HEADRICK RESIDENCE

8822 S.E. 62ND STREET, MERCER ISLAND, WA. 98040

PROJECT INFORMATION

ADDRESS: 8822 62ND STREET, MERCER ISLAND, WA 98040
TAX ID 865050-0040

REFERENCE FOR PHASE I: PHASE I PERMIT #1905-249 CAO 19-014

ZONING: R-9.6 8000 SF GFA ALLOWED.

AREA SUMMARY, LOT COVERAGE, GROSS FLOOR AREA & HARDSCAPE SEE SHEET A2.2

SCOPE OF WORK: PHASE 2

ALL PHASE 2 CONSTRUCTION IS OUTSIDE OF NEW CRITICAL AREA ORDINANCE BUFFER AND SETBACK CURRENTLY REQUIRED BY CODE. PHASE 1 CONSTRUCTION (PERMIT # 1905-249 and CAO19-014) WAS DESIGNED AND PERMITTED UNDER THE OLD CRITICAL AREAS ORDINANCE.

ALL OF PHASE TWO CONSTRUCTION OCCURS OUTSIDE OF ALL CRITICAL AREA BUFFER AND SETBACK CURRENTLY REQUIRED BY CODE.

TREE REMOVAL:

NO NEW TREES ARE ANTICIPATED TO BE REMOVED AS PART OF PHASE 2. ALL TREES REQUIRING REMOVAL WERE REVIEWED AS PART OF PHASE 1; PERMIT # 1905-249

PHASE TWO PROPOSED WORK

NEW ONE STORY RESIDENCE WITH PARTIAL SECOND FLOOR BEDROOMS
ATTACH TO NEW GARAGE PERMITTED UNDER PHASE 1 OF THIS PROJECT: #1905-249

1. DEMOLISH RESIDENCE, EXCEPT FOR FULL BASEMENT FOUNDATION WALLS
2. CONSTRUCT NEW RESIDENCE USING A COMBINATION OF EXISTING BASEMENT FOUNDATION AND NEW FOUNDATIONS.
3. COMPLETE DECKING FROM RESIDENCE TO POOL
4. COMPLETE STORM DRAINAGE AND RELATED BIO PLANTERS

BUILDING CODES

REQUIRED CODES:

IBC 2018
IRC 2018

CONSTRUCTION:

VB - FULLY SPRINKLERED
(TYPE R FIRE SPRINKLER SYSTEM WILL
BE ADDED FOR PHASE ONE & PHASE TWO COMPLETE).

SURVEY / ACCURACY STATEMENT:

AS-BUILT SURVEY NOTE:
PRIOR TO FINAL INSPECTION AS-BUILT SURVEY
1. PROVIDE IMPERVIOUS SURFACE, LOT COVERAGE, AND HARDSCAPE SURVEY
2. PROVIDE PROPERTY LINE / SETBACK SURVEY

ENERGY ENVELOPE: SEE ENERGY SHEET A1.2 & A1.3

NOTE: AVERAGE BUILDING ELEVATION / ON SITE PLAN SHEET A2

NOTE: LOT SLOPE CALCULATION / ON SITE PLAN SHEET A2

FIRE PROTECTION

FIRE DEPARTMENT REQUIREMENTS:
NFPA 13R FIRE SPRINKLER SYSTEM
NFPA 72 MONITORED "CHAPTER 29" FIRE ALARM SYSTEM

ENERGY NOTES

1. WHOLE HOUSE VENTILATION: PROVIDE CONTINUOUSLY OPERATING HEAT RECOVERY VENTILATION SYSTEM . DUCTED SYSTEM SHALL DISTRIBUTE OUTSIDE AIR TO ALL HABITABLE ROOMS.

2. LOCAL EXHAUST: PROVIDE SOURCE SPECIFIC INTERMITTENT/CONTINUOUS VENTILATION AT KITCHEN, BATHS, AND LAUNDRY. PROVIDE REQUIRED CONTROLS AS APPLICABLE, BACK-DRAFT DAMPERS AND NOISE RATINGS SHALL NOT EXCEED 1.0 SONE RATING.

3. BUILDING AIR LEAKAGE: PROVIDE CONTINOUS AIR BARRIER. ALL EXTERIOR DOORS AND WINDOWS SHALL BE WEATHER-STRIPPED OR GASKETED AND SEALED. JOINTS AND OPENINGS IN ENVELOPE SHALL BE SEALED, CAULKED, ALL RECESS LIGHTING AT BUILDING ENVELOPE SHALL BE APPROVED FIXTURE AND INSTALLED WITH GASKETS OR SEALED. ENSURE ALL ELEC BOXES ETC SHALL BE GASKETED, SEALED OR CAULKED. AIR LEAKAGE SHALL CONFORM TO ENERGY FORMS ON SHEET A 1.2

4. INSULATION: FILL ALL CAVITIES. PROVIDE 1" MINIMUM AIR SPACE AT EXTERIOR BATT INSULATION

5. MOISTURE CONTROL: VAPOR BARRIER INSTALLED ON WARM SIDE OF INSULATION. PROVIDE VAPOR BARRIER AT NEW CRAWL SPACE AND/OR NEW CONCRETE SLAB ON GRADE.

6. DUCT TEST: AS APPLICABLE. COMPLETED CERTIFICATE SHALL BE POSTED PERMANENTLY AND PROIR TO FINAL INSPECTION.

7. WATER HEATER: EFFICIENT WATER HEATER., SEE SHEET A 1.2

8. THERMOSTAT: PROVIDE PROGRAMMABLE THERMOSTAT (7 DAY)

9. LIGHT FIXTURES: PROVIDE HIGH EFFICIENCY (LED LUMINAIRES) MINIMUM 75% OF TOTAL FIXTURES IN DWELLING UNIT.

10. SHOWERS / PLUMBING SHALL BE EQUIPPED WITH FLOW CONTROL DEVICES TO LIMIT TOTAL WATER FLOW RATE.

11. DRYER EXHAUST: VENT DRYER TO EXTERIOR. SIZE AND LENGTH CONFORM TO MFG RECOMMENDATION. PROVIDE BACKDRAFT DAMPER

OWNER: Greg & Jennifer Headrick / 8822 S.E. 62nd Street, Mercer Island, WA 98040

DESIGN CONSULTANTS

ARCHITECTURE: Ned Nelson, Architect / 11773 Sunrise Drive NE, Bainbridge Island, Washington 98110
425.444.6782 / nednelson@msn.com

STRUCTURAL: QUANTUM CONSULTING ENGINEERING / 1511 THIRD AVENUE SUITE 323, SEATTLE, WA 98101
206.957.3900 / 206.957.3901 fax

CIVIL: BUSH, ROED & HITCHINGS, INC. Ted Dimof, PE / Engineering Division Manager / Principal
2009 Minor Avenue East, Seattle, WA 98102
206.323.4144 / 206.720.3572 / tedd@brhinc.com

GEOTECHNICAL ENGINEER: GEOTECH CONSULTANTS / Robert Ward / 2401 10th Ave E, Seattle, WA 98102
425.747.5618 / geotech@geotechnw.com

SURVEYOR: TERRANE Edwin J.Green Jr. / 10801 Main Street, Suite 102, Bellevue, WA 98004
425.458.4488 / support@terrane.net

INDEX TO DRAWINGS

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	SURVEY
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A2	SITE PLAN
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S4.5	TYPICAL DETAILS

AS-BUILT SURVEY NOTE:

PRIOR TO FINAL INSPECTION AS-BUILT SURVEY

1. PROVIDE IMPERVIOUS SURFACE, LOT COVERAGE, AND HARDSCAPE SURVEY
2. PROVIDE PROPERTY LINE / SETBACK SURVEY

REVISED: 02-28-2023

Ned Nelson, Architect
11773 Sunrise Drive NE,
Bainbridge Island, WA 98110
telephone: 425.444.6782
email: nednelson@msn.com

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040
PHASE II

REVISIONS:

Mark	Date
1	02-28-23

DATE: 04-28-22

PROJECT INFORMATION

SHEET: A1

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

(PER CHICAGO TITLE INSURANCE COMPANY, ORDER NUMBER 0134363-ETU, DATED AUGUST 23, 2018)

LOT 8, BLOCK 1, TIMBERLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 52 OF PLATS, PAGE 20, IN KING COUNTY, WASHINGTON. SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

SCHEDULE B ITEMS

ITEM 1
COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON PLAT OF TIMBERLAND, RECORDED IN VOLUME 52 OF PLATS, PAGE 20:
RECORDING NO: 4393606 (BLANKET IN NATURE)

ITEM 3
EASEMENT (S) FOR THE PURPOSE (S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON
PURPOSE: INGRESS AND EGRESS, SOLELY FOR MAINTAINING, OPERATION, REPAIRING AND REPLACING SANITARY SEWER AND STORM DRAINAGE PIPE AND LINES
RECORDING DATE: FEBRUARY 23, 1982
RECORDING NO.: 8202230542
AFFECTS: A PORTION OF SAID PREMISES (PLOTTED)

ITEM 4
SANITARY SEWER EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (PLOTTED)

ITEM 5
COMMITMENT TO CONTRIBUTE TO REPAIR OF TIMBERLAND/SALEM WOODS RAVINE AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (BLANKET IN NATURE)

METHOD OF SURVEY

INSTRUMENTATION FOR THIS SURVEY WAS A LEICA ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE DIRECT AND REVERSE ANGLES, NO CORRECTION NECESSARY. MEETS STATE STANDARDS SET BY WAC 332-130-090.

BEARING MERIDIAN

A BEARING OF S88°43'21"E ON THE CENTERLINE OF S.E. 63RD STREET, PER THE PLAT OF TIMBERLAND ADDITION, AS RECORDED IN VOLUME 19 OF PLATS, PAGE 20, RECORDS OF KING COUNTY, WA.

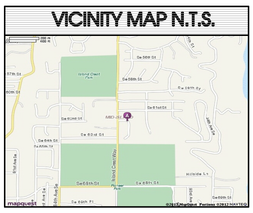
VERTICAL DATUM

CITY OF MERCER ISLAND BENCH MARK NO. 2289
(NAVD 88) (VISITED 08-06-12)

FOUND "1/2" COPPER PIN IN CONC (DN 1.5'), LOCATED SE 63RD ST, OPP HSE #8817.

ELEVATION = 292.97'

VICINITY MAP N.T.S.

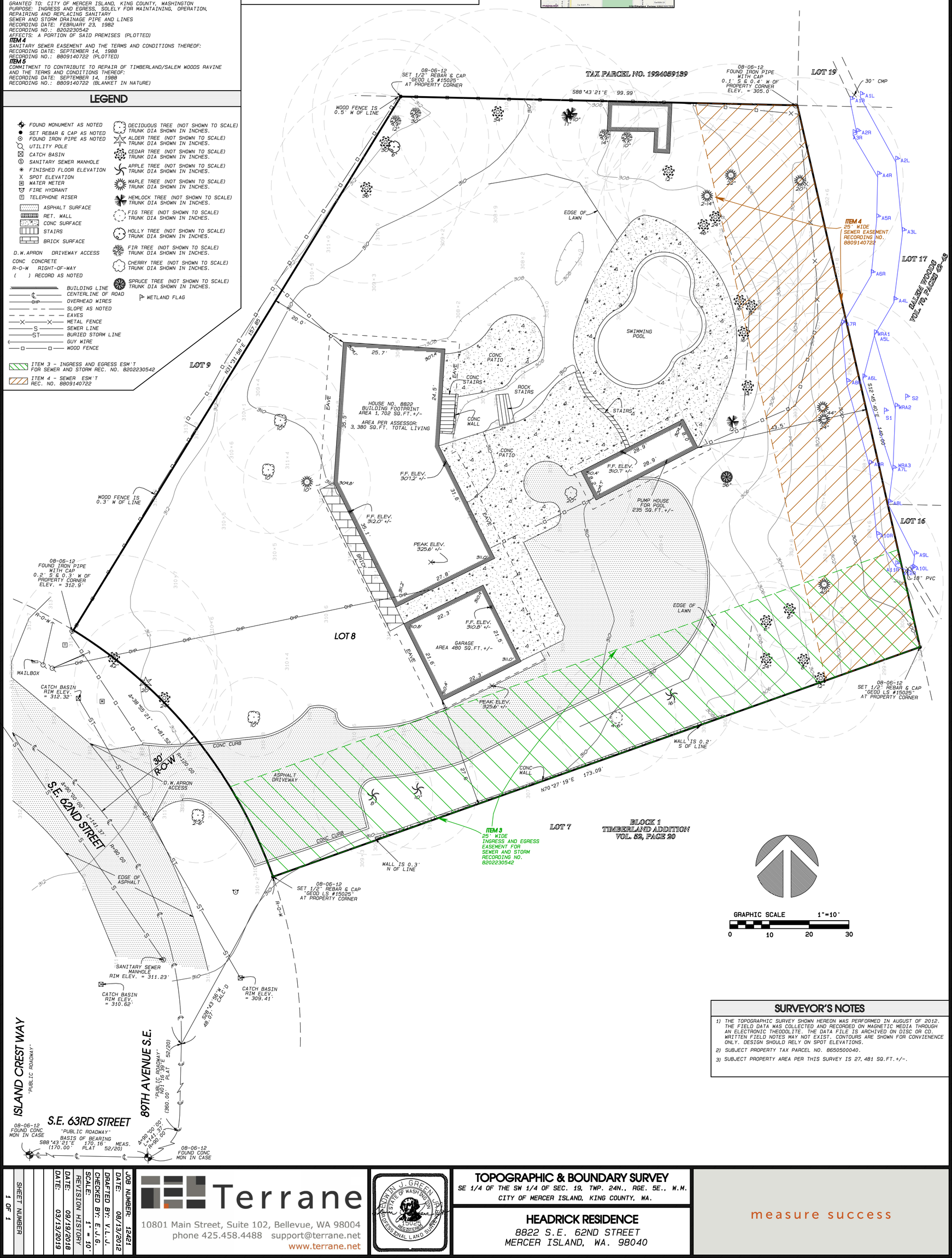


LEGEND

- FOUND MONUMENT AS NOTED
- SET REBAR & CAP AS NOTED
- FOUND IRON PIPE AS NOTED
- UTILITY POLE
- CATCH BASIN
- SANITARY SEWER MANHOLE
- FINISHED FLOOR ELEVATION
- SPOT ELEVATION
- WATER METER
- FIRE HYDRANT
- TELEPHONE RISER
- ASPHALT SURFACE
- RET. WALL
- CONC SURFACE
- STAIRS
- BRICK SURFACE
- D.W.APRON DRIVEWAY ACCESS
- CONC CONCRETE
- R-O-W RIGHT-OF-WAY
- ( ) RECORD AS NOTED
- BUILDING LINE
- CENTERLINE OF ROAD
- OHP OVERHEAD WIRES
- SLOPE AS NOTED
- EAVES
- METAL FENCE
- SEWER LINE
- ST BURIED STORM LINE
- GUY WIRE
- WOOD FENCE
- DECIDUOUS TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- ALDER TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- CEDAR TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- APPLE TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- MAPLE TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- HEMLOCK TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- FIG TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- HOLLY TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- FIR TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- CHERRY TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- SPRUCE TREE (NOT SHOWN TO SCALE) TRUNK DIA SHOWN IN INCHES.
- WETLAND FLAG

ITEM 3 - INGRESS AND EGRESS ESM'T FOR SEWER AND STORM REC. NO. 8202230542

ITEM 4 - SEWER ESM'T REC. NO. 8809140722



SURVEYOR'S NOTES

1) THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN AUGUST OF 2012. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVIENENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2) SUBJECT PROPERTY TAX PARCEL NO. 8650500040.
3) SUBJECT PROPERTY AREA PER THIS SURVEY IS 27,481 SQ.FT.+/-.

JOB NUMBER:	12421
DATE:	08/15/2012
REVISION HISTORY	
SCALE:	1" = 10'
CHECKED BY:	E.J.G.
DRAFTED BY:	V.L.J.
DATE:	09/18/2018
DATE:	02/13/2019
SHEET NUMBER	1 OF 1

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

EDWIN J. GREEN JR. — STATE OF WASHINGTON — 15025 — REGISTERED PROFESSIONAL LAND SURVEYOR

TOPOGRAPHIC & BOUNDARY SURVEY
SE 1/4 OF THE SW 1/4 OF SEC. 19, TWP. 24N., RGE. 5E., W.M.
CITY OF MERCER ISLAND, KING COUNTY, WA.

HEADRICK RESIDENCE
8822 S.E. 62ND STREET
MERCER ISLAND, WA. 98040

measure success

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Project Information	*Contact Information*
Headrick Residence	
8822 SE 62nd St - Mercer Island, WA	

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative		*Date*	

All Climate Zones (Table R402.1.1)		
	R-Value [a]	**U-Factor** [a]
Fenestration U-Factor [b]	n/a	0.30
Skylight U-Factor [b]	n/a	0.50
Glazed Fenestration SHGC [b,e]	n/a	n/a
Ceiling [g]	49	0.026
Wood Frame Wall [d,h]	21 int	0.056
Floor	30	0.029
Below Grade Wall [c,h]	10/15/21 int + TB	0.042
Slab [d,f] R-Value & Depth	10, 2 ft	n/a

a. *R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed *R*-value of the insulation from Appendix Table A101.4 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 Section 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 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 A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

Each dwelling unit ***In a residential building*** shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

1. **Small Dwelling Unit:** 3 credits
   Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area.
   Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.
2. **Medium Dwelling Unit:** 6 credits
   All dwelling units that are not included in #1 or #3
3. **Large Dwelling Unit:** 7 credits
   Dwelling units exceeding 5,000 sf of conditioned floor area
4. **Additions less than 500 square feet:** 1.5 credits
   All other additions shall meet 1-3 above

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

Summary of Table R406.2			
Heating Options	**Fuel Normalization Descriptions**	**Credits - select ONE heating option**	**User Notes**
1	Combustion heating minimum NAECA[b]	0.0 ☐	
2	Heat pump[c]	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 - select ONE energy option from each category [d]**	
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[e]	High Efficiency HVAC	1.0 ☐	
3.2	High Efficiency HVAC	1.0 ☑	Heat pump HSPF 9.5
3.3[e]	High Efficiency HVAC	1.5 ☐	
3.4	High Efficiency HVAC	1.5 ☐	
3.5	High Efficiency HVAC	1.5 ☐	
3.6[e]	High Efficiency HVAC	2.0 ☐	
4.1	High Efficiency HVAC Distribution System	0.5 ☐	
4.2	High Efficiency HVAC Distribution System	1.0 ☐	

Summary of Table R406.2 (cont.)			
Energy Options	**Energy Credit Option Descriptions (cont.)**	**Credits - select ONE energy option from each category [d]**	**User Notes**
5.1[d]	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 ☑	Tier 3 heat pump water heater
5.6	Efficient Water Heating	2.5 ☐	
6.1[e]	Renewable Electric Energy (3 credits max)	1.0 ☐ 3	3600 kWh Annual Solar
7.1	Appliance Package	0.5 ☐	
	Total Credits	7.0	CLEAR FORM

a. An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.
b. Equipment listed in Table C403.3.2(4) or C403.3.2(5)
c. Equipment listed in Table C403.3.2(1) or C403.3.2(2)
d. **You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.**
e. 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max.
   See the complete Table R406.2 for all requirements and option descriptions.

Please print only pages 1 through 3 of this worksheet for submission to your building official.

Table 406.3 – Energy Credits (Single Family)		
Option	**Description**	**Credits: SF**
1. EFFICIENT BUILDING ENVELOPE OPTIONS		
Only one option from Items 1.1 through 1.7 may be selected in this category.		
	Compliance with the conductive UA targets is demonstrated using Section R402.1.4, Total UA alternative, where [1-(Proposed UA/Target UA)] > the required %UA reduction.	
1.1	Prescriptive compliance is based on Table R402.1.1 with the following modifications: **Vertical fenestration U = 0.24**	0.5
1.2	Prescriptive compliance is based on Table R402.1.1 with the following modifications: **Vertical fenestration U = 0.20**	1.0
1.3	Prescriptive compliance is based on Table R402.1.1 with the following modifications: **Vertical fenestration U = 0.28** Floor R-38 Slab on grade R-10 perimeter and under entire slab below grade slab R-10 perimeter and under entire slab ***or*** Compliance based on Section R402.1.4: Reduce the Total conductive UA by 5%	0.5
1.4	Prescriptive compliance is based on Table R402.1.1 with the following modifications: **Vertical fenestration U = 0.25** Wall R-21 plus R-4 ci Floor R-38 Basement wall R-21 int plus R-5 ci Slab on grade R-10 perimeter and under entire slab Below grade slab R-10 perimeter and under entire slab ***or*** Compliance based on Section R402.1.4: Reduce the Total conductive UA by 15%	1.0
1.5	Prescriptive compliance is based on Table R402.1.1 with the following modifications: **Vertical fenestration U = 0.22** Ceiling and single-rafter or joist-vaulted R-49 advanced Wood frame wall R-21 int plus R-12 ci Floor R-38 Basement wall R-21 int plus R-12 ci Slab on grade R-10 perimeter and under entire slab Below grade slab R-10 perimeter and under entire slab ***or*** Compliance based on Section R402.1.4: Reduce the Total conductive UA by 30%	2.0
1.6	Prescriptive compliance is based on Table R402.1.1 with the following modifications: **Vertical fenestration U = 0.18** Ceiling and single-rafter or joist-vaulted R-60 advanced Wood frame wall R-21 int plus R-16 ci Floor R-48 Basement wall R-21 int plus R-16 ci Slab on grade R-20 perimeter and under entire slab Below grade slab R-20 perimeter and under entire slab ***or*** Compliance based on Section R402.1.4: Reduce the Total conductive UA by 40%.	3.0
1.7	Advanced framing and raised heel trusses or rafters Vertical Glazing U-0.28 R-49 Advanced (U-0.020) as listed in Section A102.2.1, *Ceilings below a vented attic* ***and*** R-49 vaulted ceilings with full height of uncompressed insulation extending over the wall top plate at the eaves.	0.5

Table 406.3 – Energy Credits (Single Family)		
Option	**Description**	**Credits: SF**
2. AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION OPTIONS		
Only one option from Items 2.1 through 2.4 may be selected in this category.		
2.1	Compliance based on R402.4.1.2: Reduce the tested air leakage to **3.0 air changes per hour** maximum at 50 Pascals ***or*** For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to **0.3 cfm/sf maximum at 50 Pascals *and*** All whole house ventilation requirements as determined by Section M1507.3 of the *International Residential Code* or Section 403.8 of the *International Mechanical Code* shall be met with a high efficiency fan(s) (**maximum 0.35 watts/cfm**), not interlocked with the furnace fan (if present). Ventilation systems using a furnace including an ECM motor are allowed, provided that they are controlled to operate at low speed in ventilation only mode. To qualify to claim this credit, the building permit drawings shall specify the option being selected and the maximum tested building air leakage, and shall show the qualifying ventilation system and its control sequence of operation.	0.5
2.2	Compliance based on Section R402.4.1.2: Reduce the tested air leakage to **2.0 air changes per hour maximum at 50 Pascals *or*** For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to 0.25 cfm/sf maximum at 50 Pascals ***and*** All whole house ventilation requirements as determined by Section M1507.3 of the *International Residential Code* or Section 403.8 of the *International Mechanical Code* shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of **0.65**. [1]	1.0
2.3	Compliance based on Section R402.4.1.2: Reduce the tested air leakage to **1.5 air changes per hour** maximum at 50 Pascals ***or*** For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to **0.25 cfm/sf** maximum at 50 Pascals ***and*** All whole house ventilation requirements as determined by Section M1507.3 of the *International Residential Code* or Section 403.8 of the *International Mechanical Code* shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of **0.75**. [1]	1.5
2.4	Compliance based on Section R402.4.1.2: Reduce the tested air leakage to **0.6 air changes per hour** maximum at 50 Pascals **or** For R-2 Occupancies, optional compliance based on Section R402.4.1.2: Reduce the tested air leakage to **0.15 cfm/sf** maximum at 50 Pascals **and** All whole house ventilation requirements as determined by Section M1507.3 of the *International Residential Code* or Section 403.8 of the *International Mechanical Code* shall be met with a heat recovery ventilation system with minimum sensible heat recovery efficiency of **0.80. Duct installation shall comply with Section R403.3.7**. [1]	2.0
[1] To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the maximum tested building air leakage and shall show the heat recovery ventilation system.		

Table 406.3 – Energy Credits (Single Family)		
Option	**Description**	**Credits: SF**
3. HIGH EFFICIENCY HVAC EQUIPMENT OPTIONS		
Only one option from Items 3.1 through 3.6 may be selected in this category.		
3.1 [2]	Energy Star rated (U.S. North) Gas or propane furnace with minimum AFUE of 95% ***or*** Energy Star rated (U.S. North) Gas or propane boiler with minimum AFUE of 90%. [2]	1.0
3.2 [2]	Air-source centrally ducted heat pump with minimum HSPF of 9.5. [3]	1.0
3.3[2]	Closed-loop ground source heat pump; with a minimum COP of 3.3 ***or*** Open loop water source heat pump with a maximum pumping hydraulic head of 150 feet and minimum COP of 3.6. [3]	1.5
3.4	Ductless mini-split heat pump system, zonal control: In homes where the primary space heating system is zonal electric heating, a ductless mini-split heat pump system with a minimum HSPF of 10.0 shall be installed and provide heating to the largest zone of the housing unit. [4]	1.5
3.5 [2]	Air-source, centrally ducted heat pump with minimum HSPF of 11.0. [4]	1.5
3.6 [2]	Ductless split system heat pumps with no electric resistance heating in the primary living areas. A ductless heat pump system with a minimum HSPF of 10 shall be sized and installed to provide heat to entire dwelling unit at the design outdoor air temperature. To qualify to claim this credit, the building permit drawings shall specify the option being selected, the heated floor area calculation, the heating equipment type(s), the minimum equipment efficiency, and total installed heat capacity (by equipment type).	2.0
[2] An alternative heating source sized at a maximum of 0.5 W/sf(equivalent) of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.		
[3] To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency.		
[4] To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and the minimum equipment efficiency.		
4. HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM OPTIONS		
4.1	All supply and return ducts located in an unconditioned attic shall be deeply buried in ceiling insulation in accordance with Section R403.3.7. For mechanical equipment located outside the conditioned space, a maximum of 10 linear feet of return duct and 5 linear feet of supply duct connections to the equipment may be outside the deeply buried insulation. All metallic ducts located outside the conditioned space must have both transverse and longitudinal joints sealed with mastic. If flex ducts are used, they cannot contain splices. Duct leakage shall be limited to 3 cfm per 100 square feet of conditioned floor area. Air handler(s) shall be located within the conditioned space.	0.5
4.2	HVAC equipment and associated duct system(s) installation shall comply with the requirements of Section R403.3.7. Locating system components in conditioned crawl spaces is not permitted under this option. Electric resistance heat and ductless heat pumps are not permitted under this option. Direct combustion heating equipment with AFUE less than 80% is not permitted under this option. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the heating equipment type and shall show the location of the heating and cooling equipment and all the ductwork.	1.0

Table 406.3 – Energy Credits (Single Family)		
Option	**Description**	**Credits: SF**
5. EFFICIENT WATER HEATING OPTIONS		
Only one option from Items 5.2 through 5.6 may be selected in this category. Item 5.1 may be combined with any option.		
5.1	A drain water heat recovery unit(s) shall be installed, which captures waste water heat from all and only the showers, and has a minimum efficiency of 40% if installed for equal flow or a minimum efficiency of 54% if installed for unequal flow. Such units shall be rated in accordance with CSA B55.1 or IAPMO IGC 346-2017 and be so labeled. To qualify to claim this credit, the building permit drawings shall include a plumbing diagram that specifies the drain water heat recovery units and the plumbing layout needed to install it. Labels or other documentation shall be provided that demonstrates that the unit complies with the standard.	0.5
5.2	Water heating system shall include one of the following: Energy Star rated gas or propane water heater with a minimum UEF of 0.80. [5]	0.5
5.3	Water heating system shall include one of the following: Energy Star rated gas or propane water heater with a minimum UEF of 0.91 ***or*** Solar water heating supplementing a minimum standard water heater. Solar water heating will provide a rated minimum savings of 85 therms or 2000 kWh based on the Solar Rating and Certification Corporation (SRCC) Annual Performance of OG-300 Certified Solar Water Heating Systems ***or*** Water heater heated by ground source heat pump meeting requirements of Option 3.3. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the water heater equipment type and the minimum equipment efficiency and, for solar water heating systems, the calculation of minimum energy savings.	1.0
5.4	Water heating system shall include one of the following: Electric heat pump water heater meeting the standards for Tier I of NEEA's advanced water heating specification ***or*** For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier I of NEEA's advanced water heating specification, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and recirculation piping shall be insulated with R-8 minimum pipe insulation. [5]	1.5
5.5	Water heating system shall include one of the following: Electric heat pump water heater meeting the standards for Tier III of NEEA's advanced water heating specification ***or*** For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier III of NEEA's advanced water heating specification, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and recirculation piping shall be insulated with R-8 minimum pipe insulation. [5]	2.0
5.6	Water heating system shall include one of the following: Electric heat pump water heater with a minimum UEF of 2.9 and utilizing a split system configuration with the air-to-refrigerant heat exchanger located outdoors. Equipment shall meet Section 4, requirements for all units, of the NEEA standard *Advanced Water Heating Specification* with the UEF noted above ***or*** For R-2 Occupancy, electric heat pump water heater(s), meeting the standards for Tier III of NEEA's advanced water heating specification and utilizing a split system configuration with the air-to-refrigerant heat exchanger located outdoors, shall supply domestic hot water to all units. If one water heater is serving more than one dwelling unit, all hot water supply and recirculation piping shall be insulated with R-8 minimum pipe insulation. [5]	2.5
[5] To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall specify the water heater equipment type and the minimum equipment efficiency.		

Table 406.3 – Energy Credits (Single Family)		
Option	**Description**	**Credits: SF**
6. RENEWABLE ELECTRIC ENERGY OPTION		
6.1	For each 1200 kWh of electrical generation per housing unit provided annually by on-site wind or solar equipment a 1.0 credit shall be allowed, up to 3 credits. Generation shall be calculated as follows: For solar electric systems, the design shall be demonstrated to meet this requirement using the National Renewable Energy Laboratory calculator PVWATTs or approved alternate by the code official. Documentation noting solar access shall be included on the plans. For wind generation projects designs shall document annual power generation based on the following factors: the wind turbine power curve; average annual wind speed at the site; frequency distribution of the wind speed at the site and height of the tower. To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall show the photovoltaic or wind turbine equipment type, provide documentation of solar and wind access, and include a calculation of the minimum annual energy power production.	1.0
7. APPLIANCE PACKAGE OPTION		
7.1	All of the following appliances shall be new and installed in the dwelling unit and shall meet the following standards: Dishwasher – Energy Star rated Refrigerator (if provided) – Energy Star rated Washing machine – Energy Star rated Dryer – Energy Star rated, ventless dryer with minimum CEF rating of 5.2 To qualify to claim this credit, the building permit drawings shall specify the option being selected and shall show the appliance type and provide documentation of Energy Star compliance. At the time of inspection, all appliances shall be installed and connected to utilities. Dryer ducts and exterior dryer vent caps are not permitted to be installed in the dwelling unit.	0.5

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HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040
PHASE II

REVISIONS:

Mark	Date

DATE: 04-28-22

ENERGY

SHEET:
A1.2

REVISED: 02-28-2023

LEGAL DESCRIPTION

(PER CHICAGO TITLE INSURANCE COMPANY, ORDER NUMBER 0134363-ETU, DATED AUGUST 23, 2018)

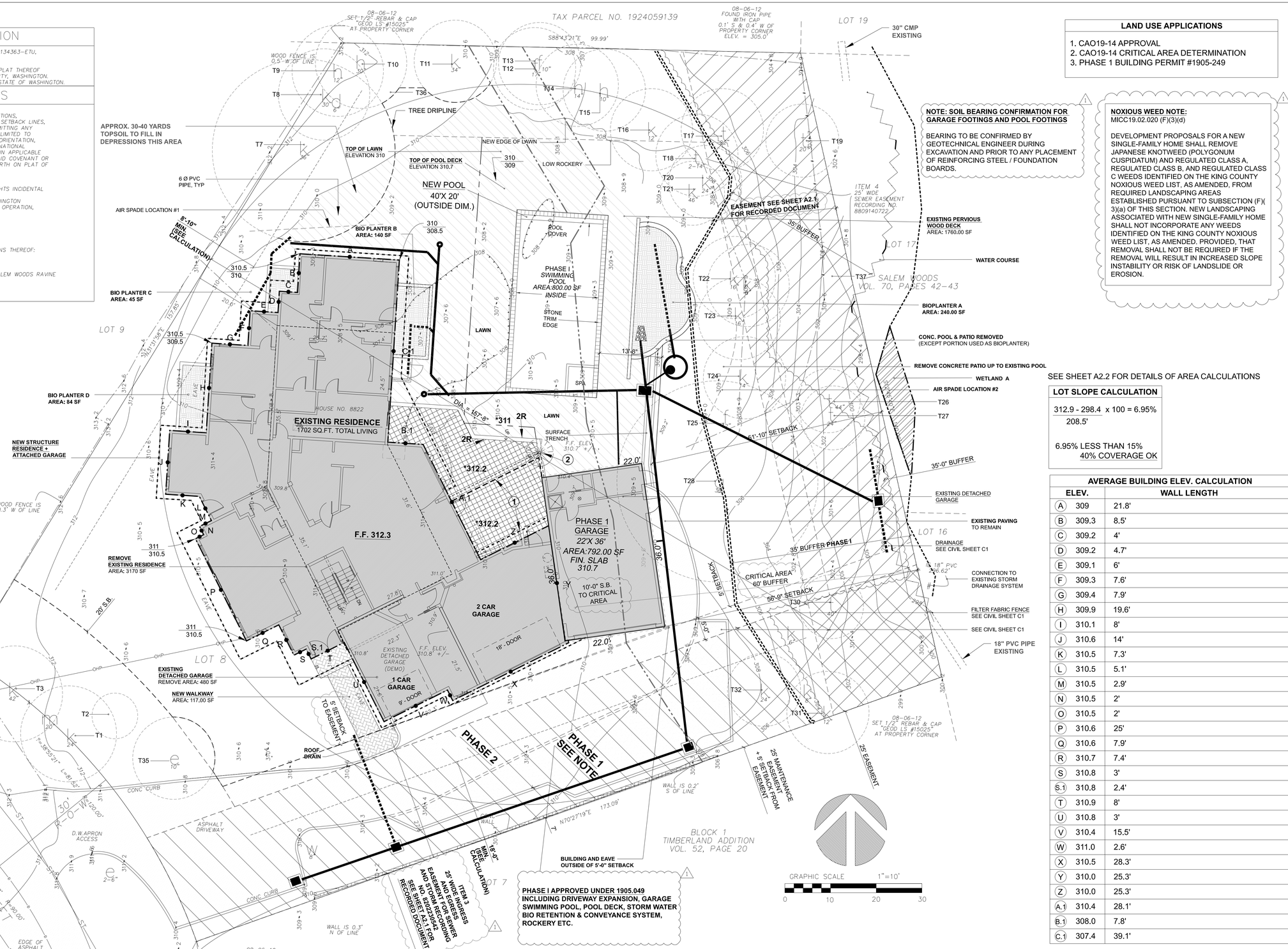
LOT 8, BLOCK 1, TIMBERLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 52 OF PLATS, PAGE 20, IN KING COUNTY, WASHINGTON. SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

SCHEDULE B ITEMS

ITEM 1
COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON PLAT OF TIMBERLAND, RECORDED IN VOLUME 52 OF PLATS, PAGE 20:
RECORDING NO: 4393606 (BLANKET IN NATURE)
ITEM 3
EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF MERCER ISLAND, KING COUNTY, WASHINGTON
PURPOSE: INGRESS AND EGRESS, SOLELY FOR MAINTAINING, OPERATION, REPAIRING AND REPLACING SANITARY SEWER AND STORM DRAINAGE PIPE AND LINES
RECORDING DATE: FEBRUARY 23, 1982
RECORDING NO.: 8202230542
AFFECTS: A PORTION OF SAID PREMISES (PLOTTED)
ITEM 4
SANITARY SEWER EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (PLOTTED)
ITEM 5
COMMITMENT TO CONTRIBUTE TO REPAIR OF TIMBERLAND/SALEM WOODS RAVINE AND THE TERMS AND CONDITIONS THEREOF:
RECORDING DATE: SEPTEMBER 14, 1988
RECORDING NO.: 8809140722 (BLANKET IN NATURE)

LEGEND

	APPROX. PHASE I & 2 DIVIDING LINE
	MAINTENANCE EASEMENTS 198809140722 – SEE PLAN 198202230542 – SEE PLAN
	TYPICAL SETBACK LINE
	BUFFER APPROVED UNDER CAO–19–014
	NEW BUFFER SETBACK 10'
	PHASE 2 ADDITION & ROOF EAVE
	WATERCOURSE
	STRUCTURE TO BE REMOVED
	EXISTING PAVING
	NEW PAVING
	BIO PLANTER
	PERVIOUS POOL DECK
	PERVIOUS PAVER ENTRY WALK
	WETLAND



PHASE I APPROVED UNDER 1905.049 INCLUDING DRIVEWAY EXPANSION, GARAGE SWIMMING POOL, POOL DECK, STORM WATER BIO RETENTION & CONVEYANCE SYSTEM, ROCKERY ETC.

NOTE:
1. UNCOVERED 2ND FLOOR DECK
2. SPIRAL STAIR, 72" DIA.

LAND USE APPLICATIONS

1. CAO19-14 APPROVAL
2. CAO19-14 CRITICAL AREA DETERMINATION
3. PHASE 1 BUILDING PERMIT #1905-249

NOTE: SOIL BEARING CONFIRMATION FOR GARAGE FOOTINGS AND POOL FOOTINGS

BEARING TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING EXCAVATION AND PRIOR TO ANY PLACEMENT OF REINFORCING STEEL / FOUNDATION BOARDS.

NOXIOUS WEED NOTE:
MICC19.02.020 (F)(3)(d)

DEVELOPMENT PROPOSALS FOR A NEW SINGLE-FAMILY HOME SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION (F)(3)(a) OF THIS SECTION. NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

SEE SHEET A2.2 FOR DETAILS OF AREA CALCULATIONS

LOT SLOPE CALCULATION

312.9 - 298.4 x 100 = 6.95%
208.5'

6.95% LESS THAN 15%
40% COVERAGE OK

AVERAGE BUILDING ELEV. CALCULATION

ELEV.		WALL LENGTH
A	309	21.8'
B	309.3	8.5'
C	309.2	4'
D	309.2	4.7'
E	309.1	6'
F	309.3	7.6'
G	309.4	7.9'
H	309.9	19.6'
I	310.1	8'
J	310.6	14'
K	310.5	7.3'
L	310.5	5.1'
M	310.5	2.9'
N	310.5	2'
O	310.5	2'
P	310.6	25'
Q	310.6	7.9'
R	310.7	7.4'
S	310.8	3'
S.1	310.8	2.4'
T	310.9	8'
U	310.8	3'
V	310.4	15.5'
W	311.0	2.6'
X	310.5	28.3'
Y	310.0	25.3'
Z	310.0	25.3'
A.1	310.4	28.1'
B.1	308.0	7.8'
C.1	307.4	39.1'

(309)(21.8) + (309.3)(8.5) + (309.2)(4) + (309.2)(4.7) + (309.1)(6) + (309.3)(7.6) + (309.4)(7.9) + (309.9)(19.6) + (310.1)(8) + (310.6)(14) + (310.5)(7.3) + (310.5)(5.1) + (310.5)(2.9) + (310.5)(2) + (310.5)(2) + (310.6)(25) + (310.6)(7.9) + (310.7)(7.4) + (310.8)(3) + (310.8)(2.4) + (310.9)(8) + (310.8)(19.4) + (310.4)(15.5) + (311)(2.6) + (310.5)(28.3) + (310)(25.3) + (310.8)(16.7) + (310.4)(28.1) + (308)(7.8) + (307.4)(39.1)
= 109,964.74 = **309.32' ABE**
21.8 + 8.5 + 4 + 4.7 + 6 + 7.6 + 7.9 + 19.6 + 8 + 14 + 7.3 + 5.1 + 2.9 + 2 + 2 + 25 + 7.9 + 7.4 + 2.4 + 8 + 19.4 + 15.5 + 2.6 + 28.3 + 25.3 + 16.7 + 28.1 + 7.8 + 39.1 = 355.5

REVISED: 02-28-2023

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Bainbridge Island, WA 98110
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HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040
PHASE II

REVISIONS:

Mark	Date
1	02-28-23

DATE: 04-28-22

SITE PLAN

SHEET: A2

#8202230542 INGRESS / EGRESS EASEMENT FOR MAINTENANCE OF SANITARY AND STORM DRAINAGE FACILITIES

8202230542

5050-0040
122 SE 62 ST.

INGRESS AND EGRESS EASEMENT

The undersigned, Grantor, for and in consideration of one dollar ($1.00) and other valuable consideration, the receipt of which is hereby acknowledged, by these presents bargains, sells, transfers and conveys unto the CITY OF MERCER ISLAND, King County, Washington, Grantee, an easement over and across the following described property situated in King County, State of Washington, to-wit;

The South 25.00 feet of Lot 8, Block 1, in the Plat of Timberland as recorded in Volume 52 of Plats, page 20, records of King County, Washington, measured perpendicular to the common property line between Lots 7 and 8 of said plat.

This easement is subject to the following limitations:

a. It shall be for the purpose of ingress and egress across said described property solely for maintaining, operating, repairing and replacing sanitary sewer and storm drainage pipe and lines plus all necessary connections and appurtenances thereto on adjacent property.

b. Said easement shall be 25 feet in width, except to the extent that it lies along the asphalt driveway in which event it shall be 25 feet or the width of the driveway, whichever is the lesser figure; otherwise the easement is as indicated on the attached map.

c. Grantee in each instance shall immediately after utilizing said access restore said premises as nearly as possible to its previous condition.

DATED this 1st day of February, 1982.

Carolyn C. Blackstock
Carolyn C. Blackstock

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

1% EXCISE TAX NOT REQUIRED
King Co. Records Division
By D Brooks, Deputy

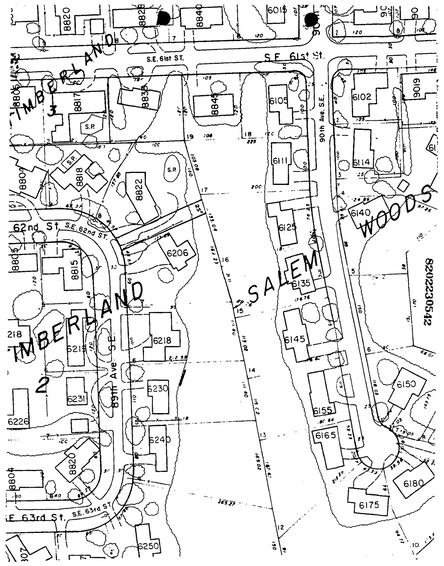
On this 1st day of February, 1982, before me, appeared Carolyn C. Blackstock, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged to me that she signed and sealed the said instrument as her free and voluntary act and deed for the uses and purposes therein mentioned.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

RECEIVED
MAR - 9 1982

Debra E. Drummonds
Notary Public in and for the State of Washington, residing at
CITY OF MERCER ISLAND

No. FILE NO. 105 Mercer Island



#8809140722 PUBLIC AND PRIVATE STORM DRAIN AND SANITARY SEWER EASEMENT

8809140722

PUBLIC AND PRIVATE
STORM DRAIN AND SANITARY SEWER EASEMENT

KNOW ALL MEN BY THESE PRESENTS that Carolyn C. Blackstock
Owner(s)/Grantor(s) of the following described property:

LOT 8, BLOCK 1, IN THE PLAT OF TIMBERLAND AS RECORDED IN VOLUME 52 OF PLATS, PAGE 26, RECORDS OF KING COUNTY, WASHINGTON.

for and in valuable consideration hereby grant and convey to Grantee, City of Mercer Island, its successors and assigns, a public and private storm drain and sanitary sewer easement over, under, upon and across the above described property as follows:

The east 25.00 feet of Lot 8, Block 1, in the Plat of Timberland as recorded in Volume 52 of Plats, page 20, Records of King County, Washington, measured perpendicular to the east property line.

Said assement being for the purpose of installing, constructing, maintaining, operating, repairing and replacing public and private sanitary sewer and storm drainage facilities and all necessary connections and appurtenances thereto, together with the right of ingress and egress from and across said described property for the foregoing purposes; provided that in the original installation of such utilities and appurtenances the Grantees shall immediately after such installation restore said premises to their original condition as near as may be.

DATED this 19th day of August, 1988.

Carolyn C. Blackstock
Carolyn C. Blackstock

STATE OF WASHINGTON)
COUNTY OF KING) ss

On this 19th day of August, 1988, personally appeared before me Carolyn C. Blackstock to me known to be the individual(s) described in and who executed the foregoing instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

BEVERLEE MAY
NOTARY PUBLIC
STATE OF WASHINGTON
JULY 23, 1990

Notary Public in and for the State of Washington, residing at Mercer Island, Washington.

RETURNED AT REQUEST OF:
Mercer Island City Clerk
3505 88th Avenue S.E.
P.O. Box 1440
Mercer Island, Washington 98040-1440

8809140722

DATED this 19th day of August, 1988.

Carolyn C. Blackstock
Property Owner

Property Owner

STATE OF WASHINGTON)
) ss
COUNTY OF KING)

On this 19th day of Aug, 1988, before me personally appeared CAROLYN C. BLACKSTOCK and to me known to be the individuals described in and who executed the foregoing instrument and acknowledged that they signed and sealed the same as their free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.

Notary Public in and for the State of Washington, residing at Mercer Island.

My Commission expires 2-26-89.

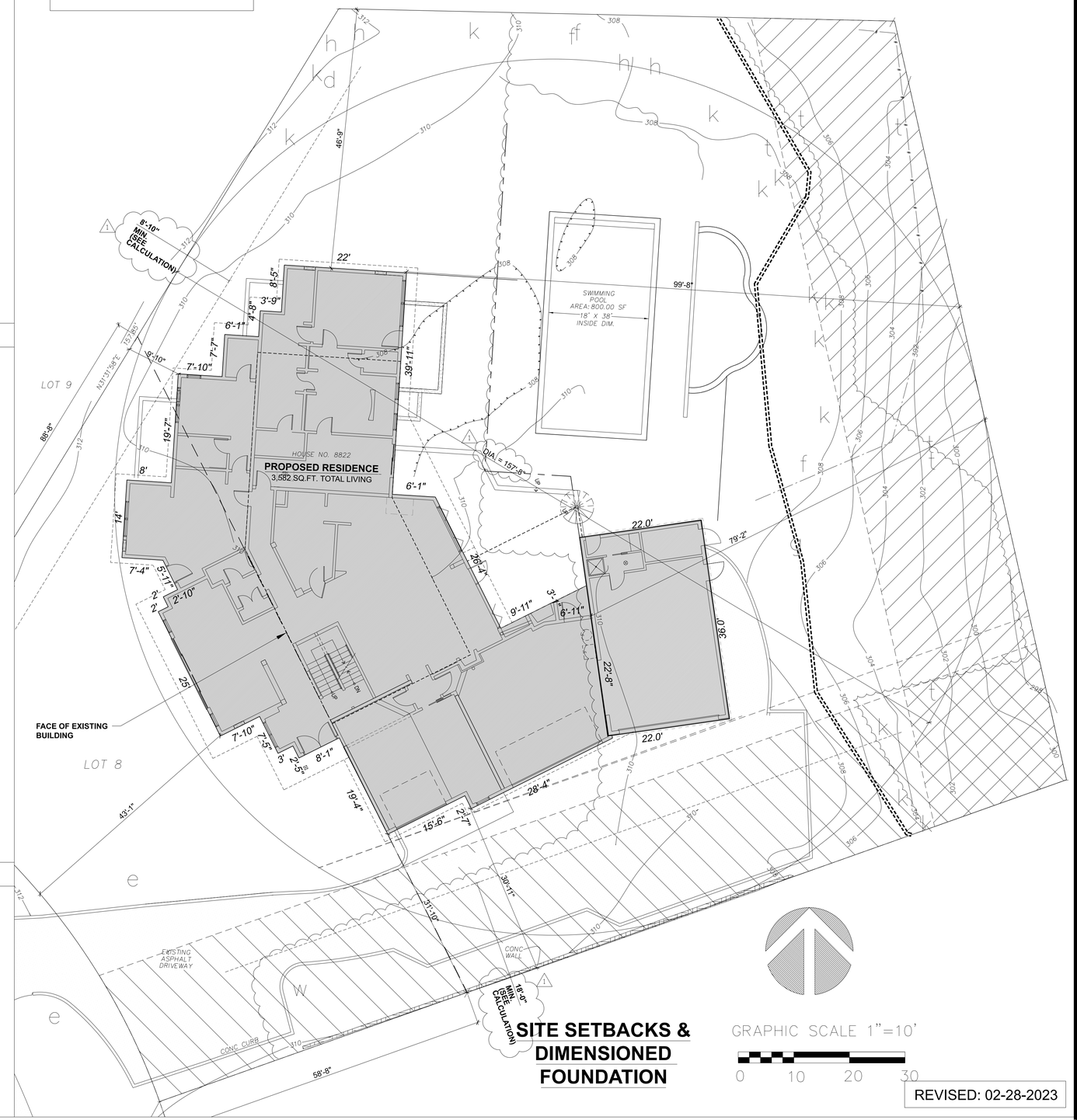
BEVERLEE MAY
NOTARY PUBLIC
STATE OF WASHINGTON

RECORDED AT REQUEST OF
Sep 14 2 11 PM '88
RECORDS OF KING COUNTY, WASH.

AS-BUILT SURVEY NOTE:
PRIOR TO FINAL INSPECTION AS-BUILT SURVEY

1. PROVIDE IMPERVIOUS SURFACE, LOT COVERAGE, AND HARDSCAPE SURVEY

2. PROVIDE PROPERTY LINE / SETBACK SURVEY



SITE SETBACKS & DIMENSIONED FOUNDATION

GRAPHIC SCALE 1"=10'
0 10 20 30

REVISED: 02-28-2023

LOT WIDTH CIRCLE

157'-8" X 17% = 26'-10"
X 33%
8'-10"

26'-10" - 8'-10" = 18'-0"

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email: nednelson@msn.com

HEADRICK RESIDENCE
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MERCER ISLAND, WA. 98040
PHASE II

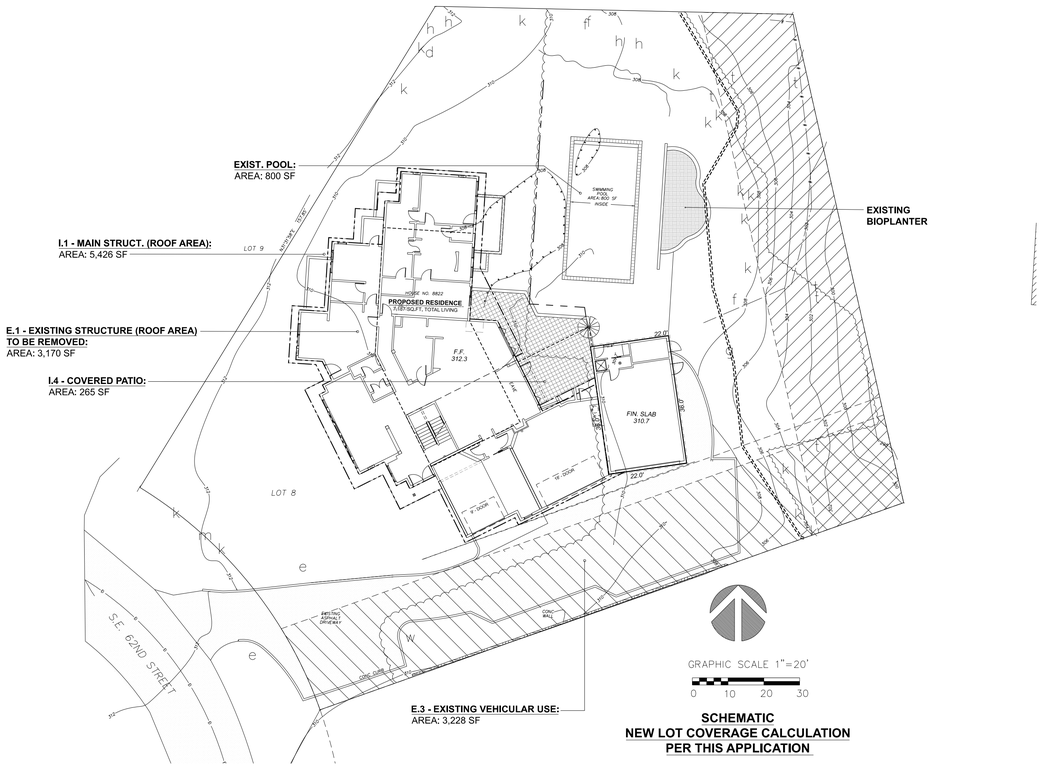
REVISIONS:

Mark	Date
1	02-28-23

DATE: 04-28-22

FOUNDATION
DIMENSIONS
EASEMENTS

SHEET: A2.1

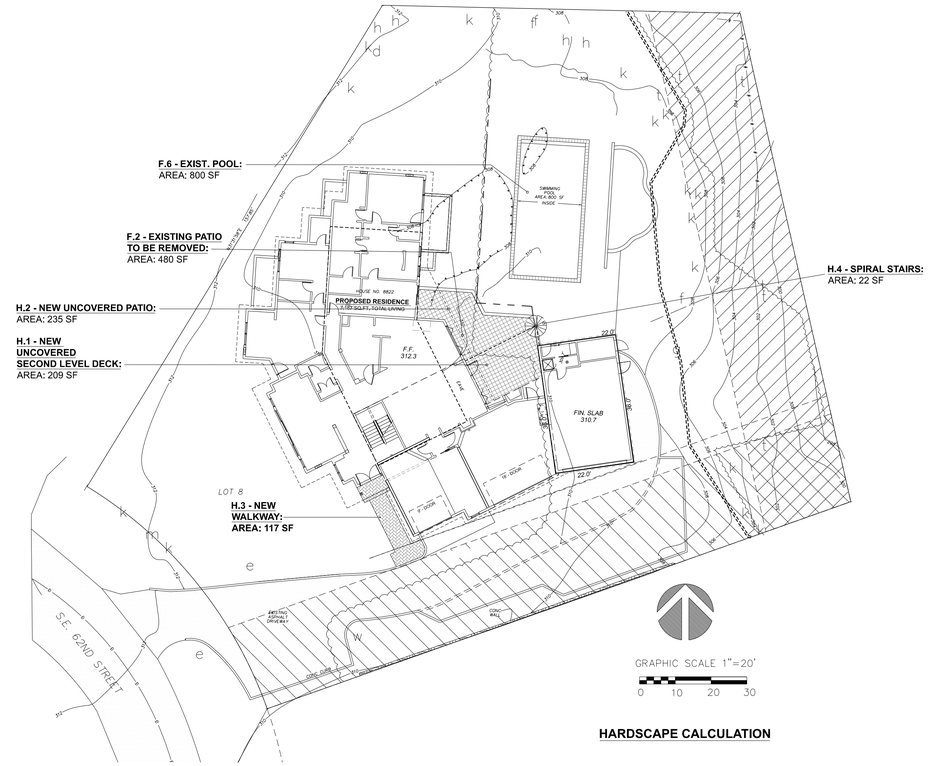


SCHEMATIC
NEW LOT COVERAGE CALCULATION
PER THIS APPLICATION

LOT COVERAGE CALCULATIONS

A.	Gross Lot Area	27,481	Square Feet
B.	Net Lot Area	27,481	Square Feet
C.	Allowed Lot Coverage Area	10,992	Square Feet
D.	Allowed Lot Coverage	40	% of Lot
E.	Existing Lot Coverage:		
	1. Main Structure Roof Area	3170	Square Feet
	2. Accessory Building Roof Area	792	Square Feet
	3. Vehicular Use (driveway, paved access easements [portion used by the lot for access], parking	3228	Square Feet
	4. Covered Patios and Covered Decks	---	Square Feet
	5. Total Existing Lot Coverage Area (E1+E2+E3+E4)	7190	Square Feet
F.	(Total Lot Coverage Area Removed)	3170	Square Feet
G.	Proposed Adjustment for Single Story (Area)	---	Square Feet
H.	Proposed Adjustment for Flag Lot	---	Square Feet
I.	Total New Lot Coverage Area:		
	1. Main Structure Roof Area	5426	Square Feet
	2. Accessory Structure Roof Area	---	Square Feet
	3. Vehicular Use (driveway, paved access easement [portion used by the lot for access], parking)	---	Square Feet
	4. Covered Patios and Covered Decks	265	Square Feet
	5. Total New Lot Coverage Area (I1 + I2 + I3 + I4)	5691	
J.	Total Project Lot Coverage Area = (E5 - F) + I5	9711	Square Feet
K.	Proposed Lot Coverage Area = (J/B) x 100	35.3	% of Lot

Lot coverage calculations shown on Plan Sheet # A2.2



HARDSCAPE CALCULATION

HARDSCAPE CALCULATIONS

A.	Gross Lot Area	27,481	Square Feet
B.	Net Lot Area	27,481	Square Feet
C.	Area Borrowed from Lot Coverage	1,281	Square Feet
D.	Allowed Hardscape Area = 9% of lot area + C	2473 + 1281	% of Lot
E.	Allowed Hardscape Area	3,754	Square Feet
F.	Total Existing Hardscape Area:		
	1. Uncovered Decks	---	Square Feet
	2. Uncovered Patios	480	Square Feet
	3. Walkways	---	Square Feet
	4. Stairs	---	Square Feet
	5. Rockeries and Retaining Walls	27	Square Feet
	6. Other POOL	800	Square Feet
	7. Total Existing Hardscape Area (F1+F2+F3+F4+F5+F6)	1307	Square Feet
G.	(Total Hardscape Area Removed)	480	Square Feet
H.	Total New Hardscape Area:		
	1. Uncovered Decks	209	Square Feet
	2. Uncovered Patios	235	Square Feet
	3. Walkways	117	Square Feet
	4. Stairs	22 (STEEL SPIRAL)	Square Feet
	5. Rockeries and Retaining Walls	---	Square Feet
	6. Other ---		Square Feet
	7. Total New Hardscape Area (H1+H2+H3+H4+H5+H6)	583	Square Feet
I.	Total Project Hardscape Area = (F7 - G) + H7	1410	Square Feet
J.	Total Project Hardscape Area = (I/B)x100	5.1	% of Lot

Hardscape calculations shown on Plan Sheet # A2.2

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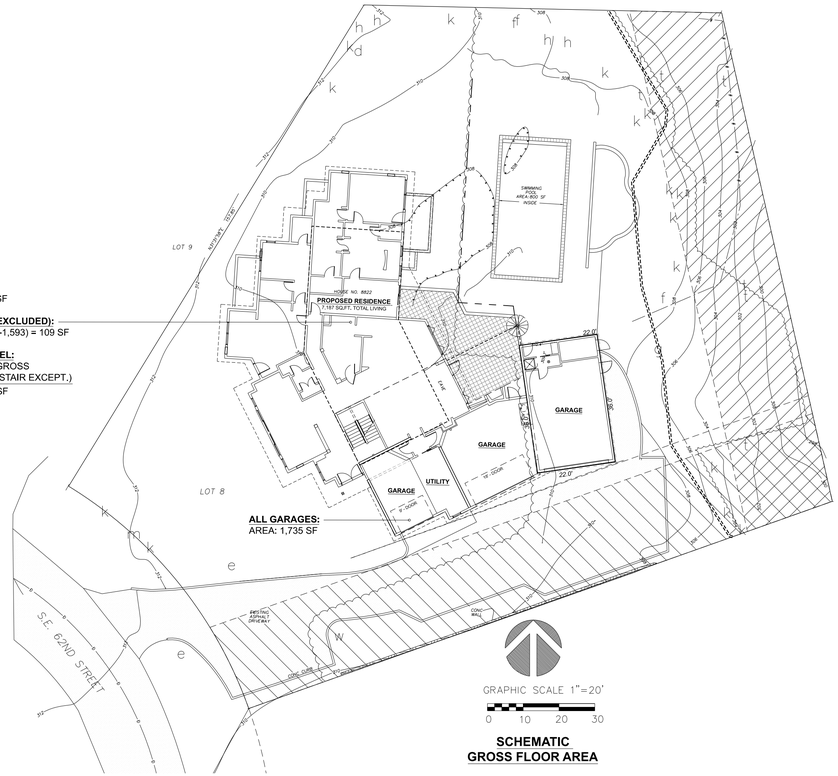
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1	02-28-23

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AREA SUMMARY
LOT COVERAGE
HARDSCAPE

SHEET:
A2.2



MAIN LEVEL:
AREA: 3,734 SF

BASEMENT (EXCLUDED):
AREA: 1,702 (-1,593) = 109 SF

SECOND LEVEL:
AREA: 1,725 GROSS
- 116 (STAIR EXCEPT.)
1,609 SF

ALL GARAGES:
AREA: 1,735 SF

GRAPHIC SCALE 1"=20'
0 10 20 30

SCHEMATIC
GROSS FLOOR AREA

GROSS FLOOR AREA CALCULATIONS

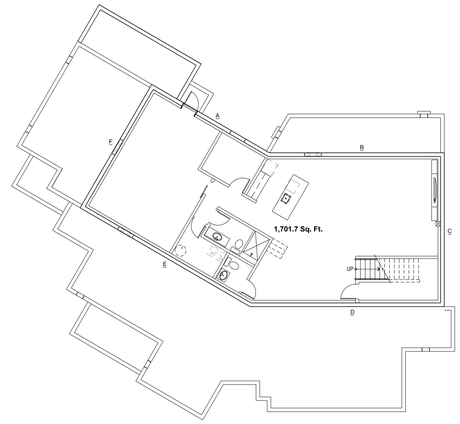
Building Area	Existing Area	Removed Area	New/Addition Area	Total
Upper Floor	--- Sq. Ft.	Sq. Ft.	1609 Sq. Ft.	1609 Sq. Ft.
Main Floor	1702 Sq. Ft.	1702 Sq. Ft.	3734 Sq. Ft.	3734 Sq. Ft.
Gross Basement Area	1702 Sq. Ft.	--- Sq. Ft.	--- Sq. Ft.	1702 Sq. Ft.
Garage/ Carport	1274 Sq. Ft.	482 Sq. Ft.	943 Sq. Ft.	1735 Sq. Ft.
Total Floor Area	4678 Sq. Ft.	2184 Sq. Ft.	Sq. Ft.	8780 Sq. Ft.
Accessory Buildings	--- Sq. Ft.	--- Sq. Ft.	--- Sq. Ft.	--- Sq. Ft.
Accessory Dwelling Unit	--- Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
2nd & 3rd Story Roofed Decks	--- Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
Basement Area Excluded	Sq. Ft.	Sq. Ft.	1593 Sq. Ft.	1593 Sq. Ft.
150% GFA Modifier* (main and upper floor x2)	--- Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
200% GFA Modifier* (main and upper floor x2)	--- Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
Staircase GFA Modifier* (x2 for a three story staircase, x3 for a four story staircase)	--- Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
TOTAL Building Area	Sq. Ft.	Sq. Ft.	Sq. Ft.	7187 Sq. Ft.

**Enter the actual room area*

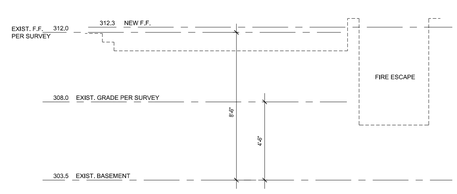
A.	Lot Area		Square Feet
B.	Zone R-8.4 ☐ R-9.6 ☑	R-12 ☐ R-15 ☐	
C.	Allowed Gross Floor Area (refer to "allowed GFA")	8000	Square Feet
D.	Allowed Gross Floor Area	---	% of Lot
E.	Proposed Gross Floor Area	7187	Square Feet
F.	Proposed Gross Floor Area	26	% of Lot

Gross floor area calculations found on Plan Sheet # A2.3

Basement exclusion calculations found on Plan Sheet # A2.3



BASEMENT PLAN



4.5' / 8.5' = 53%

Wall Segment	Length x	Coverage=	Result
A	24.58'	53%	13.03%
B	31.58'	100%	31.58%
C	27.83'	100%	27.83%
D	35.08'	100%	35.08%
E	35.50'	100%	35.50%
F	25.83'	100%	25.83%
Totals	180.40'	NA	168.85%

1,701.7 Sq. Ft. x $\frac{168.85\%}{180.40'}$

= 1,701.7 Sq. Ft. x 93.6%

= 1,592.8 Sq. Ft. Excluded from the Gross Floor Area

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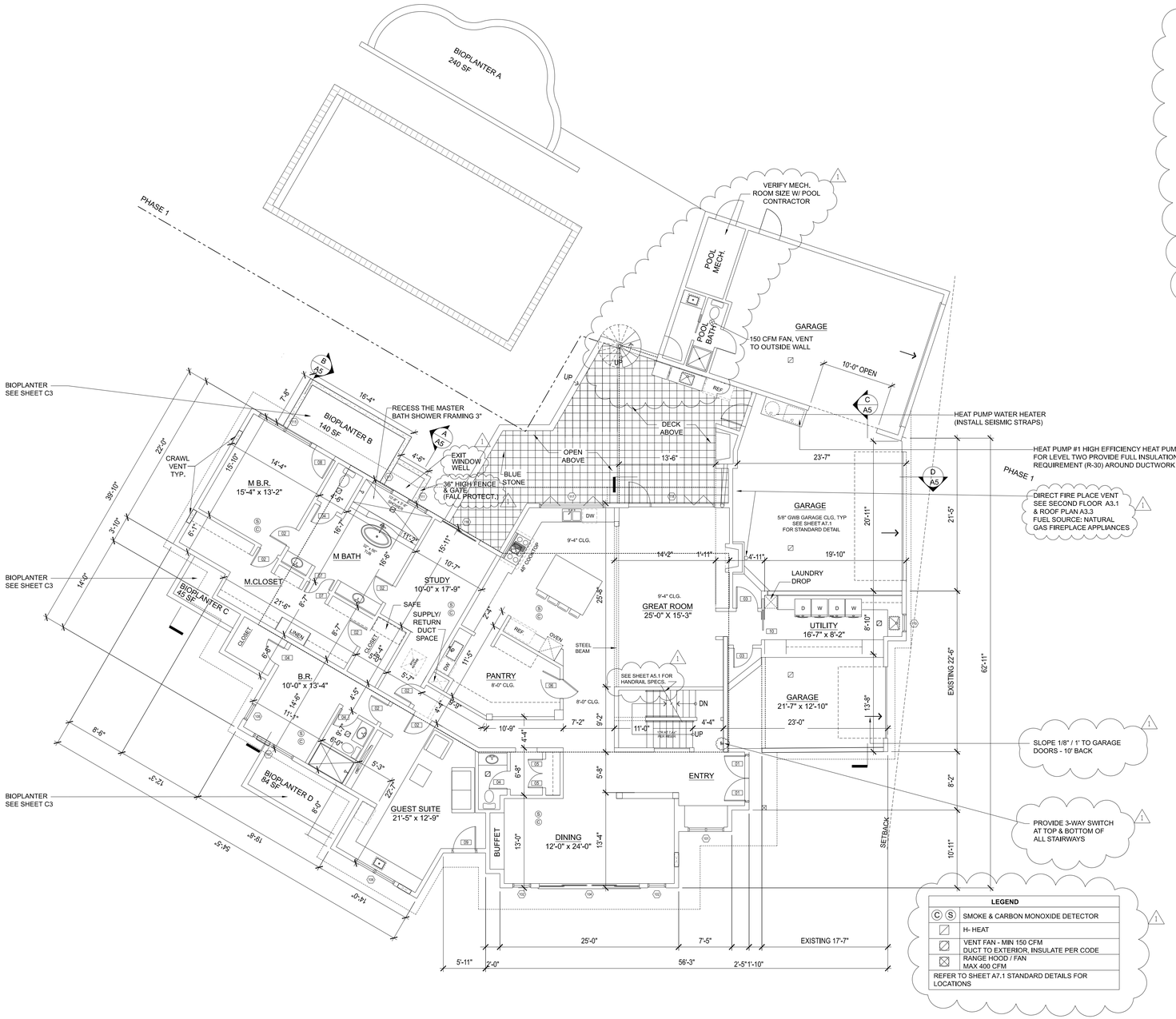
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AREA SUMMARY
GROSS FLOOR AREA

SHEET:
A2.3



MAIN LEVEL FLOOR PLAN
1/8" = 1'-0"

R302.11 Fireblocking. In combustible construction, fireblocking shall be provided to cut off both vertical and horizontal concealed draft openings and to form an effective fire barrier between stories, and between a top *story* and the roof space.

Fireblocking shall be provided in wood-framed construction in the following locations:

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs, as follows:
   1.1. Vertically at the ceiling and floor levels.
   1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
2. At interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R302.7.
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an *approved* material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E136 requirements.
5. For the fireblocking of chimneys and fireplaces, see Section R1003.19.
6. Fireblocking of cornices of a two-family *dwelling* is required at the line of *dwelling unit* separation.

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PHASE II

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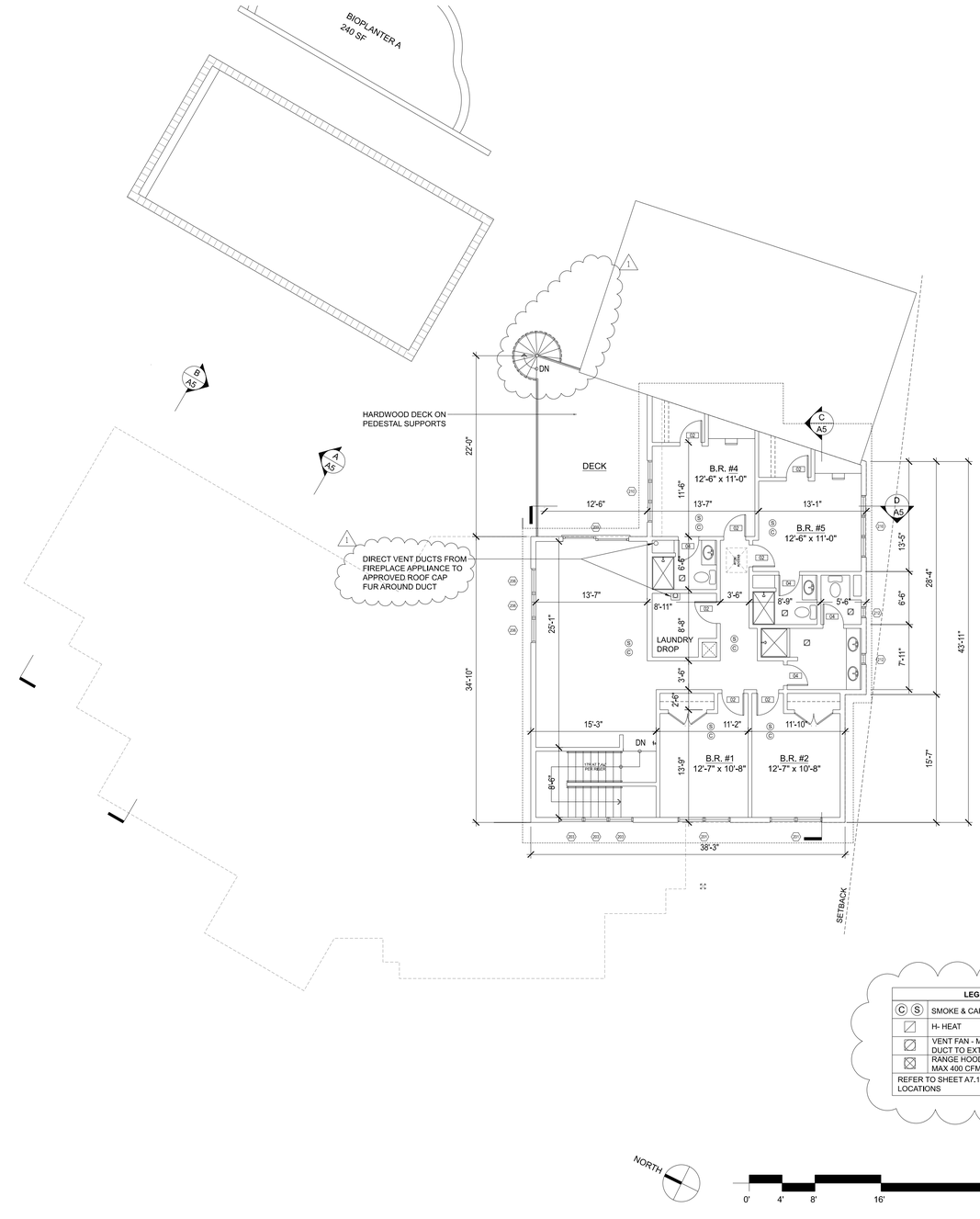
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MAIN LEVEL FLOOR PLAN

SHEET: A3

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5. For the fireblocking of chimneys and fireplaces, see Section R1003.19.
6. Fireblocking of cornices of a two-family *dwelling* is required at the line of *dwelling unit* separation.

LEGEND	
(C) (S)	SMOKE & CARBON MONOXIDE DETECTOR
	H- HEAT
	VENT FAN - MIN 150 CFM DUCT TO EXTERIOR, INSULATE PER CODE
	RANGE HOOD / FAN MAX 400 CFM
REFER TO SHEET A7.1 STANDARD DETAILS FOR LOCATIONS	

SECOND LEVEL FLOOR PLAN
1/8" = 1'-0"

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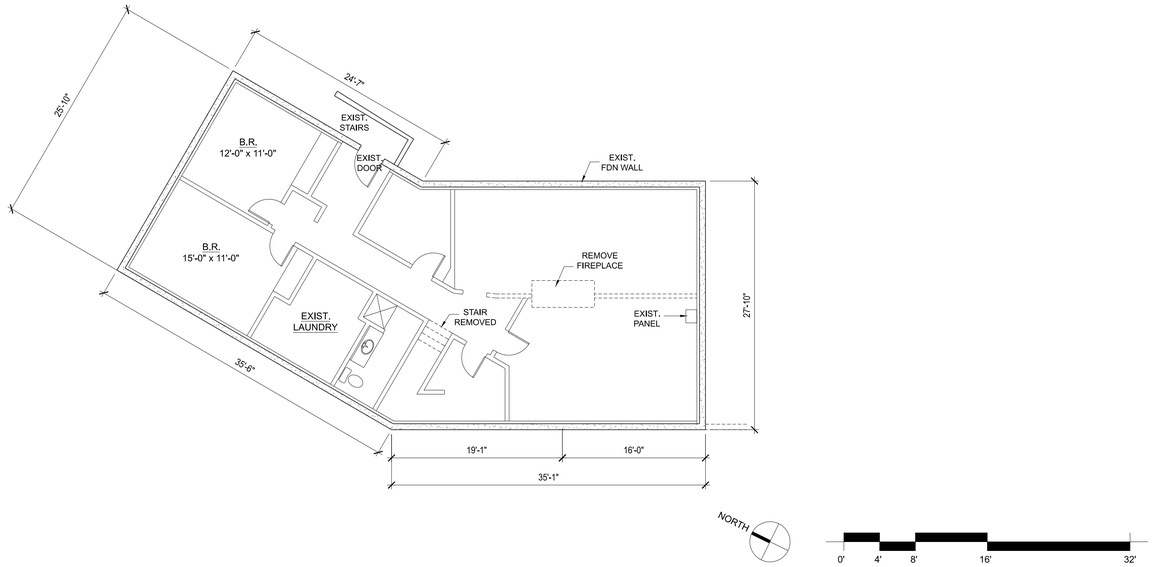
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DATE: 04-28-22

SECOND LEVEL FLOOR PLAN

SHEET: A3.1

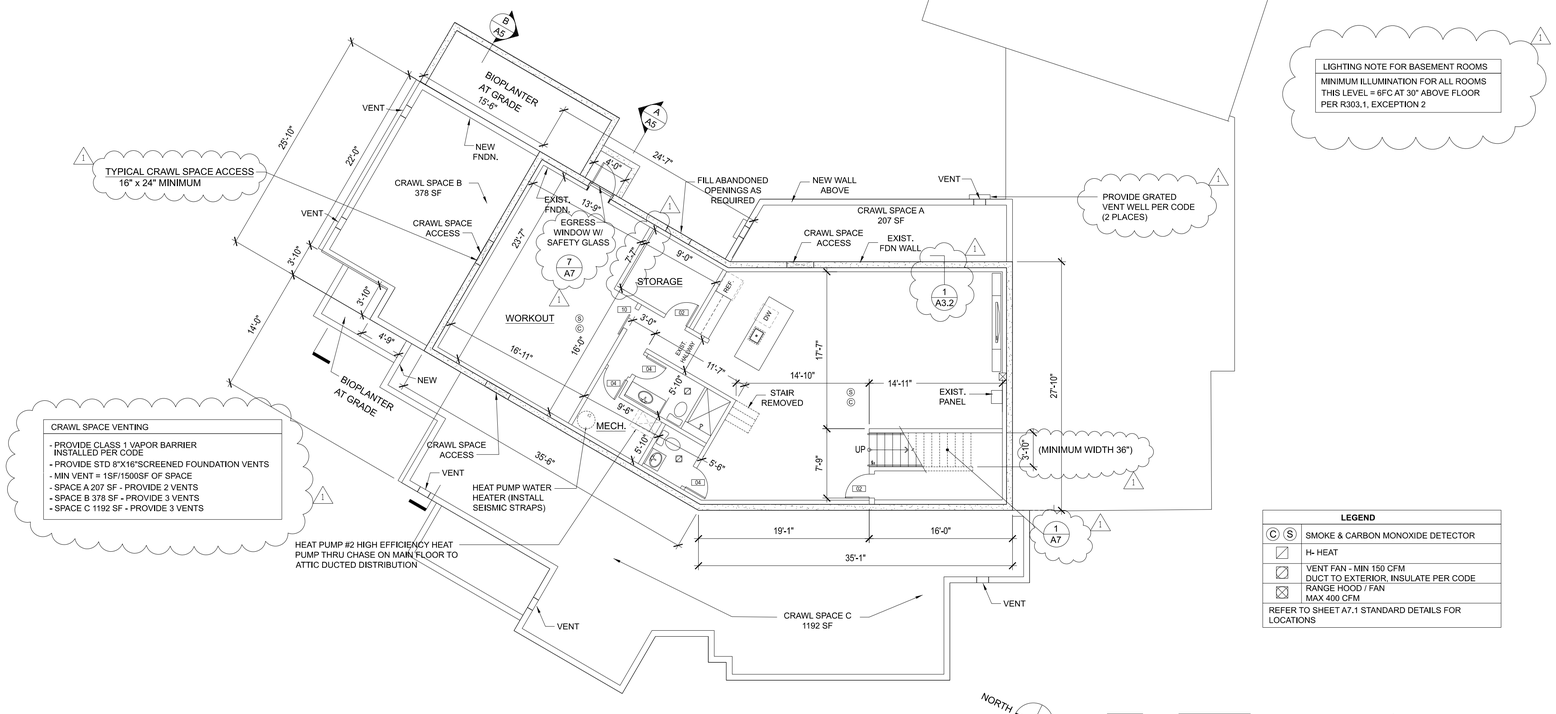


EXISTING BASEMENT FLOOR PLAN
1/8" = 1'-0"

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Fireblocking shall be provided in wood-framed construction in the following locations:

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs, as follows:
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   1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
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3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R302.7.
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an *approved* material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E136 requirements.
5. For the fireblocking of chimneys and fireplaces, see Section R1003.19.
6. Fireblocking of cornices of a two-family *dwelling* is required at the line of *dwelling unit* separation.

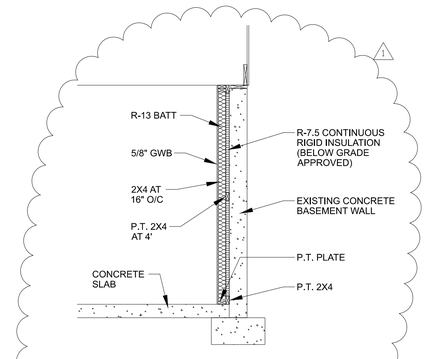


BASEMENT FLOOR PLAN
1/8" = 1'-0"

CRAWL SPACE VENTING
- PROVIDE CLASS 1 VAPOR BARRIER INSTALLED PER CODE - PROVIDE STD 8"X16"SCREENED FOUNDATION VENTS - MIN VENT = 1SF/1500SF OF SPACE - SPACE A 207 SF - PROVIDE 2 VENTS - SPACE B 378 SF - PROVIDE 3 VENTS - SPACE C 1192 SF - PROVIDE 3 VENTS

LIGHTING NOTE FOR BASEMENT ROOMS
MINIMUM ILLUMINATION FOR ALL ROOMS THIS LEVEL = 6FC AT 30" ABOVE FLOOR PER R303.1, EXCEPTION 2

LEGEND	
C S	SMOKE & CARBON MONOXIDE DETECTOR
	H- HEAT
	VENT FAN - MIN 150 CFM DUCT TO EXTERIOR, INSULATE PER CODE
	RANGE HOOD / FAN MAX 400 CFM
REFER TO SHEET A7.1 STANDARD DETAILS FOR LOCATIONS	



1 A3.2 TYPICAL BASEMENT WALL INSTALLATION
SCALE: 3/8"=1'-0"

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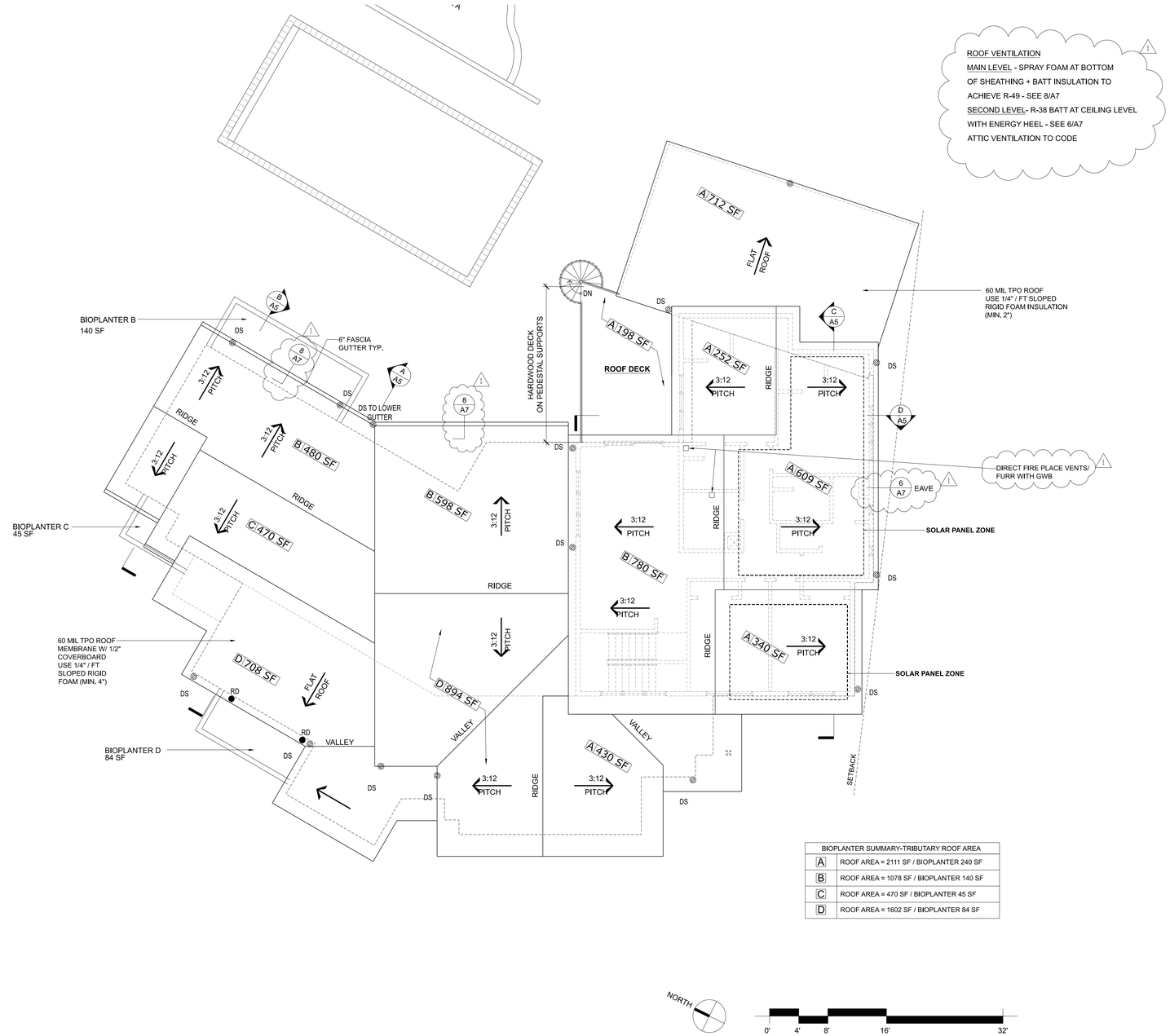
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BASEMENT FLOOR PLAN

SHEET: A3.2



BIOPLANTER SUMMARY-TRIBUTARY ROOF AREA	
A	ROOF AREA = 2111 SF / BIOPLANTER 240 SF
B	ROOF AREA = 1078 SF / BIOPLANTER 140 SF
C	ROOF AREA = 470 SF / BIOPLANTER 45 SF
D	ROOF AREA = 1602 SF / BIOPLANTER 84 SF

ROOF PLAN
1/8" = 1'-0"

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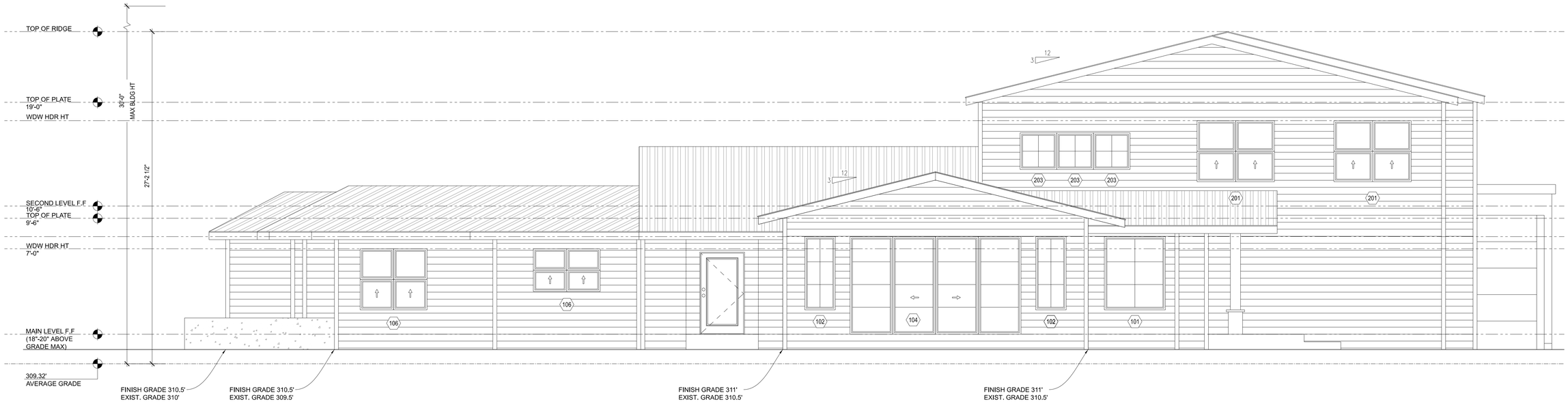
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1	02-28-23

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ROOF PLAN

SHEET:
A3.3



WEST ELEVATION
1/4" = 1'-0"



NORTH ELEVATION
1/4" = 1'-0"

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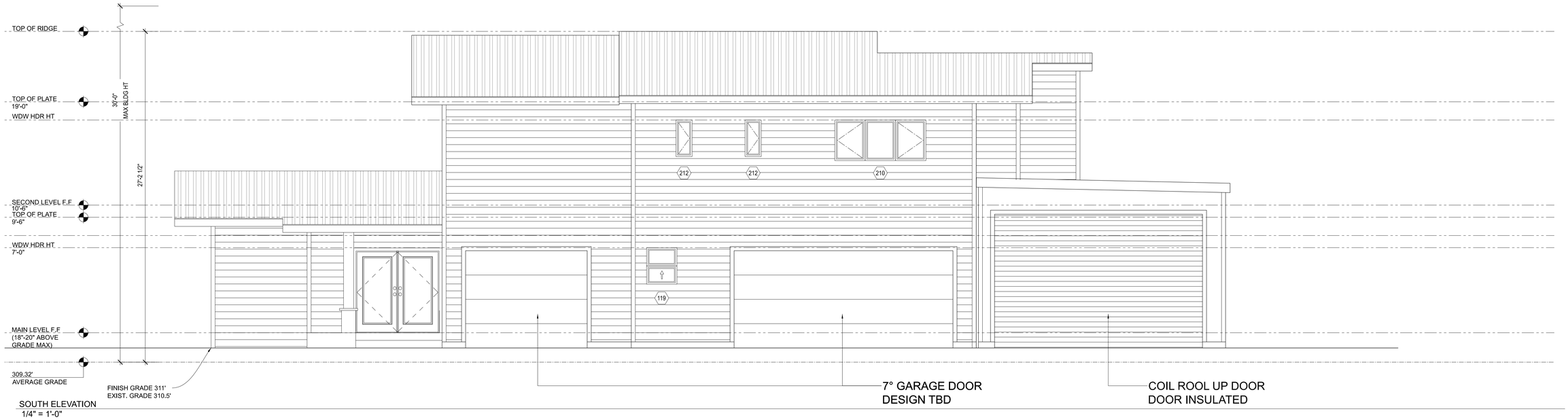
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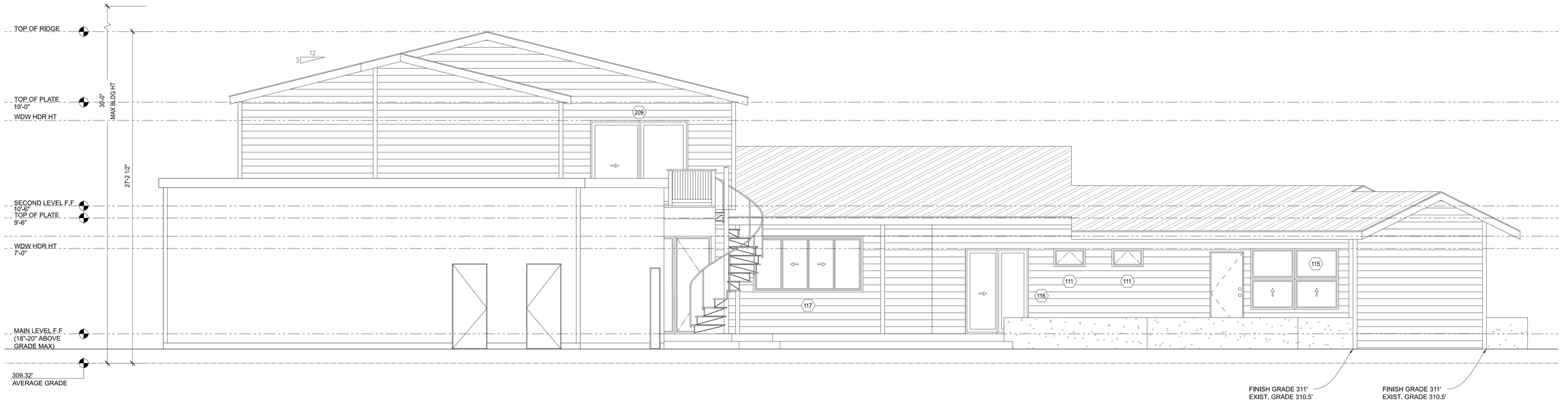
DATE: 04-28-22

ELEVATIONS

SHEET:
A4



SOUTH ELEVATION
1/4" = 1'-0"



EAST ELEVATION
1/4" = 1'-0"

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PHASE II

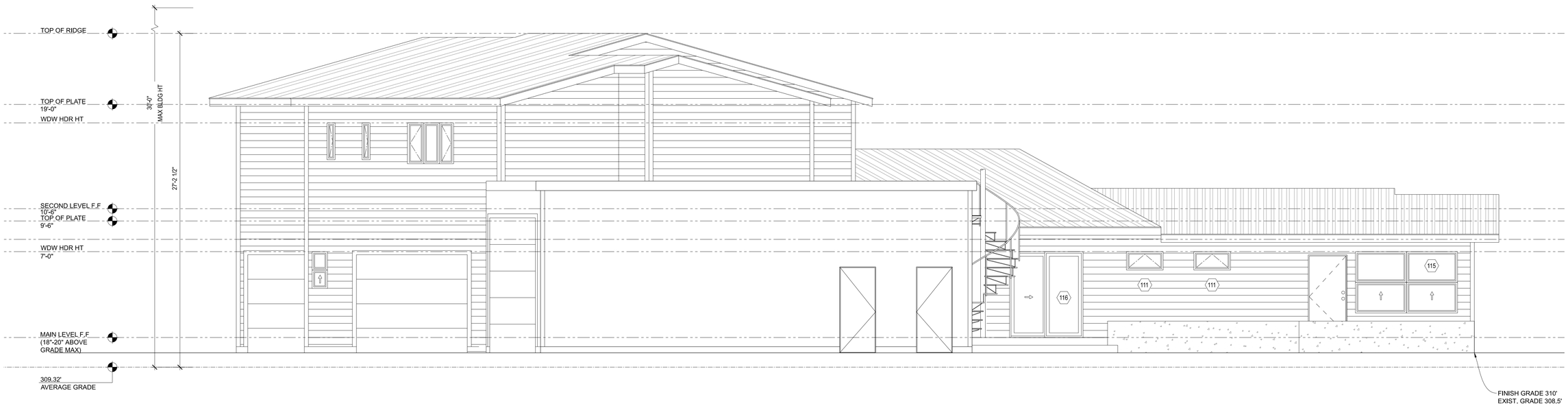
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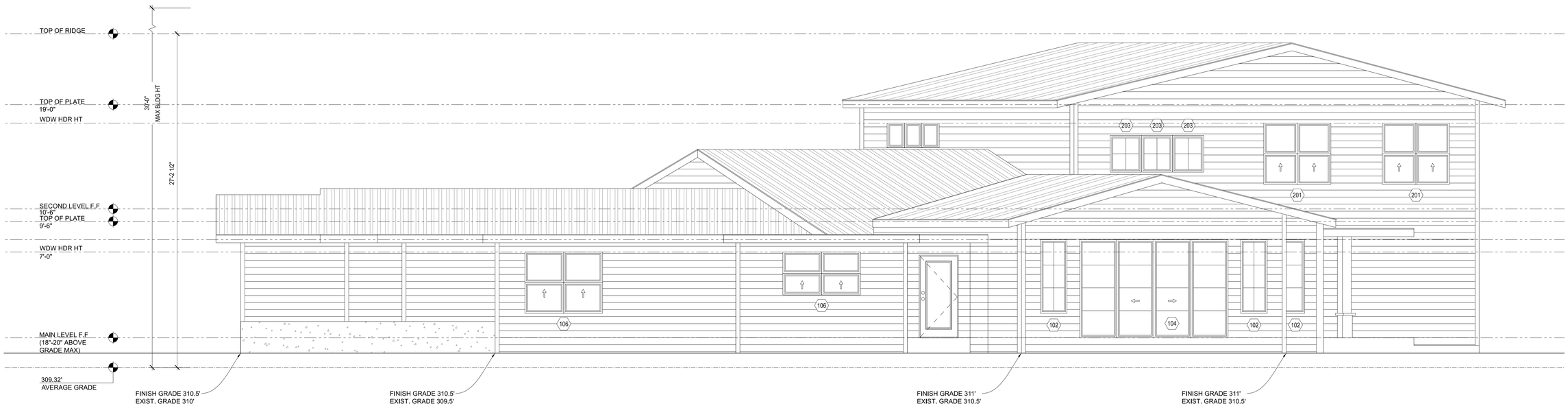
DATE: 04-28-22

ELEVATIONS

SHEET:
A4.1



A - EAST ELEVATION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"

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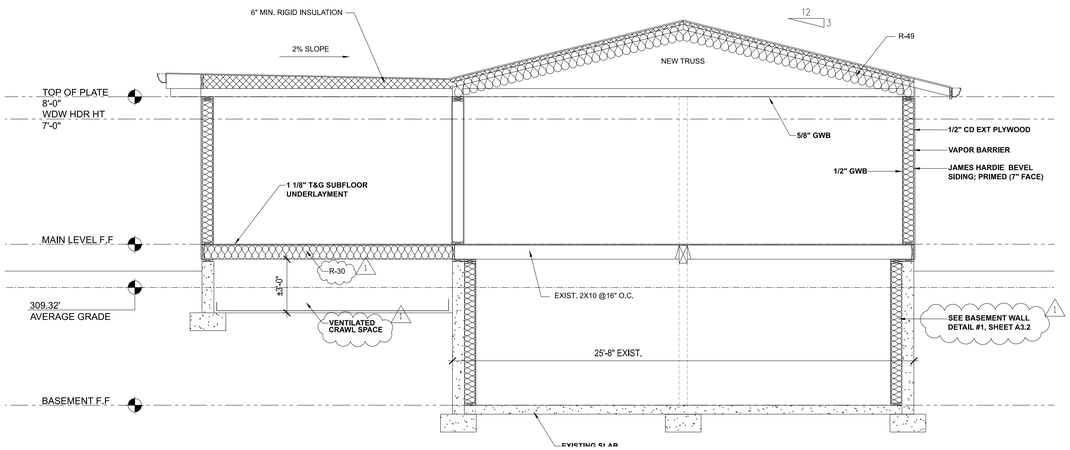
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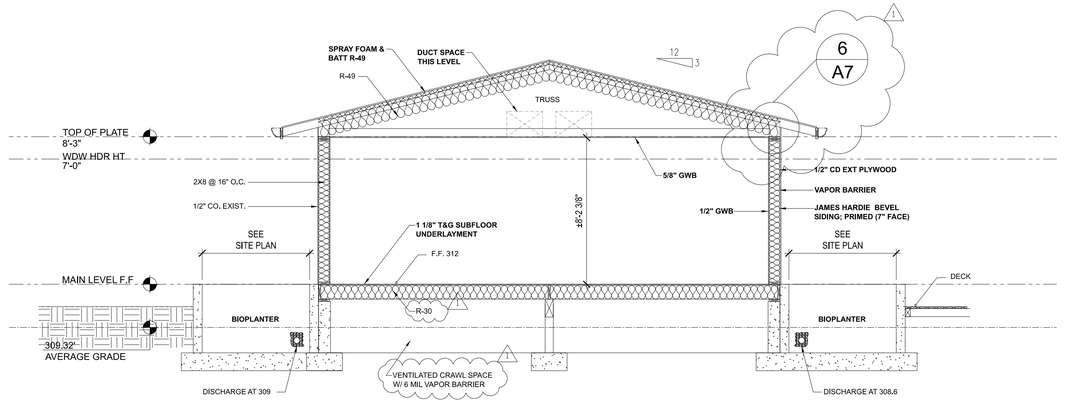
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ELEVATIONS

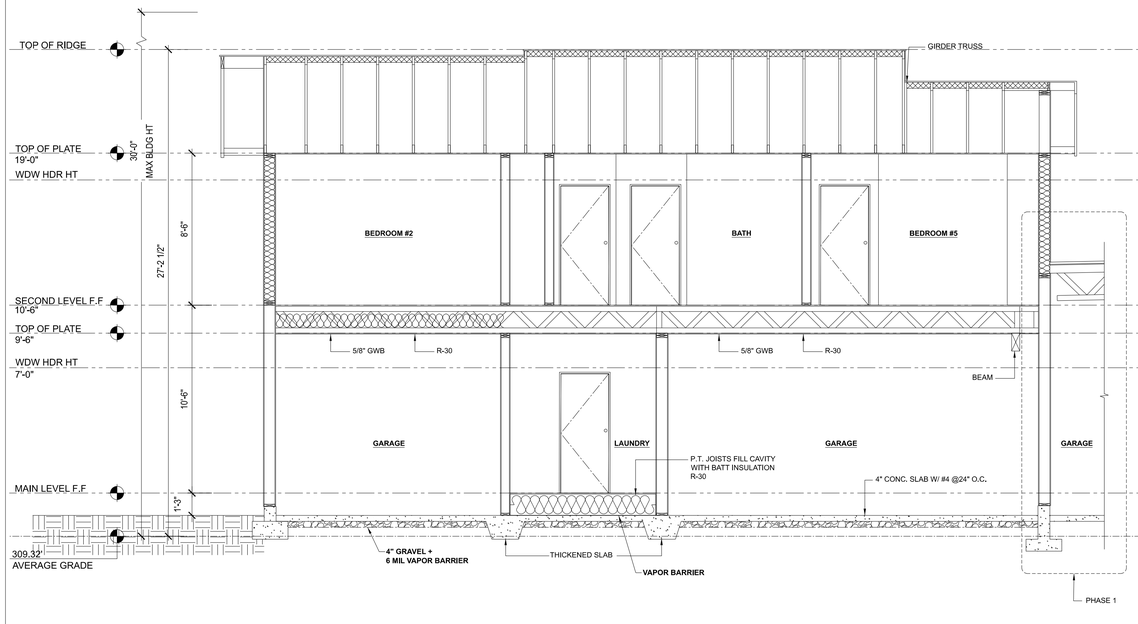
SHEET:
A4.2



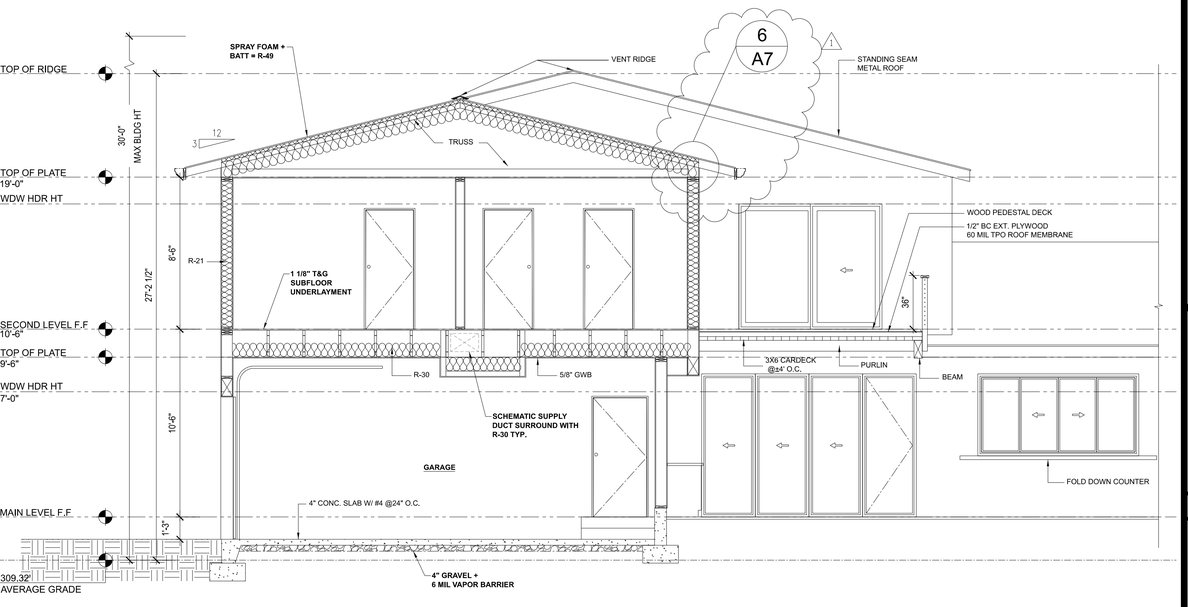
A - SECTION
1/4" = 1'-0"



B- SECTION
1/4" = 1'-0"



C - SECTION
1/4" = 1'-0"



D - SECTION
1/4" = 1'-0"

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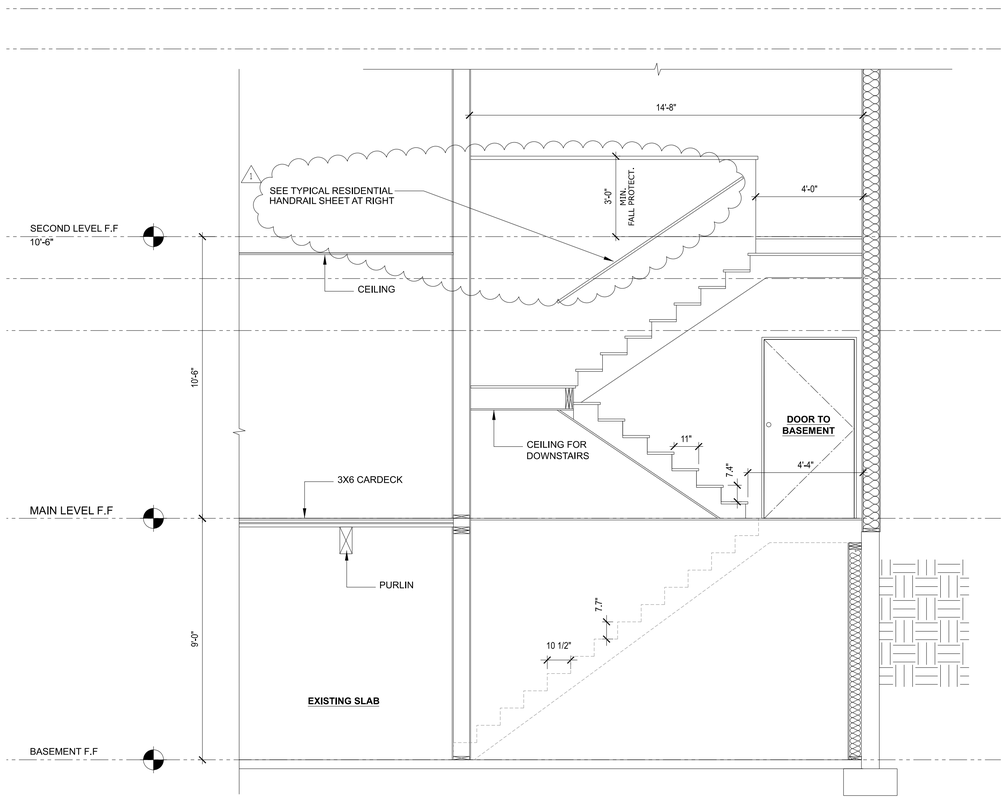
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1	02-28-23

DATE: 04-28-22

SECTIONS

SHEET:
A5



STAIRS SECTION
3/8" = 1'-0"

Residential Handrails

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

Where Required

Handrails are required on at least one side of each continuous run of treads or flight with four or more risers.

Typical Details

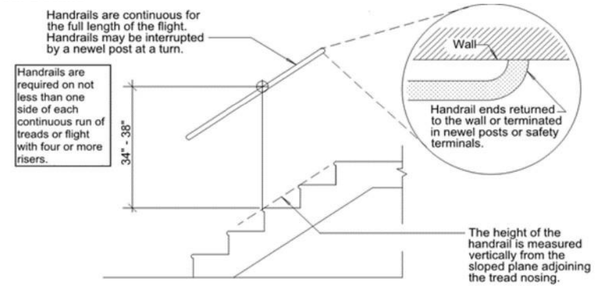


Figure 1: Typical Handrail Elevation (IRC R311.7.8)

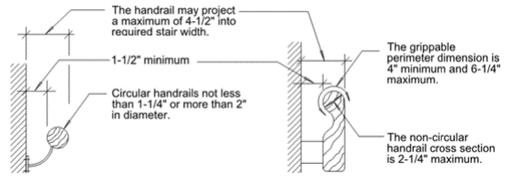


Figure 2: Type I Handrails (IRC R311.7.8.5)

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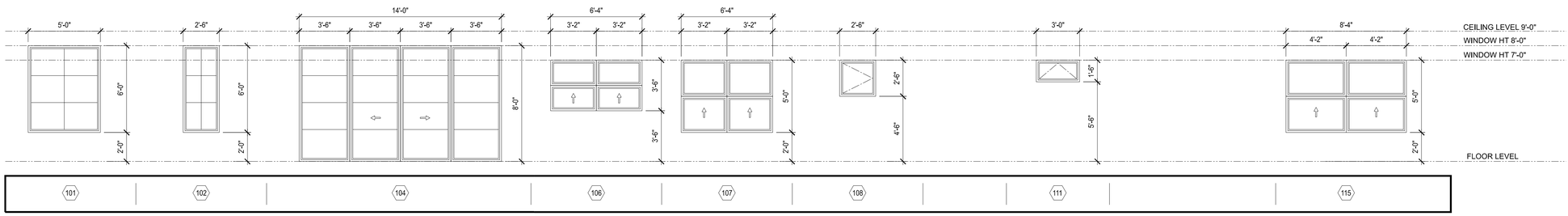
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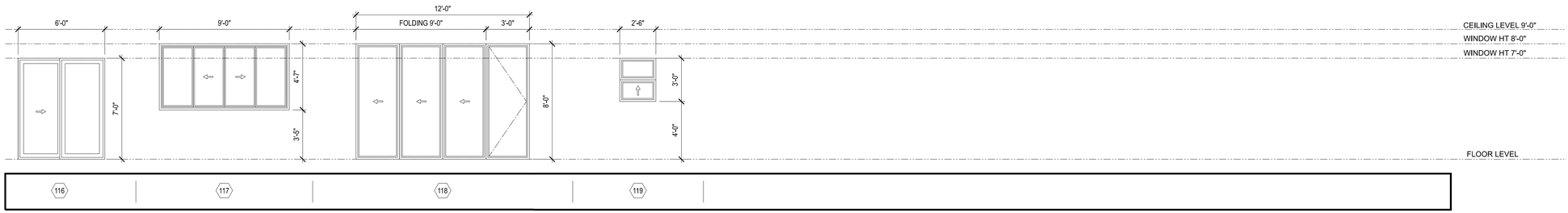
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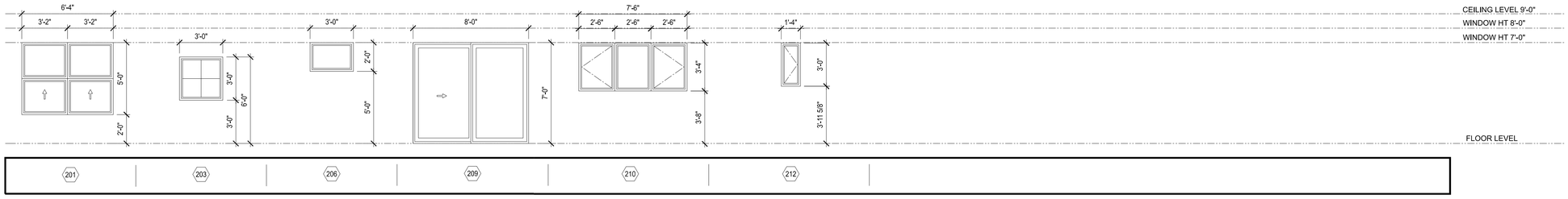
DATE: 04-28-22

SECTIONS

SHEET:
A5.1







WINDOW SCHEDULE

	TAG	LOCATION	COUNT	WIDTH	HEIGHT	AREA (SF)	MFG	EGRESS?	TEMPERED?	OBSCURE?	OPERATION	COMMENTS
LEVEL 1	101	ENTRY	1	5'-0"	6'-0"	30	MARVIN	NO	YES	NO	FIXED	MATCH HORIZONTAL MUNTINS WITH SLIDING DOOR #104
	102	DINING	2	2'-6"	6'-0"	15	MARVIN	NO	YES	NO	FIXED	MATCH HORIZONTAL MUNTINS WITH SLIDING DOOR #104
	104	DINING	1	14'-0"	8'-0"	112	MARVIN	YES	YES	NO	SLIDING BI PARTING DOOR	TEMPERED SCREEN
	106	GUEST FAMILY ROOM	2	3'-2"	3'-6"	11	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
	107	GUEST FAMILY ROOM	2	3'-2"	5'-0"	16	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
	108	GUEST ROOM	1	2'-6"	2'-6"	7	MARVIN	YES	NO	NO	CASEMENT	SCREEN
						5						
	111	M.BATH	2	3'-0"	1'-6"	4.5	MARVIN	NO	YES	NO	AWNING	SCREEN
	115	M. BEDROOM	1	4'-2"	5'-0"	21	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
	116	STUDY	1	6'-0"	7'-0"	42	MARVIN	YES	YES	NO	SLIDING GLASS DOOR	SCREEN
	117	KITCHEN	1	9'-0"	4'-7"	41	MARVIN	YES	YES	NO	BI FOLD EACH SIDE	
	118	GREAT RM	1	12'-0"	8'-0"	96	MARVIN	YES	YES	NO	SPECIAL	
	119	UTILITY	1	2'-6"	3'-0"	7.5	MARVIN	YES	YES	NO	DOUBLE HUNG	SCREEN
LEVEL 2	201	BEDROOM #1 #2	2	3'-2"	5'-0"	16	MARVIN	YES	NO	NO	DOUBLE HUNG	PAIR / SCREEN
	203	STAIRS CLERESTORY	3	3'-0"	3'-0"	9	MARVIN	NO	YES	NO	FIXED	
	206	FAMILY	3	3'-0"	2'-0"	6	MARVIN	NO	NO	NO	AWNING	
	209	FAMILY	1	8'-0"	7'-0"	56	MARVIN	YES	YES	NO	SLIDING GLASS DOOR	SCREEN
	210	BEDROOM #4	2	2'-6"	3'-4"	8.3	MARVIN	YES	NO	NO	CASEMENT & FIXED	3 / SCREEN
	212	BATH	2	1'-4"	3'-0"	4	MARVIN	YES	YES	NO	CASEMENT	SCREEN

NOTES:

1. MIN U <=0.30 TYPICAL
2. SAFETY GLAZING - PROVIDE TEMPERED GLASS FOR ALL DOOR GLAZING & WINDOW GLAZING TO CODE (IRC R308.1)
3. SEE A7.1 FOR MIN. EGRESS NOTES

WINDOW NOTES

1. EGRESS NOTES: SILL HEIGHT < 44"
   CLEAR WIDTH > 20"
   CLEAR HEIGHT > 24"
   NET AREA > 5.7 SQ. FT.
2. WINDOW SIZES ARE BASED ON FRAMED ROUGH OPENING. WINDOW MANUFACTURER TO SIZE WINDOWS ACCORDINGLY.
3. ALL DIMENSIONS (INCLUDING FRAMES AND ROUGH OPENINGS) SHALL BE FIELD VERIFIED PRIOR TO ORDERING.
4. ALL OPERABLE WINDOWS TO HAVE SCREENS.
5. ALIGN WINDOW HEADS WITH EXTERIOR DOORS. U.N.O.
6. FLASHING PER MANUFACTURER'S SPECIFICATIONS.
7. GLAZING TO BE NFRC LABELED PER 2018 WSEC R303.1.3

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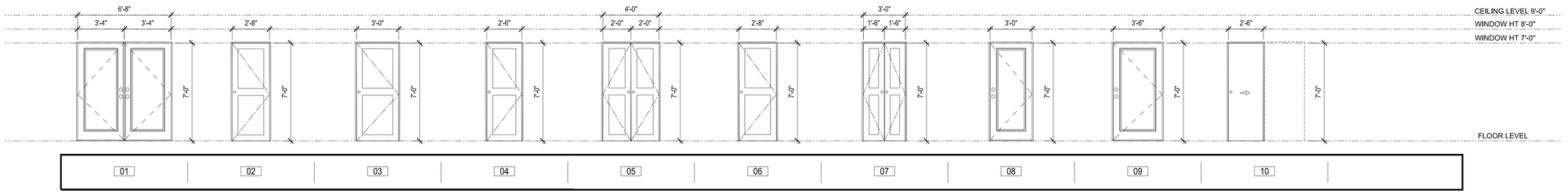
REVISIONS:

Mark	Date
1	02-28-23

DATE: 04-28-22

WINDOW SCHEDULE

SHEET:
A6



DOOR SCHEDULE

	TAG	LOCATION	COUNT	WIDTH	HEIGHT	TEMPERED?	OPERATION	COMMENTS
LEVEL 1	01	ENTRY	2	3'-4"	7'-0"	NO		PAIR
	02	BEDROOMS	7	2'-8"	7'-0"	NO		
	03	GARAGE	2	3'-0"	7'-0"	NO		SOLID CORE - 30 MIN. RATED SELF CLOSING AND LATCHING
	04	BATH	4	2'-6"	7'-0"	NO		
	05	CLOSET	2	2'-0"	7'-0"	NO		PAIR
	06	PANTRY	1	2'-8"	7'-0"	NO		
	07	MASTER CLOSET	2	1'-6"	7'-0"	NO		PAIR
	08	MASTER BEDROOM	1	3'-0"	7'-0"	NO		
	09	ENTRY	1	3'-6"	7'-0"	NO		
	10	LAUNDRY	1	2'-10"	7'-0"	NO		POCKET
LEVEL 2	02	BEDROOMS	7	2'-8"	7'-0"	NO		
	04	BATH	4	2'-6"	7'-0"	NO		
BASEMENT	02	BEDROOMS	2	2'-8"	7'-0"	NO		
	04	BATH	3	2'-6"	7'-0"	NO		
	10	WORKOUT	1	2'-6"	7'-0"	NO		POCKET

SEE STD. DETAILS, SHEET A7.1 FOR SAFETY GLAZING 1

NOTES:
1. MIN U <=0.30 TYPICAL
2. SAFETY GLAZING - PROVIDE TEMPERED GLASS FOR ALL DOOR GLAZING & WINDOW GLAZING TO CODE (IRC R308.1)
3. SEE A7.1 FOR MIN. EGRESS NOTES

1

DOOR NOTES

- BUILDING ENTRANCE DOOR, INCLUDING GARAGE DOOR, SHALL BE CAPABLE OF LOCKING
- THEY SHALL BE EQUIPPED WITH A DEAD-LOCKING LATCH BOLT WITH AT LEAST A 1/2" THROW THAT PENETRATES THE STRIKER NOT LESS THAN 1/4".
- BUILDING ENTRANCE DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
- EVERY BUILDING ENTRANCE, EXCLUDING THE GARAGE DOOR, SHALL HAVE A VISITOR OBSERVATION PORT OR GLASS SIDE LIGHT.
- OBSERVATION PORTS SHALL BE INSTALLED AT MIN 54" A.F.F. AND MAX 66" A.F.F.
- DEADBOLTS OR OTHER APPROVED LOCKING DEVICES SHALL BE PROVIDED ON ALL SLIDING DOORS AND OPERABLE WINDOWS. THE LOCK SHALL BE INSTALLED SO THAT THE MOUNTING SCREWS FOR THE LOCK ARE INACCESSIBLE FROM THE OUTSIDE.

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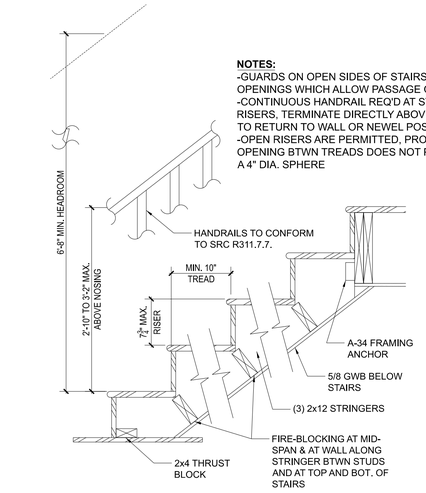
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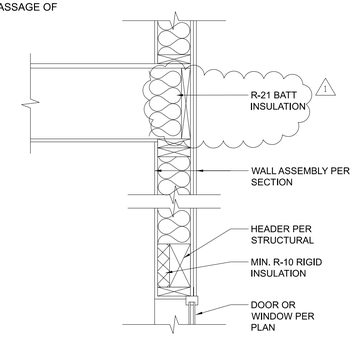
DOOR SCHEDULE

SHEET:
A6.1

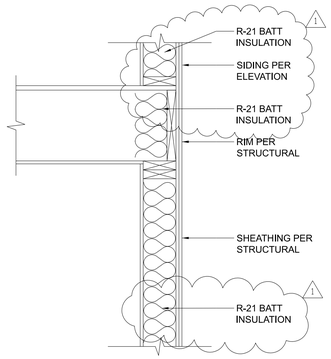


NOTES:
-GUARDS ON OPEN SIDES OF STAIRS SHALL NOT HAVE OPENINGS WHICH ALLOW PASSAGE OF A 4-3/8" DIA. SPHERE.
-CONTINUOUS HANDRAIL REQ'D AT STAIRS w/ (4) OR MORE RISERS, TERMINATE DIRECTLY ABOVE TOP AND BOT. RISER, TO RETURN TO WALL OR NEWEL POST.
-OPEN RISERS ARE PERMITTED, PROVIDING THAT THE OPENING BTWN TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIA. SPHERE

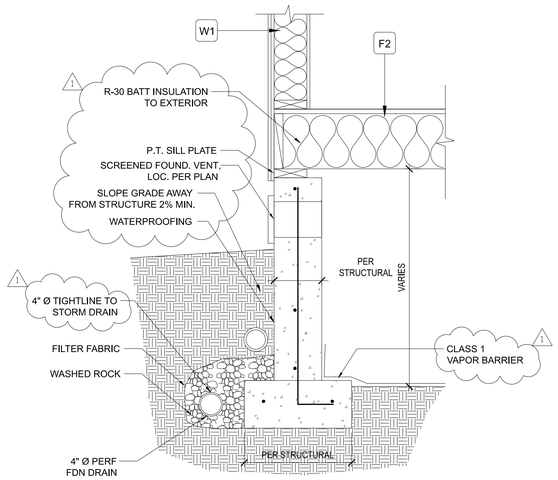
1 / A7 TYPICAL INTERIOR STAIRS
SCALE: 1"=1'-0"



2 / A7 TYPICAL HEADER
SCALE: 1"=1'-0"



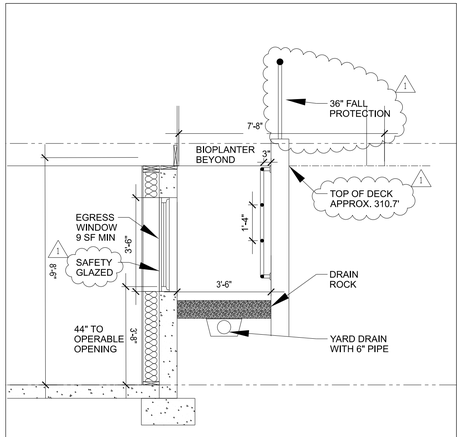
3 / A7 TYP. EXTERIOR WALL AT PLATE
SCALE: 1"=1'-0"



4 / A7 TYP. FOUNDATION AT CRAWL SPACE
SCALE: 1"=1'-0"

5 / A7 TYP. FOUNDATION AT GARAGE
SCALE: 1"=1'-0"

6 / A7 EAVE DETAIL - MAIN FLOOR & SECOND FLOOR
SCALE: 1"=1'-0"



7 / A7 SECTION DETAIL AT BASEMENT EGRESS WINDOW
SCALE: 3/8"=1'-0"

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REVISIONS:

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1	02-28-23

DATE: 04-28-22

DETAILS

SHEET: A7

Residential Guards (Guardrails)

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

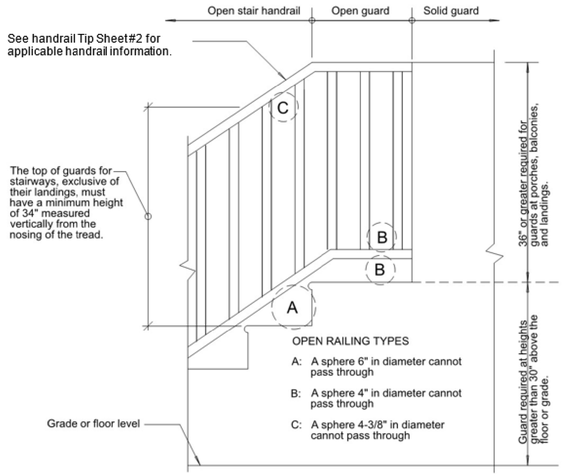


Figure 1: Guard Elevation (IRC R312)

Requirements

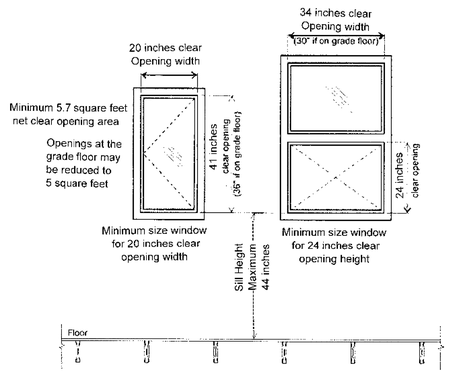
- ☐ Guards shall comply with IRC R312.1; refer to Figure 1 for major requirements.
- ☐ Guards shall be structurally designed to comply with IRC Table R301.5 (i.e., designed for a 200-pound load in any direction along the top and a 50-pound point load elsewhere).
- ☐ For glass guards or guards with glazing, see IRC R308.4.4.

Residential Emergency Egress Openings

This Tip Sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

Emergency Escape and Rescue Opening

- ☐ Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall be operational from the inside without the use of keys, tools, or special knowledge, and open directly into a public way, or to a yard or court that opens to a public way. (R310.1)
- ☐ Where bars, grilles, covers, screens, or opening control devices are placed on emergency escape and rescue openings, area or window wells, the minimum net clear opening sizes shall comply and such devices shall be releasable or removable from the inside without the use of key, tool, special knowledge, or force greater than that required for normal operation of the escape and rescue opening. (R310.4)



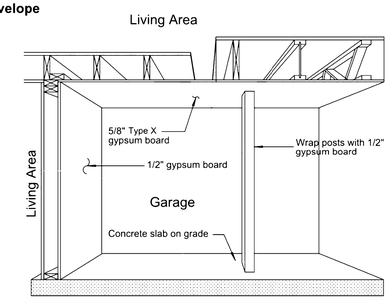
Residential Garage Separation

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments.

IRC Table R302.6 - Dwelling/Garage Separation

Access	Material
From the residence and attics	Not less than 1/2-inch gypsum board or equivalent applied to the garage side
From habitable rooms above the garage	Not less than 5/8-inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 1/2-inch gypsum board or equivalent
Garages located less than 3 feet from a dwelling unit on the same	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are

Envelope

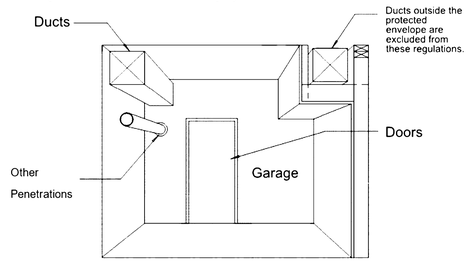


Dwelling / Garage Separation

Fastening of Gypsum Board per IRC Table R702.3.5

- ☐ 5/8-inch Type X gypsum board at garage ceiling beneath habitable rooms to be fastened with:
  - 1-7/8-inch 6d cooler nails, or 1-1/4-inch Type W screws, at 6 inches on center when the framing is 24 inches on center maximum.
- ☐ 1/2-inch gypsum board at walls separating the garage from the dwelling to be fastened with:
  - 1-5/8-inch 5d cooler nail at 8 inches on center, or 1-1/4-inch Type W screws at 16 inches on center, when framing is 16 inches on center maximum.
  - 1-5/8-inch 5d cooler nails at 8 inches on center, or 1-1/4-inch Type W screws at 12 inches on center, when framing is 24 inches on center maximum.

Penetrations (at the Protected Envelope)



Duct Penetrations

Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage must be a minimum of No. 26 gauge sheet metal with no register outlets (openings) into the garage. (R302.5.2)

Other Penetrations

Penetrations through the required separation must be protected at openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion. The material filling this annular space shall not be required to meet the ASTM E 136 requirements. (R302.11, Item 4)

Doors

Doors separating the garage and living spaces shall be solid wood doors not less than 1-3/8 inches thick, solid or honeycomb-core steel not less than 1-3/8 inches thick, or 20-minute rated doors, equipped with a self-closing device. These doors shall not open into a sleeping room. (R302.5.1)

Smoke, Heat, and Carbon Monoxide Alarms

This tip sheet reflects code requirements of the 2018 International Residential Code (IRC) with Washington State Amendments and the 2016 edition of NFPA 72.

Definitions

- ☐ **Smoke alarm:** A device designed to respond when it senses smoke, typically as an indicator of fire.
- ☐ **Heat alarm:** A device designed to respond when it senses a rise in temperature, typically as an indicator of fire.
- ☐ **Carbon monoxide alarm:** A device designed to respond when it senses carbon monoxide, a poisonous gas.
- ☐ **All alarms** shall be UL listed and installed per manufacturer instructions. (R314.1.1, R315.1.1)

New Construction

- ☐ Smoke alarms and carbon monoxide alarms shall be installed throughout each dwelling unit in all **required locations**. (R314.2.1, R315.2.1)
- ☐ A heat detector shall be provided in each new attached garage. (R314.2.3)
- ☐ Smoke alarms, heat alarms, and carbon monoxide alarms shall receive their **primary power** from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. (R314.6, R315.6)
- ☐ Where more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be **interconnected** in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. (R314.4, R315.5)
- ☐ Heat alarms shall be **connected** to a heat alarm or smoke alarm that is installed in the dwelling unit. Alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification. (R314.4.1)
- ☐ Physical interconnection of smoke alarms shall not be required where **listed wireless alarms** are installed and all alarms sound upon activation of one alarm. (R314.4, R315.5)

Required Locations

- ☐ A **smoke alarm** shall be located in each sleeping room or sleeping loft. (R314.3)
- ☐ A **smoke alarm** shall be located in each napping area of a family home childcare. (R314.3)
- ☐ A **smoke alarm** and a **carbon monoxide alarm** (or combination smoke and carbon monoxide alarm) shall be located outside each sleeping area in the immediate vicinity of the bedroom(s). (R314.3, R315.3)
- ☐ At least one **smoke alarm** and one **carbon monoxide alarm** shall be located on each floor level, including basements and habitable attics. (R314.3, R315.3)
- ☐ In split level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level. (R314.3)
- ☐ A **carbon monoxide alarm** is required in a bedroom when a fuel-burning appliance is installed in the bedroom or its attached bathroom. (R315.3)
- ☐ A combination alarm (**combined smoke and carbon monoxide alarm**) is acceptable in any required location. (R314.5, R315.4)
- ☐ A **heat alarm** is required in each new attached garage. (R314.2.3)

Alarms and Detectors Near Cooking Appliances per NFPA 72

Refer to Figure 2:

A. **Photoelectric** smoke alarms shall not be installed less than 6 feet horizontally from a permanently installed cooking appliance. (NFPA 72 29.8.3.4 (4))

B. **Ionization** smoke alarms with an alarm-silencing switch must not be less than 10 feet from a permanent cooking appliance. (NFPA 72 29.8.3.4 (4))

C. **Ionization** smoke alarms without an alarm-silencing switch must not be less than 20 feet from a permanent cooking appliance. (NFPA 72 29.8.3.4 (4))

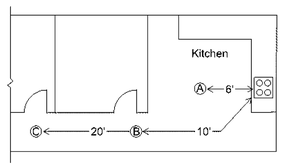


Figure 2: Smoke Alarms and Smoke Detectors Near Cooking Appliances

Carbon Monoxide Alarm Location Limitations

- ☐ Do not place alarms directly above or beside fuel-burning appliances.
- ☐ Do not place alarms in direct sunlight.
- ☐ Do not place alarms in low areas where children can reach. Do not place alarms behind curtains or any structure that might prevent carbon monoxide from reaching the sensor.

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PHASE II

REVISIONS:

Mark	Date
1	02-28-23

DATE: 04-28-22

DETAILS

SHEET: A7.1

EXISTING TREES

TREE #	TREE TYPE		DBH	DRIPLINE	RETAIN OR REMOVE
1.	WESTERN RED CEDAR	*THUJA PLICATA*	19" DBH	20' DL	RETAIN
2.	MOUNTAIN ASH	*SORBUS AMERICANA*	6" DBH	10' DL	RETAIN
3.	WESTERN RED CEDAR	*THUJA PLICATA*	48" DBH	21'DL	RETAIN
4.	JAPANESE MAPLE	ACER PALMATUM	9" DBH	15' DL	RETAIN
5.	PACIFIC DOGWOOD	*CORNUS NUTTALLII*	7" DBH	15' DL	RETAIN
6.	MAGNOLIA	*MAGNOLIA GRANDIFLORA*	12" DBH	15' DL	RETAIN
7.	WESTERN RED CEDAR	*THUJA PLICATA*	33" DBH	20' DL	RETAIN
8.	WESTERN RED CEDAR	*THUJA PLICATA*	25" DBH	20' DL	RETAIN
9.	DOUGLAS FIR	*PSEDUO-TSUGA MENZIESII*	20" DBH	20' DL	RETAIN
10.	DOUGLAS FIR	*PSEDUO-TSUGA MENZIESII*	22" DBH	20' DL	RETAIN
11.	WESTERN RED CEDAR	*THUJA PLICATA*	33" DBH	18' DL	RETAIN
12.	HEMLOCK	*TSUGA HETEROPHYLLA*	15" DBH	18' DL	RETAIN
13.	HEMLOCK	*TSUGA HETEROPHYLLA*	15" DBH	18' DL	RETAIN
14.	HEMLOCK	*TSUGA HETEROPHYLLA*	14" DBH	15' DL	RETAIN
15.	HEMLOCK	*TSUGA HETEROPHYLLA*	12" DBH	12' DL	RETAIN
16.	WESTERN RED CEDAR	*THUJA PLICATA*	12" DBH	12' DL	RETAIN
17.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	28" DBH	25' DL	RETAIN
18.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	28" DBH	25' DL	RETAIN
19.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	27" DBH	20' DL	RETAIN
20.	WESTERN RED CEDAR	*THUJA PLICATA*	28" DBH	20' DL	RETAIN
21.	WESTERN RED CEDAR	*THUJA PLICATA*	57" DBH	24' DL	RETAIN
22.	WESTERN RED CEDAR	*THUJA PLICATA*	20" DBH	18' DL	RETAIN
23.	WESTERN RED CEDAR	*THUJA PLICATA*	18" DBH	20' DL	RETAIN
24.	WESTERN RED CEDAR	*THUJA PLICATA*	17" DBH	18' DL	RETAIN
25.	HEMLOCK	*TSUGA HETEROPHYLLA*	11" DBH	14' DL	RETAIN
26.	STUMP SPROUT				RETAIN
27.	STUMP SPROUT				RETAIN
28.	SPRUCE,	*PICEA MARIANA*	39" DBH	22' DL	RETAIN
29.	PREVIOUSLY REMOVED				N/A
30.	BIG LEAF MAPLE	*ACER MACROPHYLLUM*	41" DBH	30' DL	RETAIN
31.	WESTERN RED CEDAR	*THUJA PLICATA*	14" DBH	12' DL	RETAIN
32.	WESTERN RED CEDAR	*THUJA PLICATA*	30" DBH	20' DL	RETAIN
33.	PREVIOUSLY REMOVED				N/A
34.	PREVIOUSLY REMOVED				N/A
35.	GINKO	*GINKO BILOBA*	10" DBH	12' DL	RETAIN
36.	THUNDERCLOUD PLUM	*PRUNUS CERASIFERA 'THUNDERCLOUD'*	14" DBH	12' DL	RETAIN
37.	WESTERN RED CEDAR	*THUJA PLICATA*	21" DBH	15' DL	RETAIN

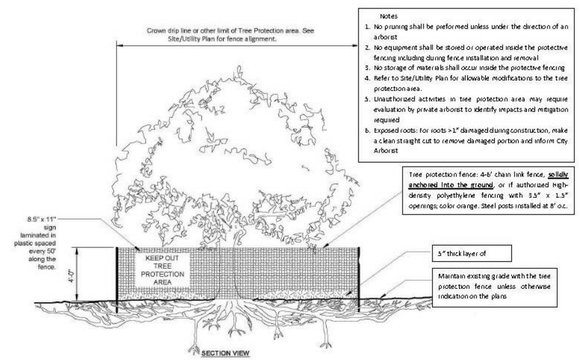
NEW / REPLACEMENT TREES

TREE #	TREE TYPE		PLANTED DBH
A.	WESTERN RED CEDAR	THUJA PLICATA	8' DRIPLINE
B.	WESTERN RED CEDAR	THUJA PLICATA	8' DRIPLINE
C.	WESTERN RED CEDAR	THUJA PLICATA	8' DRIPLINE
	(REPLACEMENTS WITH 20' OF SEPARATION OR AS CLOSE TO IT AS POSSIBLE).		

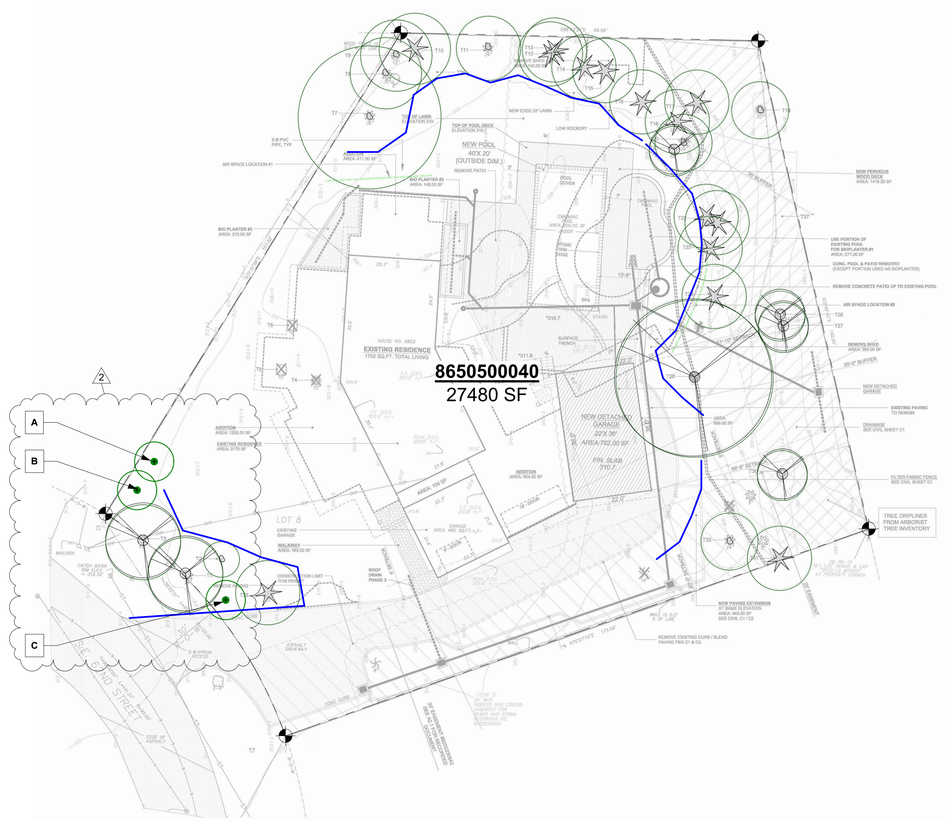
NOTE:

WHEN EXCAVATING FOR THE STORM PIPING THAT IS LOCATED WITHIN A TREES CRITICAL ROOT ZONE, THE EXCAVATION SHOULD BE DONE BY CAREFULLY DIGGING WITH HAND TOOLS OR BY USING AN AIRSPADE. SMALLER ROOTS CAN BE CUT IF NEEDED AND THE PIPING ROUTED AROUND LARGER ROOTS.

-REFER TO WETLAND RESOURCES SHEET 2/2 FOR RE-PLANTING IN THE CRITICAL AREA SPACE.



TREE PROTECTION DETAIL
3/4" = 1'-0"



ARBORISTS SITE PLAN
1" = 20'-0"

0' 10' 20' 80' NORTH

	1. TREES 10" AND GREATER
	2. TREES 24" AND GREATER
	3. TREES 36" AND GREATER
	4. EXCEPTIONAL TREES
	TREE TO BE REMOVED
	TREE PROTECTION FENCING
	NEW TREE

PHASE 2

ALL DATA WAS VERIFIED ON 3/12/22 DURING THE INSPECTION OF ALL TREES ON-SITE AND REMAINED THE SAME

1

PREPARED BY:

NEAL BAKER
ARBORISTS NW COM
ISA CERT. PN1075A
TRAQ ISA (TREE RISK ASSESSMENT QUALIFIED)
MEMBER AREA & SOCA
PH: 206 779 2579

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ONLINE: https://arboristsnw.com/
PHONE: 206-779-2579
EMAIL: neal@arboristsnw.com

No.	Description	Date
1	ARBORIST SITE INSPECTION	03/12/22
2	REVISED TREE LOCATION	04/10/23

HEADRICK RESIDENCE (PHASE 2)

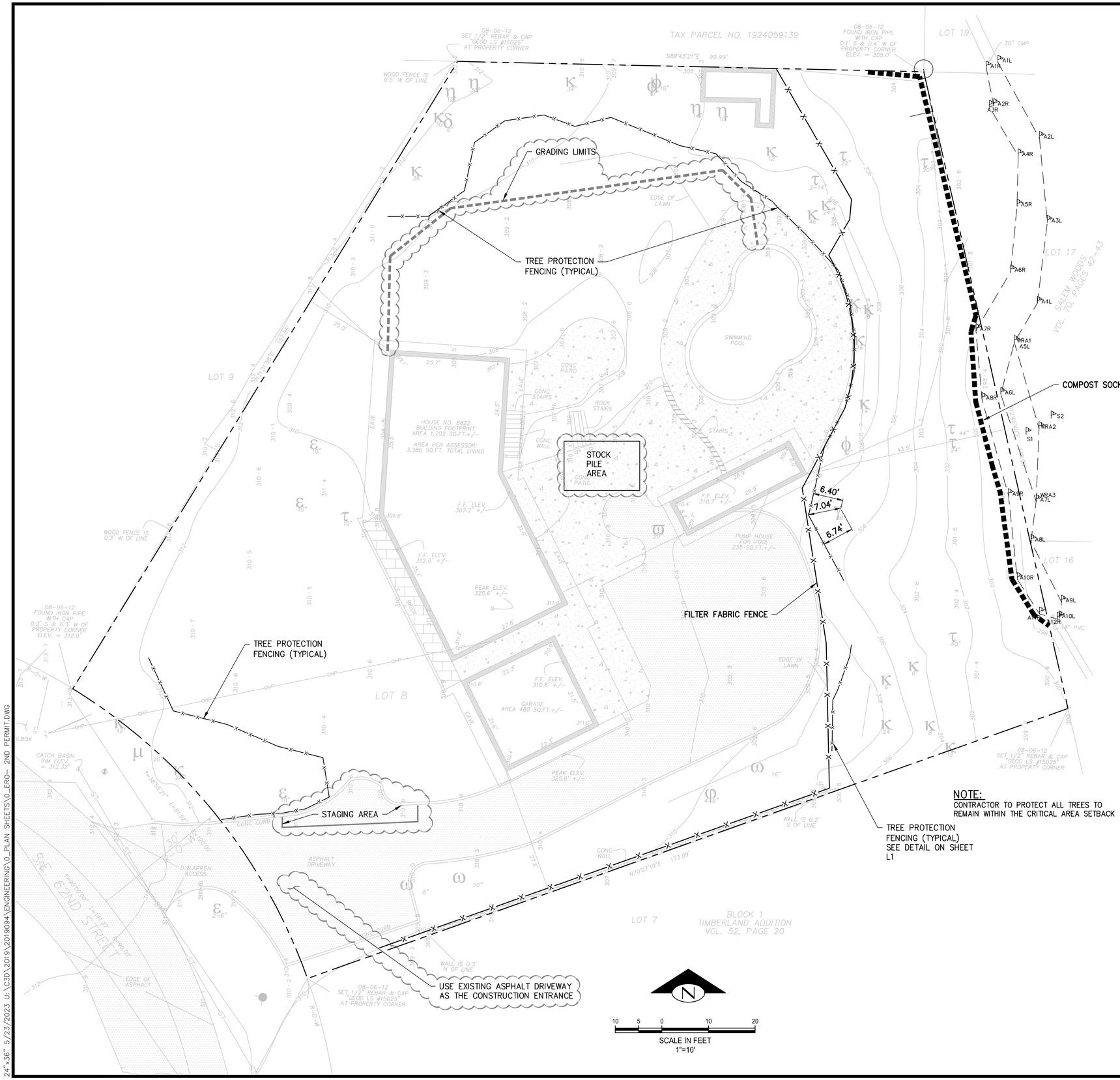
8822 SE 62ND STREET, MERCER ISLAND, WA 98040

HEADRICK RESIDENCE (PHASE 2)

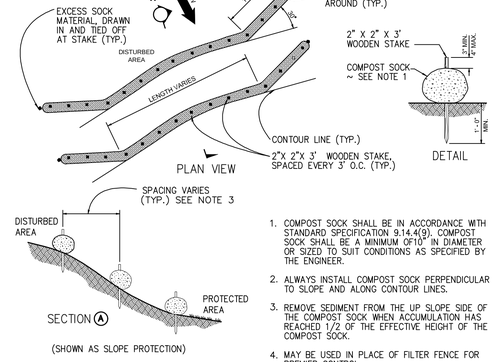
ARBORIST TREE PLAN

Project number	20006
Date	4/10/20
Drawn by	CW
Checked by	AB
	L1
Scale	As indicated

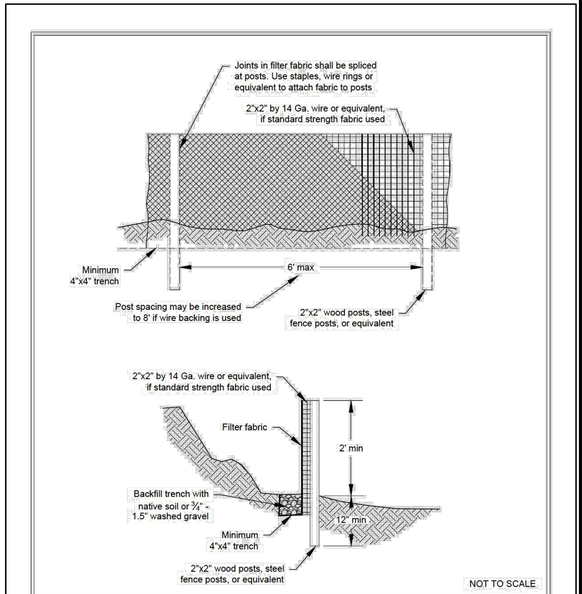
4/11/2023 7:28:38 AM



COMPOST SOCK



1. COMPOST SOCK SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 9.14.4(9). COMPOST SOCK SHALL BE A MINIMUM OF10" IN DIAMETER OR SIZED TO SUIT CONDITIONS AS SPECIFIED BY THE ENGINEER.
2. ALWAYS INSTALL COMPOST SOCK PERPENDICULAR TO SLOPE AND ALONG CONTOUR LINES.
3. REMOVE SEDIMENT FROM THE UP SLOPE SIDE OF THE COMPOST SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE COMPOST SOCK.
4. MAY BE USED IN PLACE OF FILTER FENCE FOR PREMIER CONTROL.



DEPARTMENT OF ECOLOGY
State of Washington

Figure II-4.2.12
Silt Fence

Revised October 2014

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NO.	REVISION	DATE

EROSION CONTROL PLAN
8822 S.E. 62ND STREET
HEADRICK RESIDECE
MERCER ISLAND KING COUNTY WASHINGTON

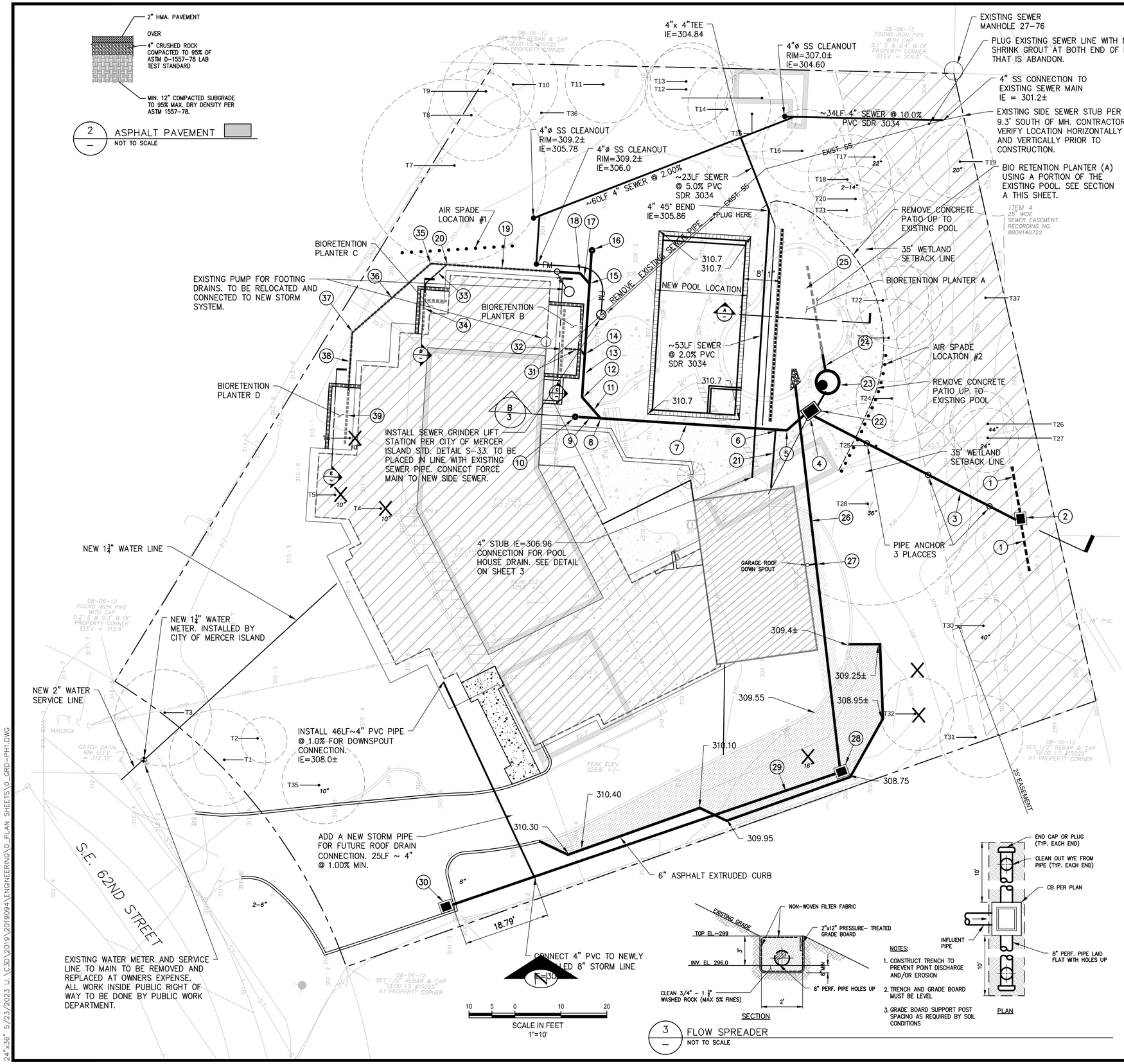
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24"x36" 5/23/2023 U:\C3D\2019\2019094\ENGINEERING\0_PLAN SHEETS\0_ERO- 2ND PERMIT.DWG

2/– ASPHALT PAVEMENT

NOT TO SCALE



3/– FLOW SPREADER

NOT TO SCALE

STORM DRAINAGE NOTES:

1. FLOW SPREADER 3/–
2. TYPE I CB W/ SOLID LID
   RIM=299.0±
   IE=296.0±, 8" W IN
   IE=296.0±, 8" N OUT
   IE=296.0±, 8" S OUT
3. 47LF ~ 8"ø HDPE FUSE WEILDED LAID ON THE HILLSIDE SLOPE @ EXISTING GRADE.
4. TYPE 26 INLET W/SOLID LID
   RIM=309.0±
   IE=307.72, 6" PVC, W IN
   IE=307.72, 8" HDPE, E OUT
5. 6" 45° BEND
   IE=307.77
6. 6" X 4" TEE
   IE=307.80, 4" S
   GARAGE FOOTING DRAIN CONNECTION
7. 38LF ~6"ø PVC 1.0%
8. 6" X 6" WYE
   IE=308.18
9. 2LF ~ 8"ø PVC @ 1.0%
10. 6" CLEANOUT
    RIM=309.0±
    IE=308.2
11. 2LF ~ 6"ø PVC @ 1.0%
12. 6" 45° BEND
    IE=308.24
13. 29LF 6" @ 1.0%
14. 6" X 4" WYE
    IE=308.34
15. 6" X 4" WYE
    IE=308.48
16. 6" CLEANOUT
    RIM=310.0±
    IE=308.50
17. 3LF 4" @ 1.0%
18. 4" 45° BEND
    IE=308.53
19. 32LF 4" @ 1.0%
20. 4" WYE IE=308.83
    OUTLET CONNECTION FOR BIO-RETENTION PLANTER 'C'
21. 12LF 4" PVC SOLID PIPE @ 1.0%
    FOR FOOTING GARAGE FOOTING DRAIN ONLY.
22. 1" ø PVC FORCE MAIN FROM PUMP STATION
23. PUMP STATION
    TYPE II 54"ø CATCHBASIN W/SOLID LID 1/C3
    RIM=309.2±
    IE=306.50, 1" FM
    IE=303.94, 4"
24. 14LF 4" PVC @ 1.0% MIN.
    INSIDE BIO RETENTION PLANTER 4" IE=304.0
25. 4"ø PERFORATED PIPE @ 0.0% ELEVATION =304.0
26. 89LF 8" @ 1.0%
27. 8" X 4" TEE
    IE=308.43
    GARAGE ROOF DRAIN CONNECTION
28. TYPE I CB W/ GRATE LID
    RIM=308.75±
    IE=306.87 8" W IN
    IE=306.87 8" N OUT
29. 89LF 8" PVC @ 1.0%
30. TYPE I CB W/ GRATE LID
    RIM=309.8
    IE=307.76, 8" E OUT

STORM DRAINAGE NOTES:

31. 4LF~4" PVC @ 2.0% MIN.
32. 18LF ~ 4"ø PERFORATED PIPE @ 0.0%
    IE = 308.36
    CAP BOTH ENDS OF PIPE
33. 4LF~4" PVC @ 2.0% MIN.
34. 11LF ~ 4"ø PERFORATED PIPE @ 0.0%
    IE = 308.88CAP BOTH ENDS OF PIPE
35. 4" 45° BEND
    IE=308.84
36. 23LF~4" PVC @ 1.0% MIN.
37. 4" 45° BEND
    IE=309.06
38. 13LF~4" PVC @ 1.0% MIN.
39. 11LF ~ 4"ø PERFORATED PIPE @ 0.0%
    IE = 309.201
    CAP END OF PIPE

TREE PROTECTION NOTE:

CONTRACTOR TO PROTECT ALL TREES TO REMAIN WITHIN THE CRITICAL AREA SETBACK. CONTRACTOR TO CALL OUT ARBORIST ON SITE DURING ANY EXCAVATION WITHIN THE TREE DRIPLINES.

AREA #1 AIR SPADE WORK AT SITE ONE WAS TO A DEPTH OF 18". TWO ROOTS FROM TREE 7 WERE FOUND 2" IN DIAMETER, NUMEROUS FIBROUS ROOTS WHERE ALSO FOUND. PROPER CUTTING OF THESE ROOTS BY HAND WILL NOT ADVERSELY AFFECT THE TREE. APPLICATION OF MULCH OVER THE REMAINING ROOT SYSTEM AND APPLICATION OF FERTILIZER IN ADVANCE OF CONSTRUCTION WILL HELP THE TREE OVERCOME ANY STRESS FROM ROOT PRUNING.

AREA #2 AIR SPADE WORK AT 18" IN DEPTH SHOWED THAT ROOTS FROM THE NEARBY TREES HAS BEEN RESTRICTED BY THE CURRENT CONCRETE PAD WITH ROOTS RUNNING UP TO AND ALONG THE EDGE OF THE PAD. THE LOCATION OF THE DRAINAGE IS EXPECTED TO HAVE MINIMAL EFFECT ON ROOTS THAT HAVE MANAGED TO GROW TO THE LOCATION. MINOR ADJUSTMENT OF THE THE DRAIN LOCATION AT THE TIME OF INSTALLATION WILL FURTHER MINIMIZE ROOT ENCROACHMENT. MULCHING AND FERTILIZER APPLICATION AND POSSIBLE ROOT PRUNING IN ADVANCE OF CONSTRUCTION WILL HELP WITH ANY TREE STRESS.

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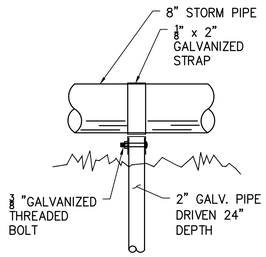
NO	REVISION	DATE

STORM DRAINAGE PLAN
8822 S.E. 62ND STREET
HEADRICK RESIDECE
MERCER ISLAND KING COUNTY WASHINGTON

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WPG	TFD
scale	date
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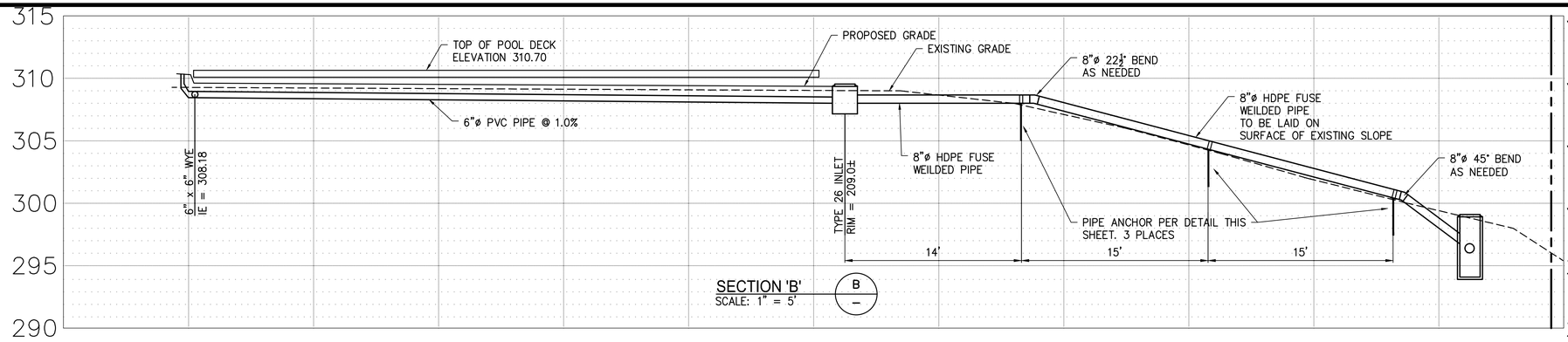
811 Call 811 two business days before you dig

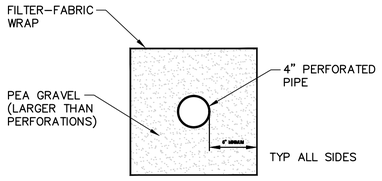
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PIPE ANCHOR

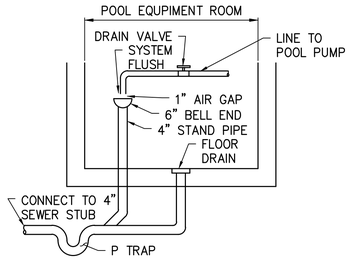
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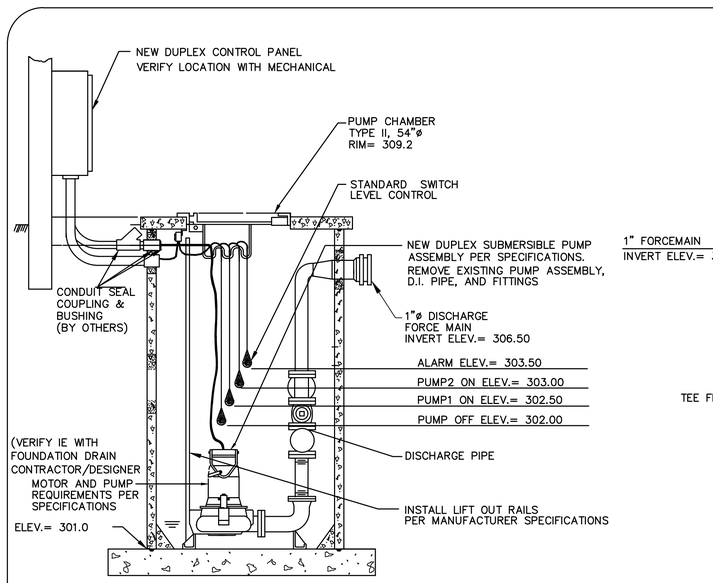
FOOTING DRAIN

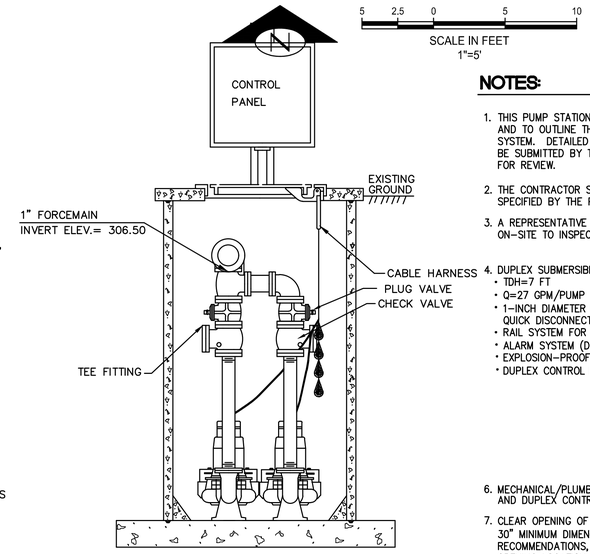
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POOL DRAIN IN GARAGE

NO SCALE





PUMP STATION DETAIL

SCALE: NOT TO SCALE

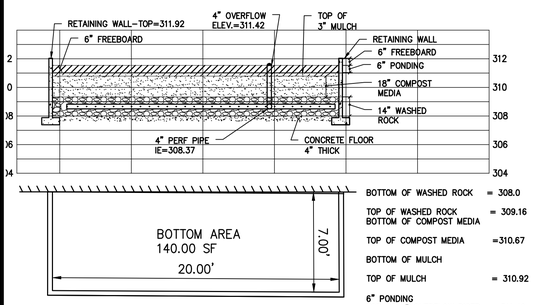
1/3

NOTES:

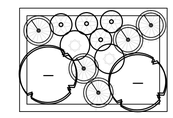
1. THIS PUMP STATION DETAIL IS FOR SCHEMATIC PURPOSES ONLY AND TO OUTLINE THE BASIC PERFORMANCE REQUIREMENTS FOR THE SYSTEM. DETAILED SHOP DRAWINGS OF THE PUMP STATION SHALL BE SUBMITTED BY THE PUMP MANUFACTURER TO THE ENGINEER FOR REVIEW.
2. THE CONTRACTOR SHALL FOLLOW THE INSTALLATION REQUIREMENTS SPECIFIED BY THE PUMP MANUFACTURER.
3. A REPRESENTATIVE OF THE PUMP MANUFACTURER SHALL BE ON-SITE TO INSPECT THE INSTALLATION OF THE SYSTEM.
4. DUPLEX SUBMERSIBLE PUMP STATION REQUIREMENTS:
   - TDH=7 FT
   - Q=27 GPM/PUMP
   - 1-INCH DIAMETER FORCEMAIN w/ QUICK DISCONNECT ELBOW
   - RAIL SYSTEM FOR PUMP
   - ALARM SYSTEM (DESIGNED BY OTHERS)
   - EXPLOSION-PROOF PUMPS AND CONTROLS
   - DUPLEX CONTROL PANEL (DESIGNED BY OTHERS)
6. MECHANICAL/PLUMBING CONTRACTOR TO SUPPLY PUMPS AND DUPLEX CONTROL PANEL.
7. CLEAR OPENING OF DUAL HINGED ACCESS DOORS SHALL BE 43"x 30" MINIMUM DIMENSIONS OR PER PUMP MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS LARGER. OPENING LOCATION OVER MANHOLE STRUCTURE SHALL BE PER PUMP MANUFACTURER RECOMMENDATIONS. ALL ACCESS COVERS SHALL BE DESIGNED FOR H-20 VEHICULAR LOADING.

BIO RETENTION PLANT LIST
05.12.2023

QTY	BOTANICAL NAME	COMMON NAME	SIZE / SPACING	NOTES
	SHRUBS & PERENNIALS			
5	CORNUS SERICEA	RED TWIGGED DOGWOOD	5 GAL / 5' OC	FULL, WELL-ROOTED
13	CAREX OBNUPTA	SLOUGH SEDGE	1 GAL /2' OC	FULL, WELL-ROOTED
18	CAMAS LEICHTLINII	GIANT CAMAS	1 GAL /18" OC	FULL, WELL-ROOTED
5	IRIS DOUGLASIANA	DOUGLAS IRIS	1 GAL /2' OC	FULL, WELL-ROOTED



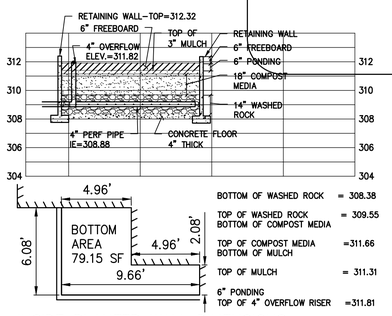
INSIDE PLANTER WALL DIMENSIONS



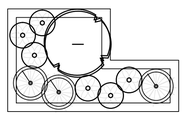
PLANTING DIAGRAM INSIDE PLANTER

NO SCALE

B SECTION B BIO RETENTION PLANTER



INSIDE PLANTER WALL DIMENSIONS

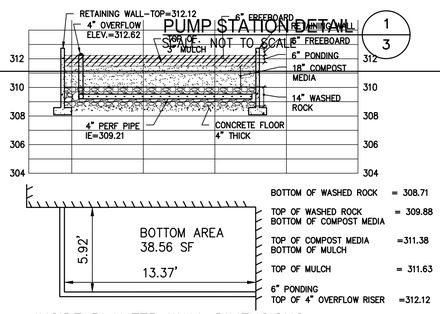


PLANTING DIAGRAM INSIDE PLANTER

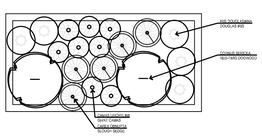
NO SCALE

C SECTION C BIO RETENTION PLANTER

1"=5' H & 1"=5' V



INSIDE PLANTER WALL DIMENSIONS



PLANTING DIAGRAM INSIDE PLANTER

NO SCALE

D SECTION D BIO RETENTION PLANTER

1"=5' H & 1"=5' V

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MERCER ISLAND KING COUNTY WASHINGTON

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GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

2. DESIGN LOADING CRITERIA

ROOF SNOW LOAD	25 PSF
ROOF DEAD LOAD ALLOWANCE FOR PV PANELS (IN DESIGNATED AREAS)	5 PSF
FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF
FLOOR LIVE LOAD (RESIDENTIAL EXTERIOR DECKS AND BALCONIES)	60 PSF
MECHANICAL UNITS	WEIGHTS FURNISHED BY MANUFACTURER

SNOW : ROOF SNOW LOAD = 25 PSF
GROUND SNOW LOAD = 20 PSF
EXPOSURE Ce = 1.00
IMPORTANCE FACTOR Is = 1.00
THERMAL FACTOR Ct = 1.00

WIND : ANALYSIS PROCEDURE: ASCE 7-16 CHAPTER 27 "PART 1 - BUILDINGS OF ALL HEIGHTS"
RISK CATEGORY II
98 MPH
EXPOSURE "D"
TOPOGRAPHIC FACTOR Kzt = 1.3
WIND BASE SHEAR, NORTH/SOUTH Vn = 41.9 K
WIND BASE SHEAR, EAST/WEST Vn = 39.7 K

EARTHQUAKE : ANALYSIS PROCEDURE: IBC "EQUIVALENT LATERAL FORCE PROCEDURE"
SEISMIC DESIGN CATEGORY (SDC) = D
RISK CATEGORY = II
SEISMIC SITE CLASS = C
IMPORTANCE FACTOR Ie = 1.0
MAPPED MCE Ss = 1.451; S_1 = 0.505
DESIGN ACCELERATION Sds = 1.165; S_{d1} = 0.503
SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5
SEISMIC BASE SHEAR Vs = 22.92 K

3. LATERAL LOADS ARE TRANSFERRED BY THE ROOF AND FLOOR DIAPHRAGMS TO THE SHEAR WALLS. FORCES ARE BASED ON THE TRIBUTARY AREA FOR EACH SHEAR WALL AND ARE CARRIED BY THE SHEAR WALLS TO THE FOUNDATION.

4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

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

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

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

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

9. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. WHERE INFORMATION ON THE DRAWINGS IS IN CONFLICT WITH THE SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. DO NOT SCALE THE DRAWINGS.

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

GEOTECHNICAL

11. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH (CONTROLLED, COMPACTED STRUCTURAL FILL OR BOTH) AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND GEOTECHNICAL ENGINEER. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED UNDER COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE GEOTECHNICAL REPORT.

THE STRUCTURAL DESIGN IS BASED ON THE FOLLOWING VALUES FROM THE REFERENCED GEOTECHNICAL REPORT:

ALLOWABLE SOIL BEARING PRESSURE	3,000 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	35 PCF + 10H / 35 PCF
SEISMIC SURCHARGE PRESSURE (RESTRAINED)	7H PSF
PASSIVE SOIL PRESSURE	300 PCF
SOIL COEFFICIENT OF FRICTION	0.50
SOIL DENSITY	130 PCF

GEOTECHNICAL REPORT REFERENCE:#19086 BY GEOTECH CONSULTANTS, INC. DATED MARCH 20, 2019.

CONCRETE

12. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI 117. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 2,500 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS (BEFORE THE ADDITION OF ADMIXTURES). THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.55 FOR FOOTINGS AND 0.45 FOR ALL SLABS AND EXPOSED CONCRETE UNLESS OTHERWISE NOTED. EXCEPT FOR FOOTINGS AND SLAB ON GRADE, AGGREGATE SIZE SHALL NOT EXCEED 3/4".

THE MINIMUM AMOUNT OF CEMENT AND THE MAXIMUM SLUMP MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. (THE W/C RATIO LIMITS STILL APPLY). THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITIOUS MATERIAL, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 301. CHEMICAL ADMIXTURES AND FLY ASH SHALL CONFORM TO ASTM C494 AND C618 RESPECTIVELY. FLY ASH PERCENTAGE OF TOTAL CEMENTITIOUS MATERIAL SHALL NOT EXCEED 20%. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY TO CONTRACT DOCUMENTS. CONTRACTOR MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.3.1. ALL CONCRETE EXPOSED TO THE WEATHER AND ALL GARAGE SLABS-ON-GRADE SHALL OBTAIN A 28-DAY STRENGTH f'c OF 3,000 PSI IN ACCORDANCE WITH ACI 318 TABLE 19.3.2.1 AND IBC SECTION 1904.1. THIS INCREASE IN REQUIRED STRENGTH IS FOR DURABILITY ONLY (SPECIAL INSPECTION IS NOT REQUIRED). ALL CONCRETE TO RECEIVE A STEEL TROWELED FINISH SHALL NOT BE AIR-ENTRAINED.

13. REINFORCING STEEL (FOR RESIDENTIAL) SHALL CONSIST OF #4 BARS CONFORMING TO ASTM A615, GRADE 40, fy = 40,000 PSI AND SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT 48 BAR DIAMETERS, 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS, LAP 2'-0" MINIMUM. PROVIDE (2) #4 MIN. U.N.O. TRIM BARS AROUND ALL OPENINGS IN CONCRETE WALLS OR SLABS EXTENDING 2'-0" PAST CORNERS, TYPICAL.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO REINFORCING BARS SHALL BE "WET-SET" INTO THE CONCRETE. PROVIDE A 20' LONG REBAR GROUND (UFER GROUND) PER ELECTRICIAN.

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

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST EARTH	3"
FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER	2"
SLABS AND WALLS (INTERIOR FACE)	1"

15. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

ANCHORAGE

16. SCREW ANCHORS INTO CONCRETE SHALL BE "TITEN HD", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-2713 INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL SCREW ANCHOR INSTALLATION.

WOOD

17. FRAMING LUMBER: SHALL BE KILN DRIED OR MC-19 (MOISTURE CONTENT LESS THAN 19%), AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD NO. 17 GRADING RULES FOR WEST COAST LUMBER. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS (2X, 3X, AND 4X MEMBERS)	DOUGLAS FIR OR HEM-FIR NO. 1
BEAMS AND STRINGERS (INCLUDING 6 X AND LARGER MEMBERS)	DOUGLAS FIR NO. 1
POSTS AND TIMBERS	DOUGLAS FIR NO. 1
STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING (AS NOTED ON PLANS / DETAILS)	DOUGLAS FIR OR HEM-FIR NO. 2

18. WOOD SETTLEMENT SHRINKAGE: DUE TO CROSS GRAIN WOOD SHRINKAGE, THIS BUILDING IS EXPECTED TO SETTLE APPROXIMATELY 1/8 TO 1/4 INCH PER STORY. ALL UTILITIES SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHER MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE THICKNESS OF THE WALL PLATES AND NOT IN THE LENGTH OF THE WALL STUDS.

19. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM D3737 AND ANSI A190.1 STANDARDS. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. CERTIFICATES OF CONFORMANCE MUST BE MADE AVAILABLE TO BUILDING INSPECTORS. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800 KSI. ALL CANTILEVERED OR CONTINUOUS BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800 KSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 5,000' RADIUS UNLESS SHOWN OTHERWISE ON THE PLANS. ALL GLUE LAMINATED COLUMNS SHALL BE DOUGLAS FIR COMBINATION 2, Fc = 1,900 PSI, Fby = 1,800 PSI, Fbx = 1,700 PSI, E = 1,700 KSI (4 LAMS MINIMUM DEPTH).

20. PARALLEL STRAND LUMBER (PSL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL PARALLEL STRAND LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR STRANDS GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

Fb = 2900 PSI, E = 2.2x 10^6 PSI, Fv = 290 PSI
Fb = 2400 PSI, E = 1.8x 10^6 PSI, F'c = 2500 PSI (COMMERCIAL COLUMNS)

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

21. WOOD I-JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE I-JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH WOOD JOIST PROVIDED. GLUE FLOOR JOISTS TO SHEATHING AS REQUIRED BY THE JOIST MANUFACTURER.

22. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH IBC SECTION 2303.4 AND ANSI/TPI 1-2014 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. TRUSSES SHALL BE HANDLED, INSTALLED, AND BRACED PER "HIB 91" PER THE TRUSS PLATE INSTITUTE. LOADING SHALL BE AS FOLLOWS:

TOP CHORD SNOW LOAD	25 PSF
TOP CHORD DL ALLOWANCE FOR PV PANELS	5 PSF
TOP CHORD DEAD LOAD	5 PSF
BOTTOM CHORD LIVE LOAD	10 PSF (NOT INCLUDED IN TOTAL)
BOTTOM CHORD DEAD LOAD	5 PSF
TOTAL LOAD	40 PSF
NET WIND UPLIFT (TOP CHORD)	10 PSF

THE LOADS ABOVE SHALL BE INCREASED TO THE FOLLOWING IF THE TRUSSES MEET THE DESCRIPTION OF AN "UNINHABITABLE ATTIC WITH LIMITED STORAGE" AS DEFINED IN FOOTNOTE j OF IBC TABLE 1607.1:

BOTTOM CHORD LIVE LOAD	20 PSF - INCLUDE IN TOTAL
BOTTOM CHORD DEAD LOAD	10 PSF

SNOW LOAD DUE TO DRIFTING AND UNBALANCED LOADS SHALL BE INCLUDED PER THE IBC. TOP CHORDS SHALL BE DF LUMBER. UTILIZE A MINIMUM CREEP FACTOR OF 2.0 FOR DEAD AND SUSTAINED LIVE LOADS IN DETERMINING THE TRUSS DEFLECTIONS. MAXIMUM TOTAL DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/240 OF THE TOTAL SPAN AND MAXIMUM LIVE LOAD DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/360 OF THE TOTAL SPAN. PROVIDE ADEQUATE PLIES AND/OR METAL BRACKETS TO ADEQUATELY DISTRIBUTE THE BEARING PRESSURE AT THE ENDS OF THE GIRDER TRUSSES TO THE TOP PLATES OF THE BEARING WALLS SUCH THAT THE BEARING PRESSURE DOES NOT EXCEED 405 PSI. PROVIDE ADDITIONAL TRUSSES (AS REQUIRED) TO CARRY ALL CONCENTRATED LOADS AND MECHANICAL UNITS.

WOOD TRUSSES SHALL UTILIZE I.C.C. OR IAPMO UES APPROVED CONNECTOR PLATES. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

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REVISIONS:

Mark	Date	
1	08/12/22	PERMIT CORRECTION
2	05/19/23	DESIGN REVISIONS

PERMIT SET 02-04-22

GENERAL STRUCTURAL DETAILS

SHEET: S1.0

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

23. TRUSS SUPPLIERS NOTE: THE TRUSS CONFIGURATIONS, INCLUDING DEPTHS AND MEMBER SIZES SHOWN ON THE DRAWINGS, INDICATE THE DESIRED TRUSS CONFIGURATION AND ARE TO BE COMPLIED WITH WHEREVER POSSIBLE. IF A TRUSS MANUFACTURER IS UNABLE TO MEET THE LOAD REQUIREMENTS SPECIFIED WITH THE TRUSS CONFIGURATION INDICATED, THE MANUFACTURER IS TO SUBMIT WRITTEN NOTICE TO THAT EFFECT TO THE ARCHITECT PRIOR TO SUBMITTING A COST PROPOSAL OR BID.

    IF A DIFFERENT SYSTEM IS PROPOSED THAT REQUIRES REVISIONS TO PRESENT STRUCTURAL FRAMING OR DETAILS, SUCH SYSTEM SHALL BE CONSIDERED SUBJECT TO THE APPROVAL OF THE OWNER, ARCHITECT, AND STRUCTURAL ENGINEER.

    IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND TRUSS MANUFACTURER TO VERIFY THE WEIGHT AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS. IT SHALL BE NOTED IN THE TRUSS MANUFACTURER'S BID WHETHER OR NOT AN ALLOWANCE HAS BEEN MADE FOR MECHANICAL UNITS.

    TRUSS SHOP DRAWINGS WILL NOT BE REVIEWED WITHOUT CALCULATIONS BEARING THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER.

24. WOOD SHEATHING SHALL BE APA RATED, EXTERIOR GLUE; EXPOSURE 1, IN CONFORMANCE WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PS-1 OR PS-2. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS.

    UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH (2) 10d-F NAILS AT EACH END, UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPACED PER PLANS. WHERE NOT NOTED OTHERWISE, NAIL PANEL EDGES WITH 8d NAILS @ 6" O.C. EDGES, 12" O.C. IN THE FIELD.

25. ALL WOOD EXPOSED TO WEATHER, OR BEARING ON UNPROTECTED CONCRETE BELOW GRADE, OR BEARING ON UNPROTECTED CONCRETE LESS THAN 8" FROM EXPOSED EARTH SHALL BE PRESSURE-TREATED, U.O.N. PRESSURE TREATMENT SHALL BE WITH AN APPROVED PRESERVATIVE AND BRANDED WITH A QUALITY CONTROL AGENCY MARK BY THE AMERICAN WOOD PRESERVERS BUREAU OR EQUAL. ALL METAL HARDWARE IN CONTACT WITH TREATED WOOD SHALL BE PROTECTED WITH A G185 GALVANIZED COATING (ZMAX) OR BETTER. ALL NAILS IN TREATED WOOD SHALL BE HOT-DIP GALVANIZED OR BETTER. PROVIDE 2 LAYERS OF 30# ASPHALT IMPREGNATED BUILDING PAPER BETWEEN NON-PRESSURE-TREATED LEDGERS, BLOCKING, ETC., AND CONCRETE.

26. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL BOLTS TIGHTENED TO SNUG TIGHT.

27. WOOD FASTENERS:

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

DRAWING ID	NAIL NAME	NAIL DIAMETER	NAIL LENGTH
"6d"	6d Common	0.113"	2"
"8d Box"	8d Box	0.113"	2-1/2"
"8d"	8d Common	0.131"	2-1/2"
"10d-F"	10d Framer	0.131"	3"
"10d"	10d Shear	0.148"	2-1/4"
"16d"	16d Sinker	0.148"	3-1/4"

    IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

    B. NAILS - SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

    C. SCREWS SHALL BE WOOD SCREWS OF THE DIAMETER AND LENGTH NOTED ON THE DRAWINGS. SDS FASTENERS ARE SIMPSON STRONG DRIVE SCREWS.

    D. HOT DIPPED GALVANIZED NAILS, BOLTS AND METAL PLATES - ALL NAILS, BOLTS AND METAL PLATES IN CONTACT WITH PRESSURE TREATED (INCLUDING FIRE-RETARDANT TREATED) LUMBER SHALL BE HOT DIPPED GALVANIZED.

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

    A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS SNUGLY AGAINST WOOD FRAMING AFTER WOOD HAS REACHED SPECIFIED MOISTURE CONTENT.

    B. WALL FRAMING: ALL BEARING AND SHEAR WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2 x 4 STUDS @ 16" O.C. AT INTERIOR WALLS AND 2 x 6 @ 16" O.C. AT EXTERIOR WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL BEARING AND SHEAR WALLS AND AT EACH SIDE OF ALL OPENINGS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW.

    ALL BEARING STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 8" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS WITH 3"x3"x1/4" PLATE WASHERS @ 4'-0" O.C., UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH 10d-F NAILS @ 8" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES AND GYPSUM SHEATHING ON EXTERIOR SURFACES ATTACHED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH SCREWS AT 8" O.C. USE 1-1/4 " W #6 SCREWS FOR 1/2" GWB AND 5/8" GWB WHERE OCCURS. USE 1-1/4" W #6 GALVANIZED SCREWS FOR 1/2" GWB AND 5/8" EXTERIOR GYPSUM SHEATHING, WHERE OCCURS. VERIFY THE FIRE ASSEMBLY REQUIREMENTS WHERE APPLICABLE WITH THE ARCHITECT.

    C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH 10d-F NAILS @ 8" O.C. STAGGERED UNLESS OTHERWISE NOTED.

    D. POSITIVE CONNECTIONS: PROVIDE THE FOLLOWING SIMPSON CONNECTORS AT TYPICAL FRAMING UNLESS OTHERWISE NOTED ON PLAN OR DETAIL. PROVIDE CCQ/ECCQ CAPS AND PBS BASES AT POSTS. PROVIDE BC BASE WHERE POST BEARS ON WOOD FRAMING BELOW. PROVIDE LUS SERIES HANGERS FOR 2X FLOOR AND ROOF JOISTS. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED.

ABBREVIATIONS

@	At	L	Angle
d	Penny (Nails)	LB.	Pound
ϕ	Diameter	LL	Live Load
°	Degrees	LLH	Long Leg Horizontal
...#	Pounds	LLV	Long Leg Vertical
#...	Number	LONGIT.	Longitudinal
		LT. WT.	Lightweight
(A)	Above		
A.B.	Anchor Bolt	MAX.	Maximum
ADD'L	Additional	MECH.	Mechanical
ALT.	Alternate	MEZZ.	Mezzanine
APPROX.	Approximate	MF	Moment Frame
ARCH.	Architect	MFR.	Manufacturer
		MIN.	Minimum
(B)	Below	MISC.	Miscellaneous
B/	Bottom of	MK.	Mark
BF	Braced Frame		
BLKG.	Blocking	(N)	New
BLDG.	Building	N.	North
BM.	Beam	N.S.	Near Side
BOT.	Bottom	NOM.	Nominal
BRG.	Bearing	NTS	Not to Scale
BTWN.	Between		
		O.C.	On Center
℄	Centerline	O.D.	Outside Diameter
C	Camber	O.F.	Outside Face
CIP	Cast In Place	O.H.	Overhang
C.J.	Construction Joint or Control Joint	OPNG.	Opening
CJP	Complete Joint Penetration	OPP.	Opposite
CLG.	Ceiling		
CLR.	Clear	PAF	Powder Actuated Fastener
CMU	Concrete Masonry Unit	PC	Precast
COL.	Column	PERM.	Permanent
CONC.	Concrete	PERP.	Perpendicular
CONN.	Connections	PJP	Partial Joint Penetration
CONST.	Construction	PL or ℗	Plate
CONT.	Continuous	PLF	Pounds per linear Foot
CSK.	Countersink	PLYWD	Plywood
		PREFAB.	Prefabricated
DBA	Deformed Bar Anchor	PSF	Pounds per Square Foot
DBL.	Double	PSI	Pounds per Square Inch
DEG.	Degree	P.T. or PT	Post-Tensioning
DF	Doug Fir-Larch	P/T	Pressure-Treated
DIA.	Diameter		
DIAG.	Diagonal	RAD.	Radius
DIAPH.	Diaphragm	REF.	Reference
DIM.	Dimension	REINF.	Reinforce or Reinforcement
DN.	Down	REQD.	Required
DO	Ditto	REV.	Revise
DTL.	Detail	R.O.	Rough Opening
DWG.	Drawing		
		S.	South
(E)	Existing	SCH. or SCHED.	Schedule
E.	East	SECT.	Section
EA.	Each	SHT.	Sheet
E.F.	Each Face	SIM.	Similar
EL.	Elevation	SOG	Slab On Grade
ELEV.	Elevator	SPEC.	Specification
EMBED.	Embedment Length	SQ.	Square
ENGR.	Engineer	SQ. FT.	Square Feet
EQ.	Equal	SQ. IN.	Square Inch(es)
E.W.	Each Way	SPF	Spruce-Pine-Fir
EXP.	Expansion	S.S.	Stainless Steel
EXT.	Exterior	STD.	Standard
		STIFF.	Stiffener
FDN.	Foundation	STL.	Steel
FIN.	Finish	STR.	Structural
FLR.	Floor	SUB.	Substitute
FRP	Fiber Reinforced Polymer	SYM.	Symmetrical
F.S.	Far Side		
FT.	Foot or Feet	T/	Top of
FTG.	Footing	T&B	Top and Bottom
		T&G	Tongue & Groove
GA.	Gauge	TEMP.	Temporary
GALV.	Galvanized	THRU	Through
GL	Glue Laminated	T.O.C.	Top of Concrete
GWB	Gypsum Wall Board	T.O.S.	Top of Steel
		T.O.W.	Top of Wall
HDG	Hot Dipped Galvanized	TRANS.	Transverse
HDR.	Header	TS	Tube Steel
HF	Hem Fir	TYP.	Typical
HGR.	Hanger		
HORIZ.	Horizontal	U.O.N.	Unless Otherwise Noted
HSS	Hollow Structural Section		
HT.	Height	VERT.	Vertical
		VIF	Verify in Field
I.D.	Inside Diameter		
I.F.	Inside Face	W.	West
IN.	Inch	W/ or w/	With
INFO.	Information	W.H.S.	Welded Headed Stud
INT.	Interior	W/O	Without
		WP	Work Point
JT.	Joint	W.T.S.	Welded Threaded Stud
		WWF	Welded Wire Fabric
K	Kips		
KSF	Kips per Square Foot	X SECT.	Cross Section
KSI	Kips per Square Inch	X-STR	Extra Strong
		XX-STR	Double Extra Strong

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REGISTERED
PROFESSIONAL ENGINEER

HEADRICK RESIDENCE
8822 S.E. 62ND STREET,
MERCER ISLAND, WA. 98040
PHSE II

REVISIONS:

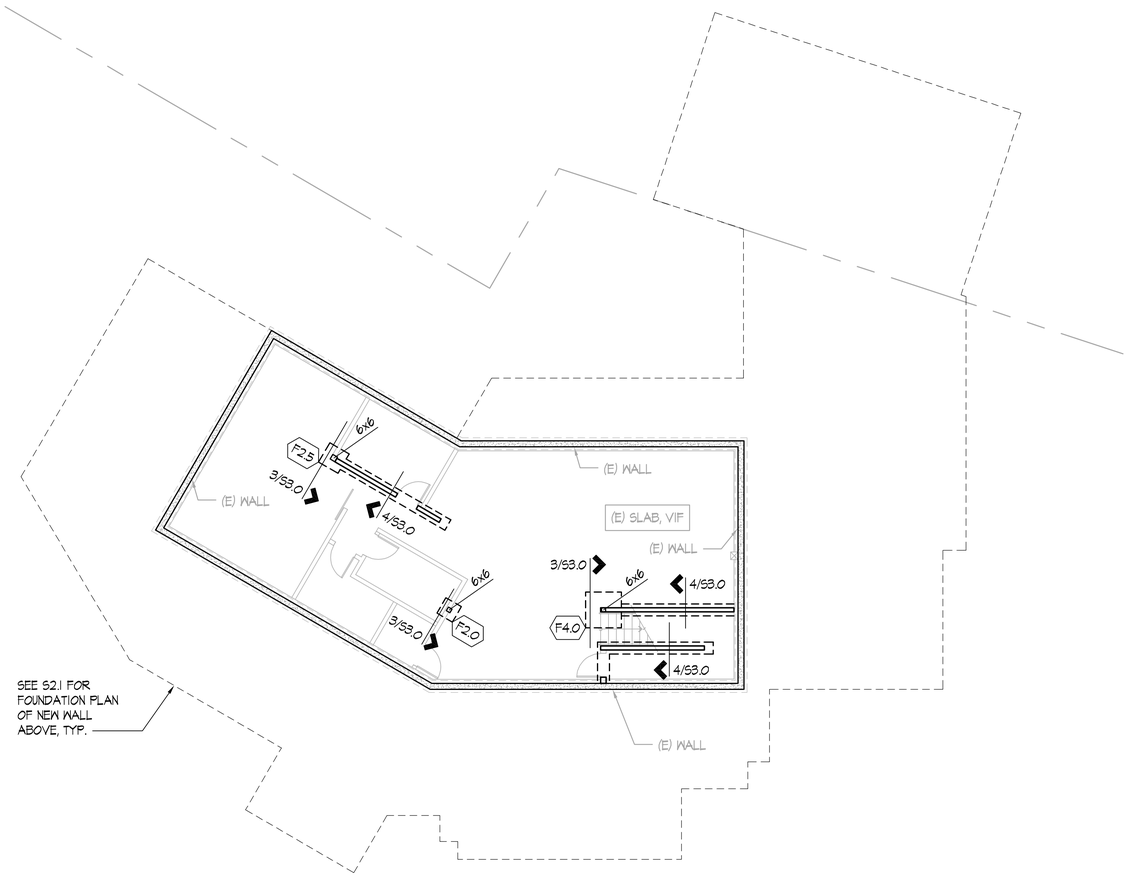
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1	08/12/22	PERMIT CORRECTION
2	05/19/23	DESIGN REVISIONS

PERMIT SET 02-04-22

GENERAL STRUCTURAL DETAILS

SHEET:
S1.1

File: 271-s101.dwg Plotted: Fri, 05/19/2023 11:44 am



BASEMENT FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

BASEMENT FOUNDATION PLAN NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION DETAILS. SEE SHEET S4.0 FOR TYPICAL WOOD DETAILS.
3. SLAB-ON-GRADE SHALL BE 4" THICK CONCRETE REINFORCED WITH #4 @ 16" O.C. EACH WAY AT MID-DEPTH, U.O.N. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SUB-GRADE MOISTURE BARRIER AND ELEVATIONS, ETC.
4. FOR SLAB-ON-GRADE JOINTS, SEE DETAIL 2/S3.0.
5. WHERE NEW CONCRETE IS CAST AGAINST EXISTING CONCRETE FOUNDATIONS, DRILL AND EPOXY #4 DOWELS x 3'-0" LONG TO LAP WITH THE NEW FOOTING LONGITUDINAL REINFORCING (5" MINIMUM EMBEDMENT).
6. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
7. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS AND SLABS, SEE DETAIL 1/S4.0.
8. ALL BEARING AND SHEAR WALLS SHALL BE 2x4 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
9. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).

LEGEND:

- Fx.x — INDICATES SPREAD FOOTING. SEE 12/S3.0 FOR SCHEDULE
- INDICATES FOOTING
- INDICATES FOUNDATION WALL, WOOD BEARING WALL OR SHEAR WALL
- INDICATES WOOD BEARING OR SHEAR WALL AT THIS LEVEL. SEE PLAN NOTES 6 & 8
- INDICATES NON-BEARING/ NON-SHEAR WALL AT THIS LEVEL. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS

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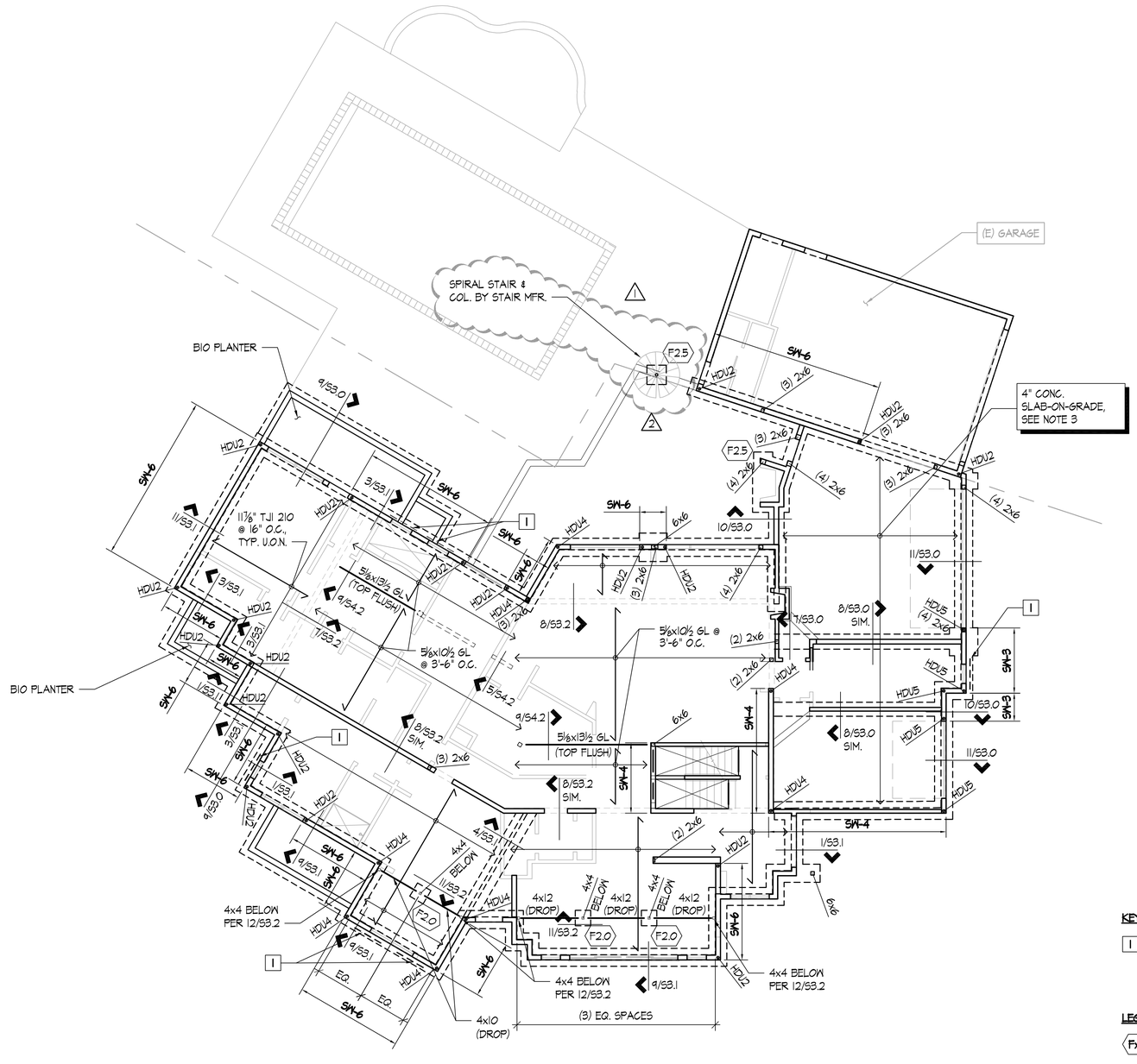
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BASEMENT FOUNDATION PLAN

SHEET: S2.0

File: 271-s200.dwg Revised: Fri, 05/19/2023 11:44 am



FOUNDATION / FIRST LEVEL FRAMING PLAN

SCALE: 1/8" = 1'-0"

FOUNDATION / FIRST LEVEL FRAMING PLAN NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION DETAILS. SEE SHEET S4.0 FOR TYPICAL WOOD DETAILS.
3. SLAB-ON-GRADE SHALL BE 4" THICK CONCRETE REINFORCED WITH #4 @ 16" O.C. EACH WAY AT MID-DEPTH, U.O.N. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SUB-GRADE MOISTURE BARRIER AND ELEVATIONS, ETC.
4. FOR SLAB-ON-GRADE JOINTS, SEE DETAIL 2/S3.0.
5. WHERE NEW CONCRETE IS CAST AGAINST EXISTING CONCRETE FOUNDATIONS, DRILL AND EPOXY #4 DOWELS x 3'-0" LONG TO LAP WITH THE NEW FOOTING LONGITUDINAL REINFORCING (5" MINIMUM EMBEDMENT).
6. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
7. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS AND SLABS, SEE DETAIL 1/S4.0.
8. TYPICAL FLOOR FRAMING CONSISTS OF 1-1/8" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER JOISTS AT 16" O.C. HANG TJI JOISTS WITH ITS TOP FLANGE HANGERS AND GLULAM WITH BA TOP FLANGE HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
9. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
10. ALL BEARING AND SHEAR WALLS SHALL BE 2x4 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
11. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
12. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL FLOOR BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.1.
13. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x10 FOR EXTERIOR BEARING WALLS AND (2) 2x10 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
14. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
15. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING REQUIREMENTS.
16. SW-x INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA, U.O.N.
17. HDUx INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.

KEY NOTES:

1 STRAPPING AROUND SHEAR WALL OPENING PER 1/S4.3

LEGEND:

- Fxx — INDICATES SPREAD FOOTING. SEE 12/S3.0 FOR SCHEDULE
- INDICATES FOOTING
- INDICATES FOUNDATION WALL, WOOD BEARING WALL OR SHEAR WALL
- INDICATES FRAMING DIRECTION
- INDICATES EXTENT OF FRAMING
- SW-x — INDICATES SHEAR WALL TYPE AT THIS LEVEL. SEE PLAN NOTE 16
- INDICATES WOOD BEARING OR SHEAR WALL AT THIS LEVEL. SEE PLAN NOTES 10 & 16
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW
- INDICATES NON-BEARING/ NON-SHEAR WALL AT THIS LEVEL. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- INDICATES HEADER MEMBER. SEE PLAN NOTE 13
- (#2X) — INDICATES MULTIPLE STUD POST AT THIS LEVEL. SEE PLAN NOTE 12
- XX — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTE 17

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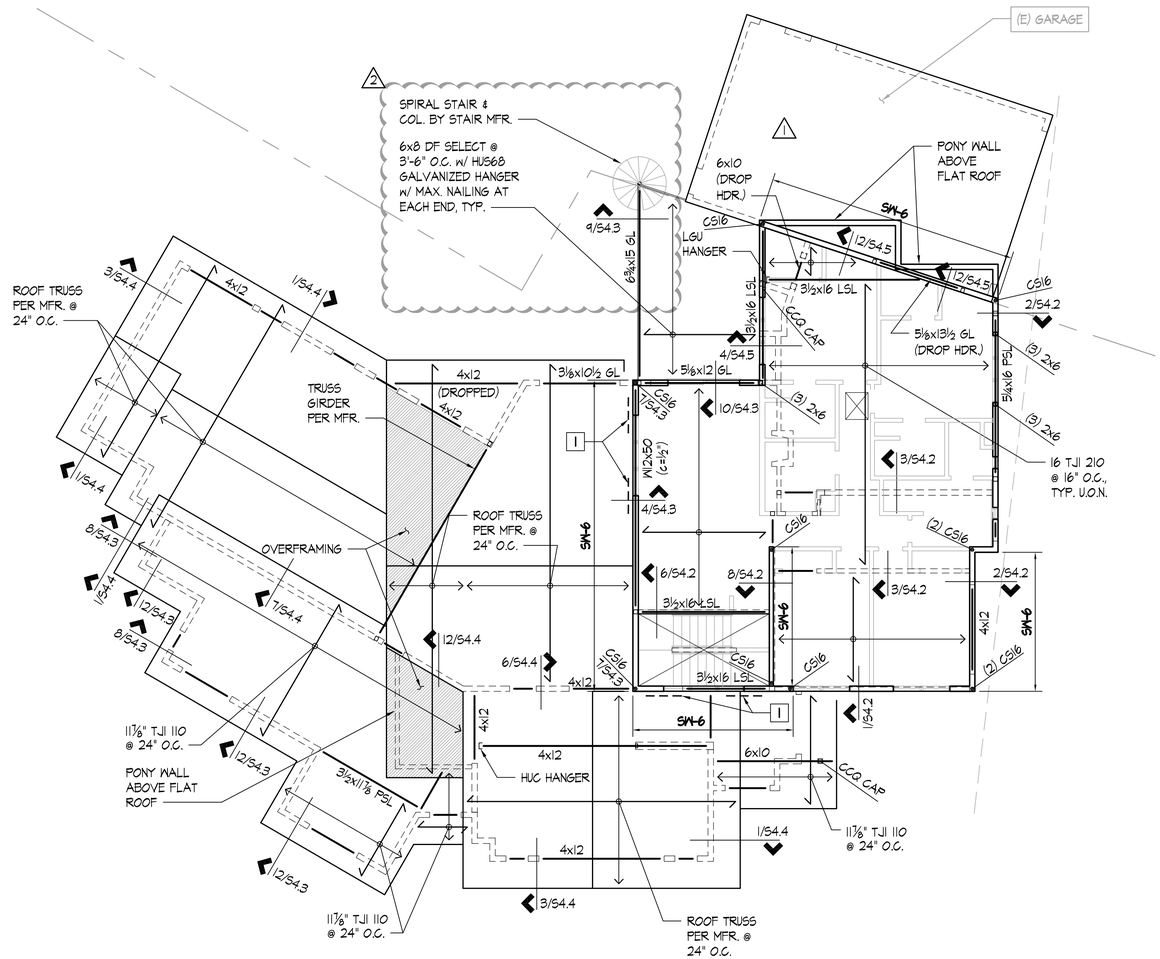
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FIRST LEVEL FRAMING PLAN

SHEET: S2.1

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SECOND LEVEL / LOWER ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

SECOND LEVEL / LOWER ROOF FRAMING PLAN NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
3. TYPICAL ROOF FRAMING CONSISTS OF 15/32" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER PRE-FABRICATED ROOF TRUSSES AND 2x FRAMING @ 24" O.C., U.O.N. (SEE THE STRUCTURAL GENERAL NOTES FOR TRUSS DESIGN CRITERIA).
4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. PROVIDE SOLID BLOCKING BETWEEN EACH ROOF JOIST OR TRUSS AT SUPPORTS. PROVIDE AN H1 CLIP AT EVERY MEMBER TO TOP PLATE.
6. ATTACH NON-BEARING INTERIOR WALLS TO BOTTOM OF TRUSSES WITH STC CLIPS AT 48" O.C. INSTALL IN ACCORDANCE WITH MFR. RECOMMENDATIONS. SEE DETAIL 9/S4.4.
7. TYPICAL FLOOR FRAMING CONSISTS OF 1-1/8" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER 16" TJI 210 JOISTS AT 16" O.C. HANG TJI JOISTS WITH ITS TOP FLANGE HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
8. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
9. ALL BEARING AND SHEAR WALLS SHALL BE 2x4 @ 16" O.C. INTERIOR AND 2x6 @ 16" O.C. EXTERIOR U.O.N.
10. POSTS INDICATED ARE AT THIS LEVEL. ALL POSTS NOT SPECIFIED SHALL BE (2) 2x U.O.N. SOLID SAWN MEMBERS OF EQUIVALENT SIZE MAY BE SUBSTITUTED FOR BUILT-UP MEMBERS (SUCH AS A 4x6 FOR (3) 2x4).
11. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL FLOOR BEAMS AND ALL POSTS ABOVE FOR FULL BEARING. PROVIDE BLKG. AT JOISTS PER DETAIL 7/S4.1.
12. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x10 FOR EXTERIOR BEARING WALLS AND (2) 2x10 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
13. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
14. ALIGN A JOIST OR JOIST BLOCKING OVER THE FULL LENGTH OF ALL BEARING/SHEAR WALLS. SEE 8/S4.0 FOR SPECIAL SHEAR WALL BLOCKING REQUIREMENTS.
15. SW-x — INDICATES SHEAR WALL AT THIS LEVEL. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS. ALL EXTERIOR WALLS SHALL BE SHEATHED PER SW-6 CRITERIA, U.O.N.
16. HDUx — INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.
17. CSxx/CMxx — INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.

KEY NOTES:

1 — STRAPPING AROUND SHEAR WALL OPENING PER 1/S4.3

LEGEND:

- INDICATES FRAMING DIRECTION
- INDICATES EXTENT OF FRAMING
- SW-x — INDICATES SHEAR WALL TYPE AT THIS LEVEL. SEE PLAN NOTE 15
- INDICATES WOOD BEARING OR SHEAR WALL AT THIS LEVEL. SEE PLAN NOTES 9 & 15
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW
- INDICATES NON-BEARING/ NON-SHEAR WALL AT THIS LEVEL. SEE 1 & 2/S4.1 FOR CONNECTION DETAILS
- INDICATES HEADER MEMBER. SEE PLAN NOTE 13
- (8)2x — INDICATES MULTIPLE STUD POST AT THIS LEVEL. SEE PLAN NOTE 12
- XX — INDICATES HOLDOWN TYPE AT THIS LEVEL. SEE PLAN NOTES 16 & 17
- INDICATES ROOF OVERFRAMING PER DETAIL 4/S4.4

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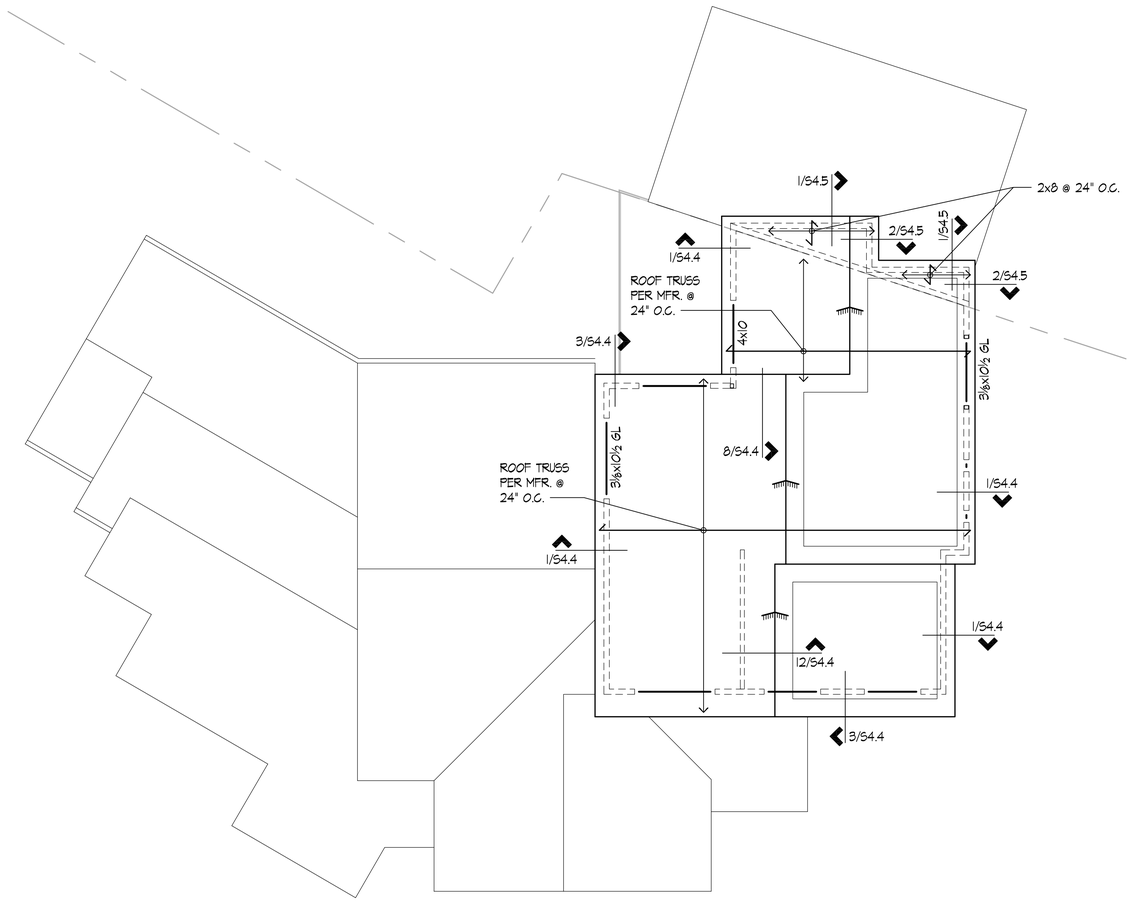
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SECOND LEVEL / LOWER ROOF FRAMING PLAN

SHEET: S2.2

File: 271-s202.dwg Plotted: Fri, 05/19/2023 11:45 am



ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.3 FOR TYPICAL WOOD DETAILS.
3. TYPICAL ROOF FRAMING CONSISTS OF 15/32" APA RATED SHEATHING (INDEX 32/16), LAID FACE GRAIN PERPENDICULAR OVER PRE-FABRICATED ROOF TRUSSES AND 2x FRAMING @ 24" O.C., U.O.N. (SEE THE STRUCTURAL GENERAL NOTES FOR TRUSS DESIGN CRITERIA).
4. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131"Ø x 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS (UNBLOCKED). SEE DETAIL 6/S4.0.
5. PROVIDE SOLID BLOCKING BETWEEN EACH ROOF JOIST OR TRUSS AT SUPPORTS. PROVIDE AN H1 CLIP AT EVERY MEMBER TO TOP PLATE.
6. ALL HEADERS NOT SHOWN ON PLAN SHALL BE (2) 2x10 FOR EXTERIOR BEARING WALLS AND (2) 2x10 FOR INTERIOR BEARING WALLS. SEE 10/S4.1 FOR HEADER DETAIL.
7. PROVIDE SOLID OR BUILT-UP WOOD POSTS BENEATH THE ENDS OF ALL ROOF BEAMS FOR FULL BEARING.
8. FOR TOP PLATE SPLICE SEE DETAIL 6/S4.1.
9. ATTACH NON-BEARING INTERIOR WALLS TO BOTTOM OF TRUSSES WITH STC CLIPS AT 48" O.C. INSTALL IN ACCORDANCE WITH MFR. RECOMMENDATIONS. SEE DETAIL 9/S4.4.
10. PROVIDE 5 PSF OF ALLOWANCE FOR SOLAR PANEL ON THE ROOF TRUSSES.

LEGEND:

- INDICATES FRAMING DIRECTION
- INDICATES EXTENT OF FRAMING
- INDICATES WOOD BEARING WALL OR SHEAR WALL BELOW
- INDICATES ROOF OVERFRAMING PER DETAIL 4/S4.4
- INDICATES HEADER MEMBER. SEE PLAN NOTE 6

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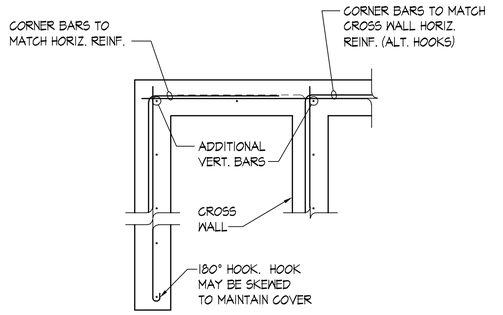
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ROOF FRAMING PLAN

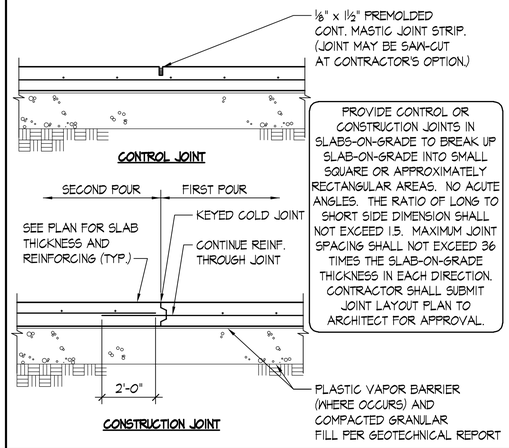
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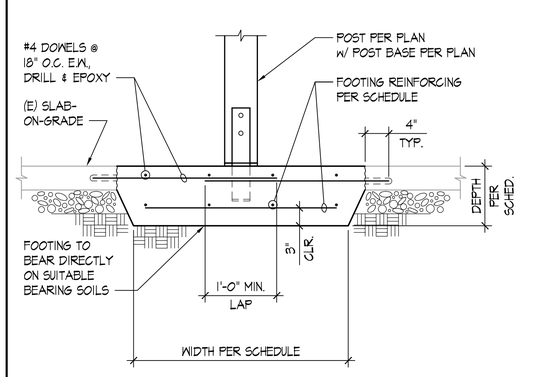
1 TYPICAL CORNER BAR AND WALL END BAR ARRANGEMENT AT CONCRETE WALLS OR FOOTINGS

SCALE: NONE



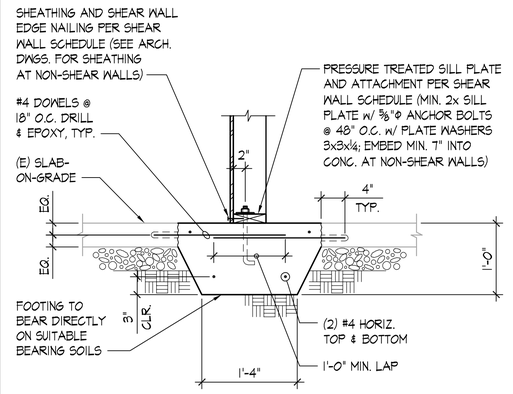
2 TYPICAL SLAB-ON-GRADE JOINTS

SCALE: NONE



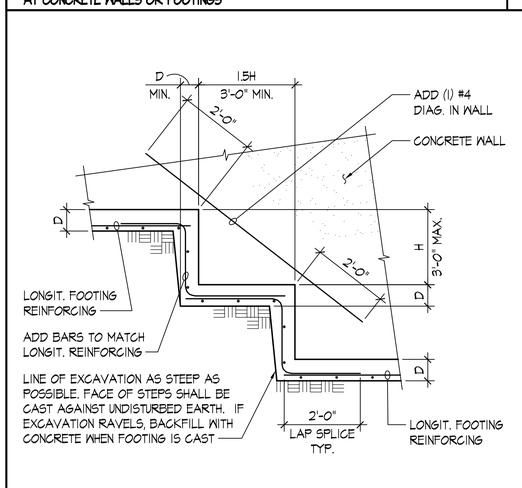
3 TYPICAL SPREAD FOOTING AT EXISTING SLAB-ON-GRADE

SCALE: NONE



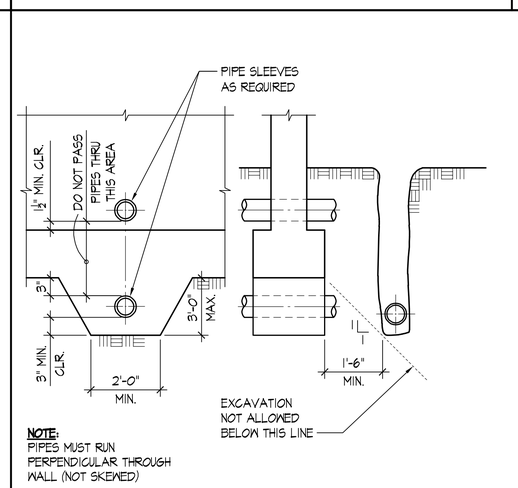
4 TYPICAL INTERIOR WALL FOUNDATION AT EXISTING CONCRETE

SCALE: NONE



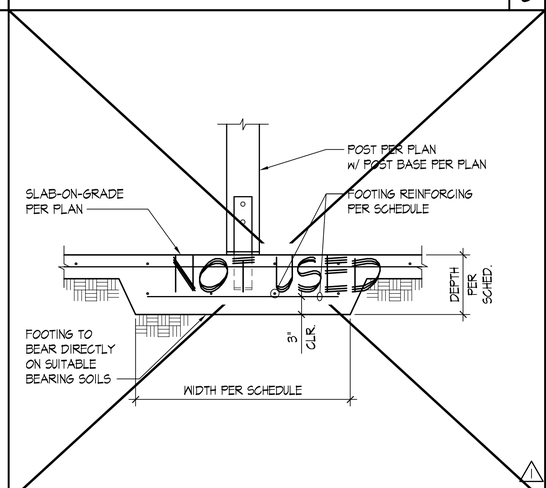
5 TYPICAL STEPPED FOOTING

SCALE: NONE



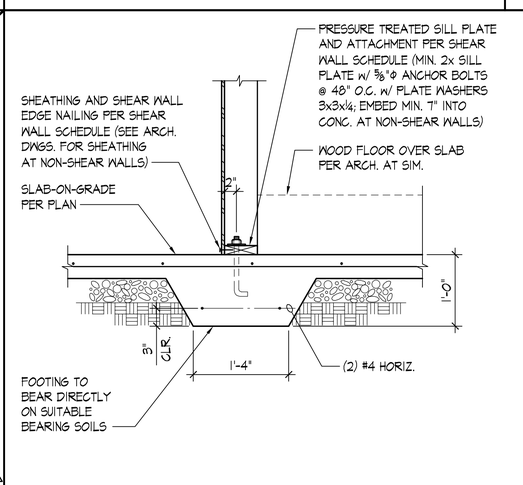
6 TYPICAL PIPE AND TRENCH LOCATIONS PERPENDICULAR TO FOOTING

SCALE: NONE



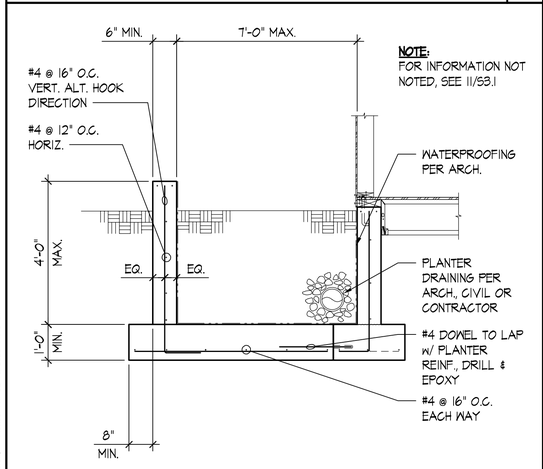
7 TYPICAL SPREAD FOOTING AT SLAB-ON-GRADE

SCALE: NONE



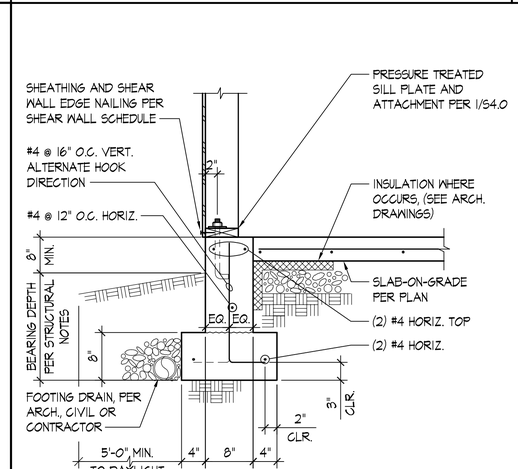
8 TYPICAL INTERIOR WALL FOUNDATION (THICKENED SLAB)

SCALE: NONE



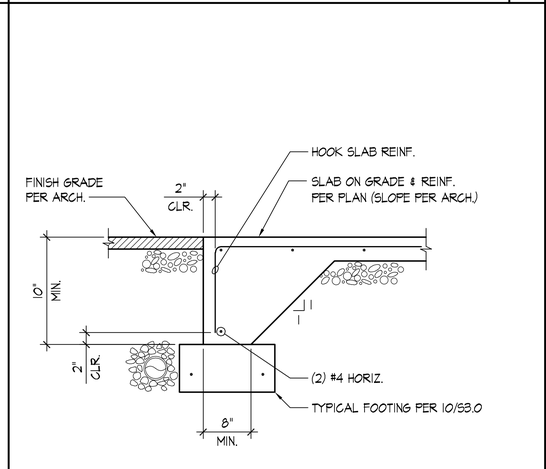
9 BIO PLANTER

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



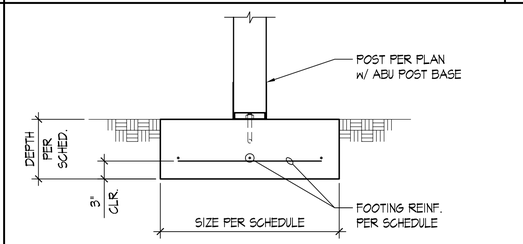
10 TYPICAL PERIMETER WALL FOUNDATION AT SLAB-ON-GRADE

SCALE: NONE



11 TYPICAL THICKENED SLAB AT DOOR

SCALE: NONE



MARK	SIZE	DEPTH	REINFORCING	REMARKS
F2.0	2'-0" x 2'-0"	10"	(2) #4 EA. WAY	.
F2.5	2'-6" x 2'-6"	10"	(3) #4 EA. WAY	.
F3.0	3'-0" x 3'-0"	12"	(4) #4 EA. WAY	.
F4.0	4'-0" x 4'-0"	12"	(6) #4 EA. WAY	.

12 SPREAD FOOTING SCHEDULE

SCALE: NONE

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REVISIONS:

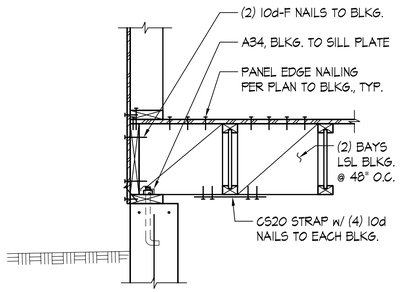
Mark	Date	
1	08/12/22	PERMIT CORRECTION
2	05/19/23	DESIGN REVISIONS

PERMIT SET 02-04-22

TYPICAL FOUNDATION/SLAB DETAILS

SHEET:
S3.0

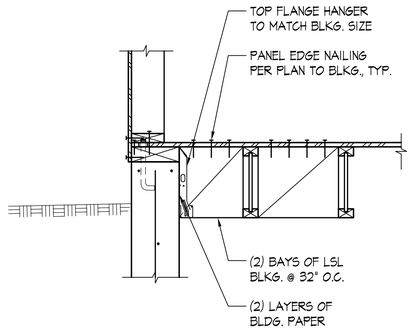
File: 271-s300.dwg Plotted: Fri, 05/19/2023 11:45 am



NOTE: SEE I-JOIST PERPENDICULAR DETAIL (BELOW) FOR FOUNDATION AND INFORMATION NOT NOTED

TYPICAL FOUNDATION - I-JOIST PARALLEL SCALE: NONE | 1

DETAIL SCALE: 1"=1'-0" | 2

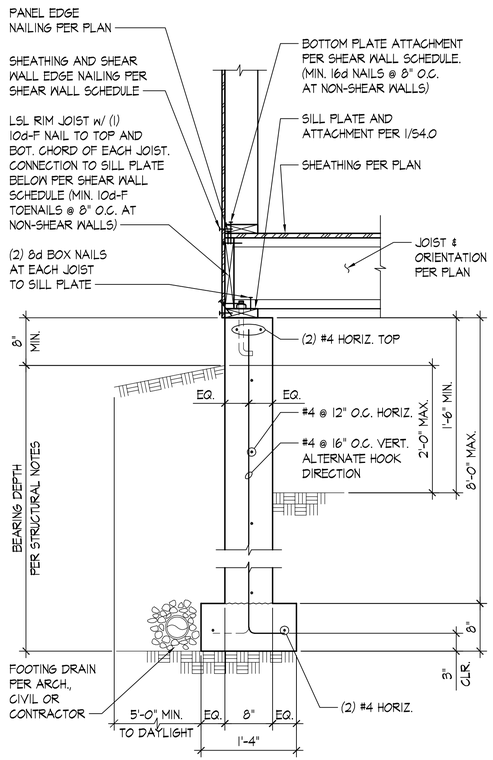


NOTE: SEE I-JOIST PERPENDICULAR DETAIL (BELOW) FOR FOUNDATION AND INFORMATION NOT NOTED

TYPICAL FOUNDATION - I-JOIST PARALLEL W/ HANGER SCALE: NONE | 3

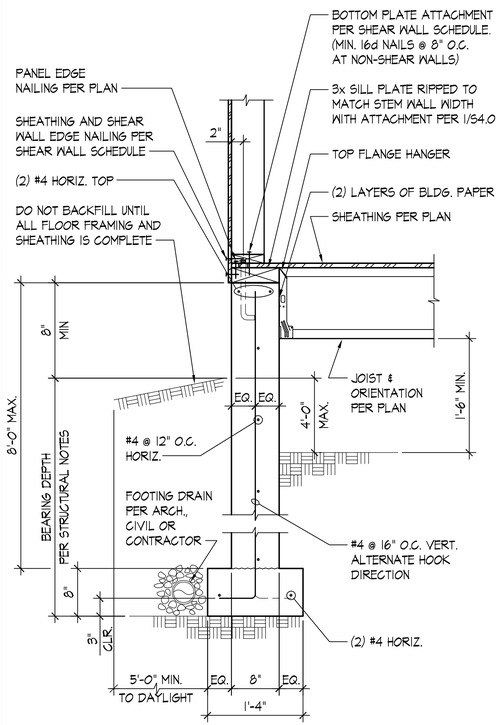
DETAIL SCALE: 1"=1'-0" | 4

NOTE:
SEE ARCH. OR CONTRACTOR DESIGN FOR VENTING REQUIREMENTS (DO NOT INTERRUPT NAILING, PROVIDE 1½" MIN. CLR. FROM TOP & BOTTOM OF RIM)



TYPICAL FOUNDATION - I-JOIST PERPENDICULAR SCALE: NONE | 9

DETAIL SCALE: 1"=1'-0" | 10



TYPICAL FOUNDATION - I-JOIST PERPENDICULAR W/ HANGER SCALE: NONE | 11

DETAIL SCALE: 1"=1'-0" | 12

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Mark	Date	
1	08/12/22	PERMIT CORRECTION
2	05/19/23	DESIGN REVISIONS

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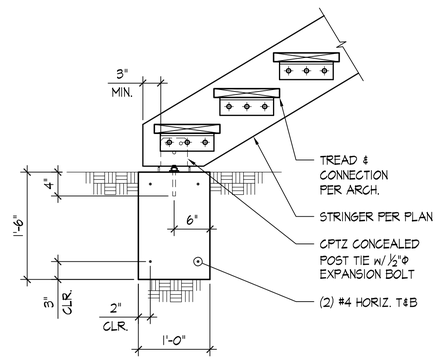
TYPICAL CRAWLSPACE DETAILS

SHEET:
S3.1

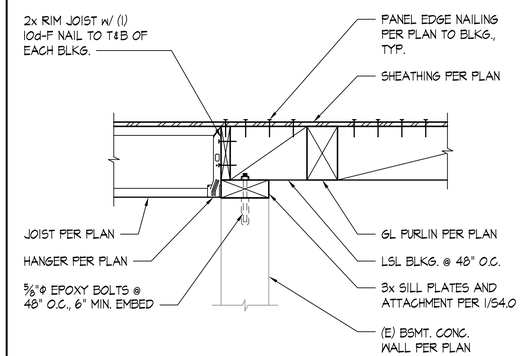
File: 271-s301.dwg Plotted: Fri, 05/19/2023 11:45 am

DETAIL SCALE: NONE | 1

DETAIL SCALE: NONE | 2

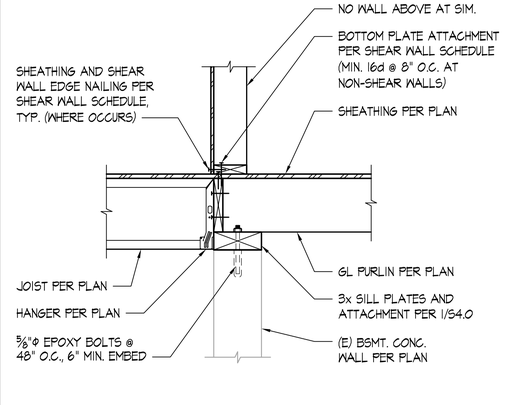


DETAIL SCALE: NONE | 3



NOTE:
CONTRACTOR TO VERIFY
(E) CONC. WALL HEIGHT

DETAIL SCALE: NONE | 4



NOTE:
CONTRACTOR TO VERIFY
(E) CONC. WALL HEIGHT

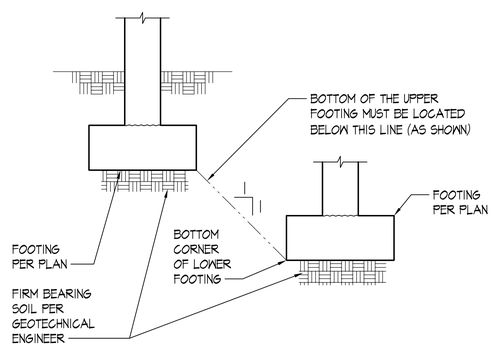
DETAIL SCALE: NONE | 5

TYPICAL EXTERIOR WOOD STAIR FOUNDATION SCALE: NONE | 6

TOP OF BASEMENT WALL WITH I-JOISTS PERPENDICULAR AND GLULAM PURLINS PARALLEL SCALE: NONE | 7

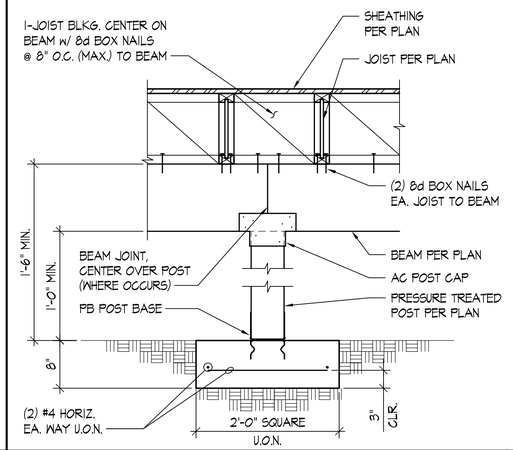
TOP OF BASEMENT WALL WITH I-JOISTS AND GLULAM PURLINS PERPENDICULAR SCALE: NONE | 8

DETAIL SCALE: NONE | 9

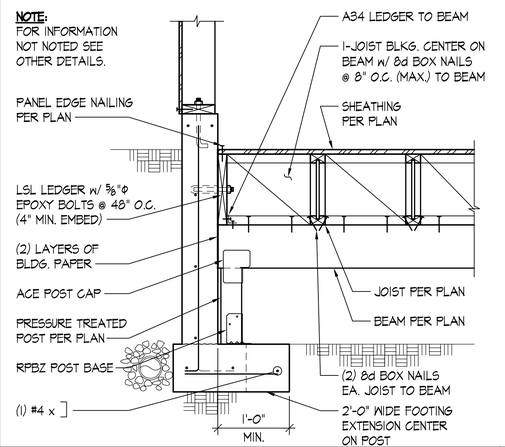


VERTICAL OFFSET OF ADJACENT FOOTINGS SCALE: NONE | 10

TYPICAL CRAWL SPACE SPREAD FOOTING (I-JOIST ON BEAM) SCALE: NONE | 11



TYPICAL CRAWL SPACE POST AT FOUNDATION WALL (I-JOIST ON BEAM) EXTERIOR GRADE HIGH SCALE: NONE | 12



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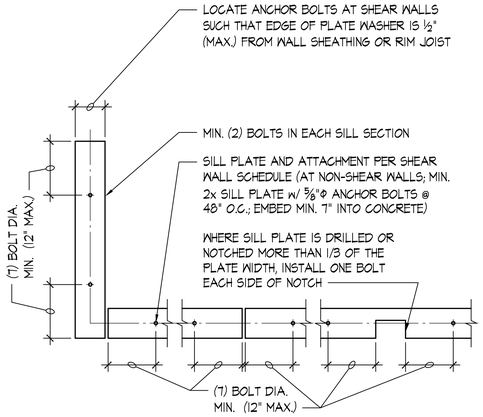
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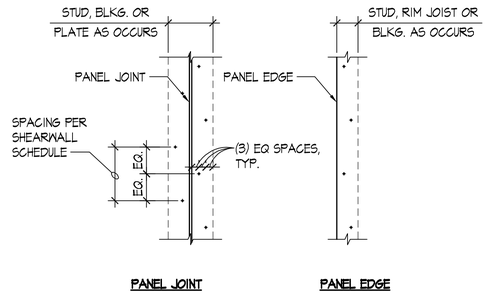
PERMIT SET 02-04-22

DETAILS

SHEET:
S3.2



TYPICAL SILL PLATE BOLTING - PLAN VIEW SCALE: NONE | 1



NOTE:
STAGGER EA. LINE OF NAILING (AT ALL PANEL EDGES) AS INDICATED

TYPICAL STAGGERED NAILING SCALE: NONE | 2

SHEAR WALL SCHEDULE

SHEAR WALL TYPE	SHEAR WALL SHEATHING (1)	PANEL EDGE FRAMING (2)(7)	PANEL EDGE NAILING (3)	BOTTOM PLATE ATTACHMENT			TOP PLATE ATTACHMENT	
				2x BOTTOM PLATE CONNECTION TO RIM JOIST OR BLOCKING BELOW	ANCHOR BOLTING OF SILL PLATE TO CONCRETE BELOW (4)(5)		RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE (6)	
					3x PLATE	2x PLATE	INTERIOR WALL	EXTERIOR WALL
SW-6	7/16" APA ONE-SIDE SHTG.	2x	0.131"Φx2½" @ 6" O.C.	0.148"Φx3¼" @ 6" O.C. (9)	⅝"Φ @ 48" O.C.	⅝"Φ @ 48" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.
SW-4	7/16" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.131"Φx2½" @ 4" O.C. (8)	0.148"Φx3¼" @ 4" O.C. (9)	⅝"Φ @ 48" O.C.	⅝"Φ @ 32" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.
SW-3	7/16" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.131"Φx2½" @ 3" O.C. (8)	0.148"Φx3¼" @ 3" O.C. (9)	⅝"Φ @ 32" O.C.	⅝"Φ @ 24" O.C.	A35 @ 12" O.C.	LTP4 @ 12" O.C.

NOTES:

(1) INSTALL PANEL SHEATHING EITHER HORIZONTALLY OR VERTICALLY FOR THE ENTIRE LENGTH OF THE WALL PER PLAN. WALL STUD SPACING SHALL BE 16" O.C. MAXIMUM.

(2) ALL INTERMEDIATE WALL STUDS SHALL BE PER PLAN. PROVIDE BACKING FRAMING AT ALL PANEL EDGES INCLUDING HORIZONTAL BLOCKING PER THE SCHEDULE.

(3) PROVIDE NAILING TO ALL PANEL EDGES, TOP & BOTTOM PLATES AND HORIZONTAL BLOCKING. PROVIDE THE SAME NAILING PATTERN TO EACH MULTIPLE STUD OF THE BUILT-UP HOLD DOWN POST. NAIL PANEL TO INTERMEDIATE FRAMING MEMBERS w/ 0.131"Φ x 2½" @ 12" O.C.

(4) EMBED CAST-IN-PLACE 5/8"Φ ANCHOR BOLTS 7" MIN. (OR EMBED ADHESIVE ANCHOR BOLTS 5 1/2" IN (E) CONCRETE; SEE STRUCTURAL NOTES). PROVIDE PLATE WASHER 3" x 3" x 1/4" AT EACH ANCHOR BOLT. SILL PLATES SHALL BE TREATED PER GENERAL NOTES, AND SHALL BE 2x OR 3x PER THE SCHEDULE. SEE DETAIL 1/S4.0 FOR OTHER REQUIREMENTS.

(5) PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

(6) PROVIDE 0.131"Φ x 1-1/2" LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"Φ x 2-1/2" LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/S4.1 FOR TOP PLATE SPLICE.

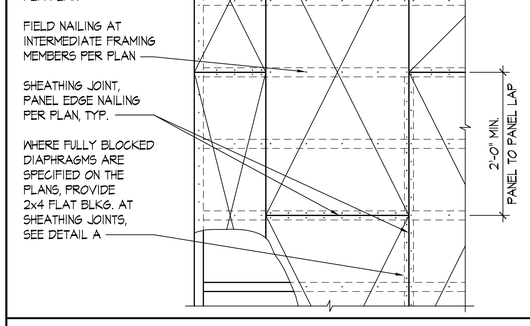
(7) ALTERNATIVE TO 3x STUDS AND 3x HORIZ. BLOCKING IS (2) 2x STUDS/BLKG. NAILED TOGETHER WITH 0.148"Φ x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).

(8) STAGGER NAILS PER 2/S4.0.

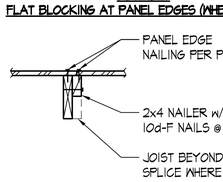
(9) RIM JOIST/BLOCKING MINIMUM WIDTH OF 1¾". STAGGER NAILS PER 2/S4.0 WHERE SPACING IS LESS THAN 6" O.C.

(10) STAGGER ANCHOR BOLTS ON EITHER SIDE OF SILL PLATE AS NOTED ON 1/S4.0.

SHEAR WALL SCHEDULE - 8d NAILS SCALE: NONE | 8



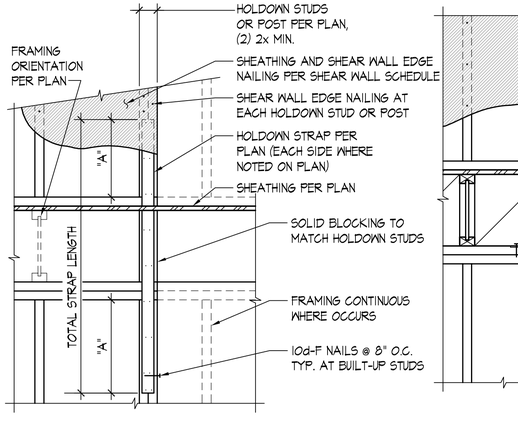
TYPICAL ROOF AND FLOOR DIAPHRAGM SHEATHING SCALE: NONE | 6

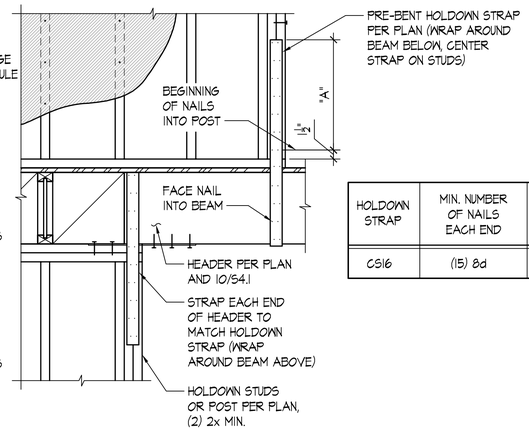


DETAIL A
FLAT BLOCKING AT PANEL EDGES (WHERE REQD.)

DETAIL B
PANEL EDGE NAILING AT JOIST SPLICE

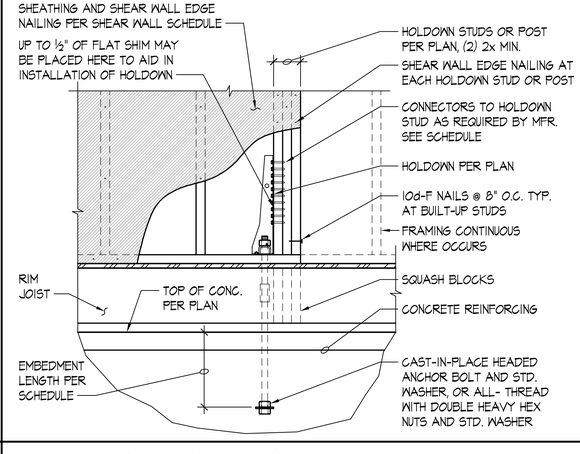
NOTES:
1. RUN LONG DIMENSION OF SHEATHING PANELS PERPENDICULAR TO FRAMING.
2. WHERE FRAMING LAP SPLICE AND SHEATHING JOINTS ARE OFFSET, SEE DETAIL B ABOVE.





HOLDOWN STRAP	MIN. NUMBER OF NAILS EACH END	MIN. STRAP END LENGTH "A"
CS16	(15) 8d	1'-4"

TYPICAL FLOOR TO FLOOR HOLDOWN STRAP & FLOOR TO HEADER HOLDOWN STRAP SCALE: NONE | 10



HOLDOWN	ANCHOR BOLT Φ	ANCHOR BOLT IN CONCRETE EMBED LENGTH	CONNECTORS TO HOLDOWN STUDS
HDU2	⅝"Φ	13"	(6) ¼"x2½" SDS
HDU4	⅝"Φ	13"	(10) ¼"x2½" SDS
HDU5	⅝"Φ	13"	(14) ¼"x2½" SDS

NOTE:
PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

TYPICAL HOLDOWN TO CONCRETE AT RIM JOIST SCALE: NONE | 12

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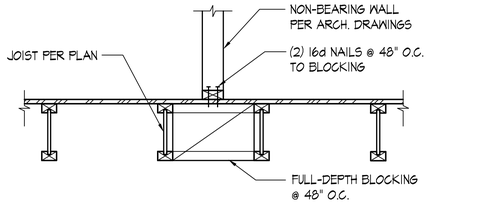
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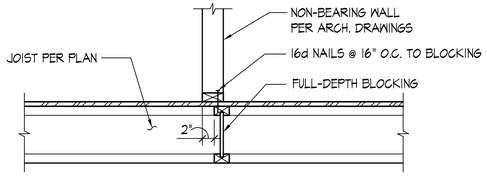
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TYPICAL WOOD DETAILS

SHEET:
S4.0

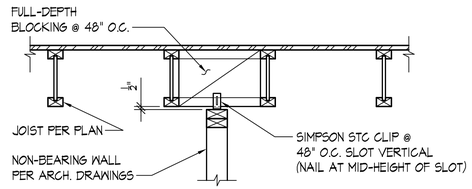


WALL PARALLEL TO FLOOR FRAMING

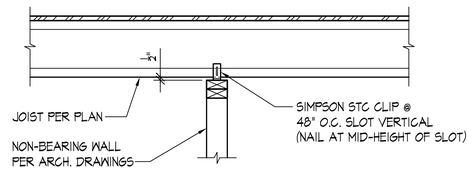


WALL PERPENDICULAR TO FLOOR FRAMING

TYPICAL NON-STRUCTURAL WALL SUPPORT (BOTTOM) - I-JOIST SCALE: NONE | 1



WALL PARALLEL TO ROOF/FLOOR FRAMING



WALL PERPENDICULAR TO ROOF/FLOOR FRAMING

TYPICAL NON-STRUCTURAL WALL SUPPORT (TOP) - I-JOIST SCALE: NONE | 2

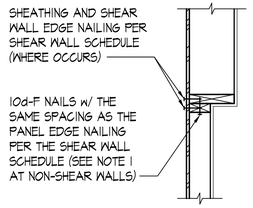
CEILING JOIST SCHEDULE	
SIZE	MAX. SPAN
2x4 @ 24" O.C. 2x4 @ 16" O.C.	8'-0" 9'-2"
2x6 @ 24" O.C. 2x6 @ 16" O.C.	12'-6" 14'-4"
2x8 @ 24" O.C. 2x8 @ 16" O.C.	16'-6" 19'-0"
2x10 @ 24" O.C. 2x10 @ 16" O.C.	21'-2" 24'-3"

NOTES:
CEILING JOIST TABLE BASED ON HF #2, Fb=850 PSI (REPETITIVE MEMBER USE), Fv = 150 PSI
$E=1.3X10^6$ PSI, DEFL. < L/240

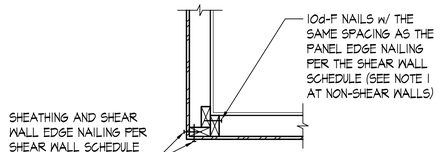
ATTIC LIVE LOAD = 10.0 PSF
CEILING DEAD LOAD = 5.0 PSF

CEILING JOIST SCHEDULE SCALE: NONE | 3

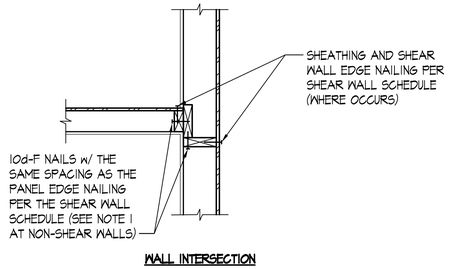
NOTES:
1. AT NON-SHEAR WALLS, NAIL STUDS TOGETHER WITH 10d-F NAILS @ 8" O.C.
2. ADDITIONAL STUDS REQUIRED AS NAILERS, ETC. ARE NOT SHOWN.



VARYING WALL SIZE

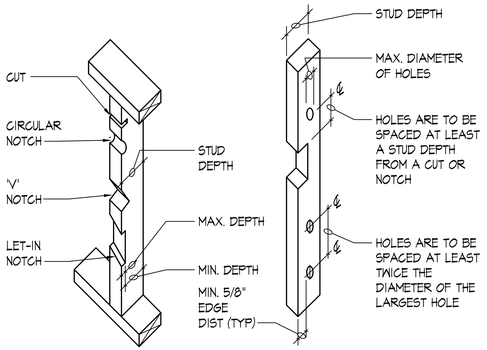


WALL CORNER



WALL INTERSECTION

TYPICAL WALL INTERSECTIONS - RESIDENTIAL SCALE: NONE | 8



A. CUTTING AND NOTCHING WOOD STUDS
(DO NOT NOTCH MORE THAN 3 ADJACENT STUDS w/o REVIEW BY ENGINEER)

BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	1/8"	2-3/8"
2x6	1-3/8"	4-1/8"
2x8	1-7/8"	5-3/8"

NON-BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	1-1/2"	2"
2x6	2-3/8"	3-1/8"
2x8	3"	4-1/4"

B. HOLES IN WOOD STUDS

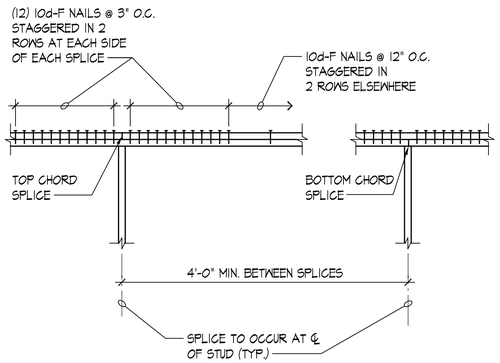
BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	1-1/2"
2x6	2-3/8"
2x8	3"

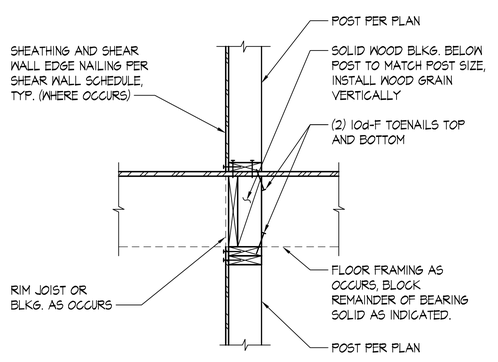
NON-BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	2-1/4"
2x6	3-3/8"
2x8	4-1/2"

TYPICAL ALLOWABLE HOLES AND NOTCHES IN STUDS SCALE: NONE | 9

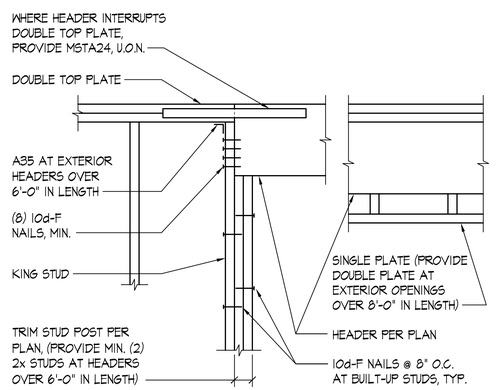


TYPICAL TOP PLATE SPLICE SCALE: NONE | 6

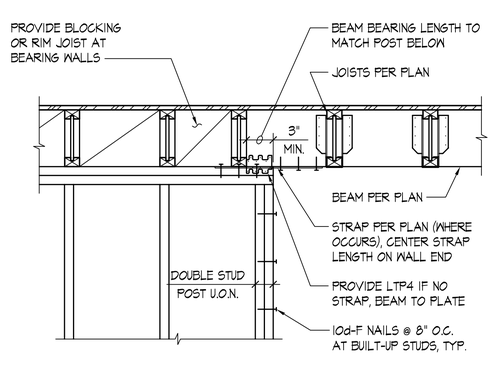


NOTE:
FRAMING CONDITIONS VARY, FOR INFORMATION NOT NOTED SEE PLAN & APPROPRIATE DETAILS

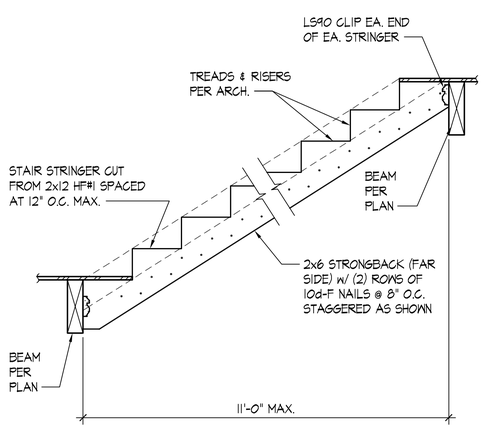
TYPICAL POST AT FLOOR SCALE: NONE | 7



TYPICAL HEADER SCALE: NONE | 10



TYPICAL FLUSH BEAM SCALE: NONE | 11



TYPICAL STAIR STRINGER SCALE: NONE | 12

File: 271-4401.dwg Plotted: Fri, 05/19/2023 11:45 am

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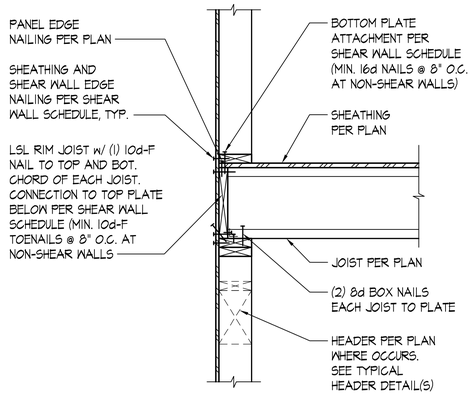
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Mark	Date	
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2	05/19/23	DESIGN REVISIONS

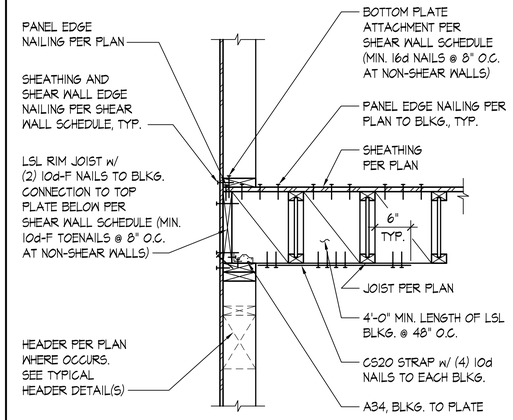
PERMIT SET 02-04-22

TYPICAL WOOD DETAILS

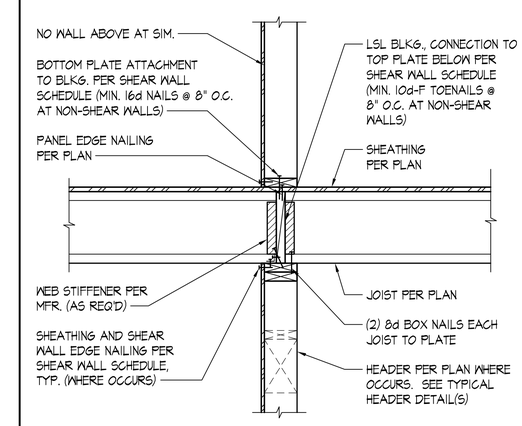
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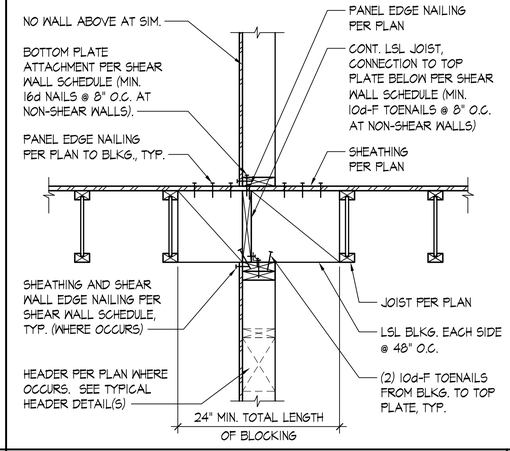
TYPICAL EXTERIOR WALL - I-JOIST PERPENDICULAR — SCALE: NONE | 1



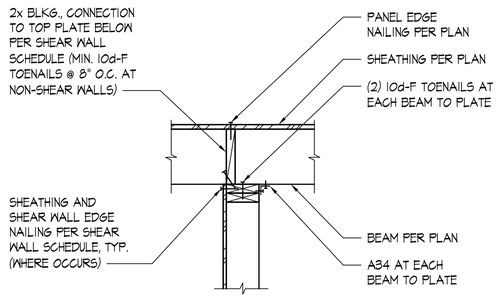
TYPICAL EXTERIOR WALL - I-JOIST PARALLEL — SCALE: NONE | 2



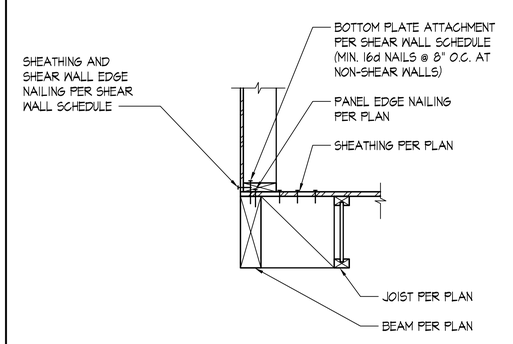
TYPICAL INTERIOR WALL - I-JOIST PERPENDICULAR — SCALE: NONE | 3



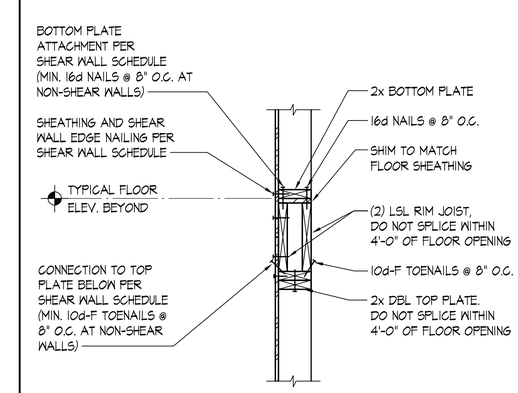
TYPICAL INTERIOR WALL - I-JOIST PARALLEL — SCALE: NONE | 4



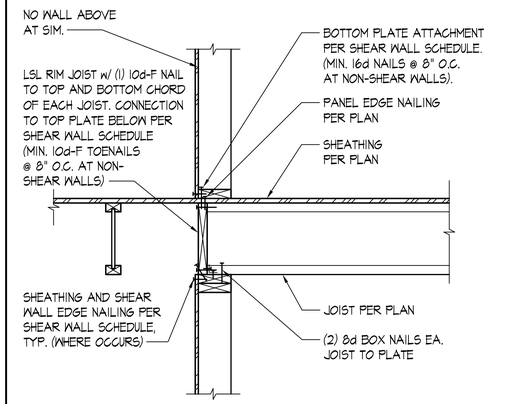
GLULAM JOISTS ON THE STRUCTURAL WALL — SCALE: NONE | 5



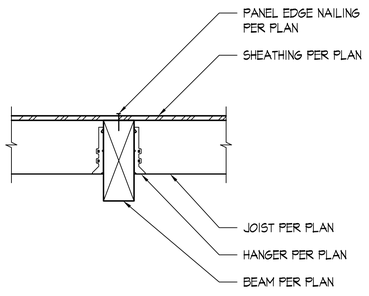
STRUCTURAL WALL TO PARALLEL BEAM BELOW — SCALE: NONE | 6



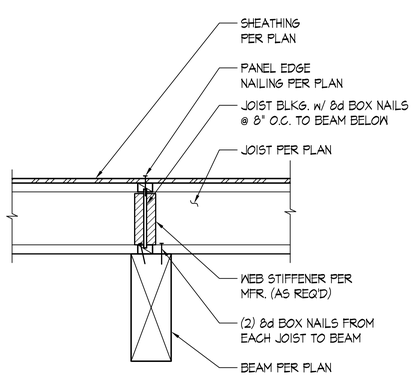
EXTERIOR WALL AT FLOOR OPENING - I-JOIST — SCALE: NONE | 7



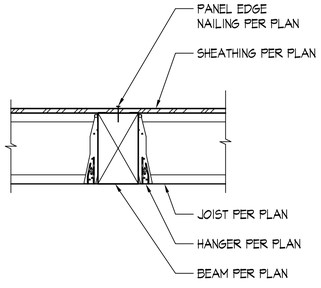
TYPICAL INTERIOR WALL WITH I-JOISTS PERPENDICULAR AND PARALLEL — SCALE: NONE | 8



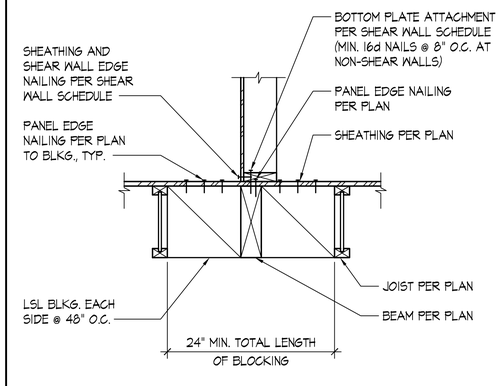
GLULAM JOISTS TO GLULAM BEAM CONNECTION — SCALE: NONE | 9



TYPICAL I-JOIST TO DROP BEAM CONNECTION — SCALE: NONE | 10



TYPICAL I-JOIST TO FLUSH BEAM CONNECTION — SCALE: NONE | 11



TYPICAL STRUCTURAL WALL TO PARALLEL BEAM BELOW - I-JOIST PARALLEL — SCALE: NONE | 12

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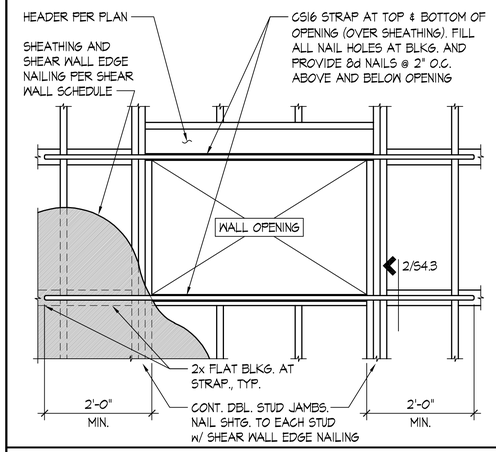
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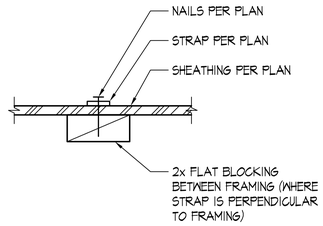
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TYPICAL FLOOR DETAILS

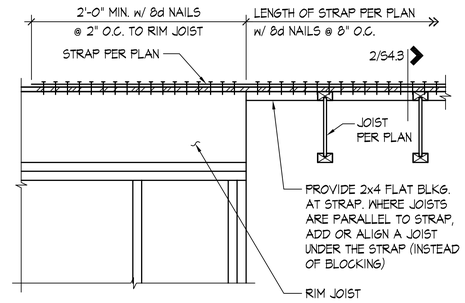
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S4.2



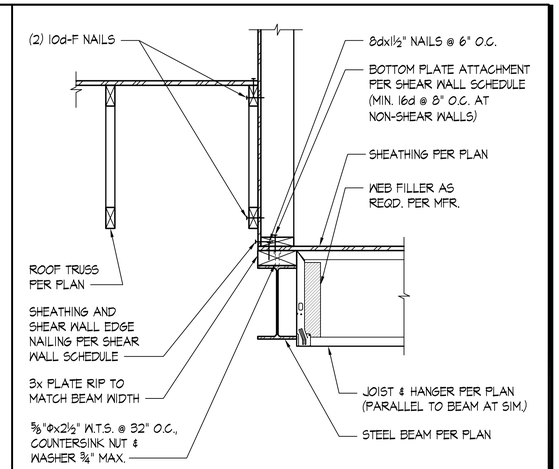
STRAPPING AROUND SHEAR WALL OPENING — SCALE: NONE — 1



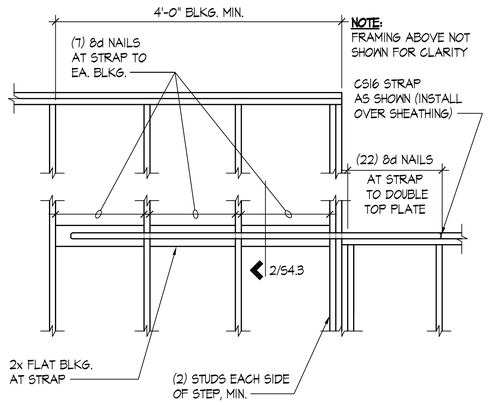
STRAP TO BLOCKING DETAIL — SCALE: NONE — 2



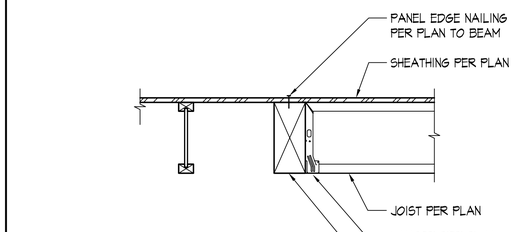
TYPICAL DRAG STRUT DETAIL — SCALE: NONE — 3



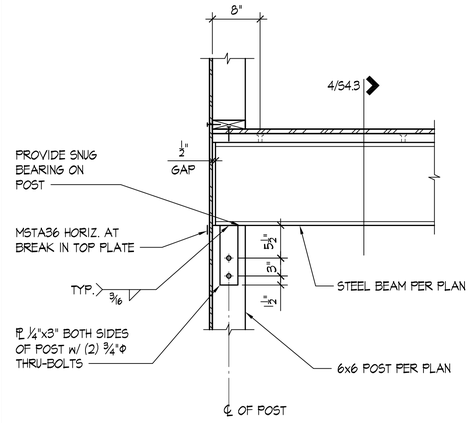
TYPICAL WOOD JOIST TO STEEL BEAM w/ 2x PLATE — SCALE: NONE — 4



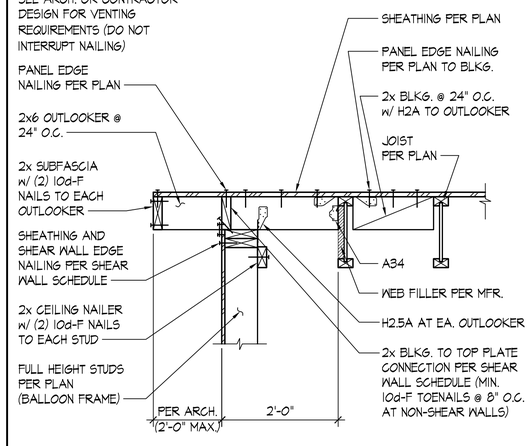
TYPICAL PLATE HEIGHT STEP — SCALE: NONE — 5



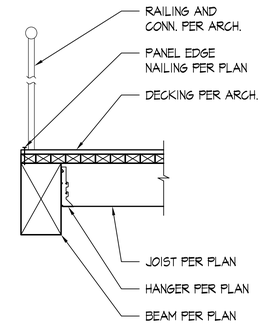
FLUSH BEAM AT JOIST DIRECTION CHANGE — SCALE: NONE — 6



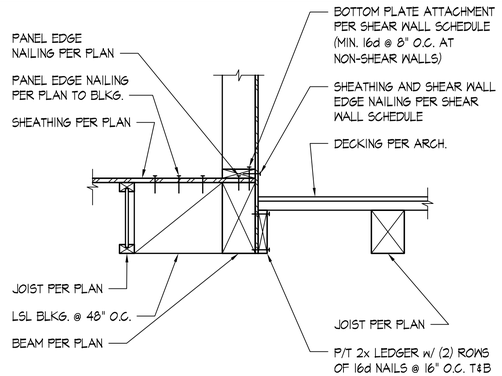
TYPICAL WOOD POST SUPPORTING STEEL BEAM — SCALE: NONE — 7



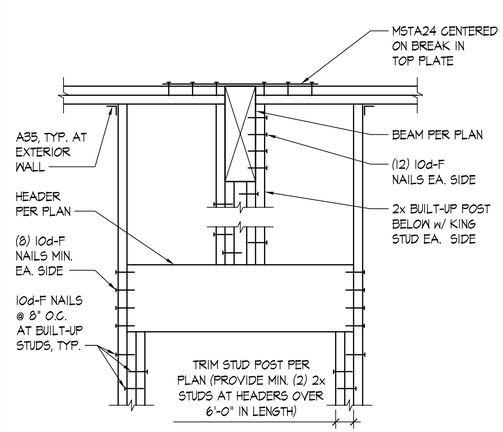
TYPICAL EXTERIOR WALL TO 2x ROOF OUTLOOKER - I-JOIST PARALLEL — SCALE: NONE — 8



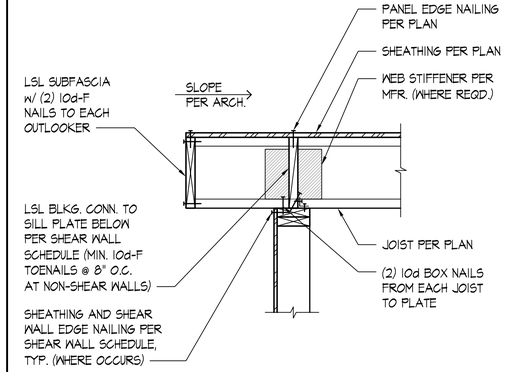
TYPICAL DECK EDGE - JOIST PERPENDICULAR TO BEAM SUPPORT — SCALE: NONE — 9



TYPICAL DECK EDGE - JOIST PARALLEL TO BEAM SUPPORT — SCALE: NONE — 10



TYPICAL DROP BEAM TO WALL SUPPORT (OVER HEADER) — SCALE: NONE — 11



TYPICAL FLAT ROOF - I-JOIST PERPENDICULAR TO WALL — SCALE: NONE — 12

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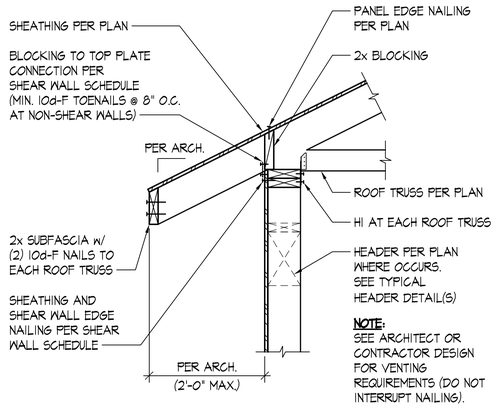
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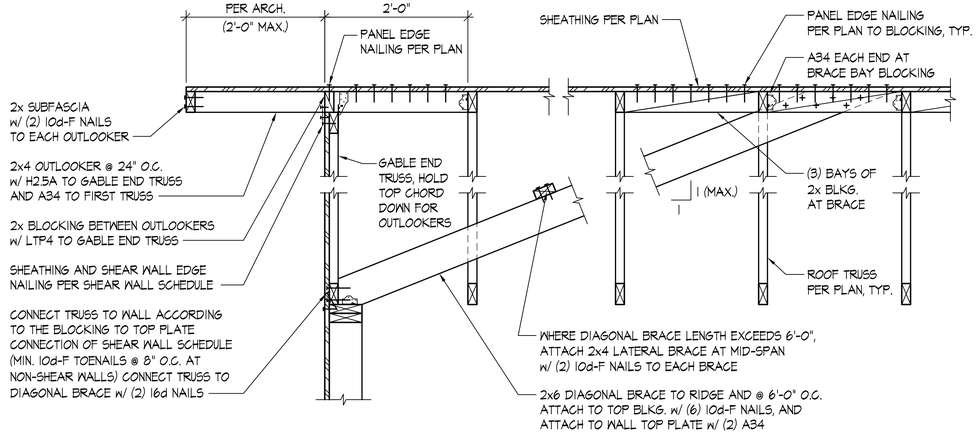
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TYPICAL DETAILS

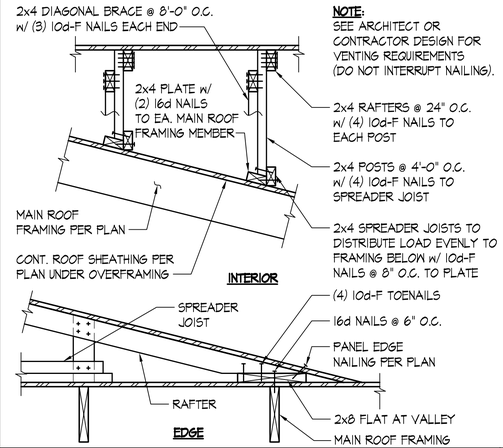
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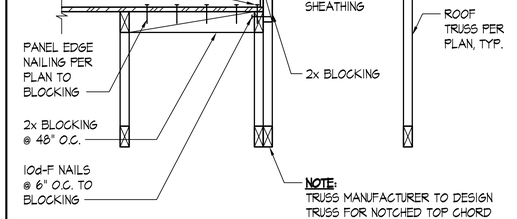
TYPICAL ROOF TRUSS TO EXTERIOR WALL - TRUSS PERPENDICULAR SCALE: NONE | 1



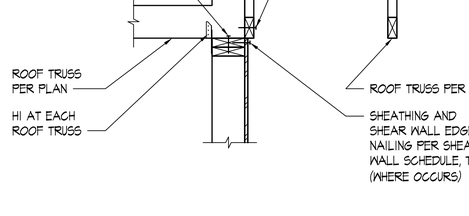
TYPICAL ROOF TRUSS TO EXTERIOR WALL - TRUSS PARALLEL SCALE: NONE | 3



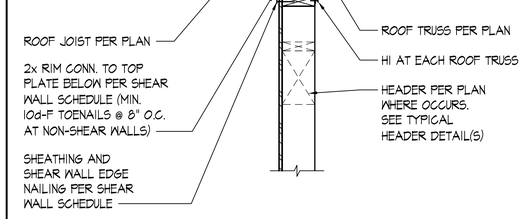
TYPICAL ROOF OVERFRAMING SCALE: NONE | 4



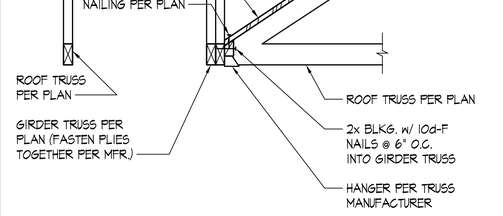
TYPICAL ROOF STEP - TRUSS PARALLEL SCALE: NONE | 5



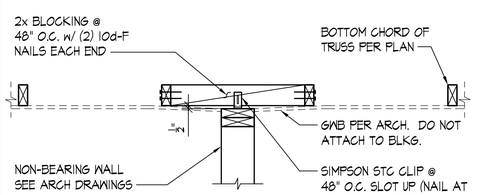
ROOF TRUSS - TRUSS PARALLEL AND PERPENDICULAR SCALE: 1"=1'-0" | 6



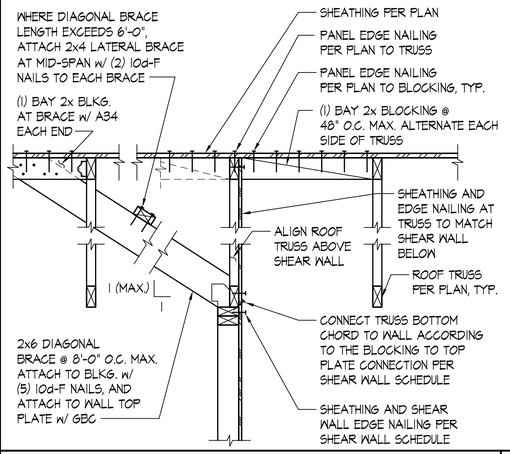
DETAIL SCALE: 1"=1'-0" | 7



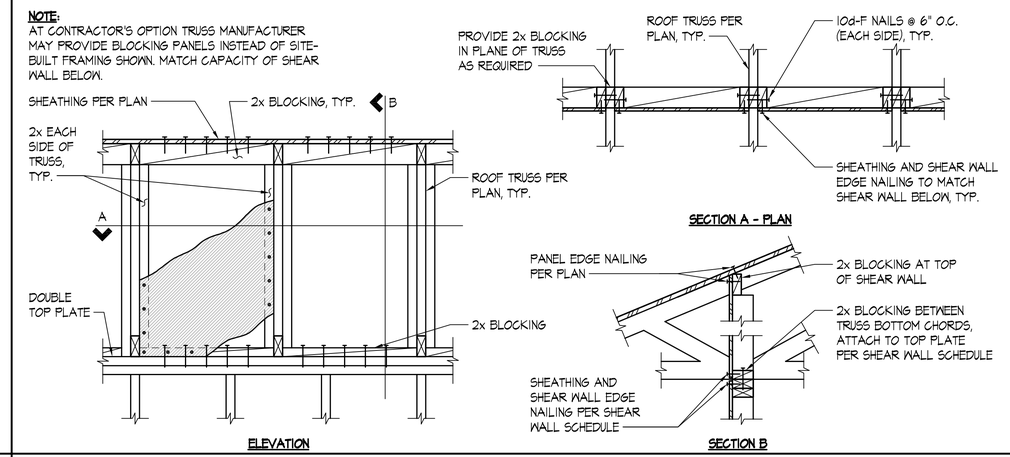
TYPICAL ROOF TRUSS TO GIRDER TRUSS SCALE: NONE | 8



TYPICAL NON-STRUCTURAL WALL SUPPORT (TOP) - TRUSS SCALE: NONE | 9



TYPICAL ROOF TRUSS TO INTERIOR SHEAR WALL - TRUSS PARALLEL SCALE: NONE | 10



TYPICAL ROOF TRUSS TO SHEAR WALL - TRUSS PERPENDICULAR SCALE: NONE | 12

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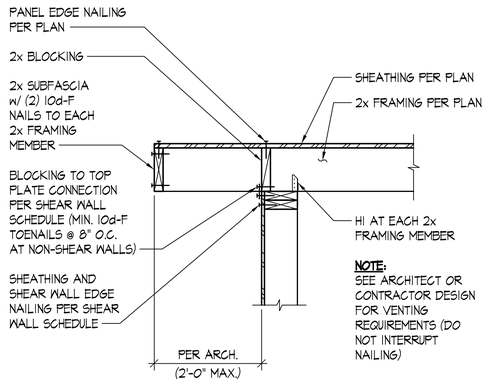
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2	05/19/23	DESIGN REVISIONS

PERMIT SET 02-04-22

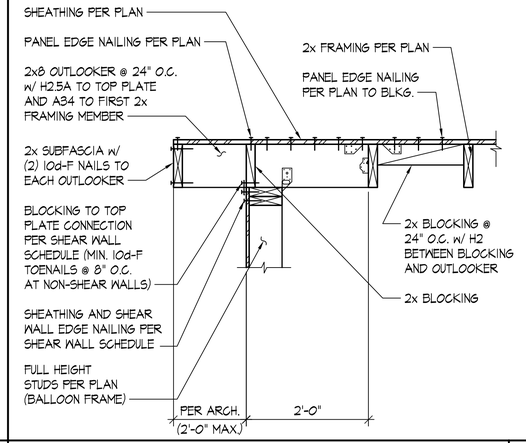
TYPICAL TRUSS DETAILS

SHEET: S4.4

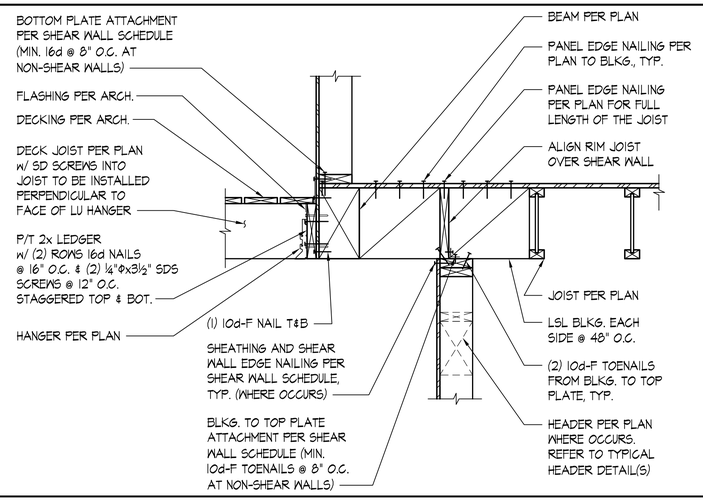
File: 271-s404.dwg Plotted: Fri, 05/19/2023 11:46 am



TYPICAL SLOPED ROOF FRAMING TO EXTERIOR WALL - 2x FRAMING PERPENDICULAR — SCALE: 1"=1'-0" — 1



TYPICAL EXTERIOR WALL TO 2x ROOF OUTLOOKER - 2x FRAMING PARALLEL — SCALE: 1"=1'-0" — 2

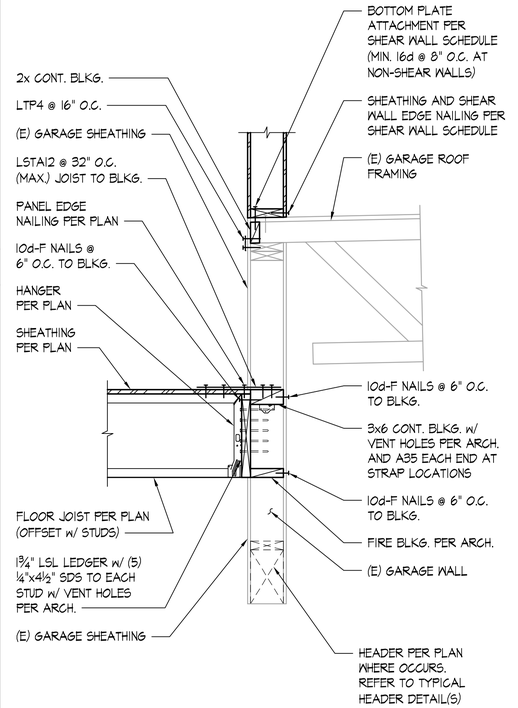


EXTERIOR WALL w/ BEAM SUPPORT PARALLEL TO I-JOISTS — SCALE: 1"=1'-0" — 4

DETAIL — SCALE: 1"=1'-0" — 5

DETAIL — SCALE: 1"=1'-0" — 6

DETAIL — SCALE: 1"=1'-0" — 7



DETAIL — SCALE: 1"=1'-0" — 12

DETAIL — SCALE: 1"=1'-0" — 9

DETAIL — SCALE: 1"=1'-0" — 10

DETAIL — SCALE: 1"=1'-0" — 11

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REVISIONS:

Mark	Date	
1	08/12/22	PERMIT CORRECTION
2	05/19/23	DESIGN REVISIONS

PERMIT SET 02-04-22

TYPICAL DETAILS

SHEET: S4.5

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