

GENERAL NOTES

1. CODE COMPLIANCE:
ALL WORK SHALL COMPLY WITH THE 2021 WSEC, 2021 IRC, 2021 IMC, 2021 IFGC, 2021 UPC, 2021 IFC, 2021 IMPC, 2020 NEC, 2021 ECCC, 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 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.

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: PREDOMINANT 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.

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 POLYETHYLENE.

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-36.

HEATING & COOLING: ELECTRIC AIR SOURCE HEAT PUMP.

TEMP. CONTROL: FOR HEATING AND COOLING, THERMOSTAT SHALL BE CAPABLE OF

INSULATION VALUES: PRESCRIPTIVE METHOD
WALLS: R-21/R-5 G
FLAT ATTICS/CEILINGS: R-60
VAULTED CEILINGS: R-38
FLOORS (OVER UNHEATED SPACES): R-38
SLAB-ON-GRADE: R-10

BEING SET FROM 55-65 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-6. 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 C 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 GPM 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. 88 CFM RUNNING CONTINUOUSLY PER 2021 IRC TABLE 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	5
HEATED SQUARE FOOTAGE	4326 SF
AIRFLOW (CFM)	88 CFM MIN.

PROJECT DATA

PROJECT ADDRESS: 5222 FOREST AVE SE MERCER ISLAND 98040
PROPERTY TAX ID NUMBER: 141030-0057
SCOPE OF WORK: CONSTRUCTION OF NEW TWO-STORY SINGLE FAMILY RESIDENCE WITH ATTACHED GARAGE
ZONING: R-15
CONSTRUCTION TYPE: TYPE V B
SEISMIC ZONE: 3
NUMBER OF STORIES: 2 STORIES
FIRE PROTECTION: NFPA 13R FIRE SPRINKLERS
BUILDING HEIGHT: MAX. 30 FT ABOVE AVERAGE BUILDING ELEV.
GROSS FLOOR AREA: 12,000 SF OR 40 % LOT AREA, WHICHEVER IS LESS
LOT AREA: 15,001 SF
SETBACKS: FRONT: 20' SIDE: 15' TOTAL MIN. 5' REAR: 10' FROM 60' NGPA BUFFER

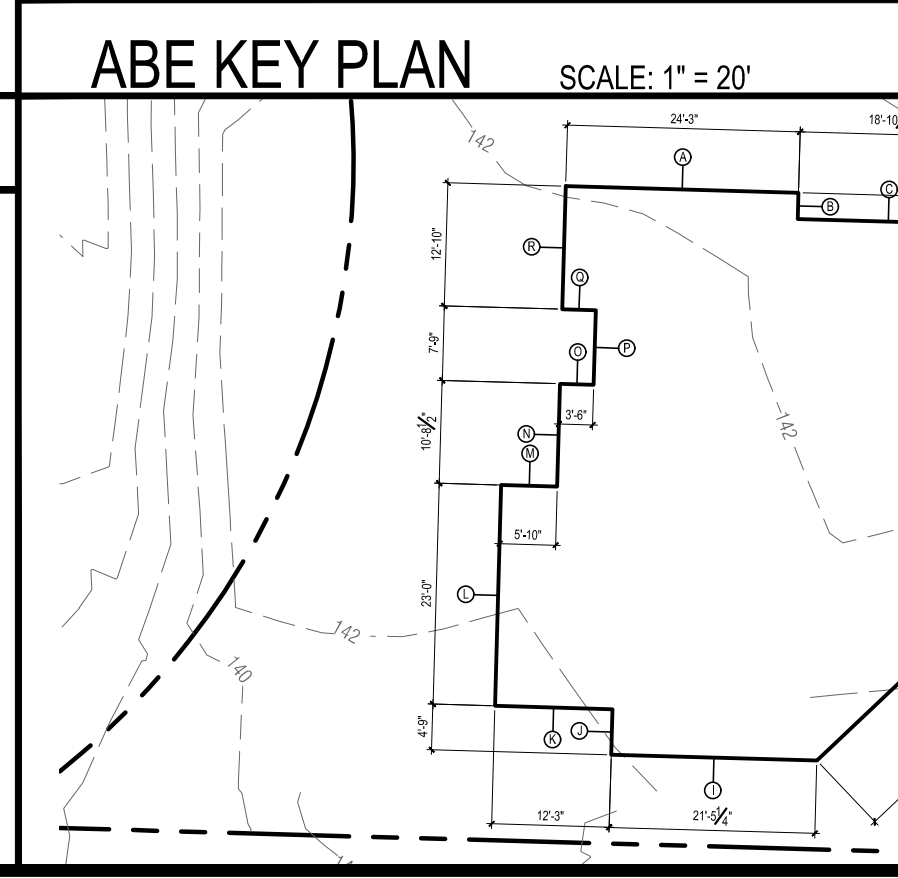
PROJECT TEAM

OWNER: SEASCAPE HOMES, LLC
CONTRACTOR: SEASCAPE HOMES, LLC
ARCHITECT: STURMAN ARCHITECTS, INC.
GEOTECHNICAL ENGINEER: GEOTECH CONSULTANTS, INC.
CIVIL ENGINEER: PATRICK HARRON & ASSOCIATES, LLC
STRUCTURAL ENGINEER: LONGITUDE120 ENGINEERING

AVERAGE BUILDING ELEV.

Wall Length	Elevation Pt.	Wall Length X Elev. Pt.	
A	24.58	141.5	3478.07
B	2.75	141.0	387.75
C	18.875	140.5	2651.9375
D	16.67	140.5	2342.135
E	2.83	141.5	400.445
F	13.79	141.5	1951.285
G	9.46	142.0	1343.32
H	27.08	144.0	3899.52
I	21.42	142.5	3052.35
J	4.75	142.0	674.5
K	12.25	142.0	1739.5
L	23	142.0	3266
M	5.5	142.0	781
N	10.71	142.0	1520.82
O	3.5	142.0	497
P	7.75	142.0	1100.5
Q	3.5	142.0	497
R	12.83	142.0	1821.86
221.245	2553.0	31404.99	

31404.99 / 221.245 = **141.95 Average Building Elevation**



SHEET INDEX

A1.0 COVER SHEET - GENERAL & ENERGY NOTES, LEGAL PROJECT DATA, CUT-FILL CALC. INDEX, SITE PLAN
A1.1 FULL SITE PLAN
A1.2 REPLACEMENT TREE PLAN
SURVEY
C1.0 COVER SHEET AND SITE PLAN
C2.0 DEMO & TESC PLAN
C2.1 TESC DETAILS
C3.0 GRADING, STORM, DRAINAGE & UTILITY PLAN
C3.1 STORM DRAINAGE DETAILS FOR LOT 2
C3.2 UTILITY DETAILS
A2.0 MAIN FLOOR PLAN
A2.1 UPPER FLOOR
A2.2 ROOF PLAN
A3.0 EXTERIOR ELEVATIONS
A3.1 EXTERIOR ELEVATIONS
A4.0 BUILDING SECTIONS
A4.1 BUILDING SECTIONS
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A5.0 WALL SECTIONS
A6.0 ARCHITECTURAL DETAILS
S-0 COVER SHEET
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S-2 FOUNDATION PLAN
S-3 FIRST FLOOR FRAMING PLAN
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S-6 SECOND FLOOR WALL FRAMING & SHEAR WALL PLAN
S-7 ROOF FRAMING PLAN
SD-1 STRUCTURAL DETAILS
SD-2 STRUCTURAL DETAILS

2021 WSEC CREDITS

PROJECT IS A NEW RESIDENCE GREATER THAN 1500 SQ FT OF CONDITIONED AREA & LESS THAN 5000 SQ FT OF CONDITIONED AREA, AND SO IS A MEDIUM DWELLING UNIT REQUIRING 8.0 CREDITS

OPTION	CREDITS	DESCRIPTION
4	3.0	-HEAT PUMP EFFICIENCY (AIR COOLED) 14.3 SEER2, HSPF2 8.5
1.2	1.0	-VERTICAL FENESTRATION U = .28, 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/ CFM EFFICIENCY OF 0.75, MIN. 88 CFM
3.3	0.5	-AIR SOURCE, CENTRALLY DUCTED HEAT PUMP W/ MIN. HSPF OF 9.5, HSPF2 8.5.
3.11	0.5	-CONNECTED THERMOSTAT MEETING ENERGY STAR CERTIFIED SMART THERMOSTATS/EPA ENERGY STAR SPECIFICATIONS.
5.4	1.0	-ENERGY STAR RATED GAS OR PROPANE WATER HEATER W/A MIN. UEF OF 0.91
7.1	0.5	-ENERGY STAR RATED REFRIGERATOR, DISHWASHER, WASHING MACHINE, DRYER.
TOTAL CREDITS		8

*PLEASE NOTE: ALL APPLIANCES SHALL BE INSTALLED WITH SUPPORTING DOCUMENTATION ON SITE PRIOR TO FINAL INSPECTION. NO DRYER DUCTS OR DRYER VENT CAPS SHALL NOT BE INSTALLED

LEGEND

- FINISH CONTOUR LINES
- DEMO CONTOUR LINES
- SILT FENCE
- TREE PROTECTION FENCING
- POWER LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- AREA OF LOT COVERAGE
- AREA OF HARDSCAPE
- AREA OF NGPA

LEGAL DESCRIPTION

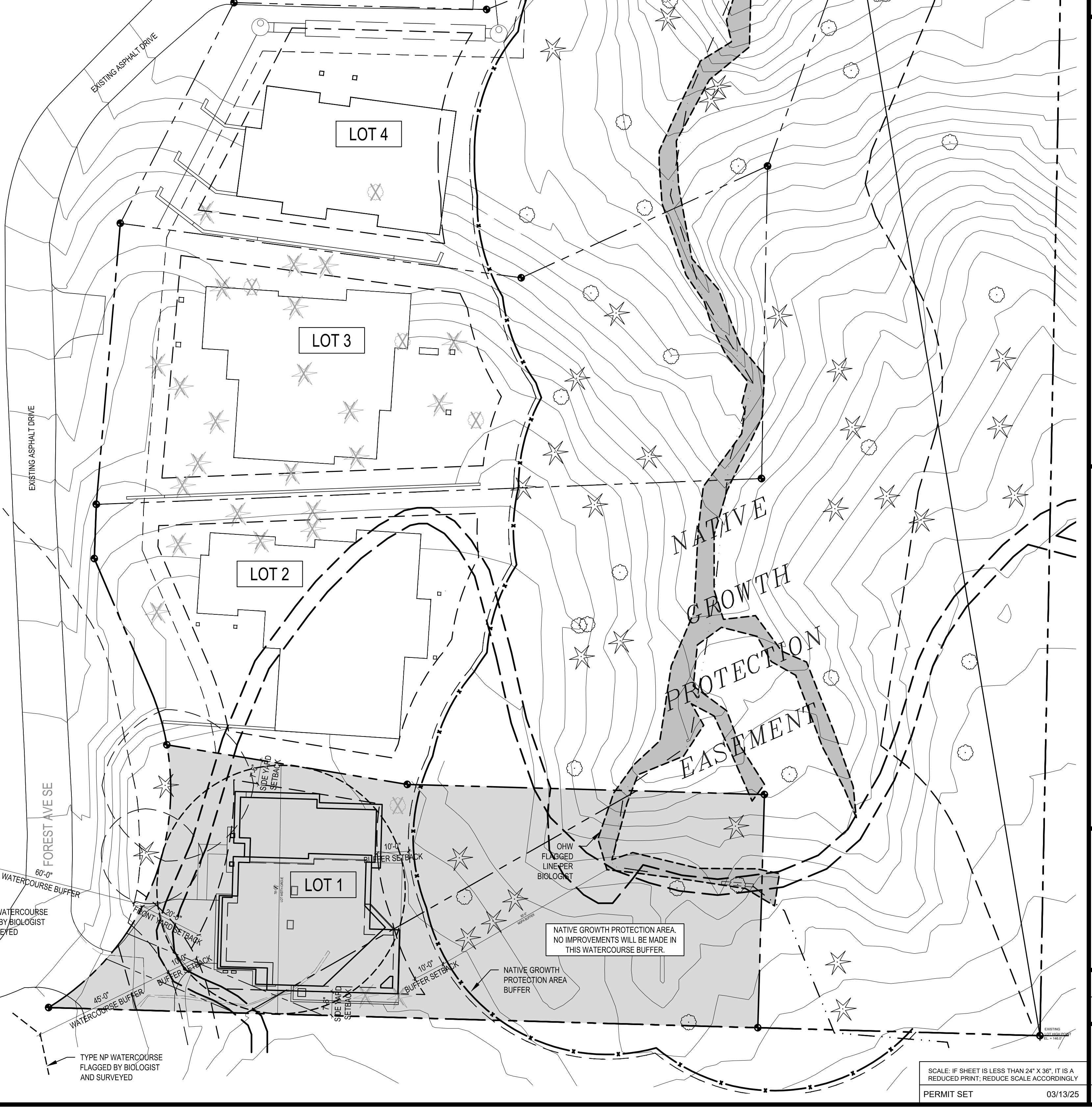
LOTS 1-4, KNUTSON SHORT PLAT, MERCER ISLAND SHORT PLAT NO. SDB07-003 AS RECORDED UNDER REC. NO. 2007121090010.
CARRS LAKE SIDE ADD "LOT 2" MERCER ISLAND SHORT PLAT NO. SDB07-003 REC NO. 2007121090010 SD SHORT PLAT DAF - LOTS 12, 13, 14, 15, 16, 17 AND 18 OF CARRS LAKE SIDE ADDITION PLAT LESS THE EAST 72.00 FT OF LOTS 12, 13, 14 AND 15 & ALSO LESS PORTLY SOUTH OF A LN DRWN PLW AND 50.00 FT SOUTH OF WHEN MEAS AT R/A TO NORTH LN OF LOTS 15-16-17 AND 18

TREE PROTECTION

A TREE PROTECTION INSPECTION IS REQUIRED BEFORE START OF WORK

FOREST CREEK PLAT SITE PLAN

SCALE: 1:20



DUTY OF COOPERATION

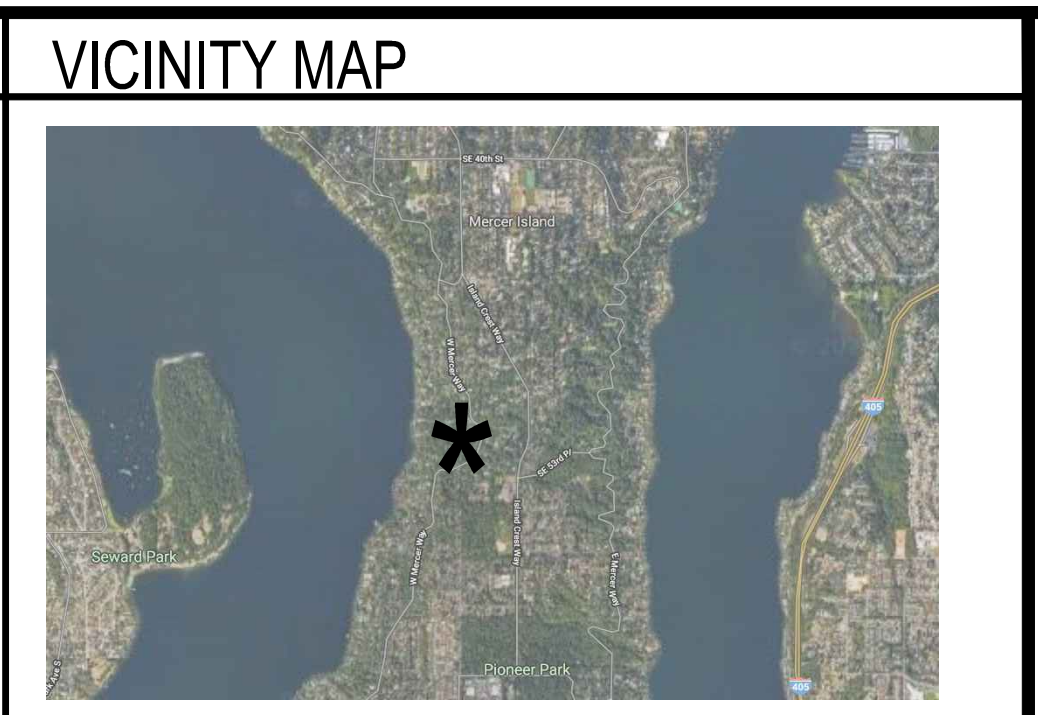
RELEASE AND ACCEPTANCE OF THESE DOCUMENTS INDICATES COOPERATION AMONG THE OWNER, CONTRACTOR, AND STURMAN ARCHITECTS. ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED IN THE USE OF THESE DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO STURMAN ARCHITECTS. FAILURE TO DO SO WILL RELIEVE STURMAN ARCHITECTS FROM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

GEOTECH ENGINEER

GEOTECHNICAL ENGINEER REQUIRED TO BE PRESENT ON SITE DURING EXCAVATION AND AT REGULAR INTERVALS DURING CONSTRUCTION TO MONITOR THE STABILITY OF THE TEMPORARY OPEN CUT EXCAVATIONS PROPOSED FOR SITE RETAINING WALLS AND RESIDENTIAL STRUCTURE EXCAVATIONS.

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.



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REGISTERED ARCHITECT
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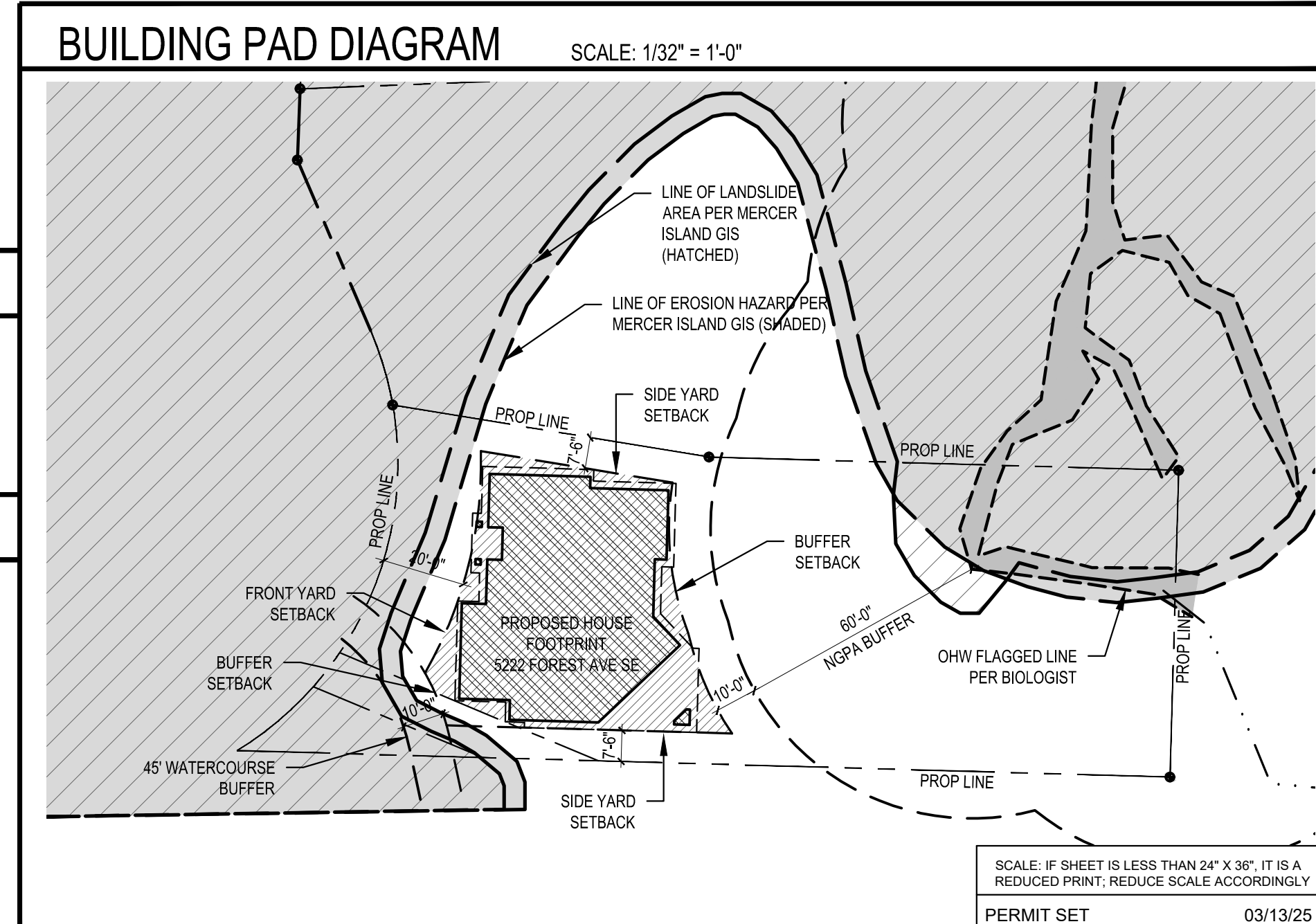
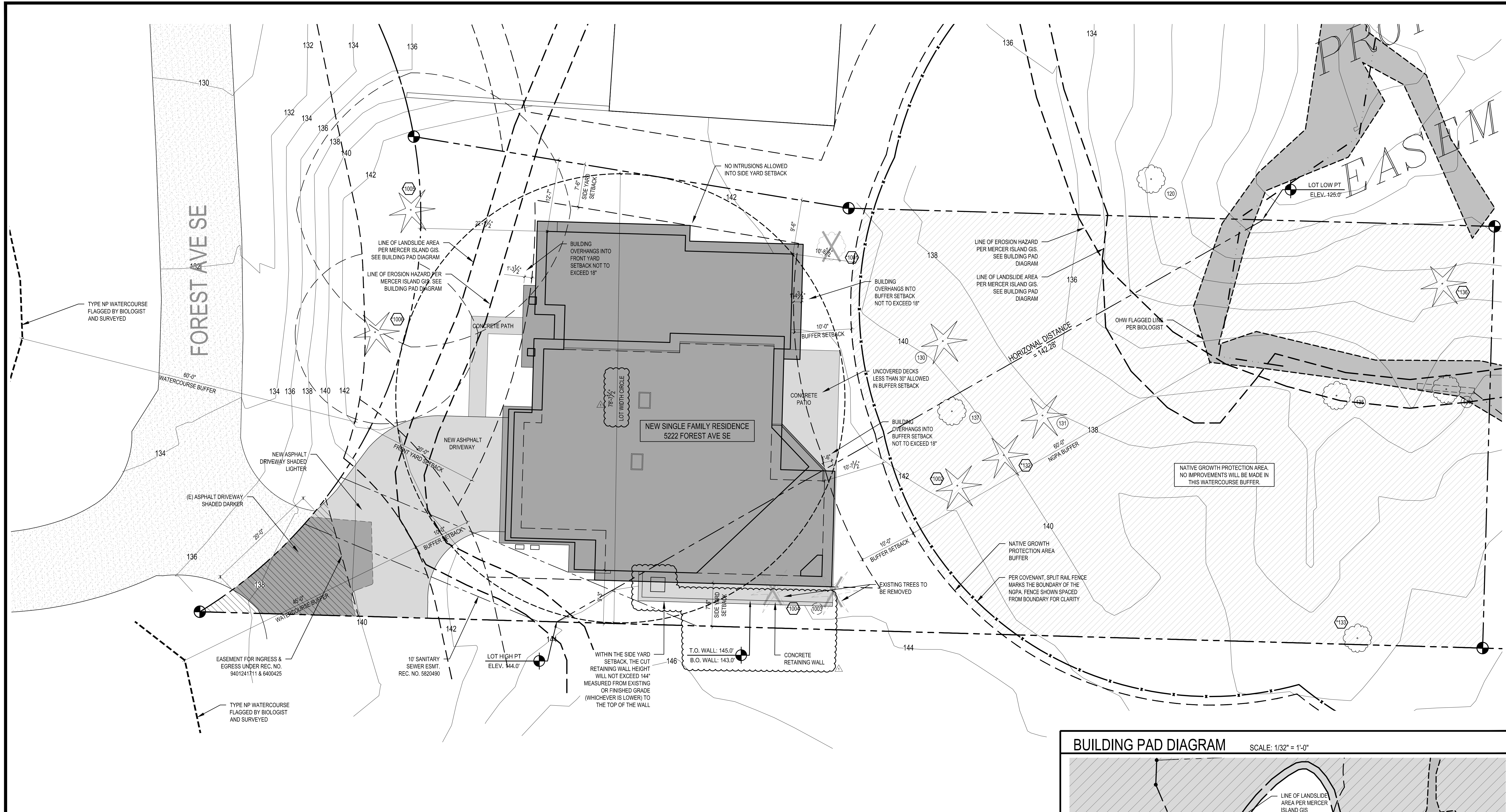
FOREST CREEK ESTATES LOT 1 PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

LOT 1 SITE PLAN GENERAL NOTES

REVISIONS:
2025-2-13 Corrections #1

DRAWN BY: KE
CHECKED BY: BJS
SHEET: **A1.0**

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY.
PERMIT SET 03/13/25 PLOT DATE: 3/13/2025



LEGEND:

- FINISH CONTOUR LINES
- DEMO CONTOUR LINES
- SILT FENCE
- TREE PROTECTION FENCING
- POWER LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- AREA OF LOT COVERAGE
- AREA OF HARDSCAPE
- AREA OF NGPA

BUILDING AREA

	MAIN FLOOR	UPPER FLOOR	HEATED SUB-TOTAL	GARAGE/WORKSHOP	GRAND TOTAL	UNHEATED PATIO	UNHEATED DECK
PROPOSED HOUSE:	1837 SF	2489 SF	4326 SF	588 SF	4914 SF	506 SF	61 SF

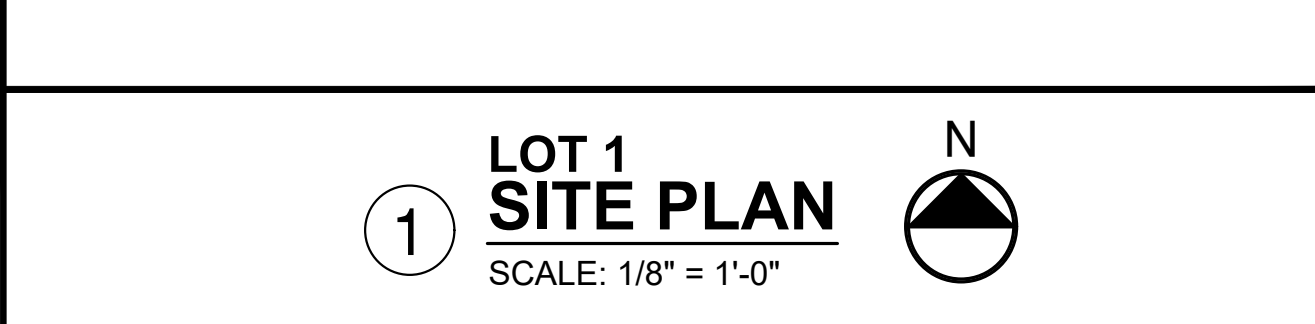
LOT COVERAGE AND HARDSCAPE

	GROSS LOT S.F.	MAIN ROOF STRUCT	DRIVES/PARKING	TOTAL LOT COVERAGE	% LOT COVERAGE	FRONT WALK	TRASH/ SIDEWALK	PATIO	RETAINING WALLS	TOTAL HARDSCAPE	% HARDSCAPE
EXISTING LOT COVERAGE AREA	15,001 SF	0 SF	291 SF	0 SF	0 %	0 SF	0 SF	0 SF	0 SF	0 SF	0 %
PROPOSED LOT COVERAGE AREA		3077 SF	991 SF	4068 SF	27.1 %	71 SF	123 SF	138 SF	27 SF	359 SF	2.4 %
NET GAIN/LOSS IMPERVIOUS AREA		+3077 SF	+700 SF	+4068 SF	+27.1 %	+71 SF	+123 SF	+138 SF	+27 SF	+359 SF	+2.4 %
% ALLOWED IMPERVIOUS AREA				6000.4 SF ALLOWABLE	40 %					1350 SF ALLOWABLE	9 %

HIGHEST EL: 144.0'
 LOWEST EL: 125.0'
 ELEVATION DIFFERENCE= 19.0'
 19.0' DIVIDED BY 142.28' (HORIZ. DIST. BTWN. HIGHEST & LOWEST ELEV.) = .133

LOT SLOPE IS 13.3%, WHICH IS LESS THAN 15% SO LOT COVERAGE ALLOWED IS 40%.

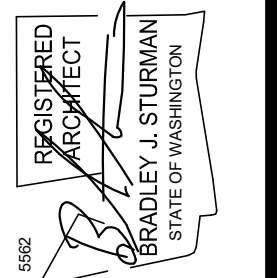
ADDITIONAL 9% OF LOT SIZE WILL DETERMINE ALLOWABLE HARDSCAPE SURFACE



GROSS FLOOR AREA

	BASEMENT EXCLUSION	NEW FLOOR AREA
MAIN FLOOR		1837 SF
SECOND FLOOR		2489 SF
GARAGE		588 SF
GROSS FLOOR AREA		4914 SF

NET LOT AREA: 15,001 SF
 ALLOWED MAX. % GFA COVERAGE: 40.0 % OR 12,000 SF
 ALLOWED GROSS FLOOR AREA: 6,000.4 SF
 PROPOSED GROSS FLOOR AREA: 4914 SF
 12" CEILING OF ENTRY/STAIRS: +82.5 SF
 12" CEILING OF BEDROOM-3: +84 SF
 12" CEILING OF REC ROOM: +43.5 SF
 12" CEILING OF PRIMARY BATH: +58 SF
 TOTAL GFA COVERAGE: 5182 SF
 PROPOSED % GFA COVERAGE: 34.5 %



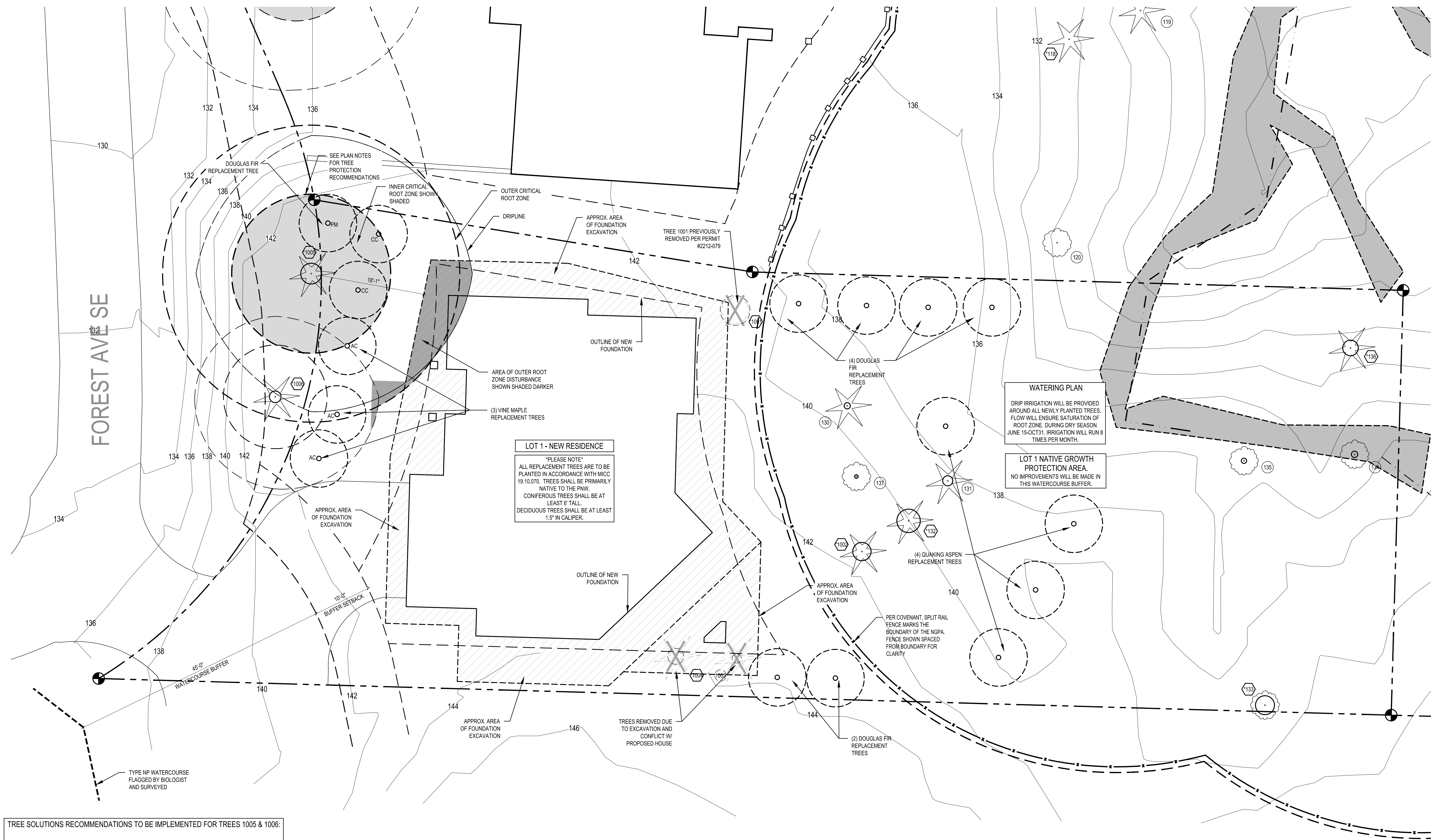
LOT 1
REPLACEMENT
TREE PLAN

REVISIONS:

2025-2-13	Connectors #1

DRAWN BY: KE
 CHECKED BY: BJS
 SHEET

A1.2



TREE SOLUTIONS RECOMMENDATIONS TO BE IMPLEMENTED FOR TREES 1005 & 1006:
 DO NOT ALLOW EXCAVATION TO ENCR OACH FARTHER INTO THE CRITICAL ROOT ZONE OF TREE 1005 AS WHAT IS CURRENTLY PROPOSED ON THE MOST RECENT PLANS.
 INSTALL TREE PROTECTION FENCING CONSISTING OF 6-FOOT-TALL CHAIN-LINK FENCING AT THE PROPOSED LIMITS OF EXCAVATION.
 CUT ANY ROOTS EXPOSED BY EXCAVATION CLEANLY AND IMMEDIATELY BACKFILL TO PREVENT DESICCATION.
 NOTIFY THE PROJECT ARBORIST IF ANY ROOTS IN EXCESS OF 2-INCHES ARE EXPOSED BY EXCAVATION SO THAT IMPACTS MAY BE REASSESSED.
 CONSIDER INSTALLING A 4-INCH LAYER OF COARSE WOODY MULCH (ARBORIST WOODCHIPS) TO THE CRITICAL ROOT ZONE OF TREE 1005 TO MITIGATE CONSTRUCTION STRESS AND IMPROVE SOIL STRUCTURE.

LOT 1 - NEW RESIDENCE
 "PLEASE NOTE"
 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.

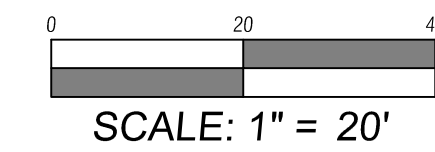
WATERING PLAN
 DRIP IRRIGATION WILL BE PROVIDED AROUND ALL NEWLY PLANTED TREES. FLOW WILL ENSURE SATURATION OF ROOT ZONE. DURING DRY SEASON JUNE 15-OCT31, IRRIGATION WILL RUN 8 TIMES PER MONTH.

LOT 1 NATIVE GROWTH PROTECTION AREA.
 NO IMPROVEMENTS WILL BE MADE IN THIS WATERCOURSE BUFFER.

REPLACEMENT TREES:
 ON-SITE:
 QUAKING ASPEN = 4
 (PM) DOUGLAS FIR= 7
 (AC) VINE MAPLE= 3
 TOTAL REQUIRED REPLACEMENT TREES = 14

"PLEASE NOTE"
 FOR THE DEVELOPMENT OF PARCEL 1410300059 ("LOT 2"), TREE 1001 WAS REMOVED AS PART OF BUILDING PERMIT 2212-079. REPLACEMENT TREES FOR TREE 1001 WILL BE INCLUDED IN THE TOTAL REQUIRED AFTER THE REMOVAL OF TREES 1003 & 1004 FOR THE DEVELOPMENT OF PARCEL 141030-0057 ("LOT 1").

1 LOT 1 REPLACEMENT TREE PLAN
 SCALE: 1/8" = 1'-0"



MERIDIAN

STATE PLANE COORDINATE SYSTEM - NORTH ZONE NAD83 (2011)
BASED ON RAPID STATIC GPS MEASUREMENTS WITH OPUS SOLUTION.

VERTICAL DATUM

NAVD 88 (GEOID 18)
BASED ON RAPID STATIC GPS MEASUREMENTS WITH OPUS SOLUTION.

THE AVERAGE CONTOUR ELEVATION WITHIN THE VICINITY OF THE PROPOSED BUILDING FOOTPRINT ON LOT 1, IS ACCURATE WITHIN 0.5' VERTICALLY AND HORIZONTALLY FROM ACTUAL ELEVATIONS.

BENCHMARKS

TBM-A
FOUND 4"x4" CONC MON WITH 2" BRASS DISC * LS#2534 WITH PUNCH 0.3 BELOW GRADE IN CASE 69.6' NW OF NW PROP CORNER.
ELEV. = 104.53'

TBM-B
FOUND 1/2" REBAR AND MGA CONTROL CAP AT W SIDE FOREST DRIVE, 0.5W OF WEST EDGE ASPHALT PAVEMENT AND 15.5W OF CB-5078.
ELEV. = 113.94'

NOTES

- A 5' ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. ALL EQUIPMENT HAS BEEN MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES. ACCURACY MEETS OR EXCEEDS W.A.C. 332-130-090.
- THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME. ALL CONTROL INDICATED AS 'FOUND' WAS RECOVERED FOR THIS PROJECT IN FEBRUARY 18, 2020, UNLESS OTHERWISE NOTED.
- UNDERGROUND UTILITIES WERE LOCATED BASED ON SURFACE EVIDENCE (I.E. PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS, ETC.). THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- TREE SIZES AND SPECIES WERE DETERMINED TO THE BEST OF OUR ABILITY. MEAD GILMAN AND ASSOCIATES DOES NOT WARRANT THE ACCURACY OF THE SIZE AND SPECIES OF ANY TREES SHOWN HEREON. ALL TREE SIZES SHOULD BE VERIFIED BY A TRAINED ARBORIST.
- THIS MAP DOES NOT INTEND TO SHOW ALL EASEMENTS OF RECORD.
- ALL CONTOUR INFORMATION EAST OF THE NATIVE GROWTH PROTECTION AREA BOUNDARY WAS GENERATED FROM PUBLIC LIDAR DATA.
- FLAGS AT OHW ARE SET BY ALTMANN OLIVER ASSOCIATES, LLC IN JANUARY OF 2023.
- THIS UPDATE TO THE TOPOGRAPHIC SURVEY IS INTENDED TO JUST SHOW THE NEW BUFFER AND ORDINARY HIGH WATER FLAGS. NO ATTEMPT TO UPDATE ANY OTHER ASPECT OF THE MAP HAS BEEN DONE.

LEGAL DESCRIPTION

LOTS 1-4, KNUTSON SHORT PLAT, MERCER ISLAND SHORT PLAT NO SUB07-003 AS RECORDED UNDER REC. NO. 2007121090010.

LEGEND

- REFERENCES**
- SET 1/2" X 24" REBAR WITH YELLOW PLASTIC CAPS STAMPED 'MGA'
 - ROS REC. NO. 2007121090010, VOL. 236, PG. 232
 - MERCER ISLAND SHORT PLAT NO SUB07-003, REC. NO. 2007121090010.
- LEGEND**
- FOUND MONUMENT
 - TEMPORARY BENCHMARK
 - GAS VALVE
 - ELECTRICAL JUNCTION BOX
 - UTILITY POLE
 - CATCH BASIN - TYPE I
 - CATCH BASIN - TYPE II
 - STORM CLEANOUT
 - YARD DRAIN
 - SEWER MANHOLE
 - FIRE HYDRANT
 - HOSE BIB
 - WATER METER
 - WATER VALVE
 - BOLLARD
 - SIGN
 - SOIL TEST PIT
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - ASPHALT
 - FENCE LINE
 - OVERHEAD POWER LINES
 - SANITARY SEWER LINE
 - STORM DRAIN LINE
 - GAS LINE
 - WATER MAIN
 - ASPHALT HATCH
 - CONCRETE HATCH
 - DECK HATCH
 - GRAVEL HATCH
 - C CEDAR
 - D DECIDUOUS
 - E ELM
 - H HEMLOCK
 - M MAPLE
 - CS CONC SLAB
 - FF FINISH FLOOR
 - FL FLOW LINE/ ASPH THICKENED EDGE
 - ST STAIRS
 - WF# WETLAND FLAG NUMBER
 - OHW FLAGGED OVERHEAD WATER LINE

TAG TABLE			
TAG #	RADIUS	DIRECTION/A	LENGTH

LOTS 2-4 ARE NOT PART OF THIS SURVEY.



12/19/2024

MEAD GILMAN
LAND SURVEYORS

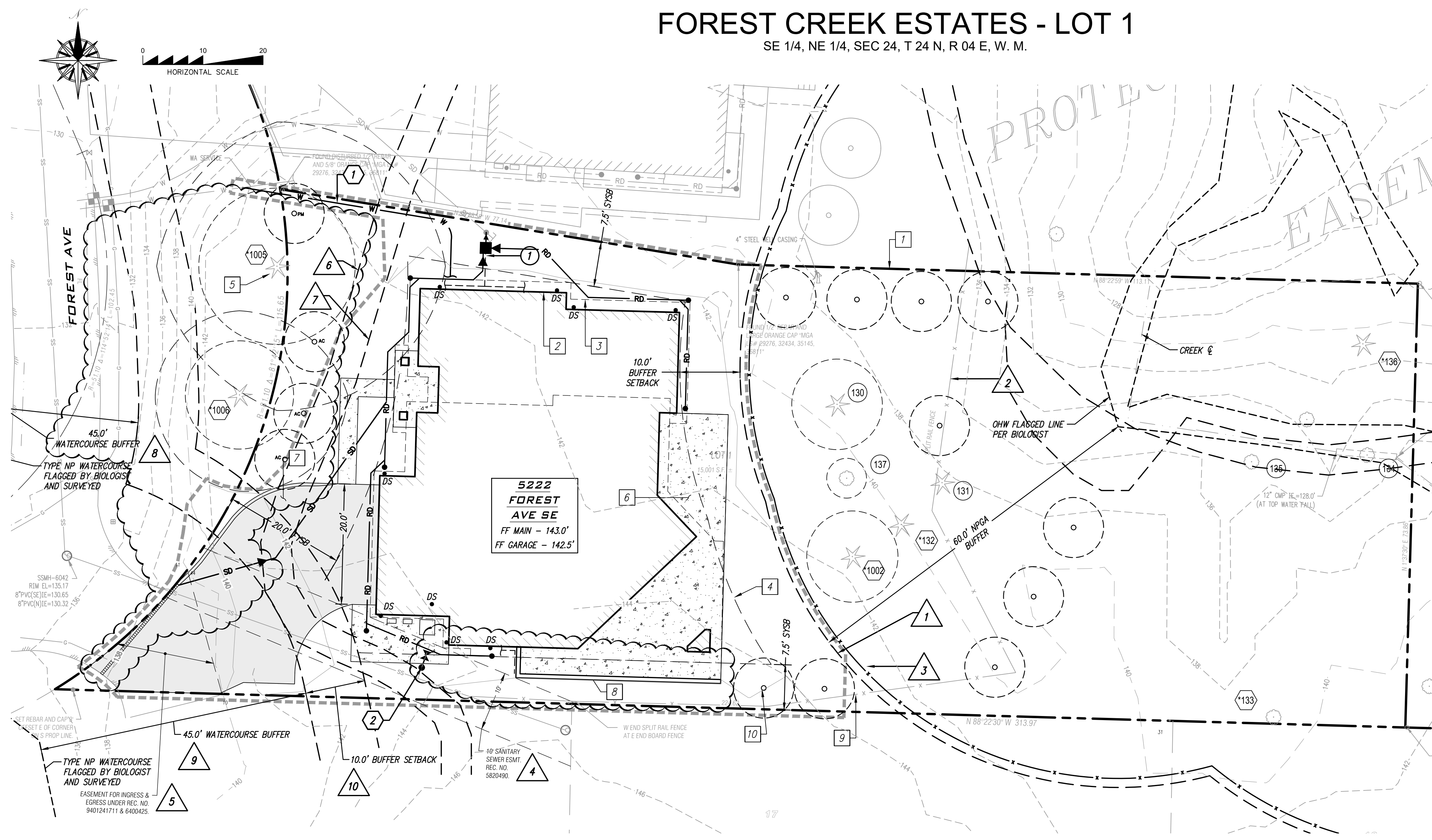


FOREST AVE LOTS
BOUNDARY & TOPOGRAPHIC SURVEY
SEASCAPE HOMES
PO BOX 40568
BELLEVUE WA 98015

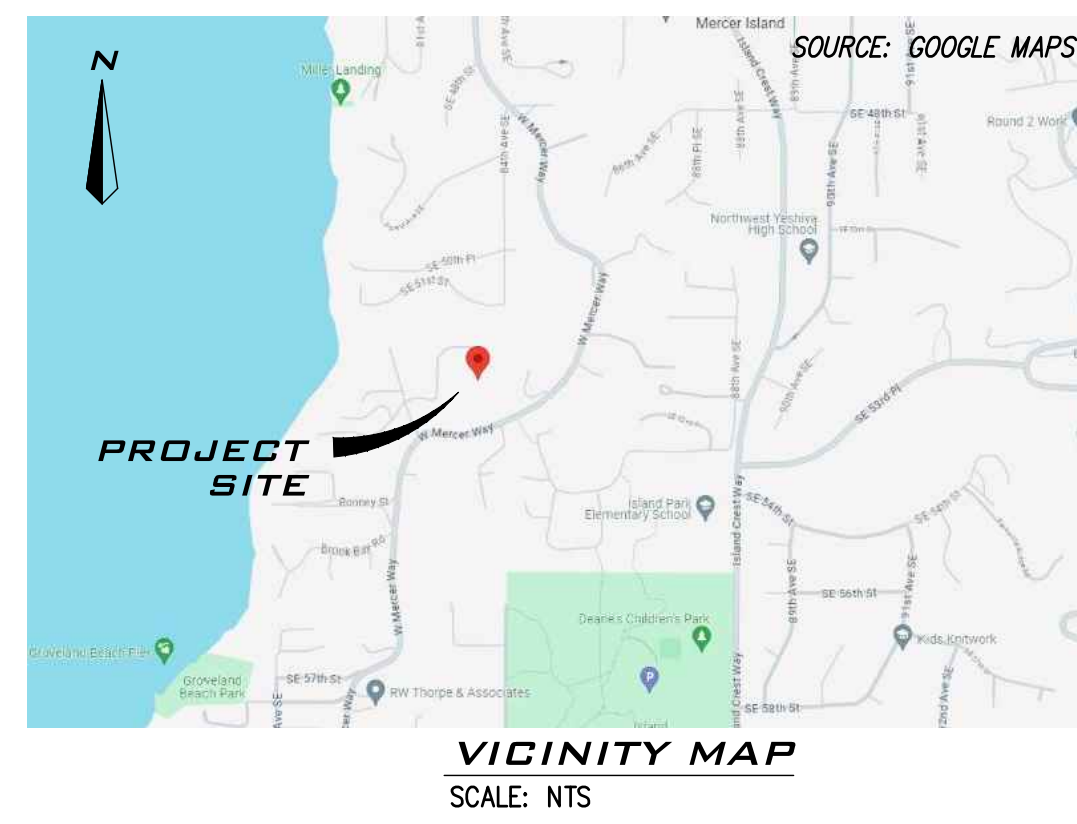
DRAWN BY: **LSD**
REVIEWED BY: **CSB**
DATE: **03-11-2020**
JOB NO. **20011**
SHEET **1 OF 1**

FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



SITE PLAN
SCALE: 1"=10'



SHEET LIST		
SHEET #	NAME	DESCRIPTION
1	C1.0	COVER SHEET & SITE PLAN
2	C2.0	DEMOLITION & TESC PLAN
3	C2.1	TESC DETAILS
4	C3.0	GRADING, STORM DRAINAGE & UTILITY PLAN
5	C3.1	STORM DRAINAGE DETAILS LOT 2
6	C3.2	UTILITY DETAILS

- 1 SITE CALLOUTS:**
- PROPERTY BOUNDARY, TYP.
 - PROPOSED BUILDING FOOTPRINT, TYP.
 - PROPOSED BUILDING ROOFLINE, TYP.
 - BUILDING SETBACK LINE, TYP. SEE DEVELOPMENT DATA NOTES FOR MINIMUM SETBACKS.
 - 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).
 - PROPOSED ON-SITE HARDSCAPES, TYP.
 - INSTALL 20.0' WIDE ASPHALT DRIVEWAY (WIDTH VARIES).
 - PROPOSED 2' TALL RETAINING WALL (BY OTHERS) (SEE SHEET C3.0 FOR GRADING PLAN).
 - PROTECT EX. FENCE, TYP.
 - PROPOSED REPLACEMENT TREE, TYP. (SEE ARCHITECTURAL PLANS).
- 2 STORM CALLOUTS:**
- PROPOSED STORM DRAINAGE SYSTEM, TYP. (SEE SHEET C3.0 FOR DRAINAGE PLAN).
- 3 UTILITY CALLOUTS:**
- PROPOSED DOMESTIC WATER SYSTEM, TYP. (SEE SHEET C3.0 FOR WATER PLAN).
 - PROPOSED SANITARY SEWER SYSTEM, TYP. (SEE SHEET C3.0 FOR SEWER PLAN).

- 4 CRITICAL AREAS & EASEMENT CALLOUTS:**
- 60' NATIVE GROWTH PROTECTION AREA (NCPA) BUFFER.
 - EXISTING NGPA SPLIT-RAIL FENCE WITH SIGNAGE. FENCE TO BE REPAIRED IF REQUIRED.
 - PER COVENANT, SPLIT RAIL FENCE MARKS THE BOUNDARY OF THE NGPA. FENCE SHOWN SPACED FROM THE BOUNDARY FOR CLARITY (TYP).
 - 10' SANITARY SEWER ESMT REC NO 4820490
 - EASEMENT FOR INGRESS AND EGRESS UNDER REC NO 9401241711 & 6400425
 - LINE OF LANDSLIDE AREA PER MERCER ISLAND GIS. SEE BUILDING PAD DIAGRAM.
 - LINE OF EROSION HAZARD PER MERCER ISLAND GIS. SEE BUILDING PAD DIAGRAM.
 - 45' WATERCOURSE BUFFER.
 - 45' WATERCOURSE BUFFER.
 - 10' BUFFER SETBACK.

PROJECT TEAM:

OWNER:
SEASCAPE HOMES LLC
JON TELLEFSON
PO BOX 40568
BELLEVUE, WA 98015
PH: 206.972.9950
EMAIL: JMT1231@GMAIL.COM

PROJECT ARCHITECT:
STURMAN ARCHITECTS
BRAD STURMAN
9 - 103RD AVENUE NE SUITE 203
BELLEVUE, WA 98004
PH: 425.451.7003
EMAIL: BRADS@STURMANARCHITECTS.COM

PROJECT 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

PROJECT SURVEYOR:
MEAD GILMAN LAND SURVEYORS
P.O. BOX 289
WOODINVILLE, WA 98072
PH: 425.486.1252
EMAIL: WWW.MEADGILMAN.COM

PROJECT GEOTECHNICAL ENGINEER:
GEOTECH CONSULTANTS INC
JIM STRANGE, P.E.
2401 10TH AVE E, SEATTLE, WA 98102
PH: 425.747.5618
EMAIL: JAMES@GEOTECHNWK.COM

PROJECT ARBORIST:
ARBOR INFO, LLC
THOMAS M. HANSON, CF, RCA
2406 N CASTLE WAY
BRIER, WA 98036
PH: 206.300.9711
EMAIL: TOM.HANSON@ARBORINFO.COM

PROJECT INFORMATION:

DEVELOPMENT DATA:

SITE AREA 49,010 SF (1.12 AC)
SITE ADDRESS 5222 FOREST AVE SE
MERCER ISLAND, WA 98040
PARCEL NUMBER 141030-0057

LEGAL DESCRIPTION:

LOTS 1-4, KNUTSON SHORT PLAT, MERCER ISLAND SHORT PLAT NO SUB07-003 AS RECORDED UNDER REC. NO. 20071210900010.

VERTICAL DATUM:

NAVD 88 (GEOID 18) BASED ON RAPID STATIC GPS MEASUREMENTS WITH OPUS SOLUTION.

BENCHMARKS:

TBM-A - FOUND 4"x4" CONC MON WITH 2" BRASS DISC "LS#2534" WITH PUNCH 0.3" BELOW GRADE IN CASE 69.6" NW OF NW PROP CORNER.
ELEV. = 104.53'
TBM-B - FOUND 1/2" REBAR AND MGA CONTROL CAP AT W SIDE FOREST DRIVE, 0.5'W OF WEST EDGE ASPHALT PAVEMENT AND 15.5'W OF CB-5078.
ELEV. = 113.94'

REFERENCES:

- ARCHITECTURAL PLANS BY STURMAN ARCHITECTS.
- BOUNDARY AND TOPOGRAPHIC SURVEY BY MEAD GILMAN LAND SURVEYORS.
- GEOTECH REPORT BY GEOTECH CONSULTANTS, INC.
- ARBORIST REPORT BY ARBOR INFO, LLC.

CALL 48 HOURS BEFORE YOU DIG 811

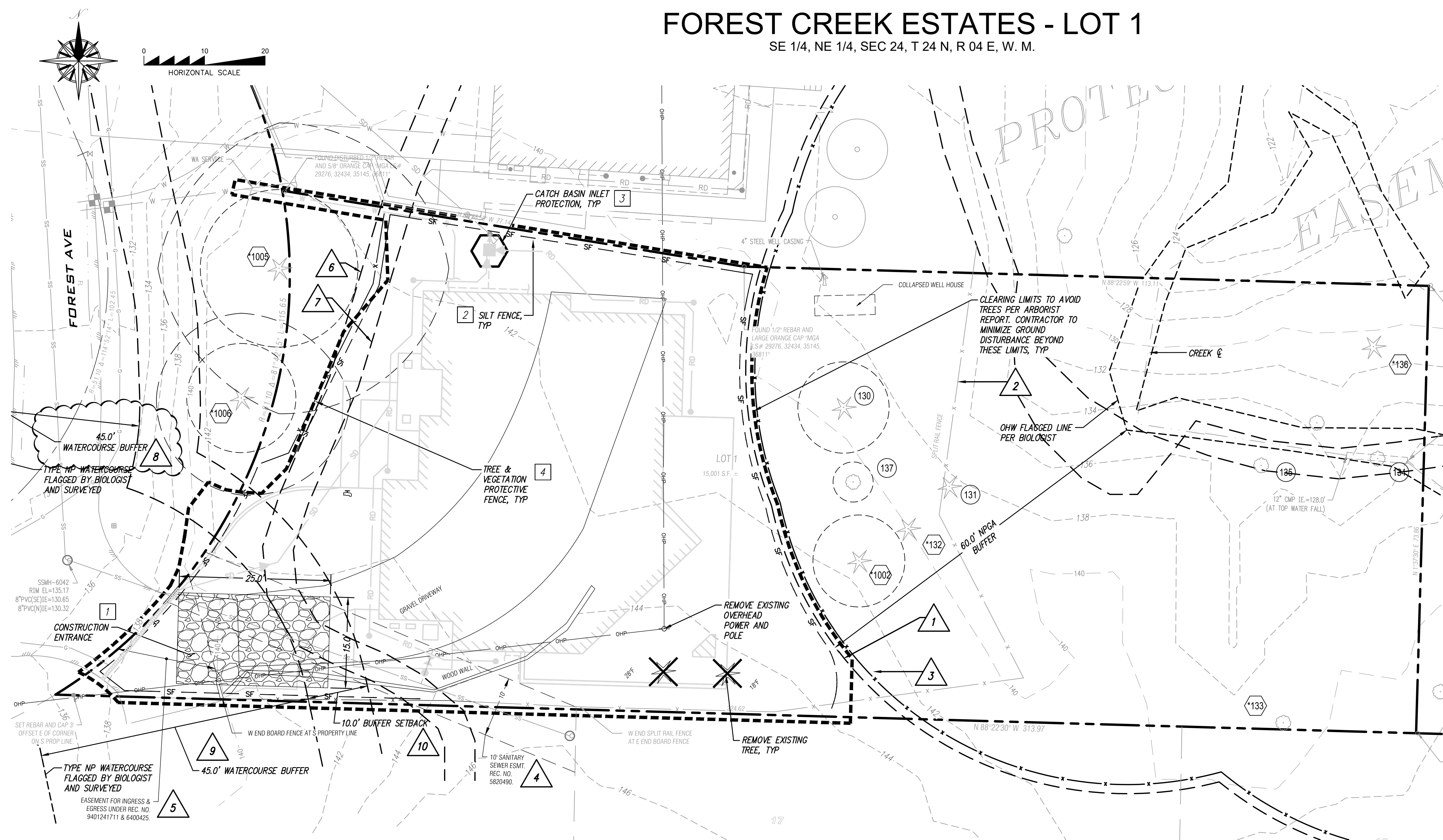
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555 OR 811 (CELL) A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

Mar 10, 2025 2:05:27PM - User Sheri Stark
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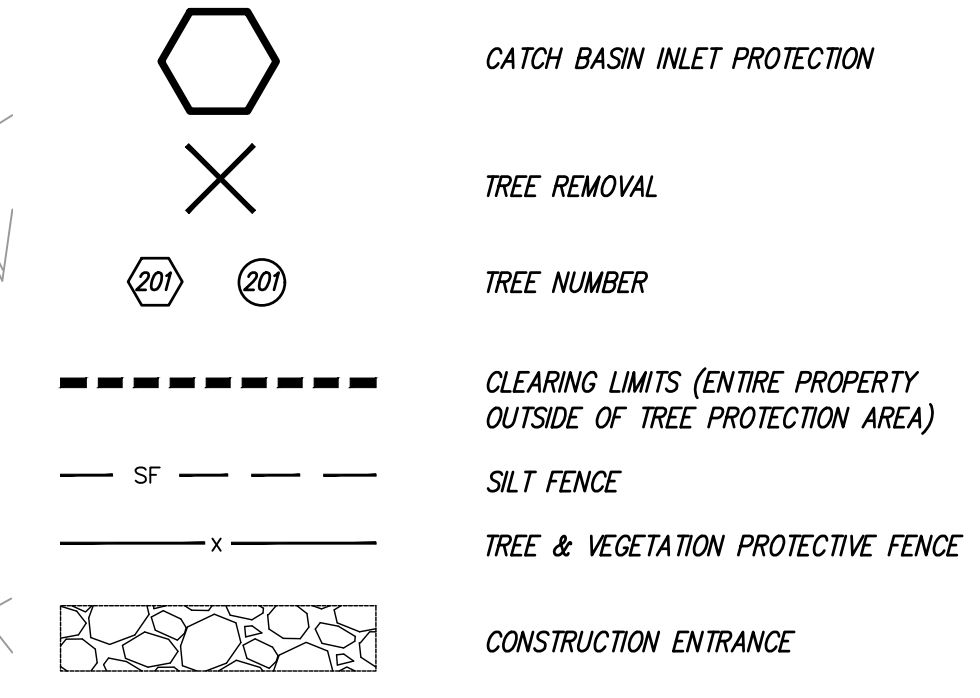
BY	SC
DESCRIPTION	
DATE	3/10/25
CITY REVIEW COMMENTS	
R#	
CITY OF MERCER ISLAND BUILDING PERMIT COVER SHEET & SITE PLAN	
Civil Engineering & Planning 14900 Interurban Ave. S, Suite 279, Seattle, WA 98168 Phone: 206.674.4659 Web: patrickharron.com	
PROJ. NO.	20113
DES. BY:	CC
OWN. BY:	CC
CHK. BY:	SC
FOREST CREEK ESTATES LOT 1 5214 FOREST AVE SE MERCER ISLAND, WA 98040	
DATE:	3/10/25
SCALE:	AS SHOWN
DRAWING NO.:	C1.0
1 OF 6	

FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.



TESC LEGEND



DEMOLITION & TESC CALLOUTS:

1. CONSTRUCTION ENTRANCE (SEE DETAIL 1, SHEET C2.1).
2. SILT FENCE, TYP (SEE DETAIL 2, SHEET C2.1).
3. CATCH BASIN INLET PROTECTION, TYP (SEE DETAIL 3, SHEET C2.1).
4. TREE & VEGETATION PROTECTIVE FENCE (SEE DETAIL 4, SHEET C2.1). SEE DEMOLITION & TESC NOTES, THIS SHEET, FOR ADDITIONAL TREE PROTECTION GUIDELINES.

TESC NOTES:

1. CLEARING LIMITS SHOWN ARE APPROXIMATE AND REPRESENT THE MINIMUM REQUIRED TO INSTALL PROPOSED IMPROVEMENTS. CLEARING LIMITS MAY BE ADJUSTED TO FIT FIELD CONDITIONS BUT SHALL NOT ENCRoACH WITHIN CRITICAL ROOT ZONES OF TREES TO BE RETAINED; COORDINATE WITH PROJECT ARBORIST TO DETERMINE CRITICAL ROOT ZONES FOR DISTURBANCE WITHIN TREE DRIP LINES.
2. SILT FENCING TO BE INSTALLED ALONG DOWN-SLOPE OF AREAS TO BE DISTURBED WITHIN THE PROPERTY. ADJUST AS REQUIRED WITH CHANGES TO CLEARING LIMITS. THIS TESC PLAN IS PROVIDED TO SHOW THE MINIMUM MEASURES REQUIRED TO CONTROL EROSION AND SEDIMENT TRANSPORT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING APPROPRIATE MEASURES FOR CHANGING SITE CONDITIONS.
3. REFER TO ARCHITECTURAL TREE PLANS FOR ADDITIONAL TREE REMOVAL AND REPLACEMENT DETAILS.
4. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDATIONS ON EXCAVATION AND SLOPES.
5. GEOTECHNICAL ENGINEER SHALL BE ON-SITE DURING EXCAVATION AND AT REGULAR INTERVALS DURING CONSTRUCTION TO MONITOR THE STABILITY OF THE TEMPORARY OPEN CUT EXCAVATIONS PROPOSED FOR SITE RETAINING WALLS AND RESIDENTIAL STRUCTURE EXCAVATIONS.
6. SOILS OF DISTURBED PREVIOUS AREAS THROUGHOUT THE DURATION OF THE PROJECT ARE TO BE AMENDED.

CRITICAL AREAS & EASEMENT CALLOUTS:

1. 60' NATIVE GROWTH PROTECTION AREA (NGPA) BUFFER.
2. EXISTING NGPA SPLIT-RAIL FENCE WITH SIGNAGE. FENCE TO BE REPAIRED IF REQUIRED.
3. PER COVENANT, SPLIT RAIL FENCE MARKS THE BOUNDARY OF THE NGPA. FENCE SHOWN SPACED FROM THE BOUNDARY FOR CLARITY (TYP).
4. 10' SANITARY SEWER ESMT REC NO 4820490
5. EASEMENT FOR INGRESS AND EGRESS UNDER REC NO 9401241711 & 6400425
6. LINE OF LANDSLIDE AREA PER MERCER ISLAND GIS. SEE BUILDING PAD DIAGRAM.
7. LINE OF EROSION HAZARD PER MERCER ISLAND GIS. SEE BUILDING PAD DIAGRAM.
8. 45' WATERCOURSE BUFFER.
9. 45' WATERCOURSE BUFFER.
10. 10' BUFFER SETBACK.

DEMOLITION & TESC PLAN
SCALE: 1"=10'

BY	DESCRIPTION	DATE	R#
SC	CITY REVIEW COMMENTS	3/10/25	1
			2
			3
			4
			5
			6
			7
			8
			9
			10

CITY OF MERCER ISLAND
BUILDING PERMIT
DEMOLITION & TESC PLAN

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S, Suite 279, Seattle, WA 98168
Phone: 206.674.4659
Web: patrickharron.com

PROJ. NO:	20113	DES. BY:	CC
OWN. BY:	CC	CHK. BY:	SC

FOREST CREEK ESTATES LOT 1
5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE:	3/10/25
SCALE:	AS SHOWN
DRAWING NO.:	C2.0
	2 OF 6

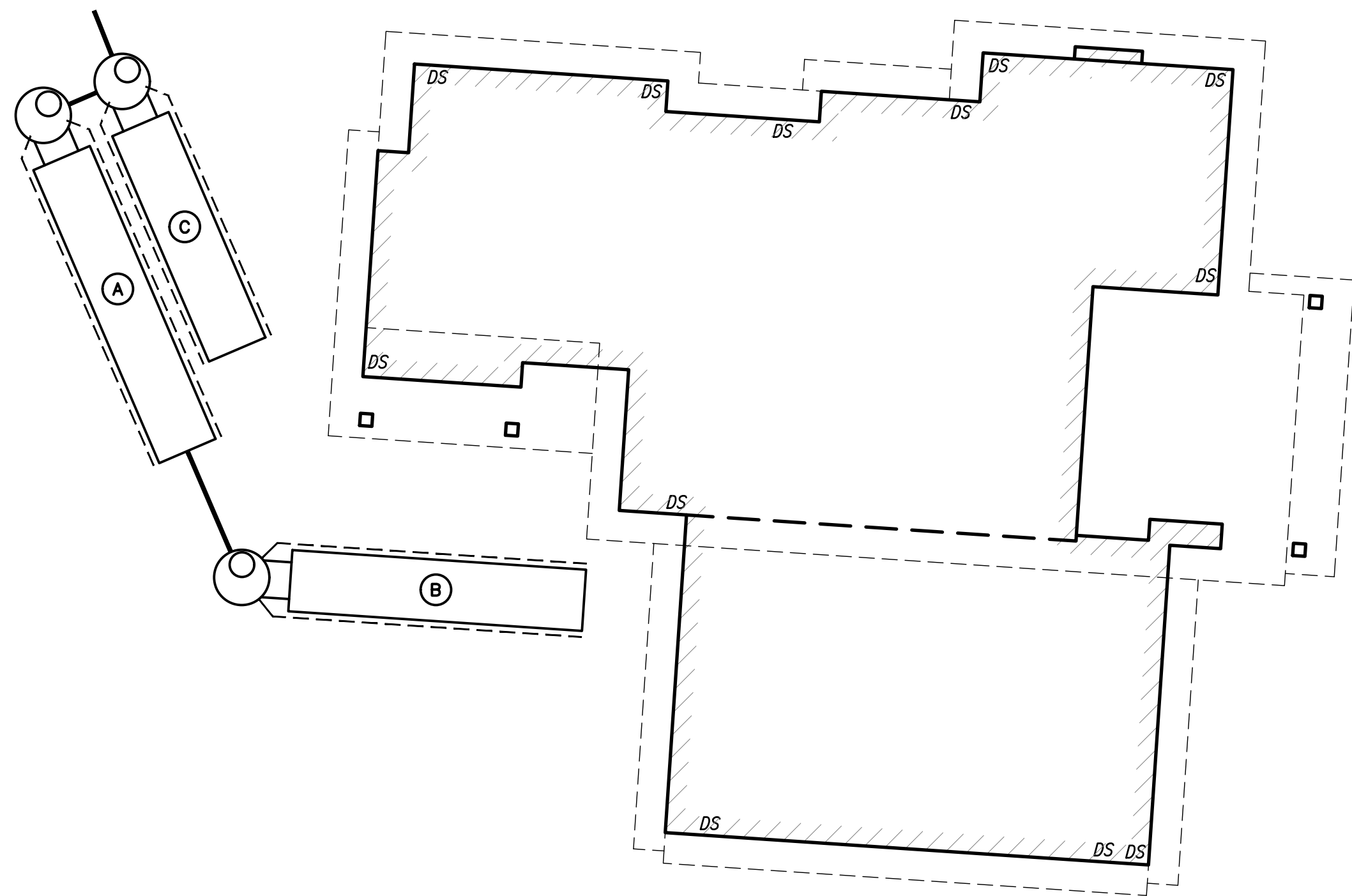
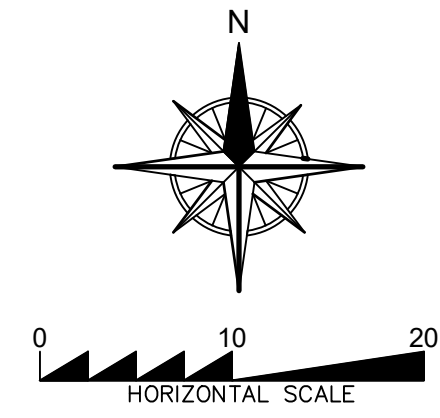
CALL 48 HOURS BEFORE YOU DIG 811

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.

Mar 10, 2025 2:05:34PM - User Sheri Stark
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FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.

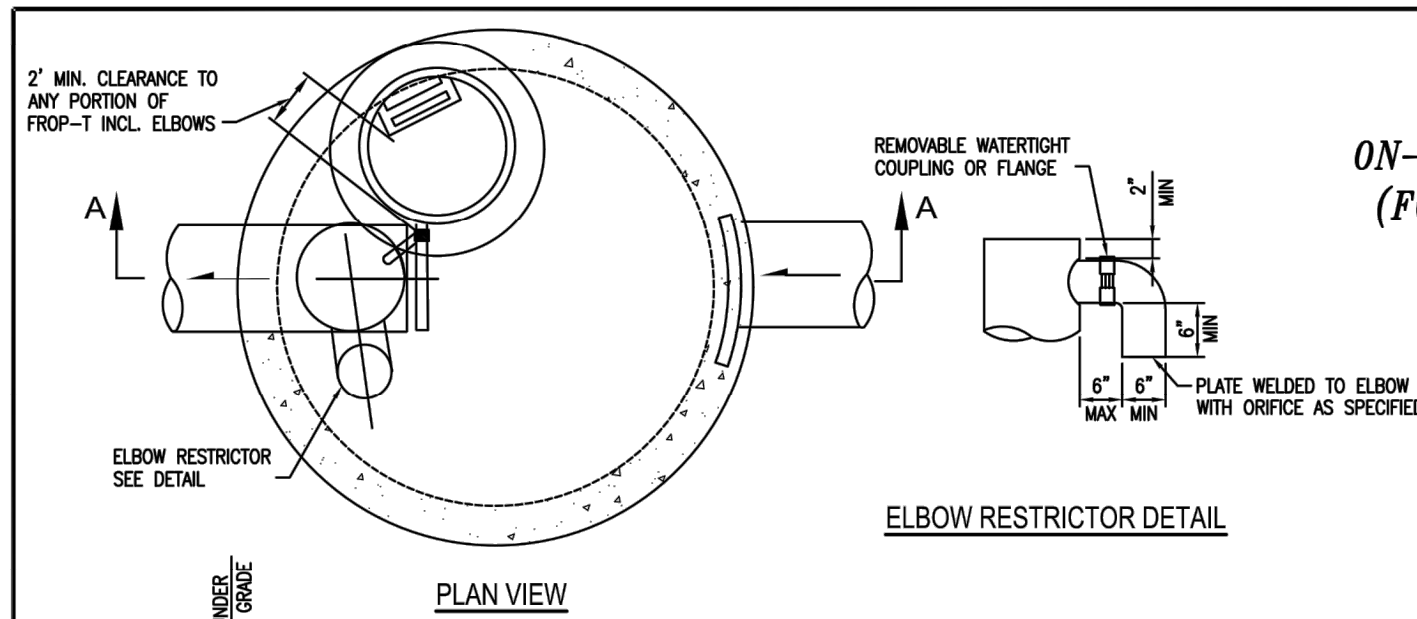


DETENTION PIPE DIAGRAM

SCALE: 1"=10'

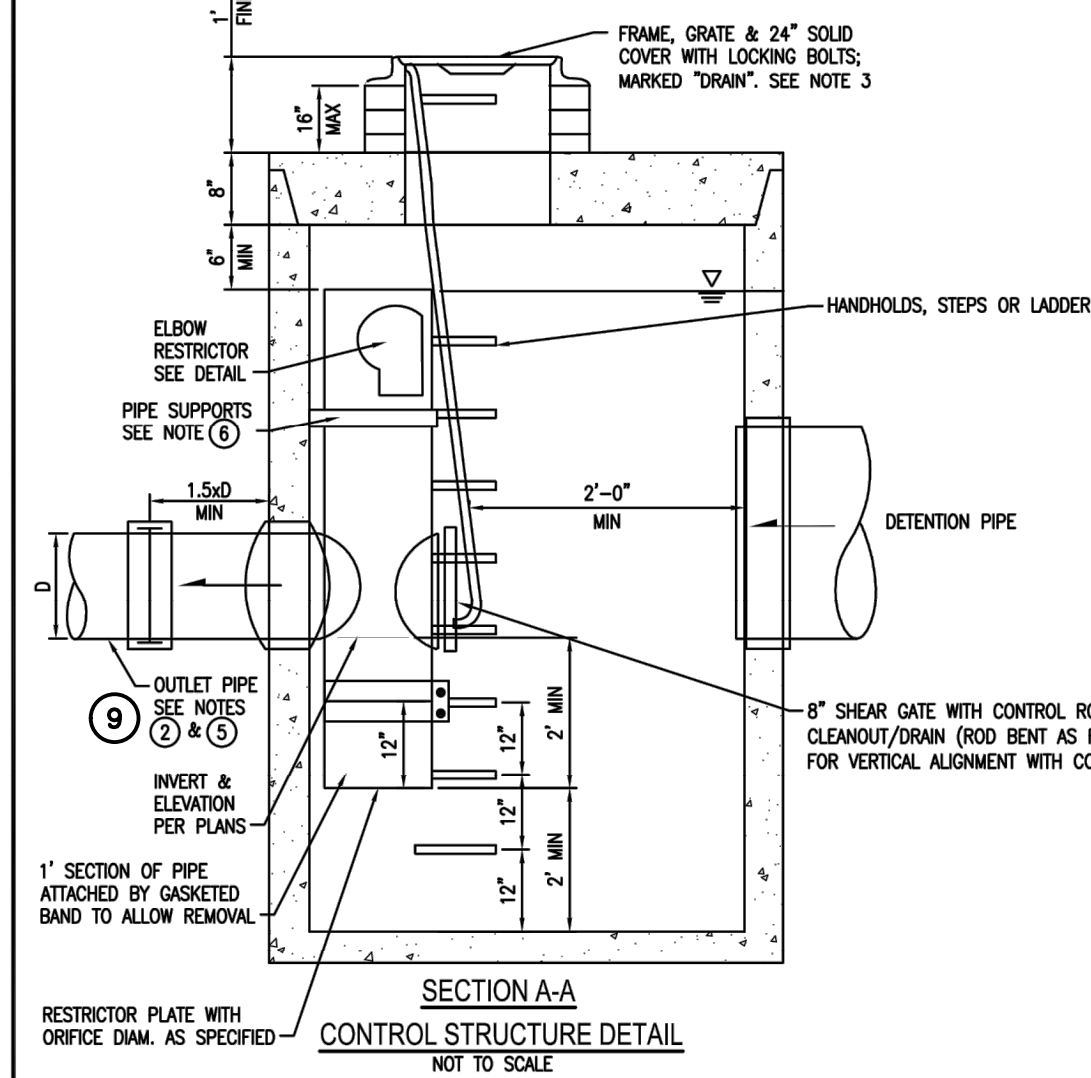
LOT 2 DETENTION SYSTEM (FOR REFERENCE ONLY)

ATTACHMENT 1 CITY OF MERCER ISLAND ON-SITE DETENTION SYSTEM WORKSHEET (FOR NEW PLUS REPLACED IMPERVIOUS AREA OF 9,500 SF OR LESS)

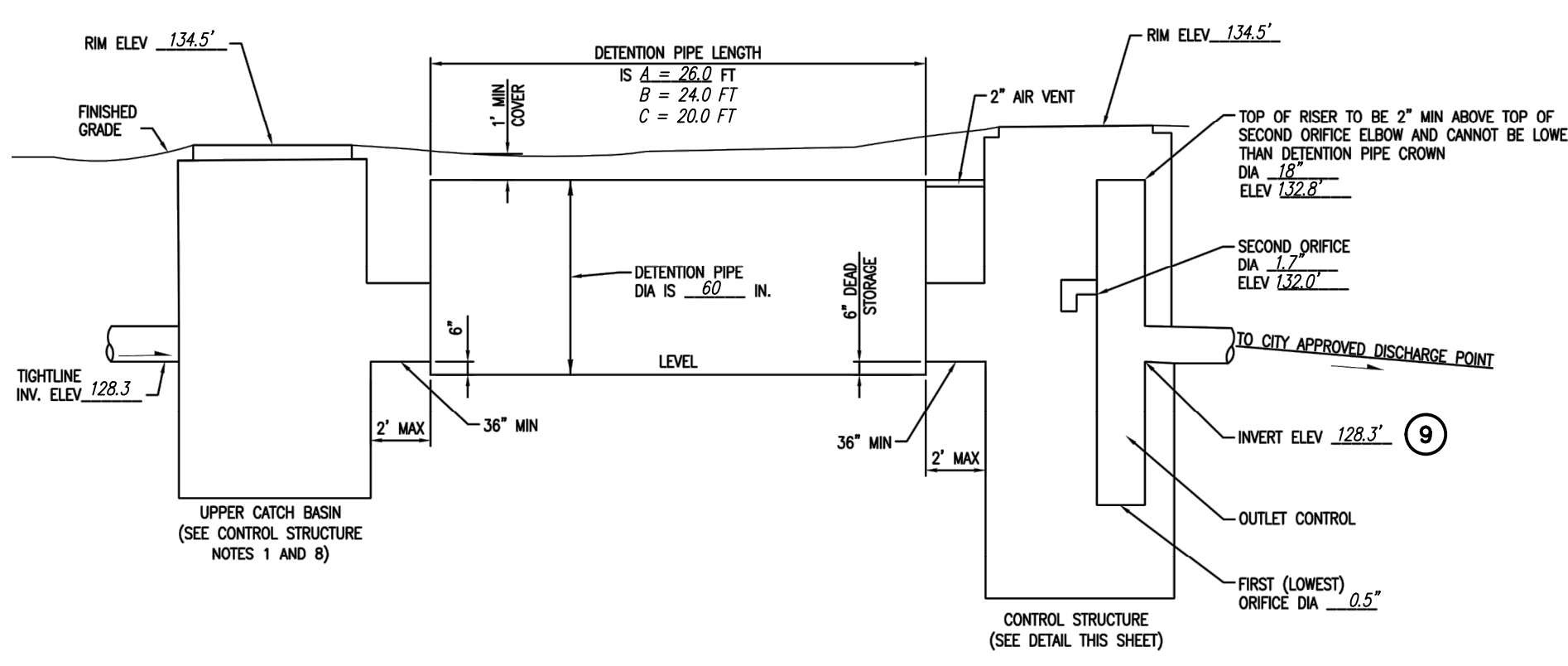


ELBOW RESTRICTOR DETAIL

OWNER: JON TELLEFSON	ADDRESS: 5214 FOREST AVE SE	PREPARED BY: SCHMIN CHAOSLAPAKUL, PE
PERMIT #: TBD	MERCER ISLAND, WA 98040	PHONE: 206.384.7539
		DATE: 8/28/23
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 11,399 SF	DETECTION PIPE DIA (INCH): 60	DETECTION PIPE LENGTH (FT): A=26.0 B=24.0 C=20.0 TOTAL=70.0
SOIL TYPE: C	PIPE MATERIAL: CMP	ORIFICE #1 DIA 0.5" INCH, ELEV 126.3' ORIFICE #2 DIA 1.7" INCH, ELEV 132.0'



SECTION A-A CONTROL STRUCTURE DETAIL
NOT TO SCALE



ON-SITE DETENTION SYSTEM
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

NOTE:
CONTROL STRUCTURE
IN SDCB #1 ONLY

- CONTROL STRUCTURE NOTES**
- USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
 - OUTLET PIPE: MIN. 6 INCH.
 - METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
 - FRAME AND LADDER OR STEPS OFFSET SO:
 - A. CLEANOUT GATE IS VISIBLE FROM TOP.
 - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 - C. FRAME IS CLEAR OF CURB.
 - IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
 - PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3"-0" VERTICAL SPACING).
 - THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275. DESIGNATION Z532K OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LEFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
 - THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.
 - INSTALL EXTERNAL DROP CONNECTION AT 8" OUTLET FROM THE CONTROL STRUCTURE (SDCB #1 ONLY).

- ON-SITE DETENTION SYSTEM NOTES:**
- CALL DEVELOPMENT SERVICES (206-275-7805) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
 - RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
 - PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING: LINED CORRUGATED POLYETHYLENE PIPE (LCP), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
 - FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

Table 1
ON-SITE DETENTION DESIGN FOR PROJECTS BETWEEN 500 SF AND 9,500 SF NEW PLUS REPLACED IMPERVIOUS SURFACE AREA

New and Replaced Impervious Surface Area (sf)	Detention Pipe Diameter (in)	Detention Pipe Length (ft)		Lowest Orifice Diameter (in) ⁽¹⁾		Distance from Outlet Invert to Second Orifice (ft)		Second Orifice Diameter (in)	
		B soils	C soils	B soils	C soils	B soils	C soils	B soils	C soils
500 to 1,000 sf	36"	30	22	0.5	0.5	2.2	2.0	0.5	0.8
	48"	18	11	0.5	0.5	3.3	3.2	0.9	0.8
	60"	11	7	0.5	0.5	4.2	3.4	0.5	0.6
1,001 to 2,000 sf	36"	66	43	0.5	0.5	2.2	2.3	0.9	1.4
	48"	34	23	0.5	0.5	3.2	3.3	0.9	1.2
	60"	22	14	0.5	0.5	4.3	3.6	0.9	0.9
2,001 to 3,000 sf	36"	90	66	0.5	0.5	2.2	2.4	0.9	1.9
	48"	48	36	0.5	0.5	3.1	2.8	0.9	1.5
	60"	30	20	0.5	0.5	4.2	3.7	0.9	1.1
3,001 to 4,000 sf	36"	120	78	0.5	0.5	2.4	2.2	1.4	1.6
	48"	62	42	0.5	0.5	2.8	2.9	0.8	1.3
	60"	42	26	0.5	0.5	3.8	3.9	0.9	1.3
4,001 to 5,000 sf	36"	134	91	0.5	0.5	2.8	2.2	1.7	1.5
	48"	73	49	0.5	0.5	3.6	2.9	1.6	1.5
	60"	46	31	0.5	0.5	4.6	3.5	1.6	1.3
5,001 to 6,000 sf	36"	162	109	0.5	0.5	2.7	2.2	1.8	1.6
	48"	90	59	0.5	0.5	3.5	2.9	1.7	1.5
	60"	54	37	0.5	0.5	4.6	3.6	1.6	1.4
6,001 to 7,000 sf	36"	192	128	0.5	0.5	2.7	2.2	1.9	1.8
	48"	102	68	0.5	0.5	3.7	2.9	1.9	1.6
	60"	64	43	0.5	0.5	4.6	3.6	1.8	1.5
7,001 to 8,000 sf	36"	216	146	0.5	0.5	2.8	2.2	2.0	1.9
	48"	119	79	0.5	0.5	3.8	2.9	2.2	1.7
	60"	73	49	0.5	0.5	4.5	3.6	2.0	1.6
8,001 to 8,500 sf ⁽¹⁾	36"	228	155	0.5	0.5	2.8	2.2	2.1	1.9
	48"	124	84	0.5	0.5	3.7	2.9	1.9	1.8
	60"	77	53	0.5	0.5	4.6	3.6	2.0	1.6
8,501 to 9,000 sf	36"	NA ⁽¹⁾	164	0.5	0.5	NA ⁽¹⁾	2.2	NA ⁽¹⁾	1.9
	48"	NA ⁽¹⁾	89	0.5	0.5	NA ⁽¹⁾	2.9	NA ⁽¹⁾	1.9
	60"	NA ⁽¹⁾	55	0.5	0.5	NA ⁽¹⁾	3.6	NA ⁽¹⁾	1.7
9,001 to 9,500 sf ^{(2)##}	36"	NA ⁽¹⁾	174	0.5	0.5	NA ⁽¹⁾	2.2	NA ⁽¹⁾	2.1
	48"	NA ⁽¹⁾	94	0.5	0.5	NA ⁽¹⁾	2.9	NA ⁽¹⁾	2.0
	60"	NA ⁽¹⁾	58	0.5	0.5	NA ⁽¹⁾	3.7	NA ⁽¹⁾	1.7

Notes:

- Minimum Requirement #7 (Flow Control) is required when the 100-year flow frequency causes a 0.15 cubic feet per second increase (when modeled in WWHM with a 15-minute timestep). Breakpoints shown in this table are based on a flat slope (0-5%). The 100-year flow frequency will need to be evaluated on a site-specific basis for projects on moderate (5-15%) or steep (> 15%) slopes.
- Soil type to be determined by geotechnical analysis or soil map.
- Sizing includes a Volume Correction Factor of 120%.
- Upper bound contributing area used for sizing.
- On Type B soils, new plus replaced impervious surface areas exceeding 8,500 sf trigger Minimum Requirement #7 (Flow Control) 2-year, 24-hour storm = 2 in; 10-year, 24-hour storm = 3 in; 100-year, 24-hour storm = 4 in
- On Type C soils, new plus replaced impervious surface areas exceeding 9,500 sf trigger Minimum Requirement #7 (Flow Control) 2-year, 24-hour storm = 2 in; 10-year, 24-hour storm = 3 in; 100-year, 24-hour storm = 4 in
- Minimum orifice diameter = 0.5 inches
- Developed = impervious (CN = 98)
- 0.5 foot of sediment storage in detention pipe
- Overland slope = 5%

**** THE PROPOSED DETENTION PIPE SYSTEM ON LOT 2 IS SIZED TO ACCOMMODATE FUTURE IMPROVEMENTS FOR LOTS 1 & 2. THE FOLLOWING PARAMETERS WERE USED IN SIZING THE PROPOSED DETENTION PIPE:**

- IMPERVIOUS AREA OF FUTURE LOT 1 & LOT 2 - 4,900 SF + 6,500 SF (INCLUDES OFFSITE) = 11,400 SF.
- SIZING PER STANDARD TABLE 1 (THIS SHEET) FOR 60" DIAM. PIPE WITH IMPERVIOUS AREAS BETWEEN 9,001 SF - 9,500 SF ==> 9,500 SF / 58 LF = 164 SF / 1 LF.

= LOTS 1 & 2 REQUIRED DETENTION PIPE LENGTH = 11,400 SF / 164 SF/LF = 70 LF.

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.

Mar 10, 2025 2:05:51PM - User: Sheri Stark
P: \2020\20113_Forest Avenue Building Permits - Mercer Island\Drawing\Working\Sheets\Lot 1\20113_C3.1-STORM DRAINAGE DETAILS.dwg

BY	SC
DESCRIPTION	CITY REVIEW COMMENTS
DATE	3/10/25
R#	

CITY OF MERCER ISLAND
BUILDING PERMIT

**STORM DRAINAGE
DETAILS LOT 2**

PATRICK HARRON & ASSOCIATES, LLC
Civil Engineering & Planning
14900 Interurban Ave. S, Suite 279, Seattle, WA 98188
Phone: 206.674.4659
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PROJ. NO.: 20113
DWN. BY: CC
CHG. BY: SC

FOREST CREEK ESTATES
LOT 1

5214 FOREST AVE SE
MERCER ISLAND, WA 98040

DATE: 3/10/25
SCALE: AS SHOWN
DRAWING NO.: C3.1
5 OF 6

FOREST CREEK ESTATES - LOT 1

SE 1/4, NE 1/4, SEC 24, T 24 N, R 04 E, W. M.

ASPHALT TO BE PLACED IN 2 LIFTS. EDGES OF EXISTING PAVEMENT TO BE SAW CUT SQUARE ENTIRE THICKNESS OF THE PAVEMENT.

TRENCH AND RESTORATION LIMITS

4" MIN. ASPHALT CONC. CLASS 10"

1" MIN. MAX. TRENCH WIDTH AT SUBGRADE

5/8" MINUS CRUSHED ROCK COMPACTED TO 95%

EXCAVATION PROTECTION PER SPECIFICATIONS

FOUNDATION MATERIAL AS REQUIRED (SEE SPEC'S)

WATER MAIN

TRENCH WIDTH SEE TABLE

TRENCH WIDTH			
PIPE SIZE	MAX. TRENCH WIDTH	WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
WATER SERVICES	2'-0"	2'-0"	4'-0"
4" OR 6"	2'-2"	3'-0"	5'-0"
8"	2'-4"	4'-0"	6'-0"
10"	2'-6"	4'-0"	6'-0"
12"	2'-8"	4'-6"	6'-6"
16"	3'-0"	5'-0"	7'-0"

NOTES

- CALL TWO BUSINESS DAYS BEFORE YOU DIG. (1-800-424-5555)
- ALL TRENCH BACKFILL MATERIAL SHALL BE 100% 5/8" MINUS CRUSHED ROCK PER WSDOT 9-03.12(3) UNLESS DIRECTED OTHERWISE BY CITY ENGINEER.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
TRENCH SECTION

12-23-2013 NO SCALE **W-3**

REV DATE APPROVED

1 W-3
C3.0 SCALE: NTS

2"-2 1/2" BRASS 90 DEGREE

1-2x3" BRASS NIPPLE

2" BALL CORP. IPXIP TYPE THREAD FORD F85007 OR EQUAL

2" COMPRESSION FITTINGS FORD C8477Q

2" CTS QUICK JOINT STIFFENER FORD NO. 550

2" GATE VALVE CONFORMING TO AWMA C509 M440677575

2" THREADED BRASS NIPPLE LENGTH VARIES

2" BRASS 90 DEGREE

NYLON COATED D.I. SADDLE WITH STAINLESS STEEL DOUBLE STRAPS, ROMAC 2020S, OR APPROVED EQUAL.

PIPE BELL, MAN FITTING, OR ANY SERVICE CONNECTION.

METER BOX SHALL BE F00 TITE #2 ALL STEEL BOX WITH TAR COATING, OR MID-STAGES PLASTICS BOX SERIES

METER BOX WITH DUCTILE IRON HINGED LID

EXISTING GRADE

18" CAST IRON VALVE BOX

TOP SECTION W/CLUB

VB940 MARKED "WATER" OLYMPIC FOUNDRY OR EQUAL (SEE W-8)

12 GAUGE INSULATED LOCATE WIRE ATTACHED TO METALLIC PIPE USING 2-#36 HOSE CLAMPS

2" INTERSTATE PLASTICS OR EQUIVALENT COPPER TUBE COMPATIBLE SOR-9 ASTM D-2737

200 PSI ONE PIECE PIPE

1-1/2" THICK MIN. VARIES

PROJECT LIMITS

UNDISTURBED OR 95% COMPACTED

1 1/2" METRON METER WITH SENSUS MXU TRANSDUCER M520R-C1-3W-X-1

6" MIN. 8" MAX.

1/8" CRUSHED ROCK GRAVEL BACKFILL FOR DRAINAGE

2"x1-1/2" IPXIP BELL REDUCER FOWLER NO. BFR76

3-1/4" BETWEEN METER FLANGES

BY-PASS VALVE LOCKED BY CITY

EXIST. SERVICE LINE

NOTES

- MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18" MINIMUM DISTANCE BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24", ALL HORIZONTALLY STAGGERED.
- PLASTIC METER BOXES SHALL NOT BE INSTALLED WITH ROADWAY, SIDEWALK, OR DRIVEWAYS.
- WHEN METER BOXES ARE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK, CONTINUOUS FELT EXPANSION MATERIAL SURROUNDING THE PERIMETER OF THE METER BOX SHALL BE PROVIDED.
- WHEN CONNECTING TO EXISTING SERVICE LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DB SERIES WITH C21 SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING SERVICE LINE DIAMETER.
- SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO WATER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.
- WATER METER SUPPLIED BY CITY.
- ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.
- NO SERVICE CONNECTIONS BETWEEN BLOW-OFF AND END OF MAIN.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
METER INSTALLATION

1-1/2" WATER METER

10-16-2013 NO SCALE **W-14**

REV DATE APPROVED

2 W-14
C3.0 SCALE: NTS

TRENCH AND RESTORATION LIMITS

SEE TABLE

1" MIN. MAX. TRENCH WIDTH AT SUBGRADE

SEE STREET RESTORATION STANDARD DETAIL ST-12

SUBSEQUENT BACKFILL COMPACTED TO 95% MATERIAL: SEE NOTE 1

EXCAVATION PROTECTION PER SPECIFICATIONS

INITIAL BACKFILL PLACED AND COMPACTED BY HAND MATERIAL: SEE NOTE 1

PIPE

PIPE BEDDING TO SPRING LINE OF PIPE MATERIAL: GRAVEL BACKFILL PER WSDOT 9-03.12(3) FOUNDATION MATERIAL AS REQUIRED (SEE DETAIL S-4)

TRENCH WIDTH SEE TABLE

TRENCH WIDTH			
PIPE SIZE	MAX. TRENCH WIDTH	WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
WATER SERVICES	2'-0"	2'-0"	4'-0"
4" OR 6"	2'-2"	3'-0"	5'-0"
8"	2'-4"	4'-0"	6'-0"
10"	2'-6"	4'-0"	6'-0"
12"	2'-8"	4'-6"	6'-6"

NOTES

- ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.6(3) OR BANK RUN GRAVEL PER WSDOT 9-03.18, COMPACTED IN 6" LIFTS.
- CDF FOR BACKFILL MAY BE REQUIRED BY CITY ENGINEER WHEN PROPER COMPACTION AROUND EXISTING UTILITIES MAY NOT BE POSSIBLE. CDF SHALL BE PER WSDOT 2-09.3(3).
- SEE S-4 FOR PIPE BEDDING DETAILS.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
TRENCH DETAIL

6-5-2009 NO SCALE **S-3**

REV DATE APPROVED

3 S-3
C3.0 SCALE: NTS

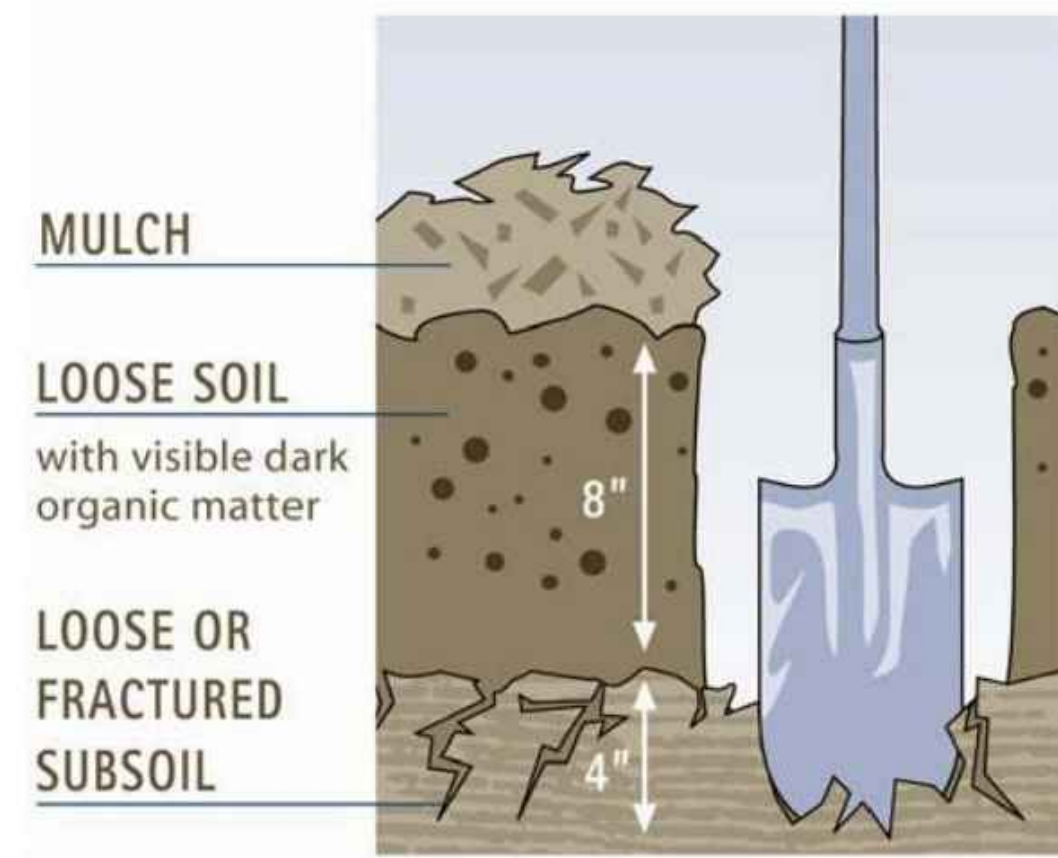


Figure 5.3.3 - Planting bed Cross-Section

5 SOIL AMENDMENT DETAIL BMP TS.13
C3.0 SCALE: 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:
 - 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.
 - MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL.
 - USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
 - THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION (BMP 17.30), 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.
 - 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 CONDUIVE 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:

- LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
- 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.
- 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.
- 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.

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.

ASTM 3034 SDR35 PVC PIPE

BUILDING LINE

COUPLING EQUAL TO CALDER COUPLING BY JOINTS, INC TO FIT

SEWER PIPE

2'-6" MIN.

6" TWO-WAY CLEAN OUT FACE UP WITH 4" CAP, 5" MIN. COVER. SEE STANDARD DETAIL S-27.

C.O. BROUGHT TO GRADE AND CARPED. CLEAN OUT 18" MIN COVER. SEE STANDARD DETAILS S-19 & S-27 OVER PIPE. (SEE NOTE 15).

INSTALL GREEN "SEWER" TRACING TAPE 1" OVER PIPE. (SEE NOTE 15).

EXIST. SIDE SEWER

REMOVE 2x4 AND CAP AND INSTALL HOUSE SEWER. COUPLING, REDUCERS, TEE AND BENDS TO FIT.

SEWER PIPE WITH "O" RING RUBBER GASKET JOINTS. LENGTH AND SIZE AS REQUIRED. MIN. 2% SLOPE.

BEND AS REQUIRED

NOTES

- ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
- CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/TEE.
- ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SEWER. NO DOWN SPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
- 18" MINIMUM COVERAGE OVER PIPE.
- 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.
- SEWER PIPE MINIMUM SIZE ON PROPERTY, 2% MINIMUM GRADE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT SEWER GRADINGS.
- ALL CONSTRUCTION REQUIRES A PLAN SHOWING PROPERTY AND DIMENSIONS AND COMPLETION OF SIDE SEWER APPLICATION AND MAINTENANCE AGREEMENT, AS NEEDED.
- BACK WATER VALVE (CHECK VALVE) IS REQUIRED:
 - IF CONNECTED TO A SHARED SIDE SEWER.
 - IF CONNECTION AT HOUSE IS LOWER THAN BOTH UPSTREAM AND DOWNSTREAM MANHOLE.
- SEE S-23 & S-24 FOR LAG LINE REQUIREMENTS.
- AS-BUILT DRAWING SHOWING LOCATION OF SIDE SEWER & ALL BENDS, C.O. ETC. IN RELATION TO THE HOUSE IS REQUIRED AFTER INSPECTION & INSTALLATION. SEE STANDARD DETAIL S-38 FOR A TYPICAL "AS BUILT".
- THE MINIMUM PIPE SIZE FOR SIDE SEWERS SHALL BE:
 - 6" - WITHIN THE PUBLIC RIGHT-OF-WAY.
 - 4" - SINGLE FAMILY RESIDENCES.
 - 6" - 2 TO 8 SINGLE FAMILY RESIDENCES.
 - 8" - BUILDINGS OTHER THAN SINGLE FAMILY RESIDENCES.
- UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED OR TAPE CONDUCTIVE WARNING TAPE 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
HOUSE SEWER CONNECTION

6-5-2009 NO SCALE **S-18**

REV DATE APPROVED

4 S-18
C3.0 SCALE: NTS

RECESSED LIFT POCKET

5/8" - 11 N.C SOCKET HD SCREW 1 1/4" LONG (BRONZE OR S.S.)

1 1/8"

14"

5/8"

1 1/4"

1 1/4"

11"

12 1/4"

14"

1/2" x 2" RAISED PADS

LOCKING COVER OLYMPIC MIDZE OR EQUAL

FINISH GRADE

2'-0" SQUARE

FINISH GRADE

2000 P.S.I. CONCRETE

4 1/2"

12" ROUND PIPE FLARE JOINT PACKING

MECHANICAL PLUG WITH "O" RING SEAL AND WING NUT

PIPE MATERIAL AS SPECIFIED

WYE

INSTALL WATERTIGHT PLUG ONLY IF FUTURE EXTENSION IS ANTICIPATED.

NOTES

- 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

6 S-19
C3.0 SCALE: NTS

BY	SC
DESCRIPTION	CITY REVIEW COMMENTS
R#	DATE
3/10/25	

CITY OF MERCER ISLAND
BUILDING PERMIT

UTILITY DETAILS

3/10/25

PROJ. NO. 20113

OWN. BY: CC

DES. BY: CC

CHG. BY: SC

DATE: 3/10/25

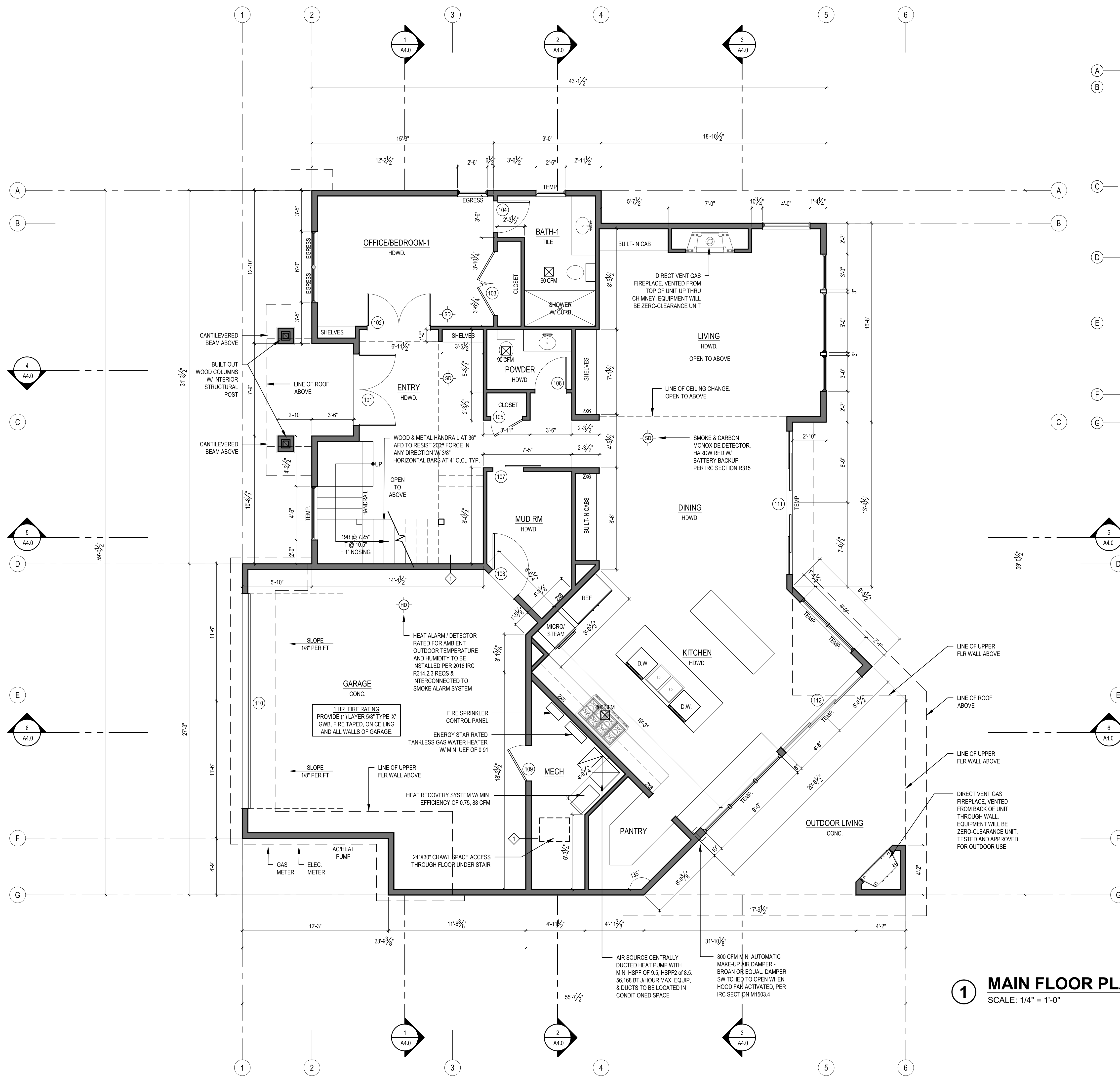
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DRAWING NO. C3.2

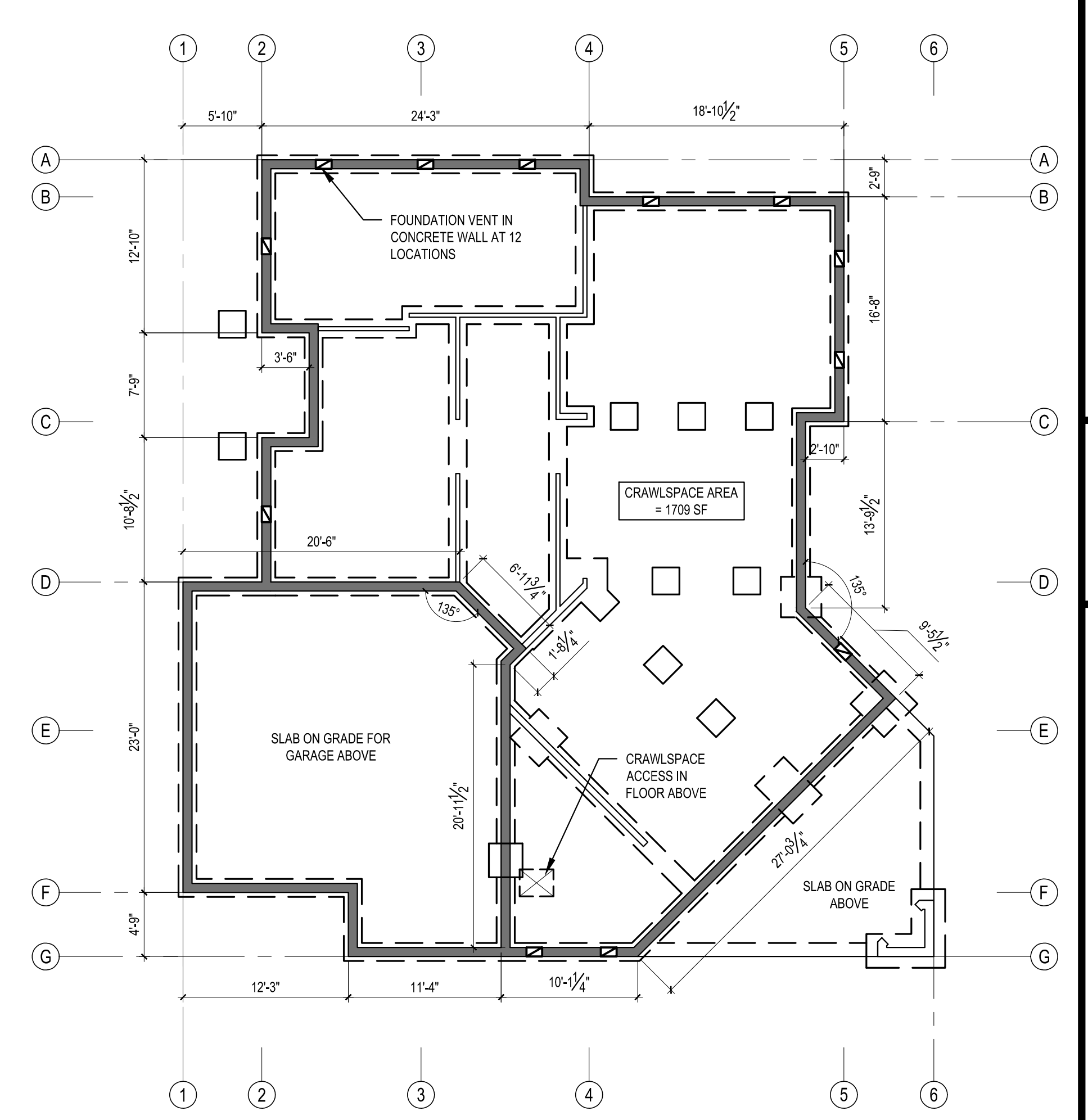
6 OF 6

5214 FOREST AVE SE
MERCER ISLAND, WA 98040

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Phone : 206.674.4659
Web : patrickharron.com



1 MAIN FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 CRAWLSPACE VENTING PLAN
SCALE: 1/8" = 1'-0"

CRAWLSPACE VENTING:
(AREA) 1709 SF / 300 = 5.7 SF VENTING REQ'D.
5.7 SF X 144 = 820.8 SQ. IN.
68 SQ. IN. STND. VENT.
820.8 / 68 = 12 VENTS REQ.
12 VENTS WILL BE PROVIDED
USE APPROVED CLASS I VAPOR RETARDER PER IBC R408.2, EXCEPTION.

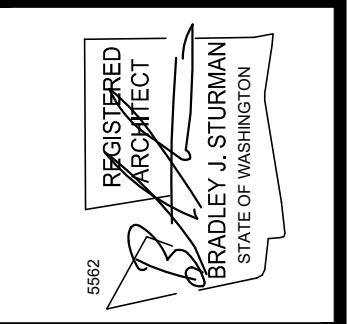
WALL PARTITION TYPES:
N.T.S. (SEE STRUCTURAL SHEETS FOR SHEAR WALLS.)

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH OF CONTINUOUS R-5 RIGID INSULATION w/ (2) LAYERS 60# BLDG. PAPER OR WRB w/ SHEATHING PER STRUCT w/ 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.

1HR. FIRE RATED GARAGE WALL
5/8" GYPSUM WALLBOARD @ INTERIOR w/ CONTINUOUS R-5 RIGID INSULATION w/ O.C.-1 1/8" CEM. CTD. NAIL-S. JOINTS EXP. OR FIN - PERM. CALKED-UL DES U305 & U314- JOINTS FIN

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY
PERMIT SET 03/13/25 PLOT DATE: 3/13/2025

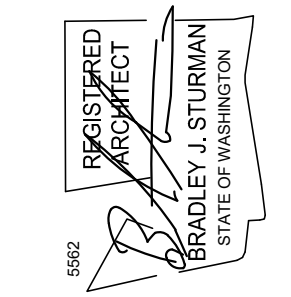


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FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

MAIN FLOOR PLAN

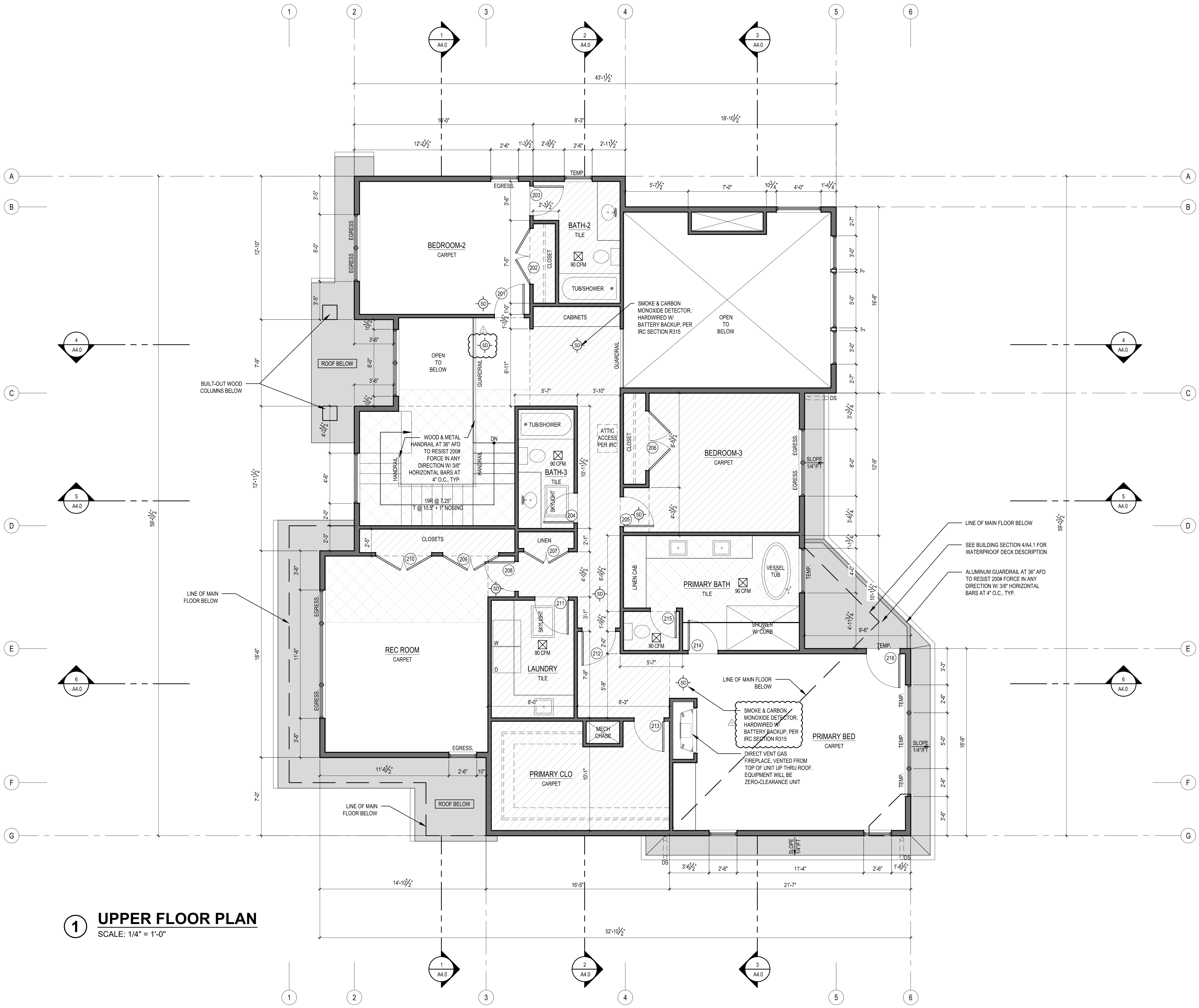
REVISIONS:	2025-5-13 Corrections #1
DRAWN BY:	KE
CHECKED BY:	BJS
SHEET	A2.0
PERMIT SET	03/13/25 PLOT DATE: 3/13/2025



FOREST CREEK ESTATES LOT 1
PERMIT SET
 5222 FOREST AVE S.E.
 MERCER ISLAND, WA 98040

UPPER FLOOR PLAN

REVISIONS:	2025-5-13	Connectors #1
DRAWN BY:	KE	
CHECKED BY:	BJS	
SHEET	A2.1	



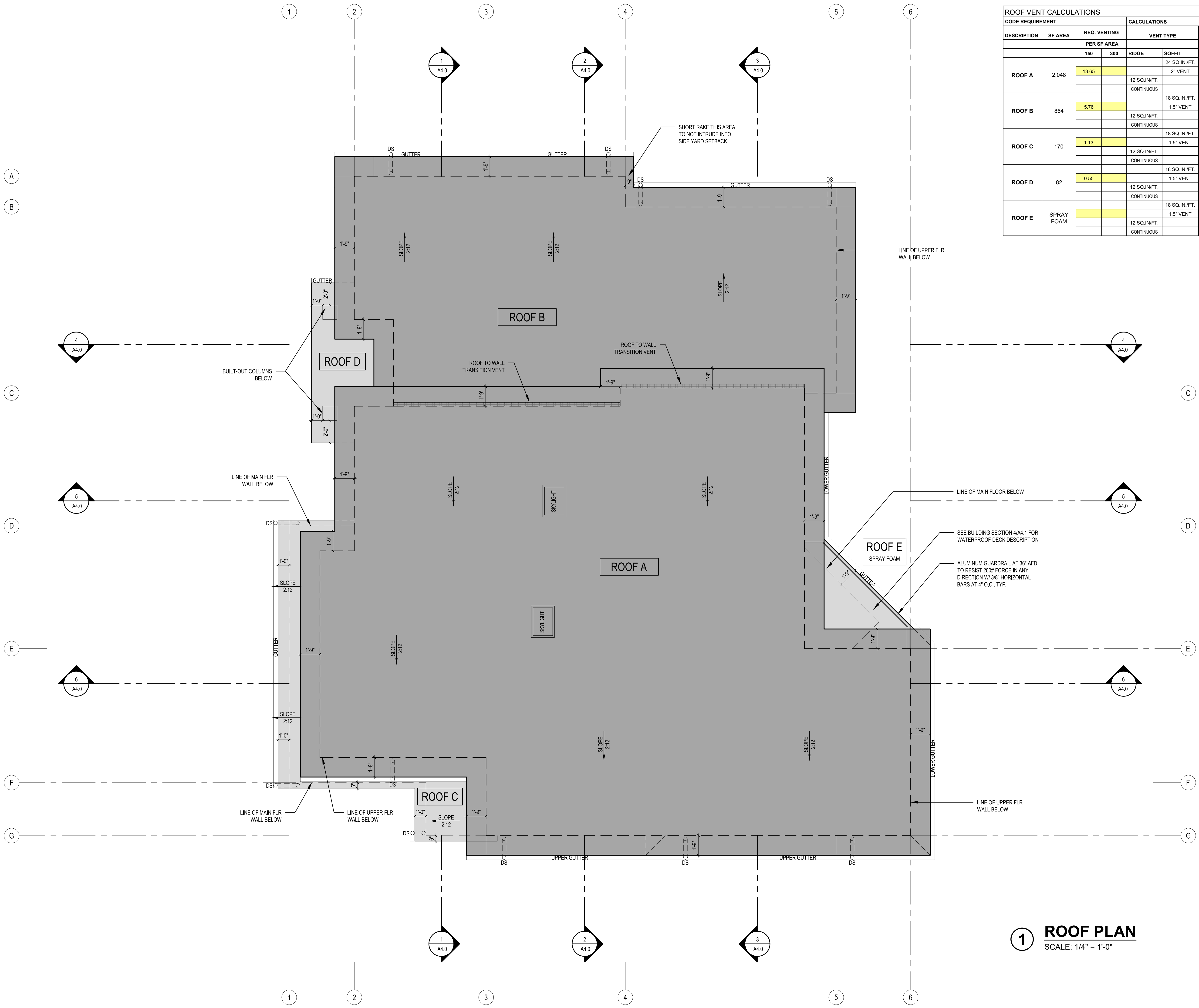
1 UPPER FLOOR PLAN
 SCALE: 1/4" = 1'-0"

POCHE LEGEND:

- AREA OF ROOF BELOW
- AREA OF FURRED DOWN FLAT CEILING
- AREA OF CEILING TALLER THAN 12'

WALL PARTITION TYPES:
 N.T.S. (SEE STRUCTURAL SHEETS FOR SHEARWALLS.)

- TYPICAL EXTERIOR WALL
 EXTERIOR WALL FINISH OF CONTINUOUS R-5 RIGID INSULATION w/ (2) LAYERS 60# BLDG. PAPER OR WRB w/ SHEATHING PER STRUCT w/ 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.
- 1HR. FIRE RATED GARAGE WALL
 5/8" GYPSUM WALLBOARD @ INTERIOR w/ 2x6 WOOD STUDS @ 16" O.C. w/ CONTINUOUS R-5 RIGID INSULATION w/ (1) LAYER 5/8" TYPE X GWB PANEL NAILED 7" O.C. 1 7/8" CEM. CTD NAIL S. JOINTS EXP OR FIN - PERM CAULKED-UL DES U305 & U314- JOINTS FIN



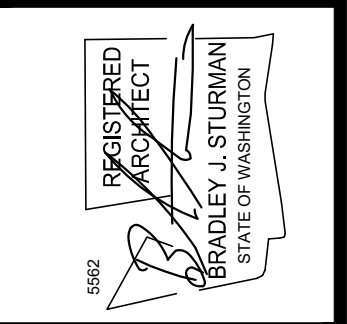
ROOF VENT CALCULATIONS														
CODE REQUIREMENT		CALCULATIONS												
DESCRIPTION	SF AREA	REQ. VENTING		VENT TYPE		X	VENT L.F.	=	TOTAL VENT AREA SQ. IN.	X	SF CONVERT. 1/144	X	ACTUAL	
		150	300	RIDGE	SOFFIT								80% EFF FACTOR	TOTAL
ROOF A	2,048	13.65			24 SQ. IN./FT.		116.75		2802		19.46		15.57	15.57
					12 SQ. IN./FT.				0		0.00		0.00	
					CONTINUOUS									
ROOF B	864	5.76			18 SQ. IN./FT.		80		1440		10.00		8.00	8.00
					12 SQ. IN./FT.				0		0.00		0.00	
					CONTINUOUS									
ROOF C	170	1.13			18 SQ. IN./FT.		28		504		3.50		2.80	2.80
					12 SQ. IN./FT.				0		0.00		0.00	
					CONTINUOUS									
ROOF D	82	0.55			18 SQ. IN./FT.		7.5		135		0.94		0.75	0.75
					12 SQ. IN./FT.				0		0.00		0.00	
					CONTINUOUS									
ROOF E	SPRAY FOAM				18 SQ. IN./FT.						0.00		0.00	0.00
					12 SQ. IN./FT.				0		0.00		0.00	
					CONTINUOUS									

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

POCHE LEGEND:

- MAIN FLOOR ROOF
- UPPER FLOOR ROOF

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY.
PERMIT SET 03/13/25



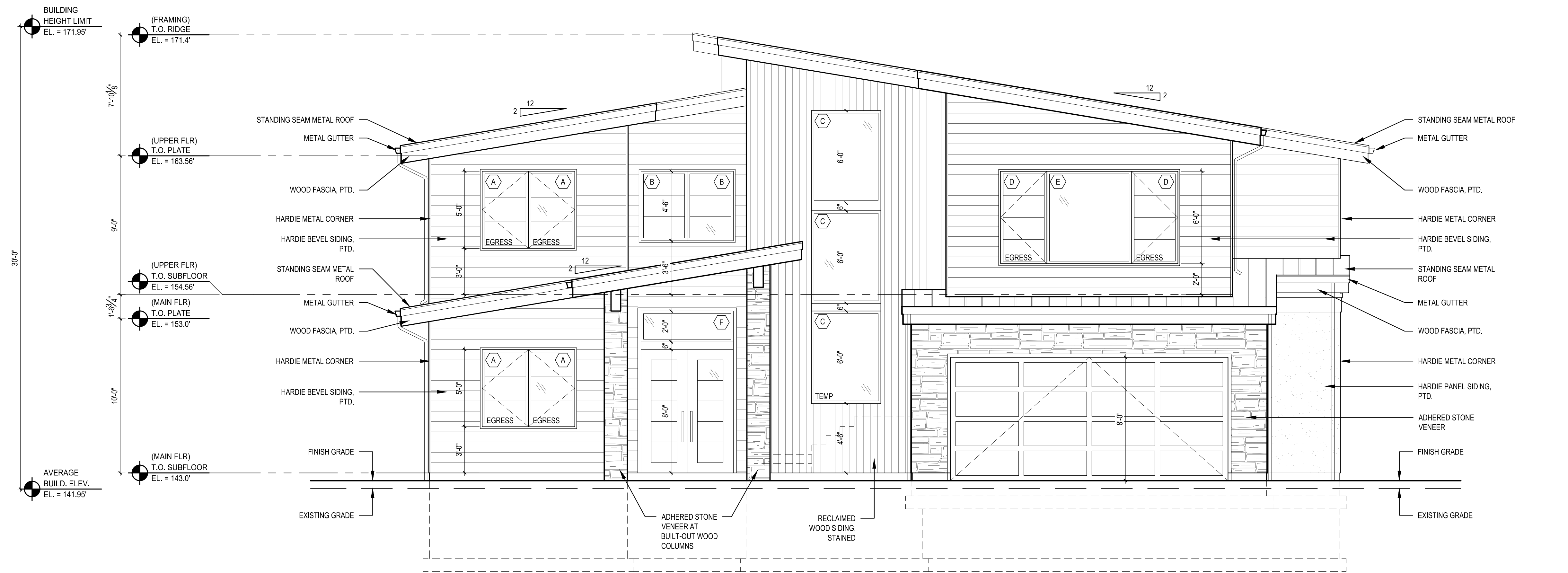
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FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

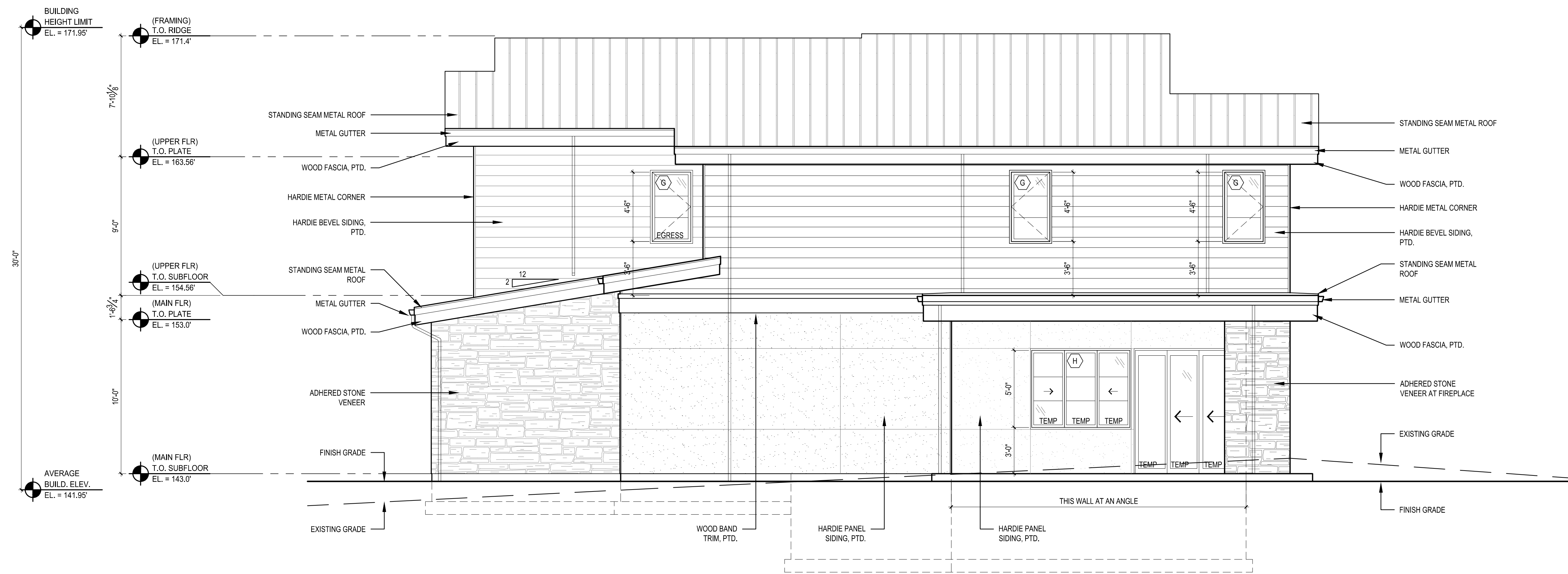
ROOF PLAN

REVISIONS:	2025-03-13 Connectors #1
DRAWN BY:	KE
CHECKED BY:	BJS
SHEET	

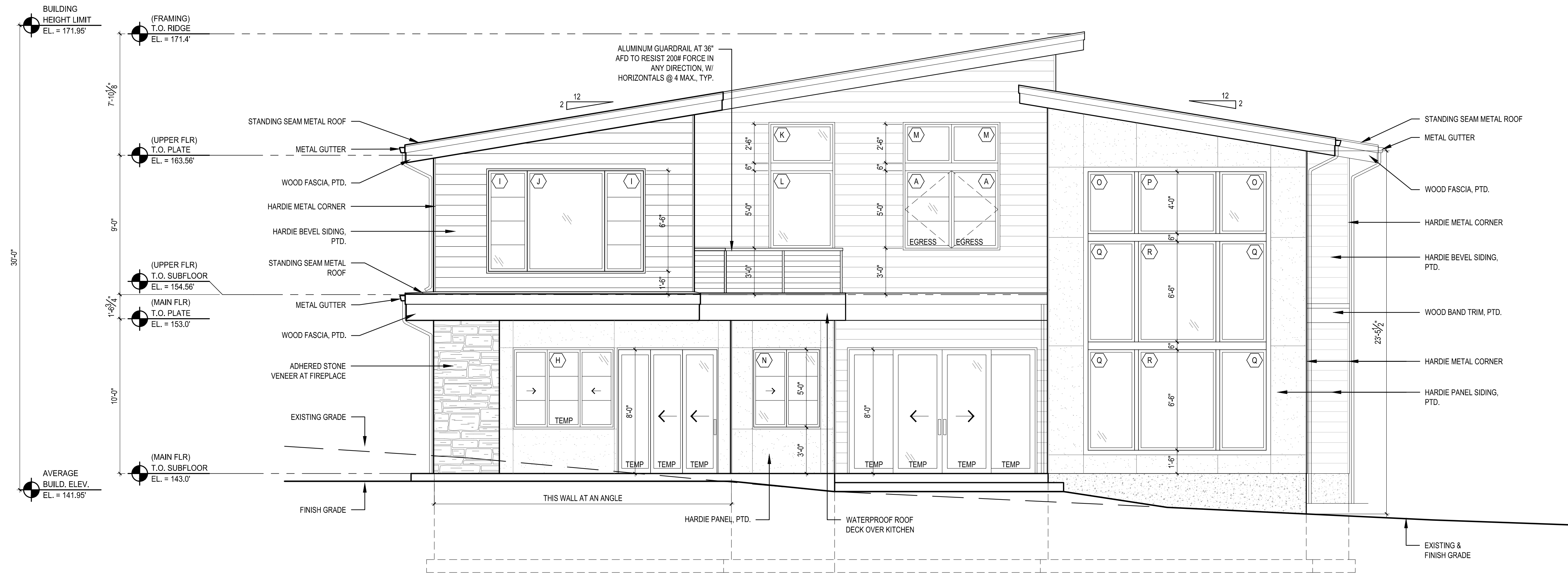
A2.2
PLOT DATE: 3/13/25



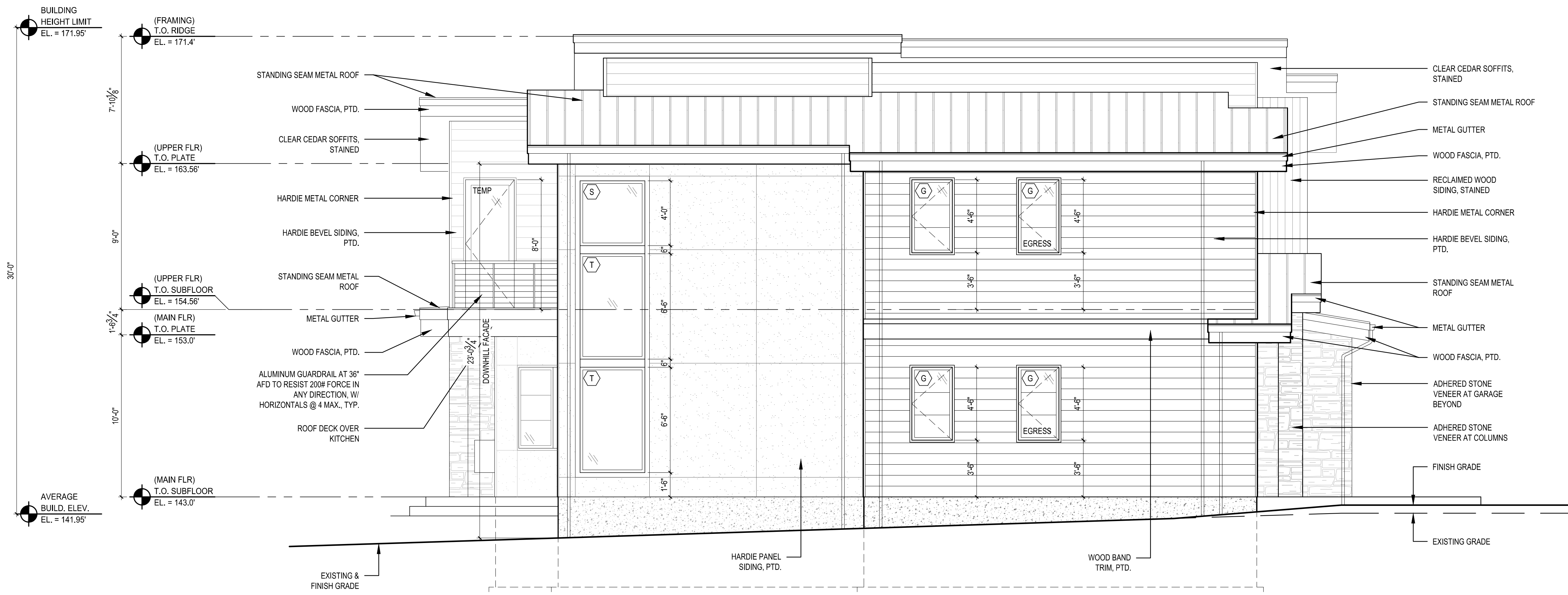
1 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



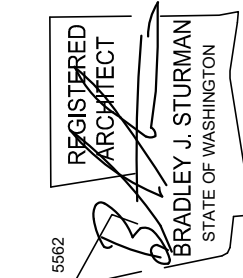
2 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



3 EAST ELEVATION
SCALE: 1/4" = 1'-0"



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



REVISIONS:

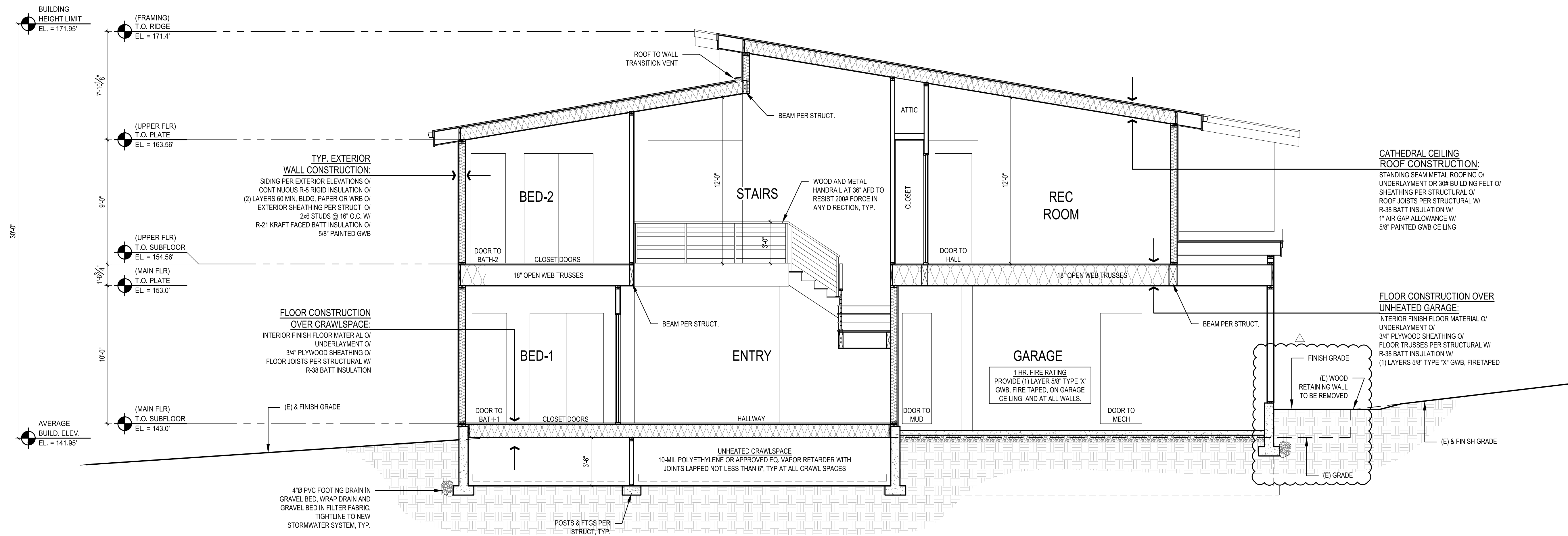
1	2025-5-13 Corrections #1
2	
3	
4	
5	

DRAWN BY: KE

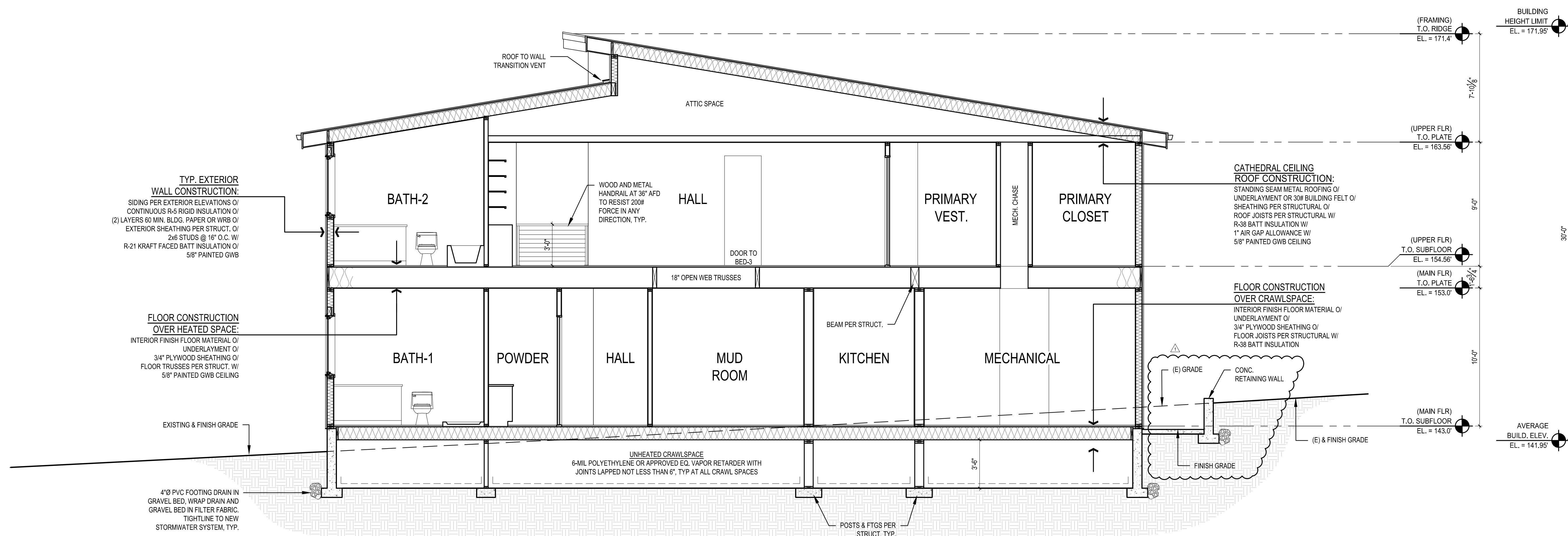
CHECKED BY: B.S.

SHEET

A3.1



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



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

STURMAN ARCHITECTS

9-103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425-4517003

FOREST CREEK ESTATES LOT 1
PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

BUILDING SECTIONS

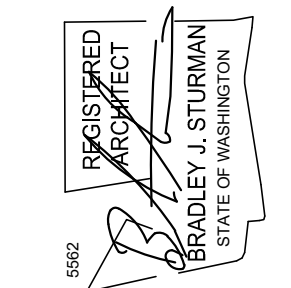
REVISIONS:
2025-5-13 Corrections #1

DRAWN BY: _____
CHECKED BY: _____
SHEET

A4.0

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

PERMIT SET 03/13/25 PLOT DATE: 3/13/2025



REVISIONS:

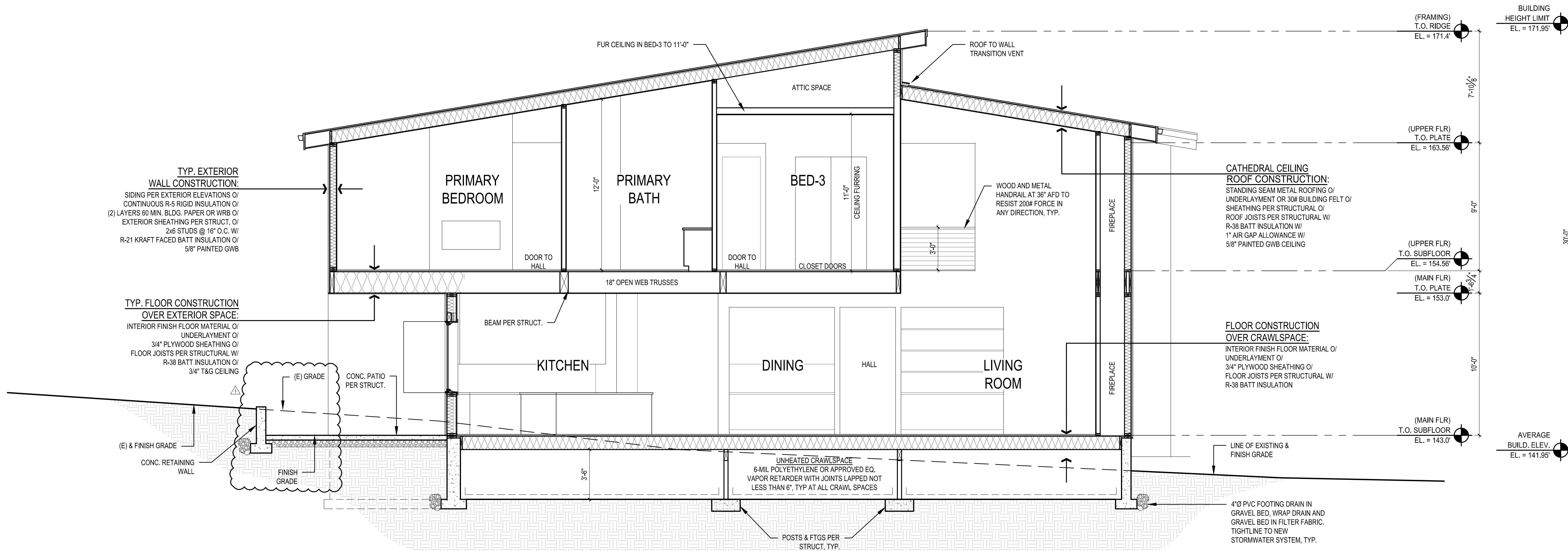
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DRAWN BY: KE

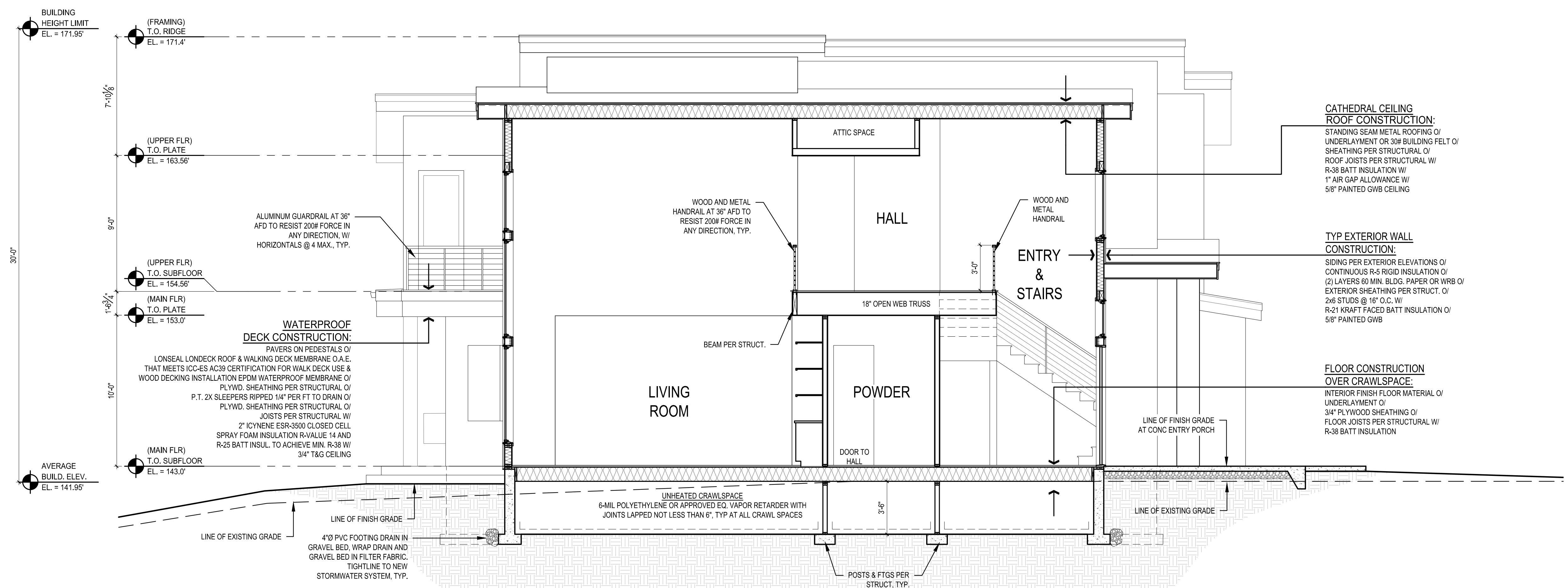
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SHEET

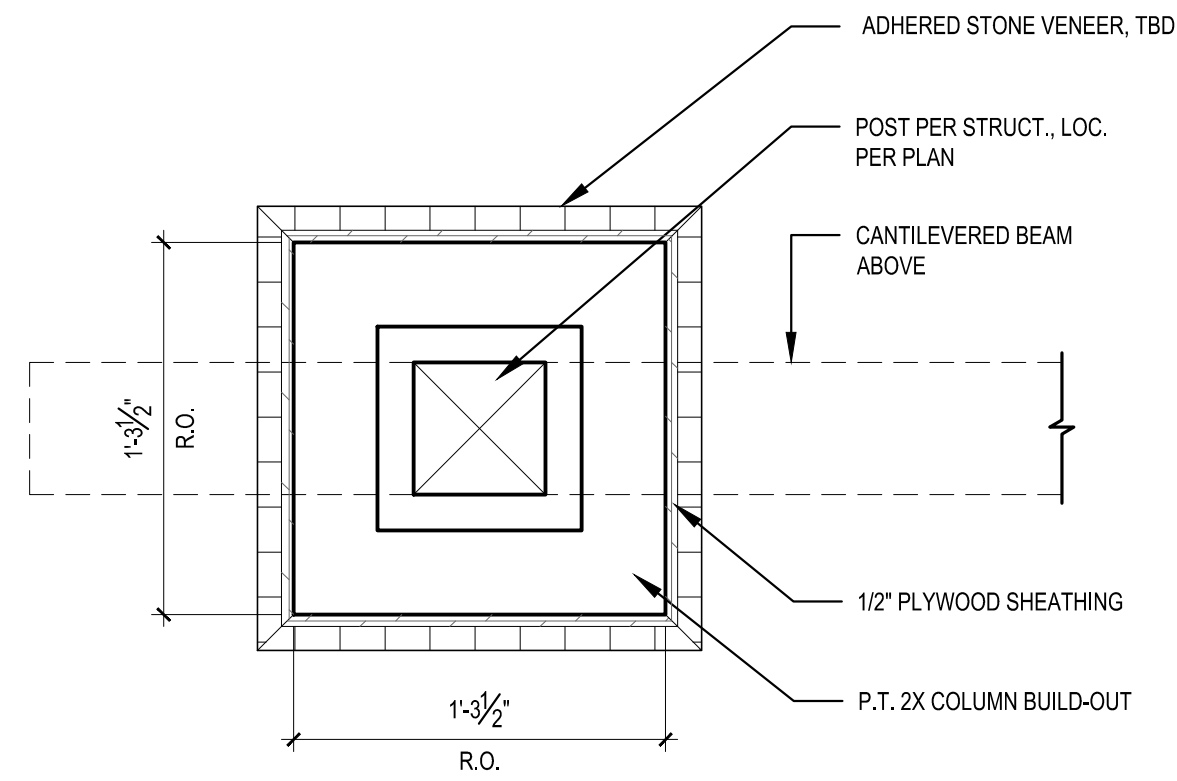
A4.1



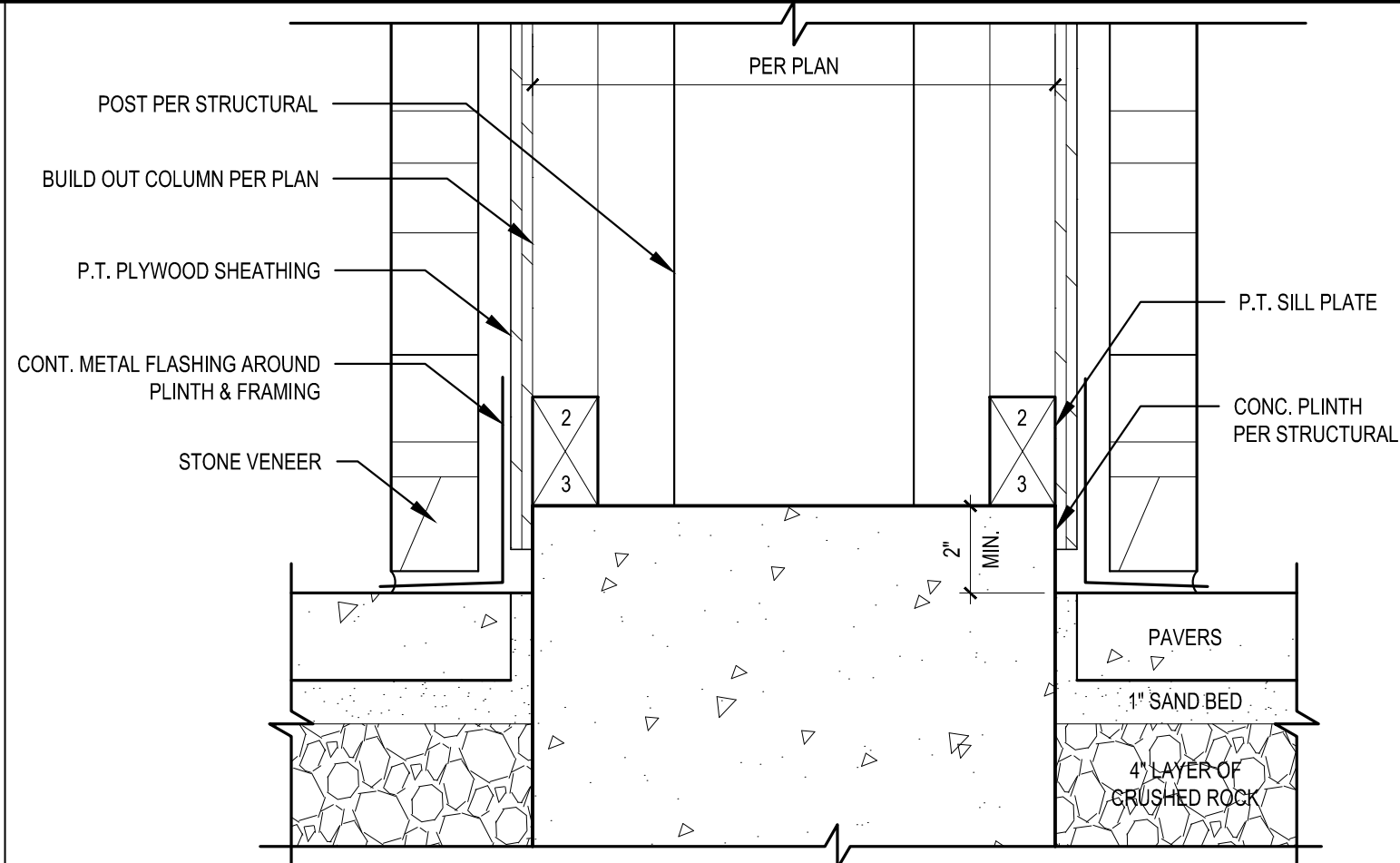
3 BUILDING SECTION
 SCALE: 1/4" = 1'-0"



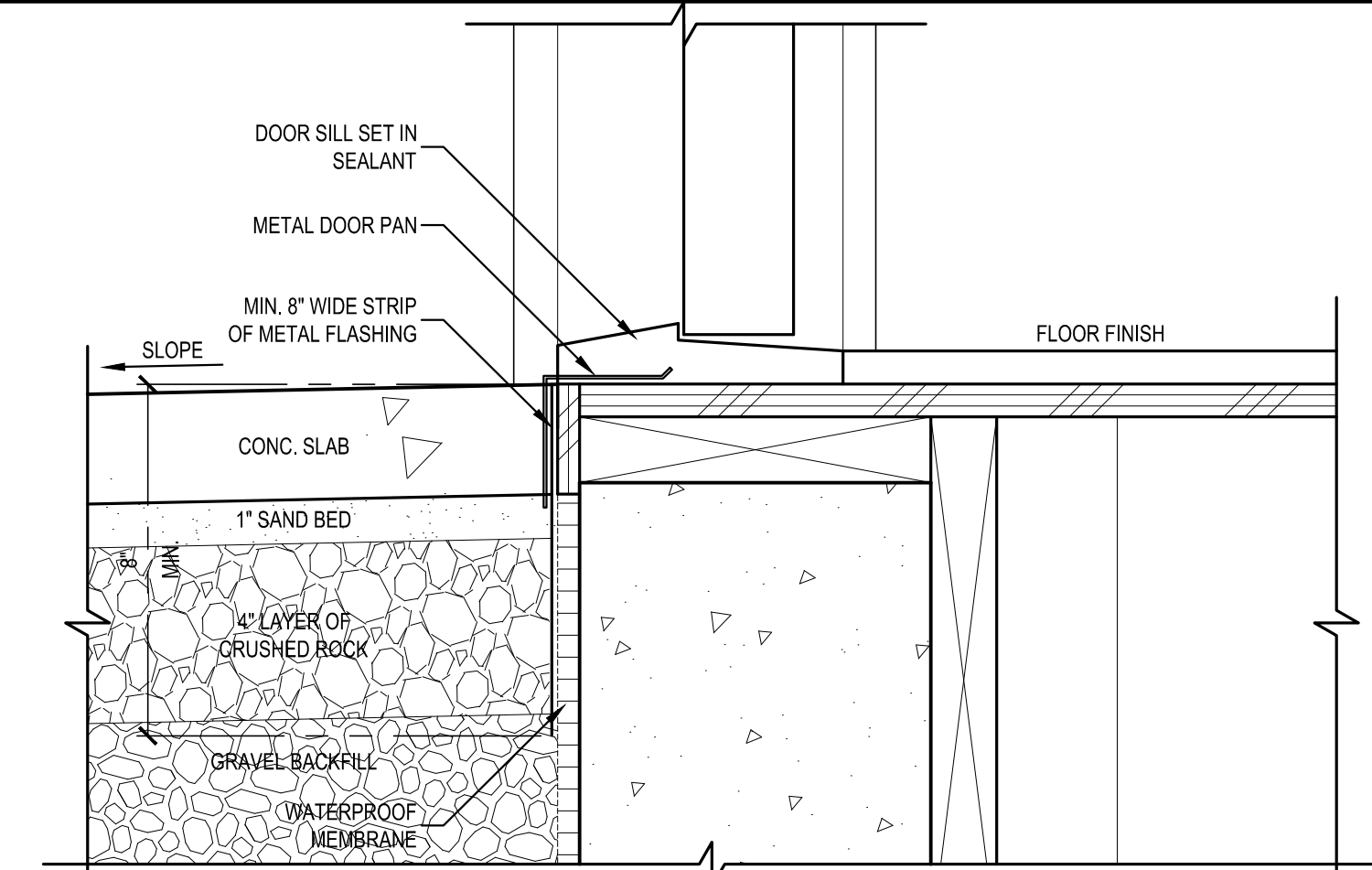
4 BUILDING SECTION
 SCALE: 1/4" = 1'-0"



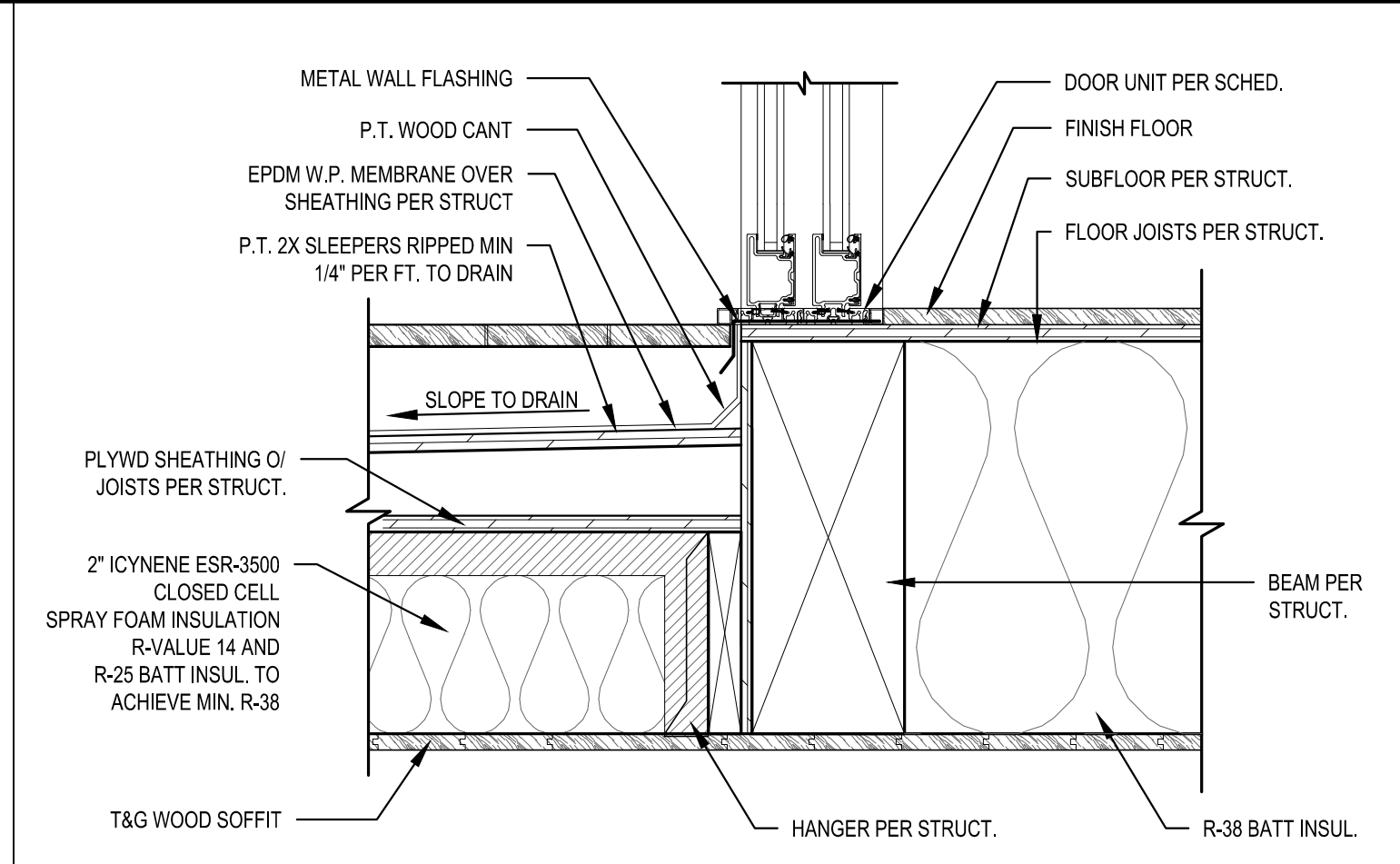
1 BUILT-OUT WOOD COLUMN PLAN DETAIL
SCALE: 1-1/2" = 1'-0"



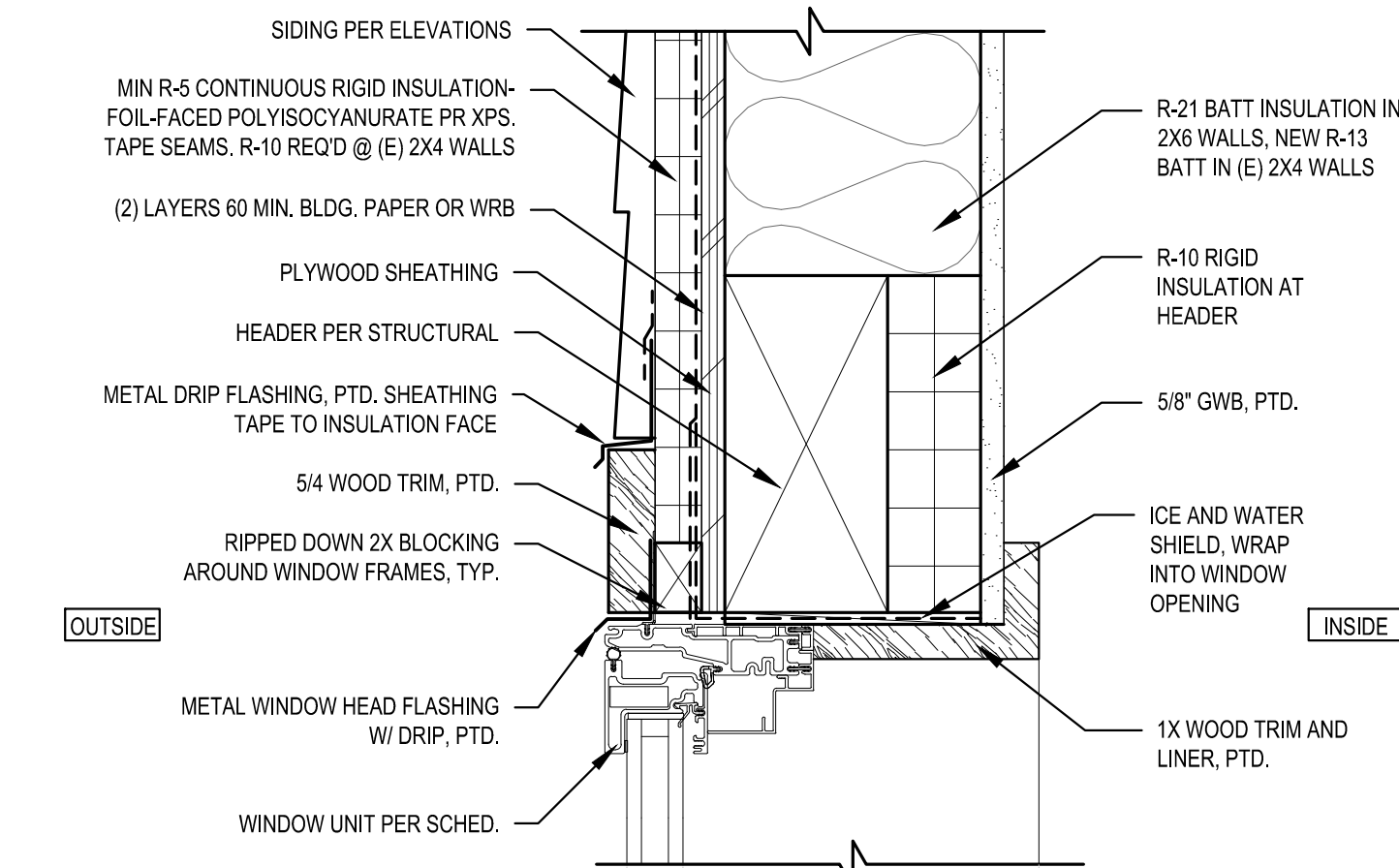
2 STONE VENEER COLUMN PLINTH DETAIL
SCALE: 3" = 1'-0"



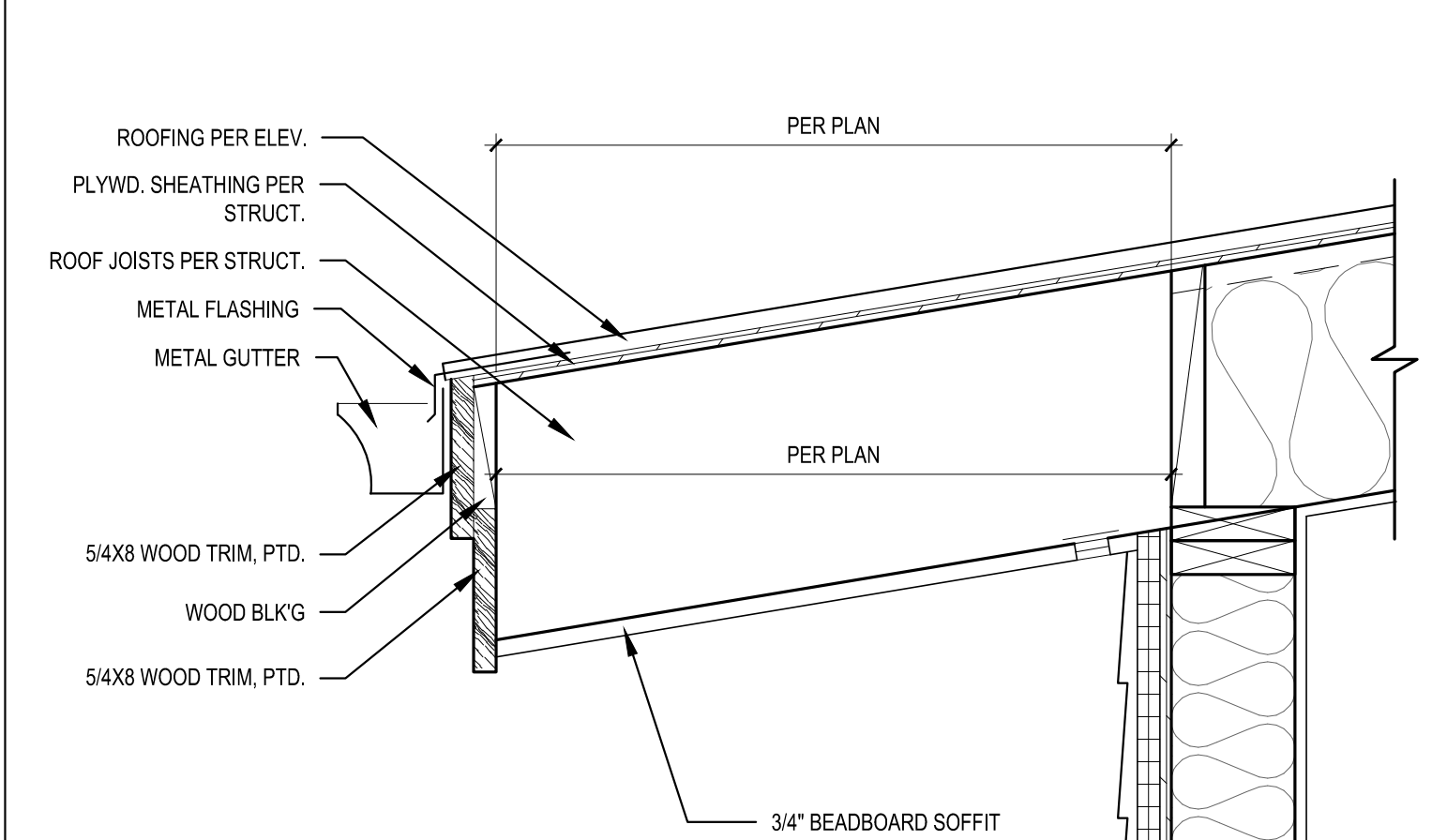
3 FLASHING DETAIL @ FLUSH THRESHOLD
SCALE: 3" = 1'-0"



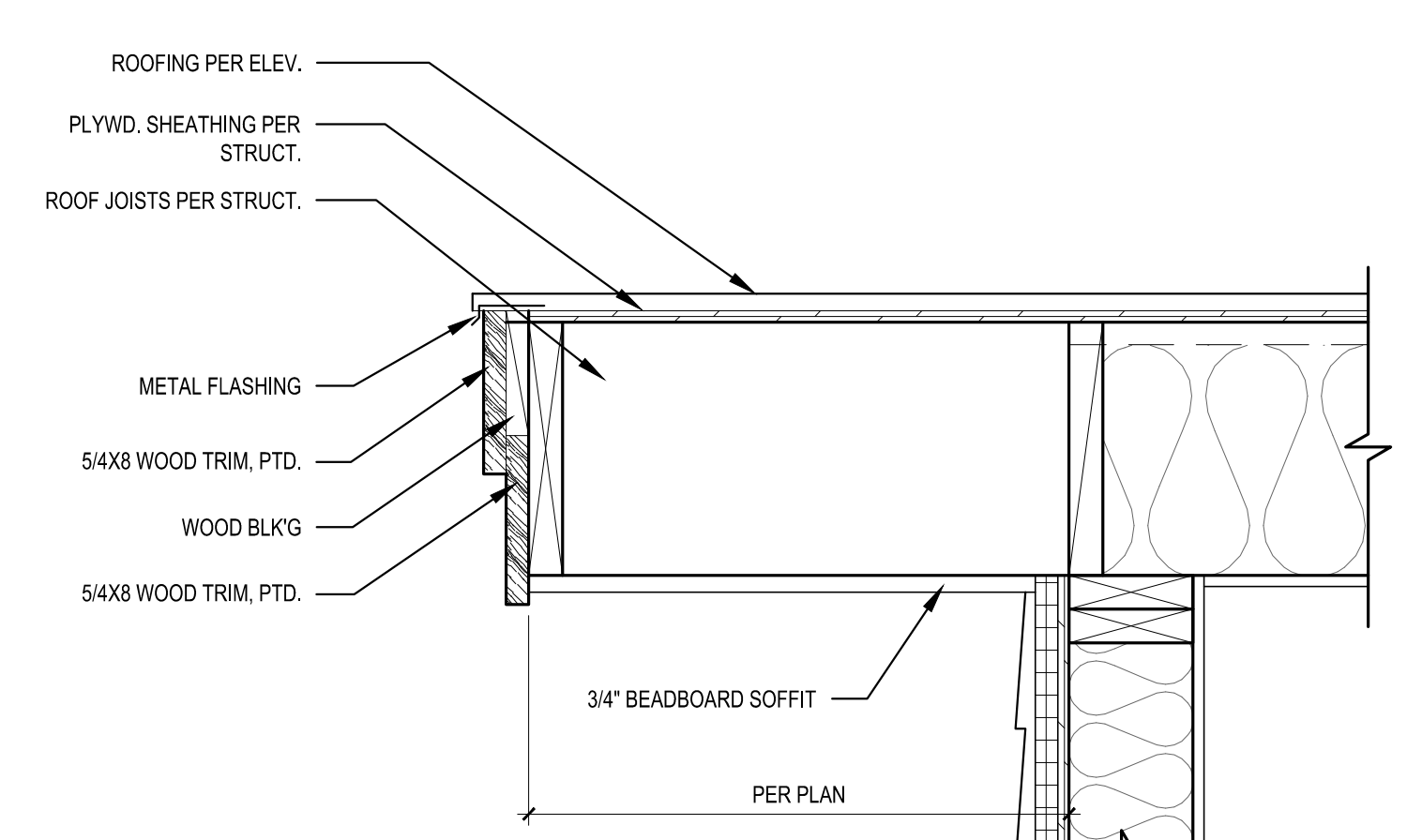
4 THRESHOLD @ DECK SECTION DETAIL
SCALE: 1-1/2" = 1'-0"



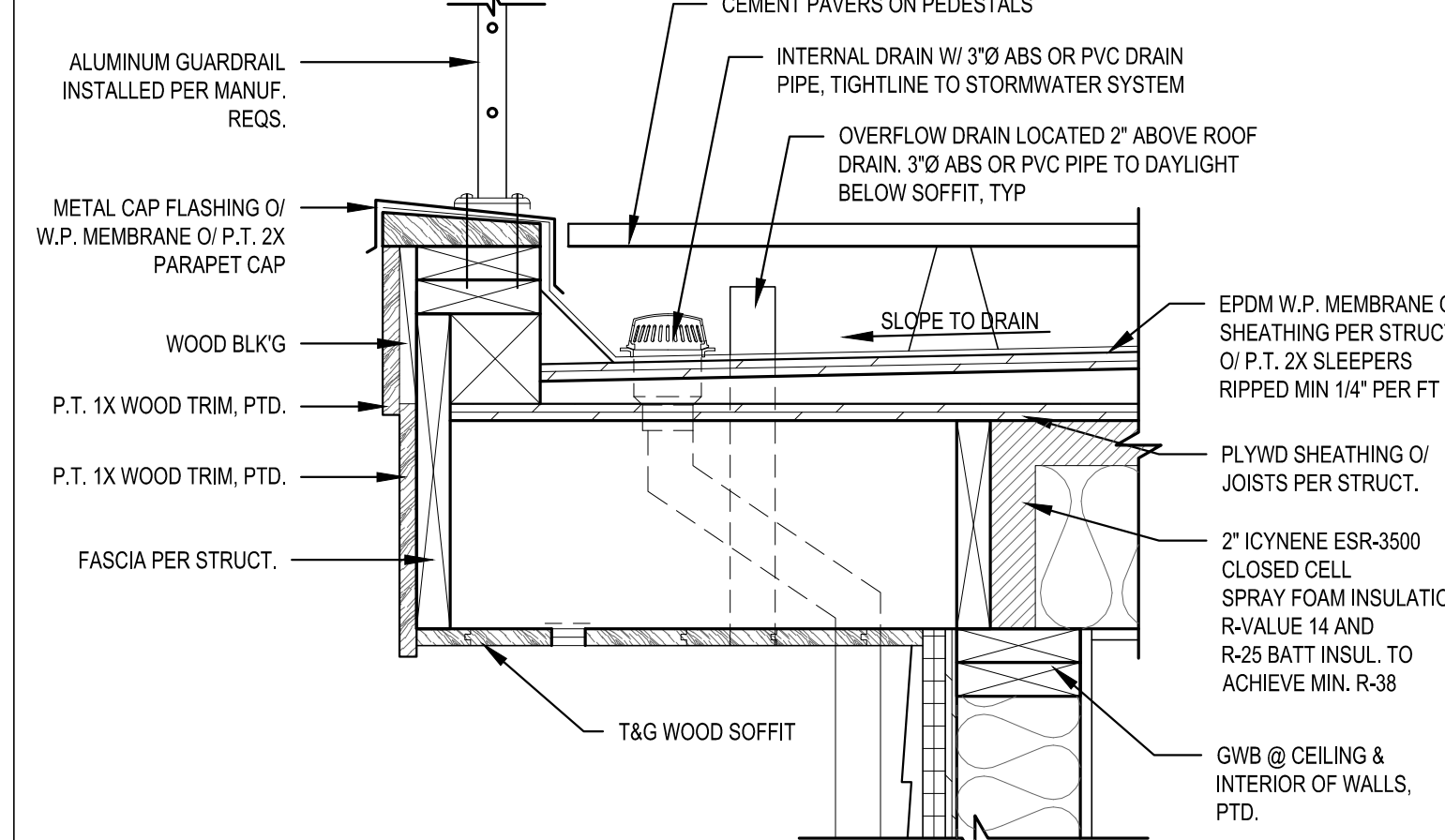
5 TYPICAL WINDOW HEAD DETAIL
SCALE: 3" = 1'-0"
SIM. AT WINDOW JAMB



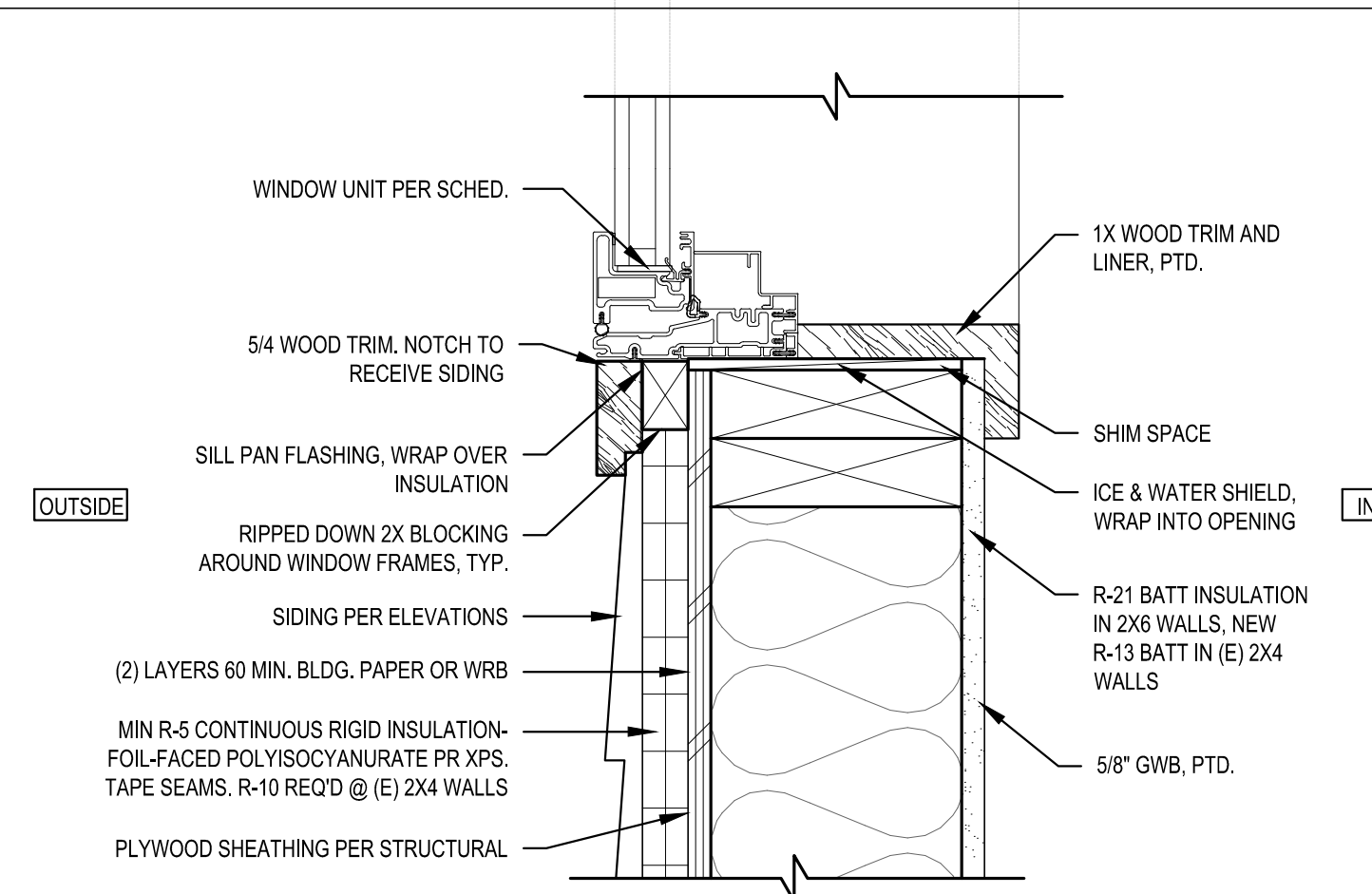
6 TYPICAL VENTED ROOF EAVE DETAIL
SCALE: 1-1/2" = 1'-0"



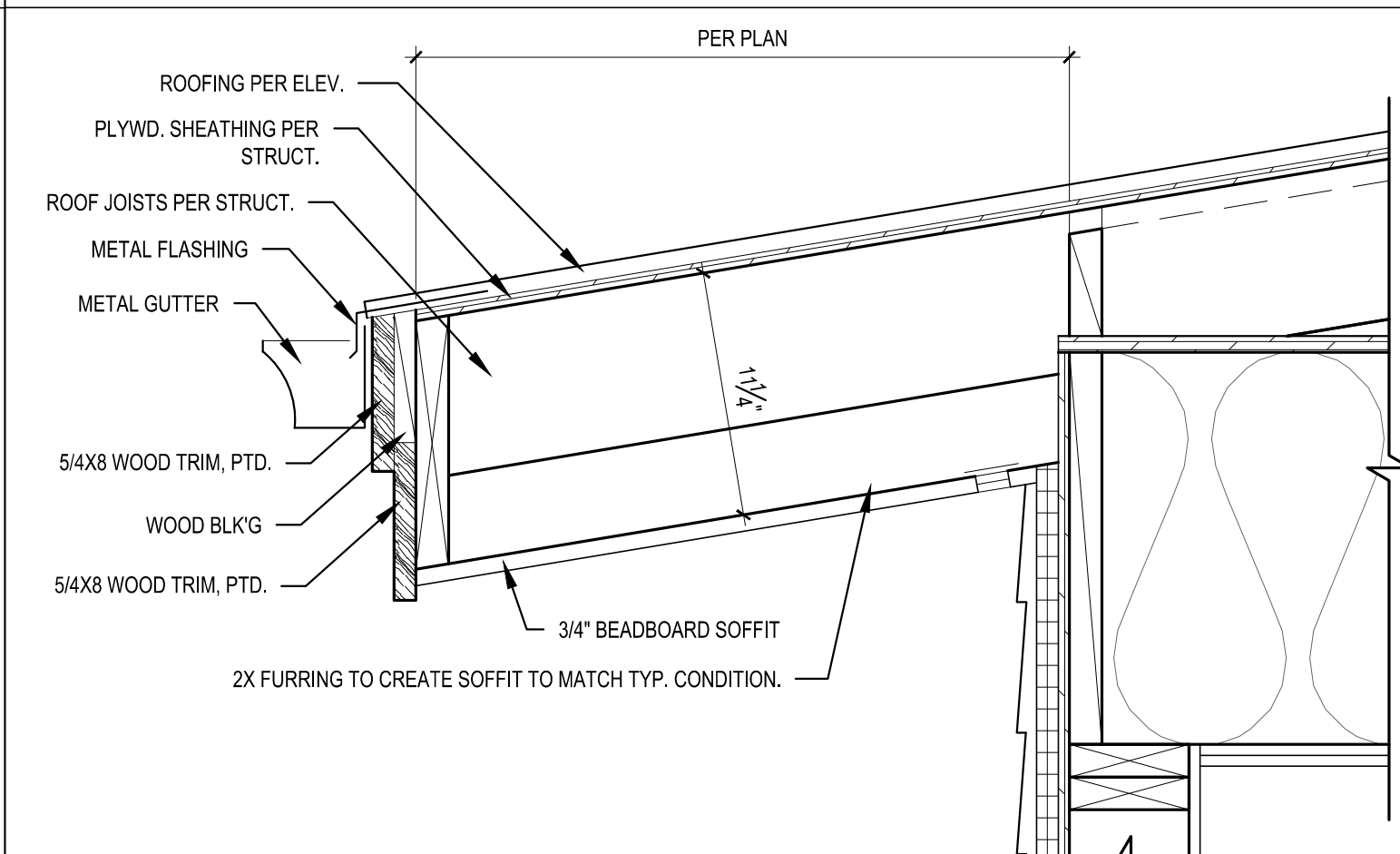
7 TYPICAL ROOF RAKE DETAIL
SCALE: 1-1/2" = 1'-0"



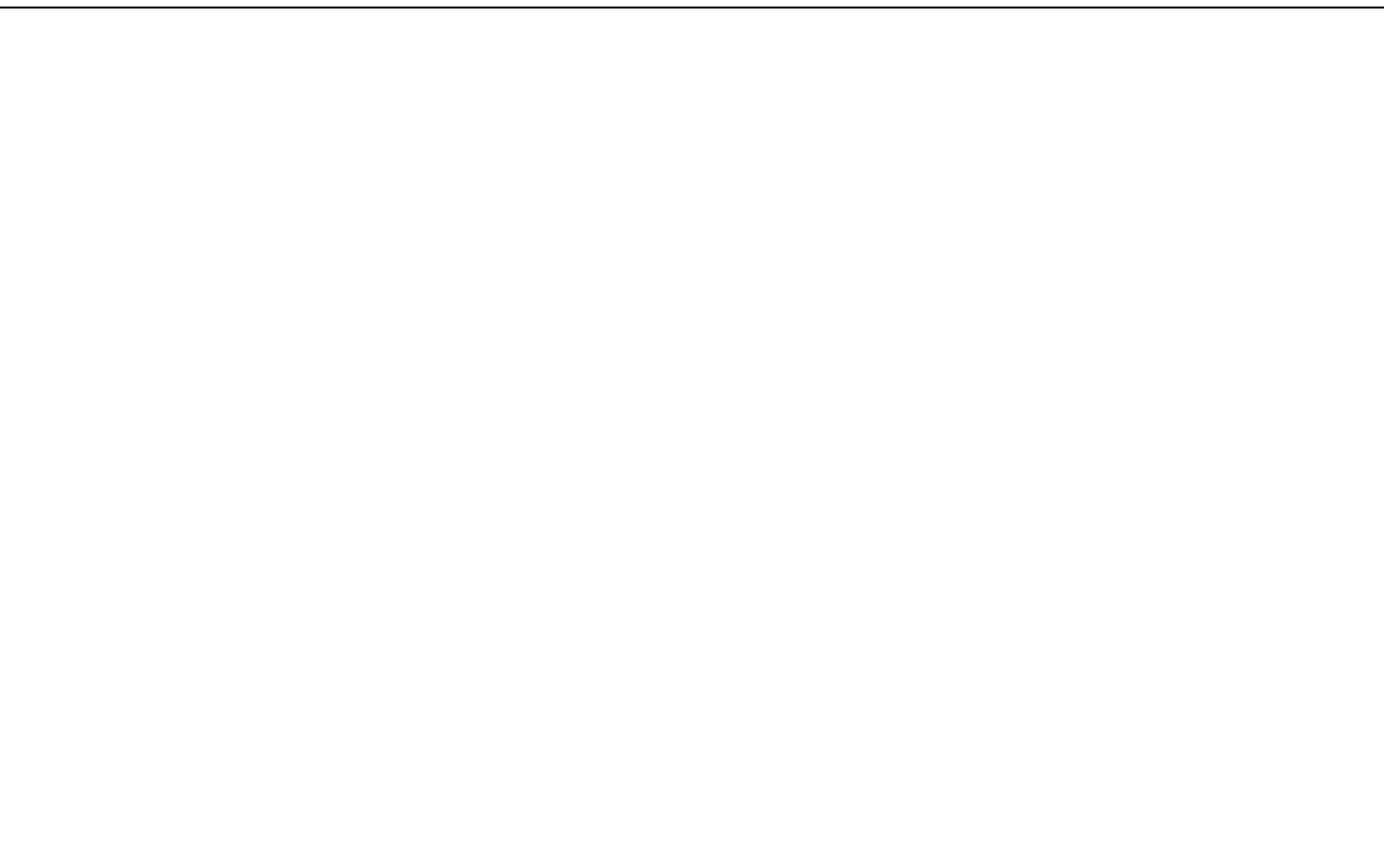
8 GUARDRAIL @ DECK SECTION DETAIL
SCALE: 1-1/2" = 1'-0"



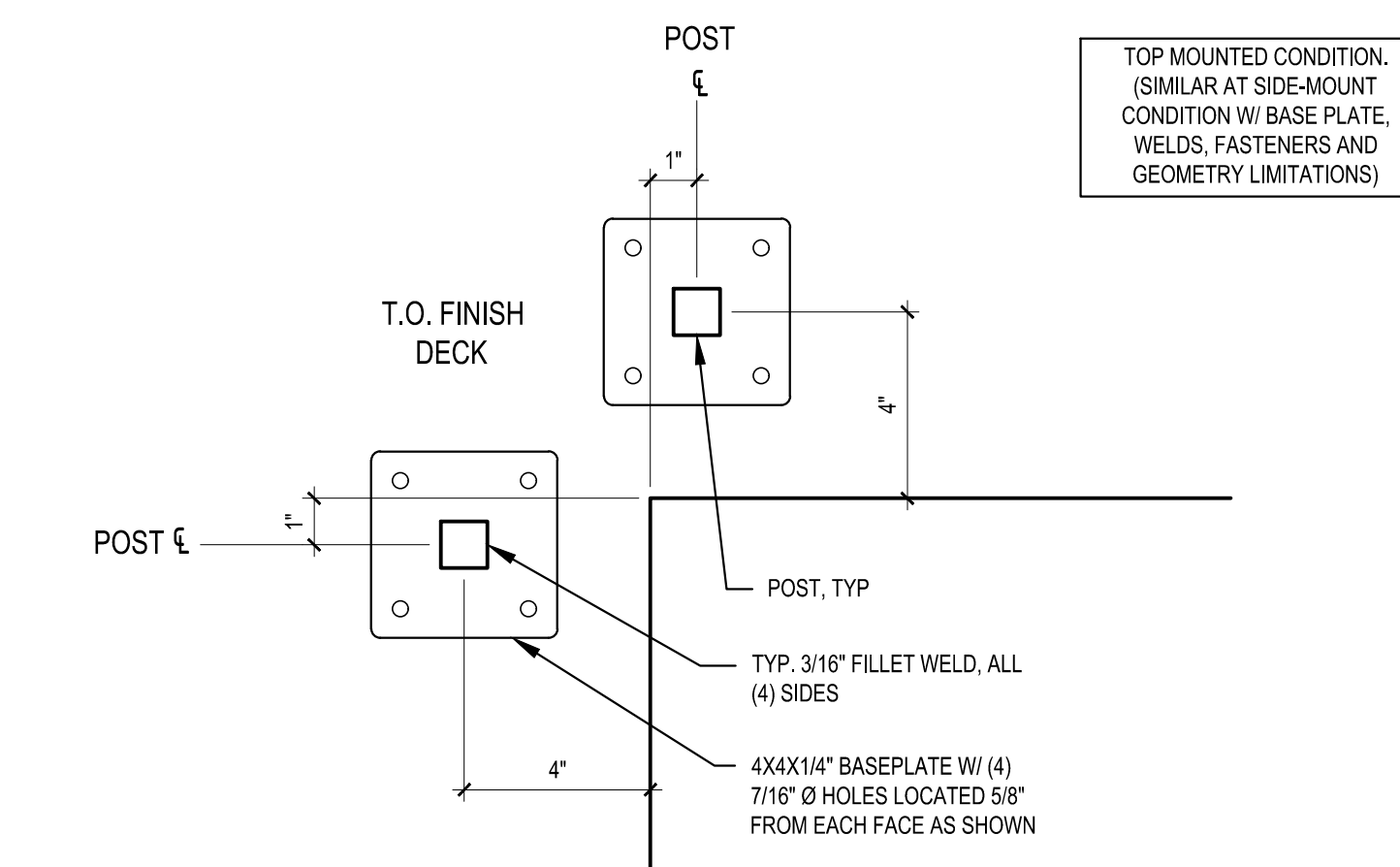
9 TYPICAL WINDOW SILL DETAIL
SCALE: 3" = 1'-0"



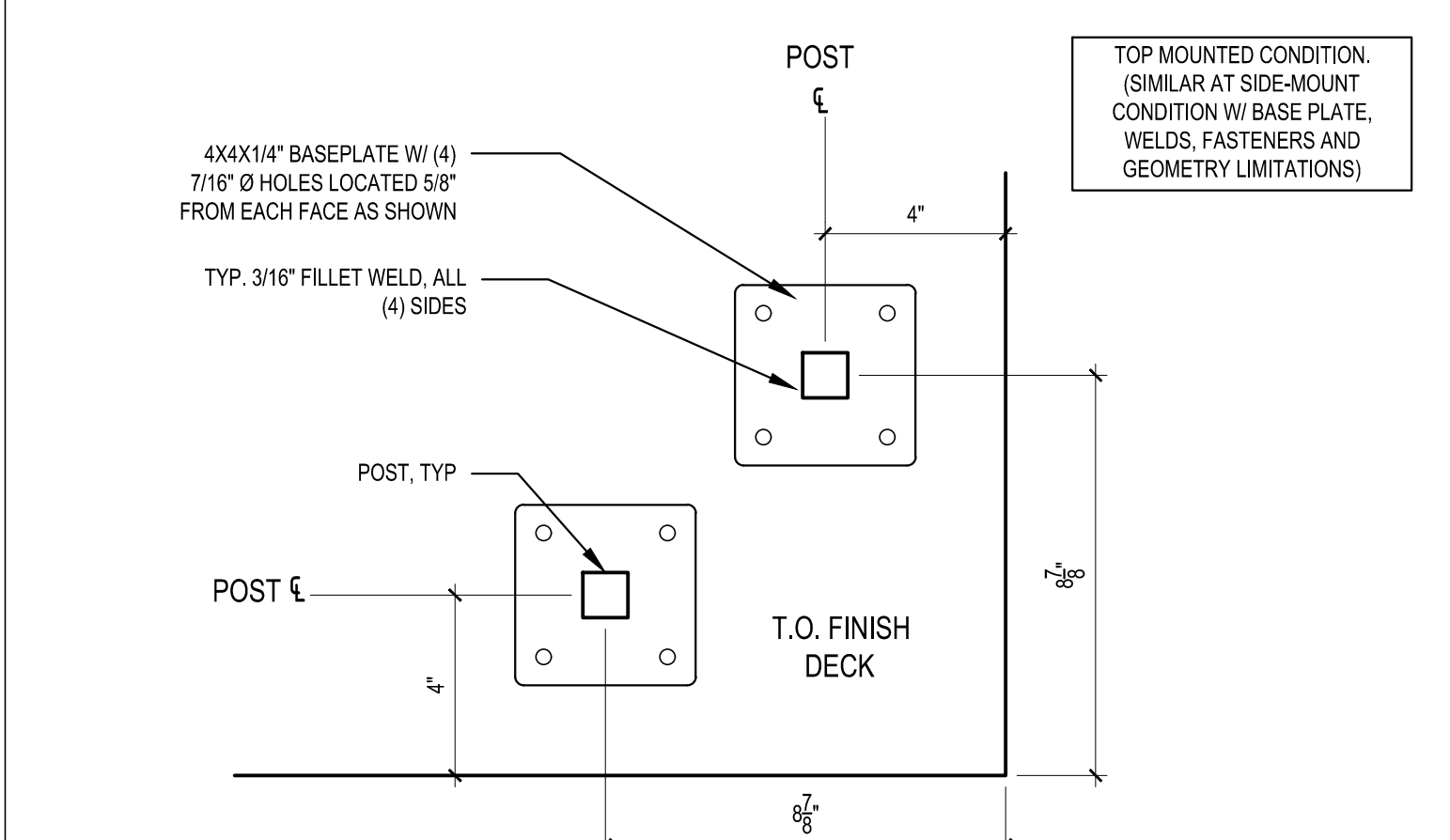
10 TYPICAL FURRED ROOF EAVE DETAIL
SCALE: 1-1/2" = 1'-0"



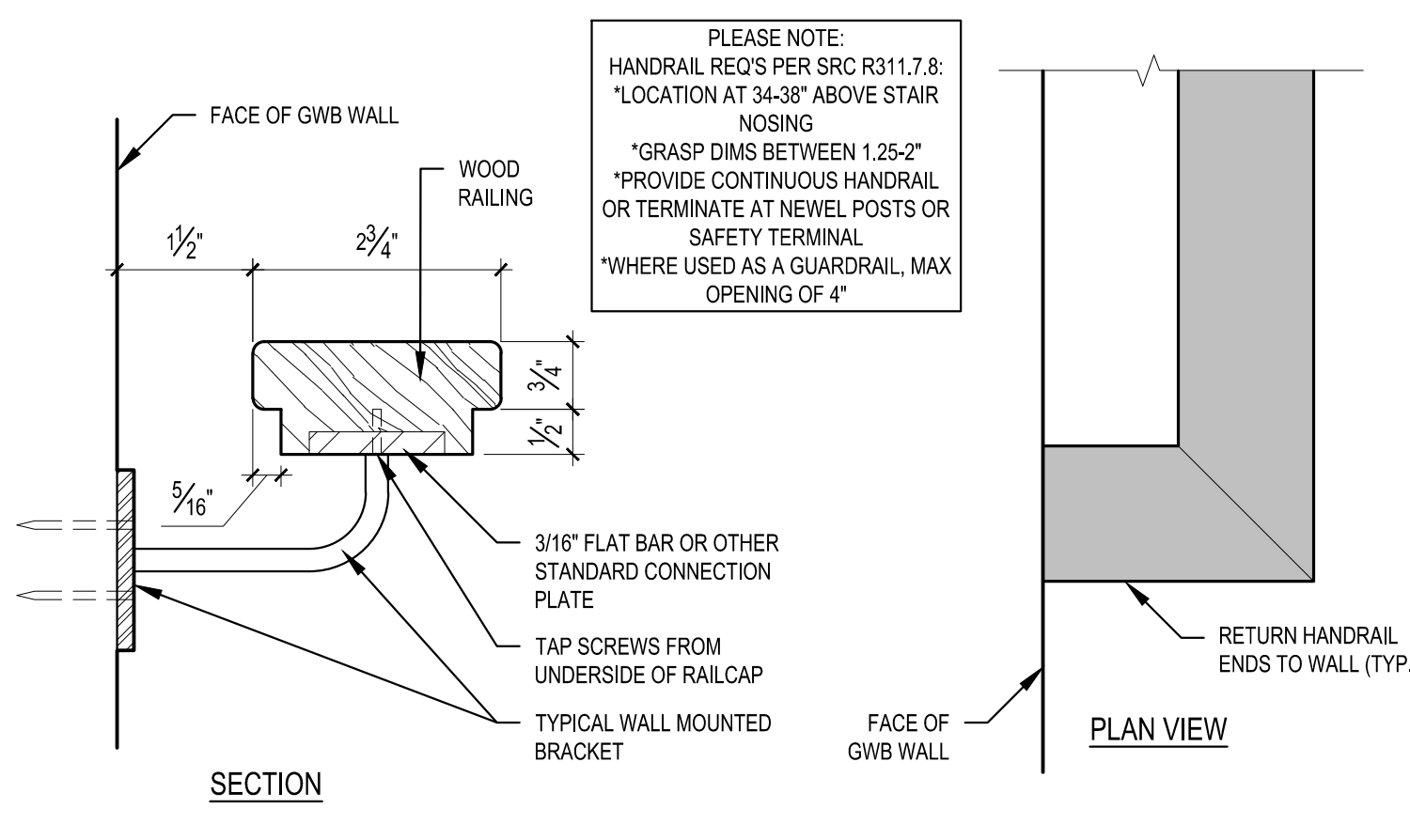
11 NOT USED
SCALE: 1-1/2" = 1'-0"



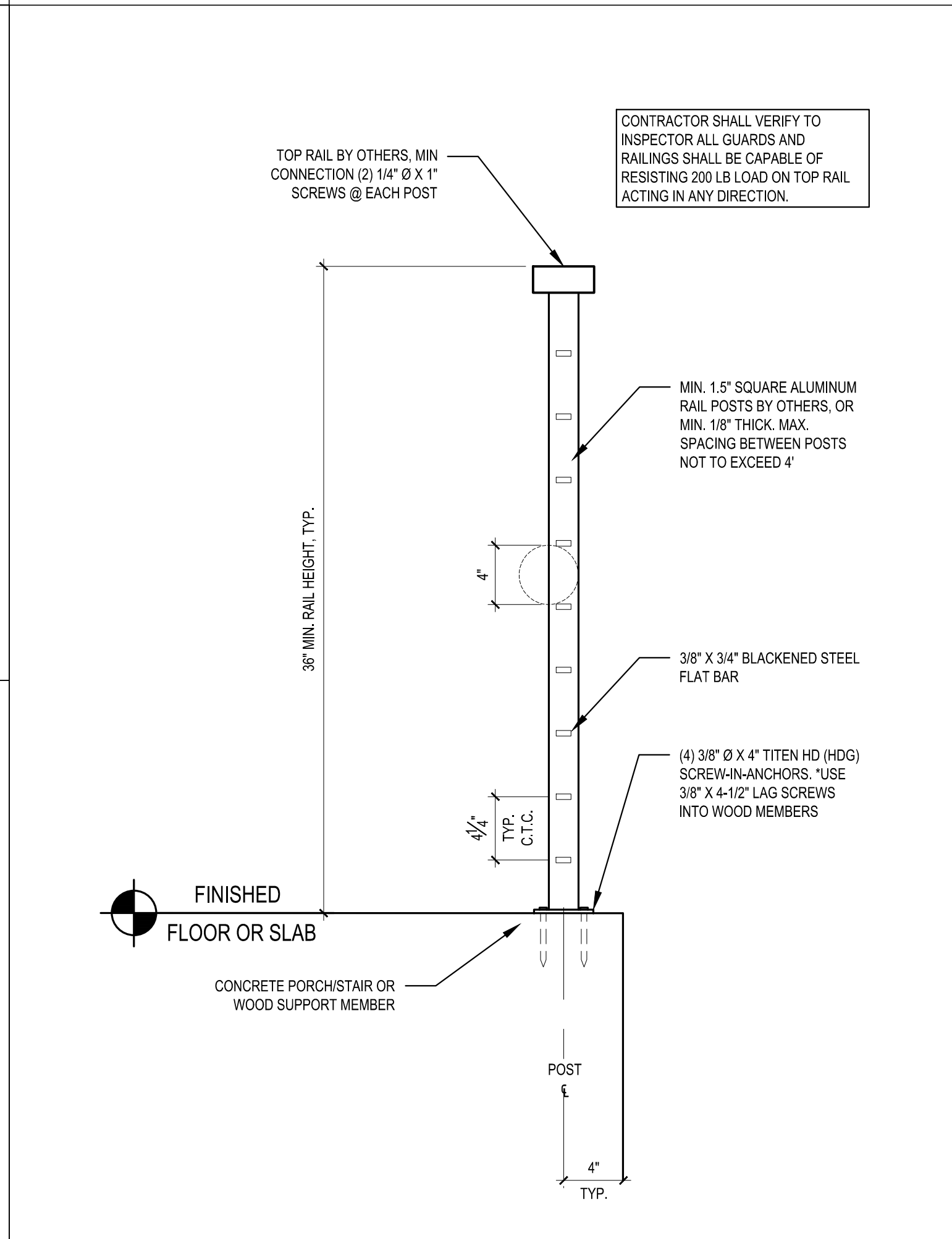
12 GUARDRAIL PLATE ATTACHMENT
SCALE: 3" = 1'-0"
SIM. AT SIDE-MOUNTED



13 GUARDRAIL PLATE ATTACHMENT
SCALE: 3" = 1'-0"
SIM. AT SIDE-MOUNTED

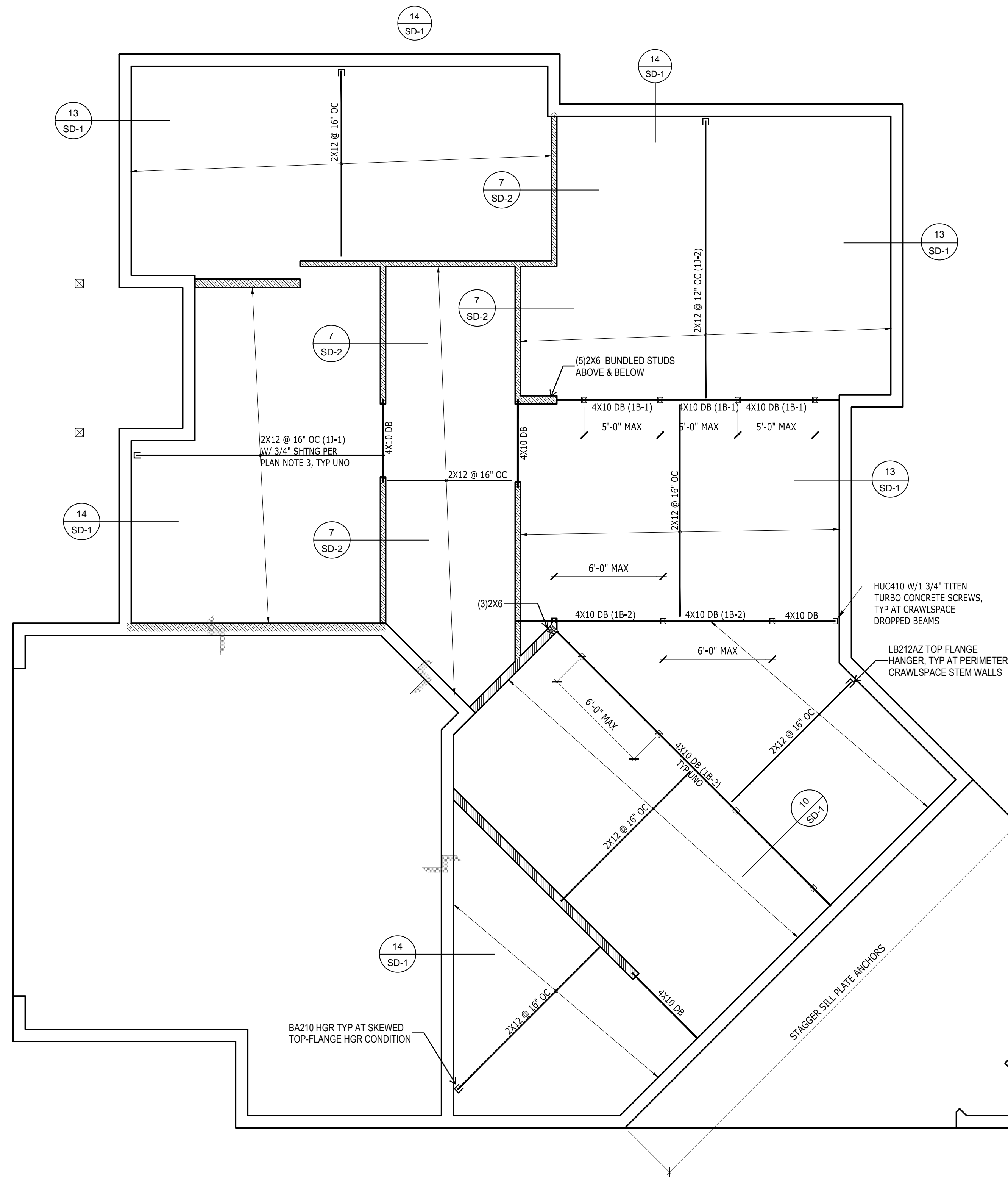


14 TYPICAL HANDRAIL DETAIL
SCALE: 6" = 1'-0"



15 RAILING ATTACHMENT -TOP-MOUNT
SCALE: 1-1/2" = 1'-0"

SCALE: IF SHEET IS LESS THAN 24" X 36", IT IS A REDUCED PRINT, REDUCE SCALE ACCORDINGLY.
PERMIT SET 03/13/25

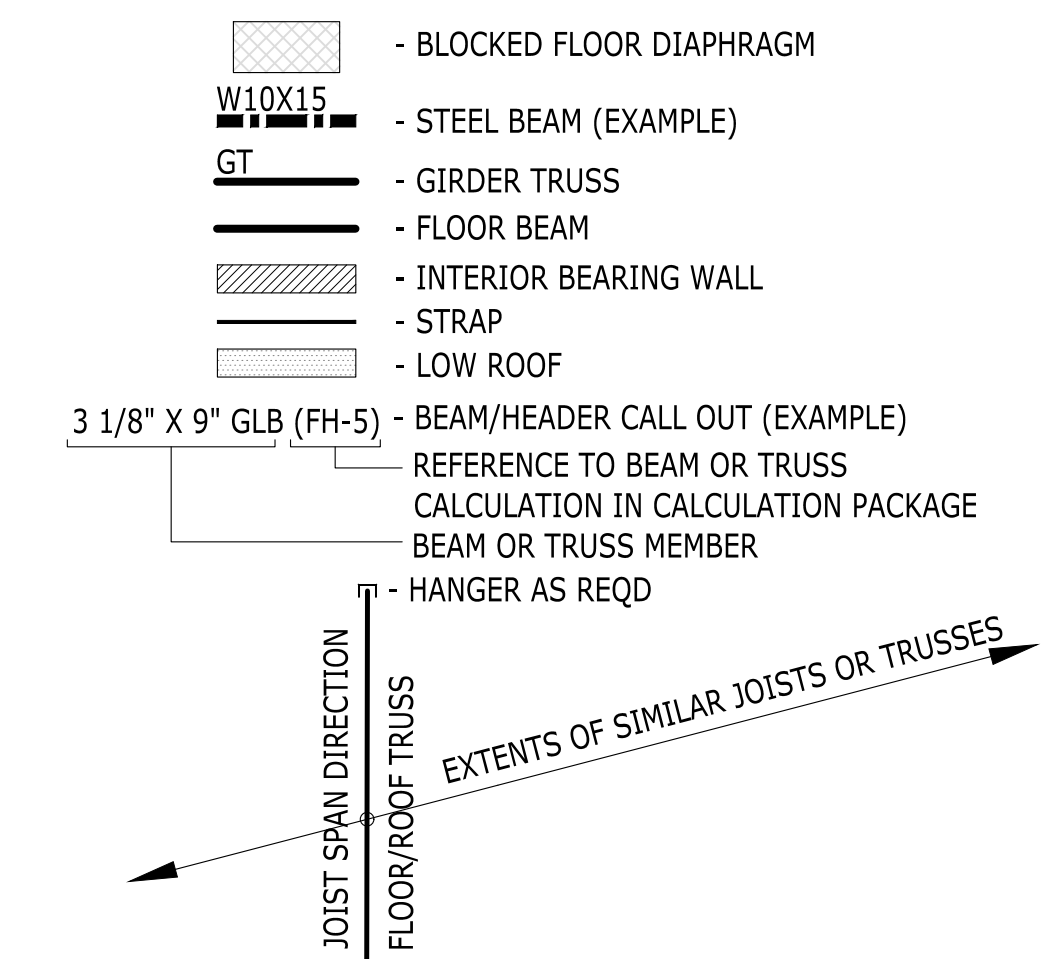


FIRST FLOOR FRAMING PLAN

FLOOR FRAMING NOTES

- GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
- FLOOR SHEATHING PER GENERAL NOTES. ALL SHEATHING TO BE GLUED AND NAILED TO FRAMING PER MANUFACTURER RECOMMENDATIONS. USE 8d COMMON NAILS (0.131" X 2 1/2") @ 6" O.C. AT PANEL EDGES AND AT ALL FRAMING DESIGNATED "WITH EDGE NAILING" OR "W/EN", AND 12" O.C. IN THE FIELD. UNO. PANEL EDGE JOINTS TO BE STAGGERED BETWEEN ADJACENT PANELS OF SHEATHING. PROVIDE GAP BETWEEN PANELS TO ALLOW FOR NATURAL EXPANSION/CONTRACTION (1/8" GAP TYP).
- LOCATE ALL OPENINGS AND PENETRATIONS AND VERIFY NO CONFLICT WITH FLOOR FRAMING. MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS BY OTHERS.
- ALL WOOD LOCATED WITHIN 8" OF FINISHED GRADE, EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL FASTENERS IN CONTACT WITH FIRE-RETARDANT OR PRESSURE-TREATED WOOD SHALL BE COVERED IN PROTECTIVE COATING (I.E. HDG OR SIM).
- ALL BEAMS SHALL BE SUPPORTED BY MIN TWO STUDS BELOW EACH END, UNLESS NOTED OTHERWISE ON PLAN. ALL BEAMS SHALL BE FRAMED FLUSH WITH JOISTS UNO. "DROPPED BEAM" OR "DB" INDICATES T/BEAM EQUAL B/JOISTS. "TOP FLUSH" OR "TF" INDICATES T/BEAM EQUAL T/JOISTS AND B/BEAM EXTENDING BELOW B/JOISTS. "BOTTOM FLUSH" OR "BF" INDICATES B/BEAM EQUAL B/JOISTS AND T/BEAM EXTENDING ABOVE T/JOISTS.
- ALL NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
- STUD QUANTITIES, POST SIZE, HOLDOWN, AND SHEARWALL REQUIREMENTS PER WALL FRAMING AND SHEARWALL PLAN BELOW.
- ALL POSTS ABOVE THE FLOOR FRAMING SHALL BE BLOCKED WITHIN THE FLOOR DEPTH ("VERTICAL GRAIN BLKG", "VERTICAL CRUSH BLKG", OR "VCB"). BLOCKING WIDTH SHALL MATCH WIDTH OF POST OR BUNDLED STUDS ABOVE AND EXTEND FULL FLOOR DEPTH.
- HORIZONTAL STRAPS INDICATED ON FRAMING PLANS SHALL BE CENTERED OVER THE TOP PLATE, BEAM, OR BLOCKING. STRAP LENGTH PER PLAN.
- ALL TIES AND HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
- ENGINEERED FLOOR JOISTS AND FLOOR TRUSSES TO BE DESIGNED BY OTHERS. REFER TO STRUCTURAL GENERAL NOTES FOR SUBMITTAL INFORMATION, AND DESIGN CRITERIA.
- FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
- TYPICAL DETAILS:
 - 9/SD-1 PONY WALL AT CRAWLSPACE
 - 10/SD-1 DROPPED BEAM AND POST AT CRAWLSPACE
 - 12/SD-1 OVERLAP STRAP AT PONY WALL

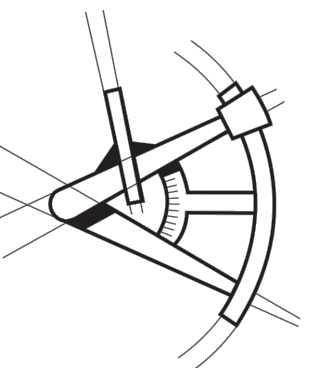
FRAMING LEGEND



TYPICAL JOIST HANGER SCHEDULE			
TJ1210			
11 7/8"	2-PLY 11 7/8"	14"	2-PLY 14"
IUS2.06/11.88	MIU4.28/11	IUS2.06/14	MIU4.28/14
2X10			
1-PLY		2-PLY	
LUS210		LUS210-2	
TYPICAL BEAM HANGER SCHEDULE			
LVL / LSL / PSL			
1 3/4"	3 1/2"	5 1/4"	7"
11 7/8"	HUS1.81/10	HHUS410	HGUS5.50/12 HGUS7.25/12
14"	HUS1.81/10	HHUS410	HGUS5.50/14 HGUS7.25/14



LONGITUDE
ONE TWENTY[®]
ENGINEERING & DESIGN



REVISIONS

DESCRIPTION	DATE	BY

PROJECT NAME

FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER

S240325-1

DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE

24X36 SHEET: 1/4" = 1'-0"

FIRST FLOOR FRAMING PLAN

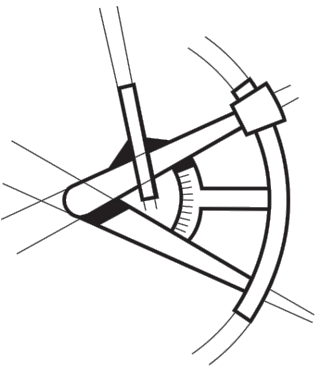
DESCRIPTION

S-3

SHEET



LONGITUDE
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ENGINEERING & DESIGN



REVISIONS

Δ	DESCRIPTION	DATE	BY

PROJECT NAME

FOREST CREEK ESTATES
LOT 1
5222 FOREST AVE SE
MERCER ISLAND, WA 98040

PROJECT NUMBER

S240325-1

DRAWN BY - MR

CHECKED BY - MRT

SHEET DATE - 05/16/2024

SCALE

24X36 SHEET: 1/4" = 1'-0"

DESCRIPTION

FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN

SHEET **S-4**

WALL FRAMING AND SHEAR WALL NOTES

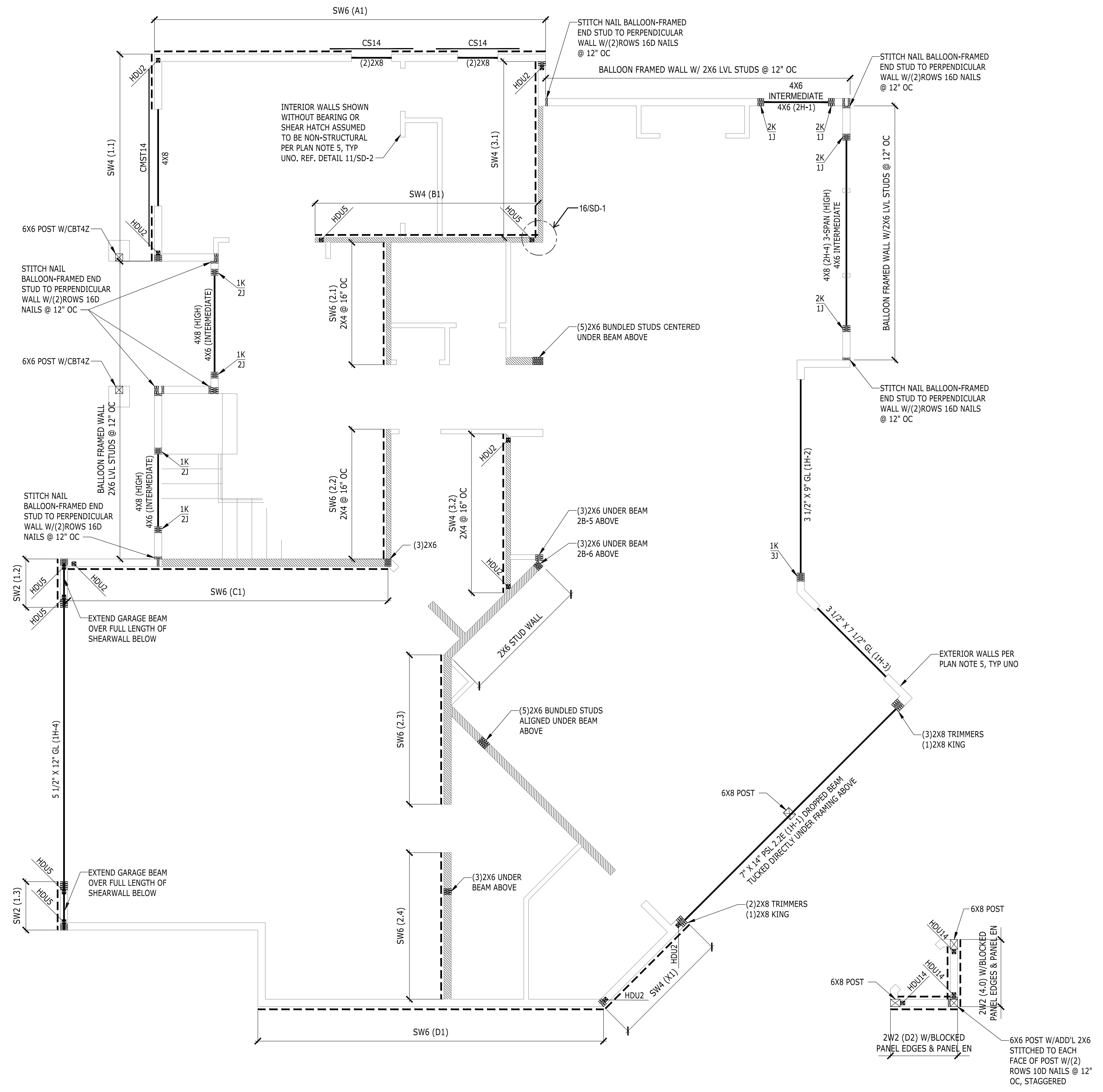
- GENERAL STRUCTURAL NOTES AND ABBREVIATIONS PER SHEET S-1.
- VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCH.
- LUMBER GRADE PER GENERAL STRUCTURAL NOTES.
- ALL BUNDLED STUDS SPECIFIED PER PLAN SHALL BE CONNECTED TOGETHER WITH 16d @ 6" O.C.
- EXTERIOR WALL STUDS SHALL BE 2X6 @ 16" O.C. (≤10'), 2X6 @ 12" O.C. (>10') UNO. INTERIOR WALL STUDS SHALL BE 2X4 @ 16" O.C. UNO. REFER TO ARCH SET FOR WALL THICKNESS REQUIREMENTS AT PLUMBING STACKS. ALL INTERIOR NON-BEARING WALLS TO BE FRAMED MIN 0.25" UNDER FLOOR SYSTEM.
- PROVIDE ONE KING STUD AND ONE JACK STUD MINIMUM AT EVERY HEADER UNO. JACK STUDS SHOULD BE CONTINUOUS TO THE FOUNDATION AND SHALL HAVE VERTICAL CRUSH BLOCKING WITHIN THE FLOOR FRAMING DEPTH MATCHING THE WIDTH OF JACK STUDS.
- SHEARWALL SHEATHING AND NAILING REQUIREMENTS PER SHEARWALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE TYPE SW6 UNO.
- ALL SHEATHING PANEL EDGES TO OCCUR OVER STUDS, PLATES, RIMS OR HORIZONTAL BLOCKING. PANEL EDGE NAILING PER SHEARWALL SCHEDULE, FIELD NAILING AT 12" O.C. UNO.
- PROVIDE MIN TWO 2X STUDS AT EACH END OF SHEARWALL UNO. PROVIDE PANEL EDGE NAILING INTO EACH STUD AT END OF WALL.
- SHEARWALL PANEL EDGE STUDS INDICATE THE MINIMUM STUD WIDTH AT ABUTTING PANEL EDGES. TWO 2X STUDS ARE AN ACCEPTABLE ALTERNATE FOR 3X STUDS. TWO 2X STUDS ARE TO BE NAILED TOGETHER WITH TWO ROWS 10d NAILS AT 6" O.C. (4" O.C. @ SW2 AND 2W2). AT DOUBLE SIDED SHEARWALLS VERTICAL PANEL EDGES TO BE STAGGERED ON OPPOSITE SIDES OF THE WALL EXCEPT END OF SHEARWALL.
- LTP4 INSTALLED OVER PLYWOOD SHALL USE 8d COMMON NAILS (.1310 X 2.5") LTP4 INSTALLED DIRECTLY AGAINST FRAMING MAY USE 8d SHORT (.131 X 1.5") RBC INSTALLED DIRECTLY AGAINST FRAMING USE 10d SHORT (.148 X 1.5").
- WINDOW STRAP INDICATES THAT A WINDOW IS INCORPORATED WITHIN THE SHEAR WALL. REFER TO FORCE-TRANSFER AROUND OPENING DETAIL FOR FRAMING REQUIREMENTS.
- STHD HOLDOWNS ARE DIMENSIONED TO CENTER OF STRAP. HDU/HD HOLDOWNS ARE DIMENSIONED TO CENTER OF ANCHOR BOLT.
- SILL ANCHOR BOLTS (J-BOLTS) SHALL BE ASTM F1554 (36KSI) HDG, ASTM A307 (36KSI) HDG OR SIM. ANCHOR BOLTS TO BE 5/8" Ø X 7" MIN EMBEDMENT. SPACING PER SHEARWALL SCHEDULE (72" O.C. MAX). EACH ANCHOR BOLT TO HAVE STANDARD HDG NUT AND WASHER INSTALLED OVER 3" X 3" X 1/4" HDG PLATE WASHER WITH AND EDGE OF THE PLATE WASHER LOCATED WITHIN 1/2" OF SHEATHED FACE OF WALL. FOR TWO-SIDED SHEARWALLS W/ 2X6 WALL FRAMING USE 4X4X1/4" PLATE WASHERS OR STAGGER ANCHOR BOLTS SO THAT EVERY OTHER PLATE WASHER IS LOCATED WITHIN 1/2" OF EACH FACE OF THE WALL.
- ALL HANGERS TO BE MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ALTERNATIVE SOLUTIONS SHALL BE SUBMITTED TO EOR FOR APPROVAL PRIOR TO INSTALLATION. REFER TO TYPICAL HANGER SCHEDULE FOR HANGER SIZE UNO ON PLAN OR DETAILS.
- FIRE-PROOFING AND MOISTURE-PROOFING REQUIREMENTS BY OTHERS.
- TYPICAL DETAILS:

- 11/SD-1 TYP HOLDOWN INSTALLATION
- 12/SD-1 TYP PONY WALL DETAIL
- 16/SD-1 HOLDOWN AT CORNER WALLS
- 17/SD-1 HDU HOLDOWN FLOOR-TO-FLOOR
- 11/SD-2 FRAMING OVER NON-BEARING WALL
- 16/SD-2 WALL TOP PLATES SPLICE

- 1/SD-2 TYP NOTCHES AND HOLES IN WOOD STUDS
- 2/SD-2 FORCE-TRANSFER AROUND WINDOWS DETAIL
- 3/SD-2 TYP HEADER FRAMING

FRAMING AND SHEATHING LEGEND

- HOLDOWN BY SIMPSON (STHD/MST/HDU/HD, TYP)
- INTERIOR BEARING WALL
- #K #J - INDICATES THE NUMBER OF KING AND JACK STUDS
- INDICATES SHEARWALL LOCATION (SW# - SHEAR WALL MARK)
- CS16 - HORIZONTAL STRAP (EXAMPLE)
- HEADER
- SW6 (A.1) - SHEAR WALL CALLOUT
REFERENCE TO WALL DESIGNATION IN THE CALCULATION PACKAGE
REFERENCE TO SHEAR WALL TYPE PER SHEAR WALL SCHEDULE
- EXAMPLE
- 3 1/8" X 9" GLB (FH-5) - EXAMPLE
REFERENCE TO BEAM OR TRUSS CALCULATION IN CALCULATION PACKAGE
BEAM OR TRUSS MEMBER

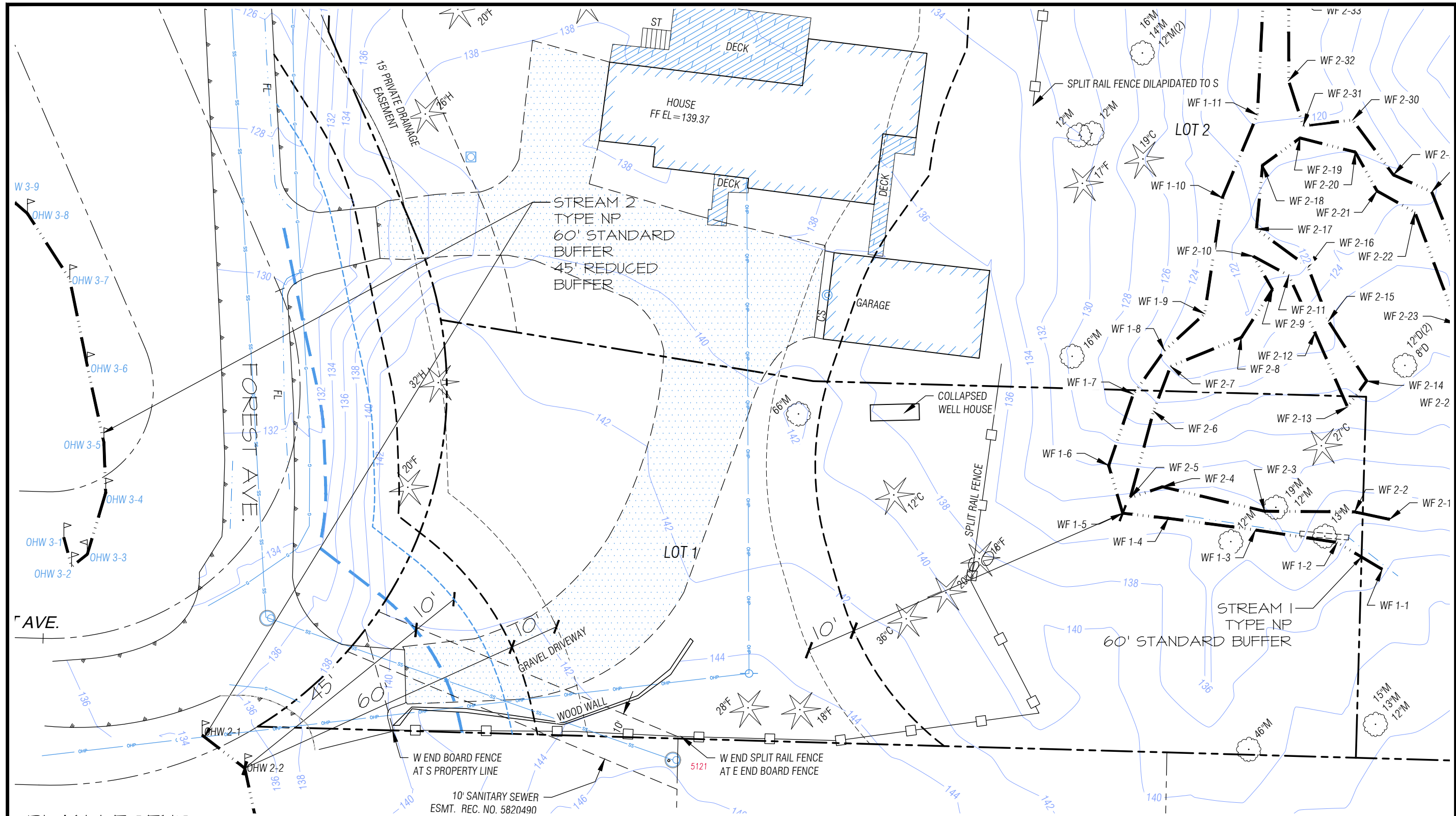


FIRST FLOOR WALL FRAMING AND SHEAR WALL PLAN

SHEAR WALL SCHEDULE

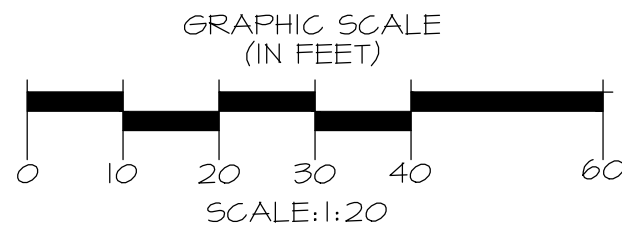
WALL	SHEATHING	PANEL EDGE NAILING (COMMON (GALV) NAILS)	PANEL EDGE STUDS	ANCHOR BOLTS 5/8" Ø EMBED 7"	RIM CONNECTION		
					AT MUD SILL/ PLATE	AT ROOF EAVE TOP PLATE	AT SILL PLATE (SINKER NAIL .1480 x 3 1/4")
SW6	7/16" APA PLY ONE SIDE	8d AT 6" O.C.	2x	48" O.C. IN 2x PLATE	LTP4 AT 24" O.C.	RBC AT 16" O.C.	16d AT 6" O.C.
SW4	7/16" APA PLY ONE SIDE	8d AT 4" O.C.	2x	32" O.C. IN 2x PLATE	LTP4 AT 16" O.C.	RBC AT 12" O.C.	16d AT 4" O.C.
SW3	7/16" APA PLY ONE SIDE	8d AT 3" O.C.	3x	16" O.C. IN 2x PLATE	LTP4 AT 16" O.C.	RBC AT 8" O.C.	16d AT 3" O.C.
SW2	7/16" APA PLY ONE SIDE	8d AT 2" O.C.	3x	12" O.C. IN 2x PLATE	LTP4 AT 12" O.C.	RBC AT 8" O.C.	16d AT 2" O.C.
2W4	7/16" APA PLY TWO SIDES	8d AT 4" O.C. EA SIDE	3x	24" O.C. IN 3x PLATE	LTP4+A35 @ 16" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 4" O.C.
2W3	7/16" APA PLY TWO SIDES	8d AT 3" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	LTP4+A35 @ 16" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 3" O.C.
2W2	7/16" APA PLY TWO SIDES	8d AT 2" O.C. EA SIDE	3x	16" O.C. IN 3x PLATE	LTP4+A35 @ 12" O.C. EA SIDE	N.A. AT ROOF EAVE	(2) ROWS 16d AT 2" O.C.

NOTES: 1) FOR NON-SHEAR WALL, PROVIDE ANCHOR BOLTS @ 72" O.C.



PLAN LEGEND

- PROPERTY LINE
- OHW TYPE NP STREAMS
- 60' STANDARD BUFFER
- 45' REDUCED BUFFER FOR STREAM 2
- 10' STRUCTURE SETBACK
- 10' STRUCTURE SETBACK FOR REDUCED BUFFER



NOTES

- I. BASE INFORMATION PROVIDED BY MEAD GILMAN LAND SURVEYORS P.O. BOX 289, WOODINVILLE, WA 98072, 425.486.1252

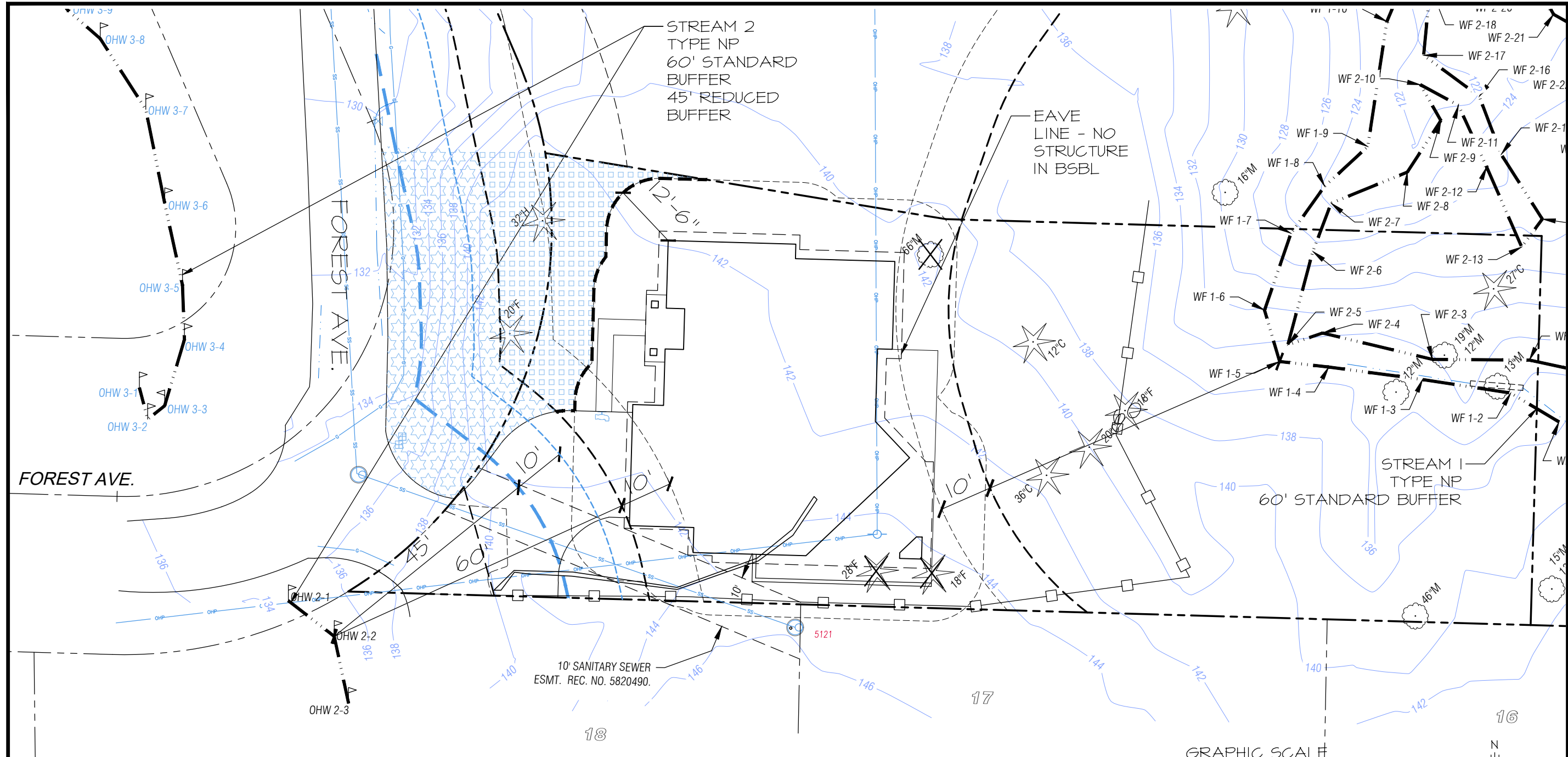
PROJECT	6656
DRAWN	SO
SCALE	AS NOTED
DATE	8-23-24
REVISION	1/5
	01-27-25

FIGURE 1: EXISTING CONDITIONS
 SEASCOPE HOMES
 FOREST AVE - BUFFER MITIGATION PLAN
 MERCER ISLAND, WASHINGTON
 PARCEL 1410300057

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 Cannon, WA 98014
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6656-MIT-01-27-25.dwg



STREAM 2
TYPE NP
60' STANDARD
BUFFER
45' REDUCED
BUFFER

EAVE
LINE - NO
STRUCTURE
IN BSBL

STREAM 1
TYPE NP
60' STANDARD BUFFER

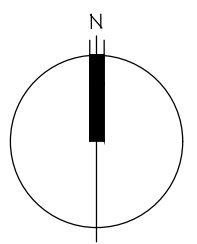
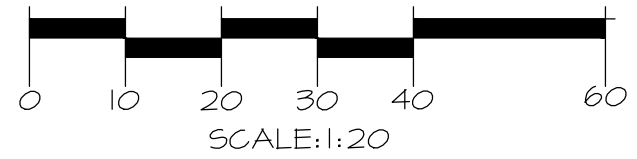
PLAN LEGEND

- PROPERTY LINE
- - - - - OHW TYPE NP STREAMS
- - - - - 60' STANDARD BUFFER
- - - - - 45' REDUCED BUFFER
- - - - - PROPOSED BUFFER
- - - - - 10' STRUCTURE SETBACK
- - - - - 10' STRUCTURE SETBACK FOR REDUCED BUFFER

MITIGATION LEGEND

- BUFFER ENHANCEMENT - HAND REMOVE HIMALAYAN BLACKBERRY AND ENGLISH IVY AROUND EXISTING SNOWBERRY, SWORD FERN, TALL OREGON GRAPE, AND DOUGLAS FIR. REPLANT AT 75% PLANTING DENSITY 1,375 SF
- BUFFER REPLACEMENT WITH ENHANCEMENT - PLANT AT 100% PLANTING DENSITY 934 SF

GRAPHIC SCALE
(IN FEET)



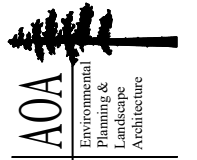
NOTES

- I. BASE INFORMATION PROVIDED BY MEAD GILMAN LAND SURVEYORS P.O. BOX 289, WOODINVILLE, WA 98072, 425.486.1252

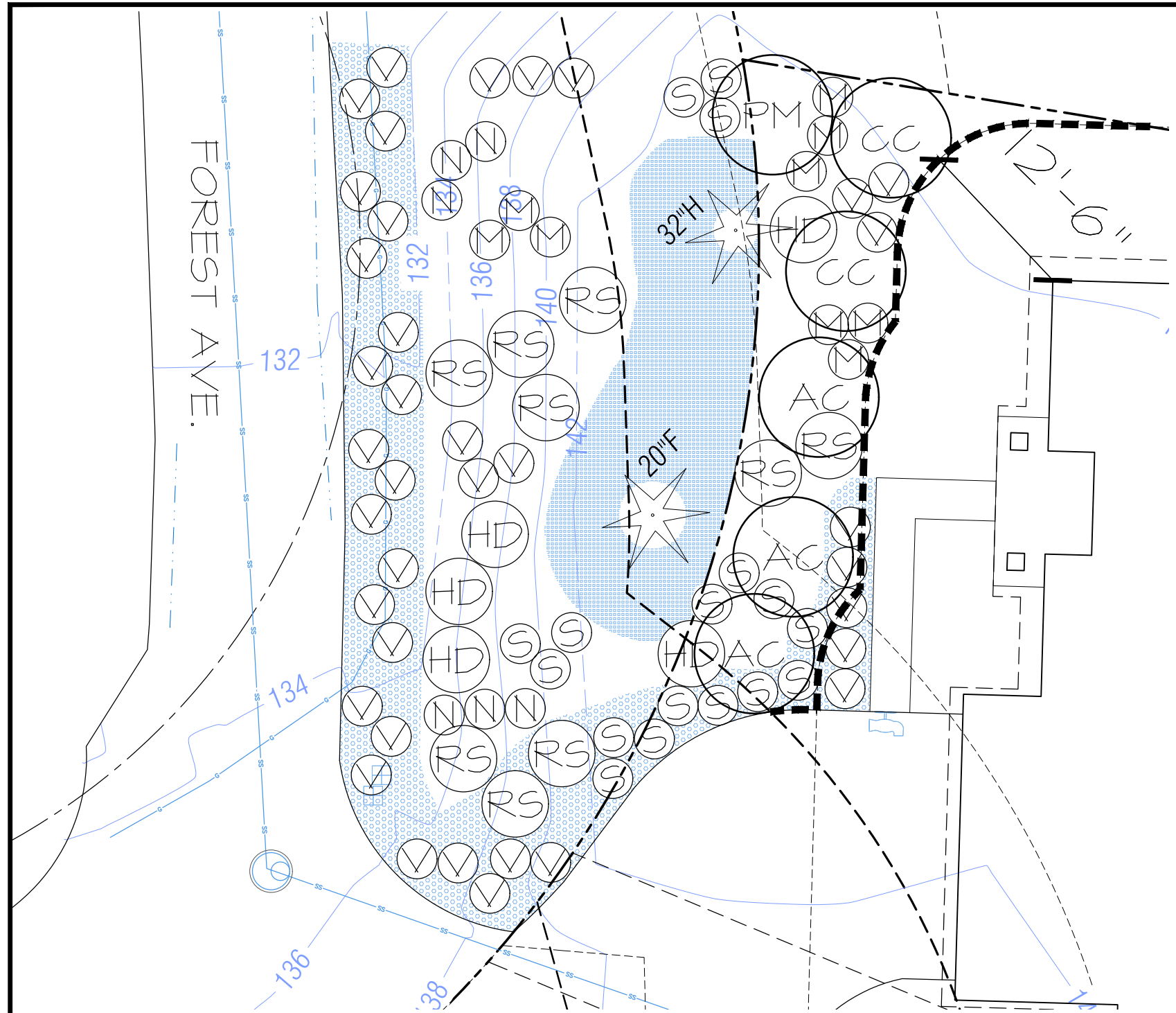
PROJECT	6656
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SCALE	AS NOTED
DATE	8-23-24
REVISED	01-27-25

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FIGURE 2: SITE PLAN
SEASCAPE HOMES
FOREST AVE - BUFFER MITIGATION PLAN
MERCER ISLAND, WASHINGTON
PARCEL 1410300057



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PLANT LIST (SEE FIGURE 4 FOR SCHEDULE)

TREES

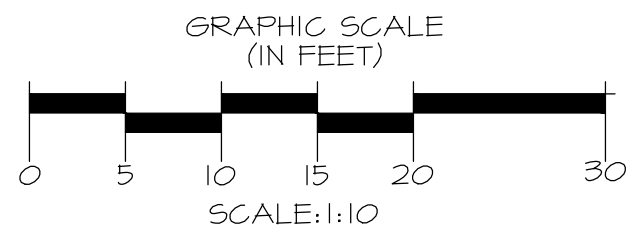
KEY	COMMON NAME
AC	VINE MAPLE
CC	WESTERN HAZELNUT
PM	DOUGLAS FIR
RP	CASCARA

SHRUBS

KEY	COMMON NAME
HD	OCEAN SPRAY
M	TALL OREGON GRAPE
RS	RED FLOWERING CURRANT
N	NOOTKA ROSE
S	SNOWBERRY
V	EVERGREEN HUCKLEBERRY

GROUND COVER

KEY	COMMON NAME
	COAST STRAWBERRY
	SALAL

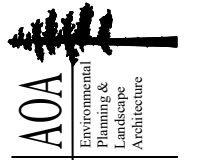


NOTES

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DRAWN	SO	PROJECT	6656
SCALE	AS NOTED	DATE	8-23-24
DATE	8-23-24	REVISION	01-27-25
			2/5

FIGURE 2: SITE PLAN
SEASCAPE HOMES
FOREST AVE - BUFFER MITIGATION PLAN
MERCER ISLAND, WASHINGTON
PARCEL 1410300057



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PLANT SCHEDULE

TREES

KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY	SIZE (MIN.)	NOTES
AC	ACER CIRCINATUM	VINE MAPLE	9' O.C.	3	2 GAL.	MULTI-STEM (3 MIN.)
CC	CORYLUS CORNUTA	WESTERN HAZELNUT	9' O.C.	2	2 GAL.	MULTI-STEM (3 MIN.)
PM	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	9' O.C.	1	2 GAL.	FULL & BUSHY

SHRUBS

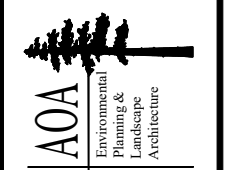
KEY	SCIENTIFIC NAME	COMMON NAME	SPACING	QTY	SIZE (MIN.)	NOTES
HD	HOLODISCUS DISCOLOR	OCEAN SPRAY	5' O.C.	7	1 GAL.	MULTI-STEM (3 MIN.)
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	3' O.C.	12	1 GAL.	FULL & BUSHY
RS	RIBES SANUINEUM	RED FLOWERING CURRANT	5' O.C.	12	1 GAL.	MULTI-STEM (3 MIN.)
N	ROSA NUTKANA	NOOTKA ROSE	3' O.C.	9	1 GAL.	MULTI-STEM (3 MIN.)
S	SYMPHORICARPOS ALBUS	SNOWBERRY	3' O.C.	20	1 GAL.	MULTI-STEM (3 MIN.)
V	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	3' O.C.	37	1 GAL.	FULL & BUSHY

GROUND COVER

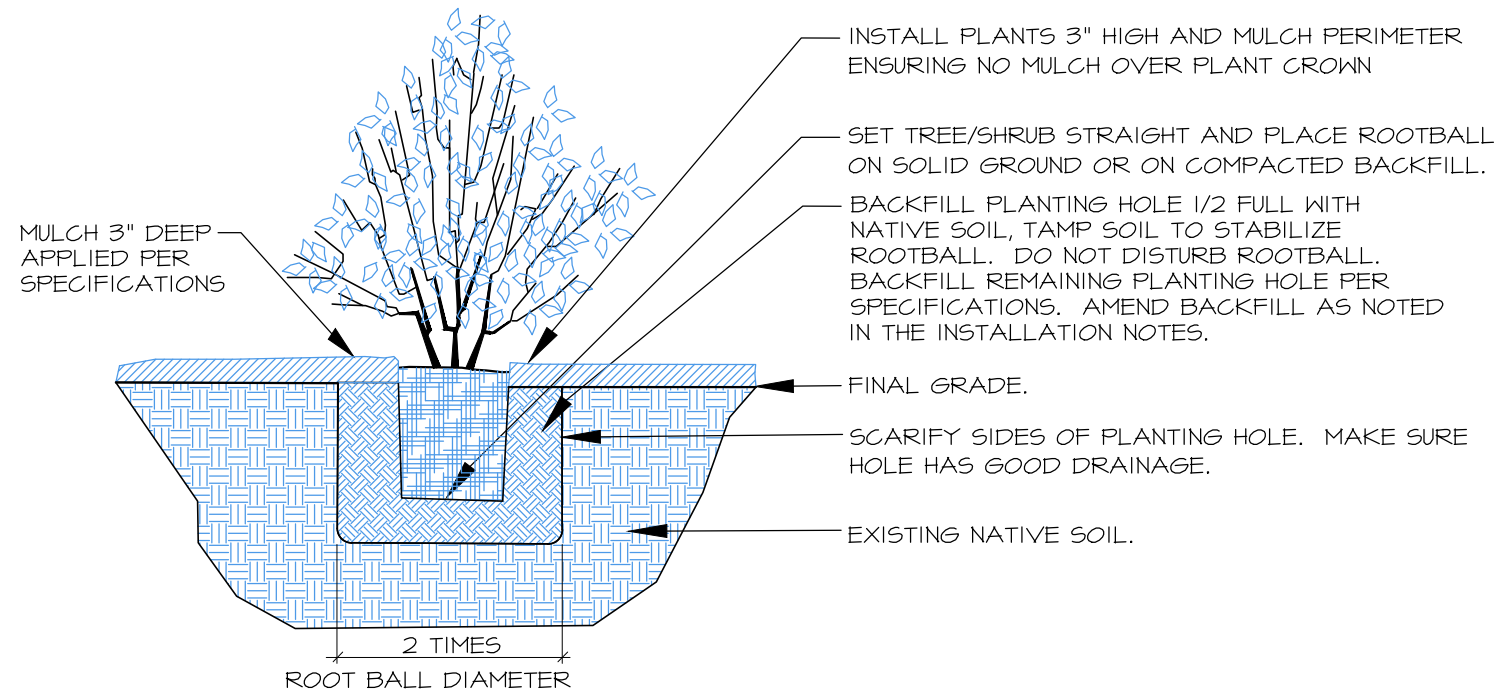
KEY	SCIENTIFIC NAME	COMMON NAME	DENSITY	QTY	SIZE (MIN.)	NOTES
	FRAGARIA CHILOENSIS	COAST STRAWBERRY	2' O.C.	75	1 GAL.	FULL & BUSHY
	GAULTHERIA SHALLON	SALAL	2' O.C.	35	1 GAL.	FULL & BUSHY

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PROJECT	6656			4/5	

FIGURE 4: PLANT SCHEDULE
 SEASCAPE HOMES
 FOREST AVE - BUFFER MITIGATION PLAN
 MERCER ISLAND, WASHINGTON
 PARCEL 1410300057



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INSTALL PLANTS 3" HIGH AND MULCH PERIMETER ENSURING NO MULCH OVER PLANT CROWN

SET TREE/SHRUB STRAIGHT AND PLACE ROOTBALL ON SOLID GROUND OR ON COMPACTED BACKFILL.

BACKFILL PLANTING HOLE 1/2 FULL WITH NATIVE SOIL, TAMP SOIL TO STABILIZE ROOTBALL. DO NOT DISTURB ROOTBALL. BACKFILL REMAINING PLANTING HOLE PER SPECIFICATIONS. AMEND BACKFILL AS NOTED IN THE INSTALLATION NOTES.

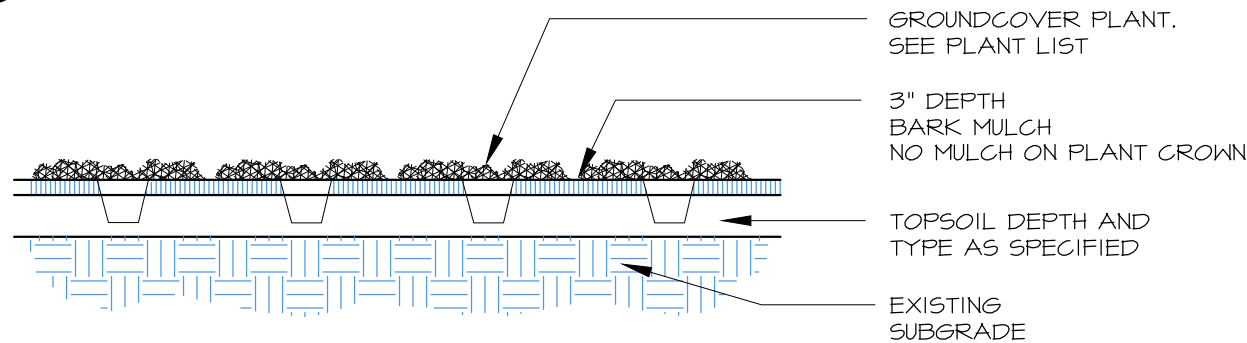
FINAL GRADE.

SCARIFY SIDES OF PLANTING HOLE. MAKE SURE HOLE HAS GOOD DRAINAGE.

EXISTING NATIVE SOIL.

1 CONTAINER TREE/SHRUB PLANTING (TYP.)

SCALE: NTS

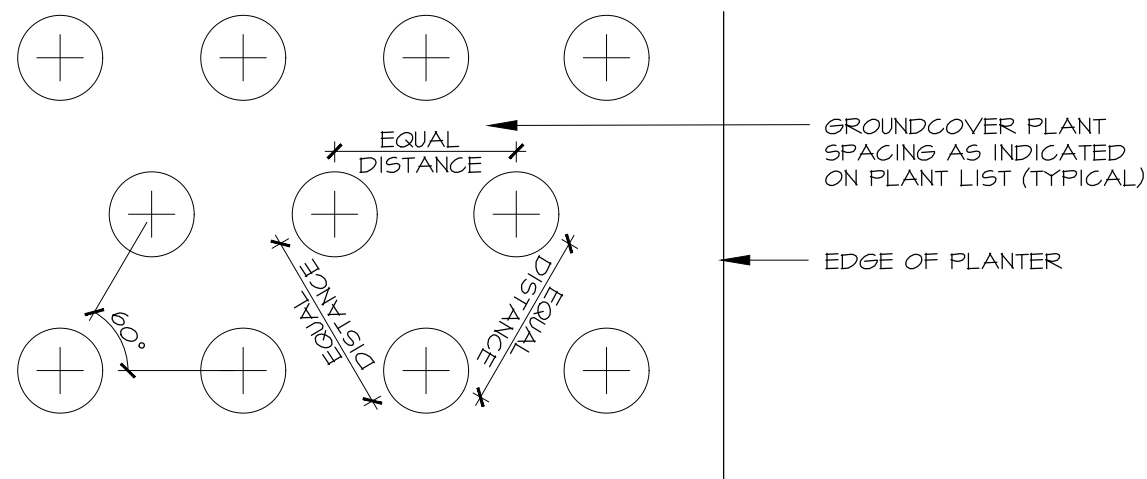


GROUNDCOVER PLANT. SEE PLANT LIST

3" DEPTH BARK MULCH NO MULCH ON PLANT CROWN

TOPSOIL DEPTH AND TYPE AS SPECIFIED

EXISTING SUBGRADE



2 GROUNDCOVER PLANTING (TYP.)

SCALE: NTS

SPECIFICATIONS

1. PRIOR TO PLANTING, ALL NON-ORGANIC DEBRIS AND NON-NATIVE, INVASIVE VEGETATION SHALL BE HAND-REMOVED AND EXPORTED OFF SITE.
2. PRIOR TO PLANTING, ALL NON-NATURAL MATERIALS SHALL BE REMOVED (GRAVEL, ROCK, CONCRETE) FROM EXISTING CLEARED AREAS. A 4" LIFT OF IMPORTED CEDAR GROVE 3-WAY TOPSOIL SHALL BE PLACED AND LIGHTLY RAKED INTO THE TOP 4" OF SUBGRADE PRIOR TO PLANTING.
3. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER 1ST AND MARCH 15TH.
4. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT. PITS SHALL BE BACKFILLED WITH A 30/70 MIX OF STEERCO TO NATIVE SOIL. PLANTS SHALL BE INSTALLED 2" HIGH AND SURFACED MULCHED TO A DEPTH OF 3" WITH HOG-FUEL PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED.
5. ALL PLANTS SHALL BE NURSERY GROWN (IN W. WA OR OR.) FOR AT LEAST 1 YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
6. LANDSCAPE CONTRACTOR TO INSTALL DRIP OR LOW-FLOW IRRIGATION SYSTEM CAPABLE OF HEAD TO HEAD COVERAGE OF ALL PLANTINGS.
7. ALL PLANTINGS SHALL BE IRRIGATED AT A RATE OF 1/2" OF FLOW 2-3 TIMES WEEKLY, FROM JUNE 15-OCT 15 THE FIRST YEAR AFTER PLANTING. THE SECOND YEAR, FLOW SHOULD BE REDUCED TO PROVIDE 1/2" OF FLOW 1-2 TIMES WEEKLY FROM JULY 1-SEPT 30. THE SYSTEM CAN BE REMOVED AFTER 3 YEARS.
8. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, MERCER ISLAND WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
9. MAINTENANCE SHALL BE IMPLEMENTED ON A REGULAR BASIS ACCORDING TO THE SCHEDULE BELOW.
10. MONITORING AND MAINTENANCE SHALL BE COMPLETED IN MARCH, MAY JULY AND SEPTEMBER PER THE APPROVED STREAM BUFFER REDUCTIONS AND ENHANCEMENT REPORT PREPARED BY AOA.

ANNUAL MAINTENANCE SCHEDULE

MAINTENANCE ITEM	J	F	M	A	M	J	J	A	S	O	N	D
WEED CONTROL			1		1		1		1			
GENERAL MAINT.			1		1		1		1			
WATERING - YEAR 1						4-6	8-12	8-12	8-12	4-6		
WATERING - YEAR 2							4-8	4-8	4-8			

1-8 = NUMBER OF TIMES TASK SHALL BE PERFORMED PER MONTH.

MAINTENANCE WILL INCLUDE:

1. REMOVAL OF NON-NATIVE PLANTS, BY HAND, AS LISTED ABOVE.
2. CONTINUED APPLICATION OF IRRIGATION, AS NOTED ABOVE.
3. REMOVAL OF PEST INFESTATIONS, LIKE TENT CATERPILLAR AND SPRUCE APHID.
4. THINNING OF RED ALDER AND MOWING OF TALL GRASSES, AS DIRECTED BY AOA TO ENSURE SURVIVAL OF PLANTED SPECIES.

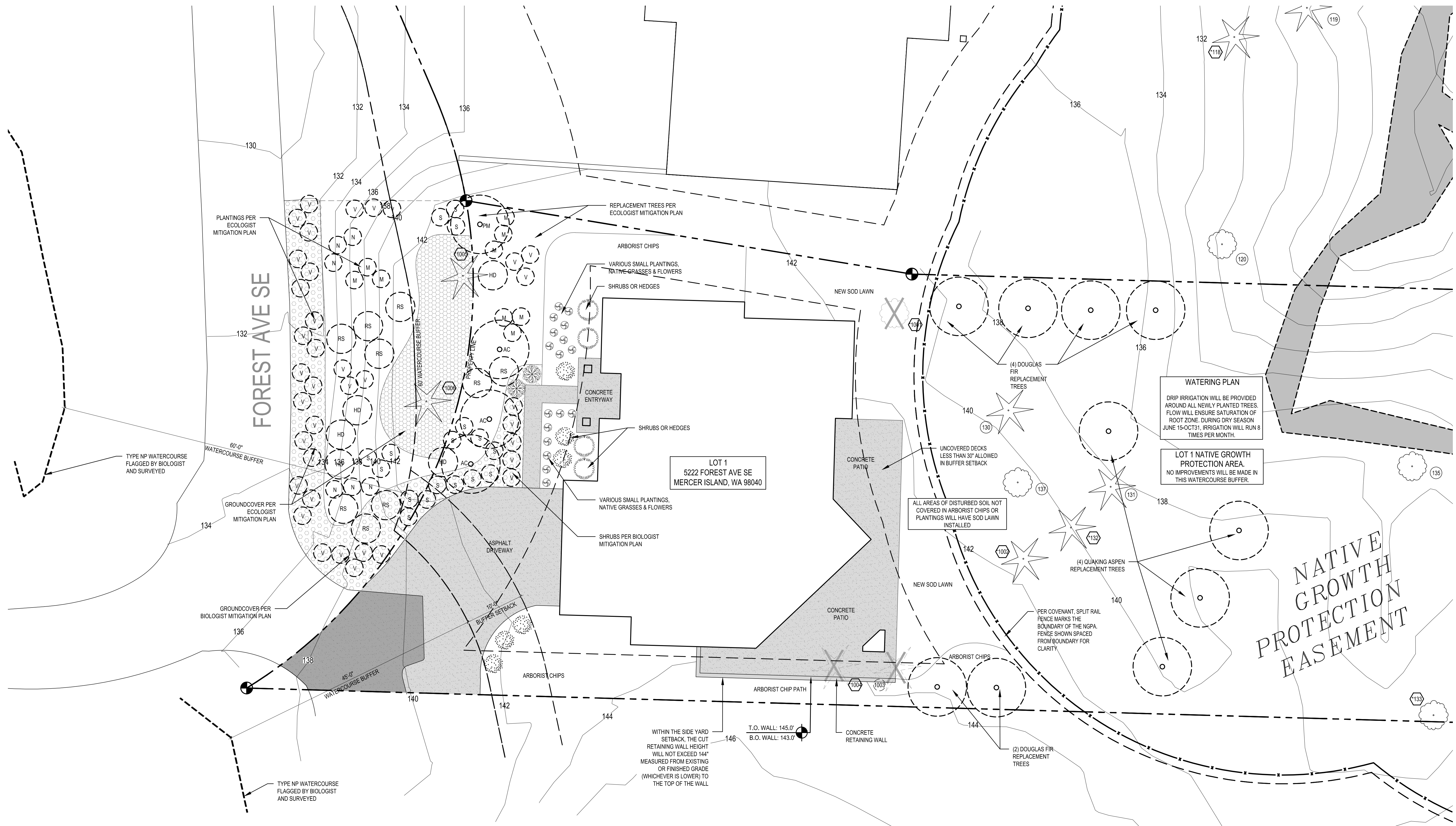
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 SCALE: AS NOTED
 DATE: 8-23-24
 REVISION: 5/5
 01-27-25

FIGURE 5: PLANTING DETAILS & SPECIFICATIONS
 SEASCAPE HOMES
 FOREST AVE - BUFFER MITIGATION PLAN
 MERCER ISLAND, WASHINGTON
 PARCEL 1410300057

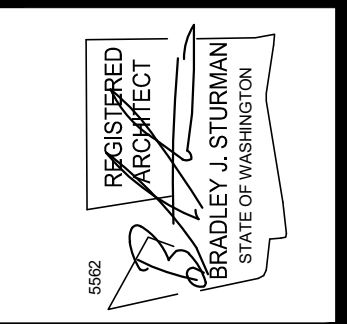
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1 CRITICAL AREA LANDSCAPE PLAN PLAN
SCALE: 1/8" = 1'-0"



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FOREST CREEK ESTATES LOT 1 PERMIT SET
5222 FOREST AVE S.E.
MERCER ISLAND, WA 98040

CRITICAL AREA LANDSCAPE PLAN

REVISIONS:

2025-5-13	Connectors #1

DRAWN BY: KE
CHECKED BY: BJS

SHEET **A1.3**