GENERAL NOTES

1. CODE COMPLIANCE:
ALL WORK SHALL COMPLY WITH THE 2021 WSEC, 2021 IRC, 2021 IMC, 2021 IFGC, 2021 UPC, 2021 IFC, 2021 IPMC, 2020 NEC, 2021 IECC WITH WA STATE AMENDMENTS, 2009 ICC A117.1, AND ALL LOCAL CODES AND ORDINANCES.

2. DIMENSIONS:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ARCHITECT OF DISCREPANCIES. IF WORK IS STARTED PRIOR TO NOTIFICATION, THE GENERAL AND SUBCONTRACTOR PROCEED AT THEIR OWN RISK.
UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO FACE OF STUDS OR FACE OF CONCRETE WALLS. FACE OF STONE VENEER LIES 6" +/- OUTSIDE THE FACE OF FRAMING. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED. VERIFY ALL ROUGH-IN DIMENSIONS FOR WINDOWS, DOORS, PLUMBING, ELECTRICAL FIXTURES AND APPLIANCES PRIOR TO COMMITMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OF DIMENSIONAL TOLERANCES REQUIRED.

3. DOCUMENT REVIEW/VERIFICATION:
CONSULT WITH ARCHITECT REGARDING ANY SUSPECTED ERRORS, OMISSIONS, OR CHANGES ON PLANS BEFORE PROCEEDING WITH THE WORK

4. ROUGH OPENINGS/BACKING:
VERIFY SIZE AND LOCATION, AS WELL AS PROVIDE ALL OPENINGS THROUGH FLOORS AND WALLS, FURRING, CURBS, ANCHORS, INSERTS, EQUIPMENT BASES AND ROUGH BUCKS/BACKING FOR SURFACE-MOUNTED ITEMS.

5. FURRING:
PROVIDE FURRING AS REQUIRED TO CONCEAL MECHANICAL AND/OR ELECTRICAL EQUIPMENT IN FINISHED AREAS. FURRING NOT SHOWN ON PLANS SHALL BE APPROVED BY ARCHITECT PRIOR TO CONSTRUCTION.

6. GRADES:
VERIFY ALL GRADES AND THEIR RELATIONSHIP TO THE BUILDING(S).

7. FLOOR LINES:
"FLOOR LINE" REFERS TO TOP OF CONCRETE SLAB OR TOP OF WOOD SUBFLOOR.

8. REPETITIVE FEATURES:
OFTEN DRAWN ONLY ONCE AND SHALL BE PROVIDED AS IF FULLY DRAWN.

9. DOORS:
DOORS NOT DIMENSIONALLY LOCATED SHALL BE 6" FROM STUD FACE TO EDGE OF DOOR, ROUGH OPENING OR CENTERED BETWEEN WALLS AS SHOWN.

10. WOOD MEMBERS IN CONTACT WITH CONCRETE, AND/OR EXPOSED TO WEATHER:
TO BE PRESSURE TREATED, TYPICAL. PROVIDE PRESSURE TREATED SILL PLATE IF FINISH GRADE IS WITHIN 8", TYPICAL.

11. FRAMING:
ALL NEW INTERIOR FRAME PARTITIONS TO BE 2X4 @ 16" O.C., & ALL NEW EXTERIOR FRAME PARTITIONS TO BE 2X6 @ 16" O.C., UNLESS OTHERWISE NOTED. VERIFY W/ STRUCTURAL DRAWINGS. EXISTING EXTERIOR WALLS ARE 2X4 STUDS @ 16" O.C., AND ARE TO REMAIN. NEW INTERMEDIATE FRAMING AT EXTERIOR WOOD WALLS REQUIRES HEADERS INSULATED WITH A MIN. R-10 INSULATION.

12. VENTILATION:
VENT ALL BATHROOM FANS, LAUNDRY FANS, RANGE HOODS AND DRYERS TO OUTSIDE ATMOSPHERE. BATHROOM/UTILITY ROOM FANS SHALL BE CAPABLE OF 5 AIR CHANGES PER HOUR AND SHALL BE VENTED DIRECTLY TO THE OUTSIDE THROUGH SMOOTH, RIGID, NON-CORROSIVE METAL, 24 GA.

DUCTWORK. FLEX DUCTING IS NOT ALLOWED. WSEC R402.4.1.2 REQUIRES THE DWELLING UNIT TO BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 1.5 AIR CHANGES PER HOUR. TESTING MUST BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2. NEW CONSTRUCTION MAY BE ISOLATED FROM EXISTING STRUCTURE FOR TESTING.

13. FLUES:
FLUES TO BE LOCATED MINIMUM 2" FROM ALL COMBUSTIBLE MATERIALS.

14. DOWNSPOUTS:
LOCATE NEW DOWNSPOUTS AS SHOWN ON ROOF PLAN, FLOOR PLANS & ELEVATIONS.

15. OTHER DOCUMENTATION:
REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL, AND/OR LANDSCAPE DRAWINGS FOR ADDITIONAL DRAWINGS, NOTES, SCHEDULES, AND SYMBOLS.

16. PROTECTION:
PROTECT ALL EXISTING FINISHES AND SURFACES. ANY DAMAGE WILL BE REPAIRED WITHOUT ADDITIONAL COST TO OWNER.

17. PERMITS:
SEPARATE ELECTRICAL, MECHANICAL, AND PLUMBING PERMITS ARE REQUIRED IN ADDITION TO THE BASIC BUILDING PERMIT

18. ROOFING:
PROVIDE NEW ROOFING TO MATCH EXISTING.

19. EXHAUST DUCTS:
PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST DUCTS. PROVIDE COMBUSTION AIR OPENINGS INTO FURNACE ROOM PER UMC 703.

20. APPLIANCES:
CLEARANCES OF UL LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS SPECIFIED IN UL LISTING.

21. WATER FLOW:
SHOWER SHALL BE EQUIPPED WITH FLOW CONTROL DEVICE TO LIMIT WATER FLOW TO 1.8 GALLONS PER MINUTE.

22. SMOKE DETECTORS & FIRE ALARM:
SMOKE & CARBON MONOXIDE THROUGHOUT NEW CONSTRUCTION. TO BE MONITORED PER FIRE DEPARTMENT REQUIREMENTS, NFPA 72 CHAPTER 29 MONITORED FIRE ALARM SYSTEM PER COMI STANDARDS. SEPARATE PERMIT REQUIRED.

23. FIREBLOCKING:
FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAMED CONSTRUCTION PER 2021 IRC SECTION R302.11: 1) IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, SPECIFICALLY VERTICALLY @ CEILING AND FLOOR LEVELS; AND HORIZONTALLY @ INTERVALS NOT EXCEEDING 10 FEET, 2) AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES, 3) IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT T.O. & B.O. RUN, 4) AT OPENINGS AROUND VENTS, PIPES, ETC. AT CEILING AND FLOOR LEVEL.

24. FIRE SPRINKLERS:
NFPA 13D PLUS FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13R AND COMI STANDARD SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

25. FIRE ALARM SYSTEM:
A NFPA 72- CHAPTER 29 MONITORED FIRE ALARM SYSTEM IN COMPLIANCE WITH NFPA 72 AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

ENERGY NOTES

CLIMATIC ZONE: ZONE #4C -MARINE
THERMAL STANDARDS FOR OPENINGS: UNLIMITED OPTION
CODE: 2021 W.S.E.C. & 2021 IRC, WAC 51-11R
SPACE HEAT TYPE: ELECTRIC AIR SOURCE HEAT PUMP

PER WSEC R401.3, A CERTIFICATE IS REQUIRED TO BE POSTED IN AN APPROVED LOCATION. IT MUST INCLUDE THE FOLLOWING: PREDOMINATE R-VALUES, U-VALUES OF FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, THE EFFICIENCIES OF HEATING/COOLING/WATER HEATING EQUIPMENT AND THE CODE EDITION UNDER WHICH THE STRUCTURE WAS PERMITTED.

INSULATION VALUES: PRESCRIPTIVE METHOD

WALLS:	R-21+R-5 ci
FLAT ATTICS/CEILINGS:	R-60
VAULTED CEILINGS:	R-38
FLOORS (OVER UNHEATED SPACES):	R-38
SLAB-ON-GRADE:	R-10

AIR INFILTRATION:
MANUFACTURED DOORS/WINDOWS: CONFORM TO SECTION R402.4.2 OF THE WASHINGTON STATE ENERGY CODE

EXTERIOR JOINTS/OPENINGS: SEAL, CAULK, GASKET OR WEATHERSTRIP TO LIMIT AIR LEAKAGE AT EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF; OPENINGS AT PENETRATIONS OF UTILITY SERVICES AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.

MOISTURE CONTROL:
WALLS: VAPOR RETARDER BONDED TO BATT INSULATION; INSTALL WITH STAPLES NOT MORE THAN 8 INCHES ON CENTER AND WITH A GAP BETWEEN AND OVER FRAMING NOT GREATER THAN 1/16 OF AN INCH; OR, VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE).

ATTICS/CEILINGS: VAPOR RETARDER OF ONE PERM CUP RATING (4 MIL POLYETHYLENE), INSTALL CONTINUOUSLY.

CRAWL SPACE: 10 MIL POLYETHELENE.

VENTILATION:
ATTICS WITH LOOSE FILL: N.A. BAFFLE VENT OPENINGS TO DEFLECT AIR ABOVE INSULATION SURFACE.
ENCLOSED JOIST OR RAFTER SPACES: PROVIDE MINIMUM OF ONE INCH CLEAR VENTED AIR SPACE ABOVE INSULATION, TAPER OR COMPRESS INSULATION AT PERIMETER TO INSURE PROPER VENTILATION, MAINTAINING MINIMUM OF R-38.

HEATING & COOLING:
ELECTRIC AIR SOURCE HEAT PUMP.

TEMP. CONTROL:
FOR HEATING AND COOLING, THERMOSTAT SHALL BE CAPABLE OF BEING SET FROM 55-85 DEGREES FAHRENHEIT AND OF OPERATING THE HEATING/COOLING SYSTEM IN SEQUENCE. THERMOSTAT TO BE AUTOMATIC DAY/NIGHT SETBACK TYPE AND 7-DAY PROGRAMMABLE.

DUCT INSULATION:
THERMALLY INSULATE ALL PLENUMS, DUCTS AND ENCLOSURES IN ACCORDANCE WITH SECTION R403.3 OF THE 2021 WSEC.

a. ALL HEATING DUCTS OUTSIDE THE BUILDING THERMAL ENVELOPE SHALL BE INSULATED WITH A MIN. OF R-8. ALL SEAM JOINTS SHALL BE TAPED, SEALED AND FASTENED WITH THE MINIMUM OF FASTENERS PER WSEC.
b. DUCTS WITHIN A CONCRETE SLAB OR IN THE GROUND SHALL BE INSULATED TO R-10 WITH INSULATION DESIGNED TO BE USED BELOW GRADE.

LIGHTING:
RECESSED LIGHTING FIXTURES INSTALLED IN BUILDING ENVELOPE SHALL COMPLY WITH WSEC PROVISIONS AND SHALL BE IC LISTED, ALL PERMANENTLY INSTALLED LAMPS IN INTERIOR AND EXTERIOR LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, MUST BE HIGH-EFFICACY LAMPS, PER 2021 WSEC R404.1, AND MUST BE CONTROLLED PER 2021 WSEC R404.2.

PIPE INSULATION:
ALL HOT WATER PIPES AND NON-RECIRCULATING COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE SHALL BE INSULATED TO R-6 MIN. PLUMBING OR MECHANICAL CANNOT DISPLACE THE REQUIRED INSULATION.

PLUMBING FIXTURES:
ALL PLUMBING FIXTURES SHALL CONFORM TO WAC 51-56-0400

ALL TOILETS 1.28 GPM MAX	URINALS 1.0 GPF MAX
SHOWERHEADS <1.8 GPM	KITCHEN FAUCETS <1.8 GPM
LAVATORIES < 1.2 GPM	

WHOLE HOUSE VENTILATION

a. WHOLE HOUSE VENTILATION SHALL BE PROVIDED BY ERV/HRV W/ INTEGRAL FANS, PROVIDING MIN. 150 CFM RUNNING CONTINUOUSLY PER 2021 IRC TABLES M1505.4.3 (1&2). FAN SHALL BE LESS THAN .35 WATT PER CFM AND RUN CONTINUOUSLY, AND HAVE A SONE RATING OF LESS THAN 1.0. VENTILATION SHALL BE ABLE TO OPERATE INDEPENDENTLY OF HEATING SYSTEM.

b. SYSTEM SHALL HAVE A 5"Ø SMOOTH FRESH AIR DUCT W/ LOUVER & SCREEN CONNECTED TO THE RETURN AIR STREAM 4' UPSTREAM OF THE AIR HANDLER AND SOUND INSULATED. ALL SUPPLY AND RETURN DUCTS IN INTERIOR SPACES SHALL ALSO BE INSULATED FOR SOUND.

c. SHALL HAVE A FILTER WITH A MERV OF AT LEAST 6 INSTALLED IN AN EASILY ACCESSIBLE LOCATION.

d. FRESH AIR VENT SHALL BE LOCATED AWAY FROM SOURCES OF ODORS OR FUMES, MIN 10' FROM PLUMBING OR APPLIANCE VENTS, AWAY FROM ROOMS W/ FUEL BURNING APPLIANCES, AND OUT OF ATTICS, CRAWL SPACES, AND GARAGES.

e. AIRFLOW FOR WHOLE HOUSE VENTILATION SHALL BE PROVIDED BY UNDERCUTTING INTERIOR DOORS 1/2" ABOVE FINISHED FLOOR, TYP.

f. WHOLE HOUSE VENTILATION SHALL BE TESTED, BALANCED AND VERIFIED AND A WRITTEN REPORT SHALL BE POSTED AND PROVIDED THE BUILDING OFFICIAL AND CERTIFICATION COMPLETED PER WSEC R403.6.2.

g. AN EXHAUST FAN WHOLE HOUSE VENTILATION IS NOT ALLOWED WITH AN ERV SYSTEM.

BEDROOMS	7
HEATED SQUARE FOOTAGE	6492 SF
CFM = 0.01(6492 SF) + 7.5(7+1 BEDROOMS)	
AIRFLOW (CFM)	125 CFM MIN.

PROJECT DATA

PROJECT ADDRESS:	3245 72ND PL SE MERCER ISLAND, WA 98040
PROPERTY TAX ID NUMBER:	130030-0840
SCOPE OF WORK:	NEW TWO-STORY SINGLE FAMILY RESIDENCE OVER BASEMENT WITH ATTACHED TWO CAR GARAGE
ZONING:	R-8.4
CONSTRUCTION TYPE:	TYPE V B
SEISMIC ZONE:	
NUMBER OF STORIES:	2 STORIES OVER BASEMENT
FIRE PROTECTION:	13D PLUS NFPA 72 MONITORED FIRE ALARM SYSTEM
BUILDING HEIGHT	30 FT ABOVE AVERAGE BUILDING ELEV. (FLAT ROOF) 35 FT ABOVE AVERAGE BUILDING ELEV. (SLOPED ROOF)
GROSS LOT AREA:	16,649 SF
NET LOT AREA:	16,649 SF
SETBACKS:	FRONT LOT LINE = 20 FT REAR LOT LINE = 25 FT SIDE LOT LINES = 15 FT, 5 FT MIN.
GROSS FLOOR AREA:	LESSER OF 40.0% LOT AREA OR 5,000 SF = 5000 SF

SHEET INDEX

A1.0	COVER SHEET - GENERAL & ENERGY NOTES, LEGAL, PROJECT DATA, SITE CALCS, SITE PLAN
A1.1	FULL SITE PLAN
A1.2	EXCAVATION, TREE REPLACEMENT PLAN
	SURVEY
C1.0	CIVIL COVERSHEET
C2.0	TESC PLAN
C2.1	TESC DETAILS
C3.0	GRADING & UTILITY PLAN
C4.0	STORMWATER PLAN
C4.1	STORMWATER DETAILS
A2.0	LOWER FLOOR PLAN
A2.1	MAIN FLOOR PLAN
A2.2	UPPER FLOOR
A2.3	ROOF PLAN
A3.0	EXTERIOR ELEVATIONS
A3.1	EXTERIOR ELEVATIONS
A4.0	BUILDING SECTIONS
A4.1	BUILDING SECTIONS
A4.2	BUILDING SECTIONS
A5.0	WALL SECTIONS
A6.0	ARCHITECTURAL DETAILS
A6.1	ARCHITECTURAL DETAILS & DOOR & WINDOW SCHEDULES
S1	STRUCTURAL GENERAL NOTES
S2.1	TYPICAL DETAILS
S2.2	TYPICAL DETAILS
S3	FOUNDATION PLAN
S4	MAIN FLOOR FRAMING PLAN
S5	UPPER FLOOR FRAMING PLAN
S6	ROOF FRAMING PLAN
S7	SECTIONS & DETAILS
S8	SECTIONS & DETAILS
S9	SECTIONS & DETAILS
S10	SECTIONS & DETAILS

PROJECT TEAM

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8717 SE 44TH PLACE
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CONTACT: DAVID YUSEN

ARCHITECT: STURMAN ARCHITECTS
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CONTACT: BRAD STURMAN

CONTRACTOR: RKK CONSTRUCTION INC
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PHONE: 206.730.1237
CONTACT: JASON KOEHLER

STRUCTURAL: OG ENGINEERING
SEATTLE, WA
PHONE: 206.290.4608
CONTACT: OWEN GOULD
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CIVIL: PATRICK HARRON & ASSOCIATES, LLC
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PHONE: 425.747.5618
CONTACT: MARC MCGINNIS

ARBORIST: SEATTLE TREE CONSULTING
3907 AURORA AVE N.
SEATTLE, WA 98103
PHONE: 206.457.5706
CONTACT: JOHN WELLS, DOUGLAS SMITH

BUILDING AREA

	LOWER FLOOR	MAIN FLOOR	UPPER FLOOR	HEATED SUB-TOTAL	GARAGE/ WORKSHOP	GRAND TOTAL	COVERED PATIOS
PROPOSED HOUSE:	2046 SF	2389 SF	2057 SF	6492 SF	648 SF	7140 SF	641 SF

LOT COVERAGE AND HARDSCAPE

	GROSS LOT S.F.	MAIN ROOF STRUCT	DRIVES/ PARKING	TOTAL LOT COVERAGE	% LOT COVERAGE
EXISTING LOT COVERAGE AREA	16,649 SF	0 SF	0 SF	0 SF	0 %
PROPOSED LOT COVERAGE AREA		4341 SF	1734 SF	6075 SF	36.5 %
NET GAIN/LOSS IMPERVIOUS AREA		+4341 SF	+1734 SF	+6075 SF	+36.5 %
% ALLOWED IMPERVIOUS AREA				6659.6 SF ALLOWABLE	40 %

HIGHEST EL: 317.22'
LOWEST EL: 311.64'
ELEVATION DIFFERENCE= 5.58'
5.58' DIVIDED BY 206.0' (HORIZ. DIST. BTWN. HIGHEST & LOWEST ELEV.) = .027

LOT SLOPE IS 2.7%,
WHICH IS LESS THAN 15% SO LOT COVERAGE ALLOWED IS 40%.

ADDITIONAL 9% OF LOT SIZE WILL DETERMINE ALLOWABLE HARDSCAPE SURFACE

	TRASH PAD	RETAINING WALLS	FRONT WALKS	SIDE WALKS	REAR PATIO	TOTAL HARDSCAPE	% HARDSCAPE
EXISTING HARDSCAPE AREA	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 %
PROPOSED HARDSCAPE AREA	0 SF	18 SF	64 SF	419 SF	748 SF	1249 SF	7.5 %
NET GAIN/LOSS HARDSCAPE AREA	+0 SF	+18 SF	+64 SF	+419 SF	+748 SF	+1249 SF	+7.5 %
% ALLOWED HARDSCAPE AREA						1498.41 SF ALLOWABLE	9 %

GROSS FLOOR AREA

	LOWER FLOOR	MAIN FLOOR	UPPER FLOOR	GARAGE	TOTAL GFA	% GFA
FLOOR AREA	2046 SF	2288 SF	1859 SF	648 SF	6841 SF	
BASEMENT EXCLUSION	-2046 SF				-2046 SF	
STAIR 1X MODIFIER			+101.0 SF		+101.0 SF	
12-16' CEILING						
16'+ CEILING			+96.0 SF		+96.0 SF	
TOTAL GFA					4992 SF	30.0%

NET LOT AREA	16,649 SF
ALLOWED MAX. % GFA COVERAGE	40.0 % OR 5,000 SF
ALLOWED GROSS FLOOR AREA	5000 SF
TOTAL PROPOSED GROSS FLOOR AREA:	**4992.0 SF OR 30.0%**

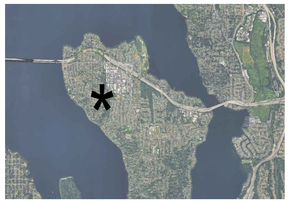
2021 WSEC CREDITS

CREDITS REQUIRED:
PROJECT IS NEW CONSTRUCTION WITH A HEATED AREA OF MORE THAN 5,000 SF. THEREFORE IT IS A LARGE DWELLING UNIT AND **9.0** CREDITS ARE REQUIRED.

SUMMARY OF TABLE R406.3

OPTION	CREDITS	DESCRIPTION
4.0	3.0	-HEAT PUMP EFFICIENCY (AIR COOLED) 14.3 SEER2, HSPF2 8.5
1.2	1.0	-VERTICAL FENESTRATION U = .25, FLOOR=R-38, R-10 RIGID INSULATION ENTIRE PERIMETER AND UNDER ENTIRE SLAB
2.2	1.5	-REDUCE TESTED AIR LEAKAGE TO 1.5 AIR CHANGES PER HOUR MAX. AT 50 PASCALS -WHOLE HOUSE VENTILATION REQS MET W/ HEAT RECOVERY SYSTEM W/ MIN. EFFICIENCY OF 0.75, MIN. 150 CFM
3.3	0.5	-AIR SOURCE, CENTRALLY DUCTED HEAT PUMP W/ MIN. HSPF OF 9.5, HSPF2 8.1.
3.11	0.5	-CONNECTED THERMOSTAT MEETING ENERGY STAR CERTIFIED SMART THERMOSTATS/EPA ENERGY STAR SPECIFICATIONS.
4.1	0.5	-HVAC EQUIP. & AND ITS DUCT SYSTEM INSTALLATION SHALL COMPLY W/ R403.3.2, ALL EQUIP. & DUCTS SHALL BE IN CONDITIONED SPACE, W/I CONTINUOUS AIR BARRIER & BUILDING THERMAL ENVELOPE.
5.6	2.0	-ELECTRIC HEAT PUMP WATER HEATER MEETING TIER 3 OF NEEA
TOTAL CREDITS	9.0	

VICINITY MAP



DUTY OF COOP.

RELEASE AND ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, CONTRACTOR, AND STURMAN ARCHITECTS. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED IN THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO STURMAN ARCHITECTS. FAILURE TO DO SO WILL RELIEVE STURMAN ARCHITECTS FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES.

ANY DEVIATION FROM THESE DOCUMENTS WITHOUT THE CONSENT OF STURMAN ARCHITECTS IS UNAUTHORIZED. FAILURE TO OBSERVE THESE PROCEDURES SHALL RELIEVE STURMAN ARCHITECTS OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING FROM SUCH ACTIONS.

NOXIOUS WEEDS

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 19.02.020(F)(3)(A). 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.

LEGAL DESCRIPTION

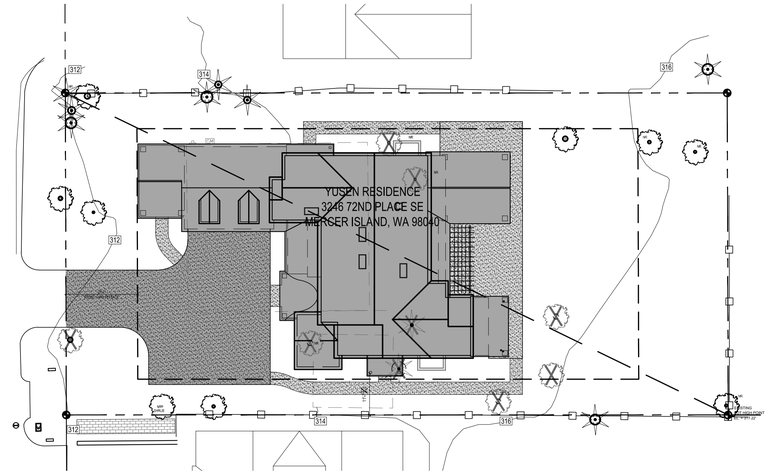
(PER STATUTORY WARRANTY DEED, RECORDING NO. 20250609000850).
LOTS 23, 24 AND 25, BLOCK 3;
EXCEPT THE EAST 65 FEET THEREOF;
AND THE NORTH 90.27 FEET OF THE SOUTH 150.27 FEET OF MAGNOLIA SQUARE "VACATED";
AND THAT PORTION OF VACATED 73RD AVENUE SOUTHEAST "WEBSTER STREET" ADJOINING;
ALL IN C.C. CALKINS' FIRST ADDITION TO EAST SEATTLE, ACCORDING TO THE PLAT
THEREOF RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON.

TREE PROTECTION

A TREE PROTECTION INSPECTION IS REQUIRED BEFORE START OF WORK

SITE PLAN

SCALE: 1" = 20'

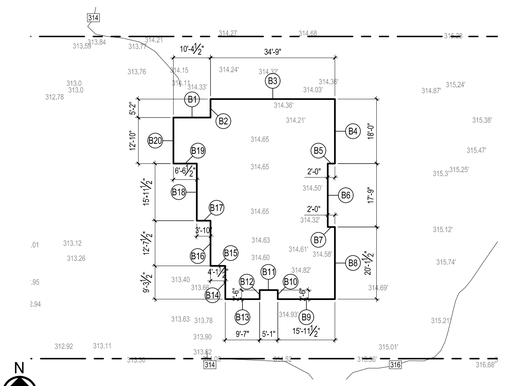


BASEMENT EXCLUSION

SCALE: 1" = 20'

BASEMENT EXCLUSION CALCULATION
BASEMENT AREA = 2046 SF

	LENGTH	COVERAGE	RESULT
B1	10.375	1	10.375
B2	5.167	1	5.167
B3	34.75	1	34.75
B4	18	1	18
B5	2	1	2
B6	17.75	1	17.75
B7	2	1	2
B8	20.125	1	20.125
B9	15.96	1	15.96
B10	2.5	1	2.5
B11	5.083	1	5.083
B12	2.5	1	2.5
B13	9.583	1	9.583
B14	9.29	1	9.29
B15	4.125	1	4.125
B16	12.625	1	12.625
B17	3.83	1	3.83
B18	15.96	1	15.96
B19	6.54	1	6.54
B20	12.83	1	12.83
TOTAL	**210.993**		**210.993**
Portion of excluded Basement Floor Area = X SF			
2,046.00	X	210.993	
		210.993	
2,046.00	X	1	
2046 SF EXCLUDED			
BASEMENT AREA = 0 SF			



SPOT ELEVATIONS PROVIDED BY SURVEYOR

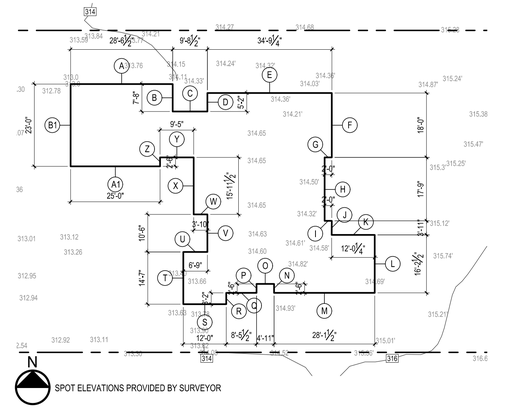
THE MERCER ISLAND DEVELOPMENT CODE EXCLUDES THAT PORTION OF THE BASEMENT FLOOR AREA FROM THE GROSS FLOOR AREA WHICH IS BELOW THE EXISTING OR FINISHED GRADE, WHICHEVER IS LOWER. THAT PORTION OF THE BASEMENT WHICH WILL BE EXCLUDED IS CALCULATED AS SHOWN.

AVERAGE BUILDING ELEV.

SCALE: 1" = 20'

AVERAGE BUILDING ELEVATION

	Wall Length	Elevation Pt.	Wall Length X Elev.
A	28.54	313.75	8954.425
B	7.667	314.25	2409.35475
C	9.71	314.25	3051.3675
D	5.167	314.25	1623.72975
E	34.77	314.25	10926.4725
F	18	314.25	5656.5
G	2	314.5	629
H	17.75	314.5	5582.375
I	2	314.5	629
J	3.92	314.5	1232.84
K	12.02	314.5	3780.29
L	16.21	314.5	5098.045
M	28.125	314.75	8852.34375
N	2.5	314.5	786.25
O	4.92	314.5	1547.34
P	2.5	314.5	786.25
Q	8.46	314	2656.44
R	3.167	314	994.438
S	12	313.75	3765
T	14.58	313.5	4570.83
U	6.75	314.75	2124.5625
V	10.5	314.5	3302.25
W	3.83	314.5	1204.535
X	15.96	314.5	5019.42
Y	9.42	314.25	2960.235
Z	2.5	313.75	784.375
A1	25	313.5	7837.5
B1	23	313	7199
TOTAL	**330.97**	**8798.3**	**103964.17**
103964.17	**314.12**	**Average Building Elevation**	
330.97	**344.12**	**Building Height Limit**	



SPOT ELEVATIONS PROVIDED BY SURVEYOR

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 04/07/2026

STURMAN ARCHITECTS
345 118th St. SE Suite 103
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
5983
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STATE OF WASHINGTON

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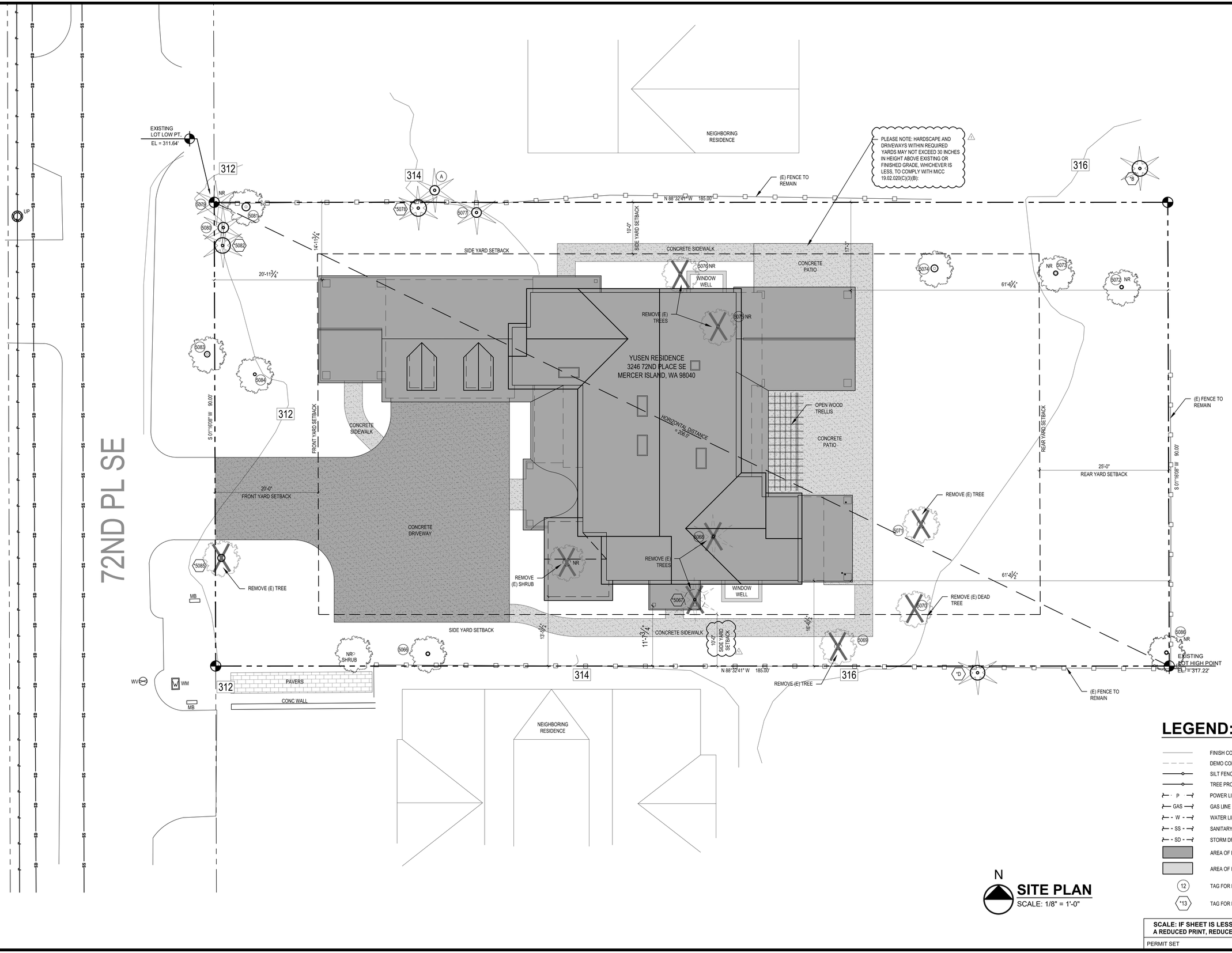
YUSEN RESIDENCE
PERMIT SET
3246 72ND PL SE
MERCER ISLAND, WA 98040

GENERAL NOTES
SITE CALCS

REVISIONS:
1 2026-4-7 Corrections #1

PLOT DATE: 4/7/2026
DRAWN BY: KE
CHECKED BY: BJS

SHEET
A1.0



LEGEND:

- FINISH CONTOUR LINES
- DEMO CONTOUR LINES
- SILT FENCE
- TREE PROTECTION FENCING
- P — POWER LINE
- GAS — GAS LINE
- W — WATER LINE
- SS — SANITARY SEWER LINE
- SD — STORM DRAIN LINE
- AREA OF LOT COVERAGE
- AREA OF HARDSCAPE
- (12) TAG FOR REGULATED TREE
- (*13) TAG FOR EXCEPTIONAL TREE

N

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

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 04/07/2026

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REGISTERED ARCHITECT
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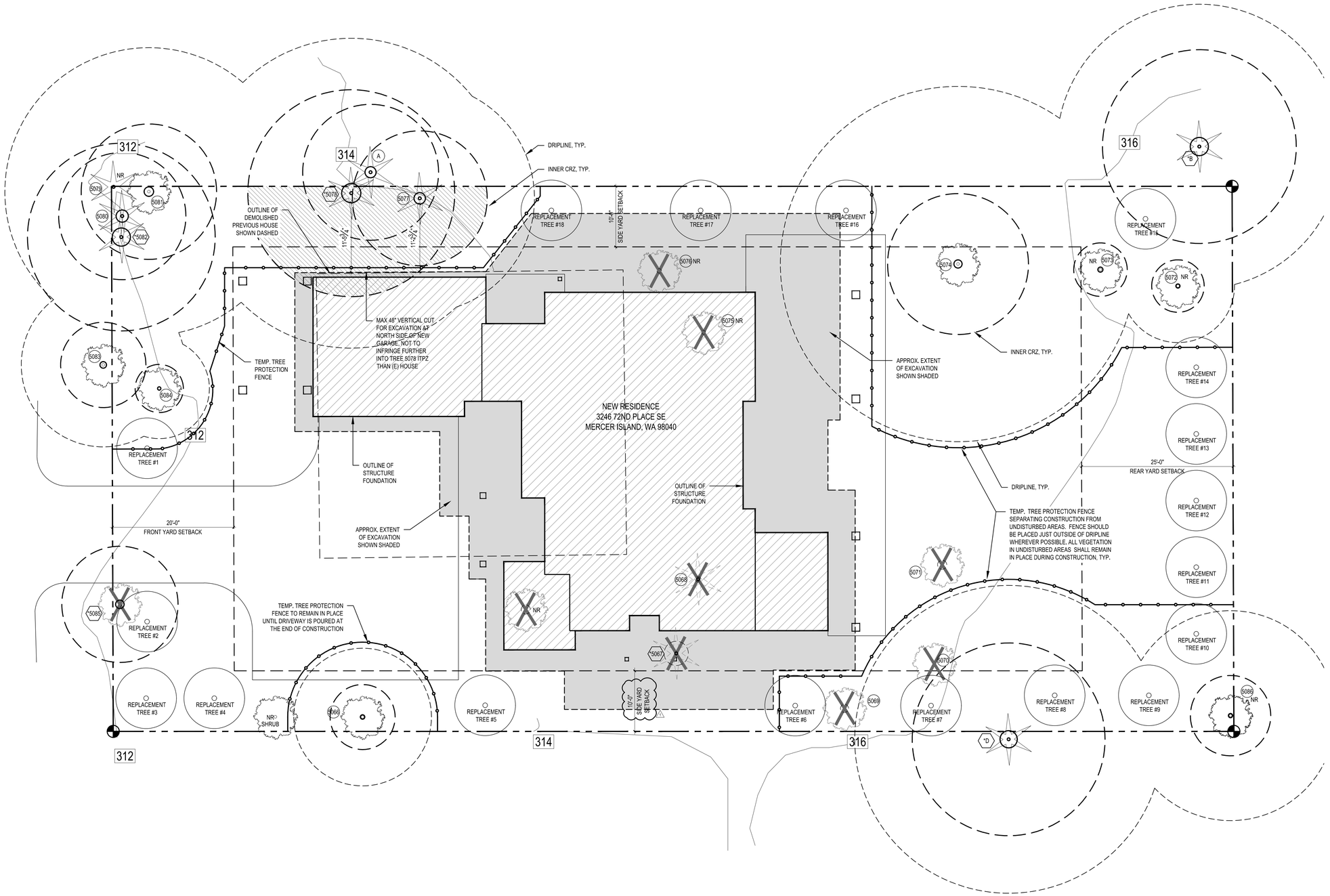
YUSEN RESIDENCE
PERMIT SET
3246 72ND PL SE
MERCER ISLAND, WA 98040

SITE PLAN

REVISIONS:
2026-4-7 Corrections #1

PLOT DATE: 4/7/2026
DRAWN BY: KE
CHECKED BY: BJS

SHEET
A1.1



N

REPLACEMENT TREE & EXCAVATION PLAN

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

TREE SCHEDULE - YUSEN		
TREE NO.	RETAIN OR REMOVE	REPLACEMENT NO.
REGULATED TREES - 13		
5066		
5067*	REMOVE	6
5068	REMOVE	2
5069	REMOVE	2
5071	REMOVE	2
5074		
5077		
5078*		
5080		
5081		
5082*		
5084		
5085*	REMOVE	6
NON-REGULATED TREES - 7		
5070	REMOVE (dead)	0
5072		
5073		
5075	REMOVE	0
5076	REMOVE	0
5079		
5086		
TOTAL REPLACEMENTS:		**18**

LEGEND:

- FINISH CONTOUR LINES
- DEMO CONTOUR LINES
- TREE PROTECTION FENCING
- INNER CRITICAL ROOT ZONE
- TREE DRIPLINE
- 12 — TAG FOR REGULATED TREE
- *13 — TAG FOR EXCEPTIONAL TREE
- AREA OF HOUSE FOUNDATION
- AREA OF APPROX. EXCAVATION
- AREA OF INNER CRZ

NOTES AND RECOMMENDATIONS:

1. INSTALL TREE PROTECTION FENCING CONSISTING OF 6-FOOT-TALL CHAIN-LINK FENCING AT THE PROPOSED LIMITS OF EXCAVATION.

2. CUT ANY ROOTS EXPOSED BY EXCAVATION CLEANLY AND IMMEDIATELY BACKFILL TO PREVENT DESICCATION.

3. NOTIFY THE PROJECT ARBORIST IF ANY ROOTS IN EXCESS OF 2-INCHES ARE EXPOSED BY EXCAVATION SO THAT IMPACTS MAY BE REASSESSED.

4.CONSIDER INSTALLING A 4-INCH LAYER OF COARSE WOODY MULCH (ARBORIST WOODCHIPS) TO THE CRITICAL ROOT ZONE OF TREES 5069, 5077 AND 5078 TO MITIGATE CONSTRUCTION STRESS AND IMPROVE SOIL STRUCTURE.

5.ALL REPLACEMENT TREES ARE TO BE PLANTED IN ACCORDANCE WITH MICC 19.10.070. TREES SHALL BE PRIMARILY NATIVE TO THE PNW. CONIFEROUS TREES SHALL BE AT LEAST 6' TALL. DECIDUOUS TREES SHALL BE AT LEAST 1.5" IN CALIPER.

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 04/07/2026

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REGISTERED ARCHITECT
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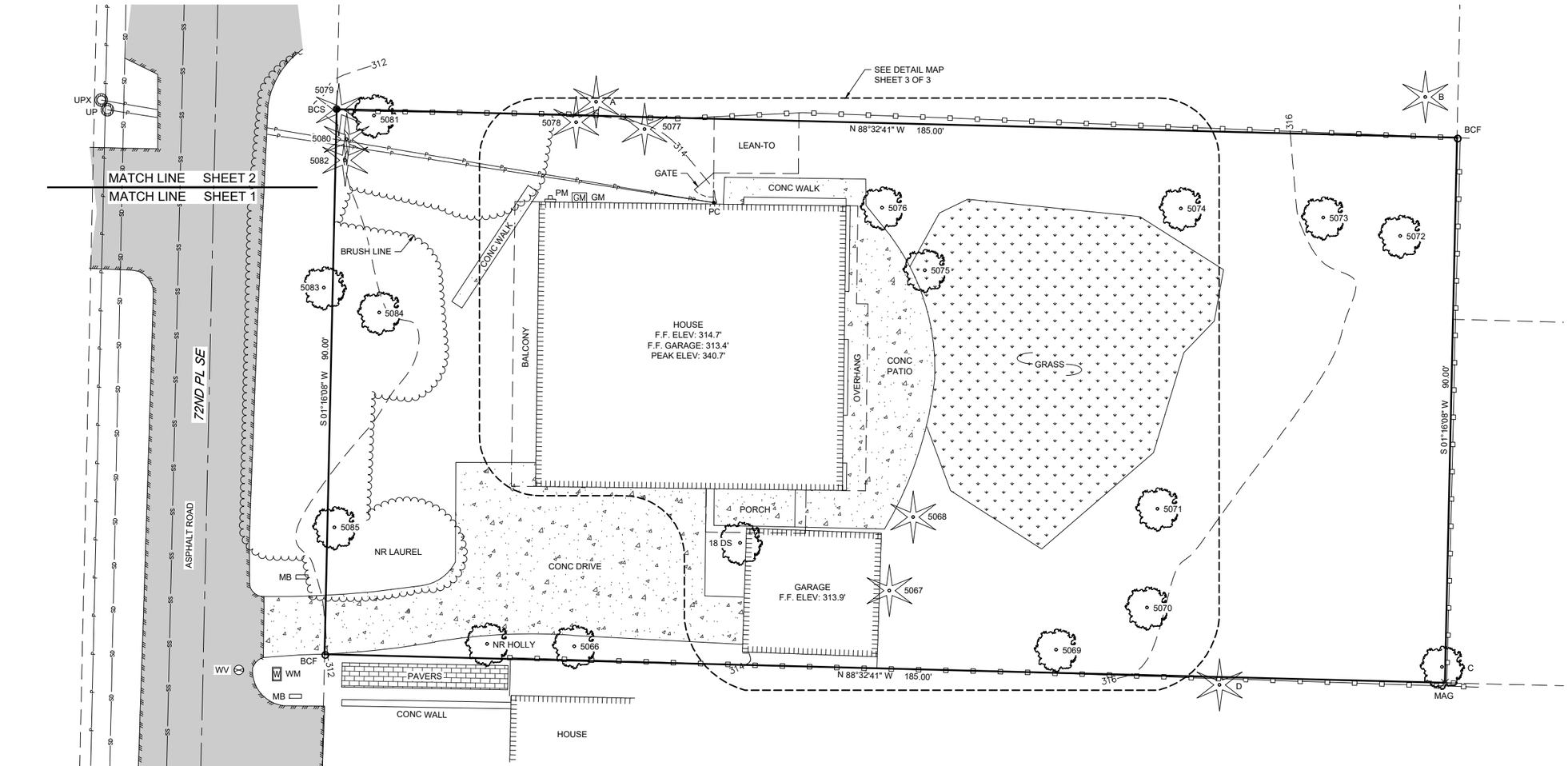
YUSEN RESIDENCE
PERMIT SET
3246 72ND PL SE
MERCER ISLAND, WA 98040

SITE PLAN

REVISIONS:
2. 2026-4-7 Corrections #1

PLOT DATE: 4/7/2026
DRAWN BY: KE
CHECKED BY: BJS

SHEET
A1.2



BASIS OF BEARING
WASHINGTON STATE PLANE COORDINATE SYSTEM - NORTH ZONE

BASIS OF ELEVATION
CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) SSHO, ZSE1 & HAHD

EQUIPMENT & PROCEDURES
TOTAL STATION: TOPCON GPT-3500 SERIES. METHOD: FIELD TRAVERSE.
GPS UNIT: IG5 GNSS STATIC RECEIVER. METHOD: STATIC OBSERVATION.

SURVEY REFERENCES
(R1) RECORD OF SURVEY, RECORDING NO. 8001259008.
(R2) RECORD OF SURVEY, RECORDING NO. 8510239003.
(R3) RECORD OF SURVEY, RECORDING NO. 20230223900025.
(R4) RECORD OF SURVEY, RECORDING NO. 20030226900015.
(R5) RECORD OF SURVEY, RECORDING NO. 20071005900002.
(R6) RECORD OF SURVEY, RECORDING NO. 20160225900009.
(R7) SHORT PLAT SUB0002-001, RECORDING NO. 20000823900005.
(R8) SHORT PLAT SUB17-012, RECORDING NO. 20180131900008.
(R9) LOT LINE REVISION SUB07-004, RECORDING NO. 20070615900014.
(R10) AMERICAN LAND TITLE ASSOCIATION COMMITMENT FOR TITLE INSURANCE NO. 50050243-101, DATED APRIL 14, 2025 AT 8:00 A.M.

SITE INFORMATION
ASSESSORS PARCEL NO. 130030-0840
SITE OWNER: SARAH MACLEOD, TRUSTEE OF DIEGO KOBE TRUST
SITE ADDRESS: 3246 72ND PL SE, MERCER ISLAND, WA 98040
CALCULATED LOT AREA: 16,649± SQ. FT. OR 0.38 ACRES
ZONING: R-8.4
JURISDICTION: CITY OF MERCER ISLAND

LEGAL DESCRIPTION
(PER STATUTORY WARRANTY DEED, RECORDING NO. 20250609000850).

LOTS 23, 24 AND 25, BLOCK 3;

EXCEPT THE EAST 65 FEET THEREOF;

AND THE NORTH 90.27 FEET OF THE SOUTH 150.27 FEET OF MAGNOLIA SQUARE "VACATED";

AND THAT PORTION OF VACATED 73RD AVENUE SOUTHEAST "WEBSTER STREET" ADJOINING;

ALL IN C.C. CALKINS' FIRST ADDITION TO EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON.

NOTES
1. NO EASEMENTS OF RECORD HAVE BEEN DISCLOSED BY HEREIN REFERENCED COMMITMENT FOR TITLE INSURANCE.

2. THE BOUNDARY LINES DEPICTED HEREON REPRESENT DEED LINES AND DO NOT PURPORT TO REPRESENT OWNERSHIP LINES THAT MAY OTHERWISE BE DETERMINED BY LEGAL ACTION OR A COURT OF LAW.

3. ALL ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL (AMSL) ELEVATIONS REFERENCED TO THE NAVD 88 DATUM.

4. THE CONTOURS SHOWN HEREON ARE BASED UPON DIRECT FIELD OBSERVATION. CONTOUR ACCURACY IS +/- ONE-HALF THE CONTOUR INTERVAL

5. RECORD BEARINGS HAVE BEEN ROTATED TO HEREIN REFERENCED NAD 83 (2011) MERIDIAN.

6. THE INFORMATION SHOWN HEREON REPRESENTS THE RESULTS OF A FIELD SURVEY MADE ON 06-12-25 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

LINETYPE LEGEND
- OVERHEAD POWER LINES
- SANITARY SEWER LINE
- STORM DRAINAGE LINE
- WOOD FENCE

HATCH LEGEND
- ASPHALT
- CONCRETE
- BRICK / PAVERS
- GRASS

LEGEND
UP	UTILITY POLE	
PM	POWER METER	
GM	GAS METER	
WV	WATER VALVE	
FH	FIRE HYDRANT	
WM	WATER METER	
MB	MAIL BOX	
PC	POWER CONNECTION	
BCF	FOUND REBAR & CAP	
BCS	SET REBAR & CAP	
MAG	SET MAG NAIL & WASHER	
F.F.	FINISHED FLOOR	
ELEV	ELEVATION	
DS	DECIDUOUS	
UPX	UTILITY POLE W/ XFMR	
XFMR	TRANSFORMER	
CB	CATCH BASIN	
SSMH	SEWER MANHOLE	
	DECIDUOUS AS NOTED	
	CONIFER AS NOTED	

SCALE: 1" = 10'
0' 10' 20'
WSPCS - NORTH ZONE
NAD 83 (2011)
CONTOUR INTERVAL: 2'

TREE TABLE
THE FOLLOWING TABLE WAS PROVIDED BY THE APPLICANT. TREES WERE FIELD LOCATED ON 06/12/25 BY RYKA LAND SERVICES.

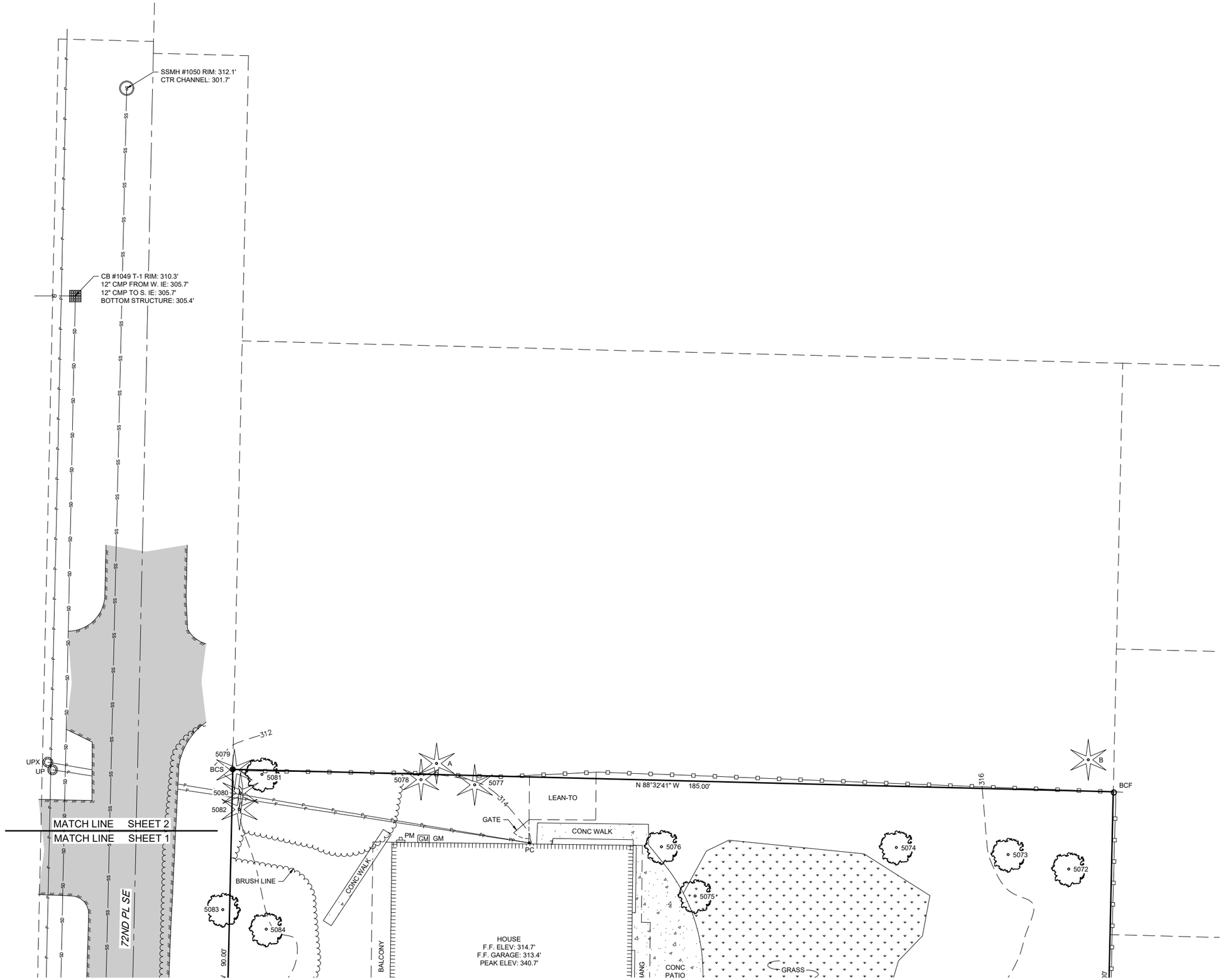
TREE #	COMMON NAME	SPECIES NAME	DSH	DLR	CLASS	COND	TPZ	ITPZ	RETAIN	NOTES
ON SITE										
5072	CHERRY	PRUNUS SP.	7	9	SMALL-NR	4	8.0	4.0		ASYMMETRICAL CANOPY
5073	GREEN LEAF PLUM	PRUNUS SP.	8	8	SMALL-NR	4	8.0	4.0		ASYMMETRICAL CANOPY
5075	HAMILTON'S SPINDLE	EUONYMUS HAMILTONIANUS	7.5	6.5	SMALL-NR	5	7.0	3.5		
5076	PEAR	PYRUS SP.	8.8	11	SMALL-NR	4	9.9	5.0		HEALTHY CANOPY, WEAK PRIMARY JUNCTION. MULTISTEM 6, 6.5
5079	WESTERN RED CEDAR	THUJA PLICATA	8	8	SMALL-NR	3	8.0	4.0		SUPPRESSED
5068	WESTERN RED CEDAR	THUJA PLICATA	11	13	REGULATED	4	12.0	6.0		BASELINES NORTH 30° THEN CORRECTS AT 7 FEET
5069	BITTER CHERRY	PRUNUS EMARGINATA	16	18	REGULATED	4	17.0	8.5		
5071	APPLE	MALUS DOMESTICA	18	18	REGULATED	4	18.0	9.0		HALLOW TRUNK, FULL CANOPY
5074	WALNUT	JUGLANS NIGRA	16	29	REGULATED	5	22.5	11.3		
5077	WESTERN RED CEDAR	THUJA PLICATA	22.6	18	REGULATED	5	20.3	10.2		
5080	WESTERN RED CEDAR	THUJA PLICATA	24	14	REGULATED	3	19.0	9.5		TOPPED, POOR STURCTURE
5081	BIG LEAF MAPLE	ACER MACROPHYLLUM	18.7	23	REGULATED	3	20.9	10.4		POOR STURCTURE
5083	CRABAPPLE	MALUS SP.	13	13	REGULATED	4	13.0	6.5		DSH TAKEN AT SMALLEST POINT BELOW JUNCTION
5066	BLACK HAWTHORN	CRATAEGUS DOUGLASII	8.8	11	EXCEP.	5	9.9	5.0		MULTISTEM 6, 5, 4
5067	WESTERN RED CEDAR	THUJA PLICATA	48	24	EXCEP.	4	36.0	18.0		FULL CANOPY, PITCH FORK STRUCTURE
5078	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	38	24	EXCEP.	5	31.0	15.5		
5082	WESTERN RED CEDAR	THUJA PLICATA	36	20	EXCEP.	3	28.0	14.0		DSH TAKEN AT SMALLEST POINT BELOW JUNCTION, POOR STRUCTURE
5084	BLACK HAWTHORN	CRATAEGUS DOUGLASII	6.7	8	EXCEP.	5	7.4	3.7		
5085	WESTERN DOGWOOD	CORNUS NUTTALLII	16.7	19	EXCEP.	3	17.9	8.9		CHLOROSIS, WILT, WATER SPROUTS
5070	CHERRY	PRUNUS SP.			DEAD	1	NA	NA	REMOVE	
ADJACENT			EST.	EST.						
A	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	22	19		5	20.5	10.3		ADJACENT TO FENCE LINE
B	COAST REDWOOD	SEQUOIA SEMPERVIRONS	36	22		5	29.0	14.5		
C	CURLY WILLOW	SALIX BABYLONIA	8	17		4	12.5	6.3		ADJACENT TO FENCE LINE. 25% CANOPY DIEBACK
D	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	34	24		6	29.0	14.5		ADJACENT TO FENCE LINE

PORTION OF THE NE1/4 OF THE SW1/4 OF SECTION 12, T. 24 N., R 4 E., W.M. KING COUNTY, WASHINGTON

RAYMOND E. SLATER JR. STATE OF WASHINGTON 36811 REGISTERED PROFESSIONAL LAND SURVEYOR
03-23-26

RYKA LAND SERVICES

DATE: 07-22-25	REVISED: 03-23-26	SCALE: 1" = 10'
JOB NO.: YUS-052125	DRAWN BY: JRS	SHEET: 1 OF 3





SCALE: 1" = 10'

0' 10' 20'

WSPCS - NORTH ZONE
NAD 83 (2011)

CONTOUR INTERVAL: 2'

LEGEND

	UP	UTILITY POLE
	PM	POWER METER
GM	GM	GAS METER
	WV	WATER VALVE
	FH	FIRE HYDRANT
	WM	WATER METER
	MB	MAIL BOX
•	PC	POWER CONNECTION
O	BCF	FOUND REBAR & CAP
●	BCS	SET REBAR & CAP
⌧	MAG	SET MAG NAIL & WASHER
	F.F.	FINISHED FLOOR
	ELEV	ELEVATION
	DS	DECIDUOUS
	UPX	UTILITY POLE W/ XFMR
	XFMR	TRANSFORMER
	CB	CATCH BASIN
S	SSMH	SEWER MANHOLE
		DECIDUOUS AS NOTED
		CONIFER AS NOTED

LINETYPE LEGEND

- OVERHEAD POWER LINES
- SANITARY SEWER LINE
- STORM DRAINAGE LINE
- WOOD FENCE

HATCH LEGEND

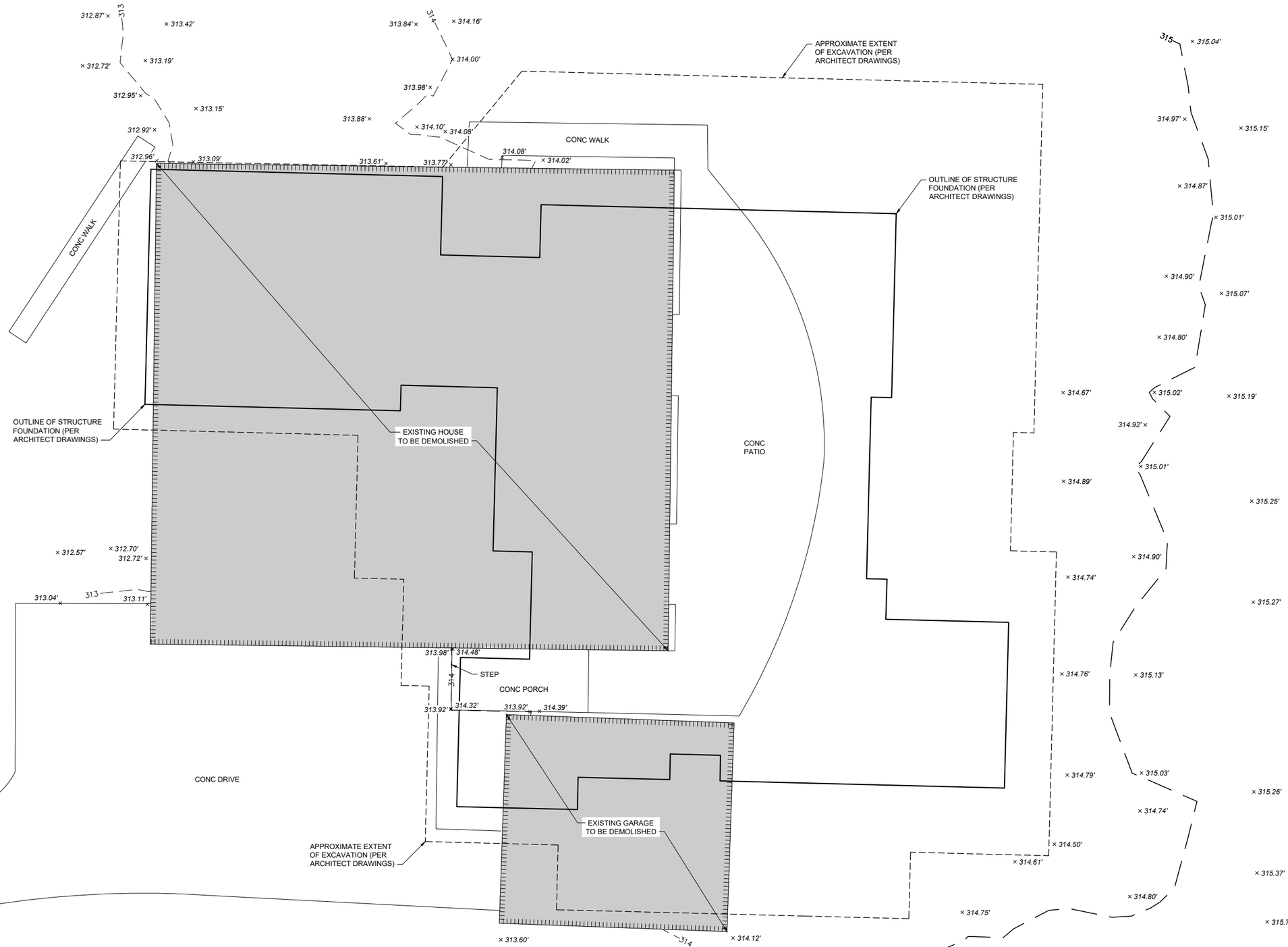
- ASPHALT
- CONCRETE
- BRICK / PAVERS
- GRASS

PORTION OF THE NE1/4 OF THE SW1/4 OF SECTION 12, T. 24 N., R 4 E., W.M. KING COUNTY, WASHINGTON

RAYMOND E. SLATER JR. STATE OF WASHINGTON 36811 REGISTERED PROFESSIONAL LAND SURVEYOR
03-23-26

RYKA LAND SERVICES

DATE: 07-22-25	REVISED: 03-23-26	SCALE: 1" = 10'
JOB NO.: YUS-052125	DRAWN BY: JRS	SHEET: 2 OF 3



WSPCS - NORTH ZONE
NAD 83 (2011)

CONTOUR INTERVAL: 1'

DETAIL MAP

NOTES

1. ELEVATIONS SHOWN HEREON ARE ABOVE MEAN SEA LEVEL (AMSL) ELEVATIONS REFERENCED TO THE NAVD 88 DATUM.

2. THE CONTOURS SHOWN HEREON ARE BASED UPON DIRECT FIELD OBSERVATION. THE VERTICAL ACCURACY IS +/- ONE-HALF THE CONTOUR INTERVAL.

3. THE INFORMATION SHOWN HEREON REPRESENTS THE RESULTS OF A FIELD SURVEY MADE ON 03-19-26 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

4. THE AVERAGE CONTOUR ELEVATION SHOWN HEREON IS ACCURATE WITHIN 6 INCHES VERTICALLY AND HORIZONTALLY FROM ACTUAL ELEVATIONS.

RAYMOND E. SLATER JR.
STATE OF WASHINGTON
36811
REGISTERED
PROFESSIONAL LAND SURVEYOR
03-23-26

RYKA LAND SERVICES

DATE: 03-23-26	REVISED:	SCALE: 1" = 5'
JOB NO.: YUS-052125	DRAWN BY: JRS	SHEET: 3 OF 3

YUSEN RESIDENCE

SEC 12, T 24 N, R 4 E, W. M.

SITE NOTES:

1. SOILS OF DISTURBED PERVIOUS AREAS TO BE AMENDED.

STORM CALLOUTS:

1. PROPOSED STORM DRAINAGE SYSTEM, TYP (SEE SHEET C3.0 FOR STORMWATER PLAN).

PROJECT TEAM:

OWNER:
DAVID AND CAITLIN YUSEN
8717 SE 44TH PLACE
MERCER ISLAND, WA 98040
PH: 425.591.6904

ARCHITECT:
STURMAN ARCHITECTS
BRAD STURMAN
9–103RD AVE NE, SUITE 203
BELLEVUE, WA 98004
PH: 425.451.7003
EMAIL: BRAD@STURMANARCHITECTS.COM

CIVIL ENGINEER:
PATRICK HARRON & ASSOCIATES, LLC
SCHWIN CHAOSILAPAKUL, PE
14900 INTERURBAN AVENUE S #279
SEATTLE, WA 98168
PH: 206.674.4659
EMAIL: SCHWIN@PATRICKHARRON.COM

CONTRACTOR:
RKK CONSTRUCTION INC
JASON KOEHLER
3056 70TH AVE SE
MERCER ISLAND, WA 98040
PH: 206.730.1237

SURVEYOR:
RYKA LAND SERVICES
RAYMOND E SLATER JR
7525 SE 24TH ST
MERCER ISLAND, WA 98040
PH: 206.523.1941

GEOTECHNICAL ENGINEER:
GEOTECH CONSULTANTS, INC
MARC MCGINNIS
2401 10TH AVE EAST
SEATTLE, WA 98102
PH: 425.747.5618
EMAIL: MARCM@GEOTECHNW.COM

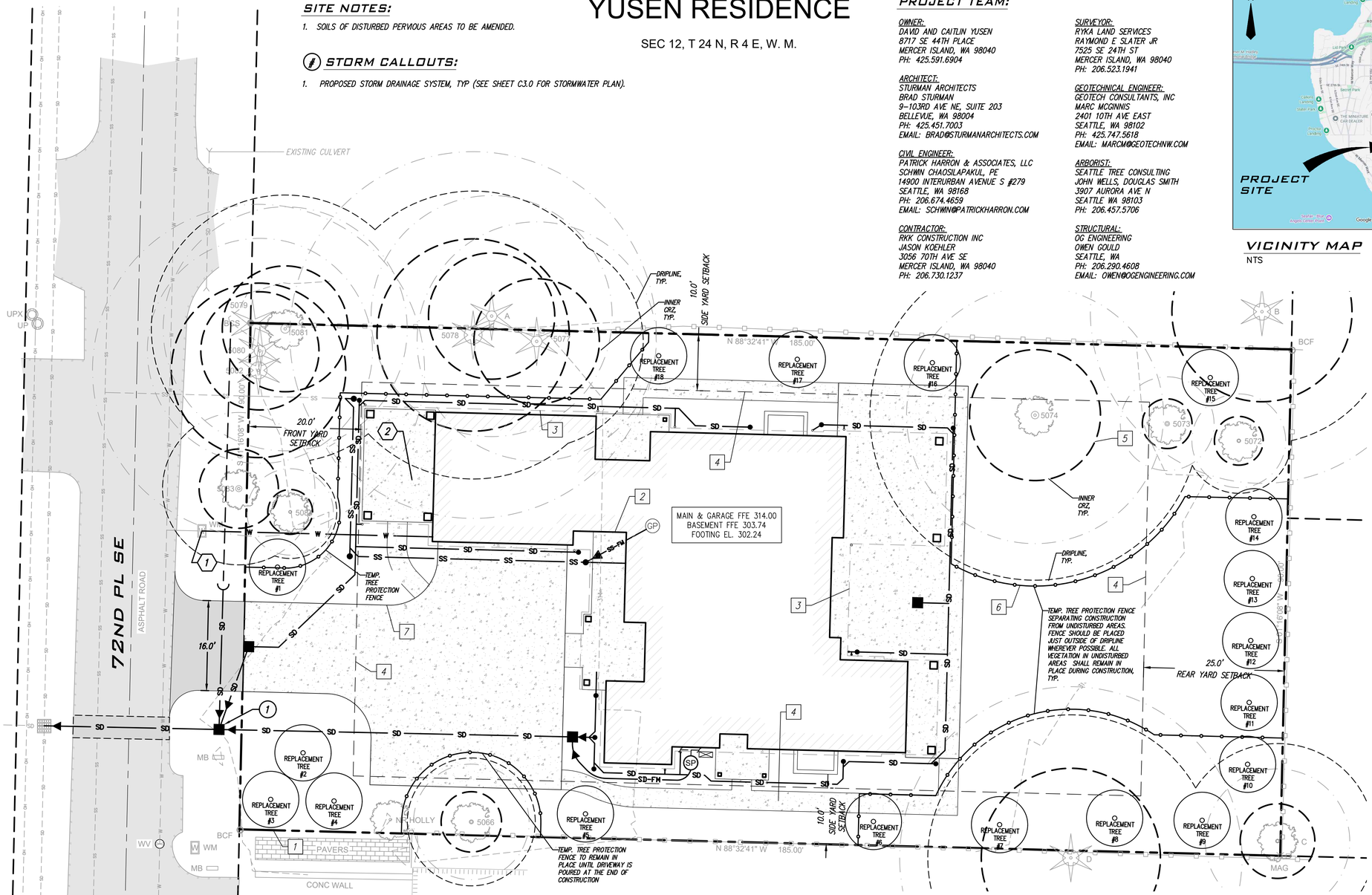
ARBORIST:
SEATTLE TREE CONSULTING
JOHN WELLS, DOUGLAS SMITH
3907 AURORA AVE N
SEATTLE WA 98103
PH: 206.457.5706

STRUCTURAL:
OG ENGINEERING
OWEN GOULD
SEATTLE, WA
PH: 206.290.4608
EMAIL: OWEN@OGENGINEERING.COM



VICINITY MAP

NTS



SITE CALLOUTS:

1. PROPERTY BOUNDARY, TYP.
2. PROPOSED BUILDING FOOTPRINT, TYP.
3. PROPOSED BUILDING ROOFLINE, TYP.
4. BUILDING SETBACK LINE, TYP. SEE PROJECT INFORMATION FOR MINIMUM SETBACKS.
5. EXISTING TREES TO BE PROTECTED–IN–PLACE UNLESS OTHERWISE NOTED, TYP (SEE ARBORIST REPORT AND SHEET C2.0 FOR LIMITS OF DISTURBANCE AND TREE PROTECTION).
6. TREE PROTECTION FENCING, TYP (SEE SHEET C2.0).
7. PROPOSED ON–SITE CONCRETE DRIVEWAY/PARKING, TYP

SEWER & WATER CALLOUTS:

1. PROPOSED DOMESTIC WATER SERVICE CONNECTED TO EXISTING METER.
2. PROPOSED SANITARY SEWER SYSTEM.

PROJECT INFORMATION:

DEVELOPMENT DATA:	
PROPERTY AREA	16,586 SF (0.38 AC)
SITE ADDRESS	3245 72ND PL SE MERCER ISLAND, WA 98040
PARCEL NUMBER	130030–0840
ZONED	R–8.4
BUILDING SETBACKS:	
FRONT YARD	20.0 FT
SIDE YARD	15.0 FT, 5FT MIN
REAR YARD	25.0 FT
LOT COVERAGE (BLDG)	LESSER OF 40% LOT AREA OR 5,000 SF
UTILITIES:	
SEWER	MERCER ISLAND PUBLIC WORKS
WATER	WATER DISTRICT
POWER	PUGET SOUND ENERGY
FIRE DISTRICT	MERCER ISLAND FIRE DEPARTMENT

LEGAL DESCRIPTION:

(PER STATUTORY WARRANTY DEED, RECORDING NO. 20250609000850).

LOTS 23, 24 AND 25, BLOCK 3;

EXCEPT THE EAST 65 FEET THEREOF;

AND THE NORTH 90.27 FEET OF THE SOUTH 150.27 FEET OF MAGNOLIA SQUARE "VACATED";

AND THAT PORTION OF VACATED 73RD AVENUE SOUTHEAST "WEBSTER STREET" ADJOINING;

ALL IN C.C. CALKINS' FIRST ADDITION TO EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 4 OF PLATS, PAGE 88, IN KING COUNTY, WASHINGTON

DATUM:

VERTICAL DATUM
WSPCS – NORTH ZONE NAD 83 (2011)

HORIZONTAL DATUM (BASIS OF ELEVATION)
CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) SSHO, ZSE1 & HAHD

SHEET LIST TABLE

SHEET #	NAME	DESCRIPTION
1	C1.0	COVER SHEET
2	C2.0	TESC PLAN
3	C2.1	TESC DETAILS
4	C3.0	GRADING AND UTILITY PLAN
5	C4.0	STORM PLAN
6	C4.1	STORM DETAILS
7	C5.0	UTILITY PLAN

ABBREVIATIONS:

AVE	AVENUE
BC	BOTTOM OF CURB
CB	CATCH BASIN
CONC	CONCRETE
CSBC	CRUSHED SURFACE BASE COURSE
CSTC	CRUSHED SURFACE TOP COURSE
DTE	DOWN–TURNED ELBOW
DWS	DESIGN WATER SURFACE
E	EAST
EG	EXISTING GRADE
ELEV	ELEVATION
EX	EXISTING
FD	FOOTING DRAIN
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
FY	FRONT YARD
HP	HIGH POINT
IE	PIPE INVERT
LP	LOW POINT
N	NORTH
NTS	NOT TO SCALE
R	RADIUS
RD	ROOF DRAIN
RY	REAR YARD
S	SOUTH
SB	BUILDING SETBACK
SDCO	STORM DRAIN CLEANOUT
SDMH	STORM DRAIN MANHOLE
SED	SEDIMENT STORAGE
SF	SQUARE FEET (FOOT)
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
ST	STREET
SLL	SOLID LOCKING LID
SY	SIDE YARD
TC	TOP OF CURB
TD	TRENCH DRAIN
TYP	TYPICAL
UTE	UP–TURNED ELBOW
W	WEST
WA	WATER

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1–800–424–5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

SCHWIN CHAOSILAPAKUL 21823 REGISTERED PROFESSIONAL ENGINEER STATE OF WASHINGTON 4/7/26

CITY OF MERCER ISLAND

COVER SHEET

YUSEN RESIDENCE

DAVID & CAITLIN YUSEN
3246 72ND PL SE
MERCER ISLAND, WA 98040

PATRICK HARRON & ASSOCIATES, LLC
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PROJ. NO.	25113
DSN. BY:	NM, CMC
DWN. BY:	SC/~~SC~~/~~NM~~
CHK. BY:	SC
DATE:	4/7/26
SCALE:	AS SHOWN
DRAWING NO.	C1.0
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Apr 07, 2026 - 3:35:30PM - User: Nick Millman
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YUSEN RESIDENCE

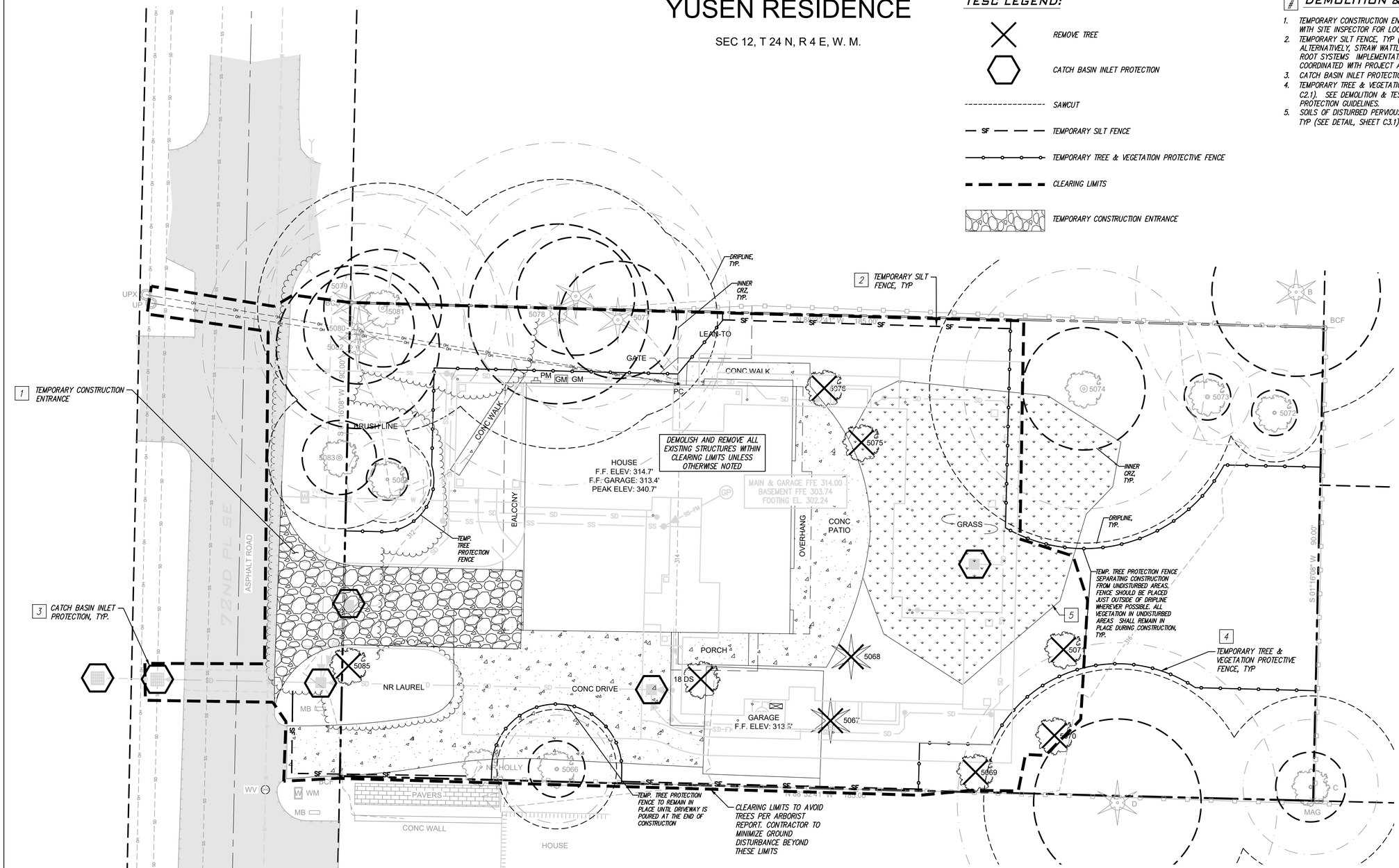
SEC 12, T 24 N, R 4 E, W. M.

TESC LEGEND:

- REMOVE TREE
- CATCH BASIN INLET PROTECTION
- SAWCUT
- SF — SF — TEMPORARY SILT FENCE
- TEMPORARY TREE & VEGETATION PROTECTIVE FENCE
- CLEARING LIMITS
- TEMPORARY CONSTRUCTION ENTRANCE

DEMOLITION & TESC CALLOUTS:

1. TEMPORARY CONSTRUCTION ENTRANCE (SEE DETAIL, SHEET C2.1). COORDINATE WITH SITE INSPECTOR FOR LOCATION AND EXTENTS.
2. TEMPORARY SILT FENCE, TYP (SEE DETAIL, SHEET C2.1 AND TESC NOTE 4). ALTERNATIVELY, STRAW WATTLES MY BE USED TO LESSEN IMPACTS ON TREE ROOT SYSTEMS IMPLEMENTATION OF SEDIMENT CONTROL SYSTEMS TO BE COORDINATED WITH PROJECT ARBORIST FOR AREAS WITHIN TPZ.
3. CATCH BASIN INLET PROTECTION, TYP (SEE DETAIL, SHEET C2.1).
4. TEMPORARY TREE & VEGETATION PROTECTIVE FENCE, TYP (SEE DETAIL, SHEET C2.1). SEE DEMOLITION & TESC NOTES, THIS SHEET, FOR ADDITIONAL TREE PROTECTION GUIDELINES.
5. SOILS OF DISTURBED PERVIOUS AREAS ARE TO BE AMENDED, PER BMP T5.13, TYP (SEE DETAIL, SHEET C3.1).



0 10 20
HORIZONTAL SCALE

DEMOLITION & TESC NOTES:

1. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION ON TREE PROTECTION.
2. PRIOR TO BEGINNING ANY CONSTRUCTION, COORDINATE INSTALLATION OF TREE PROTECTION FENCING WITH GENERAL CONTRACTOR, CITY AND OWNERS REPRESENTATIVE PROJECT ARBORIST. COORDINATE GRADING AND SOIL PREPARATION ACTIVITIES AROUND EXISTING TREES TO REMAIN WITH GENERAL CONTRACTOR, OWNERS REPRESENTATIVE, PROJECT ARBORIST AND CITY.
3. TREE PROTECTION BARRIERS SHALL BE INITIALLY ERECTED AT 5 FEET OUTSIDE OF THE DRIP LINE PRIOR TO MOVING ANY HEAVY EQUIPMENT ON SITE.
   - TREE PROTECTION FENCING SHALL ONLY BE MOVED WHERE NECESSARY TO INSTALL IMPROVEMENTS, BUT ONLY AS CLOSE AS THE LIMITS OF DISTURBANCE, AS INDICATED IN THE ARBORIST REPORT.
   - EXCAVATION LIMITS SHOULD BE LAID OUT IN PAINT ON THE GROUND TO AVOID OVER EXCAVATING.
   - EXCAVATIONS WITHIN THE DRIP LINES SHALL BE MONITORED BY A QUALIFIED TREE PROFESSIONAL SO NECESSARY PRECAUTIONS CAN BE TAKEN TO DECREASE IMPACTS TO TREE PARTS. A QUALIFIED ARBORIST SHALL MONITOR EXCAVATIONS WHEN WORK IS REQUIRED AND ALLOWED UP TO THE "LIMITS OF DISTURBANCE."
   - TO ESTABLISH SUB GRADE FOR FOUNDATIONS, CURBS AND PAVEMENT SECTIONS NEAR THE TREES, SOIL SHOULD BE REMOVED PARALLEL TO THE ROOTS AND NOT AT 90-DEGREE ANGLES TO AVOID BREAKING AND TEARING ROOTS THAT LEAD BACK TO THE TRUNK WITHIN THE DRIP-LINE. ANY ROOTS DAMAGED DURING THESE EXCAVATIONS SHOULD BE EXPOSED TO SOUND TISSUE AND CUT CLEANLY WITH A SAW.
   - AREAS EXCAVATED WITHIN THE DRIP LINE OF RETAINED TREES SHOULD BE THOROUGHLY IRRIGATED WEEKLY DURING DRY PERIODS.
   - PREPARATIONS FOR FINAL LANDSCAPING SHALL BE ACCOMPLISHED BY HAND WITHIN THE DRIP LINES OF RETAINED TREES. PLANTINGS WITHIN THE DRIP LINES SHALL BE LIMITED. LARGE EQUIPMENT SHALL BE KEPT OUTSIDE OF THE TREE PROTECTION ZONES.
4. FILTER/SILT FENCING WITHIN THE TPZ OF RETAINED TREES SHALL BE INSTALLED IN A MANNER THAT DOES NOT SEVER ROOTS. INSTALL SO THAT FILTER/SILT FENCING SITS ON THE GROUND AND IS WEIGHED IN PLACE BY SANDBAGS OR GRAVEL. DO NOT TRENCH TO INSERT FILTER/SILT FENCING INTO THE GROUND. REFER TO PROJECT ARBORIST TREE PROTECTION SPECIFICATIONS ON C2.1.

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

CHRISTOPHER MICHAEL CARLSON — 22344 — REGISTERED PROFESSIONAL ENGINEER — 4/7/26

CITY OF MERCER ISLAND

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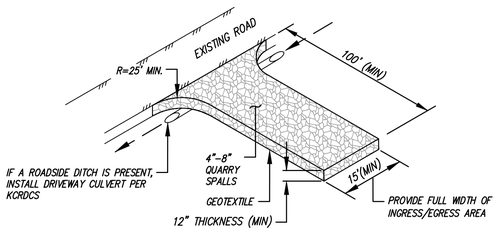
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YUSEN RESIDENCE

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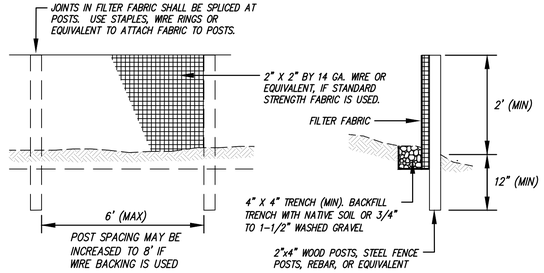


NOTES:

1. PER KING COUNTY ROAD DESIGN AND CONSTRUCTION STANDARDS (KCRDCS), DRIVEWAYS SHALL BE PAVED TO EDGE OF R–O–W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO AVOID DAMAGING OF THE ROADWAY.
2. IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD.

CONSTRUCTION ENTRANCE

SCALE: NTS

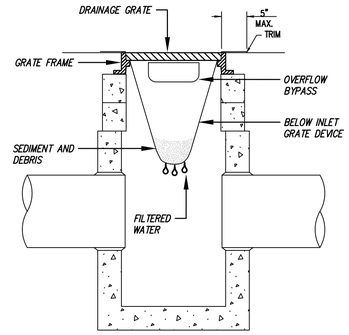


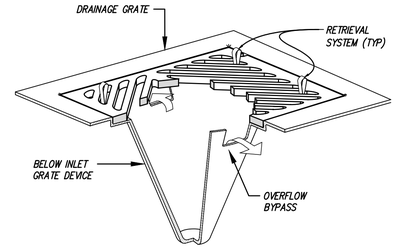
NOTE:

1. SILT FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOURS WHENEVER POSSIBLE

SILT FENCE

SCALE: NTS



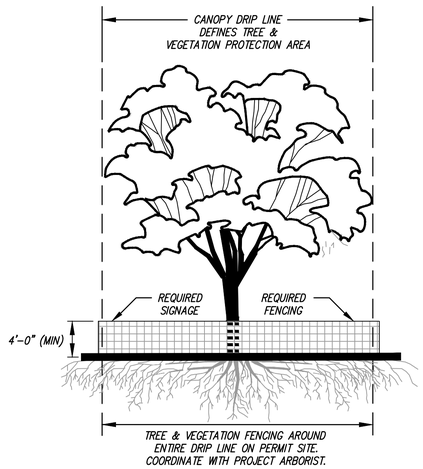


NOTES:

1. SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
2. THE BIGD SHALL HAVE A BUILT–IN HIGH–FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
3. THE RETRIEVAL SYSTEM MUST ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.
4. PERFORM MAINTENANCE IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATION 8–01.3(15).

CATCH BASIN INLET PROTECTION

SCALE: NTS



TREE PROTECTION FENCING AND SIGN

1. CHAIN LINK, WIRE MESH, OR SIMILAR OPEN RIGID MATERIAL (NO PLYWOOD)
2. MUST BE INSTALLED PRIOR TO DEMOLITION OR GROUND DISTURBANCE
3. KEPT IN PLACE FOR THE DURATION OF CONSTRUCTION
4. NO SOIL DISTURBANCE OR ACTIVITY ALLOWED WITHIN FENCED AREA: MATERIAL STORAGE/STOCKPILING, PARKING, EXCAVATION, DUMPING, OR WASHING
5. MODIFICATIONS OF THESE REQUIREMENTS BY APPROVAL OF SDCI PLANNER ONLY
6. IF ROOTS GREATER THAN 2 INCH FOUND OUTSIDE OF FENCING, PROTECT BY HAND EXCAVATION AND, IF NECESSARY, CUT CLEANLY AND KEEP MOIST
7. USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

VEGETATION PROTECTION

1. ORANGE MESH OR SIMILAR OPEN MATERIAL
2. MINIMIZE CONSTRUCTION ZONE
3. PROTECT VEGETATION OUTSIDE CONSTRUCTION ZONE WITH FENCING AS SHOWN
4. USE 3 INCHES OR DEEPER WOOD CHIP MULCH OUTSIDE FENCED AREAS TO PROTECT FEEDER ROOTS

TREE & VEGETATION PROTECTIVE FENCE

SCALE: NTS

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R#	DATE	DESCRIPTION	BY

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MERCER ISLAND, WA 98040

DATE: 4/7/26

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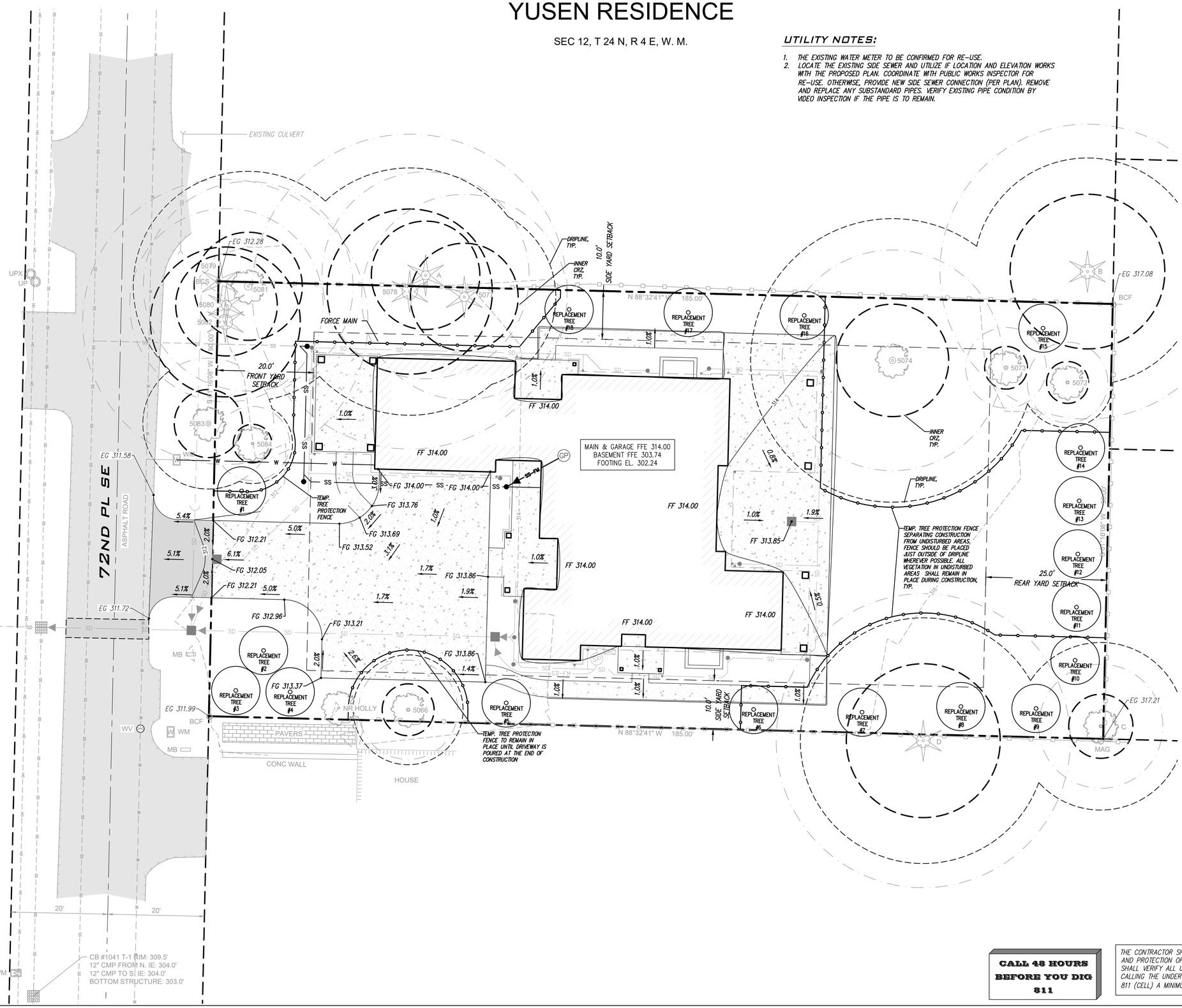
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YUSEN RESIDENCE

SEC 12, T 24 N, R 4 E, W. M.

UTILITY NOTES:

1. THE EXISTING WATER METER TO BE CONFIRMED FOR RE-USE.
2. LOCATE THE EXISTING SIDE SEWER AND UTILIZE IF LOCATION AND ELEVATION WORKS WITH THE PROPOSED PLAN. COORDINATE WITH PUBLIC WORKS INSPECTOR FOR RE-USE. OTHERWISE, PROVIDE NEW SIDE SEWER CONNECTION (PER PLAN). REMOVE AND REPLACE ANY SUBSTANDARD PIPES. VERIFY EXISTING PIPE CONDITION BY VIDEO INSPECTION IF THE PIPE IS TO REMAIN.



0 10 20
HORIZONTAL SCALE

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R#	DATE	DESCRIPTION	BY

CHRISTOPHER A. LAPAKUL — 22400 — REGISTERED PROFESSIONAL ENGINEER — 4/7/26

CITY OF MERCER ISLAND

GRADING PLAN

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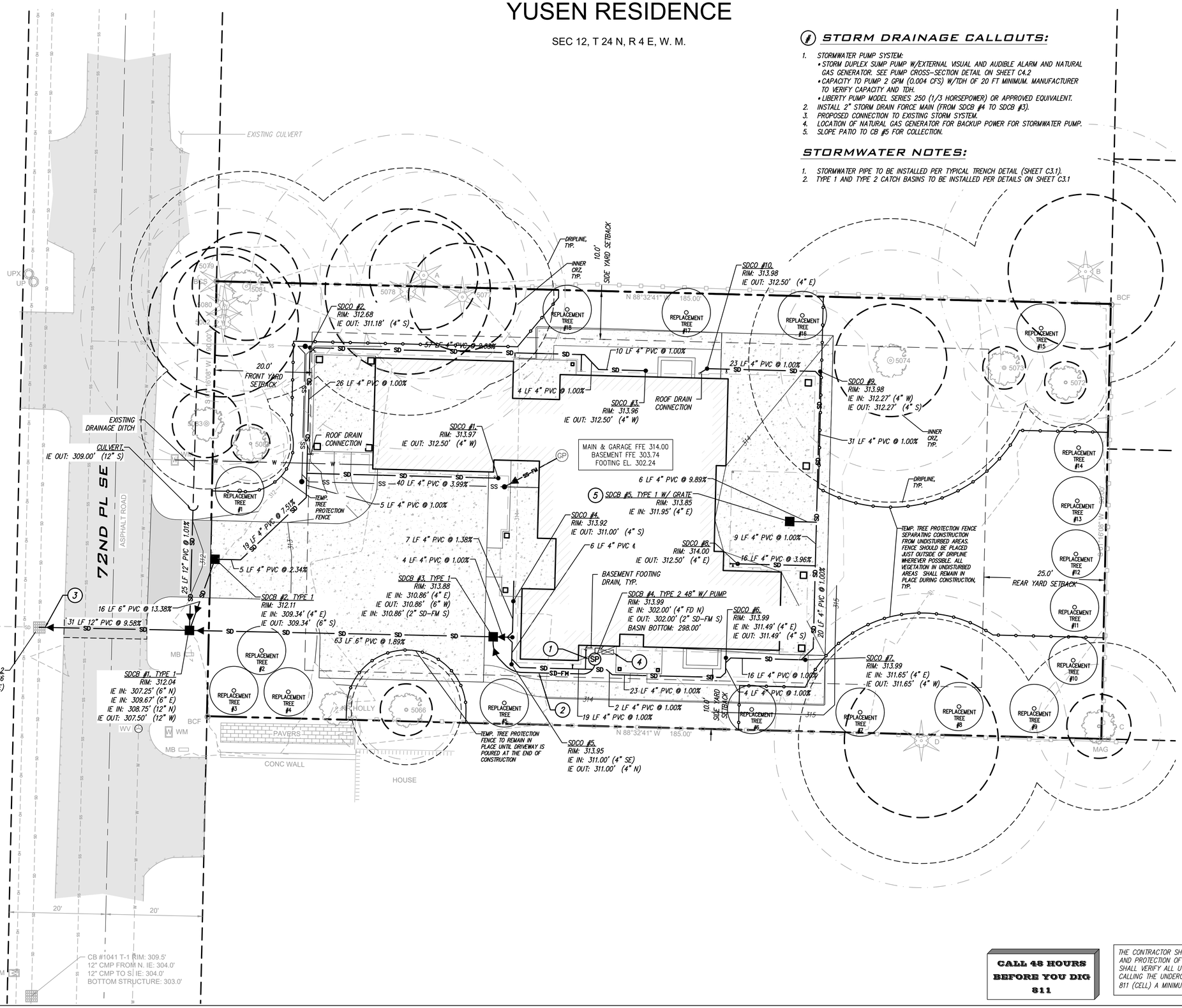
SEC 12, T 24 N, R 4 E, W. M.

STORM DRAINAGE CALLOUTS:

1. STORMWATER PUMP SYSTEM:
   - STORM DUPLEX SUMP PUMP W/EXTERNAL VISUAL AND AUDIBLE ALARM AND NATURAL GAS GENERATOR. SEE PUMP CROSS-SECTION DETAIL ON SHEET C4.2
   - CAPACITY TO PUMP 2 GPM (0.004 CFS) W/TDH OF 20 FT MINIMUM. MANUFACTURER TO VERIFY CAPACITY AND TDH.
   - LIBERTY PUMP MODEL SERIES 250 (1/3 HORSEPOWER) OR APPROVED EQUIVALENT.
2. INSTALL 2" STORM DRAIN FORCE MAIN (FROM SDCB #4 TO SDCB #3).
3. PROPOSED CONNECTION TO EXISTING STORM SYSTEM.
4. LOCATION OF NATURAL GAS GENERATOR FOR BACKUP POWER FOR STORMWATER PUMP.
5. SLOPE PATIO TO CB #5 FOR COLLECTION.

STORMWATER NOTES:

1. STORMWATER PIPE TO BE INSTALLED PER TYPICAL TRENCH DETAIL (SHEET C3.1).
2. TYPE 1 AND TYPE 2 CATCH BASINS TO BE INSTALLED PER DETAILS ON SHEET C3.1



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CITY OF MERCER ISLAND

STORM PLAN

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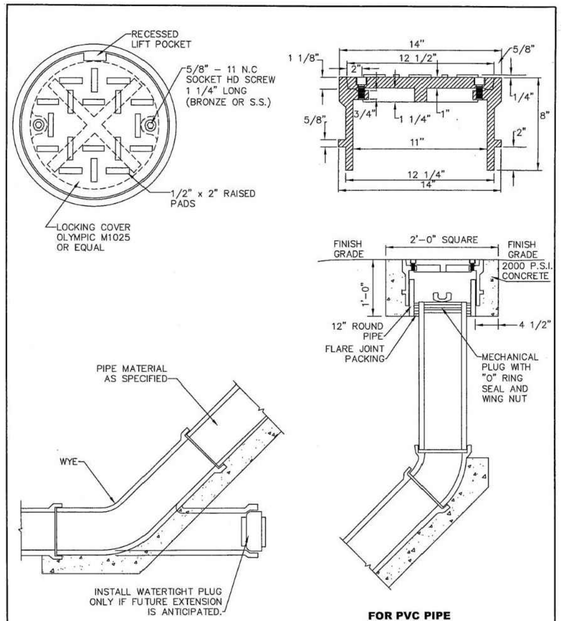
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YUSEN RESIDENCE



FOR PVC PIPE

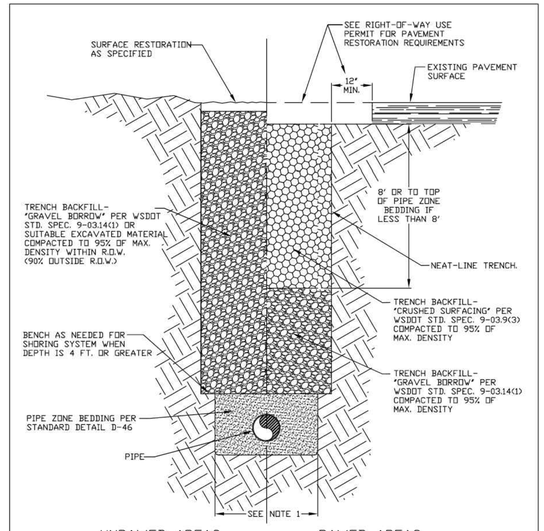
NOTES

1. SEE S-27 FOR INSTALLATION DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER

CLEAN OUT DETAIL

6-5-2009	NO SCALE	**S-19**
REV DATE		APPROVED



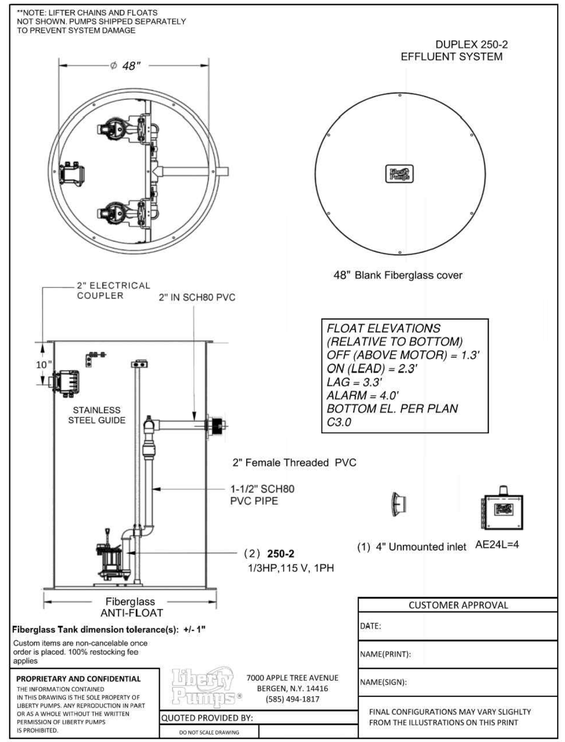
NOTES:

1. MAXIMUM WIDTH OF TRENCH AT TOP OF PIPE ZONE:
   - 36" FOR PIPE UP TO AND INCLUDING 18" NOMINAL DIAMETER.
   - NOMINAL DIAMETER PLUS 18" FOR PIPE LARGER THAN 18" NOMINAL DIAMETER.
2. EXCAVATIONS OVER 4' DEEP SHALL COMPLY WITH THE SAFETY STANDARD DESCRIBED IN CHAPTER 296-155 – PART N OF THE WAC.
3. SEE "BEDDING, BACKFILL AND COMPACTION" IN CHAPTER D8 OF THE ENGINEERING STANDARDS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
4. RECYCLED CONCRETE RUBBLE SHALL NOT BE USED AS BEDDING IN THE PIPE ZONE, AS TRENCH BACKFILL OR AS BACKFILL ABOVE THE PROJECTED NEAT-LINE TRENCH ABOVE A PIPE OR STRUCTURE.

NO SCALE

TITLE

TYPICAL TRENCH DETAIL



Fiberglass Tank dimension tolerance(s): +/- 1"

Custom items are non-cancelable once order is placed. 100% restocking fee applies

CUSTOMER APPROVAL
DATE:
NAME(PRINT):
NAME(SIGN):
FINAL CONFIGURATIONS MAY VARY SLIGHLTY FROM THE ILLUSTRATIONS ON THIS PRINT

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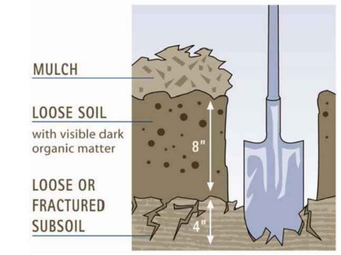


Figure 5.3.3 – Planting bed Cross-Section

SOIL AMENDMENT DETAIL BMP T5.13

NTS

DESIGN GUIDELINES:

- SOIL RETENTION. RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.

- SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:

1. A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
2. MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
3. USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
   a. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP T7.30), WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
   b. CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A.) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.

THE RESULTING SOIL SHOULD BE CONDUCIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

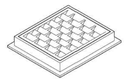
- IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:

1. LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
2. AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
3. STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
4. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

MAINTENANCE:

- ESTABLISH SOIL QUALITY AND DEPTH TOWARD THE END OF CONSTRUCTION AND ONCE ESTABLISHED, PROTECT FROM COMPACTION, SUCH AS FROM LARGE MACHINERY USE, AND FROM EROSION.
- PLANT VEGETATION AND MULCH THE AMENDED SOIL AREA AFTER INSTALLATION.
- LEAVE PLANT DEBRIS OR ITS EQUIVALENT ON THE SOIL SURFACE TO REPLENISH ORGANIC MATTER.
- REDUCE AND ADJUST, WHERE POSSIBLE, THE USE OF IRRIGATION, FERTILIZERS, HERBICIDES AND PESTICIDES, RATHER THAN CONTINUING TO IMPLEMENT FORMERLY ESTABLISHED PRACTICES.

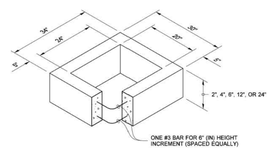
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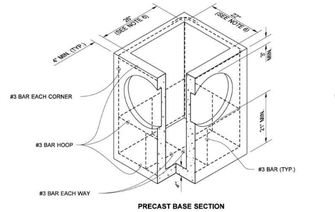
FRAME AND VANED GRATE

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP ★ (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

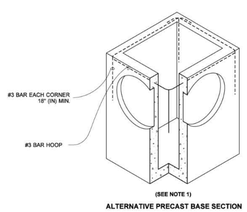
★ CORRUGATED POLYETHYLENE STORM SEWER PIPE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION



(SEE NOTE 1)

ALTERNATIVE PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the **Precast Base Section**.
7. All pickup holes shall be grouted full after the basin has been placed.

Julie Heilman
2020.09.01 07:52:50 -07'00'

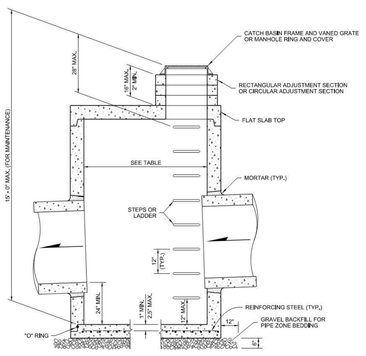
CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Roark, Steve
Digitally signed by Roark, Steve
Date: 2020.09.09 09:45:23 -07'00'
STATE DESIGN ENGINEER
Washington State Department of Transportation

DRAWN BY: FERN LEDELL



CATCH BASIN DIMENSIONS				
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

PIPE ALLOWANCES					
CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER				
	CONCRETE	ALL METAL	CPSSP ① PP ④	SOLID WALL PVC ②	PROFILE WALL PVC ③
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72"	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

① Corrugated Polyethylene Storm Sewer Pipe (See **Standard Specification Section 9-05.20**)
② (See **Standard Specification Section 9-05.12(1)**)
③ (See **Standard Specification Section 9-05.12(2)**)
④ Polypropylene Pipe (See **Standard Specification 9-05.24**)

NOTES

1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
4. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3.**

Julie Heilman
Feb 20 2018 12:49 PM

CATCH BASIN TYPE 2

STANDARD PLAN B-10.20-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Heilman, Julie
Feb 20 2018 12:49 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

R#	DATE	DESCRIPTION	BY

COSTA LAPAKULIS 23784 EXPIRES: 4/7/26 REGISTERED PROFESSIONAL ENGINEER
4/7/26

CITY OF MERCER ISLAND

STORM DETAILS

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S. Suite 279, Seattle, WA 98168
206.851.4053
Web: patrickharron.com

PROJ. NO.	DSN. BY:
25113	NM, CMC
DWN. BY: SC~~DSH~~NM	CHK. BY: SC

YUSEN RESIDENCE

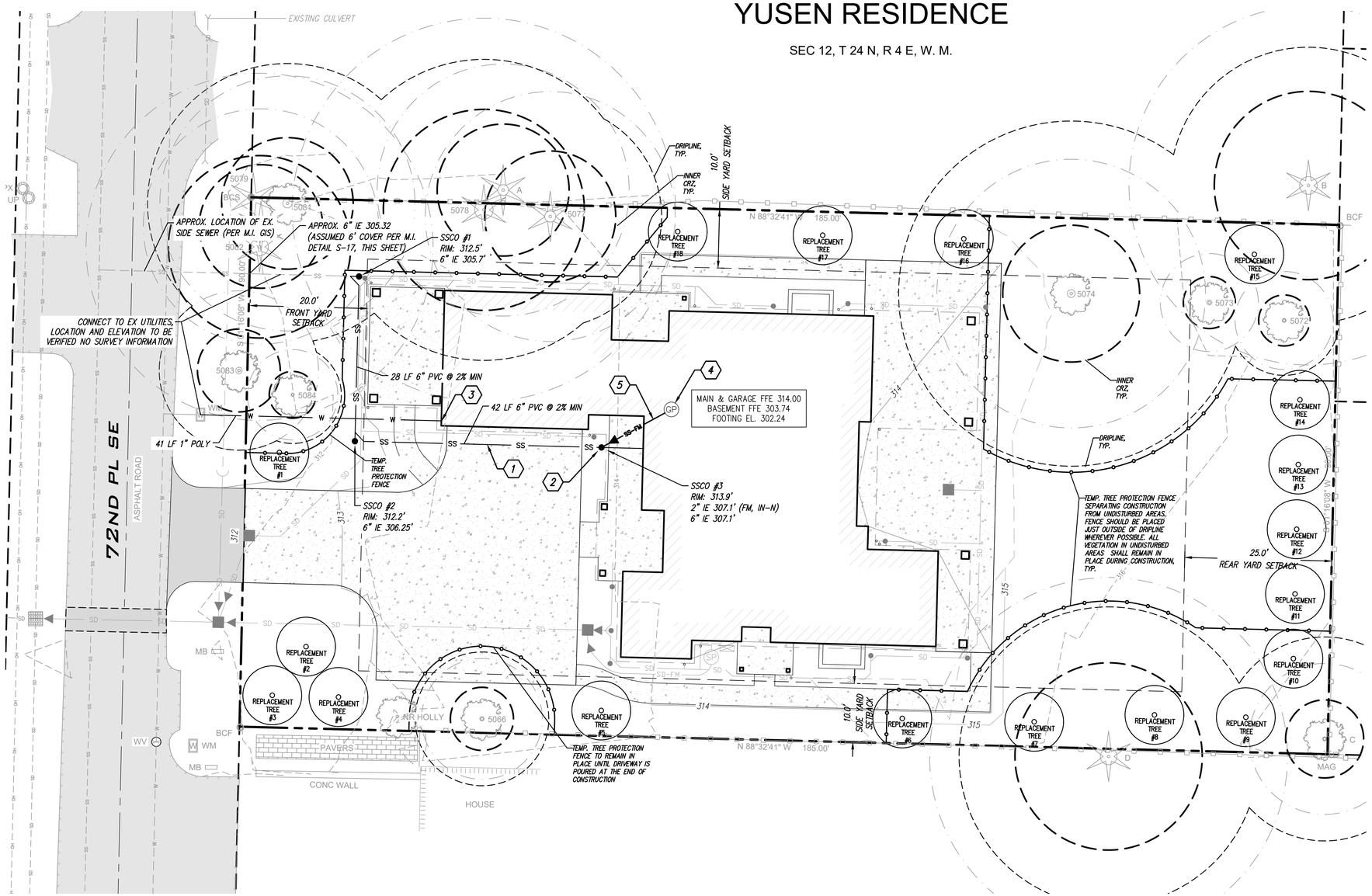
DAVID & CAITLIN YUSEN
3246 72ND PL SE
MERCER ISLAND, WA 98040

DATE:	4/7/26
SCALE:	AS SHOWN
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	6 OF 7

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YUSEN RESIDENCE

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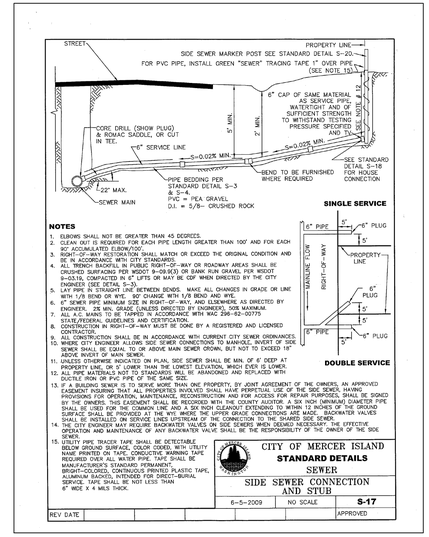
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HORIZONTAL SCALE

UTILITY CALLOUTS:

1. INSTALL 6" PVC SANITARY SIDE SEWER @ 2.0% (MIN), PER CITY OF MERCER ISLAND STD. PLAN NO. S-17 (SEE DETAIL 1, THIS SHEET). CONNECT TO EX. 6" SS STUB.
2. INSTALL SANITARY SEWER CLEANOUT, PER CITY OF MERCER ISLAND STD. DETAIL NO. S-17 (SEE DETAIL 1, THIS SHEET).
3. CONNECT TO EX. WATER LINE, LOCATION TO BE CONFIRMED
4. INSTALL SANITARY SEWER GRINDER PUMP PER CITY OF MERCER ISLAND STD. DETAIL S-33 (THIS SHEET) FOR BASEMENT SYSTEM:
   - SANITARY GRINDER PUMP W/ VISUAL AND AUDIBLE ALARM (BY OTHERS).
   - 2 HORSEPOWER MINIMUM PUMP SIZE REQUIRED PER CITY OF MERCER ISLAND STD. DETAIL S-33.
   - CAPACITY REQUIRED TO PUMP 480 GPD (MIN) W/ TDH OF 10'.
   - APPROXIMATE PROPOSED PUMP LOCATION SHOWN ON PLAN.
5. INSTALL 13 LF 2" SANITARY SEWER FORCE MAIN (TO SSCO #1).

UTILITY NOTES:

1. EXISTING WATER METER TO BE CONFIRMED FOR RE-USE.
2. LOCATE THE EXISTING SIDE SEWER AND UTILIZE IF LOCATION AND ELEVATION WORKS WITH PROPOSED PLAN. COORDINATE WITH PUBLIC WORKS INSPECTOR FOR RE-USE. OTHERWISE, PROVIDE NEW SIDE SEWER CONNECTION (PER PLAN). REMOVE AND REPLACE ANY SUBSTANDARD PIPES. VERIFY EXISTING PIPE CONDITION BY VIDEO INSPECTION IF PIPE IS TO REMAIN.

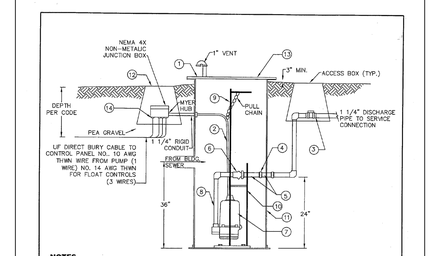


NOTES

1. FLEXING SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/DOG'.
3. RIGHT-OF-WAY RESTORATION SHALL MATCH OR EXCEED THE ORIGINAL CONDITION AND BE IN ACCORDANCE WITH CITY STANDARDS.
4. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE COMPACTED BY MEANS OF A VIBRATORY OR GRAVITY RAM TYPE TAMPER UNLESS OTHERWISE APPROVED. FLOATS OR JETS ON MAY BE USE WHEN DIRECTED BY THE CITY ENGINEER (SEE DETAIL S-3).
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 6" SEWER PIPE MINIMUM SIZE IN RIGHT-OF-WAY, AND ELSEWHERE AS DIRECTED BY ENGINEER. 2% MIN. GRADE (UNLESS DIRECTED BY ENGINEER), 50% MAXIMUM.
7. ALL A.C. MAINS TO BE TAPPED IN ACCORDANCE WITH WAC 296-62-30775 STATE/FEDERAL GUIDELINES AND CERTIFICATION.
8. CONNECTION IN RIGHT-OF-WAY MUST BE DONE BY A REGISTERED AND LICENSED CONTRACTOR.
9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CITY SEWER ORDINANCES.
10. WHERE CITY ENGINEER ALLOWS SIDE SEWER CONNECTIONS TO MANHOLE, INVERT OF SIDE SEWER SHALL BE EQUAL TO OR ABOVE MAIN SEWER CROWN, BUT NOT TO EXCEED 18" ABOVE INVERT OF MAIN.
11. UNLESS OTHERWISE INDICATED ON PLAN, SIDE SEWER SHALL BE MIN. OF 6' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST ELEVATION, WHICH EVER IS LOWER.
12. ALL PIPE MATERIALS NOT TO STANDARDS WILL BE ABANDONED AND REPLACED WITH DUCTILE IRON OR PVC PIPE OF THE SAME SIZE.
13. IF A BUILDING SEWER IS TO SERVE MORE THAN ONE PROPERTY, BY JOINT AGREEMENT OF THE OWNERS, AN APPROVED EASEMENT INSURING THAT ALL APPURTENTES INVOLVED SHALL HAVE PERPETUAL USE OF THE SIDE SEWER, HAVING RESPONSIBILITY FOR MAINTENANCE, RECONSTRUCTION AND FOR ACCESS FOR REPAIR PURPOSES, SHALL BE SIGNED BY THE OWNERS. THIS EASEMENT SHALL BE RECORDED WITH THE COUNTY AUDITOR. A SIX INCH (MINIMUM) DIAMETER PIPE SHALL BE USED FOR THE COMMON LINE AND A SIX INCH CLEANOUT EXTENDING TO WITHIN 12 INCHES OF THE GROUND SURFACE SHALL BE PROVIDED AT THE WYE WHERE THE UPPER GRADE CONNECTIONS ARE MADE. BACKWATER VALVES SHALL BE INSTALLED ON SERVICE LINES UPSTREAM OF THE CONNECTION TO THE SHARED SIDE SEWER.
14. WHERE A SIDE SEWER SERVES MORE THAN ONE PROPERTY, AN OWNERS ASSOCIATION SHALL BE THE EFFECTIVE ENTITY FOR OPERATION AND MAINTENANCE OF ANY BACKWATER VALVE SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE SIDE SEWER.
15. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME, AND SHALL BE INSTALLED ABOVE ALL PIPELINES. WHERE REQUIRED OVER ALL WATER PIPE, TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SIDE SEWER CONNECTION AND STUB
6-5-2009 | NO SCALE | S-17
REV DATE | APPROVED

1 S-17
SCALE: NTS



NOTES

1. 24" DIAMETER GALVANIZED COVER.
2. POWER CONDUIT.
3. 1 1/4" PVC TRUE UNION BALL VALVE (SS) HAYWARD OR EQUAL.
4. 1 1/4" GALVANIZED UNION
5. 1 1/4" GALVANIZED NIPPLES
6. CHECK VALVE AND PUMP DISCONNECT HYDROMATIC OR EQUAL.
7. 2 HP GRINDER PUMP.
8. 1 1/4" GALVANIZED PIPING, APPROX. 1.2'.
9. HOT DIPPED GALVANIZED STEEL RAIL GUIDE SYSTEM.
10. HOT DIPPED GALVANIZED PUMP TECH SHORT RAIL.
11. 24" x 60" FIBERGLASS TANK.
12. ACCESS BOX
    NON-TRAFFIC AREAS-EQUAL TO CARSON MODEL 1419-14B, WITH 1419-2B COVER.
    TRAFFIC AREAS-H-20 RATED CONCRETE BOX EQUAL TO FOOTITE 891/2 METER BOX.
    LIDS SHALL BE MARKED ELECTRICAL OR SEWER RESPECTIVELY.
13. TOP CAN BE SET FLUSH WITH GROUND, IF A CONCRETE PAD IS POURED AROUND THE LIFT STATION AND SLOPE AWAY FROM STATION. KEEP ROOTS AND DEBRIS OUT OF STATION.
14. BOTTOM ENTRY WATER TIGHT STRAIN RELIEF CONNECTORS (FOR USE WITH UNDERGROUND CABLES) ATTACH USING LOCK-NUT WITH SEALING FITTING.

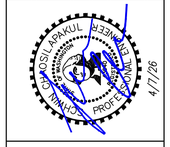
CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
GRINDER LIFT STATION
6-5-2009 | NO SCALE | S-33

2 S-33
SCALE: NTS

CALL 48 HOURS BEFORE YOU DIG 811

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R#	DATE	DESCRIPTION	BY



CITY OF MERCER ISLAND

UTILITY PLAN

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S. Suite 279, Seattle, WA 98168
Phone: 425.467.4628
Web: patrickharron.com

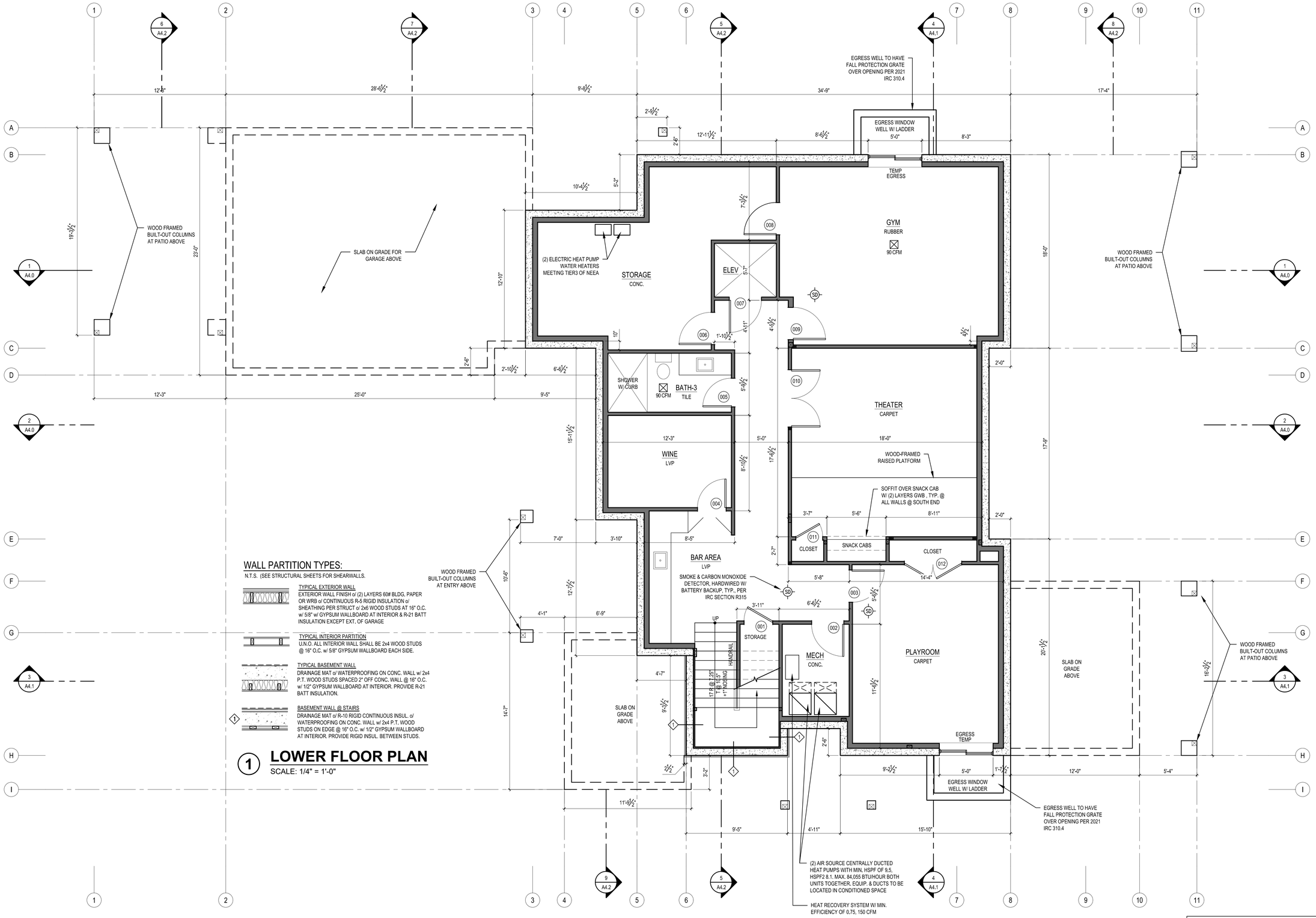
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SD~~XX~~NM	SC

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3246 72ND PL SE
MERCER ISLAND, WA 98040

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WALL PARTITION TYPES:

N.T.S. (SEE STRUCTURAL SHEETS FOR SHEARWALLS.

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ (2) LAYERS 60# BLDG. PAPER OR WRB o/ CONTINUOUS R-5 RIGID INSULATION o/ SHEATHING PER STRUCT o/ 2x6 WOOD STUDS AT 16" O.C. w/ 5/8" w/ GYPSUM WALLBOARD AT INTERIOR & R-21 BATT INSULATION EXCEPT EXT. OF GARAGE

TYPICAL INTERIOR PARTITION
U.N.O. ALL INTERIOR WALL SHALL BE 2x4 WOOD STUDS @ 16" O.C. w/ 5/8" GYPSUM WALLBOARD EACH SIDE.

TYPICAL BASEMENT WALL
DRAINAGE MAT o/ WATERPROOFING ON CONC. WALL w/ 2x4 P.T. WOOD STUDS SPACED 2" OFF CONC. WALL @ 16" O.C. w/ 1/2" GYPSUM WALLBOARD AT INTERIOR. PROVIDE R-21 BATT INSULATION.

BASEMENT WALL @ STAIRS
DRAINAGE MAT o/ R-10 RIGID CONTINUOUS INSUL. o/ WATERPROOFING ON CONC. WALL w/ 2x4 P.T. WOOD STUDS ON EDGE @ 16" O.C. w/ 1/2" GYPSUM WALLBOARD AT INTERIOR. PROVIDE RIGID INSUL. BETWEEN STUDS.

1 LOWER FLOOR PLAN

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

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 04/07/2026

STURMAN ARCHITECTS
345 118th St. SE Suite 103
Bellevue, WA 98004
TEL: 425-451-7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
9460

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MERCER ISLAND, WA 98040

LOWER FLOOR PLAN

REVISIONS:
1 2026-04-7 Corrections #1

PLOT DATE: 4/7/2026
DRAWN BY: KE
CHECKED BY: BJS

SHEET
A2.0

EXTERIOR HEAT PUMP COMPONENTS

GENERATOR

600 CFM MIN. AUTOMATIC MAKE-UP AIR DAMPER - BROAN OR EQUAL. DAMPER SWITCHED TO OPEN WHEN HOOD FAN ACTIVATED, PER IRC SECTION M1503.4

EGRESS WINDOW WELL BELOW

HEAT ALARM / DETECTOR RATED FOR AMBIENT OUTDOOR TEMPERATURE AND HUMIDITY TO BE INSTALLED PER 2018 IRC R314.2.3 REQS & INTERCONNECTED TO SMOKE ALARM SYSTEM

YARD

RECYCLE

TRASH

COVERED PATIO
CONC.

WOOD FRAMED BUILT-OUT COLUMNS AT PATIO ABOVE

ATTIC ACCESS W/ PULL DOWN STAIR. SEE PLAN NOTES

GARAGE
CONC.

1 HR. FIRE RATING
PROVIDE (1) LAYERS 5/8" TYPE 'X' GWB. FIRE TAPED, ON CEILING AND ALL WALLS OF GARAGE.

UPPER FLOOR ABOVE

SLOPE 1/8" PER FT

SLOPE 1/8" PER FT

COVERED PATIO
CONC.

TEMP

PANTRY
HDWD.

90 CFM

T/R

ICE

MICRO

REF

FRZ

KITCHEN
HDWD.

OVENS

D/W

T/R

BUILT-IN BENCH

MUD RM.
HDWD.

POWDER
HDWD.

90 CFM

ELEV.

500 CFM

UPPER FLOOR ABOVE

COVERED PATIO
CONC.

WOOD FRAMED BUILT-OUT COLUMNS AT PATIO ABOVE

BUILT-OUT WOOD COLUMNS, PTD., TYP. @ INTERIOR

SMOKE DETECTOR PER PLAN NOTE 1

UPPER FLOOR ABOVE

WOOD TRELLIS ABOVE

DINING
HDWD.

BUILT-IN BUFFET

DECORATIVE BOX BEAMS ABOVE

LIVING ROOM
HDWD.

DIRECT VENT GAS FIREPLACE, VENTED FROM TOP OF UNIT UP THRU ROOF. EQUIPMENT WILL BE ZERO-CLEARANCE UNIT

CENTRAL PATIO
CONC.

CABS/SHELVES

CABS/SHELVES

CABS/SHELVES

2X4 WALL SPACED 1" OFF LIVING ROOM WALL

CURBLESS SHOWER

90 CFM

FRANKIE'S BATH
TILE

CLOSET

CLOSET

WOOD FRAMED BUILT-OUT COLUMNS AT ENTRY ABOVE

FRONT PORCH

ENTRY
HDWD.

OPEN TO ABOVE

HANDRAIL PER PLAN NOTE 3

UP

DN

20 R @ 7.35" 1" NOSING

17 R @ 7.25" 1" NOSING

HANDRAIL

HANDRAIL

BREEZEWAY
TILE

90 CFM
WD

STACKABLE WASHER & DRYER

FRANKIE'S LIVING
CARPET

FRANKIE'S BED
CARPET

STAGGERED STUD 2X4 WALL ON 2X6 PLATE

UPPER FLOOR ABOVE

BUILT-OUT WOOD COLUMN W/ WOOD TRIM. 2-3"Ø ABS OR PVC INTERNAL DOWNSPOUT THRU COLUMN, TIGHTLINE TO STORMWATER SYSTEM, TYP.

OFFICE
HDWD.

ATTIC ACCESS PER PLAN NOTE 2

EGRESS

EGRESS

EGRESS

EGRESS

EGRESS WINDOW WELL BELOW

PLAN NOTES:

1. SMOKE & CARBON MONOXIDE DETECTOR, HARDWIRED W/ BATTERY BACKUP, PER 2021 IRC SECTION R315

2. ATTIC ACCESS PER 2021 IRC R807. MINIMUM ROUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22" X 30", LOCATED WHERE UNOBSTRUCTED HEADROOM IS MIN. 30".

3. GUARDRAIL W/ STEEL VERTICALS SPACED MAX. 4" & WOOD ____ CAP @ 36" ABOVE FINISH FLOOR INSTALLED PER MANUFACTURER'S REQS. TO RESIST 200# FORCE IN ANY DIRECTION, TYP.

WALL PARTITION TYPES:

N.T.S. (SEE STRUCTURAL SHEETS FOR SHEARWALLS.

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ CONTINUOUS R-5 RIGID INSULATION o/ (2) LAYERS 60# BLDG. PAPER OR WRB o/ SHEATHING PER STRUCT o/ 2x6 WOOD STUDS AT 16" O.C. w/ 5/8" w/ GYPSUM WALLBOARD AT INTERIOR & R-21 BATT INSULATION EXCEPT EXT. OF GARAGE

TYPICAL INTERIOR PARTITION
U.N.O. ALL INTERIOR WALL SHALL BE 2x4 WOOD STUDS @ 16" O.C. w/ 5/8" GYPSUM WALLBOARD EACH SIDE.

2 1HR. FIRE RATED GARAGE WALL
5/8" GYPSUM WALLBOARD @ INTERIOR o/ 2X6 WOOD STUDS @ 16" O.C., w/ R-21 BATT INSULATION w/ CONTINUOUS R-5 RIGID INSULATION w/ (1) LAYER 5/8" TYPE 'X' GWB PANEL NAILED 7" O.C.-1 7/8" CEM CTD NAILS- JOINTS EXP OR FIN - PERIM CAULKED- UL DES U305 & U314- JOINTS FIN

1 MAIN FLOOR PLAN

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

STURMAN ARCHITECTS
345 118th St. SE Suite 103
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TEL: 425-451-7003

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REVISIONS:
2026-4-7 Corrections #1

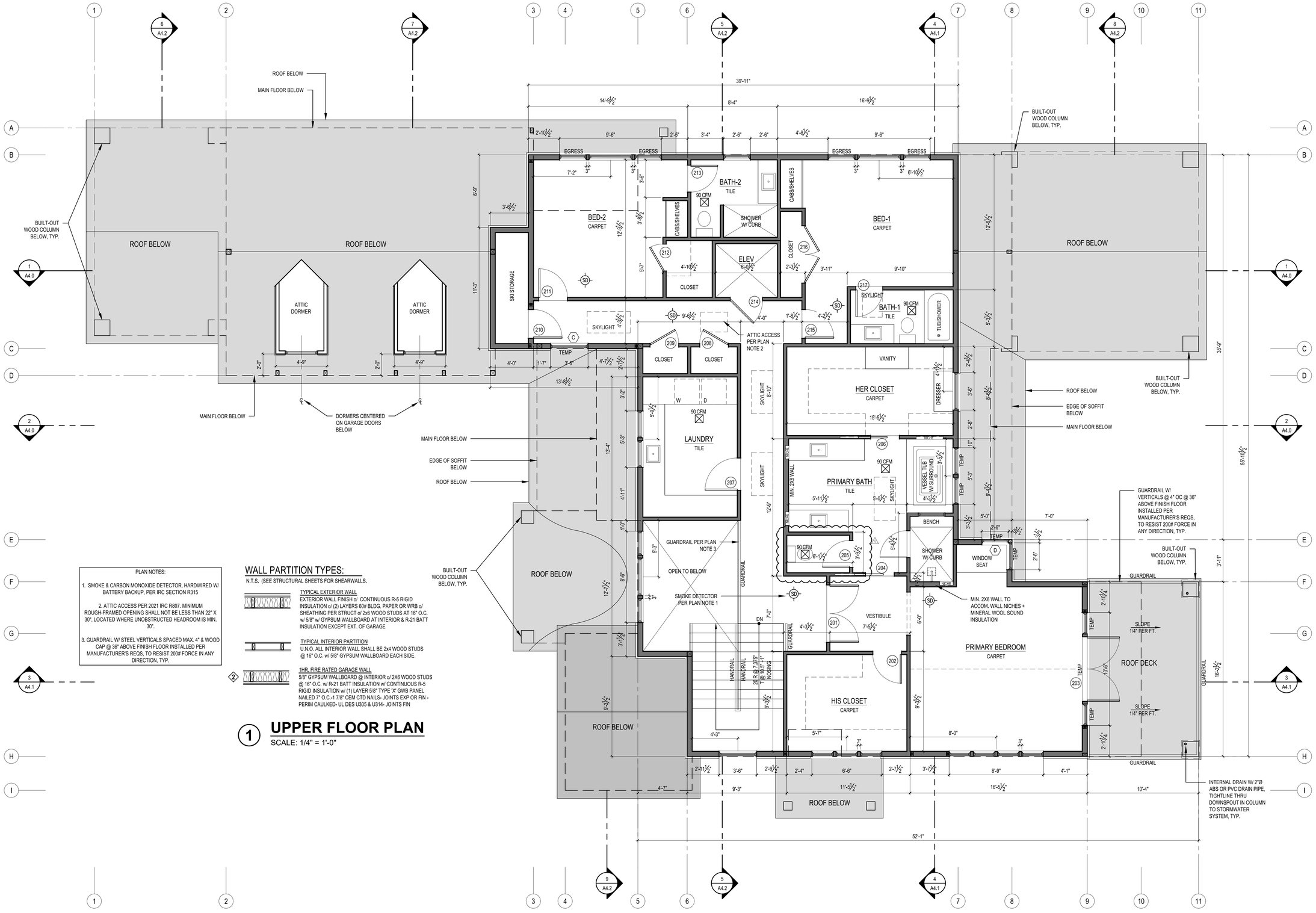
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DRAWN BY: KE
CHECKED BY: BJS

SHEET
A2.1

MAIN FLOOR PLAN

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 04/07/2026



PLAN NOTES:

1. SMOKE & CARBON MONOXIDE DETECTOR, HARDWIRED W/ BATTERY BACKUP, PER IRC SECTION R315

2. ATTIC ACCESS PER 2021 IRC R807. MINIMUM ROUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22" X 30", LOCATED WHERE UNOBSTRUCTED HEADROOM IS MIN. 30".

3. GUARDRAIL W/ STEEL VERTICALS SPACED MAX. 4" & WOOD CAP @ 36" ABOVE FINISH FLOOR INSTALLED PER MANUFACTURER'S REQS, TO RESIST 200# FORCE IN ANY DIRECTION, TYP.

WALL PARTITION TYPES:

N.T.S. (SEE STRUCTURAL SHEETS FOR SHEARWALLS,

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ CONTINUOUS R-5 RIGID INSULATION o/ (2) LAYERS 60# BLDG. PAPER OR WRB o/ SHEATHING PER STRUCT o/ 2x6 WOOD STUDS AT 16" O.C. w/ 5/8" w/ GYPSUM WALLBOARD AT INTERIOR & R-21 BATT INSULATION EXCEPT EXT. OF GARAGE

TYPICAL INTERIOR PARTITION
U.N.O. ALL INTERIOR WALL SHALL BE 2x4 WOOD STUDS @ 16" O.C. w/ 5/8" GYPSUM WALLBOARD EACH SIDE.

2 1HR. FIRE RATED GARAGE WALL
5/8" GYPSUM WALLBOARD @ INTERIOR o/ 2X6 WOOD STUDS @ 16" O.C. w/ R-21 BATT INSULATION w/ CONTINUOUS R-5 RIGID INSULATION w/ (1) LAYER 5/8" TYPE 'X' GWB PANEL NAILED 7" O.C.-1 7/8" CEM CTD NAILS- JOINTS EXP OR FIN - PERIM CAULKED- UL DES U305 & U314- JOINTS FIN

1 UPPER FLOOR PLAN

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

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UPPER FLOOR PLAN

REVISIONS:
2026-4-7 Corrections #1

PLOT DATE: 4/7/2026
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CHECKED BY: BJS

SHEET
A2.2

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

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PLAN NOTES:

1. ATTIC ACCESS PER 2018 IRC R807. THE ACCESS OPENING WILL BE REQUIRED TO BE A MIN. SIZE WHICH ALLOWS REMOVAL OF LARGEST APPLIANCE, SHALL BE LOCATED LESS THAN 20 FEET FROM APPLIANCES, SHALL BE PROVIDED WITH A CONTINUOUS SOLID FLOORING NOT LESS THAN 24 INCHES WIDE, SHALL BE PROVIDED WITH A LUMINAIRE CONTROLLED BY A SWITCH LOCATED AT THE ACCESS OPENING, SHALL HAVE A RECEPTACLE OUTLET LOCATED AT OR NEAR THE APPLIANCES, PER 2018 IRC M1305.1.1.

2. ATTIC IS TO BE UNINHABITABLE SPACE WITH LIMITED STORAGE AND HVAC USAGE ONLY.

3. ATTIC SPACE IS NOT TO BE "FINISHED." ONLY PLYWOOD SHEATHING FLOOR IS ALLOWED. INSULATION @ ROOF AND FRAMING TO REMAIN EXPOSED. NO GYP SHALL BE INSTALLED.

VARYING ROOF PITCHES:

THERE ARE THREE ROOF PITCHES IN THIS PROJECT. FOR EACH PITCH, THERE IS A DIFFERENT EAVE OVERHANG DIMENSION TO ENSURE ALIGNMENT OF TOP OF FASCIA.

4:12 EAVE = PER PLAN
6:12 EAVE = 12"
8:12 EAVE = 9"

POCHE LEGEND:

MAIN FLOOR ROOF

UPPER FLOOR ROOF

ROOF VENT CALCULATIONS

CODE REQUIREMENT				CALCULATIONS									ACTUAL	
DESCRIPTION	SF AREA	REQ. VENTING PER SF AREA 150	REQ. VENTING PER SF AREA 300	VENT TYPE RIDGE	VENT TYPE SOFFIT	X	VENT L.F.	=	TOTAL VENT AREA SQ. IN.	X	SF CONVERT. 1/144	X	80% EFF FACTOR	TOTAL
ROOF G	460				28 SQ.IN./FT.		40		960		6.67		5.33	6.87
		3.07			1.5" VENT									
				12 SQ.IN/FT.			23		276		1.92		1.53	
				CONTINUOUS										
ROOF H	255				18 SQ.IN./FT.		24		432		3.00		2.40	3.22
		1.70			1.5" VENT									
				12 SQ.IN/FT.			12.25		147		1.02		0.82	
				CONTINUOUS										
ROOF E	57				18 SQ.IN./FT.		8		144		1.00		0.80	0.80
		0.38			1.5" VENT									
				12 SQ.IN/FT.					0		0.00		0.00	
				CONTINUOUS										

1 **ROOF PLAN**
SCALE: 1/4" = 1'-0"

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

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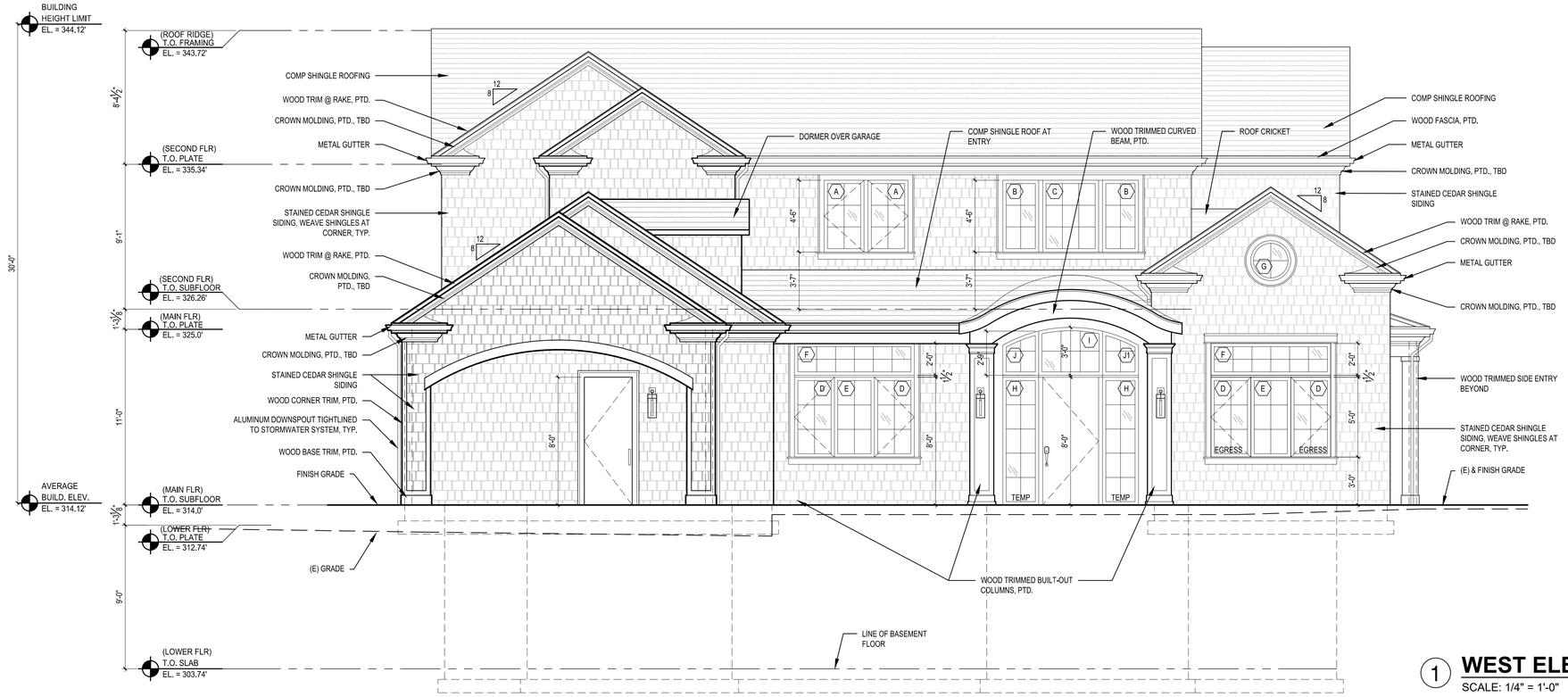
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ROOF PLAN

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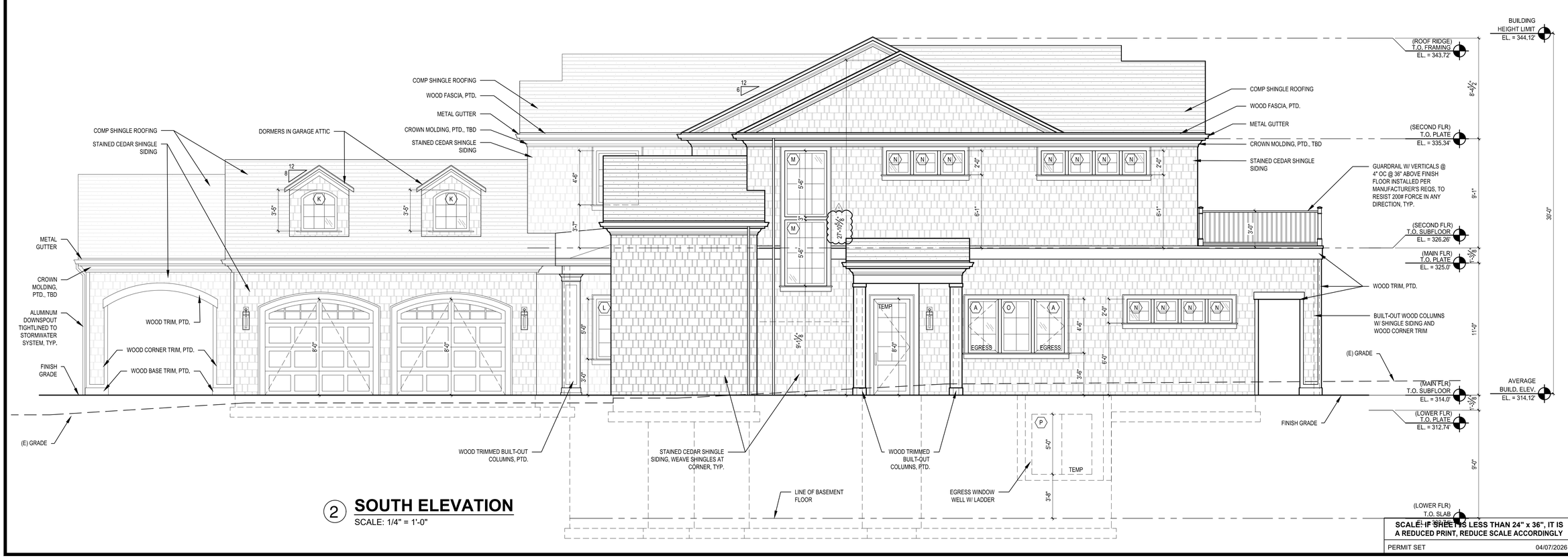
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SHEET
A2.3



1 WEST ELEVATION

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



2 SOUTH ELEVATION

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

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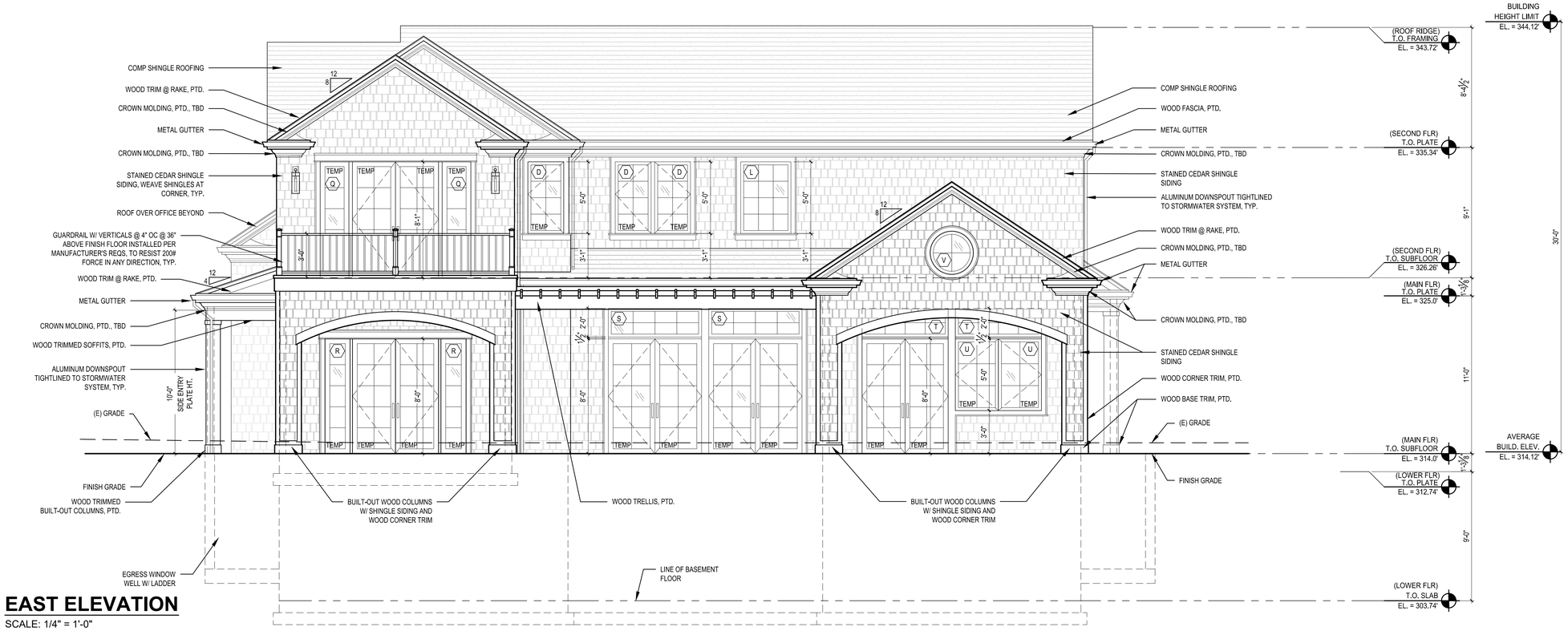
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EXTERIOR ELEVATIONS

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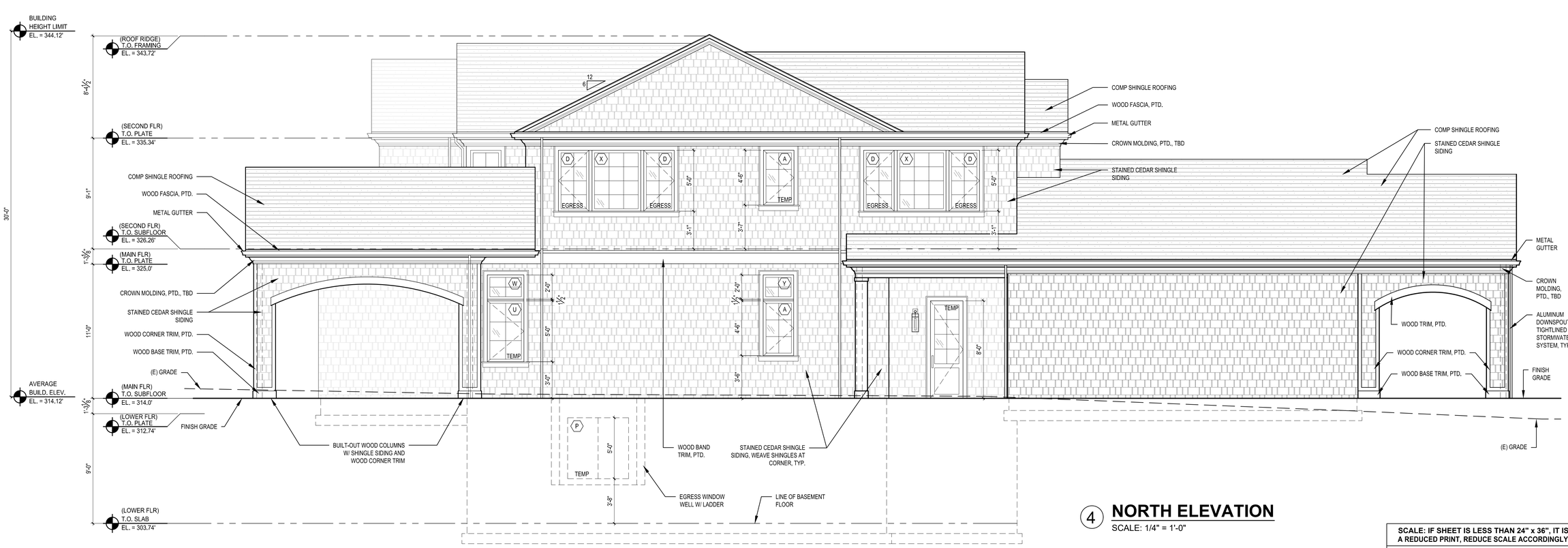
PLOT DATE: 4/7/2026
DRAWN BY: KE
CHECKED BY: BJS

SHEET
A3.0



3 EAST ELEVATION

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



4 NORTH ELEVATION

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

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

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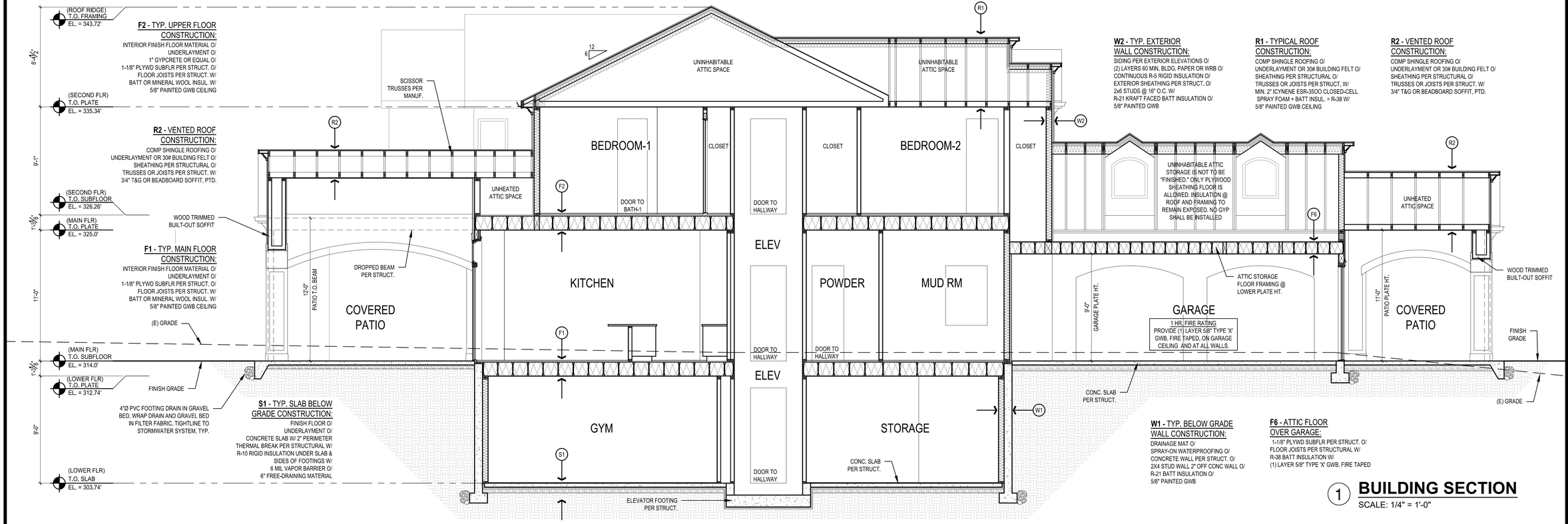
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EXTERIOR ELEVATIONS

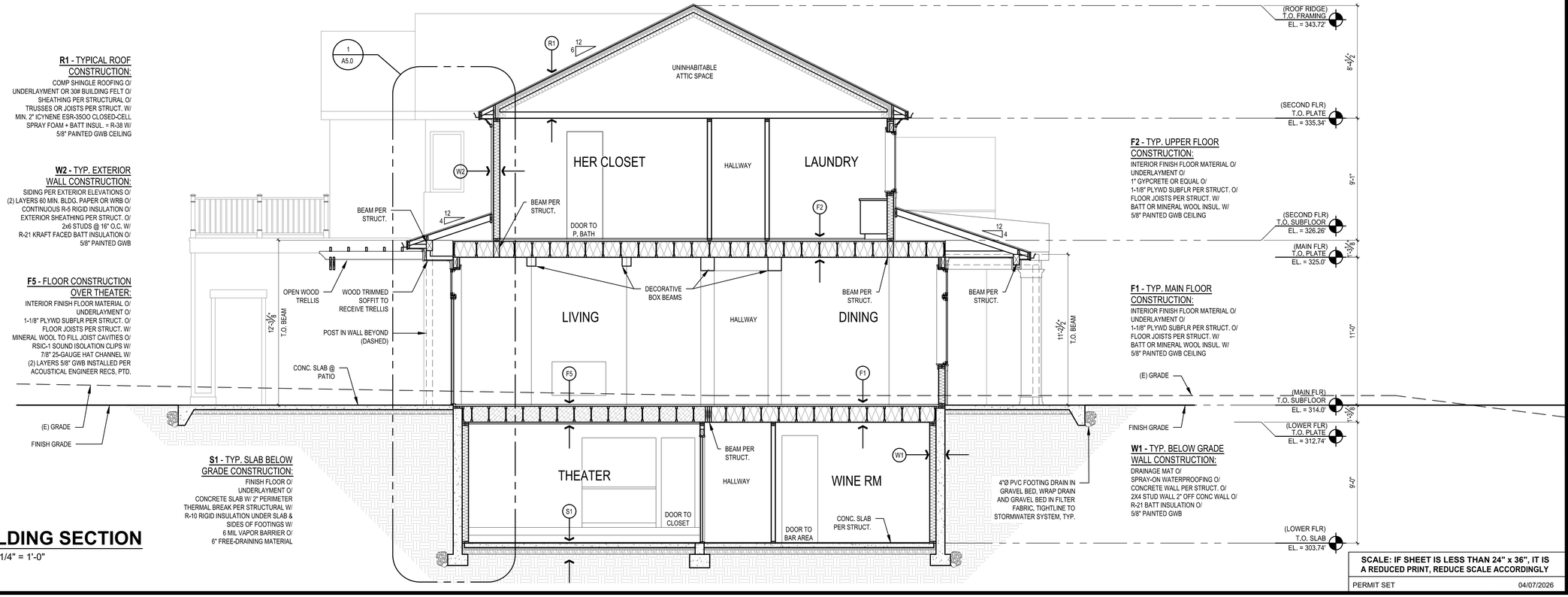
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A3.1



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



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

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BUILDING SECTIONS

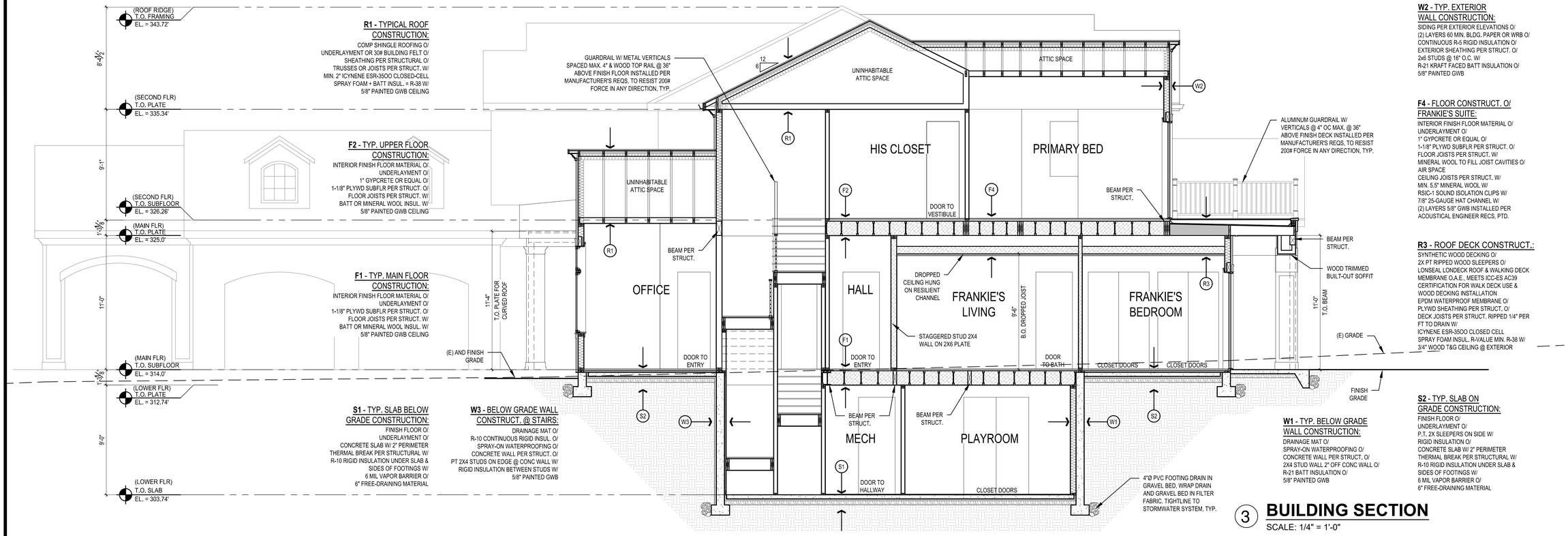
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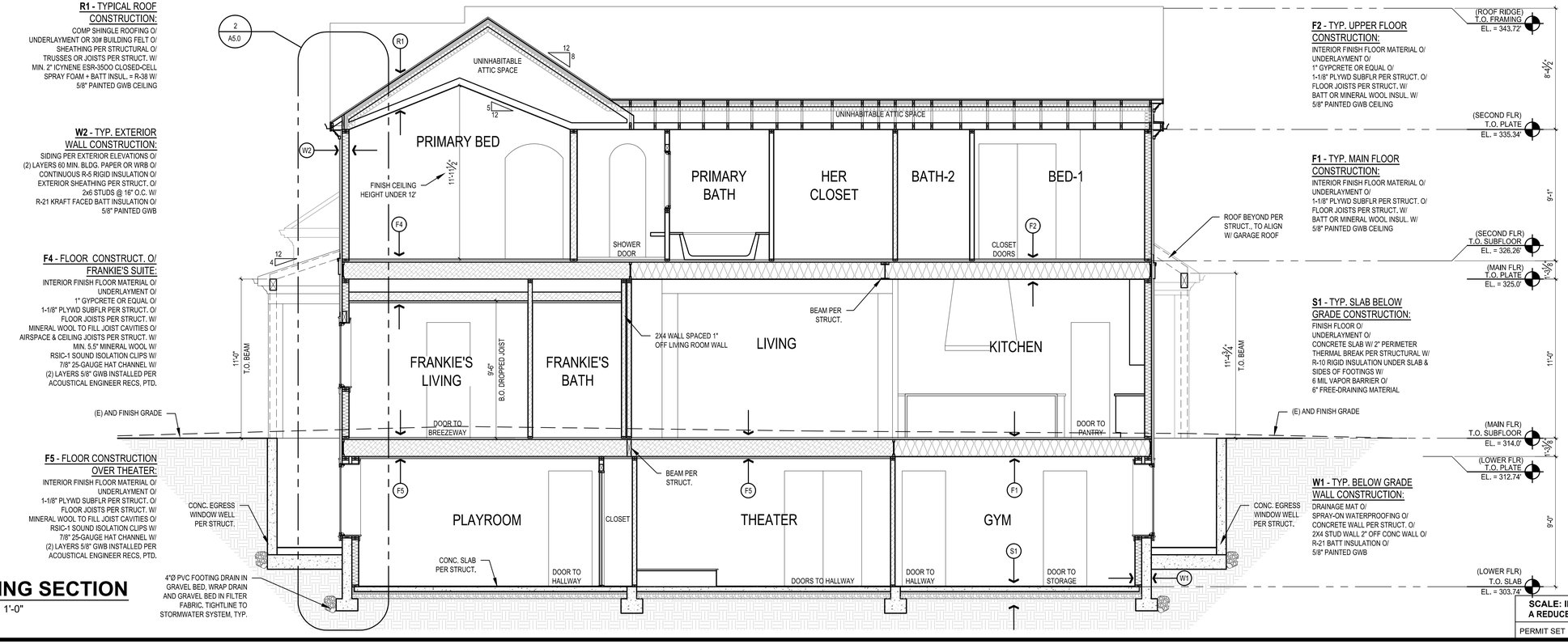
SHEET
A4.0

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



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

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

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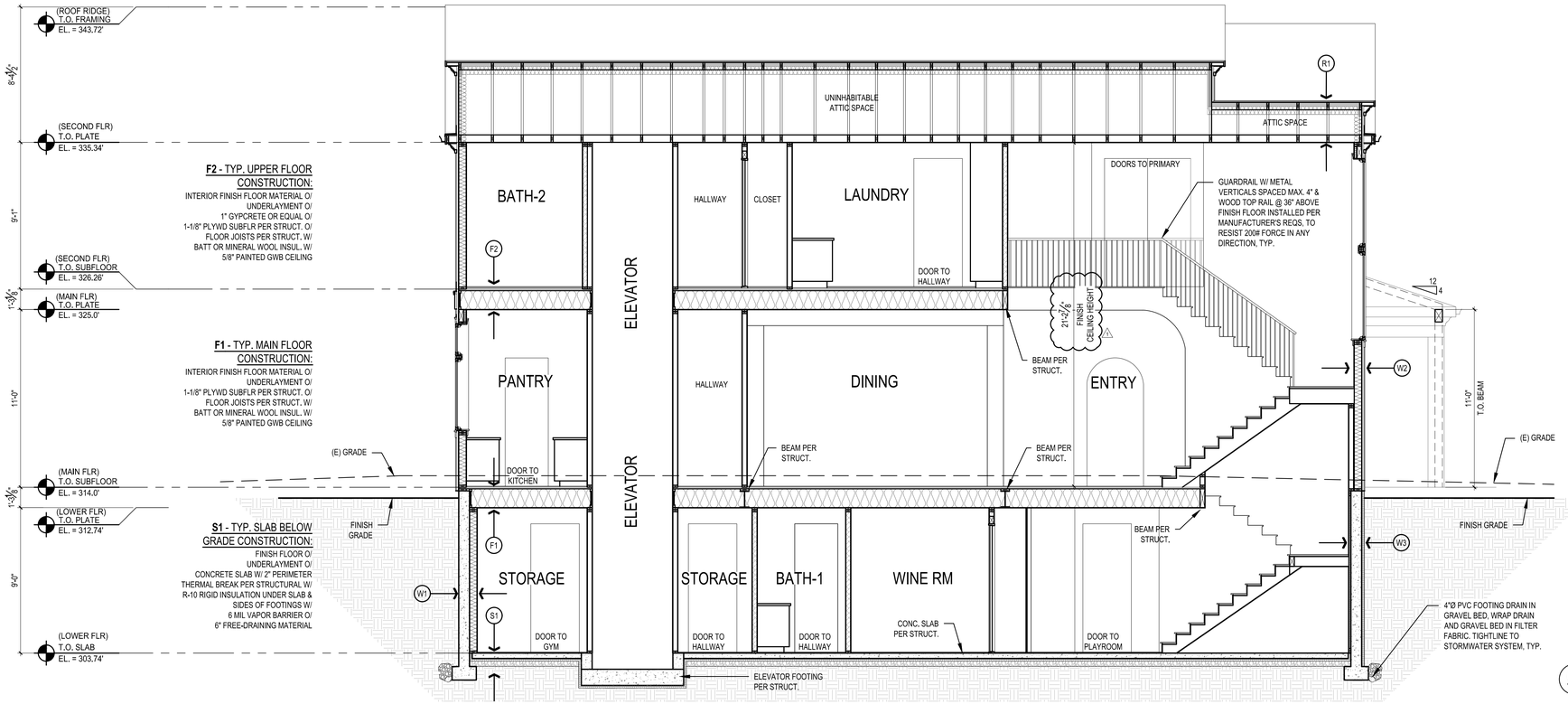
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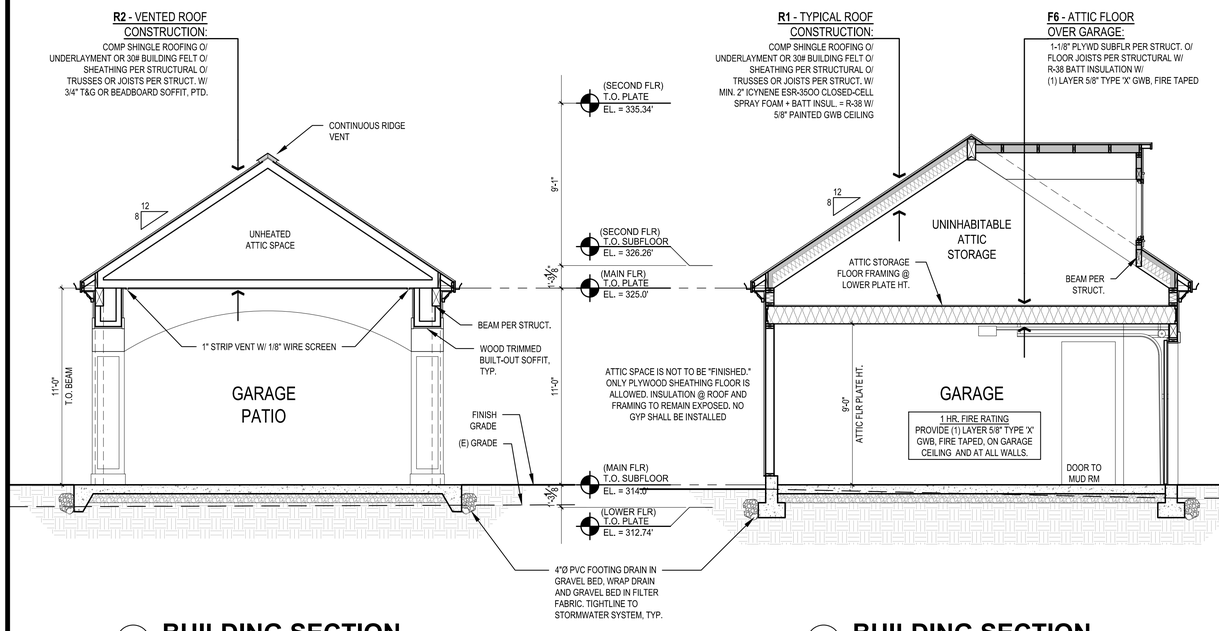
R1 - TYPICAL ROOF CONSTRUCTION:
COMP SHINGLE ROOFING O/
UNDERLAYMENT OR 30# BUILDING FELT O/
SHEATHING PER STRUCTURAL O/
TRUSSES OR JOISTS PER STRUCT. W/
MIN. 2" ICYNENE ESR-3500 CLOSED-CELL
SPRAY FOAM + BATT INSUL. = R-38 W/
5/8" PAINTED GWB CEILING

W2 - TYP. EXTERIOR WALL CONSTRUCTION:
SIDING PER EXTERIOR ELEVATIONS O/
(2) LAYERS 60 MIN. BLDG. PAPER OR WRB O/
CONTINUOUS R-5 RIGID INSULATION O/
EXTERIOR SHEATHING PER STRUCT. O/
2x6 STUDS @ 16" O.C. W/
R-21 KRAFT FACED BATT INSULATION O/
5/8" PAINTED GWB

W1 - TYP. BELOW GRADE WALL CONSTRUCTION:
DRAINAGE MAT O/
SPRAY-ON WATERPROOFING O/
CONCRETE WALL PER STRUCT. O/
2X4 STUD WALL 2" OFF CONC WALL O/
R-21 BATT INSULATION O/
5/8" PAINTED GWB

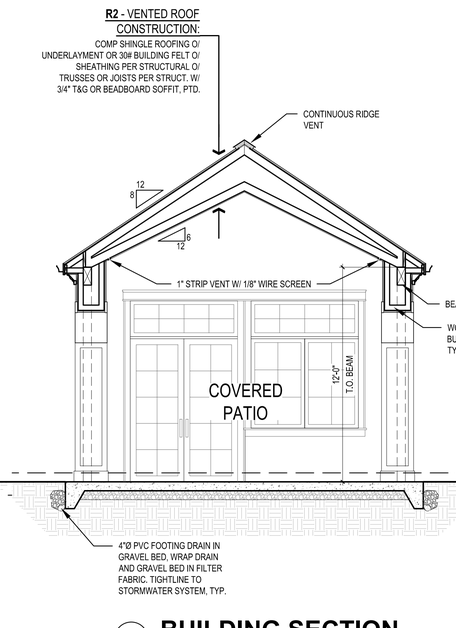
W3 - BELOW GRADE WALL CONSTRUCT. @ STAIRS:
DRAINAGE MAT O/
R-10 CONTINUOUS RIGID INSUL. O/
SPRAY-ON WATERPROOFING O/
CONCRETE WALL PER STRUCT. O/
PT 2X4 STUDS ON EDGE @ CONC WALL W/
RIGID INSULATION BETWEEN STUDS W/
5/8" PAINTED GWB

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

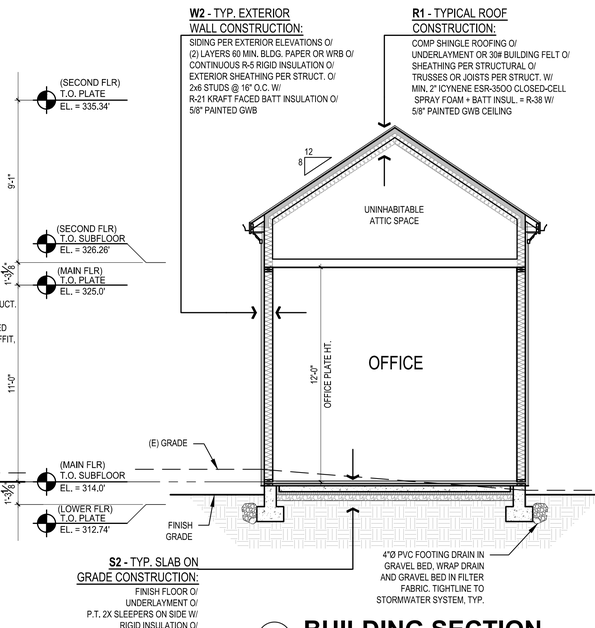


6 BUILDING SECTION
SCALE: 1/4" = 1'-0"

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



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



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

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

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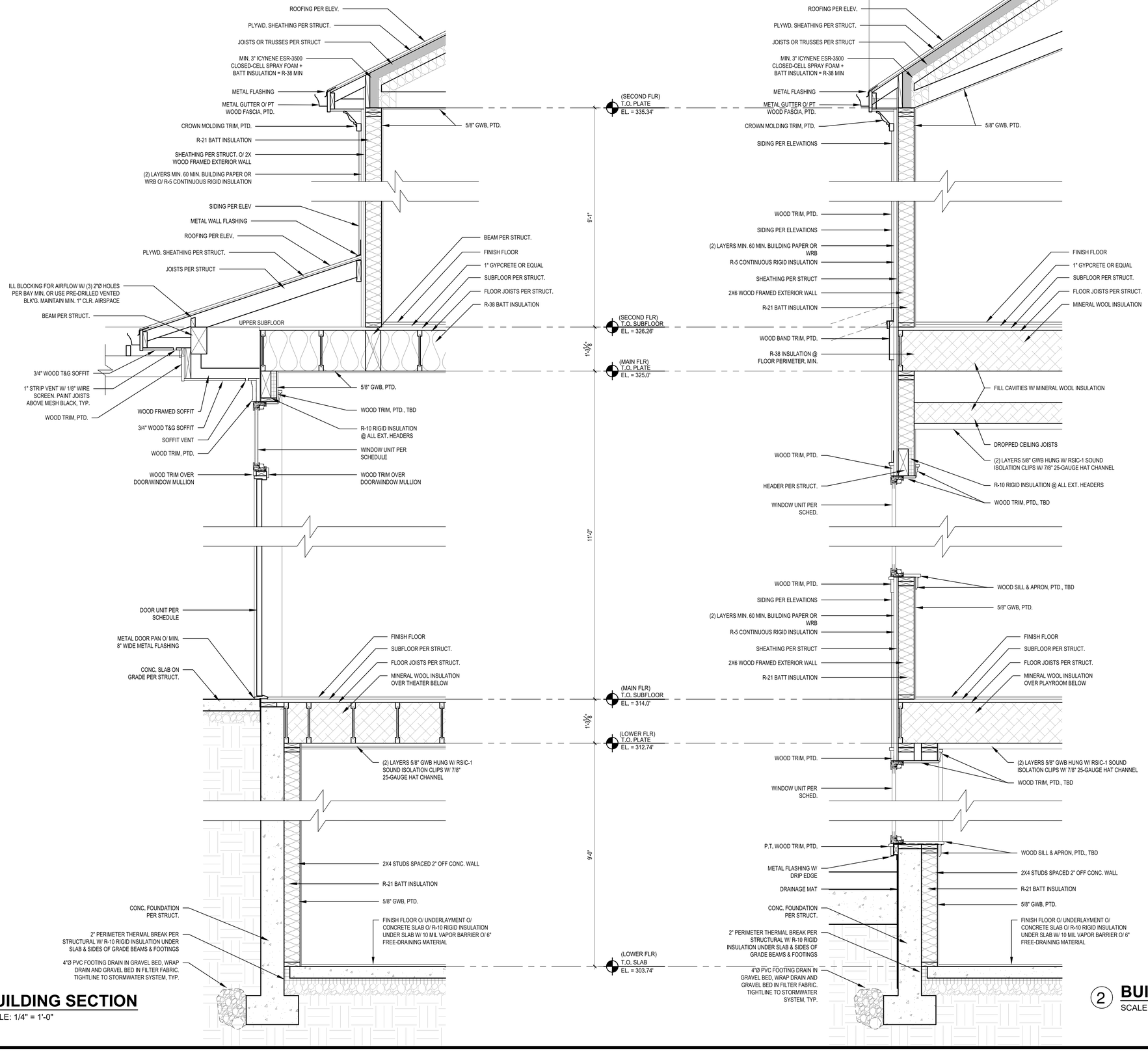
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SHEET
A4.2



1 BUILDING SECTION

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

2 BUILDING SECTION

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

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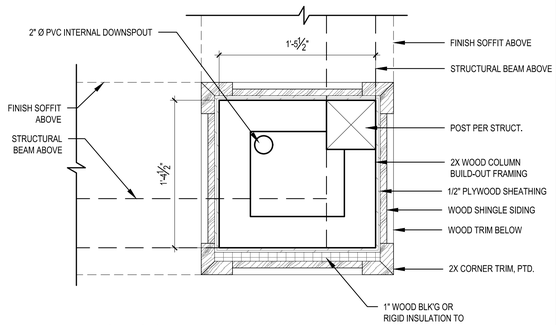
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WALL SECTIONS

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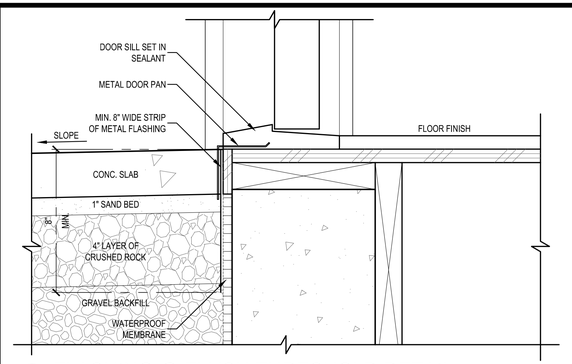
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SHEET
A5.0

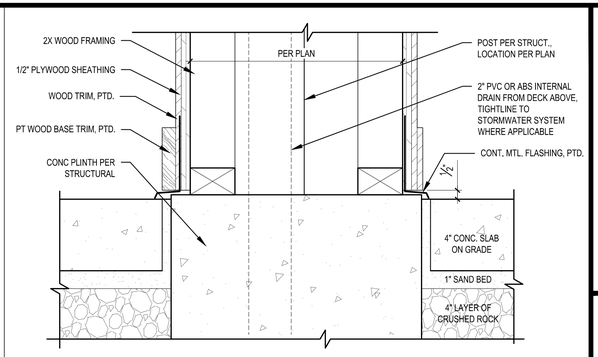


1 W.P. DECK COLUMN PLAN
SCALE: 1 1/2" = 1'-0"

2 NOT USED
SCALE: 1 1/2" = 1'-0"

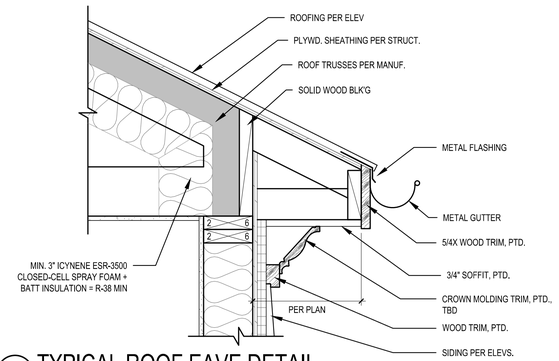


3 FLASHING @ FLUSH THRESHOLD DETAIL
SCALE: 3" = 1'-0"

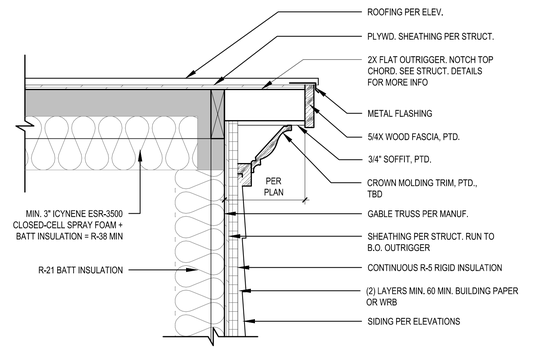


4 CONC. PLINTH COLMN BASE DETAIL
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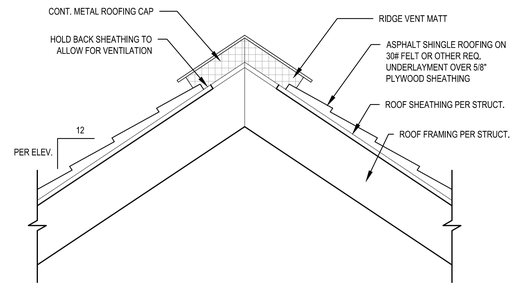
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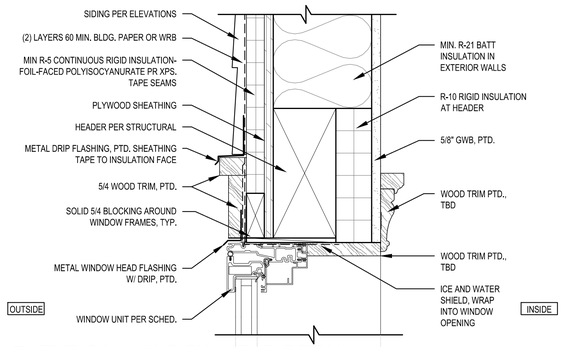
6 TYPICAL ROOF EAVE DETAIL
SCALE: 1 1/2" = 1'-0"



7 TYPICAL ROOF RAKE DETAIL
SCALE: 1 1/2" = 1'-0"

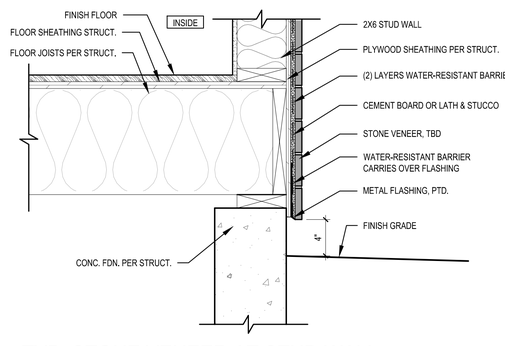


8 TYP. ROOF RIDGE VENT DETAIL
SCALE: 1 1/2" = 1'-0"

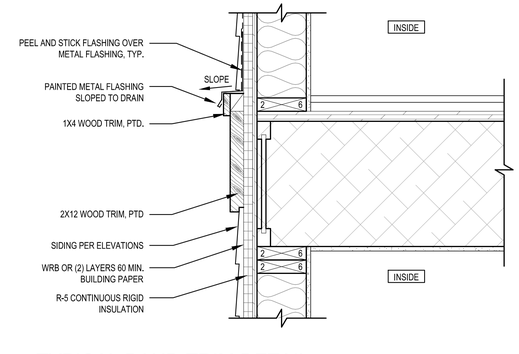


9 TYPICAL WINDOW HEAD DETAIL
SCALE: 3" = 1'-0"

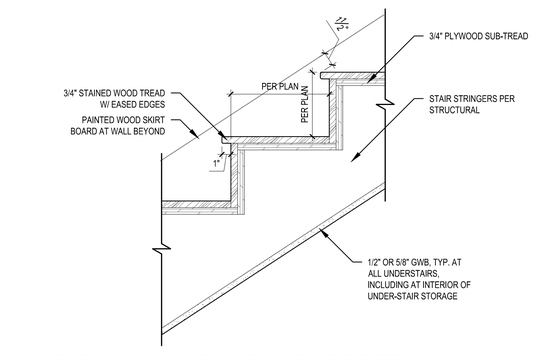
SIM. AT WINDOW JAMB



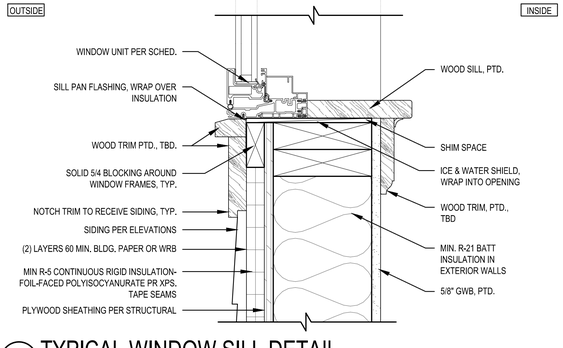
10 TYP. STONE VENEER AT STUD WALL
SCALE: 1 1/2" = 1'-0"



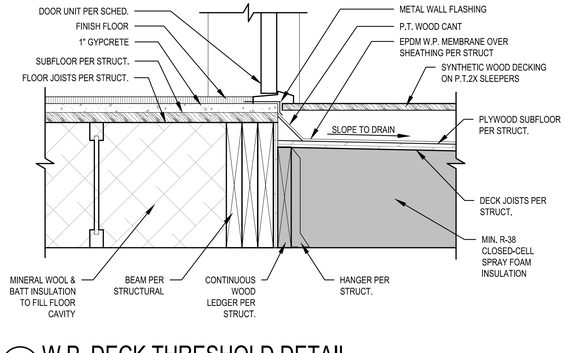
11 TYPICAL BAND TRIM DETAIL
SCALE: 1 1/2" = 1'-0"



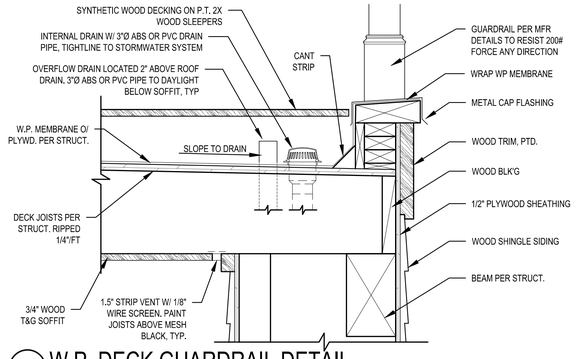
12 TYPICAL CLOSED STAIR RISER DETAIL
SCALE: 1 1/2" = 1'-0"



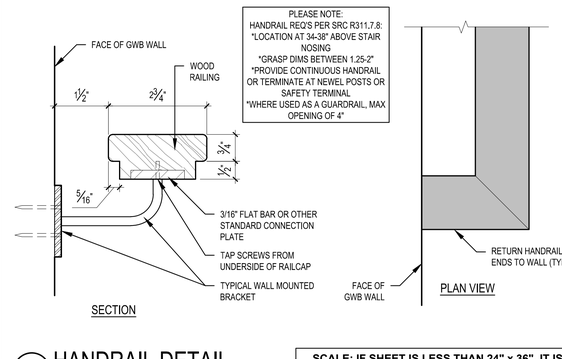
13 TYPICAL WINDOW SILL DETAIL
SCALE: 3" = 1'-0"



14 W.P. DECK THRESHOLD DETAIL
SCALE: 1 1/2" = 1'-0"



15 W.P. DECK GUARDRAIL DETAIL
SCALE: 1 1/2" = 1'-0"



16 HANDRAIL DETAIL
SCALE: 3" = 1'-0"

SCALE: IF SHEET IS LESS THAN 24" x 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY

PERMIT SET 9/18/2022

STURMAN ARCHITECTS
9- 103rd Ave NE Suite 203 Bellevue, WA 98004
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REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
9583

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4006 RESIDENCE
PERMIT SET

4006 E MERCER WAY
MERCER ISLAND, WA 98040

ARCHITECTURAL DETAILS

REVISIONS:
CORRECTION 1 2022-7-18
CORRECTION 2 2022-8-17
CORRECTION 3 2022-10-19
REVISIONS 2024-8-18

PLOT DATE: 4/7/2026
DRAWN BY: JM, KE
CHECKED BY: BJS

SHEET
A6.0

GENERAL NOTES

1.0 GENERAL

1.1 Construction shall conform to the 2021 INTERNATIONAL RESIDENTIAL CODE and all other requirements of authorities having jurisdiction.

1.2 These drawings are the property of O.G. Engineering, PLLC ("Engineer"). These drawings and the information contained herein shall not be used for completion of or revisions to this project by others, extensions of this project or any other project without Engineer's express written permission.

1.3 Refer to Architectural Plans for all dimensions and elevations not shown. Do not scale drawings. The contractor shall verify all pertinent dimensions and existing conditions prior to beginning construction. Conflicts, differences in information, and omissions in drawings shall be brought to the attention of the Engineer for resolution prior to construction. Changes from the drawings shall be made only with the prior approval of the Engineer. All work is subject to review and approval by the local building department. All work shall conform to all permit and building department requirements. All details shall be considered typical at similar conditions. Details shall be used where applicable, unless otherwise noted. Details intend to show concepts that may not exactly match specific site conditions. All work shown on these drawings is new unless noted as existing.

1.4 The contractor shall be solely responsible for jobsite and construction safety and compliance with all current safety regulations. Jobsite visits performed by the Engineer do not include a review of the adequacy of the contractor's safety measures. The Engineer has no authority to exercise any control over any construction contractor or their employees in connection with their work or any health or safety precautions. Only the final, permanent structure is shown on these drawings. The contractor shall be solely responsible for the means and methods of construction, including but not limited to construction sequencing and providing all necessary shoring, bracing and other temporary supports during construction. The contractor shall be solely responsible for obtaining all necessary independent engineering reviews of all temporary conditions and support systems during construction.

1.5 Utility information is not shown on these drawings. The contractor shall be solely responsible for locating and protecting utilities prior to and during construction. The contractor shall be solely responsible for all damage to utilities resulting from their work, and all damage to utilities shall be repaired solely at the contractor's expense.

1.6 All waterproofing and drainage information shown on these drawings is for illustrative purposes only. Waterproofing and drainage are the design responsibility of others.

2.0 DESIGN BASIS – BUILDING STRUCTURES

2.1 Vertical Loads (psf, U.O.N.)	Dead	Live	Snow
Roof	18[1]		25
Roof Deck	18	60	
Storage Attic	15	40	
Upper Floor	25	40	
Main Floor	15	40	

[1]Includes 4psf for solar-ready zones.

2.2 Seismic Design Data (per the 2018 IBC)
Risk Category: II
Importance Factor: Ie=1.0
Site Coordinates: 47.5804°N, 122.2418°W
Mapped Spectral Response Acceleration: Ss=1.41, S1=0.49
Site Class: D (per geotechnical report)
Spectral Response Coefficients: Sds=0.94
Seismic Design Category: D
Main Seismic Force-Resisting System: Wood Structural Panel Shear Walls
Response Modification Factor: R=6.5
Seismic Response Coefficient: Cs=0.14
Redundancy Factor: ρ=1.0
Over-strength Factor: Ω=2.5
Analysis Procedure Used: Equivalent Lateral Force Procedure

2.3 Wind Design Data (per the 2021 IBC)
Risk Category: II
Basic Wind Speed: 98 mph
Exposure Category: C
Topographic Factor: 1.60 (per Mercer Island wind load map)

3.0 INSPECTIONS

The construction work shall be inspected as required by the IRC Section R106. The contractor is solely responsible for understanding the requirements of and coordinating all inspections, observations and testing and ensuring that all work is performed to the satisfaction of the inspector.

4.0 FOUNDATIONS & RETAINING WALLS

4.1 New foundations and retaining walls have been designed in accordance with recommendations in the geotechnical report referenced in the following section. The design basis is as follows:

*Allowable vertical bearing pressure:	2000 psf[1]
*Active pressure:	40 pcf
*Seismic surcharge	8H
*Passive pressure:	300 pcf
*Sliding friction coefficient:	0.44

[1]A ⅓ increase in allowable soil bearing pressure has been used for short term loads

4.2 All site preparation, grading, earthwork and site drainage, including but not limited to sub-grade preparation, foundation and retaining wall excavations, structural fill specifications, compaction requirements, and site drainage installation, shall be performed in accordance with the Geotechnical Report prepared by the Geotechnical Engineer, Geotech Consultants, Inc., dated October 14, 2025. The Geotechnical Report is part of the construction documents and a copy may be obtained from the Geotechnical Engineer's office. The contractor shall notify Geotech Consultants, Inc. (425-747-5618) in advance of any earthwork operations and Geotech Consultants, Inc. should be present to observe and test, as necessary, the earthwork and foundation installation phases of the project.

5.0 MATERIALS

5.1 Wood:

5.1.1 All 2x & 3x sawn lumber shall be Hem Fir grade number 2, except sill plates which shall be Doug Fir grade number 2 or better, and all 4x and larger lumber shall be Doug Fir grade number 1, U.O.N. Mudsills and all sawn lumber in contact with concrete, masonry, ground, exposed to weather or moisture, shall be P.T. Preservative retention levels in P.T. wood shall meet the requirements of the applicable use category in accordance with AWPA U1-16, and shall not exceed those required to comply with AWPA Use Category UC4A. Do not use wood treated with ACZA. Field-cut ends, notches and drilled holes of P.T. wood shall be treated in the field in accordance with AWPA M4. P.T. is not required at naturally decay-resistant (i.e. redwood, cedar etc.) sawn lumber members.

5.1.2 Engineered Wood Framing Members and I-Joists shall be TrusJoist®or approved equal. 'PSL' denotes Parallam 2.2E for beams and 1.8E for posts. 'LSL' denotes Timberstrand 1.55E for members with depth equal to or greater than 9½", and 1.3E for members with depth less than 9½". 'LVL' denotes Microllam 2.0E. 'TJI' denotes TJI I-joists.

5.1.3 Glulam framing members shall be DF/DF, stress class 24F-1.8E, combination symbol 24F-V8, U.O.N.

5.1.4 All wood framing members shall have 19% maximum moisture content at time of installation.

5.2 Concrete:

Hardrock, normal-weight concrete with a minimum 28-day compressive strength of 3,000 psi. Slump range shall be 3-5 inches. Maximum aggregate size shall be 1". Maximum water/cement ratio shall be 0.5. Concrete exposed to weather shall be air-entrained with total air content between 5%-7% of total concrete volume.

5.3 Reinforcing Steel Bars:

ASTM A615, Grade 60

5.4 Post-Installed Dowels & Anchors into Existing Concrete & CMU

Epoxy: Simpson SET-3G (Installed & inspected per ICC No. ESR-4057)

5.5 Bolts and Threaded Rods:

5.5.1 Threaded Rod: ASTM F1554 Grade 36

5.5.2 Sill Anchor Bolts: ASTM A307
Bent bar "J" anchor bolts shall have a hook with a 90-degree bend with an inside diameter of three bolt diameters, plus an extension of one and one half bolt diameters at the free end.

5.5.3 Bolts in Timber Connections: ASTM A307

5.5.4 Bolts in Steel Connections: ASTM A325-N (High-Strength)

5.6 Structural Steel:

Wide Flange (W): A992 (Fy = 50 ksi)
Plate and Bar: A36 (Fy = 36 ksi)

6.0 CONCRETE CONSTRUCTION

6.1 Concrete elements shall be constructed in single continuous pours, without construction joints, unless otherwise approved by the Engineer. Reinforcement shall be the longest lengths practical. Splices in rebar are not allowed in footings or walls less than 20 feet long. Lap splices shall be staggered at least 2 ft. in adjacent bars. Where reinforcement or anchor edge distances are noted on the drawings as "clear", the distance shall be taken from the face of reinforcement or anchor to edge of concrete. Cast-in-place reinforcement and anchor bolts shall be installed prior to concrete placement and shall not be "wet-set" into freshly poured concrete.

6.2 Reinforcement installation details, including rebar bends, hooks, splices and development lengths shall be in accordance with the requirements of IRC Section R608.5.4, U.O.N. Concrete materials, forms, mixing and delivery shall be in accordance with the requirements of the IRC Section R404.1.3.3.

6.3 Concrete Coverage over Reinforcing Steel

Unless otherwise noted, maintain the minimum concrete cover to face of reinforcement or anchors as follows:

1) 3" Where concrete is cast against and permanently exposed to earth except slab on grade.
2) 2" Where concrete is exposed to earth but formed, or exposed to weather.
3) 1½" Where concrete is not exposed to earth or weather.

7.0 WOOD CONSTRUCTION

7.1 General Framing

Connections not specified on these drawings shall conform to the IRC fastening schedule, refer to Table R602.3(1). Depth of all posts in walls shall match stud depth, U.O.N. Block floor joist space solid under posts and cripple studs supporting headers and continue support to foundation. Face nail all plies of multi-ply studs with 10d@6"o.c. Obtain approval from engineer prior to ripping or creating notches or holes in framing members, U.O.N. Install double joists below all interior walls parallel to floor joists and solid blocking below all interior walls perpendicular to floor joists, U.O.N. All beams shall be continuous across supports unless explicitly shown as multiple pieces. Install full depth blocking between framing members over supports, unless otherwise noted. Intall 2x4 blkg btwn adjacent joists/rafters/trusses @24"o.c. over interior partitions. All flush beams framing into walls shall continue to back edge of supporting dbl top plate; stop rim joist each side of beam where occurs.

7.2 Engineered Wood Framing

See TrusJoist "Installation Guide for Floor and Roof Framing" (TJ-9001) for TJI Joist nailing, web stiffeners, backer blocks, other TJI Joist framing and connection requirements not specified on these drawings, and for allowable holes in TJI joists and engineered wood beams.

7.3 Fasteners

Nails specified on these drawings are common nails, U.O.N. Fasteners in contact with P.T. wood, exposed to weather or in contact with ground shall be hot-dipped galvanized per IRC Section 317.3, or shall have equivalent corrosion resistance. Dissimilar metals & coatings shall not be in contact. Bolt holes shall be a minimum of 1/32" to a maximum of 1/16" larger than the bolt diameter. Bolts shall not be forcibly driven, and shall be tightened to the snug-tight condition. Install standard cut washers under all bolt heads and nuts bearing against wood.

7.4 Connectors

Connectors specified on these drawings are manufactured by the SIMPSON STRONG-TIE® Company. Refer to latest catalog for information not specifically noted herein. Connectors in contact with P.T. wood, exposed to weather or in contact with ground shall be ZMAX or HDG galvanized. All connectors shall receive the maximum number of fasteners, U.O.N. Dissimilar metals & coatings shall not be in contact. Shim gaps in connectors for different framing sizes with plywood as required. Non-field-adjustable hangers specified as sloped or skewed shall be manufactured sloped or skewed.

7.5 Wood Structural Panels

WSPs shall bear the APA trademark and shall meet the requirements of the latest edition of USDOC PS1 or PS2. Use 10d common wire nails to fasten panels with 1½" minimum penetration into framing at all panel edge and field nailing, U.O.N. Nails shall be located at least ⅜" from panel ends and edges. Stagger nails at adjoining panel edges. Drive nail heads flush with panel surface. Maintain ⅛" gap between all adjoining panel edges. Center interior panel joints on framing members or blocking. Provide ¼" space between untreated panel and concrete or masonry. Minimum panel dimension shall be 2'-0". Panel storage and handling during transport and construction shall be in accordance with APA recommendations and shall protect the panels from prolonged exposure to moisture from rain, snow, ground or other sources. WSPs permanently exposed to weather shall be exterior grade.

7.6 Shear Walls and Exterior Wall Sheathing

7.6.1 Shear walls are noted on the plans. Shear walls shall be sheathed with ½" APA RATED SHEATHING, EXPOSURE 1 WSPs with a span rating of 32/16, U.O.N. Panels shall not be less than 4'-0" x8'-0", except at boundaries and changes in framing. Panels shall be laid with strength axis vertical. Install 2x blkg under all unsupported panel edges; all panel edges shall be supported by and fastened to min. 2x common studs or blocking, U.O.N. on shear wall schedule. Edge nail panels to posts within shear walls. Install double stud or min. 4x post at the ends of all shear walls. Provide solid blocking under double studs & posts between floors and continue support to foundation. See shear wall schedule for more information.

7.6.2 WSP Wall Nailing, U.O.N.:

Panel Edge Nailing: 10d@6"o.c. maximum.
Intermediate (Field) Nailing: 10d@12"o.c. maximum.

7.6.3 All new exterior walls not called out as shear walls shall be sheathed on their exterior face with ½" APA RATED SHEATHING, EXPOSURE 1 WSPs with a span rating of 32/16 and nailing per note 7.6.2., U.O.N. All other fasteners & requirements shall conform to the shear wall schedule for wall type ①.

7.7 Holdowns and Tiedown Straps

Holdowns and tiedown straps shall be attached to double studs or min. 4x posts, U.O.N. See latest Simpson Catalog for additional requirements not noted herein. See holdown schedule for anchor bolt sizes and additional specifications. Refer to note 7.1 for nailing and framing requirements at holdown/tiedown posts. Install solid post at shear wall corners or intersections where holdowns/tiedowns occur. All holdowns/tiedowns shall have the maximum number of fasteners.

7.8 Sill Anchor Bolts

There shall be a minimum of two sill anchor bolts per piece with one bolt located not more than 12" or less than 4½" from each end of each piece. Holes in sills for bolts shall not be oversized. Sill anchor bolts into fresh concrete shall be ⅝"ø with 7" min. embed. into concrete. Sill anchor bolts into hardened concrete shall be ⅝"ø mechanically-galvanized TITEN HD anchors w/min. 6½" embed. into concrete. See shear wall schedule for spacing of sill anchor bolts in shear walls. Maximum sill anchor bolt spacing at non-shear-walls shall be 6'-0"o.c. at interior walls and 4'-0"o.c. at exterior walls. All sill anchor bolts at shear walls and mudsills shall be installed with 0.229"x3"x3" steel plate washers. Edge of sill anchor bolt plate washers shall be located ½" max. from inside face of wall sheathing or rim joist where occurs.

7.9 Floor and Roof Sheathing

7.9.1 Wood structural panel sheets at floors and roofs shall be laid with strength axis perpendicular to supports and continuous over two or more spans, unless otherwise noted on drawings. Stagger adjacent panels 4'-0"o.c. lengthwise.

7.9.2 Unless otherwise noted, typical roof sheathing shall be unblocked ⅜" APA RATED SHEATHING, EXPOSURE 1 WSPs with a span rating of 40/20. Panels shall be fastened to framing members with 10d nails @6"o.c. at all supported panel edges and 10d nails @12"o.c. intermediate (field) nailing. Install 'PSCL' sheathing clips (one mid-way between each support) at all unsupported panel joints.

7.9.3 Unless otherwise noted, typical floor sheathing shall be unblocked ¾" APA RATED STURD-I-FLOOR EXPOSURE 1 WSPs with a span rating of 48/24 and T&G edges. Panels shall be fastened to framing members with 10d nails @6"o.c. at all supported panel edges and 10d nails @12"o.c. field nailing. Glue sheathing to all supports (including blocking) with ¼" minimum beads of approved adhesive meeting APA specification AFG-01.

7.10 Metal-Plate-Connected Wood Trusses

7.10.1 The design, manufacture and installation of trusses shall be in accordance with the requirements of ANSI/TPI 1 and the IRC Section R502.11.

7.10.2 Trusses, structural fascia, their connections to other trusses/fascias, and truss eave blocking are the design responsibility of the supplier, and shall be designed by a civil or structural engineer licensed in the State of Washington ("Truss Designer"). Trusses shall be designed to support the following specific unfactored loads in addition to their self-weight, in addition to any loads specifically indicated on plan:

Vertical Roof Loads - Top Chord
*Dead: 14 psf (Does not include truss self-weight)
*Snow: 25 psf
*Wind: -35 psf (uplift)

Vertical Ceiling Loads - Bottom Chord
*Dead: 5 psf (Does not include truss self-weight)
*Live: 10 psf (Non-concurrent with other live loads)

7.10.3 Drag trusses shall be designed for the uniform unfactored seismic drag load acting longitudinally along the entire top chord length with a magnitude indicated on plan.

7.10.4 Trusses shall not rely on interior walls for support, U.O.N.; trusses shall be designed to span between exterior bearing walls.

7.10.5 Trusses shall be braced to provide lateral stability and prevent rotation in accordance with the SBCA BCSI "Guide to Good Practice for Handling, Installing and Bracing of Metal-Plate-Connected Wood Trusses". Bracing shall be designed and specified by the truss designer.

7.10.6 Trusses and their connections shall not be notched, cut, spliced or otherwise altered or damaged in any way without the prior written consent of both the E.O.R. and truss designer.

7.10.7 Truss design drawings and calculations, prepared by a civil or structural engineer licensed in the State of Washington in accordance with the IRC Section R502.11.4, shall be submitted to the contractor, architect, engineer and local building official for review and acceptance prior to fabrication, and shall be provided with the shipment of trusses to the job site.

7.10.8 Attach top plates of interior, non-bearing partition walls to truss bottom chords with 'STC' clips, leaving a ¼" to ½" vertical gap between bottom of truss and top of plate. Attach adjacent gypsum board ceiling to top plate with 'DS' clips. Do not fasten gypsum board ceiling to truss bottom chord within 16" of top plate.

8.0 STRUCTURAL STEEL

8.1 Steel fabrication and erection shall be in accordance with "Specification for Structural Steel Buildings" (AISC 360).

8.2 Welding shall be in accordance with "Structural Welding Code - Steel" (AWS D1.1) Specifications. Minimum tensile strength of weld metal shall be 70 ksi, U.O.N. Welding electrodes shall be as recommended by their manufacturer for the position and other conditions of actual use. All welding shall be performed by AWS Certified Welders.

8.3 Bolt holes shall be drilled or punched. Bolt holes shall be standard, and hole size shall be 1/16" larger diameter than the nominal size of bolt used, U.O.N. Bolts shall be installed snug-tight, U.O.N.

8.4 All steel framing and fasteners exposed to weather or in contact with ground shall be hot-dipped galvanized after fabrication to meet the requirements of ASTM 153. Upon completion of erection; touch-up, de-slag, clean and apply zinc-rich primer to exposed welds or other unprotected markings incurred during the transportation, handling or erection process. Dissimilar metals & coatings shall not be in contact. All steel surfaces that are not galvanized shall be painted with manufacturer's standard rust-prohibitive primer and paint.

8.5 No penetrations shall be made through steel framing except as specifically indicated on these structural drawings or with the prior written permission of the engineer.

ABBREVIATIONS

@	AT
ADJ.	ADJACENT
ALT.	ALTERNATE
ARCH.	ARCHITECT
A.T.R.	ALL-THREAD ROD
B.F.	BALLOON-FRAMED
BLKG	BLOCKING
BLW.	BELOW
BM	BEAM
BOTT.	BOTTOM
C.I.P.	CAST-IN-PLACE
C.J.	CONSTRUCTION JOINT
CL	CENTERLINE
CLR.	CLEAR
CONT.	CONTINUOUS
CSK.	COUNTERSINK
ø	DIAMETER
DBL.	DOUBLE
DF	DOUGLAS FIR
DIM	DIMENSION
D.J.	DOUBLE JOIST
D.R.	DOUBLE RAFTER
E.J.	EXPANSION JOINT
ELEV.	ELEVATION
EMBED.	EMBEDMENT
ENGR.	ENGINEER
E.N.	EDGE NAILING
E.O.R.	ENGINEER OF RECORD
EQ.	EQUAL
E/W	EACH WAY
(E)	EXISTING
F.J.	FLOOR JOIST
F.N.	FIELD NAILING
FTG	FOOTING
G.L.	GRID LINE
GLB	GLULAM BEAM
G.C.	GENERAL CONTRACTOR
H.D.G.	HOT-DIPPED GALVANIZED
HDR	HEADER
HF	HEM FIR
IBC	2018 INTERNATIONAL BUILDING CODE®
INV.	INVERTED
IRC	2018 INTERNATIONAL RESIDENTIAL CODE®
K.D.	KILN-DRIED LUMBER
LOCN	LOCATION
MAX.	MAXIMUM
MANUF.	MANUFACTURER
M.B.	MACHINE BOLT
MIN.	MINIMUM
NSFC	NOT SHOWN FOR CLARITY
N.T.S.	NOT TO SCALE
o/	OVER
o.c.	ON CENTER
O/H	OPPOSITE HAND
OPNG	OPENING
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PT	PRESSURE-PRESERVATIVE-TREATED
QUAD.	QUADRUPLE
REQ'D	REQUIRED
RFT	RETROFIT
R.R.	ROOF RAFTER
R.W.	REDWOOD
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.O.G.	SLAB ON GRADE
SIM.	SIMILAR
SQ.	SQUARE
STD	STANDARD
S.W.S.	SHEAR WALL SCHEDULE
T.B.D.	TO BE DETERMINED
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TYP.	TYPICAL
TRPL.	TRIPLE
T.O.	TOP OF
U.O.N.	UNLESS OTHERWISE NOTED
U/S	UNDERSIDE
u/	UNDER
V.I.F.	VERIFY IN FIELD
W.R.C.	WESTERN RED CEDAR
W.P.	WATERPROOFING
WSP	WOOD STRUCTURAL PANEL

PERMIT SET

REV.	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

CLIENT: DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

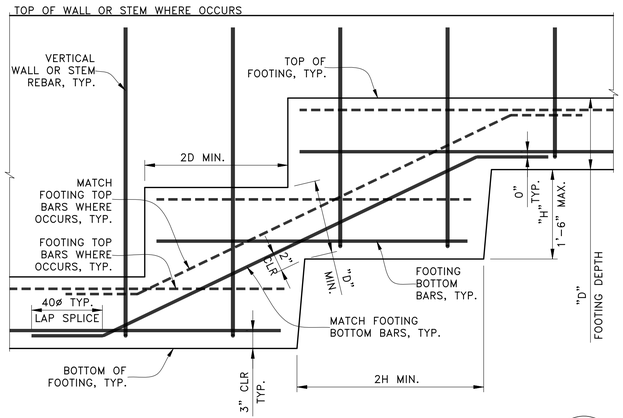
OWEN REMICK ZOLLER
STATE OF WASHINGTON
52707
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

ENGINEER OF RECORD

O.G. ENGINEERING, PLLC
3201 1st Ave S, Suite 101, Seattle, WA 98134
(206) 290-4608
owen@ogengineer.com

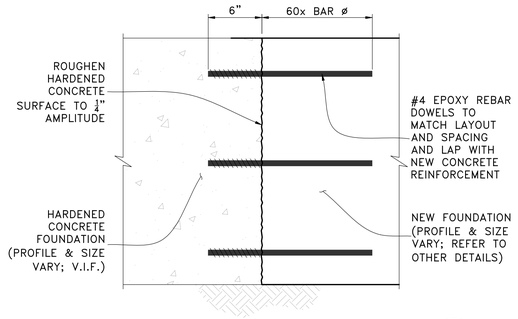
SHEET TITLE: GENERAL NOTES

SCALE: AS NOTED
JOB NO. 25014
SHEET. NO. S1



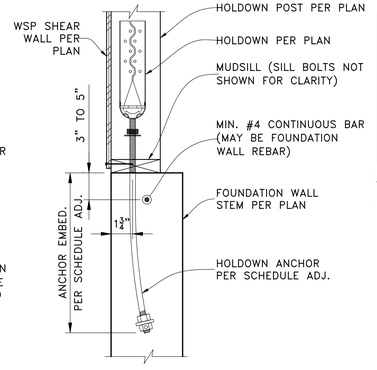
TYPICAL STEPPED FOOTING — A

SCALE: NTS



TYPICAL FRESH TO HARDENED CONCRETE — B

SCALE: NTS



HOLDOWN SCHEDULE		
HOLDOWN	ANCHOR	ANCHOR EMBEDMENT
HDU2	SB⅝x24	18"
HDU4	SB⅝x24	18"
HDU5	SB⅝x24	18"
HDU8	SB⅝x24	18"

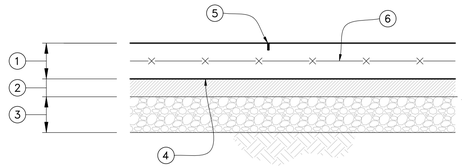
NOTES:
1) SEE GENERAL NOTE 7.7 FOR ADDITIONAL HOLDOWN SPECIFICATIONS NOT NOTED HEREIN.

TYPICAL HOLDOWN AT FOUNDATION WALL STEM — C

SCALE: NTS

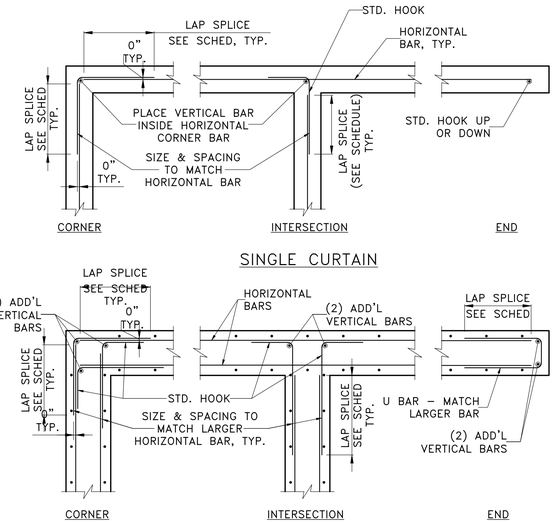
SLAB ON GRADE DETAIL KEY

1. SLAB ON GRADE PER PLAN
2. RIGID INSULATION BY ARCHITECT WHERE OCCURS (S.A.D.)
3. 4" SUB-BASE CONSISTING OF ⅝" CLEAN, CRUSHED, COMPACTED DRAIN ROCK
4. VAPOR RETARDER BY ARCHITECT WHERE OCCURS (S.A.D.)
5. CRACK CONTROL JOINTS @10'-0"o.c. MAX. EACH WAY
6. W.W.F. PER PLAN. USE SPACERS BELOW MESH TO MAINTAIN POSITION AT CENTER OF SLAB



TYPICAL SLAB ON GRADE — D

SCALE: NTS

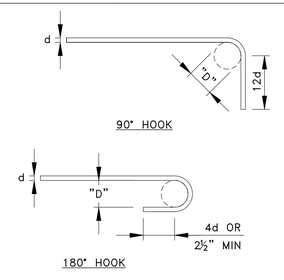


TYPICAL CONCRETE WALL & FOOTING CORNERS, INTERSECTIONS & ENDS — E

SCALE: NTS

BAR SIZE	"D" (IN.)
#3	2¼
#4	3
#5	3¾
#6	4½
#7	5¼
#8	6
#9	9½
#10	10¾
#11	12

NOTE:
ALL BENDS SHALL BE MADE COLD

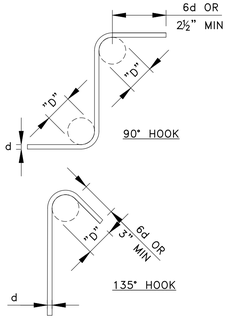


TYPICAL REINFORCEMENT BENDS — F

SCALE: NTS

BAR SIZE	"D" (IN.)
#3	1½
#4	2
#5	2½

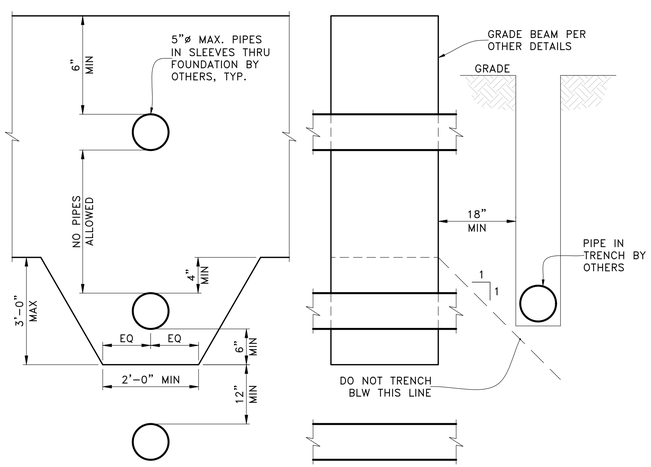
NOTE:
ALL BENDS SHALL BE MADE COLD



TYPICAL TIE & STIRRUP HOOKS — F

SCALE: NTS

NOTE: ATTACH ALL PIPES RUNNING BELOW FLOORS TO STRUCTURAL SLAB OR GRADE BEAM IN ACCORDANCE WITH THE PROJECT GEOTECH REPORT (ATTACHMENT BY OTHERS)



HORIZONTAL PIPE PENETRATIONS THROUGH FOUNDATIONS — G

SCALE: NTS

MODIFICATION FACTORS:
THE LENGTHS NOTED ABOVE SHALL BE MULTIPLIED BY THE FOLLOWING FACTORS AS APPLICABLE:
- 1.3 FOR TOP BARS (MORE THAN 12" CONC. CAST BELOW)
- 1.3 FOR LIGHT WEIGHT CONCRETE
- 1.5 FOR BARS WITH LESS THAN 2 BAR DIAMETERS CLEAR SPACING OR FOR BARS WITH LESS THAN 1 BAR DIAMETER OF CONCRETE COVER
- 1.5 FOR EPOXY COATED BARS U.O.N.

THE MODIFICATION FACTORS NOTED ABOVE SHALL BE COMBINED WHEN MULTIPLE CONDITIONS OCCUR. FOR EXAMPLE, FOR TOP BARS IN LIGHT WEIGHT CONCRETE, THE SPLICE LENGTH NOTED ABOVE SHALL BE MULTIPLIED BY 1.3x1.3=1.69

BAR SIZE	STRAIGHT BAR DEVELOPMENT LENGTH (Ld), INCHES	LAP SPLICE LENGTH, INCHES	HOOKED BAR DEVELOPMENT LENGTH (Ldh), INCHES
#3	17	22	9
#4	22	29	11
#5	28	36	14
#6	33	43	17

NOTES:
1. SPLICES OF REINFORCEMENT SHALL BE STAGGERED AT LEAST 2'-0"
2. SPLICES IN WALLS CONTAINING TWO CURTAINS OF REINFORCEMENT SHALL NOT OCCUR IN THE SAME LOCATION
3. TOP BAR FACTOR DOES NOT APPLY TO BARS IN WALLS
4. HOOKED BAR DEVELOPMENT LENGTH APPLIES TO BARS TERMINATING IN A STANDARD HOOK (REFER TO OTHER DETAILS).

TYPICAL DEVELOPMENT LENGTH & LAP SPLICE SCHEDULE – CONCRETE — H

SCALE: NTS

PERMIT SET

REV	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

CLIENT: DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

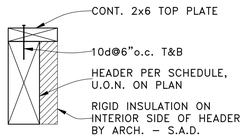
OWEN REMICK GOULD — STATE OF WASHINGTON — 52797 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
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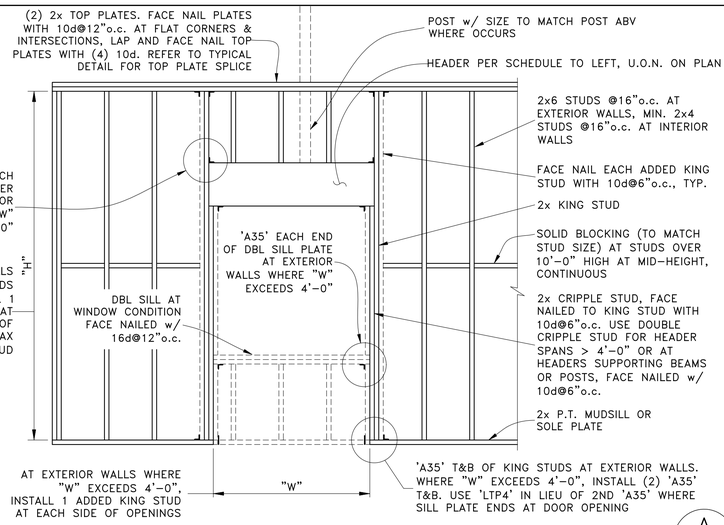
SHEET TITLE: TYPICAL DETAILS

SCALE: AS NOTED
JOB NO. 25014
SHEET NO. S2.1

HEADER SCHEDULE, U.O.N.	
"W" MAX. OPENING	MIN. HEADER
4'–0"	4x6
6'–0"	4x8
8'–0"	4x10
10'–0"	4x12

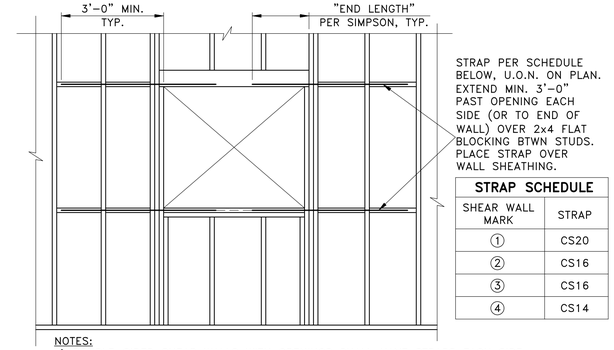


EXTERIOR HEADER @ 2x6 WALLS



TYPICAL STUD WALL FRAMING — A

SCALE: NTS

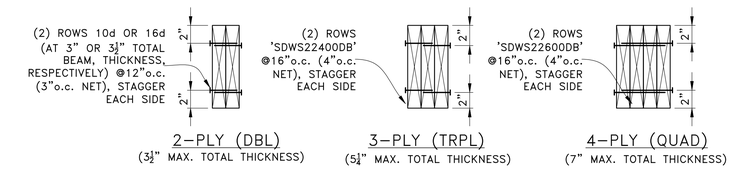


STRAP SCHEDULE	
SHEAR WALL MARK	STRAP
①	CS20
②	CS16
③	CS16
④	CS14

NOTES:
1) DOUBLE–SIDED SHEAR WALLS WITH OPENINGS SHALL HAVE STRAPS EACH SIDE
2) IF SILL PLATE CARRYING BOTTOM STRAP IS NOT CONTINUOUS, STRAP SHALL BE CONTINUOUS ACROSS ENTIRE LENGTH OF SILL

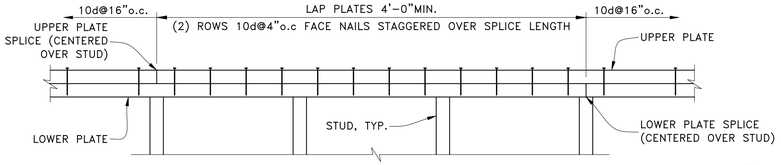
TYPICAL SHEARWALL STRAP AROUND OPENINGS — B

SCALE: NTS



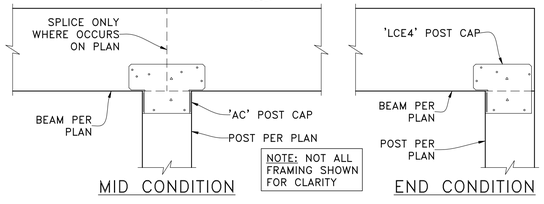
TYPICAL MULTI–PLY BEAM FASTENING — C

SCALE: NTS



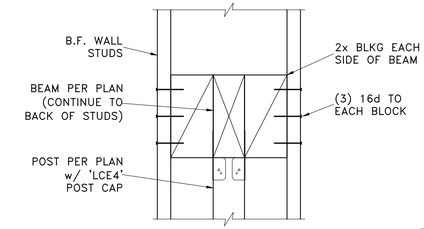
TYPICAL DOUBLE TOP PLATE SPLICE — D

SCALE: NTS



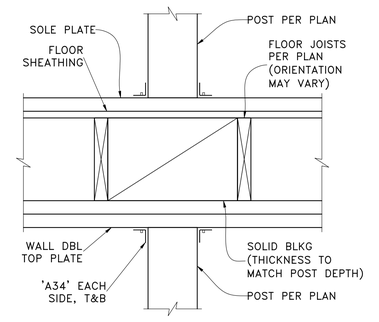
BEAM TO ISOLATED POST — E

SCALE: NTS



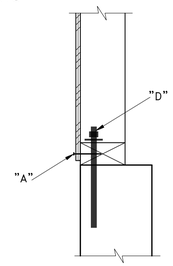
POST IN BALLOON–FRAMED WALL — F

SCALE: NTS

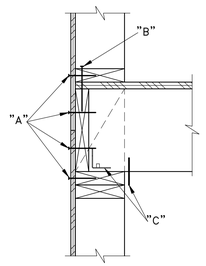


POST IN WALL AT FLOOR — G

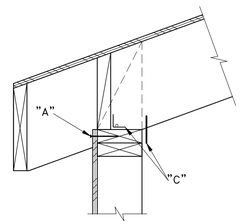
SCALE: NTS



FOUNDATION LEGEND



UPPER FLOOR LEGEND



ROOF LEGEND

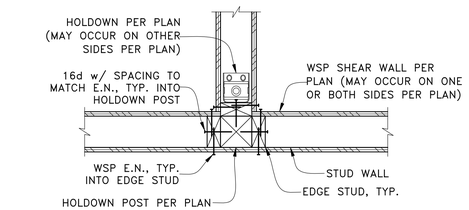
SHEAR WALL SCHEDULE (1/2" SHEATHING–RATED WOOD STRUCTURAL PANELS)							
SHEAR WALL MARK	CAPACITY (PLF)	EDGE NAILING "A"	FIELD NAILING [2]	FRAMING AT ADJOINING PANEL EDGES	SOLE PLATE FASTENERS "B"	FRAMING CLIPS "C"	SILL ANCHOR BOLT SPACING – "D"
①	310	10d@6"o.c.	10d@12"o.c.	2x NOMINAL	'SDS25600' @ 8"o.c. [4]	'A34' OR 'LTP4' @ 16"o.c. [5]	4'–0"o.c. [6]
②	460	10d@4"o.c.	10d@12"o.c.	2x NOMINAL	'SDS25600' @ 8"o.c. [4]	'A34' OR 'LTP4' @ 8"o.c. [5]	2'–8"o.c. [6]
③	600	10d@3"o.c. [1]	10d@12"o.c.	3x OR 2–2x NOMINAL [3]	'SDS25600' @ 8"o.c. [4]	'A34' OR 'LTP4' @ 8"o.c. [5]	2'–8"o.c. [6]
④	770	10d@2"o.c. [1]	10d@12"o.c.	3x OR 2–2x NOMINAL [3]	'SDS25600' @ 4"o.c. [4]	'A34' OR 'LTP4' @ 8"o.c. [5]	1'–4"o.c. [6]
DBL SIDED ②	920	10d@4"o.c. [1]	10d@12"o.c.	3x OR 2–2x NOMINAL [3]	'SDS25600' @ 4"o.c. [4]	'A34' OR 'LTP4' @ 4"o.c. [5]	1'–4"o.c. [6]
DBL SIDED ③	1200	10d@3"o.c. [1]	10d@12"o.c.	3x OR 2–2x NOMINAL [3]	'SDS25600' @ 4"o.c. [4]	'A34' OR 'LTP4' @ 4"o.c. [5]	1'–4"o.c. [6]
DBL SIDED ④	1540	10d@2"o.c. [1]	10d@12"o.c.	3x OR 2–2x NOMINAL [3]	'SDS25600' @ 3"o.c. [4]	'A34' OR 'LTP4' @ 4"o.c. [5]	8"o.c. [6]

NOTES

1) STAGGER ROWS OF EDGE NAILING ½" APART. ON DBL SIDED WALLS, STAGGER EDGE NAILS ON PANELS ON OPPOSITE SIDES OF WALL.
2) NAILING TO ALL INTERMEDIATE FRAMING MEMBERS IN FIELD OF PANEL
3) PANEL EDGE NAILING SHALL BE STAGGERED. 2–2x FRAMING MEMBERS SUPPORTING PANEL EDGES SHALL BE FACE NAILED WITH 10d, SPACING TO MATCH PANEL EDGE NAILING, STAGGERED. STAGGER PANEL EDGES IN OPPOSITE PANELS MIN. 2'–0" APART ON DBL SIDED SHEAR WALLS.
4) SCREWS SHALL HAVE MIN. 2" PENETRATION INTO RIM JOIST/ BLOCKING – USE LONGER SCREWS IF NECESSARY.
5) FRAMING CLIPS ARE ONLY REQUIRED WHERE SPECIFIED ON FRAMING DETAILS.
6) SEE GENERAL NOTES 7.6 & 7.8 FOR MORE INFORMATION.

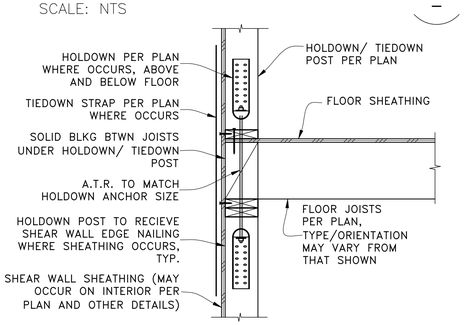
SHEAR WALL SCHEDULE (S.W.S.) — H

SCALE: NTS



HOLDOWN AT CORNER — I

SCALE: NTS



TYPICAL UPPER FLOOR HOLDOWN OR TIEDOWN STRAP — L

SCALE: NTS

PERMIT SET

REV.	DATE	DESCRIPTION
	12–22–25	PERMIT SET

PROJECT:
NEW SINGLE–FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

CLIENT:
DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

ORAN REMICK COLLIN — STATE OF WASHINGTON — 32797 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

ENGINEER OF RECORD

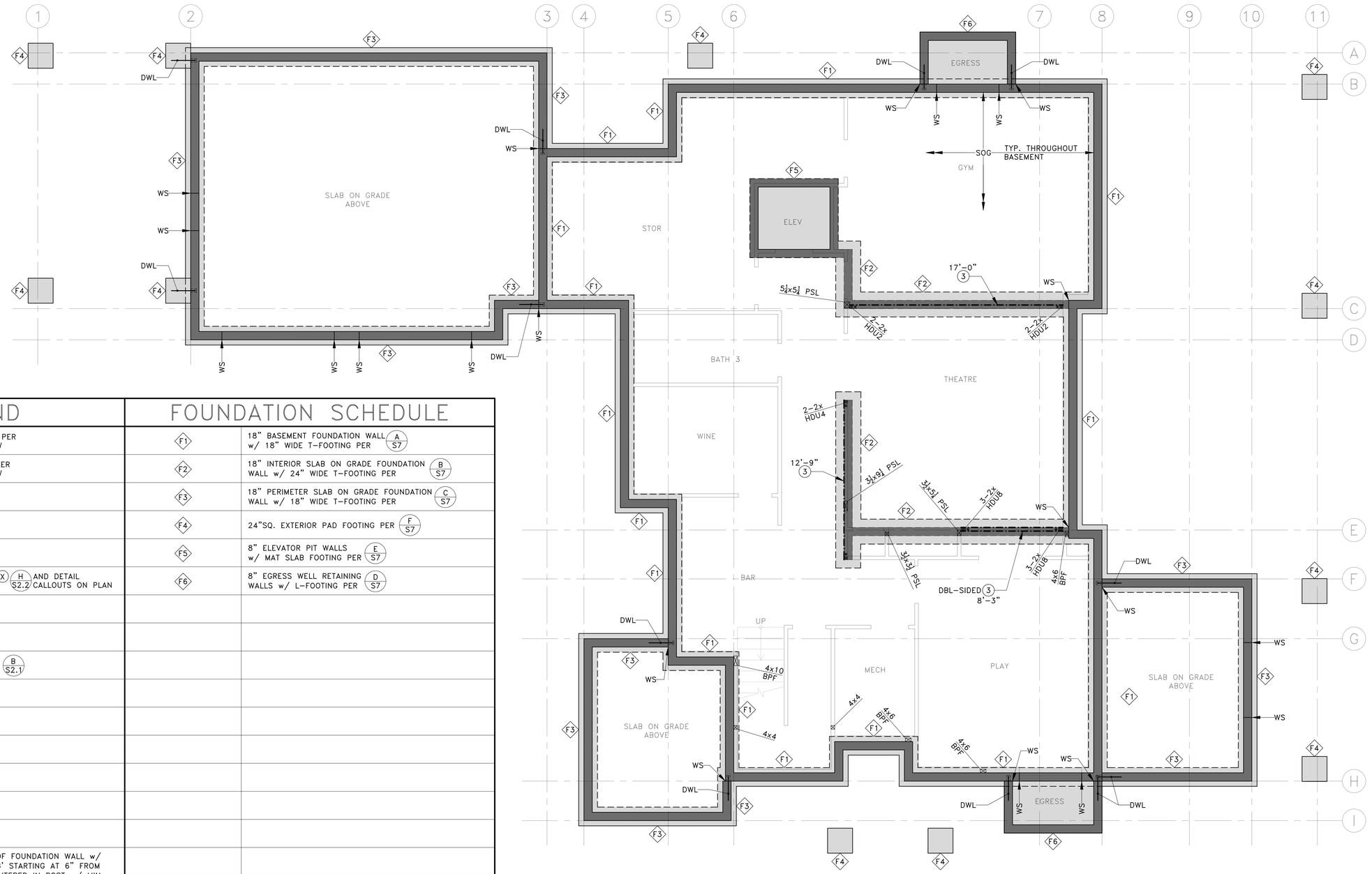
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SHEET TITLE: TYPICAL DETAILS

SCALE: AS NOTED

JOB NO. 25014

SHEET. NO. S2.2



NORTH

PLAN LEGEND

	CONCRETE FOUNDATION WALL PER FOUNDATION SCHEDULE BELOW
	CONCRETE SPREAD FOOTING PER FOUNDATION SCHEDULE BELOW
	STUD WALL ABOVE FLOOR
	WALL BELOW FLOOR
	WINDOW BY ARCH (S.A.D.)
(X) 'L'	½" W.S.P. SHEAR WALL TYPE (X) w/ MIN. LENGTH 'L', PER (H/S2.2) AND DETAIL CALLOUTS ON PLAN
4x4	POST ABOVE FOUNDATION
2-2x HDU2	POST & HOLDOWN PER (C/S2.1)
DWL	EPOXY REBAR DOWEL FRESH TO HARDENED CONCRETE PER (B/S2.1)
	STEP IN LEVEL
BPF	BOLT POST TO INSIDE FACE OF FOUNDATION WALL w/ VERT. ROW OF 'THD50800HMG' STARTING AT 6" FROM T&B, 12"o.c. MAX. BTWN, CENTERED IN POST w/ MIN. 3½" TO EDGE OF CONCRETE WHERE OCCURS (V.I.F.). ANCHOR MAIN FLOOR BEAM TO POST w/ 'H8' EACH SIDE. PLACE W.P. BARRIER BTWN UNTREATED WOOD & CONCRETE. NOTCH FURRING WALL TOP PLATE AS REQ'D TO ALLOW POST TO EXTEND UP TO U/S OF BEAM.
SOG	4" CONCRETE SLAB ON GRADE w/ 6x6-W4.5xW4.5 W.W.F. PER (D/S2.1)
WS	STEP IN T.O. FNDN WALL (S.A.D.)

FOUNDATION SCHEDULE

F1	18" BASEMENT FOUNDATION WALL w/ 18" WIDE T-FOOTING PER (A/S7)
F2	18" INTERIOR SLAB ON GRADE FOUNDATION WALL w/ 24" WIDE T-FOOTING PER (B/S7)
F3	18" PERIMETER SLAB ON GRADE FOUNDATION WALL w/ 18" WIDE T-FOOTING PER (C/S7)
F4	24"SQ. EXTERIOR PAD FOOTING PER (F/S7)
F5	8" ELEVATOR PIT WALLS w/ MAT SLAB FOOTING PER (E/S7)
F6	8" EGRESS WELL RETAINING WALLS w/ L-FOOTING PER (D/S7)

SHEET NOTES:
1. ALL PSL POSTS BEARING ON FOUNDATION WALLS SHALL UTILIZE 'ABUZ' POST BASES PLACED DIRECTLY ON CONCRETE (STOP MUDSILL EACH SIDE) w/ 'THD62600HMG' ANCHORS & 1" STANDOFF PLATES PACKED SOLID w/ NON-SHRINK, NON-METALLIC MIN. 5000psi GROUT PRIOR TO INSTALLATION. SAWN LUMBER POSTS MAY BEAR ON WALL MUDSILLS.
2. REFER TO STRUCTURAL FOUNDATION DETAILS FOR REQUIRED MIN. DEPTH OF FOOTINGS BELOW RELEVANT ARCHITECTURAL DATUM, SUCH AS TOP OF ADJACENT SLAB. COMPARE TO ARCHITECTURAL DRAWINGS TO DETERMINE BOTTOM OF FOOTING ELEVATIONS. STEP FOOTINGS AS REQUIRED PER DETAIL A/S2.1 (FOOTING STEP LOCNS NSFC ON PLAN).

PERMIT SET

REV	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

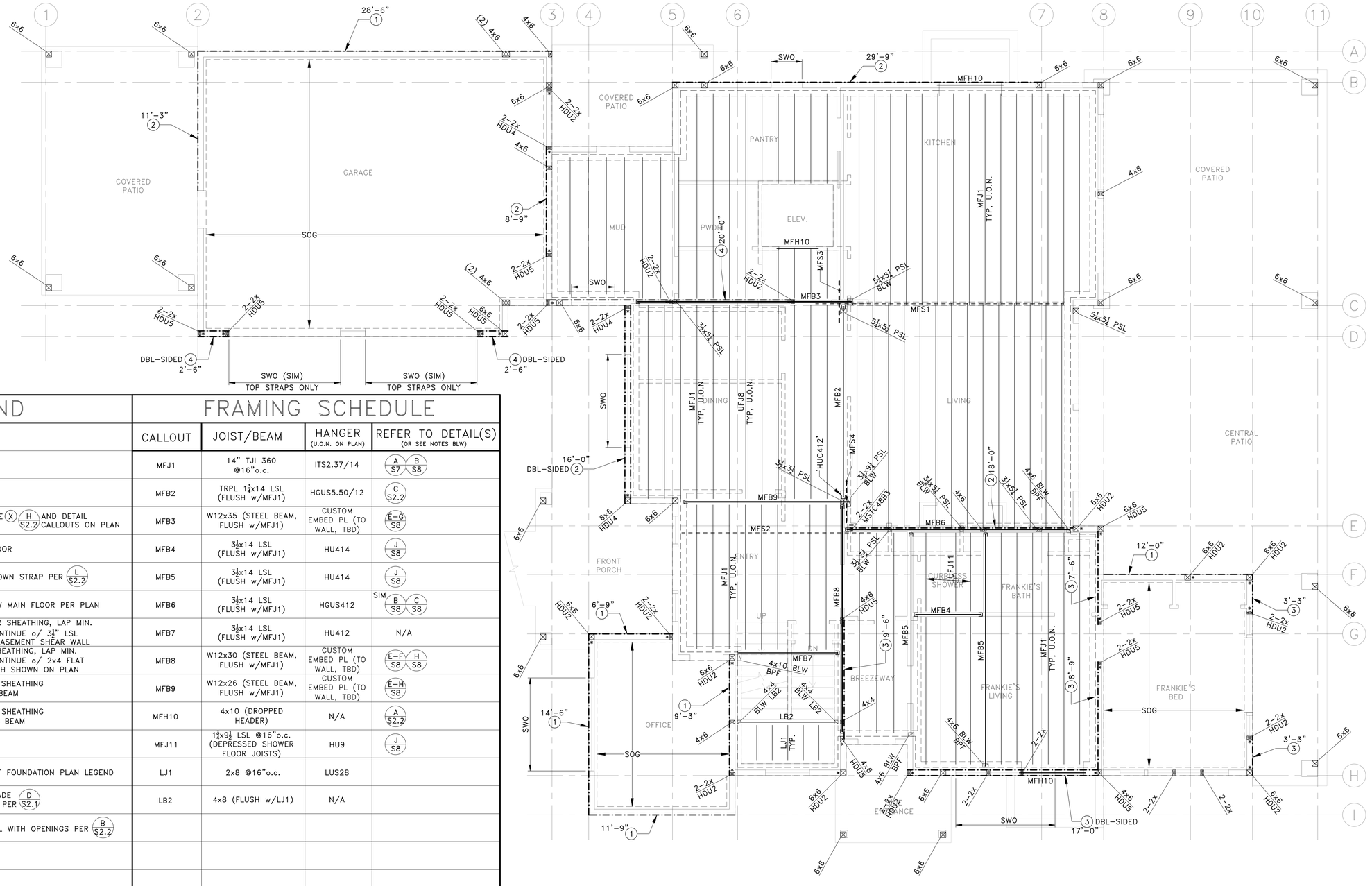
CLIENT: DAVID AND CAITLIN YUSEN
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SHEET TITLE: LOWER FLOOR FOUNDATION PLAN

SCALE: AS NOTED
JOB NO. 25014
SHEET. NO. S3



PLAN LEGEND

	STUD WALL ABOVE FLOOR
	WALL BELOW FLOOR
	WINDOW BY ARCH (S.A.D.)
(X) 'L'	½" W.S.P. SHEAR WALL TYPE (X) (H) S2.2 AND DETAIL w/ MIN. LENGTH 'L', PER CALLOUTS ON PLAN
4x4 OR 4x4 BLW	POST ABOVE OR BELOW FLOOR
2-2x HDU2 OR 2-2x MSTC28	POST & HOLDOWN OR TIEDOWN STRAP PER (L) S2.2
	METAL STRAP ON OR BELOW MAIN FLOOR PER PLAN
MFS1	'CMSTC12' STRAP o/ FLOOR SHEATHING, LAP MIN. 36" o/ T.O. BEAM AND CONTINUE o/ 3½" LSL FULL-DEPTH BLKG ABOVE BASEMENT SHEAR WALL
MFS2	'CS16' STRAP o/ FLOOR SHEATHING, LAP MIN. 24" o/ T.O. BEAM AND CONTINUE o/ 2x4 FLAT BLKG BTWN F.J. FOR LENGTH SHOWN ON PLAN
MFS3	'MSTA30' STRAP o/ FLOOR SHEATHING o/ T.O. F.J. TO ABUTTING BEAM
MFS4	'MSTC66' STRAP o/ FLOOR SHEATHING o/ T.O. BEAM TO ABUTTING BEAM
BPF	SEE SHEET S3 – BASEMENT FOUNDATION PLAN LEGEND
SOG	4" CONCRETE SLAB ON GRADE (D) S2.1 w/ 6x6-W4.5xW4.5 W.W.F. PER
SWO	STRAP AROUND SHEAR WALL WITH OPENINGS PER (B) S2.2
BEAM HANGER	FLUSH-FRAMED JOIST OR BEAM CONNECTION; SEE FRAMING SCHEDULE FOR HANGERS, U.O.N. ON PLAN OR DETAILS (JOIST HANGERS NOT SHOWN ON PLAN FOR CLARITY)
	JOIST OR BEAM BEARING ON DROPPED BEAM OR HEADER (BEARING WALL SIM). POST DOWN TO HEADER WHERE OCCURS (POST WIDTH TO MATCH BEAM, NOT SHOWN FOR CLARITY). INSTALL FULL-DEPTH BLKG EACH SIDE OF JOIST OR BEAM OVER SUPPORT

FRAMING SCHEDULE

CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
MFJ1	14" TJI 360 @16"o.c.	ITS2.37/14	(A) S7 (B) S8
MFB2	TRPL 1¾x14 LSL (FLUSH w/MFJ1)	HGUS5.50/12	(C) S2.2
MFB3	W12x35 (STEEL BEAM, FLUSH w/MFJ1)	CUSTOM EMBED PL (TO WALL, TBD)	(E-G) S8
MFB4	3½x14 LSL (FLUSH w/MFJ1)	HU414	(J) S8
MFB5	3½x14 LSL (FLUSH w/MFJ1)	HU414	(J) S8
MFB6	3½x14 LSL (FLUSH w/MFJ1)	HGUS412	SIM (B) S8 (C) S8
MFB7	3½x14 LSL (FLUSH w/MFJ1)	HU412	N/A
MFB8	W12x30 (STEEL BEAM, FLUSH w/MFJ1)	CUSTOM EMBED PL (TO WALL, TBD)	(E-F) S8 (H) S8
MFB9	W12x26 (STEEL BEAM, FLUSH w/MFJ1)	CUSTOM EMBED PL (TO WALL, TBD)	(E-H) S8
MFH10	4x10 (DROPPED HEADER)	N/A	(A) S2.2
MFJ11	1¾x9¼ LSL @16"o.c. (DEPRESSED SHOWER FLOOR JOISTS)	HU9	(J) S8
LJ1	2x8 @16"o.c.	LUS28	
LB2	4x8 (FLUSH w/LJ1)	N/A	

SHEET NOTES:

1. EXTERIOR CROWN MOULDING, CURVED SOFFITS, TRELLISES, MINOR OVERHANGS AND OTHER NON-STRUCTURAL ORNAMENTATION NOT EXPLICITLY DETAILED ON THESE STRUCTURAL DRAWINGS ARE BY OTHERS (S.A.D.).
2. TYPICAL MAIN FLOOR SHEATHING (SUBFLOOR) SHALL BE 1⅛" APA-RATED SHEATHING PER GENERAL NOTE X.X.
3. ALL PSL POSTS BEARING ON FOUNDATION WALLS SHALL UTILIZE 'ABUZ' POST BASES PLACED DIRECTLY ON CONCRETE (STOP MUDSILL EACH SIDE) w/ 'THD62600HMG' ANCHORS & 1" STANDOFF PLATES PACKED SOLID w/ NON-SHRINK, NON-METALLIC MIN. 5000psi GROUT PRIOR TO INSTALLATION. SAWN LUMBER POSTS MAY BEAR ON WALL MUDSILLS.

NORTH

PERMIT SET

REV	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

CLIENT: DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

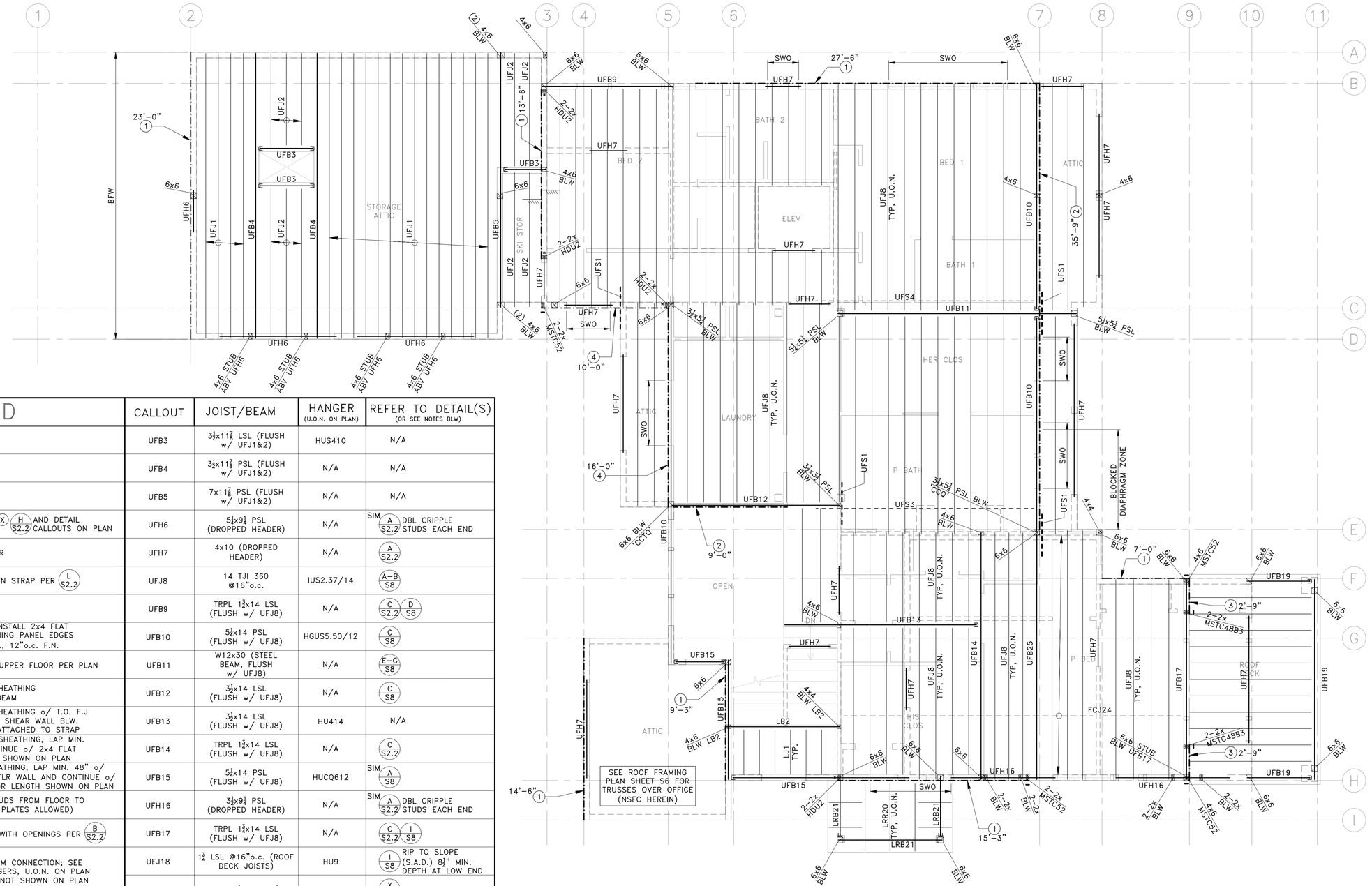
TOM E. REMICK, COMPANY — STATE OF WASHINGTON — 52797 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

ENGINEER OF RECORD

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SHEET TITLE: MAIN FLOOR FRAMING PLAN

SCALE: AS NOTED
JOB NO. 25014
SHEET NO. S4



PLAN LEGEND

		CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
	STUD WALL ABOVE FLOOR	UFB3	3½x11⅞ LSL (FLUSH w/ UFJ1&2)	HUS410	N/A
	WALL BELOW FLOOR	UFB4	3½x11⅞ PSL (FLUSH w/ UFJ1&2)	N/A	N/A
	WINDOW BY ARCH (S.A.D.)	UFB5	7x11⅞ PSL (FLUSH w/ UFJ1&2)	N/A	N/A
(X) 'L'	½" W.S.P. SHEAR WALL TYPE (X) (H S2.2) AND DETAIL w/ MIN. LENGTH 'L', PER CALLOUTS ON PLAN	UFH6	5¼x9¼ PSL (DROPPED HEADER)	N/A	SIM (A S2.2) DBL CRIPPLE STUDS EACH END
4x4 OR 4x4 BLW	POST ABOVE OR BELOW FLOOR	UFH7	4x10 (DROPPED HEADER)	N/A	(A S2.2)
2-2x HDU2 OR 2-2x MSTC28	POST & HOLDOWN OR TIEDOWN STRAP PER (L S2.2)	UFJ8	14 TJI 360 @16"o.c.	IUS2.37/14	(A–B S8)
	STEP IN LEVEL (S.A.D.)	UFB9	TRPL 1¾x14 LSL (FLUSH w/ UFJ8)	N/A	(C S2.2) (D S8)
	BLOCKED DIAPHRAGM ZONE: INSTALL 2x4 FLAT BLKG BLW ALL FLOOR SHEATHING PANEL EDGES & PROVIDE 10d@ 2½"o.c. E.N., 12"o.c. F.N.	UFB10	5¼x14 PSL (FLUSH w/ UFJ8)	HGUS5.50/12	(C S8)
	METAL STRAP ON OR BELOW UPPER FLOOR PER PLAN	UFB11	W12x30 (STEEL BEAM, FLUSH w/ UFJ8)	N/A	(E–G S8)
UFS1	'MSTC40' STRAP o/ FLOOR SHEATHING o/ T.O. BEAM TO ABUTTING BEAM	UFB12	3½x14 LSL (FLUSH w/ UFJ8)	N/A	(C S8)
UFS2	'MSTA36' STRAP o/ FLOOR SHEATHING o/ T.O. F.J TO ABUTTING RIM JOIST OVER SHEAR WALL BLW. E.N. FULL–LENGTH OF UFJ1 ATTACHED TO STRAP	UFB13	3½x14 LSL (FLUSH w/ UFJ8)	HU414	N/A
UFS3	'CMSTC16' STRAP o/ FLOOR SHEATHING, LAP MIN. 24" o/ T.O. BEAM AND CONTINUE o/ 2x4 FLAT BLKG BTWN F.J. FOR LENGTH SHOWN ON PLAN	UFB14	TRPL 1¾x14 LSL (FLUSH w/ UFJ8)	N/A	(C S2.2)
UFS4	'CS16' STRAP o/ FLOOR SHEATHING, LAP MIN. 48" o/ T.O. RIM JOIST ABOVE MAIN FLR WALL AND CONTINUE o/ 2x4 FLAT BLKG BTWN F.J. FOR LENGTH SHOWN ON PLAN	UFB15	5¼x14 PSL (FLUSH w/ UFJ8)	HUCQ612	SIM (A S8)
BFW	B.F. EXTERIOR RAKE WALL STUDS FROM FLOOR TO ROOF (NO INTERMEDIATE TOP PLATES ALLOWED)	UFH16	3½x9¼ PSL (DROPPED HEADER)	N/A	SIM (A S2.2) DBL CRIPPLE STUDS EACH END
SWO	STRAP AROUND SHEAR WALL WITH OPENINGS PER (B S2.2)	UFB17	TRPL 1¾x14 LSL (FLUSH w/ UFJ8)	N/A	(C S2.2) (I S8)
BEAM HANGER	FLUSH–FRAMED JOIST OR BEAM CONNECTION; SEE FRAMING SCHEDULE FOR HANGERS, U.O.N. ON PLAN OR DETAILS (JOIST HANGERS NOT SHOWN ON PLAN FOR CLARITY)	UFJ18	1¾ LSL @16"o.c. (ROOF DECK JOISTS)	HU9	(I S8) RIP TO SLOPE (S.A.D.) 8½" MIN. DEPTH AT LOW END
		UFB19	6x10 (DROPPED)	HUC610	(X SX)
	JOIST OR BEAM BEARING ON DROPPED BEAM OR HEADER (BEARING WALL SIM). POST DOWN TO HEADER WHERE OCCURS (POST WIDTH TO MATCH BEAM, NOT SHOWN FOR CLARITY). INSTALL FULL–DEPTH BLKG EACH SIDE OF JOIST OR BEAM OVER SUPPORT	LRR20	2x6 @24"o.c.	LRU26Z	(D–E S9)
		LRB21	6x10 (DROPPED)	HUC610TF	(D S9)
		LJ1	2x8 @16"o.c.	LUS28	(K S8)
		LB2	4x8 (FLUSH w/LJ1)	N/A	N/A
		FCJ24	1½x7¼ LSL @16"o.c. (DROPPED MAIN FLOOR CEILING JOISTS)	LUS28 (TO INTERSECTING WALL LEDGERS)	SIM (K S8) TYP. THROUGHOUT CEILING OVER FRANKIE'S SUITE (S.A.D.)
		UFB25	TRPL 1¾x14 LSL (FLUSH w/ UFJ8)	N/A	(C S2.2) (2) STAGGERED ROWS 10d @6"o.c. FLR SHEATHING NAILING FULL–LENGTH TO T.O. UFB22

FRAMING SCHEDULE

CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
UFJ1	11⅞ TJI 560 @12"o.c.	N/A	(A S8)
UFJ2	11⅞ TJI 210 @16"o.c.	IUS2.06/11.88	(A S8)

SHEET NOTES:
1. EXTERIOR CROWN MOULDING, CURVED SOFFITS, TRELLISES, MINOR OVERHANGS AND OTHER NON–STRUCTURAL ORNAMENTATION NOT EXPLICITLY DETAILED ON THESE STRUCTURAL DRAWINGS ARE BY OTHERS (S.A.D.).
2. TYPICAL UPPER FLOOR SHEATHING (SUBFLOOR) SHALL BE 1⅛" APA–RATED SHEATHING PER GENERAL NOTE X.X.
3. A MAX. 1" THICK LAYER OF GYPCRETE TOPPING IS ALLOWED ABOVE FLOOR SHEATHING AT ALL UPPER FLOOR AREAS EXCEPT: STORAGE ATTIC, OTHER ATTICS, AND THE ROOF DECK (S.A.D.)

PERMIT SET

REV	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

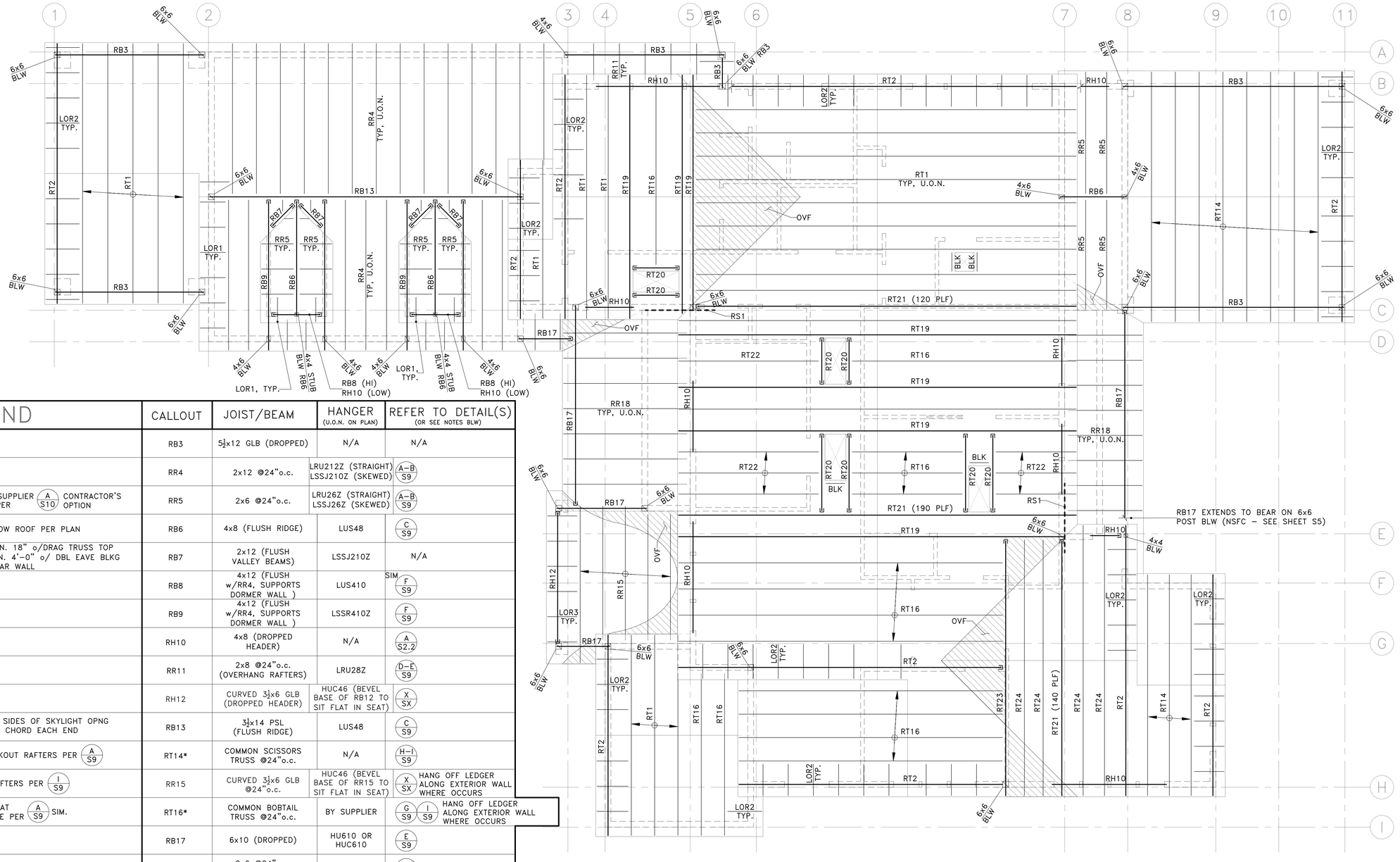
CLIENT: DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

OWEN REMICK GOLDEN — STATE OF WASHINGTON — 52797 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
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(206) 290-6408
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SHEET TITLE: UPPER FLOOR FRAMING PLAN

SCALE: AS NOTED
JOB NO. 25014
SHEET. NO. S5



NORTH

PLAN LEGEND

⊏⊏⊏⊏⊐	WALL BELOW ROOF
4x4 BLW	POST BELOW ROOF
	TRUSS OVERFRAMING BY SUPPLIER (A S10) CONTRACTOR'S OR STICK–OVERFRAMING PER (A S10) OPTION
OVF	METAL STRAP ON OR BELOW ROOF PER PLAN
RS1	'CMSTC16' STRAP, LAP MIN. 18" o/DRAG TRUSS TOP CHORD AND CONTINUE MIN. 4'–0" o/ DBL EAVE BLKG ABOVE UPPER FLOOR SHEAR WALL
BLK	2x4 BLOCKING ON SHORT SIDES OF SKYLIGHT OPNG w/'LUS24' TO TRUSS TOP CHORD EACH END
LOR1	STICK–FRAMED ROOF LOOKOUT RAFTERS PER (A S9)
LOR2	TRUSS ROOF LOOKOUT RAFTERS PER (I S9)
LOR3	2x6 LOOKOUTS @24"o.c. AT CURVED ENTRY ROOF RAKE PER (A S9) SIM.
BEAM HANGER	FLUSH–FRAMED JOIST OR BEAM CONNECTION; SEE FRAMING SCHEDULE FOR HANGERS, U.O.N. ON PLAN OR DETAILS (JOIST HANGERS NOT SHOWN ON PLAN FOR CLARITY)
	JOIST OR BEAM BEARING ON DROPPED BEAM OR HEADER (BEARING WALL SIM). POST DOWN TO HEADER WHERE OCCURS (POST WIDTH TO MATCH BEAM, NOT SHOWN FOR CLARITY). INSTALL FULL–DEPTH BLKG EACH SIDE OF JOIST OR BEAM OVER SUPPORT

FRAMING SCHEDULE

CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
RT1*	COMMON GABLE TRUSS @24"o.c.	BY SUPPLIER	(G S9) (I S9)
RT2*	STRUCTURAL RAKE WALL TRUSS	N/A	(I S9)

CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
RB3	5¼x12 GLB (DROPPED)	N/A	N/A
RR4	2x12 @24"o.c.	LRU212Z (STRAIGHT) LSSJ210Z (SKEWED)	(A–B S9)
RR5	2x6 @24"o.c.	LRU26Z (STRAIGHT) LSSJ26Z (SKEWED)	(A–B S9)
RB6	4x8 (FLUSH RIDGE)	LUS48	(C S9)
RB7	2x12 (FLUSH VALLEY BEAMS)	LSSJ210Z	N/A
RB8	4x12 (FLUSH w/RR4, SUPPORTS DORMER WALL)	LUS410	SIM. (F S9)
RB9	4x12 (FLUSH w/RR4, SUPPORTS DORMER WALL)	LSSR410Z	(F S9)
RH10	4x8 (DROPPED HEADER)	N/A	(A S2.2)
RR11	2x8 @24"o.c. (OVERHANG RAFTERS)	LRU28Z	(D–E S9)
RH12	CURVED 3½x6 GLB (DROPPED HEADER)	HUC46 (BEVEL BASE OF RB12 TO SIT FLAT IN SEAT)	(X SX)
RB13	3½x14 PSL (FLUSH RIDGE)	LUS48	(C S9)
RT14*	COMMON SCISSORS TRUSS @24"o.c.	N/A	(H–I S9)
RR15	CURVED 3½x6 GLB @24"o.c.	HUC46 (BEVEL BASE OF RR15 TO SIT FLAT IN SEAT)	(X SX) HANG OFF LEDGER ALONG EXTERIOR WALL WHERE OCCURS
RT16*	COMMON BOBTAIL TRUSS @24"o.c.	BY SUPPLIER	(G S9) (I S9) HANG OFF LEDGER ALONG EXTERIOR WALL WHERE OCCURS
RB17	6x10 (DROPPED)	HU610 OR HUC610	(E S9)
RR18	2x6 @24"o.c. (OVERHANG RAFTERS)	LRU26Z	(D–E S9)
RT19*	GABLE TRUSS GIRDER	BY SUPPLIER	(G S9)
RT20*	FLAT GIRDER TRUSS	BY SUPPLIER	N/A
RT21*	DRAG TRUSS (PROFILE MATCHES ADJ. COMMON TRUSSES)	BY SUPPLIER	SEE PLAN FOR UNIFORM SEISMIC TOP CHORD LOAD
RT22*	COMMON MONO–TRUSS @24"o.c.	BY SUPPLIER	(G S9) (I S9)
RT23*	FLAT GIRDER TRUSS	BY SUPPLIER	N/A
RT24*	COMMON CATHEDRAL TRUSS @24"o.c.	N/A	(G–I S9)

*METAL–PLATE CONNECTED WOOD TRUSS TYPE – SEE SHEET NOTE (2) ADJACENT

SHEET NOTES:
1. EXTERIOR CROWN MOULDING, CURVED SOFFITS, TRELLISES, MINOR OVERHANGS AND OTHER NON–STRUCTURAL ORNAMENTATION NOT EXPLICITLY DETAILED ON THESE STRUCTURAL DRAWINGS ARE BY OTHERS (S.A.D.).
2. ALL METAL–PLATE CONNECTED WOOD TRUSSES, STRUCTURAL FASCIA MEMBERS, THEIR CONNECTIONS TO OTHER TRUSSES/FASCIAS AND TRUSS EAVE BLKG ARE DESIGN–BUILD BY TRUSS SUPPLIER. DIMENSIONS, OPENINGS, RAISED HEELS, LOADS, SPANS AND SUPPORT CONDITIONS MAY VARY BETWEEN TRUSS MEMBERS OF THE SAME CALLOUT (S.A.D). REFER TO SHEET S1, GENERAL NOTE 7.10 FOR TRUSS DESIGN CRITERIA AND OTHER INFO. E.N. ROOF SHEATHING TO FULL–LENGTH OF ALL DRAG TRUSS TOP CHORDS. PROFILE OF ALL "STRUCTURAL RAKE WALL TRUSSES" SHALL MATCH THAT OF ADJACENT COMMON TRUSS (GABLE, SCISSORS. ETC.)

PERMIT SET

REV	DATE	DESCRIPTION
	12–22–25	PERMIT SET

PROJECT:
NEW SINGLE–FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

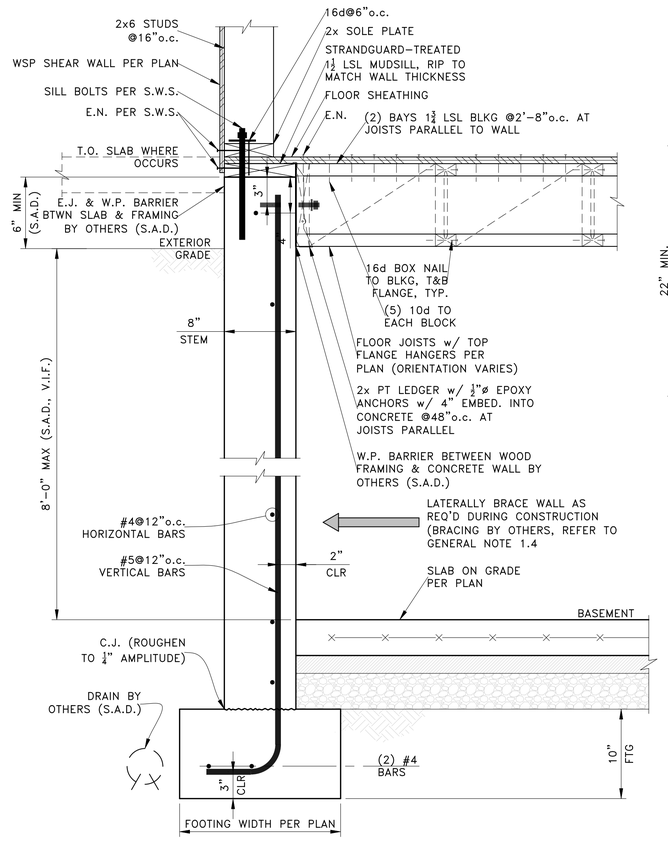
CLIENT:
DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

OWEN REMICK GOLLEN, STATE OF WASHINGTON, 52797, REGISTERED STRUCTURAL ENGINEER, PROFESSIONAL ENGINEER
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SHEET TITLE:
ROOF FRAMING PLAN

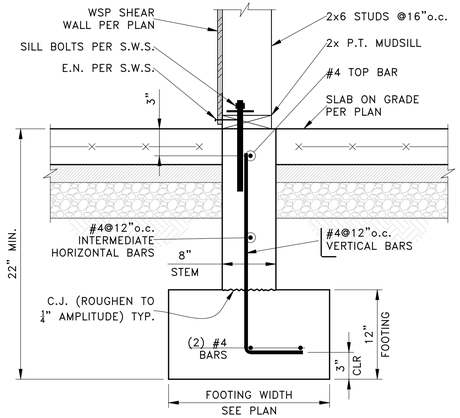
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JOB NO. 25014
SHEET. NO. S6



BASEMENT FOUNDATION WALL

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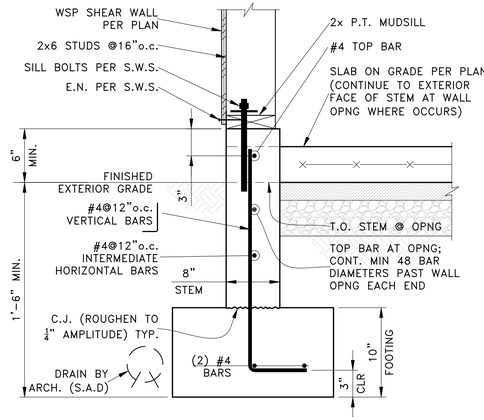
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INTERIOR SLAB ON GRADE FOUNDATION

SCALE: NTS

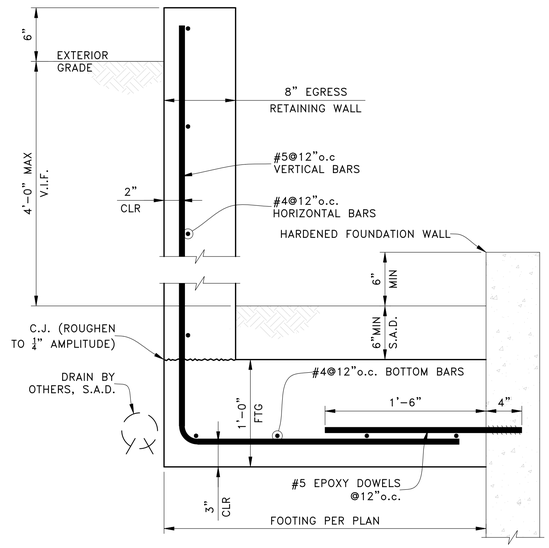
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PERIMETER SLAB ON GRADE FOUNDATION

SCALE: NTS

C



EGRESS WINDOW RETAINING WALL

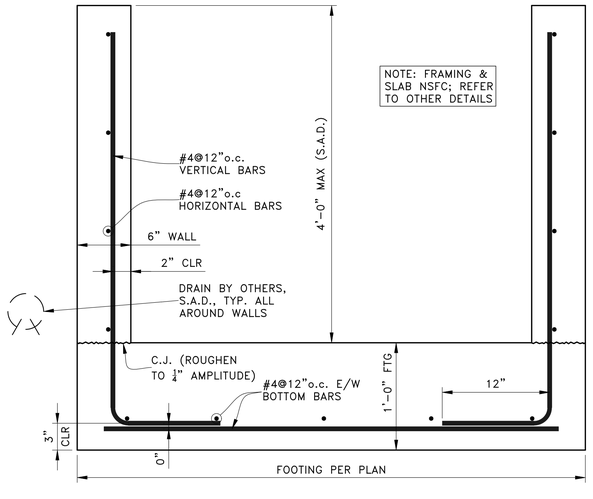
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D

EXTERIOR PAD FOOTING

SCALE: NTS

F



ELEVATOR PIT

SCALE: NTS

E

PERMIT SET

REV.	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

CLIENT:
DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

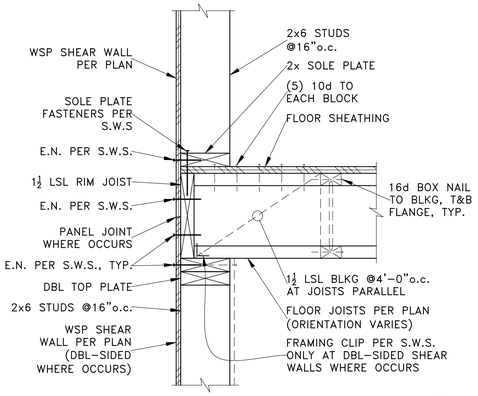
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3201 1st Ave S, Suite 101, Seattle, WA 98134
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SHEET TITLE:
SECTIONS & DETAILS

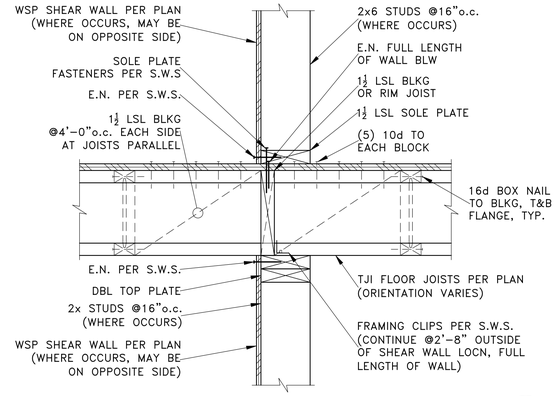
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SHEET NO. S7



EXTERIOR WALL AT FLOOR

A

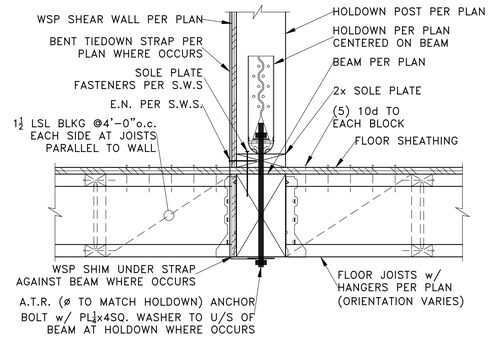
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INTERIOR SHEAR WALL AT FLOOR

B

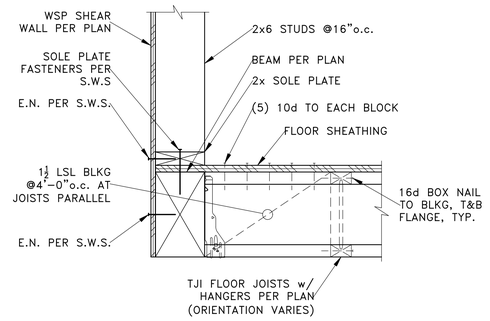
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INTERIOR SHEAR WALL ON WOOD BEAM

C

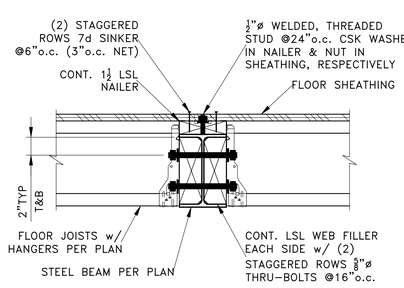
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EXTERIOR WALL ON BEAM

D

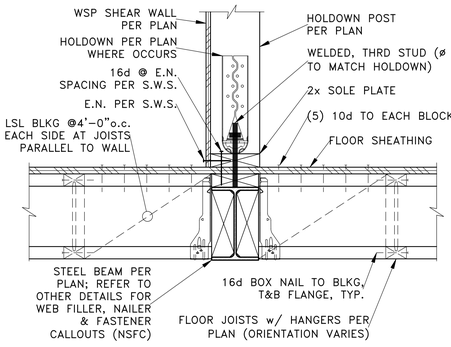
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FLUSH STEEL BEAM

E

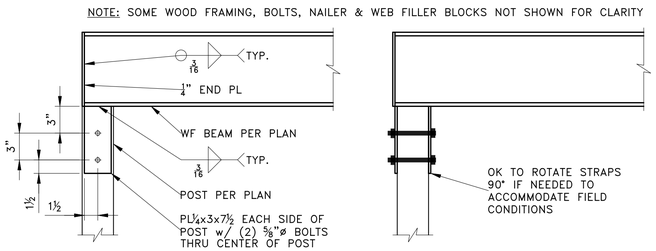
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INTERIOR SHEAR WALL ON STEEL BEAM

F

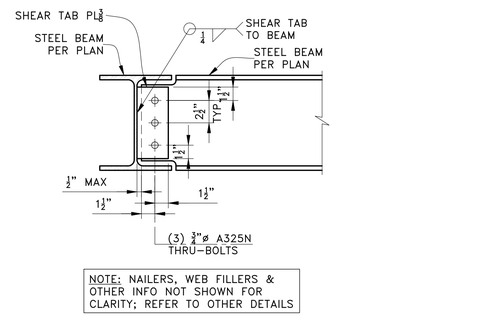
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STEEL BEAM TO WOOD POST

G

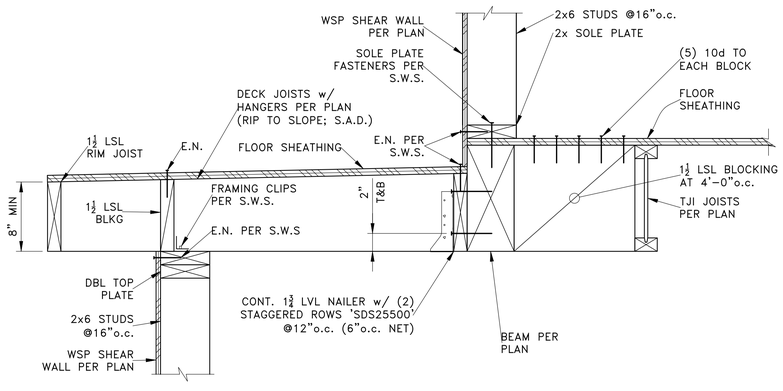
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STEEL BEAM TO BEAM

H

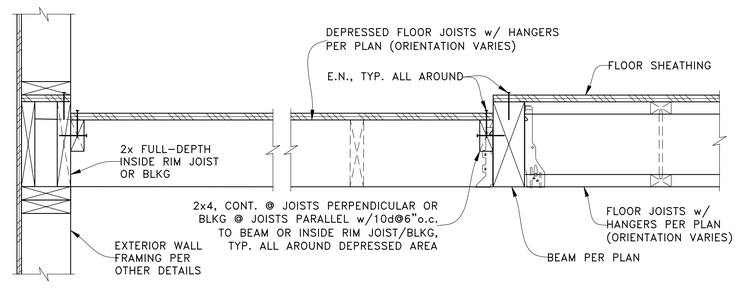
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ROOF DECK AT WALL

I

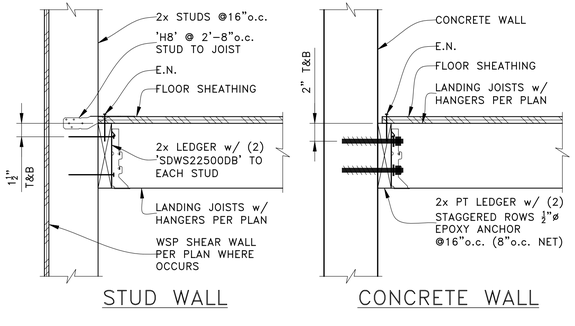
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DEPRESSED SHOWER FRAMING

J

SCALE: NTS



LANDING TO WALL

K

SCALE: NTS

PERMIT SET

REV.	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

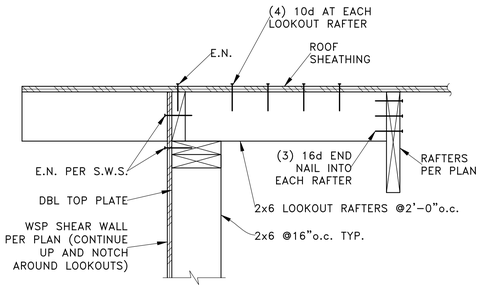
CLIENT:
DAVID AND CAITLIN YUSEN
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OWEN REMICK COLE
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SHEET TITLE:
SECTIONS & DETAILS

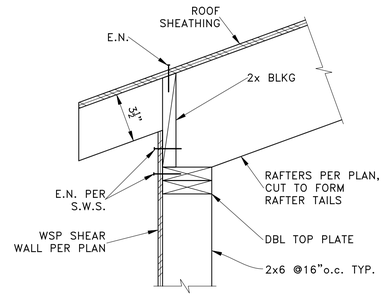
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JOB NO. 25014
SHEET NO. S8



STICK-FRAMED ROOF RAKE

SCALE: NTS

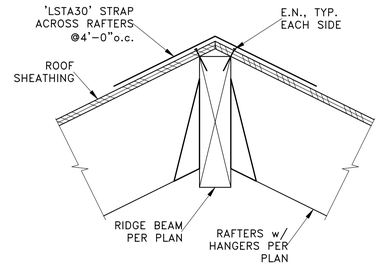
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STICK-FRAMED ROOF EAVE

SCALE: NTS

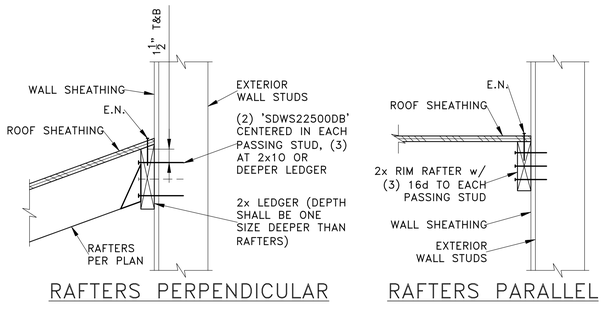
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FLUSH RIDGE BEAM

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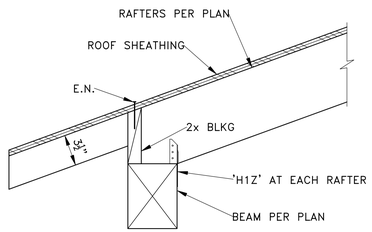
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SHED ROOF TO EXTERIOR WALL

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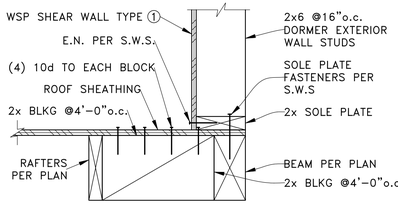
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EAVE AT BEAM

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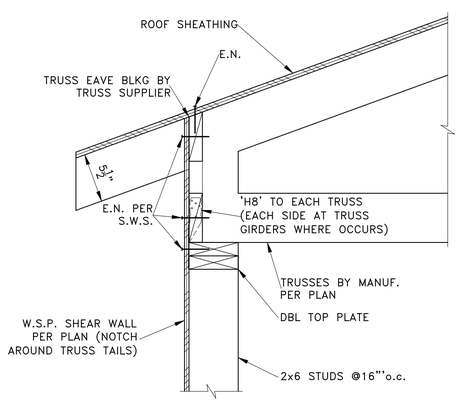
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DORMER WALL ON ROOF BEAM

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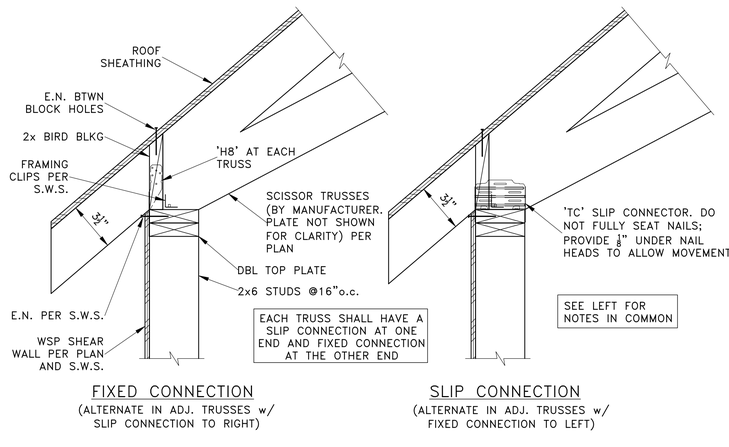
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GABLE TRUSS ROOF EAVE

SCALE: NTS

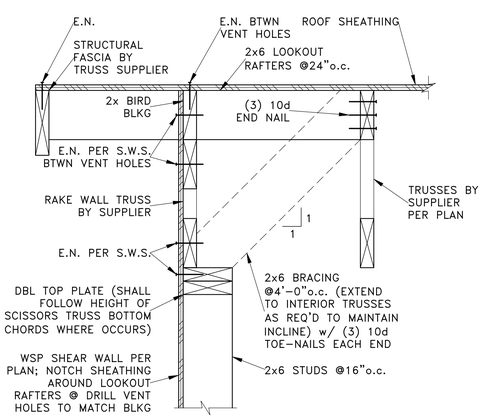
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SCISSORS TRUSSES ROOF EAVE

SCALE: NTS

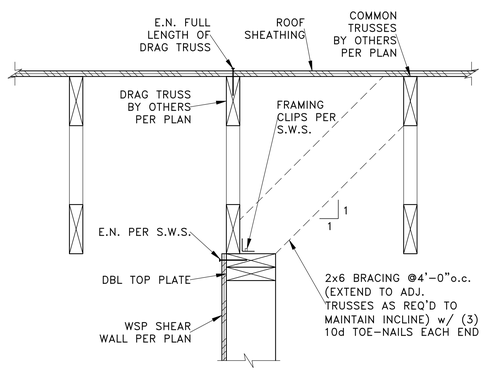
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TRUSS ROOF RAKE

SCALE: NTS

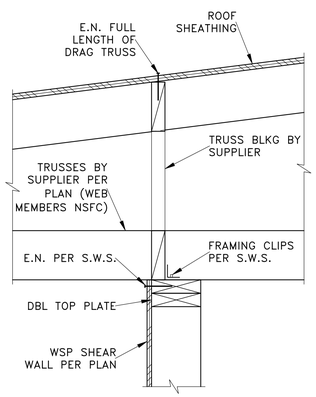
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INTERIOR SHEAR WALL AT TRUSS ROOF

SCALE: NTS

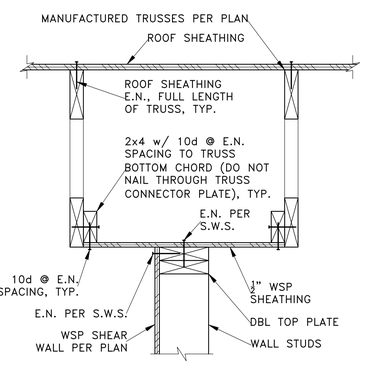
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INTERIOR SHEAR WALL AT TRUSS ROOF

SCALE: NTS

K



INTERIOR SHEAR WALL AT TRUSS ROOF

SCALE: NTS

L

PERMIT SET

REV.	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
Mercer Island, WA 98040

CLIENT:
DAVID AND CAITLIN YUSEN
3246 72nd Pl SE
Mercer Island, WA 98040

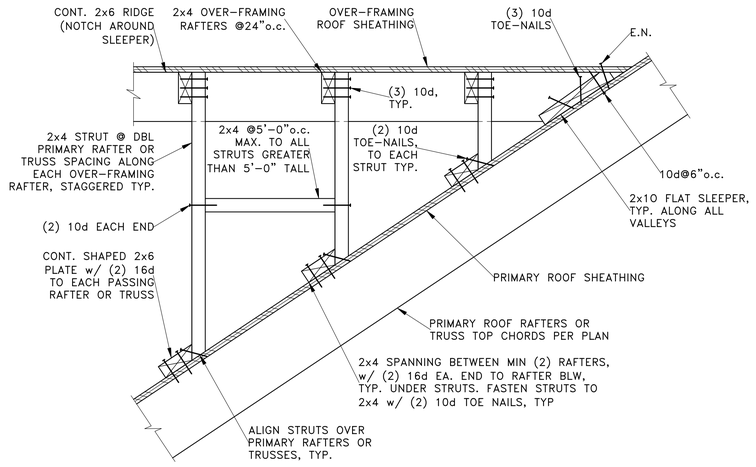
OMAR REMICA COLLIN
STATE OF WASHINGTON
52797
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

ENGINEER OF RECORD

O.G. ENGINEERING, PLLC
3201 1st Ave S, Suite 101, Seattle, WA 98134
(206) 290-4608
owen@ogengineer.com

SHEET TITLE:
SECTIONS & DETAILS

SCALE: AS NOTED
JOB NO. 25014
SHEET. NO. S9



TYPICAL OVER-FRAMING

SCALE: NTS

A
–

PERMIT SET

REV.	DATE	DESCRIPTION
	12-22-25	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
3246 72nd Pl SE
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OWEN REMICK GOULD
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SHEET TITLE:
SECTIONS & DETAILS

SCALE: AS NOTED
JOB NO. 25014

SHEET. NO.
S10