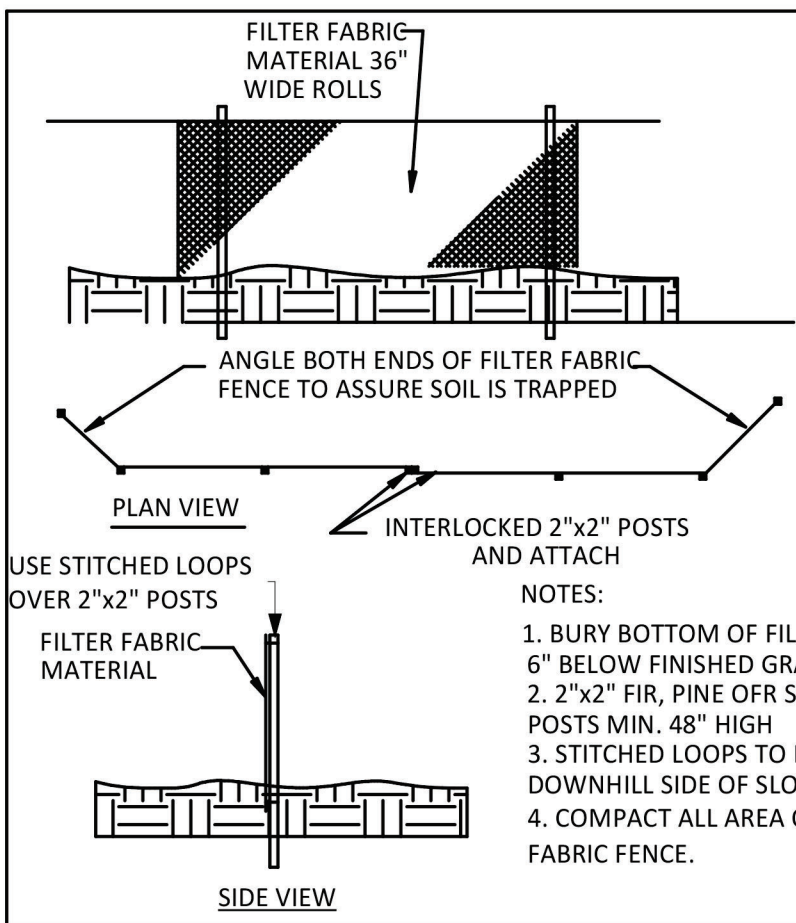


SILT FENCE DETAIL



UTILITY NOTES

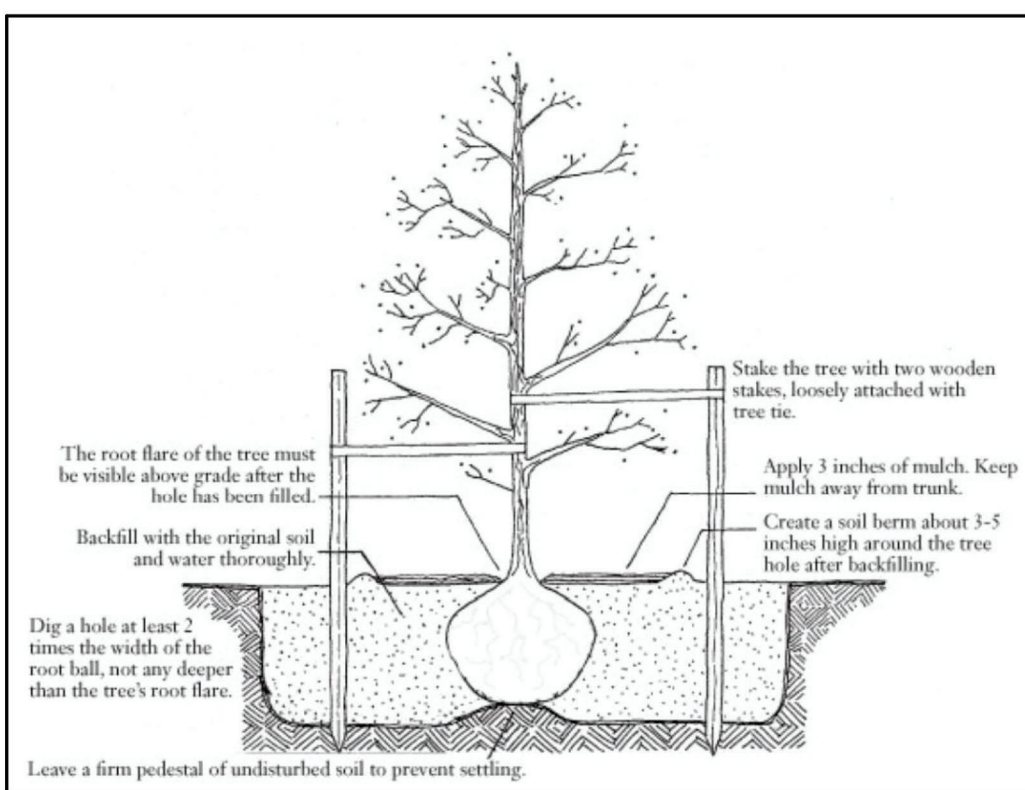
- SEPARATION BETWEEN SANITARY SEWER AND WATER SERVICES AND VAULTS SHOULD BE 5FT MINIMUM SKIN TO SKIN.
- ALL ABOVE & UNDERGROUND UTILITIES, SUCH AS GAS AND ELECTRICAL, NEED TO HAVE 3FT MINIMUM SEPARATION FROM WATER SERVICES AND METERS 2-INCH OR LESS
- ALL ABOVE & UNDERGROUND UTILITIES, SUCH AS GAS AND ELECTRICAL, NEED TO HAVE 5FT MINIMUM SEPARATION FROM WATER SERVICES LARGER THAN 2-INCH, WATER MAINS AND VAULTS.
- SEPARATION BETWEEN MULTIPLE WATER SERVICES SHOULD BE 1.5FT MINIMUM.
- A NEW WATER SERVICE CANNOT BE INSTALLED IN THE SAME LOCATION AS AN EXISTING SERVICE
- SEPARATION BETWEEN WATER METERS AND PROPERTY LINES SHOULD BE 3FT MINIMUM.
- SEPARATION FROM GUY WIRES AND ANCHORS SHOULD BE 5FT MINIMUM
- NEW WATER METERS SHOULD NOT BE PLACED IN DRIVEWAY WINGS
- WATER SERVICES MUST BE PERPENDICULAR TO THE WATER MAIN FOR THE ENTIRE PORTION IN THE PUBLIC RIGHT-OF-WAY AND ADJACENT TO THE CURB.
- STREET TREES MUST BE A MINIMUM OF 5' FROM THE NEAREST EDGE OF WATER PIPE, VALVE OR METER BOX AND A MINIMUM OF 10' FROM A FIRE HYDRANT. REFERENCE STANDARD DRAWING P-845 FOR MORE INFORMATION

NOTE TO CONTRACTOR, PRIOR TO START OF CONSTRUCTION ACTIVITIES

- ALL UTILITIES IN THE RIGHT-OF-WAY WITHIN THE DEVELOPMENT PROPERTY'S FRONTAGE MUST BE LOCATED THROUGH 811, ONE CALL PRIOR TO START OF CONSTRUCTION. CONTRACTOR WILL NEED TO BE ABLE TO PROVIDE THE LOCATE TICKET NUMBER IF REQUESTED FOR VERIFICATION.
- CONTRACTOR IS RESPONSIBLE FOR FINAL UTILITY INSTALLATION AND DESIGN
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ABOVE GROUND UTILITIES (ELECTRIC, COMMUNICATION ETC.) WIRES, PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ON-SITE SAFETY OF WORKERS AND CONFIRMING WITH COMPANIES RESPONSIBLE OF THE LINES THAT THE REQUIRED SAFETY MINIMUMS ARE MET. BUILDER'S DESIGN TAKES NO RESPONSIBILITY FOR LOCATING THESE ITEMS. BUILDER'S DESIGN TAKES NO RESPONSIBILITY FOR ON-SITE WORKER'S SAFETY. BUILDER'S DESIGN HAS NO CONTROL OVER JOB-SITE SAFETY AND WILL NOT BE HELD LIABLE FOR ANY ISSUES RELATING TO ON-SITE SAFETY.

3	UTILITY SEPARATION NOTES
0.SP	1/4" = 1'-0"

TREE PLANTING DETAIL



SIMPLIFIED DESIGN APPROACH

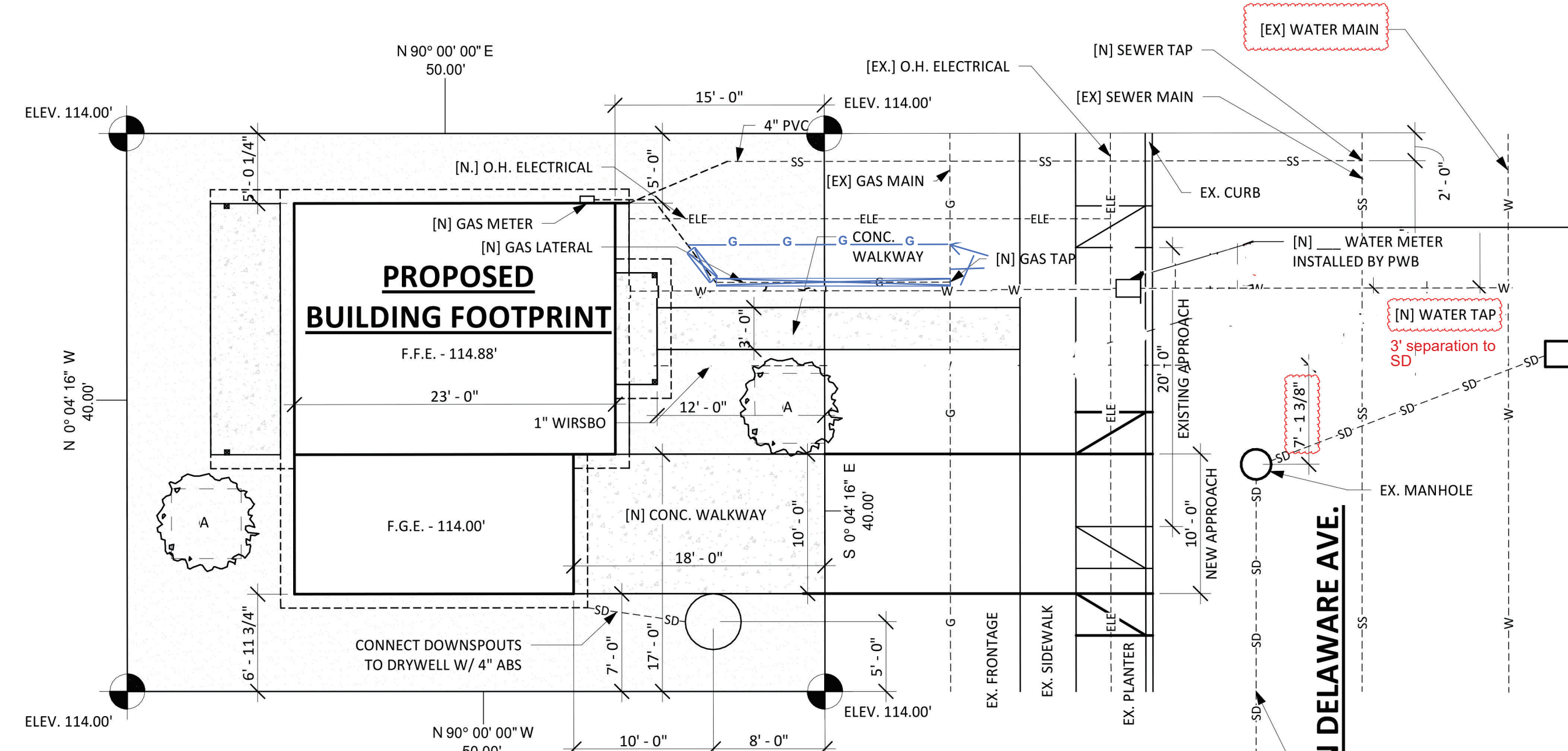
4	DRYWELL DETAILS
0.SP	1/4" = 1'-0"

7939 N DELAWARE AVE

submitted 8.26.25

City of Portland
Reviewed for Code Compliance
Date: 1/22/2026
Permit #: 25-03387-0000
Builders DESIGN INC

NOTE: APPROACH AND WORK IN THE PUBLIC ROW WILL BE UNDER A SEPARATE PERMIT, RMIP 5158092



ZONING CODE SUMMARY

- RS SINGLE DWELLING RESIDENTIAL

Development Standards
33.110.200 Housing Types Allowed
- HOUSE (SFR) - MET

33.110.215 Height
- MAX. ALLOWED = 30'
PROPOSED = 22'-8 3/4"

33.110.220 Setbacks
- FRONT - 10' ALLOWED
- SIDE SETBACK - 5' SETBACKS
- REAR SETBACK - 5' SETBACK
- GARAGE SETBACK - 18' SETBACK

33.110.225 Building Coverage
MAX. ALLOWED = 1,000 ft²
PROPOSED = 746 ft²

33.110.227 Trees
- NO TREES GREATER THAN 12" ON SITE
- TREE PROTECTION NOT PROPOSED

33.110.230 Main Entrances
- STREET FACING ENTRY PROVIDED (MET)

33.110.235 Street-Facing Facades
15% MINIMUM OPENING AREA AT STREET FACING FACADES REQUIRED
OPENING AREA % PROVIDED = 15.22%

33.110.240 Required Outdoor Areas
- EACH UNIT PROVIDED WITH OUTDOOR AREA
MEETING MINIMUM 12'X12' AREA AND 250 S.F.
- SEE SITE PLAN

33.110.245 Detached Accessory Structures
- N/A

33.110.250 Additional Standards for Garages
- N/A

33.110.275 Fences
- FENCES SHALL NOT EXCEED 6' IN HEIGHT
- FENCES SHALL NOT EXCEED 36" IN HEIGHT WITHIN 10' OF FRONT PROPERTY LINE

IMPERVIOUS AREAS
ROOF (MANAGED BY DRYWELL) = 870 S.F.
DRIVEWAY AREA (SLOPED TOWARDS STREET) = 180 S.F.
CONCRETE WALKWAYS (SLOPED TO LANDSCAPED AREA) = 33 S.F.

WATER LINE	--W-----W--
STORMWATER DRAIN	--SD-----SD--
SANITARY SEWER	--SS-----SS--
GAS LINE	--G-----G--
ELECTRIC LINE	--ELE-----ELE--

UTILITY LEGEND	1/4" = 1'-0"
----------------	--------------

NOTICE TO EXCAVATORS:
ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-232-1987).

POTENTIAL UNDERGROUND FACILITY OWNERS

Dig Safely.
Call the Oregon One-Call Center
DIAL 811 or 1-800-332-2344

EMERGENCY TELEPHONE NUMBERS

NW NATURAL GAS	M-F 7am-6pm	503-226-4211	Ext. 4313
AFTER HOURS		503-226-4211	
PGE		503-464-7777	
CENTURYLINK		1-800-573-1311	
CITY BUREAU OF MAINTENANCE		503-823-1700	
CITY WATER		503-823-4874	
VERIZON		1-800-483-1000	

1	811 NOTICE
0.SP	1/4" = 1'-0"

5	ZONING CODE - RF-R2.5
0.SP	3/4" = 1'-0"

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SENTAUR CONSTRUCTION
2505 N Winchell St, Portland, OR 97217
SITE PLAN

No.	Date	Issued by
1	Date 2	
2	Date 2	

Project number: 13688

Date: 7/8/2025 4:31:00 PM

Drawn by: CHT

Area: As indicated

Scale: As indicated

0.SP



15 NE 3RD ST. GRESHAM, OR 97030
(503) 252-3453 - buildersdesignpb.com
BUILDERSDESIGN@GMAIL.COM

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SENTAUR CONSTRUCTION
2505 N Winchell St, Portland, OR 97217
DEMO PLAN

No.	Date	Issued by

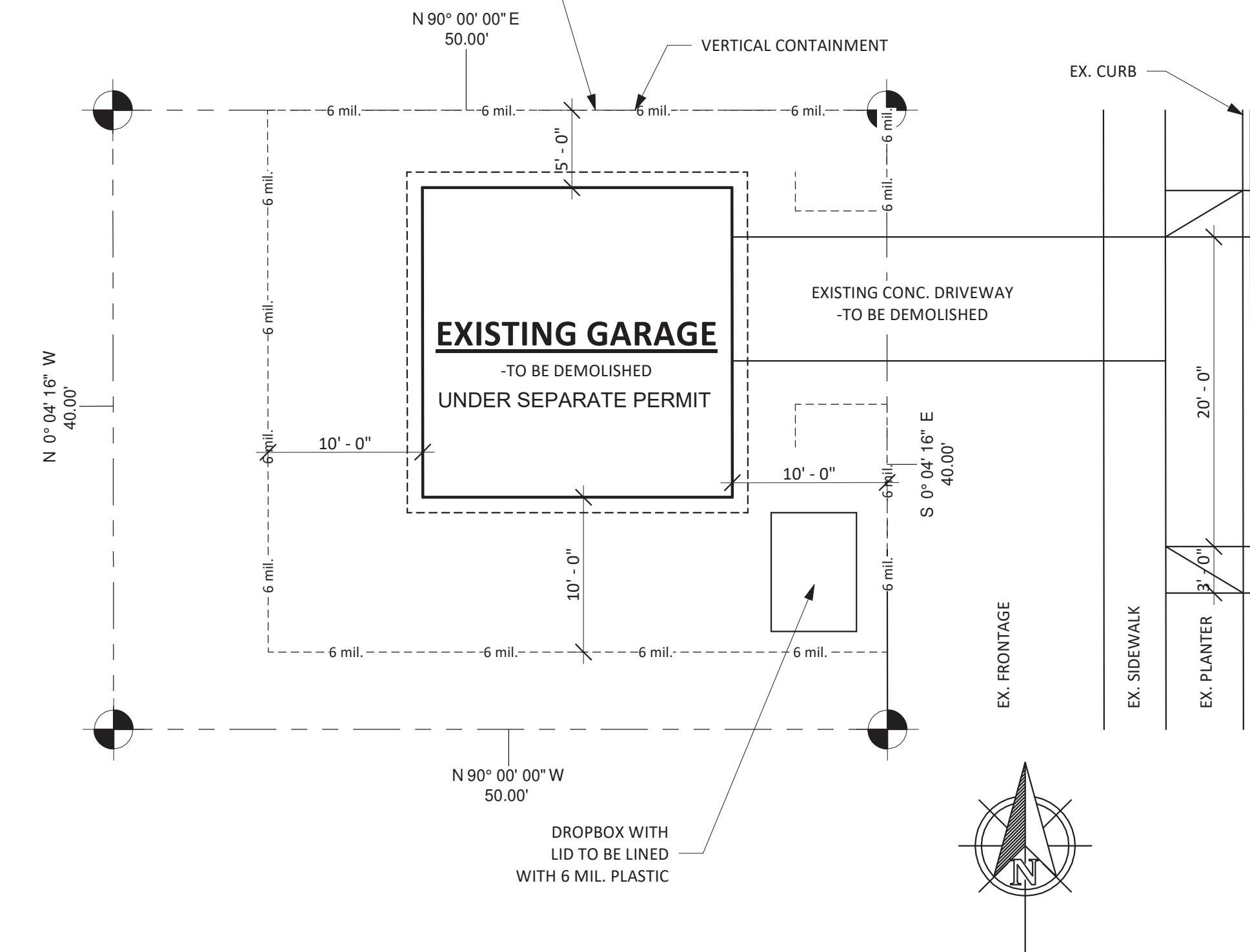
Project number: 13688
Date: 4/23/2025 4:53:42 PM
Drawn by: CHT
Area: Checker
Scale: As indicated

0.D

2. Lead hazard reduction. Prior to commencing mechanical demolition activities, all painted exterior non-structural surfaces, including, but not limited to, doors, windows, railings, soffits, trim, exterior porches (except for concrete or masonry materials), and all layers of siding (unless such surfaces have been tested as set forth in Section B.4. above and found not to contain lead-containing paint) must be removed, and all such materials must be placed in 6 mil plastic and deposited in a covered container. During the removal of these exterior painted materials, 6-mil plastic sheeting must be placed at the base of the exterior shear wall and extend at least 10 feet beyond the perimeter of the structure or work area, whichever is greater. If a property line prevents 10 feet of ground covering, vertical containment must be erected to protect neighboring properties.

SPLIT PROPERTY - 2505 N WINCHELL ST PORTLAND, OR 97217	
PROPERTY	KENTON
Neighborhood-	Portland / Multnomah
Jurisdiction-	2
City Council District-	R5 - Residential
Zoning-	SENTAUR INC
Owner-	

1	DEMO PLAN
0.D	1/8" = 1'-0"



N DELAWARE AVE.

Pre-Demolition Inspection Preparation Requirements

- 3.8.2.1. Review all approved documents and plans
- 3.8.2.2. Post the hotline signage in a location that is visible to the public from the right-of-way
- 3.8.2.3. Install the required best management practices as shown on the Erosion and Sediment Control Plan
- 3.8.2.4. Install and stage all required Demolition Plan site controls, including:
 - Soil protection and dust containment (6 mil plastic/geotextile installed; vertical containment should be installed if required)
 - Dust suppression – equipment must be on-site and operational
 - Wind speed monitor must be on-site
 - Covered containers
 - Erosion and sediment control logbook
- Name and certification of on-site accredited asbestos inspector, certified asbestos supervisor or certified asbestos worker, unless Comprehensive Asbestos Inspection and Testing as defined in Section 2.4 above and abatement for asbestos have been completed and confirming documentation has been provided to the inspector before the demolition begins 3.8.2.5. Request the #200 inspection (plan for the Demolition Manager to be on-site for this inspection)
- 3.8.2.6. Provide the BDS Site Inspector with the approved plans and permit card
- 3.8.2.7. Notify the inspector of the expected timeline for the demolition completion
- 3.9. On-Site Requirements

- 3.9.1. Pre-demolition inspection: See Section 3.11.1 below
- 3.9.2. Lead hazard reduction: One of the key components of PCC 24.55.205 is the requirement to remove all painted exterior non-structural surfaces, such as doors, windows, railings, soffits, trim, exterior porches (except for concrete or masonry materials) and all layers of siding (unless the layer has been tested and found not to contain lead-based paint).
 - 3.9.2.1. The removed painted exterior material must be placed in "6 mil plastic and deposited in a covered container." (PCC 24.55.205.C.2.) These materials must be treated as contaminated material and must be placed in 6 mil plastic liner or equivalent (not placed directly on the soil). Non-woven geotextile fabric ("road fabric") of a density to be determined by BDS is the equivalent of 6 mil plastic and, for purposes of placing removed material on the ground, is the preferred material because it is safer for workers and is more likely than plastic to adhere to paint chips and other small debris. It is also less likely that wet debris will wash off to the soil. Any material that is stockpiled (not placed in the dumpster or other lined container by the end of the day) must be covered with plastic (not necessarily 6 mil; just sufficient to keep it from blowing away and protect it from the elements). The material can either be wrapped in 6 mil plastic, then picked up and placed in the dumpster/debris container, or the material can be placed directly into dumpster/debris container if the dumpster or debris container is fully lined with the 6 mil plastic or thicker before any materials are placed in it. Plastic or non-woven geotextile fabric must be placed under stockpiles of demolition debris or painted materials, unless the painted material is tested and determined not to be lead-containing.

	DEMO NOTES
	1/4" = 1'-0"

3.9.2.2. If the structure to be demolished was constructed on or after January 1, 1978, then the lead hazard reduction requirements do not apply. The requirement to remove the exterior painted materials also does not apply to a full deconstruction since those materials will be removed without heavy machinery. However, the materials still need to be placed on the 6 mil plastic or non-woven geotextile fabric, unless they are placed directly into the lined container as described above.

3.9.2.3. To minimize exposure to neighboring properties while the exterior painted materials are being removed, either non-woven geotextile fabric or 6-mil plastic sheeting must be placed at the base of the exterior wall and extend at least 10 feet beyond the perimeter of the structure or work area on the ground. If the structure is too close to the neighboring property line to place horizontal containment, or if preferred over using horizontal containment, vertical containment needs to be attached from the top of the structure to the ground. This can be done by attaching plastic to the gutters or similar method.

Dust suppression. During mechanical demolition activities, including transfer and loading of materials, the structure, equipment parts that come in direct contact with building materials, and debris must be continuously wetted with a water spray sufficient in volume and force to prohibit airborne emission of dust and particulates from leaving the site. In addition, the entire demolition site and all debris piles must be wetted down each day prior to commencing mechanical demolition activities and at the end of each day during which mechanical demolition activities have occurred.

SPRAY METHOD:
2 – 2" Firehoses
Adjustable, spray nozzles
Water truck to be used as water source

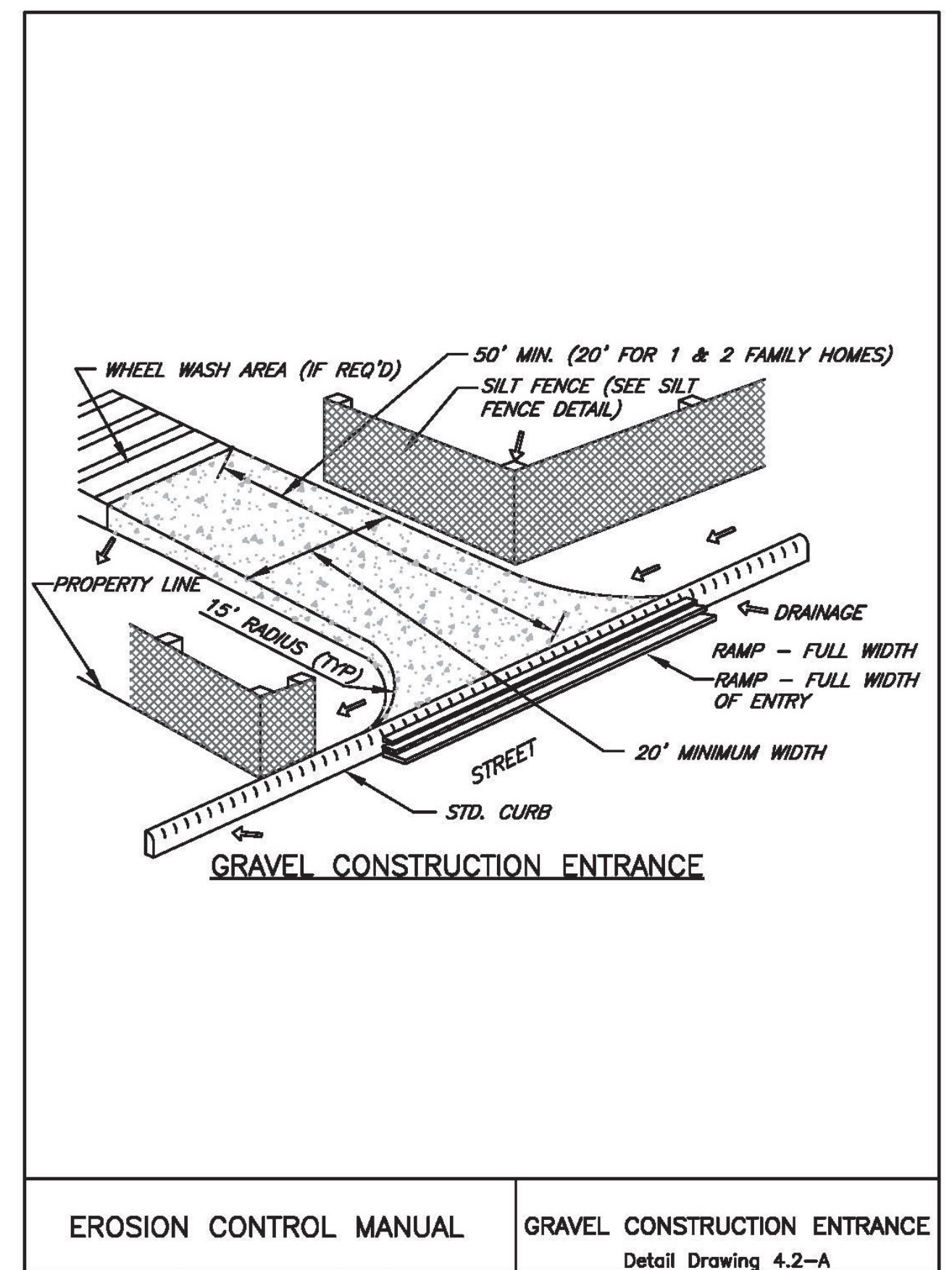
THE STRUCTURES MUST BE ADEQUATELY WETTED PRIOR TO AND DURING DEMOLITION, ALL STOCKPILES MUST BE WETTED DURING TRANSFER AND PRIOR TO COVERING AT END OF DAY IF STOCKPILED. THIS IS KNOWN AS THE WET-WET-WET METHOD

WIND SPEED RESTRICTIONS
Mechanical demolition activities must be suspended when winds exceed 25 MPH, verified regularly during mechanical demolition activities by using a hand-held anemometer prior to commencing mechanical demolition activities each day and any time wind speeds noticeably increase. Only deconstruction or other activities that do not generate dust may be conducted on the site when winds exceed 25 MPH.

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 BUILDERSDESIGN@GMAIL.COM

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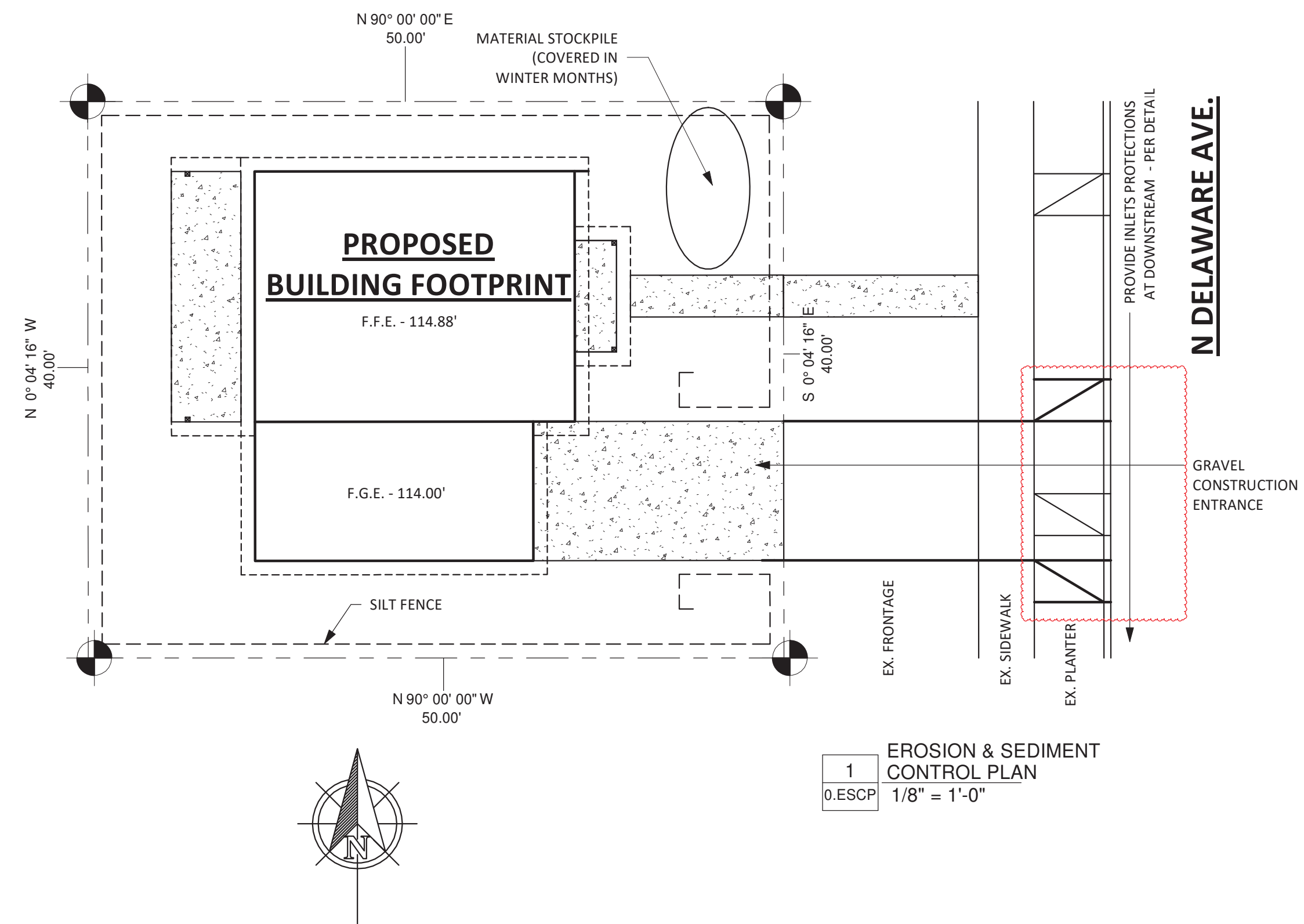
PERMANENT EROSION CONTROL MEASURES -

1. THE RESPONSIBLE PARTY SHALL MAINTAIN ALL EROSION, SEDIMENT AND POLLUTANT CONTROL MEASURES, TEMPORARY AND PERMANENT, IN PROPER FUNCTIONING ORDER.
2. THE RESPONSIBLE PARTY SHALL MAINTAIN, ADJUST, REPAIR, AND REPLACE EROSION, SEDIMENT AND POLLUTANT CONTROL MEASURES WITHIN 24 HOURS FOLLOWING A STORM EVENT TO ENSURE THAT THE MEASURES ARE FUNCTIONING PROPERLY.
3. DURING ACTIVE GROUND DISTURBING ACTIVITY, THE RESPONSIBLE PARTY SHALL INSPECT AND MAINTAIN EROSION, SEDIMENT AND POLLUTANT CONTROL MEASURES DAILY BETWEEN OCTOBER 1 AND APRIL 30.
4. ALL INSPECTIONS BY A RESPONSIBLE PARTY SHALL BE NOTED IN AN INSPECTION LOG INDICATING THE DATE AND TIME OF THE INSPECTION. THE INSPECTION LOG SHALL BE MADE AVAILABLE TO THE DIRECTOR UPON REQUEST.
5. ALL SITE PUBLIC NOTIFICATION SIGNS REQUIRED BY 10.30.020 SHALL BE MAINTAINED TO REMAIN EASILY READABLE FROM THE PUBLIC RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE GROUND DISTURBING ACTIVITY. (FOR PERMIT PROJECTS ONLY.)

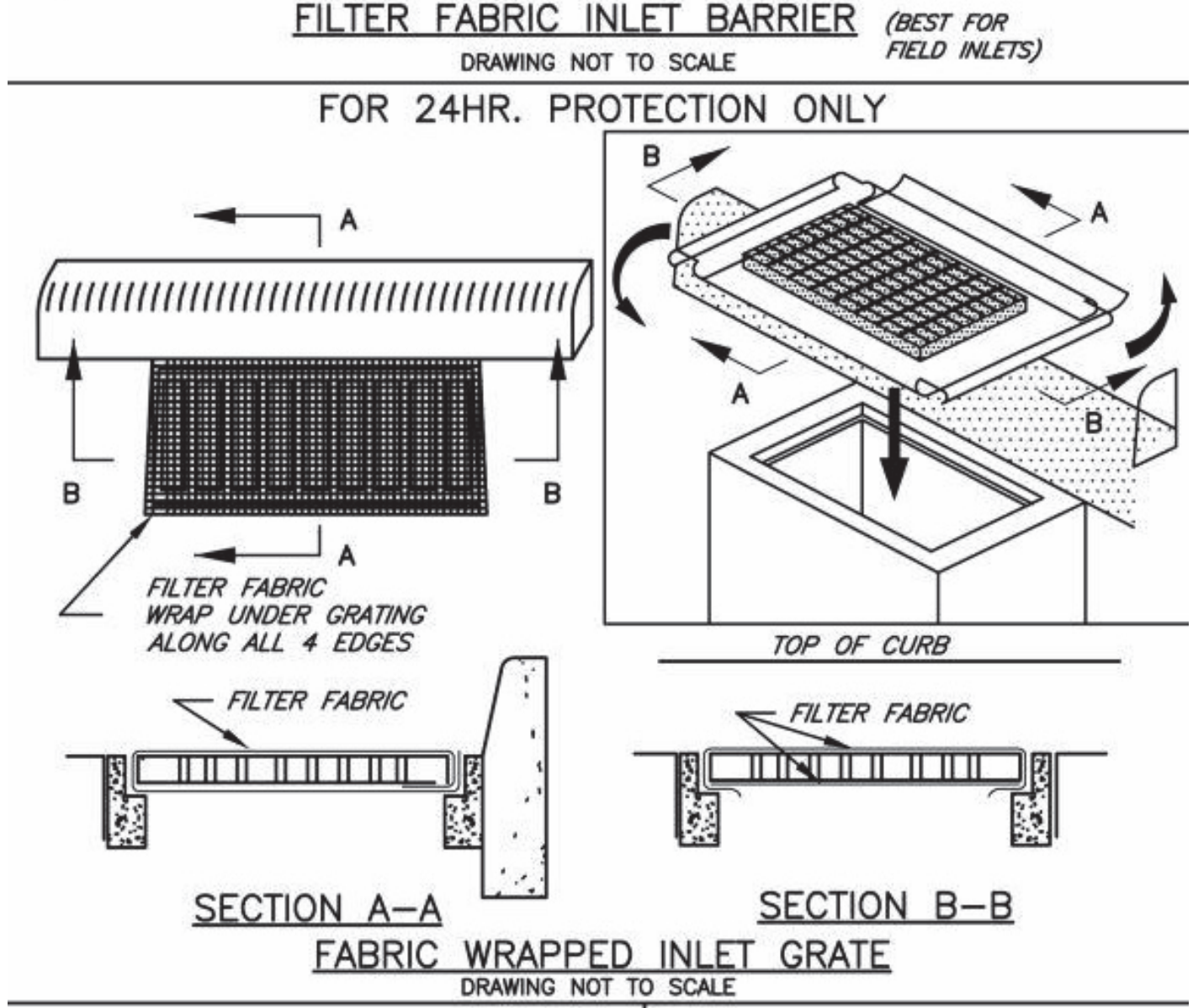
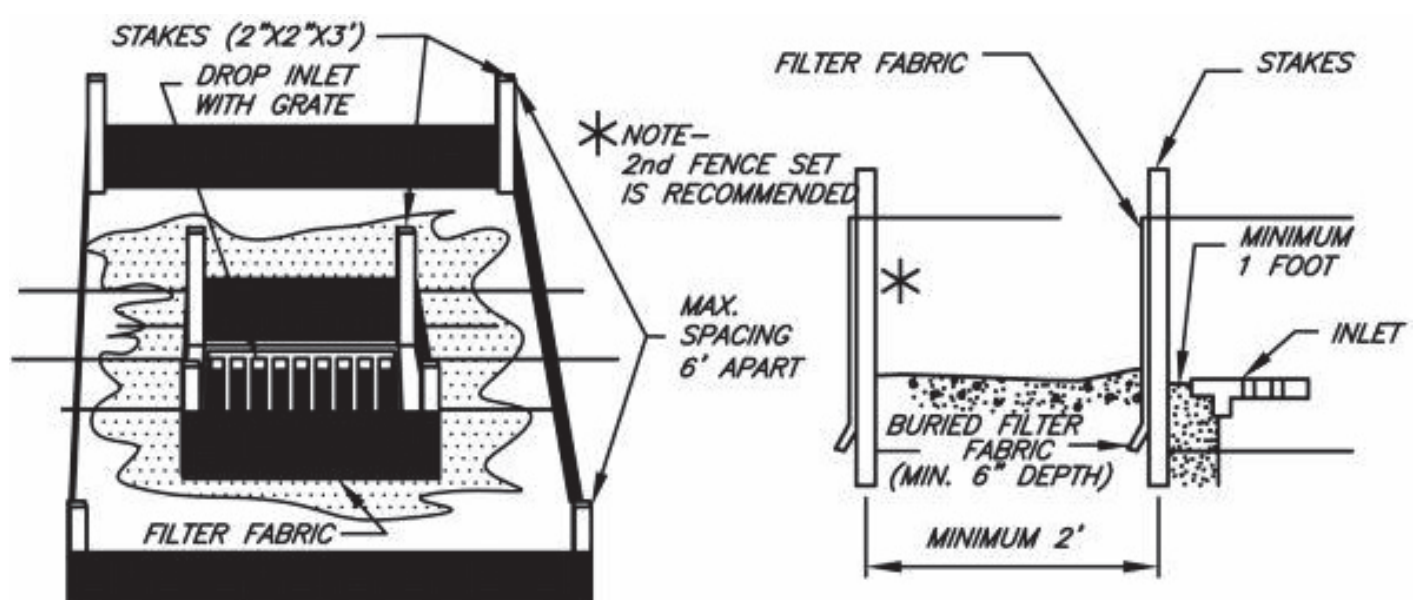
NOTE : ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO ROADWAYS OR INTO THE STORMWATER COLLECTION SYSTEM SHALL BE REMOVED OR CLEANED UP IMMEDIATELY, AND NO LATER THAN THE END OF THE WORK DAY. THE USE OF WATER TRUCKS TO WASH THE MATERIAL OFF THE ROADWAY IS NOT ALLOWED. WATER TRUCKS MAY BE USED IMMEDIATELY BEFORE SWEEPERS OR VACUUM SYSTEM TO LOOSEN SEDIMENT, PROVIDED THAT DISCHARGE TO THE STORMWATER COLLECTION SYSTEM DOES NOT OCCUR.

24/7 EMERGENCY CONTACT : HARRY HANNA - (503) 314-5067

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

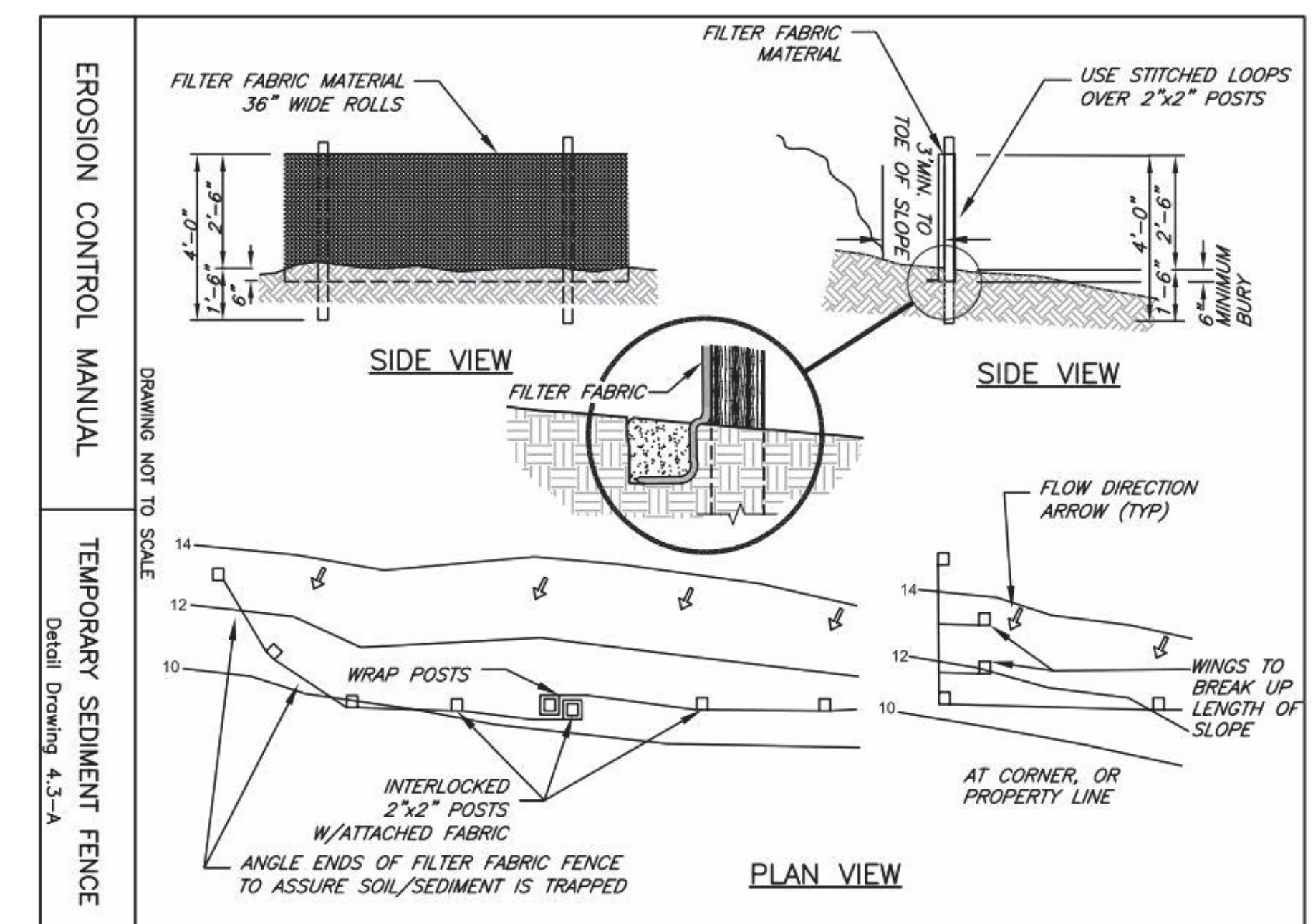


2 CONSTRUCTION ENTRANCE
 0.ESCP 1/4" = 1'-0"



EROSION CONTROL MANUAL | **INLET PROTECTION MEASURES**
 Detail Drawing 4.3-F

4 INLET PROTECTION
 0.ESCP 1/4" = 1'-0"



5 SILT FENCE
 0.ESCP 1/4" = 1'-0"

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
 0.ESCP 1/4" = 1'-0"

No.	Date	Issued by
1	Date 2	

Project number: 13688
 Date: 6/20/2025 11:33:50 AM
 Drawn by: CHT
 Area: Checker
 Scale: As indicated

0.ESCP

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 SYSTEM
 - 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.

2 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 recovery unit installed on a minimum of one shower/tub-shower.

3 WALL INSULATION UPGRADE

Exterior walls—U-0.045/R-21 conventional framing with R-5.0 continuous insulation

4 ADVANCED ENVELOPE

Windows—U-0.21 (Area-weighted average), and
Flat ceiling—U-0.017/R-60, and
Framed floors—U-0.026/R-38 or slab edge insulation to F-0.48 or less (R-10 for 48"; R-15 for 36" or R-5 fully insulated slab)

5 DUCTLESS HEAT PUMP (Dwelling units with all-electric heat)

- a. Provide ductless heat pump of minimum HSPF 10.0 or HSPF2 9.0 in primary zone replaces zonal electric heat sources, and
- b. Provide programmable thermostat for all heaters in bedrooms

6 HIGH-EFFICIENCY THERMAL ENVELOPE UAC

Proposed UA is 8 percent lower than the code UA

7 2.75 ACH AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION

Achieve a maximum of 2.75 ACH50 whole-house air leakage when third-party tested and provide a whole-house ventilation system, including heat recovery with a minimum sensible heat recovery efficiency of not less than 66 percent and total fan efficacy of 1.6 CFM/Watt (combined input for supply and exhaust).

- 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.

TABLE N1101.1(1) PRESCRIPTIVE ENVELOPE REQUIREMENTS

COMPONENT	REQUIREMENT
ABOVE GRADE WALL	R-21 INT.*
BELOW GRADE WALL	R-15c-1/R-21
FLAT CEILINGS	R-49
VAULTED CEILINGS	R-30 RAFTER R-30A ^b 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
EXTERIOR DOORS W/ GLAZING ^M	U0.27

TABLE M1507.4 EXHAUST RATES FOR RESIDENTIAL DWELLINGS

COMPONENT	REQUIREMENT
DOMESTIC KITCHENS	
RANGE HOODS / DOWNDRAFT EXHAUST	MIN. 150 CFM INTERMITTENT
BATHROOMS/TOILET ROOMS	
ROOMS CONTAINING BATHING AND SPA FACILITIES (STATIC PRESSURE SHALL BE RATED)	MIN. 80 CFM INTERMITTENT OR 20 CFM CONTINUOUS
TOILET ROOMS WITHOUT BATHING OR SPA FACILITIES, WHEN NOT PROVIDED WITH NATURAL VENTILATION IN ACCORDANCE WITH SECTION R303.3.2	MIN. 50 CFM

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. The wall component shall be a minimum solid log or timber wall thickness of 3 1/2 inches.
- d. 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.
- e. 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.
- f. 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).
- g. A = Advanced frame construction. See Section N1104.6.
- h. 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.
- i. 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 requirements.
- k. A maximum of 28 square feet of exterior door area per dwelling unit may have a U-factor of 0.54 or less.
- l. 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 horizontal plane is used on the exterior of the slab, it must be a minimum of 12 inches below finished grade.

M1505.4 Whole-house mechanical ventilation system.

Whole-house mechanical ventilation systems shall be designed in accordance with Sections M1505.4.1 through M1505.4.3.

M1505.4.1 System design.

The whole-house mechanical ventilation system shall provide balanced ventilation. Local exhaust or supply fans are permitted to serve as part of such a system. Outdoor air ventilation provided by a supply fan ducted to the return side of an air handler shall be considered as providing supply ventilation for the balanced system.

M1505.4.2 System controls.

The whole-house mechanical ventilation system shall be provided with controls that enable manual override.

M1505.4.3 Mechanical ventilation rate.

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.

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

DWELLING UNIT FLOOR AREA (square feet)	NUMBER OF BEDROOMS				
	0-1	2-3	4-5	6-7	> 7
< 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

2023 ORSC INSULATION REQUIREMENTS

6 1/4" = 1'-0"

TABLE N1104.8 AIR BARRIER INSTALLATION AND AIR SEALING REQUIREMENTS

COMPONENT	AIR BARRIER CRITERIA
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.
Ceiling/attic	The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop-down stairs, or knee wall doors to unconditioned attic spaces shall be gasketed and sealed.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of interior walls shall be sealed between wall cavities and windows or door frames. All penetrations or utility services through the top and bottom plates shall be sealed. Knee walls shall be sealed.
Windows, skylights and doors	The annular space between framing and skylights, and the jambs of windows and doors shall be air sealed. Framing cavities around windows, skylights and doors shall contain continuous insulation or be installed per the manufacturer's instructions.
Rimband joints	Rimband joints shall be a part of the thermal envelope and have a continuous air barrier.
Floors	Including cantilevered floors and floors above garages The air barrier shall be installed at any exposed edge of insulation.
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations and flue shafts opening to exterior or unconditioned space shall be sealed.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the finished surface.
Shower/tub on exterior walls	The air barrier installed at exterior walls adjacent to showers and tubs shall separate the wall from the shower or tub.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical and communication boxes. Alternatively, air-sealed boxes shall be installed.
HVAC register boots	HVAC supply and return register boots that penetrate the building thermal envelope shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.

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.

N1104.8.2 Sealing Required

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

N1105.2 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.

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.

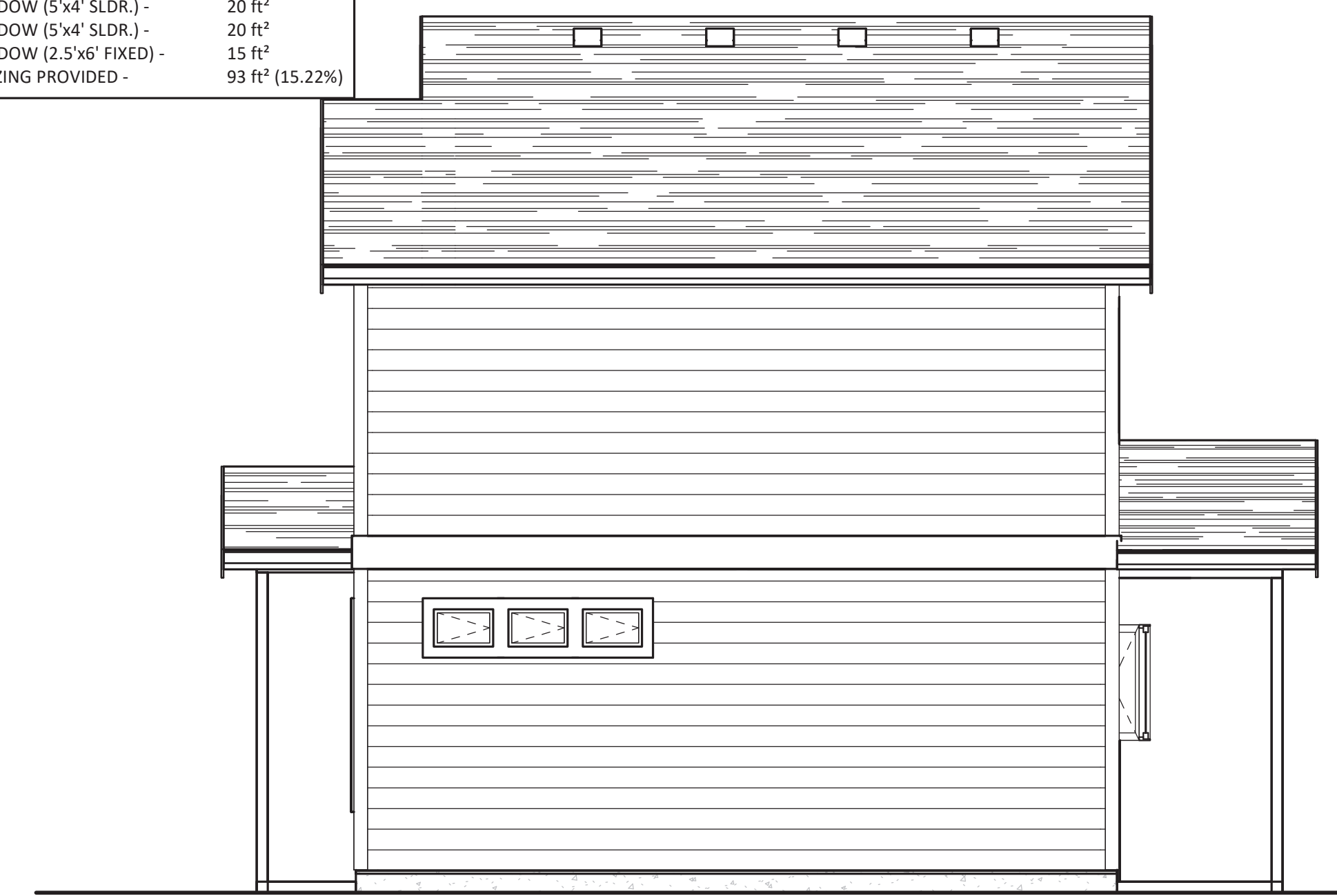
All ductwork in the crawlspace shall be insulated to R-8.

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

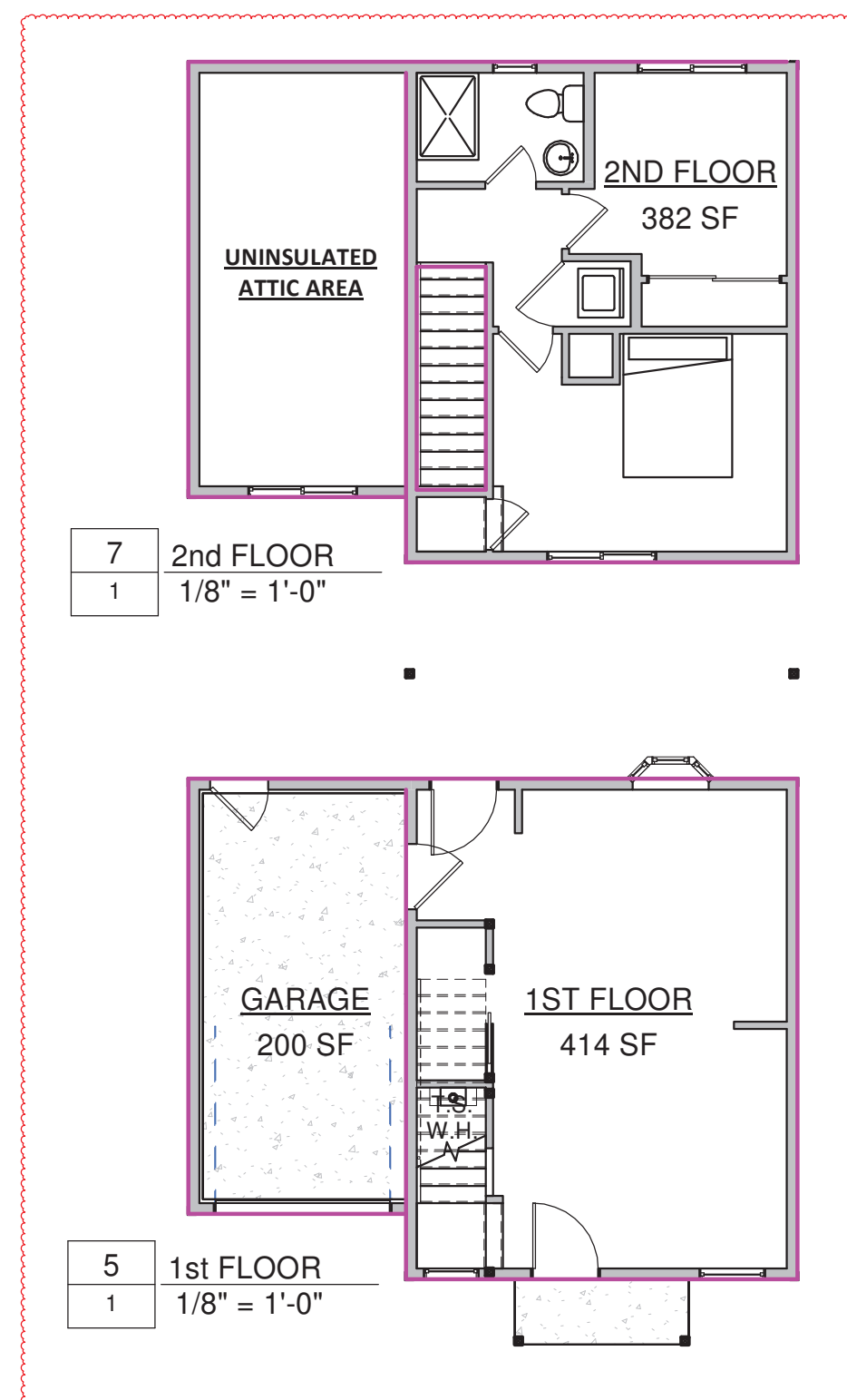
Exception: HVAC ductwork shall be permitted to be located outside of the building thermal envelope where the duct is insulated to a minimum of R-27 with a Class II or III vapor retarder.



2 LEFT.
1 1/4" = 1'-0"

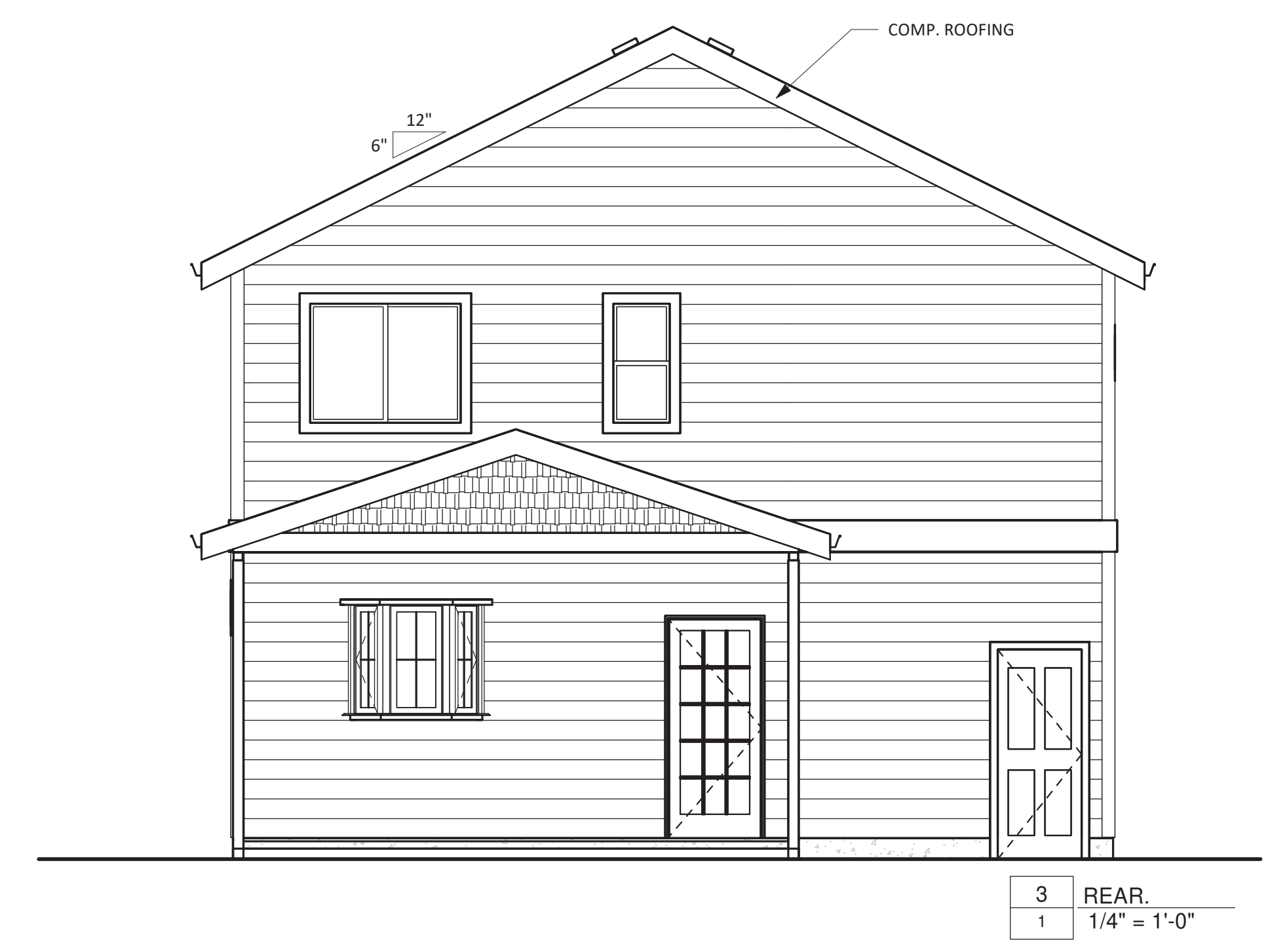


4 RIGHT
1 1/4" = 1'-0"



7 2nd FLOOR
1 1/8" = 1'-0"

5 1st FLOOR
1 1/8" = 1'-0"



3 REAR.
1 1/4" = 1'-0"

City of Portland
Reviewed and Approved
Complete
Date: 1/22/2026
Permit #: 25-0330-0000
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SENTAUR CONSTRUCTION
2505 N Winchell St, Portland, OR 97217
ELEVATIONS

No.	Date	Issued by
1	Date 2	

Project number: 13688
Date: 6/20/2025 11:33:52 AM
Drawn by: CHT
Area:
Scale: As indicated

submitted 6.26.25

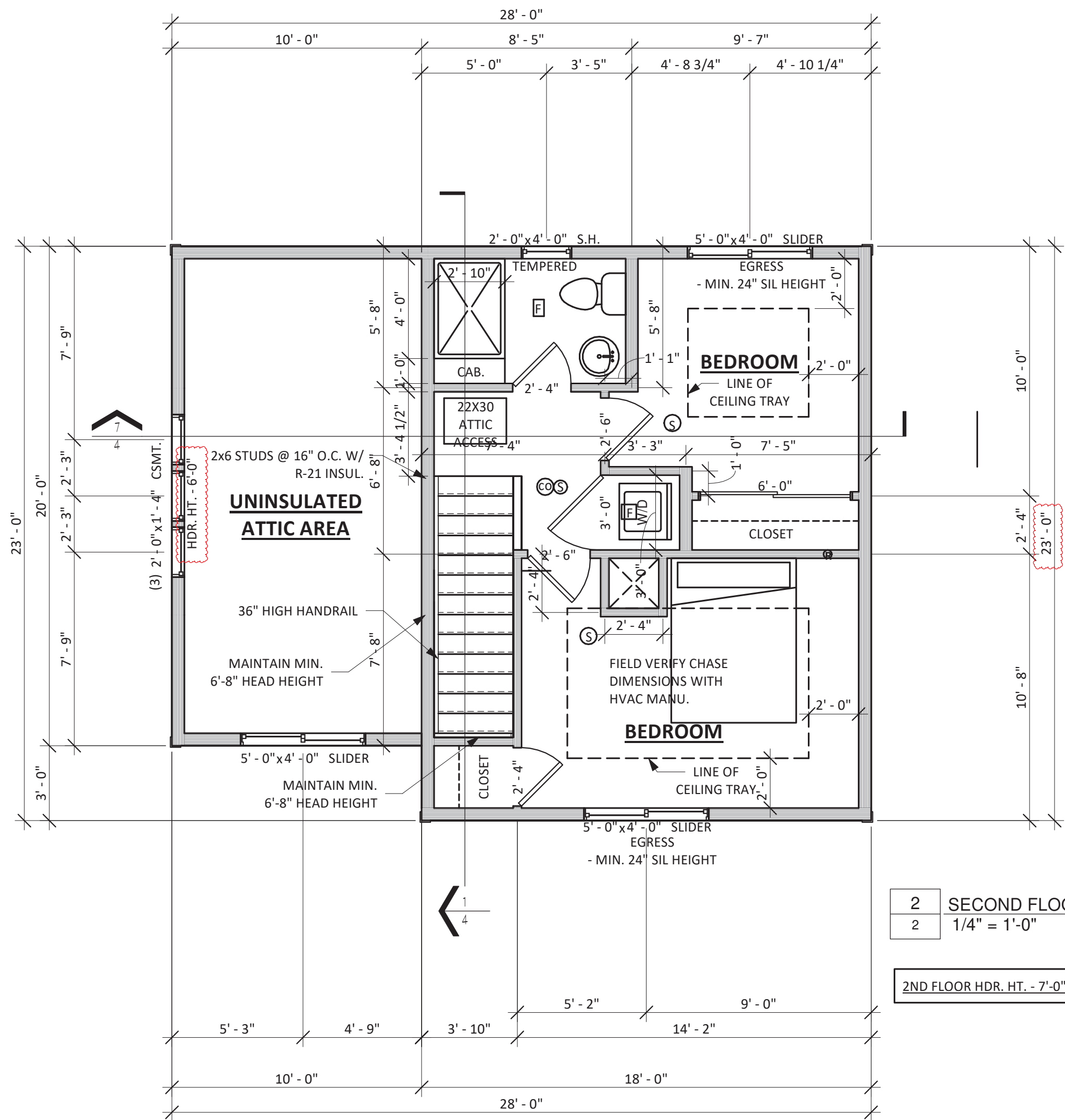
1



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(503) 252-1453 - buildersdesignpb.com
BUILDERSDESIGN@GMAIL.COM

APPROVAL STAMP

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2 SECOND FLOOR PLAN
1/4" = 1'-0"

2ND FLOOR HDR. HT. - 7'-0"

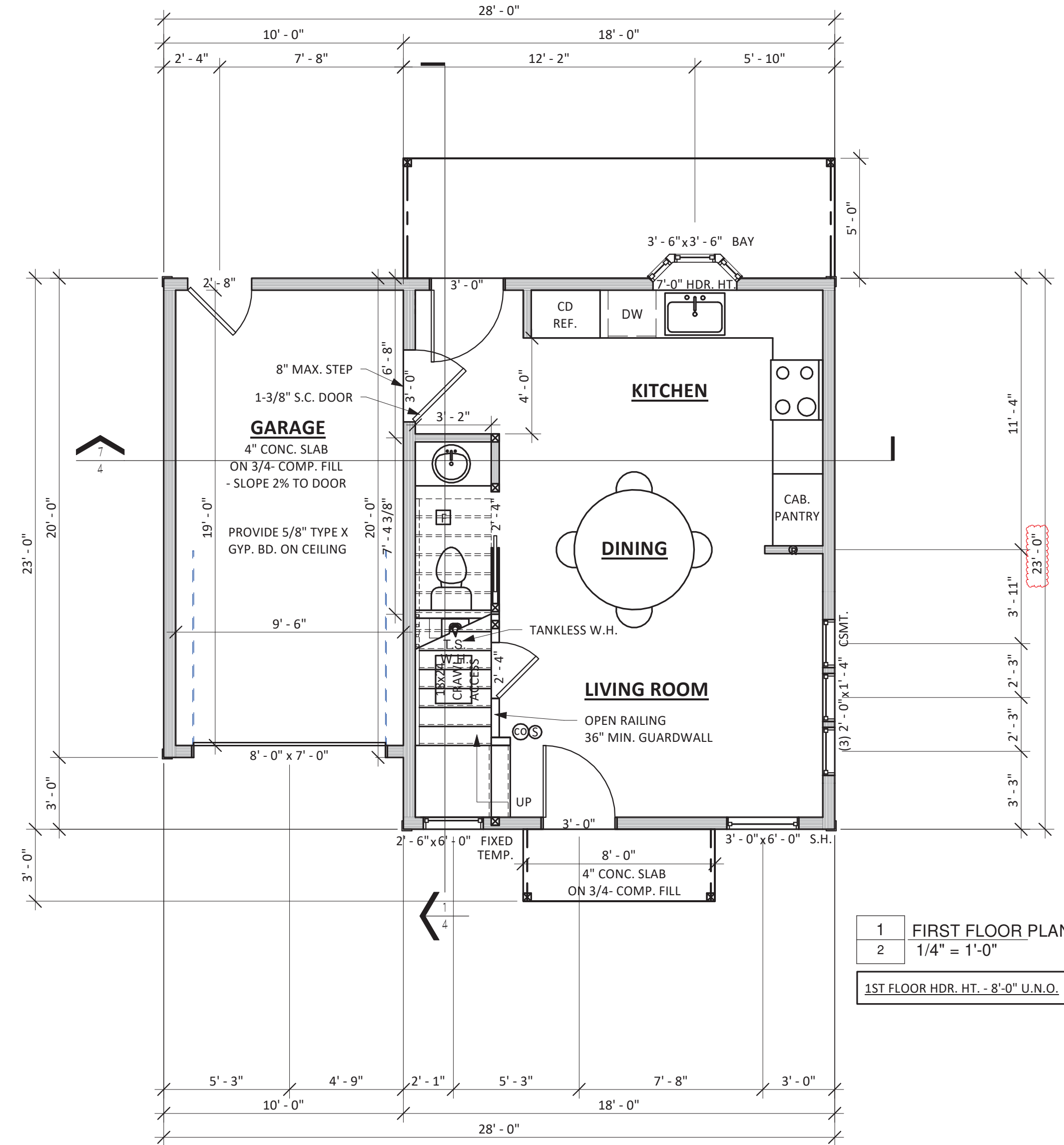
	SLIDING GLASS
	POCKET DOOR
	SWINGING DOOR
	BI-FOLD DOOR
	WALLS - SEE DETAILS
	CONCRETE WALL
	EXHAUST FAN
	SMOKE DETECTOR
	CARBON MONOXIDE DETECTOR
	RADON CONTROL - SEE RADON CONTROL DETAILS

NOTE:
- OPERABLE WINDOWS LOCATED GREATER THAN 6'-0" ABOVE FINISHED EXTERIOR GRADE, THAT ARE 24" OR CLOSER TO FLOOR LEVEL, ARE TO BE PROVIDED WITH WINDOW LIMITING DEVICES COMPLYING WITH ASTM 2090-10

NEW HOUSE LEGEND
1/4" = 1'-0"

- GARAGE SEPARATION REQUIREMENTS**
- GARAGE DOORS SHALL BE 1-3/8" SOLID CORE OR HONEYCOMB-CORE STEEL DOORS OR 20 MIN. FIRE RATED DOORS
 - DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF MIN. 26 GA. MATERIAL
 - ALL WALLS OF GARAGE ARE TO BE FINISHED WITH 1/2" GYPSUM BOARD
 - CEILING OF GARAGE TO BE FINISHED WITH 5/8" TYPE 'X' GYPSUM BOARD

GARAGE NOTES
1/4" = 1'-0"



1 FIRST FLOOR PLAN
1/4" = 1'-0"

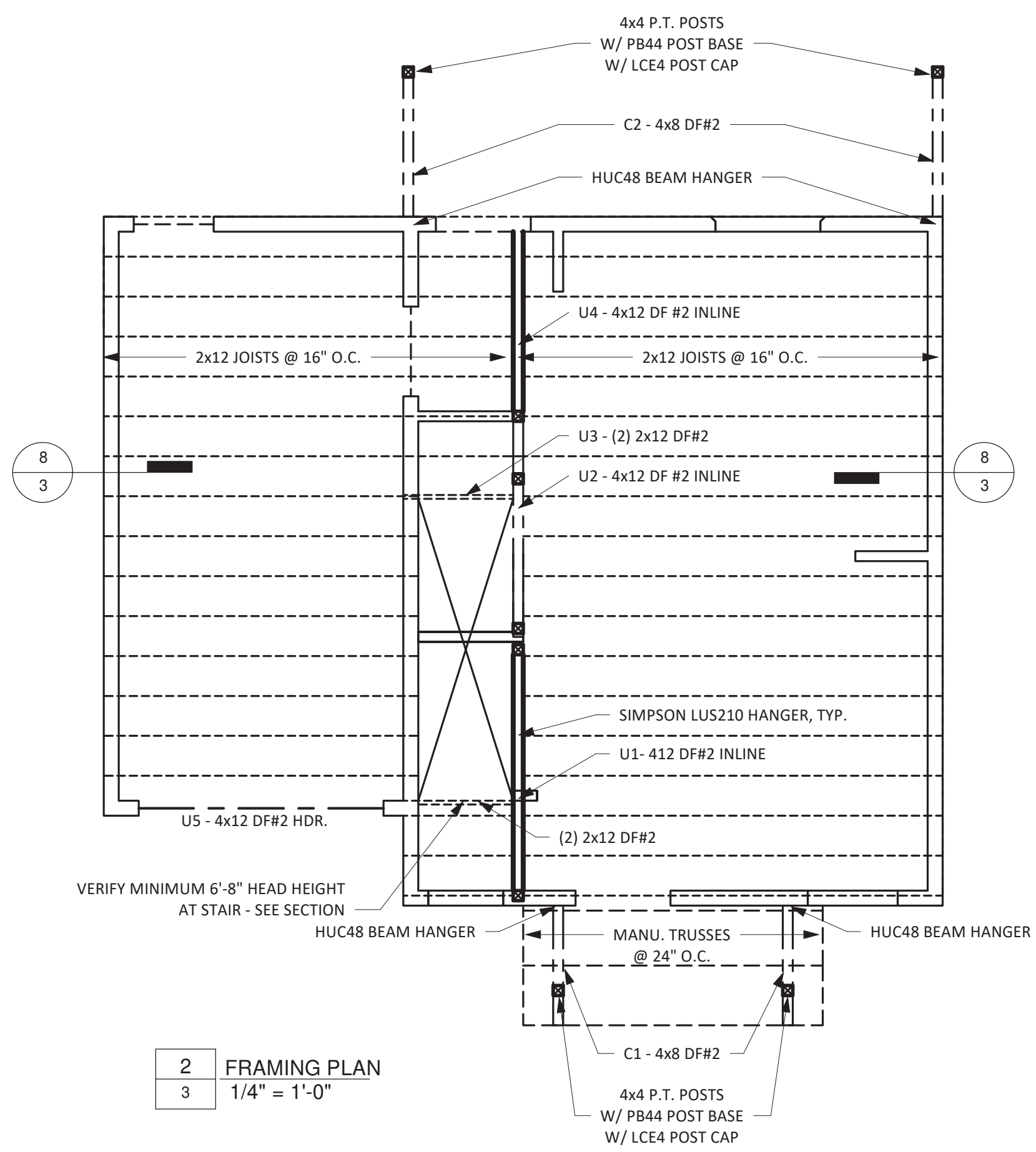
1ST FLOOR HDR. HT. - 8'-0" U.N.O.

SENTAUR CONSTRUCTION
2505 N Winchell St, Portland, OR 97217
FLOOR PLANS

No.	Date	Issued by
1	Date 2	

Project number: 13688
Date: 6/20/2025 11:33:54 AM
Drawn by: CHT
Area:
Scale: 1/4" = 1'-0"

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2 FRAMING PLAN
 1/4" = 1'-0"

DECKING TO BE 1-1/8" EDGE-GOLD SUBFLOOR	CONCRETE SLABS 4" CONC. SLAB w/ 6"x6" W1.4xW1.4 W.W.F. OVER 6" MIN. WASHED GRAVEL OVER 98% COMPACTED FILL ON UNDISTURBED SOIL, SLOPE TOWARD DOOR MIN 1/4":1'-0"
6 MIL. BLACK POLY GROUNDCOVER - SEAL ALL TEARS IN MATERIAL - SEAL ALL PENETRATIONS AND CONNECTIONS TO FOUNDATION WALLS - JOINTS LAPPED 12 AT SEAMS AND EXTENDED UP FOUNDATION WALLS 12" MIN.	
4x8 BEAMS - MIN. 18" CLEARANCE BELOW BEAMS	
4x4 POSTS (4x6 AT JOINTS) ON 55# FELT ON 18" Ø x 9" CONC. FTG.'S	
FOUNDATION VENTS - AVOID ANCHOR BOLT AND DOOR LOCATIONS VERIFY WITH PLANS AND STRUCTURAL DRAWINGS	
CONCRETE FOUNDATION WALL - SEE DETAILS	
CONCRETE PAD FOOTING - SIZE & REBAR PER PLAN - MIN. 18" FROST DEPTH	

- HOLDDOWNS LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR THE PRECISE LOCATION. SEE SHEAR NOTES PAGE AND EMBEDMENT & HOLDDOWN SPECIFICATIONS.

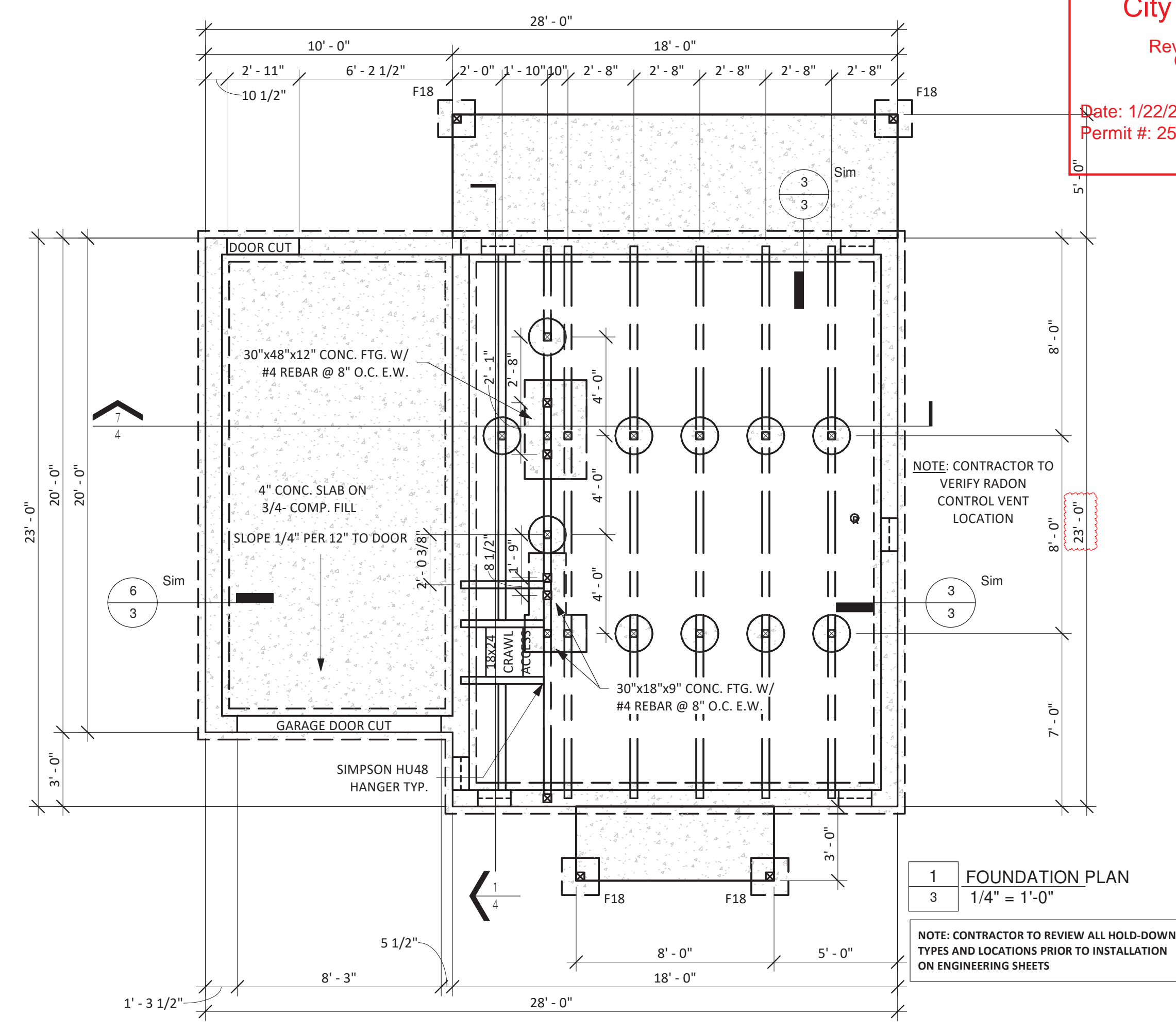
- FOUNDATION VENTILATION REQUIRED: THE FOUNDATION AREA MUST BE 1/150 OF THE AREA OF THE SPACE VENTILATED

- CRAWL SPACE IS 377 S.F.

- CRAWL SPACE VENTS MUST PROVIDE MIN. 65 SQ. IN. (0.45 S.F.)

- 377 / 150 = 2.51 - 2.51 / .45 = 6 VENTS REQUIRED

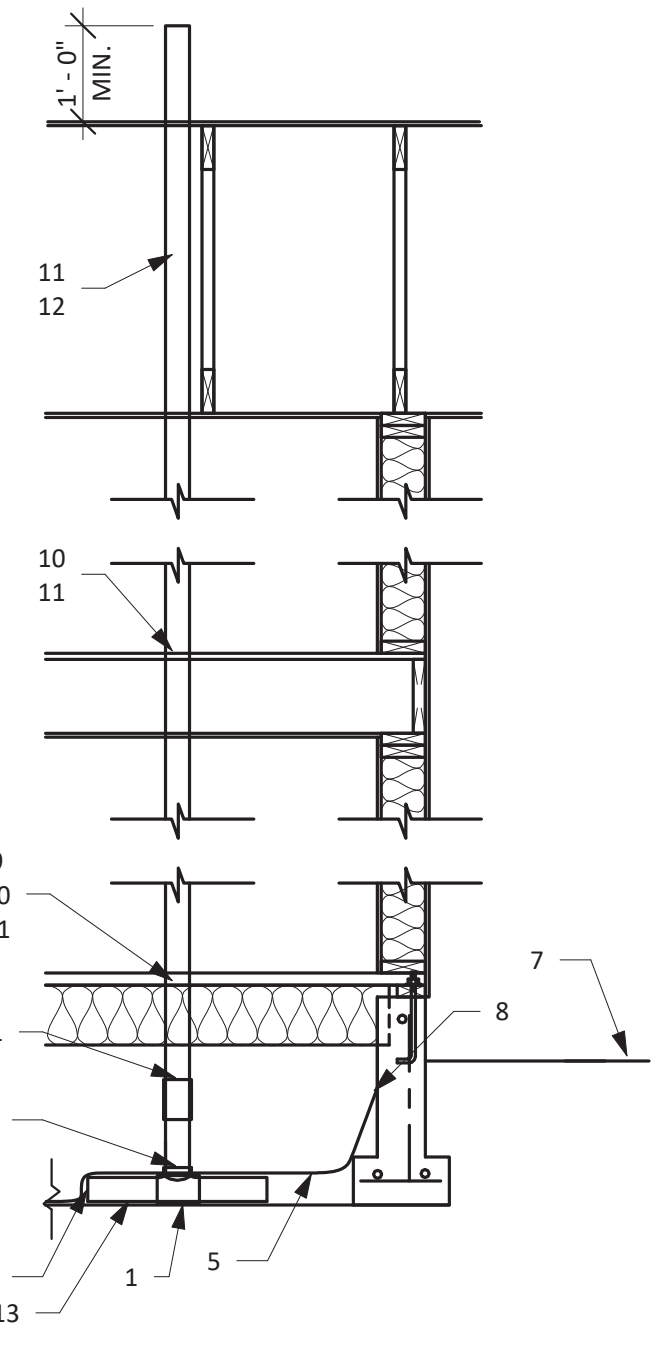
FOUNDATION LEGEND
 1/4" = 1'-0"



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

NOTE: CONTRACTOR TO VERIFY RADON CONTROL VENT LOCATION

NOTE: CONTRACTOR TO REVIEW ALL HOLD-DOWN TYPES AND LOCATIONS PRIOR TO INSTALLATION ON ENGINEERING SHEETS



SUPPORT 6X BEAMS AND 5 1/2" GLB'S WITH 4X6 POST, MINIMUM.

- SUPPORT 4X BEAMS AND 3 1/8" GLB'S WITH 4X4 POST, MINIMUM.

- ALL 2X AND 4X FRAMING SHALL BE DF-L NO. 2 MINIMUM.

- ALL 6X FRAMING SHALL BE DF-L NO. 2 MINIMUM.

- EXTERIOR DOORS AND WINDOWS ARE TO BE PROVIDED WITH 4x12 HEADERS, U.N.O.

- ALL EXTERIOR HEADERS SHALL BE SUPPORTED WITH 2X6 STUD AND KING STUDS AS LISTED IN TABLE 602.7.5, TYPICAL.

- INTERIOR NON-LOAD-BEARING HEADERS SHALL BE (2)2X6 U.N.O. SUPPORT WITH (2)2X4 STUDS, MAX SPAN=3'-0".

- EVERY ROOF TRUSS SHALL BE CONNECTED TO WALL TOP PLATES WITH SIMPSON H2.5A UPLIFT CLIPS.

- SIMPSON TOP FLANGE HANGERS SHALL BE TYPE LB, BA(MIN), OR HU.

- FACE MOUNT HANGERS SHALL BE LUC OR HUC TYPE HANGERS.

- ALL METAL HARDWARE IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED-GALVANIZED OR ZINC-COATED.

- 6X BEAM TO 6X6 POST CONNECTOR SHALL BE SIMPSON PC6Z(MIN).

- 4X BEAM TO 4X POST CONNECTOR SHALL BE SIMPSON PC4Z

- EXTERIOR WALLS AT STAIRWELLS ARE TO BE BALLOON FRAMED FROM BOTTOM SOLE PLATE TO DOUBLE TOP PLATE. FRAME W/ 2x6 STUDS @ 12" O.C.

- TOP PLATE LAP SPLICES SHALL BE FACE-NAILED WITH NOT LESS THAN (8) 16d NAILS ON EACH SID OF THE SPLICE

R602.7.5 SUPPORTS FOR HEADERS

- HEADERS SHALL BE SUPPORTED ON EACH END WITH ONE OR MORE JACK STUDS OR WITH APPROVED FRAMING ANCHORS. THE FULL-HEIGHT STUD ADJACENT TO EACH END OF THE HEADER SHALL BE END NAILED TO EACH END OF THE HEADER WITH (4) 16d NAILS. THE MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADER SHALL BE IN ACCORDANCE WITH TABLE R602.7.5

TABLE R602.7.5. MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

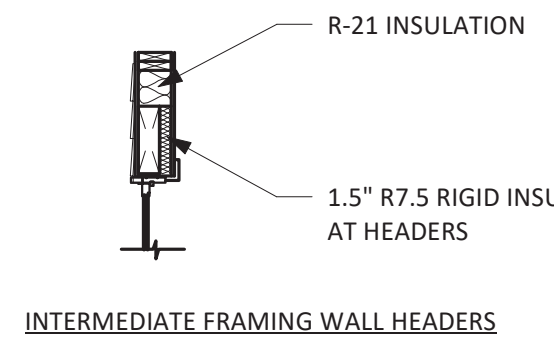
HEADER SPAN (FEET)	1	2
< 4'-8"	1	2
8'-18"	1	2

N1104.5.2 INTERMEDIATE FRAMING FOR WALLS

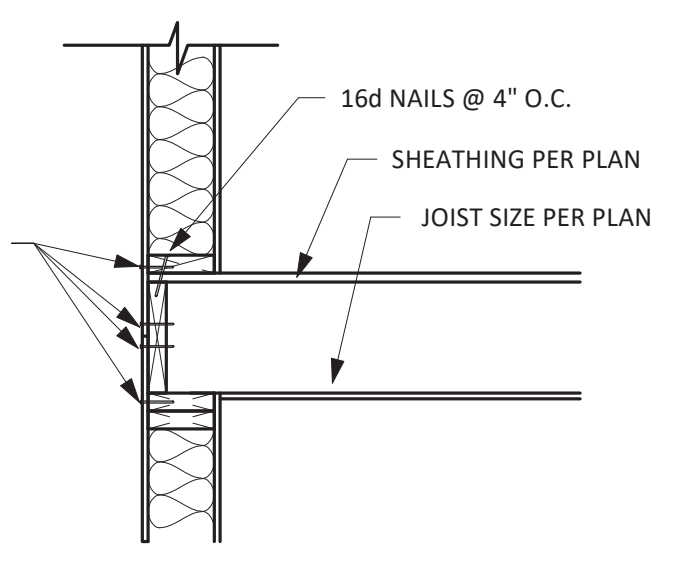
INTERMEDIATE FRAMING FOR WALLS IS AN OPTIONAL CONSTRUCTION METHOD. INTERMEDIATE FRAMING, WHEN USED TO ACHIEVE IMPROVED WALL PERFORMANCE UNDER THE REQUIREMENTS OF TABLE 1101.1(1) OR TABLE N1104.1(2), SHALL MEET THE FOLLOWING REQUIREMENTS:

- WALLS. WALLS SHALL BE FRAMED WITH 2 X STUDS AT 16 INCHES (406 MM) ON CENTER AND SHALL INCLUDE THE FOLLOWING, AS DETAILED IN ITEMS 2 AND 3.
- CORNERS AND INTERSECTIONS. EXTERIOR WALL AND CEILING CORNERS SHALL BE FULLY INSULATED THROUGH THE USE OF THREE-STUD CORNERS CONFIGURED TO ALLOW FULL INSULATION INTO THE CORNER, OR TWO-STUD CORNERS AND DRYWALL BACKUP CLIPS OR OTHER APPROVED TECHNIQUE. INTERSECTIONS OF INTERIOR PARTITION WALLS WITH EXTERIOR WALLS SHALL BE FULLY INSULATED THROUGH THE USE OF SINGLE BACKER BOARDS, MID-HEIGHT BLOCKING WITH DRYWALL CLIPS OR OTHER APPROVED TECHNIQUE.
- HEADERS. VOIDS IN HEADERS 1 INCH (25.4 MM) TO 2 INCHES (51 MM) IN THICKNESS SHALL BE INSULATED WITH INSULATION THAT HAS A VALUE OF R-4 OR GREATER PER 1-INCH (25.4 MM) THICKNESS. VOIDS IN HEADERS GREATER THAN 2 INCHES (51 MM) IN DEPTH SHALL BE INSULATED TO A MINIMUM LEVEL OF R-10.

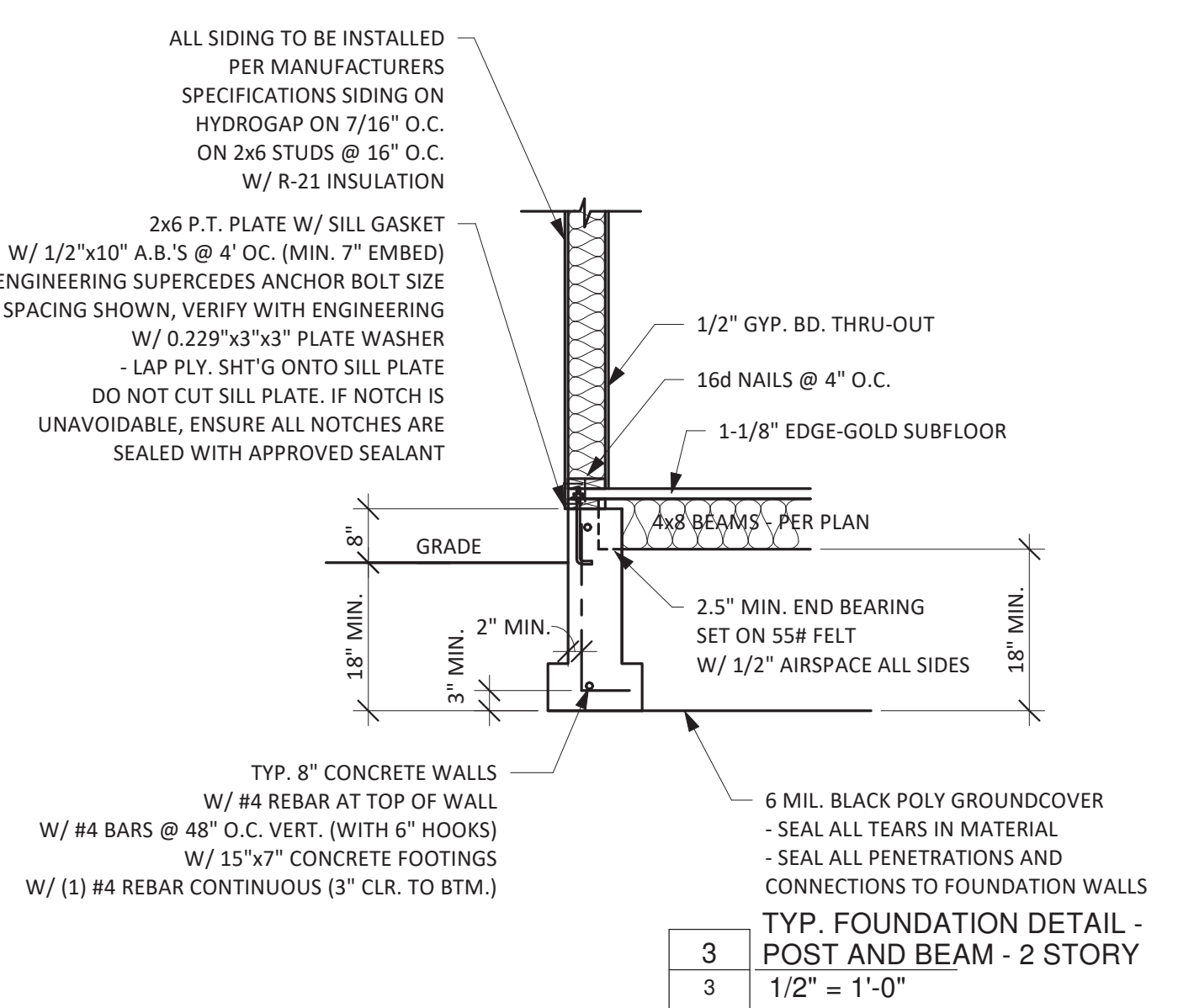
FRAMING LEGEND
 3/8" = 1'-0"



INTERMEDIATE FRAMING WALL HEADERS

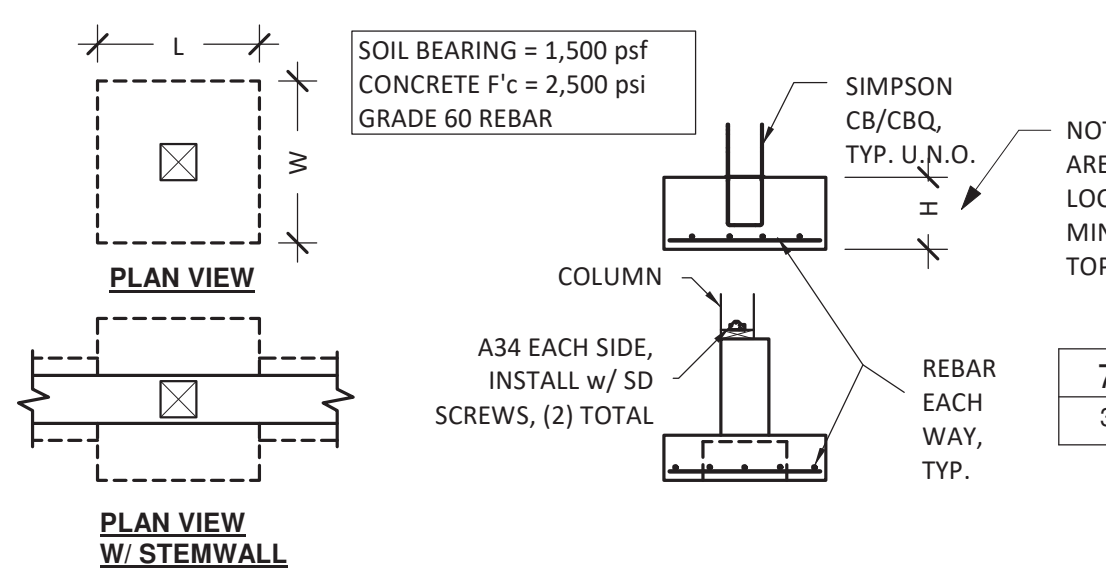


8 WALL TO FLOOR CONNECTION
 3/4" = 1'-0"



3 TYP. FOUNDATION WALL - AT GARAGE - 2 STORY
 1/2" = 1'-0"

MARK	SIZE (L" X W" X H")	REBAR (EACH WAY TYP.)	CAPACITY kips
F18	18 X 18 X 12	(2) #4	3
F24	24 X 24 X 12	(2) #4	6
F30	30 X 30 X 12	(3) #4	9

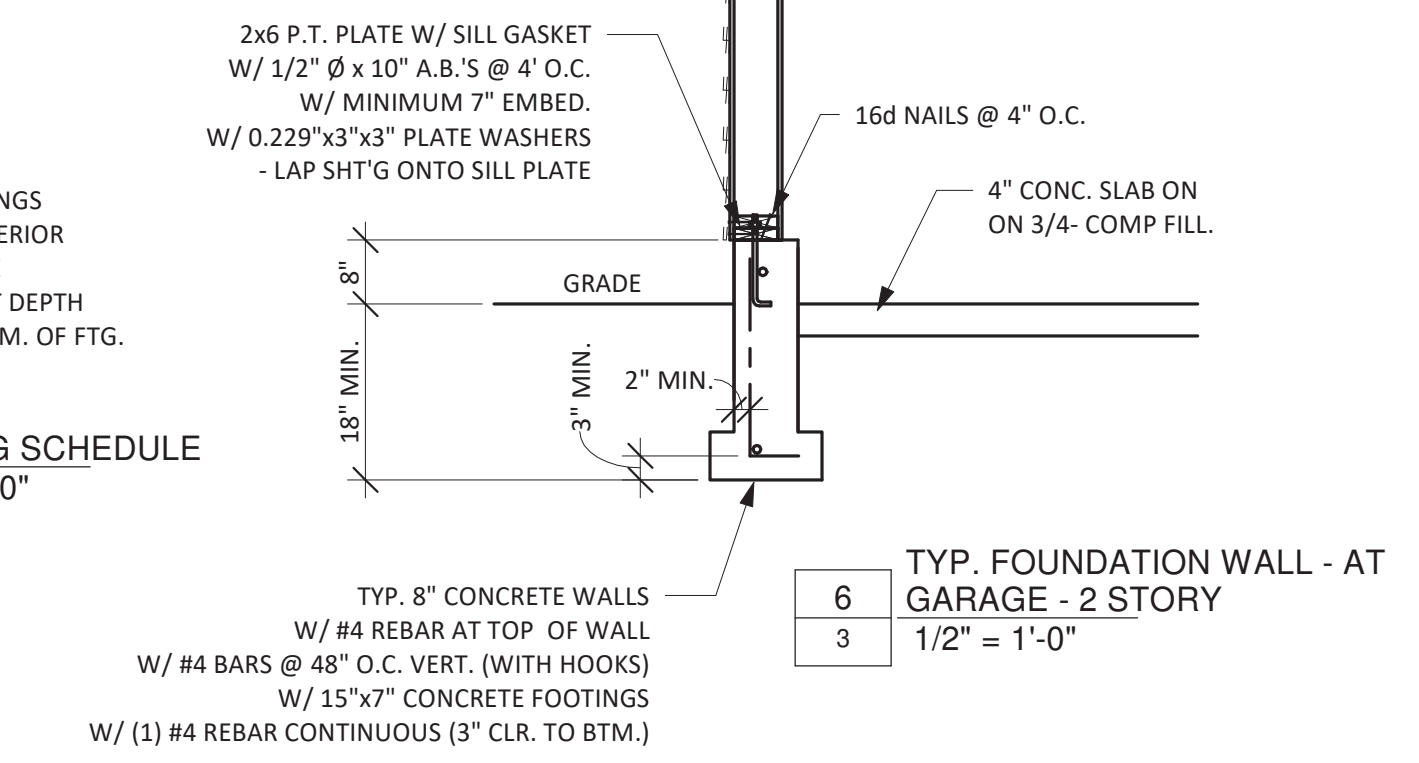


7 FOOTING SCHEDULE
 3/8" = 1'-0"

GENERAL NOTES

FLOOR SLAB:

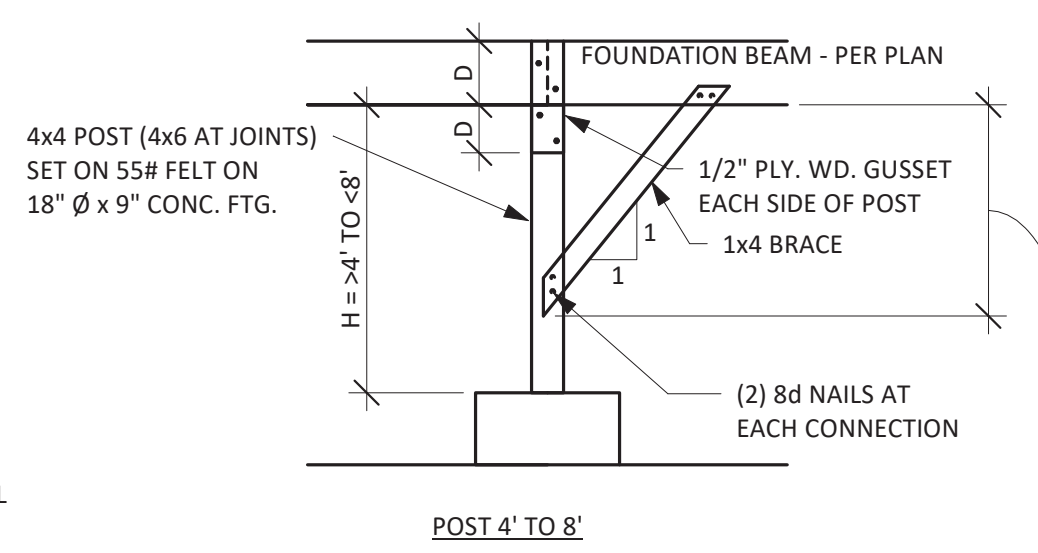
- OPTIONAL 6/6x10/10 W.W.M.
- PROVIDE CONTROL JOINTS AT 20' OC MAX.



6 TYP. FOUNDATION WALL - AT GARAGE - 2 STORY
 1/2" = 1'-0"

- RADON CONTROL NOTES
- 3" OR 4" PLUMBING TEE UNDER 6-MIL VAPOR BARRIER
 - 3" OR 4" PLUMBING TEE IN 4" CLEAN AGGREGATE UNDER SLAB. SIZE OF AGGREGATE 2" MAX, 1/4" MIN.
 - 3" OR 4" PERFORATED PIPE.
 - 3" OR 4" VENT PIPE UNDER CONCRETE SLAB. THIS VENT SHALL BE EXTENDED AND TERMINATED 12" ABOVE THE ROOF OR CONNECTED TO THE VENT PIPE FROM THE CRAWL SPACE
 - SEAL VENT TO VAPOR BARRIER BY TAPING OR OTHER MEANS SUCH AS A HOSE CLAMP.
 - 6 MIL. POLYETHYLENE OR EQUIVALENT FLEXIBLE SHEETING MATERIAL. THE JOINTS SHALL BE LAPPED 12" AND SEALED OR TAPED.
 - CONCRETE SLAB ON GRADE.
 - MEMBRANE SHALL BE SEALED AGAINST WALL WITH BEAD OF CAULK OR ADHESIVE.
 - SEAL THE PENETRATION.
 - 3" OR 4" PIPE VENT SHALL BE EXTENDED AND TERMINATED 12" ABOVE THE ROOF
 - ALL EXPOSED AND VISIBLE INTERIOR RADON VENT PIPES SHALL BE IDENTIFIED WITH AT LEAST ONE LABEL AT EACH FLOOR AND IN AN ACCESSIBLE ATTIC. THE LABEL SHALL READ "RADON REDUCTION SYSTEM
 - PROVIDE AN ELECTRICAL CIRCUIT TERMINATED IN AN APPROVED BOX FOR FUTURE INSTALLATION OF AN ACTIVE RADON MITIGATION SYSTEM AND A SYSTEM FAILURE ALARM.
 - THE SOIL-GAS COLLECTOR SHALL CONSIST OF NOT LESS THAN A 3-INCH DIAMETER (76 MM) PERFORATED PIPE. THE PIPE SHALL BE NOT LESS THAN 10 FEET (3048 MM) IN TOTAL LENGTH, WITH NOT LESS THAN 5 FEET (1524 MM) OF PERFORATED PIPE EXTENDING FROM THE POINT OF CONNECTION TO THE VERTICAL VENT PIPE. SUCH PIPE SHALL BE PLACED IN A TRENCH BACKFILLED WITH CLEAN AGGREGATE MEETING THE CRITERIA OF SECTION AF103.2, ITEM 1 SUCH THAT THE PIPE IS COMPLETELY SURROUNDED BY NOT LESS THAN 4 INCHES (102 MM) OF AGGREGATE.

NOTE: REQUIRED NUMBER OF JACK STUDS PER TABLE R602.7(1)



4 FOUNDATION POSTS.
 1/2" = 1'-0"

5 RADON CONTROL VENT IN CRAWL SPACE
 1/2" = 1'-0"

submitted 6.26.25

No.	Date	Issued by
1	Date 2	

Project number: 13688
 Date: 6/20/2025 11:33:54 AM
 Drawn by: CHT
 Area:
 Scale: As indicated

AIR HANDLING EQUIPMENT EXCEPTIONS

Up to 5% of the length of an HVAC system shall be permitted to be located outside of the thermal envelope. The HVAC system includes the equipment, distribution network and terminals that provide either collectively or individually the processes of heating, ventilating and/or air-conditioning processes to a building. Ducts shall comply with Section N1105.2.

Figure 3: Air handler in attic, with 5% allowance. The unit shall not be buried in insulation to ensure access for maintenance and proper function of the equipment.

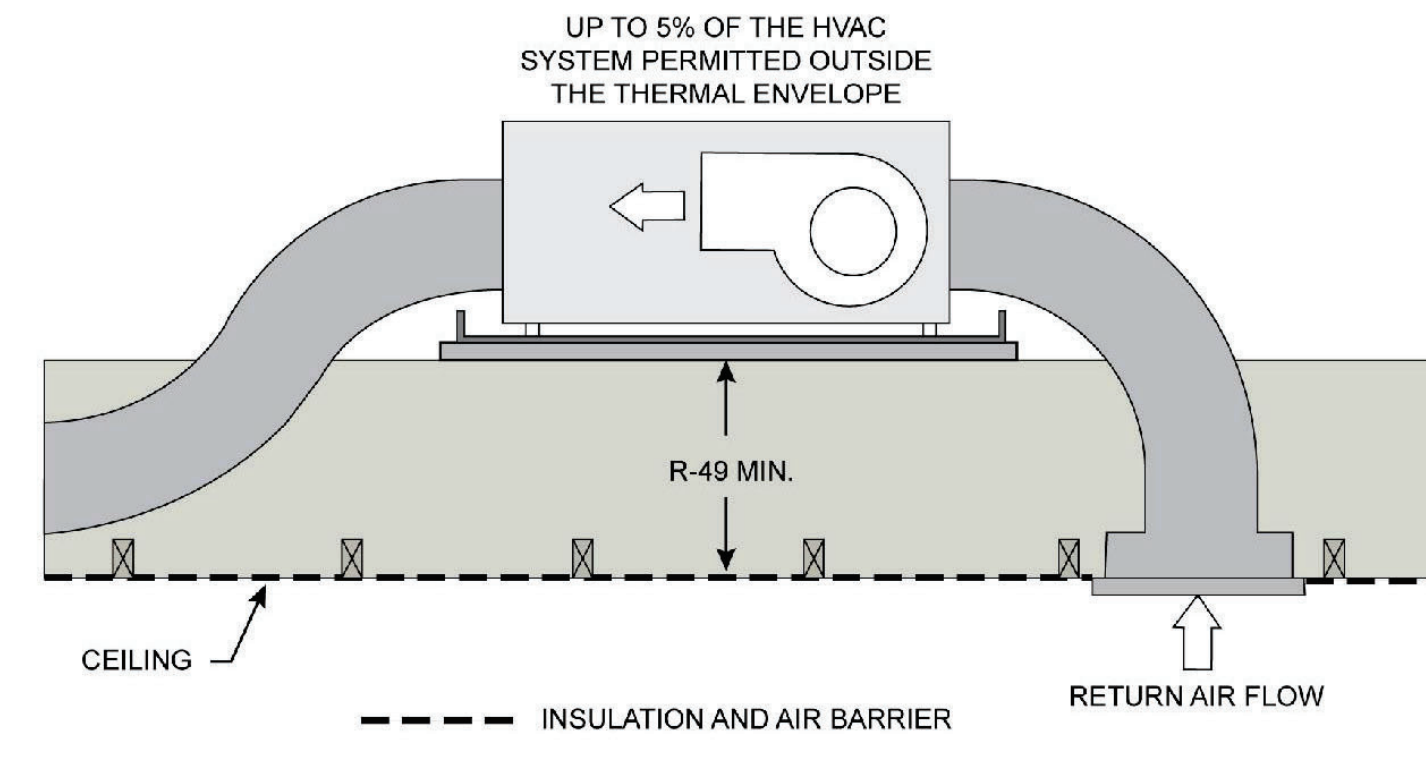
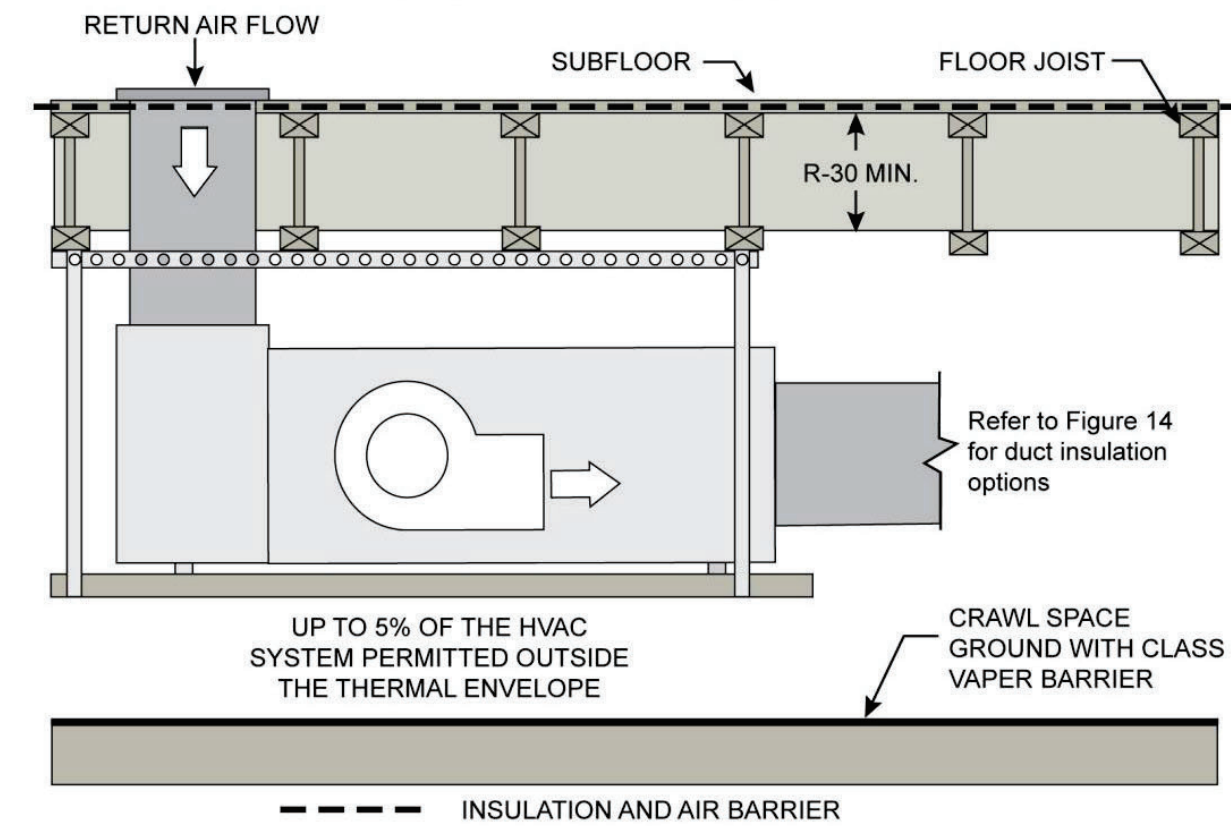


Figure 4: Air handler in crawl space, with 5% allowance. Access for maintenance and proper function of the equipment shall be available.



DUCTS WITHIN ATTIC SPACES – DEEPLY BURIED EXCEPTION

When installing ducts in a vented attic space, requirements must be met to qualify for the exception. Ducts shall comply with Section N1105.2.

Figure 10:

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 R-8 duct adding additional separation between the ductwork and the unconditioned attic.

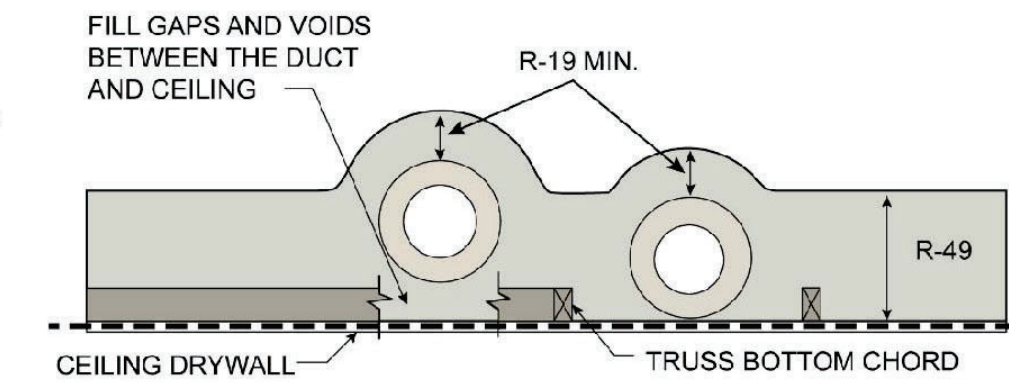


Figure 11:

Insulation depth marker flags shall be installed on the ducts every 10 feet or as approved by the building official.

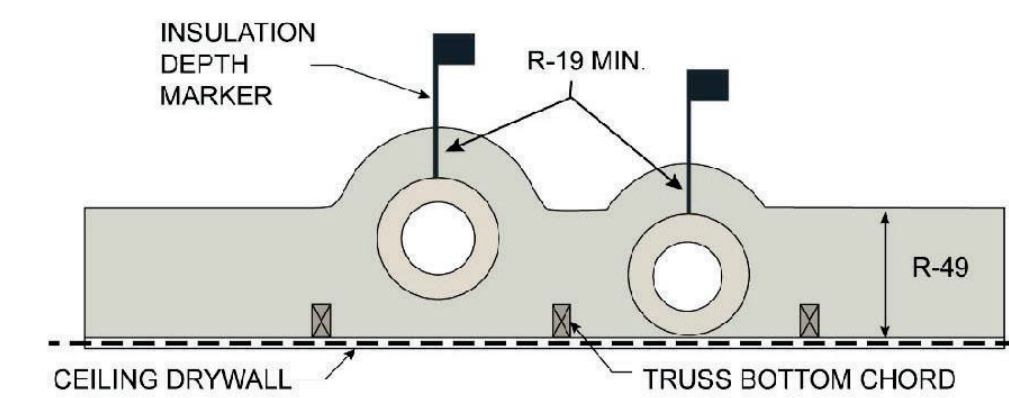


Figure 12:

Fiberglass batt material may be used to achieve the R-19 insulation level above the duct.

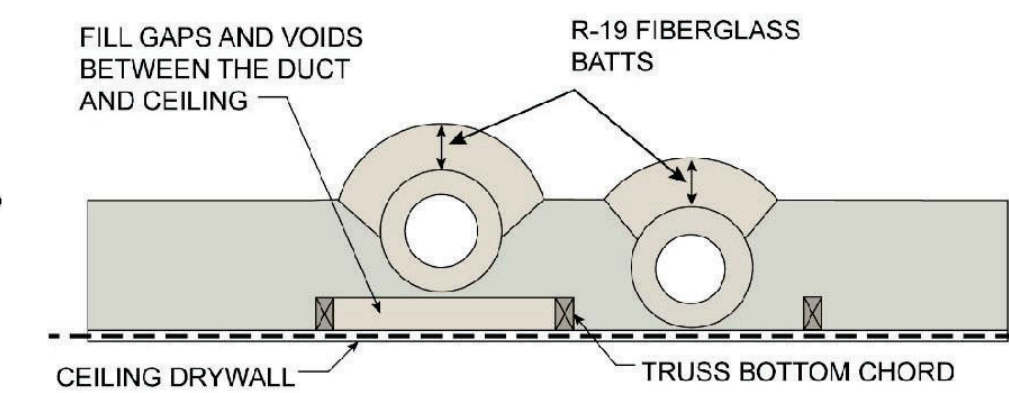
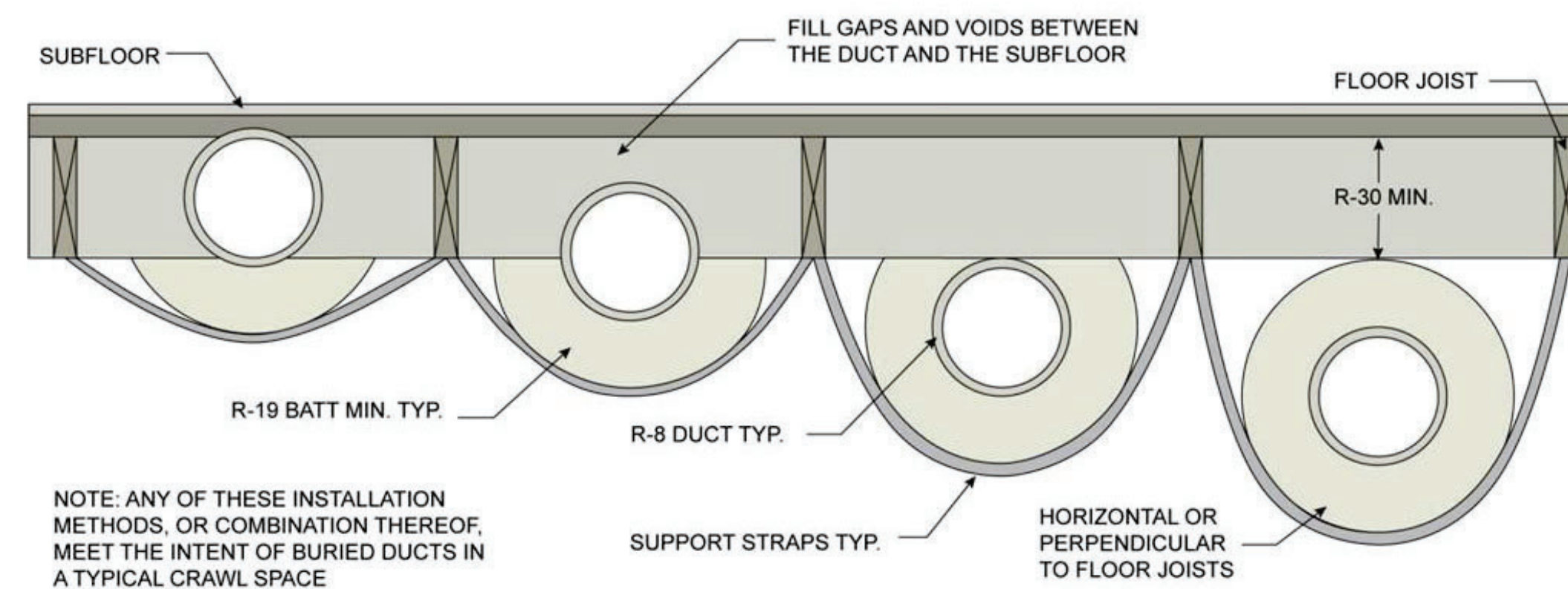


Figure 14: When in a vented under-floor space, batt insulation may be used to achieve the R-19 insulation level around the entire surface area of the duct *not in contact* with the required R-30 floor insulation. Floor insulation shall be installed to fill any gaps and voids between the duct and the floor. Depth marker flags are not required as long as the additional batt insulation is clearly marked as R-19 and there is minimal compression of the batt by support straps or other material.



NOTE: ANY OF THESE INSTALLATION METHODS, OR COMBINATION THEREOF, MEET THE INTENT OF BURIED DUCTS IN A TYPICAL CRAWL SPACE

1	DUCTING REQUIREMENTS
5	12" = 1'-0"

No.	Date	Issued by
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Project number: 13688
Date: 4/23/2025 4:53:49 PM
Drawn by: CHT
Area:
Scale: 12" = 1'-0"

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PERMIT REQUIRED PRIOR TO START OF CONSTRUCTION

R102.1 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 ERRECT, 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

1. CODE COMPLIANCE INTENT

ALL WORK SHOWN IN THE PLANS IS INTENDED TO CONFORM TO THE LATEST OREGON RESIDENTIAL SPECIALTY CODE AT THE TIME OF DRAFTING. BUILDERS DESIGN, INC. DOES NOT GUARANTEE FINAL COMPLIANCE WITH THIS OR ANY OTHER APPLICABLE CODES.

2. PRE-CONSTRUCTION REVIEW

THE CONTRACTOR AND BUILDING OWNER MUST REVIEW THE PLANS AND SITE CONDITIONS THOROUGHLY BEFORE CONSTRUCTION BEGINS. ANY ERRORS OR OMISSIONS MUST BE REPORTED TO BUILDERS DESIGN, INC., IN WRITING, PRIOR TO STARTING WORK. BUILDERS DESIGN, INC. IS NOT LIABLE FOR ISSUES IDENTIFIED AFTER CONSTRUCTION COMMENCES.

3. DIMENSIONS

WRITTEN DIMENSIONS ON THE PLANS OVERRIDE SCALED DIMENSIONS. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON-SITE AND NOTIFY BUILDERS DESIGN, INC. IN WRITING IF ADDITIONAL DIMENSIONS ARE REQUIRED. BUILDERS DESIGN, INC. IS NOT RESPONSIBLE FOR DIMENSION ERRORS UNREPORTED BEFORE CONSTRUCTION.

4. GRADING

GRADING INDICATED ON THE PLANS IS APPROXIMATE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FINAL GRADING DETERMINATIONS AND MUST INFORM BUILDERS DESIGN, INC. IN WRITING OF ANY NECESSARY PLAN CHANGES. BUILDERS DESIGN, INC. IS NOT LIABLE FOR GRADING INACCURACIES OR RELATED COSTS.

5. CODE VERIFICATION

THE CONTRACTOR MUST INDEPENDENTLY CONFIRM THAT THE PLANS MEET ALL STATE AND LOCAL BUILDING CODES BEYOND WHAT IS DEPICTED. BUILDERS DESIGN, INC.'S LIABILITY FOR DAMAGES DUE TO PLAN INACCURACIES, ERRORS, OMISSIONS, OR NON-COMPLIANCE IS LIMITED TO THE FEE PAID TO BUILDERS DESIGN, INC. UNDER THIS AGREEMENT.

6. INSTALLATION RESPONSIBILITY

THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE SELECTION, INSTALLATION, AND PERFORMANCE OF ALL MATERIALS AND ASSEMBLIES (E.G., INSULATION, FLASHING, ROOFING, VENTILATION). BUILDERS DESIGN, INC. RECOMMENDS CONSULTING LICENSED PROFESSIONALS FOR INSTALLATION AND IS NOT LIABLE FOR INSTALLATION FAILURES OR CODE VIOLATIONS DUE TO CONTRACTOR ACTIONS OR SITE CONDITIONS.

7. ZONING AND CODE LIABILITY

PLANS RELY ON CLIENT AND/OR CONTRACTOR PROVIDED INFORMATION. THE PROPERTY OWNER AND CONTRACTOR ARE SOLELY RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL ZONING AND BUILDING CODES BEFORE CONSTRUCTION. BUILDERS DESIGN, INC. DOES NOT GUARANTEE CODE COMPLIANCE, AS CODES MAY CHANGE, AND INITIAL RESEARCH DOES NOT IMPLY ONGOING CONFORMITY. THE CLIENT MUST VERIFY COMPLIANCE WITH THE GOVERNING JURISDICTION. REVISIONS DUE TO JURISDICTIONAL FEEDBACK (E.G., CHECK SHEETS) WILL BE BILLED AT AN AGREED UPON RATE. BUILDERS DESIGN, INC. IS NOT LIABLE FOR ERRORS, OMISSIONS, OR ANY RESULTING COSTS, DELAYS, OR DAMAGES. THE CLIENT SHALL FULLY INDEMNIFY, DEFEND, AND HOLD HARMLESS BUILDERS DESIGN, INC., ITS OFFICERS, EMPLOYEES, AND CONSULTANTS FROM ALL FIRST-PARTY OR THIRD-PARTY CLAIMS, DEMANDS, LOSSES, LIABILITIES, OR LEGAL ACTIONS (INCLUDING ATTORNEY FEES) ARISING FROM NON-COMPLIANCE WITH ZONING OR BUILDING CODES OR THE CLIENT'S USE OF THE PLANS.

8. JOBSITE SAFETY

BUILDERS DESIGN, INC. HAS NO CONTROL OVER THE MEANS, METHODS, OR EXECUTION OF CONSTRUCTION AND BEARS NO RESPONSIBILITY FOR JOBSITE SAFETY. BUILDERS DESIGN, INC. IS NOT LIABLE FOR INJURIES, DAMAGES, OR LOSSES INVOLVING CONTRACTORS, SUBCONTRACTORS, WORKERS, OR ANY INDIVIDUALS ON OR NEAR THE JOBSITE.

9. ACCEPTANCE OF CONDITIONS

USE OF THESE PLANS CONSTITUTES ACCEPTANCE OF ALL CONDITIONS OUTLINED HEREIN.

SITE WORK

- REMOVE TOP SOIL AND ORGANIC MATERIAL FROM THE BUILDING SITE, STOCKPILING ON SITE FOR FINAL GRADING IF POSSIBLE.
- FOOTINGS ARE TO BEAR ON UNDISTURBED LEVEL SOIL, STEPPED AS REQUIRED TO MAINTAIN THE REQUIRED DEPTH BELOW FINISH GRADE.
- ANY FILL UNDER GRADE SUPPORTED CONCRETE SLABS TO BE 4" THICK (MIN.) 3/4 MINUS ROCK COMPACTED TO 95%.
- CONCRETE SLABS TO BE 4" THICK, 3000 PSI AT 28 DAYS WITH CONTROL JOINTS AT 25' O/C. (MAX.) EACH WAY
- FINISH GRADES ARE TO REMAIN AT LEAST 6" BELOW FINISH SIDING.
- CONTRACTOR TO SLOPE GRADE MINIMUM 6" IN 10 FEET AWAY FROM BUILDING, OR CONTRACTOR SHALL PROVIDE PROPER FOOTING DRAINAGE AND FOUNDATION WALL WATER PROOFING AS DETERMINED ON SITE. PROVIDE LOW POINT DRAIN IN CRAWL SPACE FOUNDATIONS.
- 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
- BASEMENT WALLS, FOUNDATIONS WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER
- PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER, AND GARAGE FLOOR SLABS
- f2. ALL REINFORCING STEEL TO BE A-615 GRADE 60. WELDED WIRE MESH TO BE A-185.
- LAP ALL CONTINUOUS BARS 30 x DIA. (MIN.) PLACE ALL REINFORCING AS PER ACI CODES & STANDARDS.
- PROVIDE A MINIMUM CLEARANCE OF 18" UNDER GIRDERS, BEAMS, OR JOISTS, IN CRAWL SPACES.
- COVER ENTIRE CRAWL SPACE WITH 6 MIL. BLACK "VISQUEEN" AND EXTEND UP FOUNDATION WALLS AND FASTEN TO MUD SILL
- 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.
- ALL WOOD IN CONTACT WITH CONCRETE OR GROUND IS TO BE PRESSURE TREATED.
- BEAM POCKETS IN CONCRETE WALLS TO HAVE 1/2" AIR SPACE AT SIDES AND ENDS AND 3" OF BEARING (MIN.)
- MUD SILLS TO BE 2x6 PRESSURE TREATED WOOD WITH 1/2" DIA. x 10" ANCHOR BOLTS SPACING 6" O/C, OR PER SHEAR WALL SCHEDULE AND WITHIN 12" OF CORNERS. LAYOUT FOR 141 OMS 2x6 P.T. SILL PLATE, PROVIDE AB. EACH SIDE OF SILL SPLICES.
- ALL EXTERIOR WALL SILL PLATES AND SILL PLATES BETWEEN CONDITIONED AND UNCONDITIONED SPACE. MATERIAL MAY BE SEALANT, ACOUSTICAL TAPE, SILL SEALER OR OTHER PRODUCT DESIGNED TO LIMIT MOISTURE, THERMAL AND ACOUSTIC TRANSMISSION, AS WELL AS AIR INFILTRATION AND EXFILTRATION. SEE OMS SECTION N1104.8.2.

- 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
- BASEMENT WALLS, FOUNDATIONS WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER
- PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER, AND GARAGE FLOOR SLABS
- f2. ALL REINFORCING STEEL TO BE A-615 GRADE 60. WELDED WIRE MESH TO BE A-185.
- LAP ALL CONTINUOUS BARS 30 x DIA. (MIN.) PLACE ALL REINFORCING AS PER ACI CODES & STANDARDS.
- PROVIDE A MINIMUM CLEARANCE OF 18" UNDER GIRDERS, BEAMS, OR JOISTS, IN CRAWL SPACES.
- COVER ENTIRE CRAWL SPACE WITH 6 MIL. BLACK "VISQUEEN" AND EXTEND UP FOUNDATION WALLS AND FASTEN TO MUD SILL
- 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.
- ALL WOOD IN CONTACT WITH CONCRETE OR GROUND IS TO BE PRESSURE TREATED.
- BEAM POCKETS IN CONCRETE WALLS TO HAVE 1/2" AIR SPACE AT SIDES AND ENDS AND 3" OF BEARING (MIN.)
- MUD SILLS TO BE 2x6 PRESSURE TREATED WOOD WITH 1/2" DIA. x 10" ANCHOR BOLTS SPACING 6" O/C, OR PER SHEAR WALL SCHEDULE AND WITHIN 12" OF CORNERS. LAYOUT FOR 141 OMS 2x6 P.T. SILL PLATE, PROVIDE AB. EACH SIDE OF SILL SPLICES.
- ALL EXTERIOR WALL SILL PLATES AND SILL PLATES BETWEEN CONDITIONED AND UNCONDITIONED SPACE. MATERIAL MAY BE SEALANT, ACOUSTICAL TAPE, SILL SEALER OR OTHER PRODUCT DESIGNED TO LIMIT MOISTURE, THERMAL AND ACOUSTIC TRANSMISSION, AS WELL AS AIR INFILTRATION AND EXFILTRATION. SEE OMS SECTION N1104.8.2.

TABLE R602.3(1) - FASTENING SCHEDULE			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER & TYPE OF FASTENER ^{a,b,c}	SPACING AND LOCATION
ROOF			
1	BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	4-8d box (2-1/2" x 0.113")	TOE NAIL
	BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TOP PLATES, TO RAFTER OR TRUSS	2-8d common (2-1/2" x 0.131") 2-16d common (3-1/2" x 0.162")	EACH END TOE NAIL END NAIL
	FLAT BLOCKING TO TRUSS AND WEB FILLER	16d common (3-1/2" x 0.162")	6" O.C. FACE NAIL
2	CEILING JOISTS TO TOP PLATE	4-8d box (2-1/2" x 0.113")	PER JOIST, TOE NAIL
3	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS [SEE SECTION R802.5.2 AND TABLE R802.5.2(1)]	4-10d box (3" x 0.128")	FACE NAIL
4	CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTION R802.5.2 AND TABLE R802.5.2(1)]	Table R802.5.2(1)	FACE NAIL
5	COLLAR TIE TO RAFTER, FACE NAIL	4-10d box (3" x 0.128")	FACE NAIL EACH RAFTER
6	RAFTER OR ROOF TRUSS TO PLATE	3-16d box nails (3-1/2" x 0.135")	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
7	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-16d (3-1/2" x 0.135") 3-16d box (3-1/2" x 0.135")	TOE NAIL END NAIL
WALL			
8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d common (3-1/2" x 0.162")	24" O.C. FACE NAIL
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d common (3-1/2" x 0.162")	16" O.C. FACE NAIL
10	BUILT-UP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d common (3-1/2" x 0.162")	16" O.C. EACH EDGE FACE NAIL
11	CONTINUOUS HEADER TO STUD	5-8d box (2-1/2" x 0.113")	TOE NAIL
12	ADJACENT FULL-HEIGHT STUD TO END OF HEADER	4-16d box (3-1/2" x 0.135")	END NAIL
13	TOP PLATE TO TOP PLATE	16d common (3-1/2" x 0.162")	16" O.C. FACE NAIL
14	DOUBLE TOP PLATE SPLICE	8-16d common (3-1/2" x 0.162")	FACE NAIL ON EACH SIDE OF END JOINT (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	2-16d common (3-1/2" x 0.162")	16" O.C. EACH FACE NAIL
16	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANEL)	3-16d box (3-1/2" x 0.135")	16" O.C. FACE NAIL
17	TOP OR BOTTOM PLATE TO STUD	4-8d box (2-1/2" x 0.113") 3-16d box (3-1/2" x 0.135")	TOE NAIL END NAIL
18	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d box (3" x 0.128")	FACE NAIL
19	1" BRACE TO EACH STUD AND PLATE	3-8d box (2-1/2" x 0.113")	FACE NAIL
20	1" x 6" SHEATHING TO EACH BEARING	3-8d box (2-1/2" x 0.113")	FACE NAIL
21	1" x 8" AND WIDER SHEATHING TO EACH BEARING	3-8d box (2-1/2" x 0.113")	FACE NAIL

FLASHING & MOISTURE PROTECTION

- 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
- ALL EXTERIOR FLASHING ARE TO BE CONSTRUCTED WITH MIN. GAGE 28 EXPOSED & 30 GAGE CONCEALED, BAKED ENAMEL
- FLASHING SHALL BE INSTALLED AT JUNCTIONS OF CHIMNEYS AND ROOFS, IN ROOF VALLEYS AND AROUND ALL ROOF OPENINGS, INCLUDING SKYLIGHTS, ROOF VENTS, ROOF EDGES BOTH RAKE AND EAVE.
- FLASHING SHALL BE INSTALLED AROUND ALL EXTERIOR DOORS AND WINDOWS, TRANSITIONS BETWEEN SIDING AND ROOF.
- ALL FLASHING TO BE INSTALLED PER "SMACNA" LATEST EDITION OF THE "ARCHITECTURAL SHEET METAL MANUAL".
- BUILDING WRAP OF "TYVEK" OR SAME TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS, INCLUDING WRAPPING WINDOW AND DOOR OPENINGS AND TAPING JOINTS.
- 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)
- ALL PRODUCTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. DESIGNER TAKES NO RESPONSIBILITY FOR INSTALLATION.
- AT VERTICAL SIDING TRANSITIONS, BACK JOINTS WITH SELF-ADHERED FLASHING, A BACKER ROD AND CONTINUOUS BEAD OF SEALANT. AT HORIZONTAL TRANSITIONS, PROVIDE FLASHING PER ORSC R703.4. *THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH.*
- COVER SEISMIC/SHEAR STRAPS AND OTHER STRUCTURAL HARDWARE WITH SELF-ADHERED FLASHING (SAF) PRIOR TO THE APPLICATION OF WATER-RESISTIVE BARRIER (WRB). WRB MAY BE PUNCTURED DURING INSTALLATION ON SHARP EDGES OF HARDWARE, PRODUCING A GATEWAY FOR AIR AND WATER INTRUSION.
- FASTENERS PENETRATING THE EXTERIOR ENVELOPE SHOULD BE PREDRILLED AND HOLES FILLED WITH SEALANT PRIOR TO DRIVING FASTENERS.
- EXTERIOR WALL PENETRATIONS TO BE PROVIDED WITH *QUICKFLASH* PANELS OR SIMILAR PRODUCT AT UNFLANGED ELECTRICAL, MECHANICAL AND PLUMBING PENETRATIONS. PRE-MANUFACTURED FLASHING IN LIEU OF FIELD-FABRICATED SHEET METAL OR MEMBRANE FLASHING AND SEALANT IS PREFERRED. NOTE: USE OF PRE-MANUFACTURED FLASHING PANELS DOES NOT PRECLUDE RODENT PROOFING AS DEFINED IN ORSC G2404.7.
- AT WOOD FLOOR CONSTRUCTION, WE RECOMMEND FILLING VOIDS AT THE UNDERSIDE OF TUBS AND SHOWER PANS WITH INSULATION FOR ACOUSTIC DAMPENING
- WHERE WALL TILE IS INSTALLED IN TUB AND SHOWER AREAS, GLASS MAT GYPSUM BACKING PANELS (ASTM C1178), FIBER-REINFORCED GYPSUM PANELS (ASTM C1278), NONASBESTOS FIBER-CEMENT BACKER BOARD (ASTM C1288) OR NONASBESTOS FIBER MAT REINFORCED CEMENTITIOUS BACKER UNITS (ASTM C1325) SHALL BE USED PER ORSC R702.4.2. PAPER-FACED GYPSUM BOARD SHALL NOT BE USED.

ROOF FLASHING

- THE FOLLOWING ROOF CONDITIONS SHOULD BE DETAILED FOR CLARITY:
 - HIP/RIDGE.** UNDERLAYMENT SHALL BE LAPPED A MINIMUM OF 6" OVER HIPPS AND RIDGES. PROVIDE RIDGE VENTS AND RIDGE BLOCKING NECESSARY FOR ROOF SHEATHING/DIAPHRAGM NAILING.
 - VALLEY.** ROOFING/GENERAL CONTRACTOR TO ENSURE, AND DETERMINE OPEN OR CLOSED VALLEY CONSTRUCTION PER SMACNA ARCHITECTURAL SHEET METAL MANUAL FIGURE 4.10. IF OPEN VALLEY, SPECIFY METAL VALLEY FLASHING OR MINERAL-SURFACED ROLL ROOFING. GALVANIZED STEEL SHALL BE 26 GAGE MINIMUM AND NOT LESS THAN 24 INCHES WIDE. SMACNA RECOMMENDS S" MINIMUM VALLEY EXPOSURE FOR SHINGLES. IF CLOSED VALLEY, VALLEY LINING OF ONE PLY OF SMOOTH ROLL ROOFING COMPLYING WITH ASTM D6380 AND NOT LESS THAN 36 INCHES WIDE. PROHIBIT ROOF PENETRATIONS SUCH AS VENTS WITHIN 24" OF VALLEYS TO AVOID CONFLICT OF FLASHINGS.
- EAVE-TO-WALL.** T SHALL BE FLASHED PER ORSC R903.2.1. THE FOLLOWING ITEMS SHALL BE PROVIDED:
 - A 24"x36" BIBB OF SAF (SELF-ADHERED FLASHING) APPLIED TO THE WALL AT THE EAVE TERMINATION. LAP WITH WATER-RESISTIVE BARRIER.
 - A RAIN DIVERTER AT EAVE-TO-WALL INTERFACE (A.K.A. KICK-OUT FLASHING). SHEET METAL DIVERTER SHOULD BE SOLDERED WATER-TIGHT OR USE PRE- MANUFACTURED VINYL WITH STEP FLASHING LAPPED OVER. SEE ORSC R905.2.8.3.
 - HOLD END OF GUTTER AWAY FROM WALL (2" RECOMMENDED) TO ALLOW WALL CLADDING INSTALLATION WITHOUT INTERFERENCE.
- ROOF-TO-WALL.** PROVIDE AND LAP ROOF UNDERLAYMENT 8" UP ALL ADJACENT WALLS. AT CONDITIONS USING A BACKER BOARD, LAP THE ROOF UNDERLAYMENT AT LEAST THE FULL HEIGHT OF THE BACKER BOARD. PROVIDE MINIMUM BACKER BOARD OF 1X6. WHERE THE RAKE SIDE OF A PITCHED ROOF MEETS A WALL, PROVIDE STEP FLASHING FASTENED TO THE WALL ONLY, UNLESS OTHERWISE INSTRUCTED BY THE ROOFING MANUFACTURER, TO ALLOW FOR MOVEMENT AT THE ROOF-TO-WALL INTERFACE AND TO MINIMIZE PENETRATIONS OF THE ROOF SURFACE. WHERE THE HEAD OF A ROOF MEETS A WALL, APPLY ROOFING CEMENT BETWEEN METAL FLASHING AND TOP OF SHINGLES TO PRECLUDE WIND-DRIVEN RAIN AND PREVENT UPLIFT.
 - ROOF PENETRATIONS.** PLUMBING VENTS, GAS VENTS, CONCENTRIC VENTS, MECHANICAL INTAKE AND EXHAUST VENTS, ATTIC VENTS AND SOLAR EQUIPMENT MOUNTS MAY REQUIRE SPECIFIC DETAILS TO ENSURE PROPER WATERPROOFING, ENSURE INSTALLATION PER MANUFACTURER'S REQUIREMENTS. PROVIDE COMBUSTIBLE CLEARANCES WHERE REQUIRED. TERMINATE PLUMBING VENTS PER OPSC 906.1. TERMINATE GAS VENTS PER OMS SECTION 802. ALSO SEE ROOFING AND EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. INCREASE HEIGHT OF TERMINATION ABOVE HIGHEST ANTICIPATED SNOW LEVEL.

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.

EXCEPTIONS:

- 1.1/2-INCH-DIAMETER (12.7 MM) OR GREATER STEEL BOLTS.
- 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.
- PLAIN CARBON STEEL FASTENERS IN SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT SHALL BE PERMITTED.

R317.3.2 FASTENERS FOR WOOD FOUNDATIONS.

FASTENERS, 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 APPLICATIONS OR WET OR DAMP LOCATIONS.

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 RECOMMENDATIONS, SECTION R317.3.3 SHALL APPLY.

HEALTH AND SAFETY:

ALL NEW SMOKE AND CO ALARMS SHALL BE HARDWIRED WITH BATTERY BACKUP AND INTERCONNECTED WITH 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.

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

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

FRAMING NOTES

- 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 & 1.8E
 - B. PLATES, BLOCKING AND BRIDGING - NO. 3 DOUG FIR
 - C. STUDS - STUD GRADE DOUG FIR
 - D. T.&G DECKING - STUD & BETTER GRADE DOUG FIR
 - E. WALL SHEATHING - 7/16" OSB
 - F. GLU-LAM - 24-F V-4 (OR 24-F V-8 PER PLAN)
- UNLESS OTHERWISE NOTED ON DRAWINGS, ALL EXTERIOR WINDOW AND DOOR HEADERS ARE TO BE 4x12 DOUG FIR NO. 2
- PROVIDE DOUBLE JOISTS UNDER ALL BEARING PARTITIONS.
 - 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)
- SOIL BEARING PRESSURE IS ASSUMED TO BE 1500 P.S.F.
- DECK AND BALCONY GUARDRAILS TO BE 36" HIGH WITH MAXIMUM OPENING SPACES SO THAT A 4" SPHERE CAN NOT PASS THROUGH.
- PROVIDE SIMPSON H2.5A TRUSS CONNECTORS AT EACH TRUSS/RAFTER - UNLESS NOTED OTHERWISE ON PLAN
- ALL EXTERIOR FASTENERS, EXPOSED TO THE ELEMENTS TO BE STAINLESS STEEL OR GALVANIZED. INCLUDING NAIL, STAPLES, CLIPS, ETC. GYPSUM BOARD FINISH:
 - 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.

- DECK AND BALCONY GUARDRAILS TO BE 36" HIGH WITH MAXIMUM OPENING SPACES SO THAT A 4" SPHERE CAN NOT PASS THROUGH.
- PROVIDE SIMPSON H2.5A TRUSS CONNECTORS AT EACH TRUSS/RAFTER - UNLESS NOTED OTHERWISE ON PLAN
- 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.

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. VENTILATING 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.

R806.2 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.

905.2.2 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 SINGLE 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'.

- UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE PER ORSC R905.2.8.5. IF ICE BARRIER UNDERLAYMENT IS REQUIRED PER LOCAL MUNICIPAL CODE, THE ICE BARRIER SHALL EXTEND FROM THE LOWEST EDGES OF ALL ROOF SURFACES TO A POINT NOT LESS THAN 24 INCHES INSIDE THE EXTERIOR WALL LINE OF THE BUILDING PER ORSC R905.1.2.

-UNDERLAYMENT SHALL BE INSTALLED UNDER THE DRIP EDGE PER ORSC R905.2.8.5. SHINGLES SHOULD BE ADHERED TO DRIP EDGE WITH A CONTINUOUS BEAD OF ROOFING CEMENT. ASPHALT ROOF SHINGLES SHOULD OVERHANG EAVES AND RAKES 1/2" .

- OUTLOOKERS REQUIRED TO SUPPORT ROOF SHEATHING AND BARGE BOARD AT OVERHANG.

RADON CONTROL ENTRY ROUTES:

CONDENSATE DRAINS:

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

- SUMPS:**
- 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

R324.7.3 SOLAR INTERCONNECTION PATHWAY AND TERMINATION.

A SQUARE METAL JUNCTION BOX NOT LESS THAN 4 INCHES BY 4 INCHES (102 mm by 102 mm) WITH A METAL BOX COVER SHALL BE PROVIDED WITHIN 24" (610 mm) HORIZONTALLY AND VERTICALLY OF THE MAIN ELECTRICAL PANEL. A MINIMUM 3/4" (19 mm) NONFLEXIBLE METAL RACEWAY WITH A PULL STRING 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 (914 mm). WHERE THE RACEWAY TERMINATES IN THE ATTIC, THE TERMINATION SHALL BE IN A METAL JUNCTION BOX NOT LESS THAN 4 INCHES BY 4 INCHES (102 mm by 102 mm) WITH A BOX COVER LOCATED NOT LESS THAN 6 INCHES (152 mm) ABOVE THE INSULATION. THE JUNCTION BOX SHALL BE MARKED AS "RESERVED FOR SOLAR". EXCEPTION: IN LIEU OF 3/4" (19 mm) NONFLEXIBLE METAL RACEWAY, A MINIMUM OF TWO NO. 10 COPPER 3-WIRE WITH GROUND METAL CLAD (MC) CABLE SHALL BE INSTALLED BETWEEN THE JUNCTION BOXES WITH 6 INCHES (152 mm) OF FREE CONDUCTOR IN EACH JUNCTION BOX.

THESE STRUCTURAL DRAWINGS ARE BASED ON ARCHITECTURAL DRAWINGS. SEE CURRENT ISSUE OR REVISION DATE.
 DIMENSIONS AND ELEVATIONS ARE SUPPLIED BY THE ARCHITECT. THEY MAY BE PROVIDED ON THE STRUCTURAL PLANS AND DETAILS FOR THE CONVENIENCE OF THE CONTRACTOR. VERIFY DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

ORIGINAL PROJECT #
 6070425
 DATE:
 22 APR 2025

BUILDERS DESIGN SENTAUR CONSTRUCTION (PORTLAND)
 SHEAR WALL PLANS

SHEAR WALL SCHEDULE					
MARK	SHEATHING	EDGE NAILING	ABUTTING PANEL EDGE FRAMING	ANCHORAGE	
				SOLE PLATE	SILL PLATE
SW1	7/16"	8d @ 6"	ZX	16d @ 12"	1/2" A.B. @ 32"
SW3	7/16"	8d @ 3"	(2)2X	16d @ 12"	5/8" A.B. @ 32"

- SHEATHING SHALL CONSIST OF WOOD STRUCTURAL PANELS (SEE GSN).
- UNLESS NOTED ON DRAWINGS, EXTERIOR STUDS SHALL BE SPACED AT 16" O.C.
- SHEATHING NAILS SHALL BE COMMON OR GALVANIZED BOX NAILS - FIELD NAIL SPACING SHALL BE 12" FOR STUDS SPACED 16" O.C. OR LESS AND 6" O.C. FOR STUDS SPACED AT 24" O.C.
- ANCHORAGE NAILS SHALL BE COMMON NAILS.
- ANCHOR BOLTS SHALL HAVE A 3X3X0.225" WASHER AND 7" MIN EMBEDMENT. THE WASHER SHALL EXTEND TO WITHIN 1/2" FROM THE SHEATHING.
- FOR SW3, SW4, SW7, AND SW8, (2) 2" NOMINAL FRAMING STITCH-NAILED TOGETHER WITH (2) 10d NAILS @ 8" SHALL BE USED AT ABUTTING PANEL EDGES.

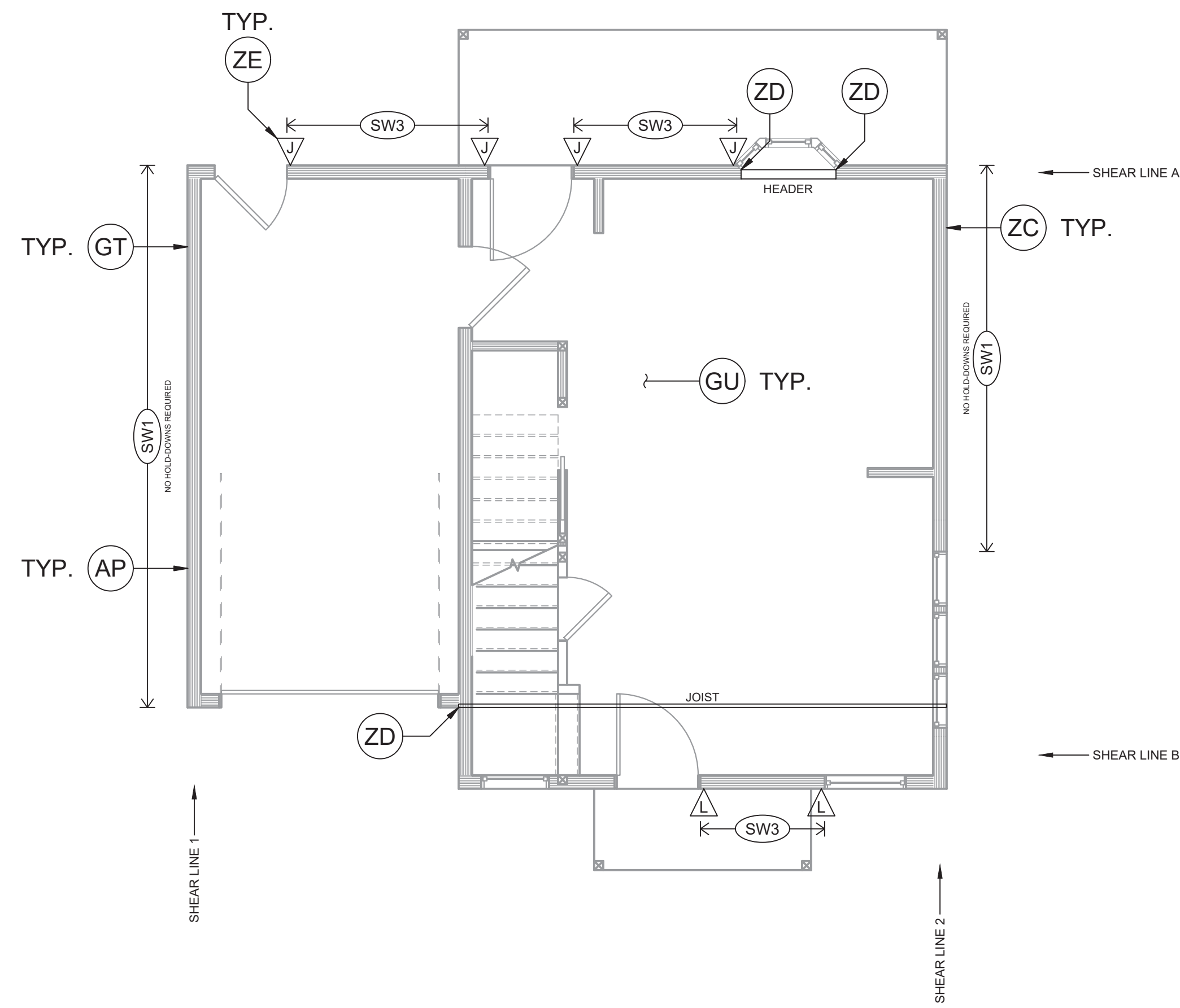
HOLD-DOWN SCHEDULE				
MARK	HOLD-DOWN	MINIMUM FASTENERS	ANCHOR	POST
J	HDU2-SDS2.5	SDS1/4" X 2-1/2" (SDS28212)	SSTB16	(2) 2X POST
L	HDU5-SDS2.5	SDS1/4" X 2-1/2" (SDS28212)	SB58X24	(2) 2X POST

- HOLD-DOWNS SHALL BE SIMPSON STRONG-TIE OR EQUIVALENT.
- SHEAR WALL EDGE NAILING SHALL BE TO HOLD-DOWN POST.
- STHD STRAPS SHALL BE "RJ" TYPE AT RIM JOIST LOCATIONS.

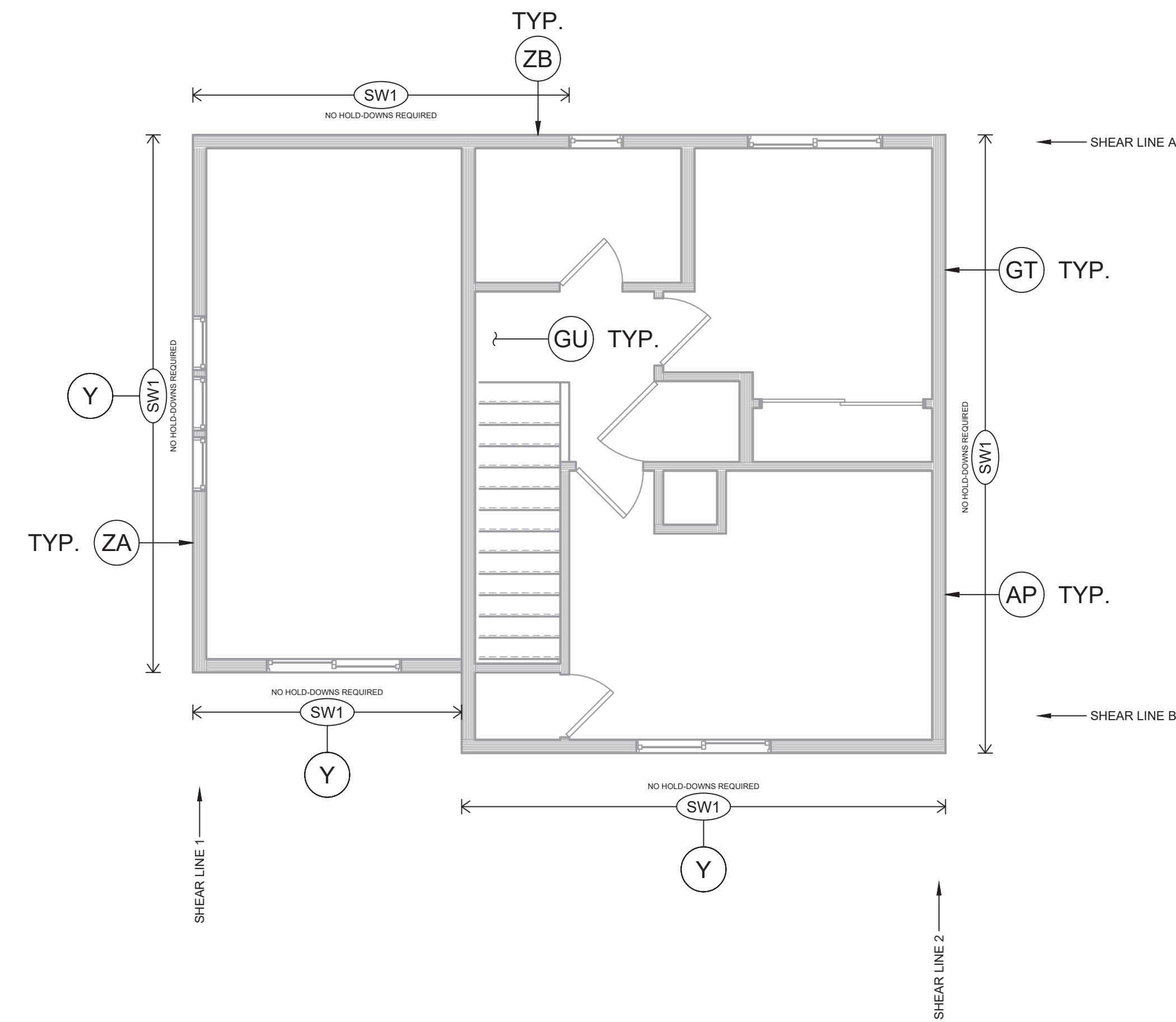
SHEATHING SCHEDULE	
TYPE	THICKNESS
UPPER FLOOR	3/4" OSB (48/24 SPAN RATING)
ROOF	7/16" OSB (24/16 SPAN RATING)

- SHEATHING PERPENDICULAR TO SUPPORTS.
- FLOOR SHEATHING NAILED & GLUED TO SUPPORT.
- 8d COMMON NAILS 6" O.C. (EDGES) 12" O.C. (FIELD).
- NAILING NO CLOSER THAN 3/8" FROM PANEL EDGE.

ALL EXTERIOR WALLS SHALL BE 2X6 DF STUD @ 16" O.C. - U.N.O.
 ALL HEADERS IN EXTERIOR WALLS SHALL HAVE MIN. (1) KING STUD AT EACH SUPPORT - U.N.O.



1 MAIN FLOOR SHEAR WALL PLAN
 SCALE: 1/4" = 1' - 0"



2 UPPER FLOOR SHEAR WALL PLAN
 SCALE: 1/4" = 1' - 0"

ISSUES / REVISIONS
12 JUN 2025 4580625 FRONT WALL ADJUSTMENT

REGISTERED PROFESSIONAL ENGINEER
 92835PE
 BRANDON TODD DECKER
 EXPIRES: 12/31/2025

S1-0