONSTRUCTION ENTRANCE 0.EC 1/4" = 1'-0"



N WINCHELL ST.

	Minimum Erosion Control Requirements	Additional Requirements
1.	Temporary sediment control (silt fences, bio-filter bags or fiber rolls, storm drain inlet protection).	Prevent the transport of sediment from the site (Manual Sections 2-2 and 4-2) Call for #200 inspection. These items must be provided even with undisturbed vegetative buffers as allowed by manual.
2.	Stabilize access points by installing a gravel construction entrance. Do not use rock or dirt ramps in the gutter, use a wood ramp if needed to get over curb.	Limit construction vehicle access, whenever possible, to one route. Stabilize access points. Provide street cleaning by sweeping or shoveling any sediment that may have been tracked out. Place sediment in a suitable disposal area where it will not erode again. (Manual Sections 2-2 and 4-1)
3.	Stabilize all soils, including stockpiles that are temporarily exposed. Use one or more of the temporary soil stabilization Best Management Practices (BMP's): temporary grasses, mulch applications, erosion blankets, plastic sheeting, plus dust control measures.	Soil Stabilization (Manual Sections 2-2 and 4-4)
4.	Maintain erosion controls identified in requirements 1 through 3 above according to specifications prescribed in manual.	Inspect and maintain required erosion and sediment controls to ensure continued performance of their intended function. (Manual Chapters 4 and 5)
5.	Comply with the necessary development activity controls, including controls for fuel spill control, waste removal, concrete waste management or painting preparation.	During construction, prevent the introduction of pollutants in addition to sediment into stormwater. (Manual Section 5)
6.	Use one or more of the following to permanently stabilize soils before final building inspection: Permanent vegetative cover, mulch applications or application of sod.	After construction but before project completion, permanently stabilize all exposed soils that have been disturbed during construction. (Manual Sections 4-4)
7.	Prevent sediment from entering all storm drains, including ditches, which receive runoff from the disturbed area	Remove temporary drain inlet protection measures after final site clean-up. Call for #210 inspection.
8.	Post signage on-site that identifies the City's Erosion Control complaint number	The sign will be provided upon approval of the pre-construction inspection. It must be maintained on-site until the final inspection.

3 EROSION CONTROL NOTES 1/4" = 1'-0"

Z 19 LOT

S CONSTRUCTION - LOT 1
5 N Winchell St, Portland, OR 97217
5 SEDIMENT CONTROL PL

No. Date Issued by
1 Date 2

EROSION

SENTAUR

Project number: 13581

Date: 11/25/2024 1:50:22 PM

Drawn by: KG

rea: 1,247 S.F.
tale As indicated

0.EC

NOTE: A balanced, whole-house ventilation system will be provided in accordance with M1505.4 TABLE N1101.1(2)ADDITIONAL MEASURES MEASURE NO. MEASURE DESCRIPTION

1 HIGH-EFFICIENCY HVAC SYSTEMa

a. Gas-fired furnace or boiler AFUE 94 percent, or b. Air source heat pump HSPF 10.0/16.0 SEER cooling or 8.5 HSPF2 / 15.0 SEER2, c. Ground-source heat pump COP 3.5 or ENERGY STAR rated.

HIGH-EFFICIENCY WATER HEATING SYSTEM

a. Natural gas/propane water heater with minimum 0.90 UEF, or b. Electric heat pump water heater with minimum 3.45 UEF, or c. Natural gas/propane tankless/instantaneous heater with minimum 0.80 UEF and drain water heat recovery unit installed on a minimum of one shower/tub-shower.

a. Appliances located within the building thermal envelope shall have sealed combustion air installed. Combustion air shall be ducted directly from the outdoors. b. The maximum vaulted ceiling surface area shall not be greater than 50 percent of the total heated

space floor area unless vaulted area has a U-factor not greater than U-0.026. c. In accordance with Table N1104.1(1), the Proposed UA total of the Proposed Alternative Design shall

be a minimum 8 percent less than the Code UA total of the Standard Base Case.

N1105.2 Insulation of Ducts

All new duct systems or new portions of duct systems exposed to unconditioned spaces, and buried ductwork within insulation that meets

the exception to Section N1105.3, shall be insulated to minimum R-8. **Exceptions:**

1. The replacement or addition of a furnace, air conditioner or heat pump shall not require existing ducts to be insulated to current code. 2. Exhaust and intake ductwork.

N1105.3 Installation of Ducts and Air Handling Equipment

For new construction and additions, all new duct systems and air handling equipment and appliances shall be located fully within the building thermal envelope. Exceptions:

Ventilation intake ductwork and exhaust ductwork. Up to 10 feet (3048 mm) of HVAC ductwork.

Where two measures are selected for compliance from Table N1101.1(2) and HVAC supply and return ductwork is installed in accordance with either Section N1105.3.1, N1105.3.2 or N1105.3.3.

SENTAUR CONSTRUCTION

hhanna@sentaur.com

CLIENT:

CONTACT INFO:

PROJECT NUMBER: 13581

N1105.3.1 Deeply Buried Duct in Attic

Ducts deeply buried in attic insulation shall be in accordance with all of the following when using Section N1105.3, Exception 3: Insulation shall be installed to fill gaps and voids between the duct and the ceiling, and a minimum of R-19 insulation shall be installed above the duct between the duct and unconditioned attic.

All ductwork in the attic shall be insulated to R-8.

Insulation depth marker flags shall be installed on the ducts every 10 feet (3048 mm) or as approved by the building official. Exception: HVAC ductwork shall be permitted to be located outside of the building thermal envelope where the duct is insulated to a minimum of R-27 with a Class II or III vapor retarder.

N1105.3.2 Ducts in an Unvented Crawlspace Outside the Building Thermal Envelope

Ducts located in an unvented crawlspace outside of the building thermal envelope shall be in accordance with all of the following when using Section N1105.3, Exception 3: In addition to meeting Section R408.3, all seams of the vapor barrier shall overlap a minimum of 12 inches (305 mm) and be sealed with

tape or other approved method. All ductwork in the crawlspace shall be insulated to R-8.

The floor between the crawlspace and the dwelling shall be insulated with minimum R-30.

N1105.3.3 Deeply Buried Duct in Vented Crawlspace

Ducts deeply buried in crawlspace insulation shall be in accordance all of the following when using Section N1105.3, Exception 3: Insulation shall be installed to fill gaps and voids between the duct and the floor above, and a minimum of R-19 insulation shall be installed below the duct and between the duct and unconditioned crawlspace. All ductwork in the crawlspace shall be insulated to R-8.

The floor between the crawlspace and the dwelling shall be insulated with minimum R30.

Exception: HVAC ductwork shall be permitted to be located outside of the building thermal envelope where the duct is insulated to a minimum of R-27 with a Class II or III vapor retarder.

TABLE N1101.1(1)					
PRESCRIPTIVE ENVELOPE REQUIREMENTS					
ABOVE GRADE WALL	R-21 INT.c				
BELOW GRADE WALL	R-15c.i/R-21				
FLAT CEILINGS	R-49				
VAULTED CEILINGS	R-30 RAFTER				
	R-30A ^{g,h} SCISSOR TRUSS				
UNDERFLOORS	R-30				
SLAB-EDGE PERIMETER	R-15				
HEATED SLAB INTERIOR	R-10				
WINDOWS	U-0.27				
SKYLIGHTS	U-0.50				
EXTERIOR DOORS	U-0.20				

TABLE M1507.4	
EXHAUST RATES FOR RESIDENTIAL DWELLINGS	
DOMESTIC KITCHENS	
RANGE HOODS / DOWNDRAFT EXHAUST	MIN. 150 CFM INTERMITTENT
BATHROOMS-TOILET ROOMS	
ROOMS CONTAINING BATHING AND SPA FACILITIES	MIN. 80 CFM INTERMITTENT OR
(STATIC PRESSURE SHALL BE RATED	20 CFM CONTINUOUS
@ 0.10-INCH WATER GAUGE FOR INTERMITTENT FANS	
TOILET ROOMS WITHOUT BATHING OR SPA FACILITIES,	
WHEN NOT PROVIDED WITH NATRUAL VENTILATION	MIN. 50 CFM
IN ACCORDANCE WITH SECTION R303.3.2	
NOTE	

MECHANICAL EXHAUST VENTS SHALL NOT TERMINATE WITHIN 36" OF OPERABLE WINDOWS

a. As allowed in Section N1104.1, thermal performance of a component may be adjusted, provided that overall heat loss does not exceed the total resulting from conformance to the required U-factor standards. Calculations to document equivalent heat loss shall be performed using the procedure and approved U-factors contained in Table N1104.1(1).

b. R-values used in this table are nominal for the insulation only in standard wood-framed construction and not for the entire assembly. c. Wall insulation requirements apply to all exterior wood-framed, concrete or masonry walls that are above grade. This includes cripple walls and rim joist areas. Nominal compliance with R-21 insulation and Intermediate Framing (Section N1104.5.2) with insulated headers.

d. The wall component shall be a minimum solid log or timber wall thickness of 31/2 inches. e. Below-grade wood, concrete or masonry walls include all walls that are below grade and do not include those portions of such wall that extend more

than 24 inches above grade. R-21 for insulation in framed cavity, R-15 continuous insulation. f. Insulation levels for ceilings that have limited attic/rafter depth such as dormers, bay windows or similar architectural features totaling not more than 150 square feet in area may be reduced to not less than R-21. Where reduced, the cavity shall be filled (except for required ventilation spaces). R-49 insulation installed to minimum 6-inch depth at top plate at exterior of structure to achieve U-factor.

g. Vaulted ceiling heated space floor area exceeding 50 percent of the total heated space floor area shall have a U-factor not greater than U-0.026

(equivalent to R-38 rafter or scissor truss with R-38 advanced framing).

h. A = Advanced frame construction. See Section N1104.6. i. Heated slab interior applies to concrete slab floors (both on and below grade) that incorporate a radiant heating system within the slab. Insulation shall be installed underneath the entire slab in addition to perimeter insulation.

j. Glass doors shall comply with window performance requirements. Windows exempt from testing in accordance with Section N1104.4 shall comply with window performance requirements if constructed with aluminum with thermal break, wood, vinyl, reinforced vinyl aluminum-clad wood, or insulated fiberglass frames, and double-pane glazing with low-emissivity coatings of 0.10 or less. Buildings designed to incorporate passive solar elements may include glazing with a U-factor greater than 0.35 by using Table N1104.1(1) to demonstrate equivalence to building envelope

k. A maximum of 28 square feet of exterior door area per dwelling unit may have a U-factor of 0.54 or less.

I. Minimum 24-inch horizontal or vertical below grade. The minimum total distance of 24 inches may be a combination of the horizontal and vertical planes. If a horizonal plane is used on the exterior of the slab, it must be a minimum of 12 inches below finished grade.

AIR BARRIER INSTALLATION AND AIR SEALING REQUIREMENTS

M1505.4 Who	le-house mechanical ventilation system.
Whole-house	mechanical ventilation systems shall be
designed in ac	cordance with Sections M1505.4.1 through
M1505.4.3.	

TABLE M1505.4.3(1)CONTINUOUS WHOLE-HOUSE						
MECHANICAL VENTILATION SYSTEM AIRFLOW RATE						
DWELLING UNIT NUMBER OF BEDROOMS						
FLOOR AREA	0 – 1	2 – 3	4 – 5	6 – 7	> 7	
(square feet)	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	
	1	l				

2023 ORSC INSULATION 5 REQUIREMENTS

1 1/4" = 1'-0"

105 | 120 | 135 | 150 | 165

Whole-house mechanical ventilation systems shall be designed in accordance with Sections M1505.4.1 through M1505.4.3. General requirements General requirements A continuous air barrier shall be installed in alignment with the building thermal envelope. Breaks or joints in the air barrier shall be sealed. The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in shall be sealed.	1 the air barrier
M1505.4.3. General requirements Breaks or joints in the air barrier shall be sealed. M1505.4.1 System design. The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the sealed of the sealed	1 the air barrier
M1505.4.1 System design. The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the contract of the contract o	n the air barrier
Wilsos, ili System design.	n the air barrier
	I
The whole-house mechanical ventilation system shall Ceiling/attic	
provide balanced ventilation. Local exhaust or supply Access openings, drop-down stairs, or knee wall doors to unconditioned attic spaces shall be gas sealed.	keted and
fans are permitted to serve as part of such a system. Outdoor air ventilation provided by a supply fan ducted The junction of the foundation and sill plate shall be sealed.	-
to the voture side of an air handler shall be considered as	
providing supply ventilation for the balanced system. Walls The junction of the top plate and the top of interior walls shall be sealed between wall cavities at door frames.	nd windows or
All penetrations or utility services through the top and bottom plates shall be sealed.	
M1505.4.2 System controls. The whole-house mechanical ventilation system shall be	
provided with controls that enable manual override. Windows, skylights and doors Windows, skylights and doors The annular space between framing and skylights, and the jambs of windows and doors shall be framing cavities around windows, skylights and doors shall contain continuous insulation or be fenestration manufacturer's instructions.	
M1505.4.3 Mechanical ventilation rate. Rim/band joists Rim/band joists shall be a part of the thermal envelope and have a continuous air barrier.	
The whole-house mechanical ventilation system shall	
provide outdoor air at a continuous rate as determined in accordance with Table M1505.4.3(1) or Equation 15-1. Floors Including cantilevered floors and floors above garages The air barrier shall be installed at any exposed edge of insulation.	
TABLE M1505.4.3(1)CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE Crawl space walls Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with over taped.	apping joints
DWELLING UNIT NUMBER OF BEDROOMS Shafts, penetrations Duct shafts, utility penetrations and flue shafts opening to exterior or unconditioned space shall	be sealed.
FLOOR AREA $0-1$ $2-3$ $4-5$ $6-7$ > 7)
(square feet) Airflow in CFM	rurfaco
1,500 30 45 60 75 90	urrace.
1,501 – 3,000 45 60 75 90 105 Shower/tub on exterior walls adjacent to showers and tubs shall separate the wall from tub.	m the shower or
3,001 - 4,500 60 75 90 105 120	707 000 100 100
4,501 – 6,000 75 90 105 120 135 Electrical/phone box on exterior walls The air barrier shall be installed behind electrical and communication boxes. Alternatively, air-set be installed.	aled boxes shall
> 7,500 90 105 120 135 150 165 150 165 170	aled to the

N1104.8.1 Air Barriers

A continuous air barrier shall be installed and fully aligned with the building thermal envelope on every vertical portion of air-permeable insulation and on the warm side of horizontal, air-permeable insulation. Air-permeable insulation shall not be used as a sealing material.

Exception: Unvented attics, continuous insulation walls and similar conditions where an impermeable insulation layer forms an air barrier.

Exterior joints around window and door frames; between wall cavities and window or door frames; between walls and foundation; between walls and roof; between wall panels; at penetrations or utility services through walls, floors and roofs; and all other openings in the exterior envelope shall be sealed in a

N1105.4 HVAC Controls

All heating, ventilating and air-conditioning systems shall be provided controls as specified herein.

N1105.4.1 Temperature Controls

Each heating, ventilating and air-conditioning system shall be provided with at least one thermostat for the regulation of temperature. Each thermostat shall be capable of being set from 55oF to 75oF (13oC to 24oC) where used to control heating only and from 70oF to 85oF (21oC to 29oC) where used to control cooling only. Where used to control both heating and cooling, it shall be capable of being set from 55oF to 85oF (13oC to 29oC) and shall be capable of operating the system heating and cooling in sequence. It shall be capable of providing a temperature range of at least 5oF 2.8oC) within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum.

N1105.4.1.1 Setback and Shutoff

The thermostat, shall provide a readily accessible automatic means for reducing the energy required for heating and cooling during periods of nonuse or reduced **Exceptions:**

- Where it can be shown that setback or shutdown will not result in a decrease in overall building energy. - Equipment with full-load demand of 2 kilowatts (6824 Btu/h) or less may be controlled by readily accessible offhour controls.

- Lowering thermostat setpoints to reduce energy consumption of the heating system shall not cause energy to be expended to reach the reduced setting.

N1105.4.1.2 Smart Thermostat

For new construction, the thermostat shall meet ENERGY STAR Smart Thermostat criteria with minimum control feature of either integral occupancy sensing or geofencing or approved equivalent. Exception: Individual heating or cooling units with heating capacity of 2 kilowatts (6824 Btu/h) or less or with cooling capacity of less than 5.3 kilowatts (18 000

N1105.4.1.3 Heat Pump Controls

Heat pumps having supplementary electric- resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.



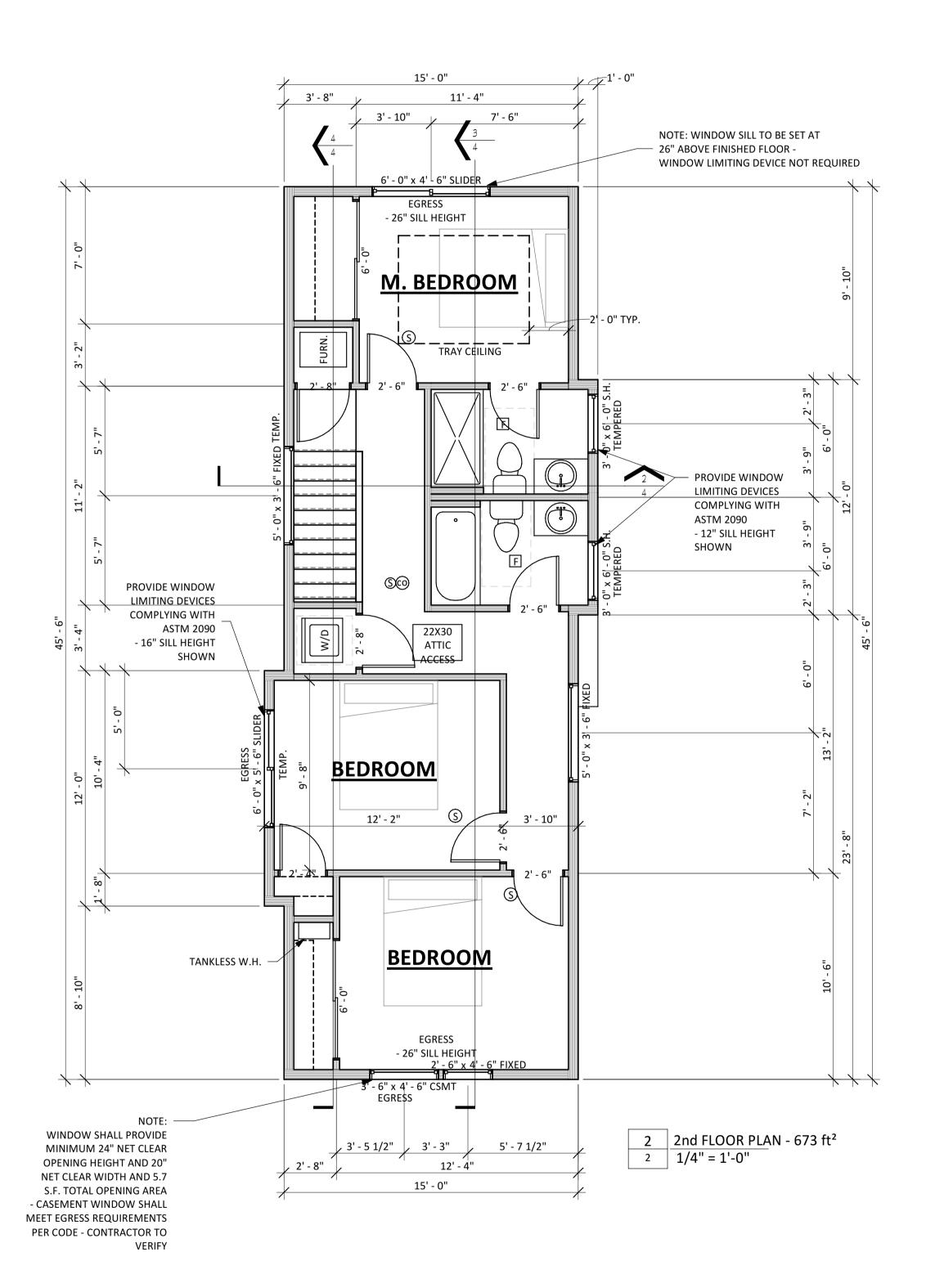
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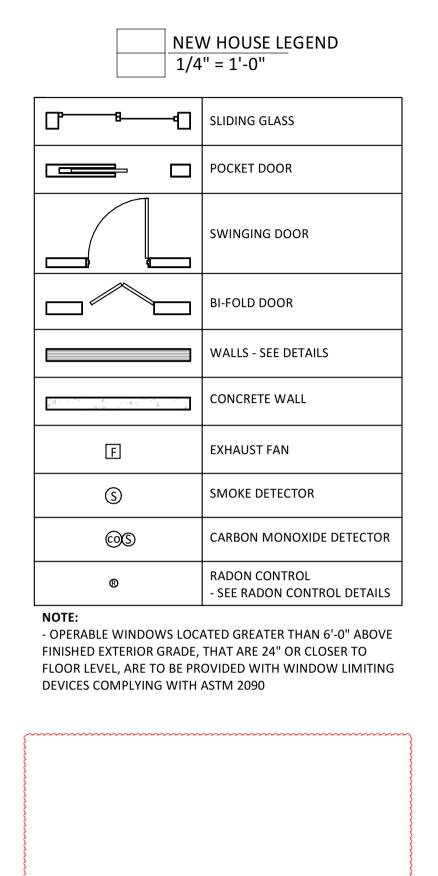
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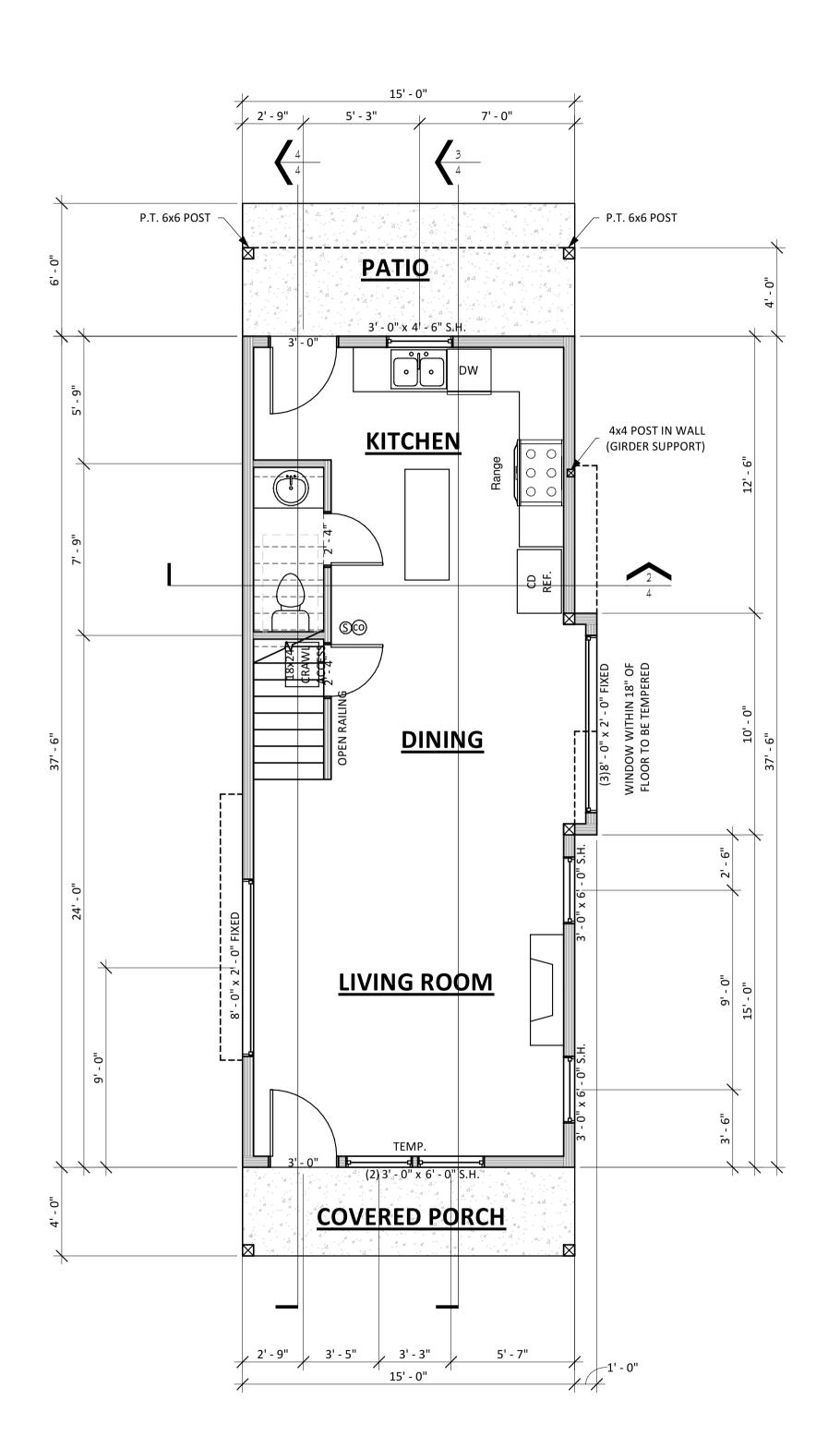
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1,247 S.F.

As indicated



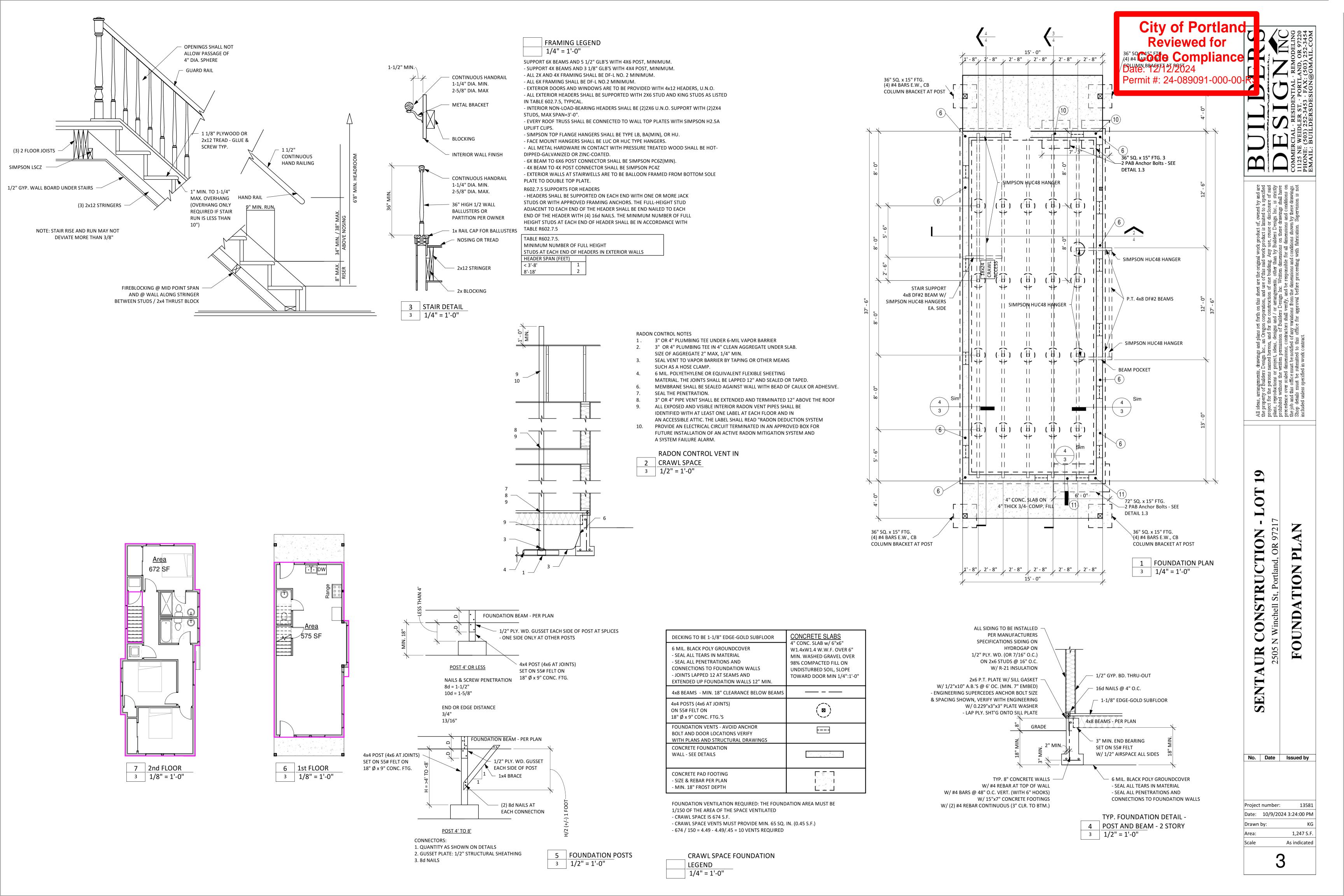


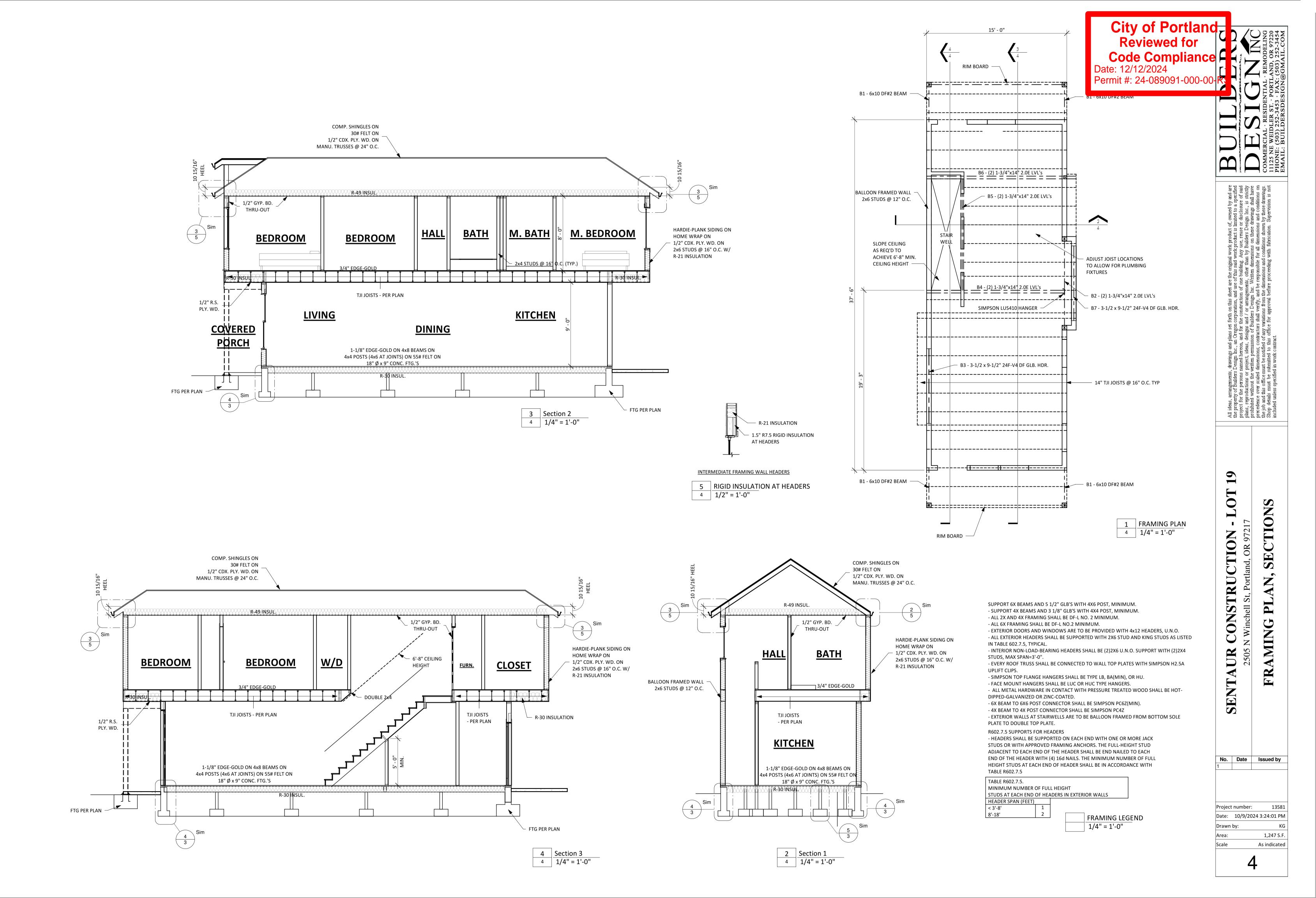


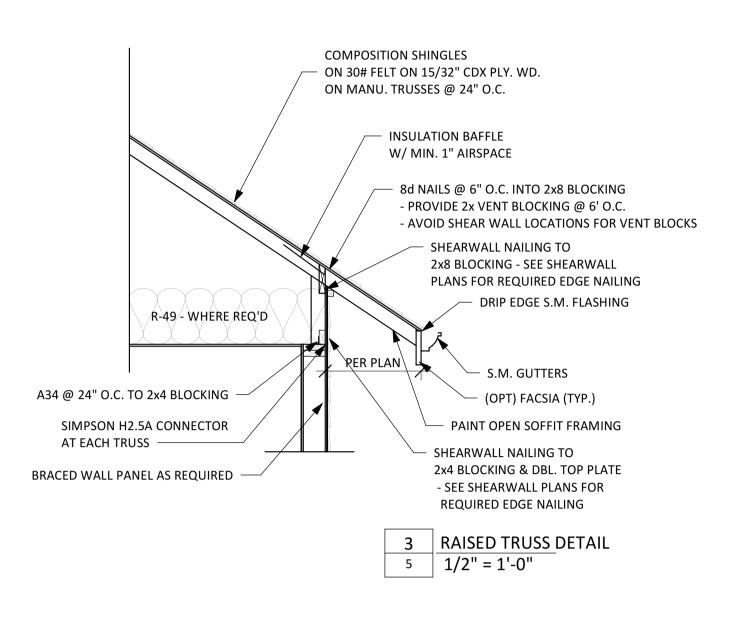
1 1st FLOOR PLAN - 575 ft²
2 1/4" = 1'-0"

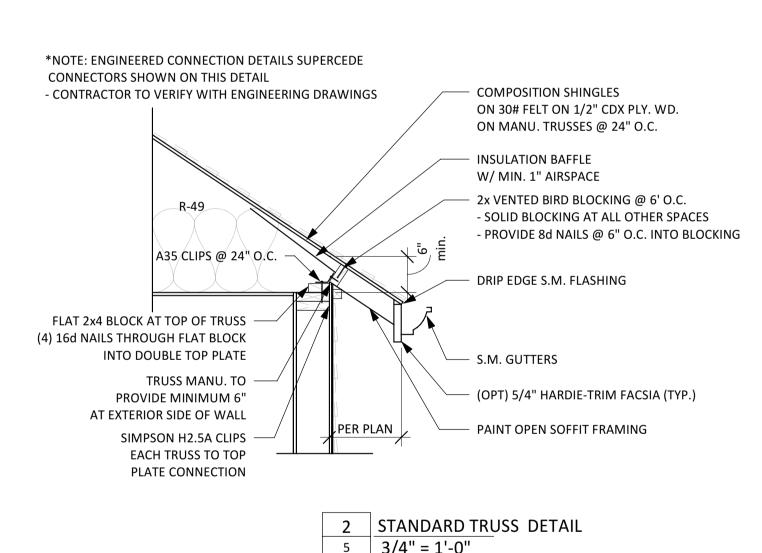
City of Portland
Reviewed for
Code Compliance
Date: 12/12/2024
Permit #: 24-089091-000-00-RS

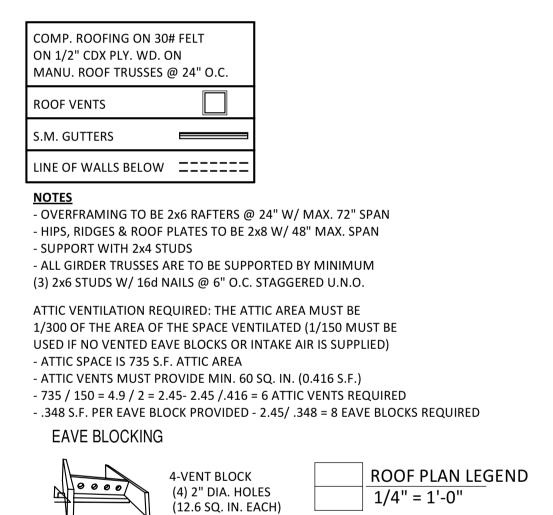
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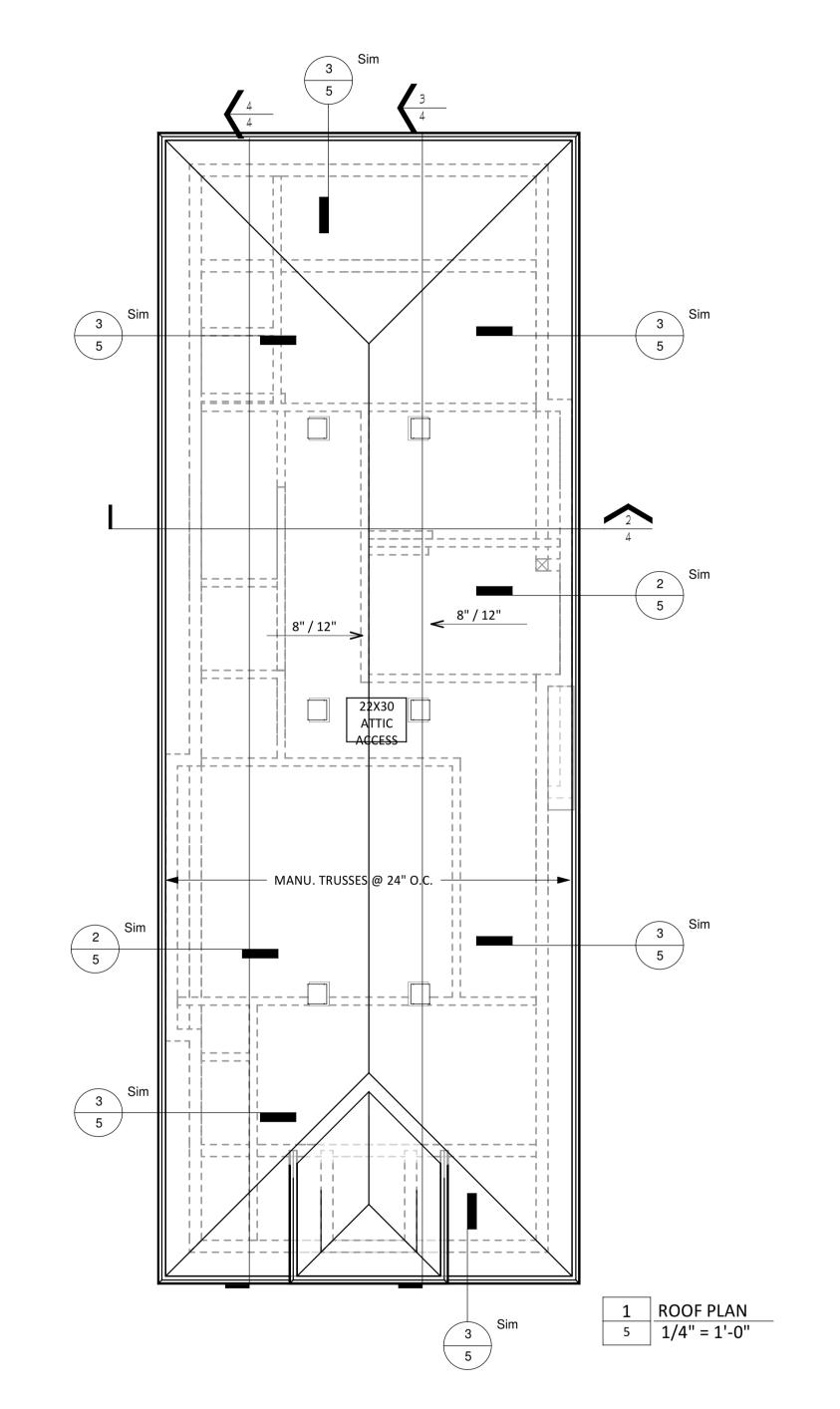




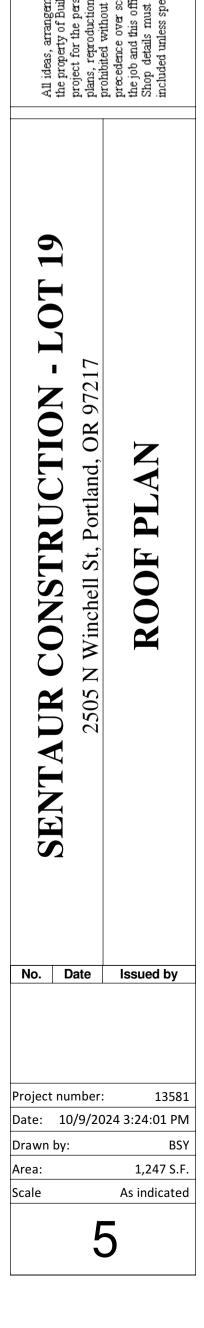








City of Portland
Reviewed for
Code Compliance
Date: 12/12/2024
Permit #: 24-089091-000-00-RS



R105.1 REQUIRED. ANY OWNER OR OWNER'S AUTHORIZED AGENT WHO INTENDS TO CONSTRUCT, ENLARGE, ALTER, REPAIR, MOVE OR CHANGE THE OCCUPANCY OF A BUILDING OR STRUCTURE, OR TO ERECT, INSTALL, ENLARGE, ALTER, REPAIR, REMOVE, CONVERT OR REPLACE ANY GAS OR MECHANICAL SYSTEM, THE INSTALLATION OF WHICH IS REGULATED BY THIS CODE, OR TO CAUSE ANY SUCH WORK TO BE PERFORMED, SHALL FIRST

MAKE APPLICATION TO THE BUILDING OFFICIAL AND OBTAIN THE REQUIRED PERMIT **CODE SUMMARY:**

- · BUILDING CODE 2023 ORSC · MECHANICAL SPECIALTY CODE - 2022 OMSC
- · ELECTRICAL CODE 2023 OESC
- · PLUMBING CODE 2023 OPSC
- · FIRE CODE 2022 OFC
- · 2022 EDITION OF ASHRAE 90.1 · 2017 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES ICCA117.1

· 2022 NFPA 13/13R/13D & 72 **GENERAL CONDITIONS**

1. ALL WORK SHALL CONFORM WITH THE LATEST ADOPTED ISSUE OF THE OREGON RESIDENTIAL SPECIALTY CODE

2. THE CONTRACTOR & BUILDING OWNER IS RESPONSIBLE FOR CAREFULLY CHECKING THE PLANS AND SITE CONDITIONS AND TO NOTIFY THE DESIGNER OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION, IN WRITING. BUILDER'S DESIGN IS NOT RESPONSIBLE FOR ANY ERRORS OR OMMISSIONS DISCOVERED AFTER CONSTRUCTION HAS COMMENCED.

3. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. PLEASE CONTACT DESIGNER IF ADDITIONAL DIMENSIONS ARE NECESSARY CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS ON SITE.

4. ALL GRADING SHOWN ON PLANS IS APPROXIMATE, CONTRACTOR IS TO BE RESPONSIBLE FOR DETERMINING ALL FINAL GRADING AND NOTIFYING DESIGNER IF CHANGES TO THE PLAN SET ARE NECESSARY.

5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT PLANS MEET ALL STATE AND LOCAL BUILDING CODES, IN ADDITION TO WHAT IS SHOWN ON THE PLAN SET. BUILDER'S DESIGN WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RELATING TO THE ACCURACY OF THE PLANS IN EXCESS OF THE FEE PAID TO BUILDER'S DESIGN.

6. ALL DETAILS SHOWN TO MEET COMPLIANCE WITH THE LATEST ADOPTED VERSION OF THE BUILDING CODE. CONTRACTOR IS RESPONSIBLE FOR ALL FINAL MATERIAL INSTALLATIONS (INCLUDING, BUT NOT LIMITED TO, INSULATION, FLASHING, ROOF, VENTILATION, ETC.). IT IS HIGHLY RECOMMENDED THAT A PROFESSIONAL BE CONSULTED FOR ALL INSTALLATION PROCEDURES. DESIGNER IS NOT RESPONSIBLE FOR FINAL INSTALLATION OF ASSEMBLIES, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL CONDITIONS ARE MET.

SITE WORK 1. REMOVE TOP SOIL AND ORGANIC MATERIAL FROM THE BUILDING SITE, STOCKPILING ON SITE FOR FINAL GRADING IF POSSIBLE.

- 2. FOOTINGS ARE TO BEAR ON UNDISTURBED LEVEL SOIL, STEPPED AS REQUIRED TO MAINTAIN THE REQUIRED DEPTH BELOW FINISH GRADE.
- 3. ANY FILL UNDER GRADE SUPPORTED CONCRETE SLABS TO BE 4" THICK (MIN.) 3/4 MINUS ROCK COMPACTED TO 95%. 4. CONCRETE SLABS TO BE 4" THICK, 3000 PSI AT 28 DAYS WITH CONTROL JOINTS AT 25' O/C (MAX.) EACH WAY
- 5. FINISH GRADES ARE TO REMAIN AT LEAST 6" BELOW FINISH SIDING.
- 6. CONTRACTOR TO SLOPE GRADE MINIMUM 6" IN 10 FEET AWAY FROM BUILDING, OR CONTRACTOR SHALL PROVIDE FOOTING DRAINAGE. **FOUNDATIONS**

TABLE R602.3(1) - FASTENING SCHEDULE

TEM DESCRIPTION OF BUILDING ELEMENTS

- 1. CONCRETE MIX AND 28 DAY STRENGTH OF CONCRETE BASEMENT WALLS, FOUNDATIONS AND OTHER CONCRETE NOT EXPOSED TO THE WEATHER BASEMENT SLABS AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS 2,500 PSI
- BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER 3,000 PSI PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER, AND GARAGE FLOOR SLABS 3,000 PSI
- f2. ALL REINFORCING STEEL TO BE A-615 GRADE 60. WELDED WIRE MESH TO BE A-185.
- 3. LAP ALL CONTINUOUS BARS 30 x DIA. (MIN.) PLACE ALL REINFORCING AS PER ACI CODES & STANDARDS. 4. PROVIDE A MINIMUM CLEARANCE OF 18" UNDER GIRDERS, BEAMS, OR JOISTS, IN CRAWL SPACES.
- 5. COVER ENTIRE CRAWL SPACE WITH 6 MIL. BLACK "VISQUEEN" AND EXTEND UP FOUNDATION WALLS AND FASTEN TO MUD SILL
- 6. PROVIDE A MINIMUM OF 1 S.F. OF NET VENTILATION AREA FOR EACH 150 S.F. OF CRAWL SPACE AREA. VENTS ARE TO BE CLOSABLE AND HAVE 1/4"
- OPENINGS IN CORROSIVE RESISTANT SCREEN. POST NOTICE ABOUT OPENING VENTS NEAR ELECTRICAL PANEL.
- 7. ALL WOOD IN CONTACT WITH CONCRETE OR GROUND IS TO BE PRESSURE TREATED.
- 8. BEAM POCKETS IN CONCRETE WALLS TO HAVE 1/2" AIR SPACE AT SIDES AND ENDS AND 3" OF BEARING (MIN.) 9. MUD SILLS TO BE 2x6 PRESSURE TREATED WOOD WITH 1/2" DIA. x 10" ANCHOR BOLTS SPACED 6'-0" O/C, OR PER SHEAR WALL SCHEDULE AND
- WITHIN 12" OF CORNERS. LAYOUT FOR 14' LONG 2x6 P.T. SILL PLATE, PROVIDE AB. EACH SIDE OF SILL SPLICES.

FLASHING & MOISTURE PROTECTION

1. CONTRACTOR TO PROVIDE A "WATER TIGHT ENCLOSURE" FOR THE VALLEY ENVIRONMENT, EMPLOYING THE HIGHEST QUALITY MATERIALS, CRAFTSMAN AND CONSTRUCTION METHODOLOGY, BOTH GENERAL AND SPECIFIC TO THE VALLEY 2. ALL EXTERIOR FLASHING ARE TO BE CONSTRUCTED WITH MIN. GAGE 28 EXPOSED & 30 GAGE CONCEALED, BAKED ENAMEL

3. FLASHING SHALL BE INSTALLED AT JUNCTIONS OF CHIMNEYS AND ROOFS. IN ROOF VALLEYS AND AROUND ALL ROOF OPENINGS.

4. FLASHING SHALL BE INSTALLED AROUND ALL EXTERIOR DOORS AND WINDOWS, TRANSITIONS BETWEEN SIDING AND ROOF. 5. ALL FLASHING TO BE INSTALLED PER "SMACNA" LATEST EDITION OF THE "ARCHITECTURAL SHEET METAL MANUAL". 6. BUILDING WRAP OF "TYVEK" OR SAME TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS, INCLUDING WRAPPING WINDOW AND

DOOR OPENINGS AND TAPING JOINTS. 7. FLASHING FOR WINDOWS: INSTALL ADHESIVE FLASHING THE WIDTH OF SILL AND UP 12" EACH JAMB, AND LAP ENTIRE LENGTH OF

JAMB, AND LAP ADHESIVE FLASHING THE WIDTH OF HEAD AND LAP 12" DOWN EACH JAMB. (DETAIL) 8. ALL PRODUCTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. DESIGNER TAKES NO RESPONSIBILITY FOR INSTALLATION.

R317.1 LOCATION REQUIRED.

INCLUDING SKYLIGHTS. ROOF VENTS. ROOF EDGES BOTH RAKE AND EAVE.

PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS BY THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1.

1.WOOD JOISTS OR THE BOTTOM OF A WOOD STRUCTURAL FLOOR WHERE CLOSER THAN 18 INCHES (457 MM) OR WOOD GIRDERS WHERE CLOSER THAN 12 INCHES (305 MM) TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREA LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.

2.WOOD FRAMING MEMBERS AND SILL PLATES IN CONTACT WITH CONCRETE OR MASONRY FOUNDATION WALLS. 3.SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER SUCH AS 6-MIL-THICK (0.15 MM) POLYETHYLENE SHEETING OR EQUIVALENT. 4.THE ENDS OF WOOD GIRDERS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING CLEARANCES OF LESS THAN 1/2 INCH (12.7

MM) ON TOPS, SIDES AND ENDS. 5.WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES (152 MM) FROM THE GROUND OR LESS THAN 2 INCHES (51 MM) MEASURED VERTICALLY FROM CONCRETE STEPS, PORCH SLABS, PATIO SLABS AND SIMILAR HORIZONTAL SURFACES EXPOSED TO THE WEATHER.

6.WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, UNLESS SEPARATED FROM SUCH FLOORS OR ROOFS BY AN IMPERVIOUS MOISTURE BARRIER. 7.WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY WALLS OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN THE WALL AND THE FURRING STRIPS OR FRAMING MEMBERS.

FIELD-CUT ENDS, NOTCHES AND DRILLED HOLES OF PRESERVATIVE-TREATED WOOD SHALL BE TREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4.

R317.1.2 GROUND CONTACT.

ALL WOOD IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES INTENDED FOR HUMAN OCCUPANCY SHALL BE APPROVED PRESSURE-PRESERVATIVE-TREATED WOOD SUITABLE FOR GROUND CONTACT USE, EXCEPT THAT UNTREATED WOOD USED ENTIRELY BELOW GROUNDWATER LEVEL OR CONTINUOUSLY SUBMERGED IN FRESH WATER SHALL NOT BE REQUIRED TO BE PRESSURE-PRESERVATIVE TREATED.

WOOD COLUMNS SHALL BE APPROVED WOOD OF NATURAL DECAY RESISTANCE OR APPROVED PRESSURE-PRESERVATIVE-TREATED WOOD.

EXCEPTIONS:

1.COLUMNS EXPOSED TO THE WEATHER OR IN BASEMENTS WHERE SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING 1 INCH (25 MM) ABOVE A CONCRETE FLOOR OR 6 INCHES (152 MM) ABOVE EXPOSED EARTH AND THE EARTH IS COVERED BY AN APPROVED IMPERVIOUS MOISTURE BARRIER SUCH AS 6-MIL-THICK (0.15 MM) POLYETHYLENE SHEETING OR EQUIVALENT. 2.COLUMNS IN ENCLOSED CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING WHERE SUPPORTED BY A CONCRETE PIER OR METAL PEDESTAL AT A HEIGHT MORE THAN 8 INCHES (203 MM) FROM EXPOSED EARTH AND THE EARTH IS COVERED BY AN IMPERVIOUS MOISTURE BARRIER.

3.DECK POSTS SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING NOT LESS THAN 1 INCH (25 MM) ABOVE A CONCRETE FLOOR OR 6 INCHES (152 MM) ABOVE EXPOSED EARTH.

R317.1.5 EXPOSED GLUED-LAMINATED TIMBERS.

THE PORTIONS OF GLUED-LAMINATED TIMBERS THAT FORM THE STRUCTURAL SUPPORTS OF A BUILDING OR OTHER STRUCTURE AND ARE EXPOSED TO WEATHER AND NOT PROPERLY PROTECTED BY A ROOF. EAVE OR SIMILAR COVERING SHALL BE PRESSURE TREATED WITH PRESERVATIVE, OR BE MANUFACTURED FROM NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD.

JOIST TO SILL, TOP PLATE OR GIRDER

PLATE (ROOF APPLICATIONS ALSO)

BAND OR RIM JOIST TO JOIST

2" PLANKS (PLANK & BEAM—FLOOR & ROOF)

RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP

R317.3.1 FASTENERS FOR PRESERVATIVE-TREATED WOOD.

FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. STAPLES SHALL BE OF STAINLESS STEEL. COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653 TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.

1.1/2-INCH-DIAMETER (12.7 MM) OR GREATER STEEL BOLTS. 2.FASTENERS OTHER THAN NAILS, STAPLES AND TIMBER RIVETS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B695, CLASS 55 MINIMUM.

3.PLAIN CARBON STEEL FASTENERS IN SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT SHALL BE PERMITTED.

APPLICATIONS OR WET OR DAMP LOCATIONS.

R317.3.2 FASTENINGS FOR WOOD FOUNDATIONS. FASTENINGS, INCLUDING NUTS AND WASHERS, FOR WOOD FOUNDATIONS SHALL BE AS REQUIRED IN AWC PWF.

R317.3.3 FASTENERS FOR FIRE-RETARDANT-TREATED WOOD USED IN EXTERIOR

FASTENERS, INCLUDING NUTS AND WASHERS, FOR FIRE-RETARDANT-TREATED WOOD USED IN EXTERIOR APPLICATIONS OR WET OR DAMP LOCATIONS SHALL BE OF HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. FASTENERS OTHER THAN NAILS, STAPLES AND TIMBER RIVETS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B695, CLASS 55 MINIMUM.

R317.3.4 FASTENERS FOR FIRE-RETARDANT-TREATED WOOD USED IN INTERIOR APPLICATIONS.

FASTENERS, INCLUDING NUTS AND WASHERS, FOR FIRE-RETARDANT-TREATED WOOD USED IN INTERIOR LOCATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF THE MANUFACTURER'S

HEALTH AND SAFETY

ALL NEW SMOKE AND CO ALARMS SHALL BE HARDWIRED WITH BATTERY BACKUP AND INTERCONNECTED WITHIN THE DWELLING UNIT ONLY SMOKE ALARMS SHALL BE LOCATED WITHIN EACH SLEEPING ROOM, IMMEDIATELY OUTSIDE OF EACH SLEEPING ROOM, AND ON EACH LEVEL OF THE DWELLING.

CO ALARMS SHALL BE LOCATED WITHIN 15' OUTSIDE OF EACH BEDROOM DOOR. ALL ALARMS SHALL BE CROSS LISTED FOR INTERCONNECTION. FANS AND SMOKE DETECTORS

FANS IN BATHING AREAS SHALL BE CONTROLLED BY TIMER. SMOKE DETECTORS SHALL BE 110V BATTERY BACKUP.

SPACING AND LOCATION

TOE NAIL

6" O.C. TOE NAIL

FACE NAIL

BLIND AND FACE NAIL

AT EACH BEARING, FACE NAIL

END NAIL

NAIL EACH LAYER AS FOLLOWS: 32" O.C. AT TOP AND BOTTOM AND STAGGERED

RECOMMENDATIONS, SECTION R317.3.3 SHALL APPLY.

<u>FRAMING</u>

1. WOOD FRAMING MEMBER GRADES ARE AS FOLLOWS UNLESS, OTHERWISE NOTED ON THE DRAWINGS A. POSTS, BEAMS, HEADERS, JOISTS AND RAFTERS - MIN. # 2 DOUG FIR OR LVL'S - 2650 FB 8 8 8 8 8 B. PLATES, BLOCKING AND BRIDGING -NO. 3 DOUG FIR

C. STUDS -STUD GRADE DOUG FIR STUD & BETTER GRADE DOUG FIR D. T&G DECKING -E. WALL SHEATHING -7/16" OSB

F. GLU-LAM -24-F V-4 (OR 24-F V-8 PER PLAN)

2. UNLESS OTHERWISE NOTED ON DRAWINGS, ALL EXTERIOR WINDOW AND DOOR HEADER REPOBLIAIT #6024 - 089091-000-0

3. PROVIDE DOUBLE JOISTS UNDER ALL BEARING PARTITIONS 4. DESIGN LOADS: ROOF -25 P.S.F. (LL) FLOOR -40 P.S.F. (LL) STAIRS -100 P.S.F. (LL) **GARAGE FLOOR -**50 P.S.F. (LL) DECKS -60 P.S.F. (LL)

5. SOIL BEARING PRESSURE IS ASSUMED TO BE 1500 P.S.F.

6. DECK AND BALCONY GUARDRAILS TO BE 36 VITH MAXIMUM OPENING SPACES SO THAT A 4" SPHERE CAN NOT PASS THROUGH. 7. PROVIDE SIMPSON H2.5A TRUSS CONNECTORS AT EACH TRUSS/RAFTER - UNLESS NOTED OTHERWISE ON PLAN 8. ALL EXTERIOR FASTENERS, EXPOSED TO THE ELEMENTS TO BE STAINLESS STEEL OR GALVANIZED. INCLUDING NAIL, STAPLES, CLIPS, ETC.

1. ERECT SINGLE LAYER 1/2" STANDARD, 5/8" F.R. AND 1/2" MOISTURE RESISTANT GYPSUM BOARD IN MOST ECONOMICAL DIRECTIONS, WITH ENDS OCCURRING OVER FIRM BACKING.

ROOF VENTILATION

R806.1 VENTILATION REQUIRED.

GYPSUM BOARD FINISH

ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY

TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE AT LEAST DIMENSION OF 1/16" MINIMUM AND 1/4" MAXIMUM. VENTILATION OPENINGS HAVING AT LEAST DIMENSION LARGER THAN 1/4" SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, OR SIMILAR MATERIAL. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM WITH THE REQUIREMENTS OF SECTION R802.7 806.2 MINIMUM AREA.

THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED

EXCEPT THAT REDUCTION OF THE TOTAL AREA TO 1/300 IS PERMITTED PROVIDED THAT AT LEAST 50% AND NOT MORE THAN 80% OF THE REQUIRED VENTILATING AREA IS PROVIDED WITH VENT OPENINGS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED

AT LEAST 3' ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. AS AND ALTERNATIVE. THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1/300 WHEN A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT EXCEEDING 1 PERM IS INSTALLED ON THE WARM IN WINTER SIDE OF THE CEILING. **R806.3 VENT AND INSULATION CLEARANCE**

WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF 1 INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT. 905.2.7 UNDERLAYMENT APPLICATION

- FOR ROOF SLOPES FROM 2 UNITS VERTICAL IN 12 UNITS HORIZONTAL UP TO 4 UNITS VERTICAL IN 12 UNITS HORIZONTAL, UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER: APPLY A 19 INCH STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL. -FOR ROOF SLOPES OF 4 UNITS IN 12 OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER: UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL. END LAPS SHALL BE OFFSET BY 6'.

RADON CONRTROL ENTRY ROUTES

CONDENSATE DRAINS:

CONDENSATE DRAINS SHALL BE TRAPPED OR ROUTED THROUGH NON-PERFORATED PIPE TO DAYLIGHT

SUMP PITS OPEN TO SOIL OR SERVING AS TERMINATION POINT FOR SUB-SLAB OR EXTERIOR DRAIN TILE LOOPS SHALL BE COVERED WITH GASKETED OR OTHERWISE SEALED LID. SUMPS USED AS THE SUCTION POINT IN A SUB-SLAB DEPRESSURIZATION SYSTEM SHALL HAVE A LID DESIGNED TO ACCOMMODATE THE VENT PIPE.

SUMPS USED AS A FLOOR DRAIN SHALL HAVE A LID EQUIPPED WITH TRAPPED INLET **SOLAR READY CONNECTION**

SOLAR READY SOLAR INTERCONNECTION PATHWAY. A SQUARE METAL JUNCTION BOX NOT LESS THAN 4 INCHES BY 4 INCHES WITH A METAL BOX COVER SHALL BE PROVIDED WITHIN 24 INCHES HORIZONTALLY OR VERTICALLY OF THE MAIN ELECTRICAL PANEL. A MINIMUM %-INCH RIGID METAL RACEWAY SHALL EXTEND FROM THE JUNCTION BOX TO A CAPPED ROOF TERMINATION OR TO AN ACCESSIBLE LOCATION IN THE ATTIC WITH A VERTICAL CLEARANCE OF NOT LESS THAN 36 INCHES.

WINDOW GLAZING – SECTION 312.2

R308.4 HAZARDOUS LOCATIONS. THE LOCATIONS SPECIFIED IN SECTIONS R308.4.1 THROUGH R308.4.7 SHALL BE CONSIDERED TO BE SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING. - CONTRACTOR TO VERIFY REQUIRED TEMPERED GLAZING LOCATIONS

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1,247 S.F. 1/4" = 1'-0"

BLOCKING BETWEEN CEILING JOISTS OR RAFTERS TO TOP PLATE 4-8d box (2-1/2" × 0.113") TOE NAIL **CEILING JOISTS TO TOP PLATE** 4-8d box (2-1/2" × 0.113") PER JOIST, TOE NAIL CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER 4-10d box (3" × 0.128") FACE NAIL PARTITIONS (SEE SECTION R802.5.2 AND TABLE R802.5.2) CEILING JOIST ATTACHED TO PARALLEL RAFTER **FACE NAIL** Table R802.5.2 (HEEL JOINT) (SEE SECTION R802.5.2 AND TABLE R802.5.2) FACE NAIL EACH RAFTER COLLAR TIE TO RAFTER, FACE NAIL OR 1-1/4" × 20 GA. 4-10d box (3" × 0.128") RIDGE STRAP TO RAFTER RAFTER OR ROOF TRUSS TO PLATE 3-16d box nails (3-1/2" × 0.135") 2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS **TOE NAIL** 4-16d (3-1/2" × 0.135") ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM 3-16d box (3-1/2" × 0.135") **END NAIL** STUD TO STUD (NOT AT BRACED WALL PANELS) 16d common (3-1/2" × 0.162") 24" O.C. FACE NAIL 16d common (3-1/2" × 0.162") STUD TO STUD AND ABUTTING STUDS AT INTERSECTING 16" O.C. FACE NAIL WALL CORNERS (AT BRACED WALL PANELS) 10 | BUILT-UP HEADER (2" TO 2" HEADER WITH 1/2" SPACER) 16d common (3-1/2" × 0.162") 16" O.C. EACH EDGE FACE NAIL 5-8d box (2-1/2" × 0.113") TOE NAIL .1 | CONTINUOUS HEADER TO STUD 12 TOP PLATE TO TOP PLATE 16d common $(3-1/2" \times 0.162")$ 16" O.C. FACE NAIL FACE NAIL ON EACH SIDE OF END JOINT 13 DOUBLE TOP PLATE SPLICE 8-16d common (3-1/2" × 0.162") (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT) 14 | BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR 16d common (3-1/2" × 0.162") 16" O.C. EACH FACE NAIL BLOCKING (NOT AT BRACED WALL PANELS) 15 | BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR 3-16d box (3-1/2" × 0.135") 3 EACH 16" O.C. FACE NAIL BLOCKING (AT BRACED WALL PANEL) 4-8d box (2-1/2" × 0.113") TOE NAIL 16 TOP OR BOTTOM PLATE TO STUD 3-16d box (3-1/2" × 0.135") END NAIL FACE NAIL TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS $3-10d box (3" \times 0.128")$ FACE NAIL 1" BRACE TO EACH STUD AND PLATE 3-8d box (2-1/2" × 0.113") FACE NAIL .9 | 1" × 6" SHEATHING TO EACH BEARING 3-8d box (2-1/2" × 0.113") 1" × 8" AND WIDER SHEATHING TO EACH BEARING FACE NAIL 3-8d box (2-1/2" × 0.113")

NUMBER & TYPE OF FASTENER^{A,B,C}

NOTE: SEE TABLE R602.3(1) FOR ADDITIONAL FASTERNER DETAILS

- 1 GENERAL NOTES
- 6 | **1/4" = 1'-0"**

TABLE R602.3(1) FASTENING SCHEDULE ITEM DESCRIPTION OF BUILDING ELEMENTS **SPACING AND LOCATION** 23 1" × 6" SUBFLOOR OR LESS TO EACH JOIST 24 2" SUBFLOOR TO JOIST OR GIRDER 27 BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS 39 | 1-1/8" — 1-1/4"

		And: 2-20d common (4" × 0.192")	FACE NAIL AT ENDS	S AND AT EACH SPLICE	
28	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d box (3-1/2" × 0.135")	AT EACH JOIST OF	R RAFTER, FACE NAIL	
29	BRIDGING OR BLOCKING TO JOIST	2-10d box (3" × 0.128")	EACH END, TOE NAIL		
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER & TYPE OF FASTENER ^{A,B,C}	PE OF FASTENER ^{A,B,C} SPACING (
			EDGES (INCHES) ^h	INTERMEDIATE SUPPORTS ^{c,e} (INCHES)	
	WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR [SEE TABLE R602.3(3) FOR WOOD STRU	R WALL SHEATHING TO FRAMING AND PARTICLE ICTURAL PANEL EXTERIOR WALL SHEATHING TO		IING TO FRAMING	
30	3/8" — 1/2"	6d common (2" × 0.113") nail (subfloor, wall) 8d common (2-1/2" × 0.131") nail (roof)	6	12 ^f	
31	19/32" — 1"	8d common nail (2-1/2" × 0.131")	6	12 ^f	
32	1-1/8" — 1-1/4"	10d common (3" × 0.148") nail	6	12	
		OTHER WALL SHEATHING ^g			
33	1/2" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1-1/2" galvanized roofing nail	3	6	
34	25/32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1-3/4" galvanized roofing nail	3	6	
35	1/2" GYPSUM SHEATHING ^d	1-1/2" galvanized roofing nail	7	7	
36	5/8" GYPSUM SHEATHING ^d	1-3/4" galvanized roofing nail	7	7	
	WOOD STRUCTURAL PAN	NELS, COMBINATION SUBFLOOR UNDERLAYMEN	T TO FRAMING		
37	3/4" AND LESS	6d deformed (2" × 0.120") nail	6	12	
38	7/8" — 1"	8d common (2-1/2" × 0.131") nail 6		12	

10d common (3" × 0.148") nail For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank

NUMBER & TYPE OF FASTENER^{A,B,C}

4-8d box (2-1/2" × 0.113")

8d common (2-1/2" × 0.131")

3-8d box (2-1/2" × 0.113")

3-16d box (3-1/2" × 0.135")

3-16d box (3-1/2" × 0.135")

3-16d common (3-1/2" × 0.162")

20d common (4" × 0.192")

diameters of 0.142 inch or less. b. Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.

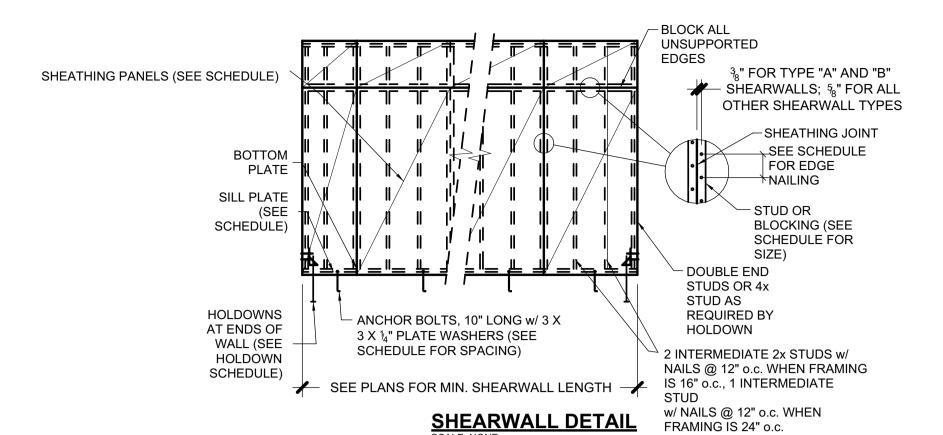
d. Four-foot by 8-foot panels shall be applied vertically.

h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing

plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.

j. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. e. Spacing of fasteners not included in this table shall be based on Table R602.3(2). f. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the basic design wind speed, V, is less than 130 mph and shall be spaced 4 inches on center where the basic design wind speed, V, is 130 mph or greater but less than 140 g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208. members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking. i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top



				SCALE: N	IONE					
TYPE	SHEATHING 1, 2	SIDES		BTM. PLATE	SILL PLATE	EDGE NAILING 6, 7	BOTTOM ¹¹ PLATE NAILING	SILL PLATE ANCHOR BOLTS 3, 4, 9	LTP4 @	W/S CAPACITY (plf) ⁹
	¹⁵ / ₃₂ " CDX	ONE	2x	2x	2x	8d @ 6"	16d @ 4"	⁵ 8" Ø @ 3'-0"	24"	360/260
B	¹⁵ / ₃₂ " CDX	ONE	2x	2x	2x	8d @ 4"	16d @ 3"	⁵ 8" ∅ @ 2'-0"	16"	530/350
	¹⁵ / ₃₂ " CDX	ONE	3x ¹⁰	2x	2x	8d @ 3"	16d @ 2"	⁵ / ₈ " ∅ @ 1'-2"	12"	690/490
	¹⁵ / ₃₂ " CDX	ONE	3x	2x	2x	8d @ 2"	16d @ 1.5"	⁵ ₈ " ∅ @ 0'-11"	9"	900/600
	¹⁵ / ₃₂ " CDX	ONE	3x	2x	3x	10d @ 2"	SDS 1/4 X 4 1/2 @ 5"	⁵ 8" ∅ @ 1'-4"	7"	1080/770
⑤	¹⁵ / ₃₂ " CDX	TWO	3x	2x	3x		SDS 1/4 X 4 1/2 @ 4"	⁵ / ₈ " ∅ @ 1'-0"	6"	1370/980
	45		_	_	•	0.1 (0.01	4 4	5	4 =	

- 15/₃₂" CDX TWO 3x 2x 3x 8d @ 2" SDS 1/4 X 4 1/2 @ 3" 58" Ø @ 0'-9" 4.5" 1790/1280 1. All exterior walls & roof shall be sheathed with 15/32" CDX or 7/16" OSB and nailed 8d @ 6" edges, 8d@ 12" field.
- 2. 7/16" APA-Rated OSB is an acceptable substitute for 15/32" CDX. 3. 1/2" φ anchor bolts @ 6'-0" o.c. except as noted.

- 4. Foundation vents are acceptable under shearwalls. Anchor bolts shall be placed 3" clear of foundation vents. Any two adjacent vents must have at lease 12" of conc. between. Anchor bolt spacing may vary, but sched. average spacing shall be maintained.
- 5. Studs and blocking specified as 3x shall be single 3" nominal lumber at intermediate abutting sheathing joints only, others may be 2x studs and blocking. Double 2x members are NOT an acceptable substitute for 3x material, per code requirements.
- 6. 8d nails shall be 0.131 dia. x 2 1/2" common wire or galvanized box (hot-dipped or tumbled) nails.
- 7. 10d nails shall be 0.148 dia. x 3" common wire or galvanized box (hot-dipped or tumbled) nails. 8. Schedule utilizes the permitted 40% increase for wind loads per IBC 2306.4.1.
- 9. Shearwalls w/ seismic load >350 & <600 plf utilize dbl. sill pl. anchors req'd for 2x sill plate material per IBC 2305.3.10 Exception. 10. 3x material is not required for all loading conditions. Refer to structural plans for exceptions, if any.
- 11. Staggerd fasteners.

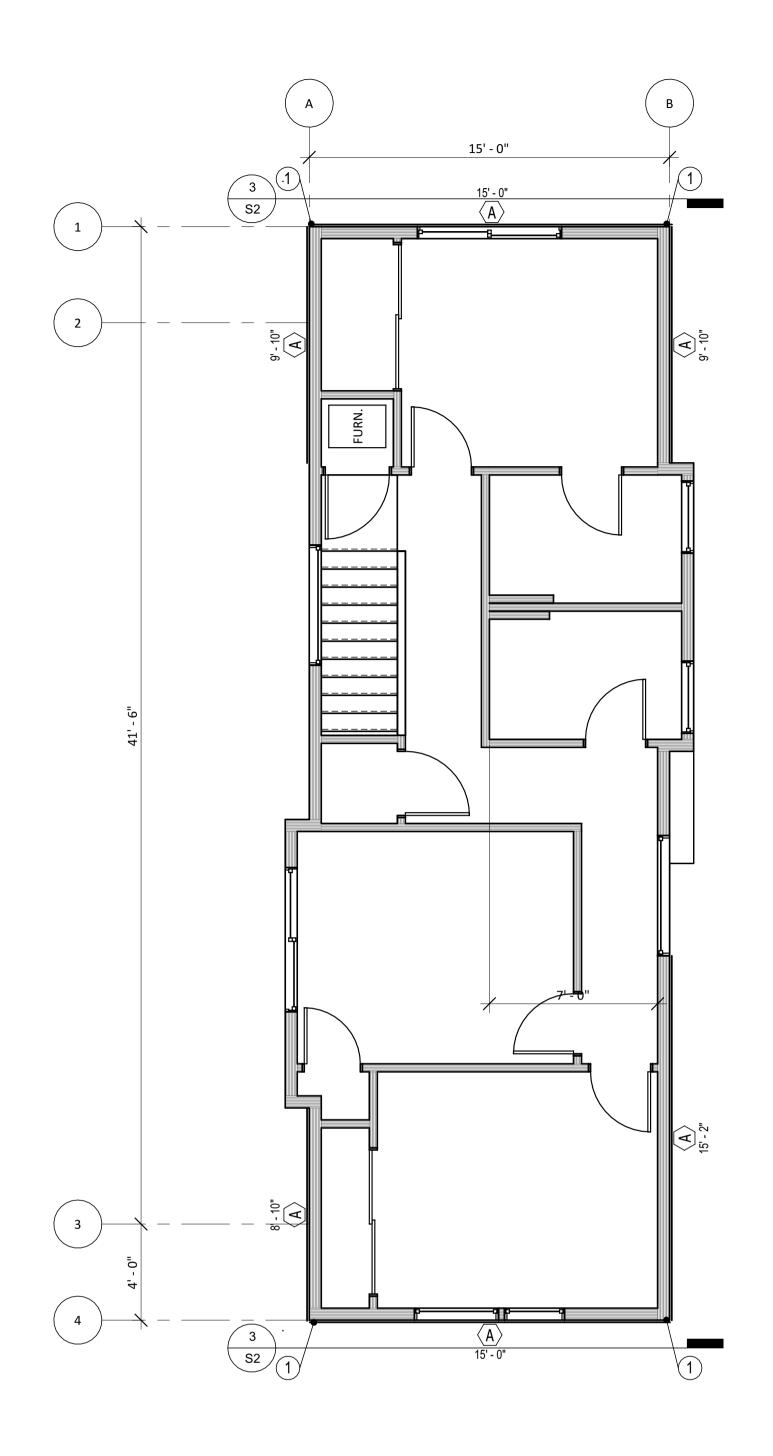
3.1 - SHEARWALL SCHEDULE -

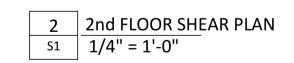
s1 1/2" = 1'-0"

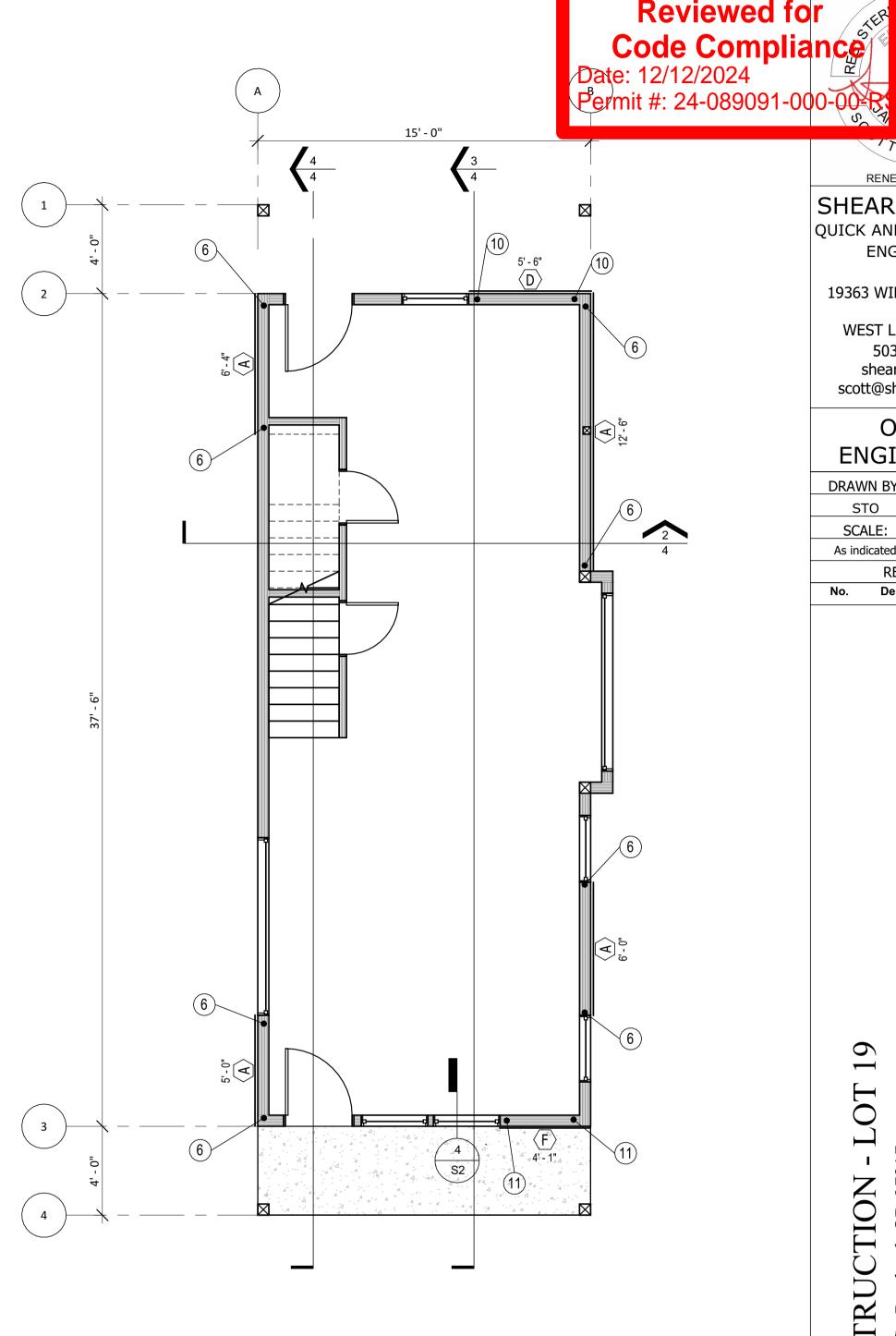
			CA	PACITY (I	lb)
	HOLDOWN	Min. Concrete Wall Thickness	6"	8"	N/A
1	MSTC28 from double stud or beam below to double double stud at end of shearwall above.				1310
2	MSTC40 from double stud or beam below to double stud at end of shearwall above.				2945
3	MSTC52 from double stud or beam below to double stud at end of shearwall above.				3925
4	MSTC66 from double stud or beam below to double stud at end of shearwall above.				5800
5	MSTC78 from double stud or beam below to double stud at end of shearwall above.				5860
6	5/8"φ SSTB24 ROD embedded 21" into concrete fou offset to align with HDU2 on double stud at end of sl		3075		
7	5/8"φ SB5/8x24 ROD embedded 18" into concrete for offset to align with HDU4 on double stud at end of sl		4565		
8	5/8" SB5/8x24 ROD embedded 18" into concrete for offset to align with HDU5 on double stud at end of sl		5645		
9	7/8" SB7/8x24 ROD embedded 18" into concrete for offset to align with HDU8 on (2) 2x stud at end of sh		5980		
10	1"φ PAB8 ROD w/ NUT embedded through stem was concrete footing (16 ½" from edge of footing), offset 2x stud at end of shearwall above.			9535	
11)	1"\$\phi\$ PAB8 ROD w/ NUT embedded through stem was concrete footing (16 \(\frac{1}{2}\)" from edge of footing), offset to 2x stud at end of shearwall above.	all 11" into 33" min width align with HHDQ11 on (2)		11,810	
12	1" φ PAB8 ROD w/ NUT embedded through stem was concrete footing (16 $\frac{1}{2}$ " from edge of footing), offset (2) 2x stud at end of shearwall above.			13,710	
13)	1"\$\phi\$ PAB8 ROD w/ NUT embedded through stem was width concrete footing (16 \(\frac{1}{2}\)" from edge of footing), on (2) 2x stud at end of shearwall above.			14,925	

8.1 - SHEARWALL HOLDOWN

5 SCHEDULE 51 1" = 1'-0"







1 1st FLOOR SHEAR PLAN
1/4" = 1'-0"

CONSTRUCTION - Winchell St, Portland, OR 9721 SENTAUR Project number: 13581

S1

RENEWAL 12/31/2024

SHEARWALL PRO

QUICK AND EASY LATERAL

ENGINEERING

19363 WILLAMETTE DRIVE

#113

WEST LINN, OR 97068

503-281-0109

shearwallpro.com

scott@shearwallpro.com

OGREN

ENGINEERING

DRAWN BY: CHECKED BY:

REVISIONS:

No. Description

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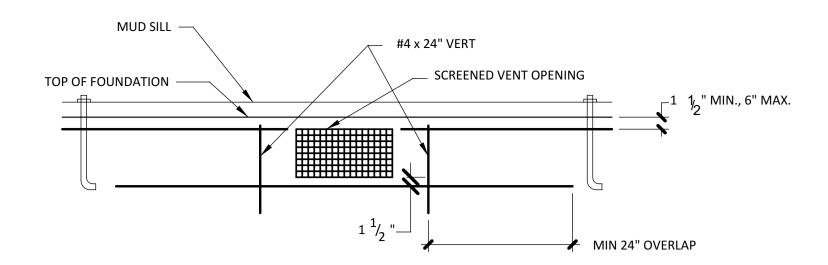
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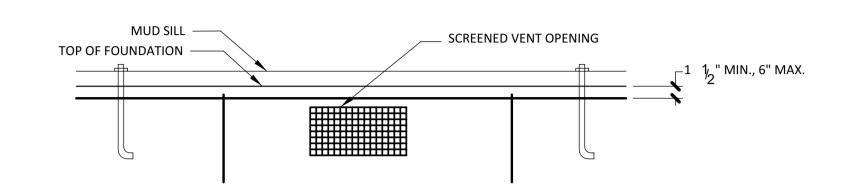
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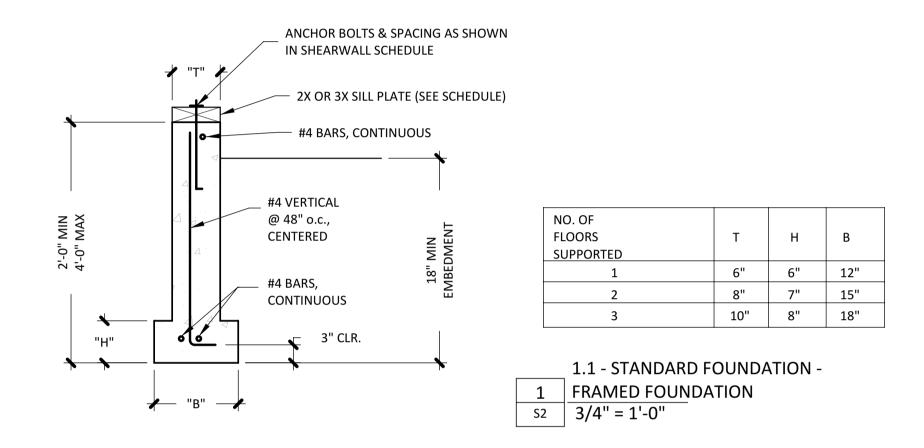
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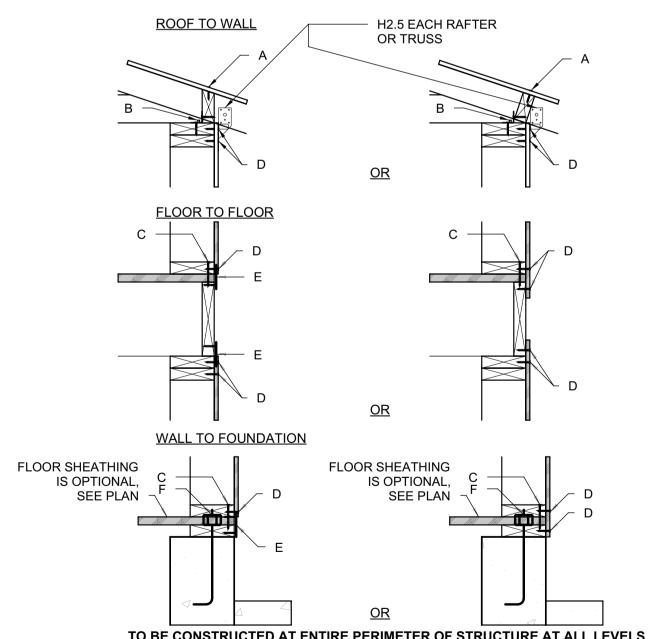


FOUNDATION AT HIGH VENT OPENING



FOUNDATION AT LOW VENT OPENING





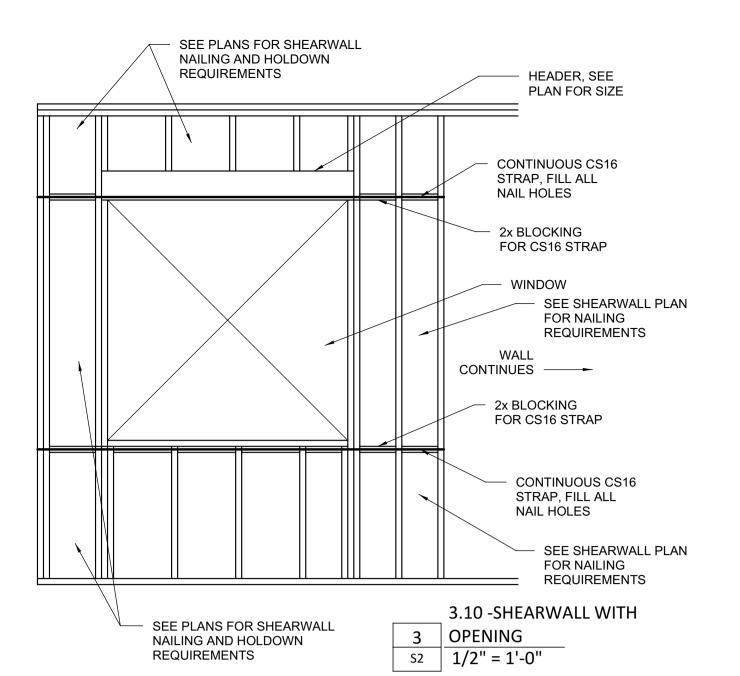
TO BE CONSTRUCTED AT ENTIRE PERIMETER OF STRUCTURE AT ALL LEVELS

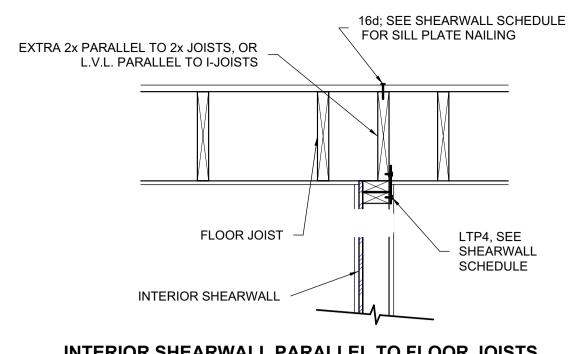
A. 8d @ 6" OR SPECIFIED ROOF DIAPHRAGM NAILING

- B. A35 @ SPECIFIED SPACING, 24" AVG. MAX C. BASE PLATE NAILING AS SPECIFIED (IF LPT4 PLATES 'E' ARE INSTALLED OR
- IF SHEATHING IS LAPPED, NAIL 16d @ 16" O.C. PER IBC 2304.9.1) D. SCHEDULED SHEARWALL NAILING
- E. LTP4 @ SCHEDULED SPACING 24" AVG. MAX (NOT REQUIRED IF SHEATHING IS LAPPED)
- F. ANCHOR BOLTS @ SCHEDULED SPACING

3.7 TYPICAL SHEAR TRANSFER DETAILS

3.7 - TYPICAL SHEAR TRANSFER DETAILS - P&B S2 | 1" = 1'-0"





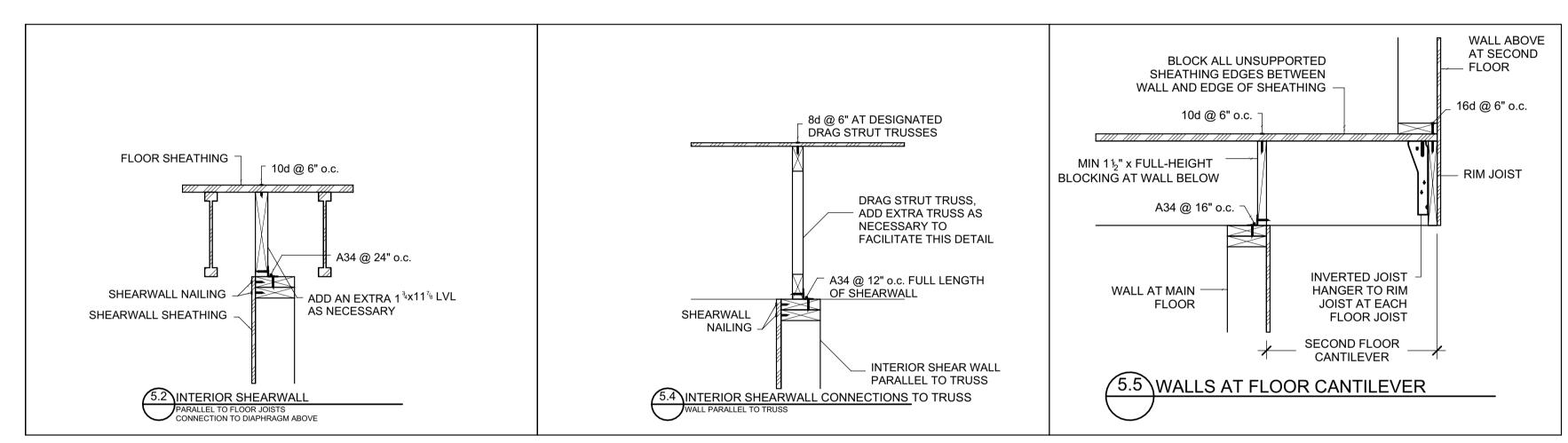
INTERIOR SHEARWALL PARALLEL TO FLOOR JOISTS

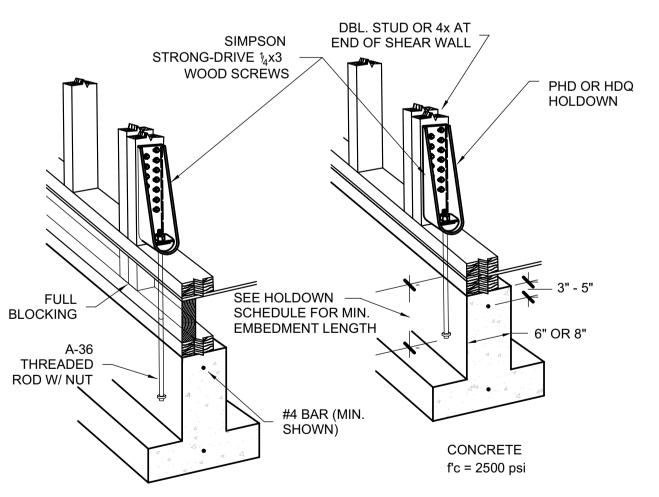
INTERIOR SHEARWALLS PARALLEL AND

5.1 - INTERIOR SHEARWALL TO 4 FLOOR JOISTS s2 | 3/4" = 1'-0"

PERPENDICULAR TO FLOOR JOISTS

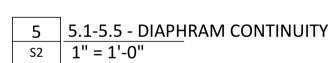
SHEARWALL WITH OPENING

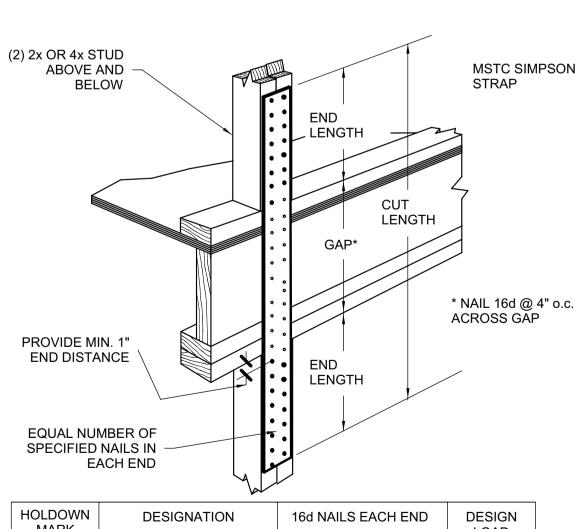




HOLDOWN TYPE	SIMPSON MODEL#	No. OF SIMPSON SDS 1/4 x2 1/2" WOOD SCREWS	THREADED ROD φ	MIN. ROD EMBEDMENT IN CONCRETE
6	HDU2	6	5 _{/8} "	21"
7	HDU4	10	5/8 "	18"
8	HDU5	14	5/8 "	18"
9	HDU8	20	7 _/ "	18"
10)	HDU11	30	1"	11" INTO FTNG
(11)	HHDQ11	24	1"	11" INTO FTNG
(12)	HHDQ14	30	1"	11" INTO FTNG
13)	HDU14	36	1"	11" INTO FTNG

8.4 - HDU AND HHDQ 7 HOLDOWNS s2 3/8" = 1'-0"





HOLDOWN MARK	DESIGNATION	16d NAILS EACH END	DESIGN LOAD
1	MSTC28	8	1310
2	MSTC40	18	2945
3	MSTC52	24	3925
4	MSTC66	34	5800
5	MSTC78	38	5860

6 8.2 - MSTC STRAPS s2 3/4" = 1'-0"

Code Compliance Permit #: 24-089091-000-00-B RENEWAL 12/31/2024

SHEARWALL PRO QUICK AND EASY LATERAL **ENGINEERING**

19363 WILLAMETTE DRIVE #113 WEST LINN, OR 97068 503-281-0109 shearwallpro.com scott@shearwallpro.com

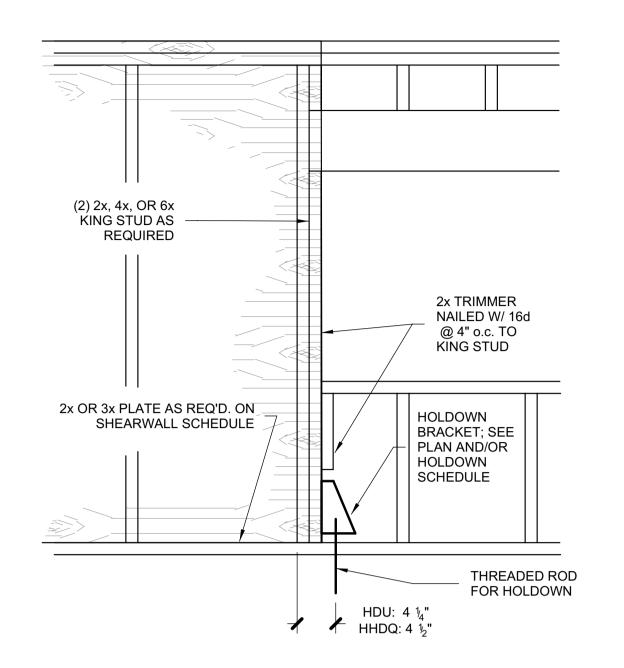
OGREN **ENGINEERING**

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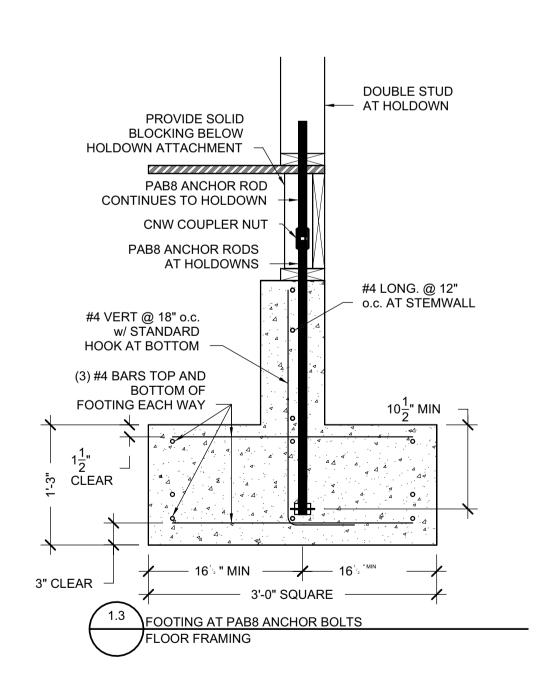
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S2



DIMENSIONS ARE FROM FACE OF STUD TO C.L. OF THREADED ROD.

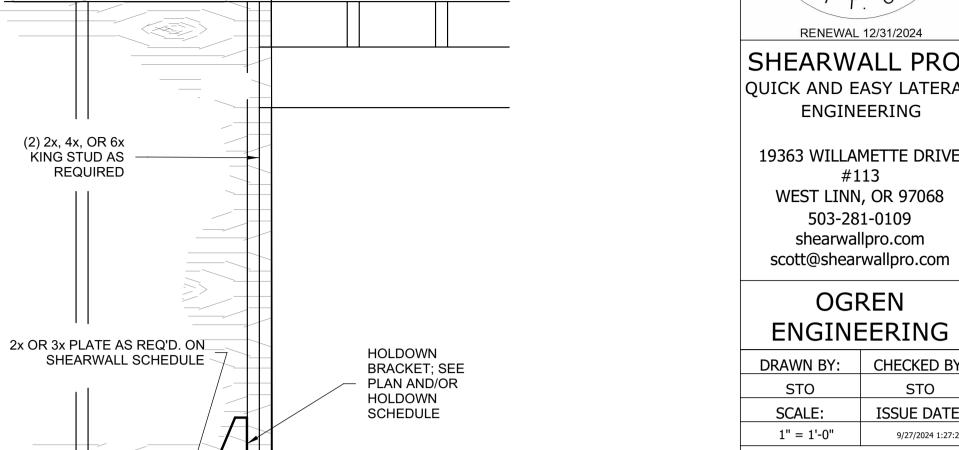
	8.11 - TYP. END OF SHEARWALL
3	AT WINDOW OPENING
S3	1" = 1'-0"



1.3 - FOOTING AT PAB ANCHOR 4 BOLTS



Permit #: 24-089091-000-00-B



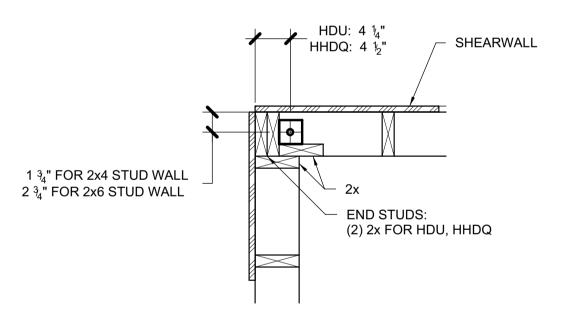
THREADED ROD

FOR HOLDOWN

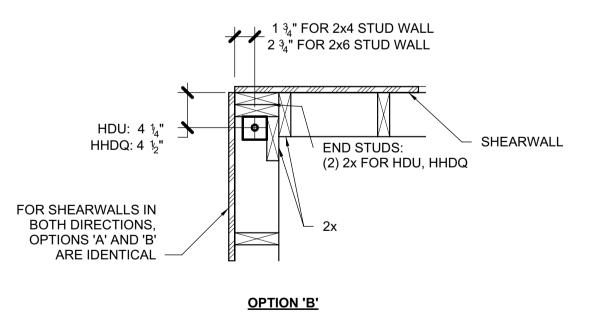
DIMENSIONS ARE FROM ROUGH OPENING TO C.L. OF THREADED ROD.

_ HDU: 4 ½" HHDQ: 4 ½"

8.9 - TYP. END OF SHEARWALL 1 AT DOOR OPENINGS s3 | 1" = 1'-0"



OPTION 'A'



8.10 - TYP. END OF SHEARWALL

2 AT WALL CORNER

RENEWAL 12/31/2024 SHEARWALL PRO QUICK AND EASY LATERAL **ENGINEERING**

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OGREN **ENGINEERING**

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REVISIONS:		

No. Description

CONSTRUC SENTAUR

DETAIL

S3

13581

Project number: