CITY OF MERCER ISLAND, WASHINGTON

Development Services Group

9611 S.E. 36th St. Mercer Island, WA 98040-3732
(206) 275-7605 FAX: (206) 275-7725 TDD: (425) 803-1751

Inspection Requests:
online: www.MyBuildingPermit.com
voicemail: (206) 275-7730

Updated February 2011

NOTE: ALL RECORDS AND DRAWINGS ARE SUBJECT TO PUBLIC DISCLOSURE AS REQUIRED BY RCW 42.56

TO BE COMPLETED BY APPLICANT

CONTACT INFORMATION:

Applicant is to complete the following information.

Applicant Contact information *prior* to permit issuance:
Name: On the Rock 98040 LLC
Address: PO Box 956 Mercer Island 98040
Phone: 206 679 2320
e-mail: SGibson@BuildGibsonInc.com

Applicant Contact information *after* permit issuance:
Name: Same
Address:
Phone:
e-mail:

REQUIRED SPECIAL INSPECTIONS / STRUCTURAL OBSERVATIONS:

It is the Engineer of Record's responsibility to specify all required Special Inspections or Structural Observation (check items below). The owner is responsible for hiring an approved private Special Inspector for the checked inspections noted below. All Special Inspectors (except Geotechnical) must be WABO certified.

When Special Inspection or Structural Observation is required, the report shall be submitted to the City Building Inspector prior to the City Inspection. **Note: Inspection by the City Inspector is required in addition to the Special Inspection or Structural Observation indicated below. Do not cover or conceal any work prior to the City inspection.**

STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (EOR):
Engineer of Record: Stephen Tapp (Lateral) Company: Stephen Tapp Phone:
☒ General Conformance to Construction Documents ☒ Other: Anderson Architecture Leif Anderson - Architect 425.672.4963 (Vert. & Structure)

SOILS / GEOTECHNICAL:
Special Inspector: Duffy Ellis Company: CES Phone (206) 930-0342

☒ Erosion control measures	☒ Subsurface drainage placement
☐ Shoring installation and monitoring	☒ Verify fill material and compaction
☒ Observe and monitor excavation	☒ Rockery installation
☒ Verification of soil bearing	☒ Pile placement (auger cast/driven pile) (IF ANY)
☐ Other:	☐ Other:

REINFORCED CONCRETE:
Special Inspector: Company: Phone:

☐ Concrete strength	☐ Retaining wall construction
☐ Reinforcing steel and concrete placement	☐ Prestressed / Precast construction
☐ Shotcrete placement	☐ Other:
☐ Other:	☐ Other:

STRUCTURAL STEEL:
Special Inspector: Company: Phone:

☐ Fabrication and shop welds	☐ Moment Frame construction
☐ Structural steel erection, field welds and bolting	☐ Other:
☐ Other:	☐ Other:

STRUCTURAL MASONRY:
Special Inspector: Company: Phone:

☐ Mortar strength	☐ Glass unit masonry installation
☐ Masonry unit strength	☐ Wall panel and veneer installation
☐ Other:	☐ Other:
☐ Other:	☐ Other:

WOOD:
Special Inspector Engineer of Record: Stephan Tapp Company: Stephan Tapp Phone: (206) 491 5151

☒ Lateral resisting system construction	☐ High strength diaphragm construction
☒ Other: Anderson Architecture (Vert Structure Leif Anderson 425 672 4963	☐ Other:

OTHER SPECIAL INSPECTIONS:
Special Inspector: Company: Phone:

☐ Epoxy grout installations	☐ Stucco installation
☐ Expansion anchor installations	☐ Other:
☐ Other post installed anchors	☐ Other:
☐ Exterior Insulation Finish System (EIFS) installation	
☐ Alternative construction methods:	
☐ Alternative construction materials:	

TO BE COMPLETED BY APPLICANT

DEFERRED SUBMITTALS:

The Applicant is required to select all deferred submittals / shop drawings for submittal to the City for review and approval prior to item fabrication / construction.

☐ Connector plate wood trusses	☐ Post tension layout
☐ Metal joist / metal trusses	☐ Exterior cladding
☐ Premanufactured structures (stairs, etc.)	☐ Window wall / curtain wall construction
☐ Precast concrete elements	☐ Other:
☐ Other:	☐ Other:

ENERGY CODE COMPLIANCE INFORMATION:

Indicate where the following information is located in the drawing set. Alternatively, incorporate or include the Residential Energy Code Prescriptive Compliance Form into the drawing set.

☒ Building envelope information: (including U-factors, insulation and moisture control) sheet: #1
☒ Whole house ventilation information: (include ventilation option and duct sizing if applicable) sheet: #1
☒ Residential Energy Code Prescriptive Compliance Form incorporated within drawing set.

TO BE COMPLETED BY DSG

PROJECT ALERTS:

Construction of the project shall be from ***approved plans only***. No deviation from the approved project plans is allowed without prior approval from the City of Mercer Island. Approved plans must be kept on site and maintained in good condition.

☑ Refer to "Conditions of Permit Approval" provided at permit issuance for required construction rules and regulations, including (but not limited to):
- Site Considerations
- Hours of work
- Construction vehicle parking restrictions
- Access road requirements
- ROW restrictions
- Drainage requirements
- Sewer requirements
- Water service requirements
- Fire code requirements
- Planning requirements

☐ Refer to "Preconstruction Meeting Checklist" provided at the preconstruction meeting for other development related rules and regulations.
☑ Temporary site address with minimum 6" high numbers visible from the street must be installed.
☑ Erosion control measures must be as shown on approved project drawings. All erosion control is to be in place and inspected prior to the start of any site work.

☑ Tree protection as shown on approved drawings shall be installed at tree dripline prior to start of any site work and must remain in place throughout the project.
☑ No trees shall be cut without a City of Mercer Island tree permit.
☐ Replacement trees must be a minimum of six feet tall at installation. They must be planted and approved prior to final inspection. Health and survival of replacement trees must be guaranteed for two years.
- Trees must be replaced at a ratio of ____ to 1.
- For this project, ____ trees are authorized to be removed and replaced with ____ trees.

☑ Refer to the "Conditions of Permit Approval" for Noise / Sound level certification of mechanical equipment requirements.
☑ Verify all required City of Mercer Island permits have been issued prior to start of the respective work. Possible permits include, but are not limited to:

☒ Fire Sprinkler	☐ Building
☐ NFPA 13	☐ Storm Water
☐ NFPA 13R	☐ Right-of-way Use
☒ NFPA 13D plus Monitored water flow alarm	☐ Rockeries / Retaining walls
☐ Fire Alarm	☐ Other:

☑ City of Mercer Island Business License required for all subcontractors. Call (206) 275-7783 for more information.

WATER SUPPLY REQUIREMENTS:

☑ Water Supply system upgrade required.
☐ City Installation
☒ Applicant Installation
Required Service Line Size: 1" (water main to meter) Required Supply Line Size: 1 1/4" (meter to house) Required Meter Size: 1"
☐ Abandonment of existing service and meter required at main.
☑ Pressure reducing valve required if pressure exceeds 80psi.
☑ Reduced pressure backflow assembly (RPBA) required for all waterfront and lots with non-city water supply (private wells or lake irrigation).
☐ Additional water supply requirements: Sizes noted above are for domestic purposes only. Actual system may need to be increased to meet fire flow requirements.

DRAINAGE REQUIREMENTS:

☐ On site detention system required.	☐ Direct discharge into the lake.
☐ On site infiltration system required.	☐ No Storm Water permit required.
☐ Connection to public storm drainage conveyance systems required.	☑ Other: Connect to storm from shore plat

SIDE SEWER REQUIREMENTS:

☑ Side sewer requires a backflow preventer when connecting to the lake line or when the elevation of the lowest plumbing fixture is lower than the elevation of the upstream manhole rim.
☐ Video tape of existing sewer required.
☐ New connection. ☐ Connect to existing ☐ Disconnect permit required. ☐ Reconnect permit required.
☑ Other: Connect to stub out from plat
Note: When side sewer is to be connected to the lake line you will need to schedule three (3) days in advance with the City of Mercer Island Maintenance Department at (206) 275-7800.

APPROVED CODE ALTERNATES:

Description: - fire coating in attic and crawlspace
- 5/8" type "X" GWB throughout

SURVEY REQUIREMENTS (The following survey information must be submitted when checked):

Surveyor shall verify points chosen for height calculations and point verification shall be submitted at the time of City foundation Inspection. A property survey may be required to verify setbacks and in some cases buildings must be surveyed onto the lot. The City reserves the right to request an impervious area survey at any time prior to issuance of Certificate of Occupancy.

Surveyor: Phone:
☑ Building height survey
☑ Building setback survey
☐ Impervious surface survey
☐ Other:

GEOTECHNICAL INFORMATION:

Land clearing, grading, filling and foundation work within geologic hazard areas is **NOT PERMITTED** between October 1 and April 1 without an approved Seasonal Development Limitation Waiver.

☐ Geotechnical Report provided. All construction must comply with the recommendations of the Geotechnical Report. A copy of report and other geotechnical information must be kept on site at all times.
Geotechnical Engineer: Phone:

SEASONAL DEVELOPMENT LIMITATION RESTRICTION:
☒ Applies (Geologic Hazard area). Grading not permitted between October 1 through April 1.
☐ Waiver approved. Grading and excavation permitted subject to all conditions noted in Seasonal Development Limitation Waiver permit.
Permit number: Approved by: Date:

TO BE COMPLETED BY DSG

REQUIRED CONSTRUCTION INSPECTIONS:

It is the applicant's responsibility to contact DSG to schedule the appropriate inspections. Request inspections online at www.MyBuildingPermit.com. Allow at least 24 hours (48 hours for Reinforcing steel) in advance of desired inspection. Be specific as to type of inspection

Inspector shall initial and date appropriate inspection *only* if approved. Note: Items marked with an "*" require a separate permit.

INSPECTIONS:
Listed in order of typical sequencing

Inspector	Date	Approved	
MW	8-24-18	☑	Pre-construction Meeting to Review Conditions of Permit Approval.
		☐	Erosion control and tree protection
		☐ *	Right-of-way use or work / easement, material delivery, etc. If applicable, separate ROW permit required
		☐	Demolition
		☐ *	Sewer disconnect and cap. If applicable, separate side-sewer permit required
		☐	Land clearing and grading
		☐	Temporary power
		☐	Pilings / Shoring / Shotcrete. If applicable, provide survey letter (property line); Geotechnical Engineer / Special Inspector reports of inspections (pile and shoring installation, etc.)
		☐	Footings, setbacks, UFER ground. If applicable, provide survey letter (building height and setbacks); Geotechnical Engineer / Special Inspector reports of inspections (soil bearing capacity, compaction, earthwork, pile installation, etc.)
		☐	Foundation walls / concrete columns
		☐	Roof and footing drains
		☐	Foundation damproofing
		☐ *	Storm drainage, including (but not limited to): • Connections to storm main in ROW • Detention systems • Water quality systems • Infiltration systems • Catch basins including oil-water separator tees • Area drains • Conveyance piping / cleanouts • Control structures / manholes • Pump systems • Bio-swales and wet vaults • Retaining wall drainage • As-Built Drawings
		☐	Water Service, including (but not limited to): • As-Built Drawings
		☐	Water Supply Piping (Meter to Home): • As-Built Drawings
		☐ *	Side sewer installation, including (but not limited to): • Connections to sewer main • Connections to existing side sewer • Back-flow valves • Grinder pump systems • Sewer manholes • As-Built Drawings
		☐	Driveway / Access road
		☐	Underslab electrical / mechanical / plumbing
		☐	Underslab insulation / vapor barrier / reinforcing
		☐	Underfloor framing
		☐	Nailing--Roof sheathing. If applicable, provide Engineer / Special Inspection letter for lateral wood inspection.
		☐	Nailing--Exterior wall and Shearwall. If applicable, provide Engineer / Special Inspection letter for lateral wood inspection.
		☐	Rough hydronic installation
		☐	Rough electric installation
		☐	Rough fire alarm (wiring inspection)
		☐	Rough plumbing installation (DWV, water)
		☐	Rough mechanical
		☐	Gas Piping
		☐	Rough fire sprinkler / hydrostatic and flow (bucket) test
		☐	Framing and glazing. If applicable, provide Engineer / Special Inspection letter for lateral wood inspection, welding epoxy anchors, etc.
		☐	Masonry construction (fireplace / walls / veneer / etc.)
		☐	Insulation installation
		☐	Stucco (paper and lath)
		☐	Shower pan (or tub)
		☐	Miscellaneous
		☐	Final Tree Restoration Inspection ☐ TT
		☐	Final inspection--Fire protection, including (but not limited to): • Sprinkler • Access Road • Fire Alarm • Fuel tank installation • Fire extinguishing system • Fire Plan Review document ☐ TF
		☐	Final inspection--Water supply protection, including (but not limited to) backflow devices for: • Waterfront property • Fire / lawn sprinkler • Well water on property • Boiler ☐ TW
		☐	Final inspection--Site and utility: includes landscape, utilities and ROW. Restoration complete and as-built drawings ready for submittal. ☐ TS
		☐	Final inspection--Building, including electrical / mechanical / plumbing. If applicable, provide closeout (summary) letters from Engineer, Special Inspectors, Geotechnical Engineer, and exterior wall cladding inspectors (EIFS). ☐ TB

90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO):

Applicant option. Additional fees will be required and must be approved prior to occupancy. TCO requires tree plantings be completed.

TO BE COMPLETED BY DSG

ADDITIONAL REQUIRED CITY INSPECTIONS:

Call the appropriate contact to arrange the inspection.

Required Inspection(s):	Contact:	Phone:	Scheduling:
Complete paving req'd			
Tree protection inspec.	K Parker	206 775 7713	

APPROVED DRAWINGS MUST BE KEPT ON THE BUILDING SITE AT ALL TIMES

REVIEWED FOR CODE COMPLIANCE
Approved
11/14/18
Date

CERTIFICATE OF OCCUPANCY
Issued after all inspections have been performed and approved
Approved Date

PERMIT NUMBER: 1806-068

PROJECT NAME: On the Rock 98040 LLC

PROJECT ADDRESS: Lot #1, 7260 North Mercer Way, Mercer Island

SITE COPY
This drawing is to be kept on the Building Site at all times.

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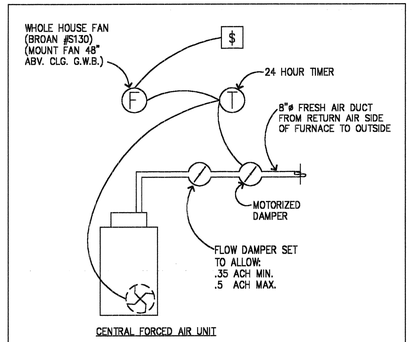


A/1 DIAGRAM OF VENTILATION SYSTEM

Design and Construction Criteria for Paver Blocks

The following notes (as a minimum) shall be included on the construction drawings for single-family residential projects intended to use permeable pavers:

1. **General:** Installation must be in accordance with the manufacturer's requirements and specifications.
2. **Subgrade:** Compact the subgrade to the minimum necessary for structural stability. Use static dual wheel small mechanical rollers or plate vibration machines for compaction. Do not allow heavy compaction due to heavy equipment operation. The subgrade should not be subject to truck traffic.
3. **Geotextile:** Geotextile fabric shall be placed beneath the reservoir layer in areas where soil remains saturated part of the year, where there is soil freeze and thaw, or over clay and moist silty subgrade soils. The geotextile fabric should pass water at a greater rate than the subgrade soils.
4. **Underdrain:** Provide an underdrain pipe when subgrade soils are poorly draining or soils remain saturated part of the year.
5. **Aggregate Materials (stone fill, leveling course, and base/sub-base reservoir layer):** Use crushed aggregate. Clean and washed. No fines. "Open graded" rock containing only a small percentage of aggregate in the small range. Do not use round rock.
   - Stone Fill/Leveling Course – ASTM No. 8 crushed aggregate. Minimum 1" to 2" thickness.
   - Reservoir Course – ASTM No. 57 crushed aggregate. Minimum 6" to 12" thickness depending on permeability of the subgrade soils.
6. **Limitations:** The design shall have no surface drainage onto the pavers from other surfaces. If surface drainage comes from minor or incidental pervious areas, those areas must be fully stabilized. Slope adjacent impervious surfaces away from the permeable pavement to the maximum extent practicable. The maximum installed slope is generally 5%.
7. **Protection:** After work is complete, the contractor shall be responsible for protecting work from sediment deposition and damage due to subsequent construction activity on the site.
8. **Improper Installation:** May result in loss of impervious surface exemption or may require reconstruction of the paving system.
9. **Inspections**: The contractor shall call for inspection of the subgrade preparation prior to placement of base material and for a subsequent inspection of the base material placement prior to installation of blocks.
10. **Maintenance**: Homeowners must adequately maintain their permeable block pavements. Over time, the space between the pavers will tend to clog. Conduct periodic visual inspections to determine if surfaces are clogged with vegetation or fine grain soils. Clogged surfaces should be corrected immediately. Surfaces should be swept with a high-efficiency or vacuum sweeper twice per year, preferably, once in the autumn after leaf fall, and again in early spring. As long as annual infiltration rate testing demonstrates that a rate of 5 inches per hour or greater is being maintained, the sweeping frequency can be reduced to once per year.

ENERGY CODE SUMMARY

ANALYSIS IS BASED ON 2009 WASHINGTON STATE ENERGY CODE, CHAPTER 6, DESIGN BY PERSCRIPTIVE REQUIREMENTS FOR GROUP R-3 OCCUPANCY (TABLE 6-1, CLIMATE ZONE 1)

OPTION III

PERCENTAGE OF GLAZING TO TOTAL FLOOR AREA		UNLIMITED
MAXIMUM GLAZING U-VALUE (VERTICAL)		.30
MAXIMUM GLAZING U-VALUE (OVERHEAD)		.50
MAXIMUM DOOR U-VALUE (606.6 EXCEPTION 2)		.20
CEILINGS	R-49	
CEILINGS (VAULTED)	R-38	
WALLS ABOVE GRADE	R-21 (INT.)	
FLOORS	R-30	
SLAB ON GRADE	R-10	

VIAQ CODE SUMMARY

HOUSE VENTILATION SYSTEM AND SPOT VENTILATION SYSTEMS TO COMPLY WITH 2009 WASH. STATE VIAQ CODE.

PROVIDE VENTILATION SYSTEM AS DIAGRAMMED IN DETAIL A/1.

WHOLE HOUSE VENTILATION SYSTEM MUST BE PERFORMANCE TESTED PRIOR TO THE FINAL INSPECTION BY THE INSTALLER OR A QUALIFIED THIRD PARTY. A LETTER OF COMPLIANCE ADDRESSING BOTH THE ACH AND CFM REQUIREMENTS MUST BE AVAILABLE FOR THE INSPECTOR AND A STICKER WITH THE SAME INFORMATION PLACED ON THE DUCT IN PROXIMITY TO THE FLOW DAMPER BEFORE A CERTIFICATE OF OCCUPANCY CAN BE ISSUED.

SEE FLOOR PLANS FOR LOCATION OF REQUIRED SPOT VENTILATION, WHOLE HOUSE FAN, TIMER AND RADON RECORDING EQUIPMENT.

CONSULT BOTH ELECTRICAL AND MECHANICAL CONTRACTORS REGARDING WIRING RELAYS BETWEEN VENTILATION SYSTEM COMPONENTS.

ALL GROUP R OCCUPANCIES SHALL CONFORM WITH SECTION 302.6.4 OF THE WASH. STATE VENTILATION AND INDOOR AIR QUALITY CODE WHICH STATES THAT DISTRIBUTION: OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY INDIVIDUAL INLETS, SEPARATE DUCT SYSTEMS, OR A FORCED-AIR SYSTEM. WHERE OUTDOOR AIR SUPPLIES ARE SEPARATE FROM EXHAUST POINTS BY DOORS, PROVISIONS SHALL BE MADE TO ENSURE AIR FLOW BY UNDERCUTTING DOORS, INSTALLATION OF GRILLS, TRANSOMS, OR SIMILAR MEANS WHERE PERMITTED BY THE UNIFORMED BUILDING CODE.

DESIGN CRITERIA:

2009 INTERNATIONAL BUILDING CODE

2009 INTERNATIONAL RESIDENTIAL CODE

R-3 OCCUPANCY GROUP

V-N TYPE CONSTRUCTION

SEISMIC ZONE #3

LATERAL LOAD-RESISTING FACTOR RW = 5.5

BASIC WIND SPEED = 80 M.P.H.

EXPOSURE 'C'

LIVE LOADS FOR EXIT FACILITIES = 40 P.S.F.

DESIGN LOADS:

FLOOR	50#/ S.F. TOTAL LOAD (65 S.F. @ STONE)
ROOF	45#/ S.F. TOTAL LOAD
ROOF (TRUSSES OR VAULTED CEILING)	50#/ S.F. TOTAL LOAD
CEILING JOISTS	15#/ S.F. TOTAL LOAD
INTERIOR PARTITION WALL (2x4 STUDS @ 16" O.C.)	50#/ L.F.
INTERIOR WALL (2x6 STUDS @ 16" O.C./ 8'-0" TALL)	70#/ L.F.
EXTERIOR WALL (2x4 STUDS @ 16" O.C./ 8'-0" TALL)	90#/ L.F.
EXTERIOR WALL (2x6 STUDS @ 16" O.C./ 8'-0" TALL)	110#/ L.F.
SOIL BEARING CAPACITY (MIN.) (SEE SOILS REPORT BY BGC, plic)	2,500#/ S.F.
DECKS	70#/ S.F.

R-12 ZONING

PROVIDE 2:1 MAX. SLOPE @ SITE-TYP

LOT COVERAGE (GFAR)

LOT AREA (GROSS LOT=14,203 S.F.-2,203 S.F. EASEMENT)		12,000 S.F. (NET)
BUILDING FOOTPRINT PER MERCER ISLAND CALC'S (INCLUDING MAIN FLOOR, UPPER FLOOR, BASEMENT & GARAGE W/ALLOW. BASEMENT DEDUCTION OF 525 S.F.)		5,156 S.F.
ALLOWABLE PERCENTAGE OF COVERAGE	(5,400 S.F.)	45 %
ACTUAL PERCENTAGE OF COVERAGE	(5,156 S.F.)	42.97 %

HEIGHT RESTRICTION:

MAX. ALLOWABLE BUILDING HEIGHT (30')	98.06'
ACTUAL BUILDING HEIGHT (SEE EAST ELEVATION SHT. # 11)	96.50'

IMPERVIOUS SURFACE AREA

ROOF AREA		2,757 S.F.
DRIVEWAY (NOT UNDER ROOF O.H.)		714 S.F.
EASEMENT AREA		2,203 S.F.
PERVIOUS PAVER PATIO & WALK (PATIO = 140 S.F./WALK = 50 S.F.)		NA S.F.
TOTAL		5,681 S.F.
LOT AREA: (GROSS)		14,203 S.F.
ALLOWABLE IMPERVIOUS (40%) (INCL.+5% DEVIATION OF ALLOW. IMPERV. SURFACES)		5,681 S.F.
ACTUAL IMPERVIOUS	(39.95%)	5,674 S.F.

NOTE: THERE WILL BE APPROXIMATELY 123 CU. YRDS. OF GRADING OUTSIDE OF THE BUILDING FOOTPRINT.

AVERAGE GRADE CALCS.

	LENGTH	ELEVATION	TOTAL
A	24	71.75	1722.00
B	2	74.00	148.00
C	12	75.00	900.00
D	22	76.00	1672.00
E	47	71.35	3353.45
F	1.5	65.50	98.25
G	15	63.40	951.00
H	1.5	61.95	92.93
I	17.5	61.45	1075.38
J	43.5	61.60	2679.60
K	7.75	64.00	496.00
L	1	64.85	64.85
M	6	65.50	393.00
N	1	66.00	66.00
O	24.75	67.65	1674.34
P	11.5	69.40	798.10
Q	5	68.60	343.00
R	6.5	68.00	442.00
S	2	68.10	136.20
T	9	67.95	611.55
U	8	68.35	546.80
V	7.5	69.25	519.38
TOTAL	276		18,783.83

18,783.83/276 = 68.06'

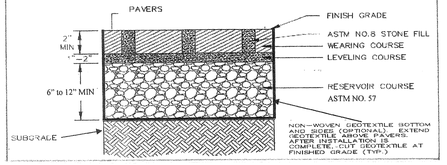
AVERAGE GRADE = 68.06'

MAX. BUILDING HEIGHT = 68.06' + 30' = 98.06'

PROPOSED BUILDING HEIGHT = 96.5'

NOTE:
EXISTING ASPHALT DRIVEWAY OF EASEMENT AND TRACT 'X' MUST BE REPLACED WITH BRUSHED CONCRETE PER SHORT PLAT/FIRE REQUIREMENTS.

PERVIOUS CONCRETE BLOCK OR "PAVER" SYSTEMS

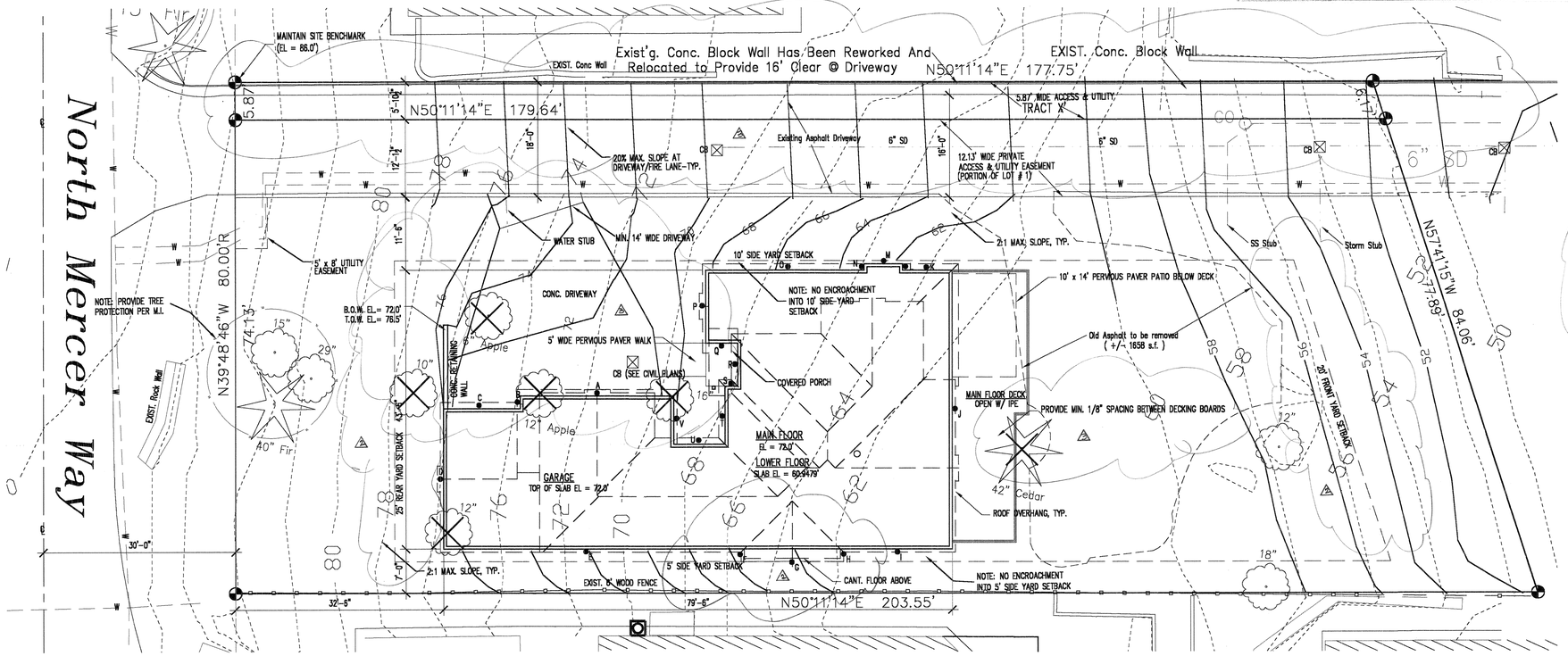


FIRE REQUIREMENTS NOTE:

1- PROJECT TO BE NFPA 13-R MODIFIED
2- PROVIDE MONITORED WATER FLOW ALARM
3- PROVIDE FIRE RETARDANT COATING IN ATTIC AND CRAWLSPACE

NOTE:
PRIOR TO STAKING FOUNDATION, A LICENSED SURVEYOR MUST VERIFY THAT THE DIMENSIONS SHOWN ON ARCHITECT'S FOUNDATION PLAN PROPERLY CLOSE. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO ARCHITECT PRIOR TO PRECEEDING WITH THE WORK.

SHEET INDEX



AREA SUMMARY (ALL AREAS ARE APPROX.)

LOWER FLOOR		1,503 S.F.
MAIN FLOOR		1,697 S.F.
UPPER FLOOR		1,640 S.F.
TOTAL FINISHED AREA		4,840 S.F.
OPEN DECK W/ IPE DECKING		470 S.F.
COVERED PORCH @ ENTRY		34 S.F.
GARAGE		841 S.F.

NOTE:
THE FINISHED SQUARE FOOTAGE SUMMARY HAS BEEN BASED ON THE "SQUARE FOOTAGE METHOD FOR CALCULATING" FOR SINGLE FAMILY RESIDENTIAL BUILDINGS, PER ANSI Z7285-1996 GUIDELINES. FINISHED SQUARE FOOTAGE CALCULATIONS FOR THIS RESIDENCE WERE MADE BASED ON PLAN DIMENSIONS ONLY AND MAY VARY FROM THE FINISHED SQUARE FOOTAGE OF THE HOUSE AS BUILT.

NOTE TO SITE PLAN

CONTENTS OF ARCHITECT'S SITE PLAN ARE FOR ORIENTATION PURPOSES ONLY AND NOT FOR CONSTRUCTION. ALL SITE PLAN DIMENSIONS AND SITE CONDITIONS, BUILDING DIMENSIONS, AND SITE DEVELOPMENT MUST BE VERIFIED BY A PROFFESIONAL SURVEYOR PRIOR TO EXCAVATION TO BE PREVENT ENCROACHMENT AND ASSURE COMPLIANCE WITH BUILDING SETBACK REQUIREMENTS, BUILDING HEIGHT RESTRICTIONS, PROPERTY LINES, EASEMENTS AND OTHER SITE RESTRICTIONS WHICH APPLY.

SITE PLAN IS BASED SOLEY ON THE FOLLOWING DOCUMENTS MADE AVAILABLE TO THE ARCHITECT.

PLAT MAP	Y	DATED: 2016	BY: TRUE NORTH LAND SURVEYORS
SURVEY	Y	DATED: 2016	BY: TRUE NORTH LAND SURVEYORS
TITLE	Y	DATED 2013	BY: CHICAGO TITLE INS. CO.

NO SEARCH OF PUBLIC RECORDS WAS MADE NOR ANY OTHER ACT PREFORMED TO DETERMINE THE POSSIBLE EXISTENCE OF ANY RECORDED OR UNRECORDED CLAIM AGAINST THE SUBJECT PROPERTY.

DRAINAGE SWALE NOTE:
PROVIDE DRAINAGE SWALE @ HOUSE PERIMETER FOR SITE DRAINAGE AWAY FROM RESIDENCE AND AWAY FROM ADJACENT PROPERTIES.

SITE PLAN

0 5' 10' 20' 30'
1"=10'

NOTE:
SHORT PLAT SUB13-008 HAS BEEN FINALED AND RECORDED PRIOR TO PERMIT ISSUANCE.

NOTE:
PERVIOUS PAVERS AT LOWER PATIO AND FRONT ENTRY WALK TO BE "ECO-STONE" BY UNI-GROUP USA (TYP). SEE CITY OF M.I. REQUIREMENTS.

NOTE:
SEE CIVIL ENGINEERING DRAWINGS FOR ALL SITE DRAINAGE SPECIFICATIONS, NOTES, DETAILS AND TEMPORARY EROSION CONTROL REQUIREMENTS.

Anderson Architecture
Leif Anderson Architect
20822 Danson Road, Lynnwood, WA 98036
425.672.4963 Fax/Phone
Leif@AndersonArchitecture.com

A Custom Residence for

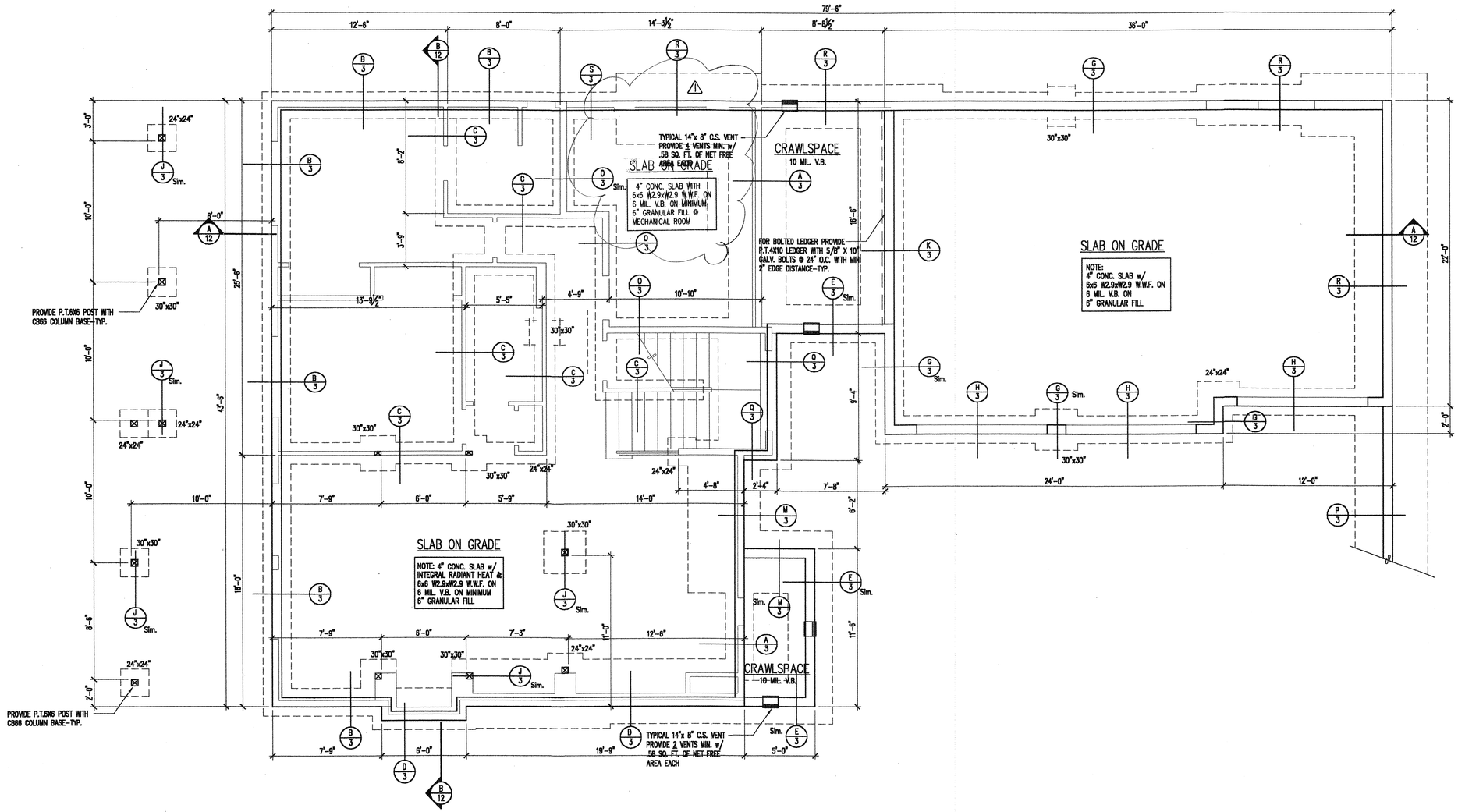
On The Rock 98040, LLC

Lot 1, 7260 North Mercer Way, Mercer Island

DATE:
03-22-2013
08-8-2013
03-20-2014 ⚠
12-20-2016 ⚠

JOB. NO.
12-12.101

SHEET NO.
1
OF 24



Foundation Plan

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

NOTE:

THE CONTRACTOR IS TO VERIFY THE HOLDOWN LOCATIONS NOTED ON THE SHEAR WALL DRAWINGS WITH THE FOUNDATION CONTRACTOR AND THE FRAMING CONTRACTOR PRIOR TO PLACING ANY HOLDOWNS OR HOLDOWN ANCHOR BOLTS. WINDOW AND DOOR ROUGH OPENINGS AND LOCATIONS ARE ALSO TO BE VERIFIED BY THE CONTRACTOR AND THE FRAMING CONTRACTOR PRIOR TO PLACING ANY HOLDOWNS OR HOLDOWN ANCHOR BOLTS.

FOUNDATION PLAN NOTES:

1. PROVIDE 1/2" AIRSPACE BETWEEN CONCRETE AND ALL NON-PRESSURE TREATED WOOD.
2. EXTERIOR FOOTINGS TO BE INTRENCHED 18" MIN. BELOW FINISHED GRADE, AND BEAR ON UNDISTURBED SOIL. STEP FOOTINGS AS SITE CONDITIONS REQUIRE.
3. ANCHOR BOLTS TO BE 5/8"ø X 12" @ 48"OC (UNO). PROVIDE BP 3" x 3" x 1/4" BEARING PLATES @ ANCHOR BOLTS.
4. PROVIDE MIN. 4"ø PERFORATED PERIMETER DRAIN IN 6" GRANULAR FILL AT BOTTOM OF FOOTINGS.
5. PROVIDE MIN. 4"ø ROOF TIGHT LINE DRAIN CONNECTING TO DOWN SPOUTS SEE ROOF FRAMING PLAN FOR DOWN SPOUT LOCATIONS.
6. BACKFILL AT EXTERIOR WALLS MAY REQUIRE COMPACTION IN THE PRESENCE OF A LICENSED ENGINEER, (FIELD VERIFY)
7. SEE GENERAL NOTES, DIVISION #6, FOR LUMBER GRADING, SPECIES AND DESIGN VALUES.
8. PROVIDE "NERVASTRAL" WATERPROOFING MEMBRANE BETWEEN CONCRETE SLAB AND WOOD FRAMING WHERE NEEDED.
9. PROVIDE INTEGRAL RADIANT HEATING TUBES AT LOWER FLOOR CONCRETE SLAB.

NOTE:

PRIOR TO STAKING FOUNDATION, A LICENSED SURVEYOR MUST VERIFY THAT THE DIMENSIONS SHOWN ON ARCHITECT'S FOUNDATION PLAN PROPERLY CLOSE. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO ARCHITECT PRIOR TO PRECEEDING WITH THE WORK.

NOTE:

VERIFY THE REQUIRED MINIMUM CONCRETE EMBEDMENT AND CONCRETE COVERAGE FOR ALL SIMPSON HOLDOWNS WITH THE MOST RECENT EDITION OF THE SIMPSON CATALOG. PROVIDE A MIN. OF 3" CLEAR @ BOTTOM OF THE HOLDOWN, COLUMN BASE AND/OR ANCHOR BOLT. PROVIDE ALL REQUIRED REINFORCING AS SPECIFIED IN THE CATALOG, OR SHOWN AND NOTED IN THE DETAILS AND THE DRAWINGS.

NOTE:

SEE SHEAR WALL DETAILS, NOTES, SCHEDULES AND FOUNDATION HOLDOWN PLAN FOR MINIMUM 3X SILL PLATE REQUIREMENTS AND LOCATIONS.

NOTE:

SEE ENGINEERING DRAWINGS AND SHEAR WALL SCHEDULES FOR ALL REQUIRED ANCHOR BOLT SIZES AND SPACINGS. PROVIDE MINIMUM 5/8"ø x 10" LONG ANCHOR BOLTS @ 48" O.C. FOR WALLS NOT DENOTED ON PLANS.

NOTE:

SEE SHEETS S-1 THRU S-7 FOR SPECIAL FRAMING NOTES, CONSTRUCTION NOTES AND DETAILS NOT NOTED ON THIS SHEET.

FOOTING SCHEDULE

18	WOOD POST ON 18"ø x 12" THK. CONC. FTG. W/ 2-#4 BARS E.W.
24	WOOD POST ON 24"ø x 12" THK. CONC. FTG. W/ 2-#4 BARS E.W.
30	WOOD POST ON 30"ø x 12" THK. CONC. FTG. W/ 3-#4 BARS E.W.
18	WOOD POST ON 18"x18"x12" THK. CONC. FTG. W/ 2-#4 BARS E.W.
24	WOOD POST ON 24"x24"x12" THK. CONC. FTG. W/ 3-#4 BARS E.W.
30	WOOD POST ON 30"x30"x12" THK. CONC. FTG. W/ 4-#4 BARS E.W.

ALL WOOD POST TO BE 4x4 (4x6 AT BEAM BUTT JOINTS) UNLESS NOTED OTHERWISE (U.N.O.) ALL RECTANGULAR FTGS. NOT SHOWN ON FOOTING SCHEDULE TO BE 12" THK. W/#4 BARS @ 6" O.C. EACH WAY U.N.O.

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STATE REGISTERED ARCHITECT
LEIF E. ANDERSON
STATE OF WASHINGTON

A Custom Residence for

On The Rock 98040, LLC

Lot 1, 7260 North Mercer Way, Mercer Island

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CITY OF MERCER ISLAND
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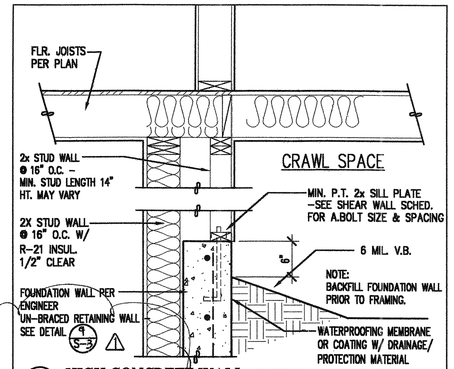
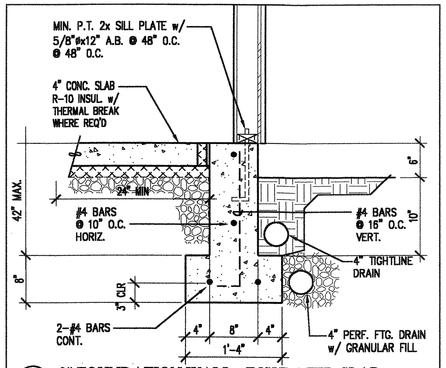
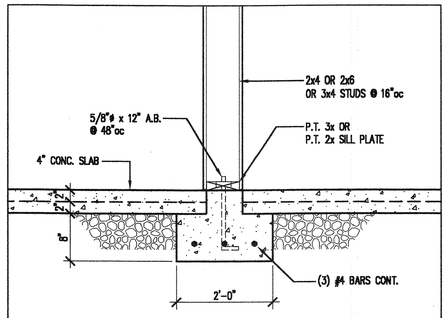
OF 24



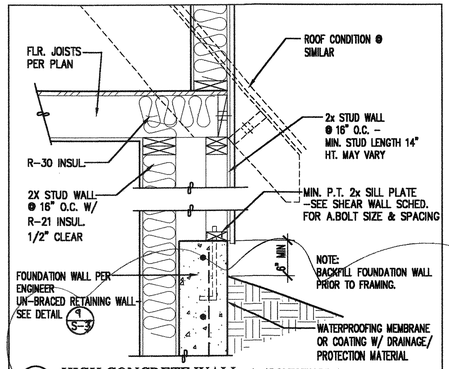
A HIGH CONCRETE WALL (INTERIOR w/ PONY WALL)
SCALE: 1" = 1'-0"



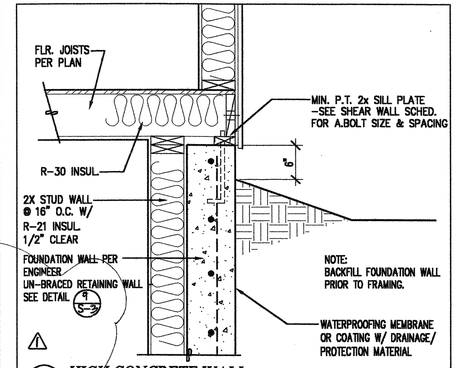
B 8" FOUNDATION WALL - INSULATED SLAB
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



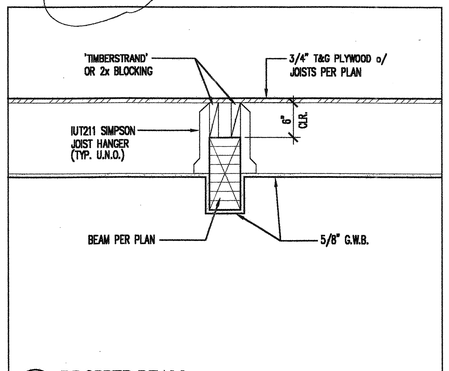
C DETAIL - INTERIOR BEARING WALL
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



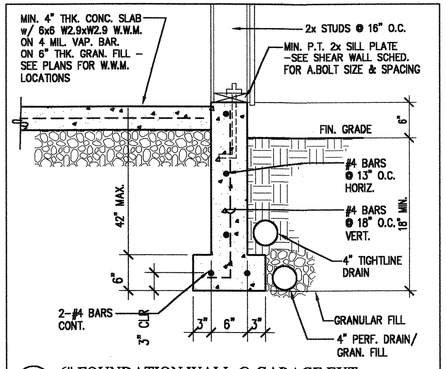
D HIGH CONCRETE WALL (w/ PONY WALL & INTERIOR FRAMED WALL)
SCALE: 1" = 1'-0"



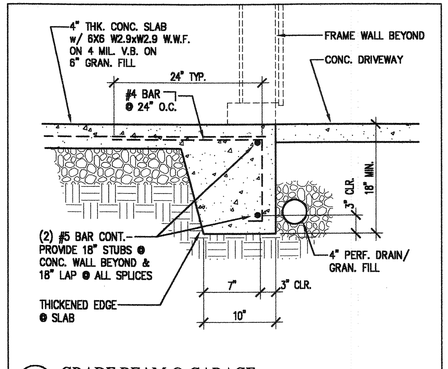
E HIGH CONCRETE WALL
SCALE: 1" = 1'-0"



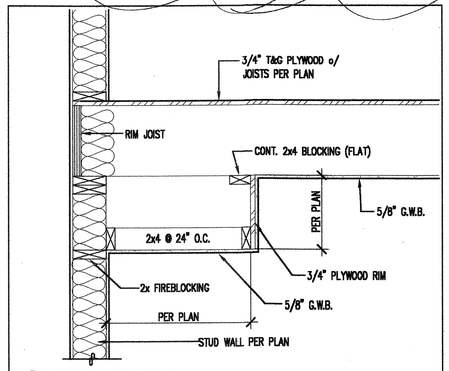
F DROPPED BEAM
SCALE: 1" = 1'-0"



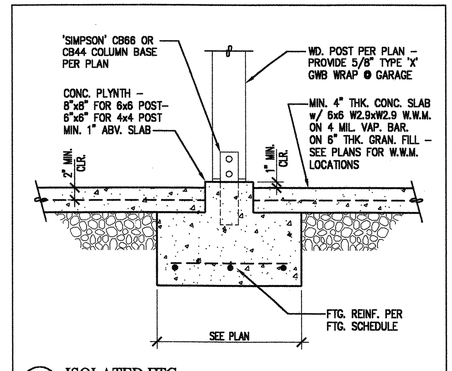
G 6" FOUNDATION WALL @ GARAGE EXT.
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



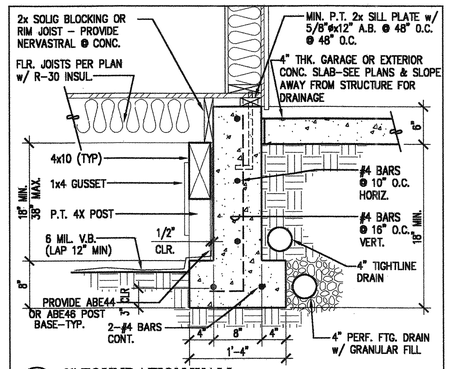
H GRADE BEAM @ GARAGE
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



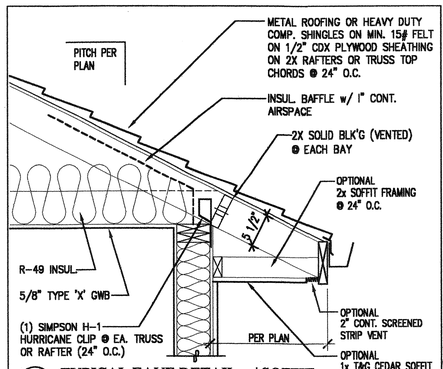
I SOFFIT DETAIL
SCALE: 1" = 1'-0"



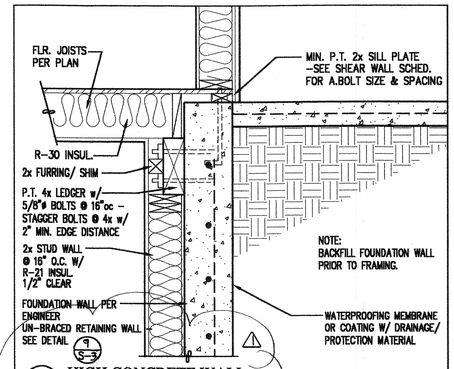
J ISOLATED FTG.
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



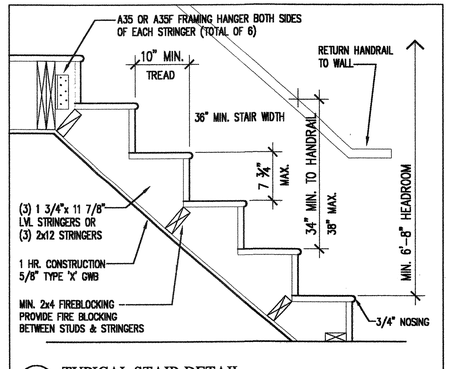
K 8" FOUNDATION WALL
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



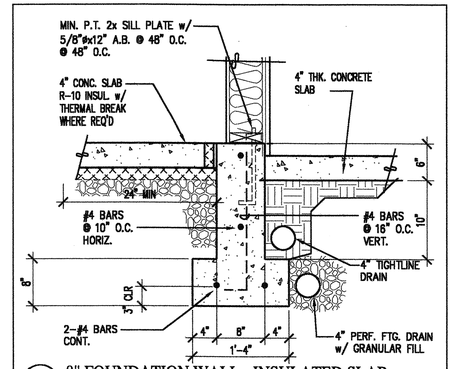
L TYPICAL EAVE DETAIL w/ SOFFIT
SCALE: 1" = 1'-0" SEE SHEET FOR TYP. WALL CONST.



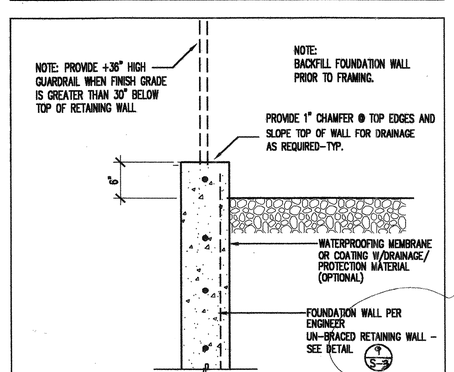
M HIGH CONCRETE WALL
SCALE: 1" = 1'-0"



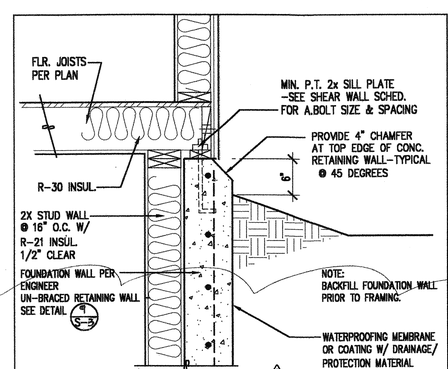
N TYPICAL STAIR DETAIL
SCALE: 1" = 1'-0"



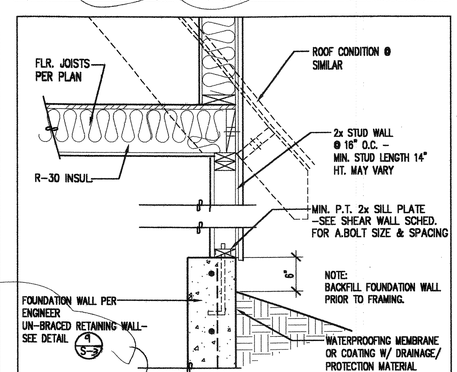
O 8" FOUNDATION WALL - INSULATED SLAB
SCALE: 1" = 1'-0" REINF: GRADE 40 (U.N.O.)



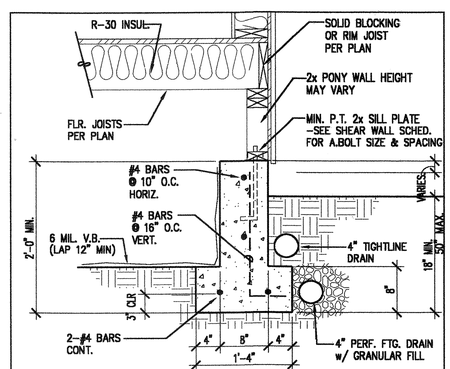
P HIGH CONCRETE WALL
SCALE: 1" = 1'-0"



Q HIGH CONCRETE WALL
SCALE: 1" = 1'-0"



R HIGH CONCRETE WALL (PONY WALL W/ FRAMED FLOOR AND/OR ROOF FRAMING)
SCALE: 1" = 1'-0"



S PONY WALL
SCALE: 1" = 1'-0"

NOTE:
PRIOR TO STAKING FOUNDATION, A LICENSED SURVEYOR MUST VERIFY THAT THE DIMENSIONS SHOWN ON ARCHITECT'S FOUNDATION PLAN PROPERLY CLOSE. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT PRIOR TO PRECEDING WITH THE WORK.

NOTE:
VERIFY THE REQUIRED MINIMUM CONCRETE EMBEDMENT AND CONCRETE COVERAGE FOR ALL SIMPSON HOLDDOWNS WITH THE MOST RECENT EDITION OF THE SIMPSON CATALOG. PROVIDE A MIN. OF 3" CLEAR @ BOTTOM OF THE HOLDOWN, COLUMN BASE AND/OR ANCHOR BOLT. AS SPECIFIED IN THE CATALOG, OR SHOWN AND NOTED IN THE DETAILS AND THE DRAWINGS.

NOTE:
SEE SHEAR WALL DETAILS, NOTES, SCHEDULES AND FOUNDATION HOLDOWN PLAN FOR MINIMUM 3X SILL PLATE REQUIREMENTS AND LOCATIONS.

NOTE:
SEE ENGINEERING DRAWINGS AND SHEAR WALL SCHEDULES FOR ALL REQUIRED ANCHOR BOLT SIZES AND SPACINGS. PROVIDE MINIMUM 5/8"ø 12" LONG ANCHOR BOLTS @ 48" O.C. FOR WALLS NOT DENOTED ON PLANS.

NOTE:
SEE SHEETS S-1 THRU S-7 FOR SPECIAL FRAMING NOTES, CONSTRUCTION NOTES AND DETAILS NOT NOTED ON THIS SHEET.

NOTE:
ALL FASTENERS FOR PRESSURE TREATED WOOD SHOULD BE ZMAX HOT-DIPPED GALVANIZED (G185) OR STAINLESS STEEL PER IBC 2304.9.5

NOTE:
PROVIDE 3000 PSI CONCRETE FOR ALL GARAGE SLABS, CARPORT SLABS, CONCRETE SLABS AND CONCRETE WALLS EXPOSED TO WEATHERING. NO SPECIAL INSPECTION REQUIRED.

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REGISTERED ARCHITECT
2015
LEIF E. ANDERSON
STATE OF WASHINGTON

A Custom Residence for
On The Rock 98040, LLC
Lot 1, 7260 North Mercer Way, Mercer Island

RECEIVED
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CITY OF MERCER ISLAND
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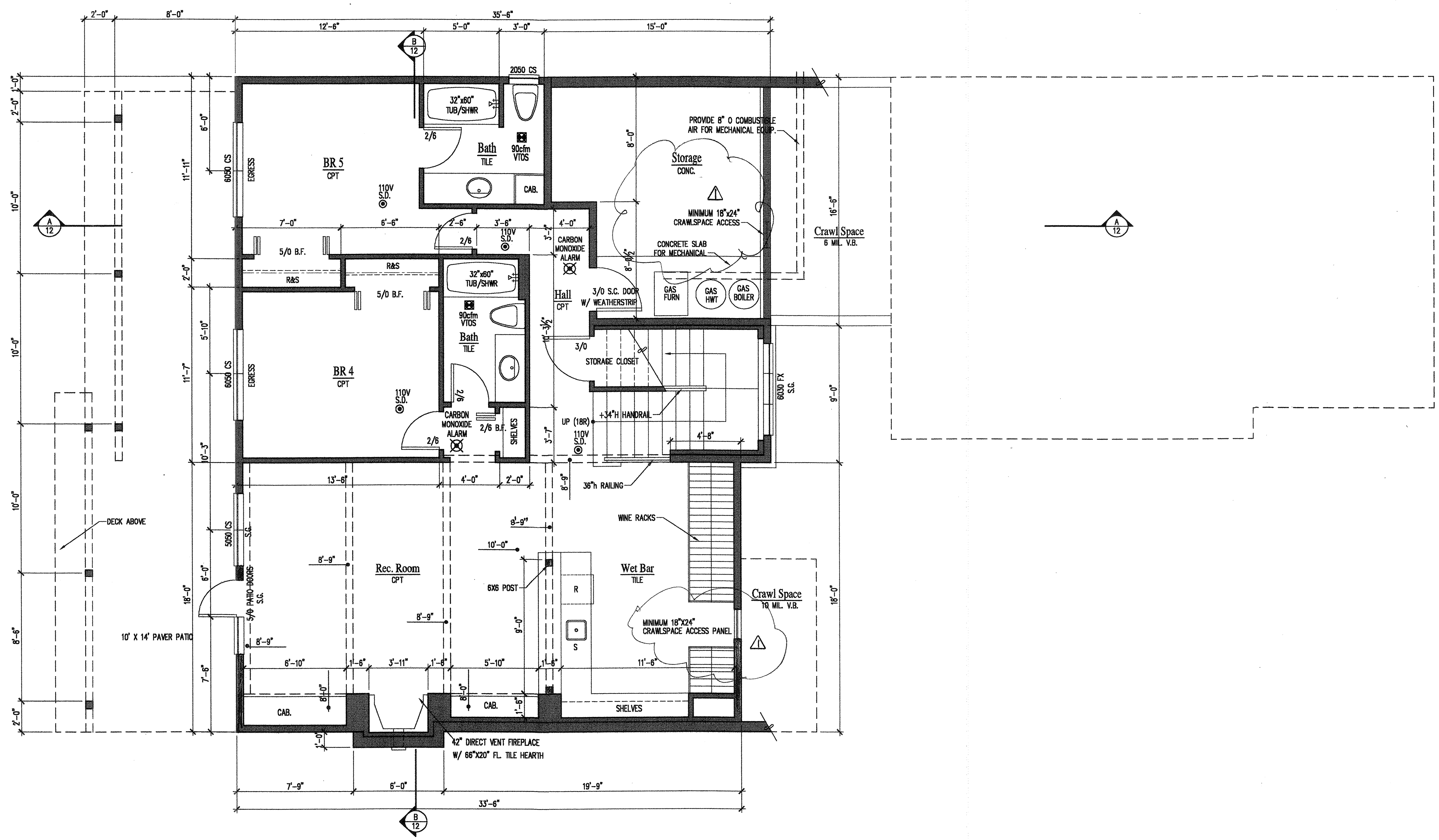

Lower Floor Plan

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

LOWER FLOOR AREA = 1,5_8 S.F.

FLOOR PLAN NOTES

1. TYPICAL PLATE HEIGHT TO BE 10'-0" (U.N.O.). NON-STANDARD PLATE LOCATIONS ARE NOTED ON THE MAIN FLOOR PLAN, THE UPPER FLOOR PLAN, THE UPPER FLOOR FRAMING PLAN, THE UPPER FLOOR CEILING FRAMING PLAN AND THE ROOF FRAMING PLAN.
2. VENT EXHAUST FANS, COOKTOPS/ HOODS AND DRYER TO THE EXTERIOR. EXHAUST FAN CAPACITIES NOTED ON PLANS ARE MINIMUM REQUIREMENTS.
3. WINDOWS TO BE BY: 'SIERRA PACIFIC' - ALUMINUM CLAD. SEE WINDOW DESIGNATIONS ON SHEETS #4, #6, & #8 FOR WINDOW MFR. ROUGH OPENINGS & SIZES. VERIFY ALL ROUGH OPENINGS WITH MANUFACTURER PRIOR TO FRAMING.
4. DOORS TO BE 8'-0" HIGH SOLID CORE WITH RAISED PANELS (U.N.O.)
5. ALL GLAZING SUBJECT TO HUMAN IMPACT SHALL BE SAFETY GLAZING. ALL GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24" ARC AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE SHALL BE SAFETY GLAZING.
6. SEE 'GENERAL NOTES', DIVISION #6, FOR LUMBER GRADING, SPECIES AND ALLOWABLE DESIGN VALUES.
7. FIRE BLOCK ALL PLUMBING PENETRATIONS. FIRE BLOCK AT 10'-0" INTERVALS (VERTICAL AND HORIZONTAL) IN WALLS.
8. TYPICAL WALL STUDS TO BE 2x6 @ 16" O.C. AT EXTERIOR INSULATED WALLS (U.N.O.). INTERIOR WALLS ARE TYPICALLY 2x4 STUDS @ 16" O.C. (U.N.O.). SEE SHEETS #5, #7 & #9 FOR NON-STANDARD STUD LOCATIONS.
9. CONTRACTOR TO INSTALL IN ACCORDANCE WITH U.L. APPROVED MANUFACTURER'S SPECIFICATIONS, ALL PREFABRICATED FIREPLACES, STOVES AND RELATED ASSEMBLIES.

NOTE TO WINDOWS:

ALL WINDOW SIZES ARE NOMINAL.
CONTRACTOR TO VERIFY ALL SIZES AND ROUGH OPENINGS WITH WINDOW MANUFACTURER PRIOR TO FRAMING.

NOTE TO DRAWING:

PROVIDE INTEGRAL HYDRONIC RADIANT HEATING AT LOWER FLOOR CONCRETE SLAB WITH CONTINUOUS R-10 SLAB INSULATION.

NOTE TO DRAWING:

PROVIDE SOFFIT CEILINGS AT LOWER FLOOR FOR MECHANICAL DUCTING (TYPICAL).

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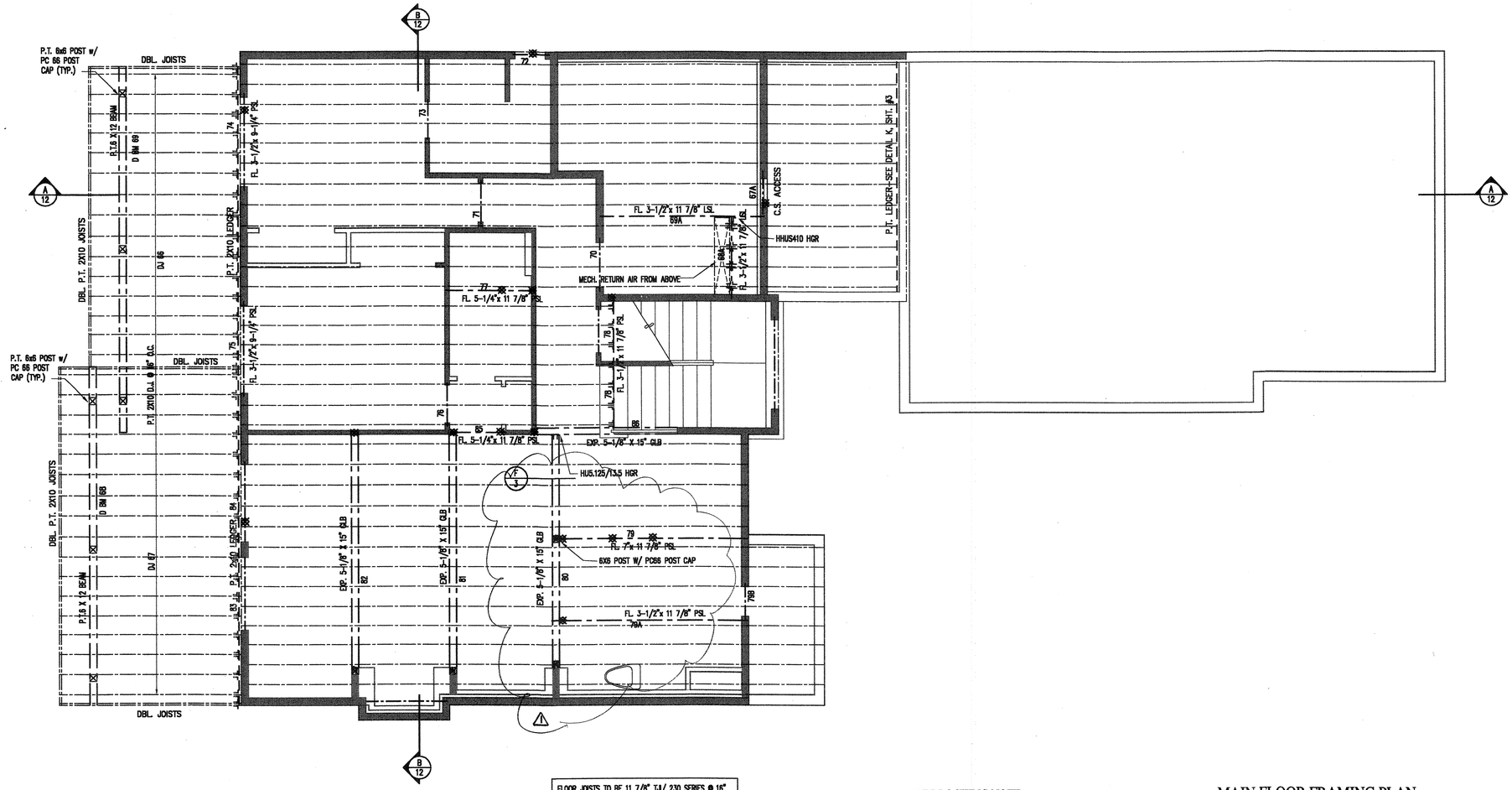

FLOOR JOISTS TO BE 11 7/8" TJI/ 230 SERIES @ 16" O.C. TYPICAL, U.N.O.

※ POINT LOAD FROM ABOVE

Main Floor Framing Plan

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

NOTE:

PONY WALLS OR CRIPPLE WALLS THAT ARE DIRECTLY BELOW A MAIN FLOOR SHEAR WALL ARE TO BE SHEATHED AND NAILED THE SAME AS THE SHEAR WALL ABOVE. ANY OPENINGS OR PENETRATIONS THROUGH THESE LOWER LEVEL SHEAR WALLS ARE TO BE IN THE MIDDLE AREAS OF THE STRUCTURAL SHEATHING (TYPICAL).

NOTE:

SEE SHEAR WALL DETAILS, NOTES, SCHEDULES AND FOUNDATION HOLDOWN PLAN FOR MINIMUM 3 X SILL PLATE REQUIREMENTS AND LOCATIONS (TYPICAL–U.N.O.).

NOTE:

SEE SHEET # 17 FOR ALLOWABLE LOCATIONS OF ROUND, SQUARE AND RECTANGULAR HOLES THROUGH THE WEBS OF TJI ENGINEERED WOOD I–JOISTS. FOLLOW ALL THE MANUFACTURER'S RECOMMENDATIONS REGARDING SIZES, SPACINGS AND QUANTITY OF HOLES AND PENETRATIONS FOR TJI I–JOISTS/FRAMING MEMBERS.

NOTE:

ALL FASTENERS FOR PRESSURE TREATED WOOD SHALL BE ZMAX HOT–DIPPED GALVANIZED (G185) OR STAINLESS STEEL PER IBC 2304.9.5.

BEAM SIZE	MIN. END POST
4x12 DF#2/4x10 DF#2	4x4 DF#2/OR (2) 2x4 STUDS STITCHED @ 12"OC W/ (2) 8d NAILS
6x10 DF#1 6x12 DF#1	4x6/6x6 DF#1 4x6/6x6 DF#1
3 1/8" GLB/3 1/2"x PSL/LSL	4x4 DF#1
5 1/8" GLB/5 1/4"x PSL/LSL	4x6/6x6 DF#1
6 3/4" GLB/7"x PSL/LSL	4x8/8x8 DF#1

MINIMUM HANGER POST/CAP REQUIRED (U.N.O.)

2x6	CJ	U26
2x8	CJ	U26
2x10	CJ	LU28
2x12	CJ	LU210
2x8	FJ	U26
2x10	FJ	LU28
2x12	FJ	LU210
2–2x8	FJ	U26–2
2–2x10	FJ	U210–2
2–2x12	FJ	U210–2
3–2x8	FJ	U26–3
3–2x10	FJ	U210–3
3–2x12	FJ	U210–3
4x6	Beam/Hdr	U46
4x8	Beam/Hdr	U46
4x10	Beam/Hdr	U410
4x12	Beam/Hdr	U410
6x8	Beam/Hdr	U66
6x10	Beam/Hdr	U610
1–3/4"x9–1/2" PSL/LVL		HU9 min.
1–3/4"x11–7/8"PSL/LVL		HU11 min.
3–1/2"x9–1/2"PSL/LSL		HU410 max.
3–1/2"x11–7/8"PSL/LSL		HU412 max.
5–1/4"x9–1/2"PSL		HHUS5.50/10
5–1/4"x11–7/8"PSL		HHUS5.50/10
4x4	Post Cap	AC4 max.
6x6	Post Cap	AC6 max.
GLB	Beam/Post	CC col. Cap
PSL	Beam/Post	CC col. Cap

NOTE:

PROVIDE SOLID FRAMING "SQUASH" BLOCKS AT BEARING FOR ALL FRAMING MEMBERS TO MATCH WIDTH OF POSTED MEMBER FROM ABOVE. SEE BEAM/SIZE AND MINIMUM END POST SCHEDULE ON THE FRAMING PLANS.

NOTE:

ALL SIMPLE SPAN GLU–LAMINATED BEAMS (GLB) ARE TO BE 24F–V4 GRADE OR BETTER (Fv=240psi, Fb=2400psi, AND E=1,800,000 psi). ALL CONTINUOUS GLB'S AND ALL CANTILEVER GLB'S ARE TO BE 24F–V8 GRADE OR BETTER (Fv=240psi, Fb=2400psi, AND E=1,800,000 psi).

NOTE:

PROVIDE FIREBLOCKING FOR ALL ELECTRICAL, PLUMBING AND MECHANICAL PENETRATIONS. PROVIDE FIREBLOCKING AT 10'–0" INTERVALS BOTH HORIZONTALLY AND VERTICALLY IN WALLS AND CHASES WITH MIN. SOLID 2X FIREBLOCKING OR 5/8" TYPE 'X' GWB (TYPICAL).

NOTE:

PROVIDE TEMPORARY POSTING OF ALL ENGINEERED WOOD BEAMS, INCLUDING EXPOSED BEAMS AND FLUSH BEAMS AS REQUIRED TO PREVENT DEFLECTION OF MEMBERS UNTIL THE REQUIRED MOISTURE CONTENT OF THE MEMBERS IS ACHIEVED.

NOTE:

FINGER JOINED STUDS SHALL NOT BE USED AT ANY HOLDOWN OR LATERAL RESISTING STRAP LOCATION.

NOTE:

SOFFIT CEILINGS AS REQUIRED FOR MECHANICAL – VERIFY ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.

DEFERRED SUBMITTAL NOTE:

THE MANUFACTERERS OF ALL FLOOR TRUSS COMPONENTS ARE REQUIRED TO PROVIDE ALL NECESSARY DESIGN DOCUMENTS AND SPECIFICATIONS TO THE BUILDING OFFICIAL FOR REVIEW AS A DEFERRED SUBMITTAL PER IBC SECT. 106.

TJI BLOCKING NOTE:

PROVIDE TJI BLOCKING (MIN) OVER ALL SUPPORTS.

SUPPORTS WITH ONE BEARING WALL ABOVE
PROVIDE "TIMBERSTRAND" LSL BLOCKING (UNO)

SUPPORTS WITH TWO BEARING WALLS ABOVE
PROVIDE DOUBLE "TIMBERSTRAND" LSL BLOCKING (UNO)

SUPPORTS WITH POINT LOAD ABOVE
PROVIDE DOUBLE "TIMBERSTRAND" LSL BLOCKING OR 2X4/2X6 SQUASH BLOCKS (UNO)

NOTE:

PROVIDE CONTINUOUS 1 1/4" TIMBER STRAND LSL RIM JOIST AT ALL EXTERIOR WALLS, UNO.

NOTE:

SEE SHEET #17 FOR TYPICAL FRAMING DETAILS AND NOTES TO FRAMING DETAILS FOR TJI ENGINEERED WOOD I–JOISTS. SEE MANUFACTURERS RECOMMENDATIONS FOR JOB SITE STORAGE AND INSTALLATION. PROVIDE SIMPSON STRONG–TIE CONNECTORS MANUFACTURED FOR USE WITH TJI ENGINEERED PRODUCTS, AND PROVIDE ALL MANUFACTURERS RECOMMENDED FASTENERS.

NOTE:

SEE SHEETS S–1 THRU S–7 FOR SPECIAL FRAMING NOTES, CONSTRUCTION NOTES AND DETAILS NOT NOTED ON THIS SHEET.

MAIN FLOOR FRAMING PLAN

1. ALL BEAMS AND HEADERS TO BE 4x10 (UNLESS NOTED OTHERWISE)
2. FLOOR JOISTS (F.J.) TO BE 11 7/8" TJI/ 230 SERIES @ 16" O.C. (U.N.O.) PLAN INDICATES FLOOR JOIST DIRECTION.
3. PROVIDE BLOCKING OVER ALL SUPPORTS. SEE TJI BLOCKING NOTES ON THIS SHEET. PROVIDE 2x CRIPPLES, WEB SUPPORTS AND BACKERS AS REQUIRED BY MFR. SEE TJI DETAILS, SHT.#17.
4. SUPPORT ALL BEAMS WITH POST OF EQUAL WIDTH (U.N.O.). SEE BEAM SIZE/ MIN. END POST SCHEDULE THIS SHEET.
5. TYPICAL PLATE HEIGHT TO BE 10'–0" (U.N.O.). NONSTANDARD PLATE LOCATIONS ARE NOTED ON THE FRAMING PLANS AND FLOOR PLANS.
6. ALL FRAMING HARDWARE TO BE BY 'SIMPSON' OR EQUAL. PROVIDE ALL MANUFACTURER'S RECOMMENDED FASTENERS.
7. SEE GENERAL NOTES, DIVISION #6 FOR LUMBER GRADING, SPECIES AND ALLOWABLE DESIGN VALUES.
8. FIRE BLOCK ALL PLUMBING PENETRATIONS. FIRE BLOCK AT 10'–0" INTERVALS (VERTICAL AND HORIZONTAL) IN WALLS.
9. WALL STUDS TO BE 2x6 @ 16" O.C. AT ALL EXTERIOR INSULATED WALLS (U.N.O.). INTERIOR WALLS ARE TYPICALLY 2x4 STUDS @ 16" O.C. (U.N.O.)
10. CEILING JOISTS (C.J.) ARE TYPICALLY 2x6 @ 24" O.C. (U.N.O.).
11. CONTRACTOR TO INSTALL IN ACCORDANCE WITH U.L. APPROVED MANUFACTURER'S SPECIFICATIONS, ALL PREFABRICATED FIREPLACES, STOVES AND RELATED ASSEMBLIES.

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2015 REGISTERED ARCHITECT LEIF E. ANDERSON STATE OF WASHINGTON

A Custom Residence for

On The Rock 98040, LLC

Lot 1, 7260 North Mercer Way, Mercer Island

RECEIVED
OCT 14 2016
CITY OF MERCER ISLAND
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03-22-2013
08-14-2013 ⚠

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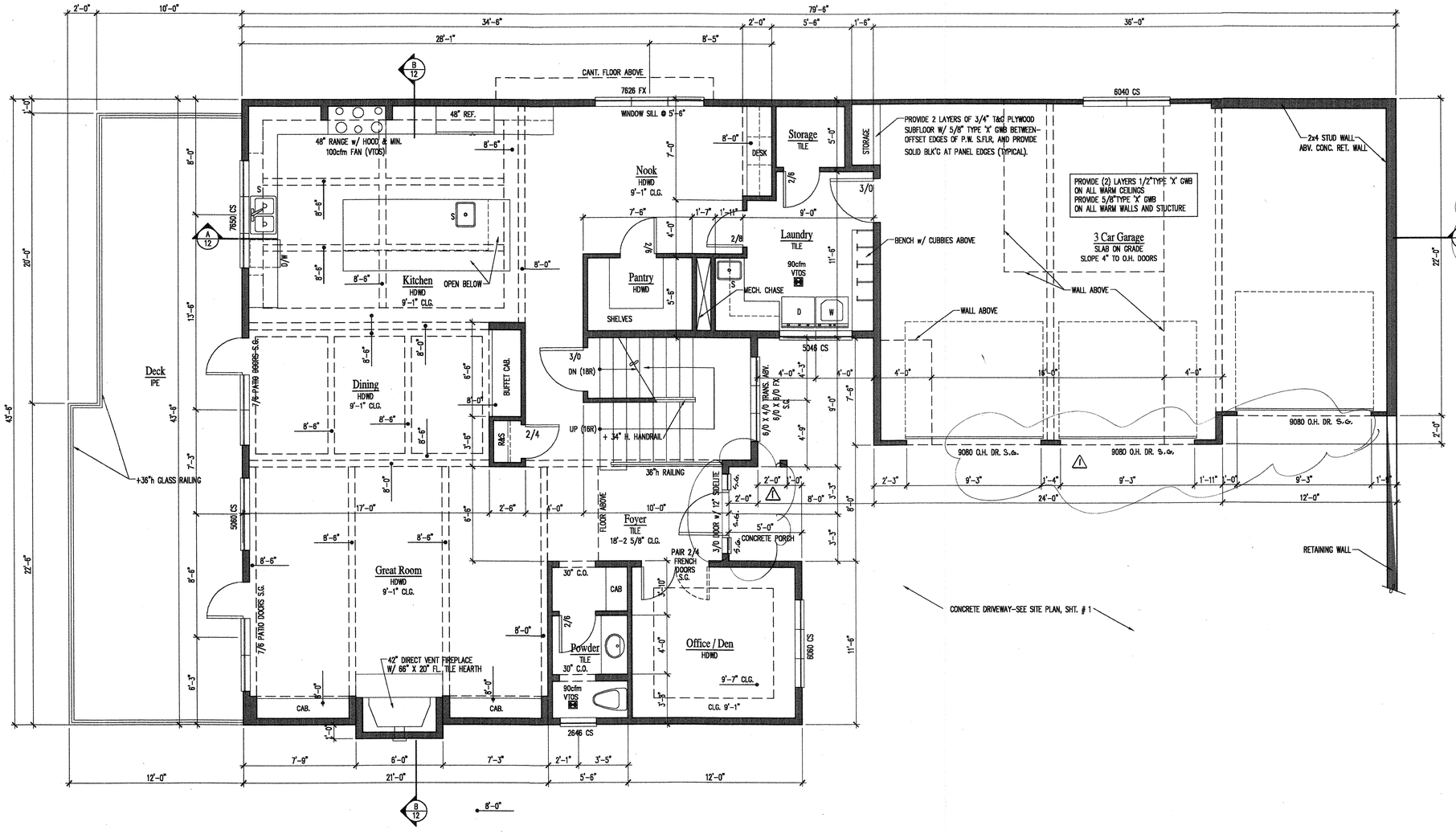

Main Floor Plan

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

MAIN FLOOR AREA = 1,697 S.F.
GARAGE AREA = 841 S.F.
OPEN DECK W/ IPE = 470 S.F.

MAIN FLOOR PLAN NOTES

1. TYPICAL PLATE HEIGHT TO BE 9'-1" (U.N.O.). NON-STANDARD PLATE LOCATIONS ARE NOTED ON THE MAIN FLOOR PLAN, THE UPPER FLOOR PLAN, THE UPPER FLOOR FRAMING PLAN, THE UPPER FLOOR CEILING FRAMING PLAN AND THE ROOF FRAMING PLAN.
2. VENT EXHAUST FANS, COOKTOPS/ HOODS AND DRYER TO THE EXTERIOR. EXHAUST FAN CAPACITIES NOTED ON PLANS ARE MINIMUM REQUIREMENTS.
3. WINDOWS TO BE BY: 'SIERRA PACIFIC' – ALUMINUM CLAD

   SEE WINDOW DESIGNATIONS ON SHEETS #4, #6, & #8 FOR WINDOW MANUFACTURER ROUGH OPENINGS & SIZES. VERIFY ALL ROUGH OPENINGS WITH MANUFACTURER PRIOR TO FRAMING.
4. DOORS TO BE 8'-0" HIGH SOLID CORE PANELED (U.N.O.)
5. ALL GLAZING SUBJECT TO HUMAN IMPACT SHALL BE SAFETY GLAZING. ALL GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24" ARC AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE SHALL BE SAFETY GLAZING.
6. SEE 'GENERAL NOTES', DIVISION #6, FOR LUMBER GRADING, SPECIES AND ALLOWABLE DESIGN VALUES.
7. FIRE BLOCK ALL PLUMBING PENETRATIONS. FIRE BLOCK AT 10'-0" INTERVALS (VERTICAL AND HORIZONTAL) IN WALLS.
8. TYPICAL WALL STUDS TO BE 2x6 @ 16" O.C. AT EXTERIOR INSULATED WALLS (U.N.O.). INTERIOR WALLS ARE TYPICALLY 2x4 STUDS @ 16" O.C. (U.N.O.). SEE SHEETS #5, #7 & #9 FOR NON-STANDARD STUD LOCATIONS.
9. CONTRACTOR TO INSTALL IN ACCORDANCE WITH U.L. APPROVED MANUFACTURER'S SPECIFICATIONS, ALL PREFABRICATED FIREPLACES, STOVES AND RELATED ASSEMBLIES.
10. ALL SKYLIGHTS ARE TO HAVE LAMINATED SAFETY GLASS, AND THE CONTRACTOR IS TO INSTALL ALL SKYLIGHTS PER IRC R308.6, AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

NOTE TO WINDOWS: ⚠

ALL WINDOW SIZES ARE NOMINAL.
CONTRACTOR TO VERIFY ALL SIZES AND ROUGH OPENINGS WITH WINDOW MANUFACTURER PRIOR TO FRAMING.

NOTE TO DRAWING:

PROVIDE 1/4" OR 1/2" WONDERBOARD ON TOP OF 3/4" PLYWOOD SUBFLOOR AT ALL AREAS TO RECEIVE TILE OR STONE
SEE PLANS FOR FINISH FLOOR LOCATIONS.

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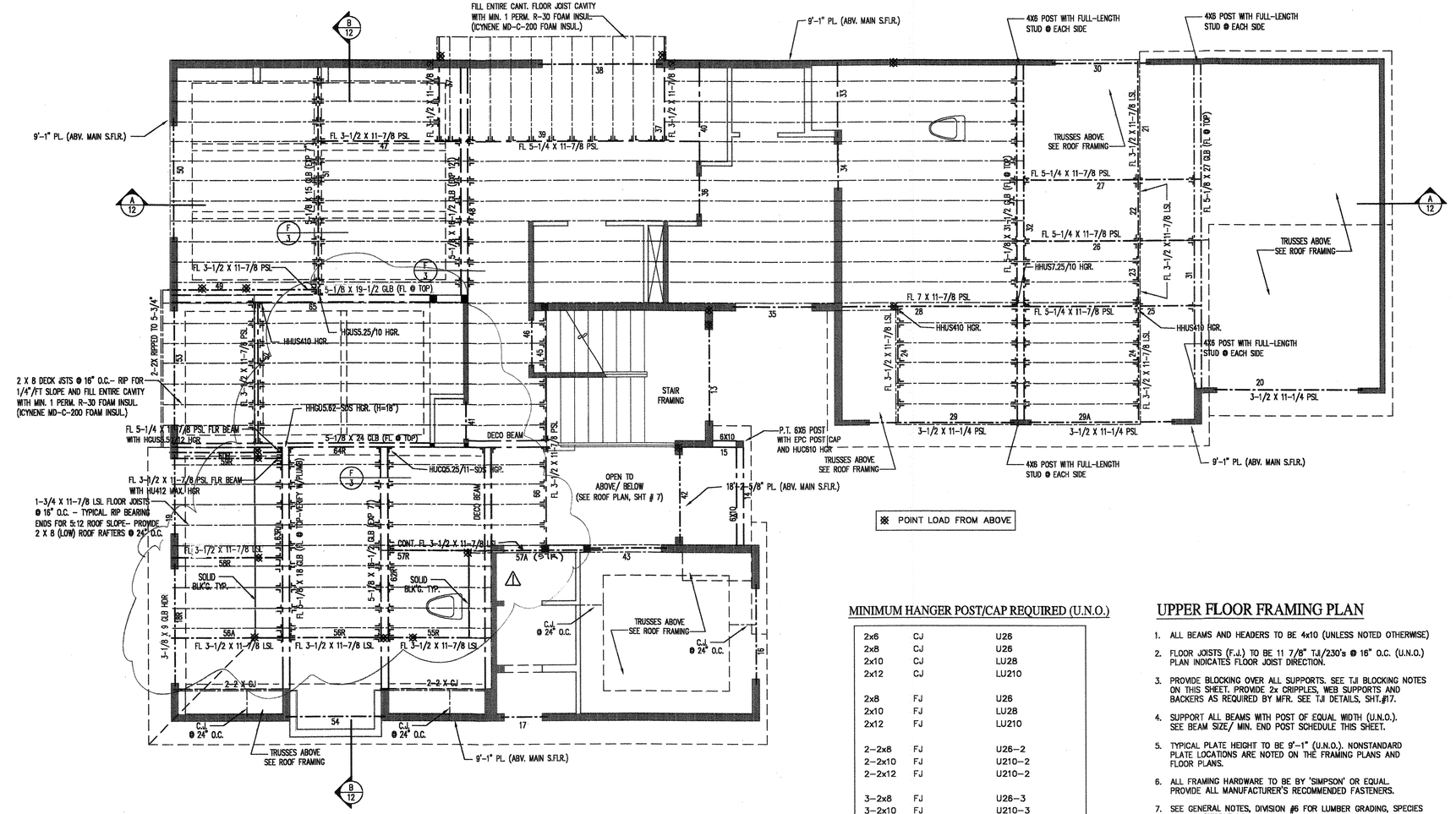

Upper Floor Framing Plan

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

MINIMUM HANGER POST/CAP REQUIRED (U.N.O.)

2x6	CJ	U26
2x8	CJ	U26
2x10	CJ	LU28
2x12	CJ	LU210
2x8	FJ	U26
2x10	FJ	LU28
2x12	FJ	LU210
2-2x8	FJ	U26-2
2-2x10	FJ	U210-2
2-2x12	FJ	U210-2
3-2x8	FJ	U26-3
3-2x10	FJ	U210-3
3-2x12	FJ	U210-3
4x6	Beam/Hdr	U46
4x8	Beam/Hdr	U46
4x10	Beam/Hdr	U410
4x12	Beam/Hdr	U410
6x8	Beam/Hdr	U66
6x10	Beam/Hdr	U610
1-3/4"x9-1/2" LSL/LVL		HU9 min.
1-3/4"x11-7/8" LSL/LVL		HU11 min.
3-1/2"x9-1/2" PSL/LSL		HU410 max.
3-1/2"x11-7/8" PSL/LSL		HU412 max.
5-1/4"x9-1/2" PSL		HHUS5.50/10
5-1/4"x11-7/8" PSL		HHUS5.50/10
4x4	Post Cap	AC4 max.
6x6	Post Cap	AC6 max.
GLB	Beam/Post	PC/CC col. Cap
PSL	Beam/Post	PC/CC col. Cap

UPPER FLOOR FRAMING PLAN

1. ALL BEAMS AND HEADERS TO BE 4x10 (UNLESS NOTED OTHERWISE)
2. FLOOR JOISTS (F.J.) TO BE 11 7/8" TJI/230's @ 16" O.C. (U.N.O.) PLAN INDICATES FLOOR JOIST DIRECTION.
3. PROVIDE BLOCKING OVER ALL SUPPORTS. SEE TJI BLOCKING NOTES ON THIS SHEET. PROVIDE 2x CRIPPLES, WEB SUPPORTS AND BACKERS AS REQUIRED BY MFR. SEE TJI DETAILS, SHT.#17.
4. SUPPORT ALL BEAMS WITH POST OF EQUAL WIDTH (U.N.O.). SEE BEAM SIZE/ MIN. END POST SCHEDULE THIS SHEET.
5. TYPICAL PLATE HEIGHT TO BE 9'-1" (U.N.O.). NONSTANDARD PLATE LOCATIONS ARE NOTED ON THE FRAMING PLANS AND FLOOR PLANS.
6. ALL FRAMING HARDWARE TO BE BY 'SIMPSON' OR EQUAL. PROVIDE ALL MANUFACTURER'S RECOMMENDED FASTENERS.
7. SEE GENERAL NOTES, DIVISION #6 FOR LUMBER GRADING, SPECIES AND ALLOWABLE DESIGN VALUES.
8. FIRE BLOCK ALL PLUMBING PENETRATIONS. FIRE BLOCK AT 10'-0" INTERVALS (VERTICAL AND HORIZONTAL) IN WALLS.
9. WALL STUDS TO BE 2x6 @ 16" O.C. AT ALL EXTERIOR INSULATED WALLS (U.N.O.). INTERIOR WALLS ARE TYPICALLY 2x4 STUDS @ 16" O.C. (U.N.O.)
10. CEILING JOISTS (C.J.) ARE TYPICALLY 2x6 @ 24" O.C. (U.N.O.).
11. DARKENED WALLS INDICATE BEARING.
12. CONTRACTOR TO INSTALL IN ACCORDANCE WITH U.L. APPROVED MANUFACTURER'S SPECIFICATIONS, ALL PREFABRICATED FIREPLACES, STOVES AND RELATED ASSEMBLIES.

TJI BLOCKING NOTE:

PROVIDE TJI BLOCKING (MIN) OVER ALL SUPPORTS.

SUPPORTS WITH ONE BEARING WALL ABOVE
PROVIDE "TIMBERSTRAND" LSL BLOCKING (UNO)

SUPPORTS WITH TWO BEARING WALLS ABOVE
PROVIDE DOUBLE "TIMBERSTRAND" LSL BLOCKING (UNO)

SUPPORTS WITH POINT LOAD ABOVE
PROVIDE DOUBLE "TIMBERSTRAND" LSL BLOCKING OR 2X4/2X6 SQUASH BLOCKS (UNO)

NOTE:

PROVIDE CONTINUOUS 1 1/4" 'TIMBERSTRAND' LSL RIM JOIST AT ALL EXTERIOR WALLS (TYPICAL-U.N.O.).

NOTE:

SEE SHEET# 17 FOR TYPICAL FRAMING DETAILS AND NOTES TO FRAMING DETAILS FOR TJI ENGINEERED WOOD I-JOISTS. SEE MANUFACTURERS RECOMMENDATIONS FOR JOB SITE STORAGE AND INSTALLATION. PROVIDE SIMPSON STRONG-TIE CONNECTORS MANUFACTURED FOR USE WITH TJI ENGINEERED PRODUCTS, AND PROVIDE ALL MANUFACTURERS RECOMMENDED FASTENERS.

NOTE:

ALL FASTENERS FOR PRESSURE TREATED WOOD SHALL BE ZMAX HOT-DIPPED GALVANIZED (G185) OR STAINLESS STEEL PER IBC 2304.9.5.

BEAM SIZE	MIN. END POST
4X10 DF#2/4x12 DF#2	4x4 DF#2/OR (2) 2x4 STUDS STITCHED @ 12"OC W/ (2) 8d NAILS
6x10 DF#1 6x12 DF#1	4x6/6x6 DF#1
3 1/8" GLB/3 1/2"x PSL/LSL	4x4 DF#1
5 1/8" GLB/5 1/4"x PSL/LSL	4x6/6x6 DF#1
6 3/4" GLB/7"x PSL	4x8/8x8 DF#1

NOTE:

PROVIDE SOLID FRAMING "SQUASH" BLOCKS AT BEARING FOR ALL FRAMING MEMBERS TO MATCH WIDTH OF POSTED MEMBER FROM ABOVE. SEE BEAM/SIZE AND MINIMUM END POST SCHEDULE ON THE FRAMING PLANS.

NOTE:

ALL SIMPLE SPAN GLU-LAMINATED BEAMS (GLB) ARE TO BE 24F-V4 GRADE OR BETTER (Fv=240psi, Fb=2400psi, AND E=1,800,000 psi). ALL CONTINUOUS GLB'S AND ALL CANTILEVER GLB'S ARE TO BE 24F-V8 GRADE OR BETTER (Fv=240psi, Fb=2400psi, AND E=1,800,000 psi).

NOTE:

SEE SHEETS S-1 THRU S-7 FOR SPECIAL FRAMING NOTES, CONSTRUCTION NOTES, CONSTRUCTION DETAILS, AND SHEAR WALL REQUIREMENTS NOT NOTED ON THIS SHEET.

NOTE:

THE MANUFACTURERS OF ALL FLOOR TRUSS COMPONENTS ARE REQUIRED TO PROVIDE ALL NECESSARY DESIGN DOCUMENTS AND SPECIFICATIONS TO THE BUILDING OFFICIAL FOR REVIEW AS A DEFERRED SUBMITTAL PER I.B.C. SECTION 106.

NOTE:

PROVIDE TEMPORARY POSTING OF ALL ENGINEERED WOOD BEAMS, INCLUDING EXPOSED BEAMS AND FLUSH BEAMS, AS REQUIRED TO PREVENT DEFLECTION OF THESE MEMBERS UNTIL THE DESIRED MOISTURE CONTENT OF THE MEMBERS IS ACHIEVED.

NOTE:

FINGER JOINTED STUDS SHALL NOT BE USED AT ANY HOLDOWN OR LATERAL RESISTING STRAP LOCATION.

NOTE:

PROVIDE FIREBLOCKING FOR ALL ELECTRICAL, PLUMBING AND MECHANICAL PENETRATIONS. PROVIDE FIREBLOCKING AT 10'-0" INTERVALS, BOTH VERTICALLY AND HORIZONTALLY IN WALLS AND CHASES WITH MINIMUM SOLID 2X FRAMING/BLOCKING OR 5/8" TYPE 'X' GYPSUM WALL BOARD (G.W.B.) - TYPICAL.

NOTE:

SEE SHEET # 17 FOR ALLOWABLE LOCATIONS OF ROUND, SQUARE AND RECTANGULAR HOLES THROUGH THE WEBS OF TJI ENGINEERED WOOD I-JOISTS. FOLLOW ALL THE MANUFACTURER'S RECOMMENDATIONS REGARDING SIZES, SPACINGS AND QUANTITY OF HOLES AND PENETRATIONS FOR TJI I-JOISTS/FRAMING MEMBERS.

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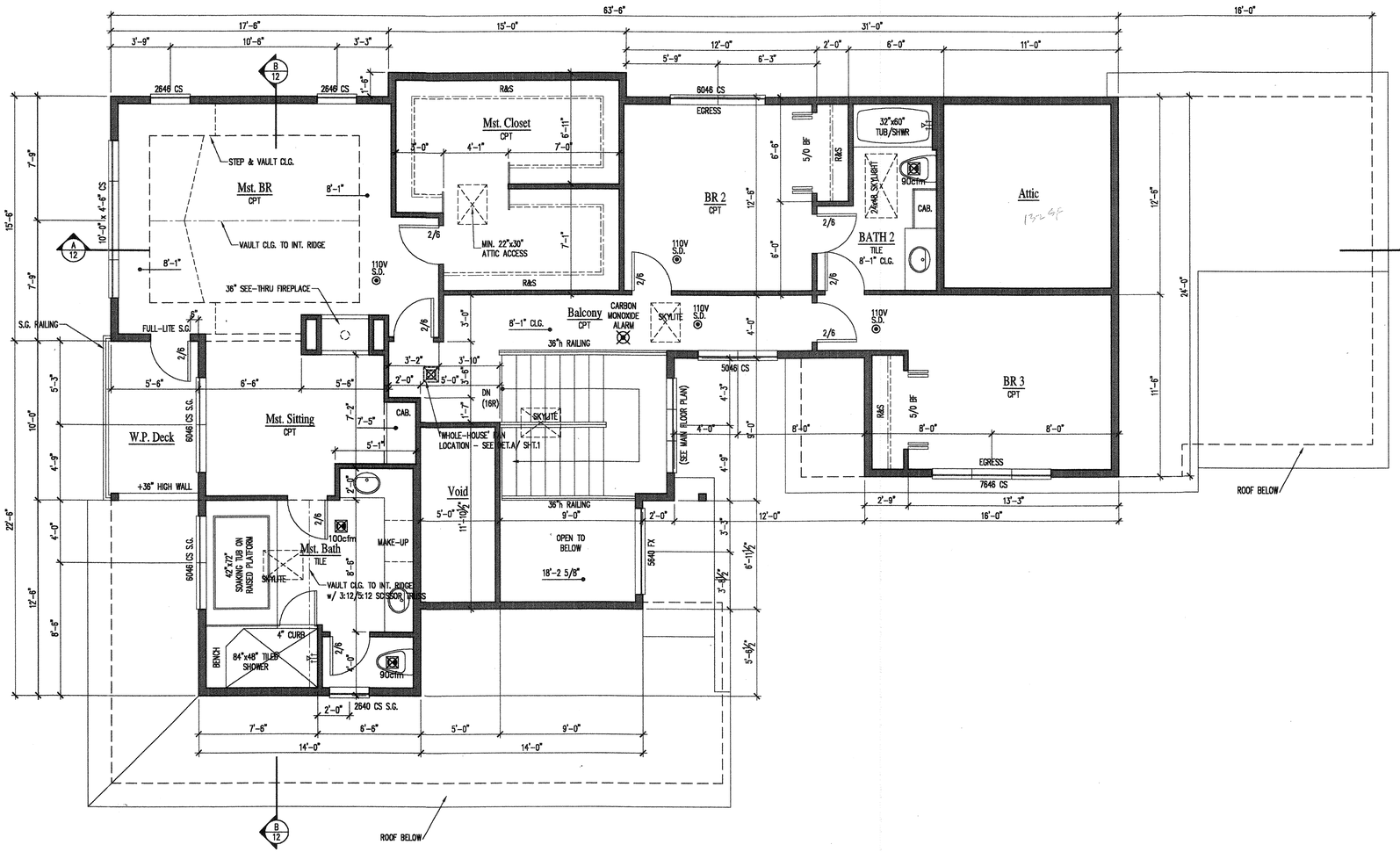

Upper Floor Plan

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

UPPER FLOOR AREA = 1,640 S.F.

2

UPPER FLOOR PLAN NOTES

1. TYPICAL PLATE HEIGHT TO BE 8'-1" (U.N.O.). NON-STANDARD PLATE LOCATIONS ARE NOTED ON THE MAIN FLOOR PLAN, THE UPPER FLOOR PLAN, THE UPPER FLOOR FRAMING PLAN, THE UPPER FLOOR CEILING FRAMING PLAN AND THE ROOF FRAMING PLAN.
2. VENT EXHAUST FANS, COOKTOPS/ HOODS AND DRYER TO THE EXTERIOR. EXHAUST FAN CAPACITIES NOTED ON PLANS ARE MINIMUM REQUIREMENTS.
3. WINDOWS TO BE BY: ~~MILGARD VINYL~~

   SEE WINDOW DESIGNATIONS ON SHEETS #4 AND #6 FOR WINDOW MANUFACTURER ROUGH OPENINGS & SIZES. VERIFY ALL ROUGH OPENINGS WITH MANUFACTURER PRIOR TO FRAMING.
4. DOORS TO BE 6'-8" HIGH SOLID CORE PANELED (U.N.O.)
5. ALL GLAZING SUBJECT TO HUMAN IMPACT SHALL BE SAFETY GLAZING. ALL GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24" ARC AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE SHALL BE SAFETY GLAZING.
6. SEE 'GENERAL NOTES', DIVISION #6, FOR LUMBER GRADING, SPECIES AND ALLOWABLE DESIGN VALUES.
7. FIRE BLOCK ALL PLUMBING PENETRATIONS. FIRE BLOCK AT 10'-0" INTERVALS (VERTICAL AND HORIZONTAL) IN WALLS.
8. TYPICAL WALL STUDS TO BE 2x6 @ 16" O.C. AT EXTERIOR INSULATED WALLS (U.N.O.). INTERIOR WALLS ARE TYPICALLY 2x4 STUDS @ 16" O.C. (U.N.O.). SEE SHEETS #4 AND #6 FOR NON-STANDARD STUD LOCATIONS.
9. CONTRACTOR TO INSTALL IN ACCORDANCE WITH U.L. APPROVED MANUFACTURER'S SPECIFICATIONS, ALL PREFABRICATED FIREPLACES, STOVES AND RELATED ASSEMBLIES.

NOTE TO WINDOWS:

ALL WINDOW SIZES ARE NOMINAL.
CONTRACTOR TO VERIFY ALL SIZES AND ROUGH OPENINGS WITH WINDOW MANUFACTURER PRIOR TO FRAMING.

NOTE TO DRAWING:

PROVIDE 1/4" OR 1/2" WONDERBOARD ON TOP OF 3/4" PLYWOOD SUBFLOOR AT ALL AREAS TO RECEIVE TILE OR STONE SEE PLANS FOR FINISH FLOOR LOCATIONS.

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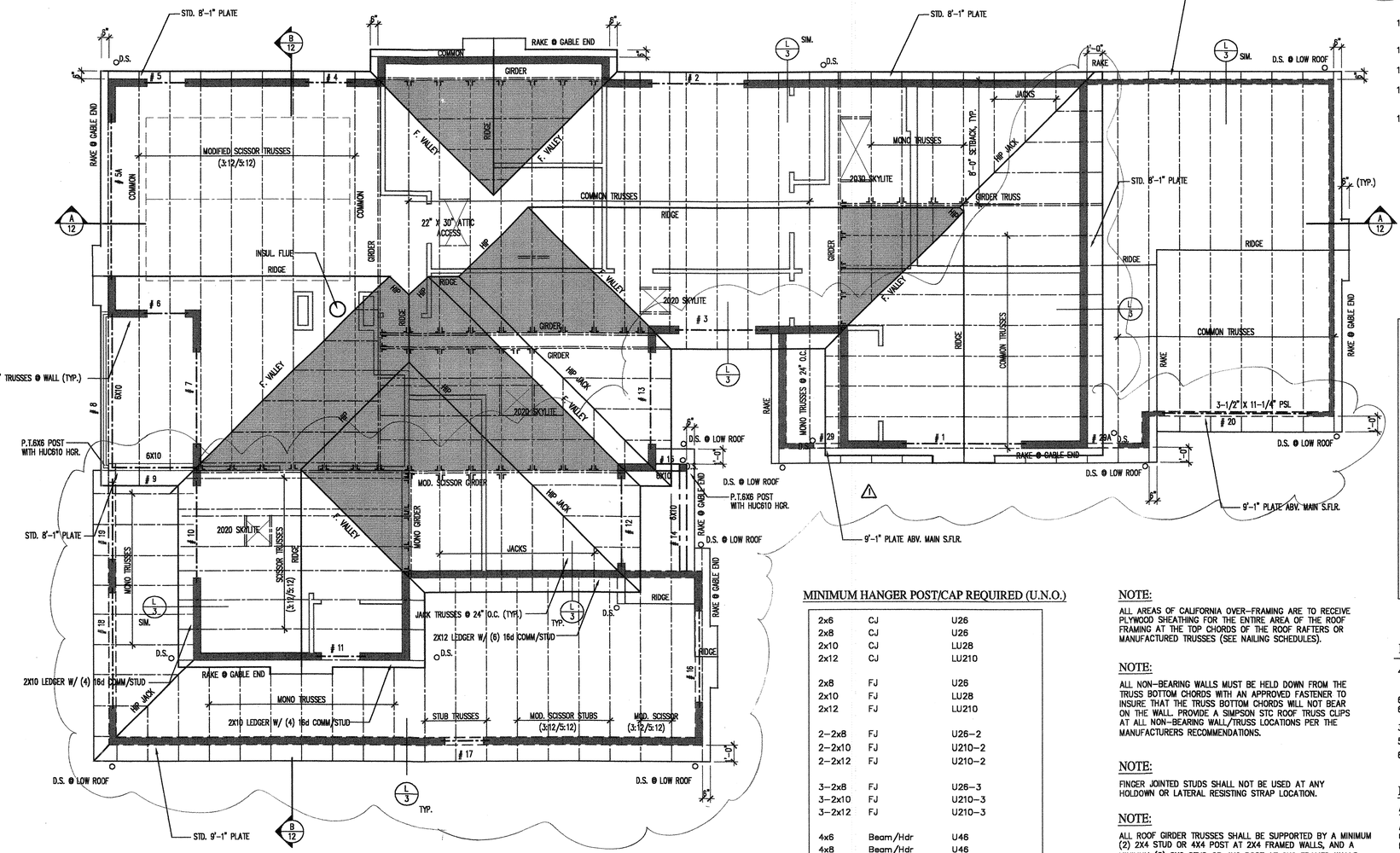

Roof Framing Plan

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

ROOF FRAMING PLAN

1. ALL BEAMS AND HEADERS TO BE 4X10 (UNO).
2. SEE GENERAL NOTES, DIVISON 6 FOR LUMBER GRADING, SPECIES AND ALLOWABLE DESIGN VALUES.
3. SOLID BLOCK OVER ALL SUPPORTS.
4. ALL RAFTERS TO BE 2X8 @ 24"OC (STICKS NOT SHOWN ON PLAN) ALL NON-STANDARD RAFTERS ARE SHOWN AND NOTED ON PLAN.
5. ROOF PITCH TO BE 5:12 (UNO)
6. DARKENED WALLS ARE LOAD BEARING.
7. TYPICAL ROOF OVERHANGS TO BE 12" @ EAVES & 6" @ GABLES (UNO)
8. SHADED AREAS INDICATE CALIFORNIA OVER FRAMING.
9. PROVIDE CONTINUOUS METAL GUTTER ON 2X8 CEDAR FASCIA BOARD.
10. DEEP CUT NON-STANDARD RAFTER SEATS TO MATCH 2X8 STANDARD RAFTERS AS REQUIRED.
11. PROVIDE 9.58 SQ FT OF ATTIC VENTILATION, 50% AT EAVES AND 50% AT MIN. OF 36" ABOVE EAVES.
12. ROOF SHEATHING TO BE 1/2" CDX PLYWOOD.
13. ROOFING TO BE HEAVY DUTY COMPOSITION.
14. PROVIDE H-1 HURRICANE ANCHOR AT EACH RAFTER OR TRUSS (TYP @ 24"OC).
15. ALL EXTERIOR SOFFIT MATERIAL TO BE 1X CEDAR T&G (V-GROOVE OUT). (SEE PLANS FOR LOCATIONS)

MANUFACTURED ROOF TRUSSES

ALL TRUSSES TO BE DESIGNED BY A PROFESSIONAL ENGINEER AND FABRICATED, INSTALLED AND BRACED AS SPECIFIED.

ALL ROOF TRUSSES SHALL CARRY MFR's STAMP.

ROOF TRUSSES SHALL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPT. APPROVAL OF ENGINEERING CALC.'s. AS SPECIFIED.
PROVIDE TRUSS DESIGN DETAILS AND DRAWINGS ON SITE FOR FRAMING INSPECTION.

ALL ROOF TRUSSES TO HAVE 2x6 TOP CHORDS, UNLESS NOTED OTHERWISE.

TRUSS MFR. TO VERIFY ALL NOTED SETBACKS & DIMENSIONS.

TRUSS MFR. TO SUPPLY ALL METAL HANGERS FOR ALL TRUSS CONNECTIONS.

ALTERATIONS OF TRUSS LAYOUT WILL REQUIRE SUPPORTING STRUCTURAL & FOUNDATION CHANGES BY ARCHITECT.

TRUSSES TO BE DESIGNED FOR 50#/ S.F. TOTAL LOAD. (25#/ S.F. DEAD LOAD & 25#/ S.F. LIVE LOAD.)

MINIMUM HANGER POST/CAP REQUIRED (U.N.O.)

2x6	CJ	U26
2x8	CJ	U26
2x10	CJ	LU28
2x12	CJ	LU210
2x8	FJ	U26
2x10	FJ	LU28
2x12	FJ	LU210
2-2x8	FJ	U26-2
2-2x10	FJ	U210-2
2-2x12	FJ	U210-2
3-2x8	FJ	U26-3
3-2x10	FJ	U210-3
3-2x12	FJ	U210-3
4x6	Beam/Hdr	U46
4x8	Beam/Hdr	U46
4x10	Beam/Hdr	U410
4x12	Beam/Hdr	U410
6x8	Beam/Hdr	U66
6x10	Beam/Hdr	U610
1-3/4"x9-1/2" LSL/LVL		HU9 min.
1-3/4"x11-7/8" LSL/LVL		HU11 min.
3-1/2"x9-1/2" PSL/LSL		HU410 max.
3-1/2"x11-7/8" PSL/LSL		HU412 max.
5-1/4"x9-1/2" PSL		HHUS5.50/10
5-1/4"x11-7/8" PSL		HHUS5.50/10
4x4	Post Cap	AC4 max.
6x6	Post Cap	AC6 max.
GLB	Beam/Post	PC/CC col. Cap
PSL	Beam/Post	PC/CC col. Cap

NOTE:
ALL AREAS OF CALIFORNIA OVER-FRAMING ARE TO RECEIVE PLYWOOD SHEATHING FOR THE ENTIRE AREA OF THE ROOF FRAMING AT THE TOP CHORDS OF THE ROOF RAFTERS OR MANUFACTURED TRUSSES (SEE NAILING SCHEDULES).

NOTE:
ALL NON-BEARING WALLS MUST BE HELD DOWN FROM THE TRUSS BOTTOM CHORDS WITH AN APPROVED FASTENER TO INSURE THAT THE TRUSS BOTTOM CHORDS WILL NOT BEAR ON THE WALL. PROVIDE A SIMPSON STC ROOF TRUSS CLIPS AT ALL NON-BEARING WALL/TRUSS LOCATIONS PER THE MANUFACTURERS RECOMMENDATIONS.

NOTE:
FINGER JOINTED STUDS SHALL NOT BE USED AT ANY HOLDOWN OR LATERAL RESISTING STRAP LOCATION.

NOTE:
ALL ROOF GIRDER TRUSSES SHALL BE SUPPORTED BY A MINIMUM (2) 2X4 STUD OR 4X4 POST AT 2X4 FRAMED WALLS, AND A MINIMUM (2) 2X6 STUD OR 4X6 POST AT 2X6 FRAMED WALLS (TYP. UNLESS NOTED OTHERWISE).

NOTE:
PROVIDE A MINIMUM 22" X 30" ACCESS THROUGH ALL CALIFORNIA OVER-FRAMING AS REQUIRED (TYPICAL).

BEAM SIZE	MIN. END POST
4X10 DF#2/4x12 DF#2	4x4 DF#2/OR (2) 2x4 STUDS STITCHED @ 12"OC W/ (2) 8d NAILS
6x10 DF#1 6x12 DF#1	4x6/6x6 DF#1
3 1/8" GLB/3 1/2"x PSL/LSL	4x4 DF#1
5 1/8" GLB/5 1/4"x PSL/LSL	4x6/6x6 DF#1
6 3/4" GLB/7"x PSL	4x8/8x8 DF#1

NOTE:
ALL SIMPLE SPAN GLU-LAMINATED BEAMS (GLB) ARE TO BE 24F-V4 GRADE OR BETTER (Fv=240psi, Fb=2400psi, AND E=1,800,000 psi). ALL CONTINUOUS GLB'S AND ALL CANTILEVER GLB'S ARE TO BE 24F-VB GRADE OR BETTER (Fv=240psi, Fb=2400psi, AND E=1,800,000 psi).

NOTE:
SEE SHEETS S-1 THRU S-7 FOR SPECIAL FRAMING NOTES, CONSTRUCTION NOTES, CONSTRUCTION DETAILS, AND SHEAR WALL REQUIREMENTS NOT NOTED ON THIS SHEET.

NOTE:
THE MANUFACTURERS OF ALL ROOF TRUSS COMPONENTS ARE REQUIRED TO PROVIDE ALL NECESSARY DESIGN DOCUMENTS AND SPECIFICATIONS TO THE BUILDING OFFICIAL FOR REVIEW AS A DEFERRED SUBMITTAL PER I.B.C. SECTION 106.

NOTE:
PROVIDE TEMPORARY POSTING OF ALL ENGINEERED WOOD BEAMS, INCLUDING EXPOSED BEAMS AND FLUSH BEAMS, AS REQUIRED TO PREVENT DEFLECTION OF THESE MEMBERS UNTIL THE DESIRED MOISTURE CONTENT OF THE MEMBERS IS ACHIEVED.

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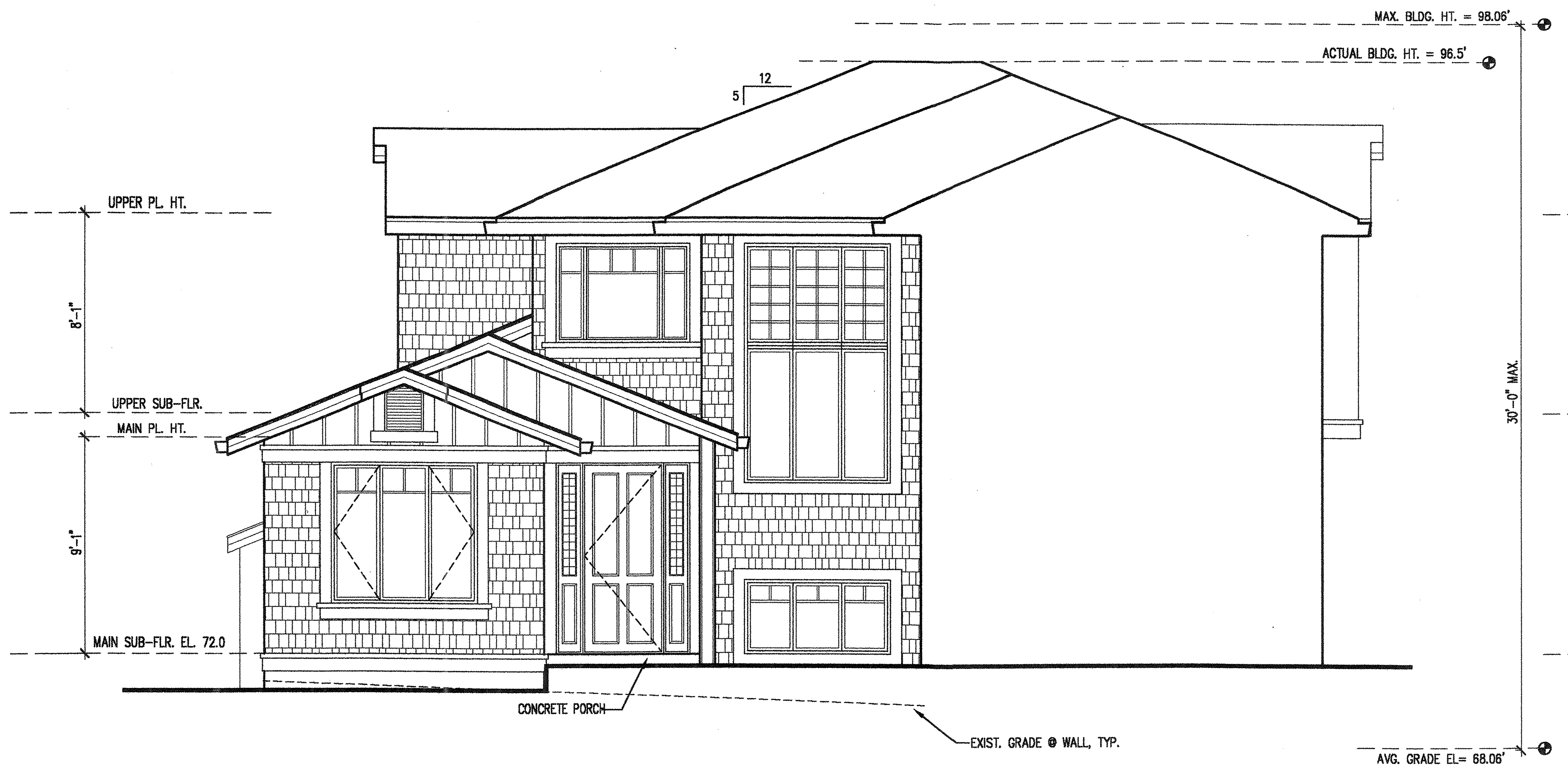
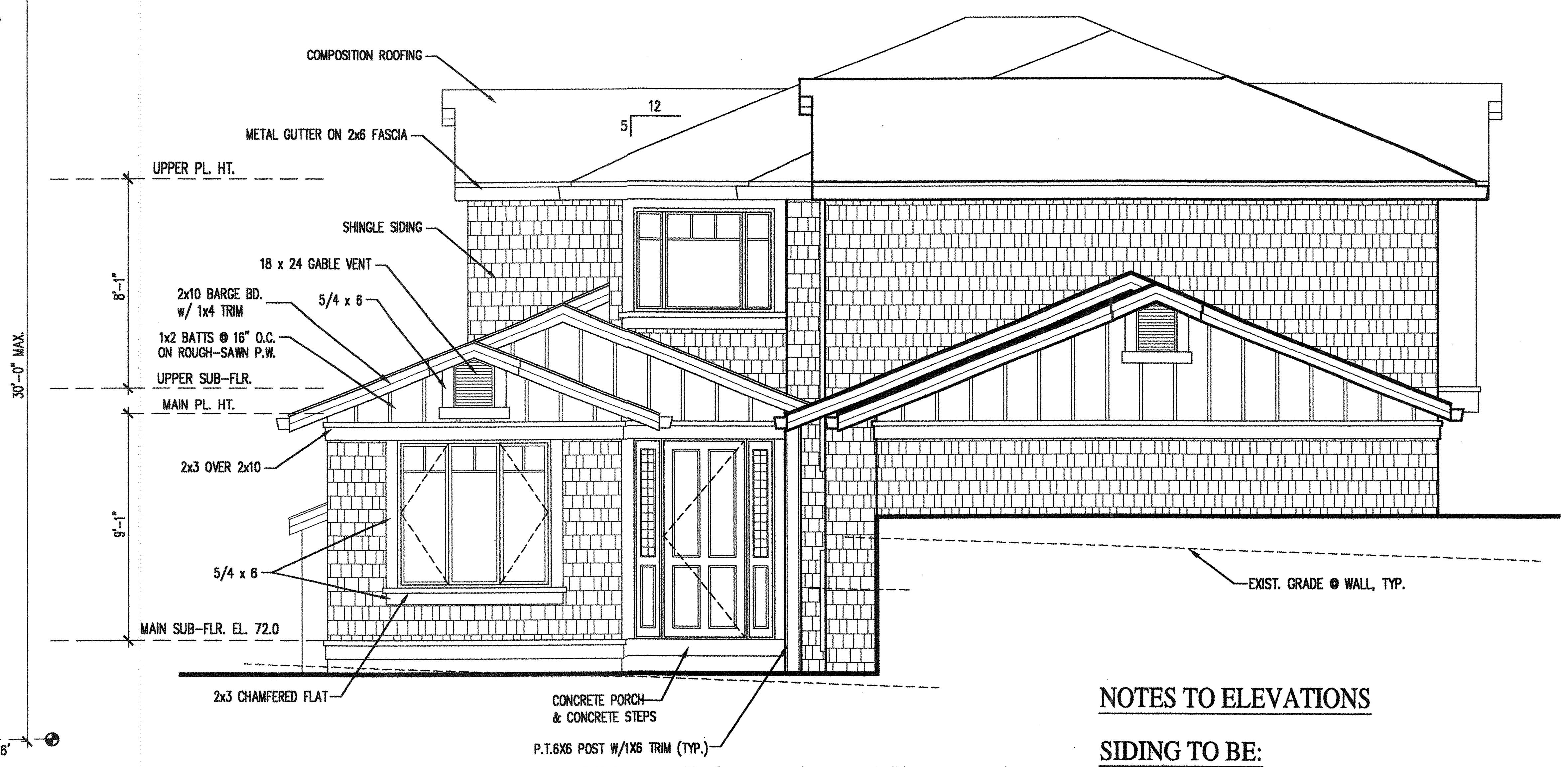


West Elevation (Main Entry)

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



West Elevation (Garage)

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

NOTES TO ELEVATIONS

SIDING TO BE:

1 GRADE BLUE LABEL 'CERTIGRADE' RED CEDAR SHINGLES, 16" LONG, WITH A 6" EXPOSURE (TYP.). PROVIDE "JOINTED" INSIDE CORNERS AND "WOVEN" OUTSIDE CORNERS. (SEE ELEVATIONS FOR LOCATIONS).

1/2" THICK ROUGH-SAWN CEDAR FACED PLYWOOD WITH 1X2 CEDAR BATTS @ 16" O.C. (SEE ELEVATIONS FOR LOCATIONS).

ROOFING TO BE:

HEAVY DUTY COMPOSITION. ROOF PITCH 5/12 (TYP.)

PROVIDE CONTINUOUS METAL GUTTER ON 2x8 CEDAR FASCIA.

PORCH SOFFITS TO BE 1X6 CLEAR CEDAR T&G WITH V-GROOVE OUT (TYPICAL).

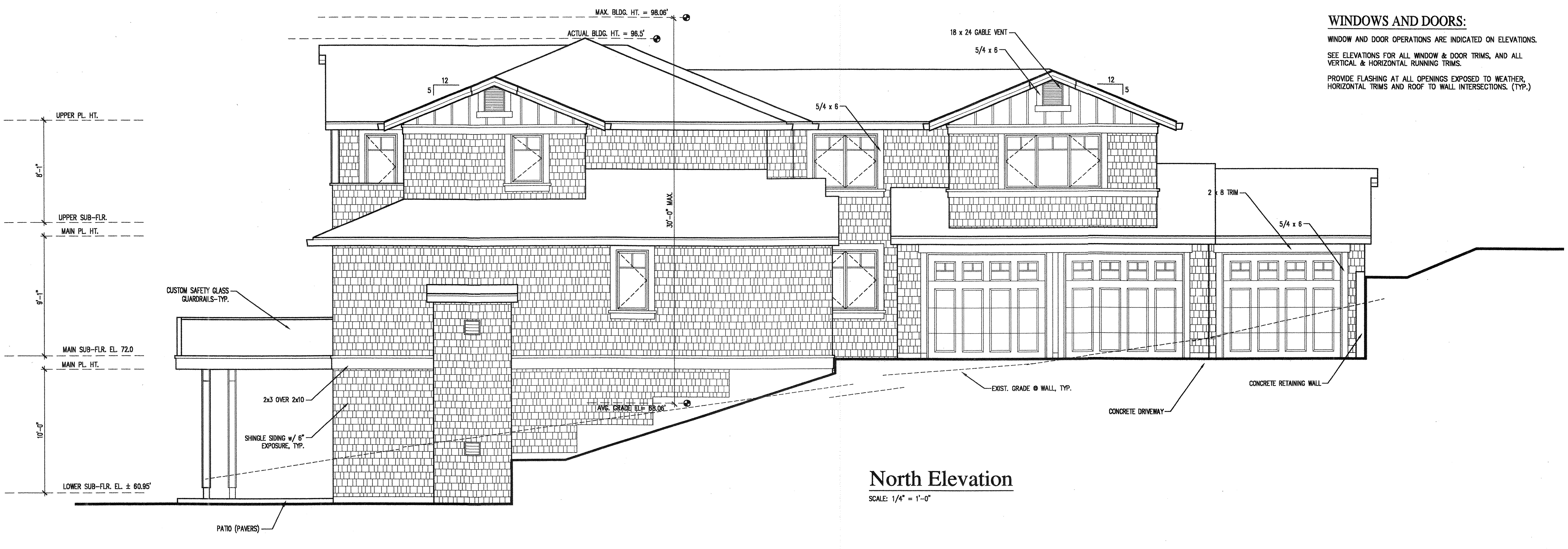
TYPICAL RAKE TRIMS TO BE 1X4 ON 2X10 BARGE BOARD.

WINDOWS AND DOORS:

WINDOW AND DOOR OPERATIONS ARE INDICATED ON ELEVATIONS.

SEE ELEVATIONS FOR ALL WINDOW & DOOR TRIMS, AND ALL VERTICAL & HORIZONTAL RUNNING TRIMS.

PROVIDE FLASHING AT ALL OPENINGS EXPOSED TO WEATHER, HORIZONTAL TRIMS AND ROOF TO WALL INTERSECTIONS. (TYP.)



North Elevation

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

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REGISTERED ARCHITECT
LEIF E. ANDERSON
STATE OF WASHINGTON

A Custom Residence for
On The Rock 98040, LLC
Lot 1, 7260 North Mercer Way, Mercer Island

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OCT 14 2016
CITY OF MERCER ISLAND
DEVELOPMENT SERVICE GROUP

DATE: 03-22-2013

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SHEET NO. 10 OF 24

NOTES TO ELEVATIONS

SIDING TO BE:

1 GRADE BLUE LABEL "CERTIGRADE" RED CEDAR SHINGLES, 16" LONG, WITH A 6" EXPOSURE (TYP.). PROVIDE "JOINTED" INSIDE CORNERS AND "WOVEN" OUTSIDE CORNERS. (SEE ELEVATIONS FOR LOCATIONS).

1/2" THICK ROUGH-SAWN CEDAR FACED PLYWOOD WITH 1X2 CEDAR BATTS @ 16" O.C. (SEE ELEVATIONS FOR LOCATIONS).

ROOFING TO BE:

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PROVIDE CONTINUOUS METAL GUTTER ON 2x8 CEDAR FASCIA.

PORCH SOFFITS TO BE 1X6 CLEAR CEDAR T&G WITH V-GROOVE OUT (TYPICAL).

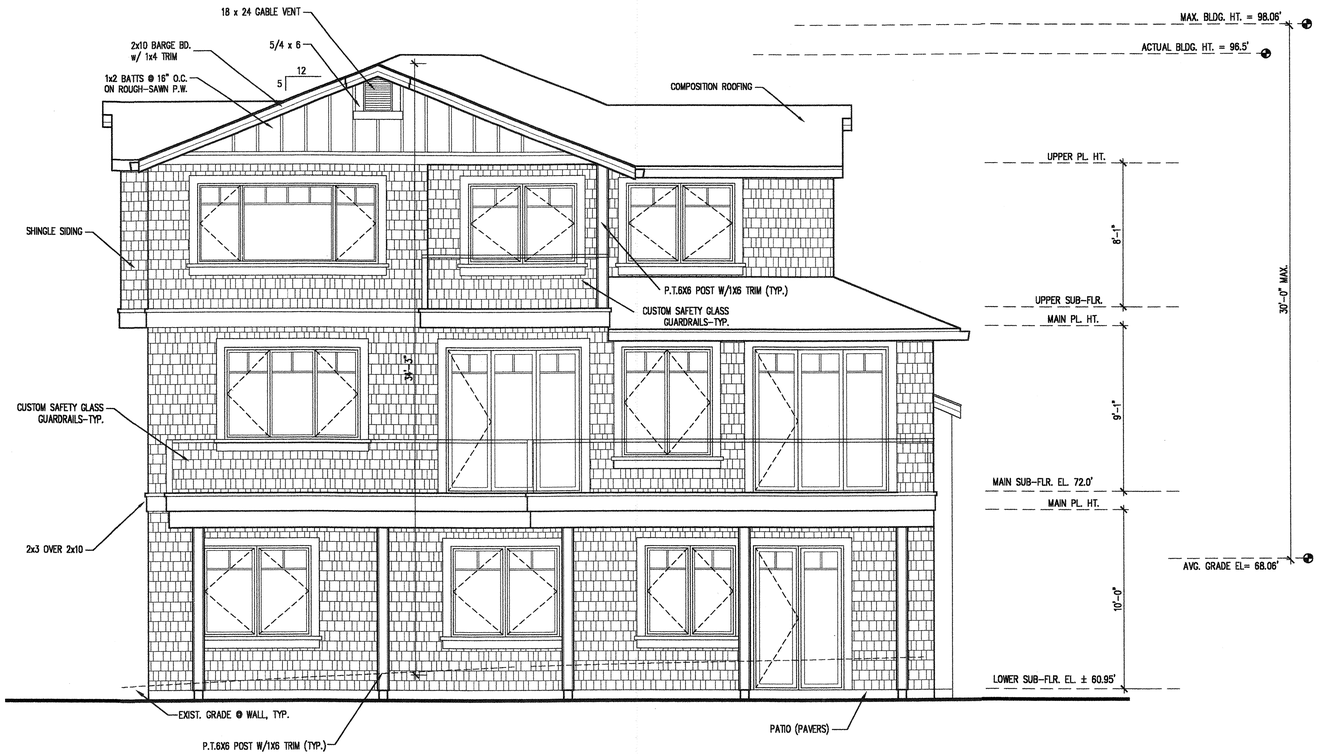
TYPICAL RAKE TRIMS TO BE 1X4 ON 2X10 BARGE BOARD.

WINDOWS AND DOORS:

WINDOW AND DOOR OPERATIONS ARE INDICATED ON ELEVATIONS.

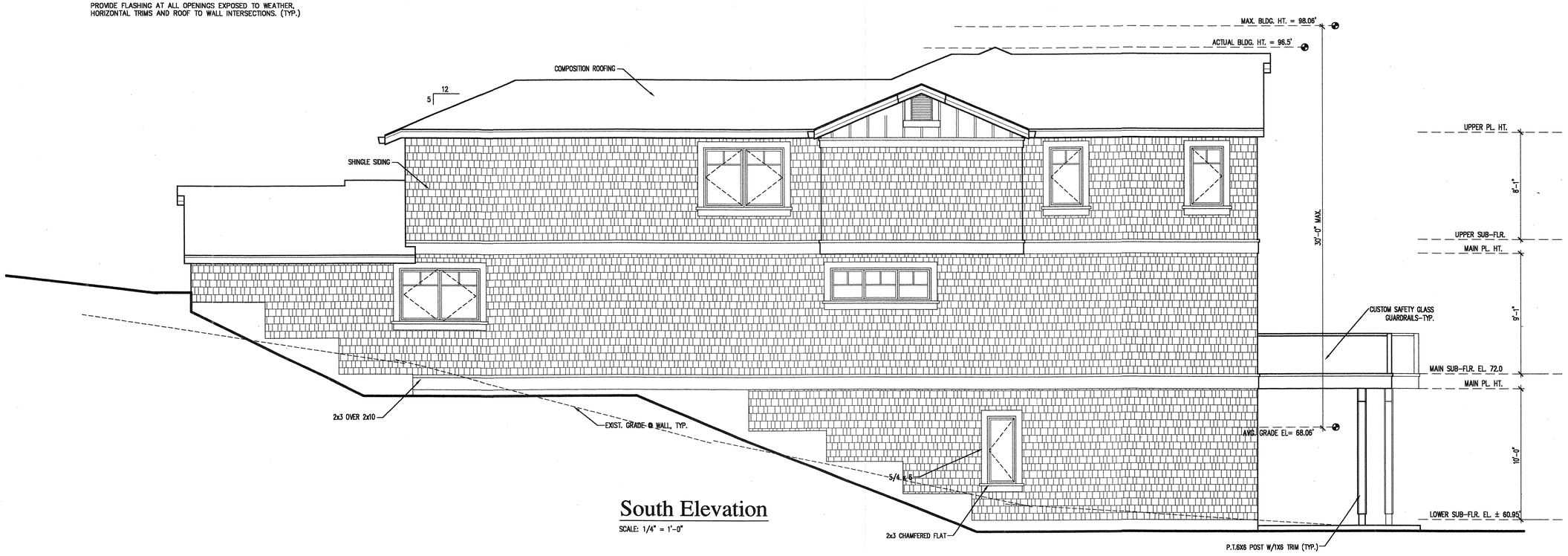
SEE ELEVATIONS FOR ALL WINDOW & DOOR TRIMS, AND ALL VERTICAL & HORIZONTAL RUNNING TRIMS.

PROVIDE FLASHING AT ALL OPENINGS EXPOSED TO WEATHER, HORIZONTAL TRIMS AND ROOF TO WALL INTERSECTIONS. (TYP.)



East Elevation

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



South Elevation

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

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STATE OF WASHINGTON 5913 REGISTERED ARCHITECT LEIF E. ANDERSON

A Custom Residence for

On The Rock 98040, LLC

Lot 1, 7260 North Mercer Way, Mercer Island

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SHEET NO. 11 OF 24

NOTES TO CONSTRUCTION

ROOF CONSTRUCTION:

HEAVY DUTY COMPOSITION ON
MIN. 15# FELT ON
1/2" CDX PLYWOOD SHEATHING ON
2x RAFTERS OR TRUSS TOP CHORDS @ 24" O.C.
R-49 INSULATION WITH VAPOR BARRIER (R-38 @ VAULTS)
2x CEILING JOISTS OR TRUSS BOTTOM CHORDS @ 24" O.C. (U.N.O.)
5/8" G.W.B. (5/8" TYPE 'X' @ GARAGE WHERE NOTED)

WALL CONSTRUCTION:

SIDING PER ELEVATIONS ON
'HOME SLICKER' DRAINAGE & VENTILATION MAT ON
MINIMUM 15# BUILDING PAPER ON
1/2" CDX PLYWOOD SHEATHING ON
2x6 STUDS @ 16" O.C. AT EXTERIOR WALLS (2x4 STUDS @ 16" O.C.
@ INTERIOR WALLS U.N.O.)
R-21 INSULATION WITH VAPOR BARRIER
1/2" G.W.B.

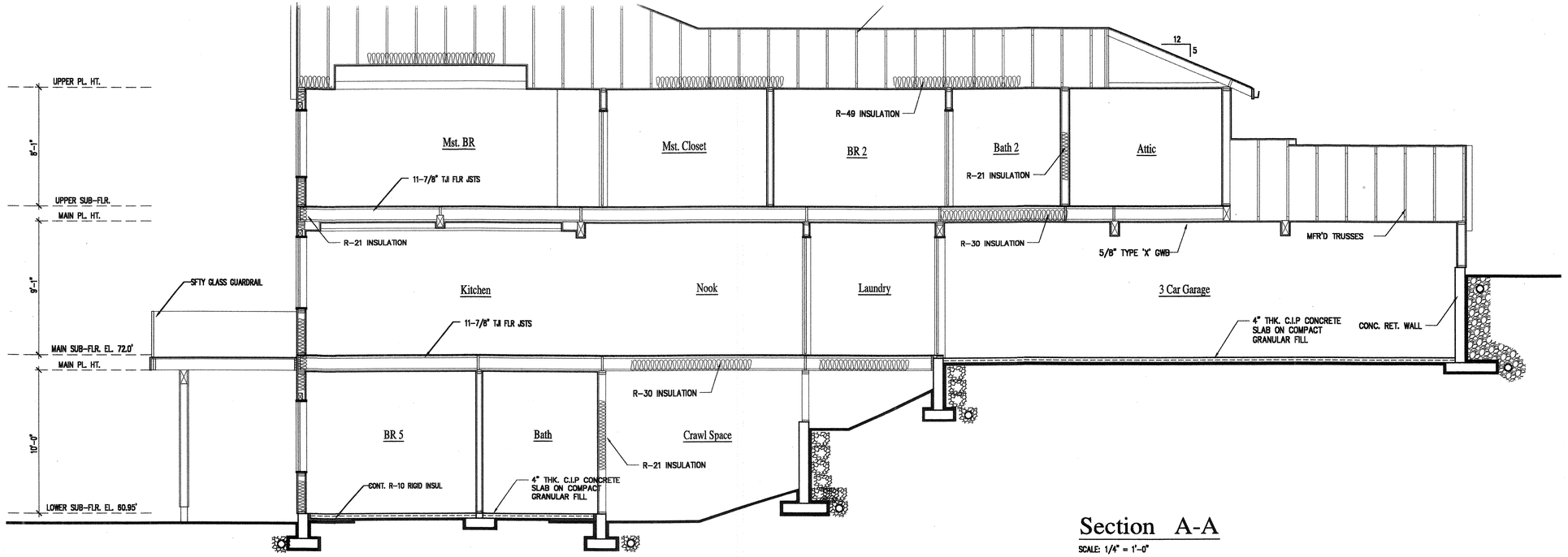
FLOOR CONSTRUCTION:

CARPET, STONE, HARDWOOD OR TILE FINISH FLOOR ON
3/4" CDX T&G PLYWOOD SUBFLOOR (SEAL ALL SEAMS) ON
11 7/8" TJI FLOOR JOISTS @ 16" O.C. (U.N.O.) –
SEE FRAMING PLANS
R-30 INSULATION WITH VAPOR BARRIER

SLAB ON GRADE CONSTRUCTION:

4" THICK CONCRETE SLAB WITH INTERGRAL RADIANT HEAT &
6x6 W2.9 x W2.9 W.W.F. ON R-10 RIGID INSULATION ON 6 MIL.
VAPOR BARRIER ON MINIMUM 6" GRANULAR FILL.

GARAGE SLAB: 4" THICK CONCRETE SLAB WITH 6x6 W2.9 x
W2.9 W.W.F. ON 4 MIL. VAPOR BARRIER ON MINIMUM 8"
GRANULAR FILL–SLOPE SLAB 4" TO O.H. DOORS @ GARAGE

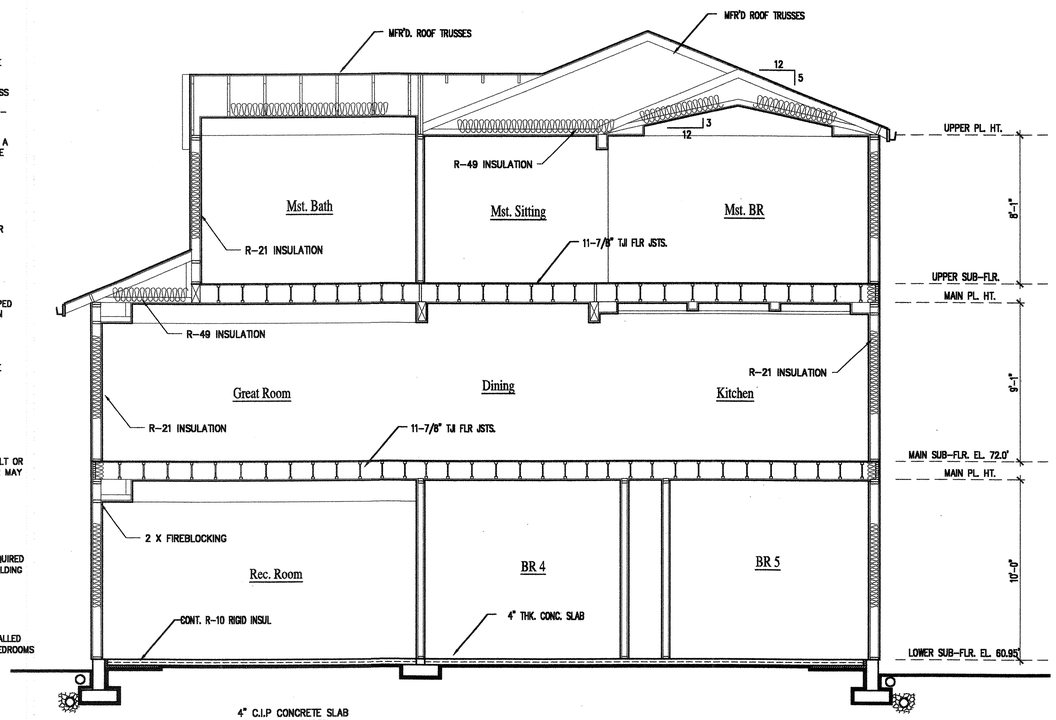


Section A-A

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

NOTES TO DRAWINGS

1. PROVIDE SAFETY GLAZING IN AREAS SUBJECT TO HUMAN IMPACT.
2. ALL GLAZING SUBJECT TO HUMAN IMPACT SHALL BE SAFETY GLAZING. ALL GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE SHALL BE SAFETY GLASS.
3. PROVIDE SAFETY GLAZING FOR PANELS WITHIN 24" RADIUS OF DOOR EDGE THAT ARE WITHIN 60" OF WALKING SURFACE.
4. PROVIDE SAFETY GLAZING FOR PANELS OVER 9 SQ FT. AND WITHIN 18" VERTICAL AND 36" HORIZONTAL OF WALKING SURFACE.
5. ALL GLAZING OF SHOWER DOORS, SHOWER ENCLOSURES, BATHTUB ENCLOSURES OR BATHTUB DOORS SHALL BE SAFETY GLAZING. GLASS ENCLOSURE DOORS AND PANELS MUST BE LABELED CATEGORY II , AND DOORS MUST SWING OUTWARD.
6. PROVIDE SAFETY GLAZING FOR TUB ENCLOSURE DOORS AND ADJACENT WALL OPENINGS.
7. ALL GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS SHALL BE SAFETY GLASS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE A STANDING SURFACE AND DRAIN INLET, SHALL ALSO BE SAFETY GLAZING.
8. THE STAIR RISE SHALL BE 7 3/4" MAXIMUM AND 4" MINIMUM, AND THE STAIR RUN OR TREAD SHALL BE 10" MINIMUM. SEE DETAIL N , SHEET # 3.
9. PROVIDE A MINIMUM OF 6'-8" HEAD CLEARANCE @ STAIRS, WITH TYPICAL MINIMUM CLEARANCE BEING MEASURED VERTICALLY FROM THE NOSE OF EACH STAIR TREAD. SEE DETAIL N , SHEET # 3.
10. THE TOP OF ALL STAIR HANDRAILS SHALL BE PLACED NOT LESS THAN 34" OR MORE THAN 38" ABOVE THE NOSING OF TREADS AND LANDINGS. STAIR HANDRAILS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE STAIRS, AND THE ENDS OF THE HANDRAIL SHALL BE RETURNED TO THE WALL.
11. THE HANDGRIP PORTION OF STAIR HANDRAILS SHALL NOT BE LESS THAN 1 1/4" OR MORE THAN 2" IN CROSS–SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. THE HANDGRIP PORTION OF HANDRAILS SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS.
12. ALL GUARDRAILS SHALL HAVE A MINIMUM HEIGHT OF 36" ABOVE THE FINISH FLOOR AND THE SPACING OF ALL INTERMEDIATE RAILS OF OPEN GUARDRAILS SHALL PROVIDE OPENINGS LESS THAN 4" CLEAR. THE SPACING OF ALL INTERMEDIATE RAILS OF OPEN HANDRAILS SHALL ALSO HAVE OPENINGS LESS THAN 4" CLEAR.
13. SUBFLOORS ARE TO BE 3/4" THICK CDX T&G PLYWOOD, AND SHALL BE NAILED WITH 10d @ 6" O.C. AT ALL PANEL EDGES, AND AT 12" O.C. IN THE FIELD.
14. PLYWOOD ROOF SHEATHING IS TO BE 1/2" THICK CDX PLYWOOD AND SHALL BE NAILED WITH 10d @ 6" O.C. AT ALL PANEL EDGES, AND AT 12" O.C. IN THE FIELD.
15. PROVIDE DOUBLE JOISTS (MINIMUM) UNDER ALL PARALLEL BEARING PARTITIONS.
16. ALL POSTS WITHIN THE GARAGE ARE TO BE WRAPPED WITH 5/8" TYPE 'X' G.W.B. AND SHALL HAVE 2"x 2"x 1/8" STEEL ANGLES ATTACHED TO ALL CORNERS FOR A HEIGHT OF 48" ABOVE THE CONCRETE SLAB.
17. FIRE STOPS SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS, FROM VERTICAL TO HORIZONTAL SPACES, INCLUDING THE STAIRS, TUBS, SHOWERS & FIREPLACES. FIREBLOCK AT 10'–0" INTERVALS (VERT. AND HORIZ.) IN WALLS. PROVIDE FIREBLOCKING AT ALL PLUMBING PENETRATIONS AND ALSO WITHIN THE 1" AIRSPACE BETWEEN THE BRICK VENEER AND THE WALL FRAMING.
18. CRAWLSPACE VENTS @ THE FOUNDATION ARE TO BE 14" x 8" WITH A ¼" CORROSION RESISTANT METAL MESH COVERING, AND SHALL HAVE A NET FREE AREA OF .56 S.F. EACH.
19. ALL EXTERIOR CONCRETE SLABS ON GRADE ARE TO BE A MINIMUM OF 3 ½" THICK.
20. ALL EXTERIOR FOOTINGS ARE TO BE INTRENCHED A MINIMUM OF 18" BELOW FINISHED GRADE AND ARE TO BEAR ON UNDISTURBED SOIL. STEP FOOTINGS AS SITE CONDITIONS REQUIRE.
21. UNENGINEERED CONCRETE FOUNDATION WALLS ARE TO BE A MAXIMUM OF 4'–0" IN HEIGHT, AND SHALL HAVE A MAXIMUM 3'–6" OF UNBALANCED BACKFILL (TYPICAL) .
22. IN ALL CRAWLSPACES, PROVIDE A MINIMUM CLEARANCE OF 12" UNDER ALL BEAMS AND 18" UNDER ALL FLOOR JOISTS.
23. UNDERFLOOR AREAS SHALL BE PROVIDED WITH A MINIMUM 18" X 24" ACCESS OPENING. PIPES, DUCTS, FRAMING, ETC. SHOULD NOT INERFERE WITH ACCESSIBILITY TO THE CRAWLSPACE. ALL CRAWLSPACE ACCESS DOORS OR PANELS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SHALL BE INSULATED AND WEATHERSTRIPPED. CRAWLSPACE ACCESS DOORS AND PANELS THAT PENETRATE ANY WALL OR FLOOR REQUIRED TO BE OF 1 HOUR CONSTRUCTION SHALL ALSO MEET THE REQUIREMENTS OF 1 HOUR CONSTRUCTION.
24. A 22" X 30" ATTIC ACCESS OPENING SHOULD BE PROVIDED FOR EACH SEPARATE ATTIC AREA (INCLUDING OVER GARAGE AREAS). ALL ATTIC ACCESS OPENINGS SHALL HAVE A MINIMUM HEADROOM CLEARANCE OF 30" AND SHOULD BE IN A READILY ACCESSIBLE LOCATION. ALL ATTIC ACCESS DOORS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SHALL BE INSULATED AND WEATHERSTRIPPED. ATTIC ACCESS DOORS THAT PENETRATE ANY WALL OR CEILING REQUIRED TO BE OF 1 HOUR CONSTRUCTION SHALL ALSO MEET THE REQUIRMENTS OF 1 HOUR CONSTRUCTION.
25. ALL WALLS BETWEEN THE GARAGE AND THE RESIDENCE SHALL BE FRAMED AND INSULATED AS EXTERIOR WALLS.
26. INSULATION SHALL BE PROVIDED WITH CLEARANCES FOR VENTING, CHIMNEYS, LIGHTS, ETC. IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS.
27. BLOWN OR POURED INSULATION IN THE ATTIC MAY BE USED WHERE THE SLOPE OF THE CEILING IS NOT MORE 3:12 AND WHERE THERE IS AT LEAST 30" OF CLEAR SPACE. WHERE EAVE VENTS OCCUR, BAFFLING OF THE VENT OPENINGS SHALL BE PROVIDED SO AS TO DEFLECT THE INCOMING AIR ABOVE THE SURFACE OF THE INSULATION. PROPER PROTECTION SHALL BE PROVIDED AROUND ALL RECESSED LIGHT FIXURES SO THAT THE FIXTURES WILL NOT BECOME OVERHEATED.
28. HOT AND COLD WATER HEATER PIPES IN THE GARAGE SHALL BE PROTECTED WITH R–3 INSULATION THAT HAS A FLAME SPREAD OF 25 OR LESS.
29. ALL INSULATION MATERIALS INCLUDING THE FACING SHALL HAVE A FLAME–SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY RATING NOT TO EXCEED 450.
30. ALL BATT INSULATION WITH AN INTEGRAL VAPOR BARRIER SHALL BE FACE STAPLED PER SECTION 502.1.6.6 OF THE 2009 WASHINGTON STATE ENERGY CODE.
31. PROVIDE POSITIVE ANCHORING OF ALL MECHANICAL APPLIANCES PER IMC SECTION M1307.2. ANCHOR ALL WATER HEATERS WITH NON–RIGID CONNECTIONS TO THE WALL FRAMING WITH A MINIMUM OF (2) 22 GUAGE X 3/4" WIDE METAL STRAPS AT THE UPPER 1/3 AND LOWER 1/3 OF THE TANK.
32. WHEN MORE THAN ONE SMOKE DETECTOR IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
33. ALL HEATING DUCTS IN UNCONDITIONED SPACE ARE TO BE INSULATED TO A MINIMUM OF R–8. ALL DUCTWORK SEAM JOINTS ARE TO BE TAPED, SEALED, AND FASTENED WITH THE MINIMUM OF FASTENERS REQUIRED BY THE MECHANICAL CODE.
34. WATER HEATERS WITH NONRIGID WATER CONNECTIONS AND OVER 4'–0" IN HEIGHT SHALL BE ANCHORED OR STRAPPED TO RESIST EARTHQUAKE MOTIONS.
35. WATER HEATERS SHALL ALSO BE EQUIPPED WITH A THERMAL EXPANSION TANK PER U.P.C. 1007
36. APPLIANCES INSTALLED IN GARAGES SHALL BE PROTECTED FROM MECHANICAL DAMAGE BY LOCATING THE EQUIPMENT OUT OF THE NORMAL PATH OF VEHICLES OR BY A PROTECTIVE BARRIER WHICH CONSISTS OF A 3" ROUND PIPE BOLLARD FILLED WITH CONCRETE AND EMBEDDED 18" INTO A CONCRETE FOOTING.
37. ELEMENTS OF APPLIANCES INSTALLED IN GARAGES WHICH CREATE A GLOW, SPARK OR FLAME SHALL BE LOCATED A MINIMUM OF 18" ABOVE THE GARAGE FLOOR.
38. HEATING APPLIANCES SHALL BE EQUIPPED WITH A LISTED SHUT–OFF DEVICE.
39. FUEL BURNING, ELECTRIC HEATING, AND HEAT PUMP APPLIANCES SHALL BE LISTED AND LABELED.
40. WATER HEATERS SHALL BE LABELED AS COMPLYING WITH NAECA.
41. CLEARANCES OF LISTED APPLIANCES FROM COMBUSTABLE MATERIALS SHALL BE A SPECIFIED IN THE LISTING. UNLISTED APPLIANCES CLEARANCES SHALL COMPLY WITH THE I.M.C.
42. THE HEATING SYSTEM SHALL BE PROVIDED WITH A DAY–NIGHT THERMOSTAT AND A SHUT–OFF. ALSO, A READILY ACCESSIBLE MANUAL MEANS SHALL BE PROVIDED TO RESTRICT OR SHUT OFF UNUSED ROOMS OR PORTIONS OF THE BUILDING.
43. SERVICE WATER HEATING SHALL BE EQUIPPED WITH AN ADJUSTABLE AUTOMATIC TEMPERATURE CONTROL.
44. SHOWERS SHALL BE EQUIPPED WITH FLOW CONTROL DEVICES TO LIMIT TOTAL FLOW TO A MAX. OF 2.5 GPM PER SHOWER HEAD.
45. AIR DUCTS AND PLENUMS PASSING THROUGH THE GARAGE WALLS, FLOOR OR CEILING TO THE DWELLING SHALL BE OF 26 GA. GALV. SHEET METAL. THE DUCTS SHALL NOT HAVE ANY OPENINGS TO THE GARAGE.
46. OUTDOOR AIR INLETS SHALL NOT BE PLACED CLOSER THAN 10' FROM AN APPLIANCE VENT OUTLET, UNLESS SUCH VENT OUTLET IS 3' ABOVE THE OUTDOOR AIR INLET, NOR LOCATED IN A PLACE WHERE IT WILL PICK UP OBJECTIONABLE ODORS, FUMES OR FLAMMABLE VAPORS, NOR IN A HAZARDOUS OR UNSANITARY LOCATION, NOR IN A ROOM OR SPACE HAVING ANY FUEL–BURNING APPLIANCES.
47. EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL BE EQUIPPED WITH BACK–DRAFT DAMPERS.
48. EXHAUST FANS, COOKTOPS AND CLOTHES DRYERS SHALL BE EXHAUSTED TO THE EXTERIOR.
49. EXHAUST DUCTS ARE TO BE CONSTRUCTED OF SMOOTH–BORE, NON–COMBUSTIBLE MATERIALS. APPROVED FLEX CONNECTORS NOT EXCEEDING 6 FT. IN LENGTH MAY BE USED IN CONNECTION WITH DOMESTIC DRYER EXHAUST.
50. ALL SOLID FUEL BURNING APPLIANCES SHALL BE PROVIDED WITH TIGHT FITTING GLASS OR METAL DOORS, AND SHALL HAVE AN OUTSIDE SOURCE OF COMBUSTION AIR DIRECTLY CONNECTED TO THE FIREBOX, OR TESTED AND LISTED PER H.U.D. CARBON–MONOXIDE PERFORMANCE REQUIREMENTS.
51. FIREPLACES SHALL BE PROVIDED WITH TIGHT FITTING FLUE DAMPERS, OPERATED BY A READILY ACCESSIBLE MANUAL OR APPROVED AUTOMATIC CONTROL, AND SHALL HAVE AN OUTSIDE SOURCE FOR COMBUSTION AIR–DUCTED INTO THE FIREBOX (MIN. OF 6 SQ. IN. WITH AN OPERABLE OUTSIDE AIR DUCT DAMPER).
52. ALL FIREPLACES PROVIDED WITH GAS LOG LIGHTERS SHALL HAVE THE DAMPERS WIRED OPEN.
53. ALL EXTERIOR BATH AND/OR SHOWER WALLS RECEIVING GYPSUM 'WONDERBOARD' OR GYPSUM 'HARDI' BACKERBOARD FOR CERAMIC TILE, STONE TILE, OR STONE SLAB SHALL NOT BE INSTALLED OVER A VAPOR BARRIER.
54. WATERPROOF BACKING IS REQUIRED IN ALL SHOWERS AREAS TO A MINIMUM OF 72" ABOVE THE DRAIN.
55. ALL EXTERIOR JOINTS SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER–STRIPPED TO LIMIT AIR LEAKAGE AT THE WINDOW AND DOOR FRAMES, THE OPENINGS BETWEEN WALLS AND FOUNDATION, BETWEEN THE WALLS AND ROOF, OPENINGS AT THE PENETRATION OF UTILITY SERVICES, AND AT ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.
56. THE CEILING AND WALLS OF ANY CLOSET/STORAGE SPACE UNDER STAIRS SHALL BE COVERED WITH 5/8" TYPE 'X' G.W.B.
57. ALL SMOKE DETECTORS SHALL BE HARD–WIRED TO A 110 VOLT SYSTEM, AND EACH SMOKE DETECTOR SHALL BE EQUIPPED WITH A BATTERY BACKUP.
58. ALL WINDOWS AND DOORS SHALL COMPLY WITH THE INTERNATIONAL BUILDING SECURITY CODE.
59. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE, BUT A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN MOUNTED AT A HEIGHT OF 48" OR LESS ABOVE THE FINISH FLOOR MAY BE PROVIDED.
60. ALL RECESSED LIGHTNING FIXTURES WHICH ARE INSTALLED IN THE BUILDING ENVELOPE SHALL COMPLY WITH THE PROVISIONS OF THE W.S.E.C.
61. RECESSED LIGHTING FIXTURES SHALL BE U.L. LABELED AND I.C. RATED.
62. THE MANUFACTURER'S OF ALL WOOD AND METAL GUARDRAIL COMPONENTS ARE REQUIRED TO PROVIDE ALL NECESSARY DESIGN DOCUMENTS AND SPECIFICATIONS TO THE BUILDING OFFICIAL FOR REVIEW AS A DEFERRED SUBMITTAL PER IBC SECTION 106.
63. ALL ROOF VENT OPENINGS, INCLUDING EAVE VENT BLOCKS, SHALL BE SCREENED WITH CORROSION–RESISTANT WIRE MESH THAT HAS 1/8" MIN. TO 1/4" MAX. OPENINGS PER IRC SECTION 806.1
64. FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL–FIRED APPLIANCES ARE INSTALLED, AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES.
65. SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE IBC, IRC AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
66. THE CONTRACTOR SHALL VERIFY TO THE INSPECTOR THAT ALL GUARDS & RAILINGS SHALL BE CAPABLE OF RESISTING A 200 LB. LOAD ON THE TOP OF THE RAIL ACTING IN ANY DIRECTION PER IRC TABLE R301.5. THE MANUFACTURERS OF ALL GUARDRAIL COMPONENTS ARE REQUIRED TO PROVIDE ALL NECESSARY DESIGN DOCUMENTS AND SPECIFICATIONS TO THE BUILDING OFFICIAL FOR REVIEW AS A DEFERRED SUBMITTAL PER IBC SECTION 106.



Section B-B

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

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GENERAL NOTES

Division 1. General Requirements

All work shall comply with the most recently adopted edition of International Building Code, International Residential Code, International Mechanical Code, Uniform Plumbing Code, National Electrical Code, Washington State Energy Code, and all applicable land use codes.

Contractor shall verify all existing site conditions, site development dimensions, and building dimensions prior to proceeding with the work. Building perimeter and floor elevations shall be established and building setback and height restriction compliance shall be verified by licensed surveyor prior to excavation. Any discrepancy in the construction documents shall be immediately brought to the Architect's attention for resolution.

Written dimensions shall have precedence over scaled dimensions.

Division 2. Site Work

Clearing and grading shall conform to all applicable regulations, and shall be conducted such that erosion of soils is minimized.

All footings shall bear on firm undisturbed soil. Foundation design is based upon an assumed average soil bearing value of 1,500 lbs./sq. ft. unless stated otherwise. Provide concrete fill under all over-excavated footings, coarse granular fill under all over-excavated slabs.

Back fill foundation drain at perimeter of building with coarse granular fill (1 1/2"–3/8" clean washed rock) with minimum of 12" wide blanket extending to 6" below finished grade. Protect drain tile and waterproofing.

Compact areas within buildings which are to be covered by concrete slab to 95% of maximum dry density. Compact areas to be covered by paving (walkways, driveways, patios,) to 90% of maximum dry density.

Rough grading shall provide positive drainage away from building. Trench to elevations below frost line for storm drains, water lines, sanitary sewer (or specific system) and irrigation sleeves.

Provide perforated plastic pipe foundation drain where shown on drawings, and connect directly to the storm water system. In addition to the perforated foundation drains, provide separate tight line for roof drains, and connect directly to the storm water system.

Rockeries and retaining walls shall be designed and installed per all applicable codes.

Division 3. Concrete Work

All reinforcing steel shall be grade 40, deformed bars. All tie wire shall be 16 gauge double annealed wire. All anchor bolts, nuts and washers shall be ASTM A–307. Lap all reinforcing bar splices a minimum of 30 bar diameters (U.N.O.).

Minimum concrete compressive strength shall be 2500 P.S.I. at 28 days unless noted otherwise. Footings and foundation walls shall contain a minimum of 5 sacks Portland cement per cubic yard, slabs shall contain a minimum of 4 1/2 sacks per cubic yard. Exposed aggregate slabs shall contain a minimum of 5 1/2 sacks per cubic yard.

Provide broom finish or exposed aggregate finish for all exterior concrete walls, patios, stairs, porches, and driveways. Provide fine float finish for surfaces to be covered be resilient flooring, tile, or carpet. Provide steel trowel finish for interior walking surfaces which will not be covered by flooring.

Slope exterior concrete slabs and garage slabs to drain. Provide wood, plastic, or fiber expansion joints at 20' O.C. max.

Protect all concrete work during curing to minimize evaporation.

Division 4. Masonry

A. Brick Veneer Masonry

Utilize standard size new brick units, ASTM C 216 in running bond unless shown otherwise on drawings. Anchor to wood framing with corrosion-resistant anchor ties, minimum No. 22 gauge x 7/8". Space anchor ties such that ties are attached at each stud, 24" O.C. maximum horizontally, and 12" O.C. maximum vertically. Provide No. 9 wire continous horizontal ties at 12" O.C. maximum, corresponding to anchor tie placement. All veneer masonry shall be fully bedded in type "S" mortar, and provided with weep holes. All exterior joints shall be either rodded or flush.

B. Stone Veneer Masonry

Anchor stone veneer units, 5" maximum thickness, to wood studs or masonry backing with No.22 gauge x 7/8" corrosion resistant sheet metal ties per IRC Sections R703.7.4 and R703.7.4.1.

All stone veneer masonry shall be fully bedded in type "S" mortar, and provided with weep holes.

C. Glass Masonry

Glass masonry units shall be minimum of 3" in thickness and installed with type "S" mortar per section R 610.8 I.R.C.

D. Steel Lintels

Provide steel angle lintels, Fy= 36,000 P.S.I. above all non-arched openings in brick or stone veneer masonry. The following lintel sizes are intended for support of 4" maximum veneer thickness, with no superimposed loads.

Clear Span (Max)	Steel Angle Size
4' –0	L 3 1/2" x 3 1/2" x 5/16"
6' –0	L 4" x 3 1/2" x 5/16"
8' –0	L 5" x 3 1/2" x 5/16"

Provide 6" bearing at each end.

E. Masonry Fireplaces

Construct masonry fireplaces of new standard size clay brick, ASTM C 216 or a combination of brick and concrete masonry units. Fireplace wall thickness shall be minimum of 8", including firebrick lining, ASTM C 27. Chimney wall thickness shall be minimum of 4" and lined with fireclay flue tile, ASTM C 315. Masonry above fireplace opening shall be supported by steel angles or by flue damper assembly designed to support such loads. Provide 6 sq. in. minimum outside combustion air opening, complete with damper. No combustible materials shall be placed within 2" of smoke chambers or interior chimneys, nor within 1" of exterior chimneys. Flues shall be sized in accordance with IRC Section R1001.12 . Chimneys shall be provided reinforcement and seismic anchorages per IRC Section R1001.1 .

No combustible materials shall be placed within 6" of the fireplace opening. Combustible materials within 12" inches of the fireplace opening shall not project more than 1/8" for each 1" clearance from such opening.

Division 5. Metals

Structural Steel:
Conform to ASTM A 36 unless noted otherwise.

Structural bolts, nuts, and washers:
Conform to ASTM A 307 unless noted otherwise.

All work to conform with American Institute of Steel Construction standards.

Division 6. Wood and Plastic

Rough Carpentry

All rough framing members shall be framed, anchored, tied and braced so as to develop the strength and rigidity necessary for the purpose for which they are used.

Nailed connections shall be in accordance with IRC Tables R602.3(1), and R602.3(2) .

All plywood shall be installed per American Plywood Association standards.

All pre-manufactured wood trusses shall be designed by a licensed engineer. Fabrication, handling, storage, installation and bracing shall be per engineer's specifications.

All foundation plates or sills, and all sleepers on concrete or masonry in direct contact with earth shall be pressure treated.

Deck framing shall be pressure treated. Decking and rails shall be pressure treated or cedar.

All joists, rafters, studs, blocking and bracing shall be HEM–FIR #2 or better, see tables on this sheet for design values.

All sawn beams, headers, posts, lintels, and girders, 4" nominal, shall be Douglas Fir– Larch #2 or better, see tables on this sheet for design values. 6" nominal shall be Douglas Fir– Larch #1 or better; Fv= 170 P.S.I., Fb= 1350 P.S.I., E= 1,600,000 P.S.I.

All glued-laminated timber shall be kiln dried Douglas Fir, 24 F–V4 or better; Fv= 240 P.S.I., Fb= 2400 P.S.I., E= 1,800,000 P.S.I.

All plywood shall be C–D grade, exterior glue.

All spaced roof sheathing shall be HEM–Fir #4 common grade or better. Provide 1 x 6 spaced roof sheathing for shake roofs, 1 x 4 for shingle roofs.

All framing lumber shall be kiln dried or air dried to 19% maximum moisture content prior to installation.

Division 7. Thermal and moisture protection

A. Bituminous Dampproofing

Apply heavy bodied asphalt bituminous dampproofing to exterior of foundation walls, extending up to finish grade, per manufacturer's instructions.

B. Water Repellents

Apply appropriate water repellent to any masonry, cement plaster or stucco per manufacturer's instructions.

C. Insulation

Install building insulation in the following minimum values:

Attic	R–49
Rafter cavity in vaulted ceiling	R–38
Walls	R–21
Framed floors over unheated space	R–30
Slab on grade at perimeter	R–10

D. Vapor Barriers

Provide integral foil or kraft vapor barrier with wall insulation. Provide 6 mil. polyethelene vapor barrier in crawl space.

E. Roofing

1. Red cedar handsplit shakes:

Apply shakes with 30 lb. roofing felt interlay. Shakes shall be laid with weather exposure of 7 1/2" for 18" resawn shakes, 10" for 24" resawn shakes , at roof slopes of 3 in 12 or greater. Provide nailing, flashing, and installation in accordance with Red Cedar Shingle and Handsplit Shake Bureau recommendations.

2. Red Cedar Shingles

Apply No.1 shingles directly over roof sheathing. Shingles shall be laid with weather exposure of 5" for No. 1, 16" shingles, 5 1/2" for No.1, 18" shingles, and 7 1/2" for No.1, 24" shingles, at roof slopes of 3 in 12 or greater. Provide nailing, flashing, and installation in accordance with the Red Cedar Shingle and Handsplit Shakes Bureau recommendations.

3. Asphalt shingles

Apply shingles over solid sheathing with minimum 15 lb. building felt underlay. Install per manufacturer's instructions & IRC Sec. R905.2.

4. Tile roofing

Apply glazed clay or glazed concrete tile in accordance with manufacturer's instructions and IRC Section R905.3 .

5. Built-up roofing

Apply 3-ply built-up roofing in accordance with manufacturer's instructions and IRC Section R905.9 .

6. Single ply roofing

Single ply roofing membranes shall be applied in accordance with the manufacturer's instructions and IRC Sections R905.12 and R905.13.

F. Wood Siding

Install wood siding of the type and orientation shown on the drawings, over minimum 15 lb. building felt or approved water vapor permeable, air infiltration retardant house wrap. See IRC Sec. R703.3.

G. Roof Accessories

Provide prefabricated roof ventilation jacks of galvanized steel or anodized aluminum.

H. Gutters and downspouts

Provide continuously formed aluminum gutters. Provide 2" x 4" rectangular downspouts. Seal all gutter connections and all gutter corner connections with butyl compound. Connect downspouts to drain lines with appropriate transition fittings.

I. Skylights

Provide double paned skylight units of the size and type shown on drawings. Install per manufacturer's instructions, including flashing, and counterflashing.

J. Sealants

Utilize resilient, non-hardening caulking designed for the intended application where it is otherwise impractical to obtain a water-tight or air-tight fitting joint between materials. Provide polyurethane foam backing rod compatible with caulking where joint size dictates.

K. Flashing and Sheet Metal

Provide 20 gauge galvanized steel flashing at roof/chimney, roof/skylight, roof/wall intersections, and wall/deck intersections, where siding is interrupted by major horizontal trim, and at heads of doors and windows exposed to weather. Provide butyl boots at all roof plumbing penetrations.

Division 8. Doors and Windows

A. Doors

Provide doors of the type and size shown on drawings. Hinged exterior doors shall be weatherstripped. Install doors per manufacturer's instructions including flashing, nailing, clearances, and finishing. Provide self closing hardware on doors, which separate residential space from garage space.

B. Windows

Provide window units of the type, size, class, and manufacturer shown on drawings. Install plumb, level, and square and per manufacturer's instructions including flashing, nailing, clearance, and finishing. Provide required documentation of window energy class rating to Bld'g. Official.

C. Glazing

All external glazing shall be double paned, excluding ornamental glazing. All glazing subject to human impact shall be safety glazing. In general, this includes but is not limited to glazing in doors, within 12" of doors, and within 18" of floors.

Glazing in skylights shall be wired glass, laminated glass with an approved interlayer having a minimum thickness of 0.030" or tempered glass, minimum thickness of 7/32".

D. Egress

Sleeping rooms shall be provided with egress windows or doors with a minimum net clear opening of 5.7 sq. ft., with minimum net clear height of 24" and net clear width of 20". Sill height shall not exceed a maximum of 44" above the floor.

E. Light and Ventilation

Window area in habitable rooms shall be not less than 1/12.5 of floor area of such rooms. Operable window (or door) area shall be not less than 1/25 of the floor area of such rooms.

Division 9. Finishes

A. Gypsum Wall Board

Walls, ceilings, and structure separating residential and garage spaces shall be covered with 5/8" type "x" gypsum wall board on garage side, and shall have all joints fire-taped and nails set and compounded.

All other walls and ceilings shall receive 1/2" gypsum wallboard. For ceiling supported by 24" o.c. framing members, verify suitability of 1/2" wallboard with manufacturer.

Walls surrounding tubs or showers shall be covered with water-resistant gypsum wall board, waterproof-surface to a height of 72" above adjacent floor.

B. Cement Plaster or stucco

Apply cement plaster or stucco at areas shown on drawings in accordance with Northwest Wall and Ceiling Bureau recommendations for materials, backing, lath, application techniques, and finish.

Division 15. Mechanical

Plumbing

Plumbing system shall be designed be a competent, experienced mechanical engineer or designer, in accordance with the Uniform plumbing Code and all applicable local codes. Water heater insulation shall conform to ASHRAE Standard 90–A–80. Hot water pipe insulation shall conform to table 5–12 of the Washington State Energy Code.

Heating, Ventilation, and Air Conditioning (HVAC)

HVAC system shall be designed be a competent, experienced mechanical engineer or designer, in accordance with the Uniform Mechanical Code and all applicable local codes. Provide documentation of furnace A.F.U.E. Ductwork insulation shall conform to table 5–11 of Washington State Energy Code. When installed in garage, heating units shall be placed such that all pilot lights, burners, heating elements or switches are located a minimum of 18" above garage floor.

Division 16. Electrical

Electrical systems shall be designed by a competent, experienced electrical engineer or designer, in accordance with the National Electrical Code and all applicable local codes. Electrical plan in architectural drawings is for schematic layout reference only.

2005 NDS DESIGN VALUES FOR BEAMS (SINGLE MEMBER USE)

Species/Grade		Size	Fb	Fv	E
2x	D.F. #2	2 x 6	1170	180	1.6
		2 x 8	1080	180	1.6
		2 x 10	990	180	1.6
		2 x 12	900	180	1.6
2x	D.F.#1	2 x 6	1300	180	1.7
		2 x 8	1200	180	1.7
		2 x 10	1100	180	1.7
		2 x 12	1000	180	1.7
2x	H.F.#2	2 x 6	1105	150	1.3
		2 x 8	1020	150	1.3
		2 x 10	935	150	1.3
		2 x 12	850	150	1.3
2x	H.F.#1	2 x 6	1267	150	1.5
		2 x 8	1170	150	1.5
		2 x 10	1072	150	1.5
		2 x 12	975	150	1.5
4x	D.F.#2	4 x 6	1170	180	1.6
		4 x 8	1170	180	1.6
		4 x 10	1080	180	1.6
		4 x 12	990	180	1.6
4x	D.F.#1	4 x 6	1300	180	1.7
		4 x 8	1300	180	1.7
		4 x 10	1200	180	1.7
		4 x 12	1100	180	1.7
4x	H.F.#2	4 x 6	1105	150	1.3
		4 x 8	1105	150	1.3
		4 x 10	1020	150	1.3
		4 x 12	935	150	1.3
4x	H.F.#1	4 x 6	1267	150	1.5
		4 x 8	1267	150	1.5
		4 x 10	1170	150	1.5
		4 x 12	1072	150	1.5
6x	D.F.#2	6 x 6	875	170	1.3
		6 x 8	875	170	1.3
		6 x 10	875	170	1.3
		6 x 12	875	170	1.3
6x	D.F.#1	6 X 6	1350	170	1.6
		6 X 8	1350	170	1.6
		6 X 10	1350	170	1.6
		6 X 12	1350	170	1.6
6x	H.F.#2	6 X 6	675	140	1.1
		6 X 8	675	140	1.1
		6 X 10	675	140	1.1
		6 X 12	675	140	1.1
6x	H.F.#1	6 X 6	1050	140	1.3
		6 X 8	1050	140	1.3
		6 X 10	1050	140	1.3
		6 X 12	1050	140	1.3

Note:

1. When sizing roof beams, Fb and Fv shall be multiplied by a snow load Duration Factor (Cd) of 1.15 . See 2005 NDS Table 2.3.2 .
2. The design values for lumber exposed to service conditions causing the wood to possess more than 19% moisture content shall be reduced as specified by the NDS Wet Service Factor Cm.
3. Because governing stresses differ with each situation, the percentage of change for the actual span of a member will vary.

2005 NDS DESIGN VALUES FOR REPETITIVE FRAMING MEMBERS

Species/Grade		Size	Fb	Fv	E
2x	D.F. #2	2 x 4	1552	180	1.6
		2 x 6	1345	180	1.6
		2 x 8	1242	180	1.6
		2 x 10	1138	180	1.6
		2 X 12	1035	180	1.6
2x	D.F.#1	2 x 4	1725	180	1.7
		2 x 6	1495	180	1.7
		2 x 8	1380	180	1.7
		2 x 10	1265	180	1.7
		2 X 12	1150	180	1.7
2x	H.F.#2	2 x 4	1465	150	1.3
		2 x 6	1270	150	1.3
		2 x 8	1173	150	1.3
		2 x 10	1075	150	1.3
		2 X 12	978	150	1.3
2x	H.F.#1	2 x 4	1682	150	1.5
		2 x 6	1457	150	1.5
		2 x 8	1345	150	1.5
		2 x 10	1233	150	1.5
		2 X 12	1121	150	1.5

Note:

1. When sizing roof beams, Fb and Fv shall be multiplied by a snow load Duration Factor (Cd) of 1.15 . See 2005 NDS Table 2.3.2 .
2. The design values for lumber exposed to service conditions causing the wood to possess more than 19% moisture content shall be reduced as specified by the NDS Wet Service Factor Cm.
3. Because governing stresses differ with each situation, the percentage of change for the actual span of a member will vary.
4. This table includes repetitive member adjustment factors. Members shall be spaced not more than 24" o.c., not less than three in number, and joined by transverse load-distributing elements per 2005 NDS.

TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING OF FASTENERS
	Roof		
1	Blocking between joists or rafters to top plate, toe nail	3-8d ($2^1/_2'' \times 0.113''$)	—
2	Ceiling joists to plate, toe nail	3-8d ($2^1/_2'' \times 0.113''$)	—
3	Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3-10d	—
4	Collar tie rafter, face nail or $1^1/_4'' \times 20$ gage ridge strap	3-10d ($3'' \times 0.128''$)	—
5	Rafter to plate, toe nail	2-16d ($3^1/_2'' \times 0.135''$)	—
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d ($3^1/_2'' \times 0.135''$) 3-16d ($3^1/_2'' \times 0.135''$)	— —
	Wall		
7	Built-up corner studs	10d ($3'' \times 0.128''$)	24" o.c.
8	Built-up header, two pieces with $^1/_2''$ spacer	16d ($3^1/_2'' \times 0.135''$)	16" o.c. along each edge
9	Continued header, two pieces	16d ($3^1/_2'' \times 0.135''$)	16" o.c. along each edge
10	Continuous header to stud, toe nail	4-8d ($2^1/_2'' \times 0.113''$)	—
11	Double studs, face nail	10d ($3'' \times 0.128''$)	24" o.c.
12	Double top plates, face nail	10d ($3'' \times 0.128''$)	24" o.c.
13	Double top plates, minimum 48-inch offset of end joints, face nail in lapped area	8-16d ($3^1/_2'' \times 0.135''$)	—
14	Sole plate to joist or blocking, face nail	16d ($3^1/_2'' \times 0.135''$)	16" o.c.
15	Sole plate to joist or blocking at braced wall panels	3-16d ($3^1/_2'' \times 0.135''$)	16" o.c.
16	Stud to sole plate, toe nail	3-8d ($2^1/_2'' \times 0.113''$) or 2-16d $3^1/_2'' \times 0.135''$)	— —
17	Top or sole plate to stud, end nail	2-16d ($3^1/_2'' \times 0.135''$)	—
18	Top plates, laps at corners and intersections, face nail	2-10d ($3'' \times 0.128''$)	—
19	1" brace to each stud and plate, face nail	2-8d ($2^1/_2'' \times 0.113''$) 2 staples $1^3/_4''$	— —
20	$1'' \times 6''$ sheathing to each bearing, face nail	2-8d ($2^1/_2'' \times 0.113''$) 2 staples $1^3/_4''$	— —
21	$1'' \times 8''$ sheathing to each bearing, face nail	2-8d ($2^1/_2'' \times 0.113''$) 3 staples $1^3/_4''$	— —
22	Wider than $1'' \times 8''$ sheathing to each bearing, face nail	3-8d ($2^1/_2'' \times 0.113''$) 4 staples $1^3/_4''$	— —
	Floor		
23	Joist to sill or girder, toe nail	3-8d ($2^1/_2'' \times 0.113''$)	—
24	$1'' \times 6''$ subfloor or less to each joist, face nail	2-8d ($2^1/_2'' \times 0.113''$) 2 staples $1^3/_4''$	— —
25	2" subfloor to joist or girder, blind and face nail	2-16d ($3^1/_2'' \times 0.135''$)	—
26	Rim joist to top plate, toe nail (roof applications also)	8d ($2^1/_2'' \times 0.113''$)	6" o.c.
27	2" planks (plank & beam – floor & roof)	2-16d ($3^1/_2'' \times 0.135''$)	at each bearing
28	Built-up girders and beams, 2-inch lumber layers	10d ($3'' \times 0.128''$)	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice.
29	Ledger strip supporting joists or rafters	3-16d ($3^1/_2'' \times 0.135''$)	At each joist or rafter

(continued)

TABLE R602.3(1)—continued
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER[b, c, e]	SPACING OF FASTENERS	
			Edges (inches)[i]	Intermediate supports[c, e] (inches)
	Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing			
30	$^3/_8'' - ^1/_2''$	6d common ($2'' \times 0.113''$) nail (subfloor wall)[j] 8d common ($2^1/_2'' \times 0.131''$) nail (roof)	6	12[g]
31	$^5/_{16}'' - ^1/_2''$	6d common ($2'' \times 0.113''$) nail (subfloor, wall) 8d common ($2^1/_2'' \times 0.131''$) nail (roof)[f]	6	12[g]
32	$^{19}/_{32}'' - 1''$	8d common nail ($2^1/_2'' \times 0.131''$)	6	12[g]
33	$1^1/_8'' - 1^1/_4''$	10d common ($3'' \times 0.148''$) nail or 8d ($2^1/_2'' \times 0.131''$) deformed nail	6	12
	Other wall sheathing[h]			
34	$^1/_2''$ structural cellulosic fiberboard sheathing	$^1/_2''$ galvanized roofing nail, $^7/_{16}''$ crown or 1" crown staple 16 ga., $1^1/_4''$ long	3	6
35	$^{25}/_{32}''$ structural cellulosic fiberboard sheathing	$1^3/_4''$ galvanized roofing nail, $^7/_{16}''$ crown or 1" crown staple 16 ga., $1^1/_2''$ long	3	6
36	$^1/_2''$ gypsum sheathing[d]	$1^1/_2''$ galvanized roofing nail; staple galvanized, $1^1/_2''$ long; $1^1/_4$ screws, Type W or S	7	7
37	$^5/_8''$ gypsum sheathing[d]	$1^3/_4''$ glavanized roofing nail; staple galvanized, $1^5/_8''$ long; $1^5/_8''$ screws, Type W or S	7	7
	Wood structural panels, combination subfloor underlayment to framing			
38	$^3/_4''$ and less	6d deformed ($2'' \times 0.120''$) nail or 8d common ($2^1/_2'' \times 0.131''$) nail	6	12
39	$^7/_8'' - 1''$	8d common ($2^1/_2'' \times 0.131''$) nail or 8d deformed ($2^1/_2'' \times 0.120''$) nail	6	12
40	$1^1/_8'' - 1^1/_4''$	10d common ($3'' \times 0.148''$) nail or 8d deformed ($2^1/_2'' \times 0.120''$) nail	6	12

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1ksi = 6.895 MPa.

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

b. Staples are 16 gage wire and have a minimum $^7/_{16}$-inch on diameter crown width.

c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.

d. Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).

f. For regions having basic wind speed of 110 mph or greater, 8d deformed ($2^1/_2'' \times 0.120$) nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if mean roof height is more than 25 feet, up to 35 feet maximum.

g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. When basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.

h. Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.

i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

TABLE R602.3(2)
ALTERNATE ATTACHMENTS

NOMINAL MATERIAL THICKNESS (inches)	DESCRIPTION[a, b] OF FASTENER AND LENGTH (inches)	SPACING[c] OF FASTENERS	
		Edges (inches)	Intermediate supports (inches)
	Wood structural panels subfloor, roof and wall sheathing to framing and particleboard wall sheathing to framing[f]		
up to $^1/_2$	Staple 15 ga. $1^3/_4$	4	8
	0.097 - 0.099 Nail $2^1/_4$	3	6
	Staple 16 ga. $1^3/_4$	3	6
$^{19}/_{32}$ and $^5/_8$	0.113 Nail 2	3	6
	Staple 15 and 16 ga. 2	4	8
	0.097 - 0.099 Nail $2^1/_4$	4	8
$^{23}/_{32}$ and $^3/_4$	Staple 14 ga. 2	4	8
	Staple 15 ga. $1^3/_4$	3	6
	0.097 - 0.099 Nail $2^1/_4$	4	8
	Staple 16 ga. 2	4	8
1	Staple 14 ga. $2^1/_4$	4	8
	0.113 Nail $2^1/_4$	3	6
	Staple 15 ga. $2^1/_4$	4	8
	0.097 - 0.099 Nail $2^1/_2$	4	8
NOMINAL MATERIAL THICKNESS (inches)	DESCRIPTION[a, b] OF FASTENER AND LENGTH (inches)	SPACING[c] OF FASTENERS	
		Edges (inches)	Body of panel[d] (inches)
	Floor underlayment; plywood-hardboard-particleboard[f]		
	Plywood		
$^1/_4$ and $^5/_{16}$	$1^1/_4$ ring or screw shank nail—minimum $12^1/_2$ ga. (0.099") shank diameter	3	6
	Staple 18 ga., $^7/_8$, $^3/_{16}$ crown width	2	5
$^{11}/_{32}$, $^3/_8$, $^{15}/_{32}$, and $^1/_2$	$1^1/_4$ ring or screw shank nail—minimum $12^1/_2$ ga. (0.099") shank diameter	6	8[e]
$^{19}/_{32}$, $^5/_8$, $^{23}/_{32}$ and $^3/_4$	$1^1/_2$ ring or screw shank nail—minimum $12^1/_2$ ga. (0.099") shank diameter	6	8
	Staple 16 ga. $1^1/_2$	6	8
	Hardboard[f]		
0.200	$1^1/_2$ long ring-grooved underlayment nail	6	6
	4d cement-coated sinker nail	6	6
	Staple 18 ga., $^7/_8$ long (plastic coated)	3	6
	Particleboard		
$^1/_4$	4d ring-grooved underlayment nail	3	6
	Staple 18 ga., $^7/_8$ long, $^3/_{16}$ crown	3	6
$^3/_8$	6d ring-grooved underlayment nail	6	10
	Staple 16 ga., $1^1/_8$ long, $^3/_8$ crown	3	6
$^1/_2$, $^5/_8$	6d ring-grooved underlayment nail	6	10
	Staple 16 ga., $1^5/_8$ long, $^3/_8$ crown	3	6

For SI: 1 inch = 25.4 mm.

a. Nail is a general description and may be T-head, modified round head or round head.

b. Staples shall have a minimum crown width of $^7/_{16}$-inch on diameter except as noted.

c. Nails or staples shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. Nails or staples shall be spaced at not more than 12 inches on center at intermediate supports for floors.

d. Fasteners shall be placed in a grid pattern throughout the body of the panel.

e. For 5-ply panels, intermediate nails shall be spaced not more than 12 inches on center each way.

f. Hardboard underlayment shall conform to ANSI/AHA A135.4.

TABLE R703.4
WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS

Anderson Architecture
Leif Anderson Architect
20822 Dawson Road, Lynnwood, WA 98036
425.672.4963 Fax/Phone
Leif@LAndersonArchitecture.com

LEIF ANDERSON

A Custom Residence for
On The Rock 98040, LLC
Lot 1, 7260 North Mercer Way, Mercer Island

RECEIVED
OCT 14 2016
CITY OF MERCER ISLAND
DEVELOPMENT SERVICE GROUP

DATE:
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JOB. NO.
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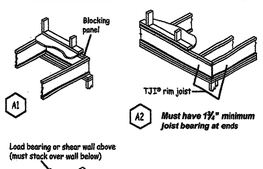
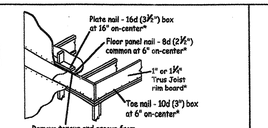
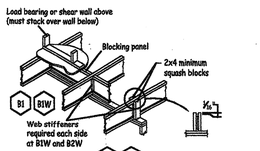
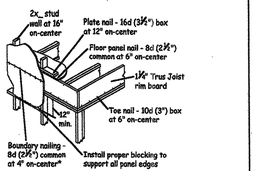
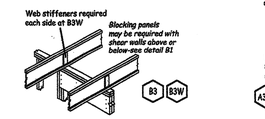
SHEET NO.
13
OF 24

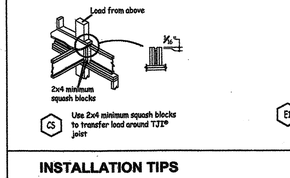


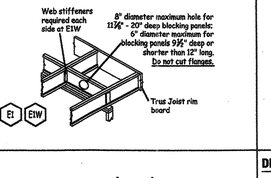


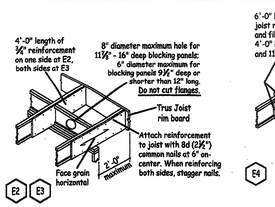


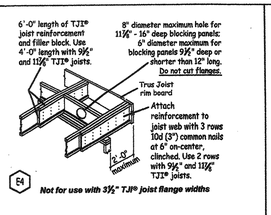


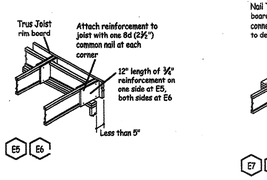


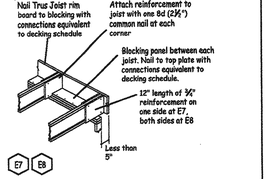


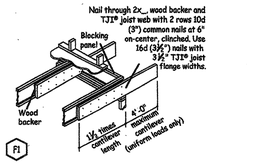


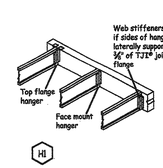


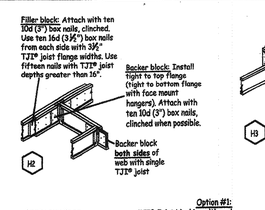


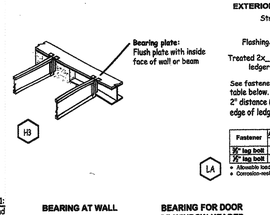


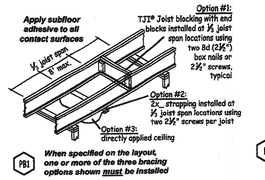


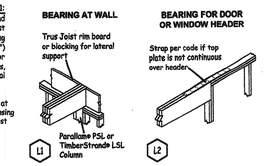


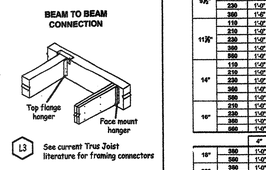


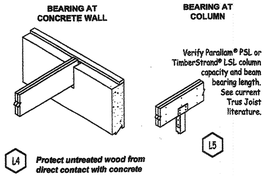


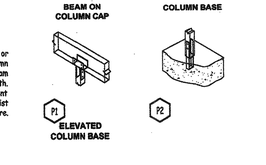


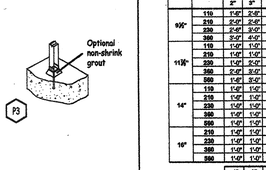


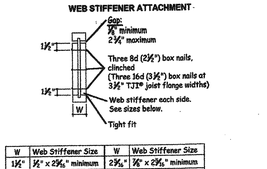


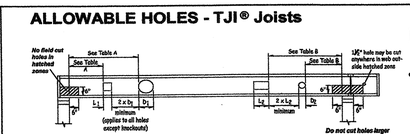


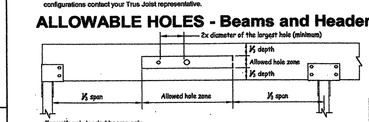


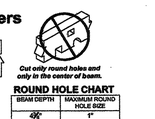


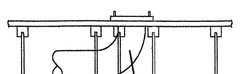


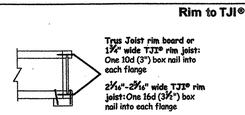


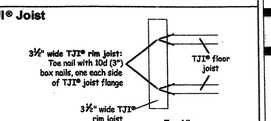


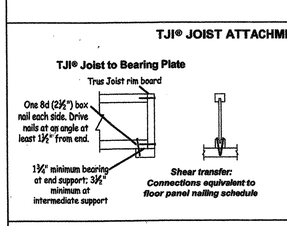


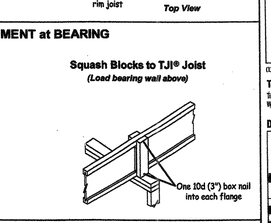


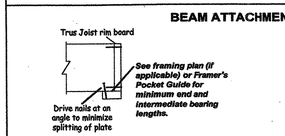


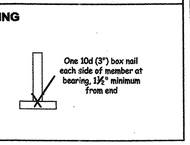












Must have 1¾" minimum joist bearing at ends

Conventional construction code minimum for use with A3 only. See Trus Joist Framer's Pocket Guide for A3.1-A3.3 installation specifications.

INTERMEDIATE BEARING
NO LOAD BEARING WALL ABOVE

**See Trus Joist Framer's Pocket Guide for additional installation specifications.*

FASTENING of FLOOR PANELS

Nail Size	Closest On-Center Spacing per Row: TJI® 110 and 210	TJI® 230, 360 and 560	Trus Joist rim board 1"	Trus Joist rim board 1¼"	TimberStrand® LSL 1¼" or wider	Microllam® LVL	Parallam® PSL
8d (2½") box	2½"	2"	6"	4"			
8d (2½") common	3½"	2"	6"	4"	3"	3"	3"
10d (3"), 12d (3¼") box	3"	2"	6"	4"			
10d (3"), 12d (3¼") common	4½"	3"	6"	4"	4"	4"	4"
16d (3½") common	N.A.	4"	16"	6"(1)	6"(1)	8"	6"

(1) Can be reduced to 4" on-center with maximum nail penetration of 1⅜" into the narrow edge.

- Recommended nailing is 12" on-center in field and 6" on-center along sheathing edge. Nailing requirements on engineered drawings supersede recommendations.
- Nailing rows must be offset at least ½" and staggered.
- 14 ga. staples may be substituted for 8d (2½") nails if minimum penetration of 1" into the TJI® joist or rim board is achieved.

Farthest On-Center Spacing per Row
Maximum spacing of nails is:
- For joist widths 1¾" or less: 18" on-center
  For joist widths greater than 1¾": 24" on-center

Use 2x4 minimum squash blocks to transfer load around TJI® joist

Not for use with 3½" TJI® joist flange widths

FILLER and BACKER BLOCK SIZES

TJI® Flange Widths	1¾"		2 1/16"		2 5/16"			3½"		
Depth	9½" or 11⅞"	14"	9½" or 11⅞"	14" or 16"	9½" or 11⅞"	14" or 16"	18" or 20"	11⅞"	14" or 16"	18" or 20"
Filler Block* (Detail H2)	2x6	2x8	2x6 + ⅜" sheathing	2x8 + ⅜" sheathing	2x6 + ½" sheathing	2x8 + ½" sheathing	2x12 + ½" sheathing	Two 2x6	Two 2x8	Two 2x12
Cantilever Filler (Detail E4)	2x6 4'-0" long	2x10 6'-0" long	2x6 + ⅜" sheathing 4'-0" long	2x10 + ⅜" sheathing 6'-0" long	2x6 + ½" sheathing 4'-0" long	2x10 + ½" sheathing 6'-0" long	Not applicable	Not applicable		
Backer Block* (Detail F1 or H2)	⅝" or ¾"		¾" or ⅞"		1" Net			2x6	2x8	2x12

* If necessary, increase filler and backer block height for face mount hangers. Maintain ⅛" gap at top of joist; see detail W. Filler and backer block lengths should accomodate required nailing without splitting (12" minimum for backer blocks and 24" minimum for filler blocks).

EXTERIOR DECK ATTACHMENT

Fastener	Allowable Load / Factored Resistance (lbs): 1¼" rim board	1" e-Rim™
⅜" lag bolt	400 / 630	N.A. / N.A.
½" lag bolt	475 / 750	325 / N.A.

- Allowable load determined in accordance with AC 124.
- Corrosion-resistant fasteners required for wet-service applications.

When specified on the layout, one or more of the three bracing options shown must be installed

BEARING AT WALL

BEARING FOR DOOR OR WINDOW HEADER

BEAM TO BEAM CONNECTION

See current Trus Joist literature for framing connectors

BEARING AT CONCRETE WALL

Protect untreated wood from direct contact with concrete

BEARING AT COLUMN

BEAM ON COLUMN CAP

ELEVATED COLUMN BASE

COLUMN BASE

CONNECTION OF MULTIPLE PIECES OF TOP-LOADED BEAMS (1)

1¾" Width Pieces:
- Minimum of 3 rows 10d (3" x 0.128") nails at 12" o.c.
- Minimum of 4 rows 10d (3" x 0.128") nails at 12" o.c. for 14" and deeper beams
- If using 12d (3¼") or larger nails, the number of nailing rows may be reduced by one.

3½" Width Pieces:
- Minimum of 2 rows ½" bolts at 24" o.c. staggered

(1) Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

L6 **Additional nailing or bolting may be required with side-loaded multiple-member beams. Refer to current product literature.**

WEB STIFFENER ATTACHMENT

W	Web Stiffener Size	W	Web Stiffener Size
1½"	½" x 2 5/16" minimum	2 5/16"	⅞" x 2 5/16" minimum
1¾"	⅝" x 2 5/16" minimum	2½"	1" x 2 5/16" minimum
2 1/16"	¾" x 2 5/16" minimum	3½"	2x4

ALLOWABLE HOLES - TJI® Joists

Table A - End Support
Minimum distance from edge of hole to inside face of nearest end support

DEPTH	TJI®	Round 2"	Round 3"	Round 4"	Round 6½"	Round 8⅞"	Round 11"	Round 13"	Sq./Rect. 2"	Sq./Rect. 3"	Sq./Rect. 4"	Sq./Rect. 6½"	Sq./Rect. 8⅞"	Sq./Rect. 11"	Sq./Rect. 13"
9½"	110	1'-0"	1'-6"	2'-0"	5'-0"				1'-0"	1'-6"	2'-6"	4'-6"			
	210	1'-0"	1'-6"	2'-0"	5'-0"				1'-0"	2'-0"	2'-6"	5'-0"			
	230	1'-0"	2'-0"	2'-6"	5'-6"				1'-0"	2'-0"	3'-0"	5'-0"			
	360	1'-6"	2'-0"	3'-0"	6'-0"				1'-6"	2'-6"	3'-6"	5'-6"			
11⅞"	110	1'-0"	1'-0"	1'-0"	2'-6"	5'-0"			1'-0"	1'-0"	1'-6"	4'-6"	6'-0"		
	210	1'-0"	1'-0"	1'-0"	2'-6"	5'-6"			1'-0"	1'-0"	2'-0"	5'-0"	6'-6"		
	230	1'-0"	1'-0"	1'-0"	3'-0"	6'-0"			1'-0"	1'-0"	2'-0"	5'-6"	7'-0"		
	360	1'-0"	1'-0"	1'-6"	4'-6"	7'-0"			1'-0"	1'-0"	2'-6"	6'-6"	7'-6"		
	560	1'-0"	1'-0"	1'-6"	5'-0"	8'-0"			1'-0"	2'-0"	3'-6"	7'-0"	8'-0"		
14"	110	1'-0"	1'-0"	1'-0"	1'-0"	2'-6"	5'-0"		1'-0"	1'-0"	1'-0"	3'-6"	6'-0"	8'-0"	
	210	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	6'-0"		1'-0"	1'-0"	1'-0"	4'-0"	6'-6"	8'-6"	
	230	1'-0"	1'-0"	1'-0"	1'-6"	3'-6"	6'-6"		1'-0"	1'-0"	1'-0"	4'-0"	7'-0"	9'-0"	
	360	1'-0"	1'-0"	1'-0"	2'-6"	5'-6"	8'-0"		1'-0"	1'-0"	1'-0"	5'-6"	8'-0"	9'-6"	
	560	1'-0"	1'-0"	1'-0"	2'-6"	6'-0"	9'-0"		1'-0"	1'-0"	1'-6"	6'-6"	9'-0"	10'-0"	
16"	210	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	3'-6"	6'-0"	1'-0"	1'-0"	1'-0"	2'-6"	6'-6"	8'-0"	10'-6"
	230	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	4'-0"	6'-6"	1'-0"	1'-0"	1'-0"	3'-0"	7'-0"	9'-0"	11'-0"
	360	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	6'-0"	9'-0"	1'-0"	1'-0"	1'-0"	4'-0"	9'-0"	10'-0"	11'-6"
	560	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	6'-6"	10'-0"	1'-0"	1'-0"	1'-0"	5'-0"	10'-0"	11'-0"	12'-0"

DEPTH	TJI®	Round 4"	Round 6"	Round 8"	Round 10"	Round 12"	Round 15"	Round 17"	Sq./Rect. 4"	Sq./Rect. 6"	Sq./Rect. 8"	Sq./Rect. 10"	Sq./Rect. 12"	Sq./Rect. 15"	Sq./Rect. 17"
18"	360	1'-0"	1'-0"	1'-0"	2'-0"	5'-0"	10'-0"		1'-0"	1'-0"	5'-0"	10'-0"	11'-0"	13'-6"	
	560	1'-0"	1'-0"	1'-0"	1'-0"	5'-0"	11'-0"		1'-0"	1'-6"	6'-6"	11'-0"	12'-0"	14'-6"	
20"	360	1'-0"	1'-0"	1'-0"	1'-0"	2'-0"	7'-0"	10'-6"	1'-0"	1'-0"	2'-6"	8'-0"	11'-6"	14'-0"	15'-6"
	560	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	7'-0"	11'-0"	1'-0"	1'-0"	4'-0"	9'-6"	12'-6"	14'-6"	15'-6"

Table B - Intermediate or Cantilever Support
Minimum distance from edge of hole to inside face of nearest intermediate or cantilever support

DEPTH	TJI®	Round 2"	Round 3"	Round 4"	Round 6½"	Round 8⅞"	Round 11"	Round 13"	Sq./Rect. 2"	Sq./Rect. 3"	Sq./Rect. 4"	Sq./Rect. 6½"	Sq./Rect. 8⅞"	Sq./Rect. 11"	Sq./Rect. 13"
9½"	110	1'-6"	2'-6"	3'-0"	7'-6"				1'-6"	2'-6"	3'-6"	6'-6"			
	210	2'-0"	2'-6"	3'-6"	7'-6"				2'-0"	3'-0"	4'-0"	7'-0"			
	230	2'-6"	3'-0"	4'-0"	8'-0"				2'-6"	3'-0"	4'-6"	7'-6"			
	360	3'-0"	4'-0"	5'-6"	9'-0"				3'-0"	4'-6"	5'-6"	8'-0"			
11⅞"	110	1'-0"	1'-0"	1'-6"	4'-0"	8'-0"			1'-0"	1'-6"	2'-6"	6'-6"	9'-0"		
	210	1'-0"	1'-0"	2'-0"	4'-6"	9'-0"			1'-0"	2'-0"	3'-0"	7'-6"	10'-0"		
	230	1'-0"	2'-0"	2'-6"	5'-0"	9'-6"			1'-0"	2'-6"	3'-6"	8'-0"	10'-0"		
	360	2'-0"	3'-0"	4'-0"	7'-0"	11'-0"			2'-0"	3'-6"	5'-0"	9'-6"	11'-0"		
	560	1'-6"	3'-0"	4'-6"	8'-0"	12'-0"			3'-0"	4'-6"	6'-0"	10'-6"	12'-0"		
14"	110	1'-0"	1'-0"	1'-0"	2'-0"	4'-6"	8'-0"		1'-0"	1'-0"	1'-0"	5'-0"	9'-0"	12'-0"	
	210	1'-0"	1'-0"	1'-0"	2'-6"	5'-0"	9'-0"		1'-0"	1'-0"	2'-0"	6'-0"	10'-0"	12'-6"	
	230	1'-0"	1'-0"	1'-0"	3'-0"	5'-6"	10'-0"		1'-0"	1'-0"	2'-6"	6'-0"	10'-6"	13'-0"	
	360	1'-0"	1'-0"	2'-0"	5'-6"	8'-6"	12'-6"		1'-0"	2'-0"	4'-0"	9'-0"	12'-0"	14'-0"	
	560	1'-0"	1'-0"	1'-6"	5'-6"	9'-6"	13'-6"		1'-0"	3'-0"	5'-0"	10'-0"	13'-6"	15'-0"	
16"	210	1'-0"	1'-0"	1'-0"	1'-0"	3'-0"	5'-6"	9'-6"	1'-0"	1'-0"	1'-0"	4'-6"	9'-6"	12'-6"	15'-6"
	230	1'-0"	1'-0"	1'-0"	1'-6"	4'-0"	6'-6"	10'-6"	1'-0"	1'-0"	1'-0"	5'-0"	10'-6"	13'-0"	16'-0"
	360	1'-0"	1'-0"	1'-0"	3'-0"	6'-6"	10'-0"	13'-6"	1'-0"	1'-0"	2'-0"	7'-6"	13'-0"	14'-6"	17'-0"
	560	1'-0"	1'-0"	1'-0"	2'-6"	7'-0"	11'-0"	15'-0"	1'-0"	1'-0"	3'-6"	9'-0"	14'-6"	16'-0"	18'-0"

DEPTH	TJI®	Round 4"	Round 6"	Round 8"	Round 10"	Round 12"	Round 15"	Round 17"	Sq./Rect. 4"	Sq./Rect. 6"	Sq./Rect. 8"	Sq./Rect. 10"	Sq./Rect. 12"	Sq./Rect. 15"	Sq./Rect. 17"
18"	360	1'-0"	1'-0"	3'-0"	6'-0"	9'-0"	15'-0"		1'-0"	4'-0"	9'-0"	14'-6"	16'-6"	19'-6"	
	560	1'-0"	1'-0"	2'-0"	6'-0"	10'-0"	16'-6"		1'-0"	6'-0"	11'-6"	16'-6"	18'-0"	20'-0"	
20"	360	1'-0"	1'-0"	1'-0"	3'-0"	6'-0"	11'-0"	15'-6"	1'-0"	1'-6"	7'-0"	12'-6"	16'-6"	19'-0"	21'-0"
	560	1'-0"	1'-0"	1'-0"	1'-6"	5'-6"	12'-0"	16'-0"	1'-0"	3'-0"	8'-6"	14'-0"	17'-6"	19'-6"	20'-6"

Rectangular holes based on measurement of longest side.

- Holes may be located vertically anywhere within the web. Leave ⅛" of web (minimum) at top and bottom of hole.
- Knockouts are located in web at approximately 12" on-center; they do not affect hole placement.
- For simple span (5' minimum) uniformly loaded joists meeting the requirements of current Trus Joist product guides, one maximum size round hole may be located at the center of the joist span **provided no other holes occur in the joist.**
- Distances are based on the maximum uniform loads shown in current Trus Joist product guides. For other load conditions or hole configurations contact your Trus Joist representative.

ALLOWABLE HOLES - Beams and Headers

Cut only round holes and only in the center of beam.

ROUND HOLE CHART

BEAM DEPTH	MAXIMUM ROUND HOLE SIZE
4⅜"	1"
5½"	1¾"
7¼" to 20"	2"

See illustration for Allowed Hole Zone

- For uniformly loaded beams only.
- Rectangular holes are not allowed.
- No holes in cantilevers.

No holes in headers or beams in plank orientation.

INSTALLATION TIPS

- Subfloor adhesive will improve floor performance, but may not be required.
- When joists are doubled at non-load bearing parallel partitions, space joists apart the width of the wall for plumbing or HVAC.
- Additional joist at plumbing drop (see detail).

- Squash blocks and blocking panels carry stacked vertical loads (details B1 and B2). Packing out the web of a TJI® joist (with web stiffeners) is not a substitute for squash blocks or blocking panels.

Rim to TJI® Joist

TJI® JOIST ATTACHMENT at BEARING

TJI® Joist to Bearing Plate

Shear transfer: Connections equivalent to floor panel nailing schedule

Squash Blocks to TJI® Joist
(Load bearing wall above)

BEAM ATTACHMENT at BEARING

DESIGN PROPERTIES

Allowable Design Properties(1) (100% Load Duration)

Grade	Width	Design Property	4⅜"	5½"	5½" Plank Orientation	7¼"	8⅝"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"
TimberStrand® LSL															
1.3E	3½"	Moment (ft-lbs)	1,735	2,685	1,780	4,550	6,335	7,240		10,520					
		Shear (lbs)	4,085	5,135	1,925	6,765	8,050	8,635		10,500					
		Moment of Inertia (in.⁴)	24	49	20	111	187	231		415					
		Weight (plf)	4.5	5.6	5.6	7.4	8.8	9.4		11.5					
1.55E	1¾"	Moment (ft-lbs)							5,210		7,975	10,920			
		Shear (lbs)							3,435		4,295	5,065			
		Moment of Inertia (in.⁴)							125		244	400			
		Weight (plf)							5.2		6.5	7.7			
	3½"	Moment (ft-lbs)							10,420		15,955	21,840			
		Shear (lbs)							6,870		8,590	10,125			
		Moment of Inertia (in.⁴)							250		488	800			
		Weight (plf)							10.4		13	15.3			
Microllam® LVL															
1.9E	1¾"	Moment (ft-lbs)		2,125		3,555		5,600	5,885	8,070	8,925	12,130	15,555	19,375	23,580
		Shear (lbs)		1,830		2,410		3,075	3,160	3,740	3,950	4,655	5,320	5,985	6,650
		Moment of Inertia (in.⁴)		24		56		115	125	208	244	400	597	851	1,167
		Weight (plf)		2.8		3.7		4.7	4.8	5.7	6.1	7.1	8.2	9.2	10.2
Parallam® PSL															
2.0E	2 11/16"	Moment (ft-lbs)						9,535	10,025	13,800	15,280	20,855	26,840	33,530	
		Shear (lbs)						4,805	4,935	5,845	6,170	7,275	8,315	9,350	
		Moment of Inertia (in.⁴)						175	192	319	375	615	917	1,305	
		Weight (plf)						7.8	8.0	9.5	10.0	11.8	13.4	15.1	
	3½"	Moment (ft-lbs)						12,415	13,055	17,970	19,900	27,160	34,955	43,665	
		Shear (lbs)						6,260	6,430	7,615	8,035	9,475	10,825	12,180	
		Moment of Inertia (in.⁴)						231	250	415	488	800	1,195	1,701	
		Weight (plf)						10.1	10.4	12.3	13.0	15.3	17.5	19.7	
	5¼"	Moment (ft-lbs)						18,625	19,585	26,955	29,855	40,740	52,430	65,495	
		Shear (lbs)						9,390	9,645	11,420	12,055	14,210	16,240	18,270	
		Moment of Inertia (in.⁴)						346	375	623	733	1,201	1,792	2,552	
		Weight (plf)						15.2	15.6	18.5	19.5	23.0	26.3	29.5	
	7"	Moment (ft-lbs)						24,830	26,115	35,940	39,805	54,325	69,905	87,325	
		Shear (lbs)						12,520	12,855	15,225	16,070	18,945	21,655	24,360	
		Moment of Inertia (in.⁴)						462	500	831	977	1,601	2,389	3,402	
		Weight (plf)						20.2	20.8	24.6	26.0	30.6	35.0	39.4	

(1) For product in beam orientation, unless otherwise noted.

TimberStrand® LSL Grade Verification

TimberStrand® LSL is available in more than one grade. The product will be stamped with its grade information, as shown in the examples below. With The TimberStrand® Beam (1.55E), larger holes can be drilled through the beam. See **Allowable Holes** on page 36.

Design Stresses

Grade	Orientation	G Shear Modulus of Elasticity (psi)	E Modulus of Elasticity (psi)	F_b Flexural Stress(1) (psi)	F_t Tension Stress(2) (psi)	$F_{c\perp}$ Compression Perpendicular to Grain(3) (psi)	$F_{c\parallel}$ Compression Parallel to Grain (psi)	F_v Horizontal Shear Parallel to Grain (psi)	SG Equivalent Specific Gravity(4)
TimberStrand® LSL									
1.3E	Beam/Column	81,250	1.3 x 10⁶	1,700	1,075	680	1,400	400	0.50(5)
	Plank	81,250	1.3 x 10⁶	1,900(6)	1,075	435	1,400	150	0.50(5)
1.55E	Beam	96,875	1.55 x 10⁶	2,325	1,070(7)	800	2,050	310(7)	0.50(5)
Microllam® LVL									
1.9E	Beam	118,750	1.9 x 10⁶	2,600	1,555	750	2,510	285	0.50
Parallam® PSL									
1.8E	Column	N.A.	1.8 x 10⁶	2,400	N.A.	N.A.	2,500	N.A.	0.50
2.0E	Beam	125,000	2.0 x 10⁶	2,900	2,025	750	2,900	290	0.50

(1) For 12" depth. For other depths, multiply F_b by the appropriate factor as follows:
- For TimberStrand® LSL, multiply by $\left[\frac{12}{d}\right]^{0.092}$
- For Microllam® LVL, multiply by $\left[\frac{12}{d}\right]^{0.136}$
- For Parallam® PSL, multiply by $\left[\frac{12}{d}\right]^{0.111}$

(2) F_t has been adjusted to reflect the volume effects for most standard applications.
(3) $F_{c\perp}$ shall not be increased for duration of load.
(4) For lateral connection design only.
(5) Specific gravity of 0.58 may be used for bolts installed perpendicular to face and loaded perpendicular to grain.
(6) Value shown is for thickness up to 3½".
(7) Value shown accounts for large hole capabilities. See **Allowable Holes** on page 36.

General Assumptions for iLevel™ Trus Joist® Residential Beams

- Lateral support is required at bearing and along the span at 24" on-center, maximum.
- Bearing lengths are based on each product's bearing stress for applicable grade and orientation.
- All members 7¼" and less in depth are restricted to a maximum deflection of 5/16".
- Beams that are 1¾" x 16" and deeper require multiple plies.
- No camber.
- Tables on pages 8-15 include load reductions applied in accordance with code.

For applications not covered in this brochure, contact your iLevel representative.

See pages 38 and 39 for multiple-member beam connections.

MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

Maximum Uniform Load Applied to Either Outside Member (PLF)

Connector Type	Number of Rows	Connector On-Center Spacing	Assembly A 3½" 2-ply	Assembly B 5¼" 3-ply	Assembly C 5¼" 2-ply	Assembly D 7" 3-ply	Assembly E 7" 2-ply	Assembly F 7" 4-ply
10d (0.128" x 3") Box Nail(1)	2	12"	370	***280***	280	***250***		
	3	12"	560	***420***	420	***370***		
½" A307 Through Bolts(2)(4)	2	24"	510	380	520	465	860	340
		19.2"	640	475	650	580	1,075	425
		16"	765	570	780	700	1,290	510
SDS ¼" x 3½" or WS35(4)	2	24"	460	***345***	345	***305***		
		19.2"	575	***430***	430	***380***		
		16"	690	***520***	520	***460***		
SDS ¼" x 6" or WS6(3)(4)	2	24"				***305***	***480***	***305***
		19.2"				***380***	***575***	***380***
		16"				***460***	***690***	***460***
3⅜" TrussLok(4)	2	24"	525	***395***	395	***350***		
		19.2"	655	***495***	495	***440***		
		16"	790	***595***	595	***525***		
5" TrussLok(4)	2	24"		375	410	***365***	***500***	***365***
		19.2"		470	515	***455***	***625***	***455***
		16"		565	615	***550***	***750***	***550***
6¾" TrussLok(4)	2	24"				335	550	335
		19.2"				420	690	420
		16"				505	825	505

(1) Nailed connection values may be doubled for 6" on-center or tripled for 4" on-center nail spacing.
(2) Washers required. Bolt holes to be 9/16" maximum.
(3) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.
(4) 24" on-center bolted and screwed connection values may be doubled for 12" on-center spacing.

General Notes

- Connections are based on NDS® 2001.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.
- ***Bold Italic*** cells indicate Connector Pattern must be installed on both sides. Stagger fasteners on opposite side of beam by ½ the required Connector Spacing.
- Verify adequacy of beam in allowable load tables on pages 16–33.
- 7" wide beams should be side-loaded only when loads are applied to both sides of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional.

Multiple-Member Connection Example

First, check the allowable load tables on pages 16-33 to verify that 3 pieces can carry the total load of 720 plf with proper live load deflection criteria. Maximum load applied to either outside member is 420 plf. For a 3-ply 1¾" assembly, 2 rows of 10d (3") nails at 12" on-center is good for only 280 plf. Therefore, use 3 rows of 10d (3") nails at 12" on-center (good for 420 plf).

Alternates:
2 rows of ½" bolts or SDS ¼" x 3½" screws at 19.2" on-center.

ALLOWABLE HOLES

TimberStrand® LSL Headers and Beams

General Notes
- Hole zones shown are suitable for uniformly loaded headers and beams only.
- No rectangular holes.
- No holes in cantilevers.
- No holes in headers or beams in plank orientation.

Microllam® LVL and Parallam® PSL Beams

General Notes
- Allowed hole zone suitable for uniformly loaded beams only.
- No rectangular holes.
- No holes in cantilevers.

Maximum Round Hole Size

Beam Depth	1.3E TimberStrand® LSL Maximum Round Hole Size	The TimberStrand® Beam Large Round Hole Size	Microllam® LVL and Parallam® PSL Maximum Round Hole Size
4⅜"	1"	–	–
5½"	1¾"	–	1¾"
7¼"–9¼"	2"	–	2"
9½"	–	3"	2"
11¼"	2"	–	2"
11⅞"	–	3⅝"	2"
14"	–	4⅝"	2"
16"–20"	–	–	2"

See illustrations for allowed hole zones.

DO NOT cut, notch, or drill holes in beams except as indicated in illustrations and in table

Silent Floor Joist Framing

DO NOT allow workers to walk on joists until braced. INJURY MAY RESULT.

WARNING

Joists are unstable until braced laterally

Bracing Includes:
- Blocking
- Hangers
- Strut Lines
- Sheathing
- Rim Board
- Rim Joist

DO NOT stack building materials on unsheathed joists. Stack only over beams or walls.

WARNING NOTES:

Lack of concern for proper bracing during construction can result in serious accidents. Under normal conditions if the following guidelines are observed, accidents will be avoided.

1. All blocking, hangers, rim boards and rim joists at the end supports of the TJI ® joists must be completely installed and properly nailed.
2. Lateral strength, like a braced end wall or an existing deck, must be established at the ends of the bay. This can also be accomplished by a temporary or permanent deck (sheathing) fastened to the first 4 feet of joists at the end of the bay.
3. Safety bracing lines of 1x4 (minimum) must be nailed to a braced end wall or sheathed area as in note 2 and to each joist. Without this bracing, buckling sideways or rollover is highly probable under light construction loads - like a worker or one layer of unnailed sheathing.
4. Sheathing must be totally attached to each TJI ® joist before additional loads can be placed on the system.
5. Ends of cantilevers require safety bracing on both the top and bottom flanges.
6. The flanges must remain straight within a tolerance of ½" from true alignment.

This sheet is intended as a supplement to the Trus Joist Framer's Pocket Guide, which should be referenced for additional information.

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2013 REGISTERED ARCHITECT
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A Custom Residence for
On The Rock 98040, LLC
Lot 1, 7260 North Mercer Way, Mercer Island

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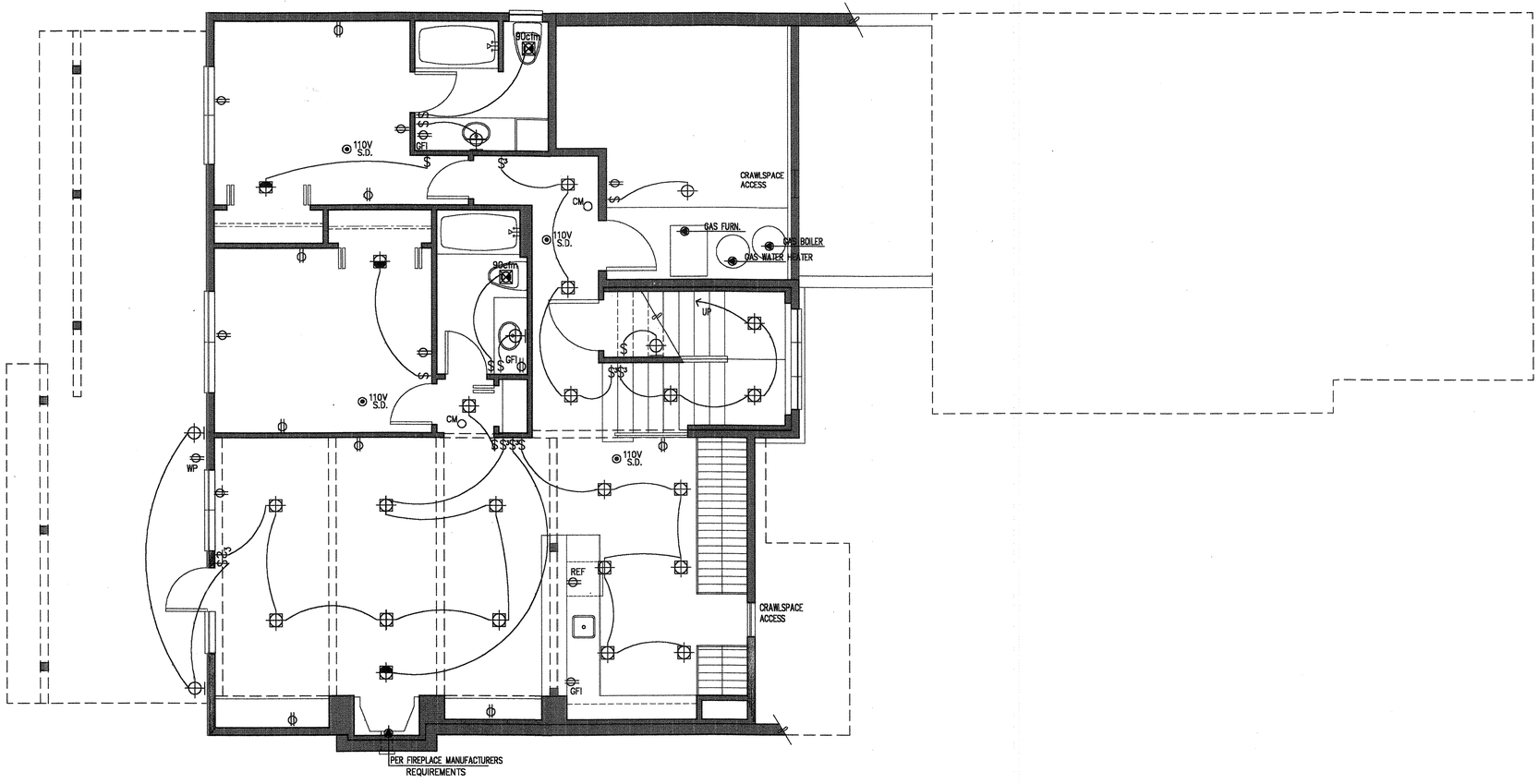
14
OF 24



Lower Floor Electrical Plan

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

ELECTRICAL SYMBOLS

- RECESSED LIGHT FIXTURE
- RECESSED EYEBALL SPOT/ WALL WASHER
- SURFACE MOUNTED FIXTURE (CEILING)
- SURFACE MOUNTED FIXTURE (WALL)
- FLOOD LIGHT
- FLUORESCENT STRIP
- 110V S.D. SMOKE DETECTOR (110V)
- DUPLEX OUTLET (110V)
- WP WATERPROOF OUTLET
- GFI OUTLET (G.F.I.)
- SWITCHED OUTLET
- OUTLET (220V)
- CM CARBON MONOXIDE DETECTOR
- FLOOR OUTLET
- FLOOR TELEPHONE OUTLET
- TELEPHONE OUTLET
- SPECIAL EQUIPEMENT OUTLET
- S STEREO SPEAKER OUTLET
- TV T.V. (CABLE TERMINAL)
- IC INTERCOM
- $ SWITCH
- $3 3 WAY SWITCH
- $4 4 WAY SWITCH
- $D DIMMER SWITCH
- FAN (RECESSED)

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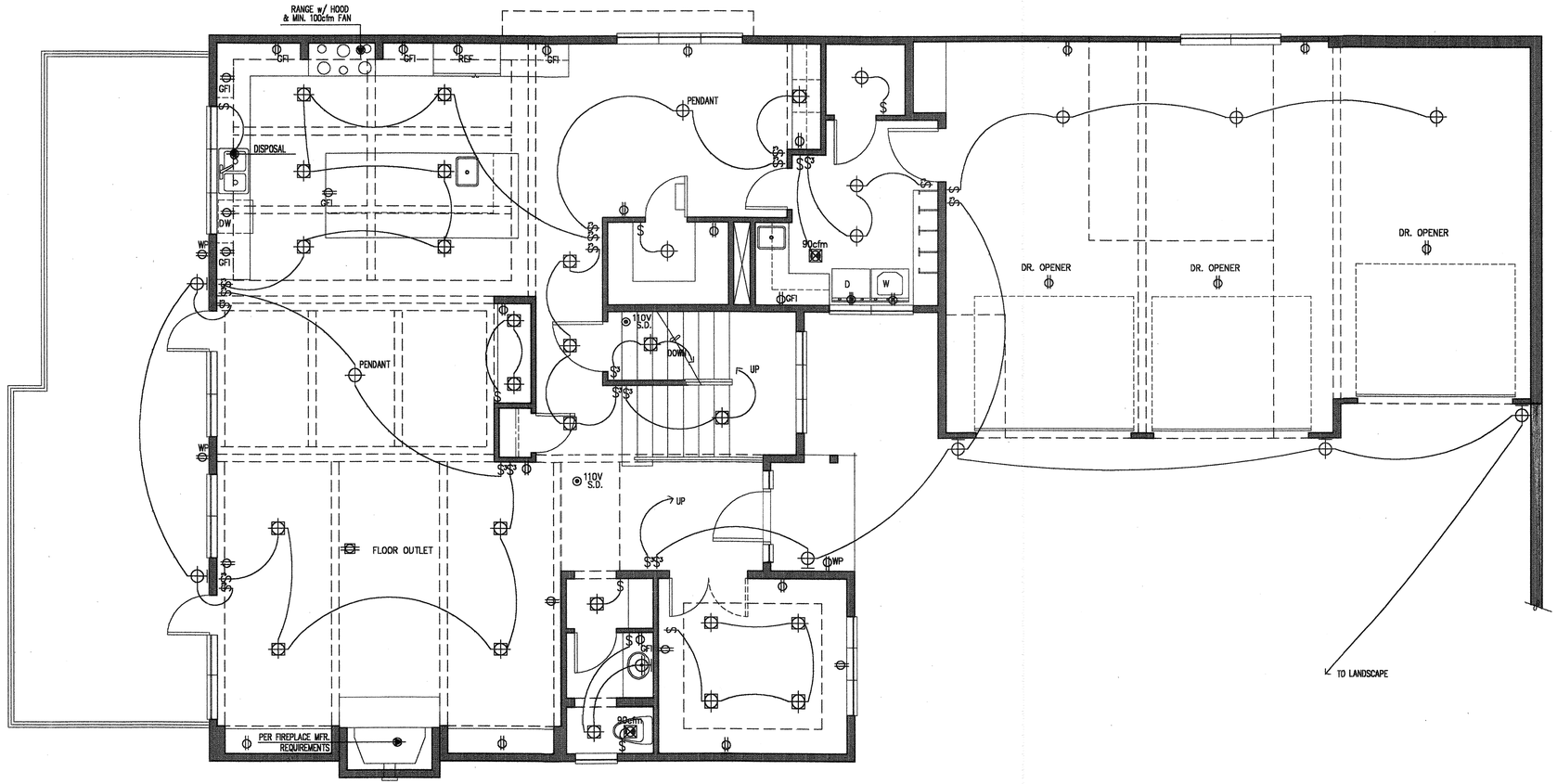

Main Floor Electrical Plan

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

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ELECTRICAL SYMBOLS

- RECESSED LIGHT FIXTURE
- RECESSED EYEBALL SPOT/ WALL WASHER
- SURFACE MOUNTED FIXTURE (CEILING)
- SURFACE MOUNTED FIXTURE (WALL)
- FLOOD LIGHT
- FLUORESCENT STRIP
- 110V S.D. SMOKE DETECTOR (110V)
- DUPLEX OUTLET (110V)
- WP WATERPROOF OUTLET
- GFI OUTLET (G.F.I.)
- SWITCHED OUTLET
- OUTLET (220V)
- CM CARBON MONOXIDE DETECTOR
- FLOOR OUTLET
- FLOOR TELEPHONE OUTLET
- TELEPHONE OUTLET
- SPECIAL EQUIPEMENT OUTLET
- S STEREO SPEAKER OUTLET
- TV T.V. (CABLE TERMINAL)
- IC INTERCOM
- $ SWITCH
- $3 3 WAY SWITCH
- $4 4 WAY SWITCH
- $D DIMMER SWITCH
- FAN (RECESSED)

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2008 REGISTERED ARCHITECT LEIF R. ANDERSON STATE OF WASHINGTON

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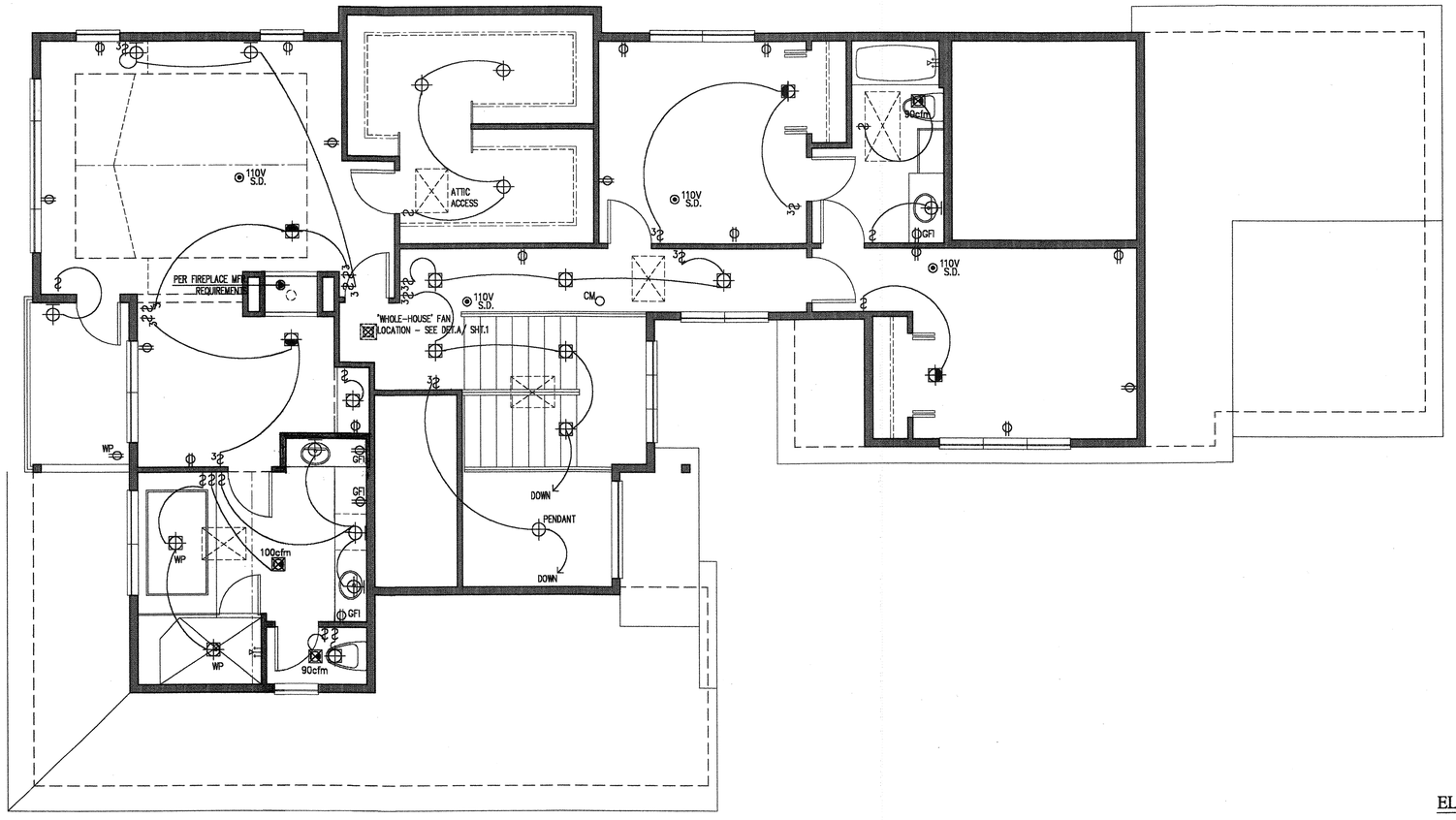

Upper Floor Electrical Plan

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

ELECTRICAL SYMBOLS

- RECESSED LIGHT FIXTURE
- RECESSED EYEBALL SPOT/ WALL WASHER
- SURFACE MOUNTED FIXTURE (CEILING)
- SURFACE MOUNTED FIXTURE (WALL)
- FLOOD LIGHT
- FLUORESCENT STRIP
- 110V S.D. SMOKE DETECTOR (110V)
- DUPLEX OUTLET (110V)
- WP WATERPROOF OUTLET
- GFI OUTLET (G.F.I.)
- SWITCHED OUTLET
- OUTLET (220V)
- CM CARBON MONOXIDE DETECTOR
- FLOOR OUTLET
- FLOOR TELEPHONE OUTLET
- TELEPHONE OUTLET
- SPECIAL EQUIPEMENT OUTLET
- S STEREO SPEAKER OUTLET
- TV T.V. (CABLE TERMINAL)
- IC INTERCOM
- $ SWITCH
- $3 3 WAY SWITCH
- $4 4 WAY SWITCH
- $D DIMMER SWITCH
- FAN (RECESSED)

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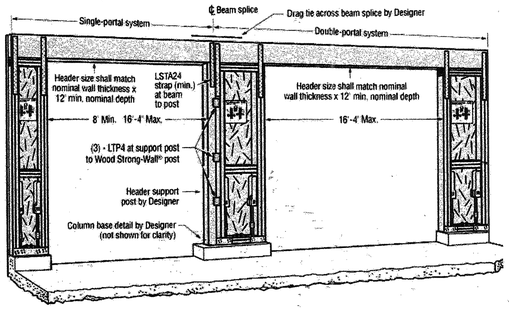
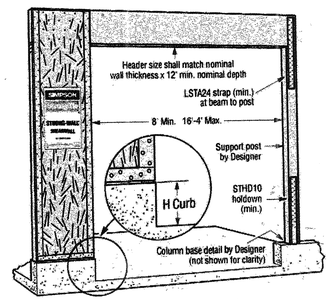
Details:

Detail 1 – Single- and Double-Wall Garage Portal



1. Beam to support post and support post to foundation uplift connectors may be reduced where justified by calculations.
2. This detail reflects lateral load requirements of a Single- and Double-Wall Portal system. It is the Designer's responsibility provide a complete load path for all loads in accordance with the governing codes.
3. System rating equals the sum of the Single- and Double-Wall Portal values.
4. Alternate Installation: A single-piece header (no camber) may be substituted for the two headers shown. The design rating this condition may then be evaluated as the sum of the individual single-wall ratings.
5. Longer header spans can be accommodated if larger headers are used such that equivalent stiffness is equal to or greate than that provided by the minimum header and maximum length indicated.
6. Simpson Strong-Tie® LTP4 and LSTA24 (by Designer) are minimum requirements to achieve the allowable loads..

Detail 2 – Single-Wall Garage Portal



1. Beam to support post and support post to foundation uplift connectors may be reduced where justified by calculations.
2. This detail reflects lateral load requirements of a Single-Wall Portal system. It is the Designer's responsibility to provide a complete load path for all loads in accordance with the governing codes.
3. Longer header spans can be accommodated if larger headers are used such that equivalent stiffness is equal to or greate than that provided by the minimum header and maximum length indicated.
4. Simpson Strong-Tie® STHD10 and LSTA24 (by Designer) are minimum requirements to achieve the allowable loads.

1 BRACED WALL PANEL ADJACENT TO A DOOR
SCALE: 1"=1'-0" (W-12)

Loading Requirements
ASCE 7-05

Codes
2009 IBC
AISC/ASD Ninth Edition
ACI 318-05
NDS 2005
SEAW Rapid Solutions Methodology for Wind Design

Wind Design
Wind Speed = 90 mph
Wind Exposure = 'C'

Soil Loads (assumed)
No soils report available
Active Equivalent fluid pressure = 35 psf (Unrestrained Wall)
Passive pressure = 300 psf
Assumed Soil density = 115 pcf
Assumed soil Bearing Pressure = 2000 psf

Building Loads
Snow Load = 25 psf
Roof (DL) = 15 psf, (LL) =25 psf
Exterior Wall (DL) = 15 psf
Interior Wall (DL) = 7.5 psf
Main (DL) = 12 psf, LL = 40 psf
Main Exterior Deck Load = 60 psf
Corridors, Stairs,Exits (LL) = 100 psf

Prefabricated Floor Trusses/Floor Joists (if required)
> Submit to engineer of record complete shop drawings and calculations stamped by a Washington State registered professional engineer for approval prior to fabrication.
> Provide for all temporary and permanent truss and joist bracing and bridging (per manufacturer's recommendations).
> Store and erect trusses in accordance with the manufacturer's details and installation recommendations.
> Substitution in prefabricated assemblies to be approved by engineer of record prior to installation.
> Plywood to be glue nailed to top flange of prefab floor joist or truss.
> Provide additional web reinforcing at TJI joists at or over supports.

Floor Loads (See loading table above)

Wood Notes
> New exterior walls to be framed with 2 x 4 or 2 X 6 studs @ 16" O.C. (unless noted otherwise).
> New interior walls to be framed with 2 x 4 studs @ 16" o.c. (unless noted otherwise).
> All frame nailing shall be in accordance with Table No. 2304.9.1, 2009 IBC.
> When a girder is spliced over a support, an adequate tie shall be provided.
> Provide solid blocking over all supports.
> Provide fire blocking within framing cavity at 10'-0"vertically and horizontally). Fire stop openings around vents, pipes, ducts, chimneys,etc. with non-combustible materials.
> Framing anchors shall be provided to support joists which frame into the side of a wood girder or framing band.
> Wood members shall have sufficient bearing area based on allowable values for compression perpendicular to grain per 2001 NDS.
> Provide double joists under all interior bearing walls.
> Where boring through studs is required for plumbing or electrical wiring in bearing walls use 2 X 6 or double 2 X 4 studs.
> All joists, studs, blocking, bracing, and rafters shall be Hem Fir #2 or better; Fb = 850 psi (1000 psi repetitive), Fv = 75 psi E = 1, 300,000

> All sawn beams, headers, posts, lintels, and girders which are 4" nominal width shall be Doug-Fir Larch #2 or better; Fb = 850 psi, Fv = 95 psi, E = 1, 600,000.
> All sawn beams, headers, posts, lintels, and girders which are 6" nominal width shall be Doug-Fir Larch #1 or better: Fb = 850 psi, Fv = 85 psi, E = 1, 600,000.
> All glue-laminated timbers to be kiln dried Doug-Fir top and bottom (24 F-V-4) for simple span beams; (24 F-V8) for multiple span or cantilever beams. Fb = 2400 psi, Fv = 165 psi, E = 1,800,000.
> All framing lumber shall be kiln dried to a maximum 19% moisture content prior to installation.
> Steel framing accessories and structural fasteners shall be as manufactured by Simpson Company (or approved equal). Connectors shall be installed in accordance with manufacturer's recommendations. Provide all plan designated manufacturer's connectors.
> Simpson Strong Tie connectors are specifically required to meet the structural calculations of this plan. Before substituting another brand, confirm load capacity based on reliable published testing data of calculations. The Engineer of Record should evaluate and give approval for substitution prior to installation.

Holdowns
> Holdowns and structural steel holdown straps to be by Simpson Company or equal. Any substitutions in hardware manufacturer must be approved by the Engineer of Record prior to installation.

Plywood Notes
> All plywood shall be installed per American Plywood Association standards.
> All plywood shall be A.P.A rated C-D Struct 1(min.).
> All panel edges to occur with long edges over wood supports, short edges to be blocked.
> All roof plywood to be ½" thick with span rating 24/0.
> Nail panels with 10d common nails at 12" o.c. in the field, 6" o.c. at all panel edges. Nail at 4" o.c. to all exterior walls and other shear walls.
> All floor plywood to be min ¾" thick with span rating 32/16.
> Nail panels with 10d. galv. nails at 6" o.c. at panel edges, 12" o.c. in the field. See Shear wall schedule for nailing patterns shear walls.
> At floor sub-floor glue floor plywood to floor joists with an approved elastomeric adhesive suitable for use in wet weather.

> See shear wall schedule and notes for wall plywood and nailing schedule.
> All plywood at waterproof decks to be pressure treated.
> Plywood floor and roof sheathing shall be laid up with face grain perpendicular to supports.
> All floor plywood shall be glue nailed to supporting joist in accordance with the American Plywood Association. Glue shall meet the requirements of Adhesive Specification AFG-01.

Concrete/Foundation Notes
> Foundation design is in accordance with chapter 19 of the 2009 IBC. All work shall be performed in accordance with all current building and safety codes.
> Concrete strengths shall be verified by standard 28-day cylinder tests, unless approved otherwise.
> Anchor bolts to be 5/8"diameter with 10" embedment @ 48" o.c. (see shear wall schedule for anchor bolt size and spacing at other than P1-6" shearwalls). All anchor bolts to be ASTM A-307.
> Assumed soil bearing pressure = 2000psf.
> Backfill behind unbraced retaining walls prior to attaching floor diaphragm.
> Exterior footings to be entrenched a minimum of 18" below existing grade and bear on firm undisturbed soil.
> All reinforcing bars to be Grade 60 deformed bars. The tie wire is to be 16 Ga. double annealed wire. Lap all reinforcing 36 diameters. At corners of walls extend horizontal bars 2" from outside face of wall and lap with elbow bars of 30 diameters at the same size and spacing. Provide 2-#5 bars around all wall openings. Provide footing dowels to match vertical reinforcing.

Concrete cover

3"	concrete poured against earth
2"	formed concrete with earth backfill
1 1/2"	outside face of walls exposed to weather, slabs on a moisture barrier
1"	walls, outside face

> Provide 4"diameter perforated PVC drain in granular fill at the base of all new exterior footings (existing and new).

Concrete mix

Mix design shall be in conformance with ACI-318-99. Submit mix designs to engineer of record 2 weeks prior to placement indicating where each concrete mix is used and the maximum aggregate size.

type	f'c	max.water/cem.ratio non-air ent.	min. air ent.	min. sks/cu.yd.
ftgs found.walls	3000	.65	.42	6
slab on grade	3000	.65	.50	5 ½

> Water reducing mixtures may be incorporated into the mix designs in accordance with ASTM C 494 and manufacturer's recommendations.
>Water/Cement ratio shall be measured by weight and shall be based on the total cementious material. Water/Cement ration shall be determined by the supplier based on the strength requirements and shall no exceed the maximum water/cement ratio shown above.

General Conditions
> Contractor will call for inspection prior to placing any footing and foundation wall concrete.
> Provide rigid insulation around the perimeter of all slabs within heated spaces.
> Permanent cut and fill slopes should not exceed 2:1 (H:V).
> All reinforcing shall be detailed in accordance with ACI detailers manual.
> All excavations shall be adequately barricaded and marked. All work area and surfaces shall be cleaned upon completion of the project. All debris and waste materials shall be removed off the site to an approved disposal area by the contractor.
-Use air -entrained (3¾-6¾) in all flat work exposed to weather.- Master flow 928 or equal.
> Provide minimum of 1/2" air space between non-pressure treated wood and concrete, or provide waterproofing membrane between concrete and non-pressure treated wood.
> Top of concrete to be field verified by contractor.
> Contractor to field verify existing grade cut and soil conditions with before proceeding with concrete retaining wall forming and reinforcing steel placement.
> Contractor shall be responsible for all safety precautions and the methods, techniques, sequences or procedures required to perform the work.
>In the case of discrepancies between the drawings and the anticipated field conditions the contractor shall notify the architect before proceeding with construction.
>DO NOT SCALE the architects or engineer's drawings – noted dimensions take precedence over scaled dimensions.

Fasteners
Fasteners for pressure treated wood must be ZMAX hot dipped galvanized (G185) or stainless steel.

SHEAR WALL SCHEDULE
2009 IBC

Wall Sheathing to be 1/2" (C-D) Structural 1, 24/0
Roof Sheathing to be 1/2" C-D) Structrual 1, 32/16
Use 10d common nails

WALL TYPE	NAIL Size	PANEL NAIL SPACING Panel Edges	Field	Top/Btm Plates	BLK'G	REQUIRED ANCHORS P.T.Sill	Bottom Plate	ALLOWABLE UNIT SHEAR (plf)
P1-6"	10d	6"	12"	6"	2 X 6 (+)	5/8"d. @ 48"	16d @ 6"	282(HF), 340(DF)
P1-4"	10d	4"	12"	4"	3 X 6 (4)	5/8"d. @ 32"	(2)16d. @ 8"	410(HF), 510(DF)
P1-3"	10d	3"	12"	3"	3 X 6 (4)	5/8"d. @ 24"	(2)16d. @ 6"	550(HF), 665(DF)
P1-2"	10d	2"	12"	2"	3 X 6 (4)	3/4"d. @ 24"	(2)16d. @ 5"	710(HF), 870(DF)
P2-4"	10d	3"	12"	3"	3 X 6 (4)	3/4"d. @ 16"	(4)16d. @ 6"	840(HF), 1020(DF)
P2-3"	10d	3"	12"	3"	3 X 6 (4)	3/4"d. @ 12"	(4)16d. @ 6"	1140(HF), 1384(DF)

Shear Wall Notes:
1. P1 indicates plywood on one side of shear wall only.
2. P2 indicates plywood on two sides of shear wall. Framing members shall be 3X. Offset panel joints to fall on different studs.
3. Plywood may be installed either horizontally or vertically on Hem-Fir #2 studs.
4. For nailing at 4",3" or 2" on center, use 3 X framing members at all panel edges. Stagger fasteners at all panel joints.
5. For nailing at 4", 3", or 2" on center use pressure treated 3X sill at foundation.
6. Solid block all panel edges with full depth blocking.
7. Use 10d common nails for shear wall fasteners.
8. Nails must be flush driven with diaphragm surface.
9. Anchor bolts to have minimum 3" X 3" X 1/4" plate washers.
10. Finger jointed studs are not to be used at holdown locations.
11. Nails for panel edges shall be 10d common (0.131"d. X 3" long). Nails for plates shall be 16d. common (0.148d. X 3 ½" long).
12. Where bottom plate nailing requires (4) nails at a specific spacing, block floor space below the sole plate consisting of a minimum of two framing members. Nailing pattern shall consist of two rows in each member offset 1/2" and staggered.
13. Do not install floor diaphragm nailing over bottom sill nailing.
14. ALL STUDS TO BE 2x HEM FIR #2 OR BETTER.

STEPHEN T. TAPP — STATE OF WASHINGTON — 19598 — REGISTERED PROFESSIONAL ENGINEER — EXPIRES: 11/2/16

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A Custom Residence for
On The Rock 98040, LLC
Lot 1, 7260 North Mercer Way, Mercer Island

Stephen Tapp
Architect / P.E.
Ph. 206-320-0534
2330 East Madison Street
Seattle, Washington

This work was prepared by me or under my supervision.

Sheet Contents:

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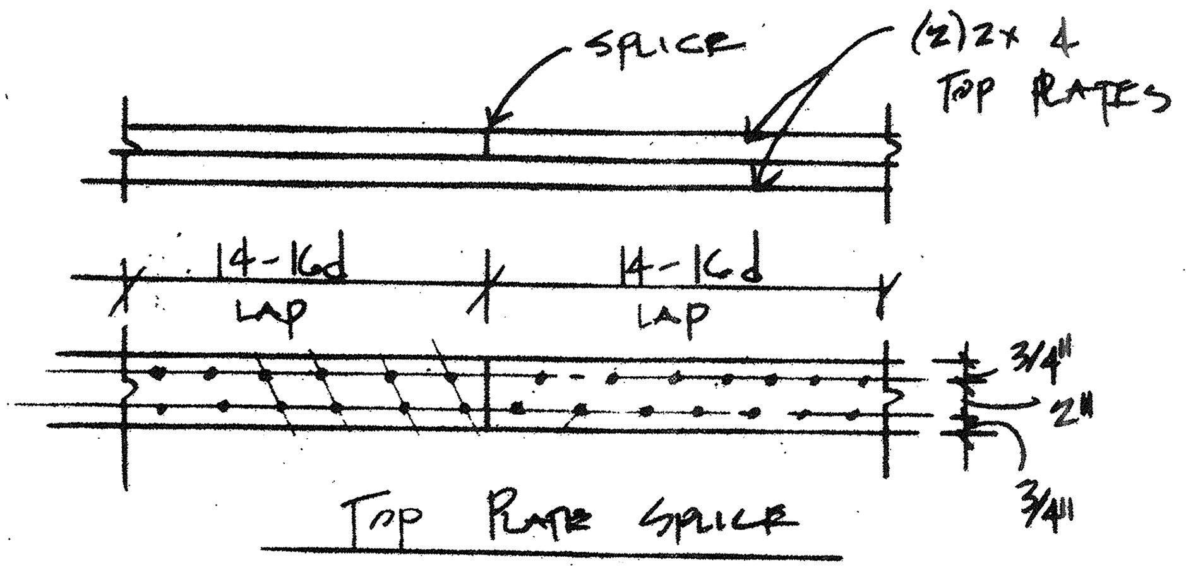
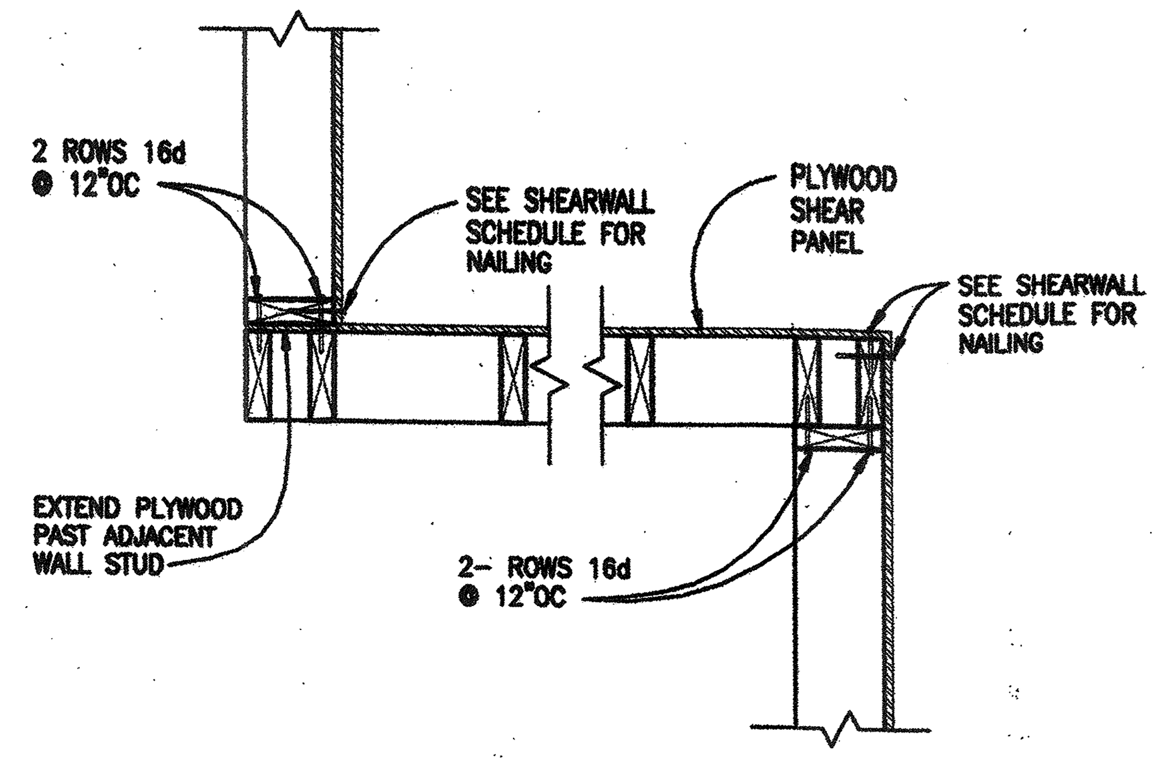
Date: 3/28/13
Job no.: T13C3
Drawn by: STT
Sheet no.:

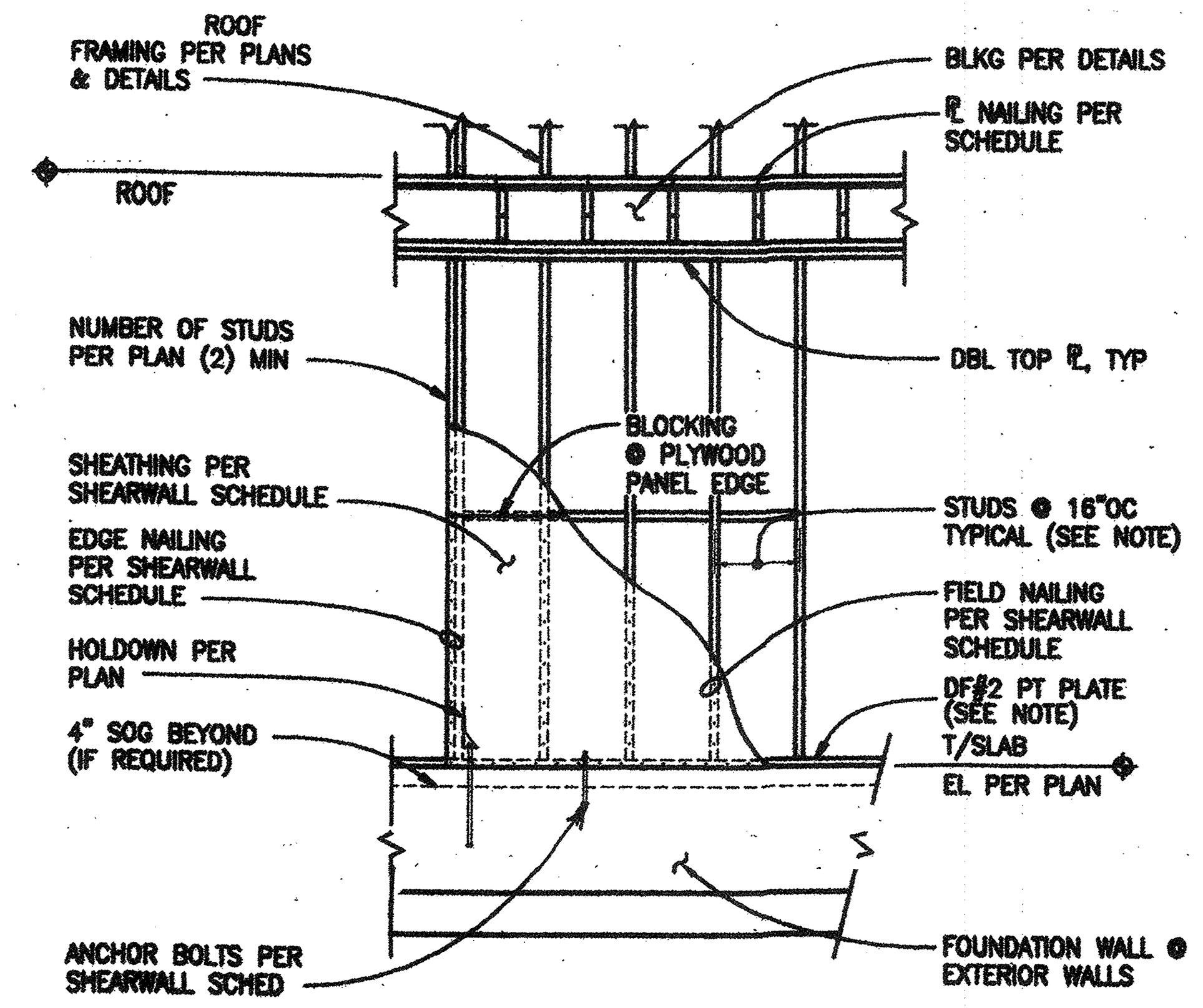
S-1



DOUBLE TOP PLATE SPLICE
SCALE: 1"=1'-0" (5)

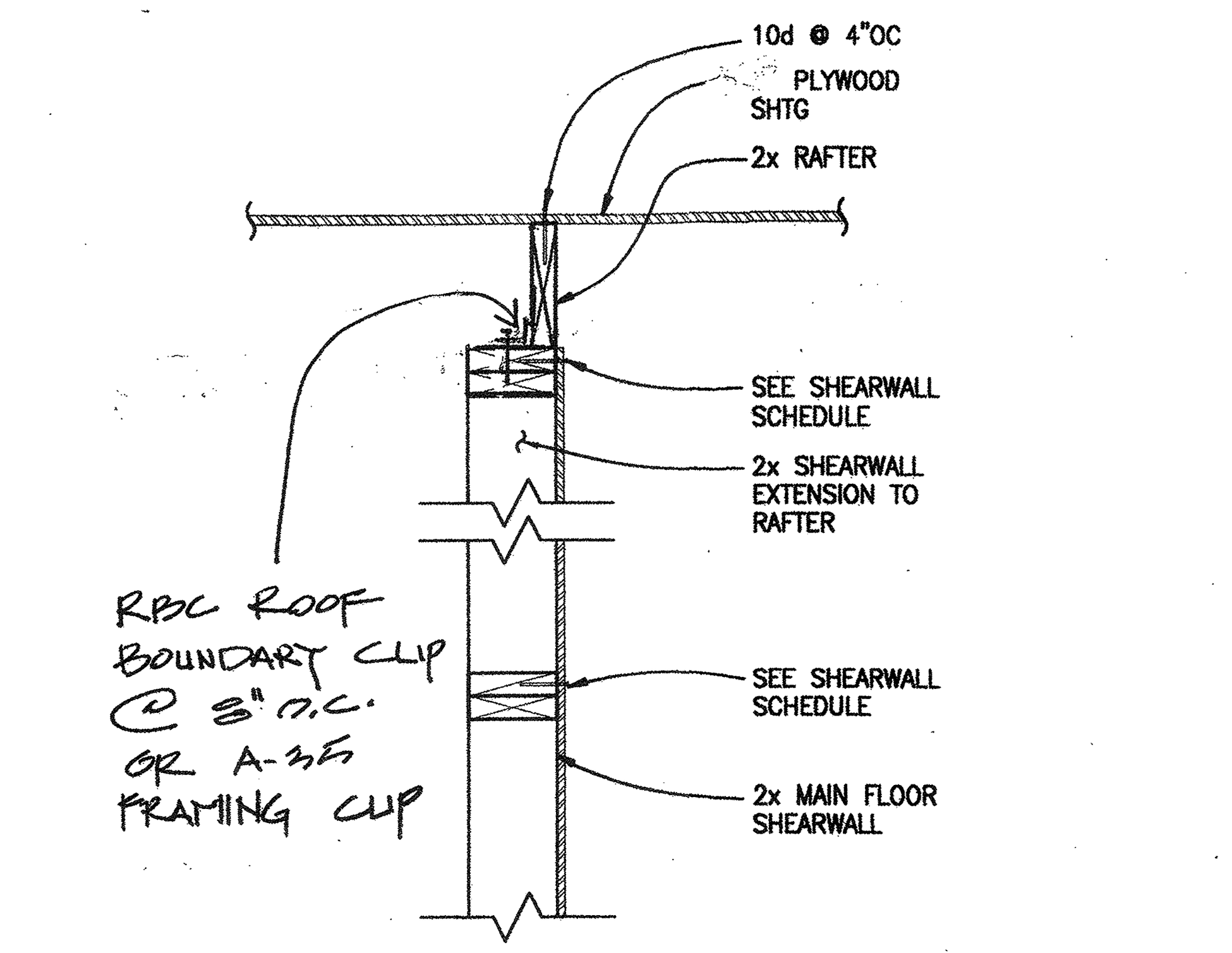


CORNER SHEAR PANEL DETAIL
SCALE: 1"=1'-0" (4)

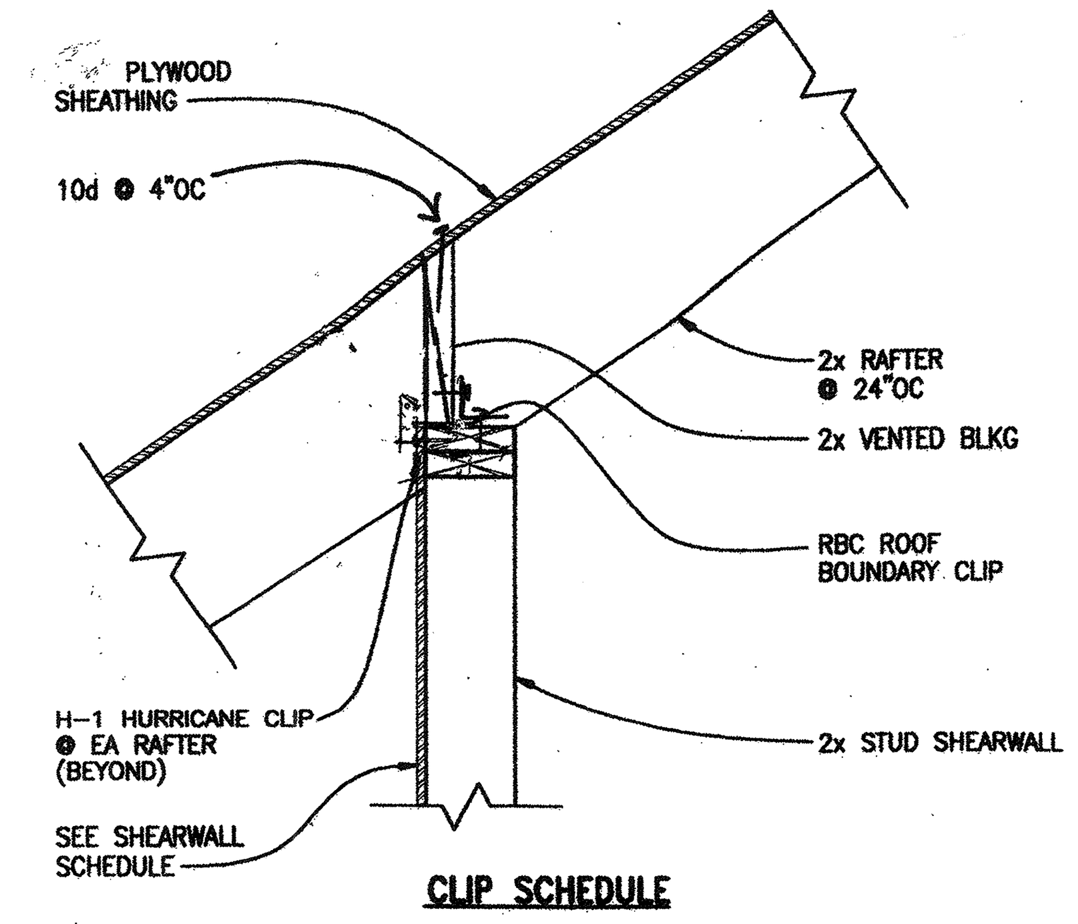


NOTE:
P1-3", P1-2" AND ALL P2 WALLS REQUIRE MIN 3X MEMBERS AT ALL PANEL EDGES AND SILL.

TYPICAL SHEARWALL ELEVATION
SCALE: NTS (3)



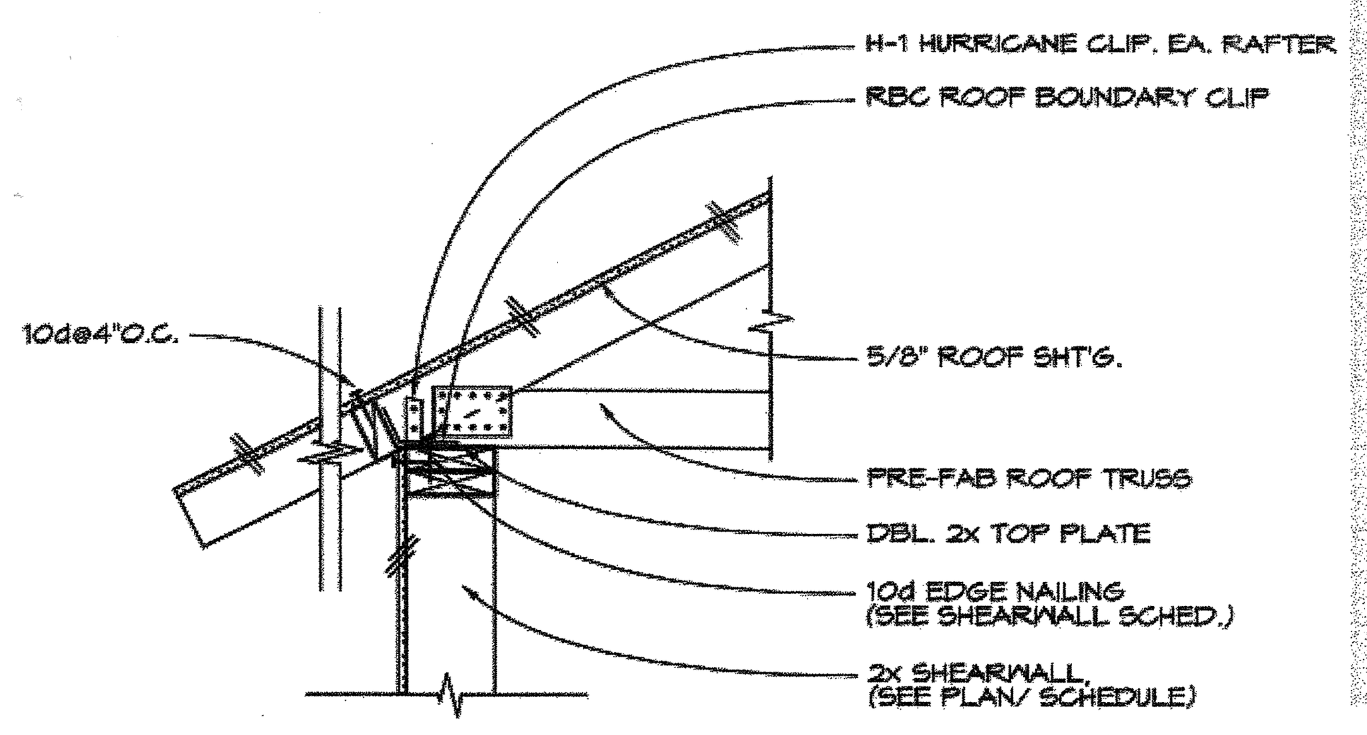
DETAIL
SCALE: 1"=1'-0" (2)



CLIP SCHEDULE

CONNECTION TYPE	HURRICANE CLIP	ROOF BOUNDARY CLIP
I	(1) H1/EACH RAFTER	(1) RBC/EACH BLOCK (P1-6", P1-4")
II	(1) H1/EACH RAFTER	(2) RBC/EACH BLOCK (P1-3", P1-2")

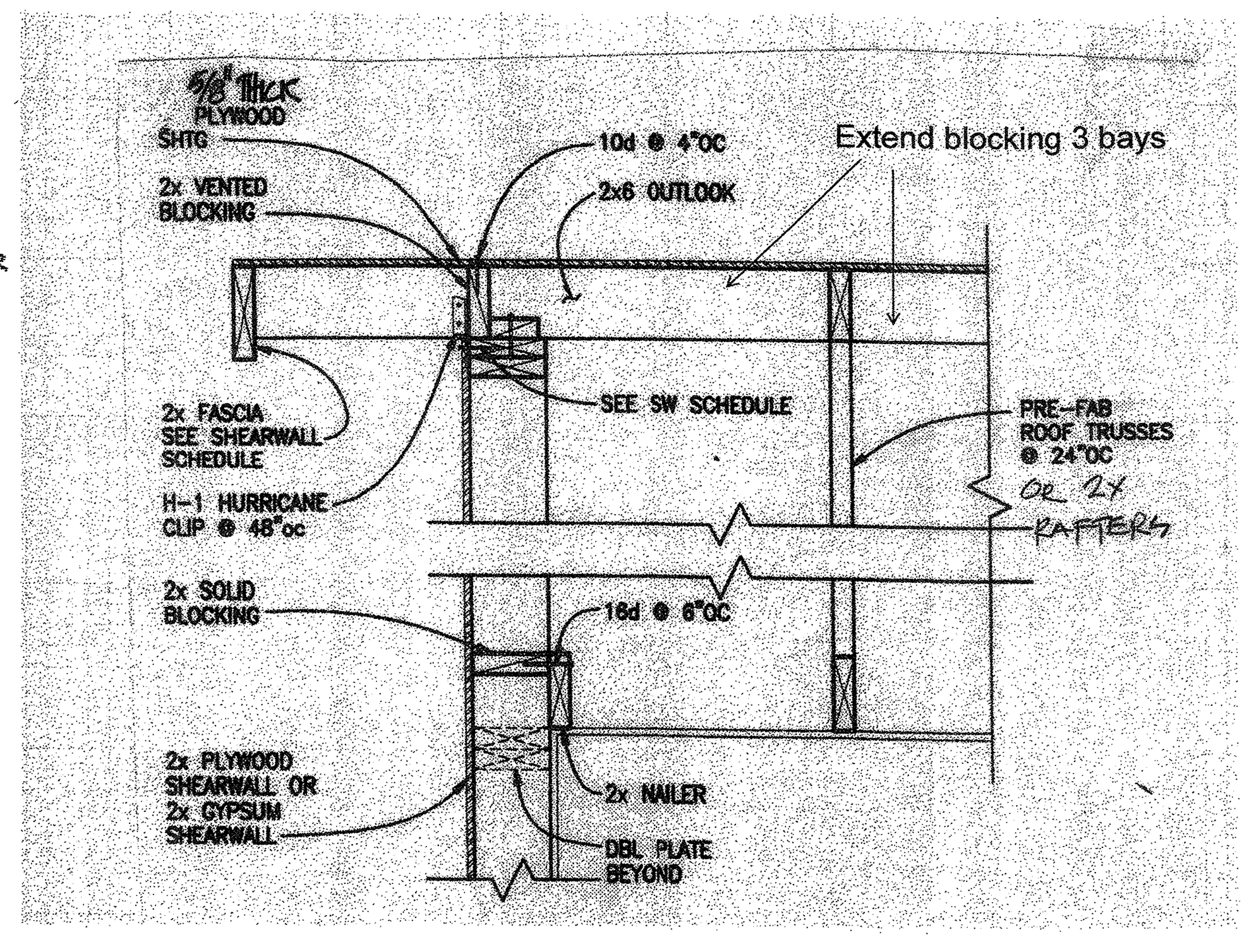
DETAIL
SCALE: 1"=1'-0" (1)



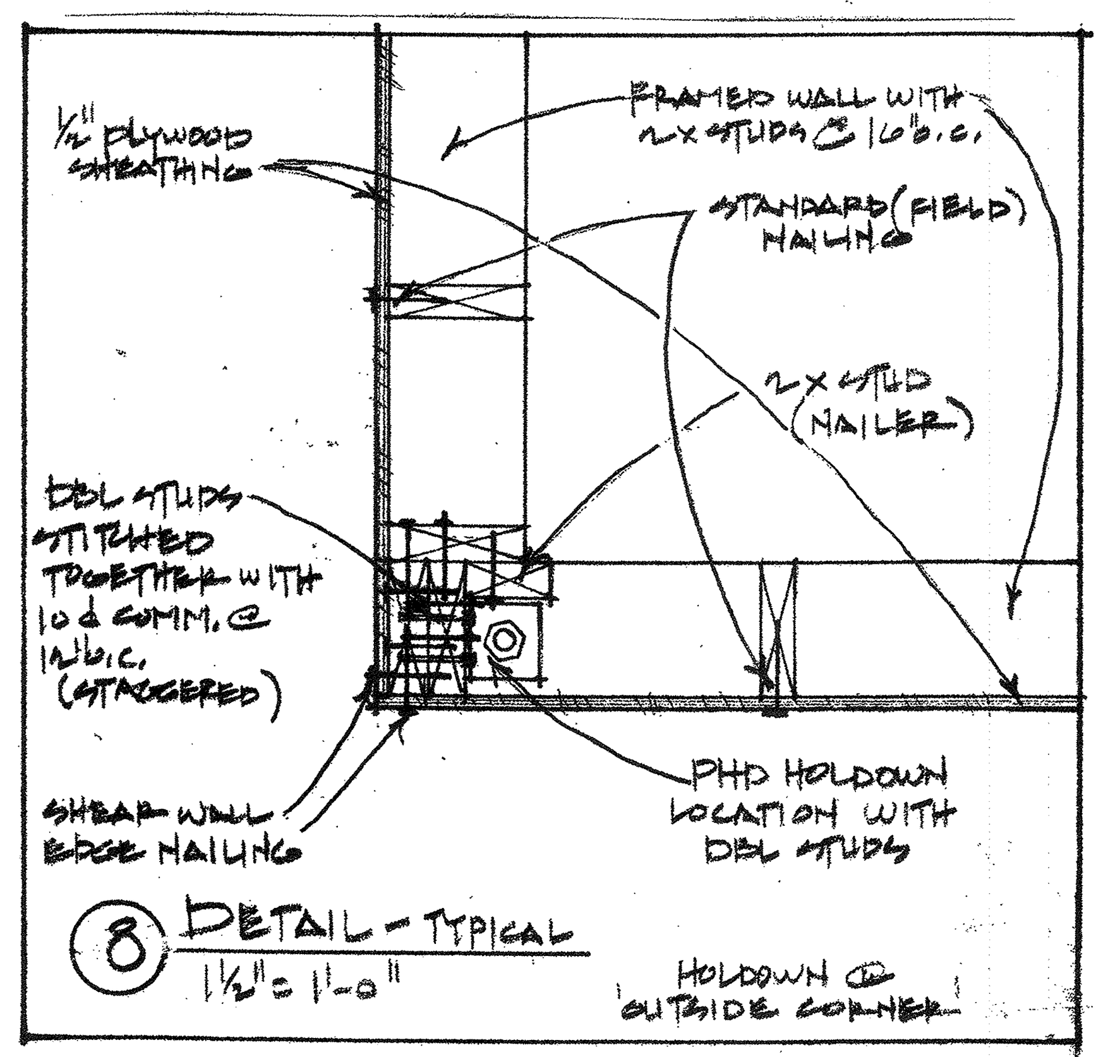
CLIP SCHEDULE

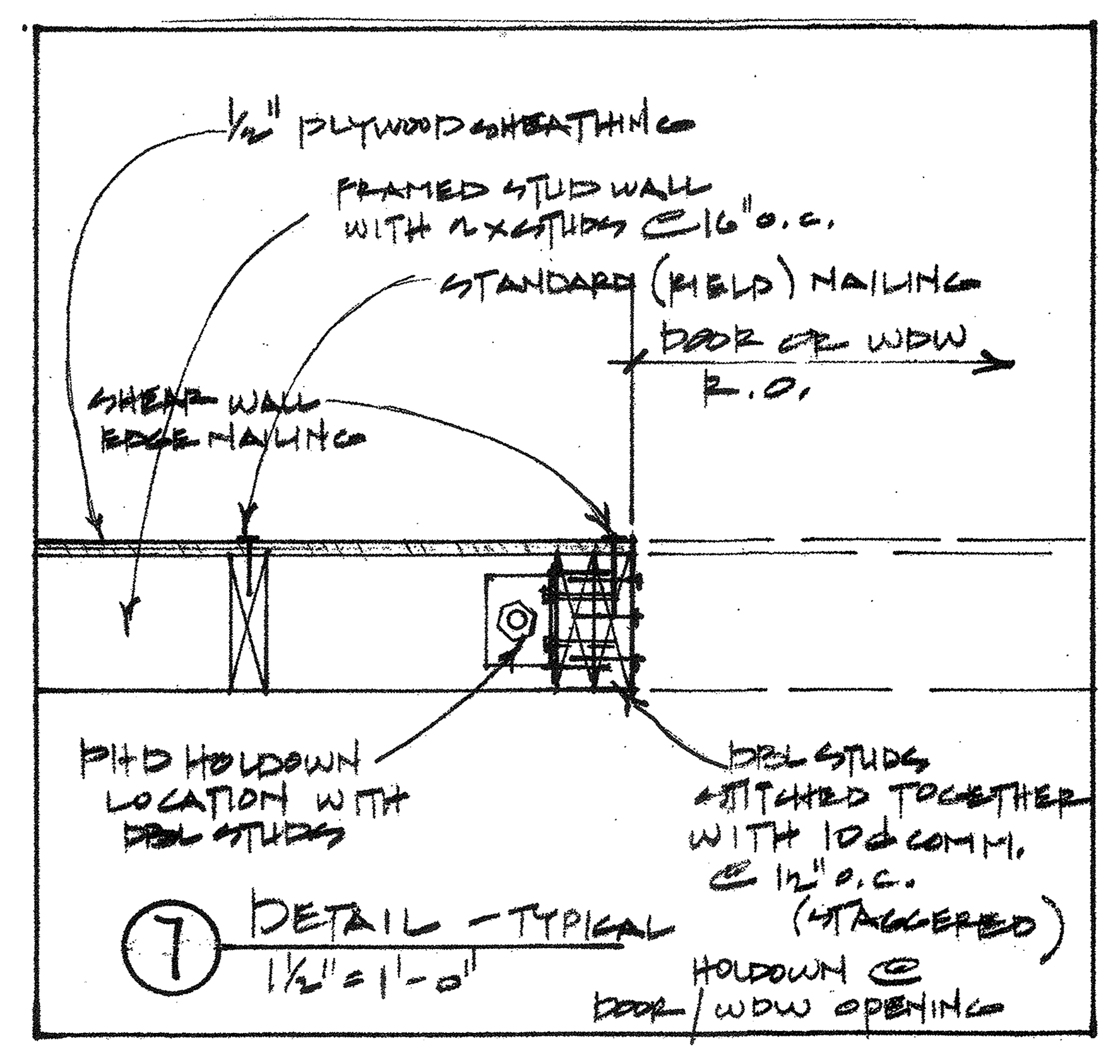
CONNECTION TYPE	HURRICANE TYPE	ROOF BOUNDARY TYPE
I	(1)-H1/ EACH RAFTER	(1)-RBC/ EACH BLOCK
II	(1)-H2.5/ EACH RAFTER	(2)-RBC/ EACH BLOCK

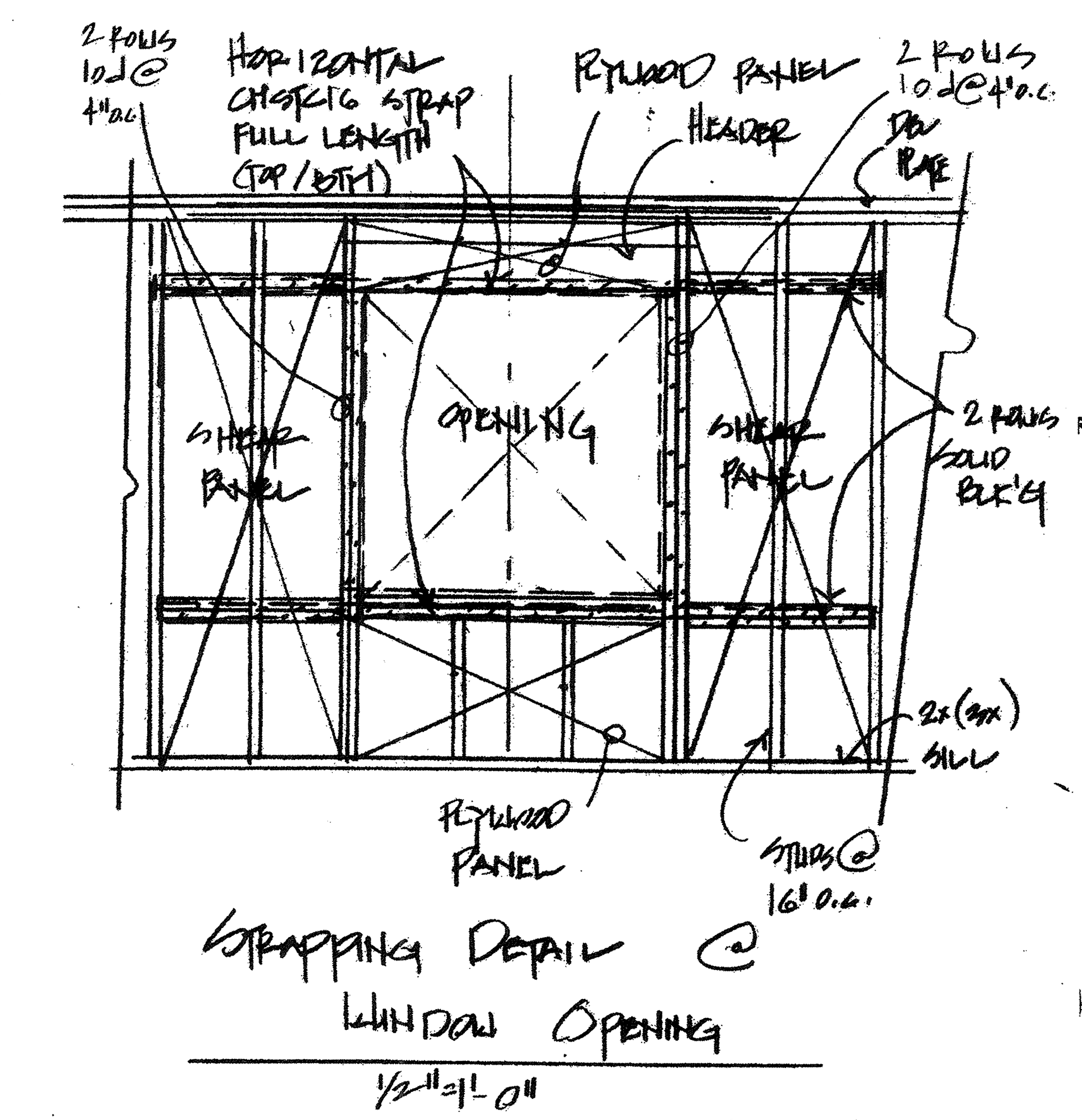
(10) DETAIL SCALE: 1"=1'-0"
FOR P1-3", P1-2" SHEAR PANELS



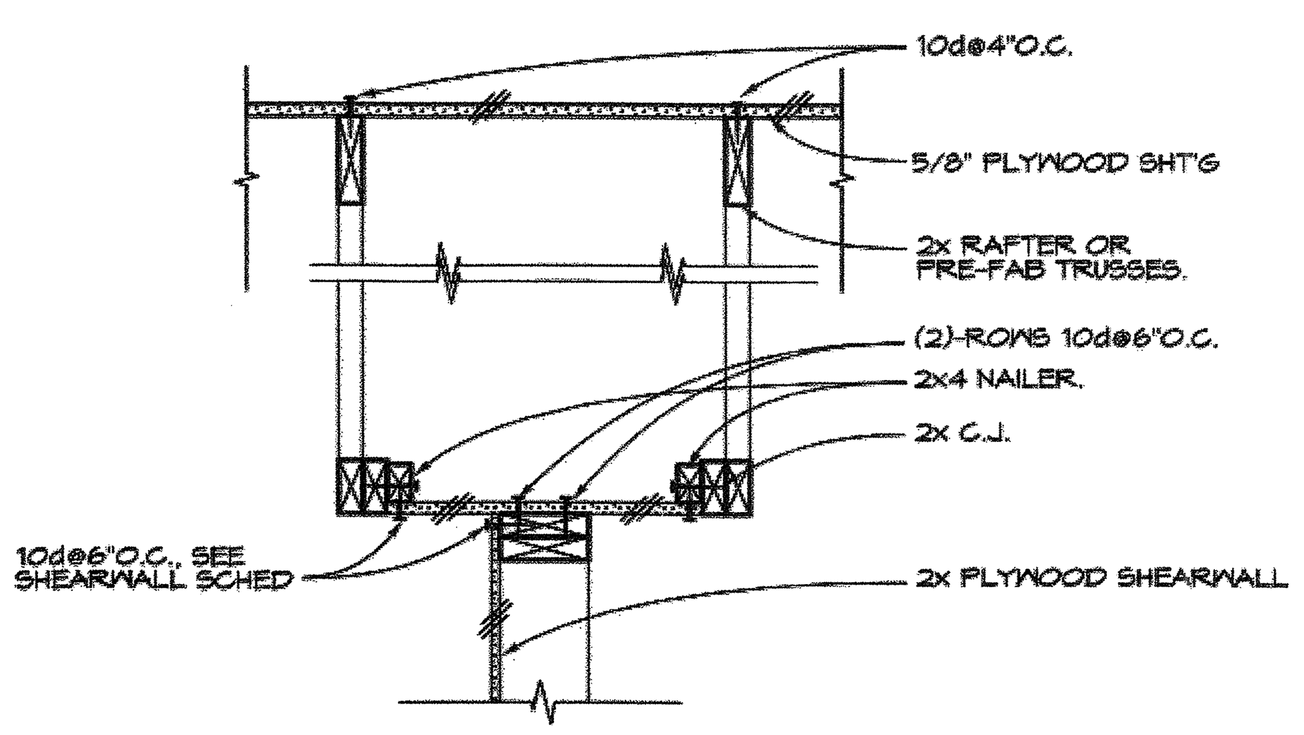
(9) Rake Detail
NTS



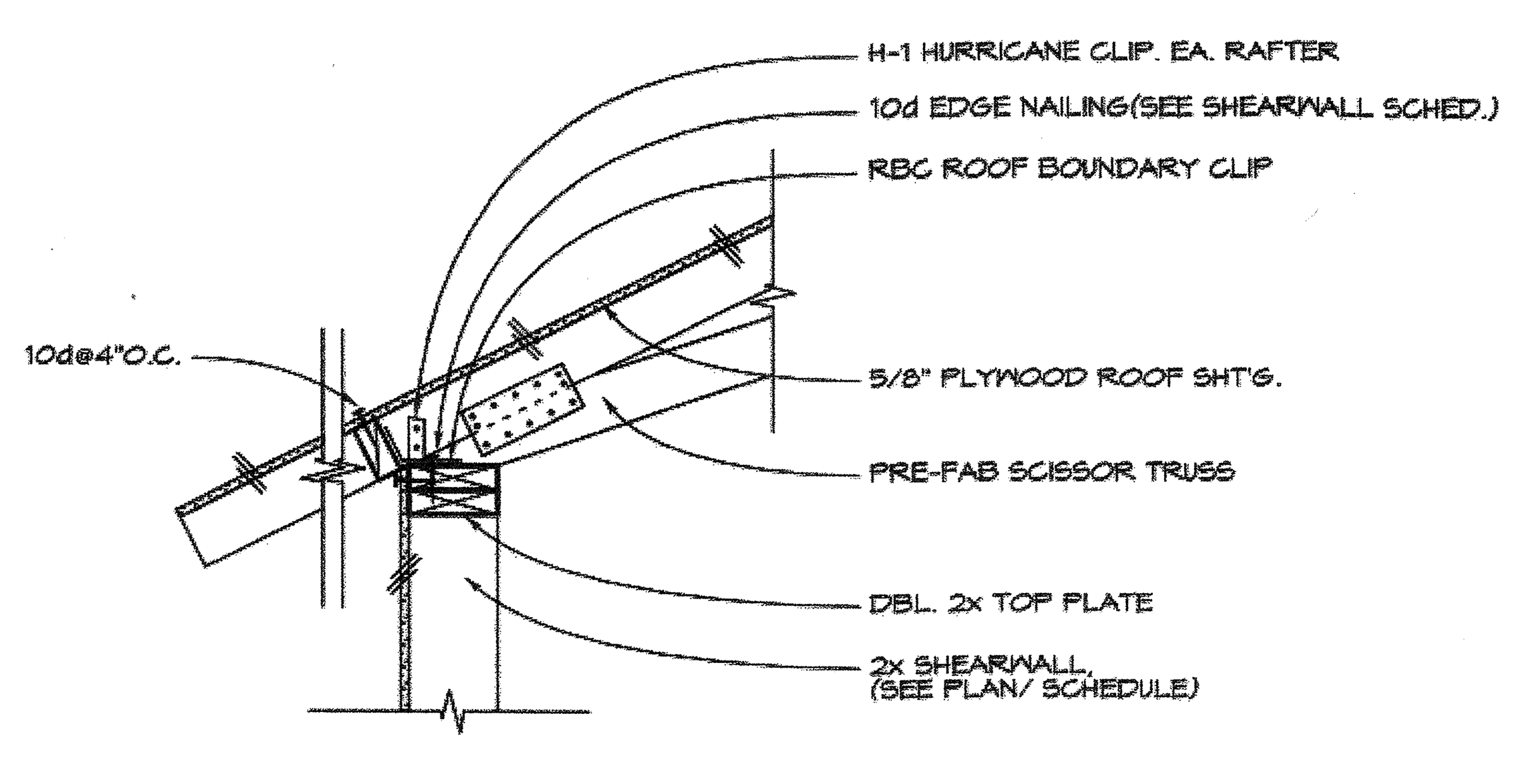




SHEARWALL @ WINDOW OPENING
SCALE: 1"=1'-0" (6)



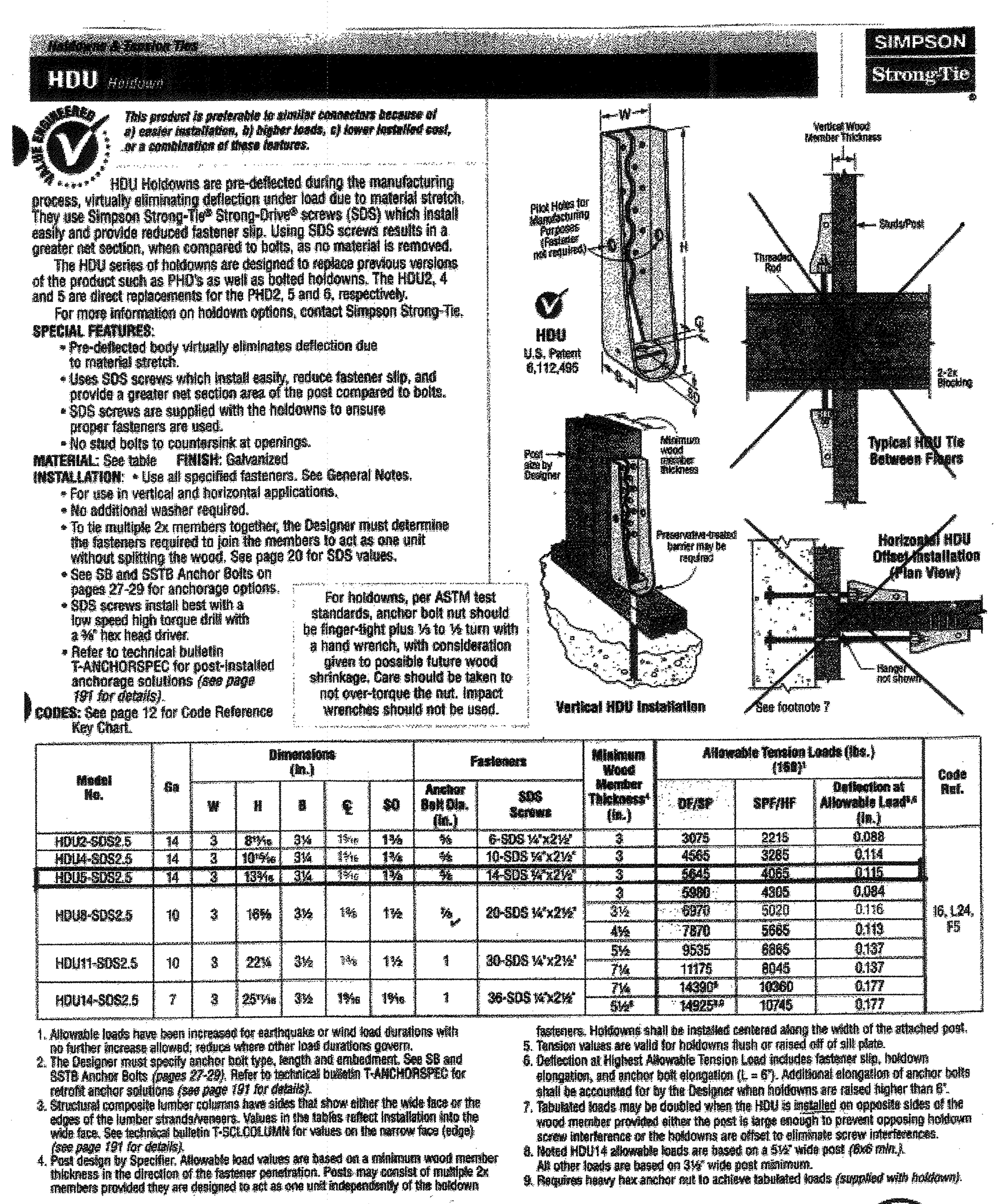
(14) DETAIL SCALE: 1"=1'-0"



CLIP SCHEDULE

CONNECTION TYPE	HURRICANE TYPE	ROOF BOUNDARY TYPE
I	(1)-H1/ EACH RAFTER	(1)-RBC/ EACH BLOCK
II	(2)-H2.5/ EACH RAFTER	(2)-RBC/ EACH BLOCK

(13) DETAIL SCALE: 1"=1'-0"


Holdowns & Tension Ties
SIMPSON Strong-Tie

HDU Holdown

This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

HDU Holdowns are pre-deflected during the manufacturing process, virtually eliminating deflection under load due to material stretch. They use Simpson Strong-Tie® Strong-Drive® screws (SDS) which install easily and provide reduced fastener slip. Using SDS screws results in a greater net section, when compared to bolts, as no material is removed.

The HDU series of holdowns are designed to replace previous versions of the product such as PHD's as well as bolted holdowns. The HDU2, 4 and 5 are direct replacements for the PHD2, 5 and 6, respectively.

For more information on holdown options, contact Simpson Strong-Tie.

SPECIAL FEATURES:
- Pre-deflected body virtually eliminates deflection due to material stretch.
- Uses SDS screws which install easily, reduce fastener slip, and provide a greater net section area of the post compared to bolts.
- SDS screws are supplied with the holdowns to ensure proper fasteners are used.
- No stud bolts to countersink at openings.

MATERIAL: See table **FINISH:** Galvanized

INSTALLATION:
- Use all specified fasteners. See General Notes.
- For use in vertical and horizontal applications.
- No additional washer required.
- To tie multiple 2x members together, the Designer must determine the fasteners required to join the members to act as one unit without splitting the wood. See page 20 for SDS values.
- See SB and SSTB Anchor Bolts on pages 27-29 for anchorage options.
- SDS screws install best with a low speed high torque drill with a 3/8" hex head driver.
- Refer to technical bulletin T-ANCHORSPEC for post-installed anchorage solutions *(see page 191 for details)*.

CODES: See page 12 for Code Reference Key Chart.

For holdowns, per ASTM test standards, anchor bolt nut should be finger-tight plus 1/3 to 1/2 turn with a hand wrench, with consideration given to possible future wood shrinkage. Care should be taken to not over-torque the nut. Impact wrenches should not be used.

HDU U.S. Patent 6,112,495

Vertical HDU Installation

Typical HDU Tie Between Floors

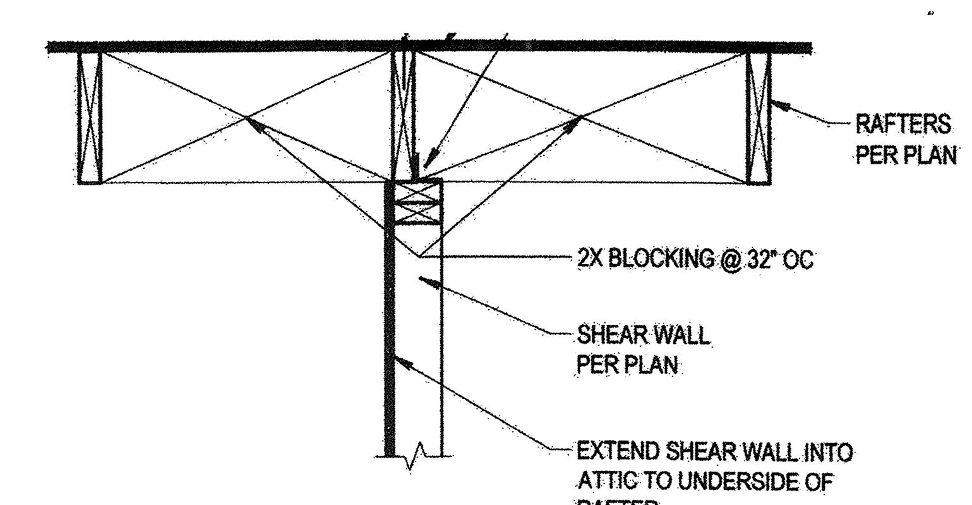
Horizontal HDU Offset Installation (Plan View)

See footnote 7

Model No.	Ga	Dimensions (in.) W	H	B	℄	SO	Fasteners: Anchor Bolt Dia. (in.)	SDS Screws	Minimum Wood Member Thickness[4] (in.)	Allowable Tension Loads (lbs.) (160)[1] DF/SP	SPF/HF	Deflection at Allowable Load[5,6] (in.)	Code Ref.
HDU2-SDS2.5	14	3	8 11/16	3 1/4	1 5/16	1 3/8	5/8	6-SDS 1/4"x2 1/2"	3	3075	2215	0.088	16, L24, F5
HDU4-SDS2.5	14	3	10 15/16	3 1/4	1 5/16	1 3/8	5/8	10-SDS 1/4"x2 1/2"	3	4565	3285	0.114	
HDU5-SDS2.5	14	3	13 3/16	3 1/4	1 5/16	1 3/8	5/8	14-SDS 1/4"x2 1/2"	3	5645	4065	0.115	
HDU8-SDS2.5	10	3	16 5/8	3 1/2	1 3/8	1 1/2	7/8	20-SDS 1/4"x2 1/2"	3	5980	4305	0.084	
									3 1/2	6970	5020	0.116	
									4 1/2	7870	5665	0.113	
HDU11-SDS2.5	10	3	22 1/4	3 1/2	1 3/8	1 1/2	1	30-SDS 1/4"x2 1/2"	5 1/2	9535	6865	0.137	
									7 1/4	11175	8045	0.137	
HDU14-SDS2.5	7	3	25 11/16	3 1/2	1 9/16	1 9/16	1	36-SDS 1/4"x2 1/2"	7 1/4	14390[8]	10360	0.177	
									5 1/2[8]	14925[8,9]	10745	0.177	

1. Allowable loads have been increased for earthquake or wind load durations with no further increase allowed; reduce where other load durations govern.
2. The Designer must specify anchor bolt type, length and embedment. See SB and SSTB Anchor Bolts *(pages 27-29)*. Refer to technical bulletin T-ANCHORSPEC for retrofit anchor solutions *(see page 191 for details)*.
3. Structural composite lumber columns have sides that show either the wide face or the edges of the lumber strands/veneers. Values in the tables reflect installation into the wide face. See technical bulletin T-SCLCOLUMN for values on the narrow face (edge) *(see page 191 for details)*.
4. Post design by Specifier. Allowable load values are based on a minimum wood member thickness in the direction of the fastener penetration. Posts may consist of multiple 2x members provided they are designed to act as one unit independently of the holdown fasteners. Holdowns shall be installed centered along the width of the attached post.
5. Tension values are valid for holdowns flush or raised off of sill plate.
6. Deflection at Highest Allowable Tension Load includes fastener slip, holdown elongation, and anchor bolt elongation (L = 6"). Additional elongation of anchor bolts shall be accounted for by the Designer when holdowns are raised higher than 6".
7. Tabulated loads may be doubled when the HDU is installed on opposite sides of the wood member provided either the post is large enough to prevent opposing holdown screw interference or the holdowns are offset to eliminate screw interferences.
8. Noted HDU14 allowable loads are based on a 5 1/2" wide post *(6x6 min.)*. All other loads are based on 3 1/2" wide post minimum.
9. Requires heavy hex anchor nut to achieve tabulated loads *(supplied with holdown)*.

DETAIL
SCALE: 1"=1'-0" (12)



(11) RAFTERS PARALLEL TO SW
SCALE: 1"=1'-0" (R-04)

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A Custom Residence for
On The Rock 98040, LLC
Lot 1, 7260 North Mercer Way, Mercer Island

Stephen Tapp
Architect / P.E.
Ph. 206-320-0634
2330 East Madison Street
Seattle, Washington

This work was prepared by me or under my supervision.

Sheet Contents:

Scale: as noted
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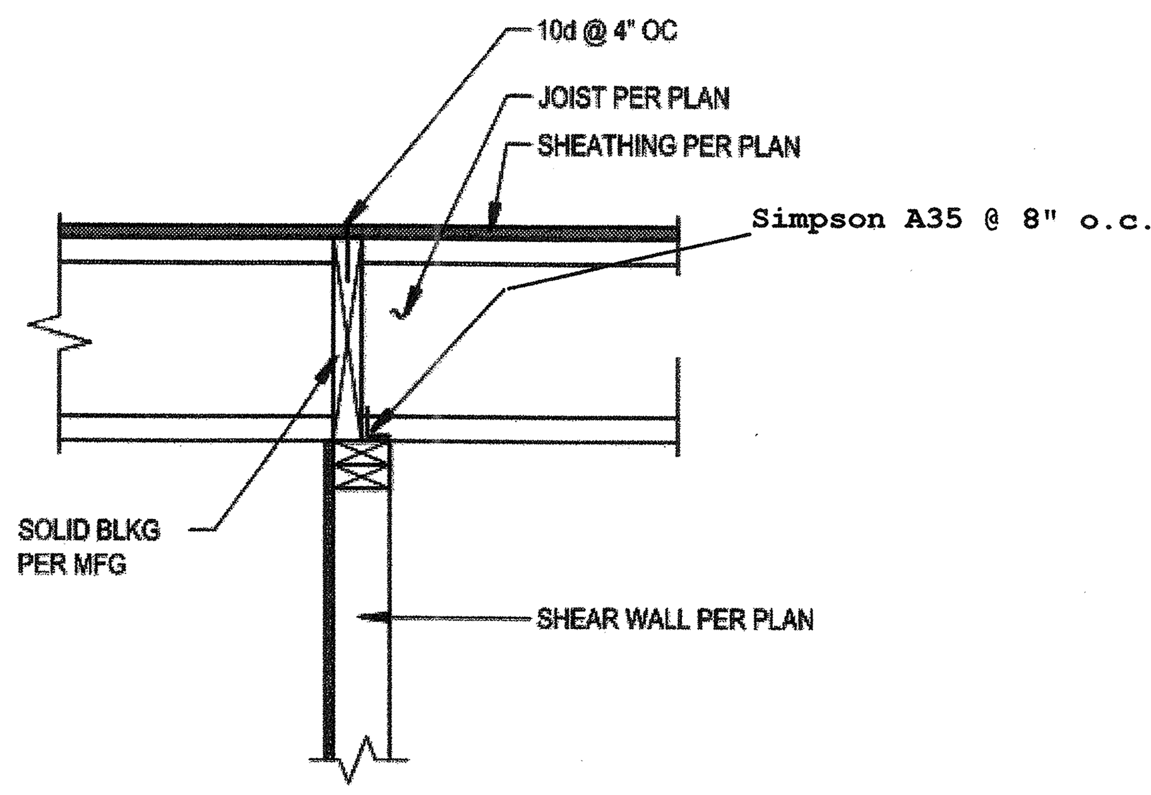
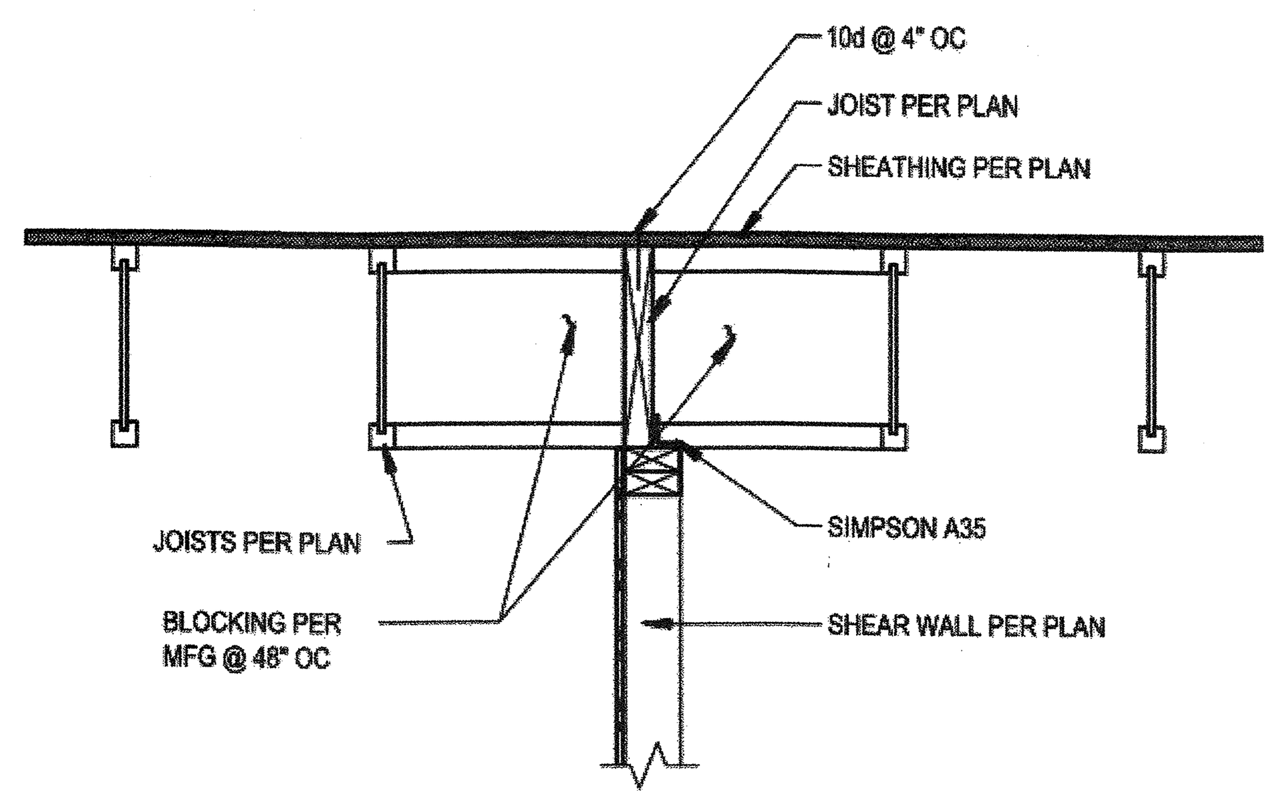
Job no.: T13C3
Drawn by: STT
Sheet no.:
S-2



4 **FLOOR TO SHEARWALL (JST PERP)**
SCALE: 1"=1'-0"



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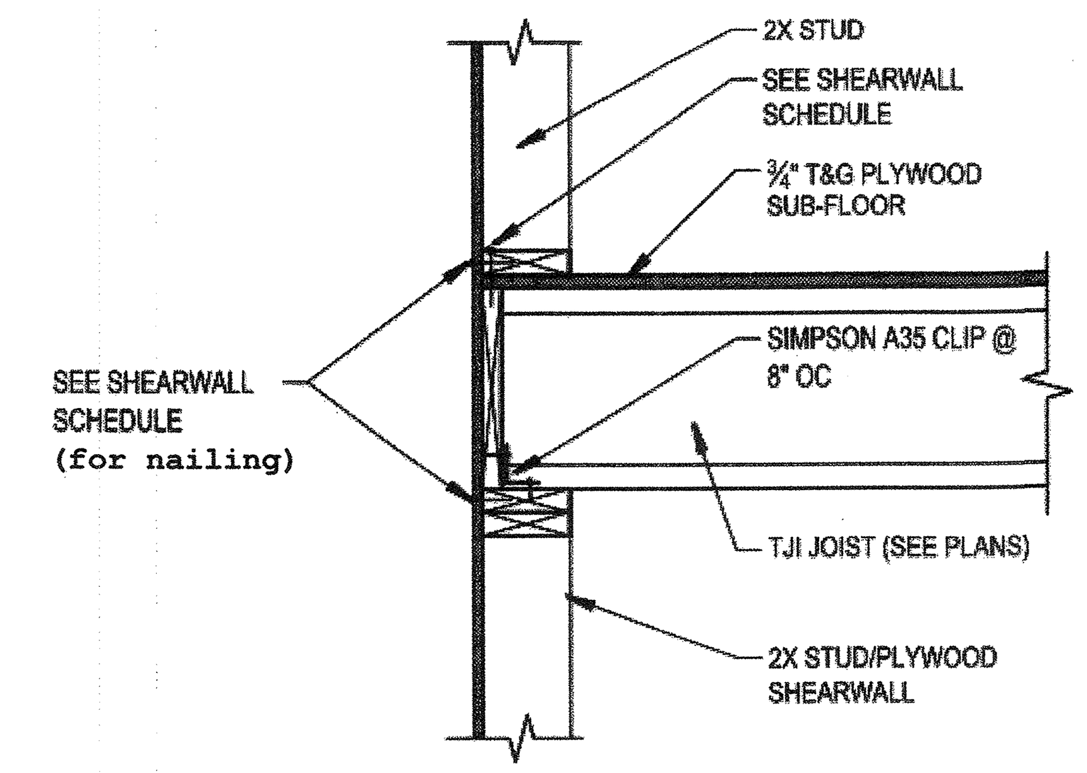
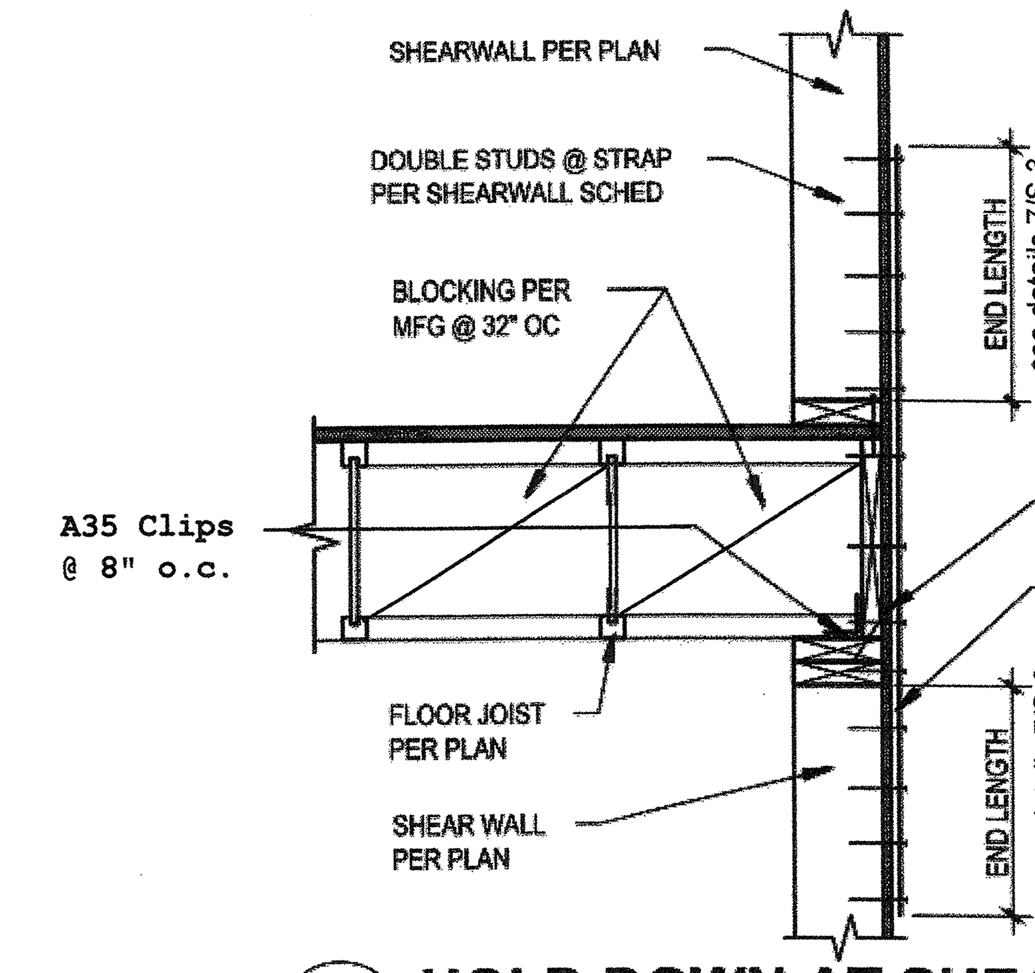
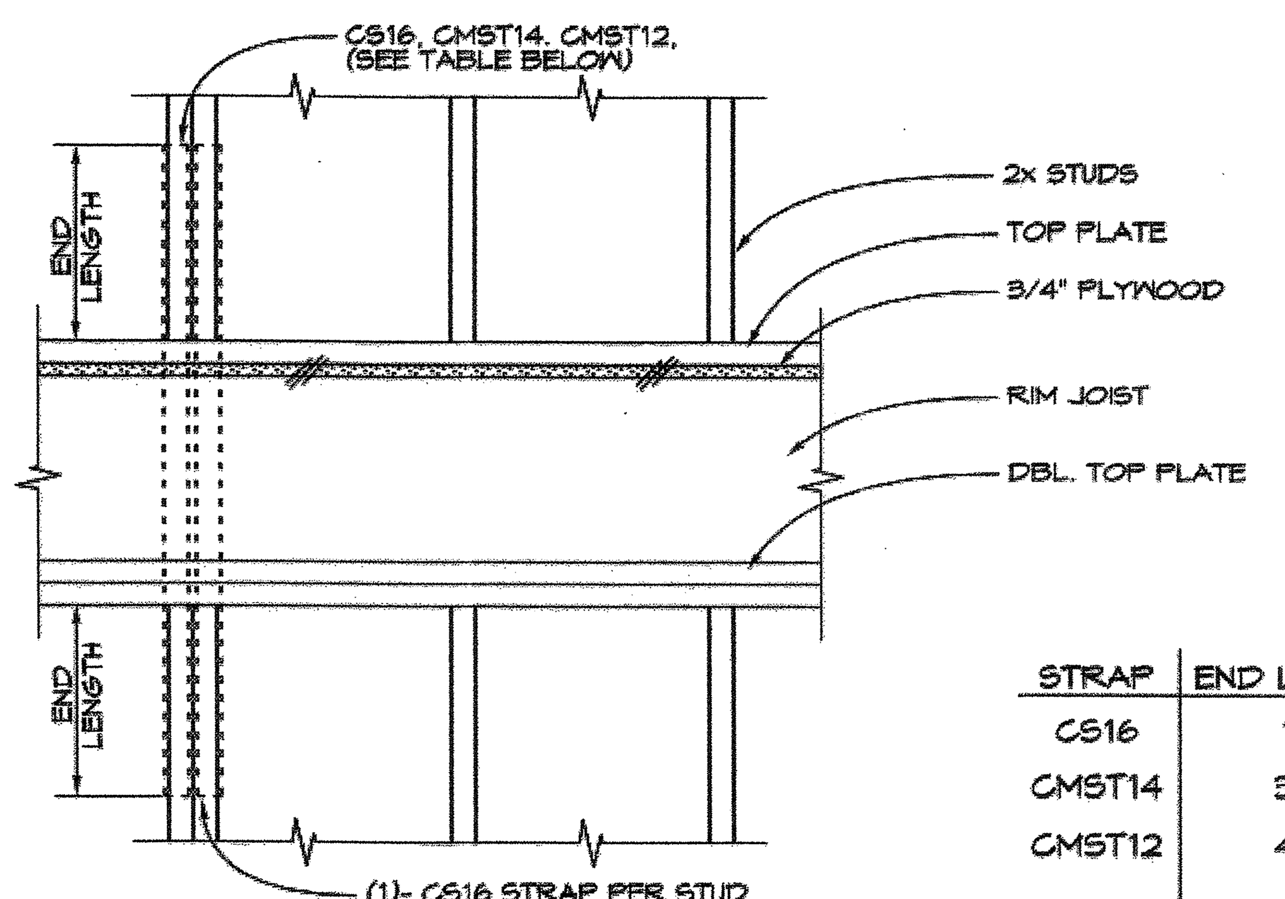


2 **SHEAR WALL AT FLOOR**
SCALE: 1"=1'-0"

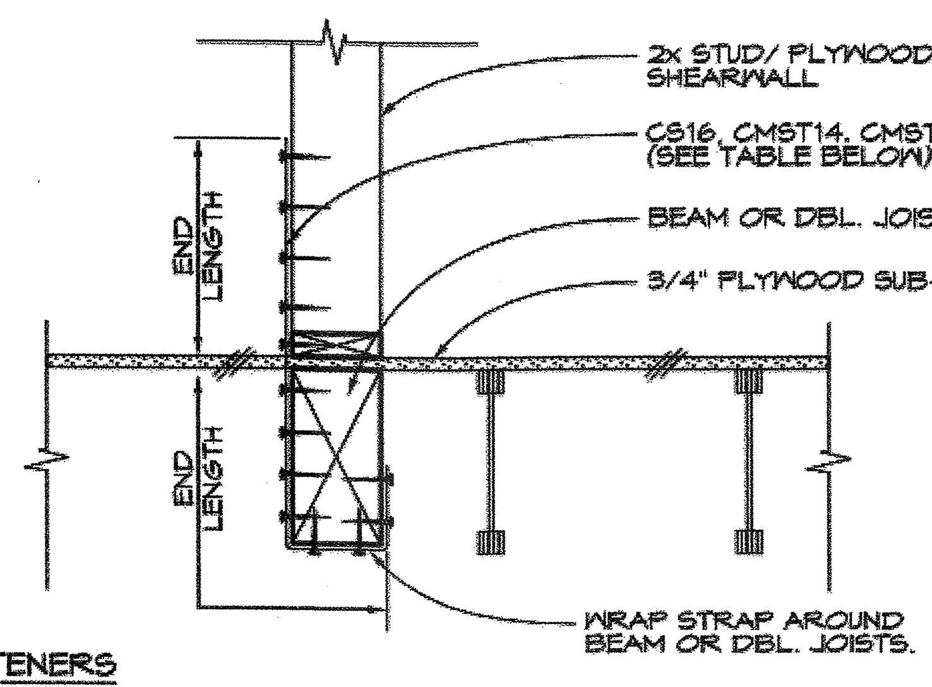


1 **HOLD DOWN AT SHEAR WALLS**
SCALE: 1"=1'-0"

Note:
nail spacing of the sill plate to reference spacing indicated on the shearwall schedule on sheet S-1.

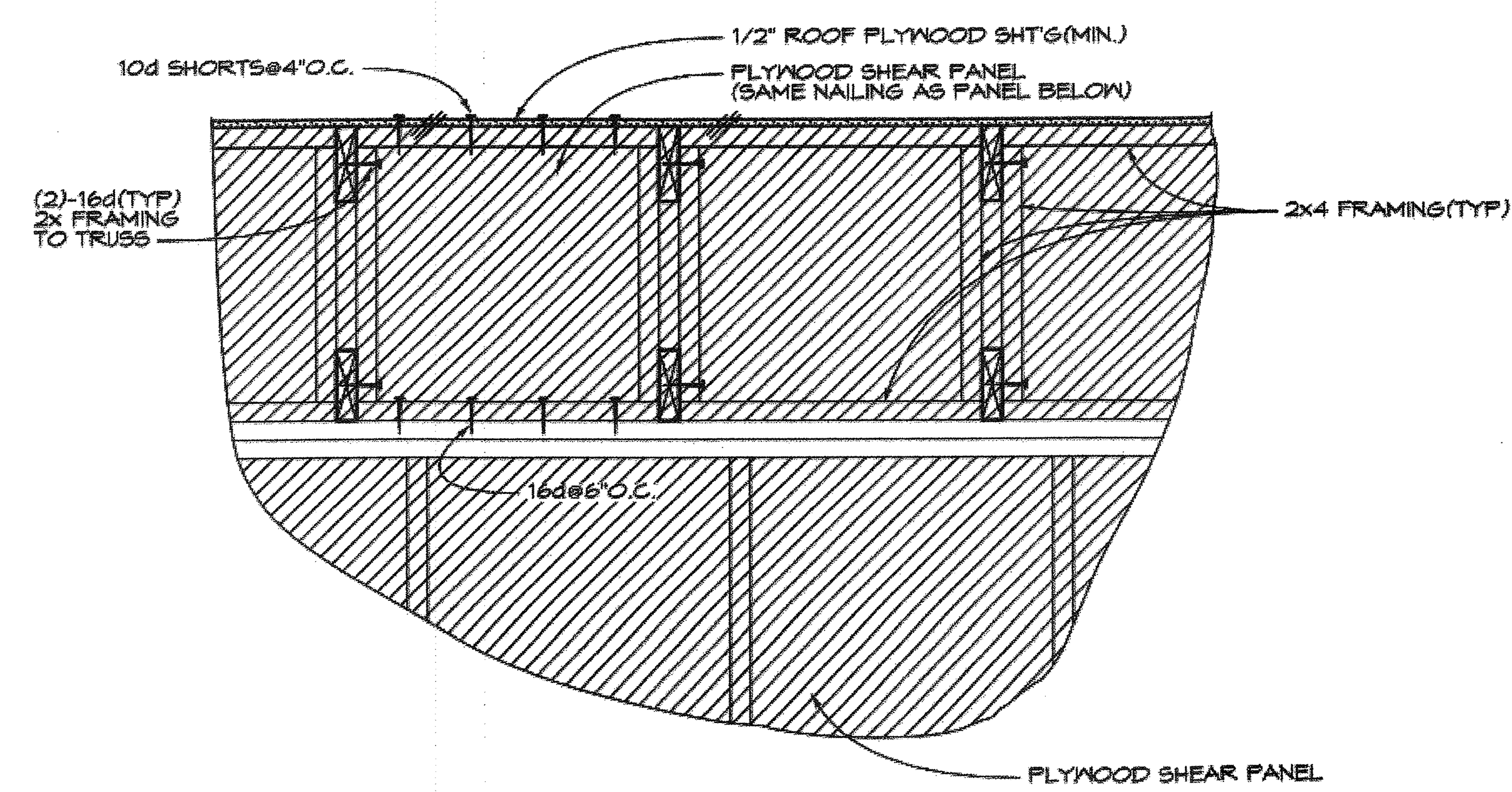


8 DETAIL
STRAP TIE WALL TO WALL SCALE: 1"=1'-0"

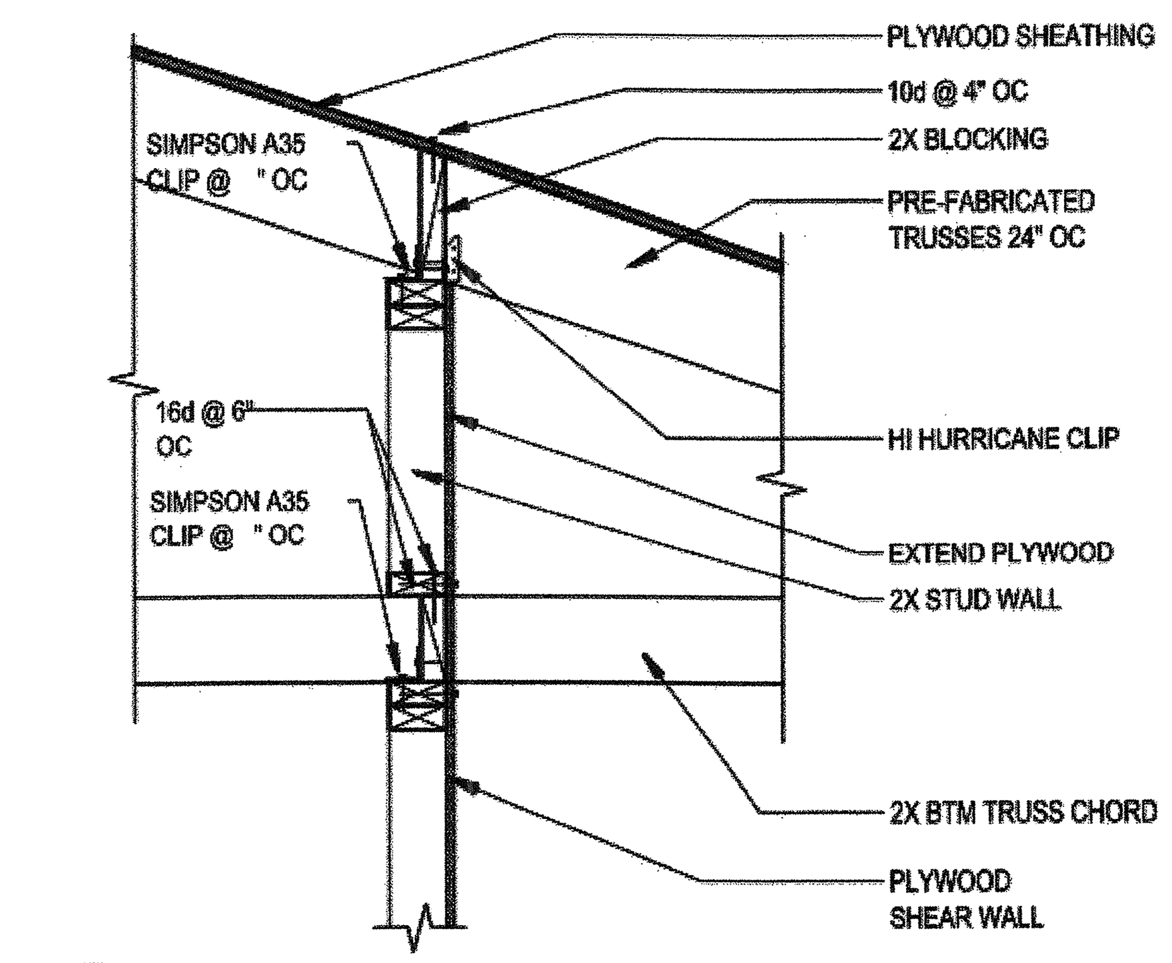


STRAP	END LENGTH	FASTENERS
CS16	11"	(22)-10d
CMST14	34"	(74)-16d
CMST12	45"	(100)-16d
CMSTC16	25"	(58)-16d

7 DETAIL
STRAP TIE WALL TO BEAM SCALE: 1"=1'-0"

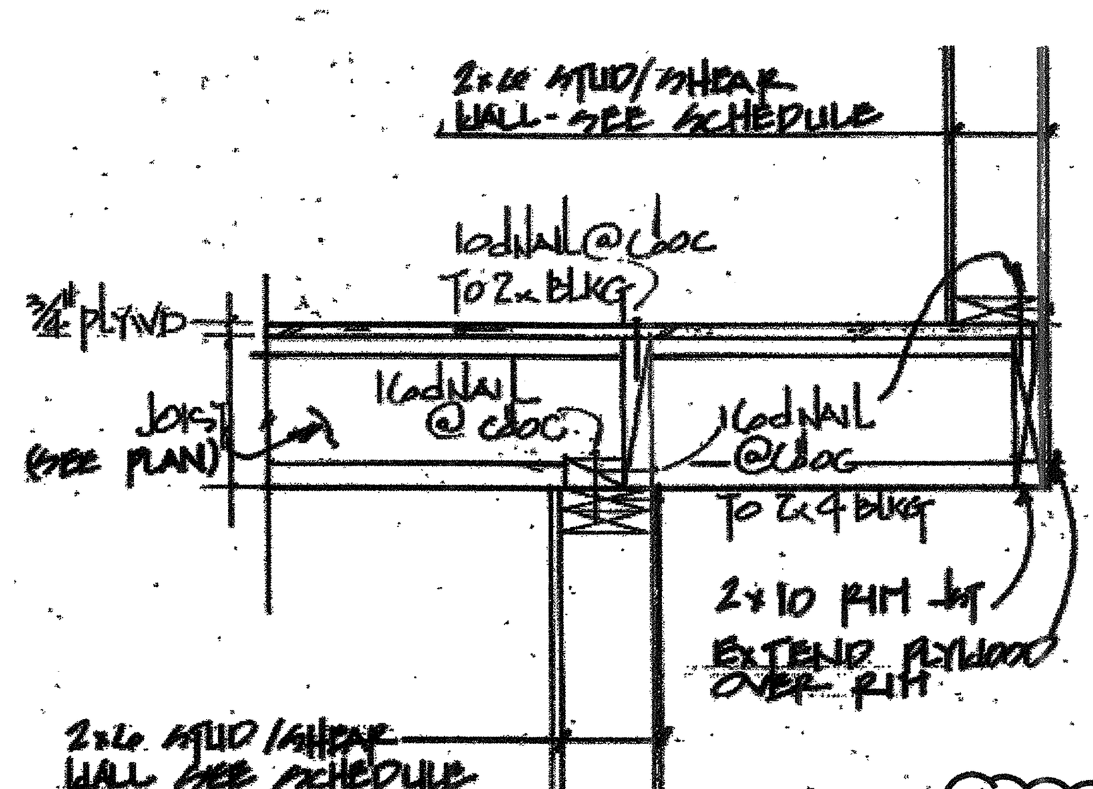


6 DETAIL SCALE: 1"=1'-0"



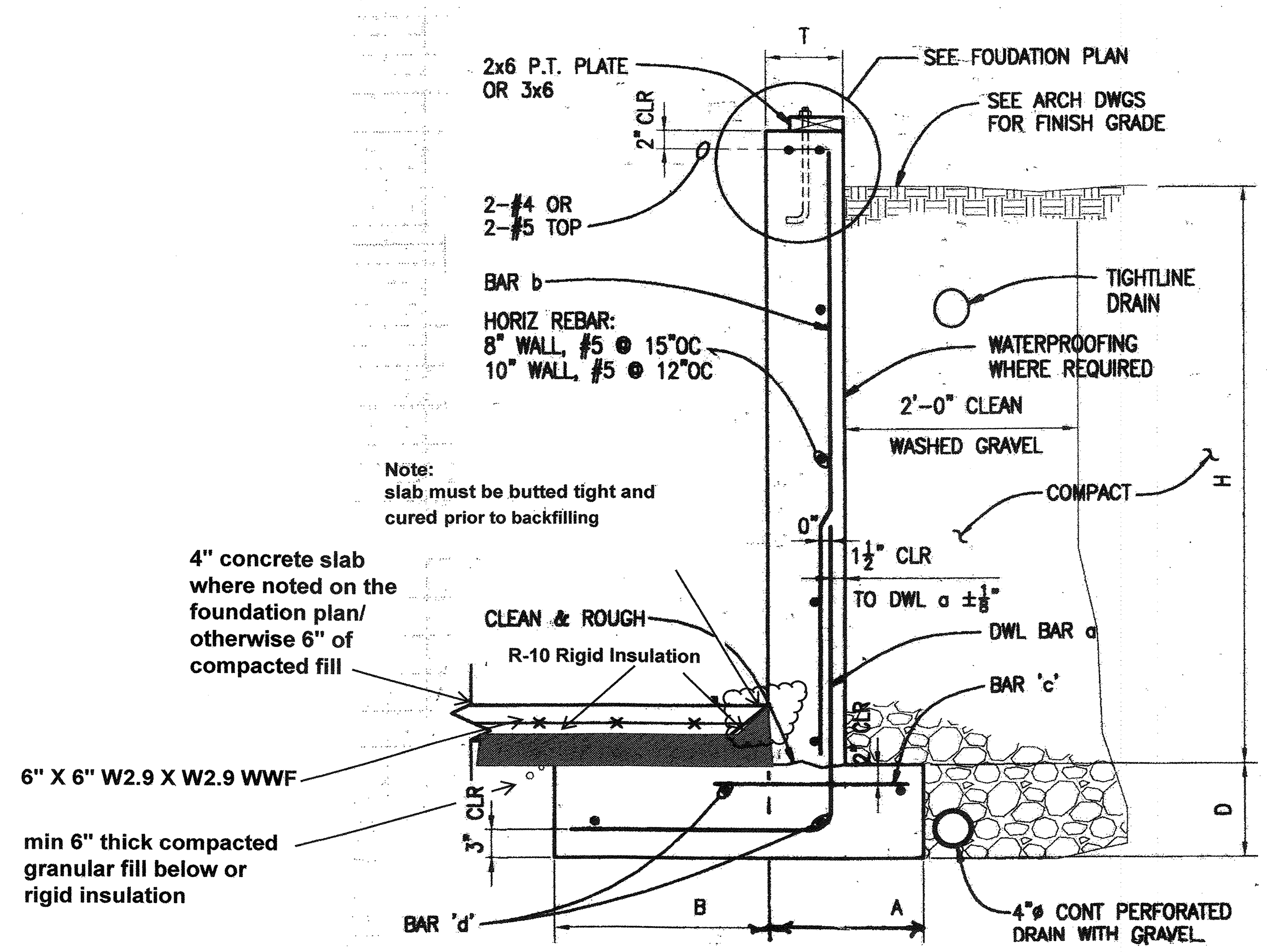
5 **DETAIL**
SCALE: 1"=1'-0"

Note:
nail spacing of the sill plate to reference spacing indicated on the shearwall schedule on sheet S-1.



Note:
nail spacing of the sill plate to reference spacing indicated on the shearwall schedule on sheet S-1.

10 WALL SECTION
1"=1'-0



9 **Concrete Retaining Wall Section**
NTS

Retaining Wall Schedule

T	H	DOWEL 'a'	BAR 'b'	BAR 'c'	BAR 'd'	L	D	A	B
8"	4'-0"	#5 @ 16" o.c. FULL HT.	------	#5 @ 15"OC	(2) #5 BOT #5 @ 18"OC TOP	2'-9"	12"	1'-6"	1'-3"
8"	6'-0"	#5 @ 16" o.c. FULL HT.	------	#5 @ 15"OC	(2) #5 BOT #5 @ 18"OC TOP	4'-7"	14"	2'-4"	2'-3"
8"	8'-0"	#5 @ 12" o.c. FULL HT	----	#5 @ 15" o.c.	(3) #5 BOT #5 @ 18" o.c. (TOP)	5'-3"	14"	1'-9"	3'-6"
10"	10'-0"	#5 @ 6" O.C. 4'-4"	#5 @ 12" o.c.	#5 @ 15" o.c.	(4) #5 BOT #5 @ 18" o.c. (TOP)	5'-0"	14"	2'-0"	3'-0"

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NOTES FOR UNBRACED RETAINING WALLS

1. CONCRETE STRENGTH f'c = 2500 psi. (if not exposed to weather), 3000 psi (if exposed to weather) no special inspection
2. REINFORCING TO BE GRADE 60 (#5), 60 (#4)
3. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED SOIL.
4. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCING BARS.
5. BACKFILL WALL TO ALLOW FOR DEFLECTION BEFORE ATTACHING FLOOR DIAPHRAGM.
6. ALLOW SOIL BEARING PRESSURE TO BE 2000 psf.
7. EQUIVALENT FLUID PRESSURE BEHIND WALL TO BE 35 pcf FOR UNBRACED WALLS.
8. ALLOW 28 DAYS MINIMUM FOR CONCRETE TO CURE.
9. ALLOWABLE PASSIVE PRESSURE TO BE 250 pcf.
10. CONTACT ENGINEER FOR ANY MODIFICATIONS OR REVISIONS TO ORIGINAL DESIGN.

STEPHEN T. TAPP, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, EXPIRES: 11/12/16

revisions
8/12/13

A Custom Residence for
On The Rock 98040, LLC
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Sheet Contents:

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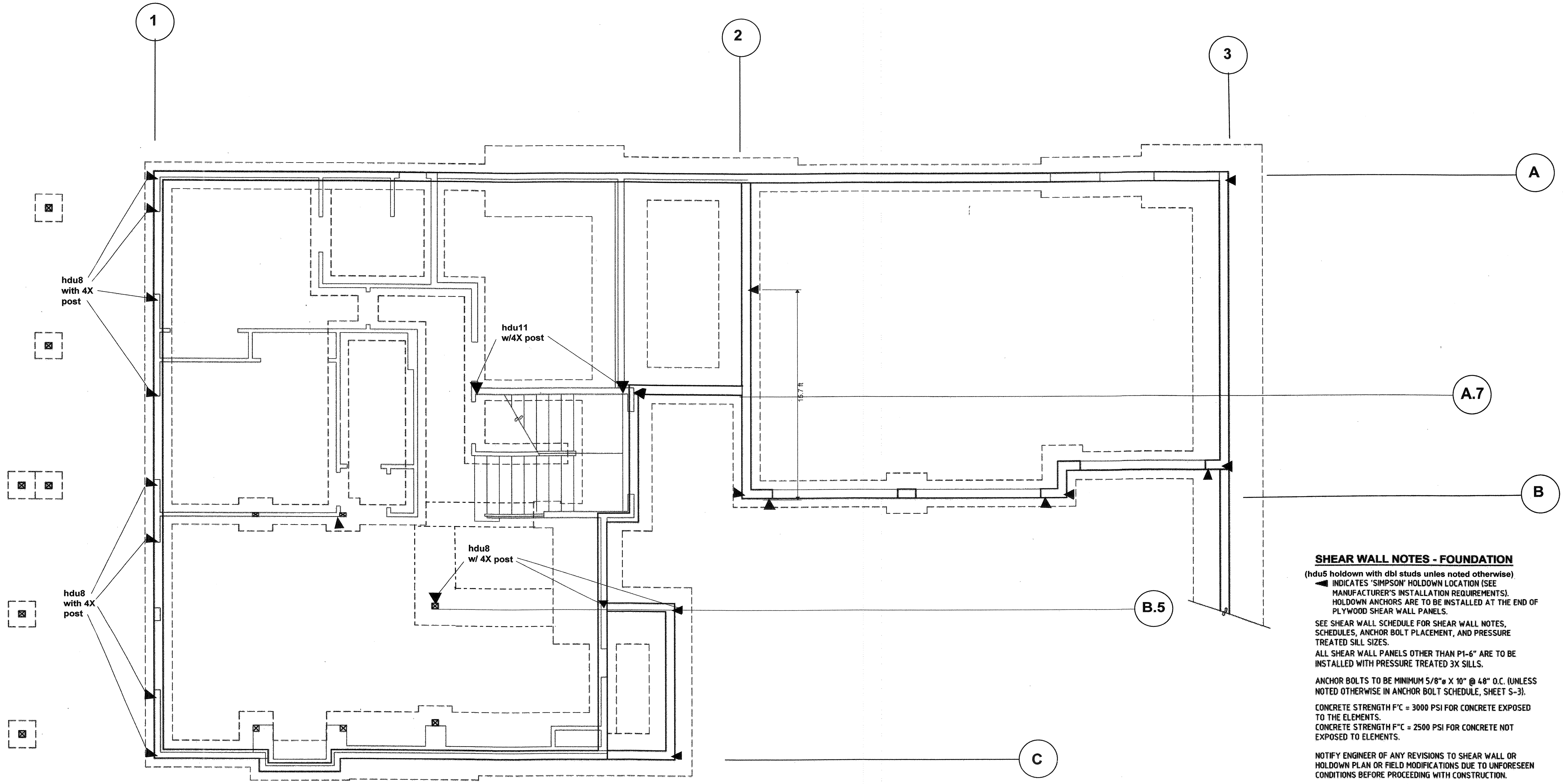
S-3



Holdown Location Plan

1/4" = 1'-0"

SHEAR WALL NOTES - FOUNDATION

(hdu5 holdown with dbl studs unles noted otherwise)

◄ INDICATES 'SIMPSON' HOLDOWN LOCATION (SEE MANUFACTURER'S INSTALLATION REQUIREMENTS). HOLDOWN ANCHORS ARE TO BE INSTALLED AT THE END OF PLYWOOD SHEAR WALL PANELS.

SEE SHEAR WALL SCHEDULE FOR SHEAR WALL NOTES, SCHEDULES, ANCHOR BOLT PLACEMENT, AND PRESSURE TREATED SILL SIZES.

ALL SHEAR WALL PANELS OTHER THAN P1-6" ARE TO BE INSTALLED WITH PRESSURE TREATED 3X SILLS.

ANCHOR BOLTS TO BE MINIMUM 5/8"ø X 10" @ 48" O.C. (UNLESS NOTED OTHERWISE IN ANCHOR BOLT SCHEDULE, SHEET S-3).

CONCRETE STRENGTH F'C = 3000 PSI FOR CONCRETE EXPOSED TO THE ELEMENTS.
CONCRETE STRENGTH F"C = 2500 PSI FOR CONCRETE NOT EXPOSED TO ELEMENTS.

NOTIFY ENGINEER OF ANY REVISIONS TO SHEAR WALL OR HOLDOWN PLAN OR FIELD MODIFICATIONS DUE TO UNFORESEEN CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.

INCREASE DEPTH OF FOUNDATION AT HOLDOWN ANCHOR BOLTS TO INSURE PROPER CONCRETE COVERAGE.

SIMPSON STRONG TIE CONNECTORS ARE SPECIFICALLY REQUIRED TO MEET THE STRUCTURAL CALCULATIONS OF THIS PLAN. BEFORE SUBSTITUTING ANOTHER BRAND, CONFIRM LOAD CAPACITY BASED ON RELIABLE PUBLISHED TESTING DATA OF CALCULATIONS. THE ENGINEER OF RECORD SHOULD EVALUATE AND GIVE APPROVAL FOR SUBSTITUTION PRIOR TO INSTALLATION.

Note: SSTB are the only approved anchors for use with the HD series holdowns

Holdown Anchor End Distance and Edge Distance

Alternate	Simpson Holdown	Stud Size	Post Size	Anchor Diameter	End Distance	Edge Distance	SSTB Embedded Depth
HDU2	HD2a	2 X 4	Dbl Studs	5/8" d.	4 7/16"	1 ¾"	5/8" d. Embedded 20 5/8"
		2 X 4	4X Post	5/8" d.	4 15/16"	1 ½"	
		2 X 6	Dbl Studs	5/8" d.	4 7/16"	2 ¾"	
		2 X 6	4X Post	5/8" d.	4 15/16"	2 ½"	
HDU5	HD5a	2 X 4	Dbl Studs	3/4" d.	5 3/16"	1 ¾"	5/8" d. Embedded 20 5/8"
		2 X 4	4X Post	3/4" d.	5 11/16"	1 ¾"	
		2 X 6	Dbl Studs	3/4" d.	5 3/16"	2 ¾"	
		2 X 6	4X Post	3/4" d.	5 11/16"	2 ¾"	
HDU8	HD6a	2 X 4	4X Post	7/8" d.	5 9/16"	1 ¾"	7/8" d. Embedded 28 7/8"
		2 X 4	4X Post	7/8" d.	5 9/16"	1 ¾"	
		2 X 6	6X Post	7/8" d.	7 9/16"	2 ¾"	
		2 X 6	6X Post	7/8" d.	7 9/16"	2 ¾"	
HDU8	HD8a	2 X 4	4X Post	7/8" d.	5 9/16"	1 ¾"	7/8" d. Embedded 28 7/8"
		2 X 4	4X Post	7/8" d.	5 9/16"	1 ¾"	
		2 X 6	6X Post	7/8" d.	7 9/16"	2 ¾"	
		2 X 6	6X Post	7/8" d.	7 9/16"	2 ¾"	
HDU11		2 X 6	6X Post	1" d.	7 9/16"	2 3/4"	1" d. Embedded 28 7/8"

Note: See foundation plan in architectural drawings for specific foundation details

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S-4

SHEAR WALL NOTES - WALLS

P1-'X' INDICATES SHEAR WALL. SEE LEGEND.

SEE SHEAR WALL SCHEDULE FOR SHEAR WALL NOTES, ANCHOR BOLT PLACEMENT, PRESSURE TREATED SILL SIZES, AND INSTALLATION DETAILS.

NOTIFY ENGINEER OF ANY REVISIONS TO SHEAR WALL OR FIELD MODIFICATIONS DUE TO UNFORESEEN CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.

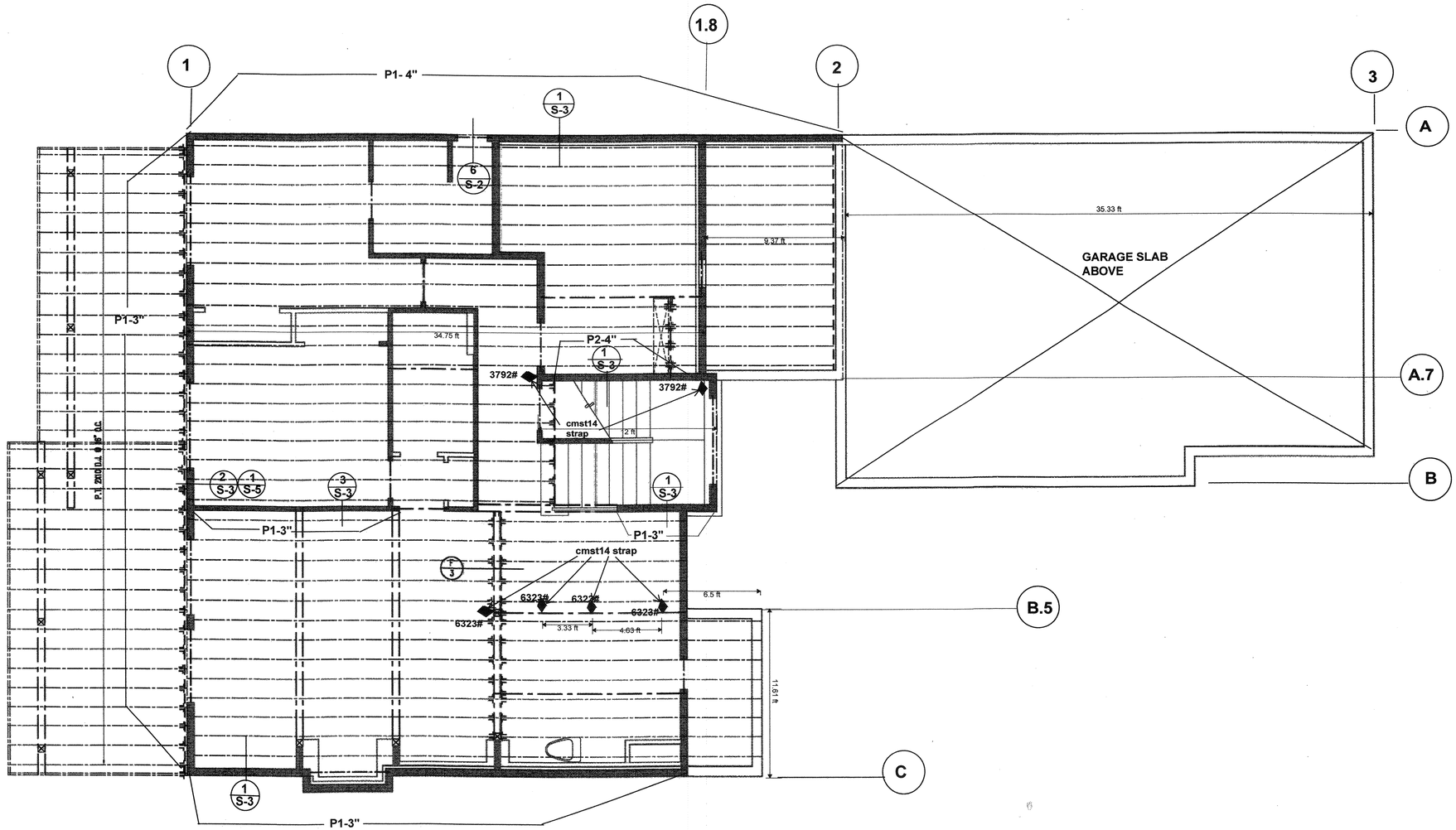
DIAPHRAGM SHEATHING NAILS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING.

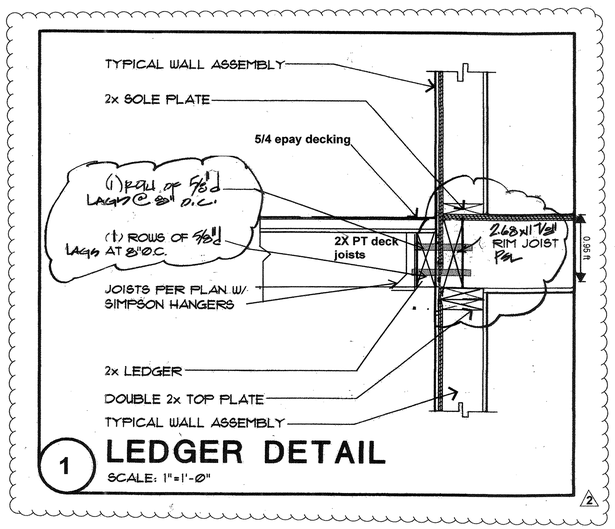
THE FASTENERS USED IN THE SHEAR WALL DESIGN ARE 10d COMMONS OR 10d GALVANIZED BOX NAILS. ANY FASTENER SUBSTITUTION WILL HAVE TO BE REVIEWED BY ENGINEER PRIOR TO CONSTRUCTION.

SOLID BLOCK BELOW SHEAR WALLS ABOVE.

cmst14 strap ◆ INDICATES SHEAR WALL TIE DOWN STRAP BETWEEN THE SHEAR WALL ABOVE AND THE FRAMING ABOVE OR THE WALLS BELOW.

SEE DETAILS 2/S-2,4/S-2,5,S-2, FOR MISCELLANEOUS CONSTRUCTION DETAILS





Lower Floor Shear Wall Plan

1/4" = 1'-0"

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S-5

Drag Strut Beams

DS-100 5 1/4" X 11 7/8" 2.0E PSL

SHEAR WALL NOTES - WALLS

P1-'X' INDICATES SHEAR WALL. SEE LEGEND.

SEE SHEAR WALL SCHEDULE FOR SHEAR WALL NOTES, ANCHOR BOLT PLACEMENT, PRESSURE TREATED SILL SIZES, AND INSTALLATION DETAILS.

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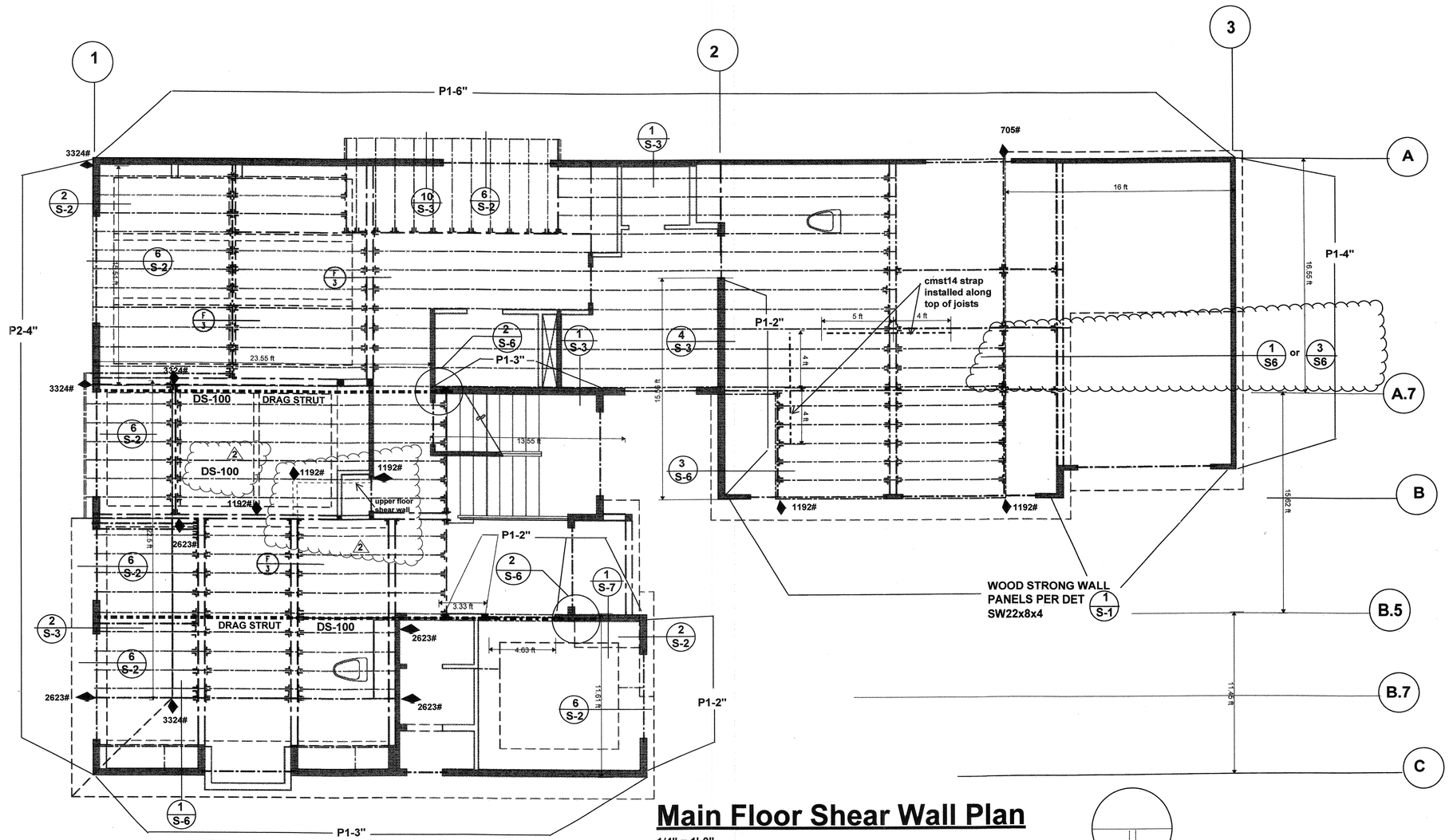
SOLID BLOCK BELOW SHEAR WALLS ABOVE.

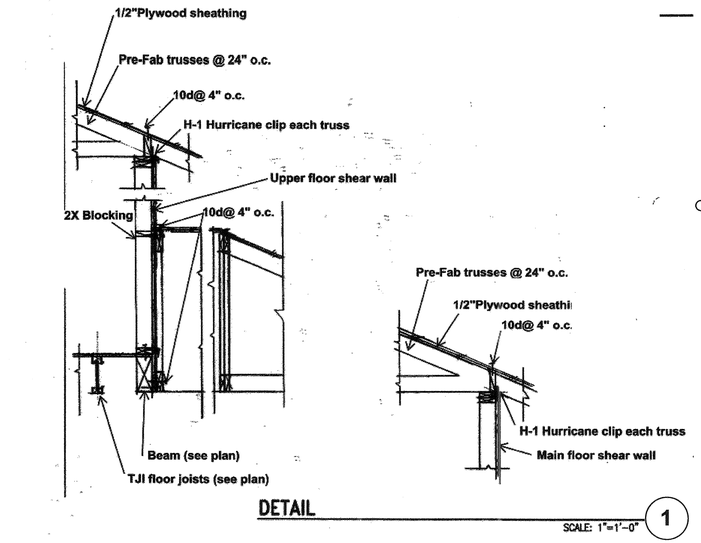
◆ INDICATES SHEAR WALL TIE DOWN STRAP BETWEEN THE SHEAR WALL ABOVE AND THE FRAMING ABOVE OR THE WALLS BELOW.

(cmstc16 strap unless noted otherwise)



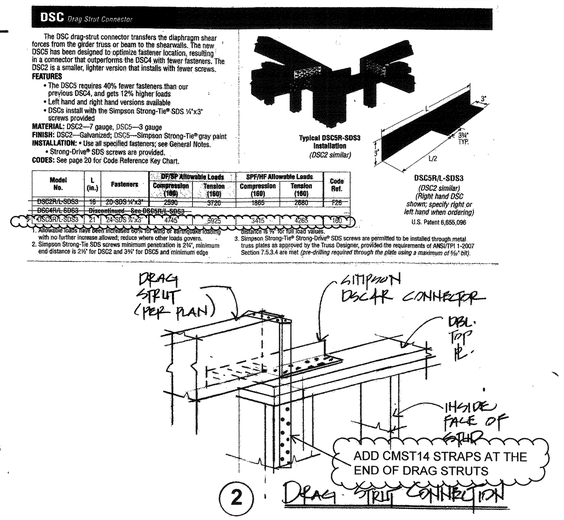
Main Floor Shear Wall Plan

1/4" = 1'-0"

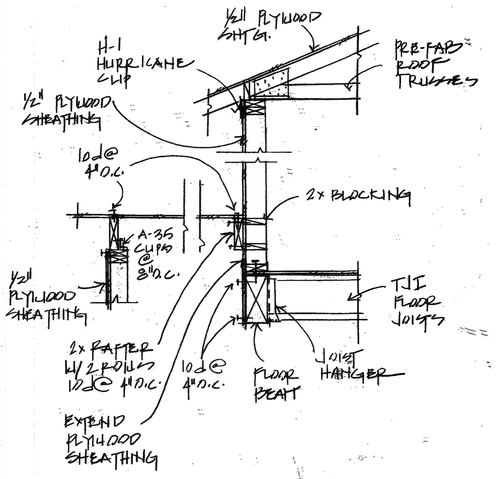


DETAIL

SCALE: 1"=1'-0" 1



2 DRAG STRUT CONNECTION



DETAIL

3/4" = 1'-0" 3

N

Note:
Provide blocking under all floor straps at Garage

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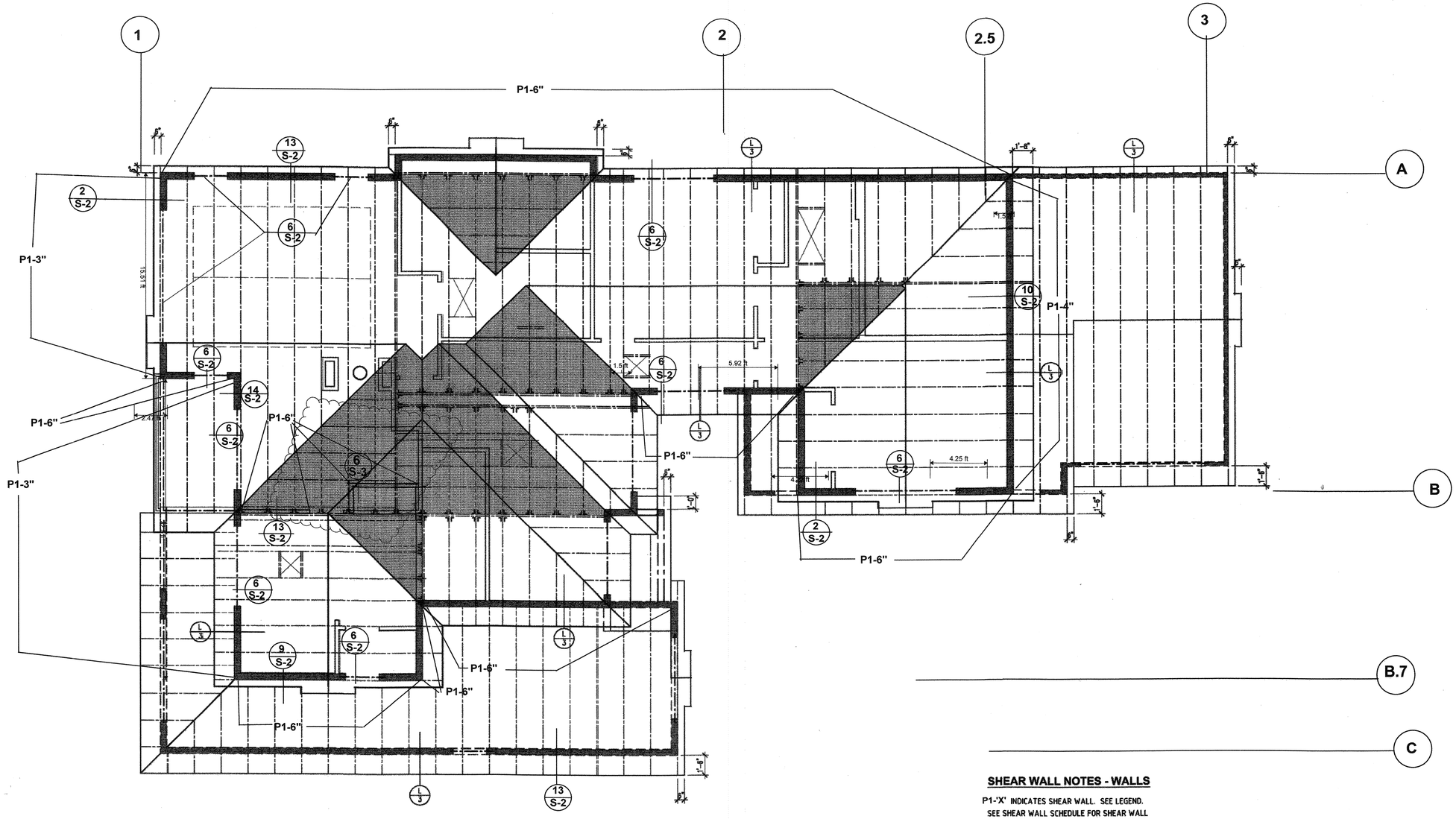
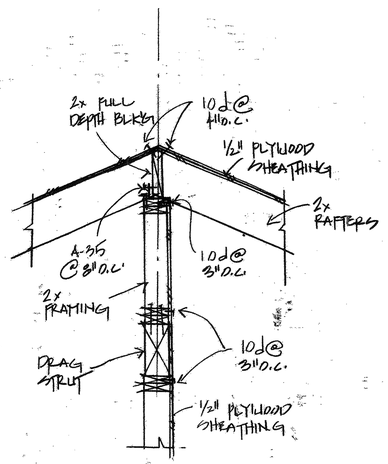


Upper Floor Shear Wall Plan

1/4" = 1'-0"



DETAIL 1

SCALE: 1"=1'-0"

N

SHEAR WALL NOTES - WALLS

P1-'X' INDICATES SHEAR WALL. SEE LEGEND.

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NOTIFY ENGINEER OF ANY REVISIONS TO SHEAR WALL OR FIELD MODIFICATIONS DUE TO UNFORESEEN CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.

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THE FASTENERS USED IN THE SHEAR WALL DESIGN ARE 10d COMMONS OR 10d GALVANIZED BOX NAILS. ANY FASTENER SUBSTITUTION WILL HAVE TO BE REVIEWED BY ENGINEER PRIOR TO CONSTRUCTION.

SOLID BLOCK BELOW SHEAR WALLS ABOVE.

◆ INDICATES SHEAR WALL TIE DOWN STRAP BETWEEN THE SHEAR WALL ABOVE AND THE FRAMING ABOVE OR THE WALLS BELOW.

SEE DETAILS 2/S-2,4/S-2,5,S-2, FOR MISCELLANEOUS CONSTRUCTION DETAILS

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S-7

EROSION CONTROL NOTES

D.8.2 STANDARD ESC PLAN NOTES
THE STANDARD ESC PLAN NOTES MUST BE INCLUDED ON ALL ESC PLANS. AT THE APPLICANT'S DISCRETION, NOTES THAT IN NO WAY APPLY TO THE PROJECT MAY BE OMITTED; HOWEVER, THE REMAINING NOTES MUST NOT BE RENUMBERED. FOR EXAMPLE, IF ESC NOTE #3 WERE OMITTED, THE REMAINING NOTES SHOULD BE NUMBERED 1, 2, 4, 5, 6, ETC.

1. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.

3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.

4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.

5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.

6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY CITY OF MERCER ISLAND.

7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.

8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).

9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.

10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.

11. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.

12. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.

13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL

14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

RECOMMENDED CONSTRUCTION SEQUENCE

A DETAILED CONSTRUCTION SEQUENCE IS NEEDED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A RECOMMENDED CONSTRUCTION SEQUENCE IS PROVIDED BELOW:

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.

2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC 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 PONDS AND TRAPS.

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 CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

11. RELOCATE SURFACE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH CITY OF MERCER ISLAND TESC REQUIREMENTS.

12. COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) OR TWO DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) 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 BMPS IF APPROPRIATE.

DENUDED AREAS REQUIREMENTS

APRIL 1 TO SEPT 30
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF CONSTRUCTION. PLEASE READ ALL CITY TESC NOTES ON SHEET C1.2.

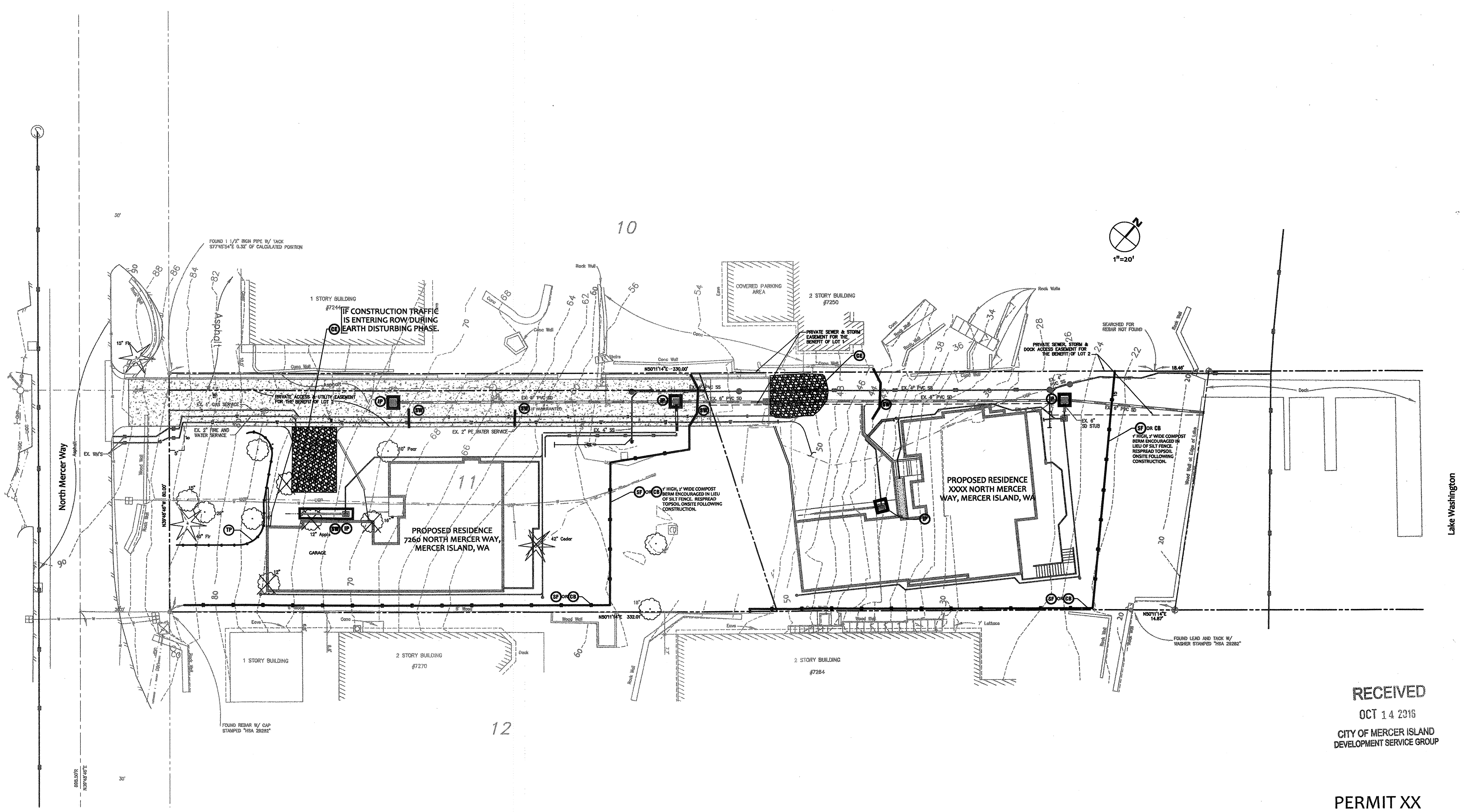
OCT 1 TO MARCH 31
ALL DENUDED AREAS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. IF AN EROSION PROBLEM ALREADY EXISTS ON THE SITE, OTHER COVER PROTECTION AND EROSION CONTROL WILL BE REQUIRED.

SURVEYOR

BOUNDARY AND TOPO SURVEY BY TRUE NORTH LAND SURVEYING, INC.

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE
FILTER FABRIC FENCE (SILT FENCE) (SF)
STABILIZED CONSTRUCTION ENTRANCE (CE)
CATCH BASIN INLET PROTECTION (IP)
~~INTERCEPTOR SWALE SEE COR DWG 504, TYPE A TEMPORARY SWALE~~ (IS)
TREE PROTECTION FENCING (TP)
CHECK DAM (CD)
STRAW WATTLES (SW) USE AS NEEDED
PLASTIC COVERING (PC) USE AS NEEDED
COMPOST BERM (CB)



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NO.	DATE	BY	REVISIONS

APPLICANT
ON THE ROCKS, LLC
CONTACT: SCOTT GIBSON

CALL
1-800-424-5555
TWO WORKING DAYS BEFORE YOU DIG

DATE: 8/9/13
JOB# 1239
DRAFTED: DE DESIGN: DE
DIGITAL SIGNATURE

8/9/13

CES
Civil Engineering Solutions
3131 WESTERN AVE, STUDIO 316 • Seattle, WA 98121
Phone: 206.930.0342 • DUFFY@CESOLUTIONS.US

EROSION CONTROL PLAN
PROPOSED RESIDENCE
PIRAK SHORT PLAT
7260 NORTH MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C1.0

APN 5315100056
AND 5315100055

CITY NOTES

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.

2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.

3. CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.

4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITIES.

5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555

6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED

7. EROSION CONTROL:
ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 "STORM WATER MANAGEMENT." SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE:

8. PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIOENGINEERED SWALES.

9. CONSTRUCTION ACCESS TO THE SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.

10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.

11. ALL EXPOSED SOILS SHALL REMAIN DENUDED FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.

12. INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL, AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.

13. OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.

14. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.

15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.

16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.

17. SILENT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.

18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.

19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.

16. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.

20. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.

21 POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.

22. THE LIMITS AND EXTENDS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZE THE PROJECT.

PERMIT XX

NO.	DATE	BY	REVISIONS

APPLICANT
ON THE ROCKS, LLC
CONTACT: SCOTT GIBSON

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DAYS BEFORE
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DATE: 4/26/13
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ELECTRONIC SIGNATURE

4/25/13
JEFFREY E. [illegible]
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER

C E S
Civil Engineering Solutions
3131 WESTERN AVE, STUDIO 316 • Seattle, WA 98121
Phone: 206.930.0342 • DUFFY@CESOLUTIONS.US

CITY NOTES
PROPOSED RESIDENCE
PIRAK SHORT PLAT
7260 NORTH MERCER WAY, MERCER ISLAND, WA 98040

DRAWING NO:
C1.1

APN 5315100056
AND 5315100055

SANITARY SEWER IMPROVEMENTS

(1) –

(2) 6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0%. CONNECT TO EXISTING SIDE SEWER.

(3) –

(4) 6" SEWER CLEANOUT.

WATER IMPROVEMENTS

(10) –

(11) MIN 1.5" (2" IF SPRINKLED) 250 PSI PRIVATE HDPE WATER (ASTM D2239) FROM METER TO HOUSE. RECOMMENDED DEPTH=36". COORDINATE HOUSE ENTRY WITH BUILDER/OWNER

STORM DRAIN

(20) 4" STORM DRAIN (3034 PVC) @ MIN 2% GRADE.

(21) 4" FOUNDATION DRAIN (3034 PVC) @ MIN 1.0 GRADE.

(22) 6" STORM DRAIN (3034 PVC) @ MIN 1.0% GRADE. ENSURE 95% COMPACTION TO PAVEMENT SUBGRADE. PAVEMENT PATCH PER CITY OF MERCER ISLAND STANDARD.

(26) N/A

STORM DRAIN STRUCTURES

(30) –

(31) –

(32) –

(33) TYPE 1 CB (WATER QUALITY) WITH STANDARD GRATE TOP. PROVIDE RISOR WITH TURNED–DOWN ELBOW FOR IMPROVED WATER QUALITY FUNCTION.

(34) –

(35) –

(39) –4" TRENCH DRAIN IN FRONT OF GARAGE. SET GRATE TOP MIN 2" BELOW GARAGE ENTRY ELEVATION. DRAIN TO CB.

(40) PRIVATE TYPE 40 CATCH BASIN IN DRIVEWAY OR EQUAL. TRAFFIC RATED GRATE. MIN 6" SUMP. WATER QUALITY TEE.

STORM WATER BMP'S

(50) N/A FOR SITE

STORMWATER DETENTION

SITE IS EXEMPT DUE TO 1/4 MILE OR LESS (DIRECT DISCHARGE) DISTANCE TO LAKE WASHINGTON.

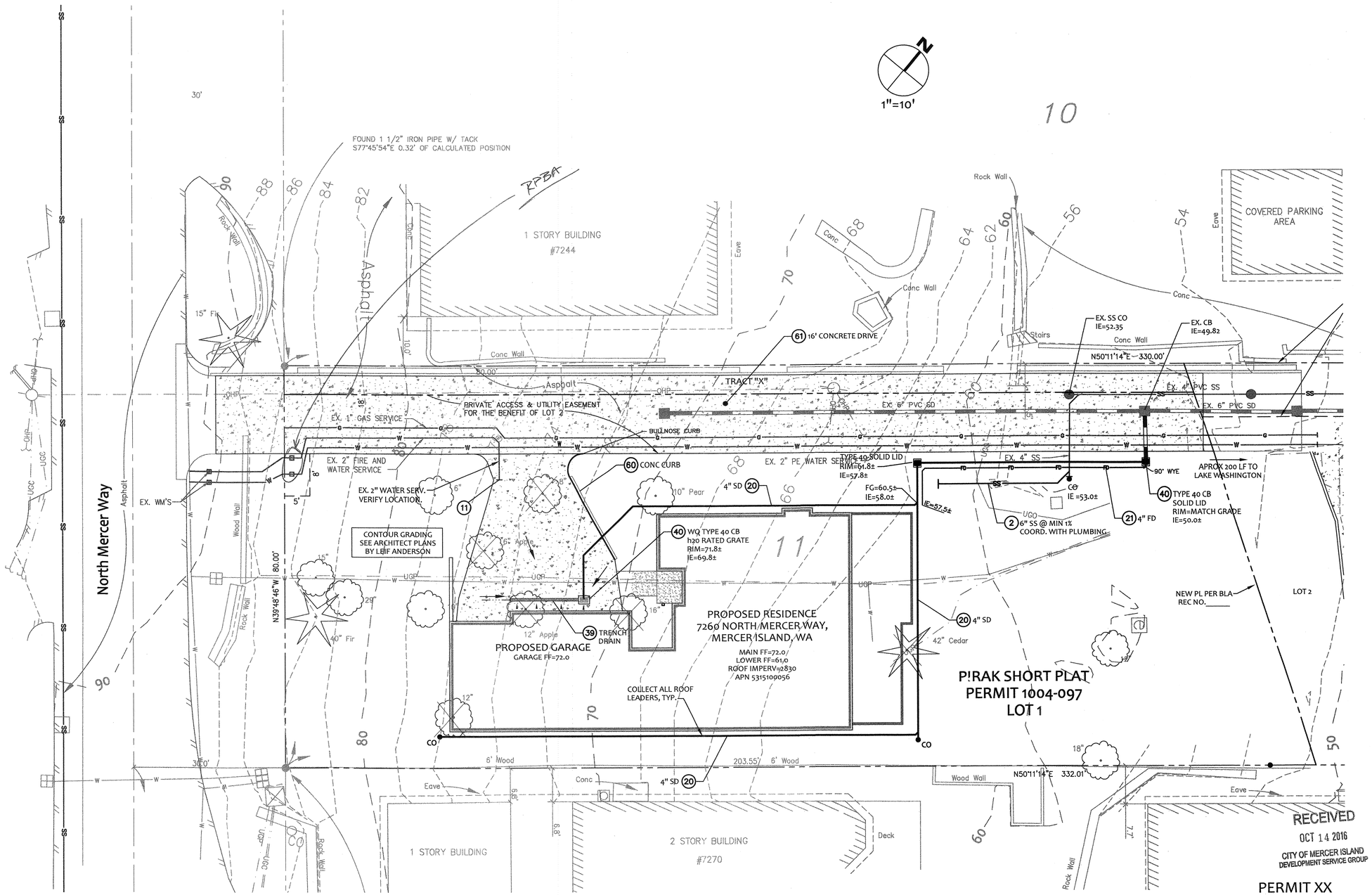
DRIVEWAY IMPROVEMENTS

(60) MIN 3" CURB ALONG LOW SIDE OF DRIVEWAY

(61) 16' WIDE CONCRETE DRIVEWAY REQUIRED TO WITHIN 150 FEET OF FURTHEST POINT OF LOT 2 HOUSE

SURVEYOR

TRUE NORTH LAND SURVEYING, INC.
815 S. WELLER STREET, SUITE 200
SEATTLE, WA 98104–3023
206.332.0800



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OCT 14 2016
CITY OF MERCER ISLAND
DEVELOPMENT SERVICE GROUP

PERMIT XX

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DRAINAGE PLAN LOT 1

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DRAWING NO:
C2.0

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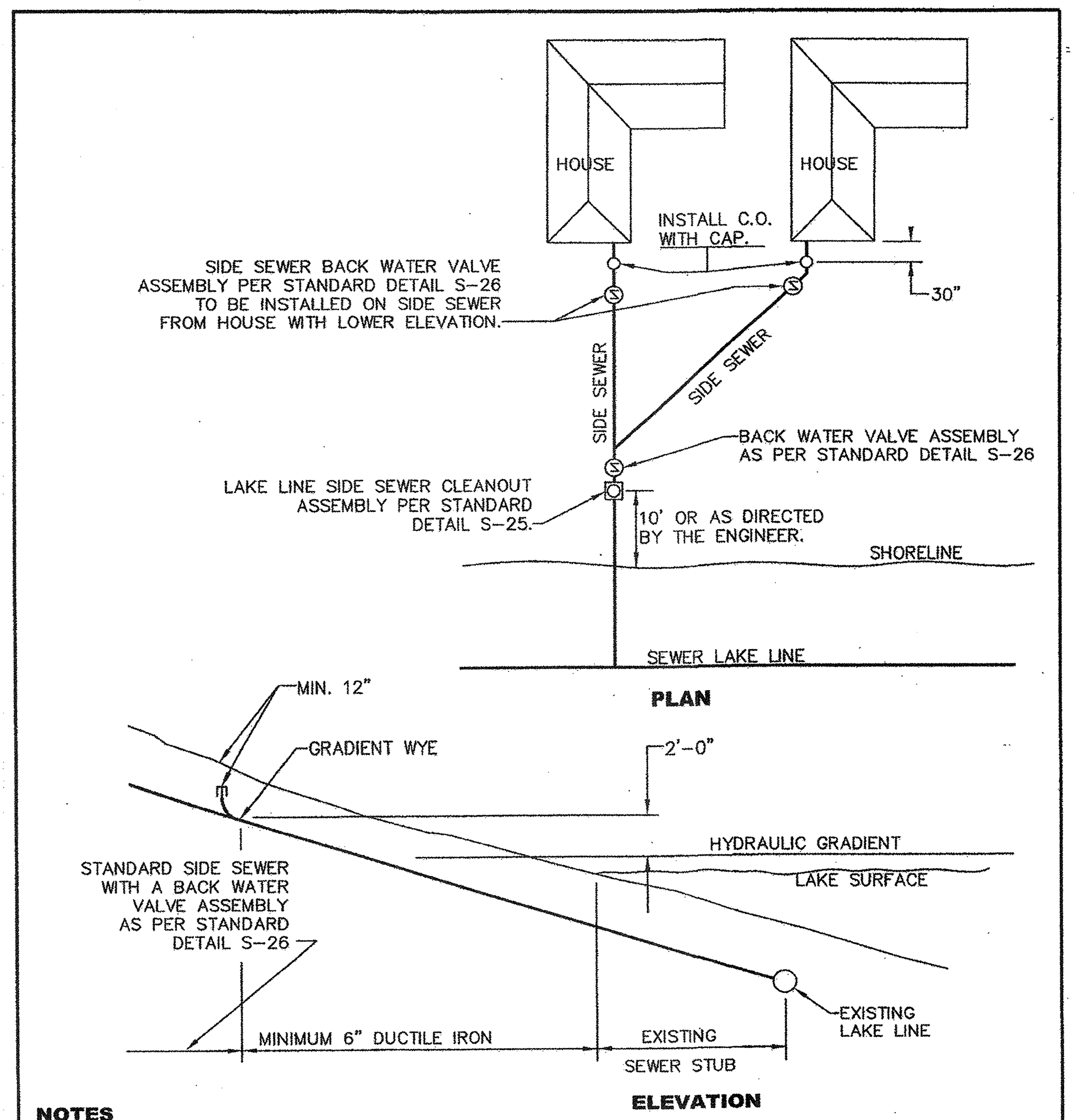
CITY DETAIL S-23



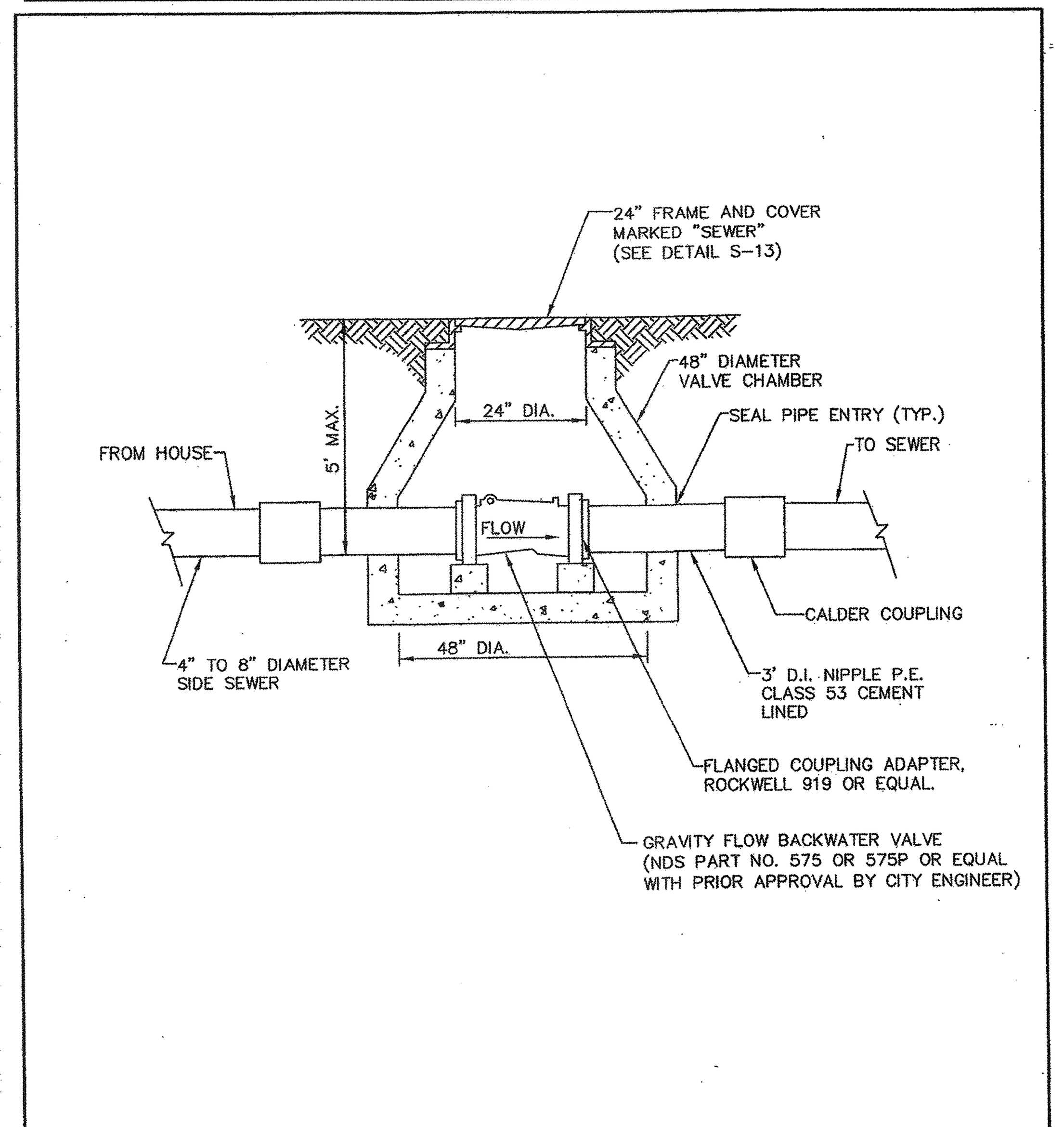
NOTES

1. BACK WATER VALVE ASSEMBLY IS PRIVATE AND SHALL BE THE PROPERTY OWNERS RESPONSIBILITY FOR MAINTENANCE.
2. PIPE AND MATERIAL SHALL BE DUCTILE IRON TO HYDRAULIC GRADIENT LINE.
3. INSTALL GRADIENT WYE AT HYDRAULIC GRADIENT PLUS 2.0' VERTICAL. CAST IRON WYE WITH MJ PLUG AND 12" OF COVER.
4. INSTALL BACK WATER VALVE BETWEEN WYE AND FIRST SERVICE CONNECTION.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
LAKE LINE CLEANOUT & BACK WATER VALVE ASSEMBLY INSTALLATION ABOVE HYDRAULIC GRADIENT

6-5-2009	NO SCALE	**S-23**
REV DATE		APPROVED

CITY DETAIL S-26



CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
BACK WATER VALVE ASSEMBLY FOR JOINT USE SIDE SEWER (4" OR 6" DIAMETER)

6-5-2009	NO SCALE	**S-26**
REV DATE		APPROVED

MERCER ISLAND CONSTRUCTION REQUIREMENTS

1. ALL IMPROVEMENTS SHALL BE INSTALLED PURSUANT TO PLANS APPROVED BY THE CITY IN ACCORDANCE WITH THE APPROVED CONSTRUCTION SCHEDULE.

2. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF MERCER ISLAND, CONDITIONS OF PERMITS ISSUED, THE GEOTECHNICAL EVALUATION RECOMMENDATIONS AND CONSTRUCTION PLANS ACCEPTED BY THE CITY. THE ENGINEER OF RECORD MAY BE REQUIRED TO MONITOR THE CONSTRUCTION, EROSION CONTROL, SITE STABILIZATION MEASURES AND PROVIDE INSPECTION REPORTS TO THE CITY ENGINEER THAT DOCUMENT ALL OF THE WORK PERFORMED.

3. THE SEASON FOR CLEARING, GRADING, AND THE CONSTRUCTION OF UTILITIES, STORM DRAINAGE FACILITIES, ROADWAYS AND RETAINING WALLS SHALL NOT BEGIN UNTIL APRIL 1, AND SHALL END BY OCTOBER 1 OF ANY YEAR, UNLESS OTHERWSE APPROVED BY THE CODE OFFICIAL AND CITY ENGINEER.

4. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN A MANNER THAT RETAINS AS MUCH NATURAL VEGETATION AS POSSIBLE.

5. THE TYPE OF EQUIPMENT TO BE USED FOR LAND CLEARING AND ROADWAY AND UTILITIES CONSTRUCTION SHALL BE DEFINED AT THE PRE-CONSTRUCTION CONFERENCE WITH THE CITY. THE NECESSARY DEVELOPMENT AND ROW USE PERMITS SHALL BE OBTAINED PRIOR TO MOVING EQUIPMENT ONTO THE SITE.

6. THE CITY ENGINEER MAY REQUIRE THAT CERTAIN IMPROVEMENTS BE HAND DUG.

7. THE CITY MAY REQUIRE THAT SPECIFIC CLEARING, GRADING, EXCAVATION, OR SENSITIVE CONSTRUCTION WORK BE EVALUATED AND DETAILED BY A GEOTECHNICAL ENGINEER. AS A CONDITION FOR COMPLETION OF THE WORK, THE CITY MAY REQUIRE THAT THE ENGINEER BE PRESENT DURING THE WORK TO MONITOR AND REVIEW SITE CONDITIONS, AND TO RECOMMEND APPROPRIATE SPECIAL CONSTRUCTION TECHNIQUES OR MITIGATING MEASURES.

8. ALL DAMAGE TO ADJACENT PROPERTIES OR PUBLIC RIGHTS-OF-WAY RESULTING FROM CONSTRUCTION (E.G., SILTATION, MUD, WATER, RUNOFF, ROADWAY DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT OR HAULING) SHALL BE EXPEDITIOUSLY MITIGATED AND REPAIRED BY THE CONTRACTOR, AT THEIR EXPENSE. FAILURE TO MITIGATE AND REPAIR SAID DAMAGE, OR TO COMPLY WITH THE ACCEPTED CONSTRUCTION PLANS, THE PERMITS ISSUED BY THE CITY, OR THE CITY REQUIREMENT FOR CORRECTIVE ACTION SHALL BE CAUSE FOR THE ISSUANCE OF A "STOP WORK" ORDER, FORECLOSURE ON THE PLAT PERFORMANCE GUARANTEE, AND/OR OTHER MEASURES DEEMED APPROPRIATE BY THE CITY ENGINEER.

9. FOLLOWING CONSTRUCTION, THE GEOTECHNICAL ENGINEER SHALL SUBMIT A LETTER TO THE CITY CONTAINING THE FOLLOWING STATEMENTS: THIS CONSTRUCTION HAS BEEN COMPLETED SUBSTANTIALLY IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL INVESTIGATION AND EVALUATION REPORT AND MADE IN CONNECTION WITH OUR ON-SITE MONITORING OF THE ACTIVITIES.

10. FOLLOWING CONSTRUCTION, THE PROJECT CIVIL ENGINEER SHALL SUBMIT A LETTER TO THE CITY CONTAINING THE FOLLOWING STATEMENT: THIS CONSTRUCTION HAS BEEN COMPLETED SUBSTANTIALLY IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED WITHIN THE STORM DRAINAGE TECHNICAL INFORMATION REPORT, APPROVED PLAN SET, AND OUR ON-SITE MONITORING OF THE ACTIVITIES.

11. IF THE DEVELOPER WISHES TO DEFER CERTAIN ON-SITE OR OFF-SITE IMPROVEMENTS, (I.E. LANDSCAPING, CURBS OR SIDEWALKS), WRITTEN APPLICATION WITH FULL AND COMPLETE ENGINEERING DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER. THE APPLICANT SHALL STATE THE REASONS WHY SUCH DELAY IS NECESSARY. IF APPROVAL IS GRANTED, SECURITY IN THE FORM OF A BOND OR ASSIGNMENT OF FUNDS SHALL BE FURNISHED TO THE CITY OF MERCER ISLAND IN AN AMOUNT EQUAL TO A MINIMUM OF 150 PERCENT OF THE ESTIMATED COST OF THE REQUIRED IMPROVEMENTS. THE CITY ENGINEER MUST ACCEPT AND ESTABLISH THE BOND AMOUNT. SUCH SECURITY SHALL LIST THE EXACT WORK THAT SHALL BE PERFORMED BY THE APPLICANT AND SHALL SPECIFY THAT ALL OF THE DEFERRED IMPROVEMENTS SHALL BE COMPLETED WITHIN THE TIME SPECIFIED BY THE CITY ENGINEER, AND IF NO TIME IS SO SPECIFIED, THEN NOT LATER THAN ONE YEAR. ALL PLAT IMPROVEMENTS SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT FOR RESIDENTIAL CONSTRUCTION. REQUESTS TO CONCURRENTLY COMPLETE PLAT IMPROVEMENTS WITH BUILDING CONSTRUCTION PERMITS MUST BE MADE IN WRITING FOR REVIEW AND APPROVED BY THE CODE OFFICIAL IN CONSULTATION WITH CITY ENGINEER.

12. THE DEVELOPER SHALL SUBMIT AS-BUILT DRAWINGS SURVEYED BY A WASHINGTON STATE LICENSED PROFESSIONAL LAND SURVEYOR OF ALL UTILITY LINES, STORM DRAIN STUBS, WATER SERVICE LINES, AND DETAILED SIDE SEWER STUBS OR CONNECTIONS TO THE MUNICIPAL SEWAGE COLLECTION SYSTEM FOR EACH LOT PRIOR TO FINAL INSPECTION. AS-BUILT PLAN SHOULD BE PROVIDED IN HARDCOPY, AUTOCAD, DXF, AND PDF FORMAT TO BE INCORPORATED INTO THE CITY'S GIS SYSTEM.

13. A BILL OF SALE FOR ANY IMPROVEMENTS TO BE TRANSFERRED TO PUBLIC OWNERSHIP AND MAINTENANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO FINAL INSPECTION OF PLAT IMPROVEMENT.

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CONSTRUCTION NOTES & DETAILS
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