CITY OF MERCER ISLAND
DEVELOPMENT SERVICES GROUP
9611 SE 36TH STREET | MERCER ISLAND, WA 98040
PHONE: 206.275.7605 | www.mercergov.org

INSPECTION REQUESTS:
online: MyBuildingPermit.com
voicemail: (206) 275-7730

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:		Applicant Contact information *post* permit issuance:	
Name:	Jon Friedman	Name:	same
Address:	P.O. Box 481 Mercer Island Wa 98040	Address:	
Phone:	(206) 550-7954	Phone:	
Email:	jon@friedmanhomes.net	Email:	

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:____ Company:____ Phone:____
☐ General Conformance to Construction Documents ☐ Other:

SOILS / GEOTECHNICAL:
Special Inspector:____ Company:____ Phone:____
☐ 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)
☐ 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: *(AISC 360, Chapter N)*
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:____ Company:____ Phone:____
☐ Lateral resisting system construction ☐ High strength diaphragm construction
☐ Other: ☐ Other:

OTHER SPECIAL INSPECTIONS:
Special Inspector:____ Company:____ Phone:____
☐ Epoxy grout installations ☐ Stucco installation
☐ Expansion anchor installations ☐ Infiltration System
☐ Other post installed anchors ☐ Exterior Insulation Finish System (EIFS) installation
☐ Alternative construction methods: ☐ Other:
☐ Alternative construction materials: ☐ Other:

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 (RECPC) Form into the drawing set.

Sheet:
☐ Building envelope: *WSEC Table 402.1.1* (include U-factors, insulation and moisture control)
☐ Whole house ventilation: *IRC Section M1507 WA Amended* (include ventilation option and duct sizing if applicable)
☐ Energy Credit Information: *WSEC Table 406.2* (include specific, written requirements)
☐ RECPC Form Information: (if incorporated within drawing set) http://www.mercergov.org/files/2012ResidentialEnergyCalcForm.pdf

☑ Air Leakage Testing. *IRC Section R402.4.1.2 WA Amendments*
☑ Provide air leakage test report verifying air leakage rate does not to exceed 5 air changes per hour.
☑ Duct Leakage Testing. *WSEC R403.2.2*
☑ Postconstruction Test. *WSEC R403.2.2.1*
☑ Rough-in Test. *WSEC R403.2.2.3*

FILE NAME: DSG CVR 2016 24x36.PDF

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:
- Site Considerations
- Hours of Work
- Construction Vehicle Parking Restrictions
- Access Road Requirements
- ROW restrictions
- Drainage Requirements
- Sewer Requirements
- Water Service Requirements
- Additional Fire Code Requirements
- Planning Requirements
- Noise Abatement Certification
- Tree Requirements

☐ Refer to "Preconstruction Meeting Checklist" provided at the preconstruction meeting for development related requirements.
☑ 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.
☑ A City of Mercer Island Business License is required for all subcontractors. Call (206) 275-7783 for more information.

TREE PROTECTION REQUIREMENTS:
☑ 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.
☐ For this project, N/A trees are authorized to be removed and replaced with N/A trees.
☐ This project appears to be within a protected eagle nest area. Contact Federal Fish and Wildlife at (360) 534-9304 or visit their website at http://www.fws.gov/pacific/eagle

FIRE PROTECTION REQUIREMENTS:
Separate Permits are required for ALL fire protection systems. For more information, see http://www.mercergov.org/Page.asp?NaviD=2614

☐ Fire Sprinkler ☐ Monitored Household
☐ NFPA 13D Fire Alarm per NFPA 72
☐ Plus ☐ Monitored Sprinkler
☐ NFPA 13R Water Flow Alarm
☐ NFPA 13 ☐ Other:
☐ Approved Fire Code Alternatives:
☐ FCA1 ☐ FCA3
☐ FCA2 ☐ FCA4

WATER SUPPLY REQUIREMENTS:
☐ Fire sprinkler design calculations must be provided prior to determining water supply system requirements.
☐ Water Supply system upgrade required
☐ City Installation.
☐ Applicant Installation.
Required Service Line Size: N/A (water main to meter) Required Supply Line Size: N/A (water main to house) Required Meter Size: N/A
☐ Abandonment of existing service and meter required at main.
☑ Pressure reducing valve required if pressure exceeds 80 psi.
☑ Reduced pressure backflow assembly (RPBA) required for all lots with waterfront or non-city water supply (private wells or lake irrigation).
☐ Additional water supply requirements:

DRAINAGE REQUIREMENTS:
☐ On site detention system required. ☐ Direct discharge into the lake.
☐ On site infiltration system required. ☐ No Storm Water permit required.
☐ As-built Utility drawings required. ☐ Connection to public storm drainage conveyance system req'd.
☐ Full Size drawings required. ☐ Other:

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 or when side sewer is shared with one or more properties.
☐ Video tape of existing sewer required (see standard details)
☐ New connection. ☐ Connect to existing. Disconnect permit required. ☐ Reconnect permit required.
☐ Other:
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 ALTERNATIVES:
Code alternatives must be Inspected. Refer to the Inspection Checklist
☐ CA1: ☐ CA2:

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:

☐ **MAXIMUM 40 PERCENT ALTERATION INSPECTION:** *MICC 19.01.050(D)(1)(b)(i)*
A Building Inspection prior to demolition is required for all legally nonconforming single family dwelling to ensure no more than 40 percent of the dwelling's exterior walls are structurally altered. Contact the Building Inspector at (206) 275-7730.
☐ Civil / Drainage ☐ LUP / Setback requirements

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 ALL inspections appropriate for the project. Request inspections online at www.MyBuildingPermit.com or by calling the Inspection Hotline at (206) 275-7730. 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.*** It is the applicants responsibility to apply for and obtain all City of Mercer Island permits.
INSPECTIONS: *(Listed in order of typical sequencing)*

Inspector Date Approved
☐ Pre-construction Meeting to Review Conditions of Permit Approval.
•☐ Tree protection
☐ Erosion control
•☐ Sewer disconnect and cap. If applicable, separate side-sewer permit required
•☐ Right-of-way use or work / easement, material delivery, etc. If applicable, separate ROW permit required
☐ Land clearing, grading and demolition
☐ 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); Special Inspector reports of inspections (soil bearing capacity, compaction, earthwork, pile installation, etc.)
☐ Foundation walls / concrete columns
☐ Roof and footing drains
☐ Foundation dampproofing
•☐ Storm drainage, including (but not limited to):
- Connections to storm main in ROW
- Detention systems
- Infiltration systems
- Catch basins including oil-water separator tees
- Area drains
- Conveyance piping / cleanouts
- Storm drain in ROW
- Control structures / manholes
- Pump systems
- Retaining wall drainage

•☐ Water Service
☐ Water Supply
☐ Water as-built drawings
•☐ Side sewer installation, including (but not limited to):
- Connections to side sewer main
- Connections to existing side sewer
- Back-flow valves
- Grinder pump systems
- Sewer manholes

☐ Driveway / Access road
☐ Underslab electrical / mechanical / plumbing
☐ Underslab insulation / vapor barrier / reinforcing
☐ Underfloor framing
☐ Nailing-Roof sheathing. If applicable, provide Special Inspection letter for lateral wood inspection.
☐ Nailing-Exterior wall and Shearwall. If applicable, provide 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 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
☐ Code Alternative CA1:
☐ Code Alternative CA2:
☐ Impact Fees Paid (If applicable)

☐ **Final Inspection:** Tree Restoration ☐ TT
☐ **Final Inspection:** Fire protection, including (but not limited to): ☐ TF
- Sprinkler
- Access Road
- Fire Code Alternatives (see below)
  - ☐ FCA1: ☐ FCA3:
  - ☐ FCA2: ☐ FCA4:
- Fuel Tank Installation
- Fire Extinguishing System
- Fire Alarm System

☐ **Final Inspection:** Water supply protection, including (but not limited to) backflow devices for: ☐ TW
- Waterfront property
- Fire / lawn sprinkler
- Well water on property
- Boiler

☐ **Final Inspection:** Site and utility: includes landscape, utilities and ROW. Site 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.

Approved *Start Date* *End Date*

ADDITIONAL REQUIRED CITY INSPECTIONS:
Call the appropriate contact to arrange the inspection.

Required Inspection(s):	Contact:	Phone:	Scheduling:

IMPACT FEES:
If applicable.
☐ Impact fees apply and are due ***prior*** to Final Inspection or on ____, whichever occurs first.
Date

PLAN REVIEW APPROVALS:
Not all review disciplines may be required to review the documents.
☐ DC *Building* ☐ RP *Planning* ☐ N/A *Engineering* ☐ N/A *Tree* ☐ N/A *Fire*

REVISED: JULY 2019

SF

PERMIT NUMBER

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

PROJECT NAME: 2265 LLC, SFR

PROJECT ADDRESS: 8005 SE 34th PL

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

REVIEWED FOR CODE COMPLIANCE
Approved *Date*

N
W E
S

GRAPHIC SCALE
5 0 5 10 20
1 INCH = 10 FT.

LEGEND

FOUND MONUMENT IN CASE	— OHP — OVERHEAD POWER
FOUND REBAR AS DESCRIBED	CATCH BASIN
SET MAG NAIL AS DESCRIBED	WOOD FENCE
MAILBOX	CONCRETE WALL
POWER METER	ROCKERY
UTILITY POLE	ASPHALT SURFACE
SANITARY SEWER MANHOLE	CONCRETE SURFACE
WATER VALVE	DS DECIDUOUS
FIRE HYDRANT	FR FRUIT
WATER METER	* INDICATES MULTI-TRUNK
SIGN	
— SS — APPROXIMATE LOCATION SANITARY SEWER LINE	
— SD — APPROXIMATE LOCATION STORM DRAIN LINE	
— W — APPROXIMATE LOCATION UNDERGROUND WATER LINE	

LEGAL DESCRIPTION

LOT 24, LUCAS HILL DIVISION NO. 5, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 61 OF PLATS, PAGE 100, RECORDS OF KING COUNTY, WASHINGTON;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

RECORD OF SURVEY BY NORTH POINTE SURVEYING, INC, FOR WILLIAM SIMMONS, AS RECORDED ON NOVEMBER 30, 2004, IN VOLUME 179 OF SURVEYS, PAGES 223 AND 224, UNDER RECORDING NO. 20041130900003, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR:	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
PROPERTY OWNER:	CORINNE ISRAEL 8005 SE 34TH PLACE MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	445830-0240
PROJECT ADDRESS:	8005 SE 34TH PLACE MERCER ISLAND, WA 98040
ZONING:	R-8.4
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	9,953 S.F. (0.228 ACRES) AS SURVEYED

GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.

2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.

3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN SEPTEMBER 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.

5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

VERTICAL DATUM & CONTOUR INTERVAL

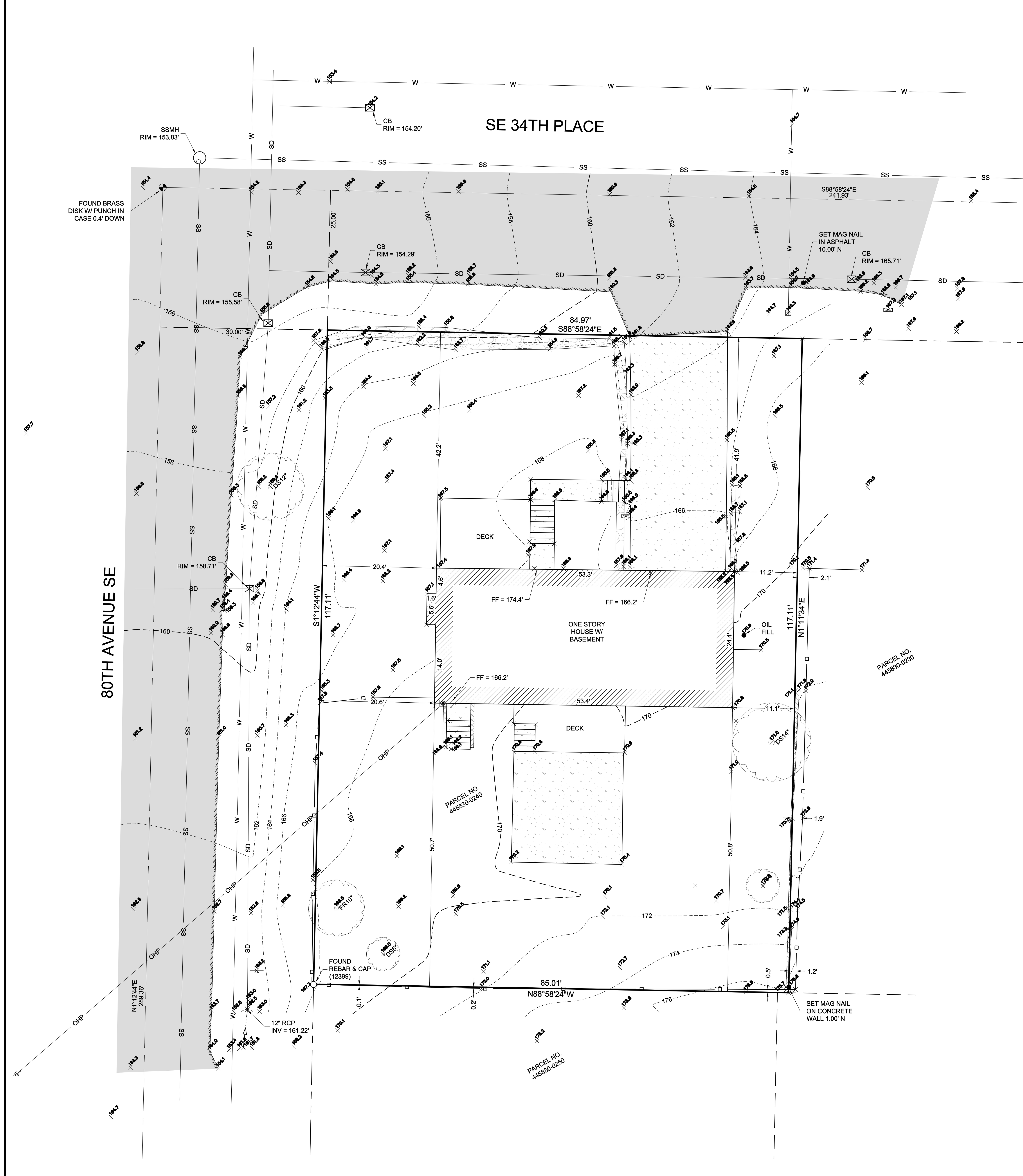
DATUM

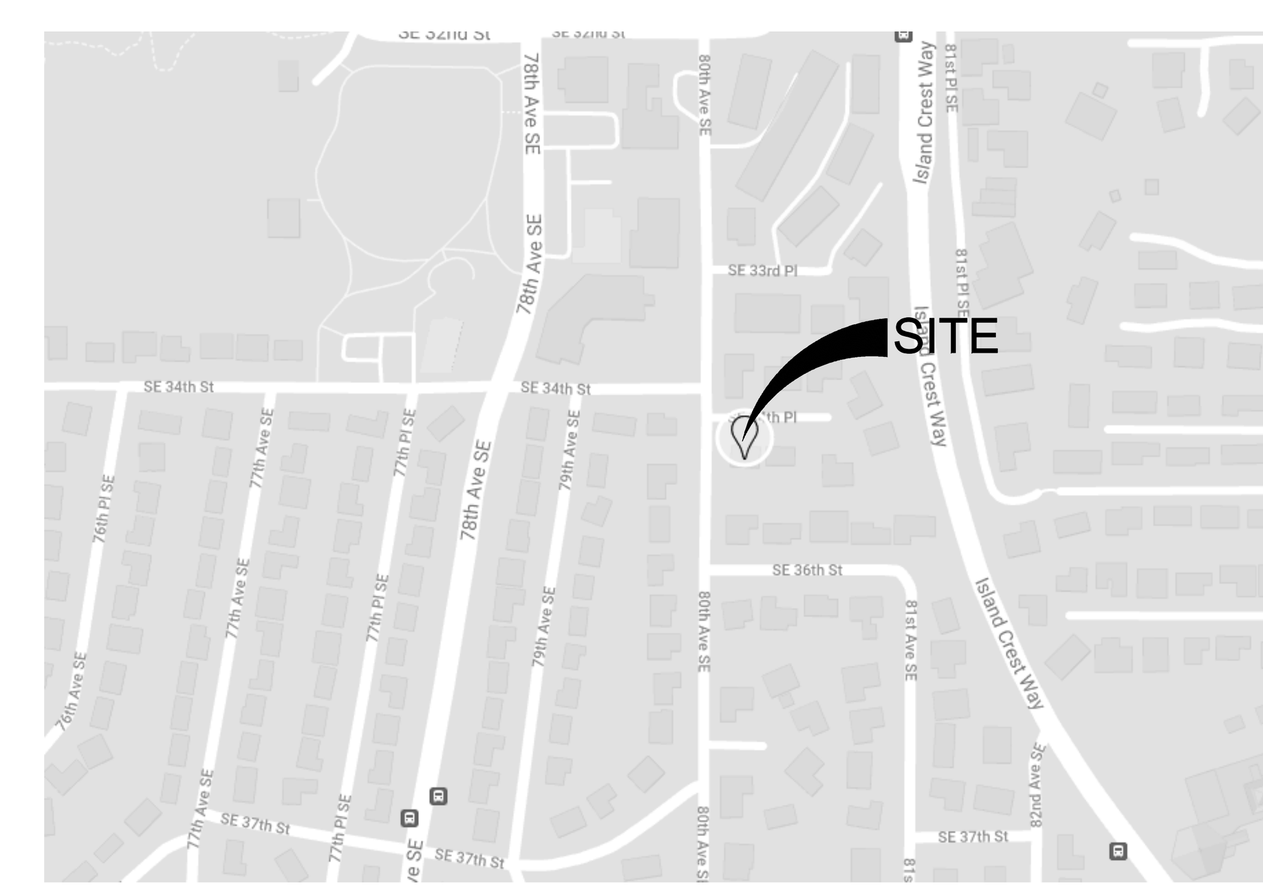
ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A BRASS CAP IN CONCRETE MONUMENT IN CASE AT THE INTERSECTION OF SE 34TH PLACE AND 80TH AVENUE SE.

POINT ID NO. 520;
ELEVATION: 153.865 FEET (46.898 METERS) NAVD 88

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





VICINITY MAP
NTS

NE 1/4, SE 1/4, SEC 12, TWP 24N, RNG 4E, W.M.

Site Surveying, Inc.
www.sitesurveymapping.com 21923 NE 11th Street Sammamish, WA 98074 Phone: 425.298.4412

12/16/21

DATE	REVISION	DRN

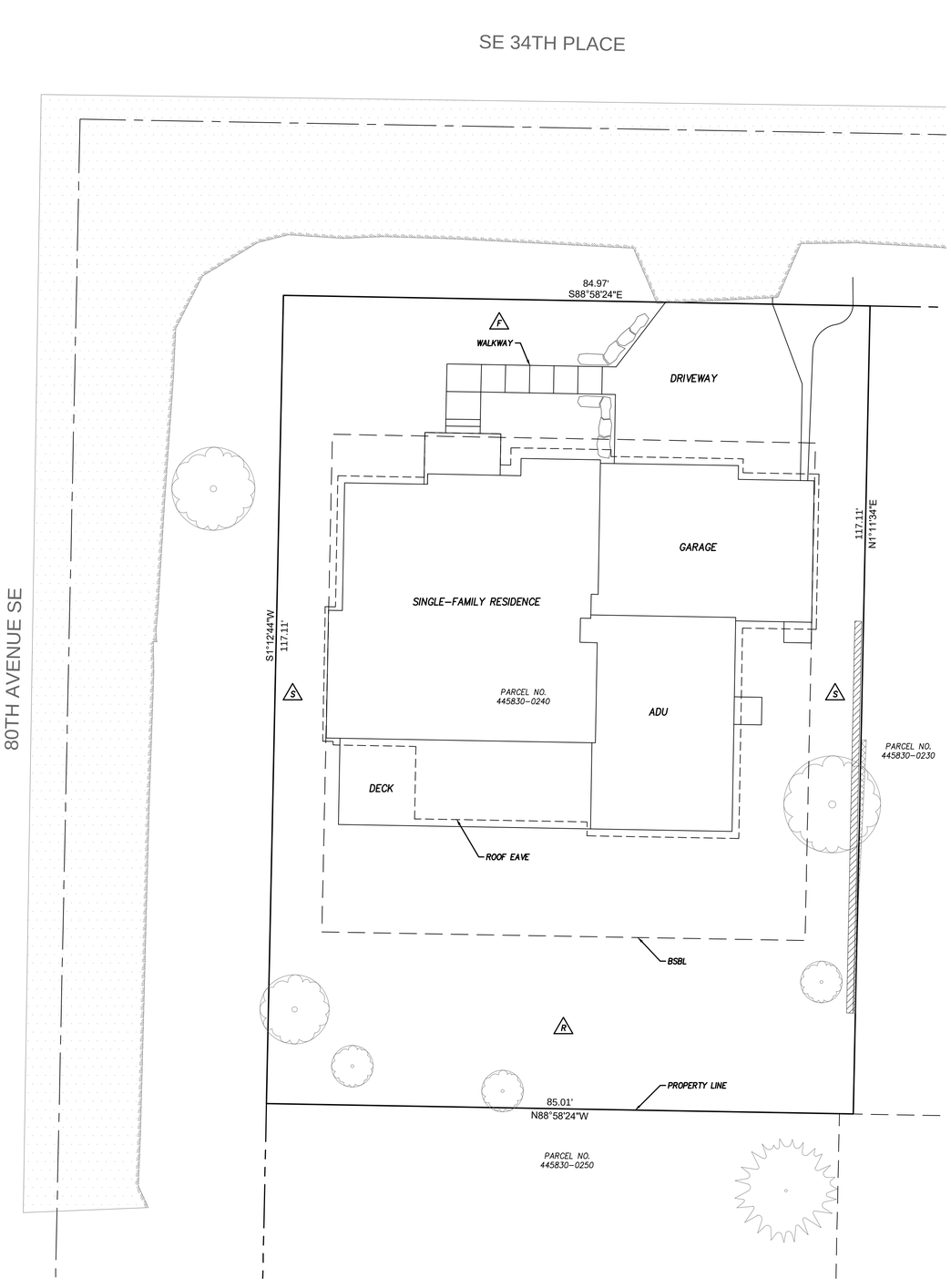
TOPOGRAPHIC SURVEY
FRIEDMAN HOMES
8005 SE 34TH PLACE
MERCER ISLAND, WA 98040

PROJECT NO. 21-610

DRAWN BY: MTS
CHECKED BY: TNW
DATE: 9/28/2021
SHEET 1 OF 1

8005 SE 34TH PL RESIDENCE

NE 1/4 OF NE 1/4 OF SECTION 12, T. 24 N., R. 04 E., W.M.
CITY OF MERCER ISLAND, STATE OF WASHINGTON



VICINITY MAP
NTS

SURVEY LEGEND

- FOUND MONUMENT IN CASE
- FOUND REBAR AS DESCRIBED
- SET MAG NAIL AS DESCRIBED
- MAILBOX
- POWER METER
- UTILITY POLE
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- SIGN
- SS — APPROXIMATE LOCATION SANITARY SEWER LINE
- SD — APPROXIMATE LOCATION STORM DRAIN LINE
- W — APPROXIMATE LOCATION UNDERGROUND WATER LINE
- OHP — OVERHEAD POWER
- CATCH BASIN
- WOOD FENCE
- CONCRETE WALL
- ROCKERY
- ASPHALT SURFACE
- CONCRETE SURFACE
- DS DECIDUOUS
- FR FRUIT

* INDICATES MULTI-TRUNK

PROJECT TEAM:

OWNER:	JON FRIEDMAN FRIEDMAN HOMES PO BOX 481 MERCER ISLAND, WA 98040 (206) 550-7954
ENGINEER:	COSTA PHILIPPIDES, PE ENCOMPASS ENGINEERING & SURVEYING 165 N.E. JUNIPER STREET, SUITE 201 ISSAQUAH, WA 98027 (425) 392-0250
SURVEYOR:	THOMAS N. WOLDENDORP SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 (425) 298-4412
ARCHITECT:	MARCUS JENKINS ARCHITECTS NORTHWEST 18915 142ND AVE NE, SUITE 100 WOODINVILLE, WA 98072 (425) 485-4900
GEOTECHNICAL ENGINEER:	KYLE R. CAMPBELL, PE EARTH SOLUTIONS NW, LLC 15365 NE 90TH ST, SUITE 100 REDMOND, WA 98052 (425) 449-4704

SITE DATA:

SITE ADDRESS:	8005 SE 34TH PL MERCER ISLAND, 98040
SITE AREA:	(9,953) SF (0.228 ACRES)
TAX PARCEL:	445830-0240
ZONING:	R-8.4

UTILITY INFORMATION:

SEWER/WATER:	CITY OF MERCER ISLAND
FIRE DISTRICT:	CITY OF MERCER ISLAND
CABLE TV:	COMCAST (800) 934-6489
ELECTRIC/GAS:	PUGET SOUND ENERGY (888) 321-7779

BSBL DISTANCES:

- F — FRONT YARD: 20'
- R — REAR YARD: 25'
- S — SIDE YARD: 7.5' (15' TOTAL)

IMPERVIOUS AREA SUMMARY:

ROOF:	3,315 SF
WALKWAY:	128 SF
DRIVEWAY:	565 SF
DECK:	152 SF
	4,160 SF (0.096 AC)

NOTES:

1. ALL CONSTRUCTION TECHNIQUES AND MATERIALS SHALL BE PER CITY OF MERCER ISLAND STANDARDS/SPECIFICATIONS.
2. SOIL SHALL BE AMENDED PER CITY STANDARDS. SEE SOIL AMENDMENT NOTES ON SHEET 2.

TAX PARCEL:

445830-0240

HORIZONTAL DATUM:

NAD 83/89

BASIS OF BEARINGS:

RECORD OF SURVEY BY NORTH POINTE SURVEYING, INC, FOR WILLIAM SIMMONS, AS RECORDED ON NOVEMBER 30, 2004, IN VOLUME 179 OF SURVEYS, PAGES 223 AND 224, UNDER RECORDING NO. 20041130900003, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM:

NAVD 88

BENCHMARK:

THE MARK IS A BRASS CAP IN CONCRETE MONUMENT IN CASE AT THE INTERSECTION OF SE 34TH PLACE AND 80TH AVENUE SE.

POINT ID NO. 520;
ELEVATION: 153.865 FEET (46.898 METERS) NAVD 88

INSTRUMENTATION:

INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.

LEGAL DESCRIPTION:

LOT 24, LUCAS HILL DIVISION NO. 5, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 61 OF PLATS, PAGE 100, RECORDS OF KING COUNTY, WASHINGTON;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

SHEET INDEX:

REVISIONS

DESCRIPTION	BY	DATE

STATE OF WASHINGTON
COSTA PHILIPPIDES
38375
REGISTERED
PROFESSIONAL ENGINEER

12/03/2021

8005 SE 34TH PL RESIDENCE
JON FRIEDMAN
COVER

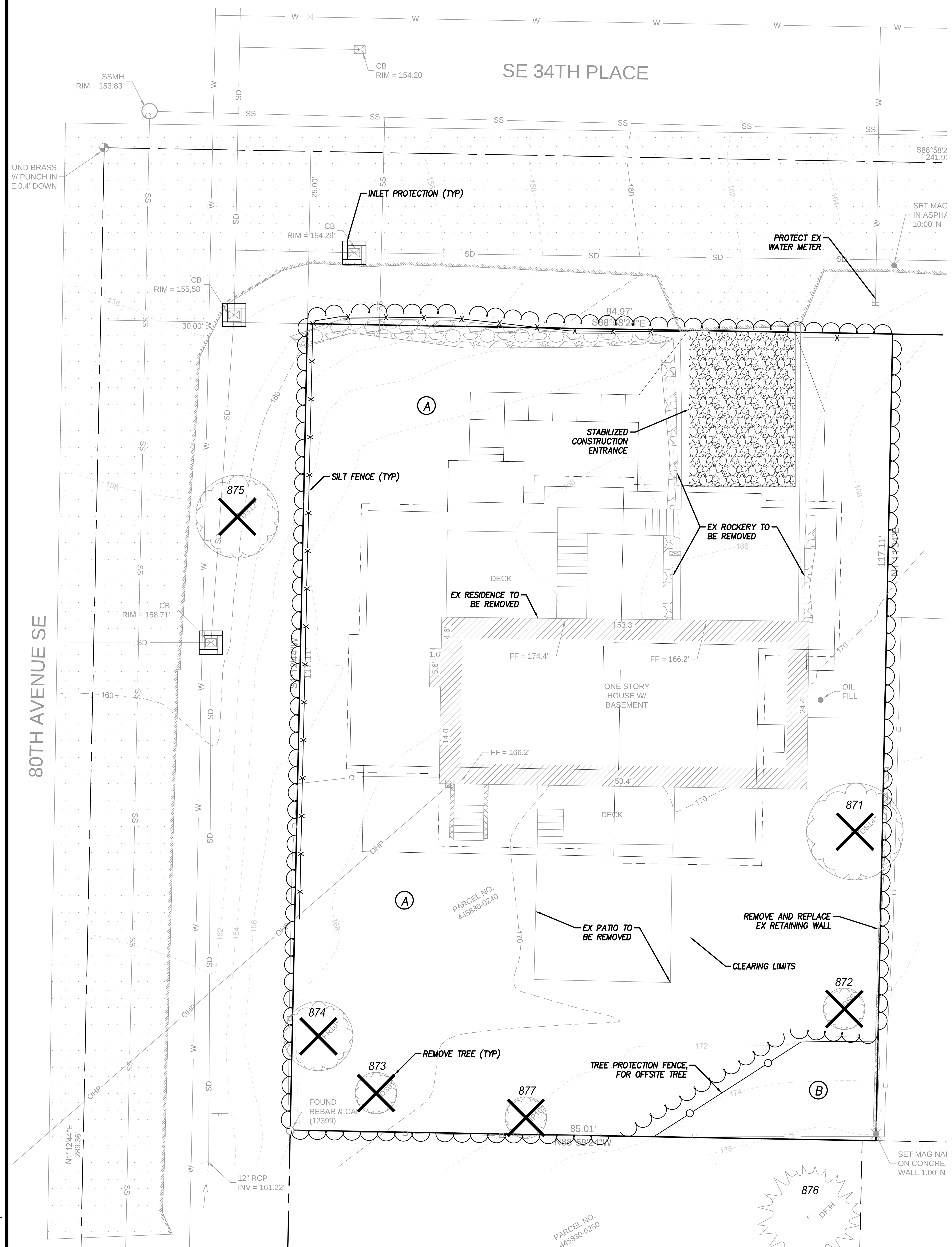
Encompass
ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Eastern Washington Division
407 Swiftwater Blvd • Cle Elum, WA 98922 • Phone: (509) 674-7433

JOB NO.	21720
DATE	12/03/2021
SCALE	1"=10'
DESIGNED	IWD
DRAWN	TNF
CHECKED	CP
APPROVED	CP
SHEET	1

FILENAME: J:\21\21720 - JON FRIEDMAN\ENGINEERING\PLAN SHEETS\1-COVER.DWG

8005 SE 34TH PL RESIDENCE

NE 1/4 OF NE 1/4 OF SECTION 12, T. 24 N., R. 04 E., W.M.
CITY OF MERCER ISLAND, STATE OF WASHINGTON



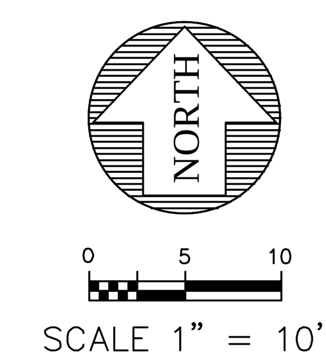
TREE TABLE		
NUMBER	TYPE	DBH (INCH)
871	CHERRY	15.0
872	CHERRY	5.3
873	APPLE	8.2
874	APPLE	14.5
875	RED ALDER	13.4
876	DOUGLAS FIR	38.0
877	ITALIAN PLUM	10.5

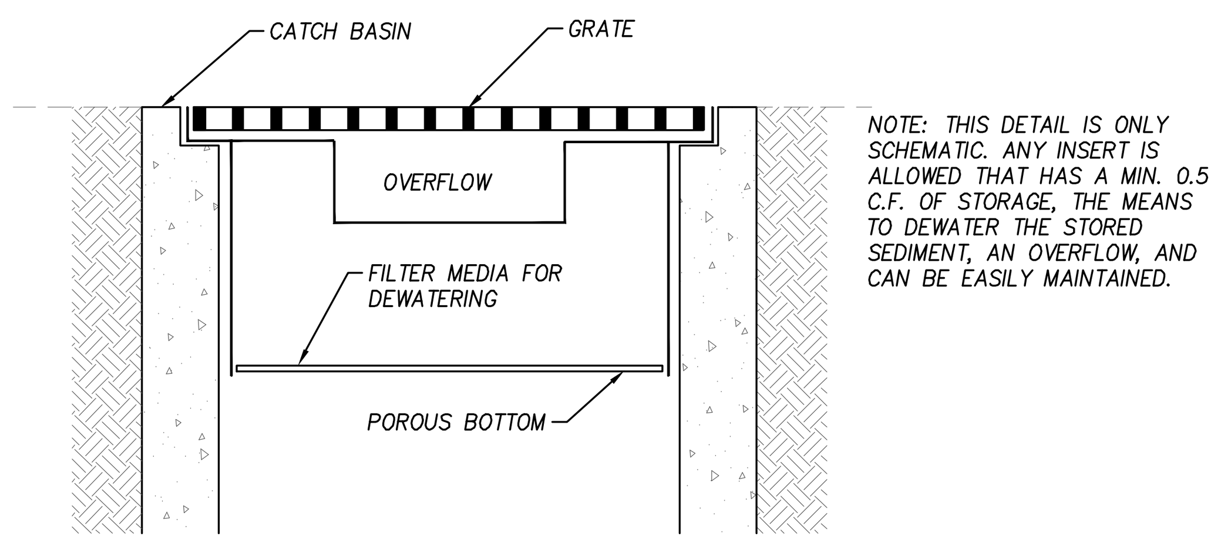
NOTE: SEE ARBORIST REPORT FOR ADDITIONAL TREE INFORMATION

SOIL MANAGEMENT AREAS:

(A) STOCKPILE EXISTING TOP SOIL, REPLACE AND AMEND AS NEEDED

(B) UNDISTURBED EXISTING SOIL





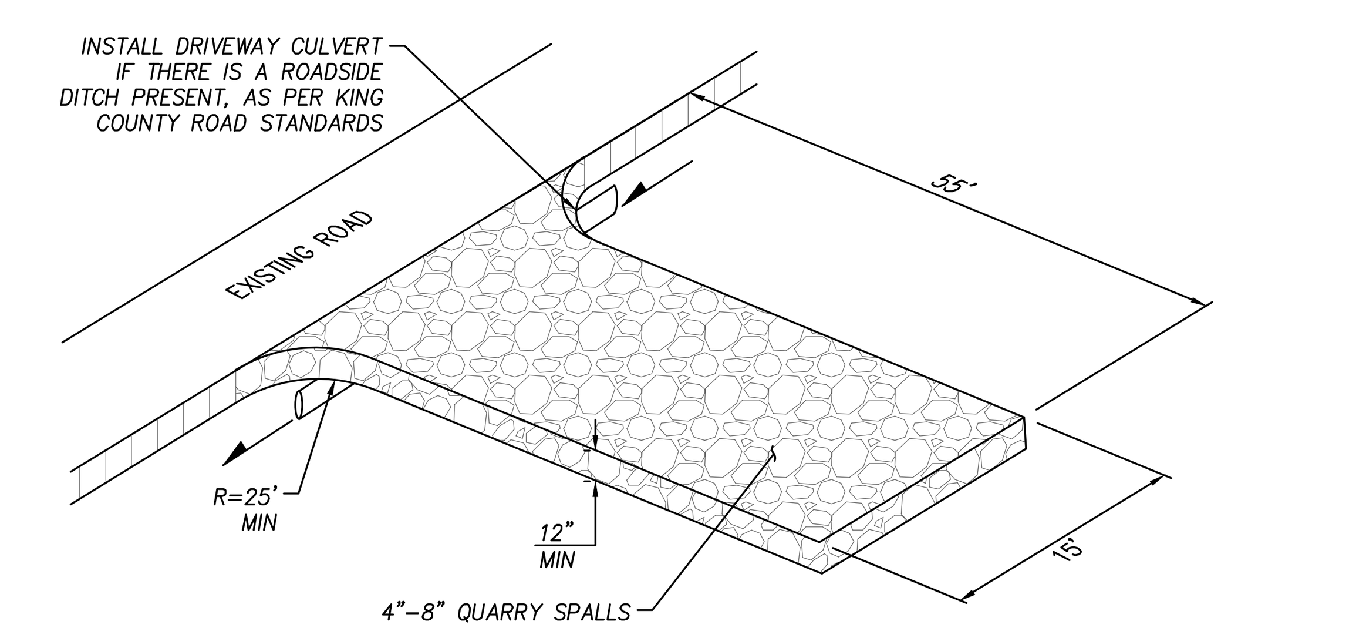
NOTE: THIS DETAIL IS ONLY SCHEMATIC. ANY INSERT IS ALLOWED THAT HAS A MIN. 0.5 C.F. OF STORAGE, THE MEANS TO DEWATER THE STORED SEDIMENT, AN OVERFLOW, AND CAN BE EASILY MAINTAINED.

MAINTENANCE STANDARDS

1. ANY ACCUMULATED SEDIMENT ON OR AROUND THE FILTER FABRIC PROTECTION SHALL BE REMOVED IMMEDIATELY. SEDIMENT SHALL NOT BE REMOVED WITH WATER, AND ALL SEDIMENT MUST BE DISPOSED OF AS FILL ON-SITE OR HAULED OFF-SITE.
2. ANY SEDIMENT IN THE CATCH BASIN INSERT SHALL BE REMOVED WHEN THE INSERT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE. THE FILTER MEDIA FOR THE INSERT SHALL BE CLEANED OR REPLACED AT LEAST MONTHLY.
3. REGULAR MAINTENANCE IS CRITICAL FOR BOTH FORMS OF CATCH BASIN PROTECTION. UNLIKE MANY FORMS OF PROTECTION THAT FAIL GRADUALLY, CATCH BASIN PROTECTION WILL FAIL SUDDENLY AND COMPLETELY IF NOT MAINTAINED PROPERLY.

CATCH BASIN PROTECTION DETAIL

NO SCALE

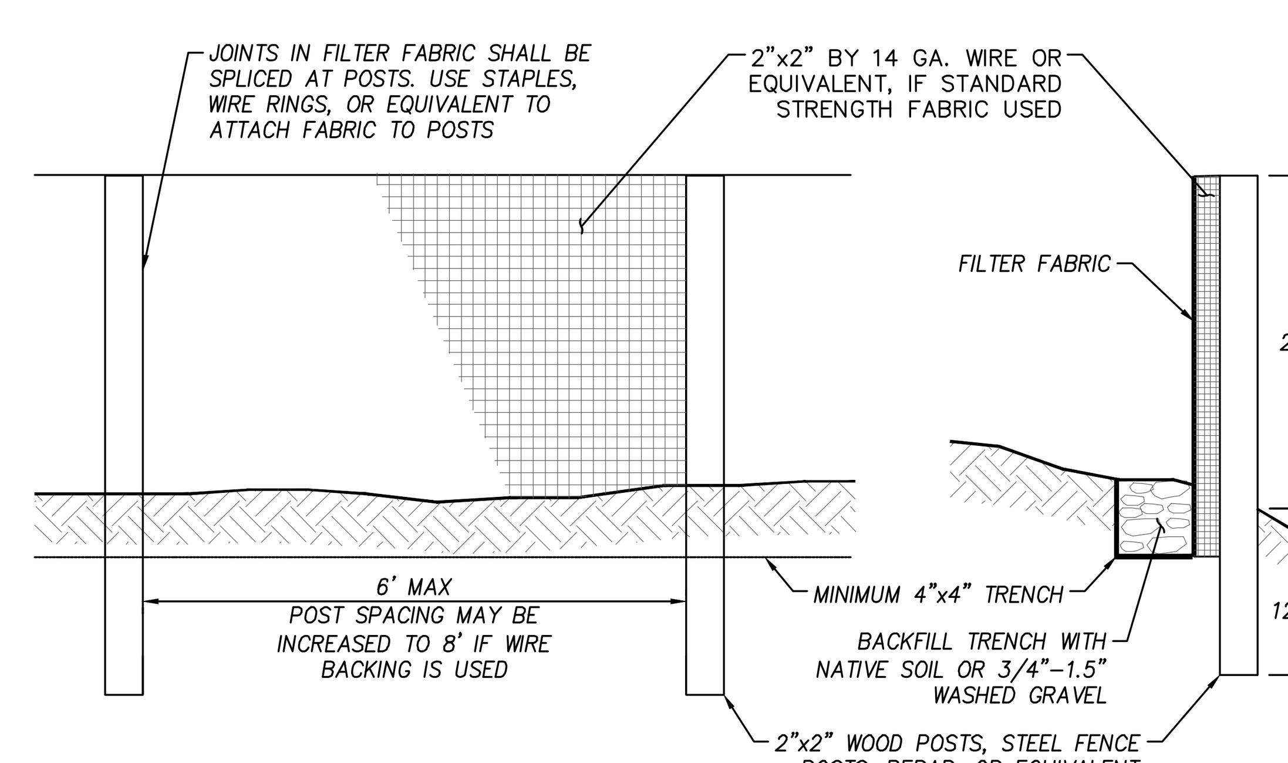


MAINTENANCE:

1. QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, A SMALL SUMP MUST BE CONSTRUCTED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP WHERE IT CAN BE CONTROLLED. WASH WATER MUST BE PUMPED BACK ONTO THE SITE AND CAN NOT DISCHARGE TO SYSTEMS TRIBUTARY TO SURFACE WATERS.
4. ANY QUARRY SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING SHALL BE INSTALLED TO CONTROL TRAFFIC.

CONSTRUCTION ENTRANCE DETAIL

NO SCALE

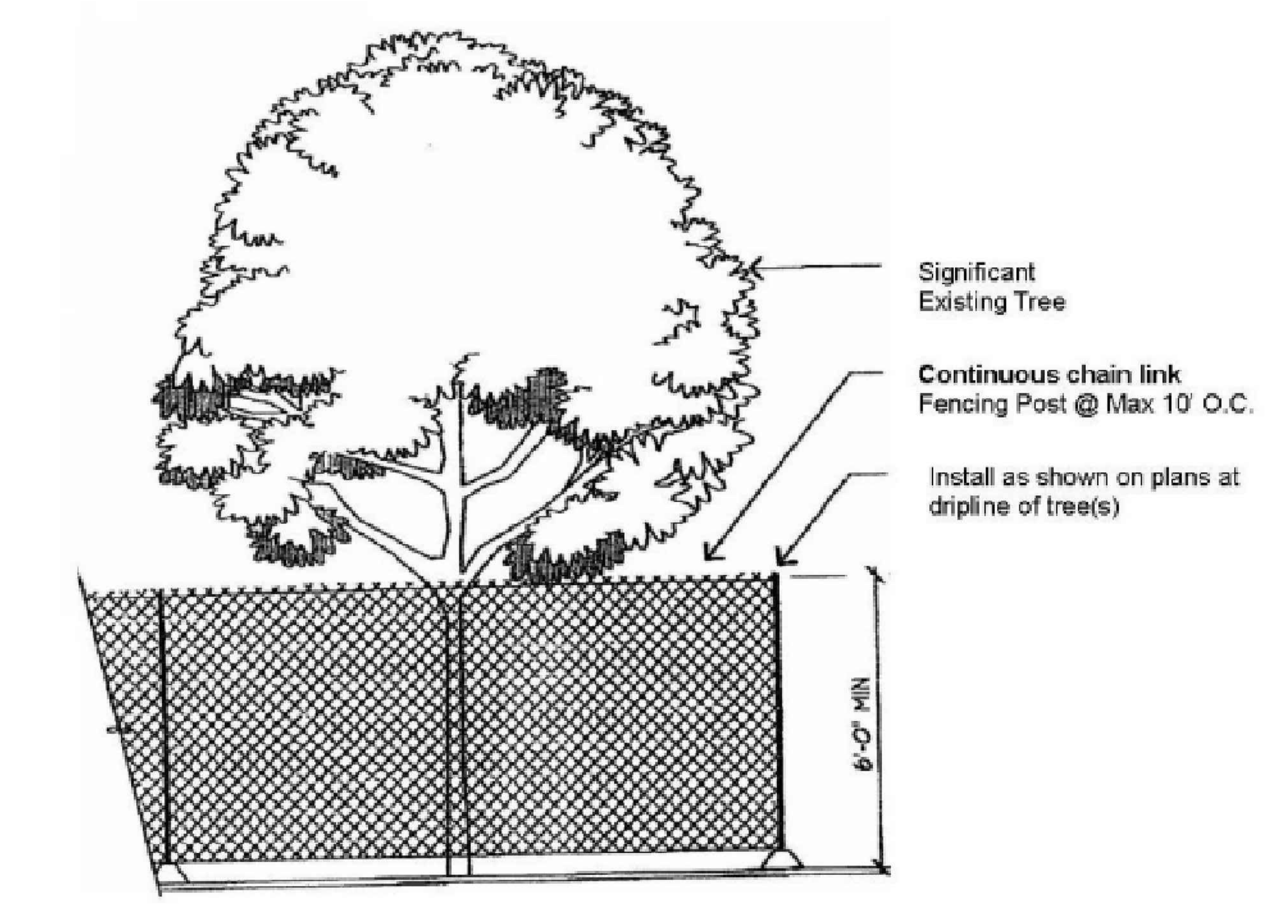


MAINTENANCE:

1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
4. SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6 INCHES HIGH.
5. IF THE FILTER FABRIC (GEOTEXTILE) HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

SILT FENCE

NO SCALE



Six-foot high temporary chain link fence shall be placed as shown on plans. Fence shall completely encircle tree(s). Install fence posts using pier blocks only. Avoid driving posts or stakes into major roots.

Make a clean straight cut to remove damaged portion of root for all roots over 1" in diameter damaged during construction. *All* exposed roots shall be temporarily covered with damp burlap and covered with soils the same day, if possible, to prevent drying. If not possible, burlap must be kept moist at all times.

Work with the protection fencing shall be done manually. No stockpiling of materials, soil, debris, vehicle traffic, or storage of equipment or machinery shall be allowed within the limit of the fencing.

Cement trucks must not be allowed to deposit waste or wash out materials from their trucks within the Tree Protection Fences.

The area within the Tree Protection Fencing must be covered with wood chips, hog fuel, or similar materials to a depth of 8 to 10 inches. The materials should be placed prior to beginning construction and remain until the Tree Protection Fencing is taken down.

TREE PROTECTION FENCE DETAIL

NO SCALE

POST-CONSTRUCTION SOIL MANAGEMENT

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP T5.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.

BMP T5.13: POST-CONSTRUCTION SOIL QUALITY AND DEPTH (FROM 2014 DEPT. OF ECOLOGY SWMMWW)
NATURALLY OCCURRING (UNDISTURBED) SOIL AND VEGETATION PROVIDE IMPORTANT STORMWATER FUNCTIONS INCLUDING: WATER INFILTRATION; NUTRIENT, SEDIMENT, AND POLLUTANT ADSORPTION; SEDIMENT AND POLLUTANT BIOFILTRATION; WATER INTERFLOW STORAGE AND TRANSMISSION; AND POLLUTANT DECOMPOSITION. THESE FUNCTIONS ARE LARGELY LOST WHEN DEVELOPMENT STRIPS AWAY NATIVE SOIL AND VEGETATION AND REPLACES IT WITH MINIMAL TOPSOIL AND SOD. NOT ONLY ARE THESE IMPORTANT STORMWATER FUNCTIONS LOST, BUT SUCH LANDSCAPES THEMSELVES BECOME POLLUTION GENERATING PERVIOUS SURFACES DUE TO INCREASED USE OF PESTICIDES, FERTILIZERS AND OTHER LANDSCAPING AND HOUSEHOLD/INDUSTRIAL CHEMICALS, THE CONCENTRATION OF PET WASTES, AND POLLUTANTS THAT ACCOMPANY ROADSIDE LITTER.
ESTABLISHING SOIL QUALITY AND DEPTH REGAINS GREATER STORMWATER FUNCTIONS IN THE POST DEVELOPMENT LANDSCAPE, PROVIDES INCREASED TREATMENT OF POLLUTANTS AND SEDIMENTS THAT RESULT FROM DEVELOPMENT AND HABITATION, AND MINIMIZES THE NEED FOR SOME LANDSCAPING CHEMICALS, THUS REDUCING POLLUTION THROUGH PREVENTION.
ESTABLISHING A MINIMUM SOIL QUALITY AND DEPTH IS NOT THE SAME AS PRESERVATION OF NATURALLY OCCURRING SOIL AND VEGETATION. HOWEVER, ESTABLISHING A MINIMUM SOIL QUALITY AND DEPTH WILL PROVIDE IMPROVED ON-SITE MANAGEMENT OF STORMWATER FLOW AND WATER QUALITY.
SOIL ORGANIC MATTER CAN BE ATTAINED THROUGH NUMEROUS MATERIALS SUCH AS COMPOST, COMPOSTED WOODY MATERIAL, BIOSOLIDS, AND FOREST PRODUCT RESIDUALS. IT IS IMPORTANT THAT THE MATERIALS USED TO MEET THE SOIL QUALITY AND DEPTH BMP BE APPROPRIATE AND BENEFICIAL TO THE PLANT COVER TO BE ESTABLISHED. LIKEWISE, IT IS IMPORTANT THAT IMPORTED TOPSOILS IMPROVE SOIL CONDITIONS AND DO NOT HAVE AN EXCESSIVE PERCENT OF CLAY FINES.

STEP 1
IDENTIFY AREAS OF THE SITE THAT WILL NOT BE DISTURBED DURING CONSTRUCTION (CLEARED, GRADED, OR DRIVEN ON). FENCE THOSE AREAS TO PREVENT IMPACTS DURING CONSTRUCTION. IF NEITHER SOILS NOR VEGETATION ARE DISTURBED, THESE AREAS DO NOT REQUIRE AMENDMENT.

STEP 2
IN DISTURBED AREAS (COMPACTED BY CONSTRUCTION TRAFFIC):
- SCARIFY THE TOP 4 INCHES OF SUBSOIL
- USE A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER TO MIX THE FIRST LIFT OF TOPSOIL INTO THE SUBSOIL (KNOWN AS SCARIFYING, RIPPING, OR TILLING)
- USE THE EQUIPMENT LISTED IN THE PREVIOUS BULLET TO SCARIFY (TILL OR RIP) SOILS TO A DEPTH OF 12 INCHES BEFORE TILLING IN AT LEAST 8 INCHES OF COMPOST

STEP 3
THREE OPTIONS TO RESTORE DISTURBED SOILS INCLUDE:
OPTION 1: TILL COMPOST (1.75 INCHES FOR TURF AREAS; 3 INCHES FOR PLANTING BEDS) INTO EXISTING SOIL, OR

OPTION 2: STOCKPILE AND REUSE EXISTING TOPSOIL (AMEND IF NEEDED TO MEET 5% ORGANIC MATTER CONTENT FOR TURF AREAS; 10% ORGANIC MATTER CONTENT FOR PLANTING BEDS), OR

OPTION 3: IMPORT 6 INCHES OF COMPOST-AMENDED TOPSOIL (25% COMPOST FOR TURF AREAS; 40% COMPOST FOR PLANTING BEDS) AND SCARIFY (TILL OR RIP) INTO EXISTING SOIL IN TWO 3-INCH LIFTS

TREE PROTECTION MEASURES

TREE PROTECTION FENCING FOR DEMOLITION:

- TREE PROTECTION FENCES WILL NEED TO BE PLACED AROUND EACH TREE OR GROUP OF TREES TO BE RETAINED.
- TREE PROTECTION FENCES ARE TO BE PLACED ACCORDING TO THE ATTACHED DRAWINGS.
- TREE PROTECTION FENCES MUST BE INSPECTED AND APPROVED BY THE CITY PRIOR TO THE BEGINNING OF ANY DEMOLITION OR CONSTRUCTION WORK ACTIVITIES.
- NOTHING MUST BE PARKED OR STORED WITHIN THE TREE PROTECTION FENCES—NO EQUIPMENT, VEHICLES, SOIL, DEBRIS, OR CONSTRUCTION SUPPLIES OF ANY SORTS.
- THE AREA OUTSIDE THE TREE PROTECTION FENCES IS THE WORK/DEVELOPMENT ZONE.
- THE AREA INSIDE THE TREE PROTECTION FENCING IS THE TREE PROTECTION ZONE.
- FENCES SHALL BE ANCHORED SO THEY CAN NOT BE MOVED

SIGNS:
- THE TREE PROTECTION FENCES NEED TO BE CLEARLY MARKED WITH THE FOLLOWING OR SIMILAR TEXT IN FOUR INCH OR LARGER LETTERS:
  "TREE PROTECTION FENCE
  DO NOT ENTER THIS AREA
  DO NOT PARK OR STORE MATERIALS
  WITHIN THE PROTECTION AREA"

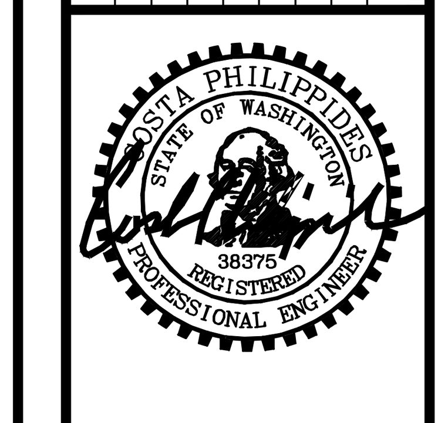
- ANY QUESTIONS, CONTACT MERCER ISLAND CODE COMPLIANCE: (206) 275-7712 CODECOMPLIANCE@MERCERGOV.ORG
- TREE PROTECTION FENCES MUST BE INSPECTED AND APPROVED BY THE CITY PRIOR TO ANY DEMOLITION OR CLEAN-UP WORK BEGINNING.
- ANY EXCAVATION, INCLUDING FOUNDATION, NEAR TREES 451, 453 OR 455 SHALL HAVE ARBORIST SUPERVISION
- MINIMIZE OVER EXCAVATION FOR FOUNDATIONS
- THE ARBORIST SHALL SUPERVISE TREE/SHRUB REMOVAL– AVOID ALL DAMAGE TO EXCEPTIONAL AND CITY TREE ROOTS

MULCH:
- THE AREA WITHIN THE TREE PROTECTION FENCING MUST BE COVERED WITH WOOD CHIPS, HOG FUEL, OR SIMILAR MATERIALS TO A DEPTH OF 6 TO 8 INCHES. THE MATERIALS SHOULD BE PLACED PRIOR TO BEGINNING CONSTRUCTION AND REMAIN UNTIL THE TREE PROTECTION FENCING IS TAKEN DOWN.

CANOPY PRUNING:
- THE CANOPIES OF SOME OF THE TREES MAY NEED TO PROPERLY PRUNED TO ALLOW FOR EQUIPMENT, BUILDING, AND CONSTRUCTION CLEARANCE. THE PRUNING MUST BE DONE BY AN INTERNATIONAL SOCIETY OF ARBORICULTURE, (ISA) CERTIFIED ARBORIST USING CURRENT INDUSTRY STANDARD PRUNING TECHNIQUES. (ANSI A300 PRUNING STANDARDS AND ANSI Z131.1 SAFETY STANDARDS AS WELL AS ALL OSHA, WISHA, AND LOCAL STANDARDS MUST BE FOLLOWED.)
- PLANT DEBRIS CAN BE CHIPPED AND UTILIZED ON SITE FOR THE MULCH UNDER THE TREES.

DEMOLITION AND REMOVAL OF THE EXISTING IMPROVEMENTS:
- WHEN DEMOLITION OCCURS, CONSTRUCTION EQUIPMENT MUST BE KEPT OUTSIDE THE TREE PROTECTION ZONE.
- DEMOLITION MUST BE FOLLOW THIS PROCESS TO PROTECT THE LONG TERM SURVIVABILITY OF THE TREES:
- AN INTERNATIONAL SOCIETY OF ARBORICULTURE, (ISA) CERTIFIED ARBORIST MUST BE WORKING WITH AND IN CONTROL OF ALL EQUIPMENT OPERATORS.
- THE CERTIFIED ARBORIST SHOULD BE OUTFITTED WITH A SHOVEL, HAND PRUNERS, A PAIR OF LOPPERS, A HANDSAW, AND A POWER SAW (A RECIPROCATING SAW, SUCH AS A "SAWSALL" IS RECOMMENDED).

REVISIONS		
DESCRIPTION	BY	DATE



12/03/2021

8005 SE 34TH PL RESIDENCE

JON FRIEDMAN

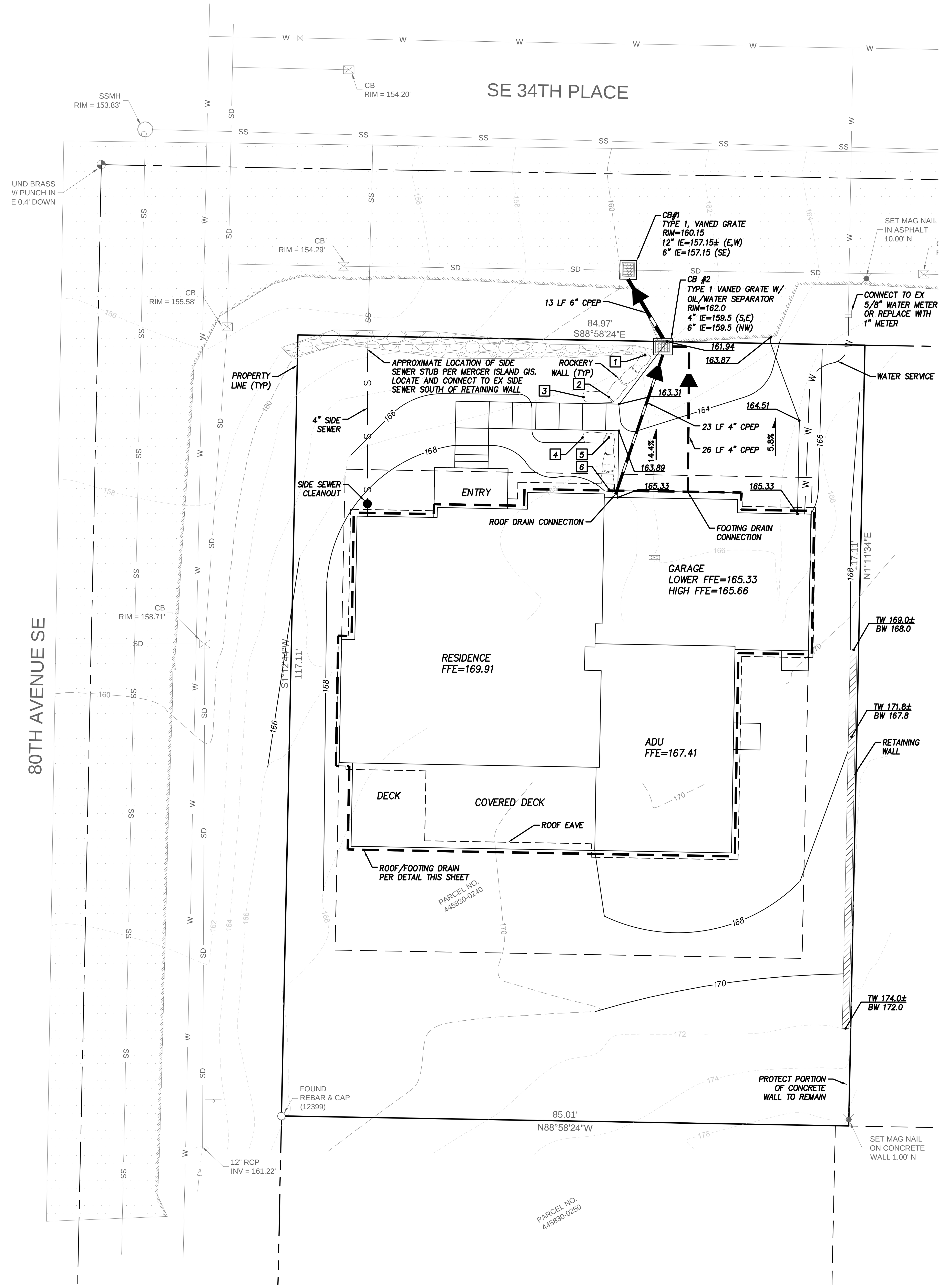
EROSION CONTROL PLAN AND NOTES

Encompass ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Eastern Washington Division
407 Swiftwater Blvd. • Cle Elum, WA 98922 • Phone: (509) 674-7433

JOB NO.	21720
DATE	12/03/2021
SCALE	SCALE
DESIGNED	IWD
DRAWN	TNF
CHECKED	CP
APPROVED	CP
SHEET	2

8005 SE 34TH PL RESIDENCE

NE 1/4 OF NE 1/4 OF SECTION 12, T. 24 N., R. 04 E., W.M.
CITY OF MERCER ISLAND, STATE OF WASHINGTON

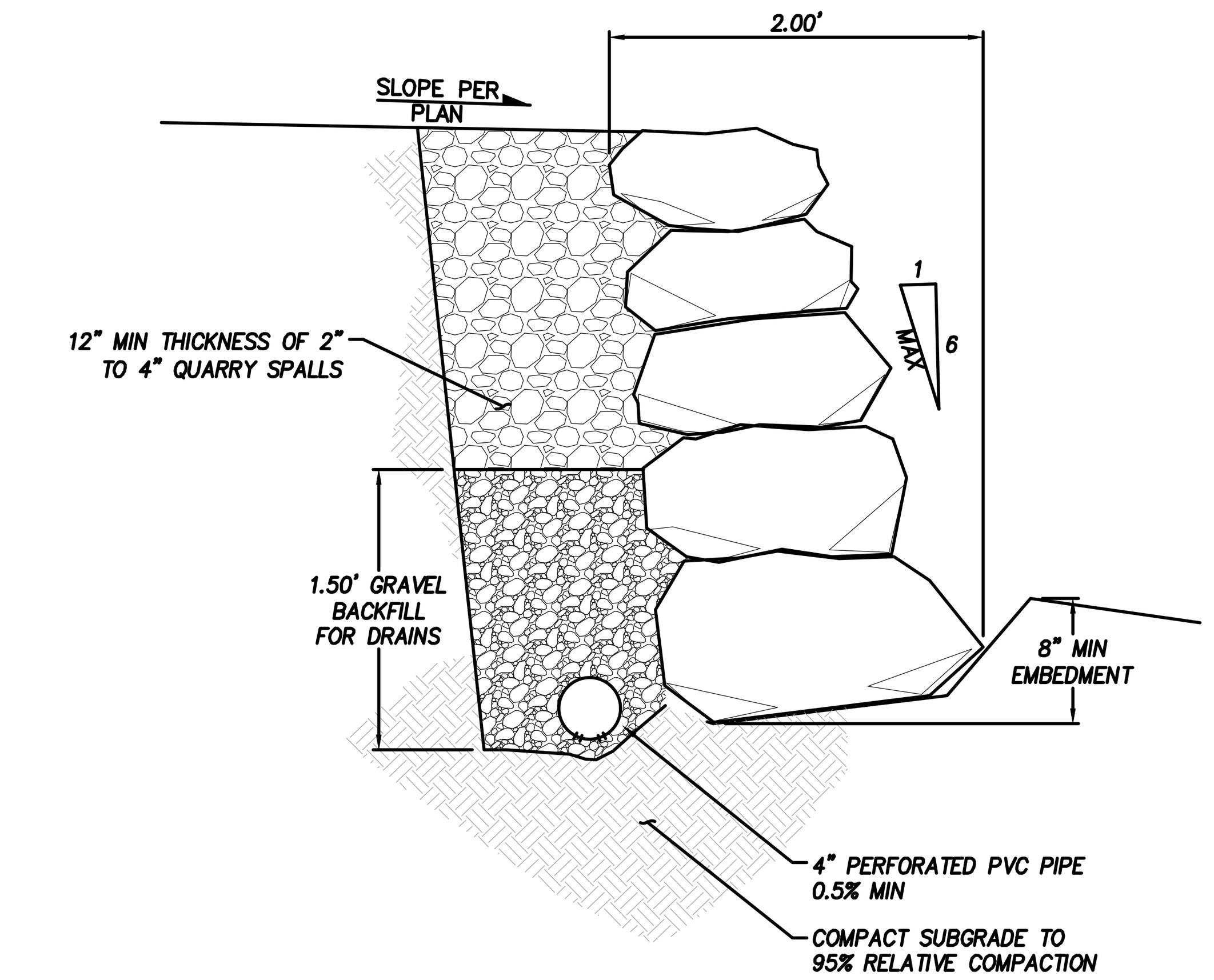


SE 34TH PLACE
80TH AVENUE SE
SSMH RIM = 153.83'
CB RIM = 154.20'
CB RIM = 154.29'
CB RIM = 155.58'
CB RIM = 158.71'
UND BRASS W/ PUNCH IN E 0.4' DOWN
SET MAG NAIL IN ASPHALT 10.00' N
CB#1 TYPE 1, VANED GRATE RIM=160.15 12" IE=157.15± (E,W) 6" IE=157.15 (SE)
CB #2 TYPE 1 VANED GRATE W/ OIL/WATER SEPARATOR RIM=162.0 4" IE=159.5 (S,E) 6" IE=159.5 (NW)
13 LF 6" CPEP
84.97' S88°58'24"E
CONNECT TO EX 5/8" WATER METER OR REPLACE WITH 1" METER
WATER SERVICE
PROPERTY LINE (TYP)
APPROXIMATE LOCATION OF SIDE SEWER STUB PER MERCER ISLAND GIS. LOCATE AND CONNECT TO EX SIDE SEWER SOUTH OF RETAINING WALL
ROCKERY WALL (TYP)
4" SIDE SEWER
SIDE SEWER CLEANOUT
23 LF 4" CPEP
26 LF 4" CPEP
14.4%
5.8%
161.34
163.87
163.31
164.51
163.89
165.33
ENTRY
ROOF DRAIN CONNECTION
FOOTING DRAIN CONNECTION
GARAGE LOWER FFE=165.33 HIGH FFE=165.66
RESIDENCE FFE=169.91
ADU FFE=167.41
DECK
COVERED DECK
ROOF EAVE
ROOF/FOOTING DRAIN PER DETAIL THIS SHEET
117.11' N1°11'34"E
117.11' S1°12'44"W
TW 169.0± BW 168.0
TW 171.8± BW 167.8
RETAINING WALL
TW 174.0± BW 172.0
PROTECT PORTION OF CONCRETE WALL TO REMAIN
FOUND REBAR & CAP (12399)
85.01' N88°58'24"W
SET MAG NAIL ON CONCRETE WALL 1.00' N
12" RCP INV = 161.22'
PARCEL NO. 445830-0240
PARCEL NO. 445830-0250
NORTH
0 5 10
SCALE 1" = 10'

WALL HEIGHTS	
1	TW=164.35 BW=162.16
2	TW=165.75 BW=163.31
3	TW=166.00 BW=164.47
4	TW=167.00 BW=164.47
5	TW=167.23 BW=163.89
6	TW=168.00 BW=165.33

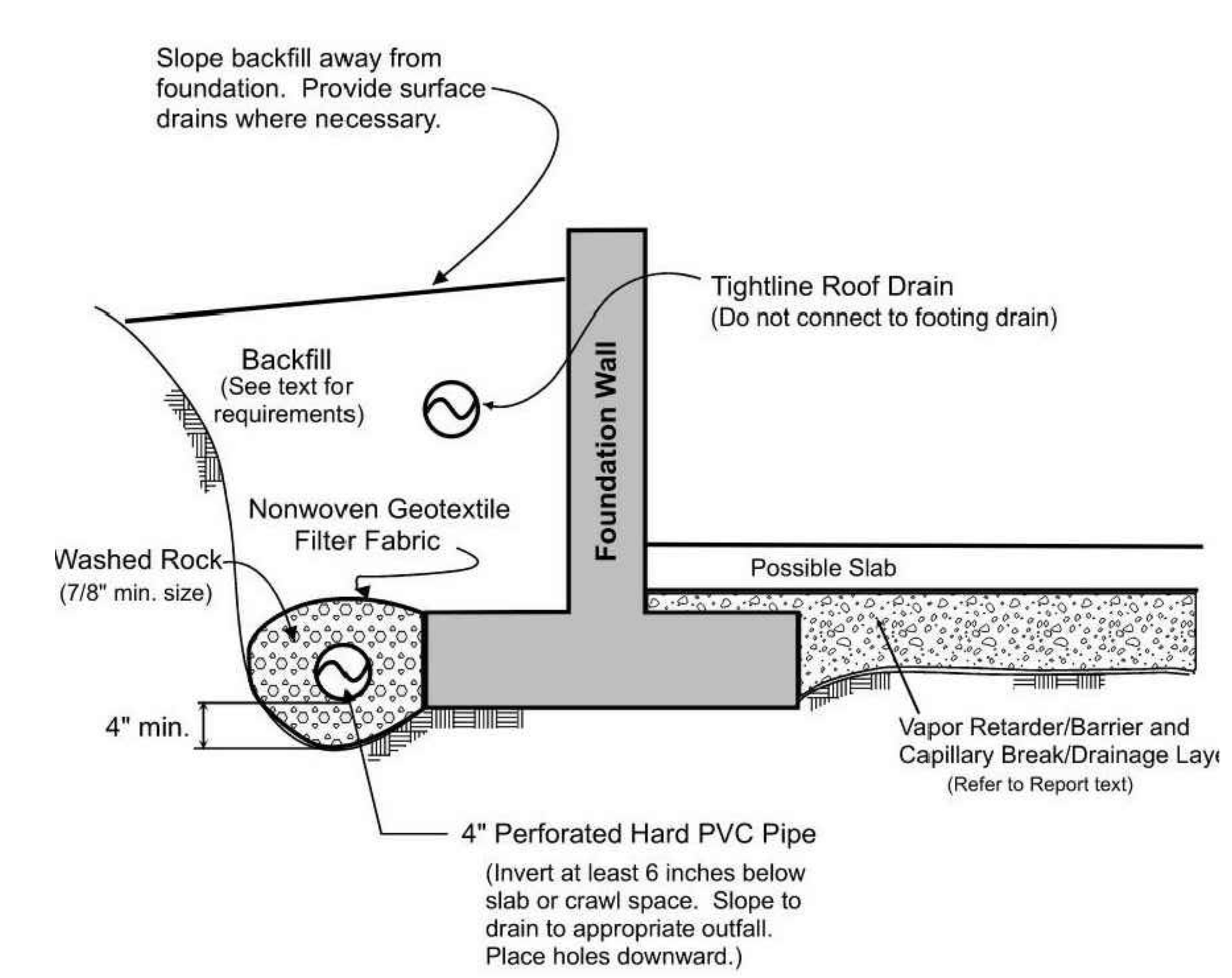
ESTIMATED EARTHWORK QUANTITIES

CUT: 230 CY
FILL: 180 CY
NET: 50 CY (CUT)



ROCKERY WALL DETAIL

NO SCALE

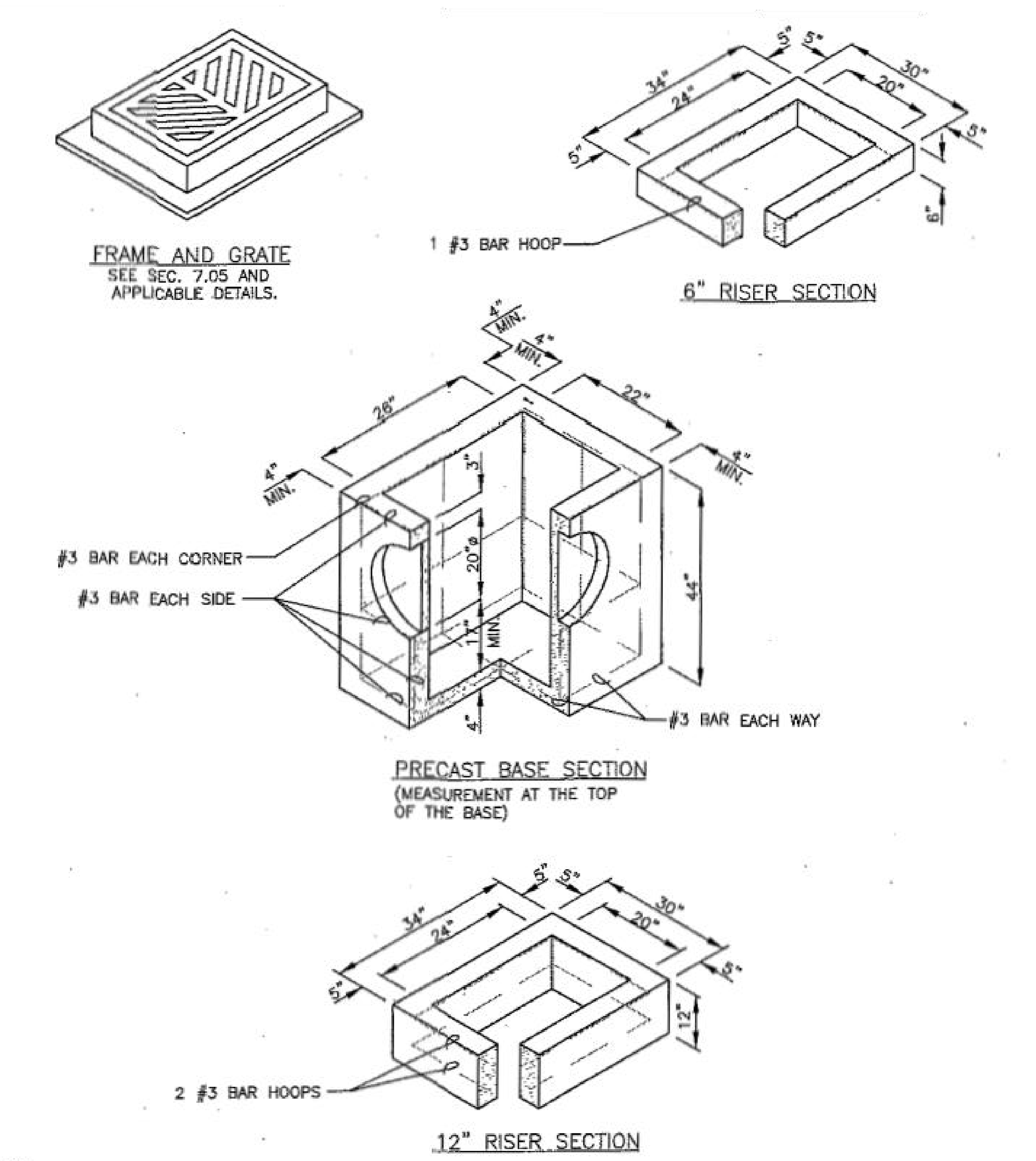


Slope backfill away from foundation. Provide surface drains where necessary.
Tightline Roof Drain (Do not connect to footing drain)
Backfill (See text for requirements)
Foundation Wall
Nonwoven Geotextile Filter Fabric
Washed Rock (7/8" min. size)
Possible Slab
4" min.
Vapor Retarder/Barrier and Capillary Break/Drainage Layer (Refer to Report text)
4" Perforated Hard PVC Pipe (Invert at least 6 inches below slab or crawl space. Slope to drain to appropriate outfall. Place holes downward.)

NOTES:
(1) In crawl spaces, provide an outlet drain to prevent buildup of water that bypasses the perimeter footing drains.
(2) Refer to report text for additional drainage, waterproofing, and slab considerations.

ROOF/FOOTING DRAIN DETAIL

NO SCALE



NOTES:

1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AASHTO M 199 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE WSDOT/APWA STANDARD SPECIFICATIONS.
2. AS AN ACCEPTABLE ALTERNATIVE TO REBAR, WELDED WIRE FABRIC HAVING A MIN. AREA OF 0.12 SQ. IN. PER FT. MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A497 (AASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN KNOCKOUTS.
3. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.
4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2 IN. MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
5. KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAM. PLUS CATCH BASIN WALL THICKNESS.
6. ROUND KNOCKOUTS MAY BE ON ALL 4 SIDES, WITH MAX. DIAM. OF 20 IN. KNOCKOUTS MAY BE EITHER ROUND OR "D" SHAPE.
7. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5 FT.
8. THE TAPER ON THE SIDES OF THE PRECAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2" PER FT.
9. CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION RR-F-621E. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
10. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.
11. FOR CATCH BASINS IN PARKING LOTS REFER TO WSDOT/APWA STANDARD DWG. B-5.60-01.
12. EDGE OF RISER OR BRICK SHALL NOT BE MORE THAN 2 IN. FROM VERTICAL EDGE OF CATCH BASIN WALL.
13. SEE THE WSDOT/APWA STANDARD SPECIFICATIONS SECTION 9-05.15 FOR METAL CASTINGS REQUIREMENTS.

TYPE 1 CATCH BASIN DETAIL

NO SCALE

REVISIONS		
DESCRIPTION	BY	DATE

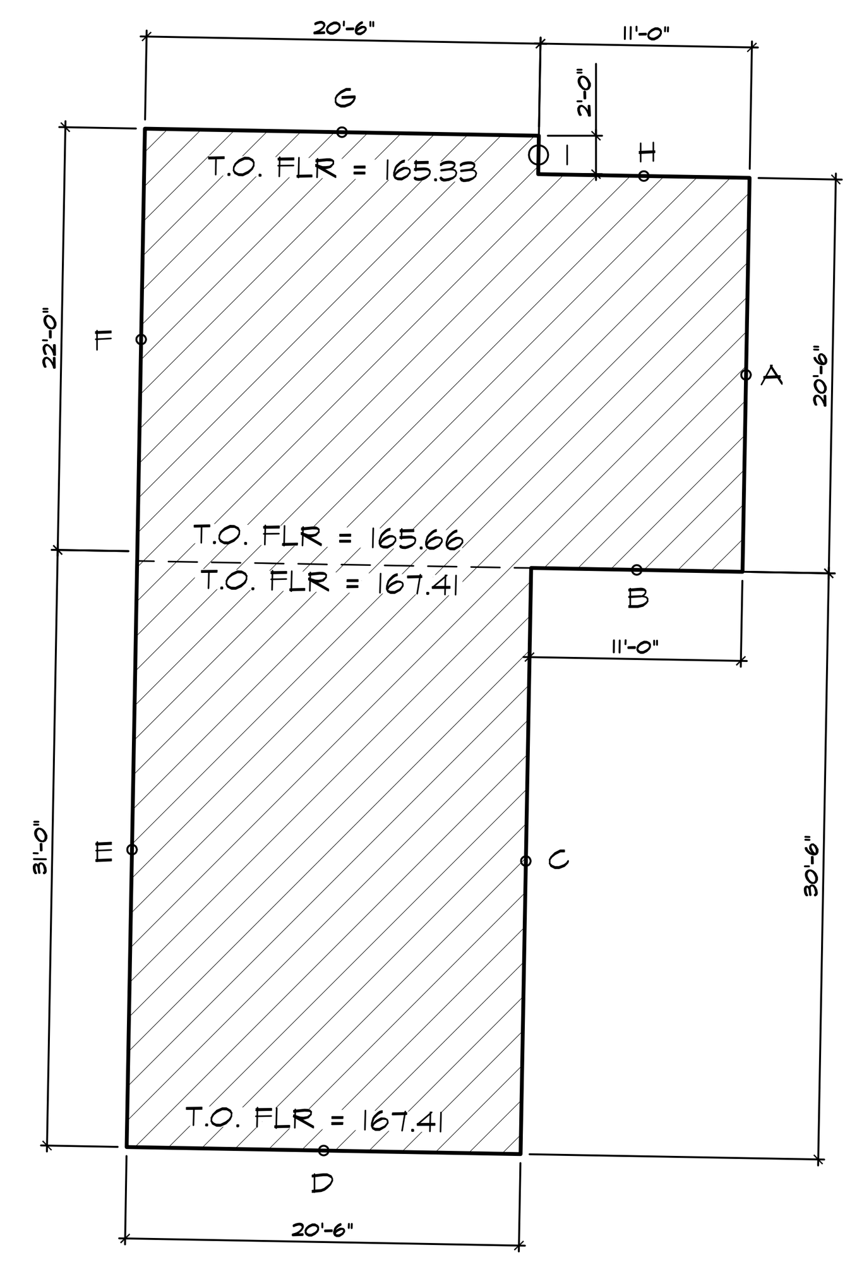
COSTA PHILIPPIDES, STATE OF WASHINGTON, 38375, REGISTERED PROFESSIONAL ENGINEER
12/03/2021

8005 SE 34TH PL RESIDENCE
JON FRIEDMAN
GRADING AND UTILITY PLAN

Encompass ENGINEERING & SURVEYING
Western Washington Division
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Eastern Washington Division
407 Swiftwater Blvd. • Cle Elum, WA 98922 • Phone: (509) 674-7433

JOB NO.	21720
DATE	12/03/2021
SCALE	1"=10'
DESIGNED	IWD
DRAWN	TNF
CHECKED	CP
APPROVED	CP
SHEET	3

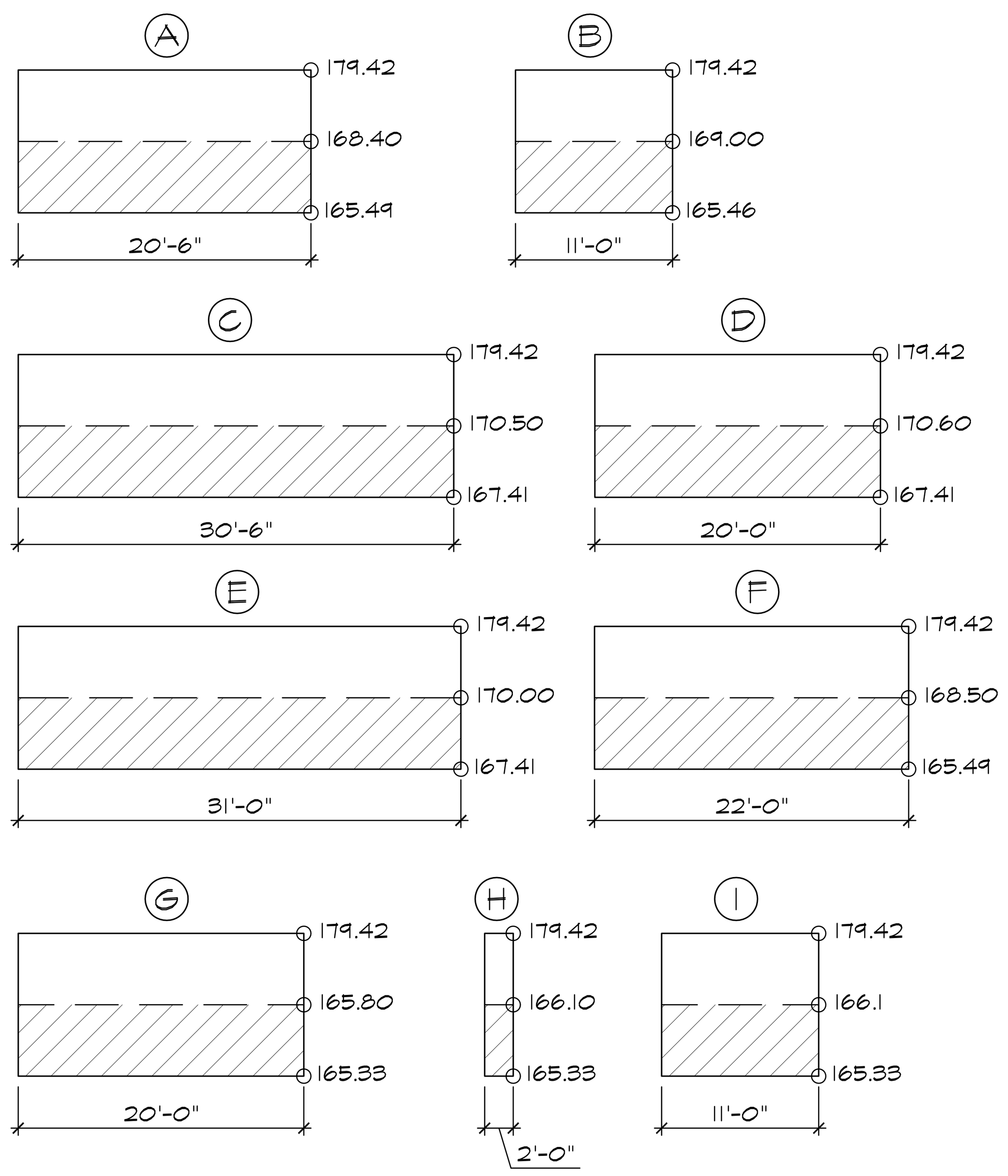
FILENAME: J:\21\21720 - JON FRIEDMAN\ENGINEERING\PLAN SHEETS\3-GRAD.DWG



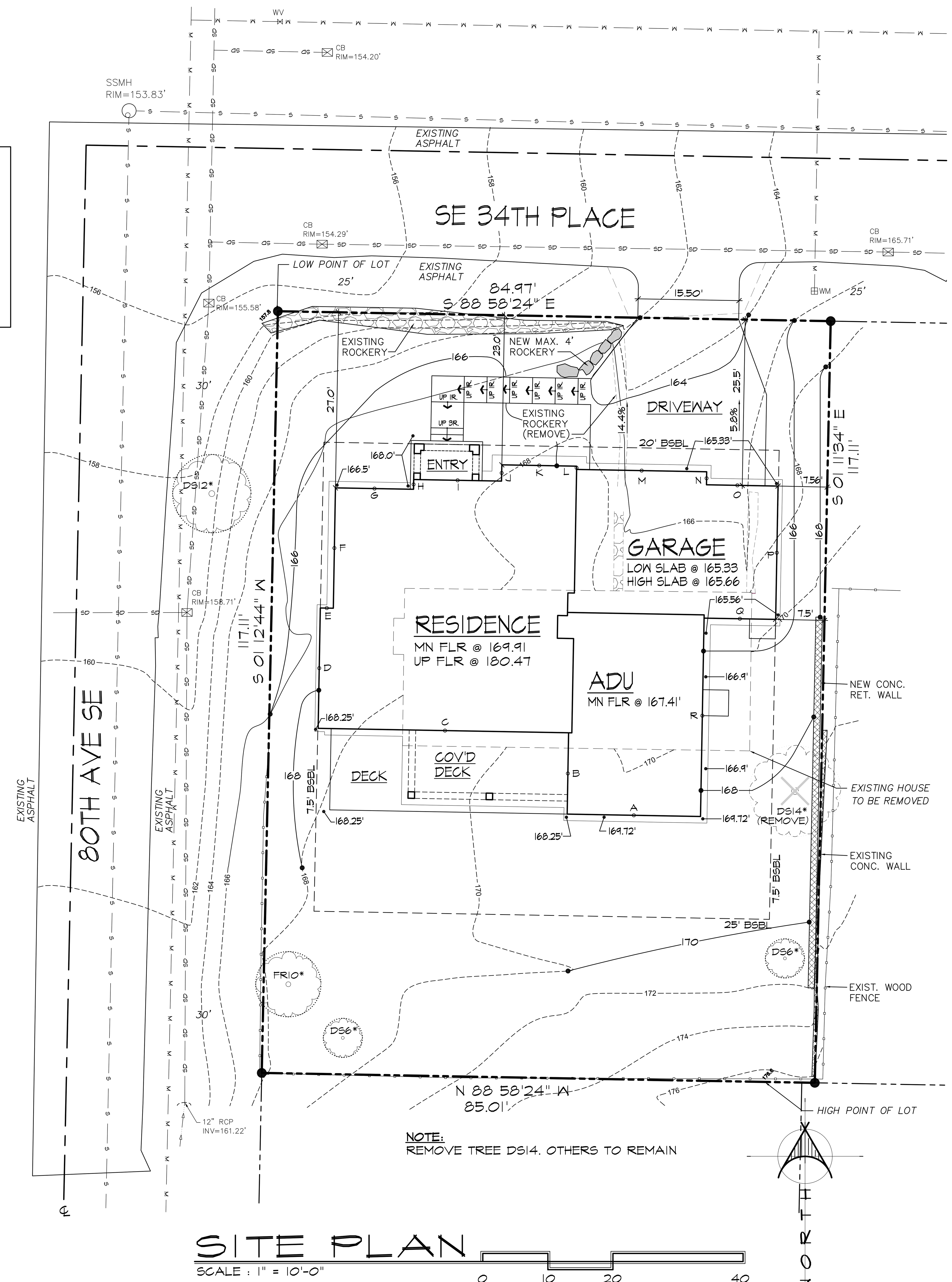
WALL SEGMENT	WALL LENGTH	X COVERAGE =	RESULT
A	20.50	20.89%	4.28
B	11.00	24.43%	2.69
C	30.50	25.73%	7.85
D	20.00	26.66%	5.33
E	31.00	21.16%	6.56
F	22.00	21.61%	4.75
G	20.00	3.35%	0.67
H	2.00	5.46%	0.11
I	11.00	5.46%	0.60
TOTALS:	168.00		32.84

1312 SF X 32.84 / 168.00
1312 X 19.55% = 256.49 SF

256.49 SF EXCLUDED FROM THE GROSS FLOOR AREA



BASEMENT EXEMPTION



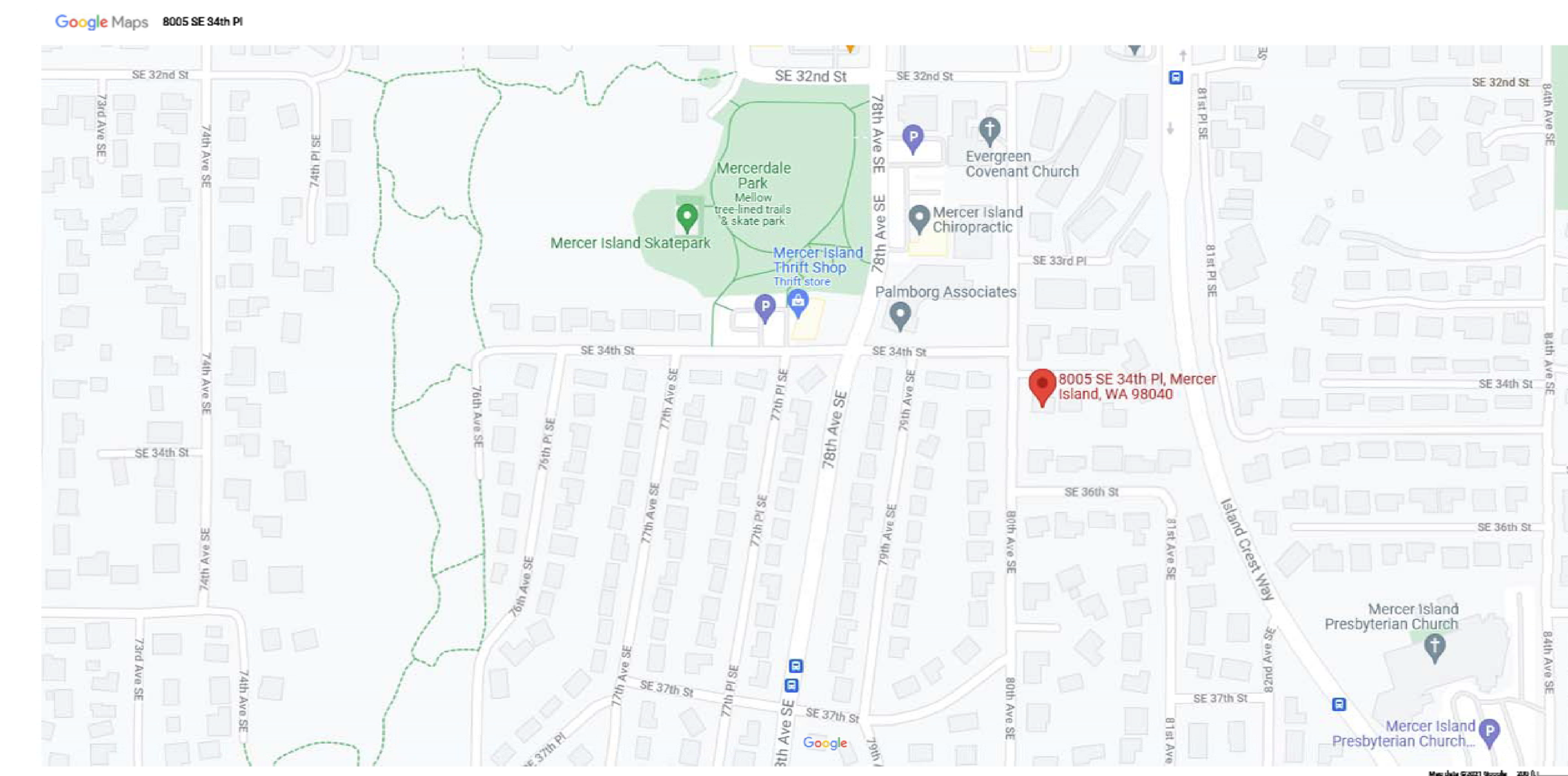
SITE PLAN

SCALE : 1" = 10'-0"

0 10 20 40

NORTH

VICINITY MAP



NTS

ARCHITECT

MARCUS JENKINS
ARCHITECTS NORTHWEST
18915 142ND AVE NE SUITE 100
WOODINVILLE, WA 98072
PH: (425) 485-4900
EM: MARCUS@ARCHITECTSNW.COM

SURVEYOR

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

OWNER

FRIEDMAN HOMES
PO BOX 481
MERCER ISLAND, WA 98040
PH: (206) 550-7954
EM: jon@friedmanhomes.net

STRUCTURAL ENGINEER

PITZER & ASSOCIATES, PLLC
7317-35TH ST NE
MARYSVILLE, WA 98270 / PH: 425-308-8070
EMAIL: TOMMYT42K@HOTMAIL.COM

LEGAL DESCRIPTION

LOT 24, LUCAS HILL DIVISION NO. 5, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 61 OF PLATS, PAGE 100, RECORDS OF KING COUNTY, WASHINGTON;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

LOT SLOPE

HIGHEST ELEV. PT. OF LOT:	176.60'
LOWEST ELEV. PT. OF LOT	157.80'
ELEVATION DIFFERENCE:	18.80'
HORIZONTAL DISTANCE BETWEEN HIGH/LOW POINTS:	140.00'
LOT SLOPE:	13.43%

HEIGHT CALC

WALL SEGMENT	WALL LENGTH	* MIDPOINT ELEVATION	= PRODUCT
A	20.50	170.60	3497.30
B	12.50	170.60	2132.50
C	38.50	169.20	6514.20
D	18.50	166.50	3080.25
E	2.00	166.30	332.60
F	18.50	167.00	3089.50
G	12.00	167.40	2008.80
H	1.50	167.50	251.25
I	13.50	167.70	2263.95
J	2.50	167.90	419.75
K	11.50	168.20	1934.30
L	0.50	168.70	84.35
M	20.00	165.80	3316.00
N	2.00	165.80	331.60
O	11.00	165.90	1824.90
P	20.50	168.40	3452.20
Q	11.00	169.00	1859.00
R	30.50	170.00	5185.00
TOTALS:	247.00	3022.50	41577.45

AVERAGE BLDG ELEV = TOTAL PRODUCTS/ TOTAL WALL LENGTHS:

41577.5 / 247.00 =		168.33 AVG. BLDG ELEV
MAX HT. ALLOWABLE =	+	30.00
MAX ELEVATION @ RIDGE =		198.33
PROPOSED RIDGE ELEVATION =	-	193.16
PROPOSED RIDGE =		5.17 BELOW HT. LIMIT

SITE ADDRESS

8005 SE 34TH PLACE
MERCER ISLAND, WA 98040

PARCEL

445830-0240

ZONING

R-8.4

LOT COVERAGE

LOT AREA:	9,953 S.F.	
ROOF OVERHANG AREA:	3,425 S.F.	
DRIVEWAY AREA:	553 S.F.	
TOTAL AREA:	3,978 S.F.	= 39.97%
MAX. AREA ALLOWED:	3,981 S.F.	= 40%

GROSS FLOOR AREA

LOT AREA:	9,953 S.F.
BASEMENT: (ADU&GARAGE)	1,312 S.F.
MAIN FLOOR:	1,449 S.F.
UPPER FLOOR:	1,972 S.F.
MINUS STAIRS w/CLG LESS THAN 16':	-40 S.F.
TOTAL GROSS FLOOR AREA:	4,693 S.F.
EXEMPT BSMT AREA:	256 S.F.
TOTAL NET GFA:	4,437 S.F.
% OF LOT AREA:	44.58%
ALLOWED GFA:	4,478 S.F.
ALLOWED % OF LOT AREA:	45.00%

FIRE AREA SUMMARY

MAIN FLOOR:	1,520 S.F.
ADU:	575 S.F.
UPPER FLOOR:	1,890 S.F.
GARAGE:	666 S.F.
COV'D AREA:	312 S.F.
TOTAL FIRE AREA:	4,963 S.F.

NOTE:
REFER TO ELEVATIONS ON SHEET A10 IN ARCHITECTURAL PLANS FOR HEIGHT CALC. DIMENSIONS

5046 REGISTERED ARCHITECT
JEFFREY P. deROULET
STATE OF WASHINGTON
12/20/21

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100
WOODINVILLE, WA 98072
OFFICE: (425) 485-4900
FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100
WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY: TC DATE: 2013
DRAWN BY: JRA DATE: 8/11/14

PROJECT MANAGER: MARCUS JENKINS

REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21

LATERAL BY: PITZER DATE: 12/7/21
LATERAL JOB NUMBER: 21-140

A0 / A13

ANW JOB NUMBER: 210248

ENERGY CODE

2018 WASHINGTON STATE ENERGY CODE/ IECC (WSEC)

TABLE R402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT [A]

CLIMATE ZONE	5 & MARINE 4
FENESTRATION U-FACTOR [B]	0.30
SKYLIGHT [B] U-FACTOR	0.50
CEILING R-VALUE [E]	49
WOOD FRAME WALL [G,H] R-VALUE	21 INT
FLOOR R-VALUE	30
BELOW GRADE [C,H] WALL R-VALUE	10/15/21 INT + 5TB
SLAB[D,F] R-VALUE & DEPTH	10, 2 FT.

TABLE R402.1.1 FOOTNOTES
FOR SI: 1 FOOT = 304.8 MM, CI = CONTINUOUS INSULATION, INT. = INTERMEDIATE FRAMING.

[A] R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE COMPRESSED R-VALUE OF THE INSULATION FROM APPENDIX TABLE AI01.4 SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.

[B] THE FENESTRATION U-FACTOR COLUMN EXCLUDES SKYLIGHTS.

[C] "10/15/21 +5TB" MEANS R-10 CONTINUOUS INSULATION ON THE EXTERIOR OF THE WALL, OR R-15 CONTINUOUS INSULATION ON THE INTERIOR OF THE WALL, OR R-21 CAVITY INSULATION PLUS A THERMAL BREAK BETWEEN THE SLAB AND THE BASEMENT WALL AT THE INTERIOR OF THE BASEMENT WALL. "10/15/21 +5TB" SHALL BE PERMITTED TO BE MET WITH R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL PLUS R-5 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE WALL. "5TB" MEANS R-5 THERMAL BREAK BETWEEN FLOOR SLAB AND BASEMENT WALL.

[D] R-10 CONTINUOUS INSULATION IS REQUIRED UNDER HEATED SLAB ON GRADE FLOORS. SEE R402.2.9.1.

[E] FOR SINGLE RAFTER- OR JOIST- VAULTED CEILINGS, THE INSULATION MAY BE REDUCED TO R-38 IF THE FULL INSULATION DEPTH EXTENDS OVER THE TOP PLATE OF THE EXTERIOR WALL.

[F] R-7.5 CONTINUOUS INSULATION INSTALLED OVER AN EXISTING SLAB IS DEEMED TO BE EQUIVALENT TO THE REQUIRED PERIMETER SLAB INSULATION WHEN APPLIED TO EXISTING SLABS COMPLYING WITH SECTION R503.1.1. IF FOAM PLASTIC IS USED, IT SHALL MEET THE REQUIREMENTS FOR THE THERMAL BARRIERS PROTECTING FOAM PLASTICS.

[G] FOR LOG STRUCTURES DEVELOPED IN COMPLIANCE WITH STANDARD ICC 400, LOG WALLS SHALL MEET THE REQUIREMENTS FOR CLIMATE ZONE 5 OF ICC 400.

[H] INT. (INTERMEDIATE FRAMING) DENOTES FRAMING AND INSULATION AS DESCRIBED IN SECTION AI03.2.2 INCLUDING STANDARD FRAMING 16 INCHES ON CENTER, 78 PERCENT OF THE WALL CAVITY INSULATED AND HEADERS INSULATED WITH A MINIMUM OF R-10 INSULATION.

1. A CERTIFICATE COMPLYING WITH 2018 WSEC R401.3 IS REQUIRED TO BE COMPLETED BY THE BUILDER OR APPROVED PARTY AND PERMANENTLY POSTED.
2. AT LEAST ONE THERMOSTAT SHALL BE PROVIDED FOR EACH SEPARATE HEATING AND COOLING SYSTEM.
3. NOT LESS THAN 90 PERCENT OF LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.

WHOLE HOUSE VENTILATION

WHOLE HOUSE VENTILATION SYSTEM TO BE DESIGNED PER WSBC AMENDMENTS TO 2018 IRC SECTION M1505.4.4.

SEE "WHOLE HOUSE VENTILATION" ON THE SCHEDULE SHEET FOR SELECTED OPTION.

WHOLE-HOUSE MECHANICAL VENTILATION AIRFLOW RATE PER EQUATION 15-1 (M1505.4.3)

VENTILATION QUALITY ADJUSTMENT PER EQUATION 15-2 (M1505.4.3.1)

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

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

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

MECHANICAL

GENERAL
SOLID FUEL BURNING APPLIANCES INCLUDE AIRTIGHT STOVES, FIREPLACE STOVES, ROOM HEATERS, FACTORY BUILT FIREPLACES AND FIREPLACE INSERTS. ALL SOLID FUEL BURNING APPLIANCES SHALL COMPLY WITH THE PROVISIONS OF I.R.C. R1006

HEATING
EACH DWELLING UNIT SHALL BE PROVIDED WITH HEATING FACILITIES CAPABLE OF MAINTAINING A TEMPERATURE OF 68 DEGREES FAHRENHEIT AT A HEIGHT OF 3'-0" ABOVE THE FLOOR AND TWO FEET FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS WHEN THE OUTSIDE TEMPERATURE IS AS SET FORTH IN THE 2018 W.S.E.C.

DEFINITION OF BUILDING THERMAL ENVELOPE FROM THE 2018 WASHINGTON STATE ENERGY CODE:
THE BELOW-GRADE WALLS, ABOVE-GRADE WALLS, FLOORS, CEILINGS, ROOF, AND ANY OTHER BUILDING ELEMENT ASSEMBLIES THAT ENCLOSE CONDITIONED SPACE OR PROVIDES A BOUNDARY BETWEEN CONDITIONED SPACE AND EXEMPT OR UNCONDITIONED SPACE.

1. FUEL BURNING APPLIANCES LOCATED WITHIN THE BUILDING ENVELOPE SHALL OBTAIN AIR FROM OUTDOORS, MEETING THE PROVISIONS OF IRC G2407
2. FUEL BURNING APPLIANCES LOCATED OUTSIDE THE BUILDING ENVELOPE SHALL MEET THE PROVISIONS OF CHAPTER 24 OF THE 2018 IRC.
3. DUCTWORK LOCATION SHALL MEET THE PROVISIONS OF CHAPTER 24 OF THE 2018 IRC.
4. COMBUSTION AIR TO MEET THE REQUIREMENTS OF I.R.C. M1701.1

ALL WARM AIR FURNACES SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY PER CHAPTER M1302 OF THE 2018 IRC.

NO WARM AIR FURNACE SHALL BE INSTALLED IN A ROOM USED OR DESIGNED TO BE USED AS A BEDROOM, BATHROOM, CLOSET OR IN ANY ENCLOSED SPACE WITH ACCESS ONLY THROUGH SUCH ROOM OR SPACE, EXCEPT PER EXCEPTIONS IN IRC G2406.2

LIQUEFIED PETROLEUM GAS BURNING APPLIANCES SHALL NOT BE INSTALLED IN A PIT, BASEMENT OR SIMILAR LOCATION WHERE HEAVIER THAN AIR GASES MIGHT COLLECT. APPLIANCES SO FUELED SHALL NOT BE INSTALLED IN AN ABOVE GRADE UNDER FLOOR SPACE OR BASEMENT UNLESS SUCH LOCATION IS PROVIDED WITH AN APPROVED MEANS FOR REMOVAL OF UNBURNED GAS.

HEATING AND COOLING APPLIANCES LOCATED IN A GARAGE AND WHICH GENERATE A GLOW, SPARK OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPORS SHALL BE INSTALLED WITH THE PILOTS AND BURNERS OR HEATING ELEMENTS AND SWITCHES AT LEAST 18" ABOVE THE FLOOR SURFACE.

FIRE DAMPERS NEED NOT BE INSTALLED IN AIR DUCTS PASSING THROUGH THE WALL, FLOOR OR CEILING SEPARATING A RESIDENCE (R-3 OCCUPANCY) FROM A GARAGE, PROVIDED SUCH DUCTS WITHIN THE GARAGE ARE CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN 0.018" (NO. 26 GALVANIZED SHEET GAUGE) AND HAVE NO OPENINGS INTO THE GARAGE

EVERY APPLIANCE DESIGNED TO BE VENTED SHALL BE CONNECTED TO A VENTING SYSTEM COMPLYING WITH CHAPTER 18 OF THE 2018 IRC.

EVERY FACTORY BUILT CHIMNEY, TYPE L VENT, TYPE B GAS VENT OR TYPE BW GAS VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING, MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE REQUIREMENTS PER CHAPTER 24 OF THE 2018 IRC.

A TYPE B OR BW GAS VENT SHALL TERMINATE PER CHAPTER 24 OF THE 2018 IRC.

VENT CONNECTORS SHALL BE INSTALLED WITHIN THE SPACE OR AREA IN WHICH THE APPLIANCE IS LOCATED AND SHALL BE CONNECTED TO A CHIMNEY OR VENT IN SUCH A MANNER AS TO MAINTAIN THE CLEARANCE TO COMBUSTIBLES PER SECTION M1803 OF THE 2018 IRC.

HEATING EQUIPMENT
ALL HEATING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE NATIONAL APPLIANCE ENERGY CONSERVATION ACT (NAECA) AND BE SO LABELED. EQUIPMENT SHALL ALSO COMPLY WITH SECTION M1411 OF THE 2018 IRC

DUCTWORK
1. DUCT SYSTEMS OR FACTORY BUILT AIR DUCTS SHALL BE OF METAL AS SET FORTH BY TABLE 1601.1.1 OF THE 2018 IRC.
2. RECTANGULAR, FLAT, OVAL AND ROUND DUCT JOINTS AND SEAMS SHALL BE AIRTIGHT PER SECTION M1601.4.1 OF THE 2018 IRC.
3. INSTALLATION OF DUCTS SHALL COMPLY WITH SECTION M1601.4 OF THE 2018 IRC.
4. DUCT INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M1601.3 OF THE 2018 IRC.
5. FINAL DUCT LEAKAGE AFFIDAVIT IS TO BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO FINAL INSPECTION. DUCT LEAKAGE AND SEALING REQUIREMENTS IN 2018 W.S.E.C. SECTION R403.3.2 TO BE MET.
6. DUCTS INSULATAED TO A MINIMUM R-8 INSULATION IN UNCONDITIONED SPACES PER W.S.E.C. SECTION R403.3.1

CARPENTRY

GENERAL
ALL FRAMING SHALL COMPLY WITH THE APPLICABLE SECTION(S) OF THE 2018 IBC/IRC.
PRESSURE TREATED WOOD REQUIRED IN LOCATIONS LISTED IN IRC R317.1

2" MINIMUM VERTICAL CLEARANCE BETWEEN WOOD & CONCRETE STEPS, PORCH SLABS, PATIO SLABS & OTHER SIMILAR HORIZONTAL SURFACES EXPOSED TO THE WEATHER.
6" MINIMUM CLEARANCE BETWEEN WOOD AND EARTH.
8" MINIMUM CLEARANCE BETWEEN UNTREATED MUSILLS AND EARTH.
12" MINIMUM CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.
18" MINIMUM CLEARANCE BETWEEN FLOOR JOISTS AND EARTH.

LOADING

ROOF	15 PSF DEAD LOAD	+	25 PSF LIVE LOAD	=	40 PSF
FLOOR TRUSSES	15 PSF DEAD LOAD	+	40 PSF LIVE LOAD	=	55 PSF
FLOOR	10 PSF DEAD LOAD	+	40 PSF LIVE LOAD	=	50 PSF
CEILING	5 PSF DEAD LOAD	+	10 PSF LIVE LOAD	=	15 PSF
DECK	10 PSF DEAD LOAD	+	60 PSF LIVE LOAD	=	70 PSF
INTERIOR PARTITION				=	7 PSF
EXTERIOR PARTITION				=	10 PSF

WOOD BEARING ON OR INSTALLED WITHIN ½" OF MASONRY OR CONCRETE TO BE TREATED WITH AN APPROVED PRESERVATIVE. SOLID BLOCKING OF NOT LESS THAN 2x THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORT OF JOISTS AND RAFTERS. ANCHOR BOLTS TO BE PER SHEAR WALL SCHEDULE AND FOUNDATION PLAN. 7" MINIMUM EMBEDMENT. ALL METAL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE STRONG TIE CONNECTORS AS MANUFACTURED BY SIMPSON COMPANY.

PROVIDE FIREBLOCKING IN CONCEALED SPACES OF STUD WALLS & PARTITIONS, INCLUDING FURRED SPACES & PARALLEL ROWS OF STUDS OR STAGGERED STUDS AS FOLLOWS:

1. VERTICALLY AT THE CEILING & FLOOR LEVELS.
2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET.

PROVIDE FIREBLOCKING AT OTHER LOCATIONS PER 2018 IRC R302.11.

INSULATION & MOISTURE PROTECTION

GENERAL
UNLESS NOTED OTHERWISE, INSULATION SHALL CONFORM TO THE WASHINGTON STATE ENERGY CODES. INSULATION BAFFLES TO MAINTAIN 1" CLEAR SPACE ABOVE INSULATION. BAFFLES TO EXTEND 6" ABOVE BATT INSULATION & 12" ABOVE LOOSE FILL INSULATION. INSULATE BEHIND BATHTUBS, SHOWERS, PARTITIONS AND CORNERS. PROVIDE FACE STAPLED BATTS OR FRICTION FIT FACED BATTS. PROVIDE 4 MIL (0.004") POLYETHYLENE VAPOR BARRIER AT WALLS OR USE CLASS II PVA PRIMER. PROVIDE R-10 INSULATION UNDER ELECTRIC WATER HEATERS.

INFILTRATION CONTROL
1. EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF AND BETWEEN WALL PANELS, OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOORS, AND ROOF, AND ALL OTHERS SUCH OPENINGS IN THE BUILDING ENVELOPE, INCLUDING ACCESS PANELS INTO UNHEATED SPACES, SHALL BE SEALED, CAULKED, GASKETED OR WEATHER-STRIPPED TO LIMIT AIR INFILTRATION.
2. ALL EXTERIOR DOORS, OTHER THAN FIRE-RATED DOORS, SHALL BE DESIGNED TO LIMIT AIR INFILTRATION AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION. DOORS BETWEEN RESIDENCE AND GARAGE ARE NOT CONSIDERED "FIRE-RATED" AND MUST MEET THE ABOVE REQUIREMENT.
3. ALL EXTERIOR WINDOWS SHALL BE DESIGNED TO ADMIT AIR INFILTRATION INTO OR FROM THE BUILDING ENVELOPE WHICH SHALL BE SUBSTANTIATED BY TESTING TO STANDARD ASTM E 283.73. SITE BUILT AND MILLWORK SHOP MADE WOODEN SASH ARE EXEMPT FROM TESTING BUT SHALL BE WEATHER-STRIPPED, CAULKED AND MORE TIGHTLY FITTING.
4. RECESSED LIGHT FIXTURES TO LIMIT AIR LEAKAGE PER W.S.E.C.

PIPING FOR HOT WATER / STEAM SYSTEMS OF PIPING FOR CONTINUOUSLY CIRCULATING HOT WATER SERVICE IS REQUIRED TO BE INSULATED PER THE W.S.E.C. HOT WATER PIPING SHALL BE INSULATED TO A MINIMUM OF R-3 PER W.S.E.C. R403.5.3. MECHANICAL SYSTEM PIPING SHALL BE INSULATED TO A MINIMUM R-6 PER W.S.E.C. R403.4

VAPOR BARRIERS / GROUND COVERS
AN APPROVED VAPOR BARRIER SHALL BE PROPERLY INSTALLED IN ROOF DECKS, IN ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND AT EXTERIOR WALLS. INSET STAPLED BATTS WITH A PERM RATING LESS THAN ONE MAY BE INSTALLED IF THE VAPOR BARRIER IS TO THE WARM SIDE, STAPLES SHALL BE PLACED NOT MORE THAN 8" O.C. AND GAPS BETWEEN THE FACING AND THE FRAMING SHALL NOT EXCEED 1/16"

VAPOR RETARDERS AT WALLS PER IRC R702.7

A GROUND COVER OF 6 MIL (0.006") BLACK POLYETHYLENE OR EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

DOORS, WINDOWS AND SKYLIGHTS

GENERAL
THE REQUIRED EGRESS DOOR MAY HAVE A MAXIMUM 7 ¾" STEP ON THE EXTERIOR SIDE FROM TOP OF THE THRESHOLD TO A MINIMUM 36" DEEP LANDING ON THE EXTERIOR SIDE OF THE DOOR. PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING, PER R311.3.1 OTHER EXTERIOR DOORS MAY HAVE A MAXIMUM (2) 7 ¾" STEPS TO A MIN. 36" DEEP LANDING. ALL GLAZING SHALL MEET THE REQUIREMENTS OF THE 2018 W.S.E.C. TABLE R402.1.1 UNLESS NOTED OTHERWISE. ALL SKYLIGHTS AND SKYWALLS SHALL HAVE LAMINATED GLASS UNLESS NOTED OTHERWISE. ALL BEDROOM EMERGENCY EGRESS WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. MINIMUM NET CLEAR OPERABLE WIDTH OF 20" AND A MINIMUM NET CLEAR OPENING HEIGHT OF 24", MAXIMUM SILL HEIGHT OF 44" MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CLEAR OPENING. OPERABLE WINDOWS WITH A SILL OF MORE THAN 72" ABOVE FINISHED THE GRADE OR SURFACE BELOW, TO BE A MINIMUM OF 24" ABOVE ADJACENT FINISHED FLOOR.

SAFETY GLAZING LOCATIONS PER 2018 IRC SECTION R308.4

R308.4.1 GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLD DOORS.

R308.4.2 GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR & THE GLAZING IS EITHER WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION OR ON A WALL LESS THAN 180 DEGREES FROM THE PLANE OF THE DOOR IN A CLOSED POSITION & WITHIN 24 INCHES OF THE HINGE SIDE OF AN IN-SWINGING DOOR.

R308.4.3 GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
1. THE EXPOSED AREA OF AN INDIVIDUAL PANEL IS LARGER THAN 9 SQUARE FEET;
2. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR;
3. THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE THE FLOOR; AND
4. ONE OR MORE WALKING SURFACES ARE WITHIN 36" MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.

R308.4.4 GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE.

R308.4.5 GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.

R308.4.6 GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES (914 MM) ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS.

R08.4.7 GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDINGS AND WITHIN A 60" HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING.

FOR EXCEPTIONS SEE IRC SECTION R308.4

GENERAL

PLANS COMPLY WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE.

CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS HAVE BEEN MADE. IT IS THE CONTRACTORS RESPONSIBILITY TO IDENTIFY ALL DISCREPANCIES TO THE ARCHITECT AT THE TIME THEY ARE NOTED. DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS.

CODES:
ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION SHALL BE FOLLOWED
1. 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) WITH WASHINGTON STATE AMENDMENTS (WSA) EXCEPT CHAPTERS 11 AND 25 THROUGH 42 ARE NOT ADOPTED. APPENDICES F,Q, & U ARE ADOPTED.
2. 2018 INTERNATIONAL BUILDING CODE (IBC) WITH WASHINGTON STATE AMENDMENTS (WSA)
3. 2018 INTERNATIONAL MECHANICAL CODE (IMC) WITH WASHINGTON STATE AMENDMENTS (WSA)
4. 2018 UNIFORM PLUMBING CODE (UPC) WITH WASHINGTON STATE AMENDMENTS.
5. 2018 INTERNATIONAL FIRE CODE WITH WASHINGTON STATE AMENDMENTS.
6. 2018 WASHINGTON STATE ENERGY CODE, RESIDENTIAL PROVISIONS (WSEC).

LOCAL JURISDICTION REQUIRES DWELLING UNIT FIRE SPRINKLER SYSTEM PER EITHER NFPA 13D OR I.R.C. P2904 ☐ YES ☐ NO

SITE WORK

GENERAL
ALL FOOTINGS TO BEAR ON FIRM, UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. ALL BACK FILL MATERIAL SHALL BE THOROUGHLY COMPACTED. FOUNDATION VENTS SHALL NOT INTERFERE WITH THE DIRECT LOAD PATH OF COLUMNS.

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN: SPEED (MPH)	WIND DESIGN: TOPOGRAPHIC EFFECTS	WIND DESIGN: SPECIAL WIND REGION	WIND DESIGN: WIND-BORNE DEBRIS ZONE	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM: WEATHERING	SUBJECT TO DAMAGE FROM: FROST LINE DEPTH	SUBJECT TO DAMAGE FROM: TERMITE	WINTER DESIGN TEMP	ICE BARRIER UNDER-LAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
25 psf	110				D2	MODERATE	12"	SLIGHT TO MODERATE		NO	N/A	113	53°F
EQUIVALENT FLUID PRESSURE = 35 P.C.F. (UNRESTRAINED WALLS) 50 P.C.F. (RESTRAINED WALLS)													

SHEET INDEX

5046 REGISTERED ARCHITECT STATE OF WASHINGTON 12/20/21
ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY: TC DATE: 2013
DRAWN BY: JRA DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS
REVISED BY: DATE:
BPS 9/15/17
BPS 4/25/19
BPS 8/19/19
BPS 10/2/19
BPS 12/20/21
LATERAL BY: PITZER DATE: 12/7/21
LATERAL JOB NUMBER: 21-140

A1 / A13

ANW JOB NUMBER: 210248

ADU

AIR LEAKAGE

Components of the building thermal envelope as listed in TABLE R402.4.1.1 shall be installed per manufacturer's specifications to limit air leakage rate to not exceed 5 air changes per hour (ACH)

AIR LEAKAGE CALCULATION (maximum blower test CFM)		$CFM_{50\text{-}calc}$		ACTUAL Blower test result	
maximum ACH	$CFM_{50\text{-}calc}$ = BLDG VOL (ft^3) X 5 ACH / 60 min =	575	cfm		cfm

SIMPLE HEATING SYSTEM SIZE

This heating system sizing is based on the Prescriptive Requirements of the 2018 Washington State Energy Code. This is for heating only. ACCA procedures for sizing cooling systems should be used to determing cooling.

Indoor Design Temperature			70		
Outdoor Design Temperature			24		
Design Temperature Difference					
Indoor - Outdoor Design Temp			46		
Conditioned Floor Area			575		
Conditioned Volume			6900		
Glazing					
Sum of UA from Glazing Schedule					27.8
Attic	U-Factor	X	Area	=	UA
R-49	0.026		276		7.18
Other:					
Single Rafter or Joist Vaulted Ceilings	U-Factor	X	Area	=	UA
R-38	0.027				
Other:					
Above Grade Walls	U-Factor	X	Area	=	UA
R-21 + R-10 HEADERS	0.056		682		38.19
Other:					
Floors	U-Factor	X	Area	=	UA
R-30	0.029				
Other:					
Below Grade Walls	U-Factor	X	Area	=	UA
R-21 Interior	0.042				
R-10 Continuous exterior	0.064				
Other:					
Slab Below Grade	F-factor	X	Length	=	UA
R-5 Thermal brk sl edge	0.57		98.33		56.05
Other:					
Slab on Grade	F-factor	X	Length	=	UA
R-10 2' perimeter	0.54		98.33		53.10
R-10 Fully insulated	0.36				
Other:					
Sum of UA					182.35

Envelope Heat Load — 8388 Btu / Hour
Sum of UA X Design Temperature Difference
Air Leakage Heat Load — 3428 Btu / Hour
((Volume X 0.6) X Design Outdoor Temp) X .018))
Building Design Heat Load — 11816 Btu / Hour
Air Leakage + Envelope Heat Loss
Building and Duct Heat Load — 1 — 11816 Btu / Hour
Use 1.1 if ducts are located in unconditioned space: Sum of Building Heat Loss X 1.1
Use 1 if ducts are located in conditioned space: Sum of Building Heat Loss X 1
Maximum Heat Equipment Output — 1.25 — 14770 Btu / Hour
Use 1.4 for forced air furnace: Building & Duct Heat Loss x 1.4
Use 1.25 for heat pump: Building & Duct Heat Loss x 1.25

WINDOW, SKYLIGHT & DOOR SCHEDULE

CONDITIONED FLOOR AREA: 575 — SUM OF UA FOR HEATING SYSTEM SIZING: 27.8
SUM OF ALL GLAZING AREAS FROM BELOW: 56

EXEMPT DOOR AND WINDOW

ROOM		U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
LIVING	EXEMPT SWING DR (24 S.F. MAX.)	0.46	1	3.00	8.00	24.00	11.04
	EXEMPT WINDOW (15 S.F. MAX.)					0.00	0.00
	SUM OF AREA AND UA FOR HEATING SYSTEM SIZE ONLY:					**24.0**	**11.0**

EXTERIOR DOORS (OPAQUE)

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
	DOOR						0.00	0.00
		SUM OF AREA AND UA:					**0.0**	**0.0**
		AREA WEIGHTED U = UA/AREA:						**0.00**

VERTICAL GLAZING

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
LIVING	CASE		0.30	3	2.50	4.00	30.00	9.00
BA4	CASE		0.30	1	2.00	3.00	6.00	1.80
BEDRM	CASE		0.30	2	2.50	4.00	20.00	6.00
							0.00	0.00
		SUM OF AREA AND UA:					**56.00**	**16.80**
		AREA WEIGHTED U = UA/AREA:						**0.30**

OVERHEAD GLAZING

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
	SKYLIGHT		0.50				0.00	0.00
		SUM OF AREA AND UA:					**0.00**	**0.00**
		AREA WEIGHTED U = UA/AREA:						**0.00**

VERTICAL GLAZING IN UNHEATED SPACES

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA
							0.00
		SUM OF VERTICAL GLAZING IN UNHEATED SPACES:					**0.00**

(not included in sum of all glazing above)

OVERHEAD GLAZING IN UNHEATED SPACES

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA
	SKYLIGHT						0.00
		SUM OF OVERHEAD GLAZING IN UNHEATED SPACES:					**0.00**

(not included in sum of all glazing above)

EXHAUST RATES

WSBC AMENDMENTS TO 2018 IRC SECTION M1505

SYMBOL	LOCATION	MINIMUM FAN REQUIREMENTS
A	Bath, Powder	Minimum 50 cfm Intermittent, 20 cfm Continuous (IRC TABLE M1505.4.4(1))
B	Kitchen	Minimum 100 cfm Intermittent, 30 cfm Continuous (IRC TABLE M1505.4.4(1)) (Range hood or down draft exhaust fan rated at min.100 cfm at 0.10" WG may be used for exhaust fan requirement.) **note**: fans in excess of 400 cfm shall provide make-up air per IRC section M1503.6
C	Whole House Fan	Flow rate per WHOLE-HOUSE MECHANICAL VENTILATION schedule

All fans to vent to outside. All other requirements of the 2018 WSEC and the WSBC amendments to the 2018 IRC section M1505 must be met.

ALARM SCHEDULE

2018 IRC SECTIONS R314 & R315

SYMBOL	DESCRIPTION	REQUIREMENTS
SA	Smoke Alarm	*110 V interconnected w/ battery backup. *Installed on each floor, in each sleeping area, and outside each separate sleeping area. Installed not less than 3 ft from the door of a bath which contains a tub or shower unless this prevents placement in a required location. *Listed in accordance with UL 217 and to comply with NFPA 72.
SA CM	Combination Smoke Alarm & Carbon Monoxide Alarm	*Installed on each floor, outside of each separate sleeping area in the immediate vicinity of the bedrooms, and in a bedroom that contains a gas fireplace in the bedroom or adjacent bathroom. *Smoke alarm requirements per above. *Combination smoke & carbon monoxide alarms listed in accordance with UL 217 & UL 2034.
HD	Heat Detector	*A heat detector or heat alarm to be installed in a central location in the garage and per the manufacturer's instructions. (WSBC amendments R314.2.1 & R314.2.3)

PRESCRIPTIVE ENERGY CODE COMPLIANCE

This project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. In addition, based on the size of the structure, the appropriate number of additional credits are checked.

CLIMATE ZONE 5 AND MARINE 4	R-Value[a]	U-Factor[a]
Fenestration U-Factor[b]	n/a	0.30
Skylight U-Factor[b]	n/a	0.50
Ceiling	49	0.026
Wood Frame Wall[g,h]	21 int	0.056
Floor	30	0.029
Below Grade Wall[c,h]	10/15/21 int + 5TB	0.042
Slab[d,f] R-Value & Depth	10, 2 ft	n/a

For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38.
Table R402.1.1 footnotes included on Sheet A1.

Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 so as to achieve the following minimum number of credits:

☑ **1. Small Dwelling Unit: 3.0 points**
Dwelling units less than 1500 square feet in conditioned floor area with less than 300 square feet of fenestration area. Additions to existing building that are greater than 500 square feet of heated floor area but less than 1500 square feet.

☐ **2. Medium Dwelling Unit: 6.0 points**
All dwelling units that are not included in #1 or #3.

☐ **3. Large Dwelling Unit: 7.0 points**
Dwelling units exceeding 5000 square feet of conditioned floor area.

☐ **4. Additions less than 500 square feet: 1.5 credits**

ENERGY CREDIT SUMMARY TABLES

Heating Options	Fuel Normalization Descriptions	Credits	
1	Combustion heating minimum NAECA	0.0	☐
2	Heat pump	1.0	☑
3	Electric resistance heat only - furnace or zonal	-1.0	☐
4	DHP with zonal electric resistance per option 3.4	0.5	☐
5	All other heating systems	-1.0	☐
Energy Options	**Energy Credit Option Descriptions**	**Credits**	
1.1	Efficient Building Envelope	0.5	☐
1.2	Efficient Building Envelope	1.0	☐
1.3	Efficient Building Envelope	0.5	☐
1.4	Efficient Building Envelope	1.0	☐
1.5	Efficient Building Envelope	2.0	☐
1.6	Efficient Building Envelope	3.0	☐
1.7	Efficient Building Envelope	0.5	☐
2.1	Air Leakage Control and Efficient Ventilation	0.5	☐
2.2	Air Leakage Control and Efficient Ventilation	1.0	☐
2.3	Air Leakage Control and Efficient Ventilation	1.5	☐
2.4	Air Leakage Control and Efficient Ventilation	2.0	☐
3.1	High Efficiency HVAC	1.0	☐
3.2	High Efficiency HVAC	1.0	☐
3.3	High Efficiency HVAC	1.5	☐
3.4	High Efficiency HVAC	1.5	☐
3.5	High Efficiency HVAC	1.5	☐
3.6	High Efficiency HVAC	2.0	☑
4.1	High Efficiency HVAC Distribution System	0.5	☐
4.2	High Efficiency HVAC Distribution System	1.0	☐
5.1	Efficient Water Heating	0.5	☐
5.2	Efficient Water Heating	0.5	☐
5.3	Efficient Water Heating	1.0	☐
5.4	Efficient Water Heating	1.5	☐
5.5	Efficient Water Heating	2.0	☐
5.6	Efficient Water Heating	2.5	☐
6.1	Renewable Electric Energy (3 credits max) 0	*1200 kwh	☐
7.1	Appliance Package	0.5	☐
Total Credits		**3.0**	

WHOLE-HOUSE MECHANICAL VENTILATION (PRESCRIPTIVE)

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4 (WASHINGTON STATE AMENDMENTS)

☑ WHOLE-HOUSE VENTILATION USING EXHAUST FANS (M1505.4.1.2)
☐ WHOLE-HOUSE VENTILATION USING SUPPLY FANS (M1505.4.1.3)
☐ WHOLE-HOUSE VENTILATION SYSTEM, BALANCED (M1505.4.1.4)
☐ WHOLE-HOUSE VENTILATION USING FURNACE INTEGRATED SUPPLY (M1505.4.1.5)

MECHANICAL VENTILATION AIRFLOW RATE PER EQUATION 15-1 (M1505.4.3) — 30 CFM (CONTINUOUS)

VENTILATION QUALITY ADJUSTMENT PER EQUATION 15-2 (M1505.4.3.1)
☐ BALANCED & DISTRIBUTED (1.0 COEFFICIENT)
☐ BALANCED & NOT DISTRIBUTED (1.25 COEFFICIENT)
☑ NOT BALANCED & DISTRIBUTED (1.25 COEFFICIENT
☐ NOT BALANCED & NOT DISTRIBUTED (1.5 COEFFICIENT)
ADJUSTED MECHANICAL VENTILATION AIRFLOW RATE — 37.5 CFM (CONTINUOUS)

INTERMITTENT OFF OPERATION (M1505.4.3.2)
RUN-TIME % IN EACH 4-HOUR SEGMENT
☐ 50 PERCENT
☐ 66 PERCEINT
☑ 75 PERCENT
☐ 100 PERCENT
INTERMITTENT FLOW RATE — 48.75 CFM

HOUSE

SIMPLE HEATING SYSTEM SIZE

This heating system sizing is based on the Prescriptive Requirements of the 2018 Washington State Energy Code. This is for heating only. ACCA procedures for sizing cooling systems should be used to determing cooling.

Indoor Design Temperature			70		
Outdoor Design Temperature			24		
Design Temperature Difference					
Indoor - Outdoor Design Temp			46		
Conditioned Floor Area			3410		
Conditioned Volume			30646		
Glazing					
Sum of UA from Glazing Schedule					144.5
Attic	U-Factor	X	Area	=	UA
R-49	0.026		2126		55.28
Other:					
Single Rafter or Joist Vaulted Ceilings	U-Factor	X	Area	=	UA
R-38	0.027				
Other:					
Above Grade Walls	U-Factor	X	Area	=	UA
R-21 + R-10 HEADERS	0.056		2616		146.50
Other:					
Floors	U-Factor	X	Area	=	UA
R-30	0.029		1762		51.10
Other:					
Below Grade Walls	U-Factor	X	Area	=	UA
R-21 Interior	0.042				
R-10 Continuous exterior	0.064				
Other:					
Slab Below Grade	F-factor	X	Length	=	UA
R-5 Thermal brk sl edge	0.57				
Other:					
Slab on Grade	F-factor	X	Length	=	UA
R-10 2' perimeter	0.54				
R-10 Fully insulated	0.36				
Other:					
Sum of UA					397.39

Envelope Heat Load — 18280 Btu / Hour
Sum of UA X Design Temperature Difference
Air Leakage Heat Load — 15225 Btu / Hour
((Volume X 0.6) X Design Outdoor Temp) X .018))
Building Design Heat Load — 33505 Btu / Hour
Air Leakage + Envelope Heat Loss
Building and Duct Heat Load — 1.1 — 36855 Btu / Hour
Use 1.1 if ducts are located in unconditioned space: Sum of Building Heat Loss X 1.1
Use 1 if ducts are located in conditioned space: Sum of Building Heat Loss X 1
Maximum Heat Equipment Output — 1.25 — 46069 Btu / Hour
Use 1.4 for forced air furnace: Building & Duct Heat Loss x 1.4
Use 1.25 for heat pump: Building & Duct Heat Loss x 1.25

WINDOW, SKYLIGHT & DOOR SCHEDULE

CONDITIONED FLOOR AREA: 3410 — SUM OF UA FOR HEATING SYSTEM SIZING: 144.5
SUM OF ALL GLAZING AREAS FROM BELOW: 571

EXEMPT DOOR AND WINDOW

ROOM		U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
FOYER	EXEMPT SWING DR (24 S.F. MAX.)	0.46	1	3.00	8.00	24.00	11.04
	EXEMPT WINDOW (15 S.F. MAX.)					0.00	0.00
	SUM OF AREA AND UA FOR HEATING SYSTEM SIZE ONLY:					**24.0**	**11.0**

EXTERIOR DOORS (OPAQUE)

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
FOYER	DOOR		0.46	1	3.00	8.00	24.00	11.04
MUD RM	DOOR		0.46	1	2.67	6.67	17.81	8.19
	DOOR						0.00	0.00
		SUM OF AREA AND UA:					**41.8**	**19.2**
		AREA WEIGHTED U = UA/AREA:						**0.46**

VERTICAL GLAZING

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
DINING	CASE		0.20	2	2.50	6.00	30.00	6.00
DINING	PICTURE		0.20	2	2.50	1.50	7.50	1.50
DINING	PICTURE		0.20	1	4.50	6.00	27.00	5.40
DINING	PICTURE		0.20	2	2.25	1.50	6.75	1.35
FOYER	PICTURE		0.20	1	1.50	6.00	9.00	1.80
BA5 HALL	PICTURE		0.20	2	2.00	1.50	6.00	1.20
BA5 HALL	AWNING		0.20	1	2.00	1.50	3.00	0.60
BA5	PICTURE		0.20	2	2.00	1.50	6.00	1.20
BA5	AWNING		0.20	1	2.00	1.50	3.00	0.60
DEN / BR5	CASE		0.20	2	2.50	6.00	30.00	6.00
FAMILY	PICTURE		0.20	2	2.50	2.00	10.00	2.00
FAMILY	SLIDER		0.20	1	8.00	5.00	40.00	8.00
NOOK	S.G.D.		0.20	1	9.00	8.00	72.00	14.40
KITCHEN	PICTURE		0.20	1	6.00	4.50	27.00	5.40
BEDRM 2	PICTURE		0.20	2	1.50	4.50	13.50	2.70
BEDRM 2	PICTURE		0.20	2	1.50	1.50	4.50	0.90
BEDRM 2	CASE		0.20	2	2.50	4.50	22.50	4.50
BEDRM 2	PICTURE		0.20	2	2.50	1.50	7.50	1.50
BEDRM 2	PICTURE		0.20	1	4.50	4.50	20.25	4.05
BEDRM 2	PICTURE		0.20	2	2.25	1.50	6.75	1.35
OPEN	PICTURE		0.20	1	1.50	4.50	6.75	1.35
OPEN	PICTURE		0.20	1	1.50	1.50	2.25	0.45
LAUNDRY	CASE		0.20	1	2.50	3.00	7.50	1.50
BEDRM 3	PICTURE		0.20	2	5.00	3.00	30.00	6.00
BEDRM 3	CASE		0.20	1	2.50	4.50	11.25	2.25
MSTR BEDRM	PICTURE		0.20	2	2.00	2.00	8.00	1.60
MSTR BEDRM	SLIDER		0.20	1	10.00	3.50	35.00	7.00
MSTR BATH	CASE		0.20	2	2.50	3.50	17.50	3.50
BEDRM 4	SLIDER		0.20	1	5.00	3.50	17.50	3.50
BA3	CASE		0.20	1	1.50	3.00	4.50	0.90
BONUS	CASE		0.20	2	2.50	4.50	22.50	4.50
BONUS	PICTURE		0.20	3	2.50	4.50	33.75	6.75
BONUS	PICTURE		0.20	1	5.00	4.50	22.50	4.50
							0.00	0.00
		SUM OF AREA AND UA:					**571.25**	**114.25**
		AREA WEIGHTED U = UA/AREA:						**0.20**

OVERHEAD GLAZING

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA	UA
	SKYLIGHT		0.50				0.00	0.00
		SUM OF AREA AND UA:					**0.00**	**0.00**
		AREA WEIGHTED U = UA/AREA:						**0.00**

VERTICAL GLAZING IN UNHEATED SPACES

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA
							0.00
		SUM OF VERTICAL GLAZING IN UNHEATED SPACES:					**0.00**

(not included in sum of all glazing above)

OVERHEAD GLAZING IN UNHEATED SPACES

ROOM	TYPE	DESCRIPTION	U-VAL	QTY	WIDTH	HEIGHT	AREA
	SKYLIGHT						0.00
		SUM OF OVERHEAD GLAZING IN UNHEATED SPACES:					**0.00**

(not included in sum of all glazing above)

ROOF VENTILATION

Standard Truss / Scissor Truss Roof Framing Assembly: ENTRY / BA5

Roof Area : 162 s.f.
Ventilation Required: 162 s.f. x 144 / 300 = 77.76 s.i. Req'd
Provide between 40% & 50% of the total required ventilation no more than 3 ft below the ridge or the highest point of the space. Remainder to be installed at eave vents.

Upper Roof Ventilation:
AF50 Roof Jack (10" x 7") = 50.00 s.i. each.
Upper Ventilation MINIMUM = 77.76 s.i. x 0.4 / s.i. of each vent = 1 vent
Upper Ventilation MAXIMUM = 77.76 s.i. x 0.5 / s.i. of each vent = 1 vent
Provide: 1 -10"x7" roof jacks. Ventilation = 50.00 s.i.
Ventilation area remainder for eave vents = 27.76 s.i. (Req'd vent-Upper vent)

Eave Ventilation:
Birdblocking: (3)2.25" dia holes per bay = 5.96 s.i. per l.f. - 25% reduction = 4.47 s.i. per l.f.
Eave Ventilation Required = 27.76 s.i. / 4.47 s.i. per l.f. = 6.21 l.f.
Provide Minimum : 7 l.f. birdblocking. Ventilation = 31.29 s.i.
Minimum Ventilation Provided = 81.29 s.i. IS GREATER THAN : 77.76 s.i. Req'd

ROOF VENTILATION

Standard Truss / Scissor Truss Roof Framing Assembly: GARAGE

Roof Area : 362 s.f.
Ventilation Required: 362 s.f. x 144 / 300 = 173.76 s.i. Req'd
Provide between 40% & 50% of the total required ventilation no more than 3 ft below the ridge or the highest point of the space. Remainder to be installed at eave vents.

Upper Roof Ventilation:
AF50 Roof Jack (10" x 7") = 50.00 s.i. each.
Upper Ventilation MINIMUM = 173.76 s.i. x 0.4 / s.i. of each vent = 2 vents
Upper Ventilation MAXIMUM = 173.76 s.i. x 0.5 / s.i. of each vent = 2 vents
Provide: 2 -10"x7" roof jacks. Ventilation = 100.00 s.i.
Ventilation area remainder for eave vents = 73.76 s.i. (Req'd vent-Upper vent)

Eave Ventilation:
Birdblocking: (3)2.25" dia holes per bay = 5.96 s.i. per l.f. - 25% reduction = 4.47 s.i. per l.f.
Eave Ventilation Required = 73.76 s.i. / 4.47 s.i. per l.f. = 16.50 l.f.
Provide Minimum : 17 l.f. birdblocking. Ventilation = 75.99 s.i.
Minimum Ventilation Provided = 175.99 s.i. IS GREATER THAN : 173.76 s.i. Req'd

ROOF VENTILATION

Standard Truss / Scissor Truss Roof Framing Assembly: ADU BEDRM / COV'D DECK

Roof Area : 533 s.f.
Ventilation Required: 533 s.f. x 144 / 300 = 255.84 s.i. Req'd
Provide between 40% & 50% of the total required ventilation no more than 3 ft below the ridge or the highest point of the space. Remainder to be installed at eave vents.

Upper Roof Ventilation:
AF50 Roof Jack (10" x 7") = 50.00 s.i. each.
Upper Ventilation MINIMUM = 255.84 s.i. x 0.4 / s.i. of each vent = 3 vents
Upper Ventilation MAXIMUM = 255.84 s.i. x 0.5 / s.i. of each vent = 3 vents
Provide: 3 -10"x7" roof jacks. Ventilation = 150.00 s.i.
Ventilation area remainder for eave vents = 105.84 s.i. (Req'd vent-Upper vent)

Eave Ventilation:
Birdblocking: (3)2.25" dia holes per bay = 5.96 s.i. per l.f. - 25% reduction = 4.47 s.i. per l.f.
Eave Ventilation Required = 105.84 s.i. / 4.47 s.i. per l.f. = 23.68 l.f.
Provide Minimum : 24 l.f. birdblocking. Ventilation = 107.28 s.i.
Minimum Ventilation Provided = 257.28 s.i. IS GREATER THAN : 255.84 s.i. Req'd

ROOF VENTILATION

Standard Truss / Scissor Truss Roof Framing Assembly: UPPER ROOF

Roof Area : 1972 s.f.
Ventilation Required: 1972 s.f. x 144 / 300 = 946.56 s.i. Req'd
Provide between 40% & 50% of the total required ventilation no more than 3 ft below the ridge or the highest point of the space. Remainder to be installed at eave vents.

Upper Roof Ventilation:
AF50 Roof Jack (10" x 7") = 50.00 s.i. each.
Upper Ventilation MINIMUM = 946.56 s.i. x 0.4 / s.i. of each vent = 8 vents
Upper Ventilation MAXIMUM = 946.56 s.i. x 0.5 / s.i. of each vent = 9 vents
Provide: 9 -10"x7" roof jacks. Ventilation = 450.00 s.i.
Ventilation area remainder for eave vents = 496.56 s.i. (Req'd vent-Upper vent)

Eave Ventilation:
Birdblocking: (3)2.25" dia holes per bay = 5.96 s.i. per l.f. - 25% reduction = 4.47 s.i. per l.f.
Eave Ventilation Required = 496.56 s.i. / 4.47 s.i. per l.f. = 111.09 l.f.
Provide Minimum : 112 l.f. birdblocking. Ventilation = 500.64 s.i.
Minimum Ventilation Provided = 950.64 s.i. IS GREATER THAN : 946.56 s.i. Req'd

PRESCRIPTIVE ENERGY CODE COMPLIANCE

This project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. In addition, based on the size of the structure, the appropriate number of additional credits are checked.

CLIMATE ZONE 5 AND MARINE 4	R-Value[a]	U-Factor[a]	
Fenestration U-Factor[b]	n/a	0.30	.20 w/option 1.2
Skylight U-Factor[b]	n/a	0.50	
Ceiling	49	0.026	
Wood Frame Wall[g,h]	21 int	0.056	
Floor	30	0.029	
Below Grade Wall[c,h]	10/15/21 int + 5TB	0.042	
Slab[d,f] R-Value & Depth	10, 2 ft	n/a	

For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38.
Table R402.1.1 footnotes included on Sheet A1.

Each dwelling unit in a residential building shall comply with sufficient options from Table R406.2 so as to achieve the following minimum number of credits:

☐ **1. Small Dwelling Unit: 3.0 points**
Dwelling units less than 1500 square feet in conditioned floor area with less than 300 square feet of fenestration area. Additions to existing building that are greater than 500 square feet of heated floor area but less than 1500 square feet.

☑ **2. Medium Dwelling Unit: 6.0 points**
All dwelling units that are not included in #1 or #3.

☐ **3. Large Dwelling Unit: 7.0 points**
Dwelling units exceeding 5000 square feet of conditioned floor area.

☐ **4. Additions less than 500 square feet: 1.5 credits**

ENERGY CREDIT SUMMARY TABLES

Heating Options	Fuel Normalization Descriptions	Credits	
1	Combustion heating minimum NAECA	0.0	☐
2	Heat pump	1.0	☑
3	Electric resistance heat only - furnace or zonal	-1.0	☐
4	DHP with zonal electric resistance per option 3.4	0.5	☐
5	All other heating systems	-1.0	☐
Energy Options	**Energy Credit Option Descriptions**	**Credits**	
1.1	Efficient Building Envelope	0.5	☐
1.2	Efficient Building Envelope	1.0	☑
1.3	Efficient Building Envelope	0.5	☐
1.4	Efficient Building Envelope	1.0	☐
1.5	Efficient Building Envelope	2.0	☐
1.6	Efficient Building Envelope	3.0	☐
1.7	Efficient Building Envelope	0.5	☐
2.1	Air Leakage Control and Efficient Ventilation	0.5	☑
2.2	Air Leakage Control and Efficient Ventilation	1.0	☐
2.3	Air Leakage Control and Efficient Ventilation	1.5	☐
2.4	Air Leakage Control and Efficient Ventilation	2.0	☐
3.1	High Efficiency HVAC	1.0	☐
3.2	High Efficiency HVAC	1.0	☐
3.3	High Efficiency HVAC	1.5	☐
3.4	High Efficiency HVAC	1.5	☐
3.5	High Efficiency HVAC	1.5	☑
3.6	High Efficiency HVAC	2.0	☐
4.1	High Efficiency HVAC Distribution System	0.5	☐
4.2	High Efficiency HVAC Distribution System	1.0	☐
5.1	Efficient Water Heating	0.5	☐
5.2	Efficient Water Heating	0.5	☐
5.3	Efficient Water Heating	1.0	☐
5.4	Efficient Water Heating	1.5	☐
5.5	Efficient Water Heating	2.0	☑
5.6	Efficient Water Heating	2.5	☐
6.1	Renewable Electric Energy (3 credits max) 0	*1200 kwh	☐
7.1	Appliance Package	0.5	☐
Total Credits		**6.0**	

ENERGY CREDIT NOTES:

FUEL NORMALIZATION

2 - HEAT PUMP

ENERGY CREDITS

1.2 - VERTICAL FENESTRATION U=0.20

2.1 - 3 AIR CHANGES PER HOUR MAXIMUM

3.5 - AIR-SOURCE CENTRALLY DUCTED HEAT PUMP WITH MIN. HSPF OF 11.0

5.5 - ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA

FOUNDATION VENTILATION

Crawlspace Area:	1464 s.f.			
Ventilation Required:	1464 s.f. / 300 =			702.72 s.i. Req'd
Use:	14" x 7"	Foundation Vents		
Vent Area =	98 s.i. - 25% reduct.,1/4"mesh =		73.5 s.i.	
Vents Required =	702.72 s.i. / Vent Area =		9.56 s.i.	
Provide : 10	14" x 7"	Vents, Area =	735 s.i.	
Ventilation Provided =	735.00 s.i. is Greater than			702.72 s.i. Req'd
Use: 10	**14" x 7"**	**Foundation Vents**		

*** FOUNDATION VENTS SHALL NOT INTERFERE WITH DIRECT LOAD PATH OF COLUMNS**
*** INSTALL 6 MIL BLACK POLYETHYLENE VAPOR RETARDER GROUND COVER**
*** REQUIRED OPENINGS SHALL BE EVENLY PLACED TO PROVIDE CROSS VENTILATION, EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTS.**

AIR LEAKAGE

Components of the building thermal envelope as listed in TABLE R402.4.1.1 shall be installed per manufacturer's specifications to limit air leakage rate to not exceed 3 air changes per hour (ACH)

AIR LEAKAGE CALCULATION (maximum blower test CFM)		$CFM_{50\text{-}calc}$		ACTUAL Blower test result	
maximum ACH	$CFM_{50\text{-}calc}$ = BLDG VOL (ft^3) X 3 ACH / 60 min =	1532	cfm		cfm

VAPOR RETARDER

FLOOR		4 MIL POLY		FACE STAPLED BACKED BATTS	X	PLYWOOD W/ EXT. GLUE
WALL		4 MIL POLY		FACE STAPLED BACKED BATTS	X	CLASS 2 PVA PRIMER
RIM JOIST		4 MIL POLY	X	FACE STAPLED BACKED BATTS		CLASS 2 PVA PRIMER
CEILING		4 MIL POLY		FACE STAPLED BACKED BATTS	X	CLASS 2 PVA PRIMER

WHOLE-HOUSE MECHANICAL VENTILATION (PRESCRIPTIVE)

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4 (WASHINGTON STATE AMENDMENTS)

☑ WHOLE-HOUSE VENTILATION USING EXHAUST FANS (M1505.4.1.2)
☐ WHOLE-HOUSE VENTILATION USING SUPPLY FANS (M1505.4.1.3)
☐ WHOLE-HOUSE VENTILATION SYSTEM, BALANCED (M1505.4.1.4)
☐ WHOLE-HOUSE VENTILATION USING FURNACE INTEGRATED SUPPLY (M1505.4.1.5)

MECHANICAL VENTILATION AIRFLOW RATE PER EQUATION 15-1 (M1505.4.3) — 79.1 CFM (CONTINUOUS)

VENTILATION QUALITY ADJUSTMENT PER EQUATION 15-2 (M1505.4.3.1)
☐ BALANCED & DISTRIBUTED (1.0 COEFFICIENT)
☐ BALANCED & NOT DISTRIBUTED (1.25 COEFFICIENT)
☑ NOT BALANCED & DISTRIBUTED (1.25 COEFFICIENT
☐ NOT BALANCED & NOT DISTRIBUTED (1.5 COEFFICIENT)
ADJUSTED MECHANICAL VENTILATION AIRFLOW RATE — 98.875 CFM (CONTINUOUS)

INTERMITTENT OFF OPERATION (M1505.4.3.2)
RUN-TIME % IN EACH 4-HOUR SEGMENT
☐ 50 PERCENT
☐ 66 PERCEINT
☑ 75 PERCENT
☐ 100 PERCENT
INTERMITTENT FLOW RATE — 128.538 CFM

EXHAUST RATES

WSBC AMENDMENTS TO 2018 IRC SECTION M1505

SYMBOL	LOCATION	MINIMUM FAN REQUIREMENTS
A	Bath, Powder	Minimum 50 cfm Intermittent, 20 cfm Continuous (IRC TABLE M1505.4.4(1))
B	Kitchen	Minimum 100 cfm Intermittent, 30 cfm Continuous (IRC TABLE M1505.4.4(1)) (Range hood or down draft exhaust fan rated at min.100 cfm at 0.10" WG may be used for exhaust fan requirement.) **note**: fans in excess of 400 cfm shall provide make-up air per IRC section M1503.6
C	Whole House Fan	Flow rate per WHOLE-HOUSE MECHANICAL VENTILATION schedule

All fans to vent to outside. All other requirements of the 2018 WSEC and the WSBC amendments to the 2018 IRC section M1505 must be met.

ALARM SCHEDULE

2018 IRC SECTIONS R314 & R315

SYMBOL	DESCRIPTION	REQUIREMENTS
SA	Smoke Alarm	*110 V interconnected w/ battery backup. *Installed on each floor, in each sleeping area, and outside each separate sleeping area. Installed not less than 3 ft from the door of a bath which contains a tub or shower unless this prevents placement in a required location. *Listed in accordance with UL 217 and to comply with NFPA 72.
SA CM	Combination Smoke Alarm & Carbon Monoxide Alarm	*Installed on each floor, outside of each separate sleeping area in the immediate vicinity of the bedrooms, and in a bedroom that contains a gas fireplace in the bedroom or adjacent bathroom. *Smoke alarm requirements per above. *Combination smoke & carbon monoxide alarms listed in accordance with UL 217 & UL 2034.
HD	Heat Detector	*A heat detector or heat alarm to be installed in a central location in the garage and per the manufacturer's instructions. (WSBC amendments R314.2.1 & R314.2.3)

REGISTERED ARCHITECT 5046 JEFFREY P. GROULET STATE OF WASHINGTON 12/20/21

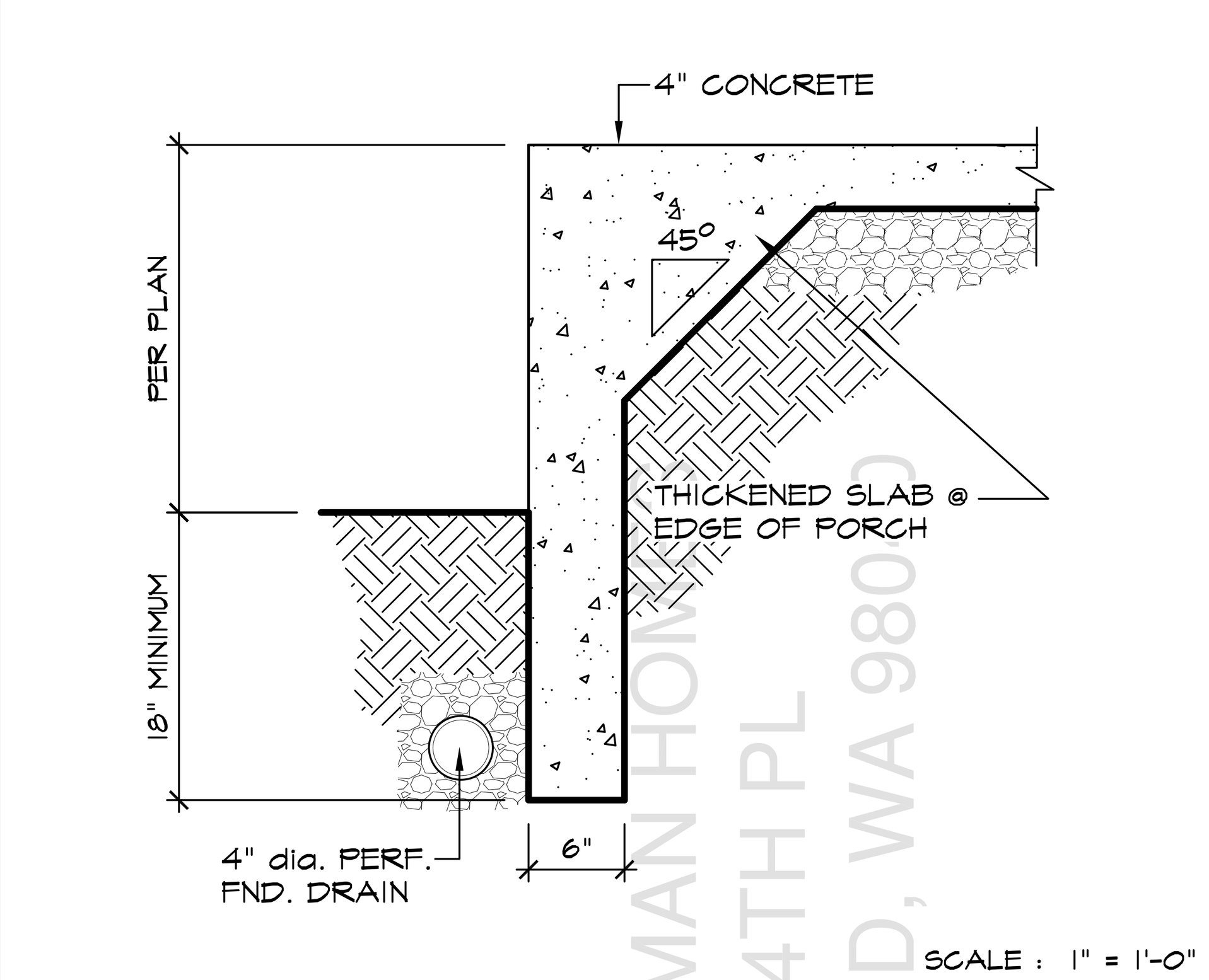
ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

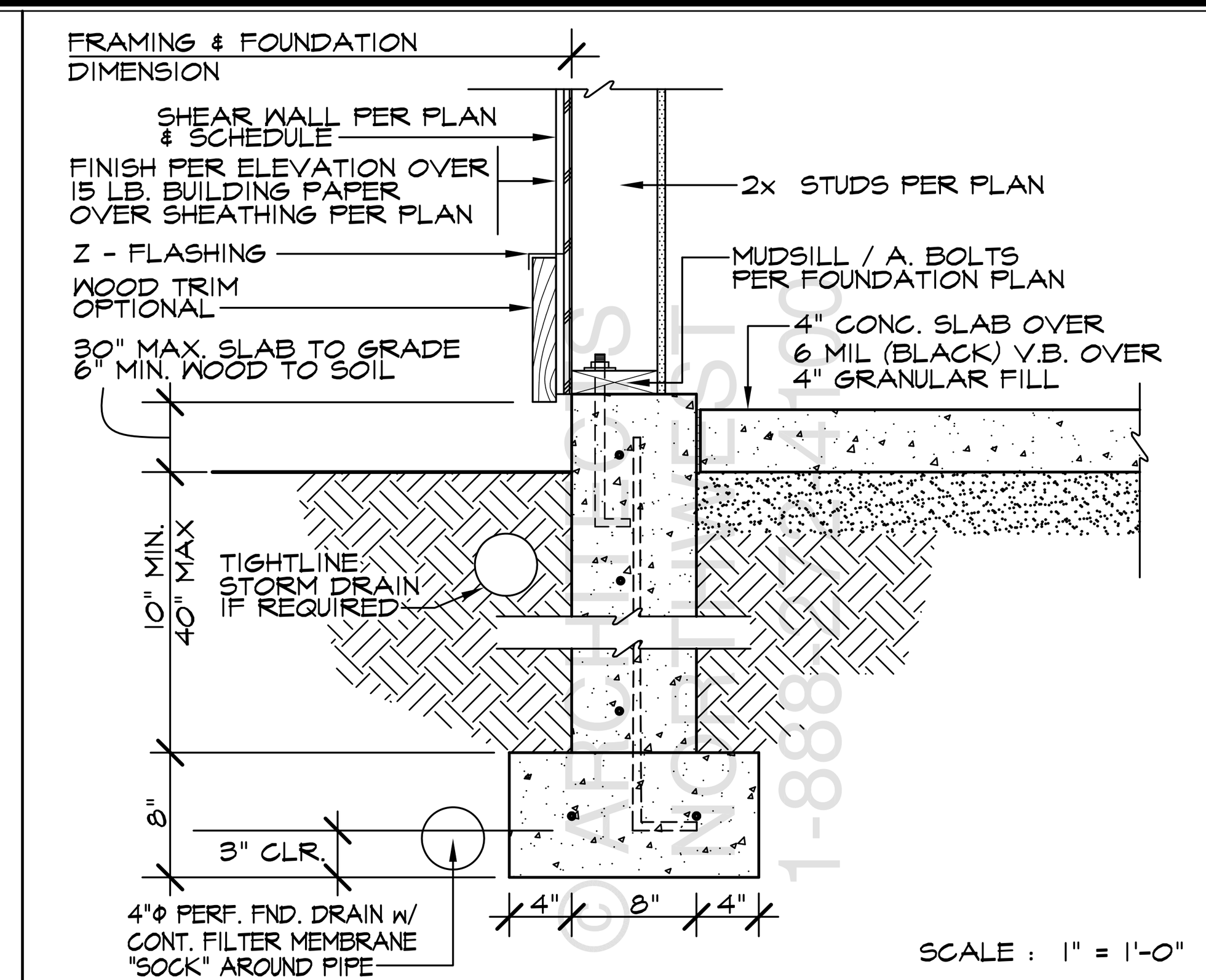
DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

A2 / A13

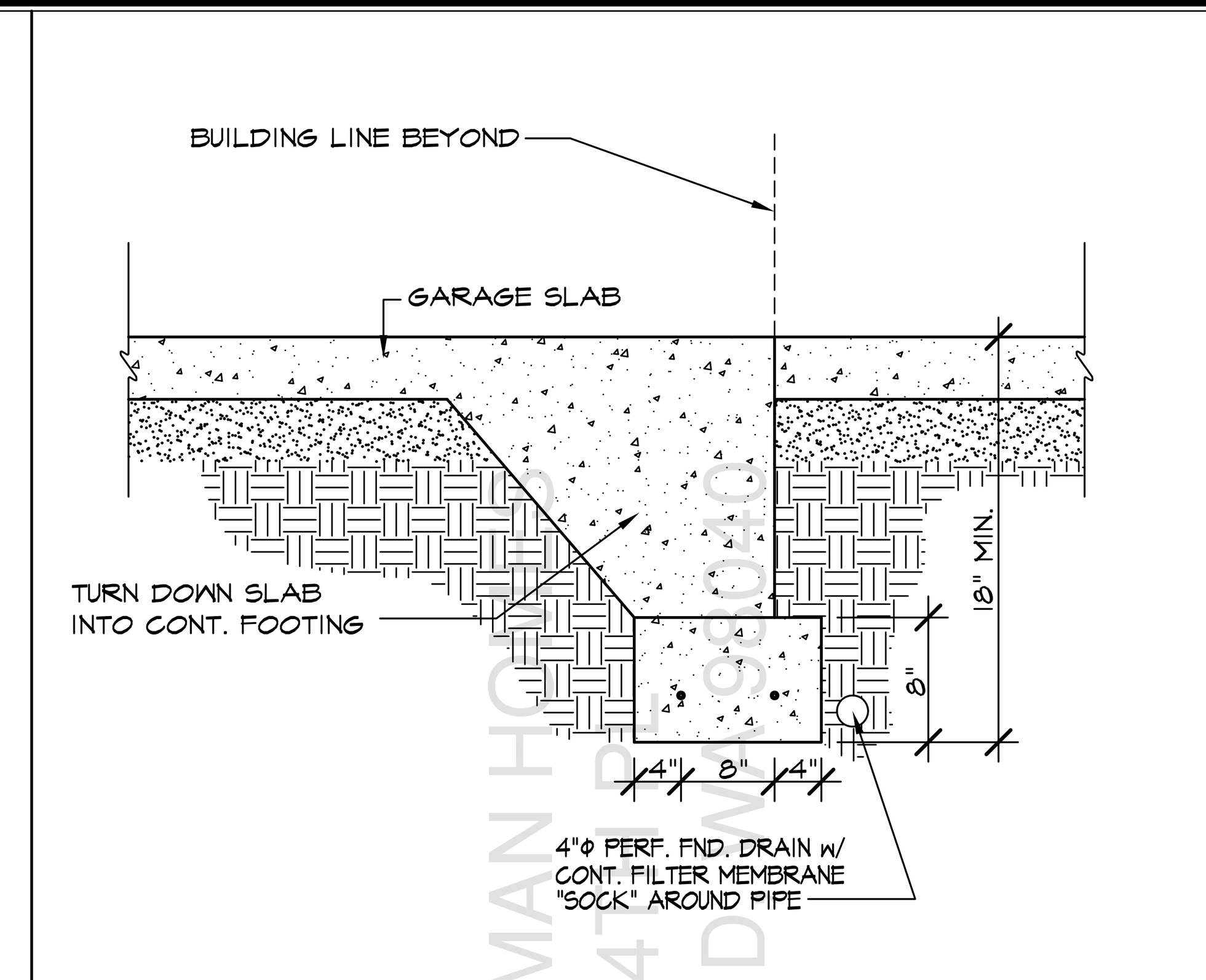
ANW JOB NUMBER: 210248



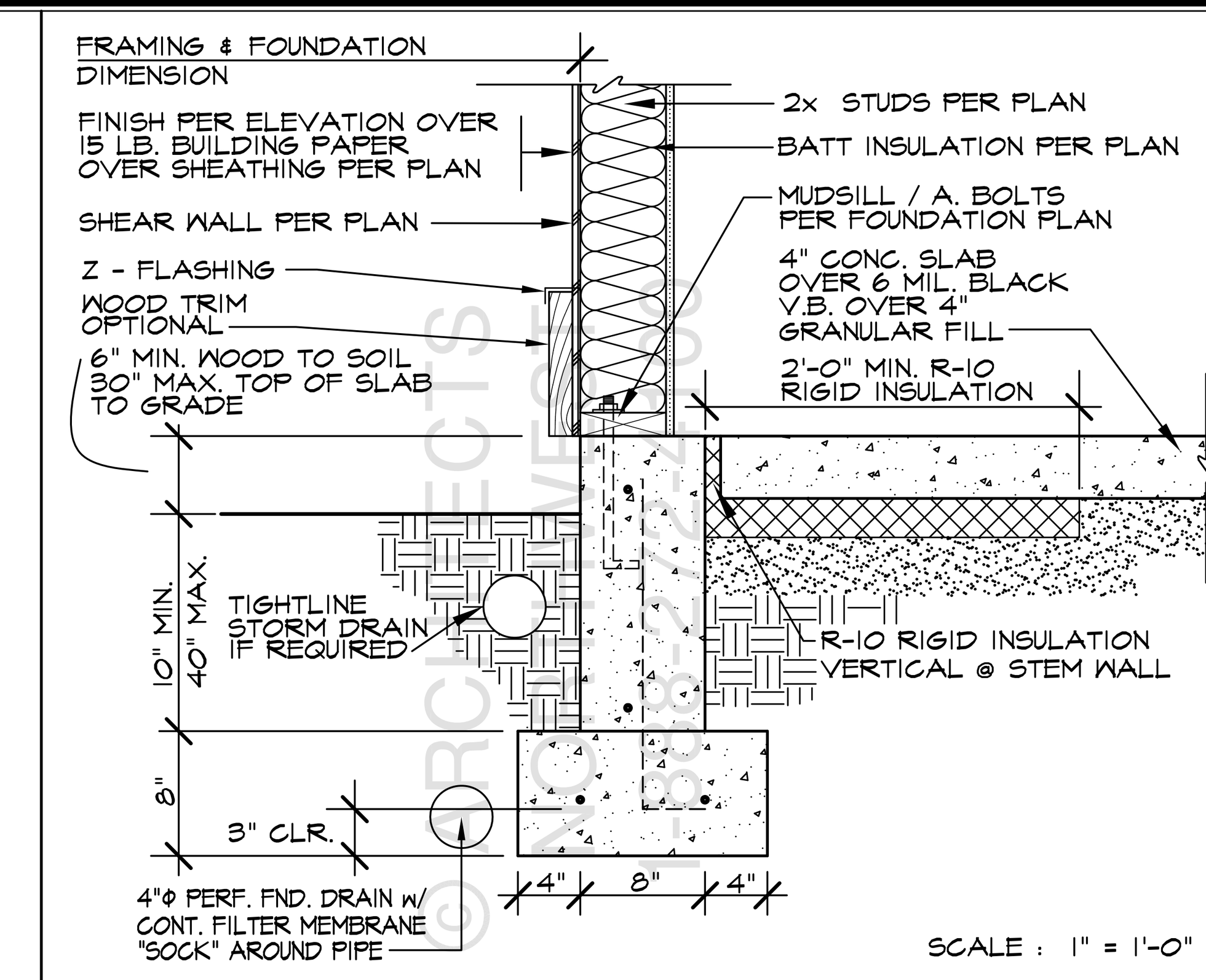
1 FND. WALL PORCH



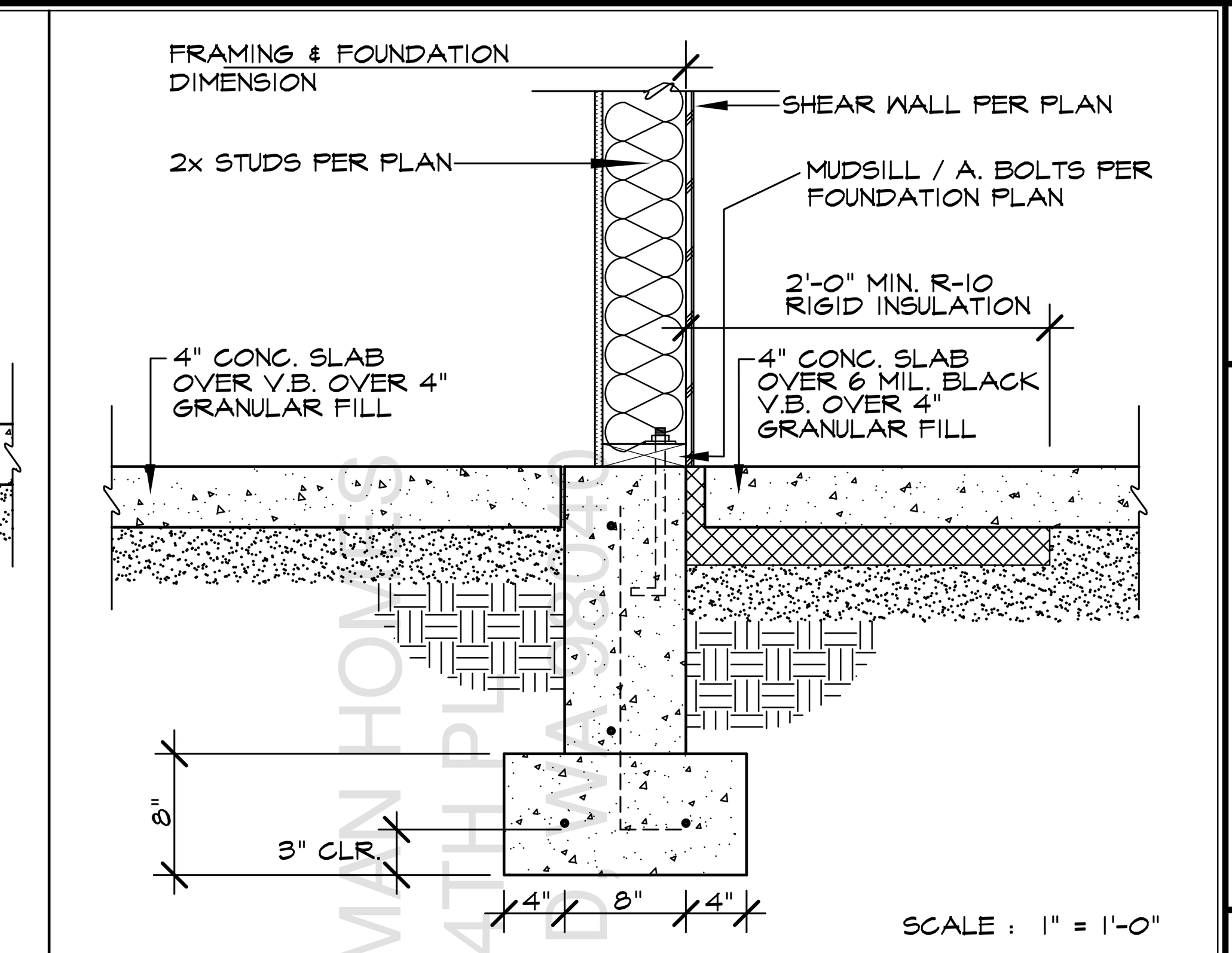
2 8" GARAGE FND. WALL



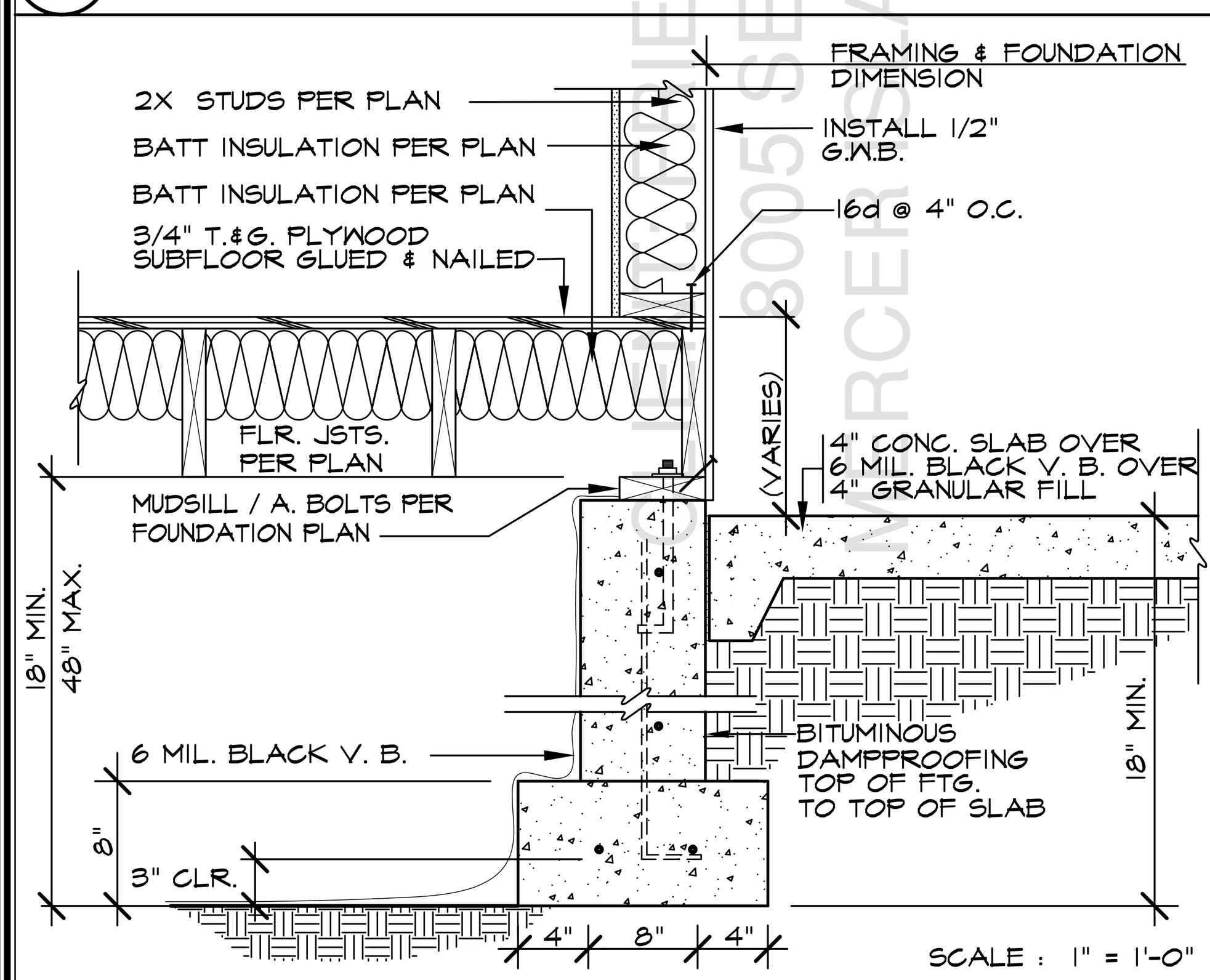
3 THICKENED SLAB @ O.H. DOOR



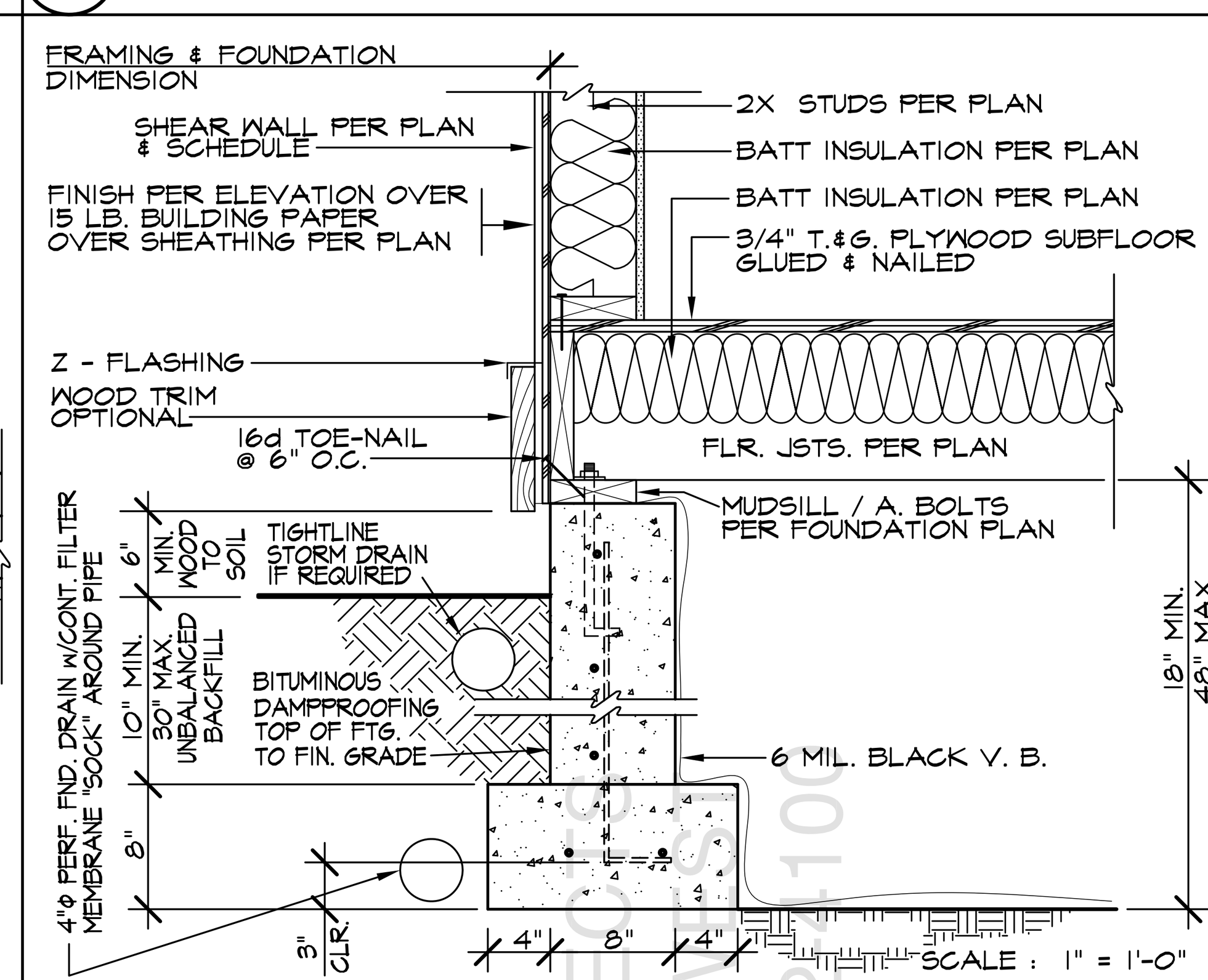
4 8" FND. WALL W/ INSUL. SLAB



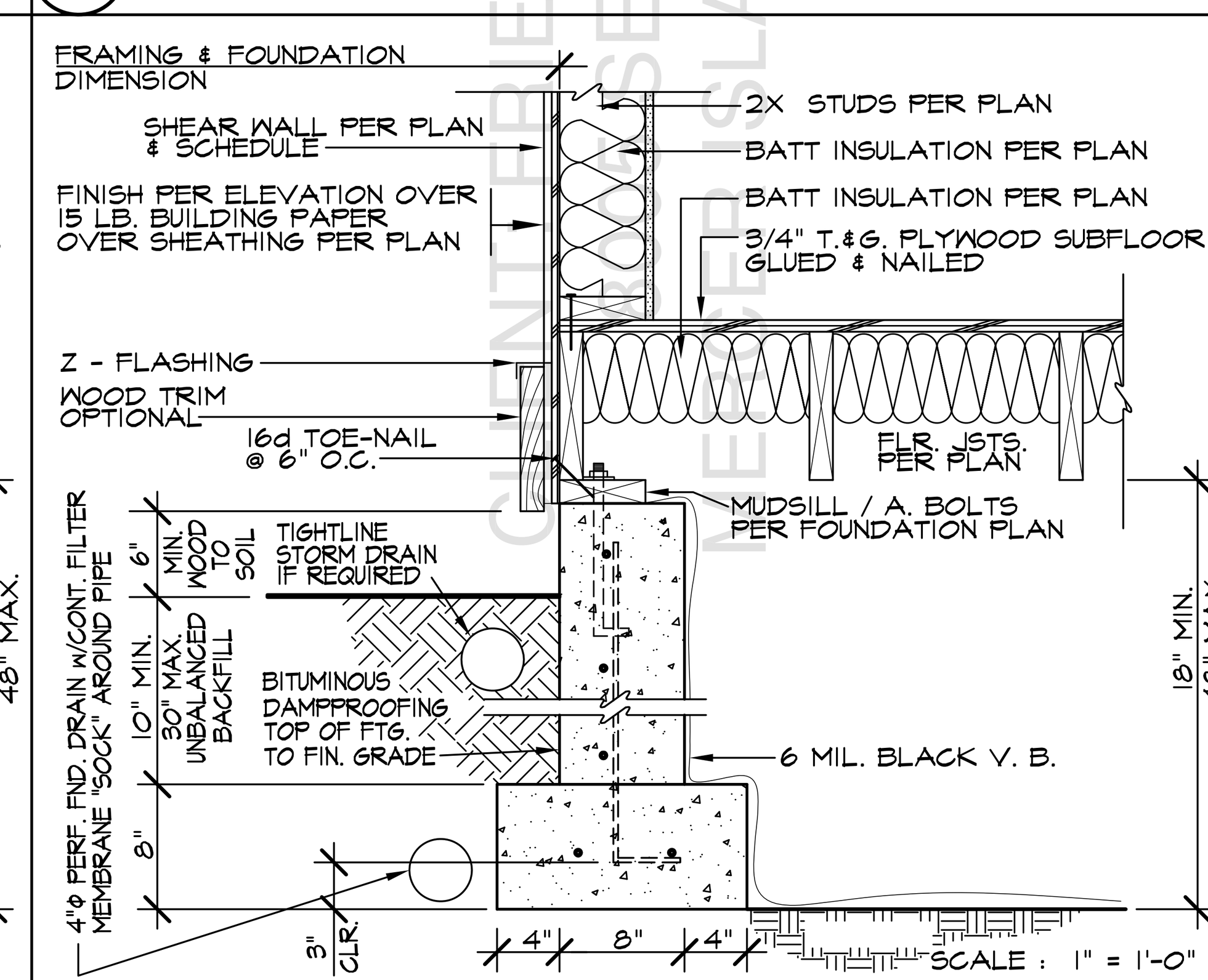
5 8" STEM WALL W/ SLAB



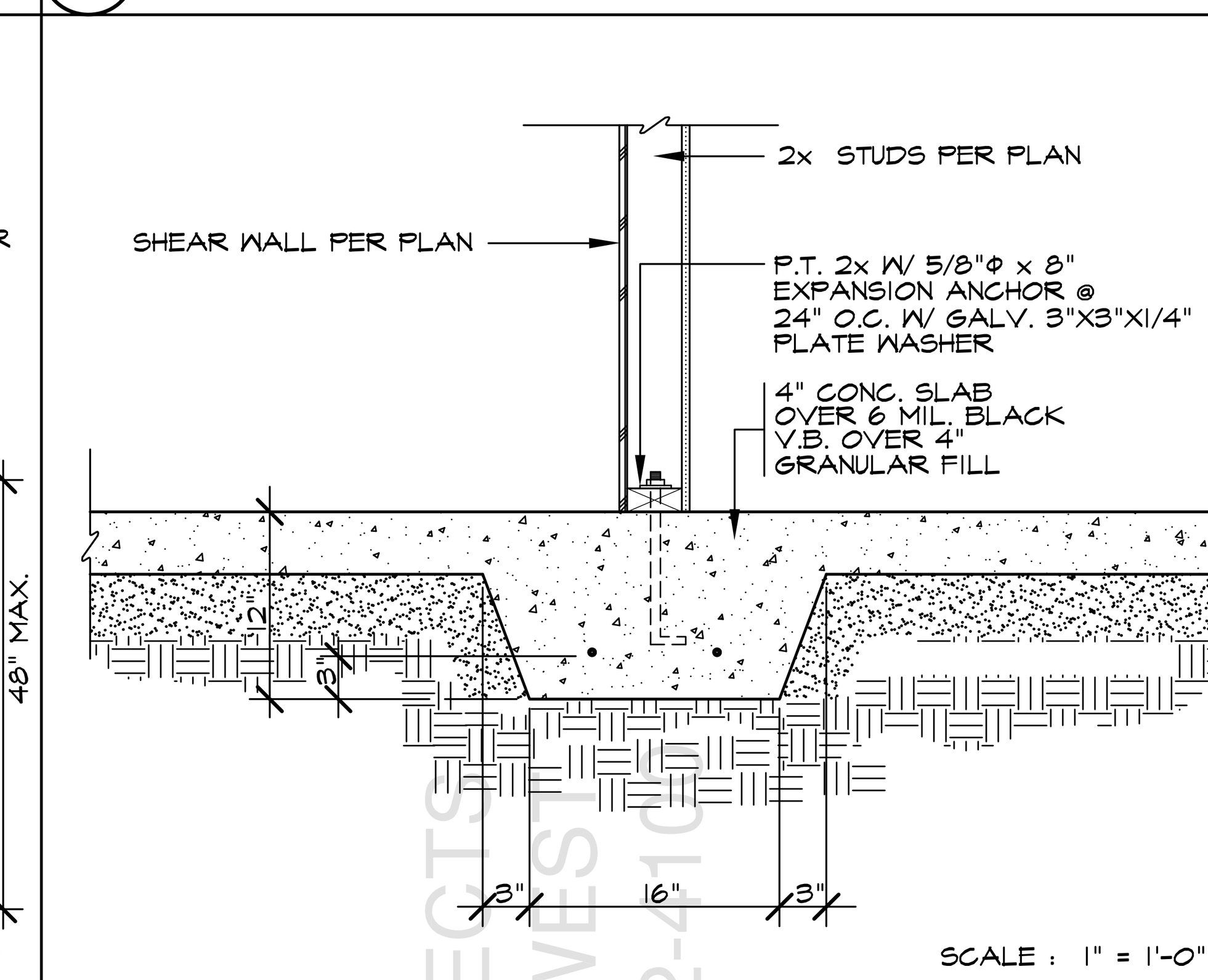
6 8" FND. WALL @ GARAGE



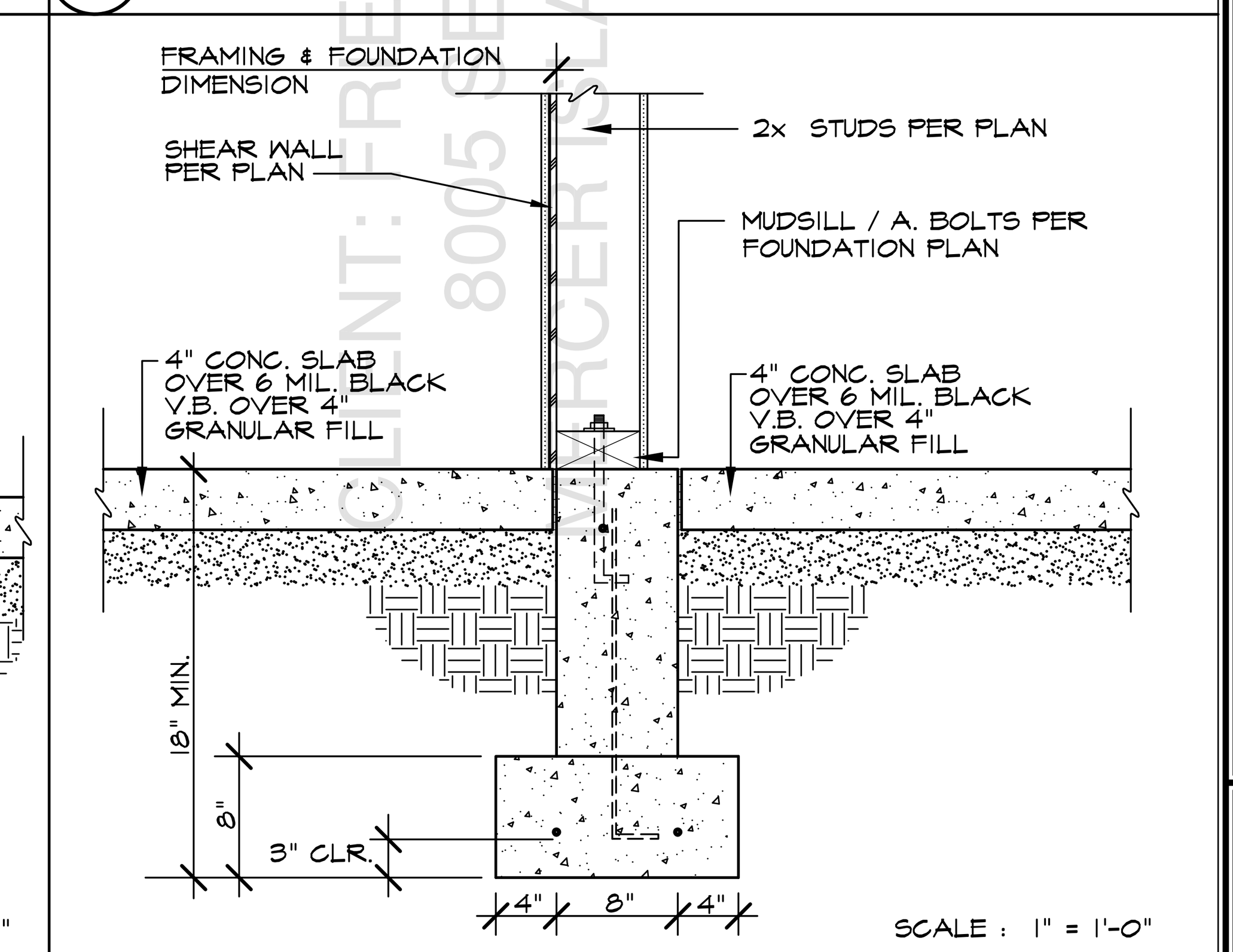
7 8" FND. WALL



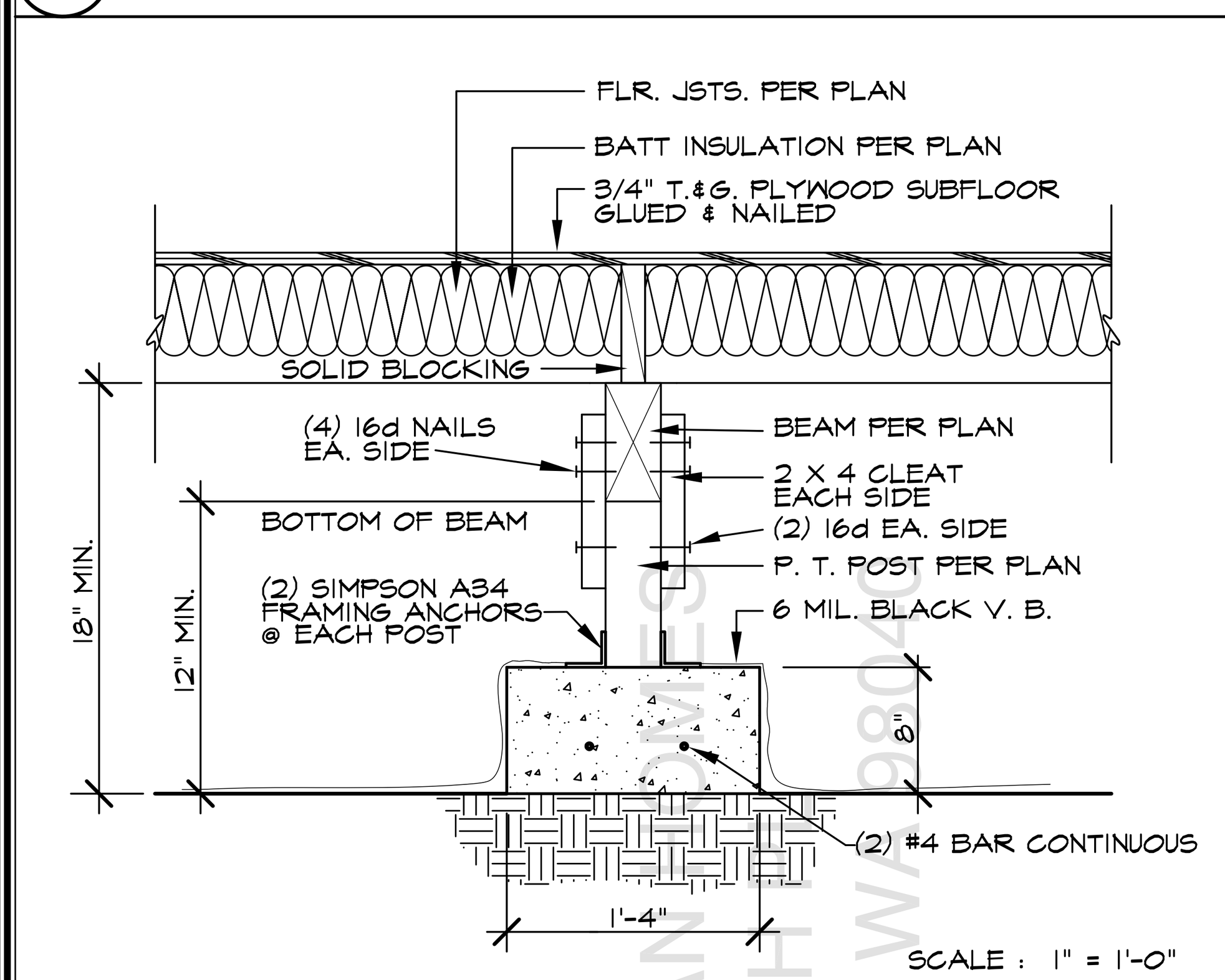
8 8" FND. WALL



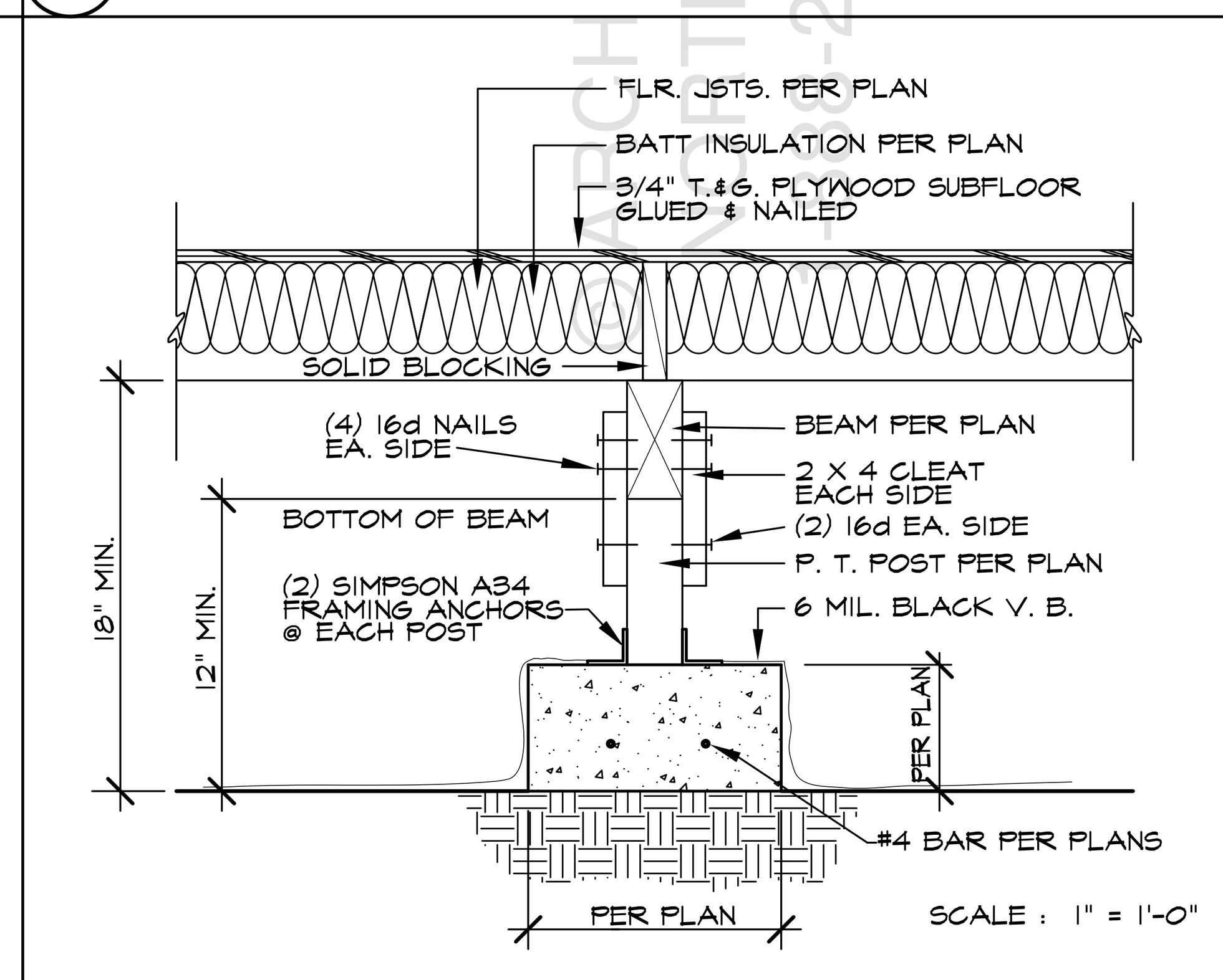
9 THICKENED SLAB



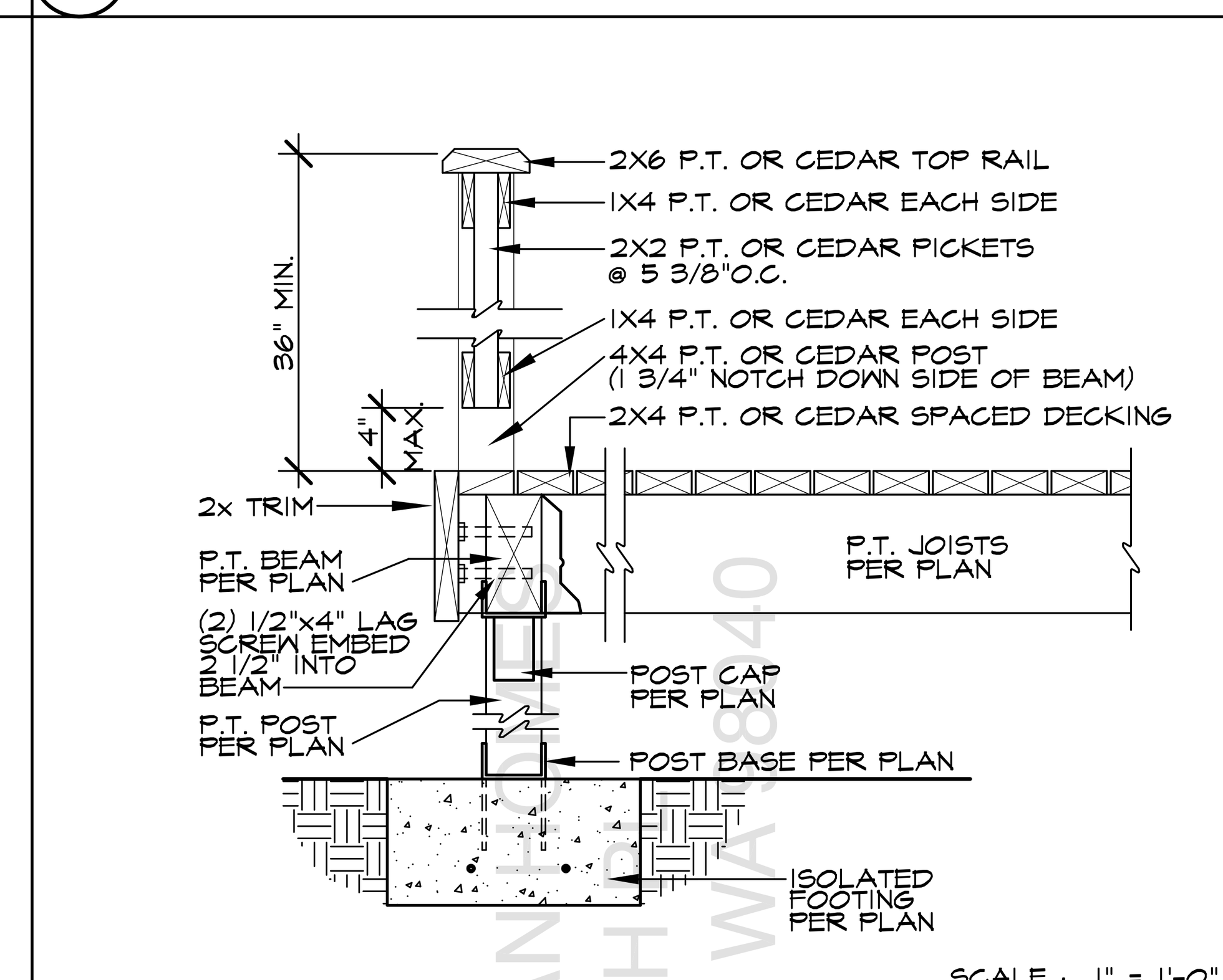
10 8" STEM WALL W/ SLAB



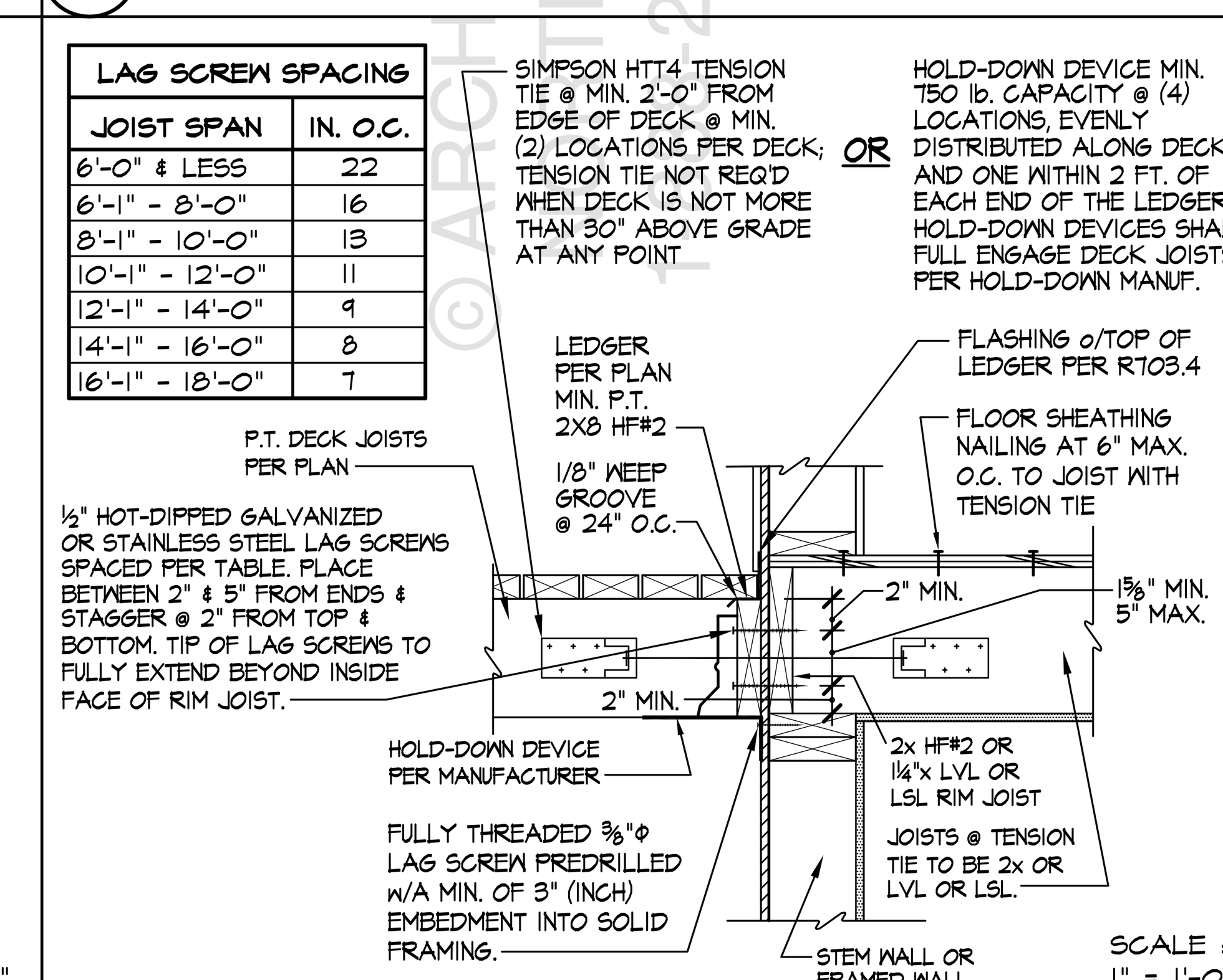
11 CONTINUOUS FOOTING



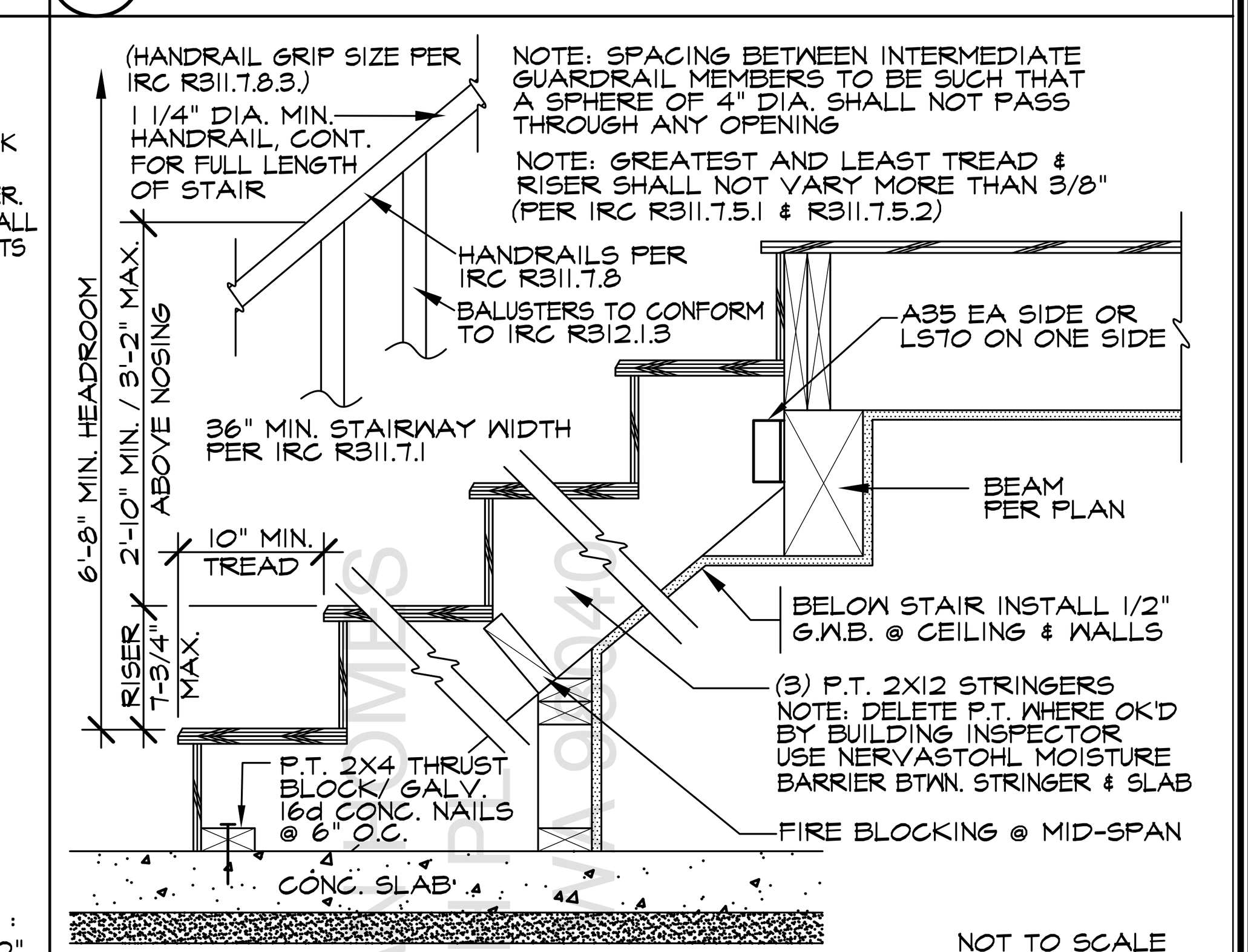
12 ISOLATED FOOTING



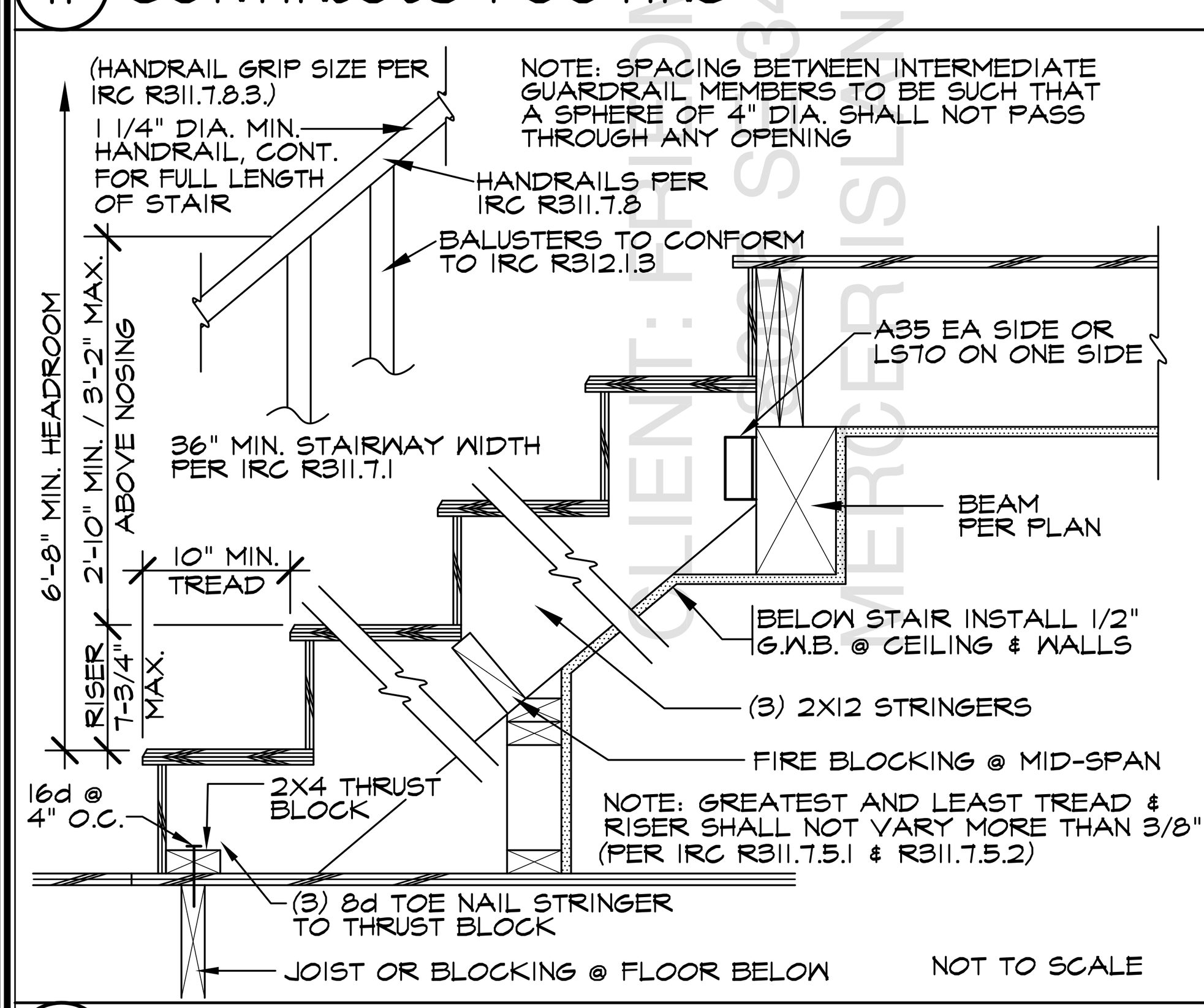
13 DECK W/ FLUSH BEAM



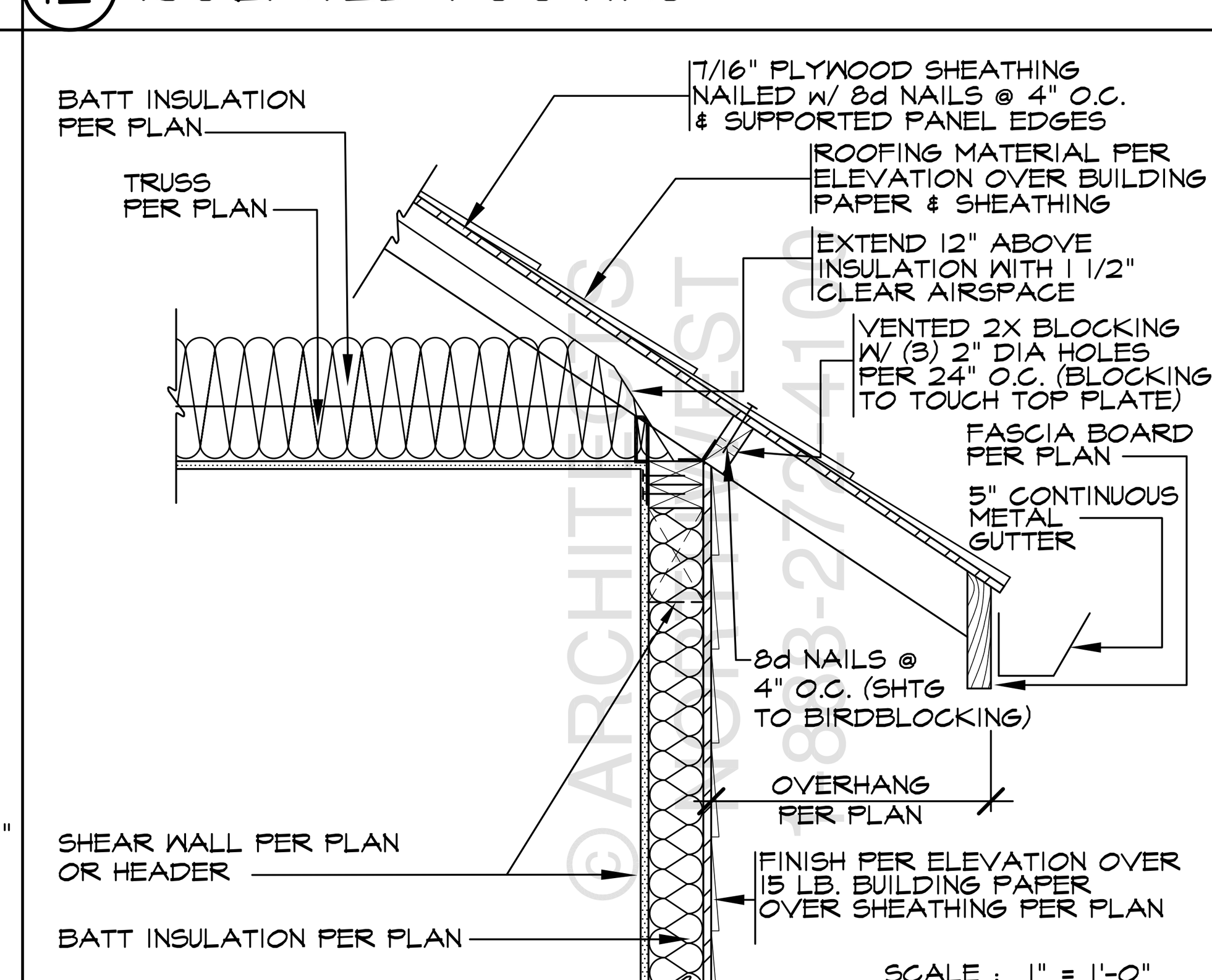
14 DECK LEDGER DETAIL



15 INTERIOR STAIR W/ SLAB



16 INTERIOR STAIR



17 FLAT CEILING & EAVE

18 NOT USED

19 NOT USED

20 NOT USED

ARCHITECTS NORTHWEST
18815-142ND AVENUE NE SUITE 100
WOODINVILLE, WA 98072
OFFICE: (425) 485-4900
FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100
WWW.ARCHITECTSNW.COM

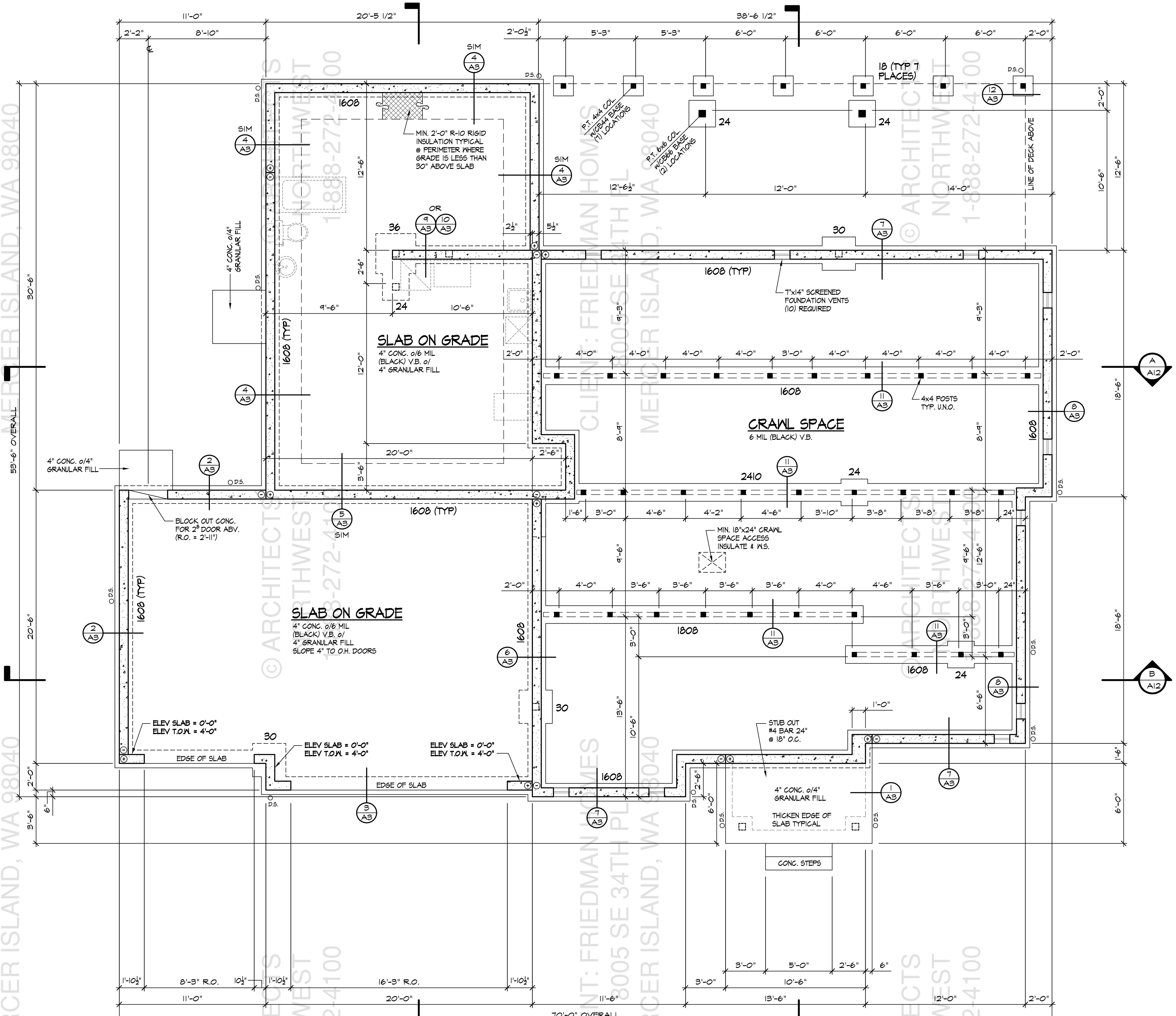
FRIEDMAN HOMES

PLAN M2595B3F-9

DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY: BPS	DATE: 9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

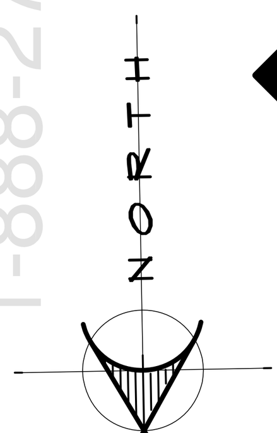
A3 / A13

ANW JOB NUMBER: 210248



FOUNDATION PLAN

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



FOUNDATION NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
2. ALL FOOTINGS TO REST ON UNDISTURBED SOIL.
3. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
4. SOFFIT & INSULATE CANTILEVERED AREAS.
5. STEP FOUNDATION PER SITE CONDITIONS.
6. 1,500 P.S.F. ASSUMED SOIL BEARING CAPACITY SHALL BE VERIFIED IN FIELD.
7. SEE SHEET A1 FOR ADDITIONAL NOTES.
8. SEE SHEET A2 FOR FOUNDATION VENTILATION CALCULATION.

NOTE: SEE 'S' SHEETS FOR LATERAL INFORMATION & ENGINEERING DETAILS

PROVIDE BITUMINOUS DAMPROOFING FROM TOP OF FTG. TO FIN. GRADE AT BASEMENT WALLS AND CRAWL SPACE WALLS.

THOMAS J. PITZER
STATE OF WASHINGTON
40881
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 12-02-22

5046 REGISTERED ARCHITECT
JEFFREY P. deR...
STATE OF WASHINGTON
12/20/21

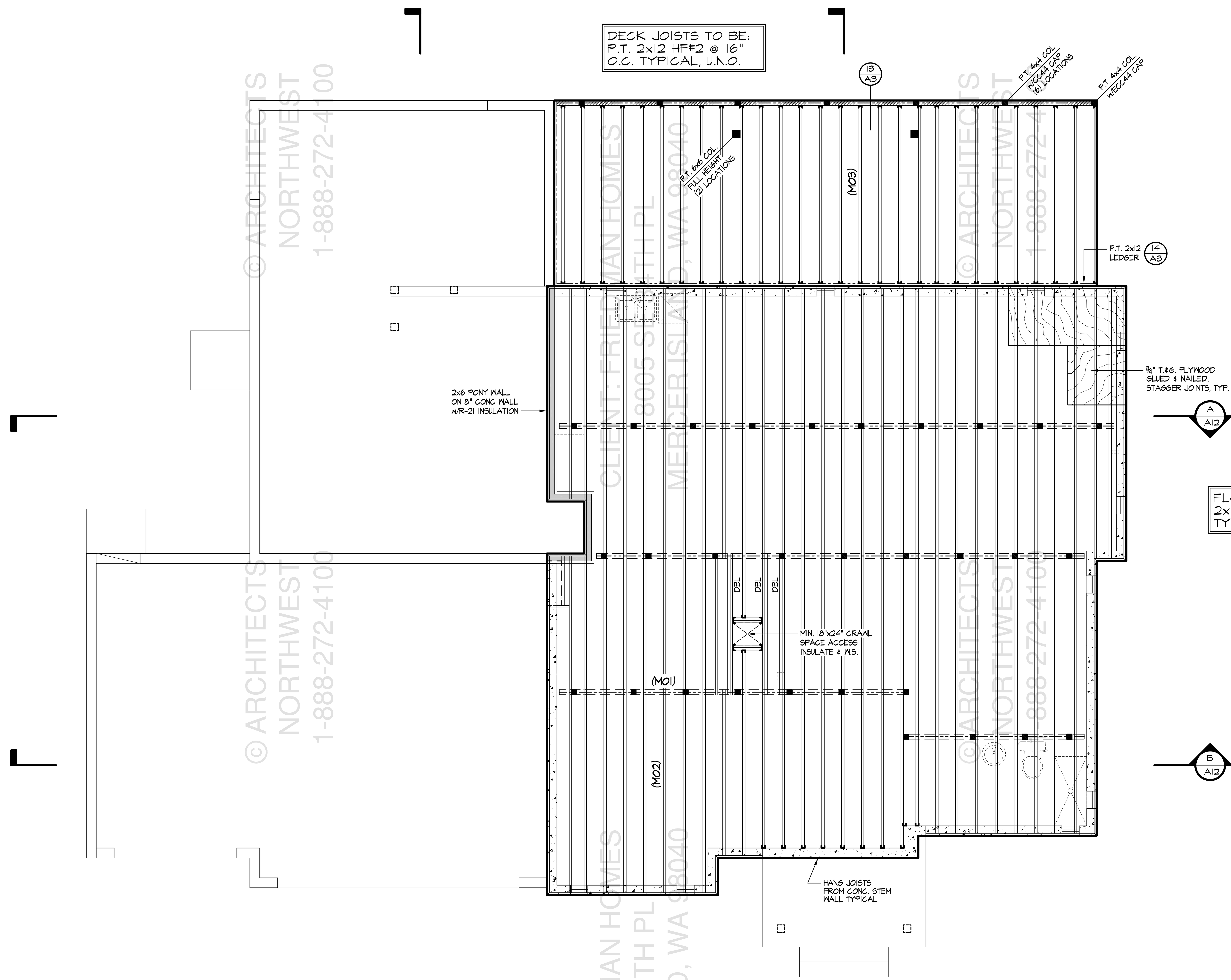
ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100
WOODINVILLE, WA 98072
OFFICE: (425) 485-4900
FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100
WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY:	DATE:
TC	2013
DRAWN BY:	DATE:
JRA	8/11/14
PROJECT MANAGER:	
MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY:	DATE:
PITZER	12/7/21
LATERAL JOB NUMBER:	21-140

A4 / A13

ANW JOB NUMBER: 210248



MAIN FLOOR FRAMING PLAN

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

NORTH

BEAM SCHEDULE

M01 - 4x10 DF#2
M02 - 2x10 HF#2 @ 16" O.C.
M03 - 2x12 HF#2 @ 16" O.C.

FLOOR FRAMING NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
2. ALL FLOOR JOISTS TO BE 2x10 HF#2 @ 16" ON CENTER UNLESS NOTED OTHERWISE (U.N.O.)
3. ALL BEAMS TO BE 4x10 DF#2 TYPICAL, U.N.O.
4. POSTS TO BE 4x4 DF#2 & 4x6 DF#2 @ BEAM JOINTS, U.N.O.
5. PROVIDE SOLID BLOCKING OVER SUPPORTS.
6. PROVIDE FIRE BLOCKING @ ALL PLUMBING PENETRATIONS.
7. BEARING WALLS ARE SHADED.
8. PLUMBING AND MECHANICAL FIXTURES ARE DASHED.
9. ■ INDICATES POINT LOAD SUPPORTED BY (2) STUDS, U.N.O.
10. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
11. SEE SHEET A1 FOR ADDITIONAL NOTES.

NOTE: SEE 'S' SHEETS FOR LATERAL INFORMATION & ENGINEERING DETAILS

BEAM SCHEDULE	
PLAN VIEW	DESCRIPTION
- - - - -	DROPPED BEAM DESIGNATED ON FLOOR PLANS.
—·—·—	DROPPED BEAM DESIGNATED ON FRAMING PLANS.
(hatched)	FLUSH AND TOP FLUSH BEAM DESIGNATED ON FRAMING PLANS.
(hatched)	UPSET BEAM DESIGNATED ON FRAMING PLANS.

THOMAS J. PITZER
STATE OF WASHINGTON
40881
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 12-02-22

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

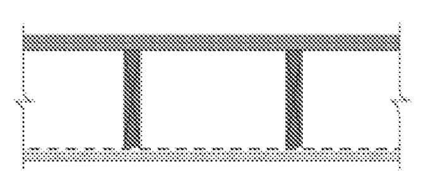
DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

A5 / A13

ANW JOB NUMBER: 210248

(A/A5) ADU CEILING FIRE RATED ASSEMBLY
FLOOR/CEILING WOOD-FRAMED

1/2" (12.7 mm) ToughRock Fireguard C or 1/2" (12.7 mm) DensArmor Plus Fireguard C gypsum board applied perpendicular to resilient channels 24" (610 mm) o.c. with 1" (25 mm) Type S drywall screws 12" (305 mm) o.c. Gypsum board end joints located midway between continuous channels and attached to additional pieces of channels 60" (1524 mm) long with screws 12" (305 mm) o.c. Resilient channels applied perpendicular to 2" x 10" wood joists 16" (406 mm) o.c. with 2" (51 mm) 6d coated nails. Wood joists supporting 1" (25.4 mm) nominal wood subfloor and 1" (25.4 mm) nominal wood finish floor, or 19/32" (15.1 mm) plywood finished floor with long edges T&G and 15/32" (11.9 mm) interior plywood with exterior glue subfloor perpendicular to joist with joints staggered.



Hourly Rating: **1-hour**

STC Rating: **45-49 STC and 67 IIC w/C&P**

Fire Test Reference: **UL L502, ULC M501, cUL L502, GA FC 5250**

Sound Test Reference: **RAL TL64-155 & IIC - CK 6512-6**

Approved for Assembly:

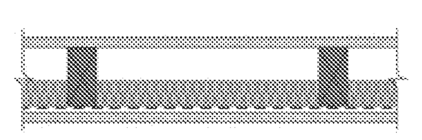
ToughRock® Fireguard C® Products

DensArmor Plus® Fireguard C® Products

DETAIL A/A5 AT ADU CEILINGS WITH HOUSE ABV.

(B/A5) ADU WALL FIRE RATED ASSEMBLY
WOOD-FRAMED WALL

Resilient channels 24" o.c. attached horizontally on one side of 2" x 4" wood studs 24" o.c. with 1-1/4" Type S drywall screws. One layer 5/8" (15.9 mm) ToughRock® Fireguard X™ or 5/8" (15.9 mm) DensArmor Plus® FireGuard® interior panels applied horizontally to channels with 1" Type S drywall screws 8" o.c. with vertical joints located mid way between studs. 3" mineral or glass fiber insulation in stud space. Opposite side: one layer 5/8" (15.9 mm) ToughRock® Fireguard X™ Products or 5/8" (15.9 mm) DensArmor Plus FireGuard interior panels applied horizontally or vertically to studs with 6d cement coated nails, 1 7/8" long, 0.0915" shank, 15/64" heads, 7" o.c. Vertical joints staggered 24" on opposite sides. Sound Tested with 3-1/2" (89 mm) fiberglass insulation



Hourly Rating: **1-hour**

STC Rating: **50-54 STC**

Fire Test Reference: **UL U309, cUL U309, GA WP 3243**

Sound Test Reference: **RAL TL77-138**

Approved for Assembly:

DensArmor Plus® Fireguard C® Products

DensArmor Plus® Fireguard® Products

DensElement™ Barrier Sheathing

DensGlass® Fireguard® Sheathing

DensShield® Fireguard® Tile Backer

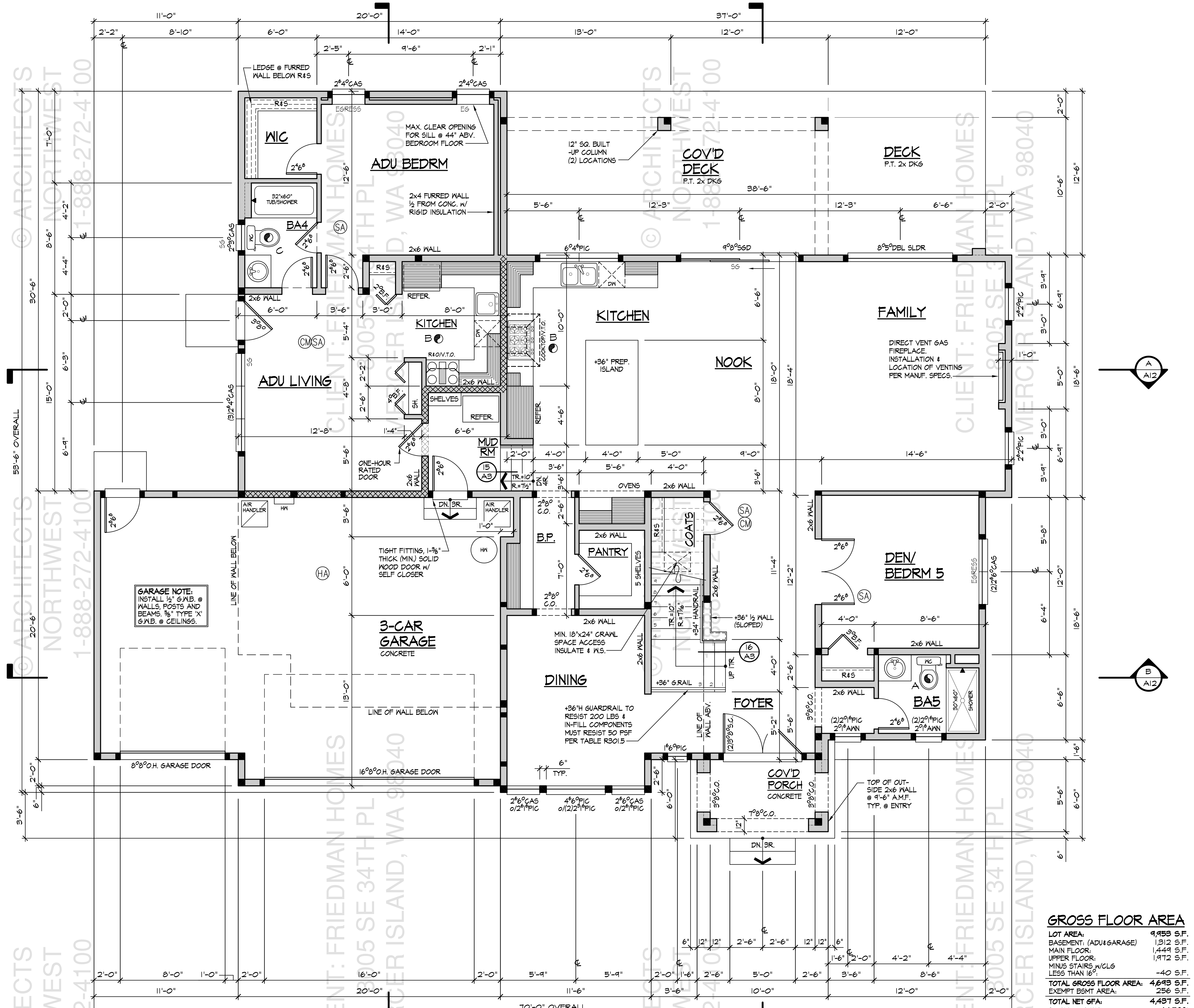
ToughRock® Fireguard C® Products

ToughRock® Fireguard X™ Mold-Guard™ Products

ToughRock® Fireguard X™ Products

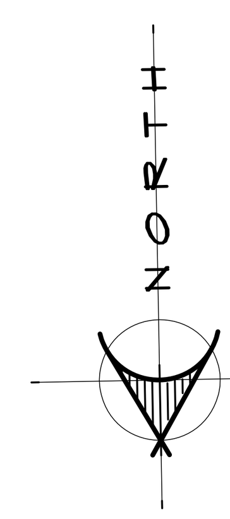
ToughRock® Lite-Weight Fire-Rated Products

= 1 HR. DWELLING ADU / RES SEPARATION PER DETAIL B/A5



MAIN FLOOR PLAN

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



NOTE: SEE 'S' SHEETS FOR LATERAL INFORMATION & ENGINEERING DETAILS

NOTE:
DUCTLESS MINI SPLIT HEAT PUMP SYSTEM W/MIN. HSPF OF 10 TYPICAL @ ADU

FLOOR PLAN NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
2. WINDOWS & DOORS ARE SHOWN & NOTED AS NOMINAL SIZES.
3. EXTERIOR WALLS TO BE 2x6 STUDS @ 16" O.C. U.N.O.
4. ■ INDICATES POINT LOAD SUPPORTED BY (2) STUDS, U.N.O.
5. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.7 & R303.8
6. SEE SHEET A1 FOR ADDITIONAL NOTES.
7. SEE SHEET A2 FOR VENTILATION SCHEDULE.
8. SEE SHEET A2 FOR ALARM SCHEDULE.

GROSS FLOOR AREA

LOT AREA:	**9,953 S.F.**
BASEMENT: (ADU&GARAGE)	1,312 S.F.
MAIN FLOOR:	1,449 S.F.
UPPER FLOOR:	1,972 S.F.
MINUS STAIRS w/CLG LESS THAN 16⁰:	-40 S.F.
TOTAL GROSS FLOOR AREA:	**4,693 S.F.**
EXEMPT BSMT AREA:	256 S.F.
TOTAL NET GFA:	**4,437 S.F.**
% OF LOT AREA:	44.58%
ALLOWED GFA:	4,478 S.F.
ALLOWED % OF LOT AREA:	45.00%

AREA SUMMARY

MAIN FLOOR:	1520 S.F.
UPPER FLOOR:	1890 S.F.
TOTAL HOUSE AREA:	**3410 S.F.**
ADU:	575 S.F.
TOTAL HEATED AREA:	**3985 S.F.**
GARAGE:	666 S.F.
COVERED AREA:	312 S.F.
UNFINISHED AREA:	N/A

REGISTERED ARCHITECT 5046 JEFFREY P. GAROUTTE STATE OF WASHINGTON 12/20/21

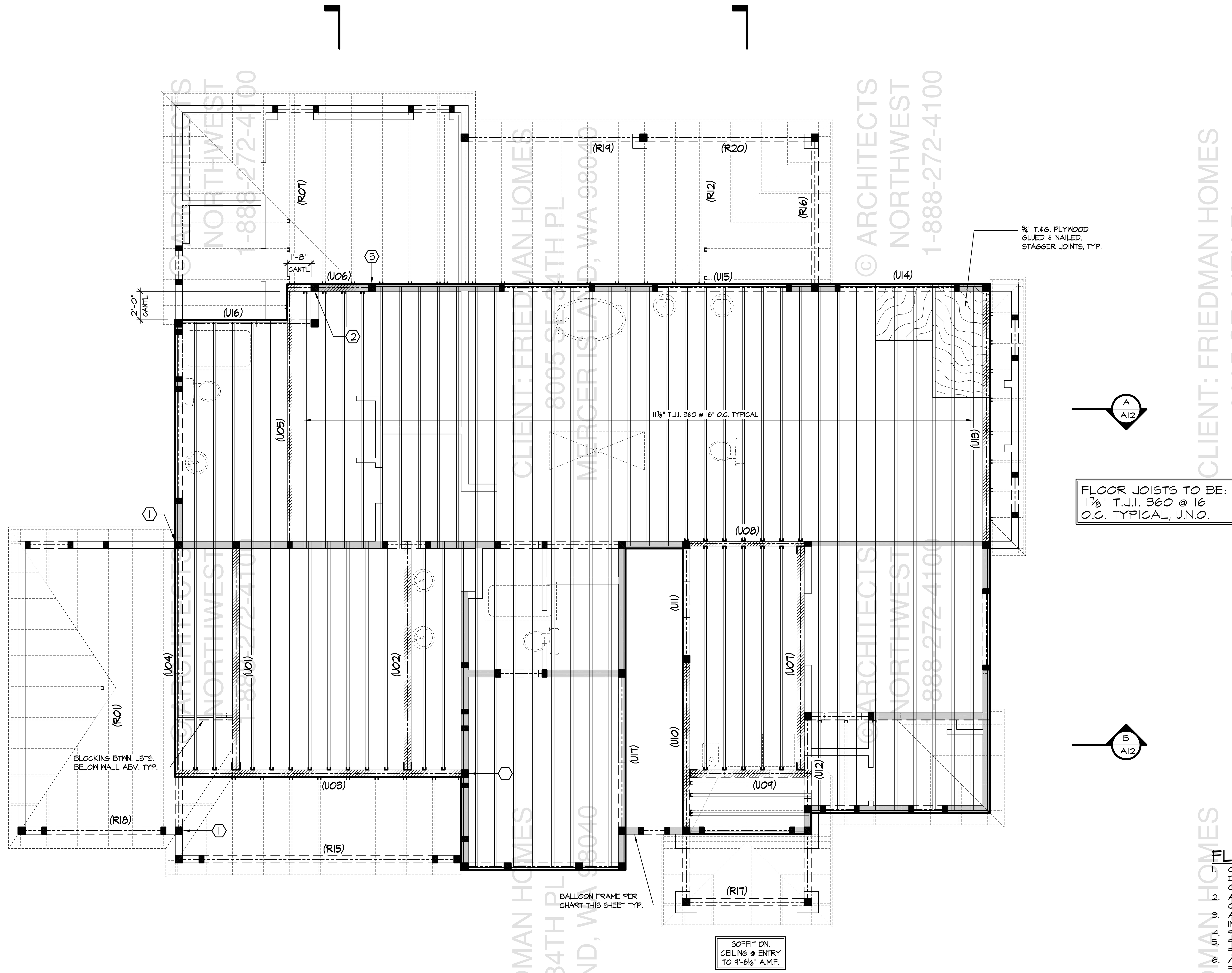
ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

A6 / A13

ANW JOB NUMBER: 210248



UPPER FLOOR FRAMING PLAN

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

NORTH

D A13

C A13

BEAM SCHEDULE

U01 - PSL 5¼"x11⅞"
U02 - PSL 5¼"x11⅞"
U03 - PSL 7"x18"
U04 - PSL 7"x18"
U05 - PSL 3½"x11⅞"
U06 - PSL 5¼"x11⅞"
U07 - PSL 3½"x11⅞"
U08 - PSL 5¼"x11⅞"
U09 - PSL 3½"x11⅞"
U10 - PSL 5¼"x11⅞"
U11 - 4x10 DF#2
U12 - 4x10 DF#2
U13 - PSL 5¼"x11⅞"
U14 - 4x10 DF#2
U15 - GLB 3½"x9¼"
U16 - PSL 5¼"x11⅞"
U17 - PSL 3½"x11⅞"

CONNECTION SCHEDULE

U01-U03 - HB5.50/11.88
U02-U03 - HB5.50/11.88
U05-U06 - HUC412
U07-U08 - HUC412
U07-U09 - HUC412
U09-U10 - HUCQ412

SHEET NOTES

1. 6x6 DF#1 POST w/ ECCQ11-6 CAP
2. 6x6 DF#1 POST w/ CCQ66 CAP
3. 6x6 DF#1 POST w/ ECCQ66 CAP

FLOOR FRAMING NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
2. ALL FLOOR JOISTS TO BE 11⅞" T.J.I. 360 @ 16" ON CENTER UNLESS NOTED OTHERWISE (U.N.O.)
3. ALL HEADERS TO BE 4x10 DF#2 w/R-10 RIGID INSULATION @ EXTERIOR WARM WALLS, U.N.O.
4. PROVIDE SOLID BLOCKING OVER SUPPORTS.
5. PROVIDE FIRE BLOCKING @ ALL PLUMBING PENETRATIONS.
6. WINDOW HEADERS @ 8'-0" ABOVE FINISHED FLOOR @ MAIN FLOOR U.N.O.
7. BEARING WALLS ARE SHADED.
8. PLUMBING AND MECHANICAL FIXTURES ARE DASHED.
9. ■ INDICATES POINT LOAD SUPPORTED BY (2) STUDS, U.N.O.
10. ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED.
11. SEE SHEET A1 FOR ADDITIONAL NOTES.

NOTE: SEE 'S' SHEETS FOR LATERAL INFORMATION & ENGINEERING DETAILS

NOTE: USE FULL LENGTH STUDS (BALLOON FRAME) PER THIS TABLE

WALL HEIGHT	FRAMING	BLOCKING
10'-0" OR LESS	2x6 @ 16" O.C.	N/A
10'-1" - 12'-6"	2x6 @ 12" O.C.	1/2 POINTS
12'-7" - 15'-0"	(2)2x6 @ 16" O.C.	1/2 POINTS
15'-1" - 17'-6"	(2)2x6 @ 12" O.C.	1/3 POINTS
17'-6" - 20'-2"	1¾"x5½" LVL @ 12" O.C.	1/3 POINTS

BEAM SCHEDULE

PLAN VIEW	DESCRIPTION
- - - - -	DROPPED BEAM DESIGNATED ON FLOOR PLANS.
—-—-—	DROPPED BEAM DESIGNATED ON FRAMING PLANS.
(hatched)	FLUSH AND TOP FLUSH BEAM DESIGNATED ON FRAMING PLANS.
(hatched, heavy outline)	UPSET BEAM DESIGNATED ON FRAMING PLANS.

THOMAS J. PITZER
STATE OF WASHINGTON
40881
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 12-02-22

5046
REGISTERED ARCHITECT
JEFFREY P. deRUYTER
STATE OF WASHINGTON
12/20/21

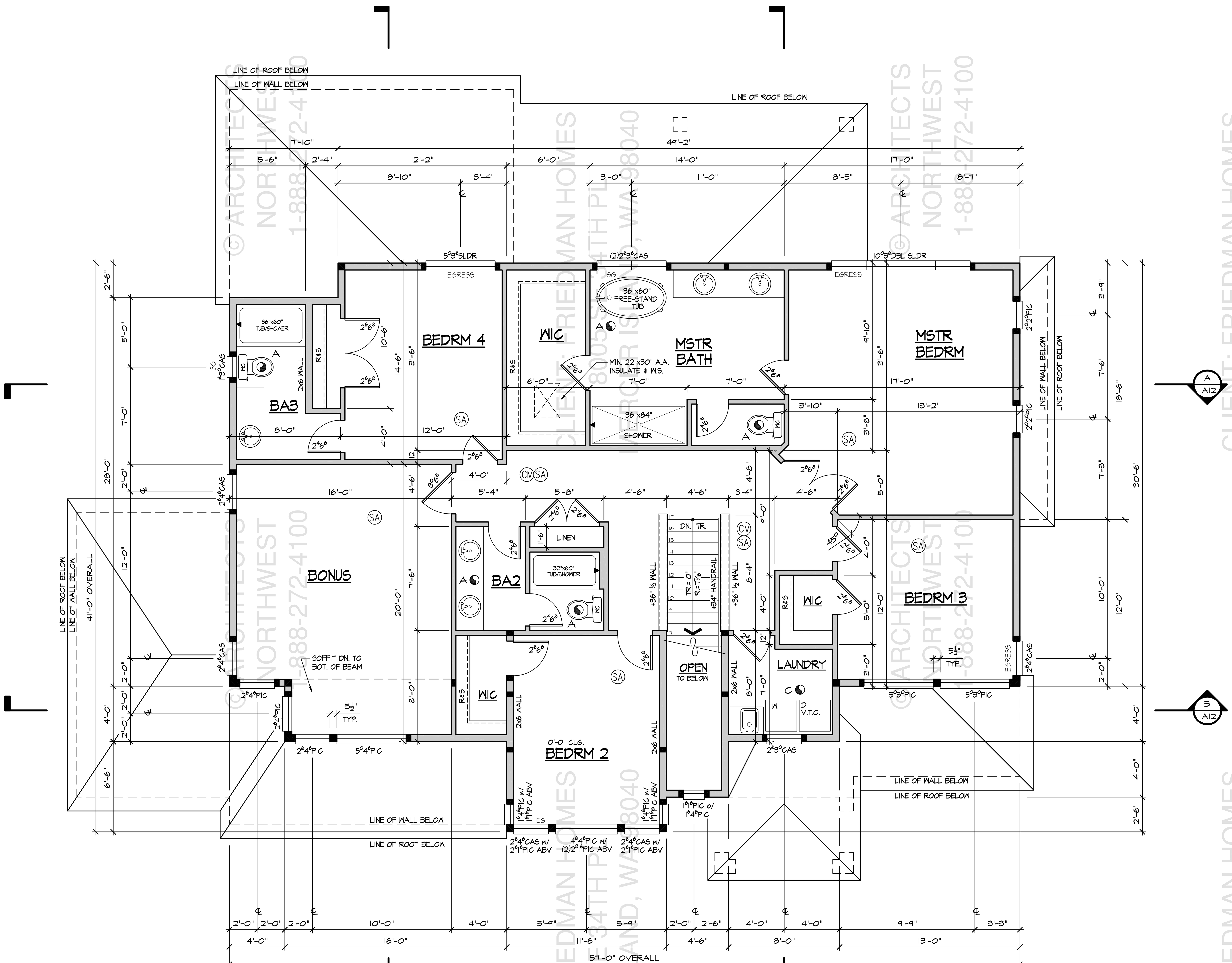
ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100
WOODINVILLE, WA 98072
OFFICE: (425) 485-4900
FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100
WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY: BPS	DATE: 9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

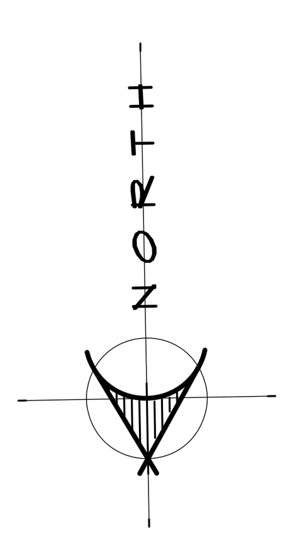
A7 / A13

ANW JOB NUMBER: 210248



UPPER FLOOR PLAN

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



FLOOR PLAN NOTES:

1. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
2. WINDOWS & DOORS ARE SHOWN & NOTED AS NOMINAL SIZES.
3. EXTERIOR WALLS TO BE 2x6 STUDS @ 16" O.C. U.N.O.
4. ■ INDICATES POINT LOAD SUPPORTED BY (2) STUDS, U.N.O.
5. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.7 & R303.8
6. SEE SHEET A1 FOR ADDITIONAL NOTES.
7. SEE SHEET A2 FOR VENTILATION SCHEDULE.
8. SEE SHEET A2 FOR ALARM SCHEDULE.

NOTE: SEE 'S' SHEETS FOR LATERAL INFORMATION & ENGINEERING DETAILS

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES

PLAN M2595B3F-9

DESIGNED BY:	DATE:
TC	2013
DRAWN BY:	DATE:
JRA	8/11/14

PROJECT MANAGER: MARCUS JENKINS

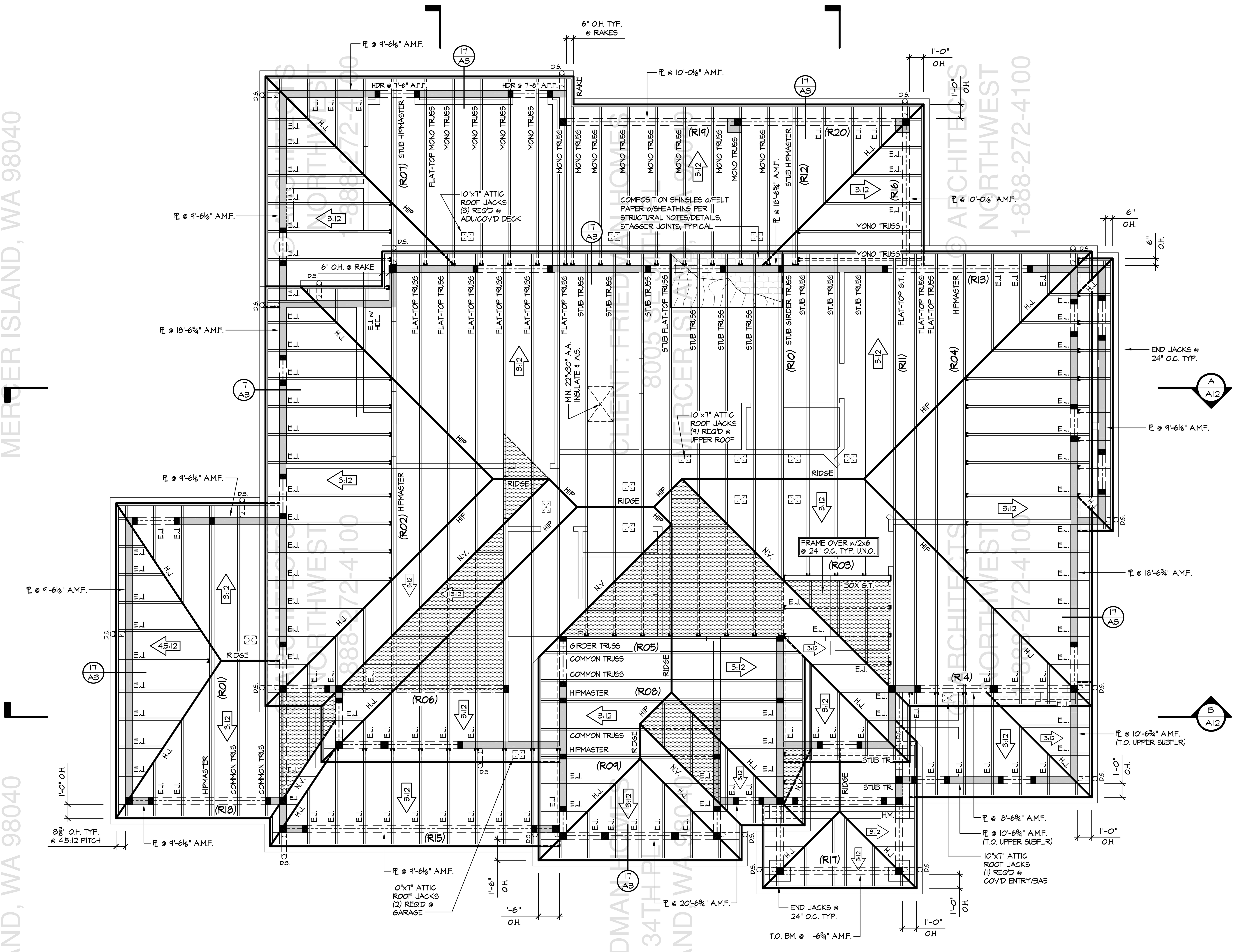
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21

LATERAL BY:	DATE:
PITZER	12/7/21

LATERAL JOB NUMBER: 21-140

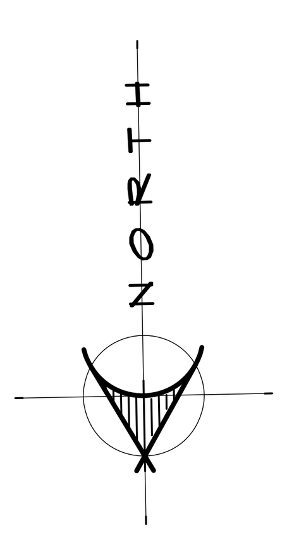
A8 / A13

ANW JOB NUMBER: 210248



ROOF FRAMING PLAN

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



BEAM SCHEDULE

- R01 - GIRDER TRUSS
- R02 - GIRDER TRUSS
- R03 - GIRDER TRUSS
- R04 - GIRDER TRUSS
- R05 - GIRDER TRUSS
- R06 - GLB $5\frac{1}{2}$"x$11\frac{1}{4}$"
- R07 - GIRDER TRUSS
- R08 - GIRDER TRUSS
- R09 - GIRDER TRUSS
- R10 - GIRDER TRUSS
- R11 - GIRDER TRUSS
- R12 - GIRDER TRUSS
- R13 - GLB $3\frac{1}{2}$"x$9\frac{1}{2}$"
- R14 - 4x10 DF#2
- R15 - 6x10 DF#2
- R16 - 4x10 DF#2
- R17 - 4x10 DF#2
- R18 - 4x10 DF#2
- R19 - 4x10 DF#2
- R20 - 4x10 DF#2

ROOF FRAMING NOTES:

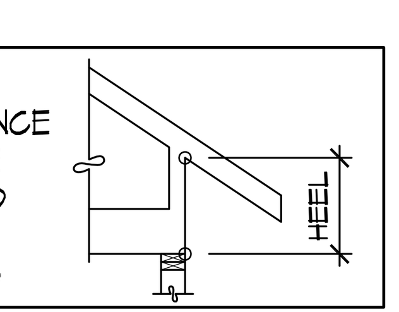
1. CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
2. ALL HEADERS TO BE 4x10 DF#2 w/ R-10 RIGID INSULATION @ EXTERIOR WARM WALLS, U.N.O.
3. PROVIDE VENTED BLOCKING OVER SUPPORTS.
4. BEARING WALLS ARE SHADED.
5. WINDOW HEADERS @ 8'-0" ABOVE FINISHED FLOOR @ MAIN FLOOR U.N.O. WINDOW HEADERS @ 6'-8" ABOVE FINISHED FLOOR @ UPPER FLOOR U.N.O.
6. ALL TRUSSES:
   * SHALL CARRY MANUFACTURER'S STAMP.
   * SHALL BE INSTALLED & BRACED TO MANUFACTURERS SPECIFICATIONS.
   * SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION.
   * SHALL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPARTMENT APPROVAL OF ENGINEERS CALCULATIONS.
   * TRUSS HANGERS SHALL BE SPECIFIED BY THE TRUSS ENGINEER.
7. ■ INDICATES POINT LOAD SUPPORTED BY (2) STUDS, U.N.O.
8. INSTALL SHEAR WALLS &/OR BLOCKING IN ROOF STRUCTURE BEFORE INSTALLING FINISH ROOFING.
9. SEE SHEET A1 FOR ADDITIONAL NOTES.
10. SEE SHEET A2 FOR ROOF VENTILATION CALCULATION(S).

NOTE: SEE 'S' SHEETS FOR LATERAL INFORMATION & ENGINEERING DETAILS

ROOF INSULATION NOTE:
WHERE SPACE IS LIMITED (LESS THAN 15"+1" REQ'D AIR GAP), FILL SPACES w/ THERMAX R-6.5 FOR EVERY INCH OF FOAM.
NOTE: 8" THICK FOAM=R-52.

ROOF UNDERLAYMENT NOTE:
ROOFS WITH PITCHES BETWEEN 2:12 AND 4:12 ARE REQUIRED TO HAVE A DOUBLE UNDERLAYMENT PER IRC 905.2.2.

NOTE:
TRUSS HEEL IS THE VERT. DISTANCE BETWEEN THE PLATE AND WHERE THE BOTTOM OF THE TOP CHORD OF THE TRUSS INTERSECTS THE EXTERIOR SIDE OF THE BEARING



BEAM SCHEDULE

PLAN VIEW	DESCRIPTION
(double dashed line)	DROPPED BEAM DESIGNATED ON FLOOR PLANS.
(dash-dot line)	DROPPED BEAM DESIGNATED ON FRAMING PLANS.
(hatched bar)	FLUSH AND TOP FLUSH BEAM DESIGNATED ON FRAMING PLANS.
(bold hatched bar)	UPSET BEAM DESIGNATED ON FRAMING PLANS.

THOMAS J. PITZER — STATE OF WASHINGTON — 40881 — REGISTERED PROFESSIONAL ENGINEER
EXPIRES 12-02-22

5046 REGISTERED ARCHITECT JEFFREY P. GAROUTTE STATE OF WASHINGTON 12/20/21

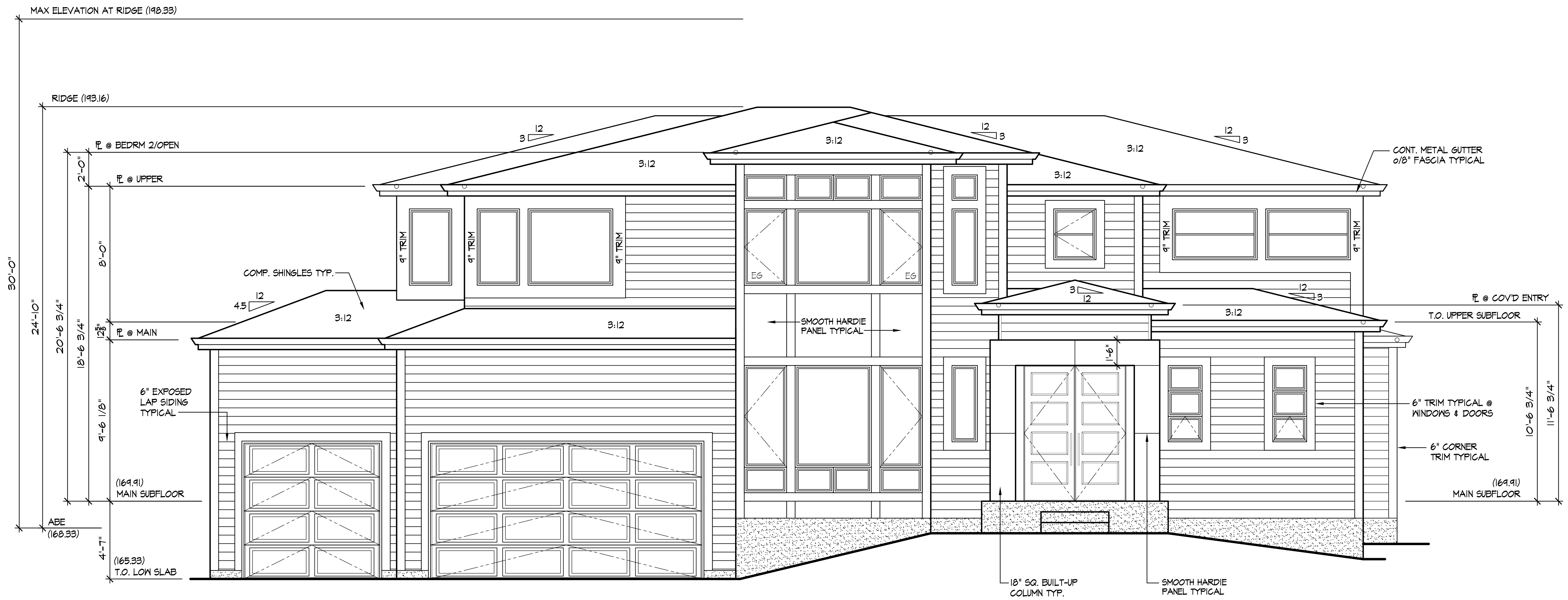
ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

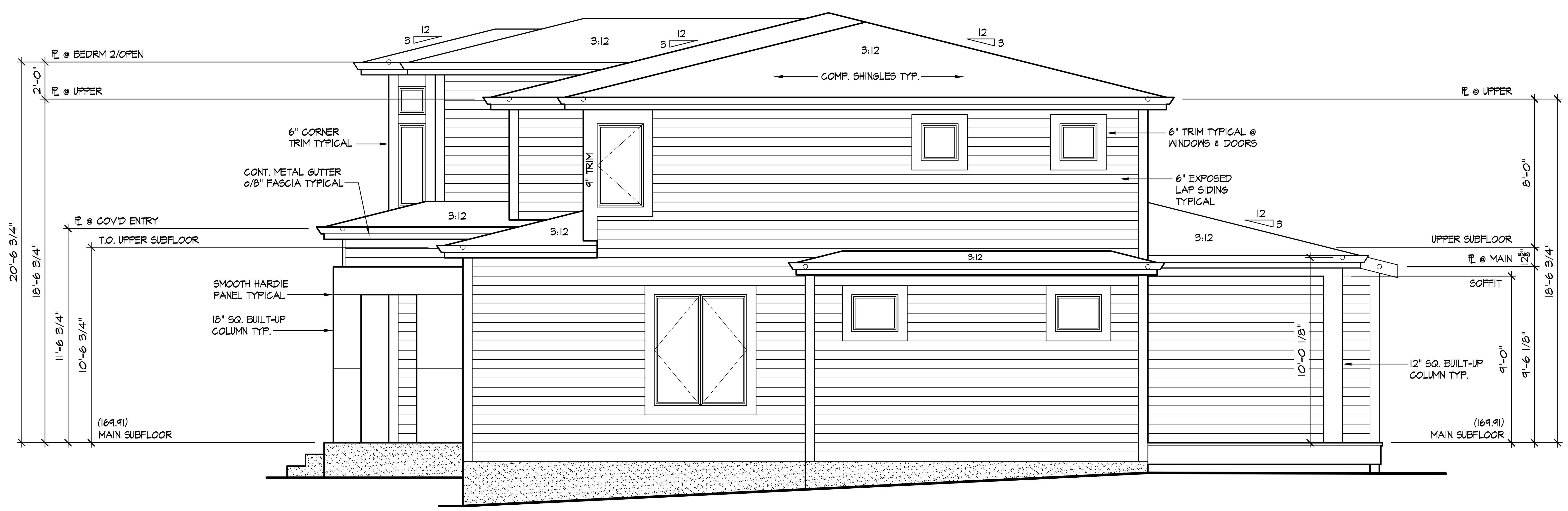
A9 / A13

ANW JOB NUMBER: 210248



NORTH ELEVATION

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



WEST ELEVATION

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

ELEVATION NOTES:

1. VERIFY SHEAR WALL NAILING & HOLDOWNS PER PLAN PRIOR TO INSTALLING SIDING.
2. MASONRY & WOOD FRAME CHIMNEYS ARE TO BE CONSTRUCTED PER I.R.C. CHAPTER 10.
3. CAULK ALL EXTERIOR JOINTS & PENETRATIONS.
4. PROVIDE APPROVED CORROSION RESISTANT FLASHING AT EXTERIOR WALL ENVELOPE PER I.R.C. R703.4
5. PROVIDE FLASHING AT ROOF PENETRATIONS PER I.R.C. R903.2 & R903.2.1
6. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR & GARAGE-INTERIOR DOORS.
7. PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ ALL EAVES, TYP.
8. ADDRESS OR HOUSE NUMBER TO BE POSTED AND PLAINLY VISIBLE FROM THE STREET FRONTAGE. NUMBERS TO BE MIN. 4" HIGH WITH ½" WIDE STROKE & CONTRASTING BACKGROUND.
9. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.7 & R303.8
10. SEE SHEET A1 FOR ADDITIONAL NOTES.

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES

PLAN M2595B3F-9

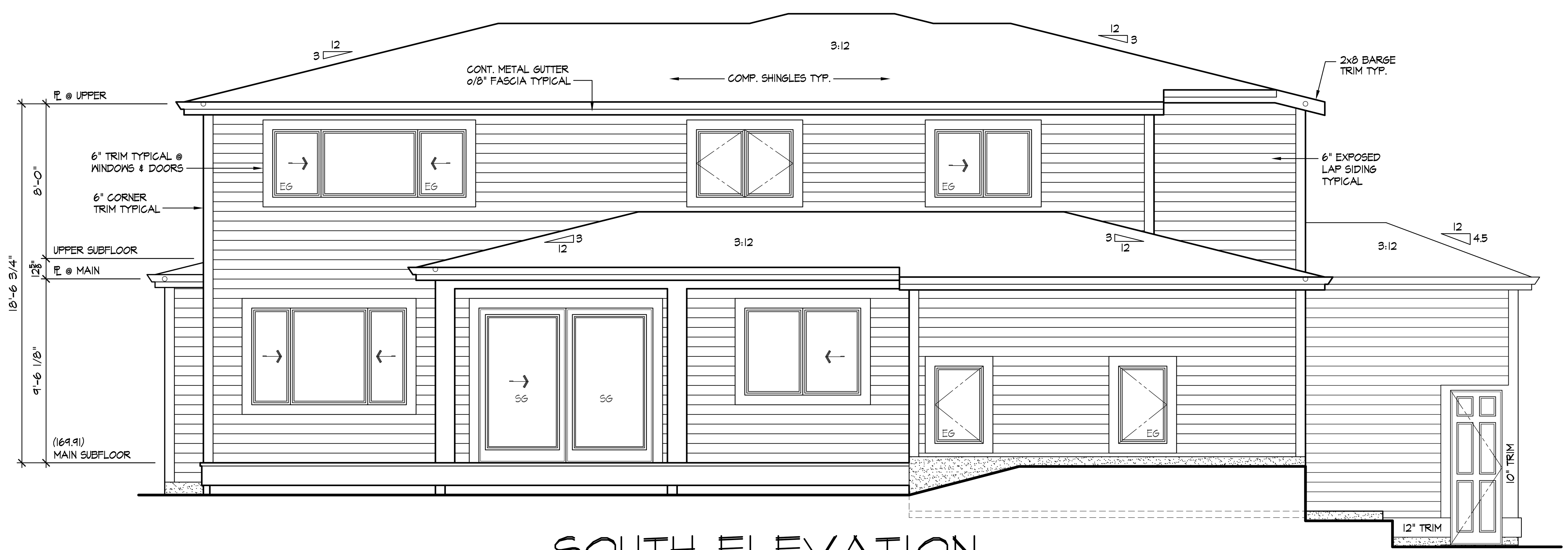
DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

A10 / A13

ANW JOB NUMBER: 210248

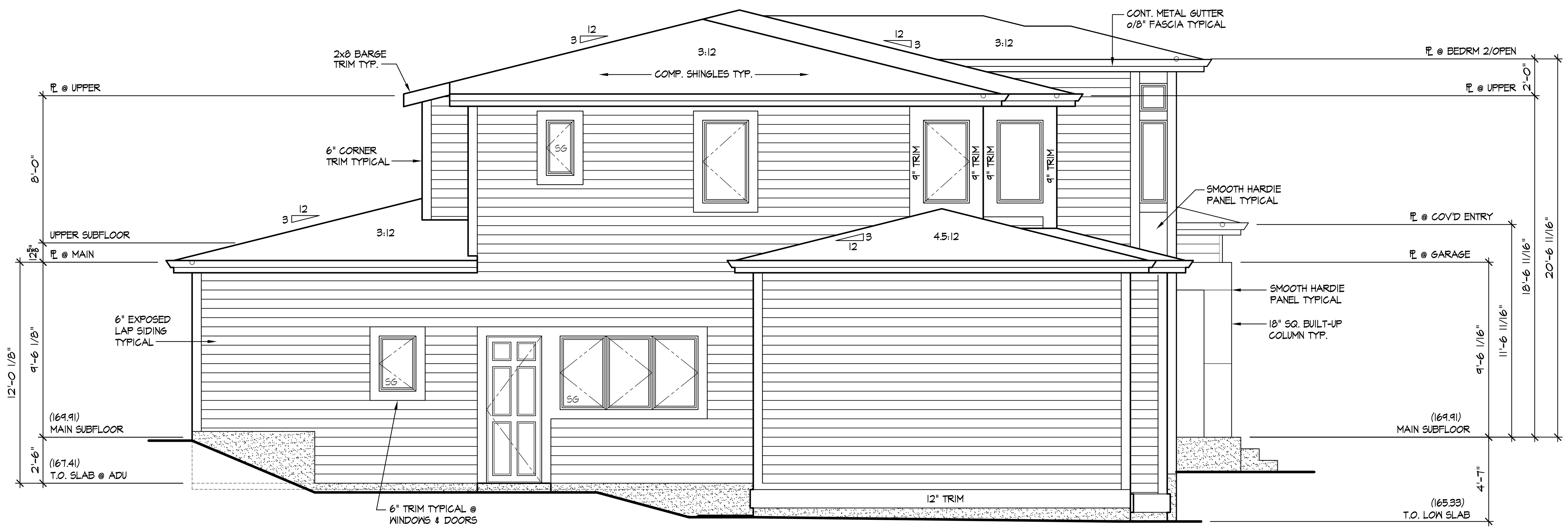
ELEVATION NOTES:

1. VERIFY SHEAR WALL NAILING & HOLDOWNS PER PLAN PRIOR TO INSTALLING SIDING.
2. MASONRY & WOOD FRAME CHIMNEYS ARE TO BE CONSTRUCTED PER I.R.C. CHAPTER 10.
3. CAULK ALL EXTERIOR JOINTS & PENETRATIONS.
4. PROVIDE APPROVED CORROSION RESISTANT FLASHING AT EXTERIOR WALL ENVELOPE PER I.R.C. R703.4
5. PROVIDE FLASHING AT ROOF PENETRATIONS PER I.R.C. R903.2 & R903.2.1
6. PROVIDE WEATHER STRIPPING AT ALL EXTERIOR & GARAGE-INTERIOR DOORS.
7. PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ ALL EAVES, TYP.
8. ADDRESS OR HOUSE NUMBER TO BE POSTED AND PLAINLY VISIBLE FROM THE STREET FRONTAGE. NUMBERS TO BE MIN. 4" HIGH WITH ½" WIDE STROKE & CONTRASTING BACKGROUND.
9. PROVIDE STAIRWAY ILLUMINATION PER I.R.C. R303.7 & R303.8
10. SEE SHEET A1 FOR ADDITIONAL NOTES.



SOUTH ELEVATION

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



EAST ELEVATION

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

REGISTERED ARCHITECT
5046
JEFFREY P. deR...
STATE OF WASHINGTON
12/20/21

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100
WOODINVILLE, WA 98072
OFFICE: (425) 485-4900
FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100
WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES

PLAN M2595B3F-9

DESIGNED BY:	DATE:
TC	2013
DRAWN BY:	DATE:
JRA	8/11/14

PROJECT MANAGER: MARCUS JENKINS

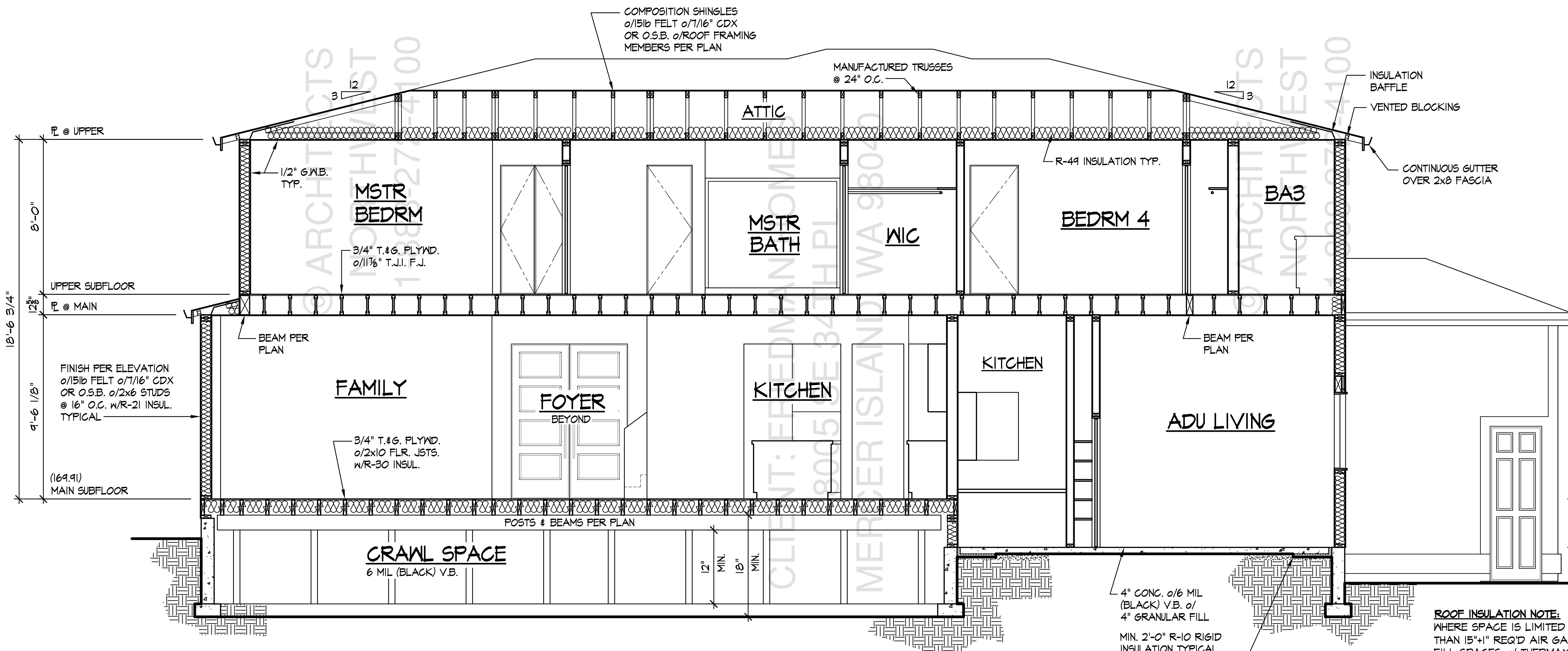
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21

LATERAL BY:	DATE:
PITZER	12/7/21

LATERAL JOB NUMBER: 21-140

A11 / A13

ANW JOB NUMBER: 210248

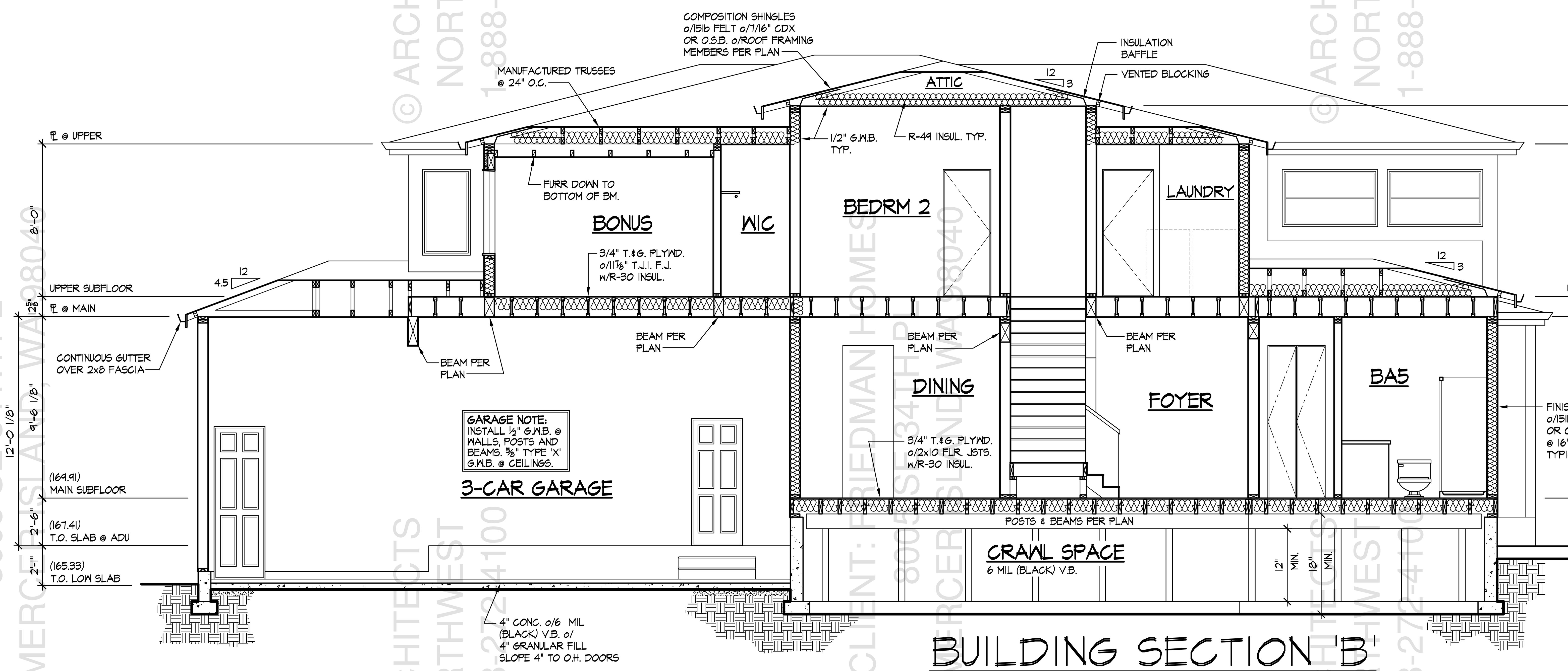


BUILDING SECTION 'A'

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

ROOF INSULATION NOTE:
WHERE SPACE IS LIMITED (LESS THAN 15"+1" REQ'D AIR GAP), FILL SPACES w/ THERMAX R-6.5 FOR EVERY INCH OF FOAM. NOTE: 8" THICK FOAM=R-52.

ROOF UNDERLAYMENT NOTE:
ROOFS WITH PITCHES BETWEEN 2:12 AND 4:12 ARE REQUIRED TO HAVE A DOUBLE UNDERLAYMENT PER IRC 905.2.2.



BUILDING SECTION 'B'

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

ROOF INSULATION NOTE:
WHERE SPACE IS LIMITED (LESS THAN 15"+1" REQ'D AIR GAP), FILL SPACES w/ THERMAX R-6.5 FOR EVERY INCH OF FOAM. NOTE: 8" THICK FOAM=R-52.

ROOF UNDERLAYMENT NOTE:
ROOFS WITH PITCHES BETWEEN 2:12 AND 4:12 ARE REQUIRED TO HAVE A DOUBLE UNDERLAYMENT PER IRC 905.2.2.

REGISTERED ARCHITECT 5046 STATE OF WASHINGTON 12/20/21

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

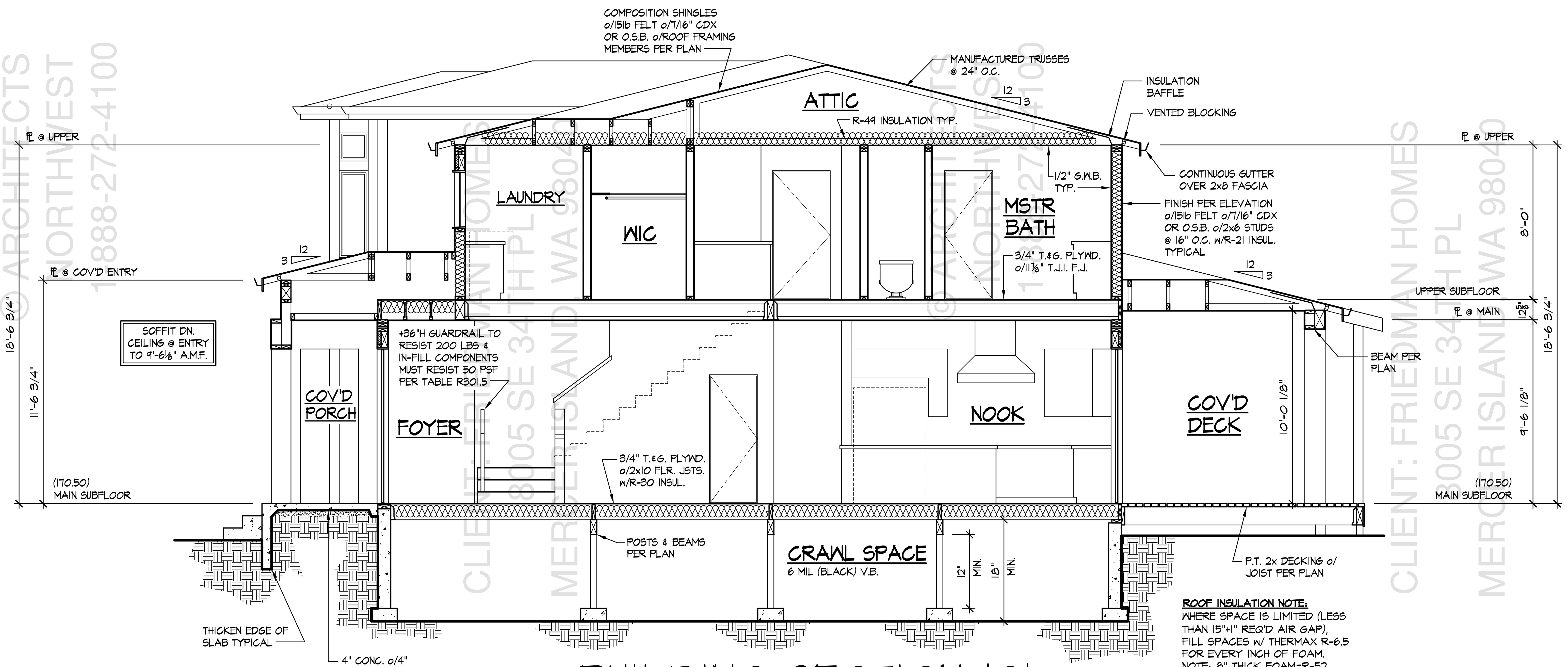
FRIEDMAN HOMES

PLAN M2595B3F-9

DESIGNED BY: TC	DATE: 2013
DRAWN BY: JRA	DATE: 8/11/14
PROJECT MANAGER: MARCUS JENKINS	
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21
LATERAL BY: PITZER	DATE: 12/7/21
LATERAL JOB NUMBER: 21-140	

A12 / A13

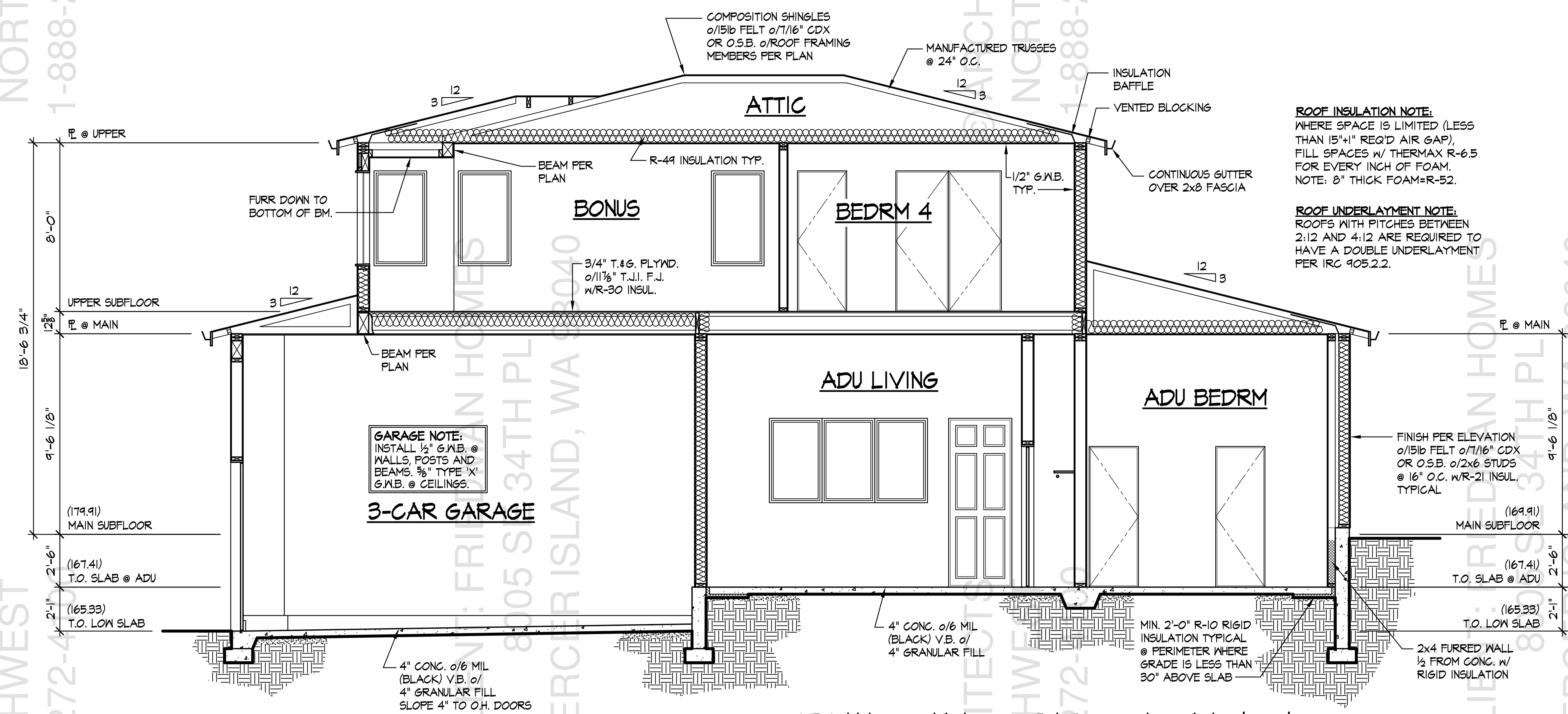
ANW JOB NUMBER: 210248



BUILDING SECTION 'C'
SCALE: 1/4" = 1'-0"

ROOF INSULATION NOTE:
WHERE SPACE IS LIMITED (LESS THAN 15"+1" REQ'D AIR GAP), FILL SPACES w/ THERMAX R-6.5 FOR EVERY INCH OF FOAM. NOTE: 8" THICK FOAM=R-52.

ROOF UNDERLAYMENT NOTE:
ROOFS WITH PITCHES BETWEEN 2:12 AND 4:12 ARE REQUIRED TO HAVE A DOUBLE UNDERLAYMENT PER IRC 905.2.2.



ROOF INSULATION NOTE:
WHERE SPACE IS LIMITED (LESS THAN 15"+1" REQ'D AIR GAP), FILL SPACES w/ THERMAX R-6.5 FOR EVERY INCH OF FOAM. NOTE: 8" THICK FOAM=R-52.

ROOF UNDERLAYMENT NOTE:
ROOFS WITH PITCHES BETWEEN 2:12 AND 4:12 ARE REQUIRED TO HAVE A DOUBLE UNDERLAYMENT PER IRC 905.2.2.

BUILDING SECTION 'D'
SCALE: 1/4" = 1'-0"

REGISTERED ARCHITECT, STATE OF WASHINGTON — 12/20/21

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100 WOODINVILLE, WA 98072
OFFICE: (425) 485-4900 FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100 WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY:	DATE:
TC	2013
DRAWN BY:	DATE:
JRA	8/11/14

PROJECT MANAGER: MARCUS JENKINS

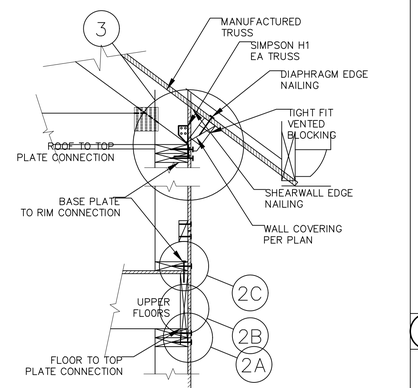
REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21

LATERAL BY:	DATE:
PITZER	12/7/21

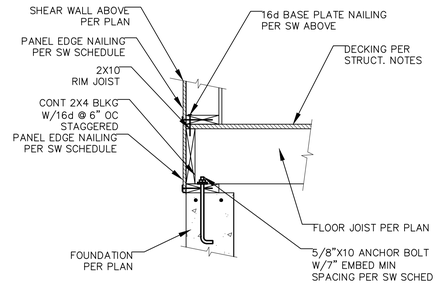
LATERAL JOB NUMBER: 21-140

A13 / A13

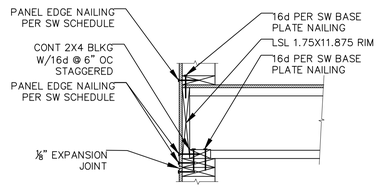
ANW JOB NUMBER: 210248



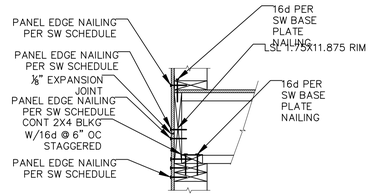
SHEATHING BROKEN @ TOP PLATE



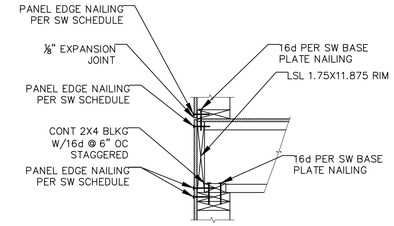
1 FLOOR DIAPHRAGM TO FOUNDATION



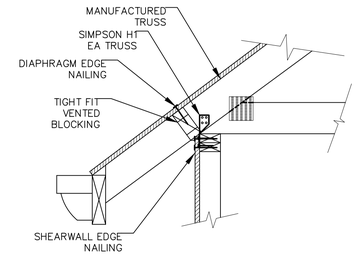
2A SHEATHING BROKEN AT TOP PLATE



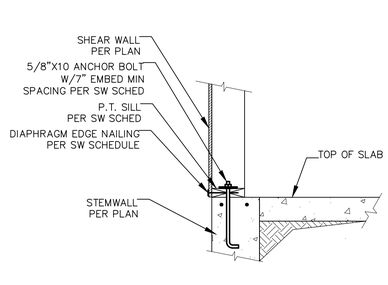
2B SHEATHING BROKEN AT MID RIMBOARD



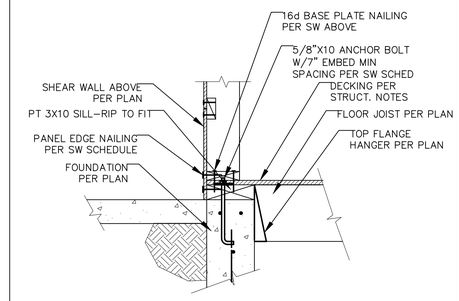
2C SHEATHING BROKEN AT BASE PLATE



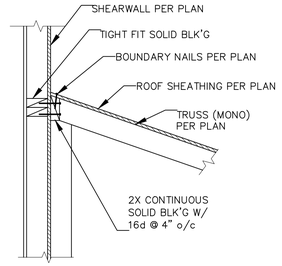
3 ROOF DIAPHRAGM TO SW W/H1



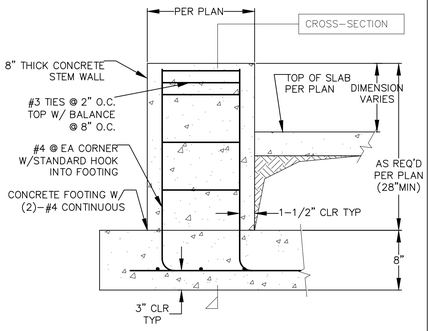
4 SW TO FOUNDATION



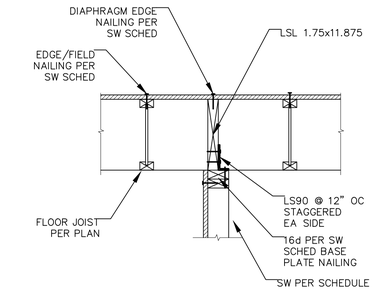
5 FLOOR DIAPHRAGM TO FOUNDATION



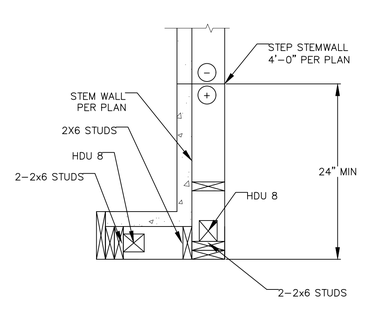
6 TRUSSES PERP TO WALL



7 RAISED STEM WALL (section below)

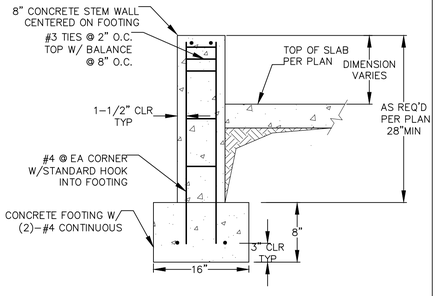


8 INT SHEARWALL PARALLEL TO FLOOR JOISTS



9 RAISED STEM WALL AT GARAGE RETURNS

10



SECTION OF RAISED STEM WALL

11

SQUARE FTG SCHEDULE

MARK	WIDTH (FT-IN)	DEPTH (INCHES)	LENGTH (FT-IN)	REINF EACH WAY
78	6-6	16	6-6	(6)#5
72	6-0	16	6-0	(6)#5
66	5-6	14	5-6	(5)#5
60	5-0	14	5-0	(5)#5
54	4-6	12	4-6	(4)#4
48	4-0	12	4-0	(4)#4
42	3-6	12	3-6	(3)#4
36	3-0	12	3-0	(3)#4
30	2-6	12	2-6	(2)#4
24	2-0	12	2-0	(2)#4
18	1-6	12	1-6	(2)#4
1608	1-4	8	CONT	(2)#4
1808	1-6	8	CONT	(2)#4
2408	2-0	8	CONT	(2)#4
2410	2-0	10	CONT	(2)#4
2412	2-0	12	CONT	(2)#4

SQUARE FOOTING SCHEDULE

HOLDOWN SCHEDULE

MODEL	ANCHOR BOLT	THRU BOLTS OR NAILS	EMBEDMENT LENGTH	MIN. EDGE DISTANCE
MSTC48B3	STRAP	(38) 16d in DBL. STUD	CENTER on RIM JOIST	
STHD14	STRAP	(38) 16d	14"	1 1/2"
STHD14RJ	STRAP	(38) 16d	14"	1 1/2"
HDU8-SDS2.5	SSTB28	(20) SDS1/4x2.5	25" MIN	1-3/4"

HOLD DOWN SCHEDULE

SHEARWALL SCHEDULE (1,6,8)

MARK (2,3)	SHEATHING-APPLY TO 2X HF STUDS @ 16" oc	PANEL EDGE NAILING (6) (13)	PANEL FIELD NAILING (2)	BASE PLATE CONN. (5),(12),(14)	SILL PLATE ANCHORS W/3X3X¼" PLATE WASHERS (4,10,11)	SW CAP-ACITY (LB)
SW-1	1/2" CDX ONE FACE	8d@6"oc	8d@12"oc	16d@6" w/2x BTM PL	5/8"dia. @ 48" oc w/2x PT PL	242
SW-2	1/2" CDX ONE FACE	8d@4"oc	8d@12"oc	16d@6" w/2x BTM PL	5/8"dia. @ 38" oc w/2x PT PL	349
SW-3	1/2" CDX ONE FACE(9)	10d@4"oc	10d@12"oc	16d@4" w/2x BTM PL	5/8"dia. @ 16" oc w/2x PT PL	428
SW-4	1/2" CDX ONE FACE(9)	10d@3"oc	10d@12"oc	#10X6" WOOD SCREWS@3" OC	5/8"dia. @ 12" oc w/3x PT PL	558
SW-5	1/2" CDX ONE FACE(9)	10d@2"oc	10d@12"oc	(2)#10X6" WOOD SCREWS@4" OC	5/8"dia. @ 19" oc w/3x PT PL	716
SW-6	1/2" CDX EA FACE(9)	10d@4"oc EA FACE	10d@12"oc EA FACE	(2)#10X6" WOOD SCREWS@4" OC	5/8"dia. @ 16" oc w/3x PT PL	856
SW-7	1/2" CDX EA FACE(9)	10d@3"oc EA FACE	10d@12"oc EA FACE	(2)#10X6" WOOD SCREWS@3" OC	5/8"dia. @ 12" oc w/3x PT PL	1116

SHEARWALL & HOLDOWN NOTES (U.N.O.)
(1) ALL STUDS AND BLOCKING SHALL BE HF#2. ALL TOP AND BOTTOM PLATES SHALL BE HF#2. ALL SHEATHING EDGES SHALL BE BACKED WITH 2X OR WIDER FRAMING UNO (SEE NOTE 2) SHEATHING MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY.
(2) LOCATE HOLDOWN (SIMPSON UNO) AT END OF SHEAR WALL
(3) CONSTRUCT CRIPPLE WALL SAME AS SHEAR WALL (SW) ABOVE, AND GABLE END SAME AS SHEAR WALL (SW) BELOW
(4) DEEPEN FOUNDATION AS REQ'D FOR HOLD DOWN EMBEDMENT.
(5) THREADED ROD AND COUPLER AS REQ'D.
(6) COMMON NAILS 8d=0.131"x2.5", 10d=0.148"x3", 12d=0.148"x3.25", 16d=0.162"x3.5", 30d=0.207"x4.5"
(7) INSTALL H1'S ON ALL TRUSSES/RAFTERS OR LS90 AT 24" OC ON GABLES AND RIM JOIST (OR SOLID BLKG) TO TOP PLATE (SILL PLATE AT FDN) UNO; TRUSSES/RAFTERS. CONNECTORS PER SIMPSON STRONG-TIE UNO.
(8) NAILING CRITERIA IS BASED ON IBC TABLE 2304.10.1 FOR CD PLYWOOD AND HF#2 FRAMING.
(9) SINGLE 3X NOMINAL MEMBER AT SILL PLATE AND AT ALL MEMBERS RECEIVING EDGE NAILIING FROM ABUTTING PANELS.
(10) ALL MACHINE BOLTS (MB) SHALL BE ASTM A307 OR BETTER. HILTI KWIK BOLTS OF THE SAME DIAMETER SHOWN ABOVE MAY BE USED IN EXISTING CONCRETE. BOLTS SHALL BE EMBEDDED A MINIMUM OF 5" INTO EXISTING CONCRETE.
(11) PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE BOTTOM PLATE ON THE SIDE(S) WITH SHEATHING FOR SW3 THROUGH SW7.
(12) ROWS CONSIST OF 2 NAILS SPACED 2" OC
(13) NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED 2" OC.
(14) SW4, SW5, SW6, & SW7 REQUIRE DOUBLE RIM JOISTS AND 3X BOTTOM PLATES.

SHEAR WALL SCHEDULE

SEISMIC DESIGN CRITERIA
SIESMIC IMPORTANCE FACTOR: 1.00
SEISMIC DESIGN CATEGORY: D
SHORT PERIOD ACCELERATION: 1.406
1-SECOND ACCELERATION: 0.489
SIESMIC FORCE RESISTING SYSTEM: BEARING WALL
RESPONSE MODIFICATION FACTOR: 6.5
DEFLECTION AMPLIFICATION FACTOR: 4.0
METHOD USED: EQUIVALENT LATERAL FORCE
SYSTEM OVERSTRENGTH FACTOR: 2.5

WIND DESIGN CRITERIA
BASIC WIND SPEED: 110 MPH
WIND EXPOSURE CATEGORY: B
DESIGN METHOD USED: ENCLOSED SIMPLE DIAPHRAGM - LOW RISE
WIND SPEED UP FACTOR: 1.3

LATERAL DESIGN CRITERIA

PITZER & ASSOCIATES, PLLC
STRUCTURAL ENGINEERS
7317 35TH STREET NE
MARYSVILLE, WA 98270
PHONE: 425-308-8070

THOMAS J. PITZER
STATE OF WASHINGTON
40881
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 12-02-22

PROJECT NAME: PLAN M2595B3F-9

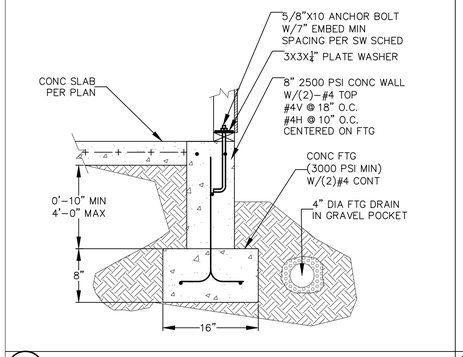
DRAWING TITLE: STANDARD LATERAL FORCE RESISTING SYSTEM DETAILS

DATE/REVISIONS
12/7/2021

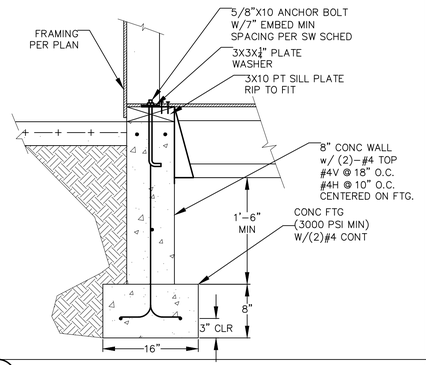
CHKED BY: TJP | DRAWN BY: TJP

P & A JOB #: 21-140

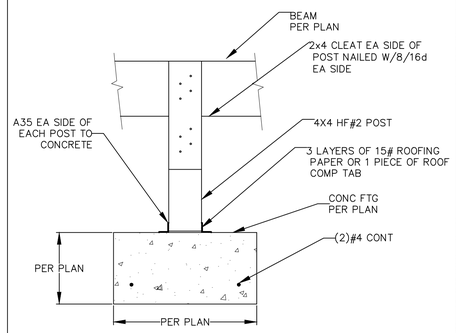
SHEET NO. S-1



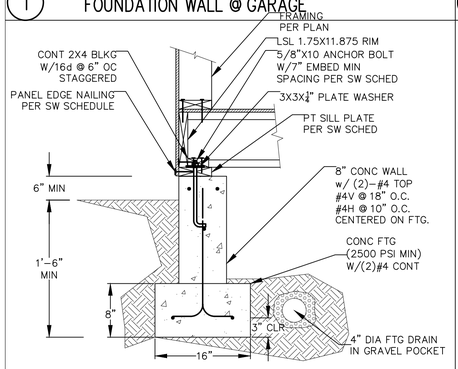
1 FOUNDATION WALL @ GARAGE



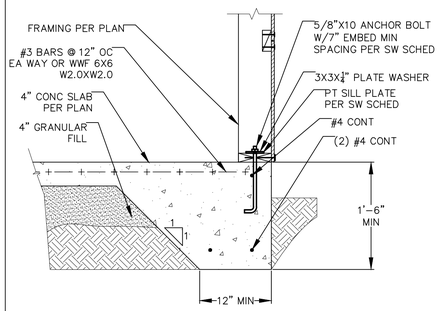
2 TYPICAL STEMWALL



3 TYPICAL POST/BEAM/FOOTING DETAIL



4 TYPICAL STEMWALL



5 THICKENED SLAB EDGE

6

RETAINING WALL SCHEDULE W/O SLAB								
H MAX	A	B	C	D	E	V BARS	H BARS	SOIL HT(MIN)
4'–0"	0'–10"	8"	0'–10"	10"	2	#4@12	#4@10	10"
6'–0"	1'–4"	8"	1'–4"	10"	3	#4@12	#4@12	16"

GENERAL NOTES:
IBC 2018 EDITION

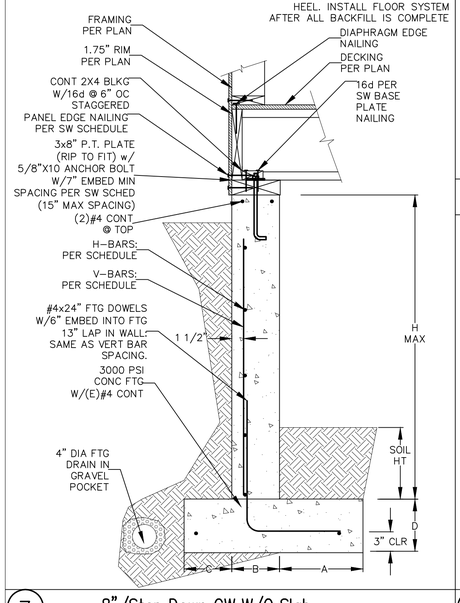
35 PCF EQUIV. FLUID PRES.
2000 PSF SOIL BEARING PRES.
0 PSF SURCHARGE

5½ SACK CEMENT PER CYD
(2500 PSI) MIN COMPRESIVE
MAX 6 GAL WATER PER SACK

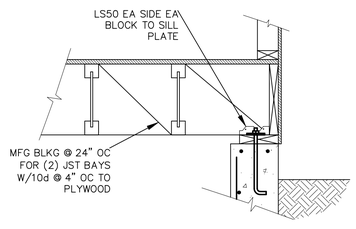
GR. 60 STEEL FOR #5 & LARGER
GR. 40 STEEL FOR #4 & SMALLER

BACKFILL w/ POUROUS MATERIAL

NOTE 1: BACKFILL OVER TO PRIOR TO BACKFILLING OVER HEEL. INSTALL FLOOR SYSTEM AFTER ALL BACKFILL IS COMPLETE.



7 8"/Step Down CW W/O Slab



ALT TOP CONN

8

GENERAL STRUCTURAL NOTES

GENERAL:
THE FOLLOWING STRUCTURAL NOTES ARE SUPPLEMENTARY AND ARE NOT INTENDED TO SUPERSEDE THE SPECIFICATIONS AND/OR DETAILS SHOWN ON THE DRAWINGS.

CODE:
ALL CONSTRUCTION SHALL CONFORM WITH THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION.

DESIGN LOADS:

ROOF	25 PSF (SNOW)
FLOORS	40 PSF LIVE LOAD
BALCONIES	60 PSF LIVE LOAD
EXIT STAIRS	100 PSF LIVE LOAD
DECKS	60 PSF LIVE LOAD
MOVEABLE PARTITIONS	20 PSF DEAD LOAD
	10 PSF DEAD LOAD FOR SEISMIC
ULTIMATE WIND SPEED	110 MPH (EXPOSURE B)
SEISMIC DESIGN CATEGORY	D
SOIL	1500 PSF (ASSUMED DESIGN BEARING)

INSPECTIONS:
NO SPECIAL INSPECTIONS ARE REQUIRED. NOTIFY BUILDING DEPARTMENT FOR BUILDING DEPARTMENT INSPECTIONS AS REQUIRED BY LOCAL ORDINANCE.

FOUNDATIONS:
EXTEND FOOTINGS TO UNDISTURBED SOIL OF 1500 PSF SOIL BEARING CAPACITY (ASSUMED). BOTTOM OF EXTERIOR FOOTINGS SHALL BE 1'6" MIN. BELOW OUTSIDE FINISHED GRADE. CENTER ALL FOOTINGS ON COLUMNS AND WALLS UNLESS SPECIFICALLY DIMENSIONED OTHERWISE.

COMPACTED FILL:
SOIL USED FOR COMPACTED FILL SHOULD CONSIST OF PREDOMINANTLY WELLGRADED GRANULAR SOIL FREE OF ORGANIC MATERIAL AND DEBRIS. FILL USED FOR FOUNDATION AND FLOOR SLAB SUPPORT MUST BE PROPERLY PLACED AND COMPACTED. FILL SHOULD BE PLACED IN MAXIMUM 8 TO 10 INCH LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED BY ASTM D–1557 TEST PROCEDURES WITHIN THE BUILDING AREA.

SHOP DRAWINGS:
SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS CONSISTING OF REPRODUCTIONS OR COPIES OF ANY PORTIONS OF THE STRUCTURAL DRAWINGS WILL NOT BE ACCEPTED AS SHOP DRAWINGS NOR REVIEWED BY THE STRUCTURAL ENGINEER AS SUCH.

1) METAL PLATE CONNECTED WOOD TRUSSES

THE ENGINEER OF RECORD WILL REVIEW SHOP DRAWINGS FOR DESIGN INTENT ONLY. VERIFICATION OF DIMENSIONS AND QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT GUARANTEED BY THE ENGINEER OF RECORD. DRAWINGS FOR COMPONENTS DESIGNED PRIMARILY BY THE MANUFACTURER SHALL BEAR THE STAMP OF A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER AND BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR A CURSORY REVIEW FOR COMPLIANCE WITH THE INTENT OF THE STRUCTURAL DRAWINGS AND FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SUBMISSIONS SHALL NCLUDE A REPRODUCIBLE AND TWO COPIES, REPRODUCIBLE WILL BE REVIEWED AND RETURNED. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE CONTRACTOR PRIOR TO REVIEW BY THE ENGINEER.

SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.

CONCRETE:
f'c=2500 PSI MIN. 5–1/2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND A MAXIMUM OF 6.0 GALLONS OF WATER PER 94 LB. SACK OF CEMENT UNO. NO SPECIAL INSPECTION REQUIRED. MAXIMUM SIZED AGGREGATE IS 1–1/2". MAXIMUM SLUMP IS 4". ADD MASTER BUILDERS POZZOLITH PER MANUFACTURERS RECOMMENDATIONS TO ALL CONCRETE EXCEPT FOOTING. ALL CONCRETE IN FOOTINGS AND WALLS SHALL BE POURED IN A MONOLITHIC POUR UNLESS SHOWN OTHERWISE OR APPROVED BY THE ARCHITECT PRIOR TO POURING CONCRETE. VIBRATE ALL CONCRETE. SEGREGATION OF MATERIALS TO BE PREVENTED. CONCRETE FOR BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE SURFACES EXPOSED TO WEATHER TO BE 3000 PSI. DRIVEWAYS, CURBS, WALKS , PATIOS, PORCHES, CARPORT SLABS, STEPS AND OTHER FLATWORK EXPOSED TO THE WEATHER AND GARAGE FLOOR SLABS OR OTHER CONCRETE THAT MAY BE EXPOSED TO DETRIMENTAL CHEMICALS TO BE TO BE 3000 PSI AND AIR ENTRAINED (5% AIR). PLACE NO FILL AGAINST FOUNDATION OR BASEMENT WALLS UNTIL FLOORS ARE IN PLACE, OR WALLS HAVE BEEN ADEQUATELY SHORED TO RESIST LATERAL EARTH PRESSURE AND CONCRETE HAS ATTAINED ITS FULL STRENGTH. SLAB–ON–GRADE ROLL AND MOISTEN SUBGRADE BEFORE POUR. WHERE VAPOR BARRIER IS REQUIRED INSTALL UNDER 2 INCHES OF CLEAN COURSE SAND. SAW CUT CRACK CONTROL JOINTS WITHIN 24 HOURS OF POUR OR INTALL ZIP–STRIP LOCATED AT COLUMN LINES. MAXIMUM AREA 400 S.F. WITH SUPPORTED 6 X 6 – W1.4 X W 1.4 WELDED WIRE MESH.

COLD WEATHER REQMT'S: CONCRETE THAT IS TO BE PLACED DURING FREEZING OR NEAR FREEZING WEATHER SHALL COMPLY WITH THE FOLLOWING:
1. ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING FREEZING OR NEAR FREEZING WEATHER.
2. CONCRETE MATERIALS AND REINFORCEMENT, FORMS, FILLERS, AND GROUND WITH WHICH CONCRETE IS TO COME IN CONTACT SHALL BE FREE FROM FROST.
3. FROZEN MATERIALS OR MATERIALS CONTAINING ICE SHALL NOT BE USED.

REINFORCING STEEL:
ALL REINFORCING STEEL OF #5 AND LARGER BARS SHALL BE GRADE 60 DEFORMED BARS, AND #3 AND #4 BARS SHALL BE GRADE 40, IN ACCORDANCE WITH ASTM SPECIFICATION A–615: UNLESS NOTED OTHERWISE ON THE DRAWINGS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM SPECIFICATION A–185 AND SHALL BE 6 X 6 – W1.4 X W 1.4 U.N.O. ON THE PLANS. LAP ONE FULL MESH AT SPLICES. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 DOUBLE ANNEALED IRON WIRE. APPROVED WIRE OR PRECAST CONCRETE BLOCK BAR SUPPORTS SHALL BE AS SPECIFIED BY THE CRSI MANUAL OF STANDARD PRACTICE MSP–1–86. LAP ALL SPLICES 42 BAR DIAMETERS MINIMUM UNLESS OTHERWISE SHOWN. PROVIDE ELBOW BARS (32 DIA.) TO LAP HORIZONTAL STEEL AT CORNERS AND INTERSECTIONS IN FOOTINGS, WALLS , AND BEAMS. PROVIDE 2–#5 ALL SIDES AND 1–#5 X 4'0" DIAGONALLY AT CORNERS OF ALL OPENINGS 1'6" OR MORE IN ANY DIRECTION. EXTEND 2'0" PAST OPENING OR HOOK. DOWEL NEW WALLS TO EXISTING WALLS AT 16" INTERVALS WITH 5/8" X 1'6" LONG PLAIN DOWELS DRILLED 6" INTO EXISTING CONCRETE.

CONCRETE COVER FOR REINFORCING STEEL CLEAR DIMENSION (U.N.O. ON PLANS):

USE	PROTECTION
SLAB AND WALL BARS:	
INTERIOR FACES	3/4"
EXPOSED TO WEATHER OR EARTH	2" (#6 AND LARGER) OR 1–1/2" (#5 AND SMALLER)
FOOTING BARS	3" FROM BOTTOM
SLAB ON GRADE	1–1/2" FROM TOP

REINFORCING WELDING:
REINFORCING MAY BE WELDED ONLY WHERE PERMITTED BY THE ENGINEER. ALL WELDED REBAR TO BE GRADE 40. MAX. CARBON CONTENT .35% (OR WELDABLE ASTM A706 GRADE 60 REINFORCEMENT IF NOTED ON THE DRAWINGS). SUBMIT MILL CERTIFICATE SHOWING REINFORCING CHEMICAL CONTENTS TO ARCHITECT. FOLLOW "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL, METAL INSERTS AND CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION" BY THE AMERICAN WELDING SOCIETY ANSI/AWS D1.4–98. ALL WELDING SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS. USE FRESH LOW HYDROGEN E70XX ELECTRODES, AWS A5.1 FOR GRADE 40 BARS AND E70XX ELECTRODES, AWS A5.1 FOR GRADE 40 BARS AND E90XX ELECTRODES, AWS A5.5 FOR GRADE 60 BARS. BENDS IN REINFORCING TO BE WELDED SHALL NOT BE CLOSER THAN 3" TO WELD.

ROOF TRUSSES:
METAL PLATE CONNECTED WOOD TRUSSES SHALL BE DESIGNED BY A WASHINGTON STATE PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE TRUSS PLATE INSTITUTE AND THE IBC. METAL PLATES SHALL BE ICBO APPROVED VERIFIED BY A CURRENT REPORT NUMBER. TRUSSES SHALL BE PLANT FABRICATED BY A MANUFACTURER IN COMPLIANCE WITH IBC SECTION 2303.4. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS, INCLUDING ERECTION PLANS, SIGNED BY A WASHINGTON STATE PROFESSIONAL ENGINEER, TO THE BUILDING DEPARTMENT AND ENGINEER FOR APPROVAL. THE TRUSSES SHALL BE MANUFACTURED IN A PLANT THE ARCHITECT APPROVES, UNDER THE REQUIREMENTS OF IBC SECTION 1703. EACH TRUSS SHALL BEAR THE QUALITY CONTROL STAMP (IBC SECTION 2303.4.1) AS WELL AS MANUFACTURING PLANT'S NAME/ADDRESS, DESIGN LOAD AND MAXIMUM SPACING, IN ACCORDANCE WITH IBC SECTION 2303.4.1. THE MANUFACTURER IS RESPONSIBLE FOR VERIFICATION OF ALL TRUSS LENGTHS PRIOR TO FABRICATION AND FOR IDENTIFICATION OF ALL TRUSS MEMBERS REQUIRING BRACING FOR REDUCTION OF BUCKLING LENGTH. THE TRUSS ERECTION CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF SAID BRACING AND FOR ALL TEMPORARY BRACING REQUIRED DURING THE INSTALLATION PROCESS. U.N.O. ON THE PLANS, EACH TRUSS/BEARING CONNECTION TO BE 2–16d TOE–NAILED PLUS ONE H1 SEISMIC TIE AT EVERY OTHER CONNECTION. PROVIDE FULL DEPTH SOLID BLOCKING BETWEEN EACH TRUSS AT EACH OUTER BEARING. PROVIDE ¾" GAP BETWEEN BOTTOM CHORDS AND PERPENDICULAR NON–BEARING WALLS AND CONNECT WITH SIMPSON DTC ON ONE SIDE.

TIMBER:

BEAMS (4X AND GREATER)	DF–L #1 OR BETTER
POSTS	DF–L #1 OR BETTER
STUDS	HF #2/STUD
ALL OTHER LUMBER	HF #2 OR BETTER

ALL 2X ___ TIMBER KILN DRIED. ALL GRADES SHALL CONFORM TO A "WWPA GRADING RULES FOR WESTERN LUMBER, LATEST EDITION". BOLT HEADS AND NUTS BEARING AGAINST WOOD SHALL BE PROVIDED WITH STANDARD CUT WASHERS. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. MISCELLANEOUS HANGERS TO BE AS MANUFACTURED BY SIMPSON STRONG–TIE COMPANY, INC. OR APPROVED EQUAL. ALL HANGERS TO BE FASTENED TO WOOD WITH PROPER NAILS. ALL HOLES SHALL BE NAILED. MACHINE BOLTS TO BE A–307. ANCHOR BOLTS INTO CONCRETE SHALL BE 5/8" DIAMETER @ 48" O.C. (UNLESS NOTED OTHER–WISE) WITH MIN. EMBEDMENT PER IBC CODE. ALL NAILS SHALL BE COMMON WIRE NAILS. SPIKE ALL LAMINATED MEMBERS TOGETHER WITH 10d NAILS @ 12" O.C. STAGGERED. SPLICE LAMINATIONS AT SUPPORTS ONLY. ALL FASTENERS AND CONNECTORS FOR PRESSURE TREATED WOOD TO BE HOT–DIPPED GALVANIZED STEEL. THE COATING WEIGHTS FOR ZINC COATED FASTENERS TO BE IN ACCORDANCE WITH ASTM A–153.

FLOOR FRAMING:
PROVIDE CONTINUOUS SOLID BLOCKING FOR JOISTS AT THE SUPPORTS AND APPROVED METAL CROSS BRIDGING @ 8'–0" MAXIMUM. PROVIDE DOUBLE JOISTS UNDER PARTITIONS EXTENDING 1/2 OR MORE OF THE JOIST SPAN. FLUSH BEAMS (F.B.) NOT CALLED OUT ON THE PLANS SHALL BE DOUBLE JOISTS. ALL VERTICALLY LAMINATED BEAMS AND HEADERS SHALL BE SPIKED TOGETHER WITH 16d AT 12" O.C. STAGGERED.

SHEAR WALL FRAMING: APPLY 7/16" CDX OR OSB TO 2X STUDS SPACED AT 16"O/C MAX, BLOCK ALL PANEL EDGES, 8d AT 6"O/C AT ALL EDGES, AND 8d AT 12"O/C AT INTERIOR SUPPORTS, U.N.O.

ROOF DIAPHRAGM: APPLY 19/32" CDX OR OSB PLYWOOD (24/0) ON ROOF, NAIL 10d AT 6"O/C AT SUPPORTED EDGES AND 10d AT 12" O/C AT INTERIOR SUPPORTS, BLKG NOT REQ'D. USE DOUBLE 2X6 HF#2 TOP PLATE W/4'–0" OVERLAP W/18–10d NAIL–GUN NAILS EA SIDE OF EA SPLICE.

2ND FLOOR DIAPHRAGM: APPLY 3/4" T&G STURD–I–FLOOR OR OSB W/2X FLOOR FRAMING MEMBERS, GLUE AND 10d AT 4" O/C AT ALL SUPPORTED EDGES, 10d AT 12"O/C AT INTERIOR SUPPORTS, U.N.O. USE DOUBLE 2X6 HF#2 TOP PLATE W/4'–0" OVERLAP W/12–10d NAIL–GUN NAILS EA SIDE OF EA SPLICE.

BEARING WALL FRAMING:
ALL DOOR AND WINDOW HEADERS NOT CALLED OUT ON THE PLANS SHALL BE 4X10 DF–L #2 WITH ONE CRIPPLE AND ONE STUD EACH END FOR OPENINGS 4'–0" OR LESS AND TWO CRIPPLES AND TWO STUDS FOR OPENINGS MORE THAN 4'–0" WIDE. ALL COLUMNS NOT CALLED OUT ON THE PLANS SHALL BE TWO (2) STUDS. BLOCK SOLID TO FOUNDATION. SPIKE LAMINATED COLUMNS TOGETHER WITH 10d @ 18" O.C. STAGGERED. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE TREATED. STAGGER SPLICES AT TOP PLATES A MIN. OF 48" TYPICAL AND NAIL PER TABLE 2304.10.1 OF THE I.B.C.

GLUED LAMINATED WOOD MEMBERS:
GLUED LAMINATED WOOD BEAMS, DOUGLAS FIR, KILN–DRIED, STRESS GRADE COMBINATION 24F–V4 (fB = 2,400 PSI) FOR SIMPLES SPANS AND 24F–V8 FOR CANTILEVER AND CONTINUOUS SPANS. GLUE SHALL BE CASEIN WITH MOLD INHIBITOR. BOTTOM LAM TO BE FREE OF UNSOUND KNOTS LARGER THAN 1/2" DIAMETER. AITC STAMP AND CERTIFICATION REQUIRED. FABRICATOR SHALL SUBMIT 3 SETS OF DETAILS AND SPECIFICATIONS TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION. ALL BEAMS ARE TO BE CAMBERED AT R = 2000' U.N.O.

ENGINEERED LUMBER PRODUCTS:
PRODUCTS MANUFACTURED BY ROSEBURG: 2.0E RIGIDLAM LVL ALLOWABLE DESIGN STRESSES: E = 2,000,000 PSI Fb = 3,100 PSI Fv = 290 PSI Fc(perp) = 750 PSI Fc(para) = 3,000 PSI EQUIVALENT ENGINEERED LUMBER PRODUCTS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PENDING REVIEW AND APPROVAL OF THE ARCHITECT, PROVIDED THEY HAVE IBC APPROVAL FOR EQUAL OR GREATER ALLOWABLE DESIGN STRESSES.

MISCELLANEOUS:
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ALL CONDITIONS AT JOBSITE INCLUDING BUILDING AND SITE CONDITIONS BEFORE COMMENCING WORK AND BE RESPONSIBLE FOR SAME. ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. UNLESS EXPRESSLY STIPULATED, NO ADDITIONAL ALLOWANCE WILL BE MADE IN THE CONTRACTOR AND/OR MANUFACTURER'S FAVOR BY VIRTUE OR ERRORS. AMBIGUITIES AND/OR OMISSIONS WHICH SHOULD HAVE BEEN DISCOVERED DURING THE PREPARATION OF BID ESTIMATE AND DIRECTED TO THE ATTENTION OF THE ARCHITECT IN A TIMELY MANNER. ANY ERRORS, AMBIGUITIES AND/OR OMISSIONS IN THE DRAWINGS OR SPECIFICATIONS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY IN WRITING. NO WORK IS TO BE STARTED BEFORE CORRECTION IS MADE. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACINGS AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH THE BUILDING DEPARTMENT FOR ALL BUILDING DEPARTMENT REQUIRED INSPECTIONS. DO NOT SCALE DRAWINGS. USE ONLY WRITTEN DIMENSIONS. THE DETAILS SHOWN ARE TYPICAL AND SHALL BE USED FOR LIKE OR SIMILAR CONDITIONS NOT SHOWN. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF THE ARCHITECT AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF THE ARCHITECT, IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAMES AS ARCHITECT. PRE–FABRICATED ITEMS TO BE HANDLED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

PITZER & ASSOCIATES, PLLC
STRUCTURAL ENGINEERS
7317 35TH STREET NE
MARYSVILLE, WA 98270
PHONE: 425–308–8070

THOMAS J. PITZER
STATE OF WASHINGTON
40881
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 12-02-22

PROJECT NAME: PLAN M2595B3F–9

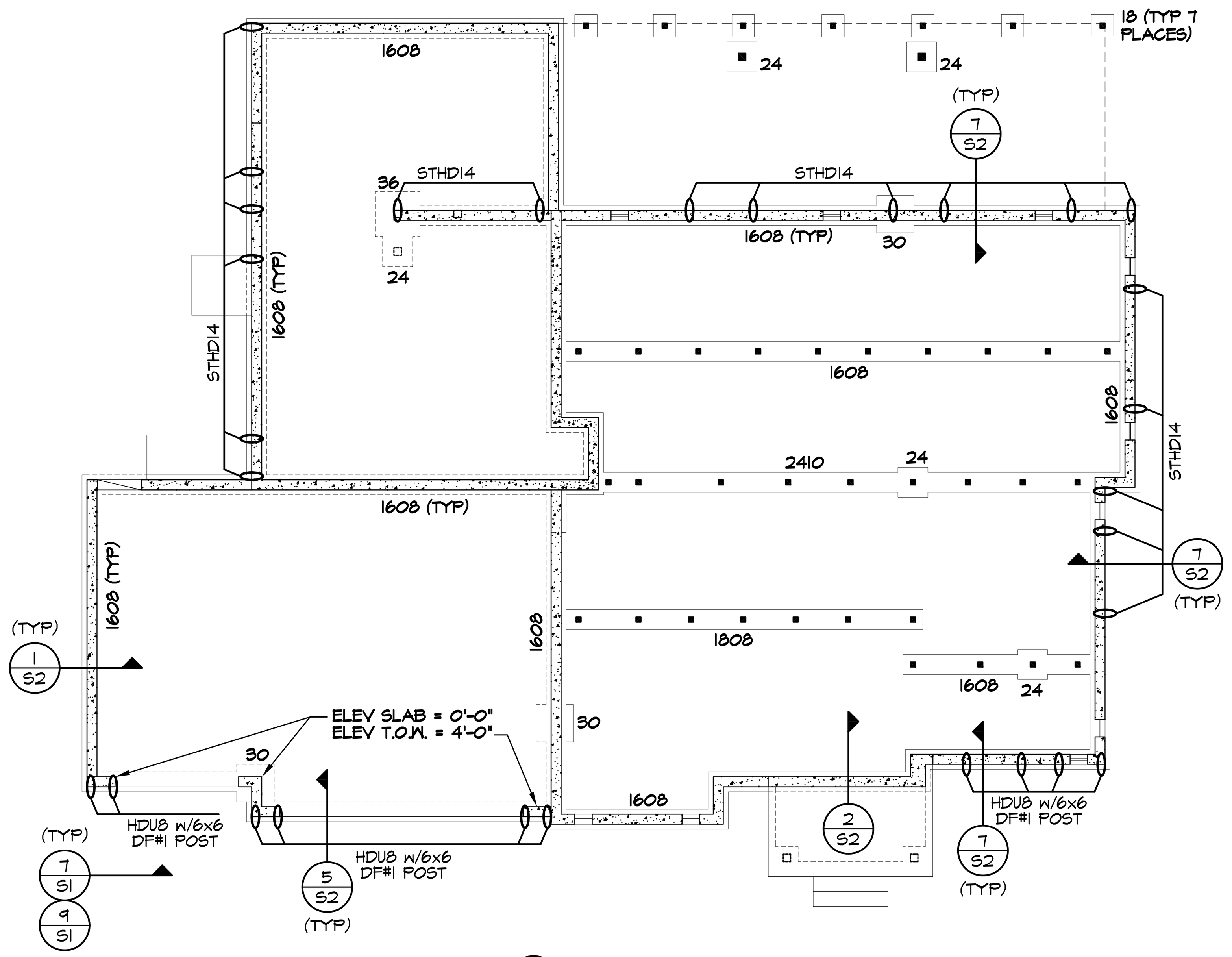
DRAWING TITLE: STRUCTURAL NOTES

DATE/REVISIONS
12/7/2021

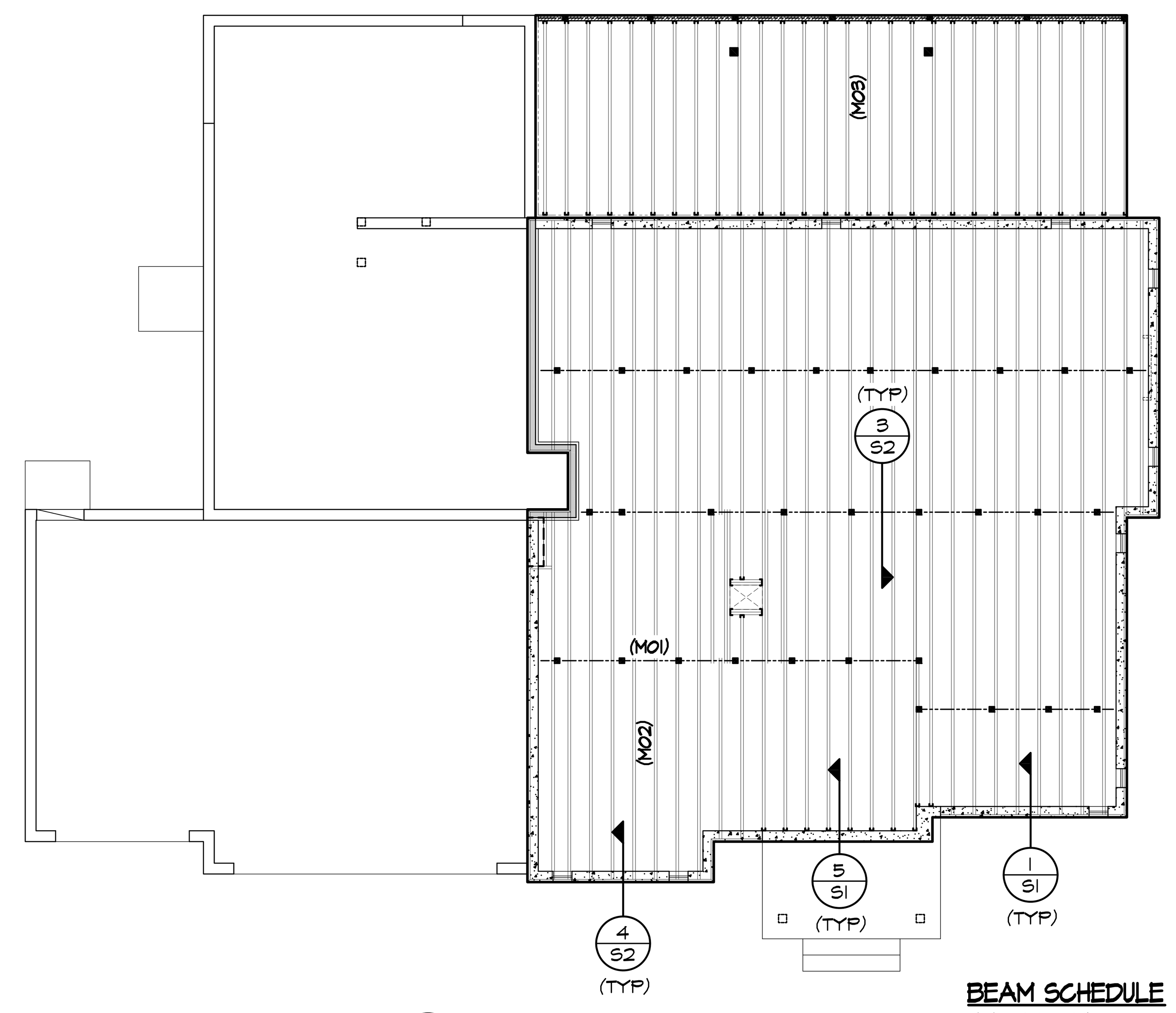
CHKED BY:	DRAWN BY:
TJP	TJP

P & A JOB #: 21–140

SHEET NO.
S–2

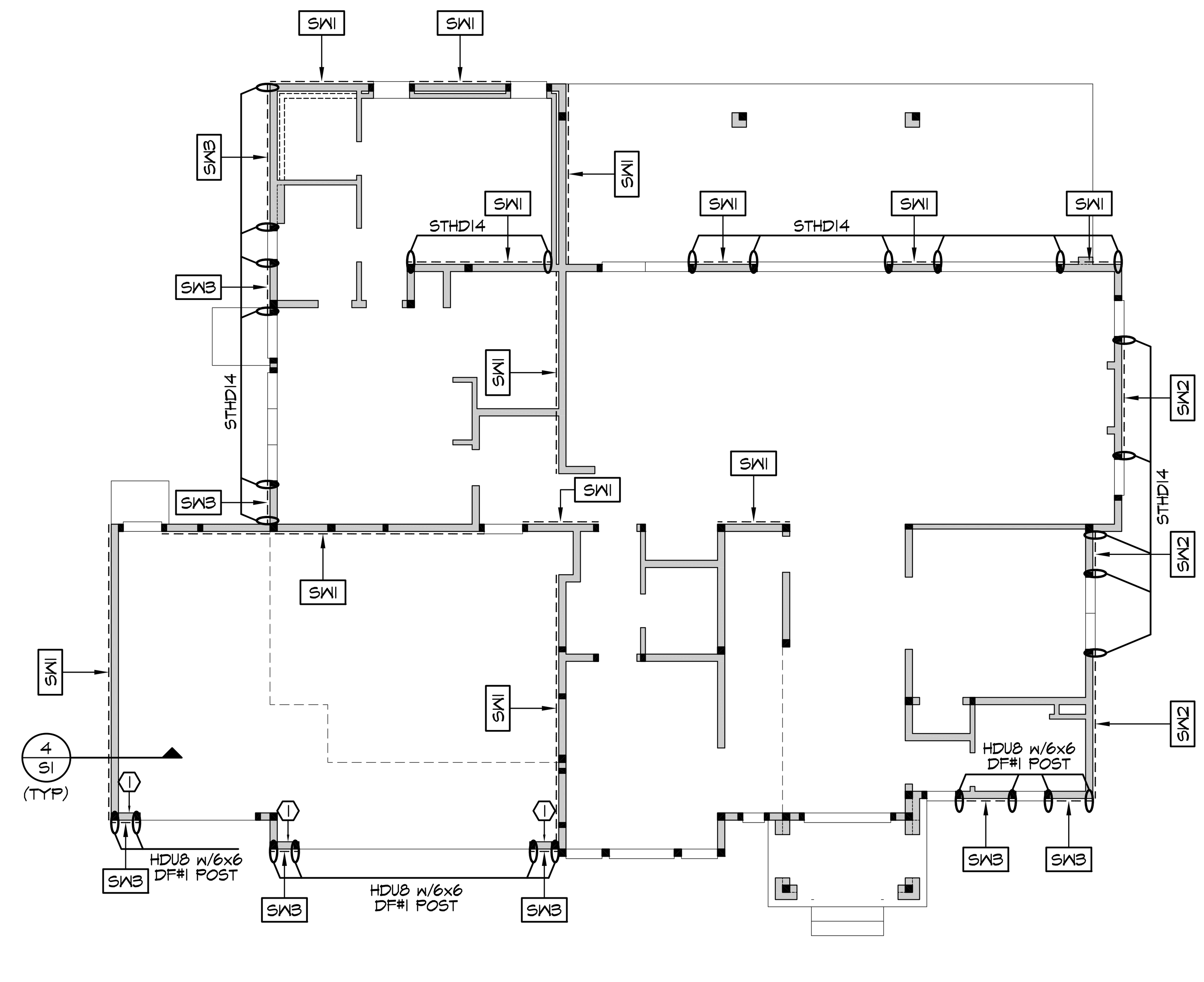


① FOUNDATION (HARDWARE)
SCALE: 1/8" = 1'-0"



② MAIN FLOOR FRAMING
SCALE: 1/8" = 1'-0"

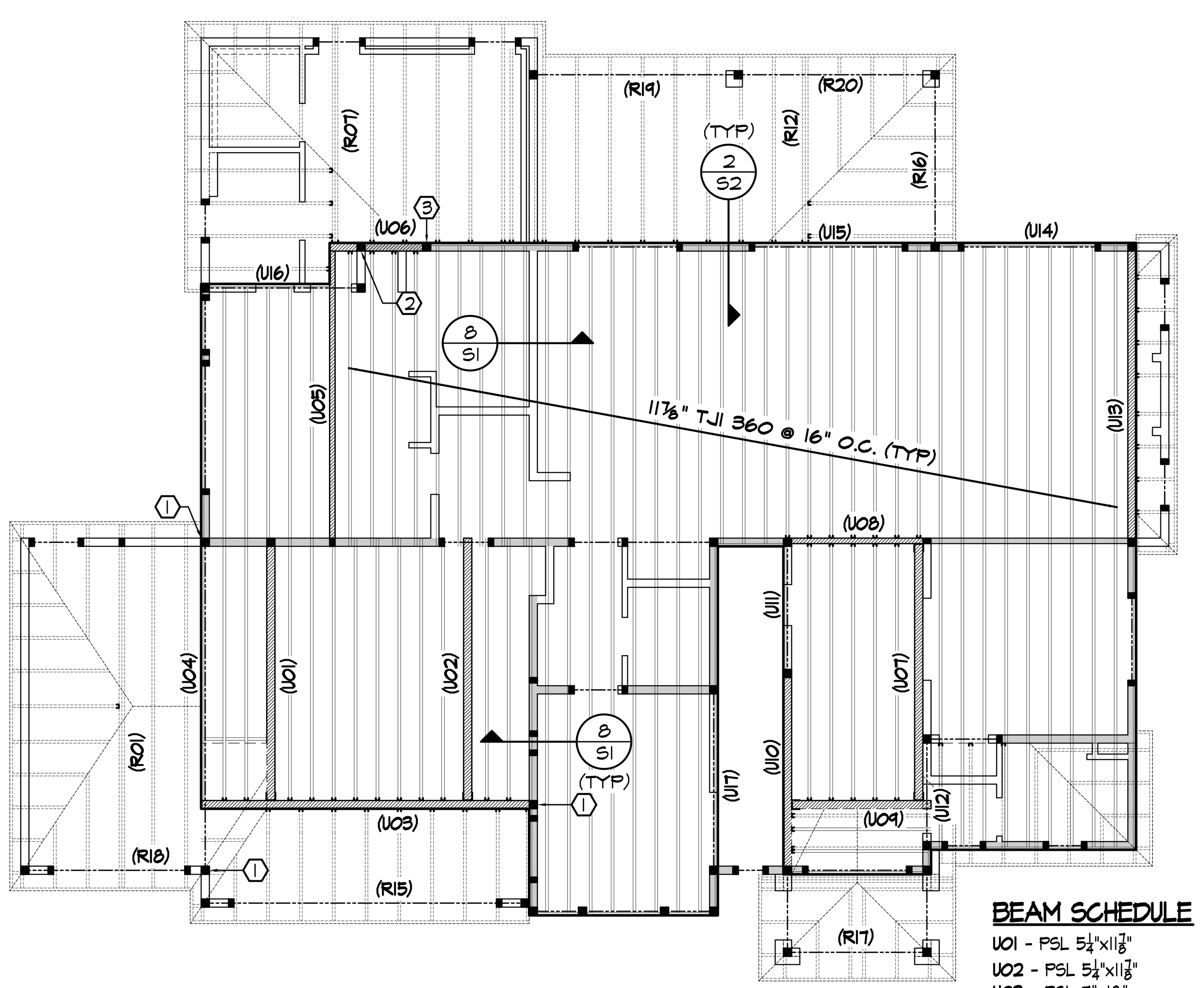
BEAM SCHEDULE
M01 - 4x10 DF#2
M02 - 2x10 HF#2 @ 16" O.C.
M03 - 2x12 HF#2 @ 16" O.C.



③ MAIN FLOOR SHEAR WALLS & HARDWARE
SCALE: 1/8" = 1'-0"

SHEET NOTES
① EXTEND HDR OVER SW NAIL SHTG TO HDR W/10d @ 4" O.C. EA. WAY

SEE SHEET S1 FOR DETAILS, NOTES & SCHEDULES FROM ENGINEER

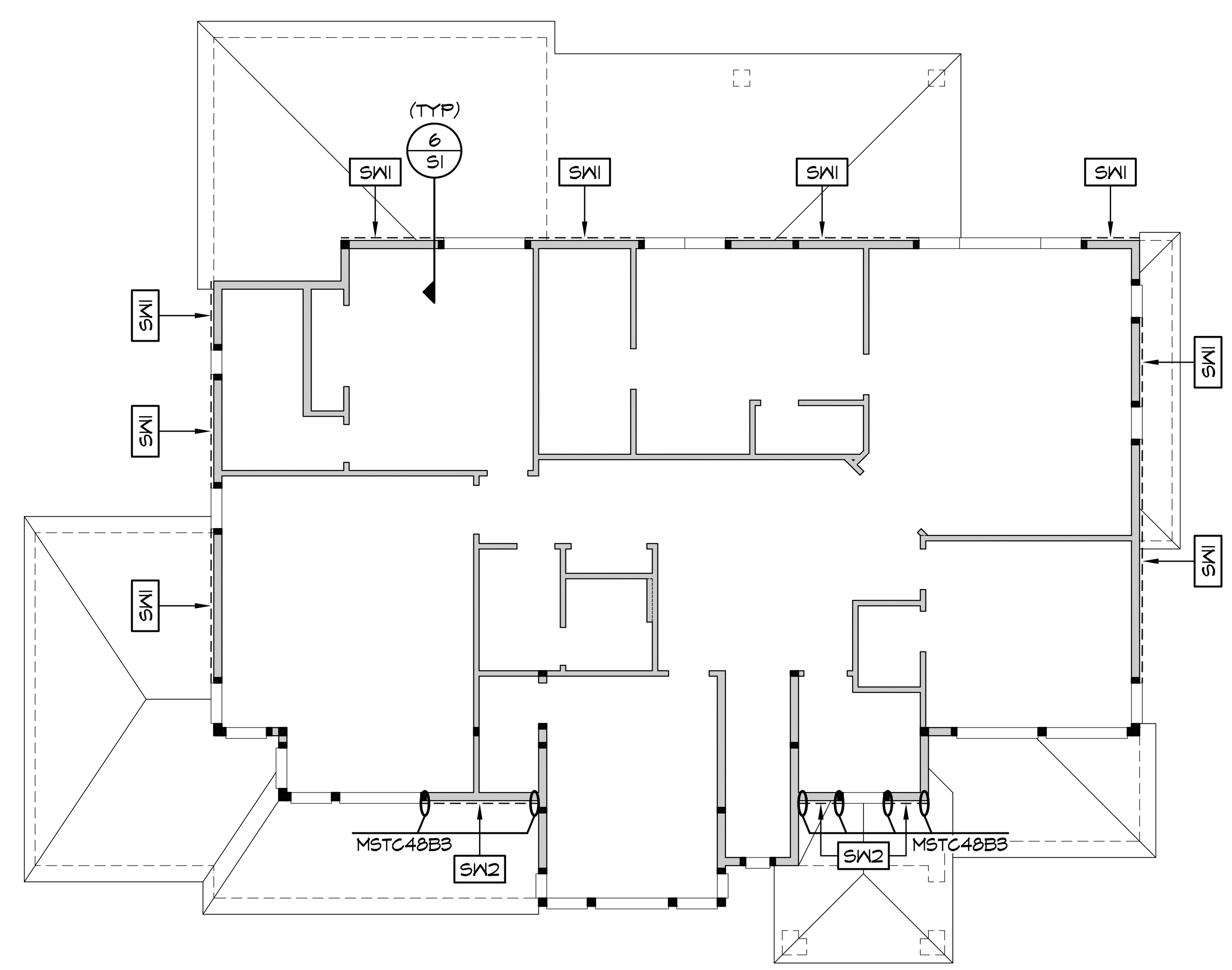


④ UPPER FLOOR FRAMING
SCALE: 1/8" = 1'-0"

BEAM SCHEDULE
U01 - PSL 5¼"x11⅞"
U02 - PSL 5¼"x11⅞"
U03 - PSL 7"x18"
U04 - PSL 7"x18"
U05 - PSL 3½"x11⅞"
U06 - PSL 5¼"x11⅞"
U07 - PSL 3½"x11⅞"
U08 - PSL 5¼"x11⅞"
U09 - PSL 3½"x11⅞"
U10 - PSL 5¼"x11⅞"
U11 - 4x10 DF#2
U12 - 4x10 DF#2
U13 - PSL 5¼"x11⅞"
U14 - 4x10 DF#2
U15 - GLB 3½"x9¼"
U16 - PSL 5¼"x11⅞"
U17 - PSL 3½"x11⅞"

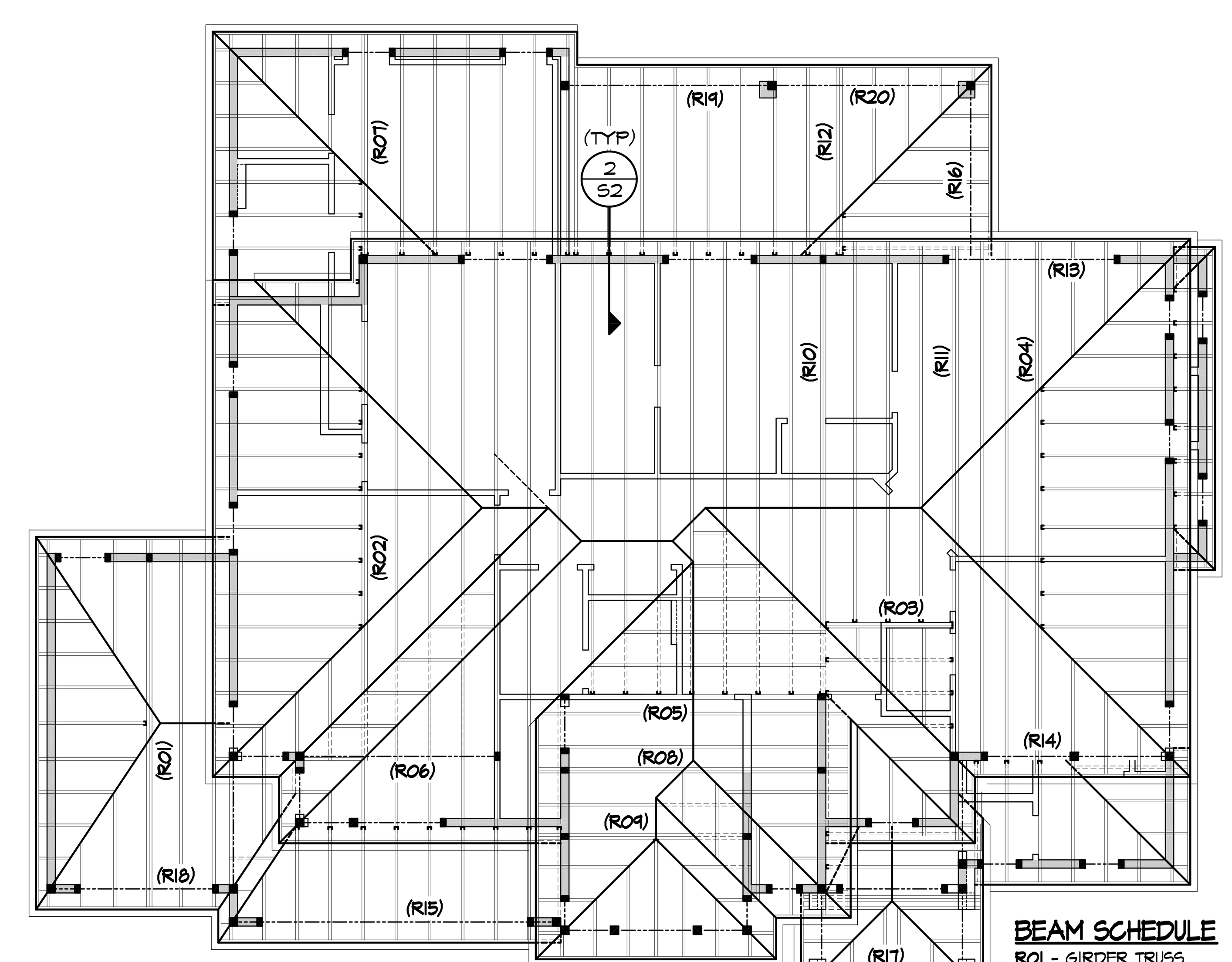
CONNECTION SCHEDULE
U01-U03 - HB5.50/11.88
U02-U03 - HB5.50/11.88
U05-U06 - HUC412
U07-U08 - HUC412
U07-U09 - HUC412
U09-U10 - HUCQ412

SHEET NOTES
① 6x6 DF#1 POST w/ ECCQ7.1-6 CAP
② 6x6 DF#1 POST w/ CCQ66 CAP
③ 6x6 DF#1 POST w/ ECCQ66 CAP



⑤ UPPER FLOOR SHEAR WALLS & HARDWARE
SCALE: 1/8" = 1'-0"

EXPIRES 12-02-22



⑥ ROOF FRAMING
SCALE: 1/8" = 1'-0"

BEAM SCHEDULE
R01 - GIRDER TRUSS
R02 - GIRDER TRUSS
R03 - GIRDER TRUSS
R04 - GIRDER TRUSS
R05 - GIRDER TRUSS
R06 - GLB 5½"x11¼"
R07 - GIRDER TRUSS
R08 - GIRDER TRUSS
R09 - GIRDER TRUSS
R10 - GIRDER TRUSS
R11 - GIRDER TRUSS
R12 - GIRDER TRUSS
R13 - GLB 3½"x9½"
R14 - 4x10 DF#2
R15 - 6x10 DF#2
R16 - 4x10 DF#2
R17 - 4x10 DF#2
R18 - 4x10 DF#2
R19 - 4x10 DF#2
R20 - 4x10 DF#2

ARCHITECTS NORTHWEST
18915-142ND AVENUE NE SUITE 100
WOODINVILLE, WA 98072
OFFICE: (425) 485-4900
FAX: (425) 487-6585
TOLL FREE: 1-888-272-4100
WWW.ARCHITECTSNW.COM

FRIEDMAN HOMES
PLAN M2595B3F-9

DESIGNED BY:	DATE:
TC	2013
DRAWN BY:	DATE:
JRA	8/11/14

PROJECT MANAGER: MARCUS JENKINS

REVISED BY:	DATE:
BPS	9/15/17
BPS	4/25/19
BPS	8/19/19
BPS	10/2/19
BPS	12/20/21

LATERAL BY: PITZER DATE: 12/7/21
LATERAL JOB NUMBER: 21-140

S3 / S3

ANW JOB NUMBER: 210248