





# ARCHITECTURAL NOTES & SPECIFICATIONS

## CODES

All Work shall comply with the current edition of the International Residential Codes (IRC) and International Energy Conservation Code (IECC) and any governing state, county, or city amendments to the code. In addition, the current versions of the codes covering plumbing, mechanical, electrical and fire shall be followed. Notify Architect of any discrepancies between the contract documents and the building codes. Work shall be done to current area wide standards and practices by experienced craftsmen.

## SCOPE

The Contractor shall verify all existing and new dimensions and job conditions and notify the Architect of any discrepancies prior to proceeding with the work. The Contractor shall be responsible for all safety precautions and the methods, techniques, sequence or procedures required performing the Work.

## GRADING

Grade entire area of property to reasonably true and even surfaces. Slope ground away from building walls to facilitate drainage. Grade to uniform levels or slopes between points where grades are noted on drawings. Round surfaces at abrupt changes in level.

Backfill behind retaining walls with free draining, granular fill and provide for subsurface drainage.

Cut slopes for permanent excavations shall not be steeper than 2 horizontal to 1 vertical and slopes for permanent fills shall be not steeper than 2 horizontal to 1 vertical unless substantiating data justifying steeper slopes are submitted.

## FOUNDATIONS— Also see Structural Notes for additional requirements.

Assumed allowable wall bearing value 2000 PSF unless indicated otherwise in Geotechnical Report. Foundation footings shall be placed upon firm, undisturbed native soil. Notify Architect if undisturbed soil depth is different from drawings. See structural drawings for minimum footing depth below adjacent grade.

Foundations supporting wood shall extend at least 6 inches above the adjacent finish grade.

Foundations for all buildings where the surface of the ground slopes more than 1 foot in 10 feet shall be level, or shall be stepped so that both top and bottom of such foundation are level.

Individual concrete pier footings shall project a minimum of 8 inches above exposed ground unless the columns or posts which they support are of approved wood of natural resistance to decay or treated wood.

Columns and posts located on concrete or masonry floors or decks exposed to the weather or to water splash or in basements and which support permanent structures shall be supported by concrete piers or metal pedestals projecting above floors unless approved wood of natural resistance to decay or treated wood is used. The pedestals shall project at least 6 inches above exposed earth and at least 1 inch above such floors.

Provide 18 inch minimum crawl space under wood joints and 12 inches under wood girders or be of wood with natural resistance to decay or be pressure treated.

Foundation walls enclosing a basement below finished grade shall be damp proofed outside by approved methods and materials.

## WOOD—Also see Structural Notes for additional requirements.

All lumber, plywood, particleboard, structural glued-laminated timber, and jointed lumber, fiberboard sheathing (when used structurally), hardboard siding (when used structurally), piles and poles shall conform to the applicable standards or grading rules specified in the IRC and shall be so identified by the grade mark or a Certificate of Inspection issued by an approved agency.

All lumber, timber, plywood, and poles required to be Treated Wood under shall be identified by the quality mark of an approved inspection agency which maintains continued supervision, testing, and inspection over the quality of the product as specified in IRC.

Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels; provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.

Frame nailing to be in compliance with Table R602.3(1), IRC.

Wood members entering masonry or concrete require one-half inch net air space on top, sides, and end.

Foundation cripple walls shall be framed of studs not less in size than the studing above. When exceeding 4 feet in height, such walls shall be framed of studs having the size requirements for an additional story. Cripple walls having a stud height less than 14 inches shall be sheathed on at least one side with a wood structural panel that is fastened to both the top and bottom plates or the cripple wall shall be constructed of solid blocking.

For conventional construction, the ends of each joist shall have not less than 1-1/2 inches of bearing on wood or metal, nor less than 3 inches on masonry except where supported on a 1 x 4 ribbon strip nailed to adjacent stud or by approved joist hanger.

Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls, or partitions more than joist depth unless sized to carry the additional load.

Joists under and parallel to bearing partitions shall be of adequate size to support the load. Double joist, sized to support the load, that are separated to permit the installation of piping or vents shall be full depth solid blocked with lumber not less than 2 inches nominal and spaced not more than 4 feet on center.

Solid blocking shall be provided over bearing partitions, walls, and beams.

Fire blocking and draftstopping shall be installed to cut off all concealed draft openings (both vertical and horizontal) and shall form an effective barrier between floors, between top story and a roof or attic space. Fire blocking shall consist of 2 inch nominal lumber. Fire blocking shall be required in concealed spaces of stud walls and partitions, including furred spaces, at the ceiling and floor levels and at 10 foot intervals both horizontally and vertically. At all interconnections between concealed vertical and horizontal spaces such as soffits, drop ceilings and cove ceilings. Between stair stringers at top and bottom and along run between studs; In openings around vents, pipes, ducts and similar openings with afford a passage for fire at ceiling and floor levels, with approved non-combustible materials. All spaces between chimneys and floors and ceilings through which chimneys pass shall be fire-blocked with noncombustible material securely fastened into place to a depth of 1 inch and shall only be placed on strips of metal or metal lath laid across the spaces between combustible material and the chimney.

All wood exposed to weather, such as wood used for deck framing including decking, railings, joists, beams, and posts shall be an approved species and grade of lumber pressure treated and/or decay-resistant heartwood of redwood, black locust or cedars.

## ROOF

Roof sheathing shall be in accordance with IRC roof sheathing. Panels exposed in outdoor applications shall be bonded with exterior glue identified as Exposure 1. Application of roof covering materials shall be in accordance with IRC.

The net free ventilating area of enclosed rafter or attic spaces or other enclosed but unheated spaces shall be not less than 1/150 of the area of each space to be ventilated, except that the area may be 1/300, provided that at least 50% and not more than 80% of the required ventilating area is located at least 3 feet above eave or cornice vents with the balance being provided by the eave or cornice vents, or if a vapor retarder not exceeding a 1 perm rating is installed on the warm side of the insulation. The vent area openings shall be covered with an IRC approved corrosion-resistant material provided that the least dimension of the covering shall not exceed one-quarter inch.

Trusses. Trusses as shown on drawings are only representations; actual truss configuration may vary per manufactures design. Stress analysis and drawings/details shall be stamped by an approved State of Washington Registered Engineer. (Drawings/details shall be provided to building officials and approved prior to installation.) Pre-manufactured trusses shall be identified by manufacturer's stamp. Girder and field identification of light metal plate connected trusses is required. Information branded, marked, or otherwise permanently affixed to each truss shall contain the following: 1) identification of the truss manufacturing company; 2) the design load; and 3) the truss spacing. Engineering data and details shall be approved by the Architect before any field cuts or truss alterations. All roof trusses shall be so framed and tied into the framework and supporting walls so as to form an integral part of the whole building. Roof trusses shall have joints well fitted and shall have all tension members well tightened before any load is placed upon the truss. Diagonal and sway bracing shall be used to brace all roof trusses.

## EGRESS

Basements and every sleeping room shall have at least one operable window or exterior door approved for emergency escape or rescue. Escape or rescue windows shall have a minimum net clear opening of 5.7 square feet. The minimum net clear opening height dimension shall be 24 inches. The minimum net clear opening width dimension shall be 20 inches. Where windows are provided as a means of escape or rescue, they shall have a finished sill height not more than 44 inches above the floor. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

All corridors shall be not less than 36 inches wide. Not less than one exit door shall be provided for direct access to the exterior without requiring travel through a garage. The required exit door shall be side-hinged not less than 3 feet in width and 6 feet 8 inches in height. A floor or landing is required on each side of the exit door. The floor or landing at the exit door shall not be more than 1 1/2-inches lower than the top of the threshold. Other than the required exit door where a stairway of two or fewer risers is located on the exterior side of a door a landing is not required for the exterior side of the door. Floors or landings at exterior doors other than the required exit door shall have a rise less than 7 3/4-inch below the top of the threshold, provided the door, other than an exterior storm or screen door does not swing over the landing. The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches measured in the direction of travel.

## STAIRWAYS & RAILS

Enclosed accessible space under stairs shall have walls, under stair surface and any soffits protected on the enclosed side with 1/2-inch gypsum board.

Stairways: Maximum riser height 7 3/4-inches, minimum tread depth 10 inches, headroom minimum 6 feet 8 inches, minimum width 36 inches. Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers. Handrail ends shall be returned or shall terminate in newel post or safety terminals. Handrails height shall be not less than 34 inches and not more than 38 inches above slope plane adjoining the tread nosing. Handrails with circular cross section shall have an outside diameter of at least 1 1/4-inches and not greater than 2-inches. Non circular handrails shall have a perimeter dimension of at least 4-inches and not greater than 6 1/4-inches with maximum cross section dimension of 2 1/4-inches. Handrails adjacent to a wall shall have a space of not less than 1 1/2-inches between the wall and the handrail.

Stairs, exit balconies and similar exit facilities shall be positively anchored to the primary to resist both vertical and lateral forces. Such attachment shall not be accomplished by use of toenails or nails subject to withdrawal.

When decks, screened porches, balconies or raised floor surfaces are more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Intermediate rails or ornamental closures are required that do not allow passage of a sphere 4 inches or more in diameter. Triangular openings created by stair risers, treads and bottom rail shall not allow the passage of a 6 inch sphere.

## GLAZING

HAZARDOUS LOCATIONS: Each pane of glazing installed in hazardous locations shall be visibly labeled with a non-removable label that designates the type and thickness of glass and safety glazing standard. The following shall be considered specific hazardous locations for the purposes of glazing:

1. Glazing in swinging doors except jalousies.
2. Glazing in fixed and sliding panels of sliding door assemblies and panels in sliding and bifold closet door assemblies.
3. Glazing in storm doors.
4. Glazing in all unframed swinging doors.
5. Glazing in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in any part of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches measured vertically above any standing or walking surface.
6. Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24 inch arc of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface.
7. Glazing in an individual fixed or operable panel, other than those locations described in Items 5 and 6 above, that meets all of the following conditions:
  - 7.1 Exposed area of an individual pane greater than 9 square feet.
  - 7.2 Bottom edge less than 18 inches above the floor.
  - 7.3 Top edge greater than 36 inches above the floor.
  - 7.4 One or more walking surfaces within 36 inches horizontally of the glazing.
8. All glazing in railings regardless of an area or height above a walking surface. Included are structural baluster panels and nonstructural in-fill panels.
9. Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches above a walking surface and within 60 inches horizontally of the water's edge. This shall apply to single glazing and all panes in multiple glazing.
10. Glazing adjacent to stairways, landings and ramps within 36 inches horizontally of a walking surface when the exposed surface of the glass is less than 60 inches above the plane of the adjacent walking surface.

The air barrier shall be continuous for the thermal envelope & across the joints & assemblies. Joints & seams shall be sealed, including sealing transitions in places & changes in materials. Penetrations of the air barrier & paths of air leakage shall be caulked, gasketed, or otherwise sealed in a manner compatible with the construction materials & location.

The completed building shall be tested and air leakage rate of the building envelope shall not exceed 0.40 cfm/sq. ft. at a pressure differential of 0.3 inches of water gauge in accordance with ASTM E 779 or an equivalent method approved by the code official.

11. Glazing adjacent to stairways within 60 inches horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glass is less than 60 inches above the nose of the tread.

EXCEPTION: The following products, materials and uses are exempt from the above hazardous locations:

1. Openings in doors through which a 3-inch sphere is unable to pass.
2. Decorative glass in exception items, 1, 6 or 7.
3. Glazing in hazardous locations, item 6, when there is an intervening wall or other permanent barrier between the door and the glazing.
4. Glazing in hazardous locations, item 6, in walls perpendicular to the plane of the door in a closed position or where access through the door is to a closet or storage area 3 feet or less in depth. Glazing in these applications shall comply with hazardous location item 7.
5. Glazing in hazardous locations, items 7 and 10, when a protective bar is installed on the accessible side(s) of the glazing 36 inches ± 2 inches above the floor. The bar shall be capable of withstanding a horizontal load of 50 pounds per linear foot without contacting the glass and be a minimum of 1 1/2-inches in height.
6. Outboard panes in insulating glass units and other multiple glazed panels in hazardous locations, item 7, when the bottom edge of the glass is 25 feet or more above grade, a roof, walking surface, or other horizontal [within 45°of horizontal] surface adjacent to the glass exterior.
7. Louvered windows and Jalousies complying with the following: Regular, float, wired or patterned glass shall be no thinner than nominal 3/8-inch and no longer than 48 inches with smooth exposed edges. Longitudinal edges may not have exposed wire.
8. Mirrors and other glass panels mounted or hung on a surface that provides a continuous backing support.
9. Safety glazing in hazardous locations, Items 10 and 11 is not required where:
  - 9.1 The side of a stairway, landing or ramp has a guardrail or handrail, including balusters or in-fill panels, complying with the provisions of Sections 1012 and 1607.7 of the International Building Code; and
  - 9.2 The plane of the glass is greater than 18 inches from the railing.

## Finish Carpentry

Fasteners and Anchorage: Provide nails, screws and other anchoring devices of type, size, material and finish suitable for intended use and required to provide secure attachment, concealed where possible. Hot-dip galvanized fasteners for work exposed to exterior and high humidities to comply with ASTM A 153.

Standing and Running Trim: Install with minimum number of joints possible, using full-length pieces from maximum length of lumber available. Cope at returns, miter at corners to produce tight fitting joints. Use scarf joints for end-to-end joints.

Install finish carpentry work plumb, level, true and straight with no distortions. Shim as required using concealed shims. Scribe and cut finish carpentry items to fit adjoining work. Anchor finish carpentry work securely to supports and substrates, using concealed fasteners and blind nailing where possible. Use fine finishing nails for exposed nailing except as indicated, countersunk and filled flush with finished surface.

## FLASHINGS

All flashings to be 26 GA galvanized metal or aluminum alloy anodized finish. Install flashings in all locations to make building watertight. These areas would include but not be limited to copings, caps, gravel stops, beam caps, drip caps over doors windows and other openings, and roof and wall intersections.

## CAULKING AND SEALANT

The following openings in the building envelope shall be caulked or otherwise sealed to limit infiltration. Around glazing and door frames, between the unit and the interior sheet rock or the rough framing as shown in details with spray foam sealer; Between all exterior wall sole plates and the structural floor, using two rows of caulking as shown in details; Over all framing joints where floors over conditioned spaces intersect exterior walls (e.g. at rim and band joists) as shown in details; Around openings in the building envelope for ducts, plumbing, electricity, telephone, and cable television lines in walls, ceilings and floors; At openings in the ceiling, (e.g. where ceiling panels meet interior and exterior walls; at exposed beams, masonry fireplaces, woodstove flues, etc.); At penetrations. All openings in the air barrier including spaces around plumbing, electric conduits and boxes, and telephone service entrances. Penetrations of exterior ceilings and walls by metal insulated flues shall be sealed according to manufacturer's specifications; at recessed lighting fixtures in unheated areas, seal around the exterior can to be air tight, the mounting flange on the exterior can is caulked to the GWB. At electrical outlets; seal gaps between GWB and outlet box.

Access Hatches and Doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weather-stripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment which prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer must be provided when loose fill insulation is installed to prevent fill from spilling into conditioned space and to maintain installed R-value.

Clearances. Where required, insulation shall be installed with clearances according to manufacturer's specifications. Insulation shall be installed so that required ventilation is unobstructed. For blown or poured loose fill, insulation clearances shall be maintained through installation of a permanent retainer.

All insulation materials, including facings such as vapor barriers or breather papers, installed within floor/ceiling assemblies, roof/ceiling assemblies, walls, crawl spaces, or attics shall have a flame-spread rating of less than 25, and a smoke density not to exceed 450 when tested in accordance with ASTM E84-01. EXCEPTIONS: 1.) foam plastic insulation shall comply with Section 2603 of the International Building Code; and 2.) when such materials are installed in concealed spaces of Types III, IV and V construction, the flame spread and smoke developed limitations do not apply to the facing, provided that the facing is installed in substantial contact with the unexposed surface of the ceiling, floor, finish. 3.) Cellulose insulation shall comply with section 719 of the International Building code.

Walls. All wall insulation shall fill the entire cavity. Exterior wall cavities isolated during framing (such as behind bathtubs and showers) shall be fully insulated to the levels of surrounding walls. All faced insulation shall be face stapled to avoid compression.

Floors. All floor insulation shall be installed in a permanent manner in substantial contact with the surface being insulated. Insulation supports shall be installed so spacing is no more than 24 inches on center. Foundation vents shall be placed so that the top of the vent is below the lower surface of the floor insulation.

## WASHINGTON STATE ENERGY REQUIREMENTS

### Some Requirements State-Wide

Fenestration	U = 0.30 (area weighted average of doors and windows)
Overhead Glazing	U = 0.50
Flat Ceilings	R = 49
Vaulted Ceilings	R = 38
Walls Above Grade	R = 21
Wall-Below grade	R = 10 (cont. ext.) or R = 15 (cont. int.) or R = 21 (cavity + slab/basement wall thermal break)
Frame Floors	R = 30
Slab on grade	R = 10
Headers	R = 10

Slabs. Perimeter insulation installed on the inside of the foundation wall shall extend downward from the top of the slab for a minimum of 24 inches or downward and then horizontally beneath the slab for a combined minimum of 24 inches. Insulation installed on the outside of the foundation shall extend downward a minimum 24 inches or to the frostline or for monolithic slabs from the top to the bottom of the footing. Above grade insulation shall be protected. Thermal breaks shall be placed in the slab between conditioned and unconditioned spaces. The entire area of a radiant slab shall be thermally isolated from the soil with minimum R-10 insulation. The insulation shall be an approved product for its intended use. If a soil gas control system is present below the radiant slab, which results in increased convective flow, the slab shall be thermally isolated from the sub-slab gravel layer.

Below-Grade Walls. Below grade exterior wall insulation (cold) side of the wall shall extend from the top of the below grade wall to the top of the footing and shall be approved for below-grade use. Above grade insulation shall be protected. Insulation used on the interior (warm) side of the wall shall extend from the top of the below-grade wall to the below-grade floor level.

## VENTILATION

Ventilation. All habitable rooms shall be provided with aggregate glazing area of not less than 8 percent of the floor area of such rooms. Ventilation shall comply with the IAQO.

## WHOLE HOUSE MECHANICAL VENTILATION

Whole house ventilation system shall comply with Washington State Ventilation and Indoor Air Quality Code Requirements, for sizing, controls, ducting, noise and other requirements.

Exhaust fans providing source specific ventilation shall have minimum fan flow rating not less than 50 CFM at 0.25 inches water gauge for bathroom laundries or similar rooms and 100 CFM at 0.25 inches water gauge for kitchens.

Whole house ventilation systems may consist of whole house exhaust, integration with forced-air systems or dedicated heat recovery ventilation systems. Whole house exhaust systems shall meet the following requirements: CFM Min. Requirements

SF	# OF BEDROOMS					
	0-1	2-3	4-5	6-7	>7	
<1500	30	45	60	75	90	
1501-3000	45	60	75	90	105	
3001-4500	60	75	90	105	120	
4501-6000	75	90	105	120	135	
6001-7500	90	105	120	135	150	
>7500	105	120	135	150	165	

Outdoor air shall be supplied by either mechanical means or with individual room outdoor air inlets. Individual room outdoor air inlets shall have a controllable and secure opening and be capable of a total opening area of not less than four square inches and tested by a nationally recognized standard or approved agency and located to avoid drafts.

Domestic kitchen range ventilation and domestic clothes dryers shall be of metal and have smooth interior surfaces. Ducts shall be substantially airtight and shall comply with the provisions of the IRC. Exhaust ducts shall terminate outside of the building and be equipped with back draft dampers. Domestic clothes dryers shall be exhausted directly to the outside if in an area that is habitable or containing other fuel burning appliances and shall meet the provisions of the IRC, as well as clothes dryer manufacturer's instructions and recommendations. Dryer exhaust ducts shall terminate on the outside of the building and shall be equipped with a backdraft damper. Ducts shall not be connected or installed with sheet metal screws or other fasteners which will obstruct the flow. Unless otherwise permitted or required by the dryer manufacturer's instructions and approved by the building official, dryer exhaust ducts shall not exceed a total combined horizontal and vertical length of 15 feet, including two 90 degree elbows. Five feet shall be deducted for each 90 degree elbow in excess of two.

## Fireplaces

Hearth Extensions. Hearths shall extend at least 16" from the front of, and at least 8" beyond each side of, the fireplace opening. Where the fireplace opening is 6 square feet or larger the hearth extension shall extend at least 20" in front, and at least 12" beyond each side of the fireplace.

Combustible materials shall not be placed within 2 inches of fireplace, smoke chamber or chimney walls. Combustible material shall not be placed within 6 inches of the fireplace opening. No such combustible material within 12 inches of the fireplace opening shall project more than 1/8" of each 1" clearance from such opening.

## HEATING SYSTEMS

Each dwelling unit shall be provided with heating facilities capable of maintaining 70 degrees F at a point 3 feet above the floor in all habitable rooms at the 97 ½% outside design temperature for the location of the building.

Liquefied petroleum gas burning appliances shall not be installed in a pit, basement, or similar location where heavier-than-air gas might collect. Appliances so fueled shall not be installed in an above grade under floor space or basement.

Appliances designed to be in a fixed position shall be securely fastened in place. Supports for appliances shall be designed and constructed to sustain vertical and horizontal loads within the stress limitations in the building code.

All fuel burning equipment shall be provided with combustion air and meet the provisions of and Chapter 14 IRC and any state ventilation requirements. Appliances located within the building envelope shall obtain combustion air from outdoors. Heating equipment located within the Building Envelope shall be thermally isolated from the heated area.

Every appliance designed to be vented shall be connected to a venting system complying with the IRC.

Every factory built chimney, Type L vent, Type B gas vent, or Type BW gas vent shall be installed in accordance with the terms of its listing, manufacturer's instructions, and the applicable provisions of IRC.

Vent connectors shall be installed within the space or area in which the appliance is located and shall be connected to a chimney or vent in such a manner as to maintain the clearance to combustibles per IRC.

Thermostat-Wall thermostat, low voltage, heat anticipating. Four time periods per day with intelligent recovery feature.

## SMOKE DETECTORS

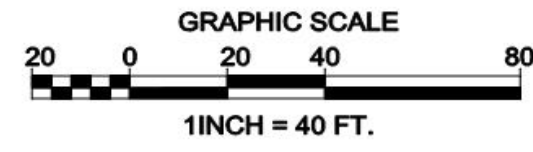
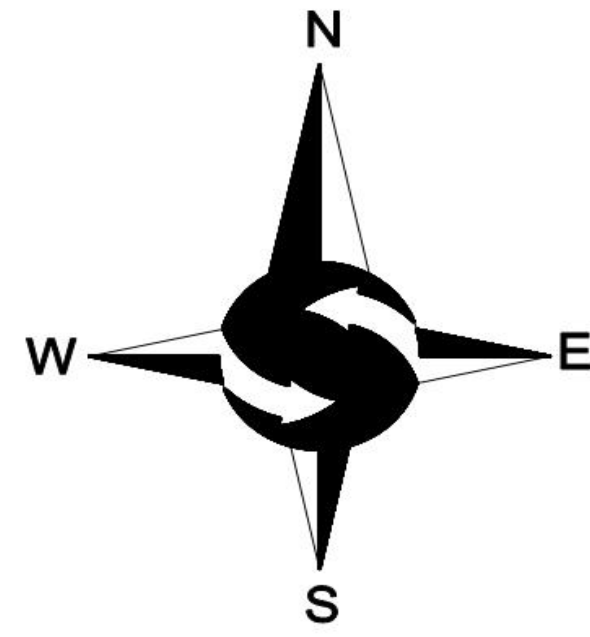
Smoke alarms shall be installed in the following locations, coordinate with drawings:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements but not including crawlspaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

All alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the dwelling unit. The alarms shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. The required smoke alarms shall receive their primary power from the building wiring and be equipped with a battery backup. The detector shall emit a signal when the batteries are low.

## CARBON MONOXIDE DETECTORS

Carbon monoxide alarms shall be installed outside each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units which fuel-fired appliances are installed or in dwelling units that have attached garages.



**LEGEND**

- FOUND MONUMENT AS DESCRIBED
- FOUND REBAR AS DESCRIBED
- ⊗ TACK IN LEAD FOUND
- SET 5/8" X 24" IRON ROD WITH YELLOW PLASTIC CAP
- ⊠ POWER METER
- ⊙ UTILITY POLE
- ⊠ GAS METER
- ⊠ SANITARY SEWER CLEANOUT
- ⊠ SANITARY SEWER MANHOLE
- ⊠ WATER VALVE
- ⊠ FIRE HYDRANT
- ⊠ WATER METER
- ⊠ SIGN
- SS- APPROXIMATE LOCATION SANITARY SEWER LINE
- SD- APPROXIMATE LOCATION STORM DRAIN LINE
- OHP— OVERHEAD POWER
- OHU— OVERHEAD UTILITIES
- X- CHAINLINK FENCE
- WOOD FENCE
- ▨ CONCRETE WALL
- ▨ ROCKERY
- ▨ ASPHALT SURFACE
- ▨ CONCRETE SURFACE
- ▨ GRAVEL SURFACE
- CE CEDAR
- DS DECIDUOUS
- HE HEMLOCK
- DF DOUGLAS FIR
- MP MAPLE
- \* INDICATES MULTI-TRUNK

**LEGAL DESCRIPTION**

THE NORTHEAST QUARTER OF GOVERNMENT LOT 3 AND THAT PORTION OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SAID GOVERNMENT LOT LYING NORTH OF THE NORTH LINE OF THAT CERTAIN EASEMENT DESCRIBED IN MODIFICATION OF EASEMENT RECORDED JUNE 20, 1963, UNDER RECORDING NUMBER 559226; AND THE WEST 150 FEET OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, ALL IN SECTION 31, TOWNSHIP 25 NORTH, RANGE 7 EAST, W. M., IN KING COUNTY, WASHINGTON, SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**BASIS OF BEARINGS**

BOUNDARY SURVEY FOR JAMES MCLEES BY CONCEPT ENGINEERING, INC AS RECORDED UNDER RECORDING NUMBER 199705219004, RECORDS OF KING COUNTY, WASHINGTON.

**PROJECT INFORMATION**

**SURVEYOR:** SITE SURVEYING, INC.  
21923 NE 11TH ST  
SAMMAMISH, WA 98074  
PHONE: 425.298.4412

**PROPERTY OWNER:** RICHARD HOLUB  
27933 E MAIN STREET  
REDMOND, WA 98053

**TAX PARCEL NUMBER:** 312507-9010

**PROJECT ADDRESS:** 27933 E MAIN STREET  
REDMOND, WA 98053

**ZONING:** RA10

**JURISDICTION:** KING COUNTY

**PARCEL ACREAGE:** 822,289 S.F. (± 11,990 ACRES)  
AS SURVEYED

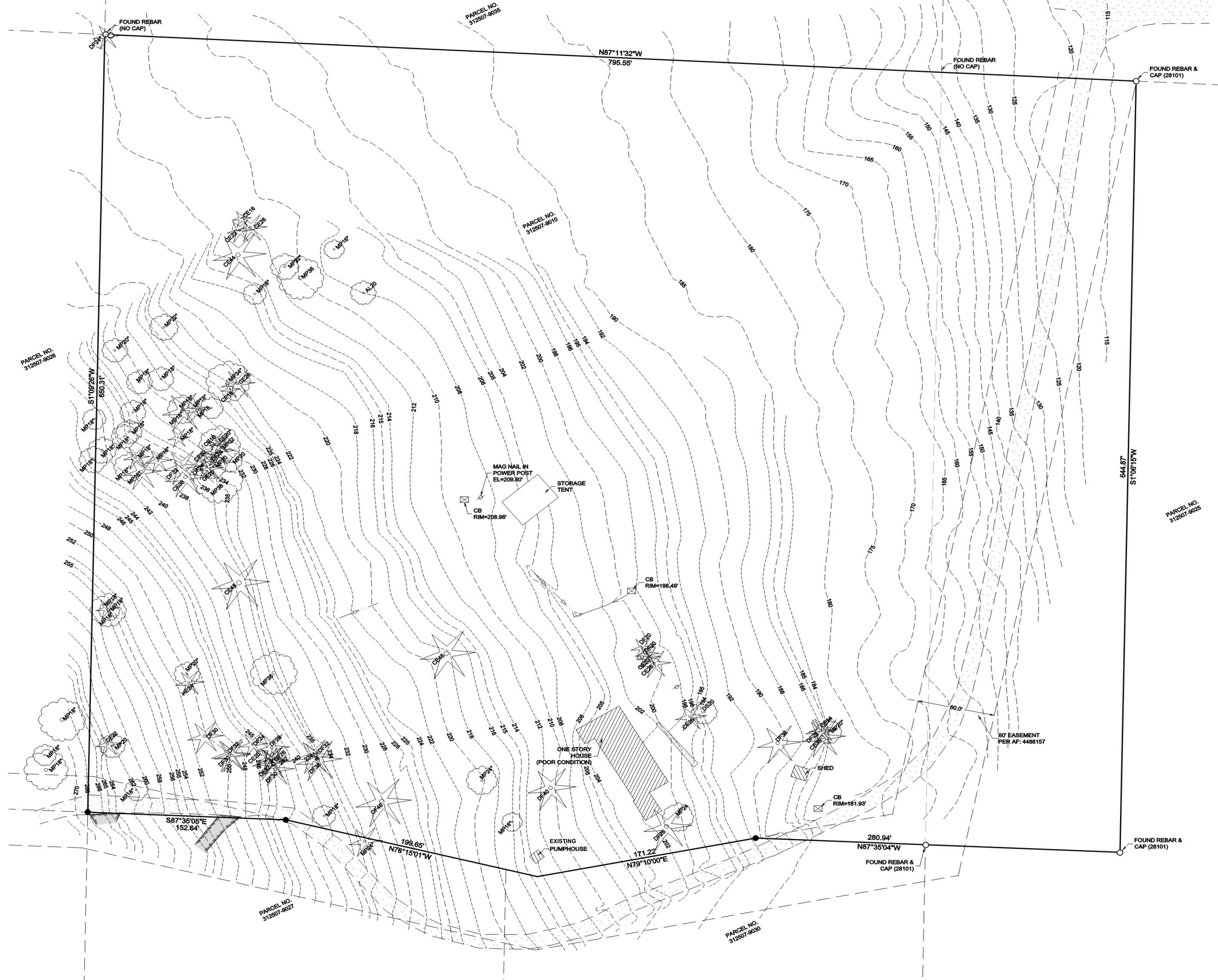
**GENERAL NOTES**

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN APRIL 2020 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

**VERTICAL DATUM & CONTOUR INTERVAL**

ELEVATIONS SHOWN ON THIS DRAWING ARE ON AN ASSUMED DATUM.

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



NW 1/4, SW 1/4, SEC 31, TWP 25N, RNG 7E, W.M.

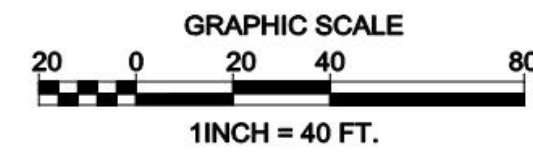
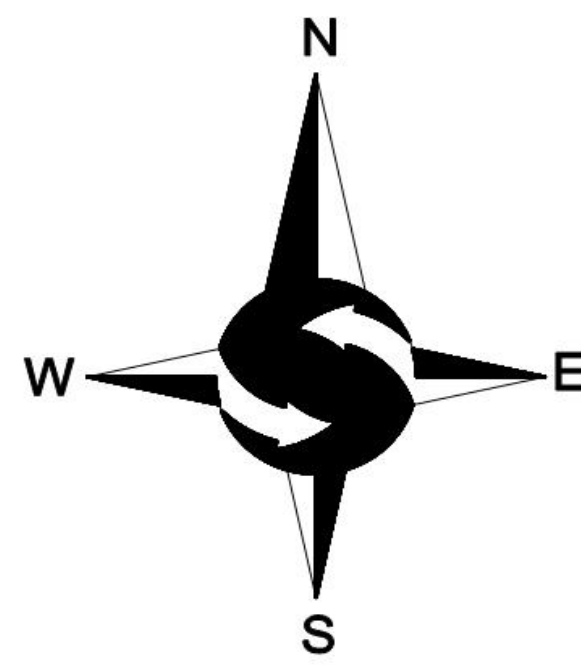


DATE	REVISION	DRN

**TOPOGRAPHIC SURVEY**  
RICHARD HOLUB  
27933 E MAIN STREET  
REDMOND, WA 98053

PROJECT NO. 20-053

DRAWN BY: EFJ  
CHECKED BY: TNW  
DATE: 4/29/2020  
SHEET 1 OF 1



**LEGEND**

● FOUND MONUMENT AS DESCRIBED	—OHP— OVERHEAD POWER
○ FOUND REBAR AS DESCRIBED	—OHU— OVERHEAD UTILITIES
⊗ TACK IN LEAD FOUND	—X— CHAINLINK FENCE
● SET 5/8" X 24" IRON ROD WITH YELLOW PLASTIC CAP	— — WOOD FENCE
⊠ POWER METER	▭ CONCRETE WALL
⊕ UTILITY POLE	▭ ROCKERY
⊕ GAS METER	▭ ASPHALT SURFACE
⊕ SANITARY SEWER CLEANOUT	▭ CONCRETE SURFACE
⊕ SANITARY SEWER MANHOLE	▭ GRAVEL SURFACE
⊕ WATER VALVE	CE CEDAR
⊕ FIRE HYDRANT	DS DECIDUOUS
⊕ WATER METER	HE HEMLOCK
—S— SIGN	DF DOUGLAS FIR
—SS— APPROXIMATE LOCATION SANITARY SEWER LINE	MP MAPLE
—SD— APPROXIMATE LOCATION STORM DRAIN LINE	* INDICATES MULTI-TRUNK

**LEGAL DESCRIPTION**

THE NORTHEAST QUARTER OF GOVERNMENT LOT 3 AND THAT PORTION OF THE EAST HALF OF THE SOUTHEAST QUARTER OF SAID GOVERNMENT LOT LYING NORTH OF THE NORTH LINE OF THAT CERTAIN EASEMENT DESCRIBED IN MODIFICATION OF EASEMENT RECORDED JUNE 20, 1983, UNDER RECORDING NUMBER 6596206; AND THE WEST 100 FEET OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER, ALL IN SECTION 31, TOWNSHIP 25 NORTH, RANGE 7 EAST, W. M., IN KING COUNTY, WASHINGTON, SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

**BASIS OF BEARINGS**

BOUNDARY SURVEY FOR JAMES MCLEES BY CONCEPT ENGINEERING, INC AS RECORDED UNDER RECORDING NUMBER 199705219004, RECORDS OF KING COUNTY, WASHINGTON.

**PROJECT INFORMATION**

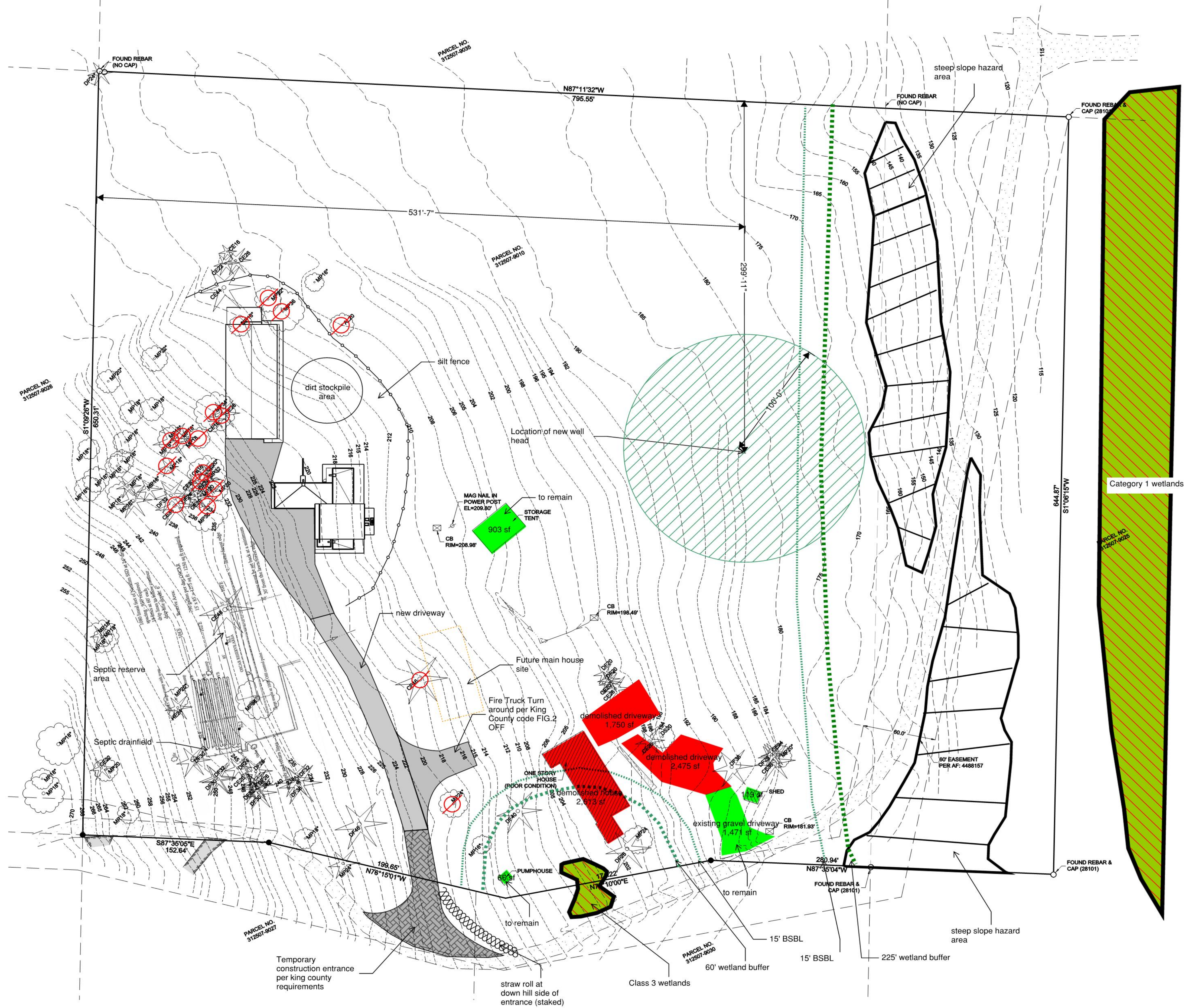
<b>SURVEYOR:</b>	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
<b>PROPERTY OWNER:</b>	RICHARD HOLUB 27933 E MAIN STREET REDMOND, WA 98053
<b>TAX PARCEL NUMBER:</b>	312507-9010
<b>PROJECT ADDRESS:</b>	27933 E MAIN STREET REDMOND, WA 98053
<b>ZONING:</b>	RA10
<b>JURISDICTION:</b>	KING COUNTY
<b>PARCEL ACREAGE:</b>	522,289 S.F. (11.990 ACRES) AS SURVEYED

**GENERAL NOTES**

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN APRIL 2020 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

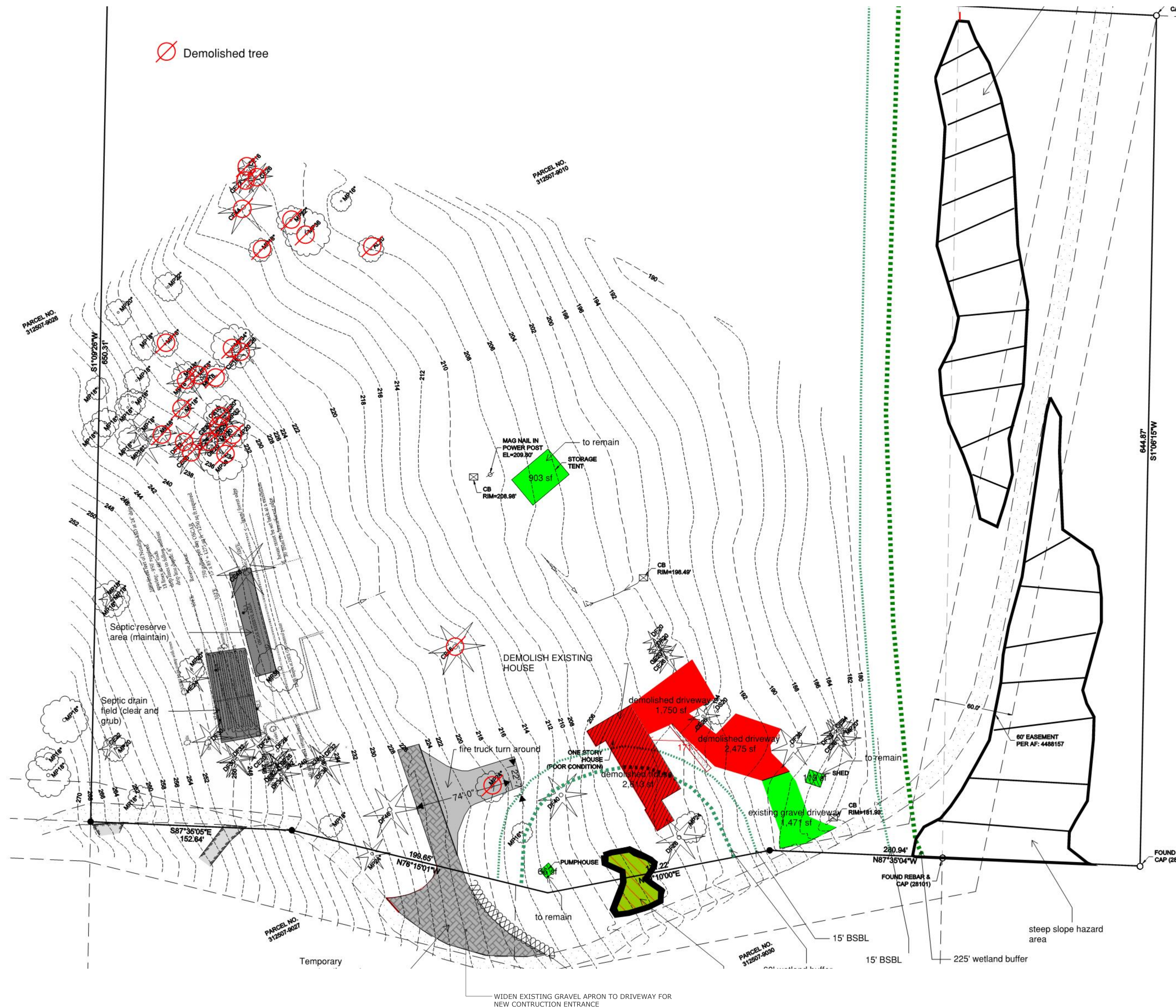
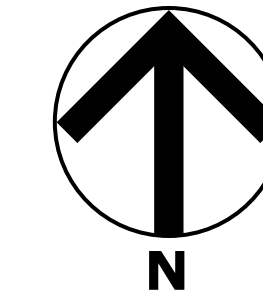
**VERTICAL DATUM & CONTOUR INTERVAL**

ELEVATIONS SHOWN ON THIS DRAWING ARE ON AN ASSUMED DATUM.  
2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



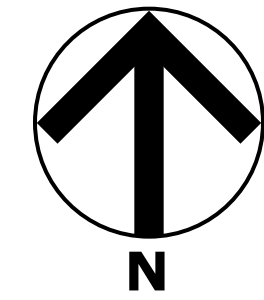
# SITE DEMOLITION PLAN

NOTE: RETAIN AND STOCK PILE TOPSOILS FOR RE-USE NO DIRT EXPORT



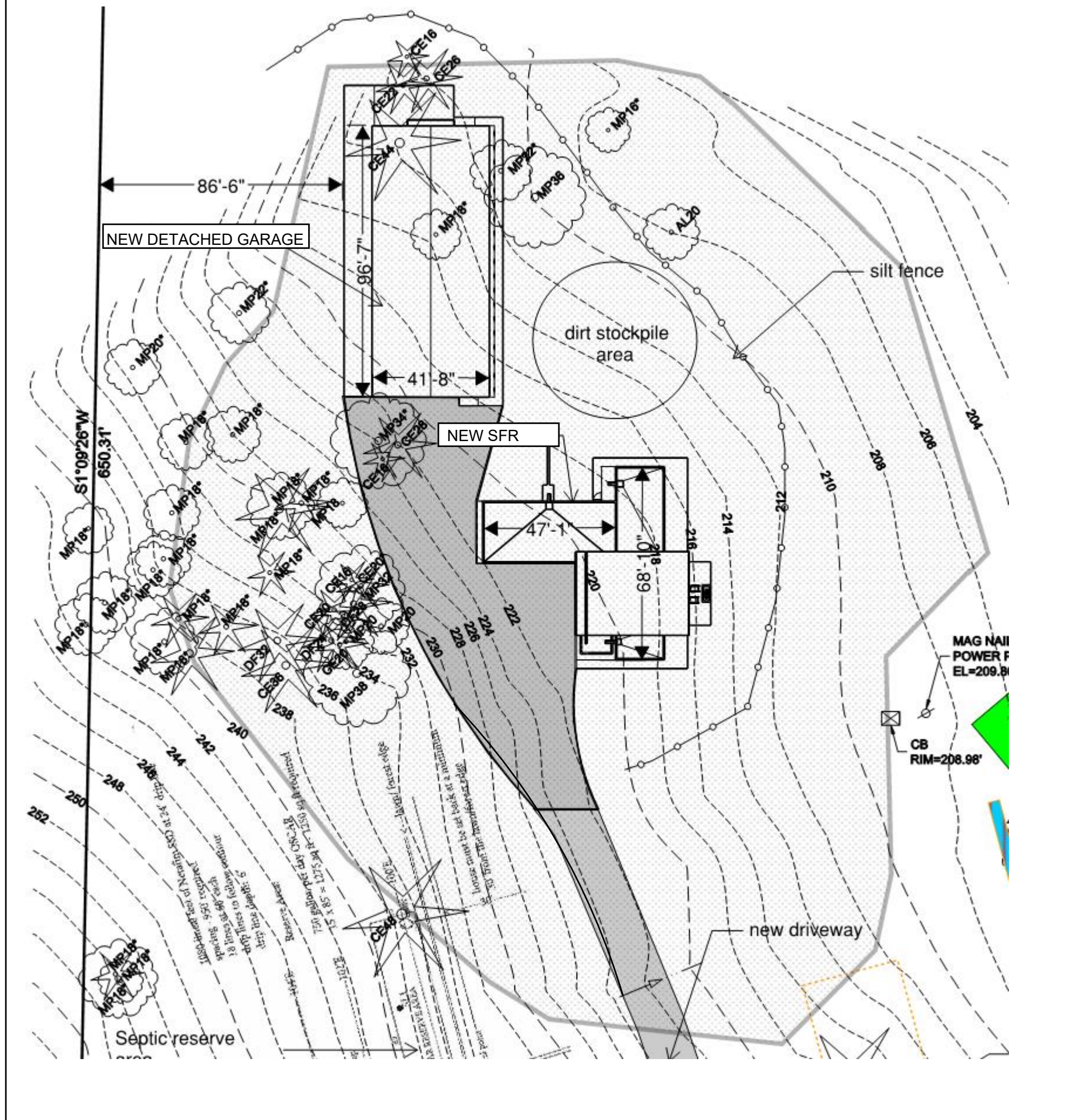
## PROJECT NARRATIVE

1. MEETING WITH KING COUNTY INSPECTOR TO START PROJECT
2. INSTALL TEMPORARY ROAD AND SILT FENCING
3. DEMOLISH TREES PER PLAN AND EXISTING HOUSE
4. CONSTRUCT DADU AND BARN
5. INSTALL SPETIC SYSTEM AND WELL
6. FINAL UTILITY CONNECTIONS
7. PREP AND INSTALL ASPHALT DRIVEWAY
8. AMEND SOILS PER COUNTY REQUIREMENTS
9. TOUCH UP GRAVEL ROAD AND DRIVEWAY



### EXISTING CONTOURS WITH BARN AND DADU OVERLAY

GRADING EXTENTS SHOWN FOR COMPARISON



### NEW CONTOURS WITH DETACHED GARAGE AND SFR OVERLAY

DETACHED GARAGE FINISH FLOOR @ 216'  
SFR FINISH FLOOR @ 218'

TOTAL AREA OF DISTURBED SOILS OUTSIDE OF BUILDING AND DRIVEWAY FOOT PRINT: 57,197SF  
SEPTIC SYTEM DISTURBED AREA: 1,878SF

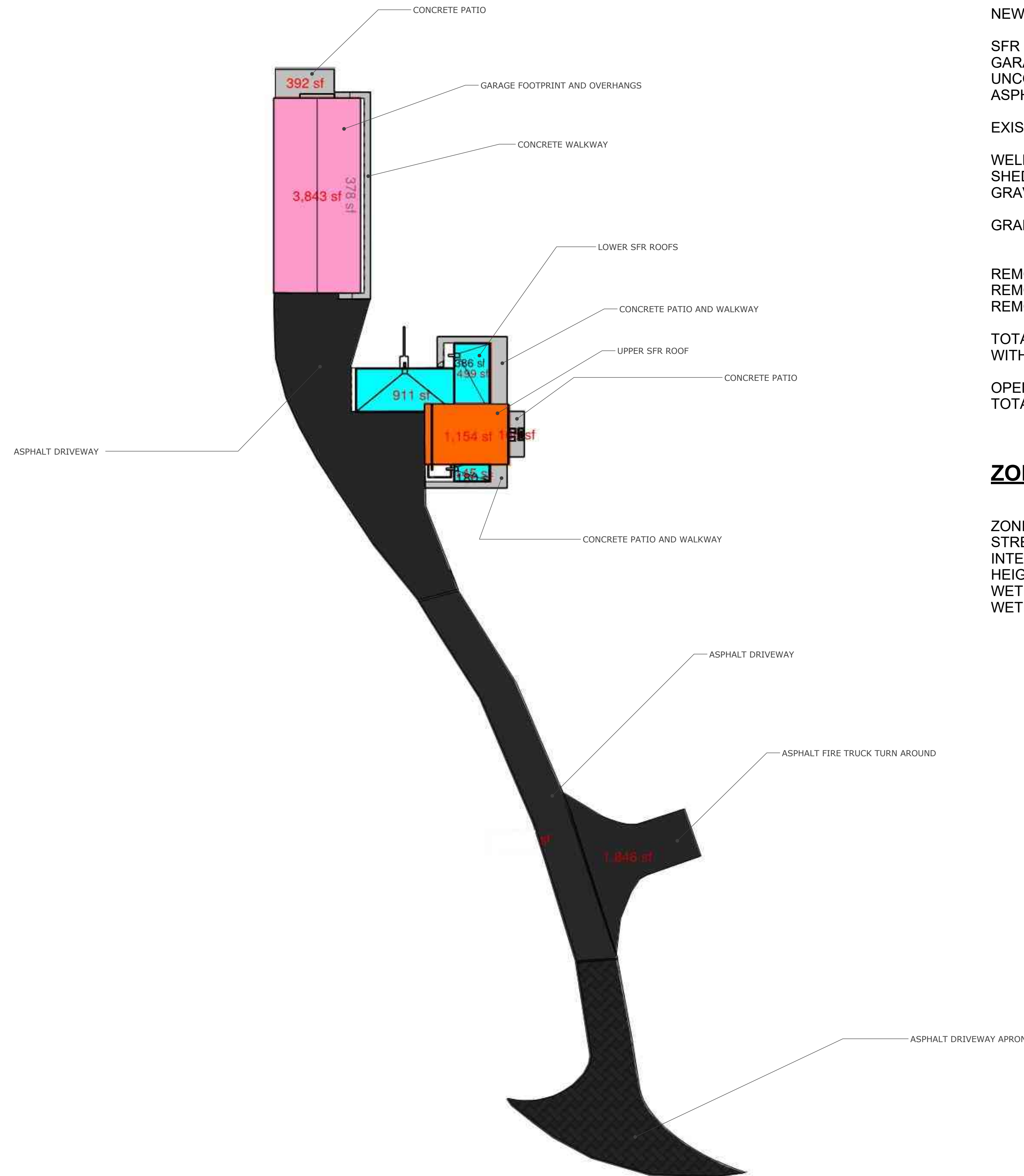


NW 1/4, SW 1/4, SEC 31, TWP 25N, RNG 7E, W.M.

**IMPERVIOUS SURFACE AREA SUMMARY**

<b>ASPHALT DRIVEWAY (1)</b>		<b>Area: 11,835</b>
Subject: ASPHALT DRIVEWAY	Color: ■	Count: 1
Area: 11,835	Count:	
<b>BARN ROOF (1)</b>		<b>Area: 3,843</b>
Subject: BARN ROOF	Color: ■	Count: 1
Area: 3,843	Count:	
<b>Cloud (1)</b>		
Subject: Cloud	Color: ■	Count: 1
Area:	Count:	
<b>CONCRETE PATIOWALK (5)</b>		<b>Area: 1,374</b>
Subject: CONCRETE PATIOWALK	Color: ■	Count: 1
Area: 385	Count:	
Subject: CONCRETE PATIOWALK	Color: ■	Count: 1
Area: 166	Count:	
Subject: CONCRETE PATIOWALK	Color: ■	Count: 1
Area: 180	Count:	
Subject: CONCRETE PATIOWALK	Color: ■	Count: 1
Area: 378	Count:	
Subject: CONCRETE PATIOWALK	Color: ■	Count: 1
Area: 302	Count:	
<b>LOWER ROOF (3)</b>		<b>Area: 1,555</b>
Subject: LOWER ROOF	Color: ■	Count: 1
Area: 911	Count:	
Subject: LOWER ROOF	Color: ■	Count: 1
Area: 429	Count:	
Subject: LOWER ROOF	Color: ■	Count: 1
Area: 145	Count:	
<b>UPPER ROOF (1)</b>		<b>Area: 1,154</b>
Subject: UPPER ROOF	Color: ■	Count: 1
Area: 1,154	Count:	
<b>EXISTING IMPERVIOUS SURFACE TO REMAIN</b>		
<b>EXISTING GRAVEL DRIVEWAY (1)</b>		<b>Area: 1,471</b>
Subject: EXISTING GRAVEL DRIVEWAY	Color: ■	Count: 1
Area: 1,471	Count:	
<b>PUMP HOUSE (1)</b>		<b>Area: 66</b>
Subject: PUMP HOUSE	Color: ■	Count: 1
Area: 66	Count:	
<b>SHED (1)</b>		<b>Area: 119</b>
Subject: SHED	Color: ■	Count: 1
Area: 119	Count:	
<b>DEMOLISHED IMPREVIOUS SURFACE</b>		
<b>DEMOLISHED DRIVEWAY (2)</b>		<b>Area: 4,225</b>
Subject: DEMOLISHED DRIVEWAY	Color: ■	Count: 1
Area: 1,750	Count:	
Subject: DEMOLISHED DRIVEWAY	Color: ■	Count: 1
Area: 2,475	Count:	
<b>DEMOLISHED HOUSE (1)</b>		<b>Area: 2,613</b>
Subject: DEMOLISHED HOUSE	Color: ■	Count: 1
Area: 2,613	Count:	
<b>DEMOLISHED STORAGE TENT (1)</b>		<b>Area: 903</b>
Subject: DEMOLISHED STORAGE TENT	Color: ■	Count: 1
Area: 903	Count:	

**NEW IMPERVIOUS SURFACE ELEMENTS**

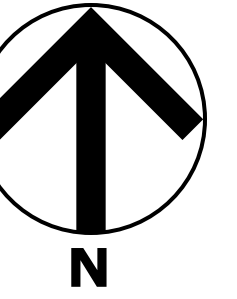


**LOT INFO**

LOT AREA:	544,500SF
MAX IMPERVIOUS SURFACE:	15%
NEW IMPERVIOUS SURFACE	
SFR FOOTPRINT AND OVERHANGS	2,709SF
GARAGE FOOT PRINT AND OVERHANGS	3,843SF
UNCOVERED DECKS AND WALKS	1,374SF
ASPHALT DRIVEWAY AND HAMMERHEAD	11,835SF
EXISTING IMPERVIOUS SURFACE TO REMAIN	
WELL PUMP HOUSE	66SF
SHED	119SF
GRAVEL DRIVEWAY	1,471SF
GRAND TOTAL IMPERVIOUS SURFACE AREA	21,336SF
PERCENTAGE	4.1%
REMOVE HOUSE	2,613SF
REMOVE GRAVEL DRIVEWAY	4,225SF
REMOVE STORAGE TENT	903SF
TOTAL IMPERVIOUS SURFACE REPLACED WITH NATIVE VEGETATED SURFACE	7,741SF
OPEN SPACE REQUIREMENTS	
TOTAL WOODLAND AREA CLEARED	11,732SF

**ZONING**

ZONING	RA10
STREET SET BACK	30 FT.
INTERIOR SET BACK	10 FT.
HEIGHT LIMIT	40 FT.
WETLAND CATEGORY I BUFFER	225 FT.
WETLAND CATEGORY III BUFFER	65 FT.

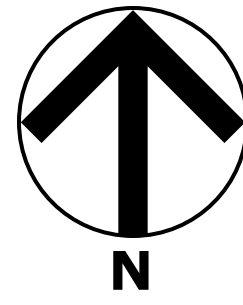
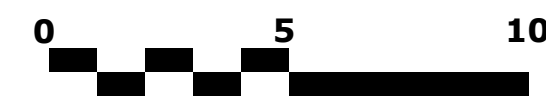






**DADU Main Floor**

1/4" per foot scale



**WHOLE HOUSE VENTILATION:**  
MECHANICAL WORK (UNDER SEPARATE PERMIT) SHALL INCLUDE AN INTERMITTENT WHOLE HOUSE EXHAUST FAN (DESIGNED TO OPERATE AT LEAST 33% OF THE TIME EVERY 4 HOURS), IN COMBINATION WITH AIR INTAKE WALL VENTS, CAPABLE OF SUPPLYING FRESH AIR VENTILATION TO ALL HABITABLE ROOMS PER THE IRC- 2015 EDITION, SECTION M1507.3 (WHOLE HOUSE MECHANICAL VENTILATION SYSTEM)

**WORK SHALL INCLUDE:**  
1. 4" SEIHO WALL VENTS (PER SRC M1507.3.5.3); MODEL "SFX" EXTERIOR ALUM. VENT LOUVER W/ BACKDRAFT DAMPER & MODEL "JRA" INTERIOR GRILLE (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).  
2. UNDERCUT ALL INTERIOR DOORS A MIN. OF 1/2" ABOVE FINISH FLOORING TO FACILITATE FRESH AIR MOVEMENT.

**80 CFM BATH FAN**  
PROVIDE PANASONIC "WHISPERGREEN" 80 CFM BATH FAN, MODEL FV-05-11V1, NON MOTION ACTIVATED, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**80 CFM BATH FAN / LIGHT**  
PROVIDE PANASONIC "WHISPER RECESSED LED" 80 CFM BATH FAN WITH LIGHTING, MODEL FV-08VREI, NON MOTION ACTIVATED, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**80 CFM BATH FAN / HEAT**  
PROVIDE PANASONIC "WHISPER WARM" 110 CFM BATH FAN, MODEL FV-11VHL2, NON MOTION ACTIVATED, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**WALL VENT W/ CAP**  
4" SEIHO WALL VENTS; MODEL "SFX" EXTERIOR ALUM. VENT LOUVER W/ BACKDRAFT DAMPER (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).

**DUCT PATH (OVERHEAD)**  
4" FLEX DUCT PATH, SHOWN FOR REFERENCE ONLY. (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).

**FLEX DUCT RISER**  
4" FLEX DUCT RISER, SHOWN FOR REFERENCE ONLY. (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).

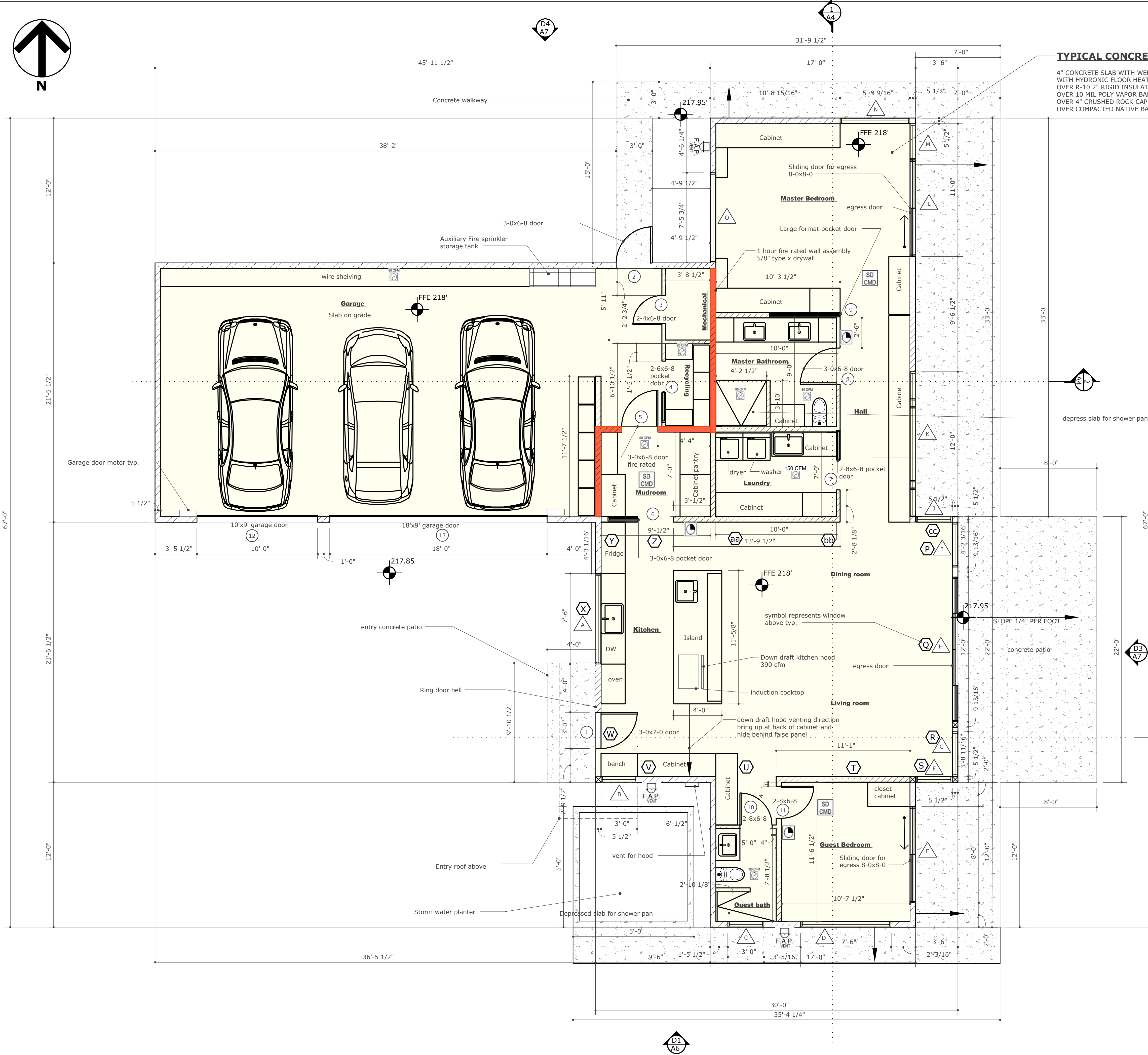
**THERMOSTAT**  
PROVIDE NEST LEARNING THERMOSTAT(S) IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**SMOKE / CARBON MONOXIDE DETECTOR**  
CONTRACTOR SHALL PROVIDE SMOKE DETECTORS PER THE IRC- 2015 EDITION, SECTIONS R314 AND R315. WORK SHALL INCLUDE:  
1) PROVIDE NEST "PROTECT" SMOKE + CO DETECTORS  
2) U.N.O., DETECTORS SHALL BE PLACED ON CEILING SURFACE AS INDICATED ON FLOOR PLANS. (VERIFY INSTALLATION WITH OWNER/ARCHITECT)  
3) DETECTORS SHALL BE POWERED BY THE BUILDING ELECTRICAL SYSTEM WITH BATTERY BACK-UP (PER N.E.C.), AND, SHALL HAVE INTERCONNECTED ALARMS.  
4) DETECTORS SHALL BE INSTALLED IN ACCORDANCE TO MANUF. INSTRUCTIONS.

**DOOR CHIME ACTIVATOR**  
PROVIDE SPORE "TRUE" ILLUMINATED DOOR CHIME ACTIVATOR, COLOR AMBER, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**DOORBELL CHIMES**  
PROVIDE SPORE "RING" DOORBELL CHIMES, W/ POLISHED ALUMINUM FINISH IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**BEDROOM EGRESS WINDOWS**  
CONTRACTOR SHALL VERIFY ALL BEDROOM EGRESS WINDOWS MEET THE FOLLOWING EGRESS REQUIREMENTS (PER IRC SECTION R310):  
1) 5.7 SF (MIN.) CLEAR OPEN AREA.  
2) 24" (MIN.) CLEAR OPEN HEIGHT.  
3) 20" (MIN.) CLEAR OPEN WIDTH.  
4) +44" A.F.F. (MAX.) SILL HT.



**TYPICAL CONCRETE SLAB ASSEMBLY**

4" CONCRETE SLAB WITH WELDED WIRE MESH REINFORCING WITH HYDRONIC FLOOR HEAT TUBING OVER R-10 2" RIGID INSULATION, INCLUDING VERTICAL AT FOUNDATION WALL OVER 10 MIL POLY VAPOR BARRIER OVER 4" CRUSHED ROCK CAPILLARY BREAK OVER COMPACTED NATIVE BACKFILL

**DOOR SCHEDULE**

Mark	Location	Size	Style	Swing	Notes
1	Entry	3-0x8-0	Full Lite	RH	
2	Garage	3-0x6-8	Flush Wood	LH	
3	Mechanical	2-4x6-8	Flush Wood	RH	
4	Recycling	2-6x6-8	Flush Wood	Pocket	
5	Mudroom	3-0x6-8	Flush Wood	LH	60 minute fire rated
6	Kitchen	3-0x6-8	Flush Wood	Pocket	
7	Laundry	2-8x6-8	Flush Wood	Pocket	
8	Master Bath	3-0x6-8	Flush Wood	RH	
9	Master Bed	6-0x8-0	Flush Wood	Pocket	
10	Guest Bath	2-8x6-8	Flush Wood	RH	
11	Guest bed	2-8x6-8	Flush Wood	RH	
12	Garage	10-0x9-0	Flush steel	Overhead	Jackshaft motor
13	Garage	18-0x9-0	Flush steel	Overhead	Jackshaft motor

**WINDOW AND SLIDING DOOR SCHEDULE**

Mark	Location	Size WxH	Style	SF	U-value	Default	Safety glass
A	Kitchen sink	7-0x3-0	Pic	21	.27	.30	Y
B	Entry	3-0x6-8	Pic over Awning	20	.28		Y
C	Guest bath	3-0x1-6	Pic	5	.27		N
D	Guest bed	7-6x1-6	Pic	11	.27		N
E	Guest bed	8-0x8-0	2 panel sliding door	64	.29		Y
F	Living	3-0x8-0	Pic over awning	24	.28		Y
G	Living	3-9x8-0	Pic over awning	30	.28		Y
H	Living	12-0x8-0	4 panel sliding door	96	.29		Y
I	Dining	3-9x8-0	Pic over awning	30	.28		Y
J	Dining	3-0x8-0	Pic over awning	24	.28		Y
K	Hall	12-0x3-0	case/pic/case	36	.29		N
L	Master bed	8-0x8-0	2 panel sliding door	64	.29		Y
M	master bed	3-0x8-0	Pic over awning	24	.28		Y
N	Master bed	5-9x8-0	Pic over awning	46	.28		Y
O	Master bed	7-5x1-6	Pic	11	.27		N
P	Clerestory E	3-9x4-2	Pic	16	.27		N
Q	Clerestory E	12-0x4-2	Pic	50	.27		N
R	Clerestory E	3-9x4-2	Pic	16	.27		N
S	Clerestory N	drawing	Pic	12	.27		N
T	Clerestory N	drawing	Pic	27	.27		N
U	Clerestory N	drawing	Pic	19	.27		N
V	Clerestory N	drawing	Pic	16	.27		N
W	Clerestory W	3-9x1-2	Pic	5	.27		N
X	Clerestory W	12-0x1-2	Pic	14	.27		N
Y	Clerestory W	3-9x1-2	Pic	5	.27		N
Z	Clerestory S	drawing	Pic	16	.27		N
AA	Clerestory S	drawing	Pic	19	.27		N
BB	Clerestory S	drawing	Pic	27	.27		N
CC	Clerestory S	drawing	Pic	12	.27		N
				760			

- All windows and sliding doors to be Marvin Modern Series ebony interior and exterior
- All glass to be double pane with Low E Coating
- Sliding doors to have low profile thresholds in Ebony color
- Black spacer bars on all windows and doors
- All operable windows (awnings and casements) to be push out operation
- All listed sizes are in actual frame dimensions (rough opening to be sized 3/4" larger)

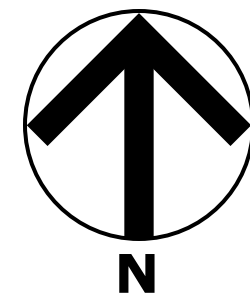
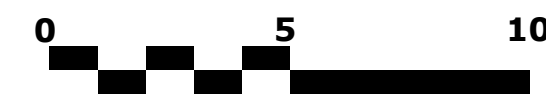
**PLAN NOTES:**

- GENERAL PLAN NOTES:**
- ALL G.W.B. IN WALLS AND CEILING TO BE 5/8" (U.N.O.)
  - ALL DIMENSIONS ARE TO FACE OF CONCRETE / FACE OF FRAMING (U.N.O.)
  - REFER TO DOOR & WINDOW SCHEDULES (A6.00 & A6.10) FOR ALL DOOR, WINDOW, & SKYLIGHT TYPES, SIZES, OPERATION, U-VALUES, & REQUIREMENTS FOR SAFETY GLAZING
  - PRESSURE TREATED WOOD IS TO BE PROVIDED AT THE FOLLOWING LOCATIONS: WOOD SILLS ON CONCRETE SLABS, AND FURRING STRIPS AT ALL CONCRETE WALLS BELOW GRADE. PER SRC R317.1, TYP.
  - G.C. TO VERIFY SEAL @ DOORS, WINDOWS, AND PLUMBING AND ELECT. PENETRATIONS AGAINST MOISTURE AND AIR LEAKS (PER REQ. B.G. 4-44)

**FIRE SPRINKLER SYSTEM:**  
IN ACCORDANCE W/ MUNICIPAL CODE, RESIDENCE IS TO BE EQUIPPED W/ AN AUTOMATIC SPRINKLER SYSTEM. DESIGN + INSTALLATION ARE TO BE UNDER SEPARATE PERMIT APPROVED BY THE FIRE DEPT. SUBMIT PLANS TO ARCHITECT PRIOR TO PERMIT APP. FOR APPROVAL.

Lower roof plan

1/4" per foot scale



**WHOLE HOUSE VENTILATION:**  
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**WORK SHALL INCLUDE:**  
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2. UNDERCUT ALL INTERIOR DOORS A MIN. OF 1/2" ABOVE FINISH FLOORING TO FACILITATE FRESH AIR MOVEMENT.

**80 CFM BATH FAN**  
PROVIDE PANASONIC "WHISPERGREEN" 80 CFM BATH FAN, MODEL FV-05-11VK1, NON MOTION ACTIVATED, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**80 CFM BATH FAN / LIGHT**  
PROVIDE PANASONIC "WHISPER RECESSED LED" 80 CFM BATH FAN WITH LIGHTING, MODEL FV-08VRE1, NON MOTION ACTIVATED, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**80 CFM BATH FAN / HEAT**  
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**WALL VENT W/ CAP**  
4"-SEIHO WALL VENTS; MODEL "SFX" EXTERIOR ALUM. VENT LOUVER W/ BACKDRAFT DAMPER (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).

**DUCT PATH (OVERHEAD)**  
4" FLEX DUCT PATH, SHOWN FOR REFERENCE ONLY. (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).

**FLEX DUCT RISER**  
4" FLEX DUCT RISER, SHOWN FOR REFERENCE ONLY. (COORDINATE EXACT LAYOUT W/ OWNER/ARCHITECT IN FIELD).

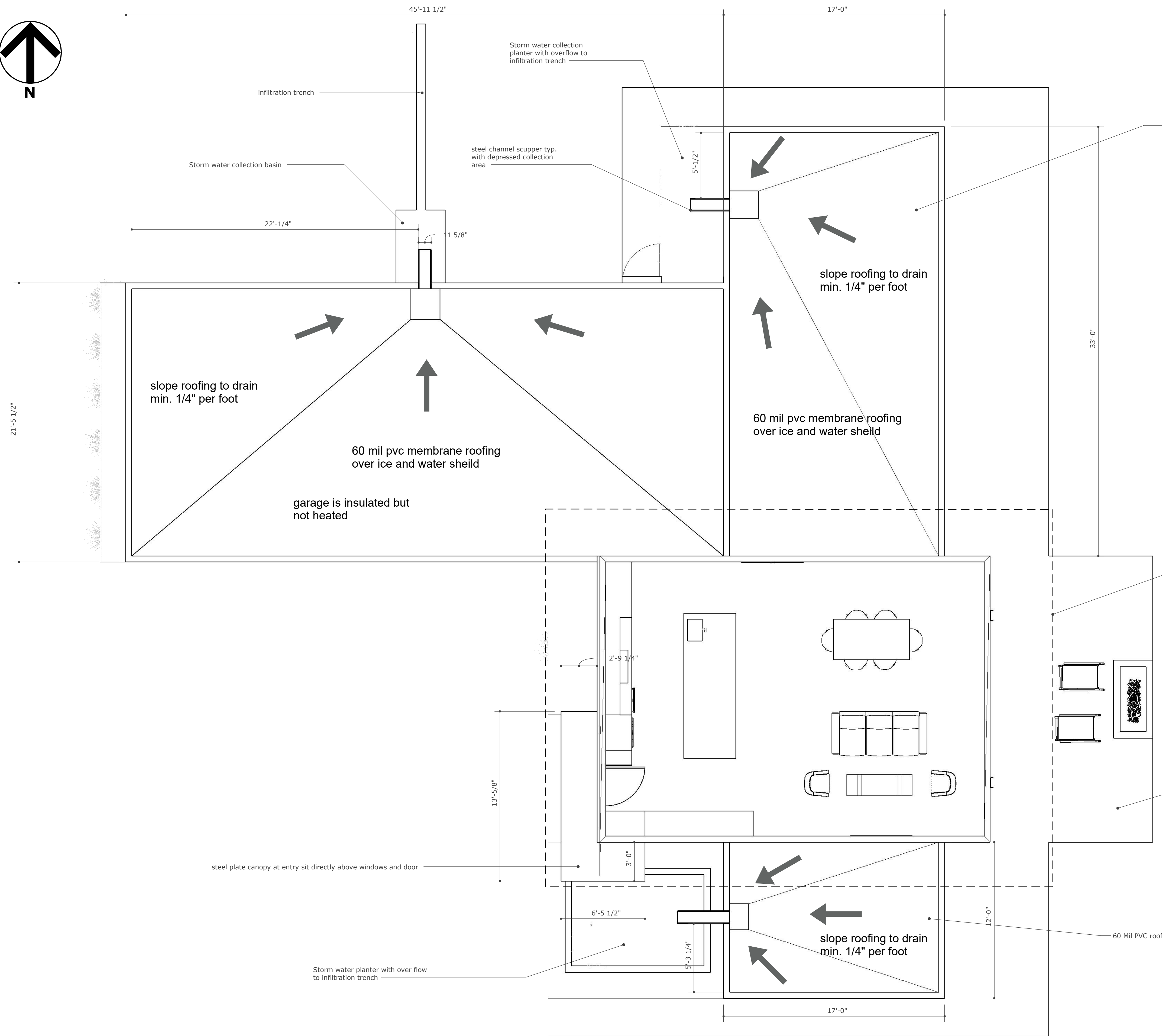
**THERMOSTAT**  
PROVIDE NEST LEARNING THERMOSTAT(S) IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**SMD SMOKE / CARBON MONOXIDE DETECTOR**  
CONTRACTOR SHALL PROVIDE SMOKE DETECTORS PER THE IRC-2015 EDITION, SECTIONS R314 AND R315. WORK SHALL INCLUDE:  
1.) PROVIDE NEST "PROTECT" SMOKE + CO DETECTORS  
2.) U.N.O. DETECTORS SHALL BE PLACED ON CEILING SURFACE AS INDICATED ON FLOOR PLANS. (VERIFY INSTALLATION WITH OWNER/ARCHITECT)  
3.) DETECTORS SHALL BE POWERED BY THE BUILDING ELECTRICAL SYSTEM WITH BATTERY BACK-UP (PER N.E.C.), AND SHALL HAVE INTERCONNECTED ALARMS.  
4.) DETECTORS SHALL BE INSTALLED IN ACCORDANCE TO MANUF. INSTRUCTIONS.

**DOOR CHIME ACTIVATOR**  
PROVIDE SPORE "TRUE" ILLUMINATED DOOR CHIME ACTIVATOR, COLOR AMBER, IN LOCATIONS AS INDICATED ON FLOOR PLANS (VERIFY INSTALLATION WITH OWNER/ARCHITECT)

**DOORBELL CHIMES**  
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**BEDROOM EGRESS WINDOWS**  
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1.) 5.7 SF (MIN.) CLEAR OPEN AREA.  
2.) 24" (MIN.) CLEAR OPEN HEIGHT.  
3.) 20" (MIN.) CLEAR OPEN WIDTH.  
4.) +44" A.F.F. (MAX.) SILL HT.



**LOWER ROOF ASSEMBLY**  
60 MIL PVC ROOFING  
OVER 5/8" CDX PLYWOOD  
OVER JOISTS AND TAPERED LUMBER PER STRUCTURAL  
7.25" CLOSED CELL SPRAY FOAM INSULATION R-54 DEMLIK HEATLOK HIGH LIFT  
5/8" DRYWALL WITH PAINT  
OVER SIGA MAJREX INTERIOR VAPOR BARRIER HYBRID PAPER  
GARAGE WILL ALSO BE INSULATED IN THE SAME MATERIALS BUT NOT HEATED

**PLAN NOTES:**

**GENERAL PLAN NOTES:**

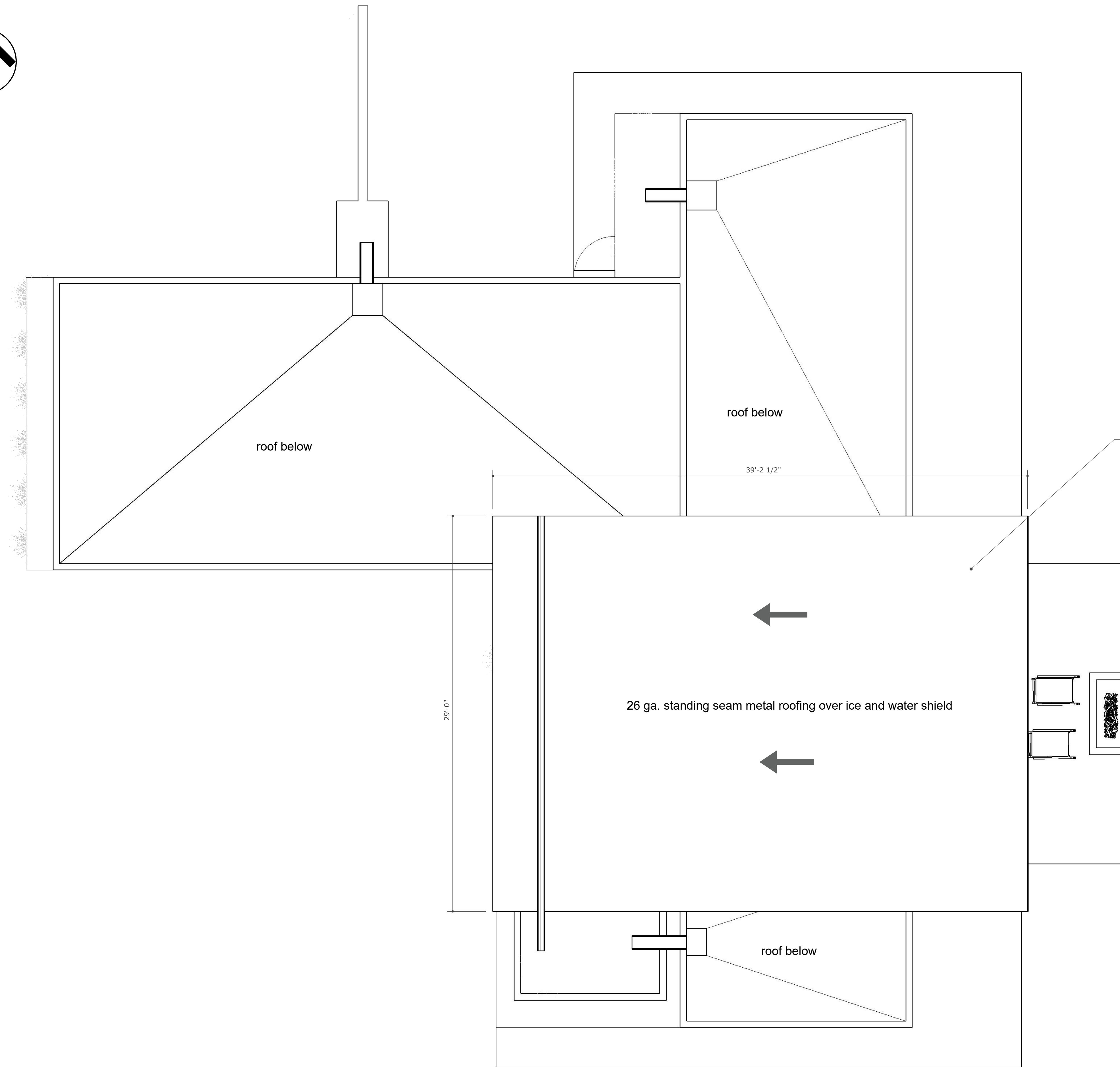
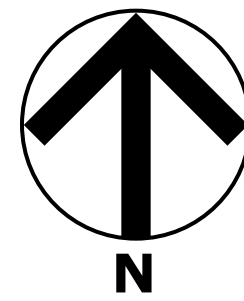
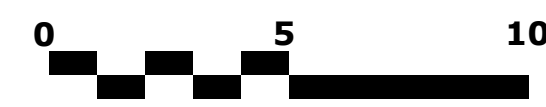
1. ALL G.W.B. IN WALLS AND CEILING TO BE 5/8" (U.N.O.)
2. ALL DIMENSIONS ARE TO FACE OF CONCRETE / FACE OF FRAMING (U.N.O.)
3. REFER TO DOOR & WINDOW SCHEDULES (A6.00 & A6.10) FOR ALL DOOR, WINDOW, & SKYLIGHT TYPES, SIZES, OPERATION, U-VALUES, & REQUIREMENTS FOR SAFETY GLAZING
4. PRESSURE TREATED WOOD IS TO BE PROVIDED AT THE FOLLOWING LOCATIONS: WOOD SILLS ON CONCRETE SLABS, AND FURRING STRIPS AT ALL CONCRETE WALLS BELOW GRADE. PER SRC R317.1, TYP.
5. G.C. TO VERIFY SEAL @ DOORS, WINDOWS, AND PLUMBING AND ELECT. PENETRATIONS AGAINST MOISTURE AND AIR LEAKS (PER REQ. B.G. 4-44)

**FIRE SPRINKLER SYSTEM:**

IN ACCORDANCE W/ MUNICIPAL CODE, RESIDENCE IS TO BE EQUIPPED W/ AN AUTOMATIC SPRINKLER SYSTEM. DESIGN + INSTALLATION ARE TO BE UNDER SEPARATE PERMIT APPROVED BY THE FIRE DEPT. SUBMIT PLANS TO ARCHITECT PRIOR TO PERMIT APP. FOR APPROVAL.

Upper roof plan

1/4" per foot scale



**UPPER ROOF ASSEMBLY**

26 GA. STANDING SEAM METAL ROOFING  
OVER HIGH TEMP. ICE AND WATER SHIELD  
OVER 1/2" CDX PLYWOOD  
OVER 7.25" RAYCORE INSULATED PANELS (R-52)  
OVER SIGA MAJREX HYBRID BUILDING PAPER  
OVER PLYWOOD AND CARDECKING (PER STRUCTURAL)  
OVER ROOF BEAMS

**PLAN NOTES:**

**GENERAL PLAN NOTES:**

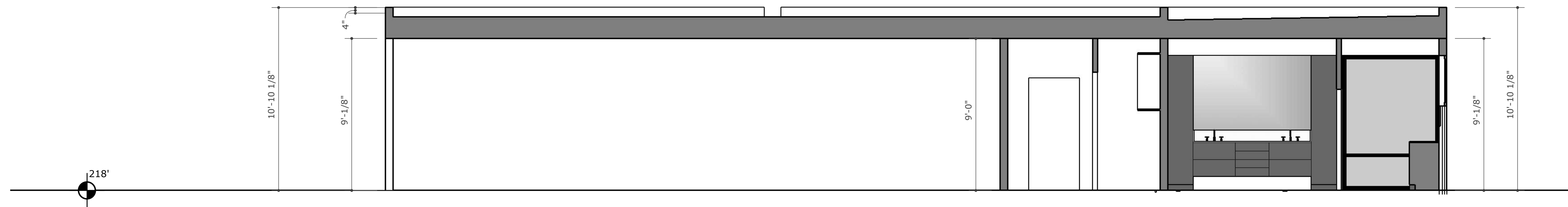
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**FIRE SPRINKLER SYSTEM:**

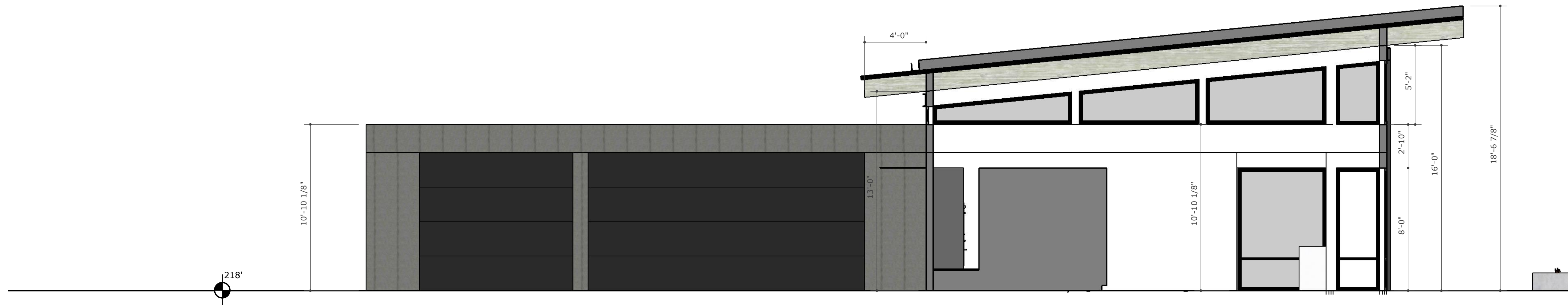
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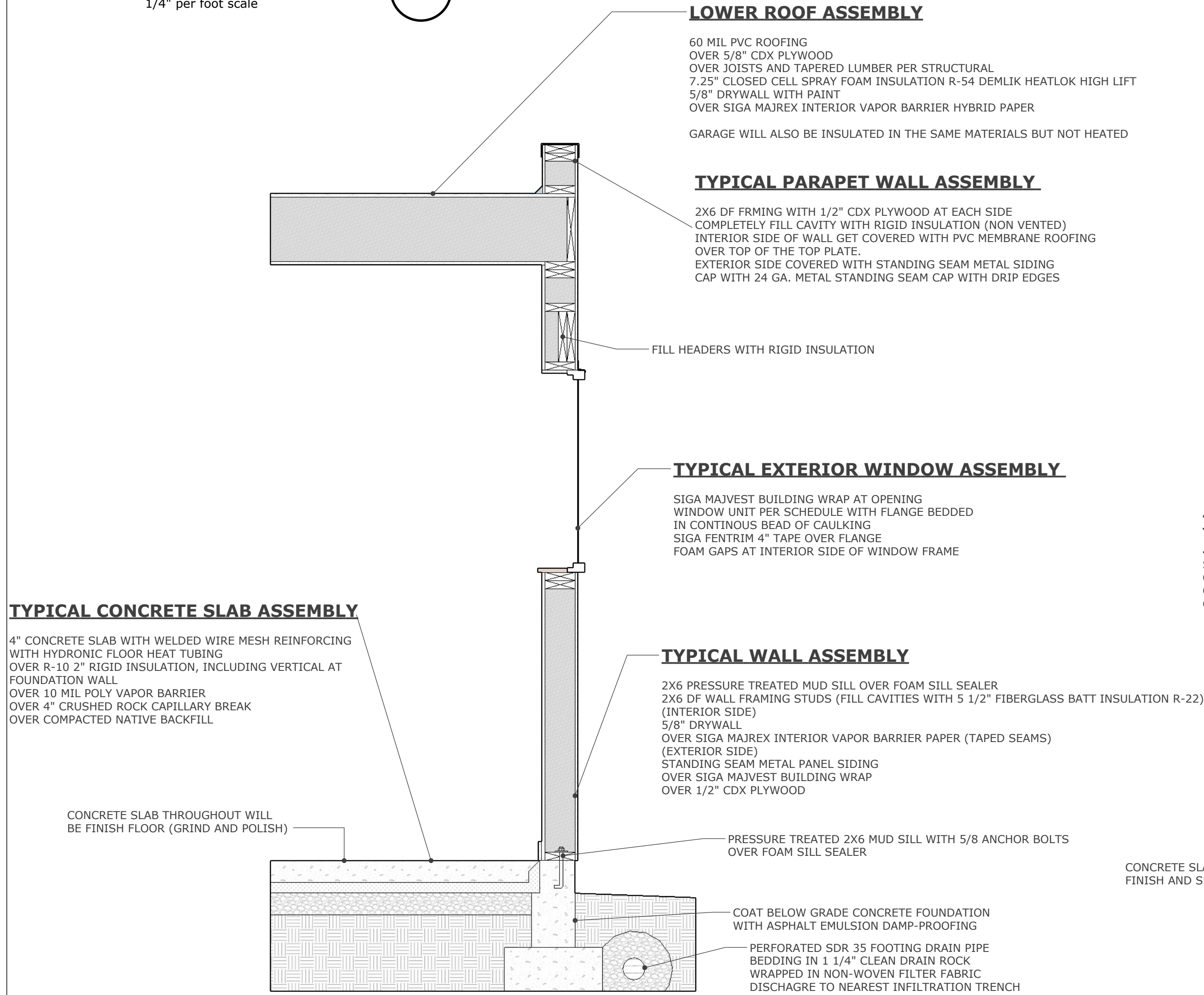
Section looking west 1  
 1/4" per foot scale



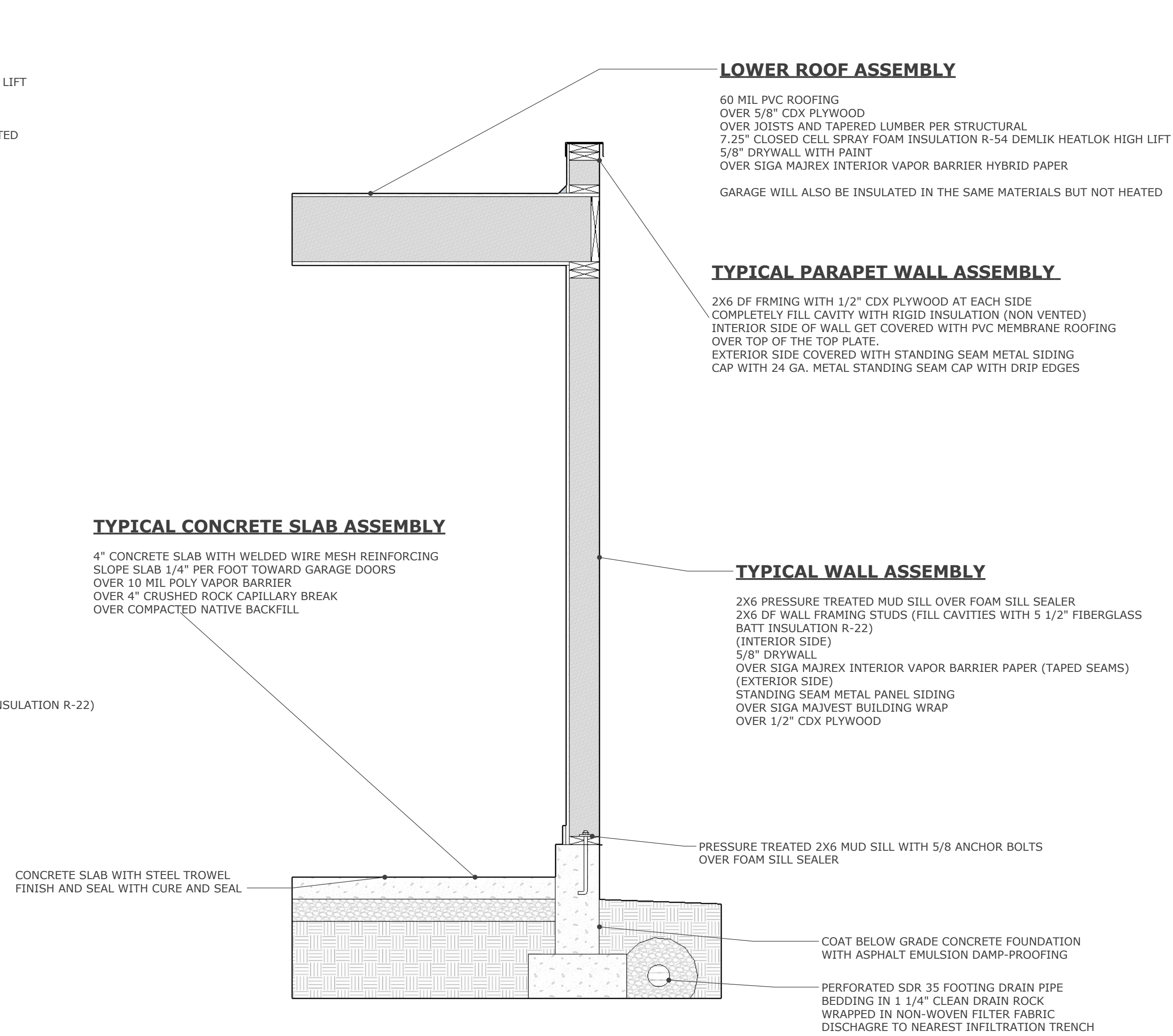
Section looking North 2  
 1/4" per foot scale



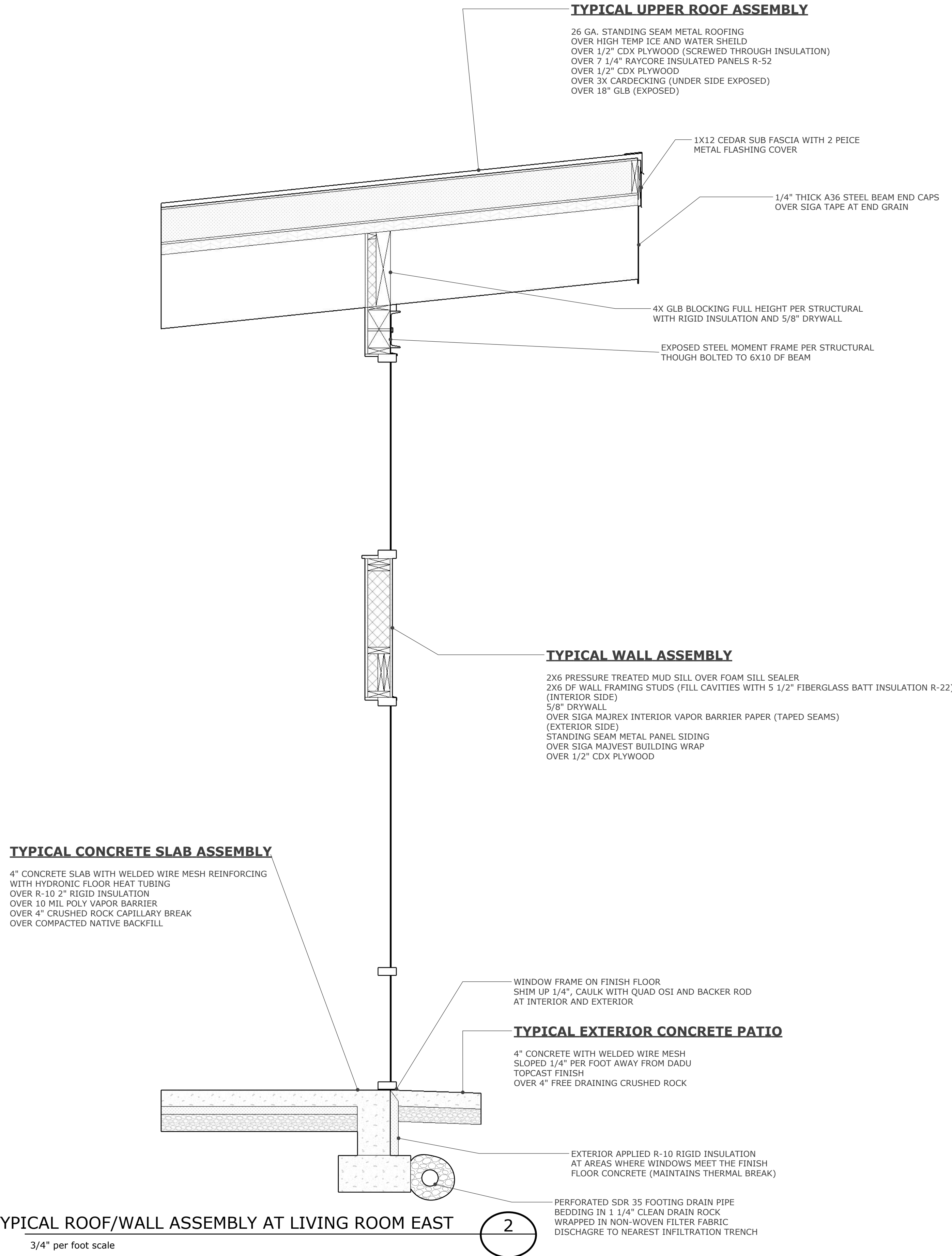
Section looking North 3  
1/4" per foot scale



TYPICAL WALL SECTION AT SFR 1  
3/4" per foot scale



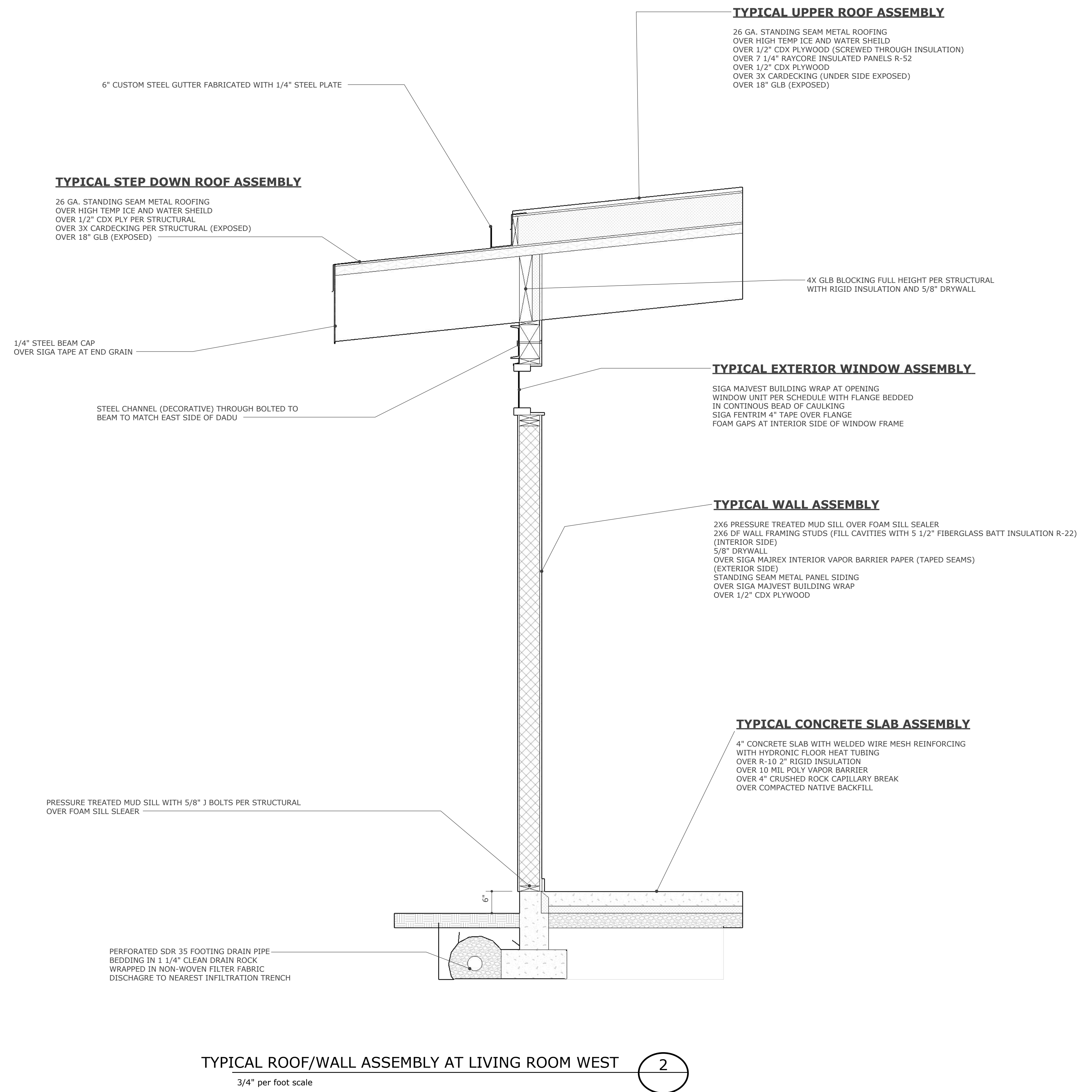
TYPICAL WALL SECTION AT SFR ATTACHED GARAGE 2  
3/4" per foot scale



TYPICAL ROOF/WALL ASSEMBLY AT LIVING ROOM EAST

3/4" per foot scale

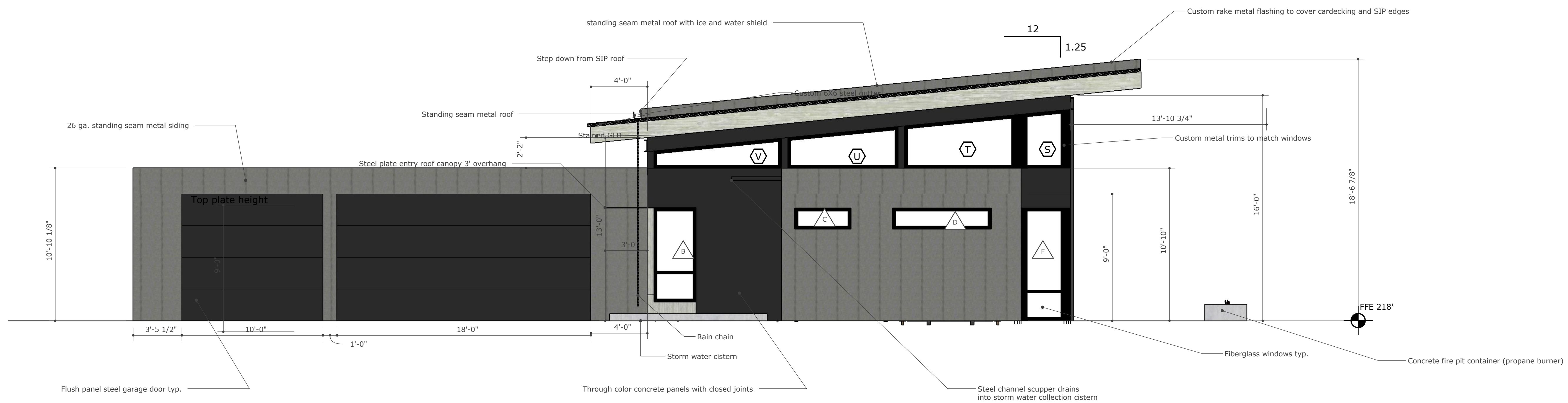
2



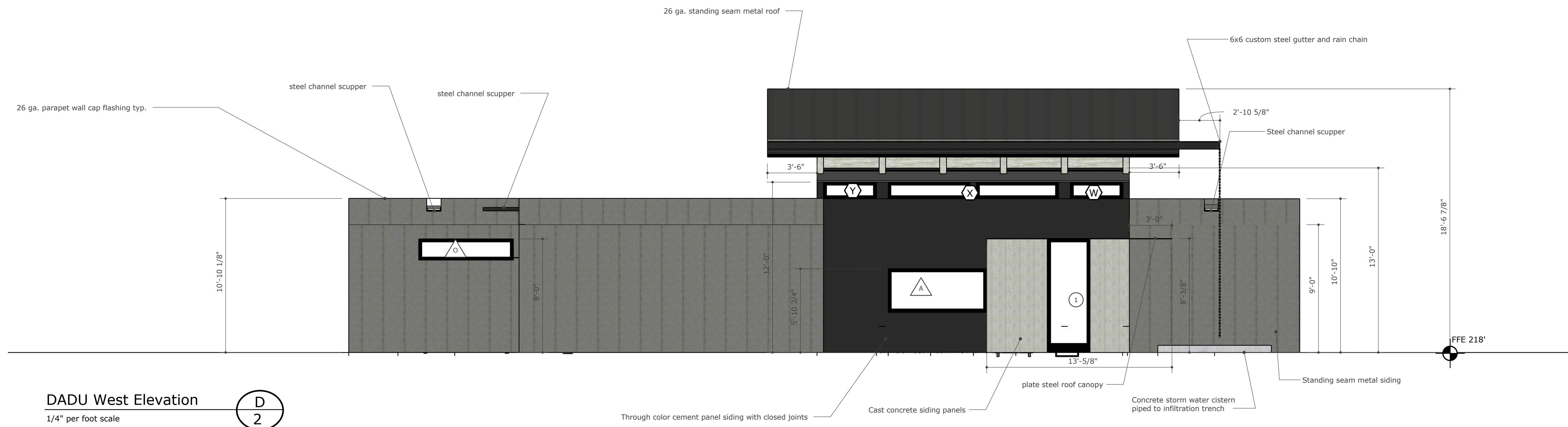
TYPICAL ROOF/WALL ASSEMBLY AT LIVING ROOM WEST

3/4" per foot scale

2

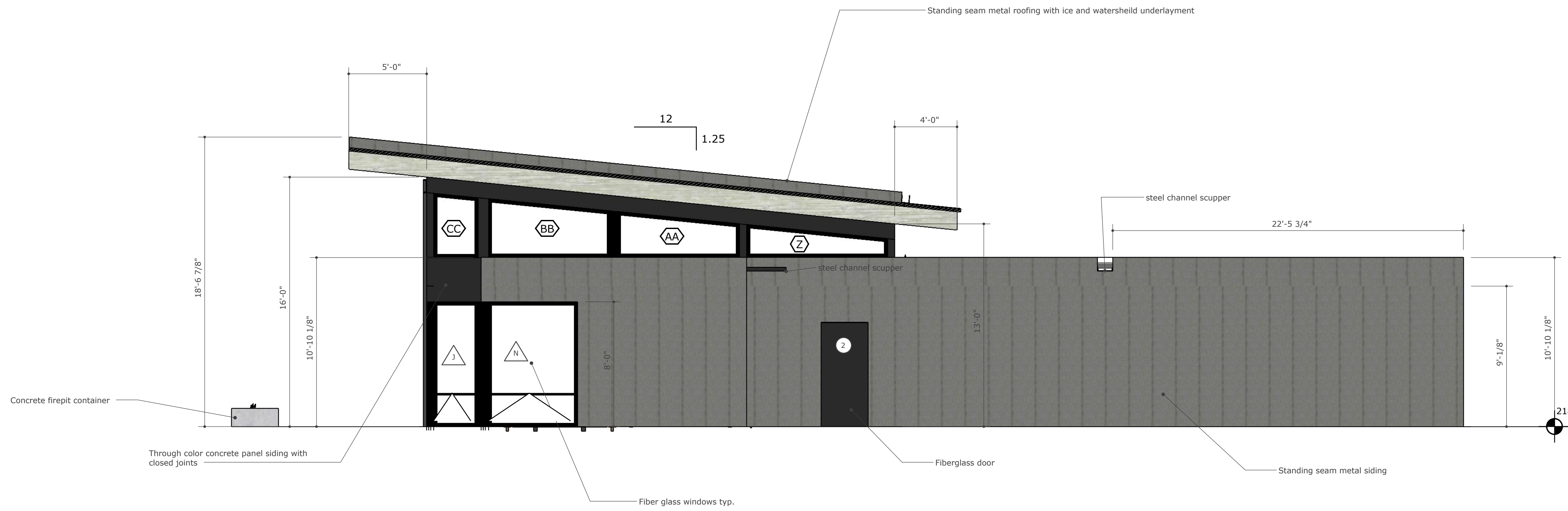


DADU South Elevation D  
1  
1/4" per foot scale

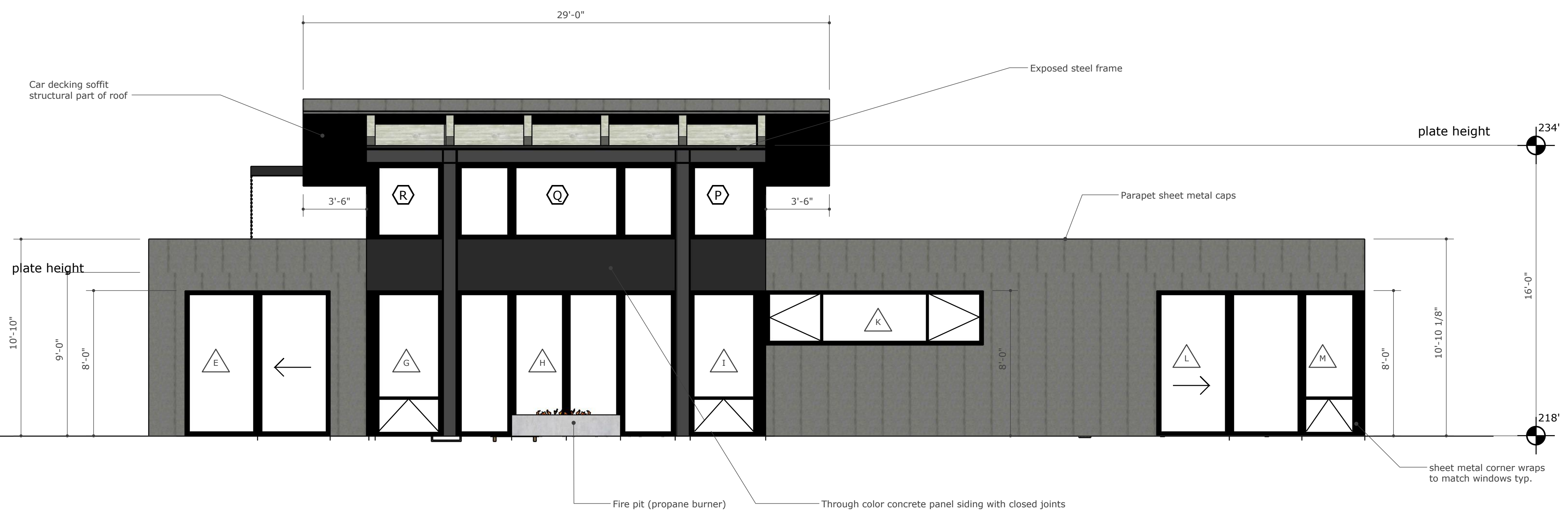


DADU West Elevation D  
2  
1/4" per foot scale

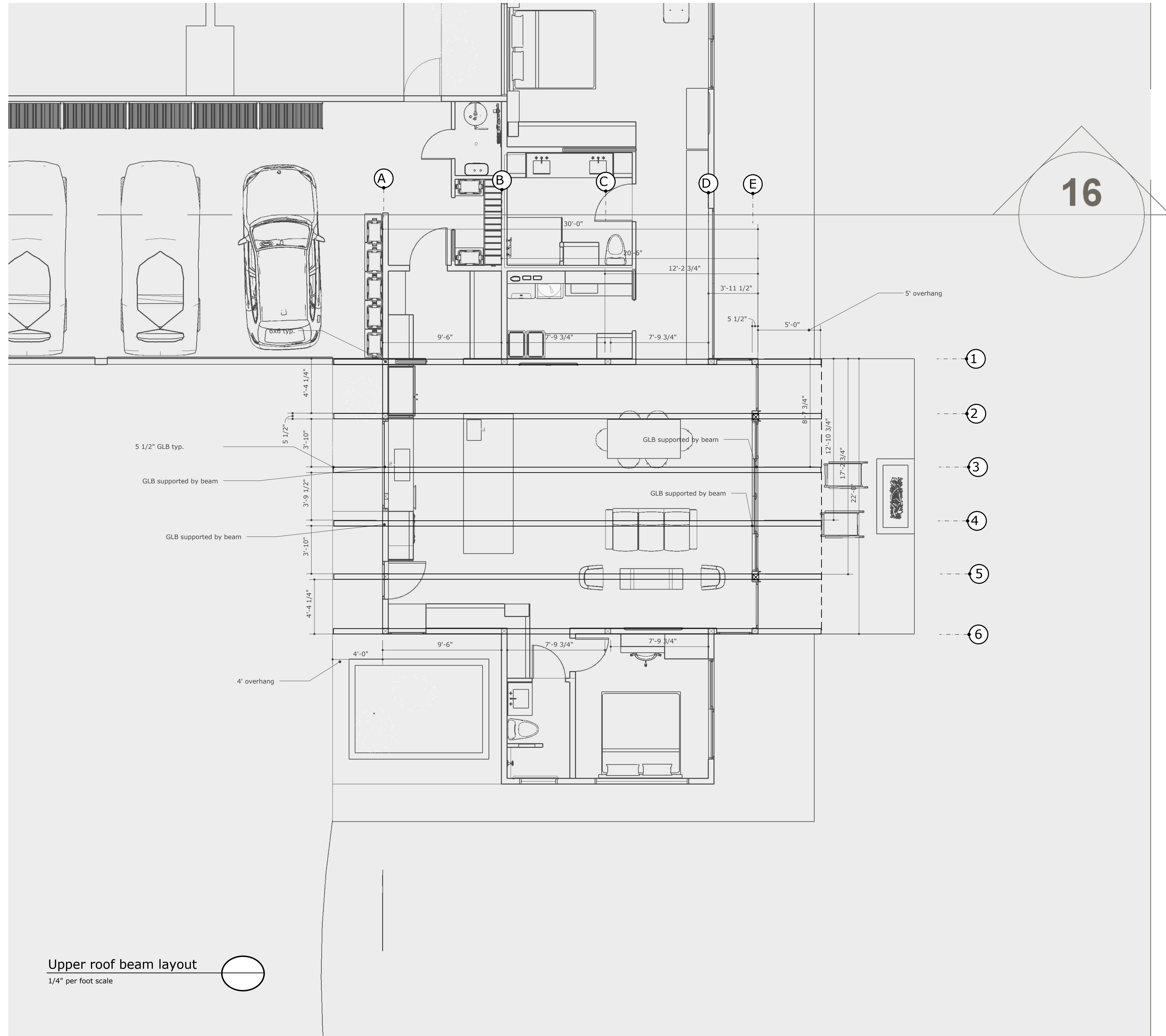
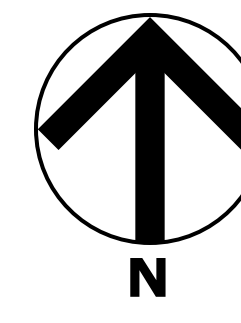




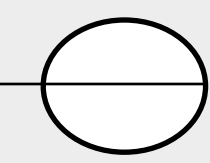
DADU North Elevation  
1/4" per foot scale



DADU East Elevation  
1/4" per foot scale



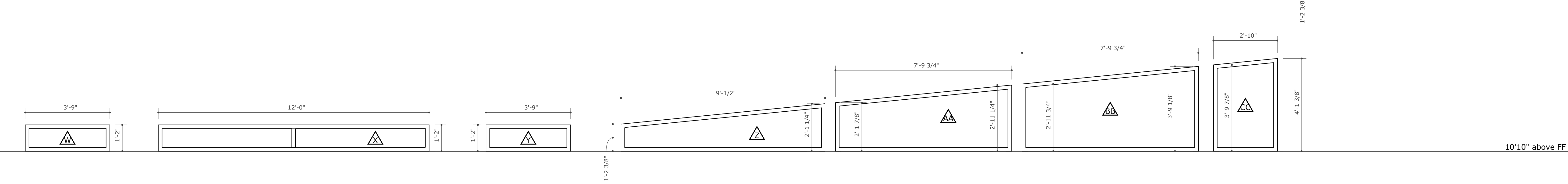
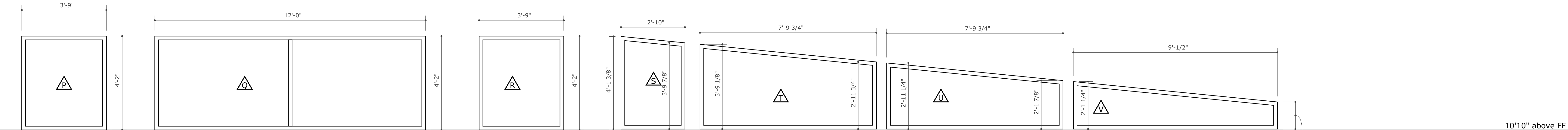
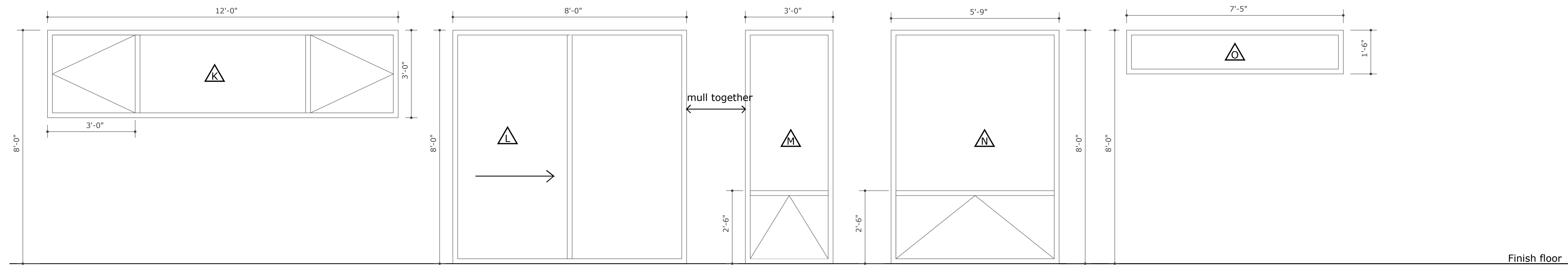
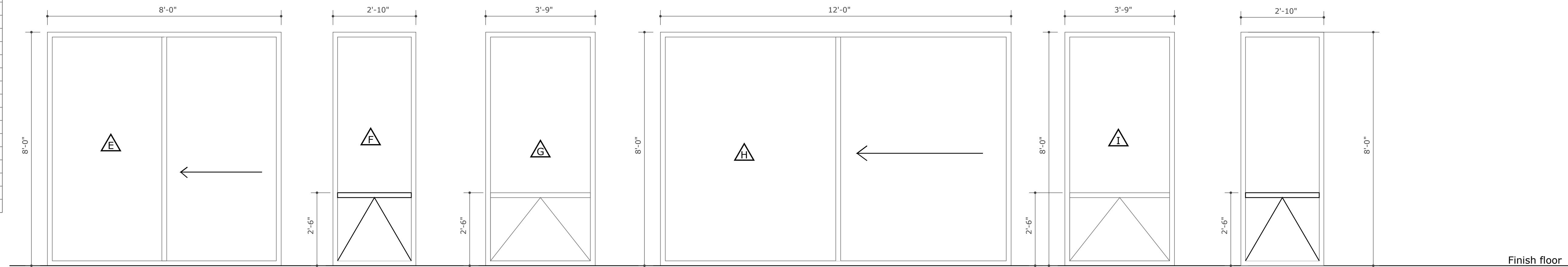
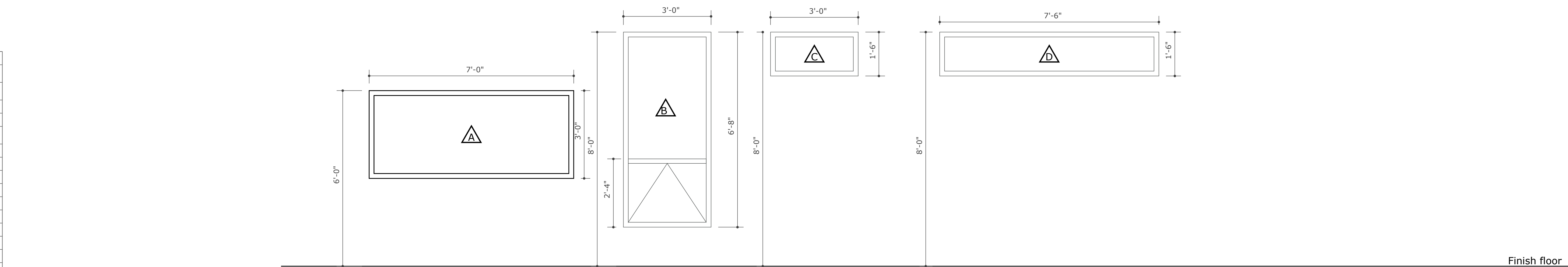
Upper roof beam layout  
1/4" per foot scale



WINDOW AND SLIDING DOOR SCHEDULE

Mark	Location	Size WxH	Style	SF	U-value	Default	Safety glass
A	Kitchen sink	7-0x3-0	Pic	21		.30	Y
B	Entry	3-0x6-8	Pic over Awning	20			Y
C	Guest bath	3-0x1-6	Pic	5			N
D	Guest bed	7-6x1-6	Pic	11			N
E	Guest bed	8-0x8-0	2 panel sliding door	64			Y
F	Living	2-10x8-0	Pic over awning	24			Y
G	Living	3-9x8-0	Pic over awning	30			Y
H	Living	12-0x8-0	4 panel sliding door	96			Y
I	Dining	3-9x8-0	Pic over awning	30			Y
J	Dining	2-10x8-0	Pic over awning	24			Y
K	Hall	12-0x3-0	case/pic/case	36			N
L	Master bed	8-0x8-0	2 panel sliding door	64			Y
M	master bed	3-0x8-0	Pic over awning	24			Y
N	Master bed	5-9x8-0	Pic over awning	46			Y
O	Master bed	7-5x1-6	Pic	11			N
P	Clerestory E	3-9x4-2	Pic	16			N
Q	Clerestory E	12-0x4-2	Pic	50			N
R	Clerestory E	3-9x4-2	Pic	16			N
S	Clerestory N	drawing	Pic	12			N
T	Clerestory N	drawing	Pic	27			N
U	Clerestory N	drawing	Pic	19			N
V	Clerestory N	drawing	Pic	16			N
W	Clerestory W	3-9x1-2	Pic	5			N
X	Clerestory W	12-0x1-2	Pic	14			N
Y	Clerestory W	3-9x1-2	Pic	5			N
Z	Clerestory S	drawing	Pic	16			N
AA	Clerestory S	drawing	Pic	19			N
BB	Clerestory S	drawing	Pic	27			N
CC	Clerestory S	drawing	Pic	12			N
				760			

- 1) All windows and sliding doors to be Marvin Modern Series ebony interior and exterior
- 2) All glass to be double pane with Low E Coating
- 3) Sliding doors to have low profile thresholds in Ebony color
- 4) Black spacer bars on all windows and doors
- 5) All operable windows (awnings and casements) to be push out operation
- 6) All listed sizes are in actual frame dimensions (rough opening to be sized 3/4" larger)
- 7) All windows and doors are viewed from the exterior
- 8) All operable windows and sliding doors to have screens
- 9) All hardware to be ebony to match frames



# GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

## CRITERIA

1. ALL MATERIALS WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2015 INTERNATIONAL BUILDING CODE (IBC).

2. DESIGN LOADING CRITERIA

### SNOW LOAD

Pf = 25 PSF

### WIND (MAIN WIND FORCE RESISTING SYSTEM)

Vult = 110 MPH  
Vasd = 85 MPH  
IMPORTANCE FACTOR, Iw= 1.0  
RISK CATEGORY = II  
TOPOGRAPHIC FACTOR, Kzt = 1.0  
EXPOSURE CATEGORY = B  
INTERNAL PRESSURE COEFFICIENT, Gcpi = 0.18  
= 8.60 KIP

### EARTHQUAKE (EQUIVALENT LATERAL FORCE PROCEDURE) (BASED ON 2008 USGS HAZARD DATA)

Ss = 1.226  
Sds = 0.825  
S1 = 0.466  
Sd1 = 0.477  
SITE CLASS D  
IMPORTANCE FACTOR, Ie= 1.0  
SEISMIC DESIGN CATEGORY= D  
RISK CATEGORY = II  
R = 3.5 FOR STEEL ORDINARY MOMENT FRAME  
OVER STRENGTH FACTOR, Ω o = 2.5  
DEFLECTION AMPLIFICATION FACTOR, Cd = 3  
REUNDANCY FACTOR = 1.0  
SEISMIC RESPONSE COEFFICIENT, Cs = 0.236  
SEISMIC BASE SHEAR = 5.4 KIP

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

4. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.

5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

9. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

## GEOTECHNICAL

10. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND, THEREFORE, MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REVISION.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE, UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

ALLOWABLE SOIL PRESSURE	2,000 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	60 PCF/35 PCF
LATERAL EARTH PRESSURE (SEISMIC)	7H (ULTIMATE LOAD)
PASSIVE EARTH PRESSURE (INCLUDES FACTOR OF SAFETY = 1.5)	350 PCF
COEFFICIENT OF FRICTION (INCLUDES FACTOR OF SAFETY = 1.5)	0.35

## CONCRETE

11. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED, AND PLACED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE SECTION 1905 AND ACI 301-11. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF  $f_c = 3,000$  PSI, SHALL CONTAIN NO LESS THAN 5 1/2 SACKS OF CEMENT, HAVE A MAXIMUM WATER / CEMENT RATIO OF 0.45, AND A SLUMP OF 5" OR LESS. CONCRETE HAS BEEN DESIGNED USING 2,500 PSI PER INTERNATIONAL BUILDING CODE SECTION 1705.3 EXCEPTION 2.3 TO AVOID SPECIAL INSPECTIONS.

ALTERNATE MIX DESIGNS NOT MEETING THE REQUIREMENTS ABOVE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD, AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH CHAPTER 5 OF ACI 318-11.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494M, AND C618. UNLESS OTHERWISE NOTED THE TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE 5% IN ACCORDANCE EXPOSURE CLASS F1 PER ACI 318-11 TABLE 4.3.1 AND TABLE 4.4.1.

12. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENTS S1), GRADE 60, fy = 60,000 PSI.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185

13. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI SP-66-04 AND 318-11. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 48 BAR DIAMETERS OR 2'-0" MINIMUM. A MAXIMUM OF ONE HALF OF THE TOTAL REINFORCEMENT SHALL BE LAPPED WITH THE REQUIRED LAP LENGTH. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. FIELD BENDING OF GRADE 60 REINFORCEMENT SHALL NOT BE ALLOWED.

14. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
ALL OTHER SURFACES	1-1/2"

15. SLABS-ON-GRADE: UNLESS NOTED OTHERWISE SHALL BE 4" CONCRETE, REINFORCED WITH 6X6 W1.4XW1.4 WELDED WIRE FABRIC CENTERED IN SLAB. UNLESS OTHERWISE DIRECTED BY SOILS ENGINEER PROVIDE MINIMUM 10 MIL VAPOR BARRIER OVER 4" OF COMPACTED SAND OR GRAVEL.

16. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES.

## STEEL

17. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE A.I.S.C. SPECIFICATIONS AND CODES:

- AISC 360-10 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.
- AISC 303-10 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AMENDED BY THE DELETION OF THE FOLLOWING SENTENCE IN PARAGRAPH 4.2.1: "THIS APPROVAL CONSTITUTES THE OWNER'S ACCEPTANCE OF ALL RESPONSIBILITY FOR THE DESIGN ADEQUACY OF ANY DETAIL CONFIGURATION OF CONNECTIONS DEVELOPED BY THE FABRICATOR AS PART OF HIS PREPARATION OF THESE SHOP DRAWINGS."
- SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
- AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE D1.1 AND D1.4

18. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

NOTE: LOWEST ANTICIPATED SERVICE TEMPERATURE FOR STEEL FRAMES = XX DEGREES FAHRENHEIT.

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
A. PLATES, ANGLES, AND RODS	A36	36 KSI
B. WIDE FLANGE SHAPES AND CHANNELS	A992	50 KSI

19. ALL BEAM PENETRATIONS NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.

20. ALL A-325 CONNECTION BOLTS SHALL BE INSTALLED TO THE SNUG-TIGHT CONDITION PER AISC SPECIFICATIONS. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. WHERE DESIGNATED SLIP CRITICAL CONNECTION BOLTS SHALL BE APPROVED SELF LOAD INDICATING TYPES AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONNECTED PILES IN SLIP CRITICAL CONNECTIONS SHALL BE PREPARED TO MEET THE REQUIREMENTS FOR CLASS A FRAYING SURFACES.

21. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70 XX ELECTRODES UNLESS OTHERWISE NOTED. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED.

## WOOD

22. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS.

### JOISTS:

HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI	(2X, 3X, AND 4X MEMBERS)
DOUGLAS FIR NO. 1 MINIMUM BASIC DESIGN STRESS, Fb = 1,350 PSI	BEAM AND STRINGERS: (6 X AND LARGER MEMBERS)
DOUGLAS FIR NO. 1 MINIMUM BASIC DESIGN STRESS, Fb = 1,200 PSI, FC = 1,000 PSI	POSTS AND TIMBERS: (6 X AND LARGER MEMBERS)
DOUGLAS FIR LARCH OR HEM-FIR NO. 2, Fb = 850 PSI, FC = 1,300 PSI	STUDS PLATES & MISCELLANEOUS LIGHT FRAMING

23. GLUED LAMINATED MEMBERS SHALL BE FABRICATED AND IDENTIFIED AS REQUIRED BY ASTM D3737 AND A.I.T.C. A190.1. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. IN ADDITION, ALL GLULAMS SHALL CONFORM TO APA PERFORMANCE STANDARD PRP-305. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800,000 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800,000 PSI. UNLESS OTHERWISE NOTED CAMBER ALL GLULAM BEAMS TO 2,000 FOOT RADIUS. WHERE REQUIRED BEAMS AND COLUMNS SHALL BE PRESSURE TREATED AFTER MANUFACTURE IN ACCORDANCE WITH AMERICAN WOOD-PRESERVATIVES ASSOCIATION STANDARD U1.

24. PARALLEL STRAND LUMBER (PSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED I.C.C.-E.S. EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: Fb = 2900 PSI, E = 2,200,000 PSI, Fv = 290 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

25. LAMINATED STRAND LUMBER (LSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED I.C.C.-E.S. EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1,550,000 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

26. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOIST MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

27. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1-09 OR PS 2-10 AND AMERICAN PLYWOOD ASSOCIATION PERFORMANCE STANDARD PRP-108. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY.

28. ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE, PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC. AND CONCRETE OR MASONRY.

PRESSURE TREATED LUMBER SHALL COMPLY WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A OR HAVE EQUIVALENT ICC-ES APPROVAL.

29. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON AND MAXIMUM NUMBER OF NAILS AS SPECIFIED BY THE MANUFACTURER SHALL BE PROVIDED. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL SAWN LUMBER JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS AND ALL PREFABRICATED PLYWOOD WEB JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS UNLESS NOTED OTHERWISE.

ALL CONNECTIONS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD, SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. HOT DIPPED GALVANIZED FASTENERS SHOULD CONFORM TO ASTM STANDARD 153, AND HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM STANDARD A653 (CLASS G-185). STAINLESS STEEL FASTENERS AND CONNECTORS SHOULD BE TYPE 304 OR 316. NOTE: ELECTROPLATED GALVANIZED FASTENERS AND CONNECTORS ARE NOT TO BE USED WITH PRESSURE TREATED WOOD. SIMPSON PRODUCT FINISHES CORRESPONDING TO THE ABOVE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND SSI300 (STAINLESS STEEL). STAINLESS STEEL HARDWARE AND FASTENERS SHALL NOT BE COMBINED WITH UNTREATED OR GALVANIZED MATERIAL.

## 30. WOOD FASTENERS:

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d	3-1/2"	0.162"

DESIGN IS BASED ON COMMON STEEL WIRE NAILS MEETING THE REQUIREMENTS OF ASTM F1667. USE OF ALTERNATE FASTENERS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

B. NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

31. WOOD FRAMING NOTES - THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.9.1 OF THE INTERNATIONAL BUILDING CODE. UNLESS OTHERWISE NOTED, ALL NAILS SHALL BE AS SPECIFIED ABOVE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF BOLTS AND LAG SCREWS SHALL CONFORM TO SECTIONS 11.1.2 AND 11.1.3 OF THE 2015 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. NATURALLY DURABLE OR PRESSURE TREATED WOOD SHALL BE PROVIDED WHERE REQUIRED BY SECTION 2304.11 OF THE INTERNATIONAL BUILDING CODE.

B. WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2X6 AT 16" O.C. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2 x 8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED AND SHALL BEAR FULLY ON A MINIMUM OF TWO STUDS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID-HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT.

STUDS MAY BE NOTCHED, CUT, OR PENETRATED WITH ROUND BORED HOLES AS FOLLOWS:

STUD SIZE	MAXIMUM NOTCH / CUT	MAXIMUM BORED HOLE
2X4	7/8"	1-3/8"
2X6	1-3/8"	2-1/8"

BORED HOLES SHALL NOT BE LOCATED WITH 5/8" FROM THE EDGE OF THE STUD OR AT THE SAME LOCATION AS A NOTCH OR CUT.

WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d AT 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS AT 4" O.C. EACH SIDE OF JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7" MINIMUM EMBEDMENT) @ 4'-0" O.C. UNLESS INDICATED OTHERWISE. PROVIDE 3"x3" x1/4" HOT-DIPPED GALVANIZED PLATE WASHERS AT ALL ANCHOR BOLTS. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d NAILS @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH NAILS AT 7" O.C. USE 5d COOLER NAILS FOR 1/2" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 24/0) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH 8d NAILS @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH NAILS @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.

NOTCHES AT THE END OF JOISTS AND RAFTERS SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER. NOTCHES IN THE TOP OR BOTTOM SHALL NOT EXCEED 1/6 THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN THE MIDDLE 1/3 OF THE SPAN. THE DIAMETER OF ROUND HOLES BORED IN JOISTS AND RAFTERS SHALL NOT EXCEED 1/3 OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN 2" FROM THE TOP OR BOTTOM EDGE.

TOENAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH TWO ROWS OF 16d @ 12" O.C. ATTACH RAFTERS AT BEARING LINES WITH H2.5 @ 24" O.C. UNLESS OTHER METAL CONNECTIONS ARE PROVIDED.

UNLESS OTHERWISE NOTED ON THE PLANS, APA RATED ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND NAILED WITH NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOISTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ALL ROOF AND FLOOR SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" O.C. UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PLYWOOD PANEL EDGES AND NAIL WITH EDGE NAILING SPECIFIED.

BYKONEN  
CARTER  
QUINN

STRUCTURAL  
ENGINEERING



04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

PROJECT TITLE:

Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

REVISIONS:

SHEET TITLE:

General  
Structural  
Notes

SCALE: as shown

DATE: 4-2-20

PROJECT NO:

SHEET NO:

\$1.00

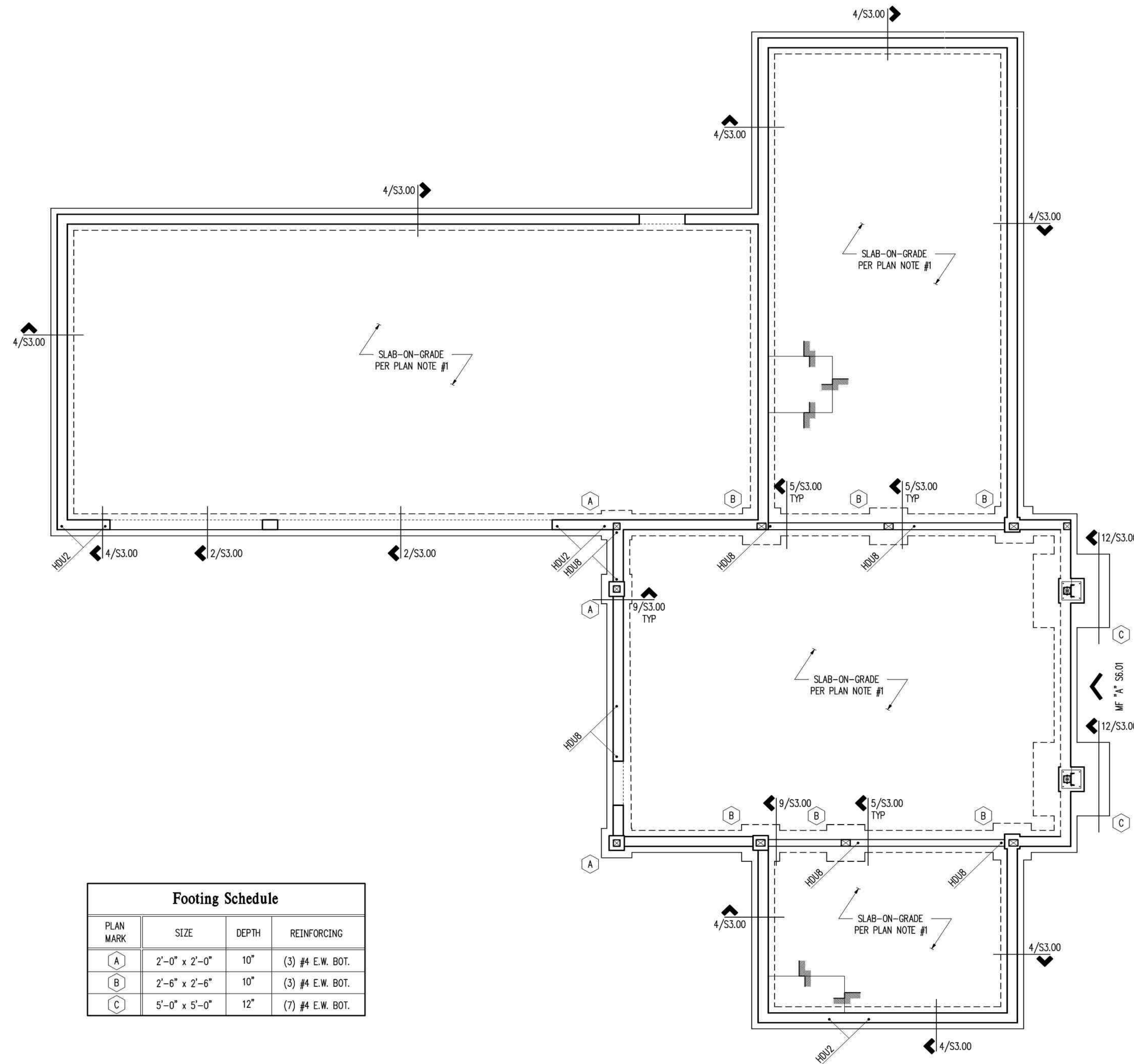


04/02/2020

DRAWN: ATC  
DESIGN: SSN  
CHECKED: NN  
APPROVED: NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

REVISIONS:



Footing Schedule			
PLAN MARK	SIZE	DEPTH	REINFORCING
A	2'-0" x 2'-0"	10"	(3) #4 E.W. BOT.
B	2'-6" x 2'-6"	10"	(3) #4 E.W. BOT.
C	5'-0" x 5'-0"	12"	(7) #4 E.W. BOT.

**FOUNDATION PLAN NOTES**

- ALL SLABS-ON-GRADE SHALL BE 4" REINFORCED WITH WVF6X6 W1.4XW1.4 U.N.O. PROVIDE MINIMUM 6-MIL VISQUEEN VAPOR BARRIER UNDER ALL SLABS. SLABS SHALL BE SUPPORTED ON A MINIMUM 4 INCHES OF FREE DRAINING MATERIAL.
- ALL ANCHORS TO BE INSTALLED AS REQUIRED BY MANUFACTURER. MINIMUM (2) 2x STUDS UNLESS OTHERWISE NOTED ON HOLD-DOWN SCHEDULE.

**LEGEND**

- INDICATES HOLD-DOWN PER SCHEDULE 8/S3.00
- INDICATES SLAB STEP PER ARCH, REFER 3/S3.00

SHEET TITLE:  
**Foundation Plan**  
SCALE:  
as shown  
DATE:  
4-2-20  
PROJECT NO:  
SHEET NO:

**Foundation Plan**

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



**S2.00**





04/02/2020

DRAWN: ATC  
DESIGN: SSN  
CHECKED: NN  
APPROVED: NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

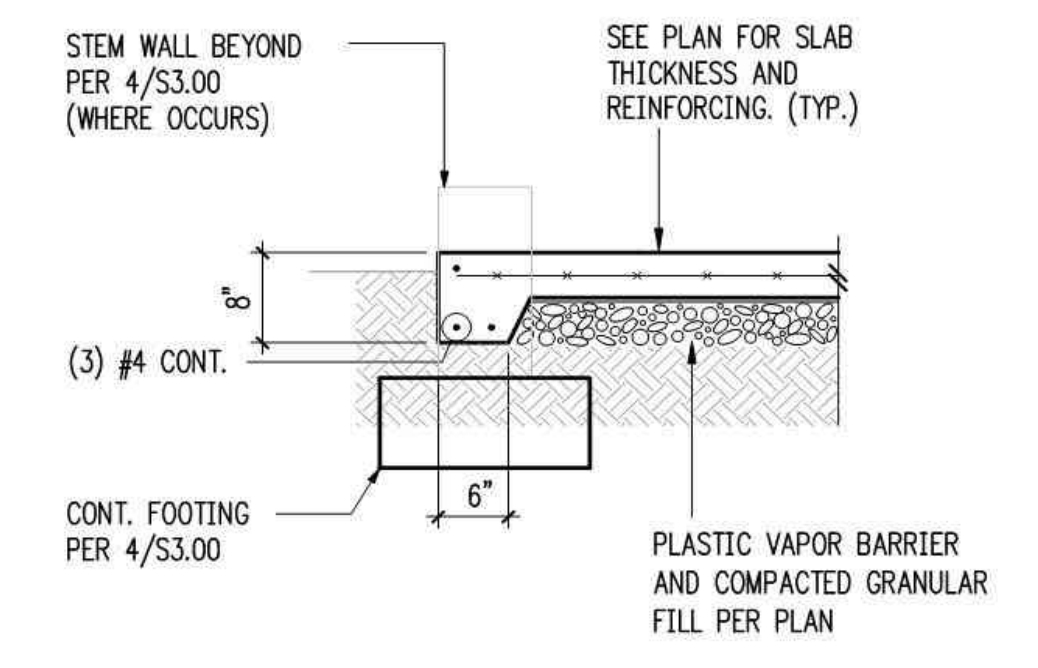
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SHEET TITLE:  
**Concrete  
Details**

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PROJECT NO:  
SHEET NO:

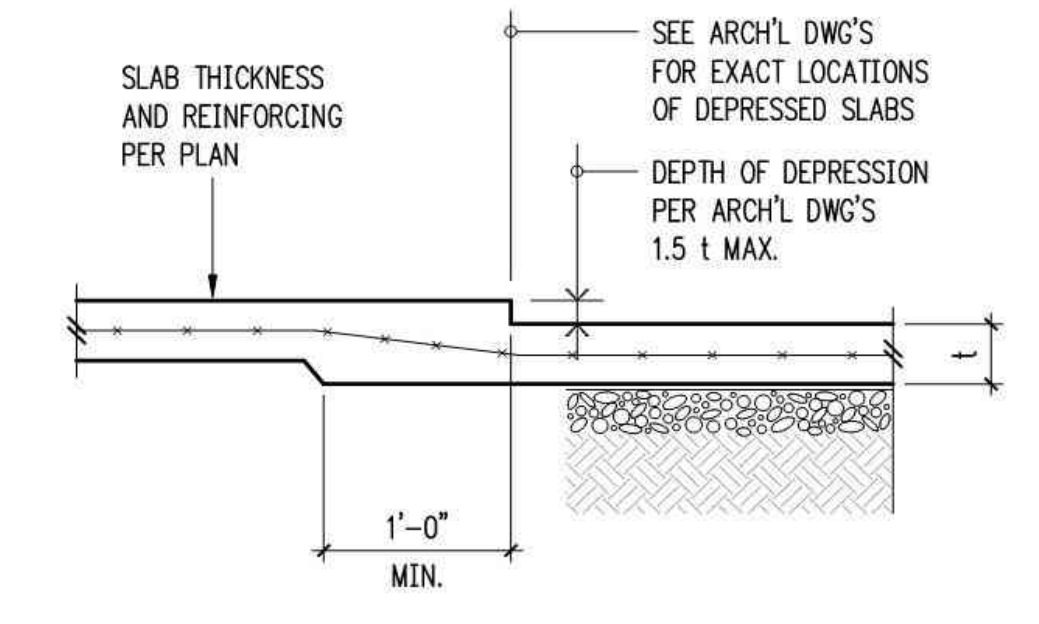
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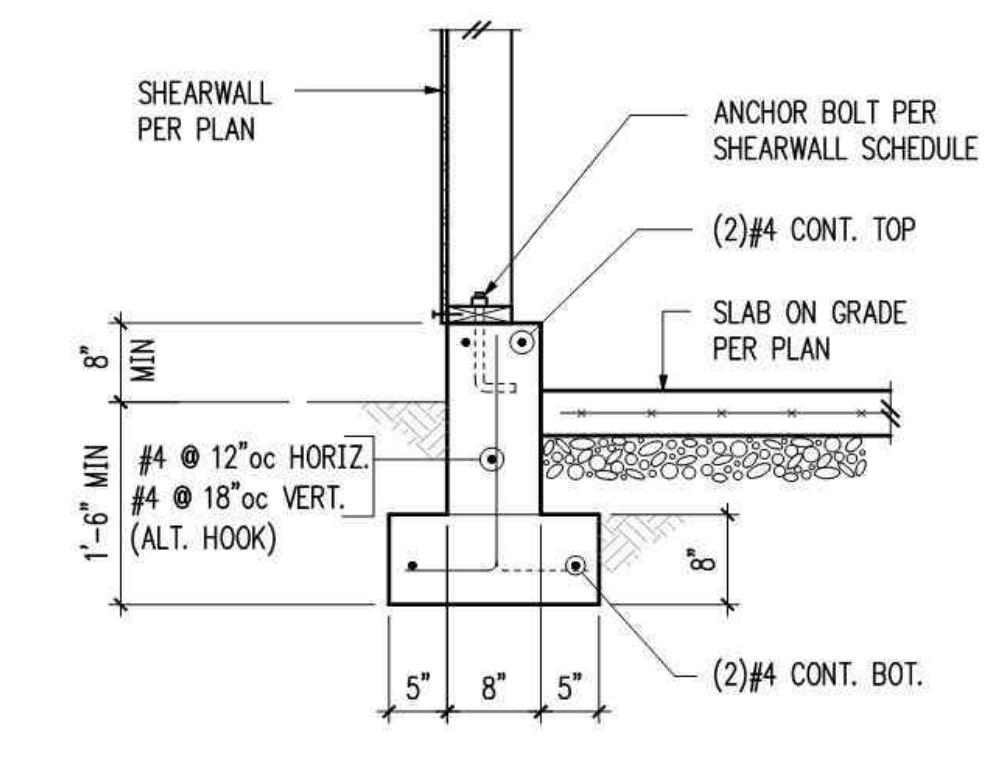
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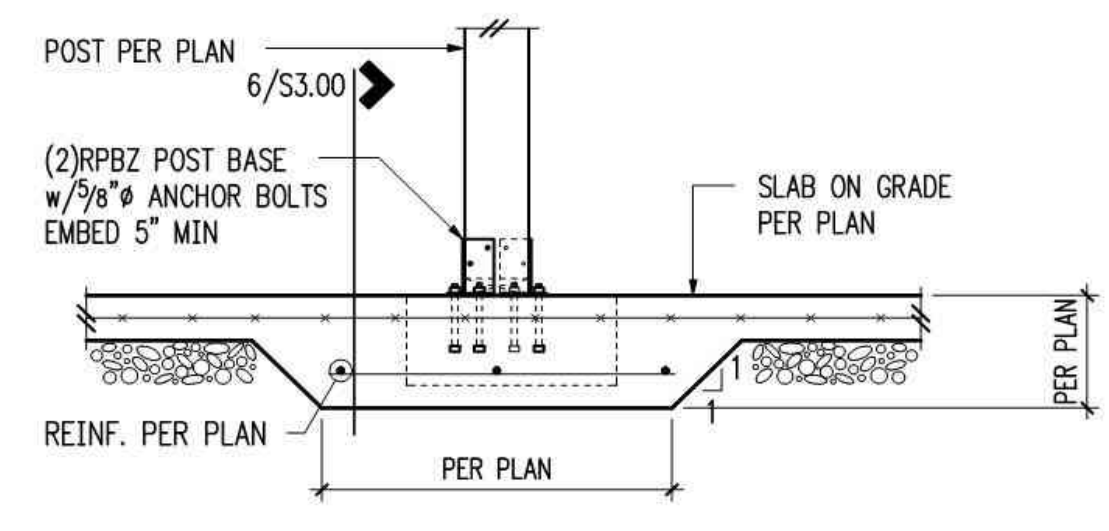
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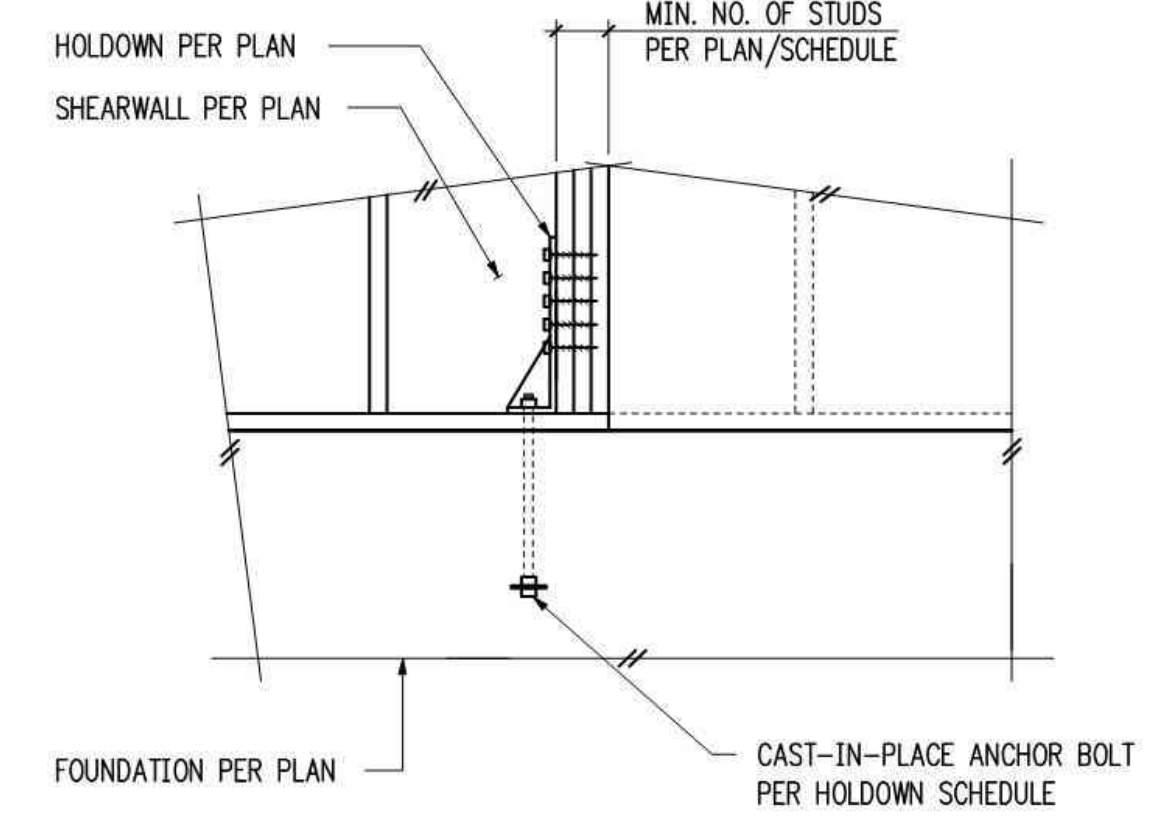
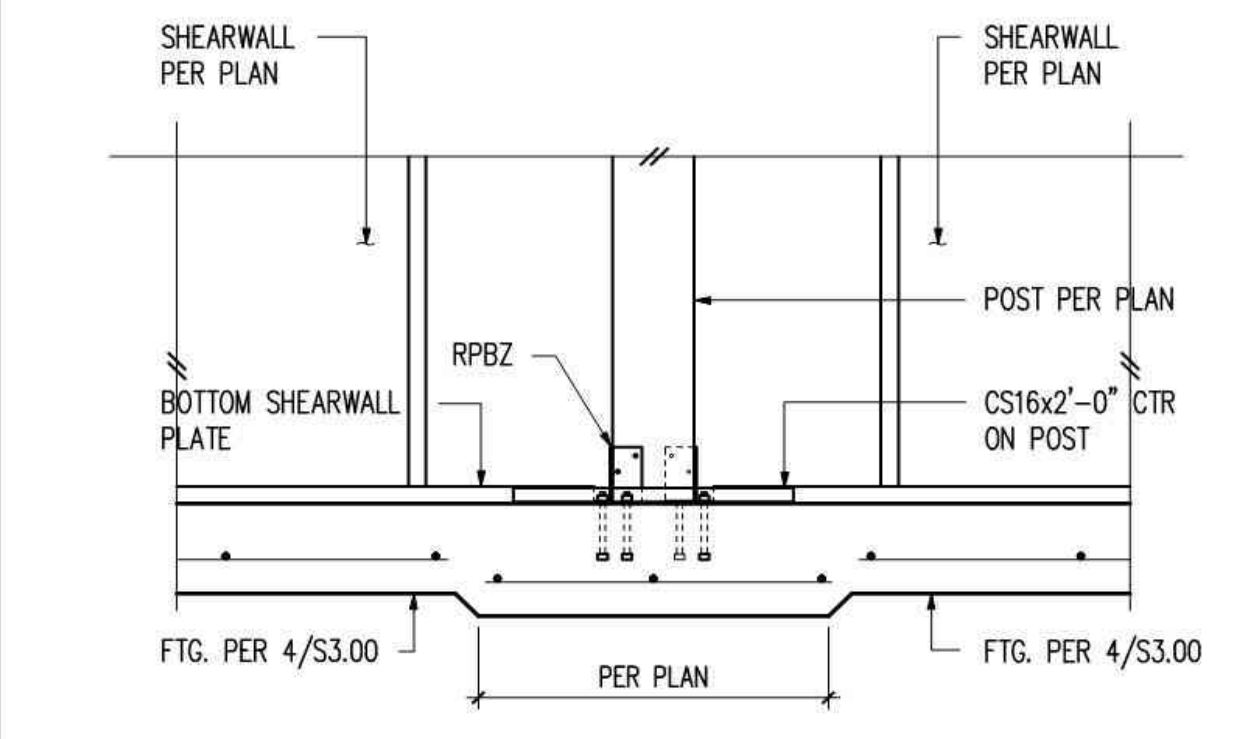
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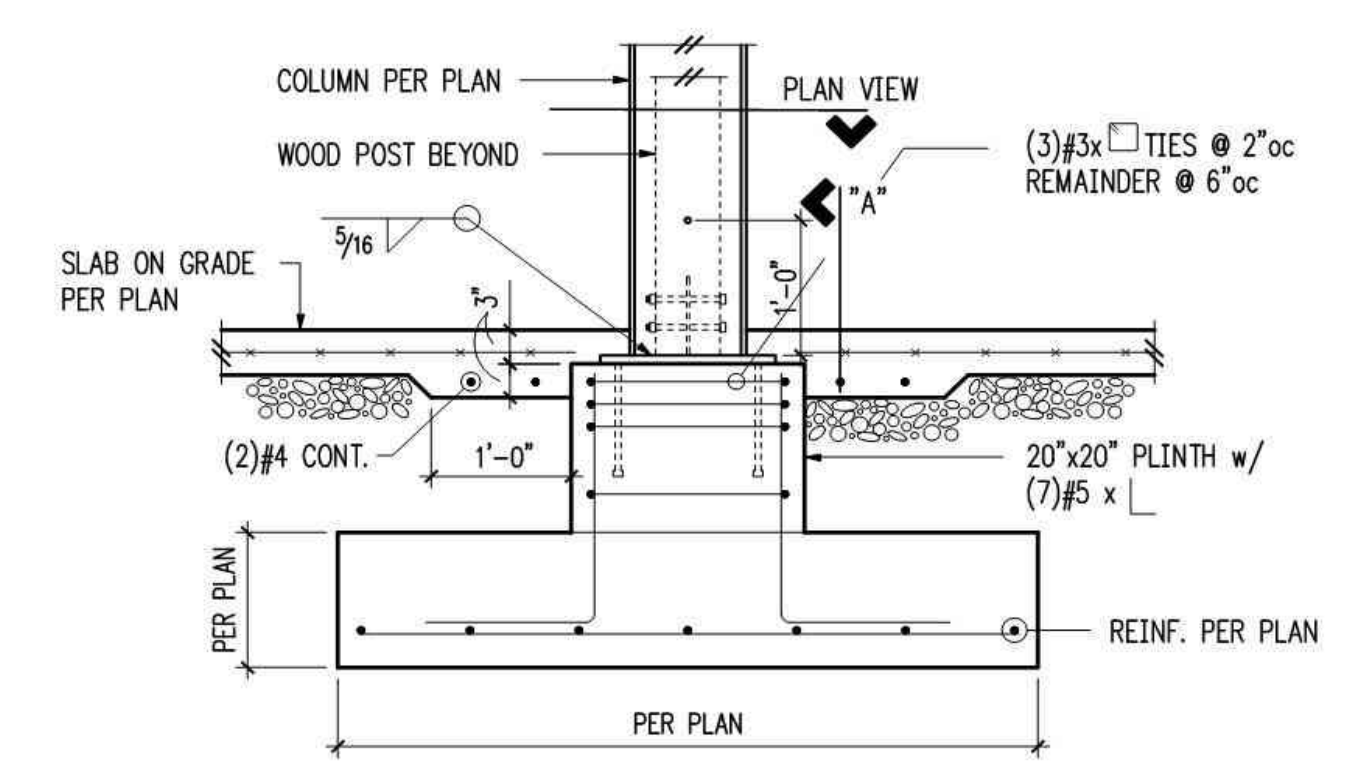
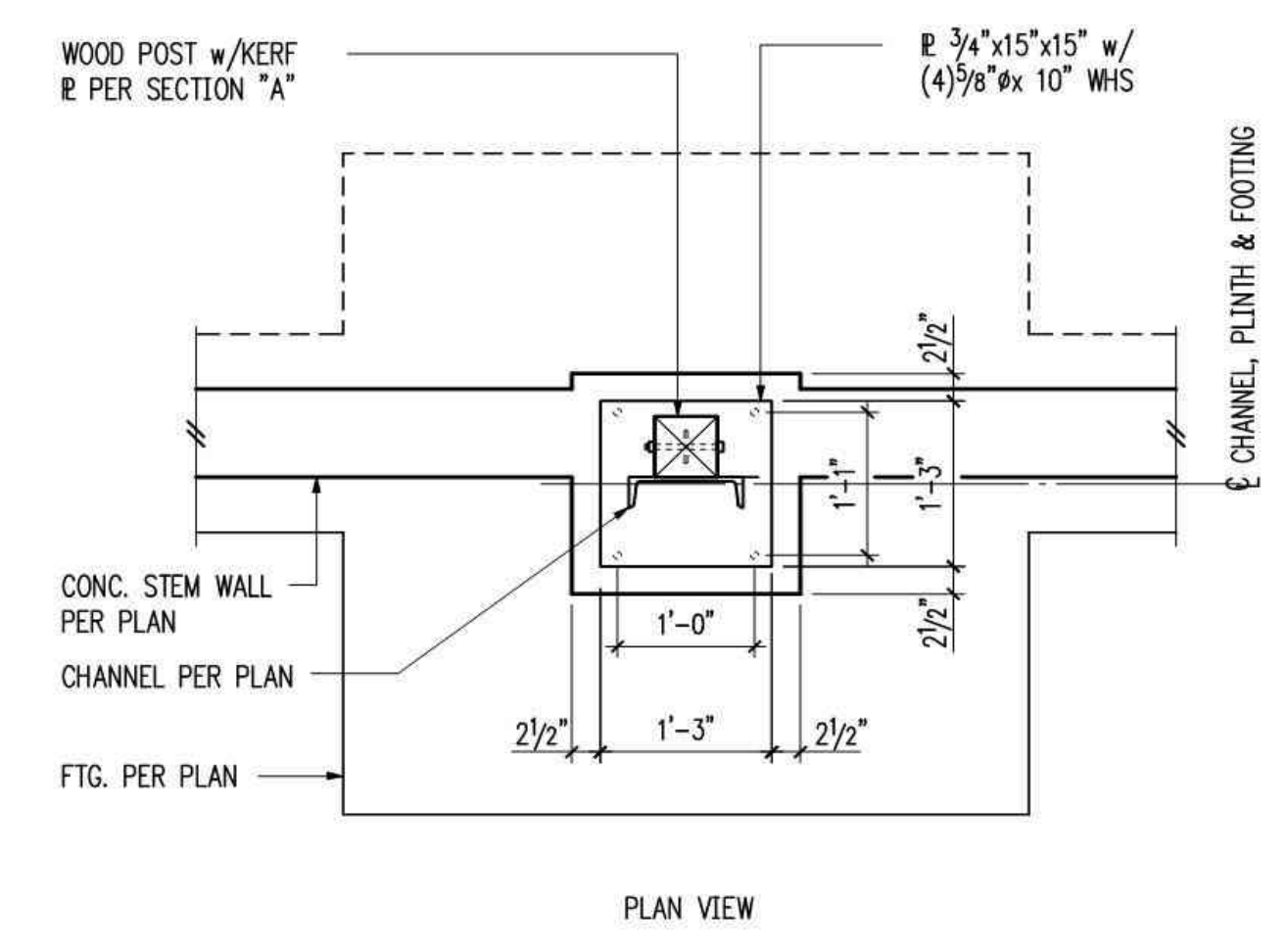
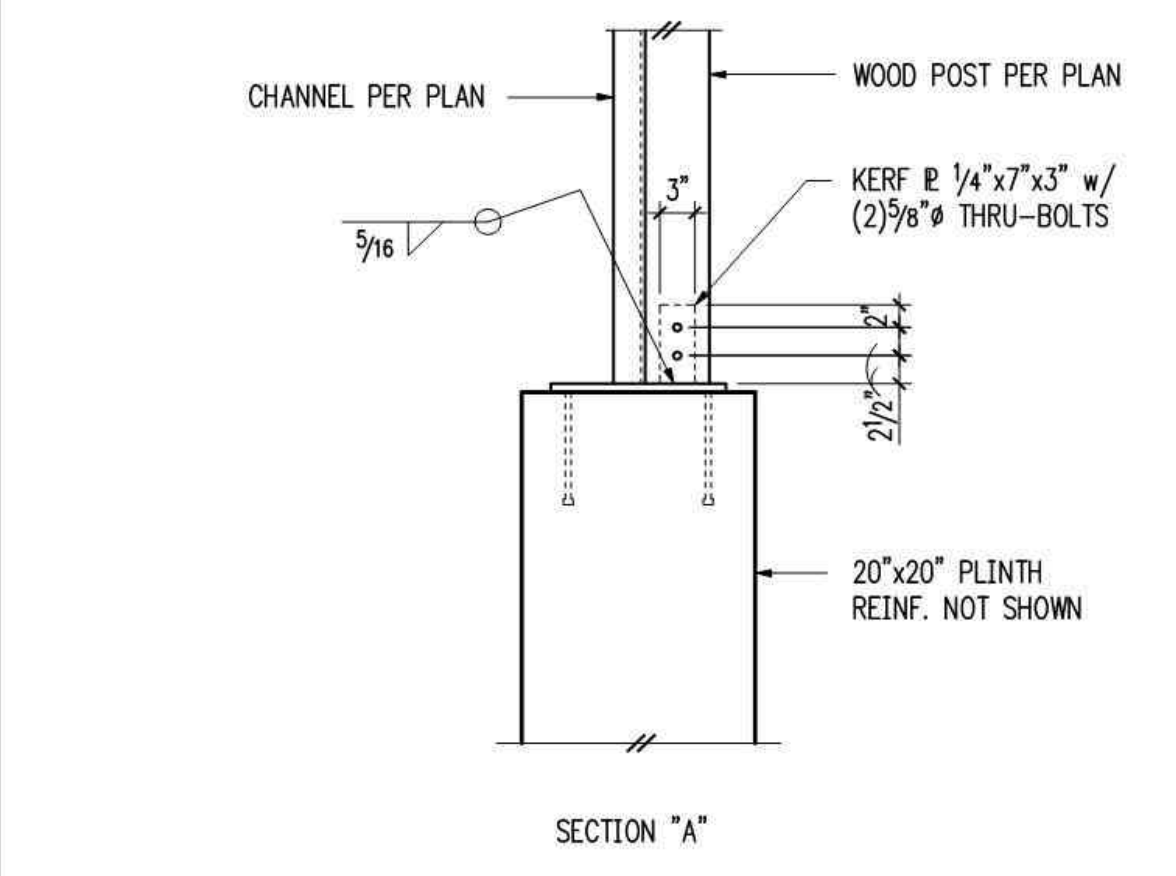
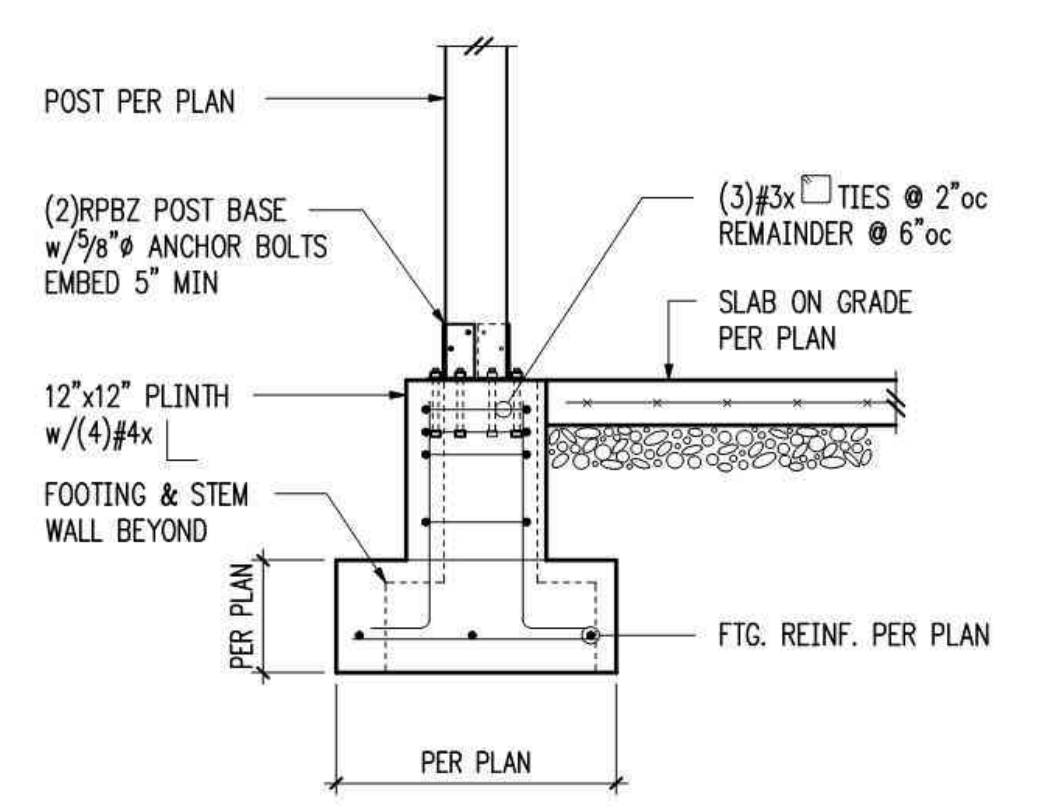
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HOLDOWN SCHEDULE		
PLAN MARK	ANCHOR BOLTS	NO. OF STUDS
HOU2	SSTB16	(2)
HOU8	SSTB28	(3)

9

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



12

S3.00



04/02/2020

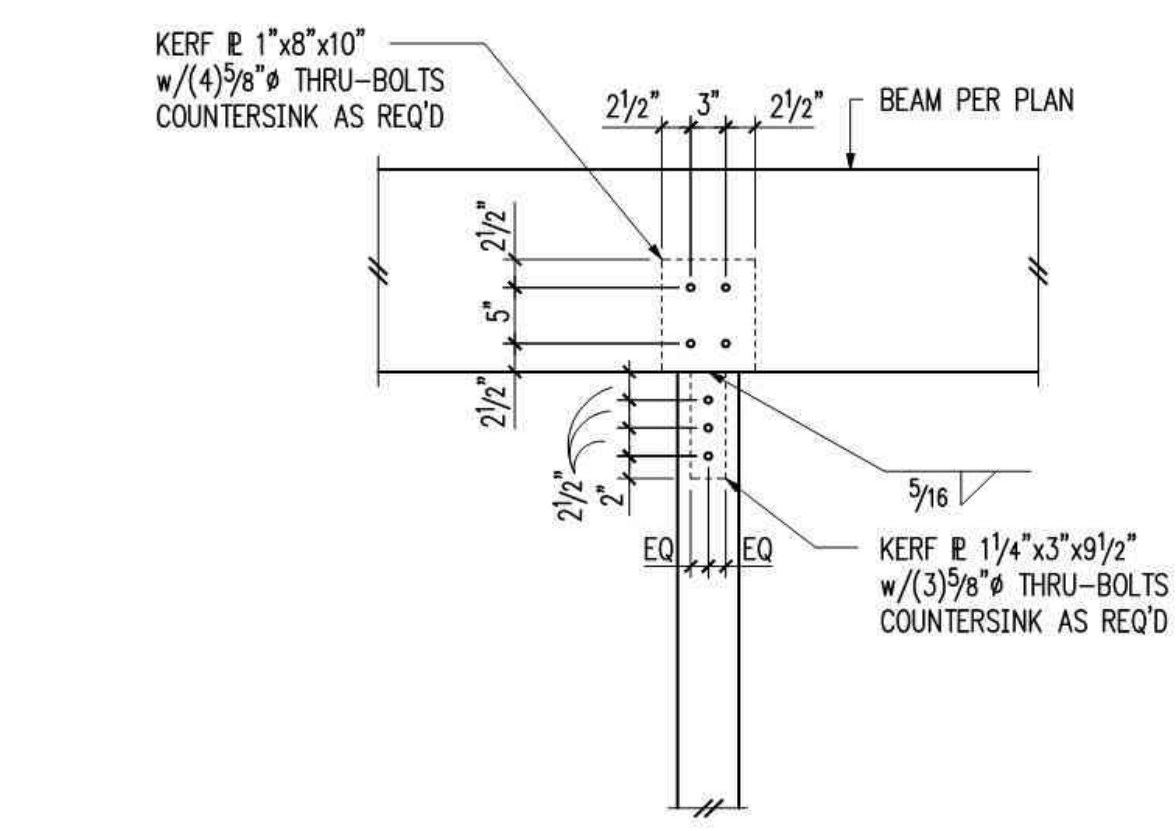
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DESIGN: SSN  
CHECKED: NN  
APPROVED: NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

REVISIONS:

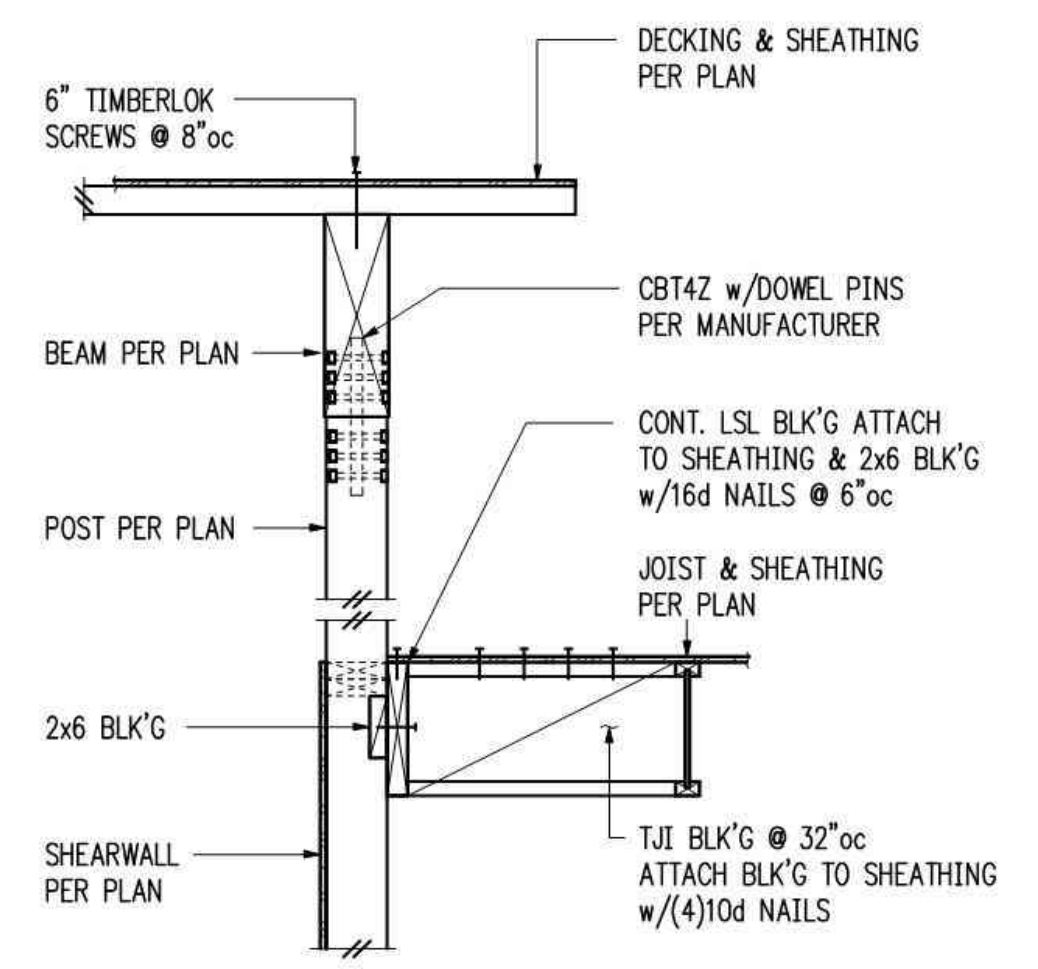
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Wood  
Details

SCALE: as shown  
DATE: 4-2-20  
PROJECT NO:  
SHEET NO:



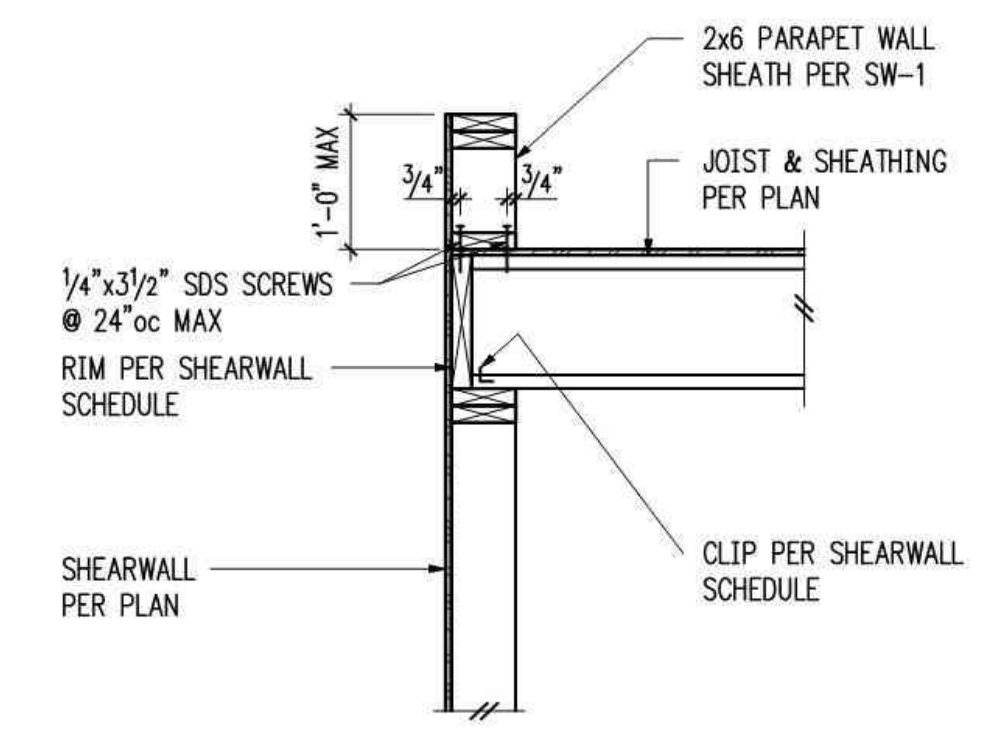
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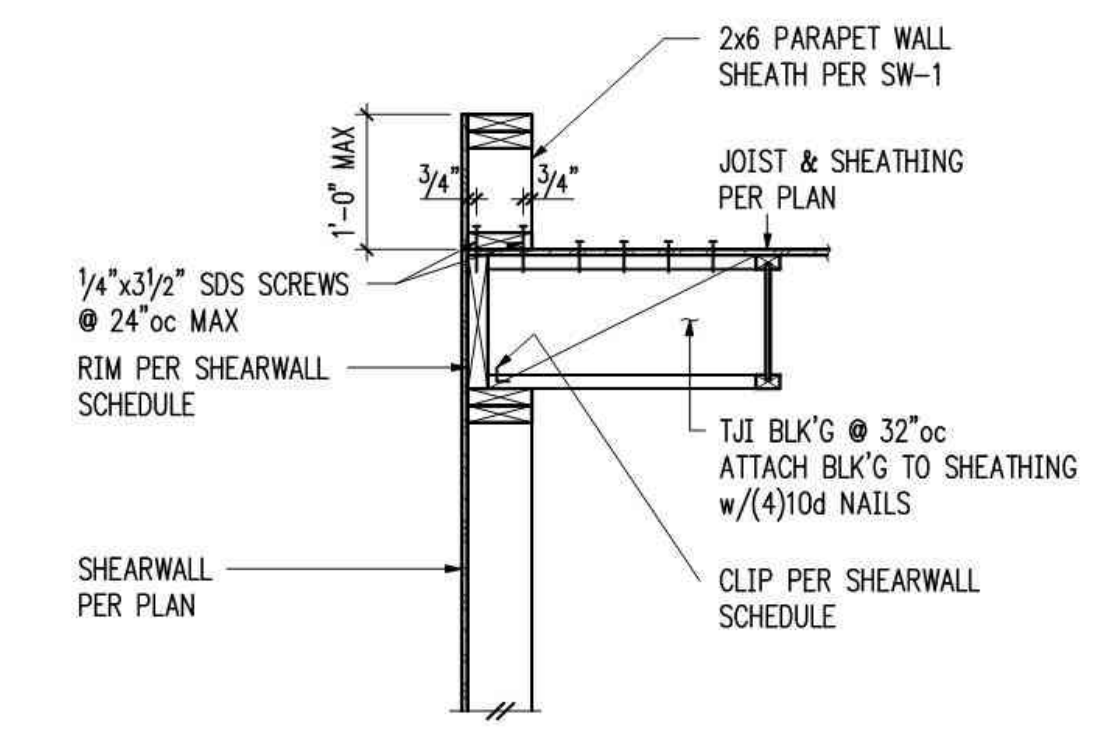
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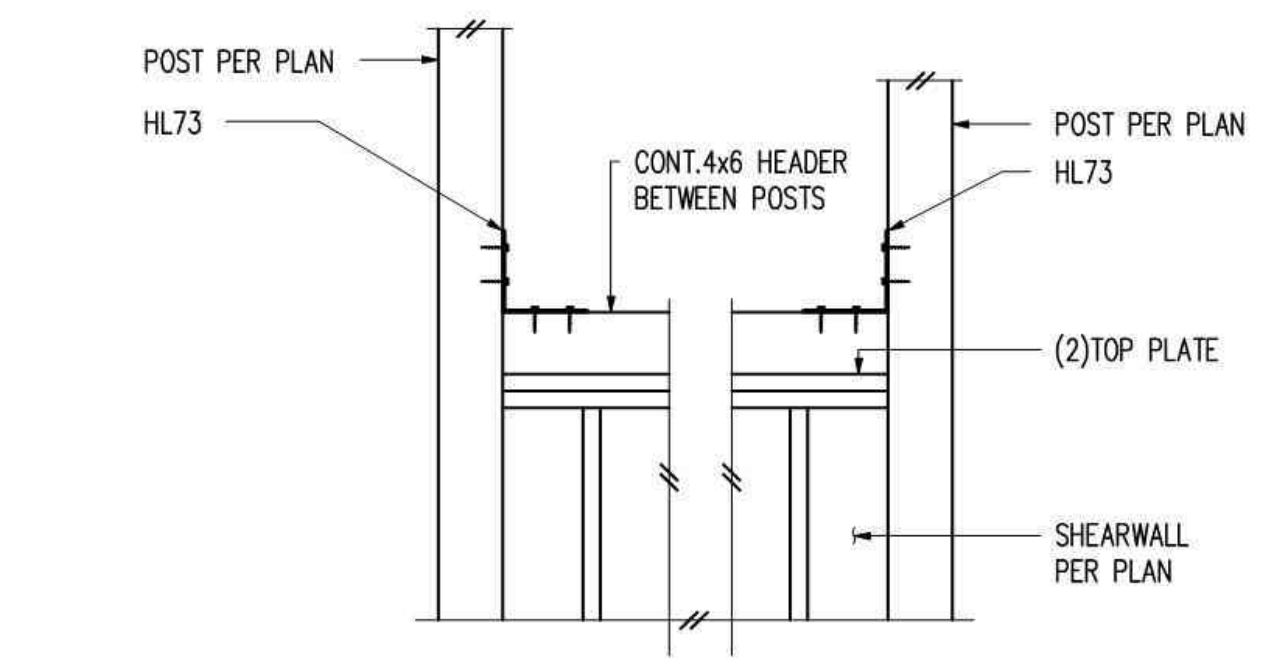
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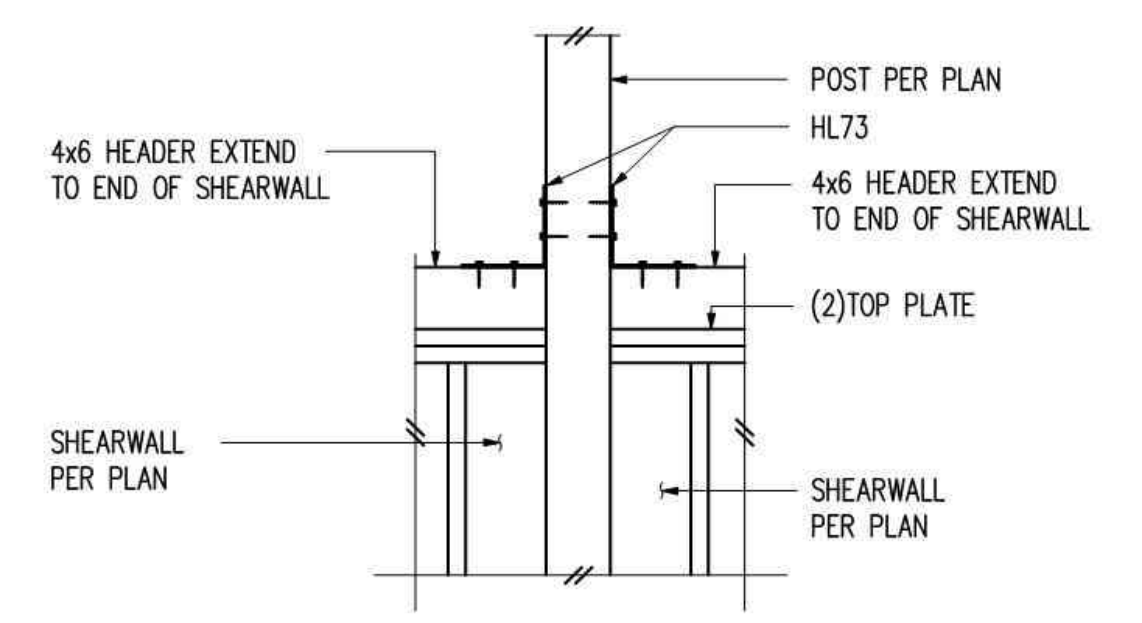
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REFER TO 3/S6.00 FOR  
CALLOUTS IN COMMON



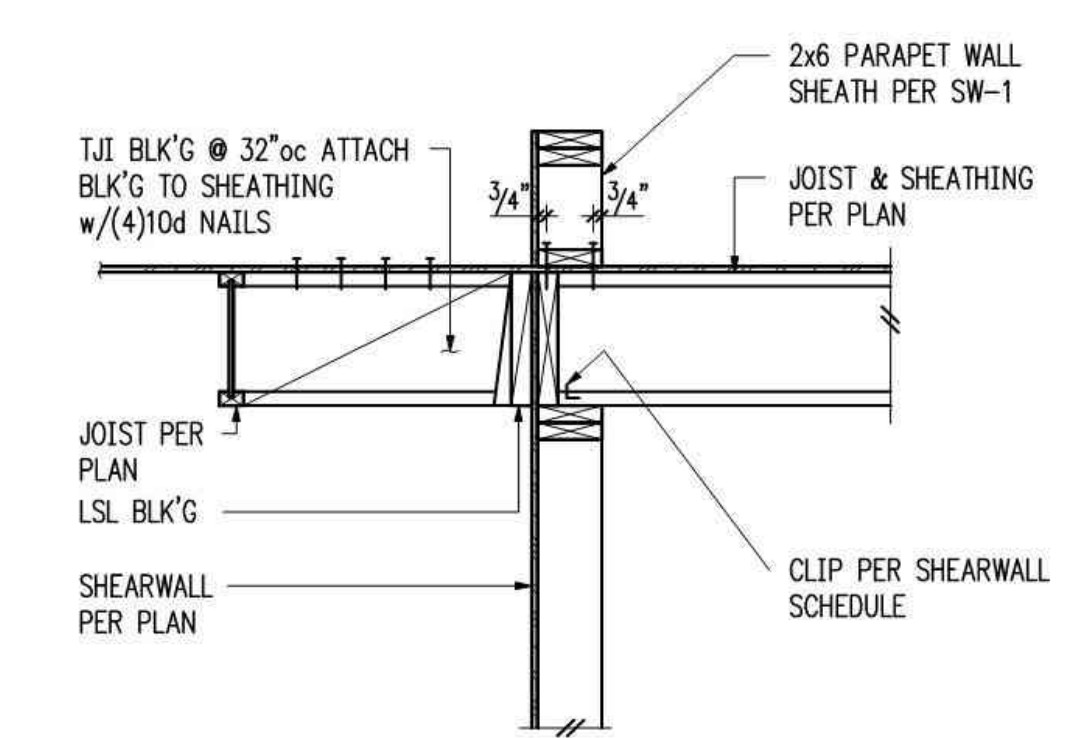
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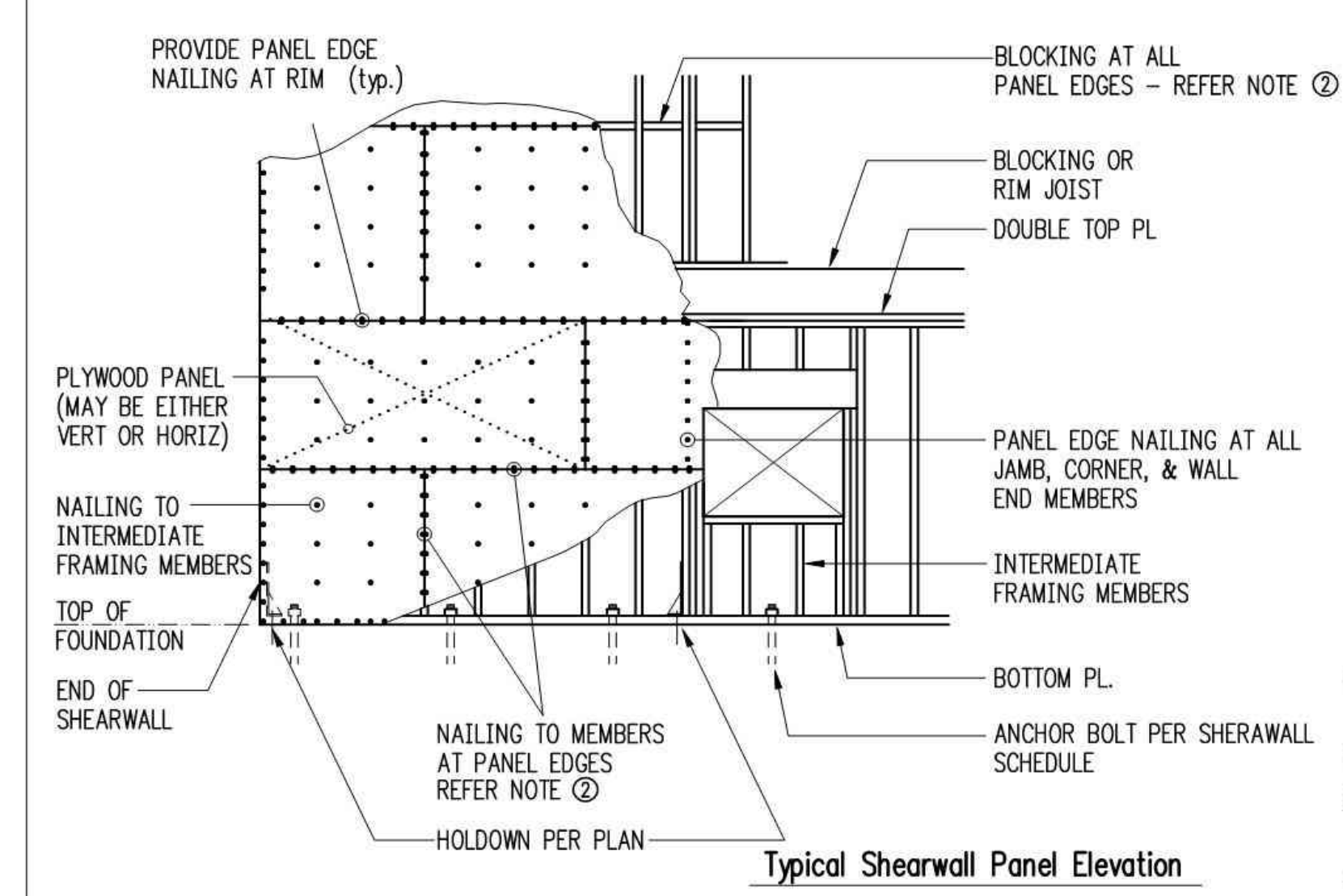
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Scale : 3/4" = 1'-0"

7

8



9

SHEAR WALL SCHEDULE								
SW #	SHEATHING	BLOCKING	PANEL EDGE NAILING	ATTACHMENT TO TOP PLATE	BOTTOM PLATE ATTACHMENT			CAPACITY (plf) SEISMIC
					LSL RIM JOIST REQ'D.	FACENAILING TO WOOD BELOW	ANCHOR BOLTING TO CONC. BELOW	
SW1	15/32" APA RATED SHEATHING	YES	8d @ 6"oc	CLIP @ 16"oc	1 3/4" LSL	NAILS @ 9"oc	5/8" @ 48"oc	240 PLF
SW2	15/32" APA RATED SHEATHING	YES	8d @ 4"oc	CLIP @ 16"oc	1 3/4" LSL	NAILS @ 6"oc	5/8" @ 48"oc	355 PLF
SW3	15/32" APA RATED SHEATHING	YES	8d @ 2"oc	CLIP @ 12"oc	3/2" LSL	(2) ROWS NAILS @ 7"oc	5/8" @ 28"oc	595 PLF
SW4	15/32" APA RATED SHEATHING EA SIDE	YES	8d @ 4"oc	CLIP @ 10"oc	3/2" LSL	(2) ROWS NAILS @ 6"oc	5/8" @ 24"oc	705 PLF
SW5	15/32" APA RATED SHEATHING EA SIDE	YES	8d @ 3"oc	CLIP @ 8"oc	3/2" LSL	(2) ROWS NAILS @ 4"oc	5/8" @ 16"oc	910 PLF

- ① NAILS SHALL BE 8d COMMON. NAILING APPLIES TO ALL PANEL EDGES (BLOCK ALL UNSUPPORTED PANEL EDGES), TOP & BOTTOM PLATES AND BLOCKING. NAIL TO INTERMEDIATE FRAMING MEMBERS 1/2" @ 12"oc.
- ② FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- ③ PROVIDE 3"x3"x0.229" PLATE WASHER AT ALL ANCHOR BOLTS. ANCHOR BOLTS SHALL BE POSITIONED SUCH THAT PLATE EDGE OF PLATE WASHER IS WITH 1/2" OF THE EDGE OF THE BOTTOM PLATE.
- ④ CLIP SHALL BE EITHER A35 OR LTP4. CLIP MAY BE OMITTED WHEN ADJOINING PANEL EDGES OCCUR @ RIM JOIST.
- ⑤ NAILS SHALL BE 10d COMMON (0.148" x 3.5" MIN) SCREWS SHALL BE SIMPSON SDS25500 (1/4" x 5" MIN.).
- ⑥ ROWS MUST BE OFFSET AT LEAST 1/2" AND STAGGERED.

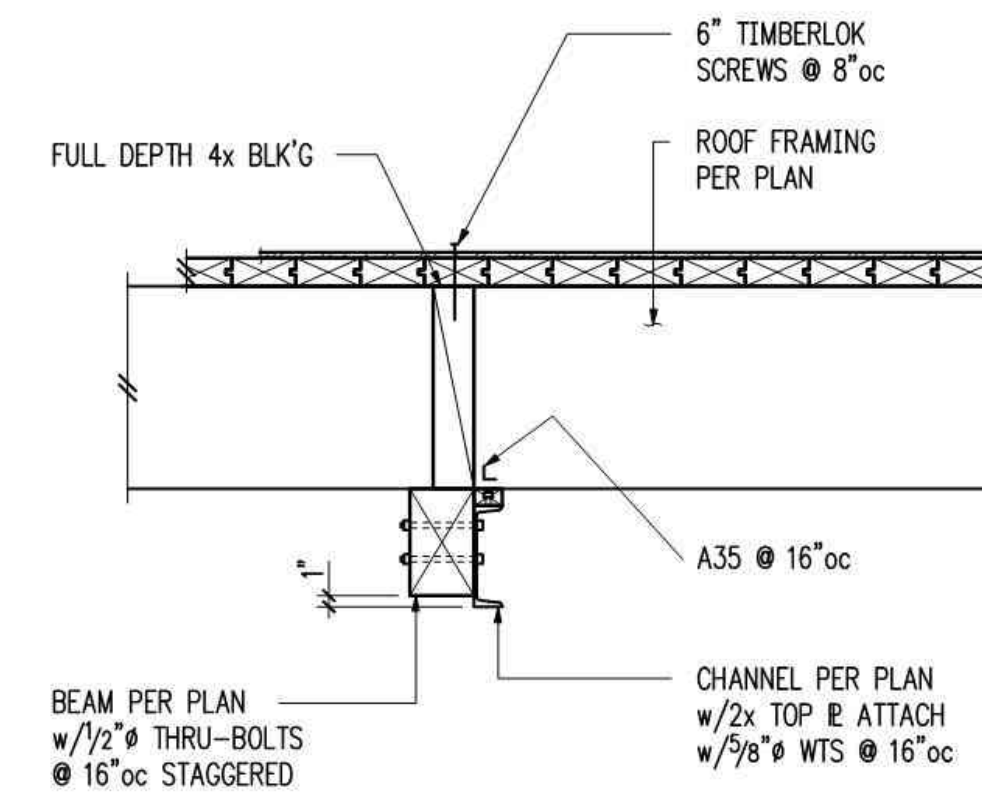
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\$6.00



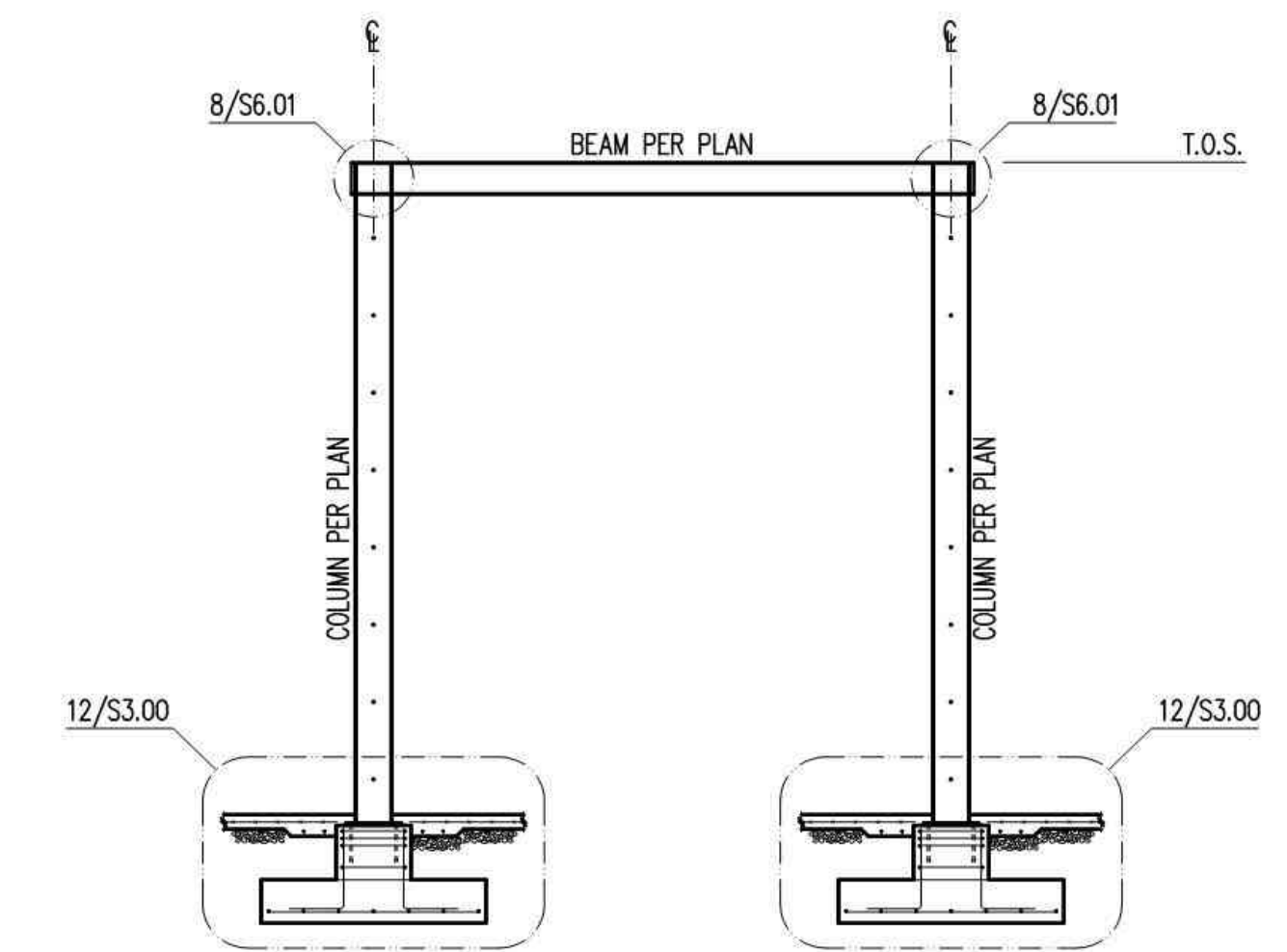
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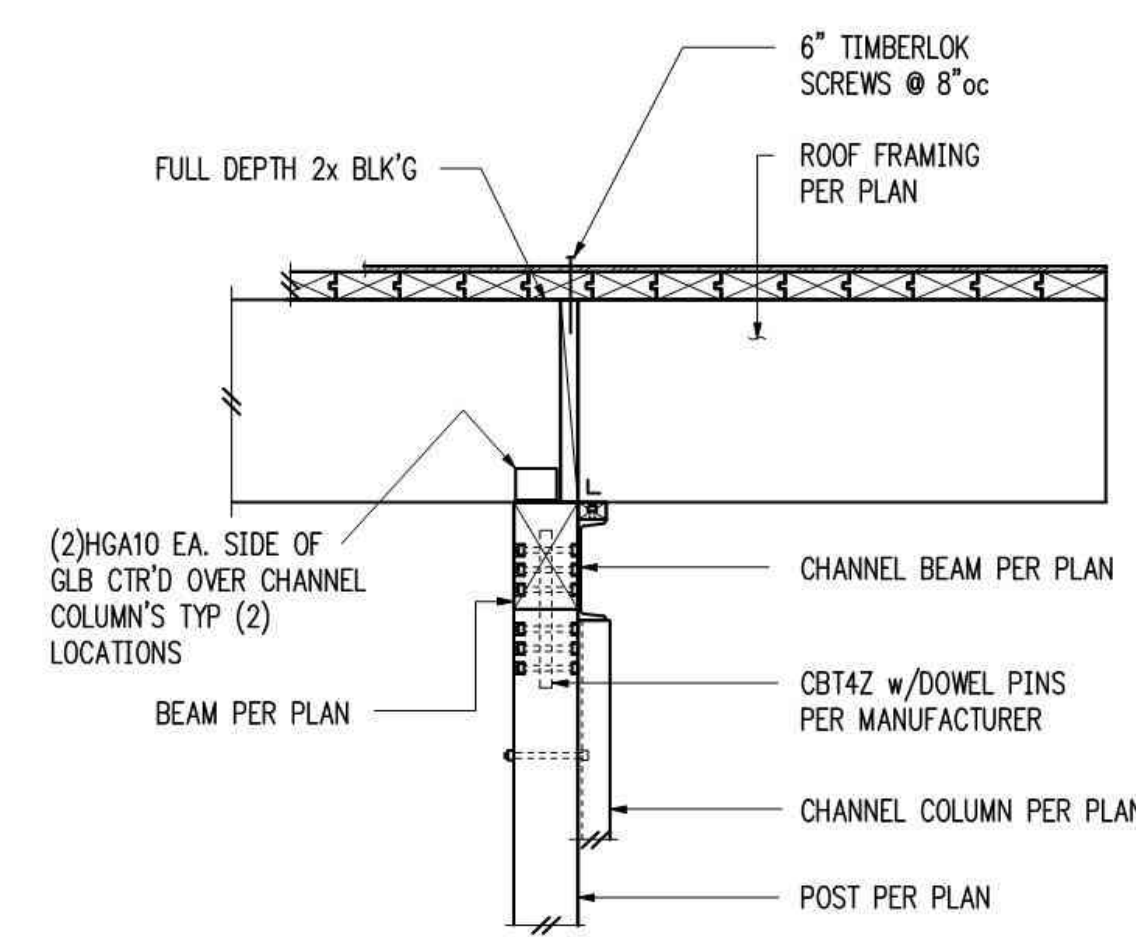
NOTE: WOOD FRAMING NOT SHOWN FOR CLARITY

Moment Frame "A"  
View Looking West

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

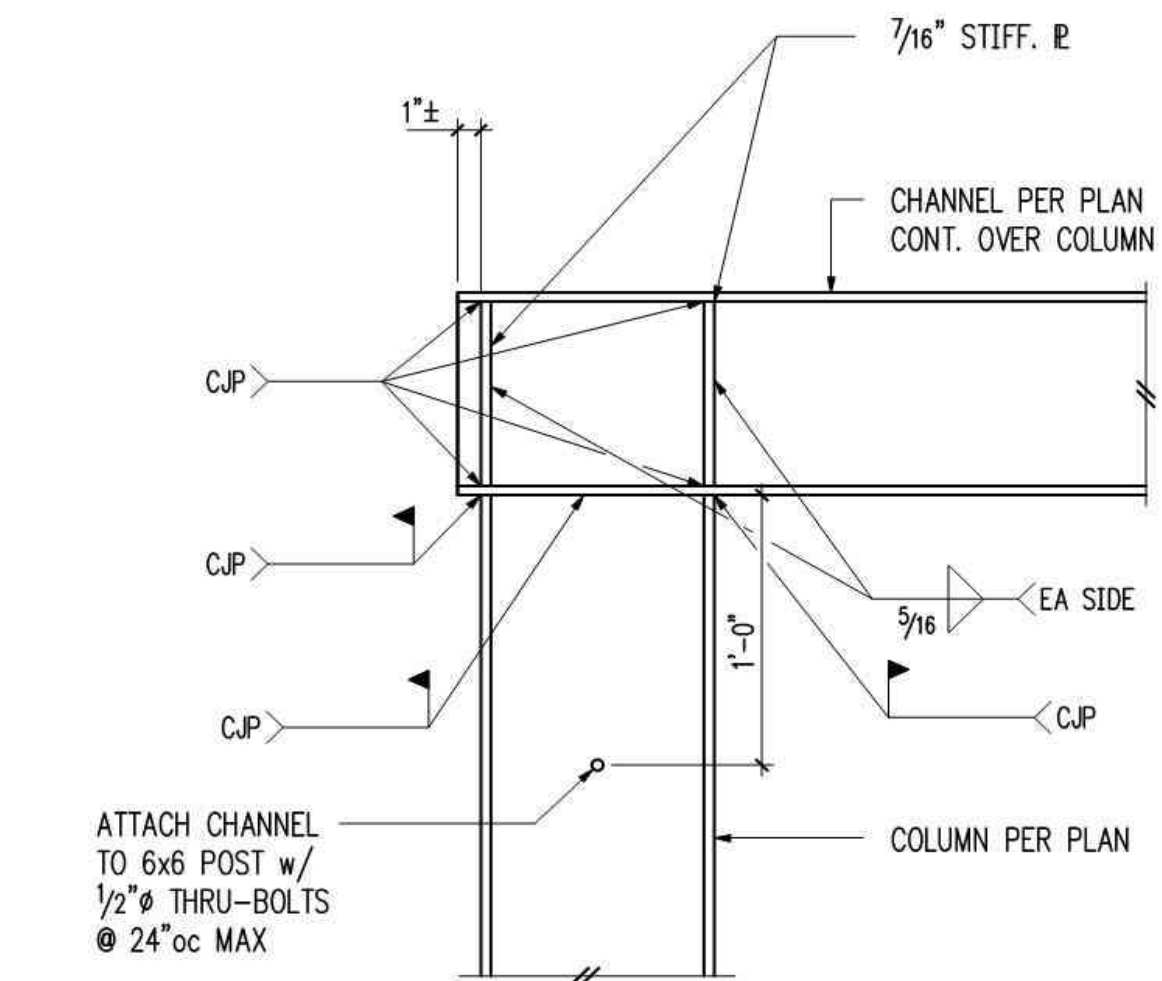
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Scale : 3/4" = 1'-0"

7



Scale : 1 1/2" = 1'-0"

9

10

11

12



04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

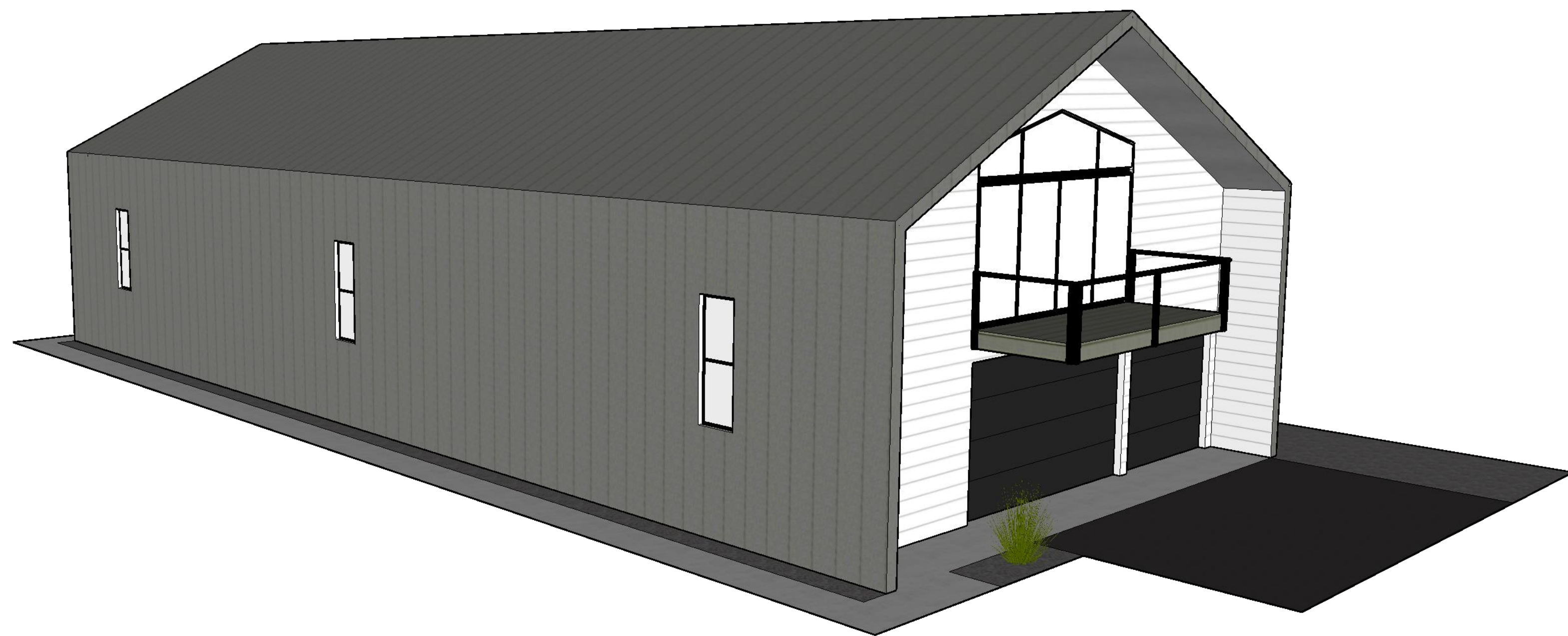
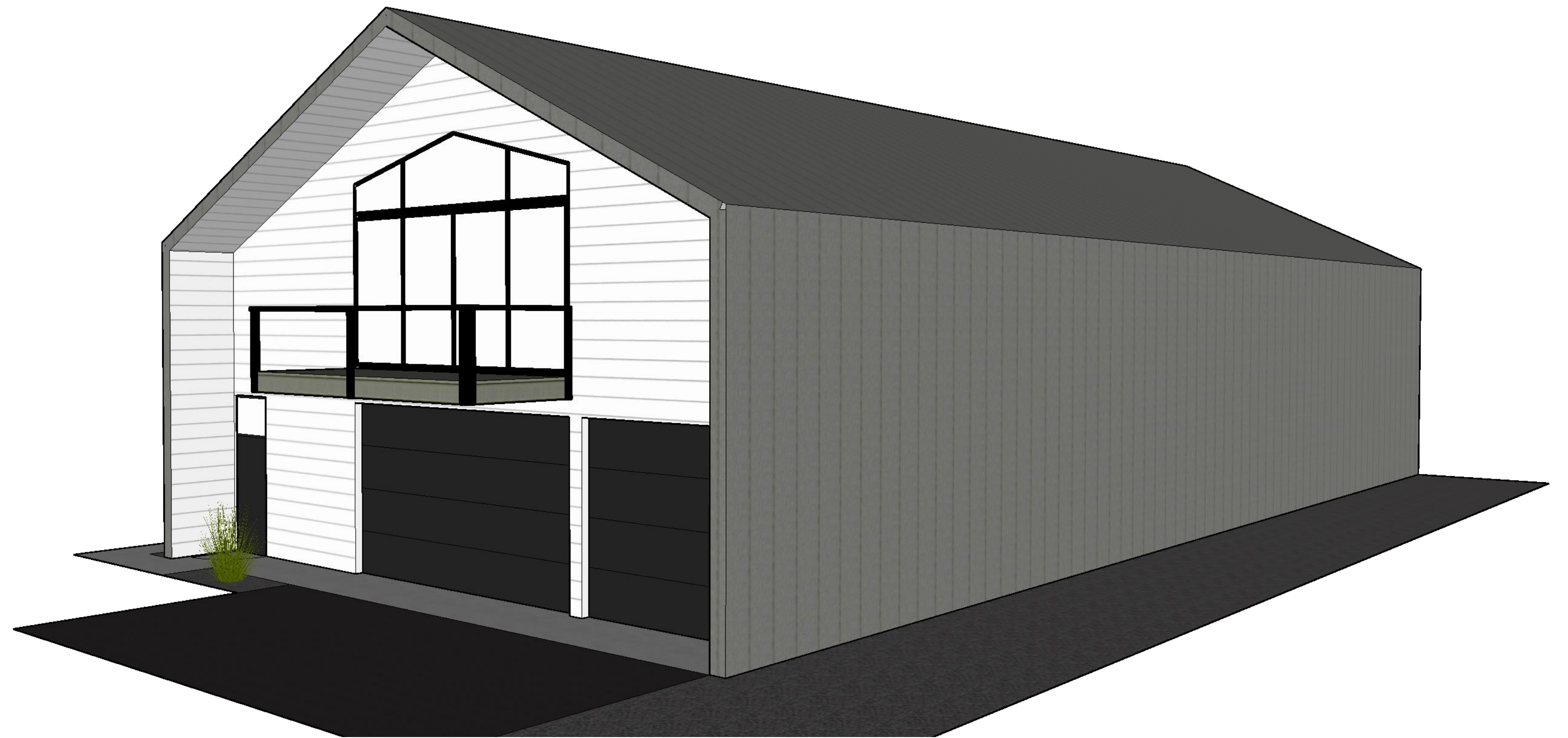
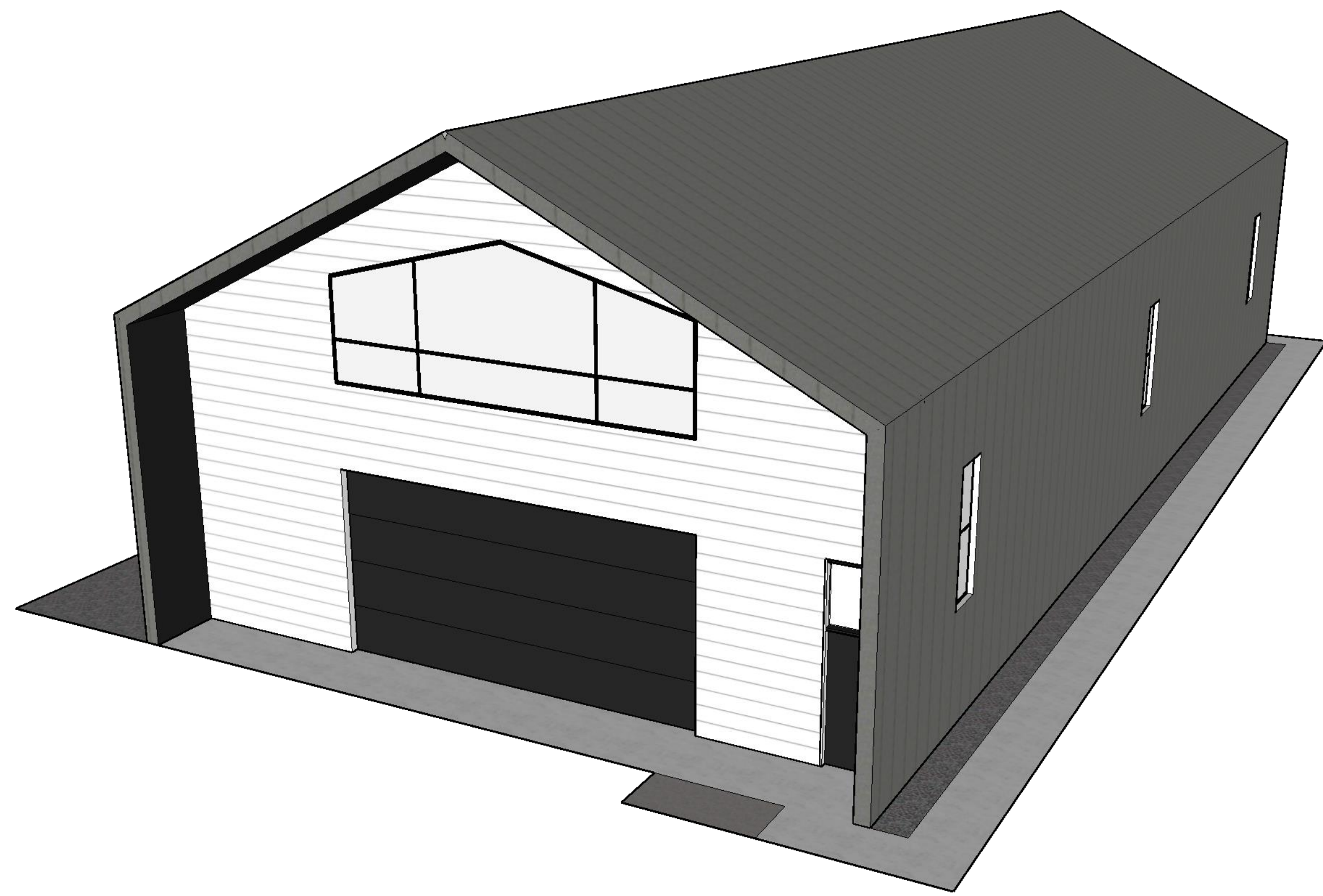
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Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

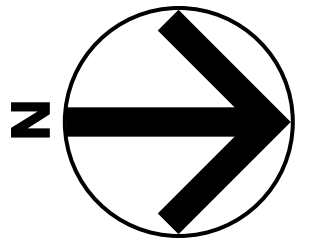
REVISIONS:

SHEET TITLE:  
**Moment Frame  
Elevation &  
Details**

SCALE:	as shown
DATE:	4-2-20
PROJECT NO:	
SHEET NO:	

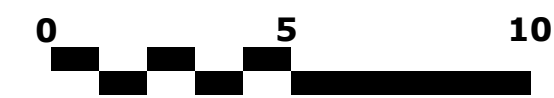
S6.01





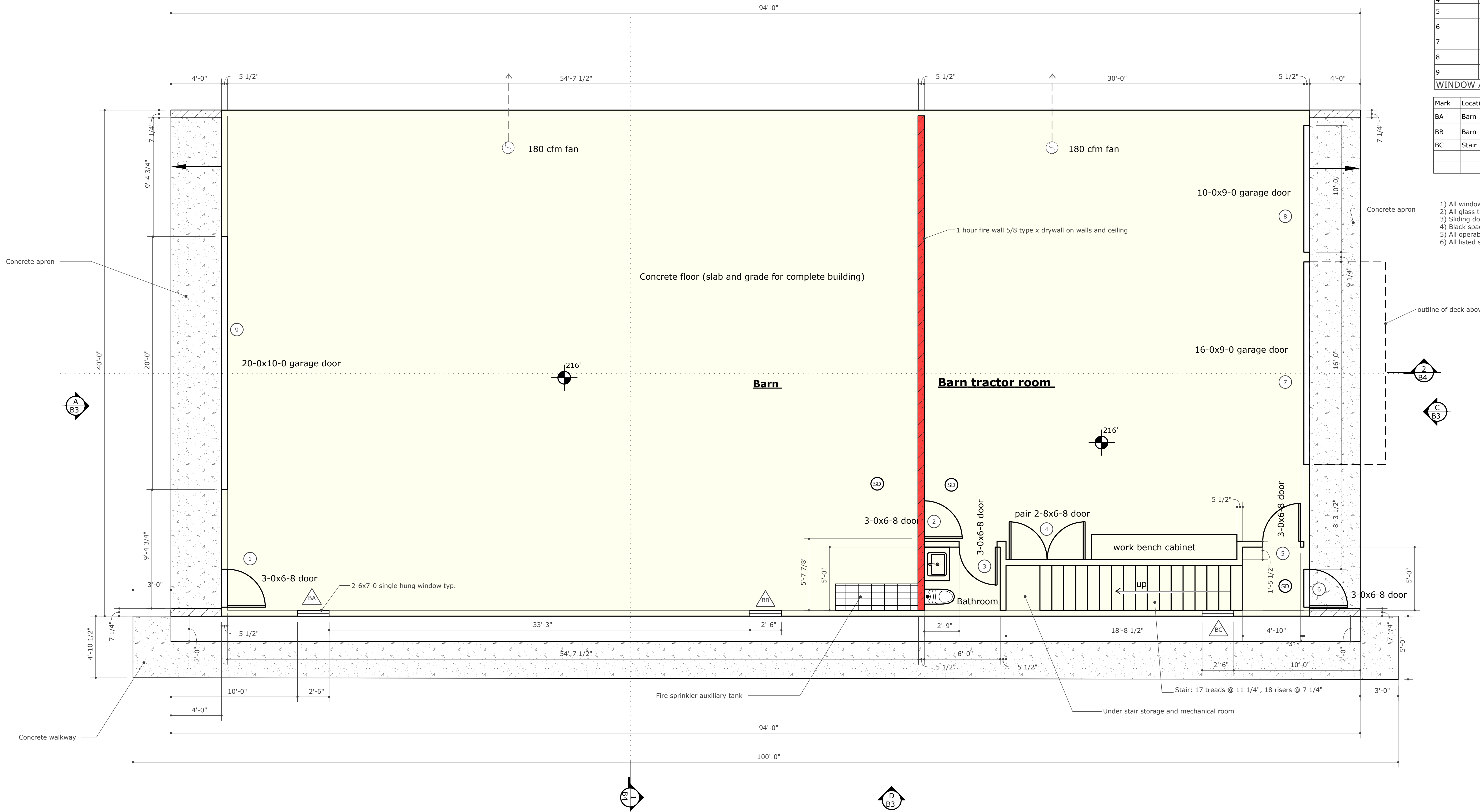
**Barn Lower Floor**

1/4" per foot scale



**B**  
**1**

**B**  
**B3**



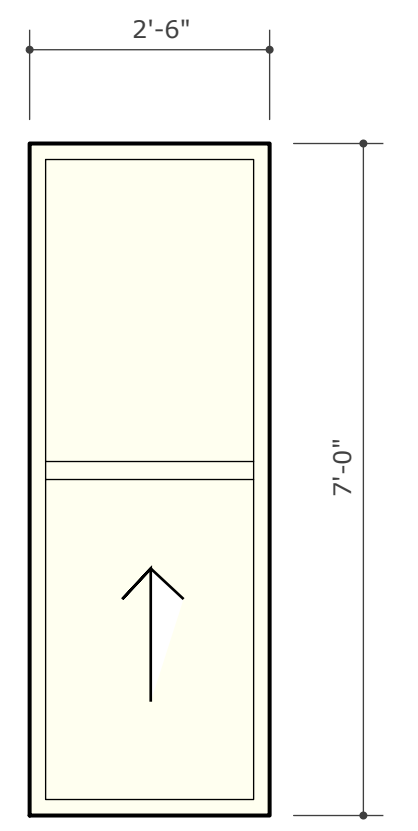
**DOOR SCHEDULE**

Mark	Location	Size	Style	Swing	Notes
1	Entry	3-0x6-8	Full Lite	LH	Transom above
2	Tractor room	3-0x6-8	Flush Wood	LH	60 minute fire rated
3	Bathroom	3-0x6-8	Flush Wood	RH	
4	Mech. Closet	2-6x6-8	Flush Wood	Pair	
5	Stair	3-0x6-8	Flush Wood	LH	60 minute fire rated
6	North Entry	3-0x6-8	Flush Wood	LH	Transom above
7	Garage door	16-0x9-0	Flush Steel	Overhead	Jackshaft opener
8	Garage door	10-0x9-0	Flush Steel	Overhead	Jackshaft opener
9	Garage door	20-0x10-0	Flush Steel	Overhead	Jackshaft opener

**WINDOW AND SLIDING DOOR SCHEDULE**

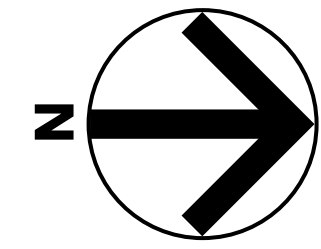
Mark	Location	Size WxH	Style	SF	U-value	Default	Safety glass
BA	Barn	2-6x7-0	single hung	17.5		.30	n
BB	Barn	2-6x7-0	single hung	17.5			n
BC	Stair	2-6x7-0	single hung	17.5			n
				52.5			

- 1) All windows and sliding doors to be Marvin Modern Series ebony interior and exterior
- 2) All glass to be double pane with Low E Coating
- 3) Sliding doors to have low profile thresholds in Ebony color
- 4) Black spacer bars on all windows and doors
- 5) All operable windows (awnings and casements) to be push out operation
- 6) All listed sizes are in actual frame dimensions (rough opening to be sized 3/4" larger)



**West windows**

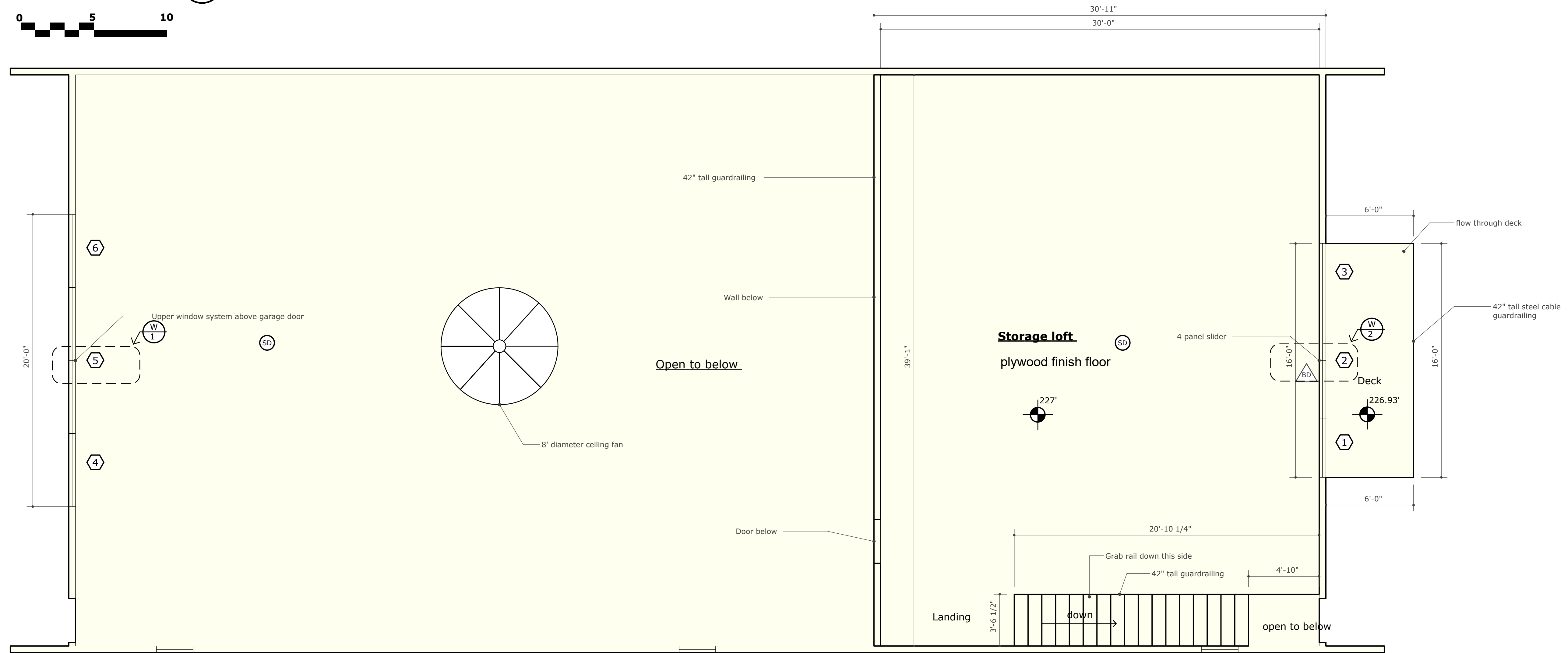
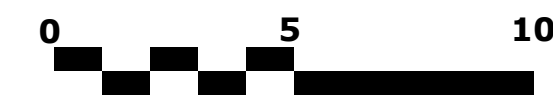
1/2" per foot scale



**Barn Upper Floor**

1/4" per foot scale

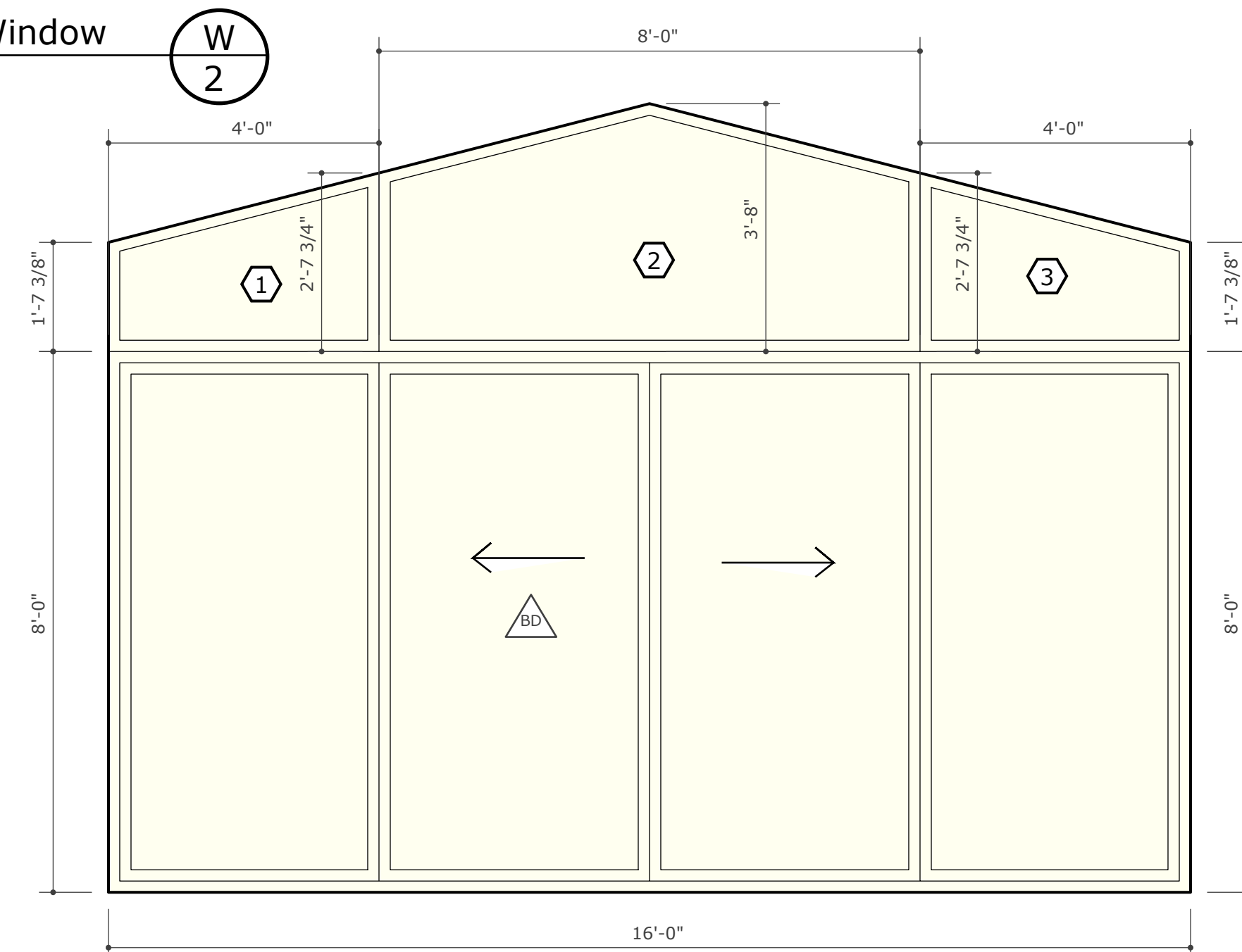
**B**  
**2**



**Barn North Window**

1/2" per foot scale

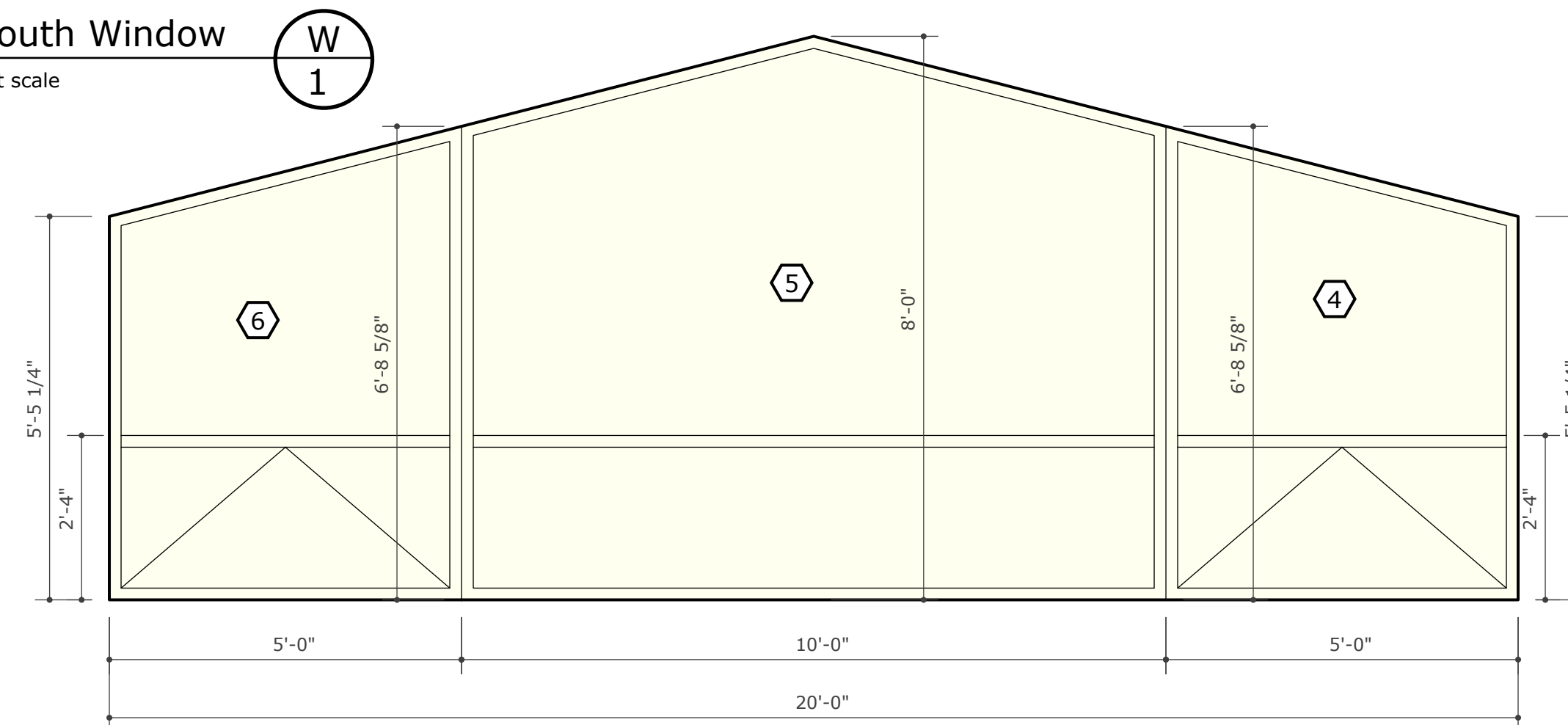
**W**  
**2**



**Barn South Window**

1/2" per foot scale

**W**  
**1**



**WINDOW AND SLIDING DOOR SCHEDULE**

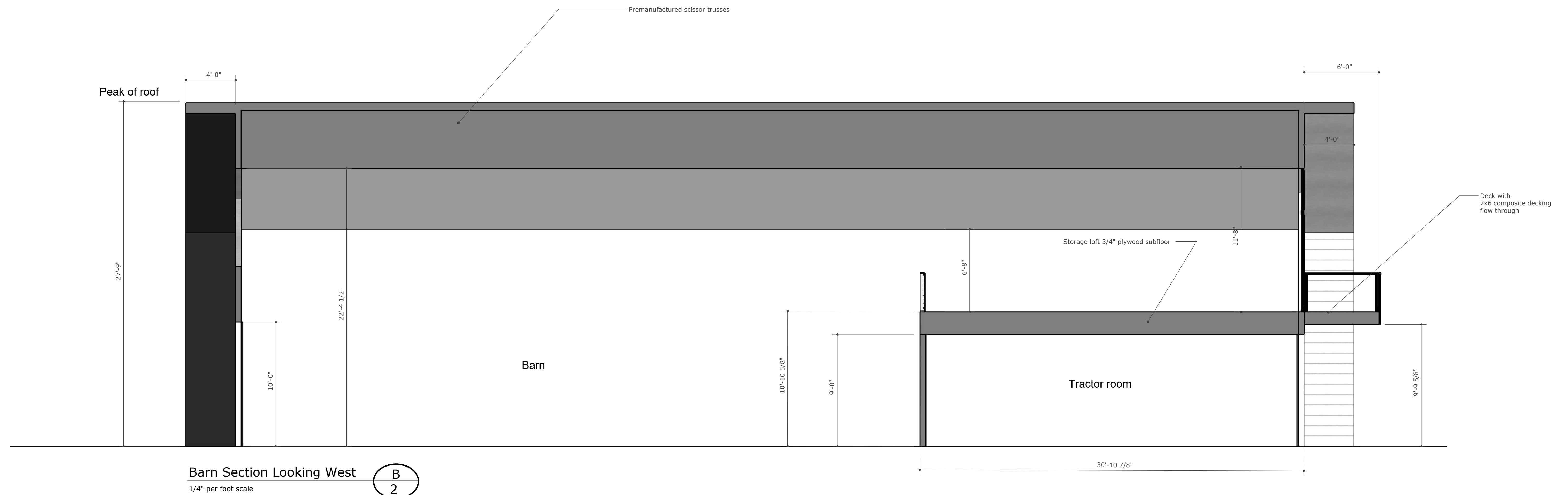
Mark	Location	Size WxH	Style	SF	U-value	Default	Safety glass
BD	Loft	16-0x8-0	4 panel sliding door	128		.30	Y
1	Loft	drawing	Pic	17.5			n
2	Loft		Pic	17.5			n
3	Loft		Pic				
4	Barn		Pic over awning				
5	Barn		Pic				
6	Barn		Pic over awning				
				52.5			

- 1) All windows and sliding doors to be Marvin Modern Series ebony interior and exterior
- 2) All glass to be double pane with Low E Coating
- 3) Sliding doors to have low profile thresholds in Ebony color
- 4) Black spacer bars on all windows and doors
- 5) All operable windows (awnings and casements) to be push out operation
- 6) All listed sizes are in actual frame dimensions (rough opening to be sized 3/4" larger)

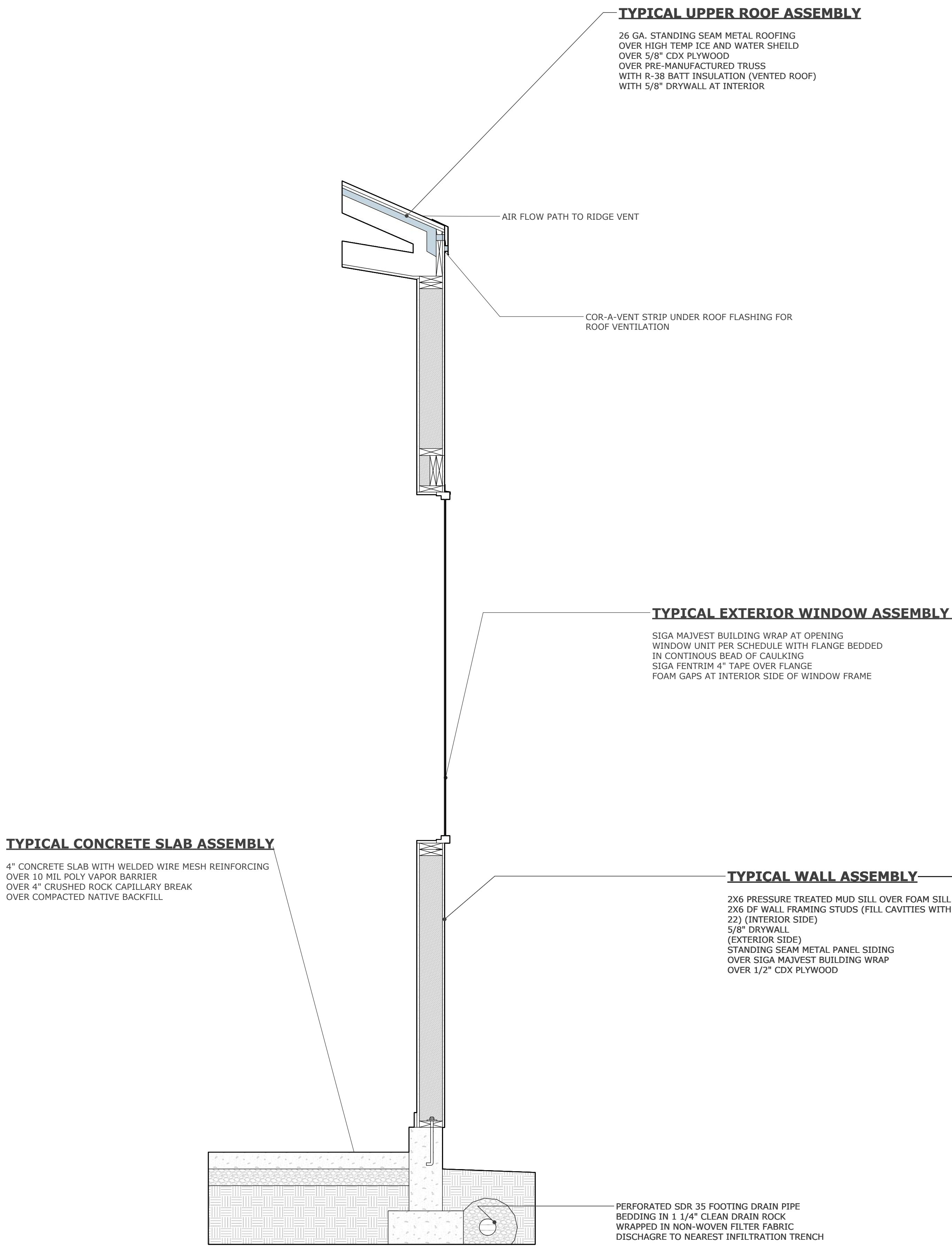




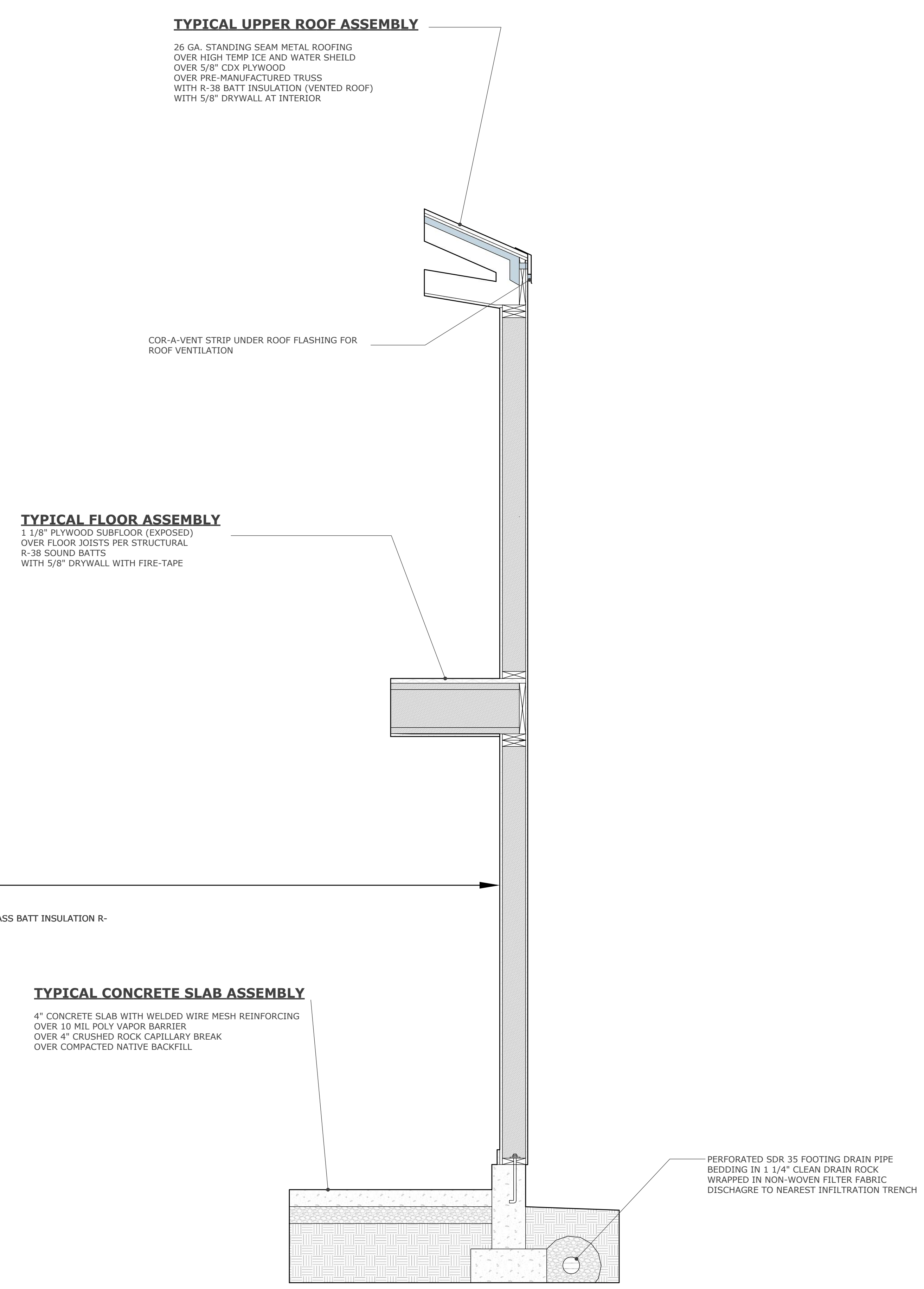
Barn Section Looking North B  
1  
1/4" per foot scale



Barn Section Looking West B  
2  
1/4" per foot scale



**TYPICAL ROOF/WALL ASSEMBLY AT BARN** 1  
3/4" per foot scale



**TYPICAL ROOF/WALL/FLOOR ASSEMBLY AT BARN** 2  
3/4" per foot scale

# GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

## CRITERIA

1. ALL MATERIALS WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2015 INTERNATIONAL BUILDING CODE (IBC).

## 2. DESIGN LOADING CRITERIA

### SNOW LOAD

Pf = 25 PSF

### WIND (MAIN WIND FORCE RESISTING SYSTEM)

Vult = 110 MPH  
Vosd = 85 MPH  
IMPORTANCE FACTOR, Iw= 1.0  
RISK CATEGORY = II  
TOPOGRAPHIC FACTOR, Kzt = 1.0  
EXPOSURE CATEGORY = B  
INTERNAL PRESSURE COEFFICIENT, Ccpi = 0.18  
= 17.30  
= 7.40

### WIND BASE SHEAR (ULTIMATE, LONG DIRECTION)

### WIND BASE SHEAR (ULTIMATE, SHORT DIRECTION)

Ss = 1.226  
Sds = 0.825  
S1 = 0.466  
Sd1 = 0.477  
IMPORTANCE FACTOR, Ie= 1.0  
SITE CLASS D  
SEISMIC DESIGN CATEGORY= D  
RISK CATEGORY = II  
R = 6.5 FOR LIGHT FRAME WOOD WALLS  
SHEATHED WITH WOOD STRUCTURAL PANELS  
OVER STRENGTH FACTOR, C2 o = 2.5  
DEFLECTION AMPLIFICATION FACTOR, Cd = 4  
REDUNDANCY FACTOR = 1.0  
SEISMIC RESPONSE COEFFICIENT, Cs = 0.127  
SEISMIC BASE SHEAR = 11.9 KIP

### EARTHQUAKE (EQUIVALENT LATERAL FORCE PROCEDURE)

(BASED ON 2008 USGS HAZARD DATA)

## SEE PLANS FOR ADDITIONAL LOADING CRITERIA

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

4. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.

5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

9. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

## GEOTECHNICAL

10. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND, THEREFORE, MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE, UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

ALLOWABLE SOIL PRESSURE	2,000 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	60 PCF/35 PCF
LATERAL EARTH PRESSURE (SEISMIC)	7H (ULTIMATE LOAD)
PASSIVE EARTH PRESSURE (INCLUDES FACTOR OF SAFETY = 1.5)	350 PCF
COEFFICIENT OF FRICTION (INCLUDES FACTOR OF SAFETY = 1.5)	0.35

## CONCRETE

11. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED, AND PLACED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE SECTION 1905 AND ACI 301-11. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF  $f_c = 3,000$  PSI, SHALL CONTAIN NO LESS THAN 5 1/2 SACKS OF CEMENT, HAVE A MAXIMUM WATER / CEMENT RATIO OF 0.45, AND A SLUMP OF 5" OR LESS. CONCRETE HAS BEEN DESIGNED USING 2,500 PSI PER INTERNATIONAL BUILDING CODE SECTION 1705.3 EXCEPTION 2.3 TO AVOID SPECIAL INSPECTIONS.

ALTERNATE MIX DESIGNS NOT MEETING THE REQUIREMENTS ABOVE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD, AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH CHAPTER 5 OF ACI 318-11.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494M, AND C618. UNLESS OTHERWISE NOTED THE TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE 5% IN ACCORDANCE EXPOSURE CLASS F1 PER ACI 318-11 TABLE 4.3.1 AND TABLE 4.4.1.

12. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENTS S1), GRADE 60, fy = 60,000 PSI.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185

13. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI SP-66-04 AND 318-11. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 48 BAR DIAMETERS OR 2'-0" MINIMUM. A MAXIMUM OF ONE HALF OF THE TOTAL REINFORCEMENT SHALL BE LAPPED WITH THE REQUIRED LAP LENGTH. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. FIELD BENDING OF GRADE 60 REINFORCEMENT SHALL NOT BE ALLOWED.

14. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
ALL OTHER SURFACES	1-1/2"

15. SLABS-ON-GRADE: UNLESS NOTED OTHERWISE SHALL BE 4" CONCRETE, REINFORCED WITH 6X6 W1.4XW1.4 WELDED WIRE FABRIC CENTERED IN SLAB. UNLESS OTHERWISE DIRECTED BY SOILS ENGINEER PROVIDE MINIMUM 10 MIL VAPOR BARRIER OVER 4" OF COMPACTED SAND OR GRAVEL.

16. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES.

## WOOD

17. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17, LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS.

### JOISTS:

(2X, 3X, AND 4X MEMBERS)

HEM-FIR NO. 2  
MINIMUM BASE VALUE, Fb = 850 PSI

BEAM AND STRINGERS:  
(6 X AND LARGER MEMBERS)

DOUGLAS FIR NO. 1  
MINIMUM BASIC DESIGN STRESS, Fb = 1,350 PSI

POSTS AND TIMBERS:  
(6 X AND LARGER MEMBERS)

DOUGLAS FIR NO. 1  
MINIMUM BASIC DESIGN STRESS, Fb = 1,200 PSI, FC = 1,000 PSI

STUDS PLATES & MISCELLANEOUS LIGHT FRAMING

DOUGLAS FIR LARCH OR HEM-FIR NO. 2, Fb = 850 PSI, FC = 1,300 PSI

18. GLUED LAMINATED MEMBERS SHALL BE FABRICATED AND IDENTIFIED AS REQUIRED BY ASTM D3737 AND A.I.T.C. A1901. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. IN ADDITION, ALL GLULAMS SHALL CONFORM TO APA PERFORMANCE STANDARD PRG-305. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800,000 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800,000 PSI. UNLESS OTHERWISE NOTED CAMBER ALL GLULAM BEAMS TO 2,000 FOOT RADIUS. WHERE REQUIRED BEAMS AND COLUMNS SHALL BE PRESSURE TREATED AFTER MANUFACTURE IN ACCORDANCE WITH AMERICAN WOOD-PRESERVATIVES ASSOCIATION STANDARD U1.

19. PARALLEL STRAND LUMBER (PSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED I.C.C.-E.S. EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: Fb = 2900 PSI, E = 2,200,000 PSI, Fv = 290 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

20. LAMINATED STRAND LUMBER (LSL): EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, PRODUCT DESIGNATION OR TYPE, THE PRODUCTION DATE, SPECIES OR SPECIES GROUP DESIGNATION, AND THE QUALITY CONTROL AGENCY. MEMBERS SHALL BE GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. STRUCTURAL CAPACITIES SHALL BE ESTABLISHED IN ACCORDANCE WITH ASTM D5456 AND PRODUCT SHALL HAVE AN APPROVED I.C.C.-E.S. EVALUATION REPORT. MEMBERS SHALL BE TRANSPORTED AND STORED PER MANUFACTURERS RECOMMENDATIONS AND SHALL NOT BE EXPOSED TO PROLONGED MOISTURE. MINIMUM REQUIRED DESIGN PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1,550,000 PSI.

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY WEYERHAEUSER. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

21. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOIST MANUFACTURED BY THE WEYERHAEUSER. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

22. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1-09 OR PS 2-10 AND AMERICAN PLYWOOD ASSOCIATION PERFORMANCE STANDARD PRP-108. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY.

23. ALL WOOD PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE, PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC. AND CONCRETE OR MASONRY.

PRESSURE TREATED LUMBER SHALL COMPLY WITH THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD U1, COMMODITY SPECIFICATION A OR HAVE EQUIVALENT ICC-ES APPROVAL.

24. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON AND MAXIMUM NUMBER OF NAILS AS SPECIFIED BY THE MANUFACTURER SHALL BE PROVIDED. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL SAWN LUMBER JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS AND ALL PREFABRICATED PLYWOOD WEB JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS UNLESS NOTED OTHERWISE.

ALL CONNECTIONS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD, SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. HOT DIPPED GALVANIZED FASTENERS SHOULD CONFORM TO ASTM STANDARD 153, AND HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM STANDARD A653 (CLASS C-185). STAINLESS STEEL FASTENERS AND CONNECTORS SHOULD BE TYPE 304 OR 316. NOTE: ELECTROPLATED GALVANIZED FASTENERS AND CONNECTORS ARE NOT TO BE USED WITH PRESSURE TREATED WOOD. SIMPSON PRODUCT FINISHES CORRESPONDING TO THE ABOVE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND S53300 (STAINLESS STEEL). STAINLESS STEEL HARDWARE AND FASTENERS SHALL NOT BE COMBINED WITH UNTREATED OR GALVANIZED MATERIAL.

## 25. WOOD FASTENERS:

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d	3-1/2"	0.162"

DESIGN IS BASED ON COMMON STEEL WIRE NAILS MEETING THE REQUIREMENTS OF ASTM F1667. USE OF ALTERNATE FASTENERS MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.

B. NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

26. WOOD FRAMING NOTES - THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.9.1 OF THE INTERNATIONAL BUILDING CODE. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE AS SPECIFIED ABOVE. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF BOLTS AND LAG SCREWS SHALL CONFORM TO SECTIONS 11.1.2 AND 11.1.3 OF THE 2015 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. NATURALLY DURABLE OR PRESSURE TREATED WOOD SHALL BE PROVIDED WHERE REQUIRED BY SECTION 2304.11 OF THE INTERNATIONAL BUILDING CODE.

B. WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2X6 AT 16" O.C. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2 x 8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED AND SHALL BEAR FULLY ON A MINIMUM OF TWO STUDS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE SOLID BLOCKING BETWEEN STUDS AT MID-HEIGHT OF ALL STUD WALLS OVER 10' IN HEIGHT.

STUDS MAY BE NOTCHED, CUT, OR PENETRATED WITH ROUND BORED HOLES AS FOLLOWS:

STUD SIZE	MAXIMUM NOTCH / CUT	MAXIMUM BORED HOLE
2X4	7/8"	1-3/8"
2X6	1-3/8"	2-1/8"

BORED HOLES SHALL NOT BE LOCATED WITH 5/8" FROM THE EDGE OF THE STUD OR AT THE SAME LOCATION AS A NOTCH OR CUT.

WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d AT 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS AT 4" O.C. EACH SIDE OF JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7" MINIMUM EMBEDMENT) @ 4'-0" O.C. UNLESS INDICATED OTHERWISE. PROVIDE 3"x3" x1/4" HOT-DIPPED GALVANIZED PLATE WASHERS AT ALL ANCHOR BOLTS. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d NAILS @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH NAILS AT 7" O.C. USE 5d COOLER NAILS FOR 1/2" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 15/32" APA RATED SHEATHING (SPAN RATING 24/0) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UNSUPPORTED EDGES), TOP AND BOTTOM PLATES WITH 8d NAILS @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH NAILS @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS.

NOTCHES AT THE END OF JOISTS AND RAFTERS SHALL NOT EXCEED 1/4 THE DEPTH OF THE MEMBER. NOTCHES IN THE TOP OR BOTTOM SHALL NOT EXCEED 1/6 THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN THE MIDDLE 1/3 OF THE SPAN. THE DIAMETER OF ROUND HOLES BORED IN JOISTS AND RAFTERS SHALL NOT EXCEED 1/3 OF THE DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED WITHIN 2" FROM THE TOP OR BOTTOM EDGE.

TOENAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH TWO ROWS OF 16d @ 12" O.C. ATTACH RAFTERS AT BEARING LINES WITH H2.5 @ 24" O.C. UNLESS OTHER METAL CONNECTIONS ARE PROVIDED.

UNLESS OTHERWISE NOTED ON THE PLANS, APA RATED ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND NAILED WITH NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF ALL ROOF AND FLOOR SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" O.C. UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PLYWOOD PANEL EDGES AND NAIL WITH EDGE NAILING SPECIFIED.

BYKONEN  
CARTER  
QUINN

STRUCTURAL  
ENGINEERING



04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

## PROJECT TITLE:

Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

## REVISIONS:

## SHEET TITLE:

General  
Structural  
Notes

SCALE: as shown

DATE: 4-2-20

PROJECT NO:

SHEET NO:

\$1.00



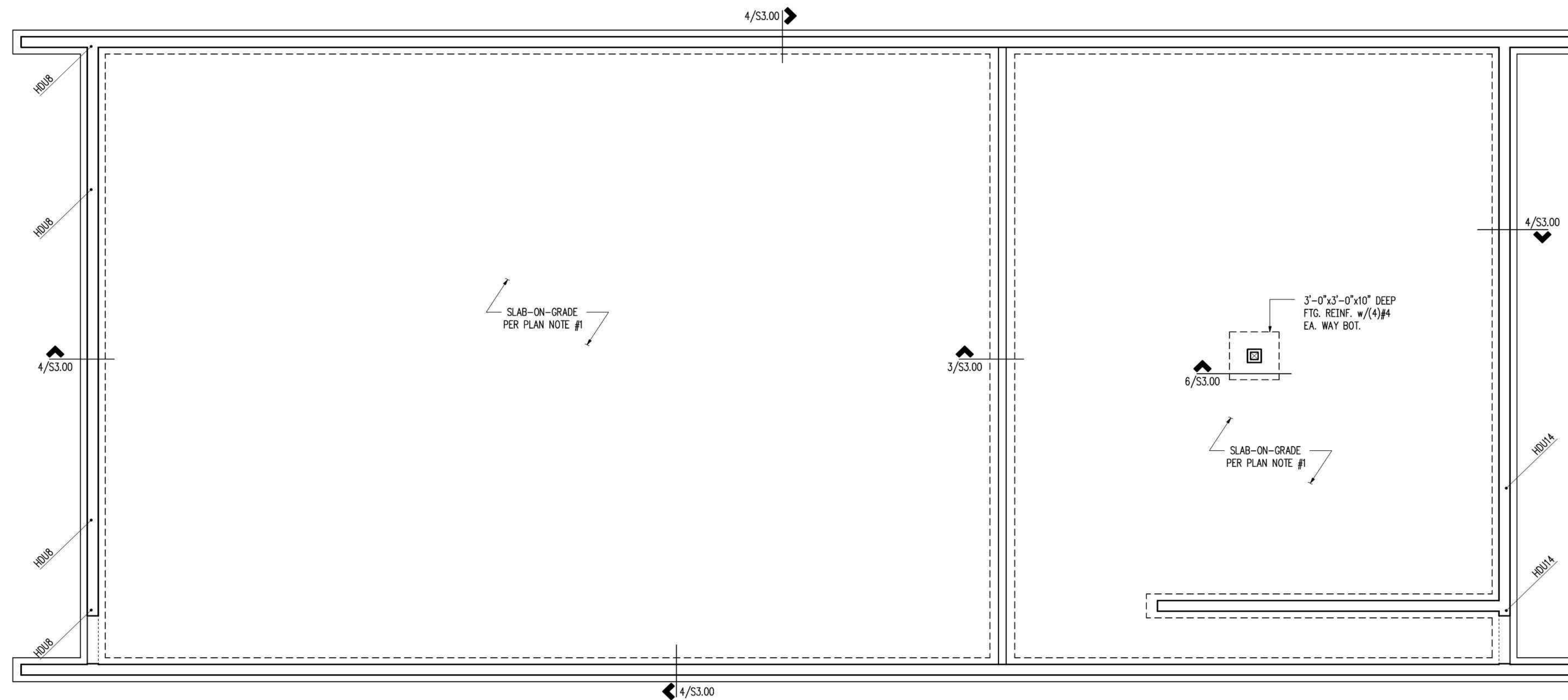


04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

REVISIONS:



**LEGEND**

INDICATES HOLD-DOWN PER SCHEDULE 8/S3.00

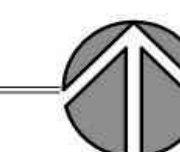
**FOUNDATION PLAN NOTES**

1. ALL SLABS-ON-GRADE SHALL BE 4" REINFORCED WITH W#6X6 W1.4XW1.4 U.N.O. PROVIDE MINIMUM 6-MIL VISQUEEN VAPOR BARRIER UNDER ALL SLABS. SLABS SHALL BE SUPPORTED ON A MINIMUM 4 INCHES OF FREE DRAINING MATERIAL.
2. ALL ANCHORS TO BE INSTALLED AS REQUIRED BY MANUFACTURER. MINIMUM (2) 2x STUDS UNLESS OTHERWISE NOTED ON HOLD-DOWN SCHEDULE.

SHEET TITLE:	Foundation Plan
SCALE:	as shown
DATE:	4-2-20
PROJECT NO:	
SHEET NO:	

**Foundation Plan**

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



**S2.00**

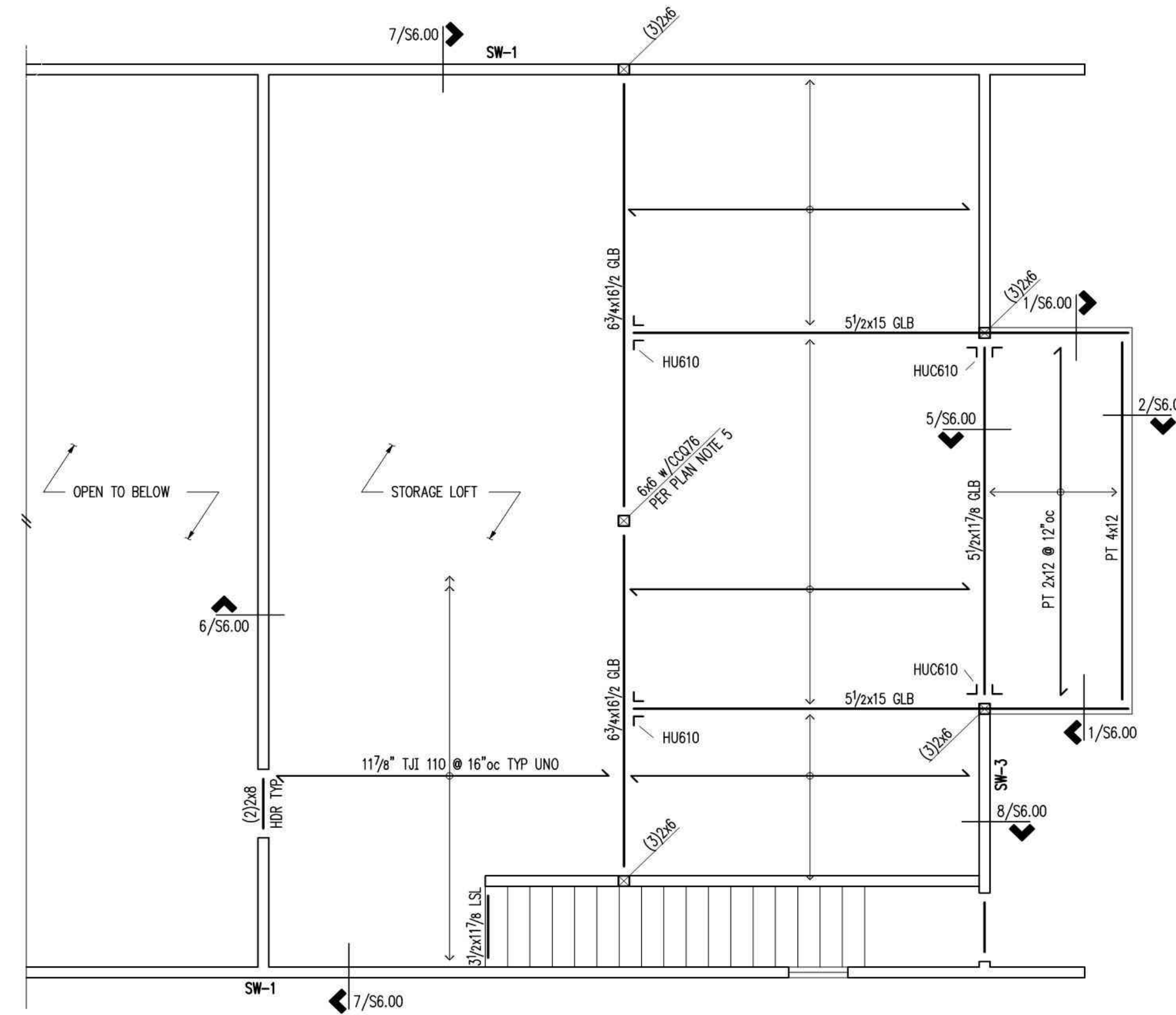


04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

REVISIONS:



**FLOOR FRAMING PLAN NOTES**

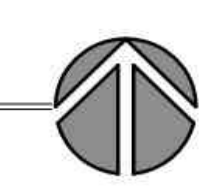
1. FLOOR SHEATHING SHALL BE 1 1/8" APA RATED SHEATHING WITH A PANEL INDEX OF 40/20. NAIL TO FRAMING WITH 10d COMMON NAILS AT 6" OC AT PANEL EDGES AND 12" OC IN FIELD UNLESS NOTED OTHERWISE ON PLANS.
2. ALL HEADERS AND BEAMS SHALL BE (2) 2x8 MINIMUM, U.N.O. REFER TO NOTE 3 FOR SUPPORT REQUIREMENTS.
3. ALL COLUMNS SHALL BE DOUBLE STUD MINIMUM, U.N.O., WITH THE BEAM OR HEADER BEARING FULLY ON THE COLUMN. INDIVIDUAL STUDS SHALL BE NAILED TOGETHER PER THE GENERAL STRUCTURAL NOTES.
4. EXTERIOR WALL SHEATHING SHALL BE 15/32" APA RATED SHEATHING WITH A PANEL INDEX OF 24/0 (ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING, AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD AT CONTRACTOR'S OPTION).
5. 6 3/4 x 16 1/2 GLB HAS BEEN DESIGNED FOR A MAXIMUM SPAN OF 19'-0". POST LOCATION MAY BE MOVED IF DESIRED IN ACCORDANCE WITH MAXIMUM GLB SPAN.

SHEET TITLE:  
**Loft Framing Plan**

SCALE:	as shown
DATE:	4-2-20
PROJECT NO:	
SHEET NO:	

**Loft Framing Plan**

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



**S2.01**

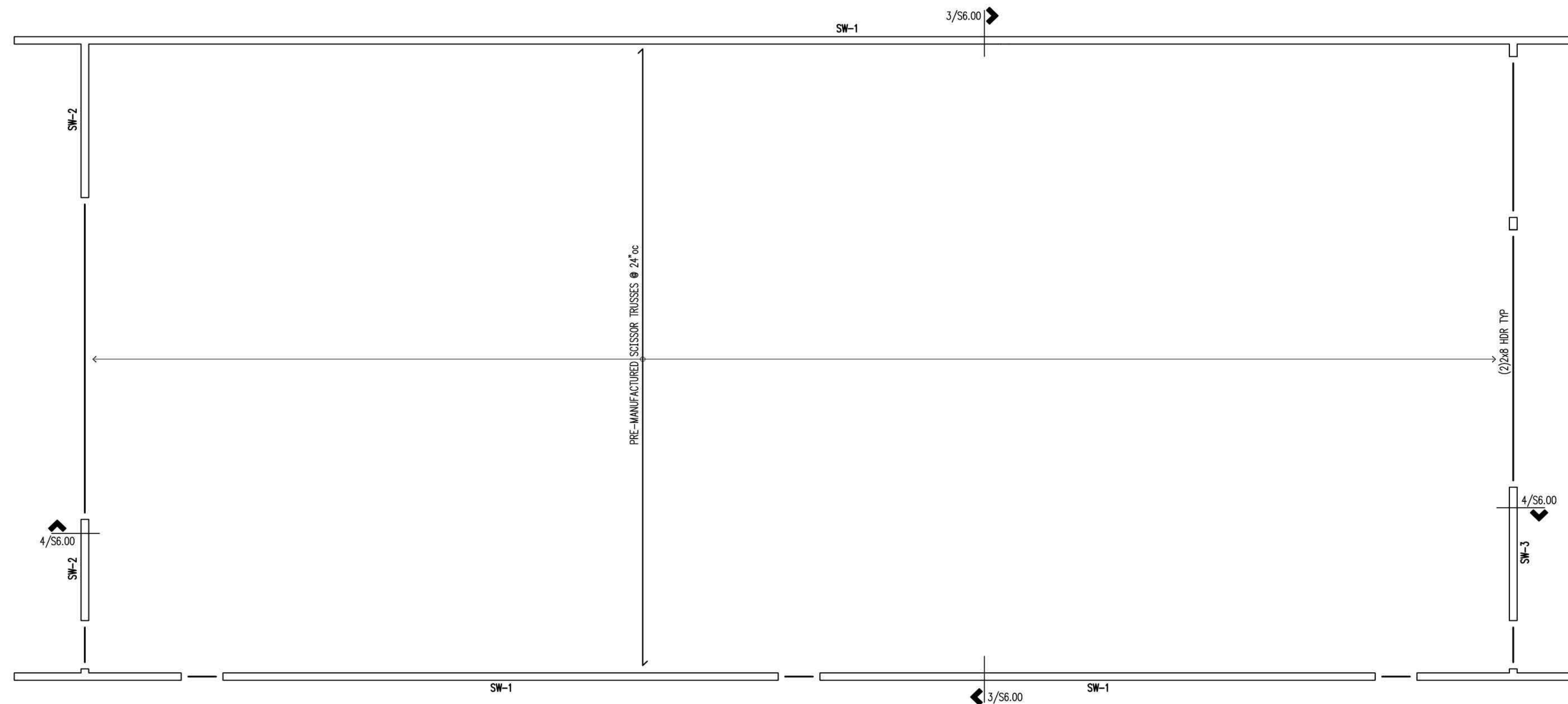


04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

REVISIONS:



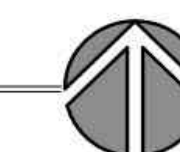
**ROOF FRAMING PLAN NOTES**

1. ROOF SHEATHING SHALL BE 15/32" APA RATED SHEATHING WITH A PANEL INDEX OF 24/0. NAIL TO FRAMING WITH 8d COMMON NAILS AT 6" OC AT PANEL EDGES AND 12" OC IN FIELD UNLESS NOTED OTHERWISE ON PLANS. WHERE NOTED ON THE PLANS ALL PANEL EDGES SHALL BE BLOCK WITH MINIMUM 2X MATERIAL.
2. ALL HEADERS AND BEAMS SHALL BE (2) 2x8 MINIMUM, U.N.O. REFER TO NOTE 3 FOR SUPPORT REQUIREMENTS.
3. ALL COLUMNS SHALL BE DOUBLE STUD MINIMUM, U.N.O., WITH THE BEAM OR HEADER BEARING FULLY ON THE COLUMN. INDIVIDUAL STUDS SHALL BE NAILED TOGETHER PER THE GENERAL STRUCTURAL NOTES.
4. EXTERIOR WALL SHEATHING SHALL BE 15/32" APA RATED SHEATHING WITH A PANEL INDEX OF 24/0 (ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING, AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD AT CONTRACTOR'S OPTION).
5. EXTERIOR WALL FRAMING SHALL BE 2X6 @ 12"oc.

SHEET TITLE:	Roof Framing Plan
SCALE:	as shown
DATE:	4-2-20
PROJECT NO:	
SHEET NO:	

**Roof Framing Plan**

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



**S2.02**



04/02/2020

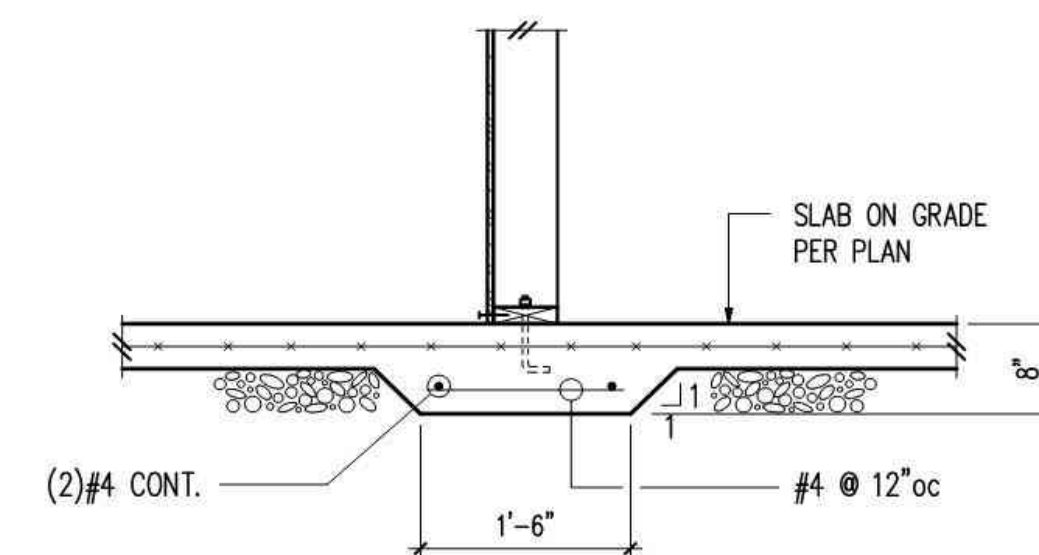
DRAWN: ATC  
DESIGN: SSN  
CHECKED: NN  
APPROVED: NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

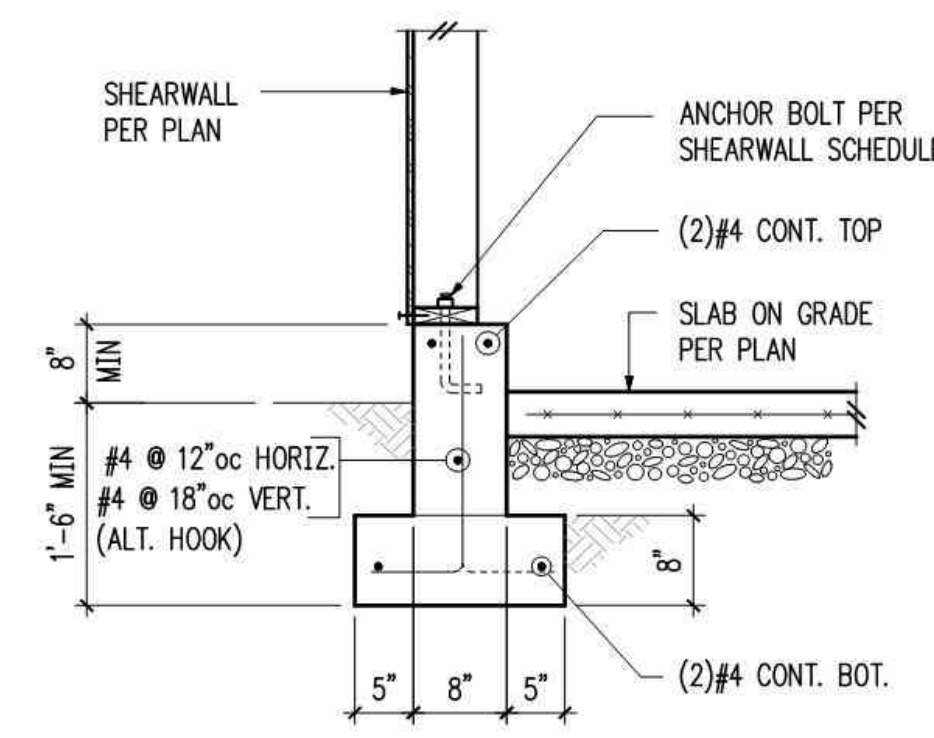
REVISIONS:

SHEET TITLE:  
**Concrete  
Details**  
SCALE: as shown  
DATE: 4-2-20  
PROJECT NO:  
SHEET NO:

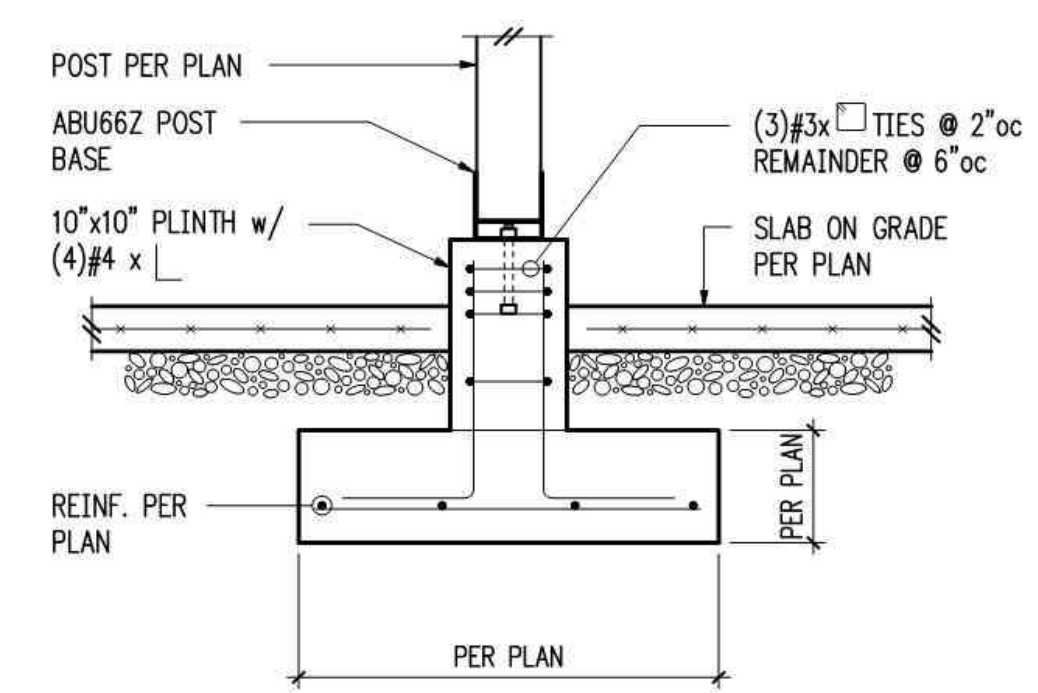
**S3.00**



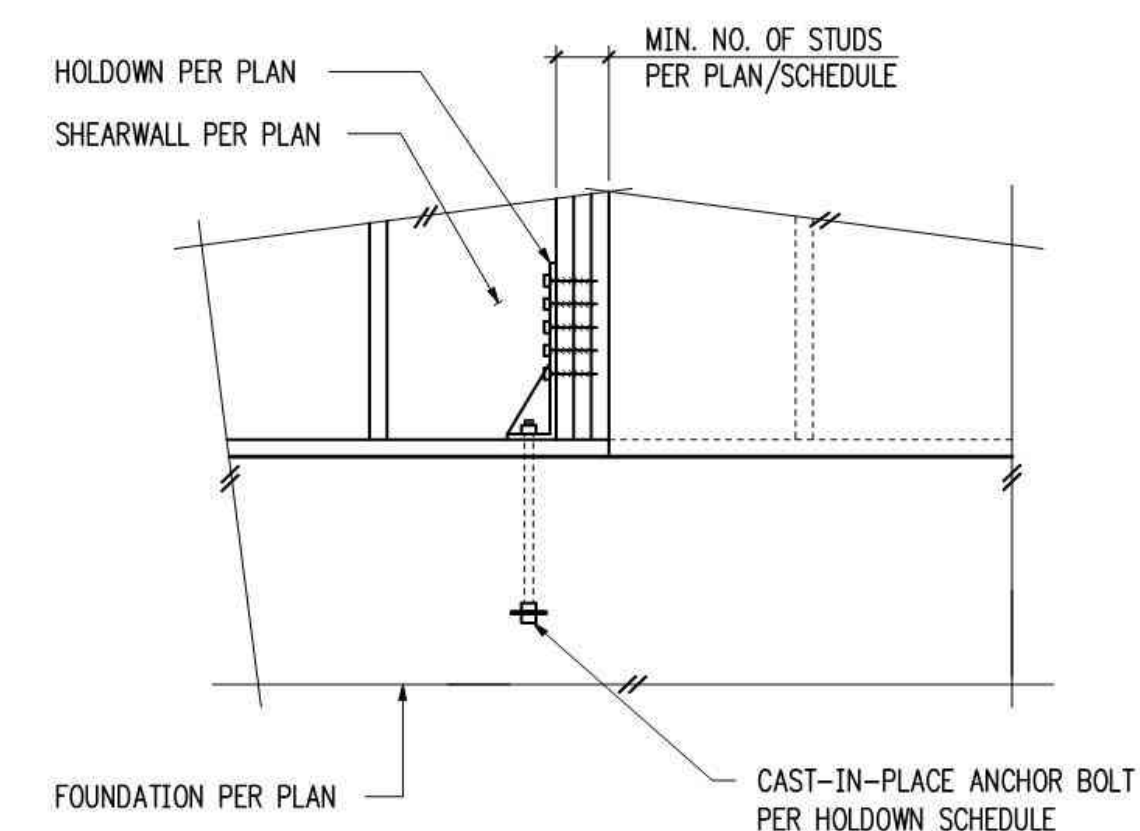
Scale : 3/4" = 1'-0"



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

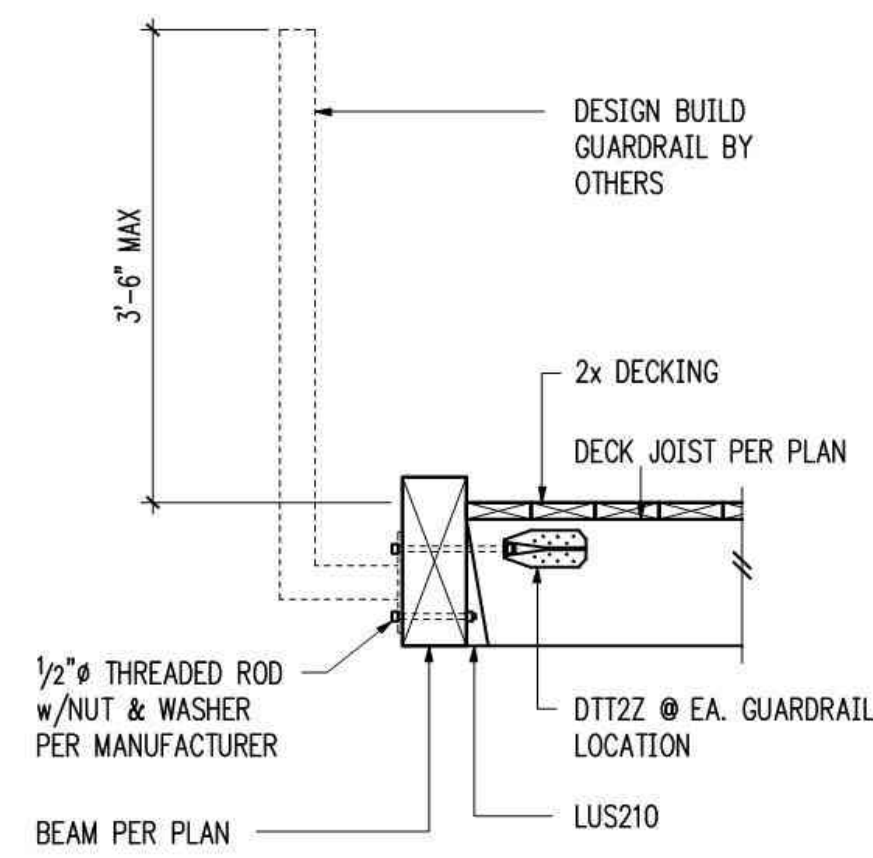


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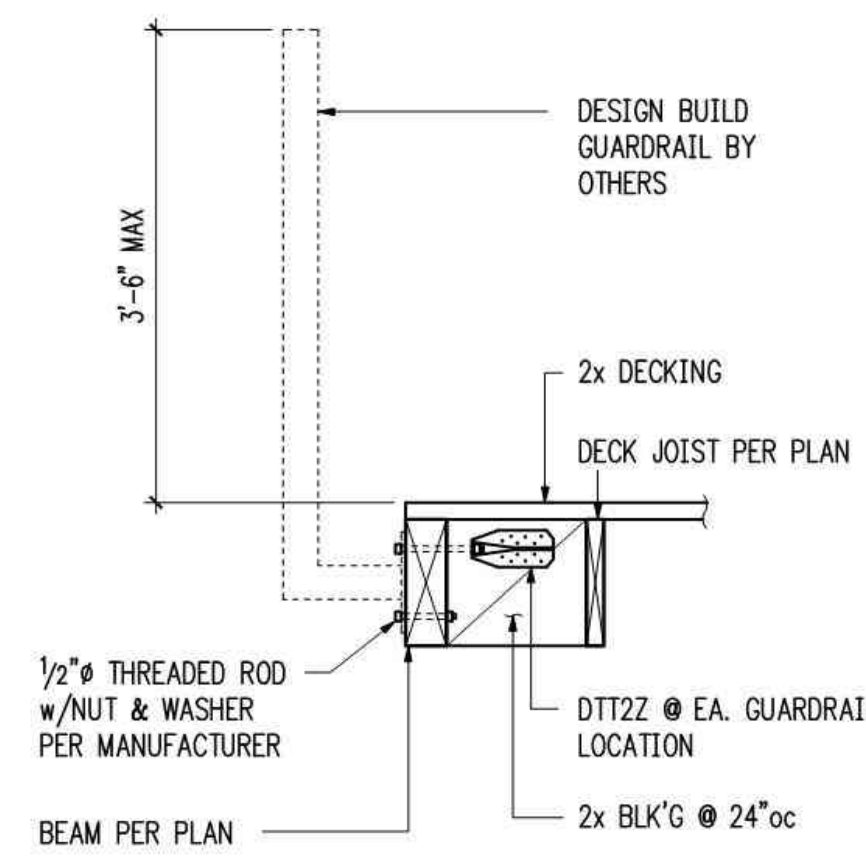
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HOLDOWN SCHEDULE		
PLAN MARK	ANCHOR BOLTS	NO. OF STUDS
HDU8	SSTB28	(3)
HDU14	PAB8	(4)



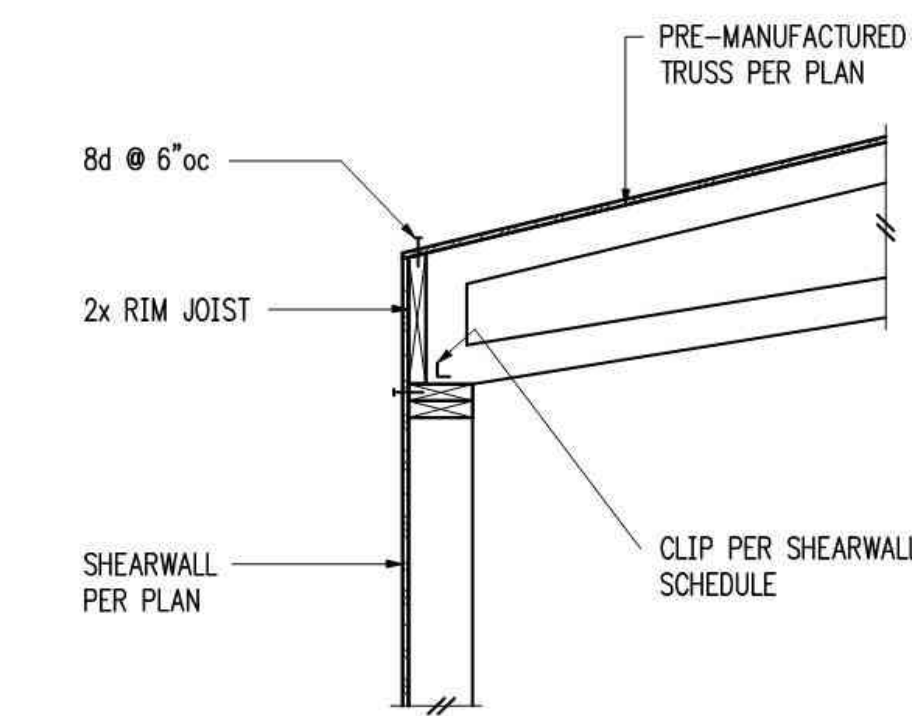
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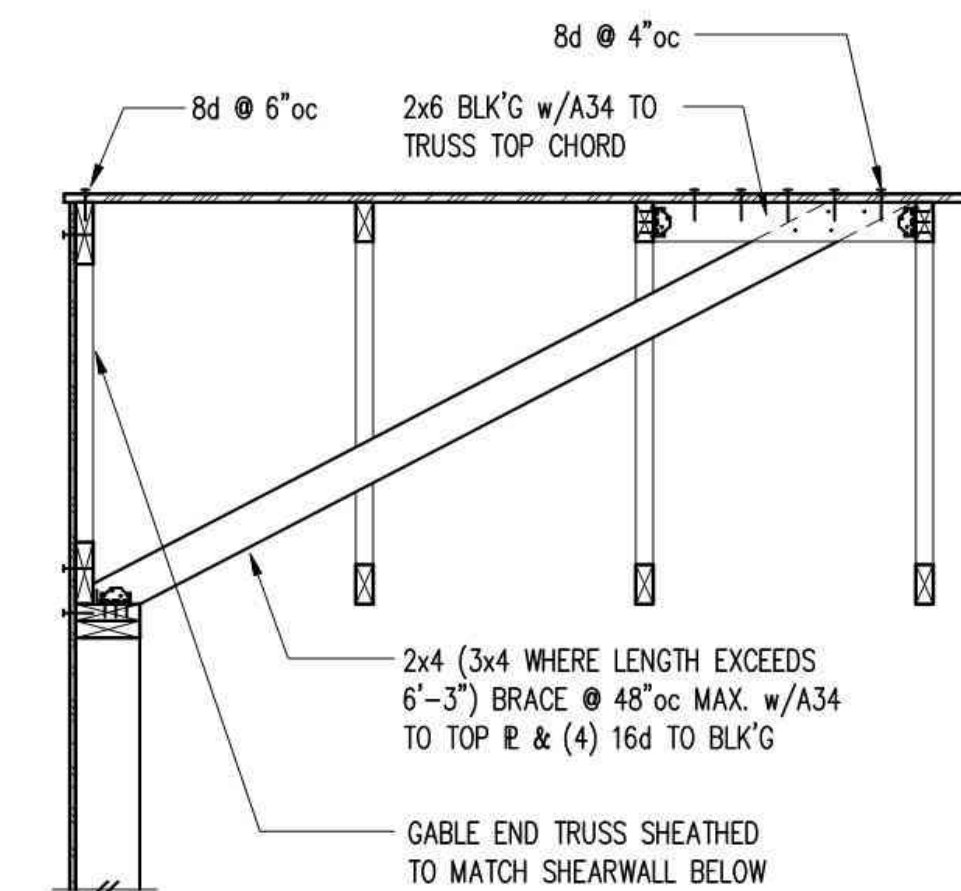
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2



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

3



4



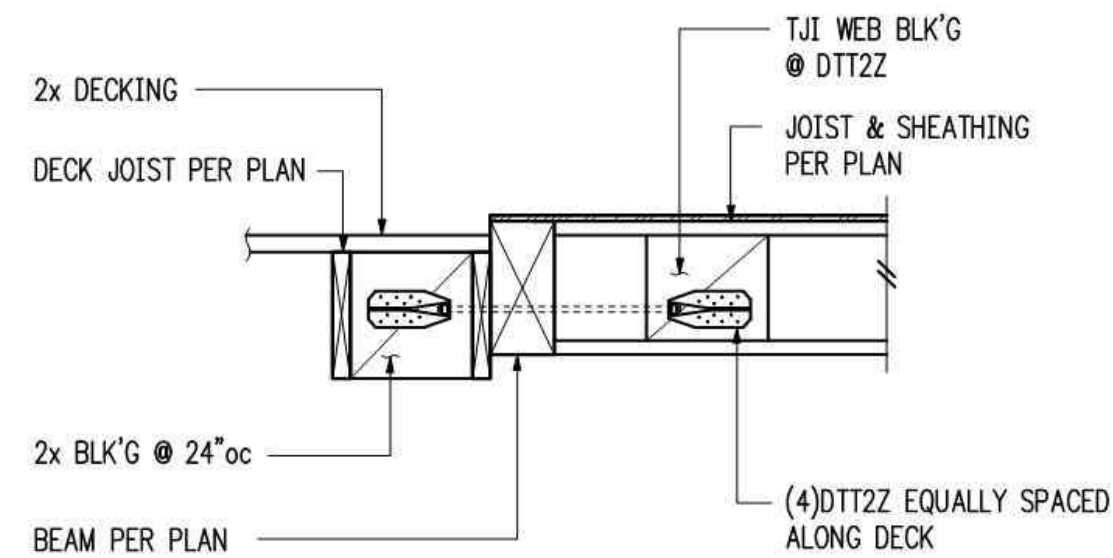
04/02/2020

DRAWN:	ATC
DESIGN:	SSN
CHECKED:	NN
APPROVED:	NN

PROJECT TITLE:  
Holub  
27933 E. MAIN ST  
REDMOND, WA 98053

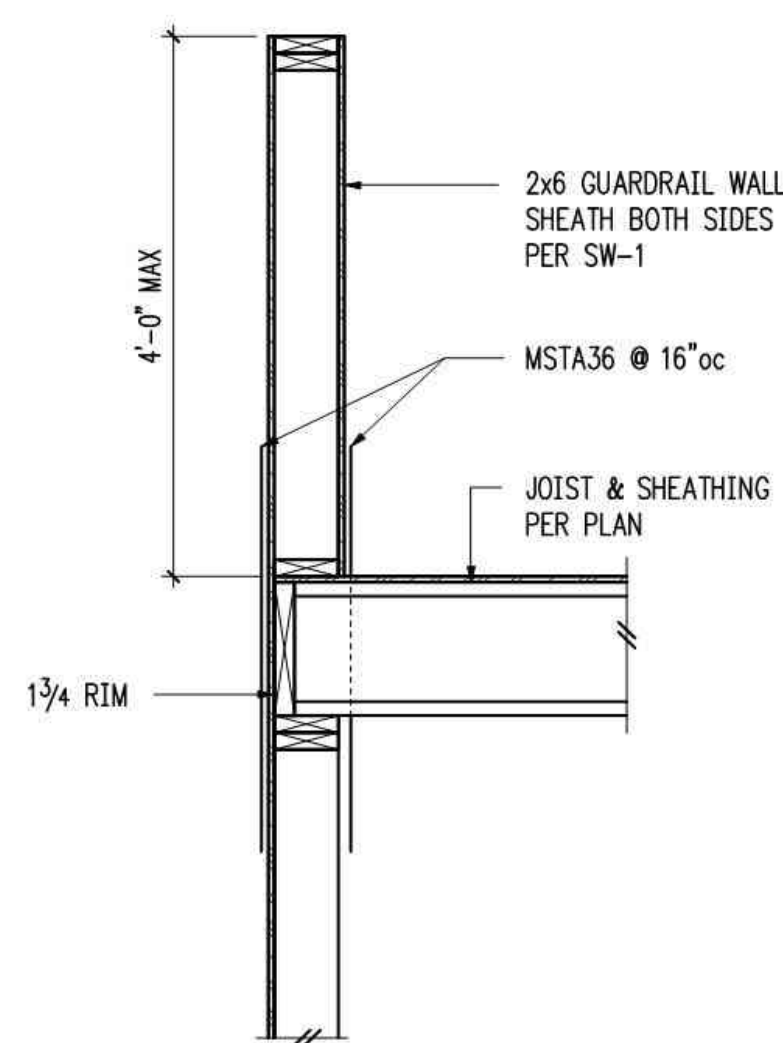
REVISIONS:

SHEET TITLE:  
**Wood  
Details**  
SCALE: as shown  
DATE: 4-2-20  
PROJECT NO:  
SHEET NO:



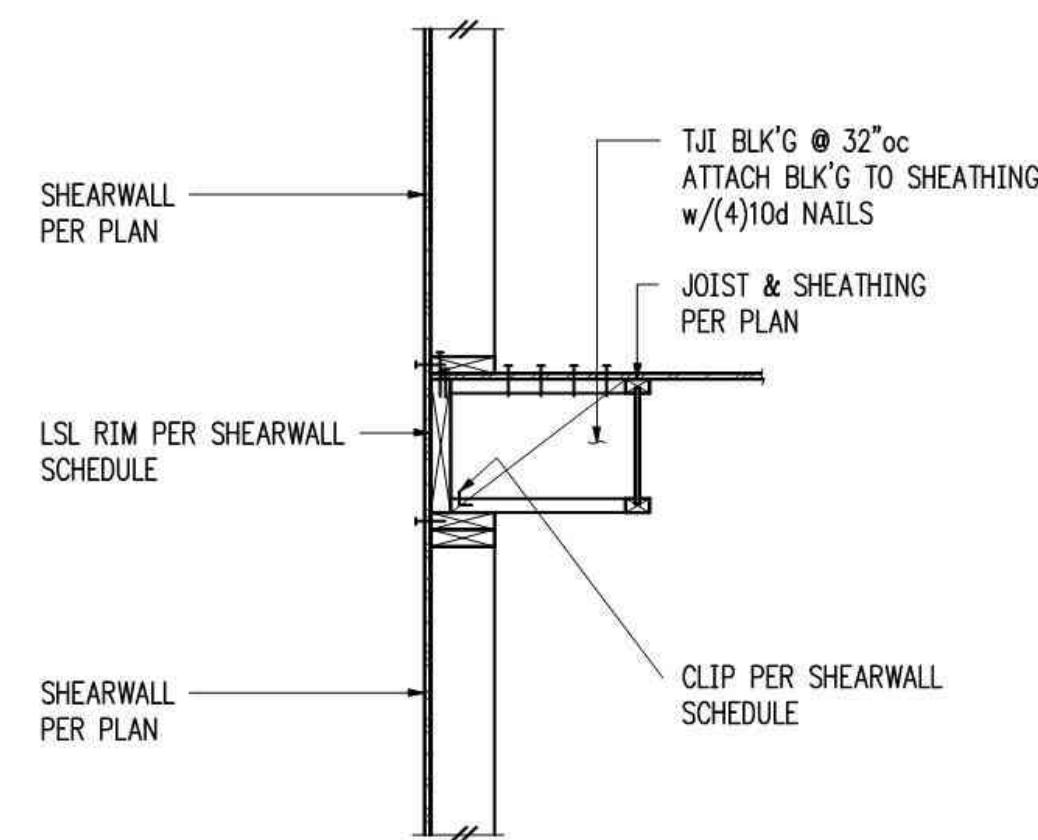
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5



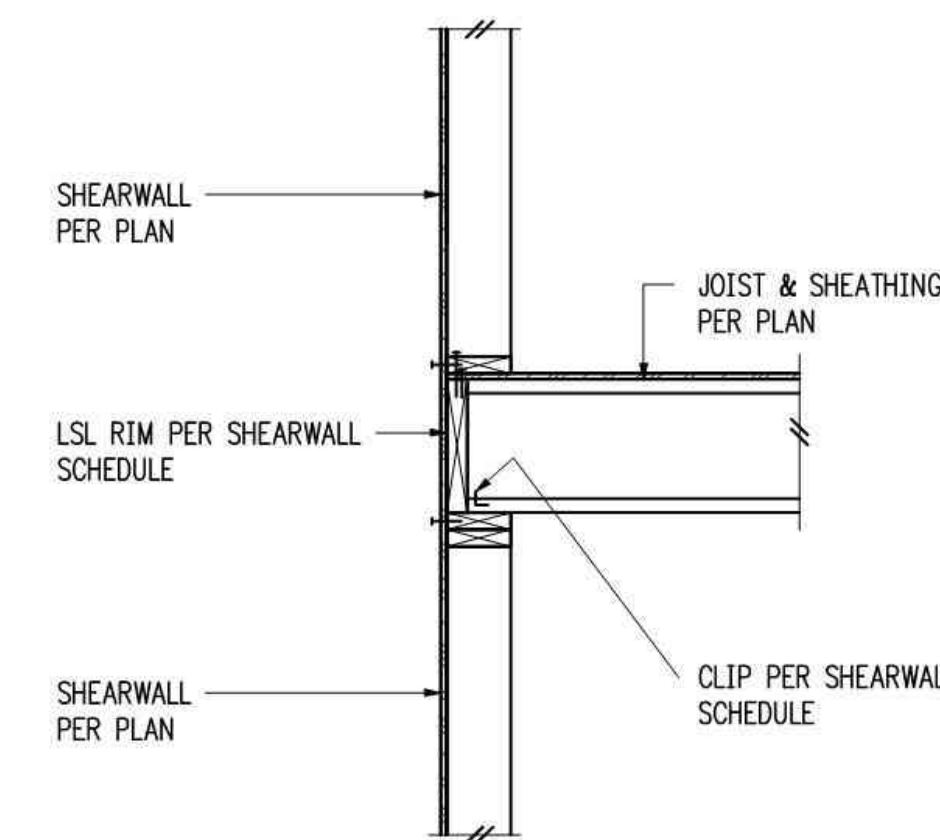
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6



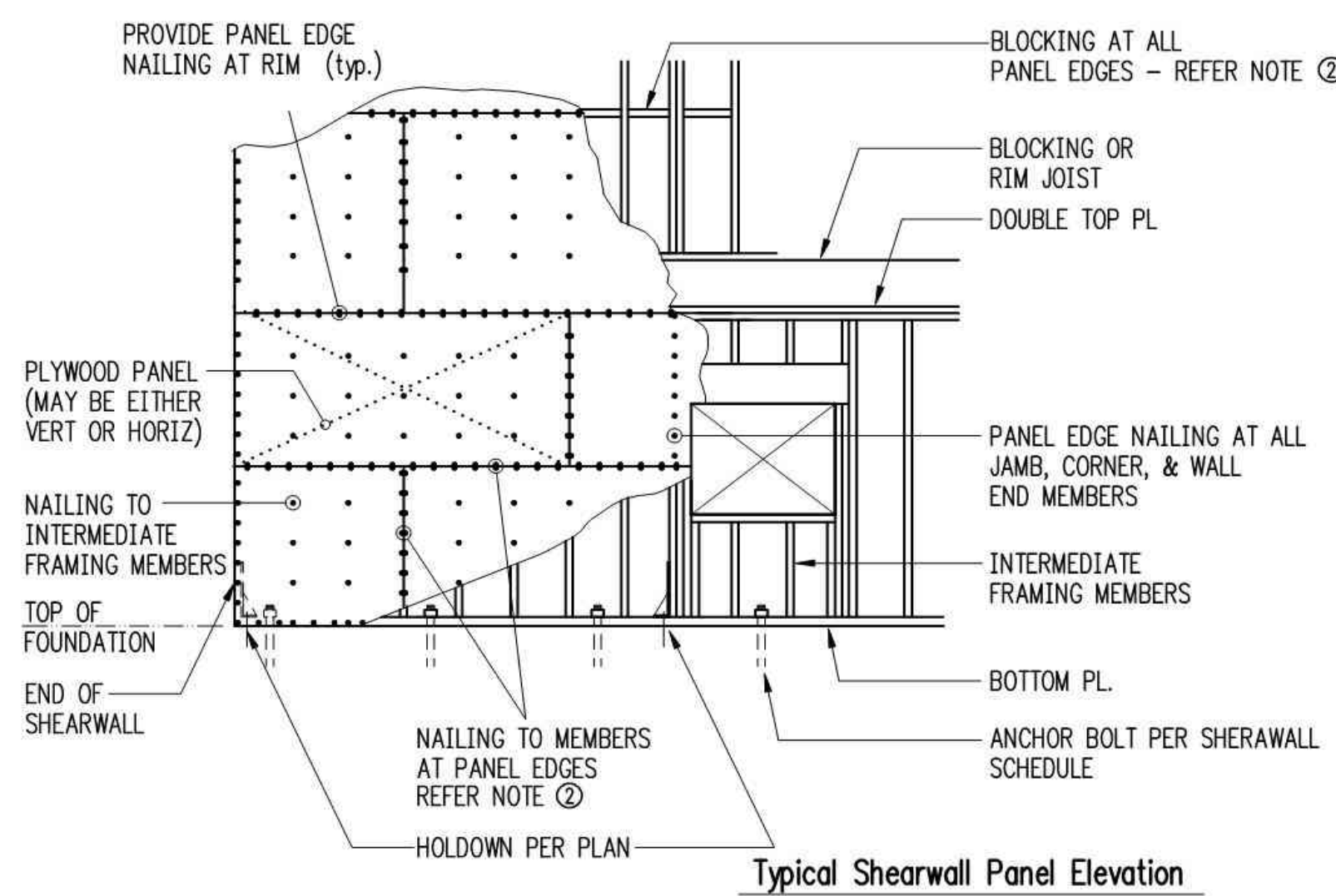
Scale : 3/4" = 1'-0"

7



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

8



9

SW #	SHEATHING	BLOCKING	PANEL EDGE NAILING	ATTACHMENT TO TOP PLATE	BOTTOM PLATE ATTACHMENT			CAPACITY (plf) SEISMIC
					LSL RIM JOIST REQ'D.	FACENAILING TO WOOD BELOW	ANCHOR BOLTING TO CONC. BELOW	
SW1	15/32" APA RATED SHEATHING	YES	8d @ 6"oc	CLIP @ 16"oc	1 3/4" LSL	NAILS @ 9"oc	5/8" @ 48"oc	240 PLF
SW2	15/32" APA RATED SHEATHING	YES	8d @ 4"oc	CLIP @ 16"oc	1 3/4" LSL	NAILS @ 6"oc	5/8" @ 48"oc	355 PLF
SW3	15/32" APA RATED SHEATHING	YES	8d @ 2"oc	CLIP @ 12"oc	3/2" LSL	(2) ROWS NAILS @ 7"oc	5/8" @ 28"oc	595 PLF

- ① NAILS SHALL BE 8d COMMON. NAILING APPLIES TO ALL PANEL EDGES (BLOCK ALL UNSUPPORTED PANEL EDGES), TOP & BOTTOM PLATES AND BLOCKING. NAIL TO INTERMEDIATE FRAMING MEMBERS 7/8d @ 12"oc.
- ② FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED.
- ③ PROVIDE 3"x3"x0.229" PLATE WASHER AT ALL ANCHOR BOLTS. ANCHOR BOLTS SHALL BE POSITIONED SUCH THAT PLATE EDGE OF PLATE WASHER IS WITH 1/2" OF THE EDGE OF THE BOTTOM PLATE.
- ④ CLIP SHALL BE EITHER A35 OR LTP4, CLIP MAY BE OMITTED WHEN ADJOINING PANEL EDGES OCCUR @ RIM JOIST.
- ⑤ NAILS SHALL BE 10d COMMON (0.148# x 3.5" MIN) SCREWS SHALL BE SIMPSON SDS25500 (1/4" x 5" MIN.)
- ⑥ ROWS MUST BE OFFSET AT LEAST 1/2" AND STAGGERED.



**King County**  
Department of Permitting  
and Environmental Review

**Residential TESC Template**

**RECOMMENDED CONSTRUCTION SEQUENCE**

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC supervisor (may be consolidated with the required notice of construction sign).
3. Flag or fence clearing limits.
4. Install catch basin protection, if required.
5. Grade and install construction entrance(s)
6. Install perimeter protection (silt fence, brush barrier, etc.).
7. Construct sediment pond and traps, if required.
8. Grade and stabilize construction roads.
9. Construct surface water controls (interceptor dikes, pipe slope drains, etc.) simultaneously with clearing and grading for project development.
10. Maintain erosion control measures in accordance with King County standards and manufacturer's recommendations.
11. Relocate erosion control measure, or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the King County Erosion and Sedimentation Control Standards.
12. Cover all areas that will be unworked for more than seven days during the dry season or two days during the wet season with straw, wood fiber mulch, compost, plastic sheeting, or equivalent.
13. Stabilize all areas within seven days of reaching final grade.
14. Seed, sod, stabilize, or cover any areas to remain unworked for more than 30 days.
15. Upon completion of the project, stabilize all disturbed areas and remove BMP's if appropriate.

**Engineering / Drainage Approval**

Signature: \_\_\_\_\_

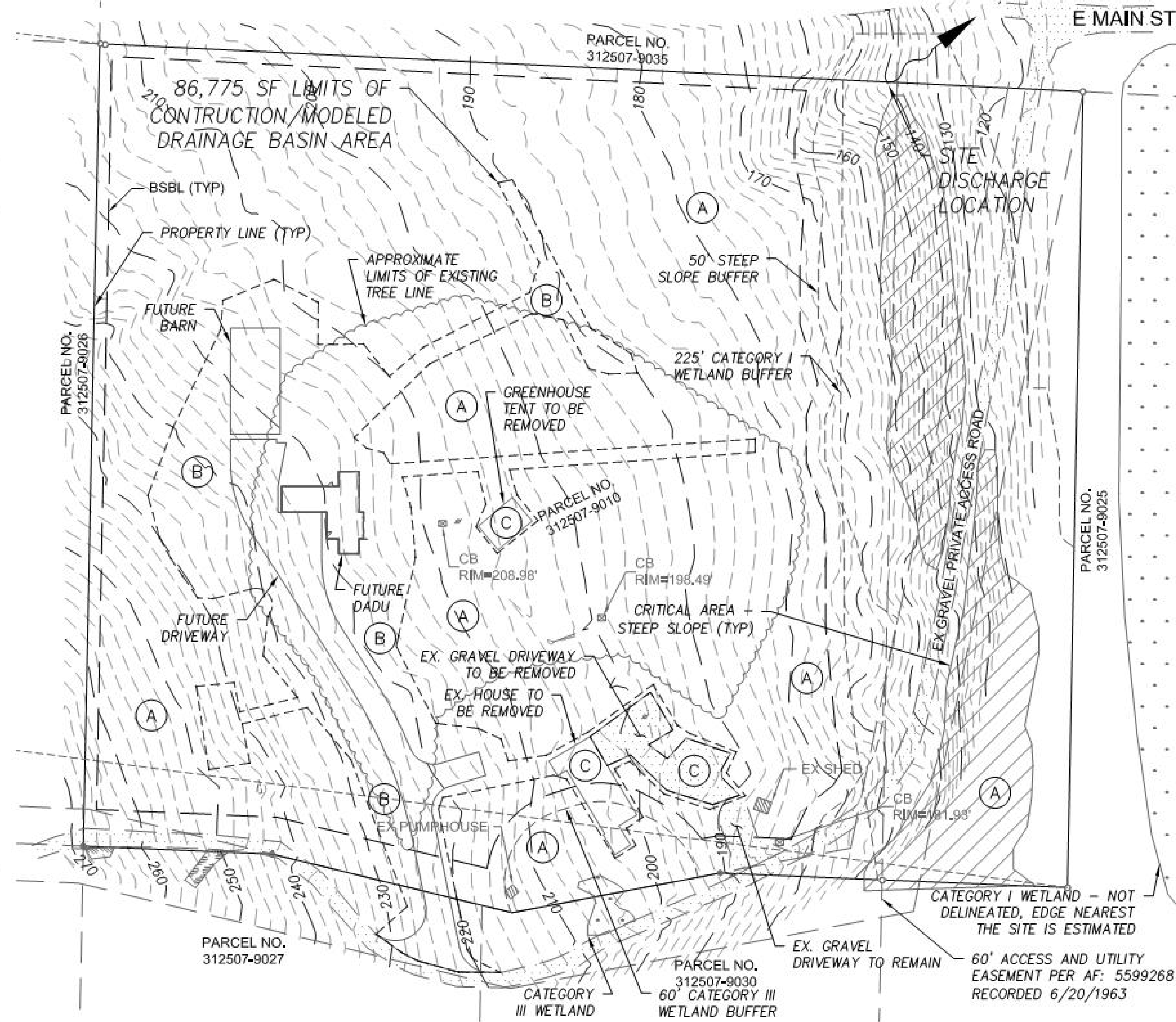
Date: \_\_\_\_\_

**Clearing / Grading Approval**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

01/15/2021



05 25 50 100  
SCALE 1" = 100'

- (A) 435,494 SF: LEAVE NATIVE SOIL UNDISTURBED.
- (B) 79,034 SF: STOCKPILE NATIVE SOIL, REAPPLY, AND AMEND IN PLACE.
- (C) 7,741 SF: LEAVE NATIVE SOIL UNDISTURBED, AND REPLANT WITH NATIVE VEGETATION AFTER EXISTING IMPERVIOUS SURFACE IS REMOVED.

**TOTAL ON-SITE IMPERVIOUS**

CONDITION	AREA (SF)
EX HOUSE (TO BE REMOVED)	2,613
EX GREENHOUSE (TO BE REMOVED)	903
EX DRIVEWAY (TO BE REMOVED)	4,225
EX DRIVEWAY (TO REMAIN)	1,471
EX PUMPHOUSE (TO REMAIN)	66
EX SHED (TO REMAIN)	119
<b>TOTAL IMPERVIOUS ONSITE</b>	<b>9,397</b>
<b>% IMPERVIOUS</b>	<b>1.7%</b>

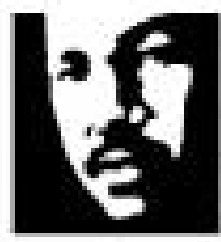


Know what's below.  
Call before you dig.

**Encompass**  
ENGINEERING & SURVEYING

**FIGURE 4 - EXISTING CONDITIONS MAP**  
HOLUB RESIDENCE  
PROJECT # 20637  
WITHIN NW SEC. 31, TWN 25N, RGE 7E

Permit Number: TBD Parcel Number: 312507-9010 Applicant Name: RICHARD HOLUB Site Address: 27933 E MAIN STREET Engineering Scale: 1" = 100' Sheet 2 of 7



**King County**  
Department of Permitting  
and Environmental Review

01/15/2021



05 25 50 100  
SCALE 1" = 100'

**Residential Site Plan Template**

Ref: KCC 21a.12.030  
Max. Impervious Surface Allowed \_\_\_\_\_  
Max. Bldg. Height Allowed \_\_\_\_\_  
Ref: KCC 21a.12.170  
Min. Bldg. Setback From Street \_\_\_\_\_  
Min. Garage Setback From Street \_\_\_\_\_  
Min. Bldg. Setback From Interior \_\_\_\_\_  
Permit Center validation:  
o Zoning  
o Site Review Not Applicable  
Validated Signature \_\_\_\_\_  
Login Initials \_\_\_\_\_ Date: \_\_\_\_\_

**Engineering / Drainage Approval**

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**Critical Areas Approval**

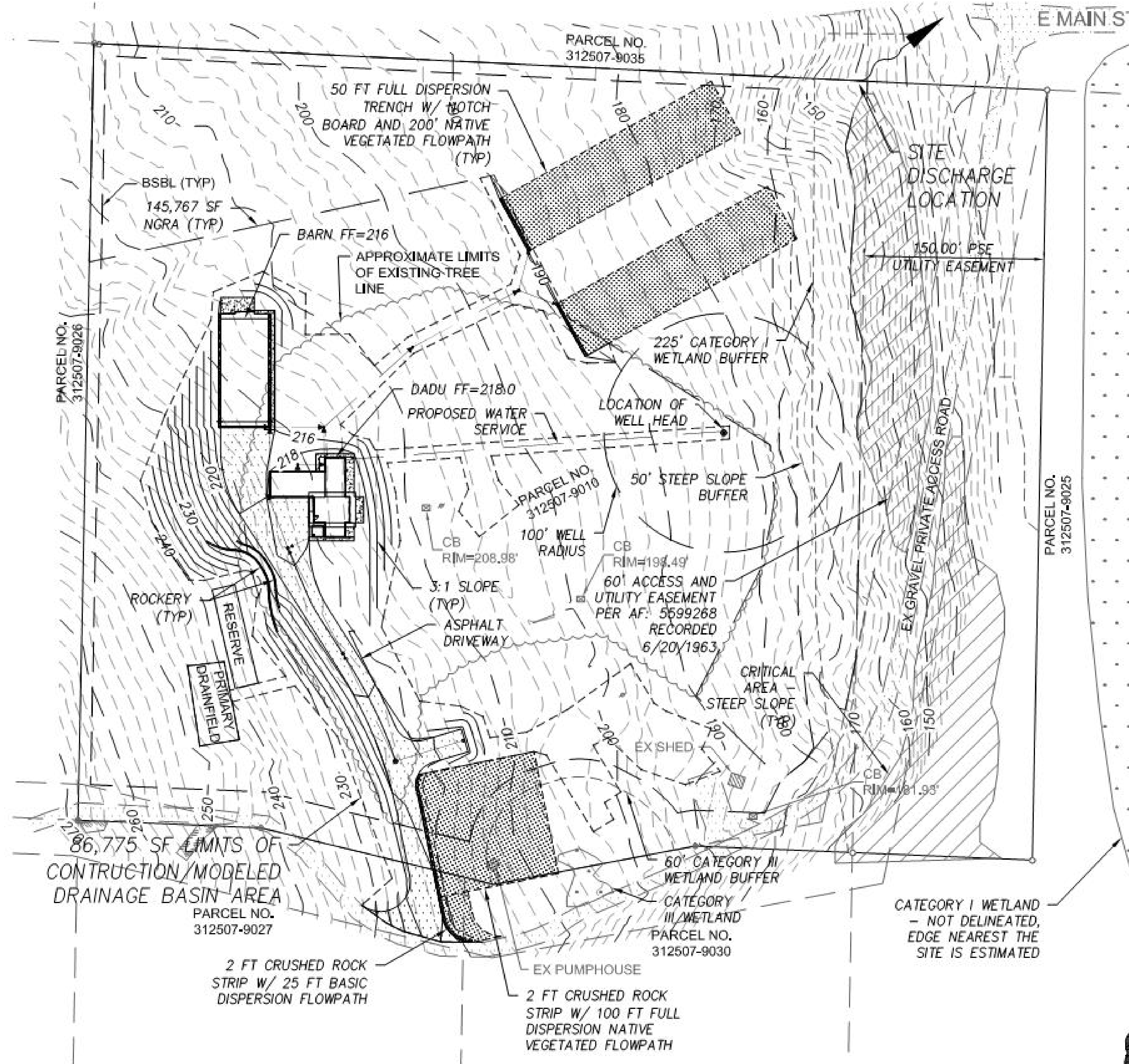
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**Clearing / Grading Approval**

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**Fire Approval**

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_



**TOTAL ON-SITE IMPERVIOUS**

CONDITION	AREA (SF)
NEW DADU	2,709
NEW BARN	3,792
NEW WALKWAYS/PATIOS	1,374
NEW DRIVEWAY	11,835
EX DRIVEWAY	1,471
EX PUMPHOUSE	66
EX SHED	119
<b>TOTAL IMPERVIOUS ONSITE</b>	<b>21,366</b>
<b>% IMPERVIOUS</b>	<b>4.1%</b>

**TOTAL OFF-SITE IMPERVIOUS**

CONDITION	AREA (SF)
NEW DRIVEWAY	2,107



Know what's below.  
Call before you dig.

**Encompass**  
ENGINEERING & SURVEYING

**FIGURE 5 - DEVELOPED CONDITIONS MAP**

HOLUB RESIDENCE  
PROJECT # 20637  
WITHIN NW SEC. 31, TWN 25N, RGE 7E

Permit Number: **TBD** Parcel Number: **312507-9010** Applicant Name: **RICHARD HOLUB** Site Address: **27933 E MAIN STREET** Engineering Scale: 1" = **100'** Sheet **4** of **7**