GENERAL NOTES

1. CODE COMPLIANCE:
ALL WORK SHALL COMPLY WITH THE 2018 IRC, 2018 IMC, 2018 IFGC, 2018 IFC, 2018 UPC, 2018 IPMC, 2008 NEC, 2018 INTERNATIONAL ENERGY CONSERVATION CODE WITH WASHINGTON STATE AMENDMENTS, 2009 ICC A117.1, AND WITH 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. VENTILLATION:
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 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 2.5 GALLONS PER MINUTE.

22. SMOKE DETECTORS:
SMOKE & CARBON MONOXIDE THROUGHOUT NEW CONSTRUCTION. TO BE MONITORED PER FIRE DEPARTMENT REQUIREMENTS.

23. FIREBLOCKING:
FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAMED CONSTRUCTION PER 2018 IRC SECTION R302.11, SPECIFICALLY: 1) IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, 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.

ENERGY NOTES

CLIMATIC ZONE:	ZONE #4C -MARINE
THERMAL STANDARDS FOR OPENINGS:	UNLIMITED OPTION
CODE:	2018 W.S.E.C. & 2018 IRC, WAC 51-11R
SPACE HEAT TYPE:	NATURAL GAS, FORCED AIR SYSTEM

INSULATION VALUES: PRESCRIPTIVE METHOD

WALLS:	R-21
FLAT ATTICS/CEILINGS:	R-49
VAULTED CEILINGS:	R-38
FLOORS (OVER UNHEATED SPACES):	R-38
SLAB-ON-GRADE:	R-10

PER WSEC R401.3, A CERTIFICATE IS REQUIRED TO BE POSTED WITHIN 3 FT OF THE ELECTRICAL PANEL; IT MUST INCLUDE THE FOLLOW: PREDOMINATE R-VALUES, U-VALUES OF FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, AND EFFICIENCIES OF HEATING/COOLING/WATER HEATING EQUIPMENT.

AIR INFILTRATION:
MANUFACTURED DOORS/WINDOWS: CONFORM TO SECTION R402.4.3 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 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: 6 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:
GAS FURNACE & AIR SOURCE HEAT PUMP

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

DUCT INSULATION:
THERMALLY INSULATE ALL PLENUMS, DUCTS AND ENCLOSURES IN ACCORDANCE WITH SECTION R403.3.1 OF THE WASHINGTON STATE ENERGY CODE.

a. ALL HEATING DUCTS IN UNCONDITIONED SPACES 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. A MIN. OF 75% OF PERMANENTLY INSTALLED LAMPS IN INTERIOR AND EXTERIOR LIGHTING FIXTURES MUST BE HIGH-EFFICACY LAMPS, PER WSEC R404.1.

PIPE INSULATION:
ALL HOT WATER PIPES, AND NON-RECIRCULATING COLD WATER PIPES LOCATED IN UNCONDITIONED SPACE, SHALL BE INSULATED TO R-3 MIN. PLUMBING OR MECHANICAL CANNOT DISPLACE THE REQUIRED INSULATION.

PLUMBING FIXTURES:
ALL PLUMBING FIXTURES SHALL CONFORM TO RCW 19.27.170

ALL TOILETS 1.6 GPM MAX	URINALS 1.0 GPF MAX
SHOWERHEADS <1.75 GPM	KITCHEN FAUCETS <1.75 GPM
LAVATORIES < 1.0 GPM	

WHOLE HOUSE VENTILATION

a. WHOLE HOUSE VENTILATION SHALL BE PROVIDED BY ERV/HRV W/ INTEGRAL FANS, PROVIDING MIN. 62 CFM RUNNING CONTINUOUSLY PER 2018 IRC TABLES M1505.4.2 (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 INSULATED W/ R-4 MIN IN HEATED AREAS. ALL SUPPLY DUCTS IN CONDITIONED SPACE SHALL BE INSULATED TO MIN. R-4.

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 SECTIONS M1505.4.1.6 AND M1505.4.1.7.

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

BEDROOMS	3
HEATED SQUARE FOOTAGE	3173 SF
CFM = 0.01(3173 SF) + 7.5(3+1 BEDROOMS)	
AIRFLOW (CFM)	62 CFM MIN.

PROJECT DATA

PROJECT ADDRESS:	2423 60th AVE SE MERCER ISLAND 98040
PROPERTY TAX ID NUMBER:	409950-0035
SCOPE OF WORK:	CONSTRUCTION OF NEW TWO-STORY SINGLE FAMILY RESIDENCE WITH ATTACHED GARAGE
ZONING:	R-8.4
CONSTRUCTION TYPE:	TYPE V B
SEISMIC ZONE:	3
NUMBER OF STORIES:	2 STORIES
FIRE PROTECTION:	NFPA 13D FIRE SPRINKLER SYSTEM
FIRE MONITORING:	NFPA 72 "CHAPTER 29" MONITORED FIRE ALARM SYSTEM REQUIRED
BUILDING HEIGHT	MAX. 30 FT ABOVE AVERAGE BUILDING ELEV.
GROSS FLOOR AREA	5,000 SF OR 40 % LOT AREA, WHICHEVER IS LESS
GROSS LOT AREA:	10,143 SF
NET LOT AREA:	8,075 SF
SETBACKS:	FRONT: 20', REAR: 25' SIDE: 15' TOTAL, MIN. 5'

PROJECT TEAM

OWNER:

MARY SMERSH
7930 SE 34TH SE #312
MERCER ISLAND, WA 98040
PHONE: 206.406.2517
EMAIL: SMERSH007@COMCAST.NET

ARCHITECT:

STURMAN ARCHITECTS, INC.
9 - 103RD AVE NE SUITE 203
BELLEVUE, WA 98004
PHONE: 425.451.7003
CONTACT: BRAD STURMAN

CIVIL ENGINEER:

NICK BOSSOFF ENGINEERING, INC
191 NE TARI LANE
STEVENSON, WA 98648
PHONE: 425.881.5904
CONTACT: NICK BOSSOFF

CONTRACTOR:

SMERSH CONSTRUCTION
PO BOX 1246
MERCER ISLAND, WA 98040
PHONE: 206.236.2020
CONTACT: JIM SMERSH

GEOTECHNICAL ENGINEER:

GEOTECH CONSULTANTS, INC.
2401 10TH AVE EAST
SEATTLE, WA 98102
PHONE: 425.260.1116
CONTACT: MARC MCGINNIS

STRUCTURAL ENGINEER:

OG ENGINEERING
-
SEATTLE, WA
PHONE: 206.290.4608
CONTACT: OWEN GOULD

LEGAL DESCRIPTION

LAKE VIEW PLACE EAST SEATTLE LOT A OF MERCER ISLAND SHORT PLAT NO MI 89-08-18 RECORDING NO 8911229007 SD SHORT PLAT DAF - LOTS 7 & 16 AND THE NORTH 7.5 FT OF LOTS 8 AND 15
PLat Block: 1; Plat Lot: POR

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.

SHEET INDEX

TREE PROTECTION

A TREE PROTECTION INSPECTION IS REQUIRED BEFORE START OF WORK

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.

LOT COVERAGE & HARDSCAPE

LOT COVERAGE	GROSS LOT S.F.	NET LOT S.F.	EXISTING DRIVEWAY	MAIN ROOF STRUCT	DRIVES/ PARKING	TOTAL LOT COVERAGE	% LOT COVERAGE
EXISTING LOT COVERAGE	10,143 SF	8076 SF	817 SF	0 SF	0 SF	0 SF	0 %
NET GAIN/LOSS LOT COVERAGE			-817 SF	+2795 SF	+410 SF	+3204 SF	+39.7 %
PROPOSED LOT COVERAGE			0 SF	2795 SF	410 SF	3204 SF	39.7 %
% ALLOWED LOT COVERAGE						3230 SF ALLOWABLE	40 %

HARDSCAPE	GROSS LOT S.F.	NET LOT S.F.	(E) ROCKERIES	RETAINING WALLS	FRONT WALK	WOOD DECK	TOTAL HARDSCAPE	% HARDSCAPE
EXISTING HARDSCAPE	10,143 SF	8076 SF	232 SF	0 SF	0 SF	0 SF	232 SF	2.9 %
NET GAIN/LOSS HARDSCAPE			+0 SF	+33 SF	+168 SF	+278 SF	+479 SF	+5.9 %
PROPOSED HARDSCAPE			232 SF	33 SF	168 SF	278 SF	711 SF	8.8 %
% ALLOWED HARDSCAPE							755 SF ALLOWABLE	8.8 %

HIGHEST EL: 57.0'
LOWEST EL: 41.0'
ELEVATION DIFFERENCE= 16.0'
16.0' DIVIDED BY 172.71' (HORIZ. DIST. BTWN. HIGHEST & LOWEST ELEV.) = .0926

LOT SLOPE IS 9.3%, WHICH IS LESS THAN 15% SO LOT COVERAGE ALLOWED IS 40% OF NET LOT SIZE

HARDSCAPE FOR LOTS WITH A NET LOT AREA OF 8,400 SQUARE FEET OR LESS MAY BE THE LESSER OF 755 SQUARE FEET OR 12 PERCENT OF THE NET LOT AREA

BUILDING AREA

	MAIN FLOOR	UPPER FLOOR		HEATED SUB-TOTAL	GARAGE/ WORKSHOP	GRAND TOTAL	UNHEATED DECKS
PROPOSED HOUSE:	1791 SF	1382 SF		3173 SF	568 SF	3741 SF	622 SF

2018 WSEC CREDITS

PROJECT IS A NEW RESIDENCE GREATER THAN 1,500 SQ FT AND LESS THAN 5,000 SQ FT CONDITIONED AREA, AND SO IS A MEDIUM DWELLING UNIT REQUIRING 6 CREDITS

OPTION	CREDITS	DESCRIPTION
2	1.0	-HEAT PUMP EFFICIENCY (AIR COOLED) 14.0 SEER, 11 HSPF
1.3	0.5	-VERTICAL FENESTRATION U = .28, FLOOR=R-38 -R-10 RIGID INSULATION ENTIRE PERIMETER AND UNDER ENTIRE SLAB IN HEATED SPACE
2.3	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, 125 CFM
3.5	1.5	-AIR SOURCE, CENTRALLY DUCTED HEAT PUMP W/ MIN. HSPF OF 11.0
4.2	1.0	-HVAC EQUIP. & AND ITS DUCT SYSTEM INSTALLATION SHALL COMPLY W/ R403.3.7. ALL EQUIP. & DUCTS SHALL BE IN CONDITIONED SPACE, WI CONTINUOUS AIR BARRIER & BUILDING THERMAL ENVELOPE.
5.2	0.5	-ENERGY STAR RATED GAS OR PROPANE WATER HEATER W/ A MIN. UEF OF 0.80
TOTAL CREDITS	6	

*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

GROSS FLOOR AREA

		NEW FLOOR AREA
MAIN FLOOR		1791 SF
SECOND FLOOR		1382 SF
GARAGE		568 SF
GROSS FLOOR AREA		3741 SF

GROSS LOT AREA	10,143 SF
ALLOWED MAX. % GFA COVERAGE	40.0 %
ALLOWED GROSS FLOOR AREA	4057.2 SF
12'+ CEILING OF LIVING ROOM	+47 SF
12'+ CEILING OF REC ROOM	+22.5 SF
COVERED DECK	+6.5 SF
TOTAL GFA COVERAGE	3817 SF
PROPOSED % GFA COVERAGE	37.6 %

VICINITY MAP

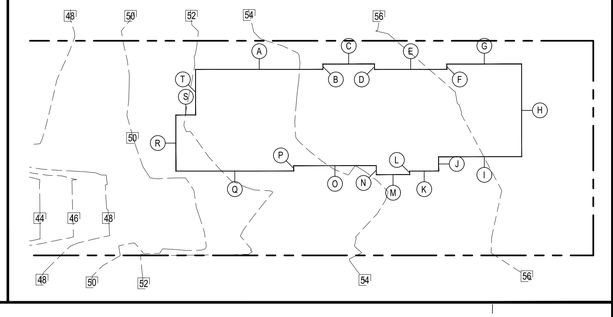
AVERAGE BUILDING ELEV.

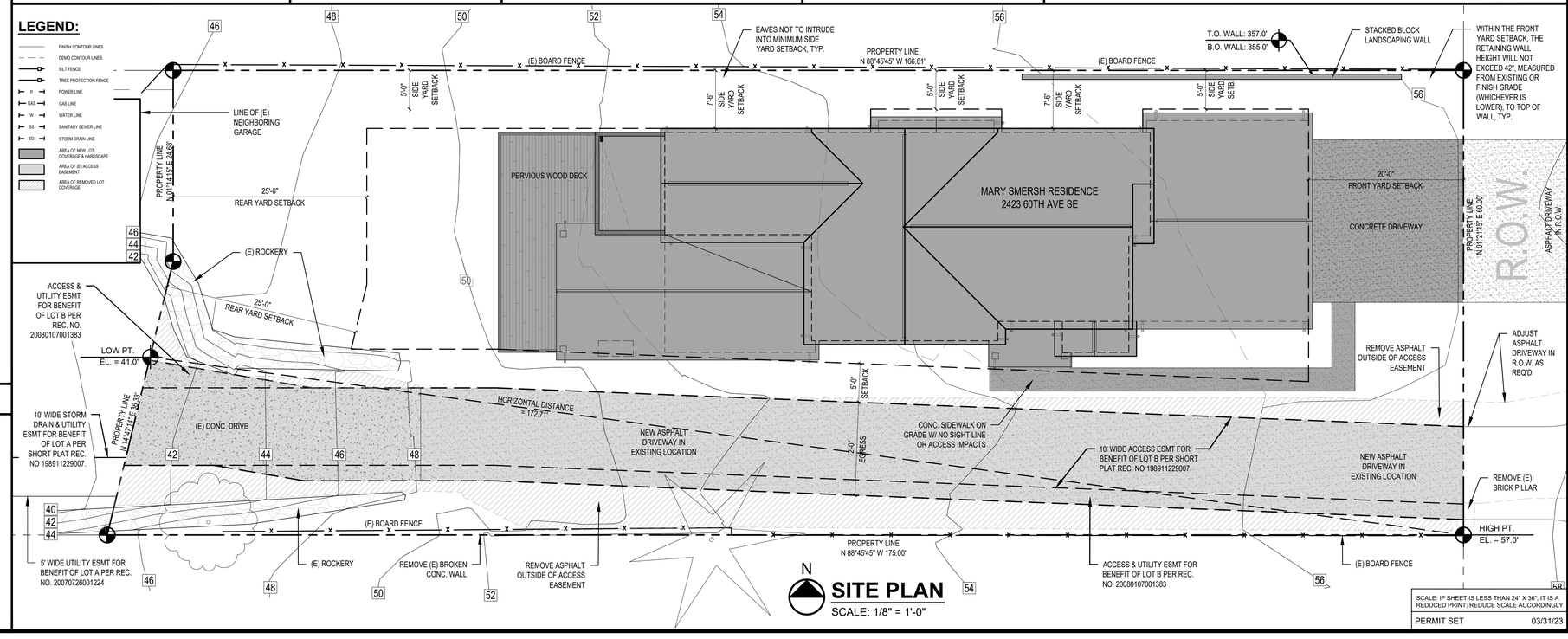
AVERAGE BUILDING ELEVATION

	Wall Length	Elevation Pt.	Wall Length X Elev. Pt.
A	35.58	53.5	1903.53
B	1.5	54.5	81.75
C	14.417	55.0	792.935
D	1.5	55.5	83.25
E	20.21	56.0	1131.76
F	1.5	56.0	84
G	20.92	56.0	1171.52
H	25.92	56.5	1464.48
I	23.21	56.0	1299.76
J	4	55.0	220
K	8.08	55.0	444.4
L	1	55.0	55
M	9.33	54.5	508.485
N	2.5	54.0	135
O	23.08	54.0	1246.32
P	1.5	53.0	79.5
Q	32.92	52.0	1711.84
R	15.67	51.0	799.17
S	5.5	52.0	286
T	12.75	52.0	663
	261.087	**1086.5**	**14161.7**
14161.7	**54.24**	**Average Building Elevation**	
261.087			

ABE KEY PLAN

SCALE: 1" = 20'





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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
5562

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

GENERAL NOTES
SITE PLAN

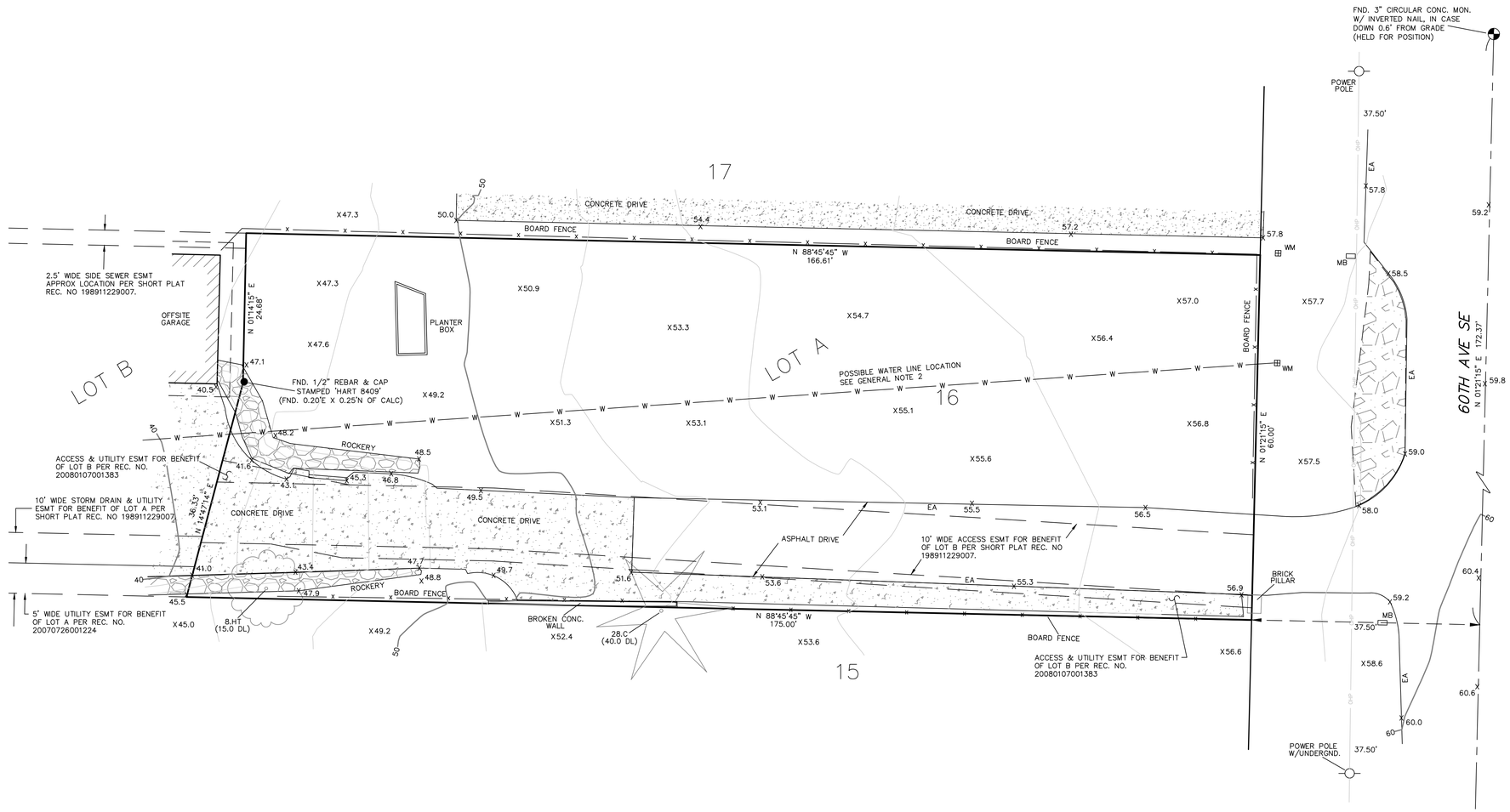
REVISIONS:

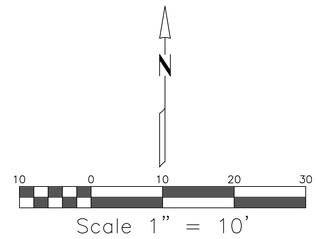
DRAWN BY: KE

CHECKED BY: BJS

SHEET
A1.0

PLOT DATE: 3/30/2023





MERIDIAN

ASSUMED– BASIS OF BEARING ROAD CENTERLINE 60TH AVE SE

LEGEND:

- FOUND MONUMENT AS DESCRIBED ON MAP
- FOUND EXISTING PROP. COR. AS SHOWN ON MAP
- SET TEMPORARY BENCHMARK AS SHOWN ON MAP

C	CEDAR TREE
DL	DRIP LINE
EA	EDGE OF ASPHALT
HT	HAWTHORNE TREE
MB	MAIL BOX
MON	MONUMENT
TBM	TEMPORARY BENCHMARK
WM	WATER METER

ROCKERY HATCH — BUILDING HATCH

CONCRETE HATCH — GRAVEL HATCH

OHP OVERHEAD POWER LINE

X XXX.X SPOT ELEVATION

CONIFER TREE — DECIDUOUS TREE

BENCHMARK & DATUM INFO

VERTICAL DATUM: NAVD88

ORIGINAL BM: WSDOT BM NO. ROANOKE: FND. 3"DOMED BRASS DISC SURFACE MON. STAMPED "WSDOT SURVEY MON 2005-ROANOKE" SET ON THE EAST SIDE OF A BRIDGE OVER I-90 ON 72ND AVE SE.
ELEV. = 155.66

TBM – A: SET MAGNETIC NAIL & FLAGGING IN THE ASPHALT IN FRONT OF SITE AS SHWON ON MAP.
ELEV. = 60.53

CONTOUR INTERVAL = 2'

LEGAL DESCRIPTION

(PER QUIT CLAIM DEED NO. 20130430000491; RECORDS OF KING CO.)

LOT A OF MERCER ISLAND SHORT PLAT NO. MI 89-08-18, RECORED UNDER KING COUNTY RECORDING NO. 8911229007.

GENERAL NOTES

1. 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.

2. UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (I.E. PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS ETC.) AND FROM CITY OF MERCER ISLAND GIS UTILITY MAP. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

3. TREE SIZES WERE LOCATED & SPECIES DETERMINED TO THE BEST OF OUR ABILITY. HOWEVER, TYEE SURVEYORS DOES NOT WARRANT THE ACCURACY OF SIZE & SPECIES SHOWN HEREON. ANY TREES CONSIDERED TO BE CRITICAL SHOULD BE VERIFIED BY A TRAINED ARBORIST.

4. EASEMENTS SHOWN HEREON FROM CHICAGO TITLE COMMITMENT NUMBER 0225872-ETU DATED OCTOBER 29, 2021.

5. NO PROPERTY CORNERS WERE SET IN CONJUNCTION WITH THIS SURVEY.

6. THE BOUNDARY FOR THIS SURVEY WAS COMPUTED USING THE PLAT OF LAKE VIEW PLACE EAST, THE PLAT OF CENTRAL ADD, KING COUNTY RECORDS OF SURVEY NO'S 20160920900019 & 199203319011.

7. THE PURPOSE OF THIS TOPOGRAPHY SURVEY IS TO AID IN THE DESIGN PHASE OF CONSTRUCTION.

8. THE CONTOURS SHOWN ARE FROM DIRECT FIELD OBSERVATIONS TO A VERTICAL AND HORIZONTAL POSITIONAL ACCURACY OF ONE-HALF OF THE STATED CONTOUR INTERVAL.

9. UTILITIES SHOWN HEREON FROM FIELD DIRECT MEASUREMENTS OF SURFACE EVIDENCE (STRUCTURES AND PIPE INVERTS) AT THE TIME OF VISIT.

10. MAP SYMBOLS ARE NOT TO SCALE.

EQUIPMENT & PROCEDURES

FIELD SURVEY CONDUCTED USING A COMBINATION OF GPS USING A REFERENCE NETWORK AND A 5" ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. SURVEY PROCEDURES MEET OR EXCEED STATE STANDARDS AS SPECIFIED BY W.A.C. 332-130 WITH REGARD TO LINEAR AND ANGULAR CLOSURES.
ALL MEASURING INSTRUMENTS FOR THIS SURVEY HAVE BEEN MAINTAINED ACCORDING TO MANUFACTURES SPECIFICATIONS.

EASEMENT NOTES

EASEMENT SCHEDULE B ITEM NUMBERS FROM CHICAGO TITLE COMMITMENT NUMBER 0225872-ETU DATED OCTOBER 29, 2021.

3. SUBJECT TO A SIDE SEWER EASEMENT RECORDING NUMBER 4655669 AFFECTS AN UNDISCLOSED PORTION OF SAID LAND ALONG THE LINE AS CONSTRUCTED.

4. SUBJECT TO EASEMENTS AS SHOWN ON SHORT PLAT NO. MI 89-08-18, REC. NO. 198911229007.

5. SUBJECT TO AN EASEMENT FOR UTILITIES OVER LOT B AS SHOWN HEREON PER RECORDING NO. 20070726001224.

7. SUBJECT TO AN EASEMENT FOR ACCESS AND UTILITIES OVER THE SUBJECT PARCEL PER RECORDING NO. 20080107001383.

THE ACCESS AND UTILITY EASEMENT UNDER RECORDING NUMBER 20070727001487 HAS BEEN TERMINATED BY THE AGREEMENT TERMINATING EASEMENT FOR INGRESS, EGRESS AND UTILITIES PER RECORDING NO. 20221103000596.

PARCEL NUMBER: 409950-0035
SITE ADDRESS: 2421 60TH AVE SE
NE1/4, NE1/4, SEC. 11, T. 24 N., R. 4 E., W.M.
CITY OF MERCER ISLAND, WASHINGTON

10-5-21

REV. REMOVE ESMT 11/22/22 TG
REV. ADD ESMTS 1/12/22 TG

TOPOGRAPHIC SURVEY
for
MARY SMERSH
2421 60TH AVE SE MERCER ISLAND, WASHINGTON 98040

TYEE SURVEYORS
Tyee Surveyors
PROFESSIONAL LAND SURVEYORS
10007 GREENWOOD AV. N. SEATTLE, WA. 98133 206-525-3660

DRAWN BY:	DATE:	JOB NO.:
AA	10-5-21	21199
CHKD BY:	SCALE:	SHEET:
TG	1" = 10'	1 OF 1

NE1/4, NE1/4, SEC. 11, T. 24 N., R. 4 E., W.M.

LEGAL DESCRIPTION

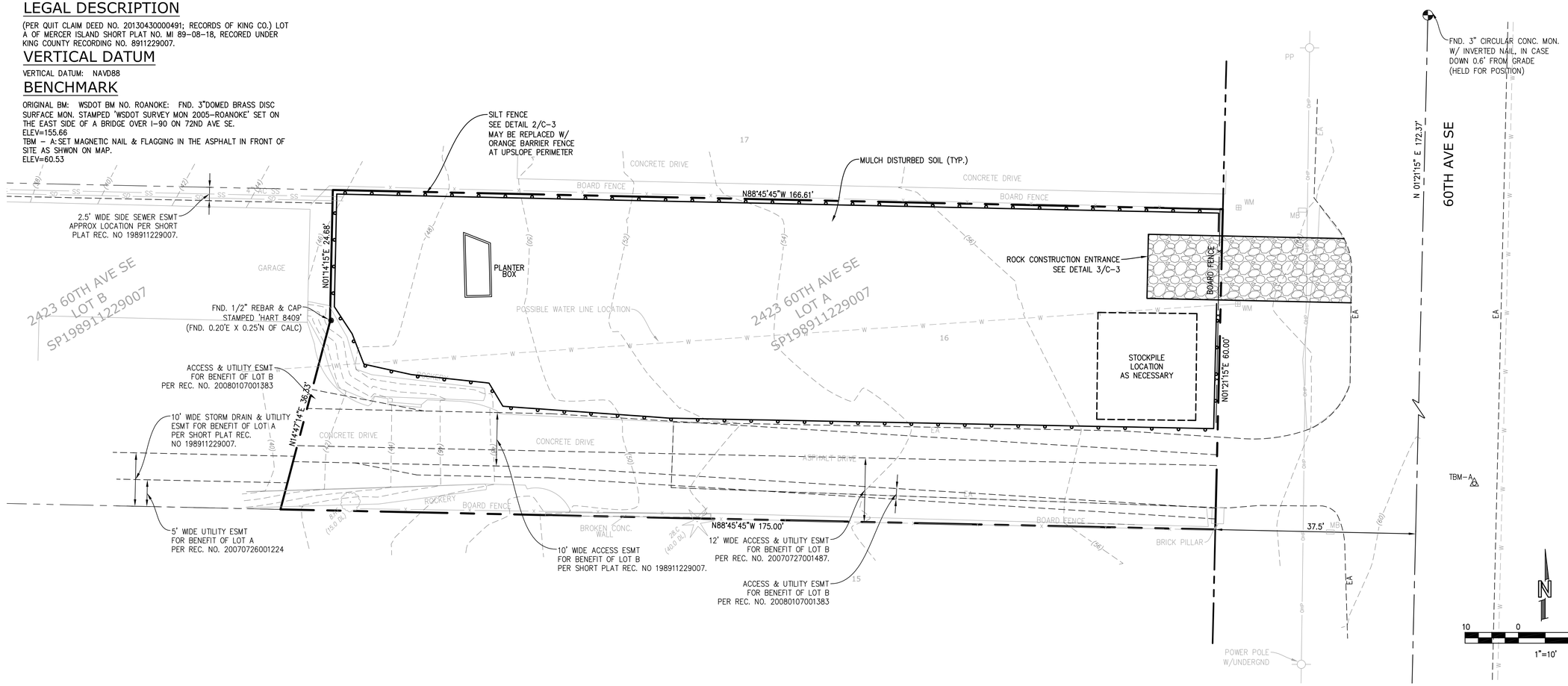
(PER QUIT CLAIM DEED NO. 20130430000491; RECORDS OF KING CO.) LOT A OF MERCER ISLAND SHORT PLAT NO. MI 89-08-18, RECORED UNDER KING COUNTY RECORDING NO. 8911229007.

VERTICAL DATUM

VERTICAL DATUM: NAVD88

BENCHMARK

ORIGINAL BM: WSDOT BM NO. ROANOKE: FND. 3"DOMED BRASS DISC SURFACE MON. STAMPED 'WSDOT SURVEY MON 2005-ROANOKE' SET ON THE EAST SIDE OF A BRIDGE OVER I-90 ON 72ND AVE SE.
ELEV=155.66
TBM - A: SET MAGNETIC NAIL & FLAGGING IN THE ASPHALT IN FRONT OF SITE AS SHWON ON MAP.
ELEV=60.53



EROSION AND SEDIMENT CONTROL NOTES

1. APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
7. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
8. ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
10. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
11. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
12. ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
13. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR. THE DDES INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

POLLUTION PREVENTION AND SPILL CONTROL

STORAGE AND HANDLING OF LIQUIDS
1. MINIMIZE AMOUNT OF LIQUIDS STORED ON SITE.
2. STORE AND CONTAIN LIQUID MATERIALS IN SUCH A MANNER THAT IF A VESSEL IS RUPTURED OR LEAKS, THE CONTENTS WILL NOT DISCHARGE, FLOW, OR BE WASHED INTO THE STORM DRAINAGE SYSTEM, SURFACE WATERS, OR GROUNDWATER. TYPICALLY THIS MEANS INSTALLING SECONDARY CONTAINMENT, SUCH AS A LINED EXCAVATION, LARGER CONTAINER, OR USING A DOUBLE-WALLED TANK OR SIMILAR COMMERCIALLY AVAILABLE CONTAINMENT FACILITY.
3. PLACE TIGHT-FITTING LIDS ON ALL CONTAINERS.
4. ENCLOSE OR COVER THE CONTAINERS WHERE THEY ARE STORED TO PROTECT FROM RAIN. THE LOCAL FIRE DISTRICT MUST BE CONSULTED FOR LIMITATIONS ON CLEARANCE OF ROOF COVERS OVER CONTAINERS USED TO STORE FLAMMABLE MATERIALS.
5. RAISE THE CONTAINERS OFF THE GROUND BY USING A SPILL CONTAINMENT PALLET OR SIMILAR METHOD THAT HAS PROVISIONS FOR SPILL CONTROL.
6. PLACE DRIP PANS OR ABSORBENT MATERIALS BENEATH ALL MOUNTED CONTAINER TAPS, AND AT ALL POTENTIAL DRIP AND SPILL LOCATIONS DURING FILLING AND UNLOADING OF CONTAINERS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
7. STORE AND MAINTAIN ABSORBENT PADS OR APPROPRIATE SPILL CLEANUP MATERIALS NEAR THE CONTAINER STORAGE AREA, IN A LOCATION KNOWN TO ALL. ENSURE THAT EMPLOYEES ARE FAMILIAR WITH THE SITE'S SPILL PLAN AND/OR PROPER SPILL CLEANUP PROCEDURES.
8. CHECK CONTAINERS (AND ANY CONTAINMENT SUMPS) DAILY FOR LEAKS AND SPILLS. REPLACE CONTAINERS THAT ARE LEAKING, CORRODED, OR OTHERWISE DETERIORATING. IF THE LIQUID CHEMICALS ARE CORROSIVE, CONTAINERS MADE OF COMPATIBLE MATERIALS MUST BE USED INSTEAD OF METAL DRUMS. NEW OR SECONDARY CONTAINERS MUST BE LABELED WITH THE PRODUCT NAME AND HAZARDS.
9. PLACE DRIP PANS OR ABSORBENT MATERIALS BENEATH A CONTAINER THAT IS FOUND TO BE LEAKING. REMOVE THE DAMAGED CONTAINER AS SOON AS POSSIBLE. MOP UP THE SPILLED LIQUID WITH ABSORBENT PADS OR RAGS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.

FUELING
1. LOCATE THE FUELING OPERATION TO ENSURE LEAKS OR SPILLS WILL NOT DISCHARGE, FLOW, OR BE WASHED INTO THE STORM DRAINAGE SYSTEM, SURFACE WATER, OR GROUNDWATER.
2. USE DRIP PANS OR ABSORBENT PADS TO CAPTURE DRIPS OR SPILLS DURING FUELING OPERATIONS.
3. IF FUELING IS DONE DURING EVENING HOURS, LIGHTING MUST BE PROVIDED.
4. STORE AND MAINTAIN APPROPRIATE SPILL CLEANUP MATERIALS IN THE MOBILE FUELING VEHICLE. ENSURE THAT EMPLOYEES ARE FAMILIAR WITH PROPER SPILL CONTROL AND CLEANUP PROCEDURES.
5. IMMEDIATELY MOP UP ANY SPILLED FUEL WITH ABSORBENT PADS OR RAGS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.

CONCRETE SAW CUTTING, SLURRY, AND WASHWATER DISPOSAL
1. SLURRY FROM SAW CUTTING THE SIDEWALK SHALL BE VACUUMED SO THAT IT DOES NOT ENTER NEARBY STORM DRAINS.
2. CONCRETE TRUCK CHUTES, PUMPS, AND INTERNALS SHALL BE WASHED OUT ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE.
3. UNUSED CONCRETE REMAINING IN THE TRUCK AND PUMP SHALL BE RETURNED TO THE ORIGINATING BATCH PLANT FOR RECYCLING.
4. HAND TOOLS INCLUDING, BUT NOT LIMITED, SCREEDS, SHOVELS, RAKES, FLOATS, AND TROWELS SHALL BE WASHED OFF ONLY INTO FORMED INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE OR IMPERMEABLE ASPHALT.
5. EQUIPMENT THAT CANNOT BE EASILY MOVED, SUCH AS CONCRETE PAVERS, SHALL ONLY BE WASHED IN AREAS THAT DO NOT DIRECTLY DRAIN TO NATURAL OR CONSTRUCTED STORMWATER CONVEYANCES.
6. WASHDOWN FROM AREAS SUCH AS CONCRETE AGGREGATE DRIVEWAY SHALL NOT DRAIN DIRECTLY TO NATURAL OR CONSTRUCTED STORMWATER CONVEYANCES.
7. WHEN NO FORMED AREAS ARE AVAILABLE, WASHWATER AND LEFTOVER PRODUCT SHALL BE CONTAINED IN A LINED CONTAINER. CONTAINED CONCRETE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.
8. CONTAINERS SHALL BE CHECKED FOR HOLES IN THE LINER DAILY DURING CONCRETE POURS AND REPLACED THE SAME DAY.

CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555

N3L
Nick Bossoff Engineering, Inc.
191 NE Tarl Lane
Stevenson, WA 98648-4201
Phone: (425) 881-5904

STATE OF WASHINGTON · NICHOLAS BOSSOFF · 29631 · REGISTERED PROFESSIONAL ENGINEER
EXPIRES 7/2/23

NO.	DATE	REVISION
1	08/31/22	PERMIT SUBMITTAL
2	03/27/23	CITY INTAKE COMMENTS

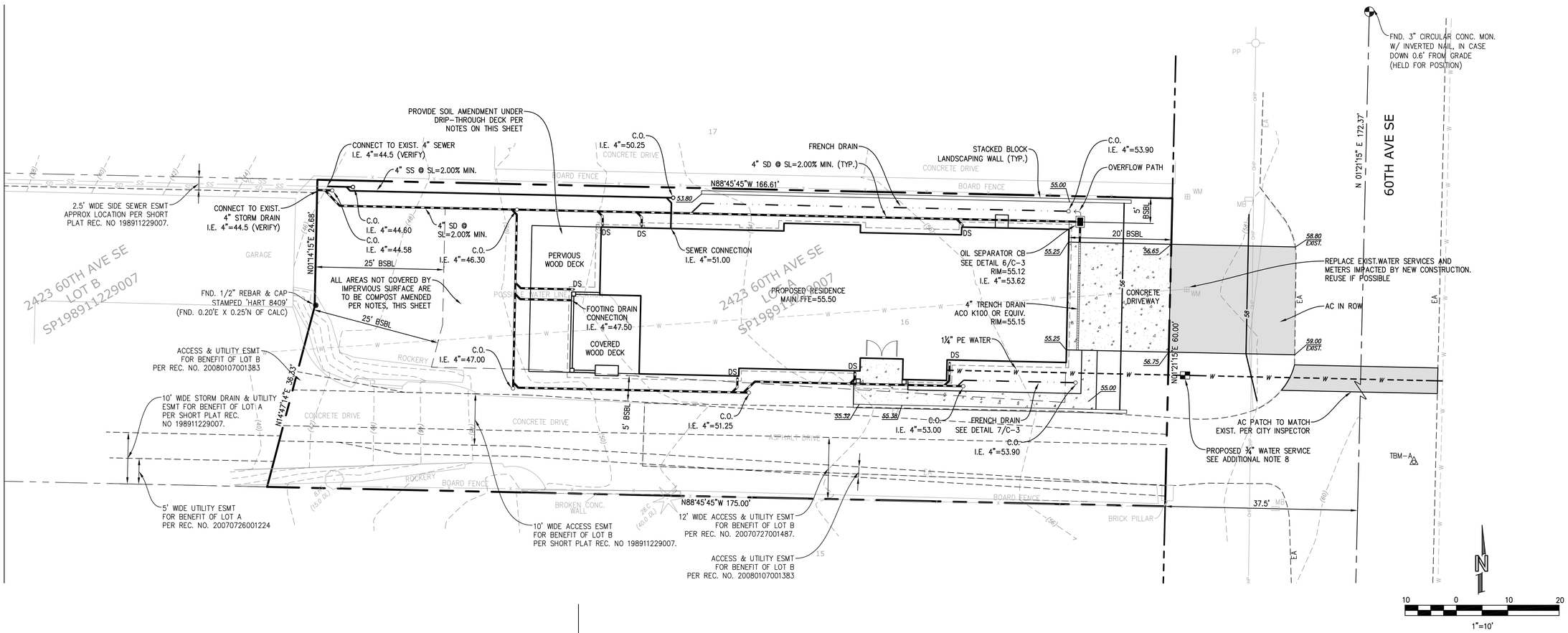
PROJECT MANAGER: N. BOSSOFF, P.E.
DESIGNED: NB
DRAWN: TKB
JOB NUMBER: SARC-2203
FILE NAME: SARC-2203pln.dwg

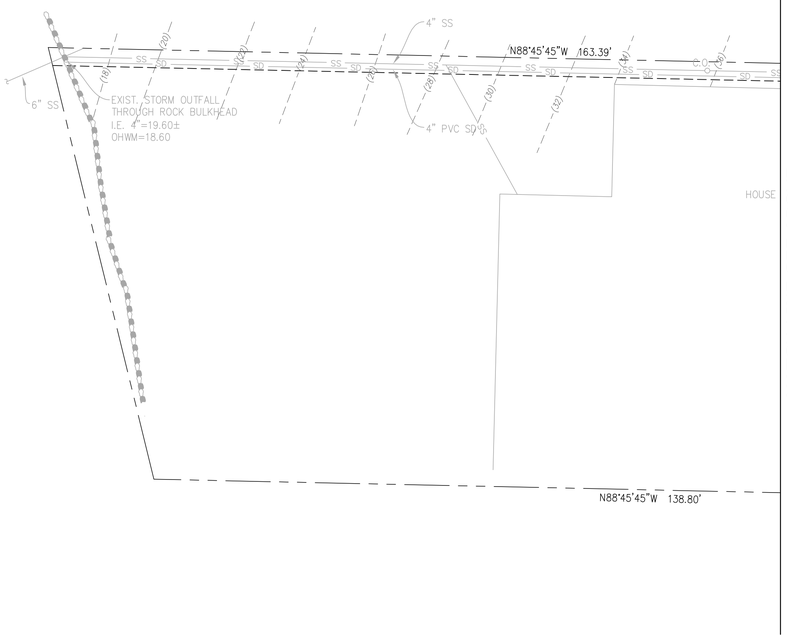
M. SMERSH RESIDENCE
2423 60TH AVE SE
MERCER ISLAND WASHINGTON

TITLE: T.E.S.C. PLAN

SHEET: C-1

NE1/4, NE1/4, SEC. 11, T. 24 N., R. 4 E., W.M.





POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES

A. 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.

B. 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 DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173-350-220, 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.

C. 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 "PREAPPROVED" 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.

ADDITIONAL NOTES:

1. ALL CONSTRUCTION MATERIALS AND PRACTICE SHALL CONFORM TO THE CITY OF MERCER ISLAND STANDARDS AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARDS.
2. EXISTING UTILITIES AS SHOWN ARE FROM CITY RECORDS AND ARE APPROXIMATE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO IDENTIFY, LOCATE AND PROTECT ABOVE AND BELOW GRADE UTILITIES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND THE PROPOSED IMPROVEMENTS.
3. THE CONTRACTOR IS RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL AND SHALL MAINTAIN THE NECESSARY SAFEGUARDS AND MANAGE THE CONSTRUCTION SO AS TO PREVENT WATERBORNE SEDIMENTS FROM LEAVING THE SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR.
5. ON-SITE PRIVATE STORM AND SEWER PIPE SHALL BE SOLVENT WELDED SCHEDULE 40 PVC OR PVC ASTM D3034 SDR35 UNLESS SHOWN OTHERWISE. PVC PIPE LAID AT A SLOPE IN EXCESS OF 20% SHALL BE SOLVENT WELDED SCHEDULE 40 PVC. STORM PIPE IN THE RIGHT-OF-WAY SHALL BE HIGH-DENSITY POLYETHYLENE DOUBLE-WALLED SMOOTH INTERIOR PIPE SUCH AS ADS N-12 OR EQUIVALENT.
6. FOOTING DRAINS SHALL BE INSTALLED AROUND THE BASE OF ALL FOUNDATION FOOTINGS THAT ENCLOSE A CRAWL SPACE, CELLAR, BASEMENT, GARAGE OR OTHER BUILDING SPACE. FOOTING DRAINS SHALL BE PERFORATED 4-INCH DIAMETER PVC CONFORMING TO D2729, PERFORATIONS DOWN. GRANULAR BACKFILL SHALL BE PLACED AROUND AND ABOVE THE DRAIN TO A DEPTH OF 2/3 OF THE WALL HEIGHT. FILTER FABRIC (MIRAFI 140N OR EQUIVALENT) SHALL BE PLACED BETWEEN THE GRANULAR BACKFILL AND NATIVE SOILS. TIE THE FOOTING DRAIN INTO THE STORM LINE AT A LOCATION WHERE THE FOOTING DRAIN ELEVATION IS AT LEAST 12-INCHES ABOVE THE STORM LINE.
7. EXISTING SIDE SEWER AND STORM DRAIN DEPTH AND LOCATION SHALL BE DETERMINED PRIOR TO ANY CONSTRUCTION, INCLUDING BUILDING CONSTRUCTION. REPORT CONFLICTS WITH PROPOSED CONSTRUCTION TO ENGINEER. NEW SIDE SEWER CONNECTION TO MAIN OR SEWER EJECTOR PUMP MAY BE NECESSARY FOR BASEMENT.
8. PROPOSED METER LOCATION, IF SHOWN, IS APPROXIMATE. CONTRACTOR TO COORDINATE EXACT LOCATION OF NEW SERVICE/METER/ SUPPLY LINE WITH CITY WATER DEPARTMENT DURING CONSTRUCTION.
9. EACH DOWNSPOUT SHALL CONNECT TO A RIGID NON-PERFORATED PIPE AT THE BUILDING PERIMETER. UNDER NO CIRCUMSTANCES SHALL DOWNSPOUTS CONNECT DIRECTLY TO THE PERFORATED FOOTING DRAIN.
10. USE SAND COLLARS FOR PVC PIPE CONNECTIONS TO MANHOLES.
11. VERTICAL BENDS ON THE STORM DRAINS MAY BE NECESSARY TO MAINTAIN MIN. 1.5' SOIL COVER OVER PIPE. MAX. PIPE BENDS TO BE 45°.
12. DOWNSPOUT LOCATIONS SHOWN ARE PRELIMINARY. REFER TO ARCHITECTURAL PLANS FOR FINAL DOWNSPOUT LOCATIONS.
13. AN UNDERSLAB DRAINAGE SYSTEM MAY BE NECESSARY DEPENDENT ON GEOTECHNICAL EVALUATION BY OTHERS.
14. WINDOW WELLS SHALL BE DESIGNED FOR PROPER DRAINAGE BY CONNECTING TO THE BUILDING'S FOUNDATION DRAINAGE SYSTEM REQUIRED PER SECTION R310.2.3.2 OF THE INTERNATIONAL RESIDENTIAL CODE. A DRAINAGE SYSTEM FOR WINDOW WELLS IS NOT REQUIRED WHERE THE FOUNDATION IS ON WELL-DRAINED SOIL OR SAND-GRAVEL MIXTURE SOILS IN ACCORDANCE WITH THE UNITED SOIL CLASSIFICATION SYSTEM, GROUP I SOILS, AS DETAILED IN TABLE R405.1 OF THE IRC

Nick Bossoff Engineering, Inc.
191 NE Tarl Lane
Stevenson, WA 98648-4201
Phone: (425) 881-5904

STATE OF WASHINGTON NICHOLAS BOSSOFF 29631 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 7/2/23

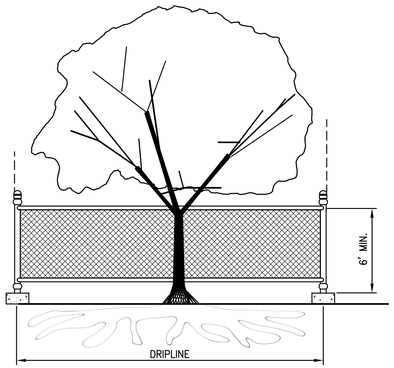
NO.	DATE	REVISION
1	08/31/22	PERMIT SUBMITTAL
2	03/27/23	CITY INTAKE COMMENTS

N. BOSSOFF, P.E.
PROJECT MANAGER:
NB
DESIGNED:
TKB
DRAWN:
SARC-2203
JOB NUMBER:
SARC-2203pln.dwg
FILE NAME:

M. SMERSH RESIDENCE
2423 60TH AVE SE
MERCER ISLAND WASHINGTON

TITLE:
DRAINAGE PLAN

SHEET:
C-2

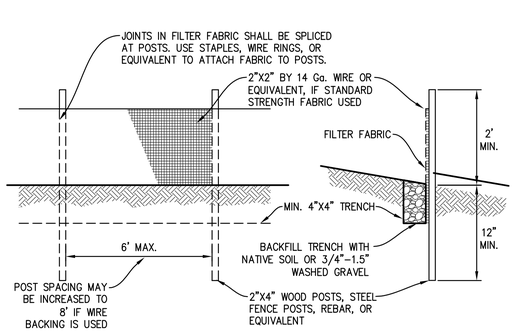


TREE PROTECTION DURING CONSTRUCTION

1. 6-FT. HIGH TEMPORARY CHAIN LINK FENCE SHALL BE PLACED AT THE DRIPLINE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE THE TREE(S). INSTALL FENCE POSTS USING PIER BLOCKS ONLY. AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
2. FOR ROOTS OVER 1-IN DIA. THAT ARE DAMAGED DURING CONSTRUCTION, MAKE A CLEAN, STRAIGHT CUT TO REMOVE THE DAMAGED PORTION. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING, AND SHALL BE COVERED WITH SOIL AS SOON AS POSSIBLE.
3. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING.

TREE PROTECTION — 1

SCALE: NTS



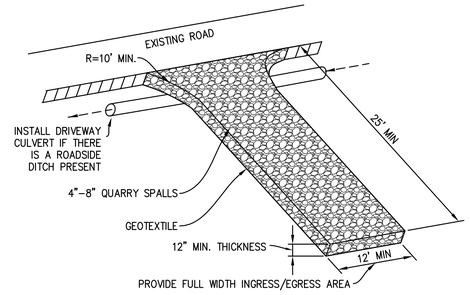
NOTE: FILTER FABRIC FENCE SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.

MAINTENANCE STANDARDS

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

SILT FENCE — 2

SCALE: NTS

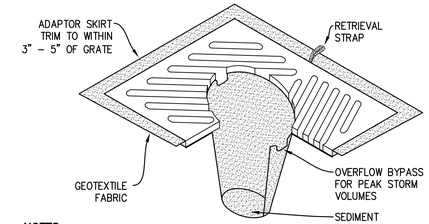


MAINTENANCE STANDARDS

1. QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREET, THE CONSTRUCTION OF A SMALL SUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.
4. ANY ROCK SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING (SECTION 5.4.1) SHALL BE INSTALLED TO CONTROL TRAFFIC.

ROCK CONSTRUCTION ENTRANCE — 3

SCALE: NTS

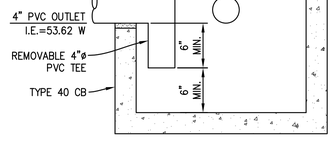


NOTES

1. INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
2. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL.
3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.

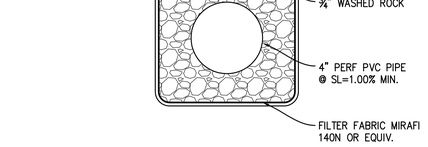
CB INSERT — 4

SCALE: NTS



OIL SEPARATOR CB — 6

SCALE: NTS



FRENCH DRAIN — 7

SCALE: NTS

Nick Bossoff Engineering, Inc.
191 NE Tarl Lane
Stevenson, WA 98648-4201
Phone: (425) 881-5904

NICHOLAS J. BOSSOFF — STATE OF WASHINGTON — 29631 — REGISTERED PROFESSIONAL ENGINEER

EXPIRES 7/2/23

NO.	DATE	REVISION
1	08/31/22	PERMIT SUBMITTAL
2	03/27/23	CITY INTAKE COMMENTS

N. BOSSOFF, P.E.
PROJECT MANAGER:
NB
DESIGNED:
TKB
DRAWN:
SARC-2203
JOB NUMBER:
SARC-2203pln.dwg
FILE NAME:

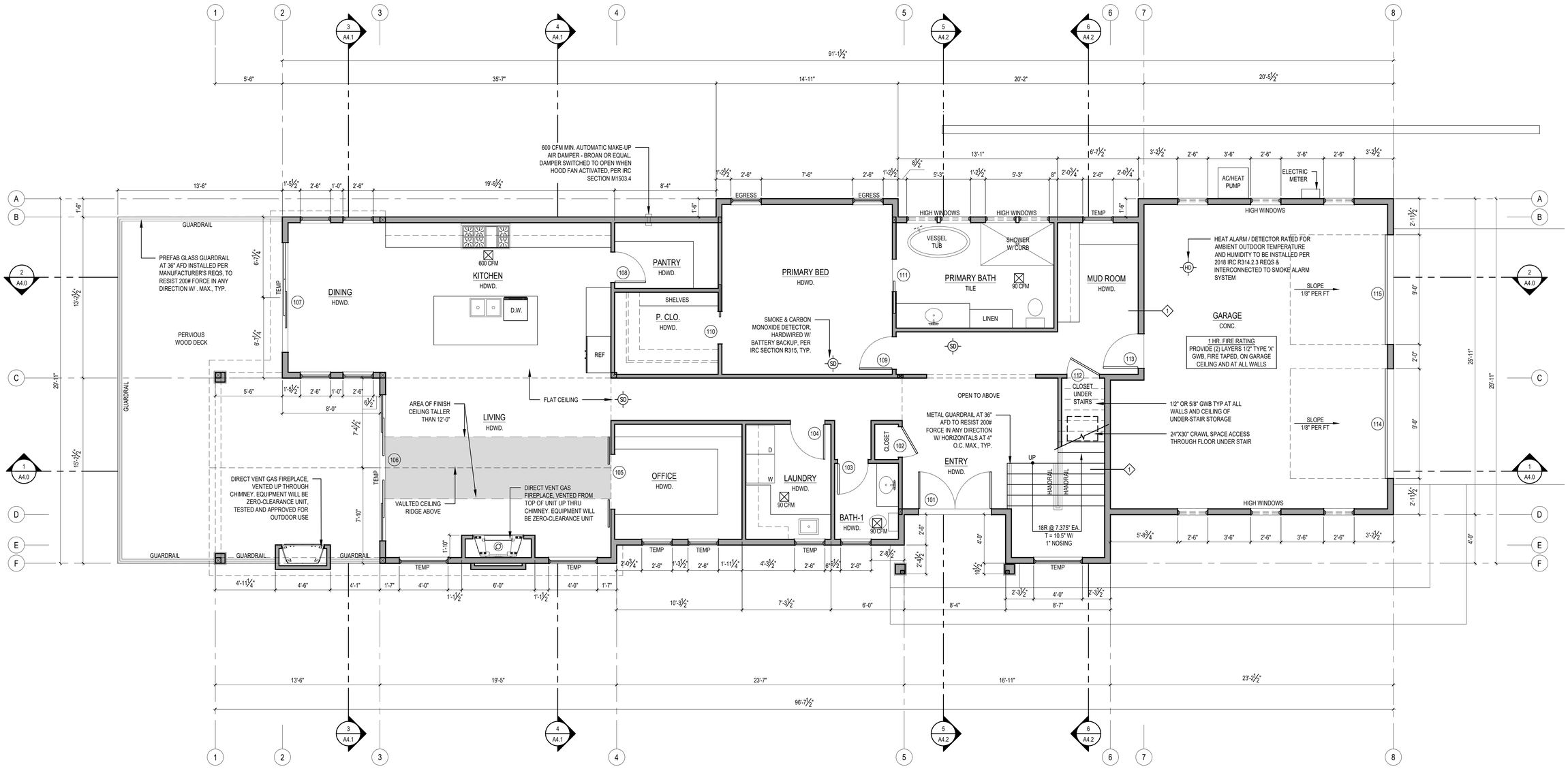
M. SMERSH RESIDENCE

2423 60TH AVE SE

MERCER ISLAND WASHINGTON

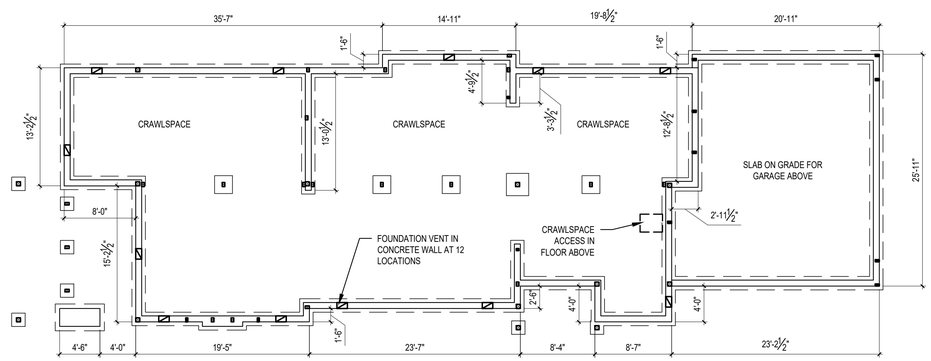
TITLE: DETAILS

SHEET: C-3



1 MAIN FLOOR PLAN

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



2 CRAWLSPACE VENT PLAN

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

WALL PARTITION TYPES:

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

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ (2) LAYERS 60# BLDG. PAPER o/ 1/2" CDX PLYWOOD o/ 2x6 WOOD STUDS AT 16" O.C. w/ 1/2" GYPSUM WALLBOARD AT INTERIOR. PROVIDE R-21 BATT INSULATION EXCEPT AROUND GARAGE.

TYPICAL INTERIOR PARTITION
U.N.O. ALL INTERIOR WALL SHALL BE 2x4 WOOD STUDS @ 16" O.C. w/ 1/2" GYPSUM WALLBOARD EACH SIDE.

TYPICAL FURRED WALL
2" AIRSPACE, 2x4 P.T. WOOD STUDS @ 16" O.C. w/ 1/2" GYPSUM WALLBOARD AT INTERIOR. PROVIDE R-21 BATT INSULATION.

1HR. FIRE RATED WALL
5/8" THK GWB, TYPE 'X' O/ 2X6 WD STUDS @ 16" O.C. PANELS NAILED 7" O.C.-1 7/8" CEM CTD NAILS- JOINTS EXP OR FIN - PERIM CAULKED- UL DES U305 & U314- JOINTS FIN

CRAWLSPACE VENTING:

(AREA) 1661 SF / 300 = 5.54 SF VENTING REQ'D.
5.54 SF X 144 = 797.76 SQ. IN.
68 SQ. IN. STND. VENT.
797.76 / 68 = 11.7 VENTS REQ.
12 VENTS WILL BE PROVIDED

USE APPROVED CLASS I VAPOR RETARDER PER IBC R408.2, EXCEPTION.

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003
REGISTERED ARCHITECT BRADLEY J. STURMAN STATE OF WASHINGTON 5662
www.sturmanarchitects.com

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

MAIN FLOOR PLAN

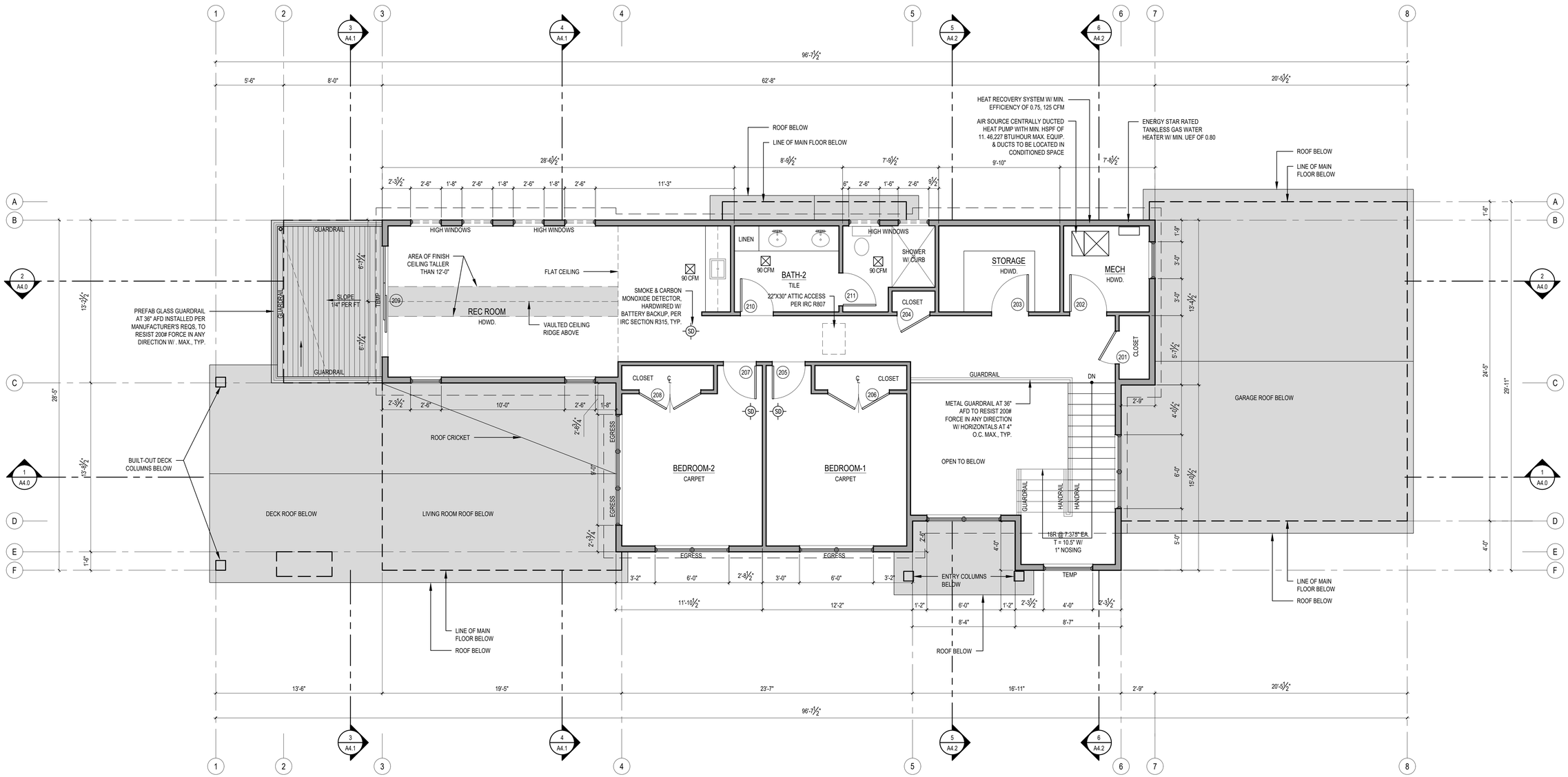
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET
A2.0

PLOT DATE: 3/30/2023



WALL PARTITION TYPES:

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

TYPICAL EXTERIOR WALL
EXTERIOR WALL FINISH o/ (2) LAYERS 60# BLDG. PAPER o/ 1/2" CDX PLYWOOD o/ 2x6 WOOD STUDS AT 16" O.C. w/ 1/2" GYPSUM WALLBOARD AT INTERIOR. PROVIDE R-21 BATT INSULATION EXCEPT AROUND GARAGE.

TYPICAL INTERIOR PARTITION
U.N.O. ALL INTERIOR WALL SHALL BE 2x4 WOOD STUDS @ 16" O.C. w/ 1/2" GYPSUM WALLBOARD EACH SIDE.

TYPICAL FURRED WALL
2" AIRSPACE, 2x4 P.T. WOOD STUDS @ 16" O.C. w/ 1/2" GYPSUM WALLBOARD AT INTERIOR. PROVIDE R-21 BATT INSULATION.

1HR. FIRE RATED WALL (1)
5/8" THK GWB, TYPE 'X' O/ 2X6 WD STUDS @ 16" O.C. PANELS NAILED 7" O.C.-1 7/8" CEM CTD NAILS- JOINTS EXP OR FIN - PERIM CAULKED- UL DES U305 & U314- JOINTS FIN

PLAN NOTES:

1. CONTRACTOR SHALL CONFIRM TO INSPECTOR CAPACITY OF ALL GUARDS AND HANDRAILS SHALL BE CAPABLE OF RESISTING 200# FORCE IN ANY DIRECTION.

2. ATTIC ACCESS PER 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 IRC M1305.1.3 & M1305.1.3.1.

1 UPPER FLOOR PLAN

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

N

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
5662
STATE OF WASHINGTON

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

UPPER FLOOR PLAN

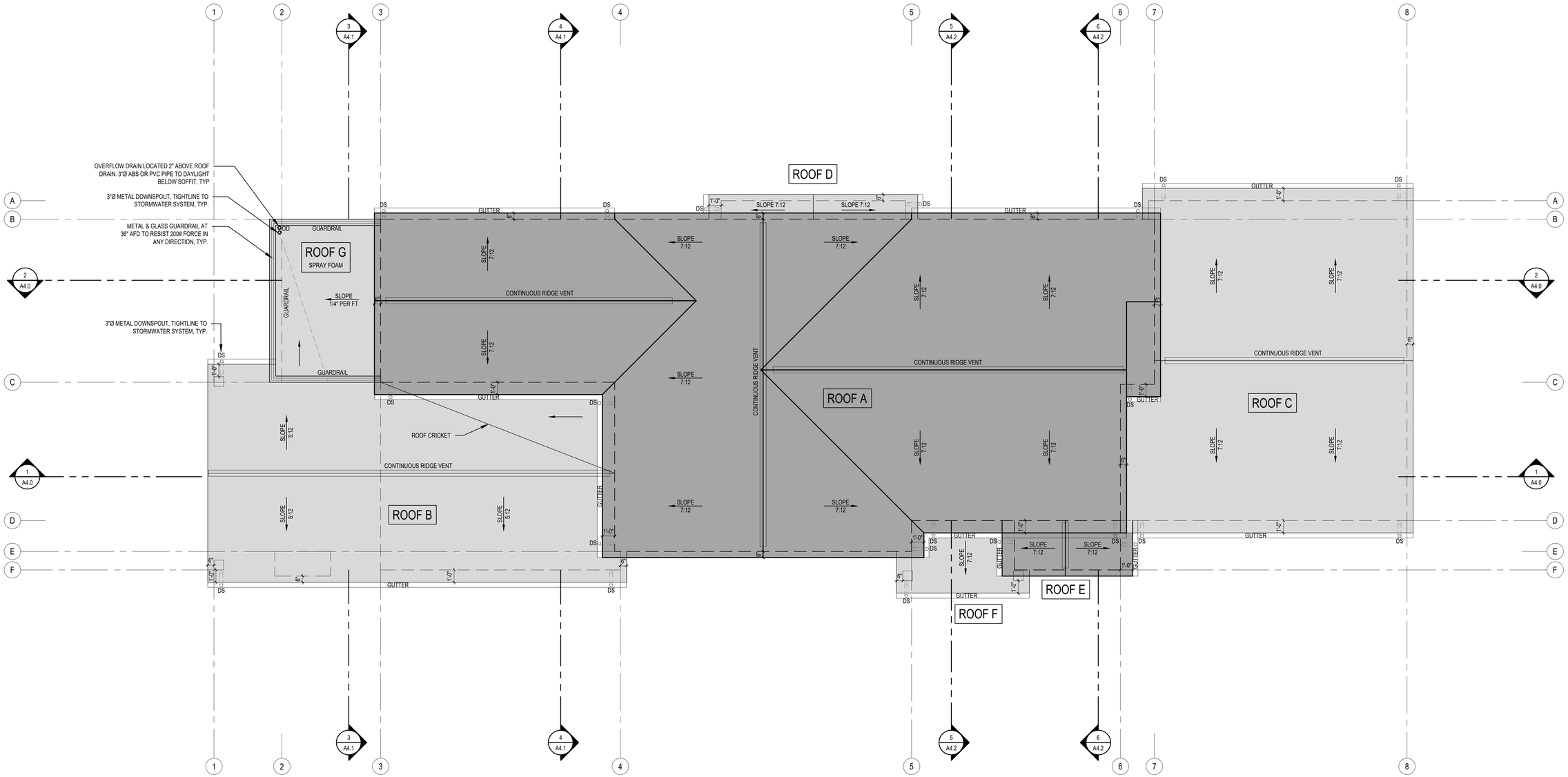
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET
A2.1

PLOT DATE: 3/30/2023



1 ROOF PLAN

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

ROOF VENT CALCULATIONS

CODE REQUIREMENT				CALCULATIONS										ACTUAL	
DESCRIPTION	SF AREA	REQ. VENTING PER SF AREA		VENT TYPE		X	VENT L.F.	=	TOTAL VENT AREA	X	SF CONVERT. 1/144	X	80% EFF FACTOR	TOTAL
		150	300	RIDGE	SOFFIT				SQ. IN.					
ROOF A	1,347	8.98			18 SQ.IN./FT.		91		1638		11.38		9.10	14.50
					1.5" VENT									
				12 SQ.IN/FT.			81		972		6.75		5.40	
				CONTINUOUS										
ROOF B	500	3.33			18 SQ.IN./FT.		38.5		693		4.81		3.85	6.02
					1.5" VENT									
				12 SQ.IN/FT.			32.5		390		2.71		2.17	
				CONTINUOUS										
ROOF C	561	3.74			18 SQ.IN./FT.		44		792		5.50		4.40	5.92
					1.5" VENT									
				12 SQ.IN/FT.			22.75		273		1.90		1.52	
				CONTINUOUS										
ROOF D	22	0.15			18 SQ.IN./FT.		3		54		0.38		0.30	0.30
					1.5" VENT									
				12 SQ.IN/FT.			1.5				0.00		0.00	
				CONTINUOUS										
ROOF E	34	0.23			18 SQ.IN./FT.		8		144		1.00		0.80	0.80
					1.5" VENT									
				12 SQ.IN/FT.			4				0.00		0.00	
				CONTINUOUS										
ROOF F	42	0.28			18 SQ.IN./FT.		9.75		175.5		1.22		0.98	0.98
					1.5" VENT									
				12 SQ.IN/FT.							0.00		0.00	
				CONTINUOUS										

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
5662

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

ROOF PLAN

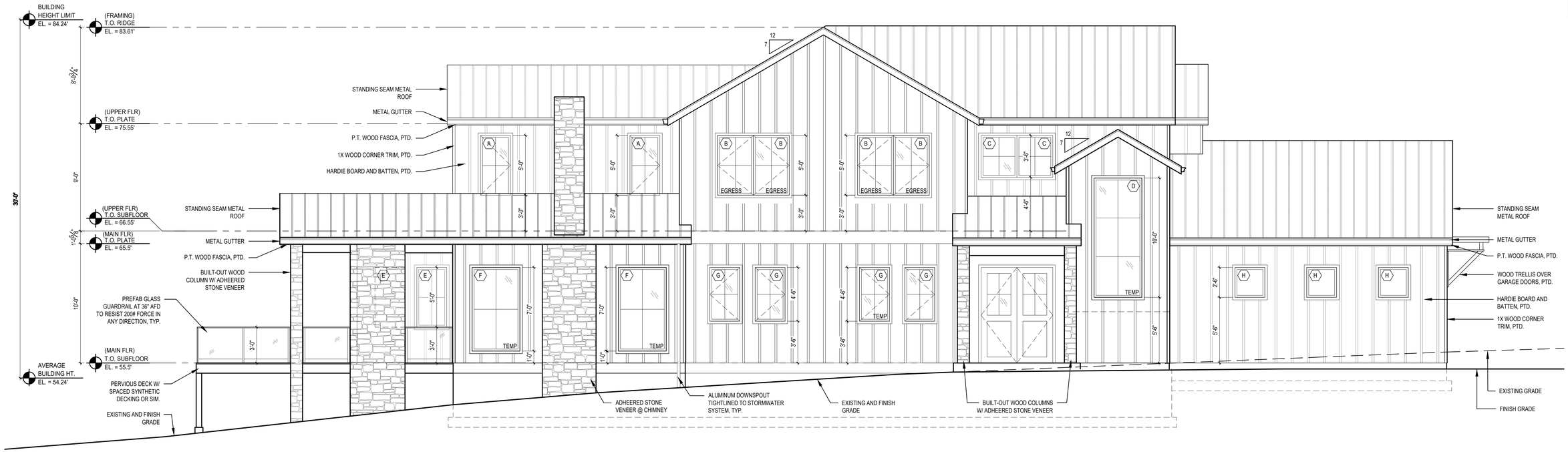
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

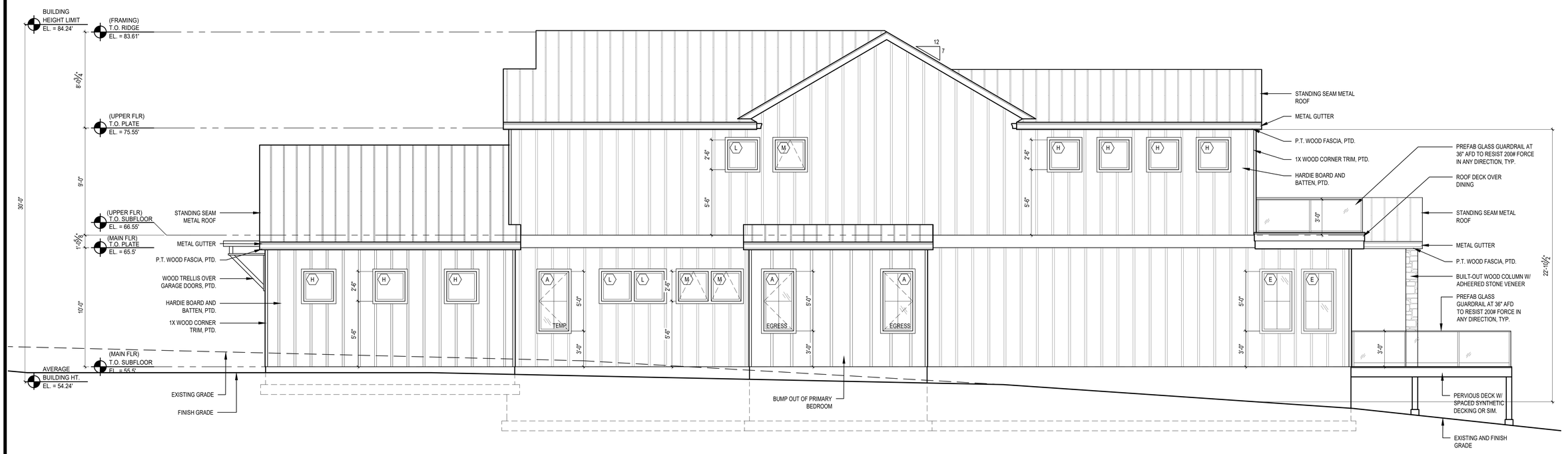
SHEET A2.2

PLOT DATE: 3/30/2023



1 SOUTH ELEVATION

SCALE: 1/4" = 1'



2 NORTH ELEVATION

SCALE: 1/4" = 1'

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
5662

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

EXTERIOR ELEVATIONS

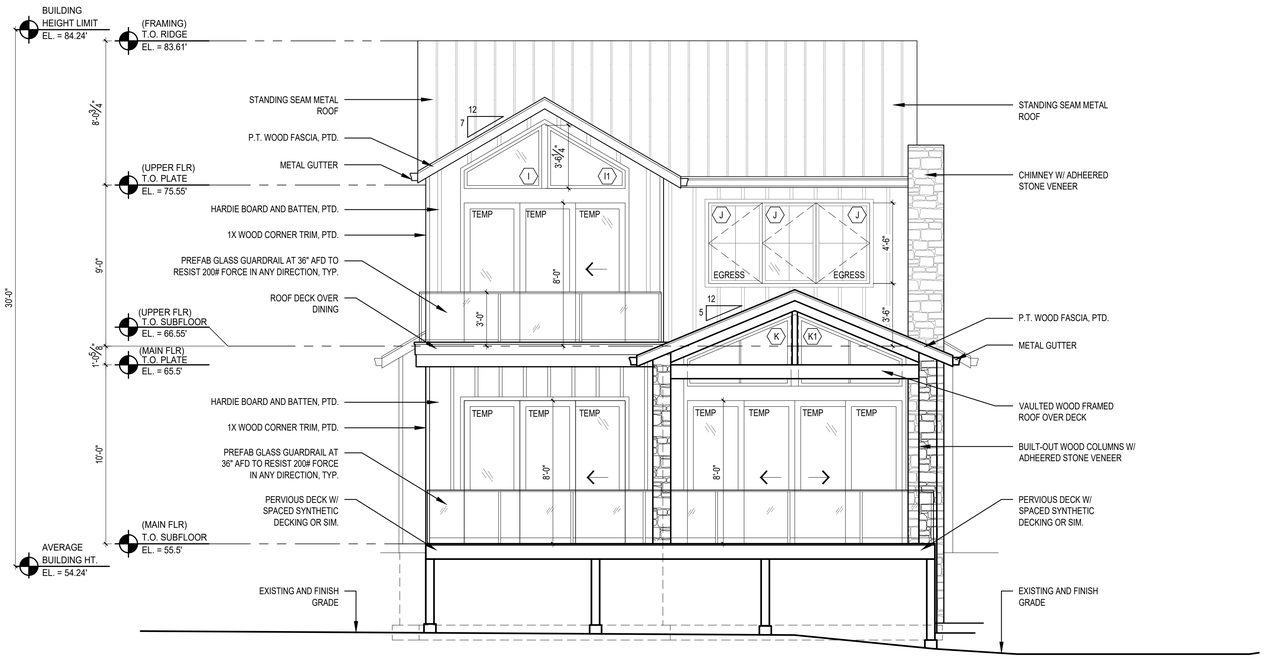
REVISIONS:
1 2 3 4 5

DRAWN BY: KE

CHECKED BY: BJS

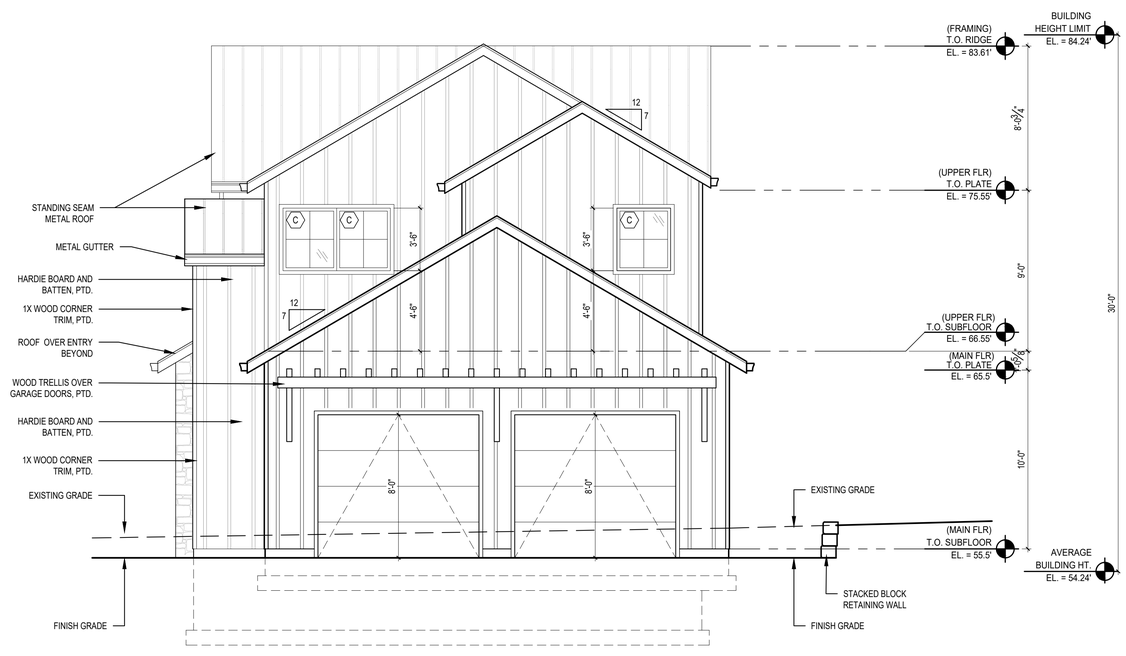
SHEET
A3.0

PLOT DATE: 3/30/2023



3 WEST ELEVATION

SCALE: 1/4" = 1'



4 EAST ELEVATION

SCALE: 1/4" = 1'

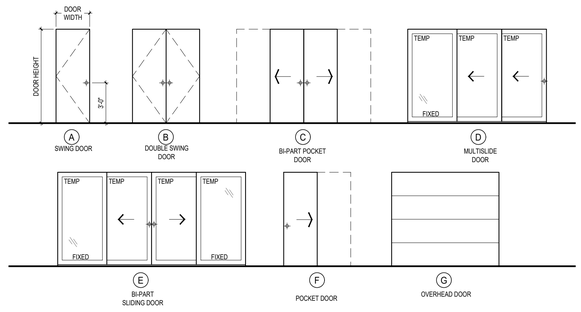
WINDOW SCHEDULE - Smersh Residence

TAG	DESCRIPTION	R.O. SIZE		TEMP.	QTY.	AREA (SF)	U-VAL (MIN.)	GLAZING	REMARKS & NOTES
		WIDTH	HEIGHT						
A	CASEMENT	2'-6"	5'-0"	TEMP	5		0.28	LOW E / CLEAR	SOME TEMPERED
B	CASEMENT	3'-0"	5'-0"		4		0.28	LOW E / CLEAR	EGRESS
C	FIXED	3'-0"	3'-6"		5		0.28	LOW E / CLEAR	
D	FIXED	4'-0"	10'-0"	TEMP	1		0.28	LOW E / CLEAR	TEMPERED GLASS
E	FIXED	2'-6"	5'-0"		4		0.28	LOW E / CLEAR	
F	FIXED	4'-0"	7'-0"	TEMP	2		0.28	LOW E / CLEAR	TEMPERED GLASS
G	CASEMENT	2'-6"	4'-6"	TEMP	4		0.28	LOW E / CLEAR	SOME TEMPERED
H	FIXED	2'-6"	2'-6"		10		0.28	LOW E / CLEAR	
I	FIXED	4'-4"	3'-6"		1		0.28	LOW E / CLEAR	TRANSOM, SLANTED HEAD
I1	FIXED	4'-4"	3'-6"		1		0.28	LOW E / CLEAR	TRANSOM, SLANTED HEAD, REVERSE
J	CASEMENT	3'-0"	4'-6"		3		0.28	LOW E / CLEAR	EGRESS
K	FIXED	5'-9"	3'-11"		1		0.28	LOW E / CLEAR	TRANSOM, SLANTED HEAD
K1	FIXED	5'-9"	3'-11"		1		0.28	LOW E / CLEAR	TRANSOM, SLANTED HEAD, REVERSE
L	FIXED	2'-6"	2'-6"		3		0.28	LOW E / CLEAR	SHOWER WINDOWS
M	AWNING	2'-6"	2'-6"		3		0.28	LOW E / CLEAR	

DOOR SCHEDULE - Smersh Residence

DOOR NO.	LOCATION	SIZE WIDTH	SIZE HEIGHT	DOOR TYPE	TEMP. GLASS	DOOR THK.	U-VAL (MIN.)	REMARKS
MAIN FLOOR								
101	ENTRY	PR 3'-0"	8'-0"		Y	1-3/4"	0.28	TEMPERED GLASS
102	ENTRY CLOSET	2'-6"	8'-0"			1-3/4"		
103	BATH-1	2'-6"	8'-0"			1-3/4"		
104	LAUNDRY	2'-10"	8'-0"			1-3/4"		SOUND GASKET
105	OFFICE	PR 2'-3"	8'-0"			1-3/4"		BI-PART POCKET
106	LIVING	12'-0"	8'-0"		Y	1-3/4"	0.28	TEMP, BI-PART SLIDER
107	DINING	9'-0"	8'-0"		Y	1-3/4"	0.28	TEMPERED GLASS
108	PANTRY	2'-6"	8'-0"			1-3/4"		
109	PRIMARY BEDROOM	2'-8"	8'-0"			1-3/4"		
110	PRIMARY CLOSET	2'-8"	8'-0"			1-3/4"		
111	PRIMARY BATH	2'-8"	8'-0"			1-3/4"		POCKET
112	UNDERSTAIR CLOSET	2'-8"	8'-0"			1-3/4"		
113	GARAGE	2'-10"	8'-0"			1-3/4"		20 MIN FIRE RATED, GASKET
114	GARAGE	9'-0"	8'-0"			1-3/4"		OVERHEAD DOOR
115	GARAGE	9'-0"	8'-0"			1-3/4"		OVERHEAD DOOR
UPPER FLOOR								
201	HALL CLOSET	2'-8"	8'-0"			1-3/4"		
202	MECHANICAL	3'-0"	8'-0"			1-3/4"		SOUND GASKET
203	STORAGE	3'-0"	8'-0"			1-3/4"		
204	HALL CLOSET	2'-8"	8'-0"			1-3/4"		
205	BEDROOM-1	2'-8"	8'-0"			1-3/4"		
206	BED-1 CLOSET	PR 2'-6"	8'-0"			1-3/4"		
207	BEDROOM-2	2'-8"	8'-0"			1-3/4"		
208	BED-2 CLOSET	PR 2'-6"	8'-0"			1-3/4"		
209	REC ROOM	9'-0"	8'-0"		Y	1-3/4"	0.28	TEMPERED GLASS
210	BATH-2	2'-8"	8'-0"			1-3/4"		
211	BATH-2	2'-8"	8'-0"			1-3/4"		

DOOR TYPES:



WINDOW & DOOR SCHEDULE NOTES:

1.) CONTRACTOR TO VERIFY ALL GLAZING SIZING, AND DOOR DIMENSIONS IN FIELD PRIOR TO ROUGH FRAMING & ORDERING OF GLAZING/WINDOW/DOOR MATERIALS. REVIEW SIZES AND ANY DISCREPANCIES W/ ARCHITECT.

2.) ALL GLAZING TO BE "LOW E", INSULATED GLASS UNLESS NOTED OTHERWISE.

3.) ALL OPERABLE WINDOWS TO HAVE SCREENS.

4.) GLAZING INDOORS AND/OR WITHIN 24" OF A DOOR TO BE TEMPERED. SEE EXTERIOR ELEVATION FOR TEMP. GLASS LOCATION & EGRESS WINDOWS.

5.) 2018 WSEC & VIAQ RESIDENTIAL PRESCRIPTIVE OPTION 3 ADOPTED. GLAZING AREA INDICATED UNLIMITED. SEE ENERGY NOTE AT A1.0 SHEET FOR DETAILS.

6.) ALL WINDOWS AND DOORS WITHOUT A BUG ARE EXISTING TO REMAIN.

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
5662

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

EXTERIOR ELEVATIONS

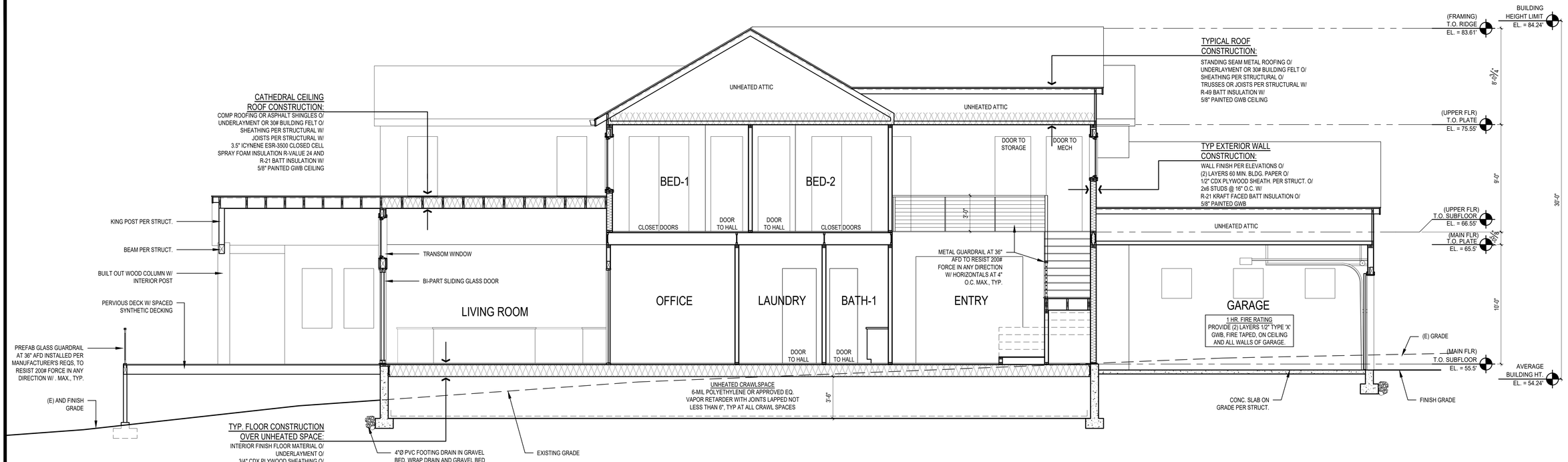
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

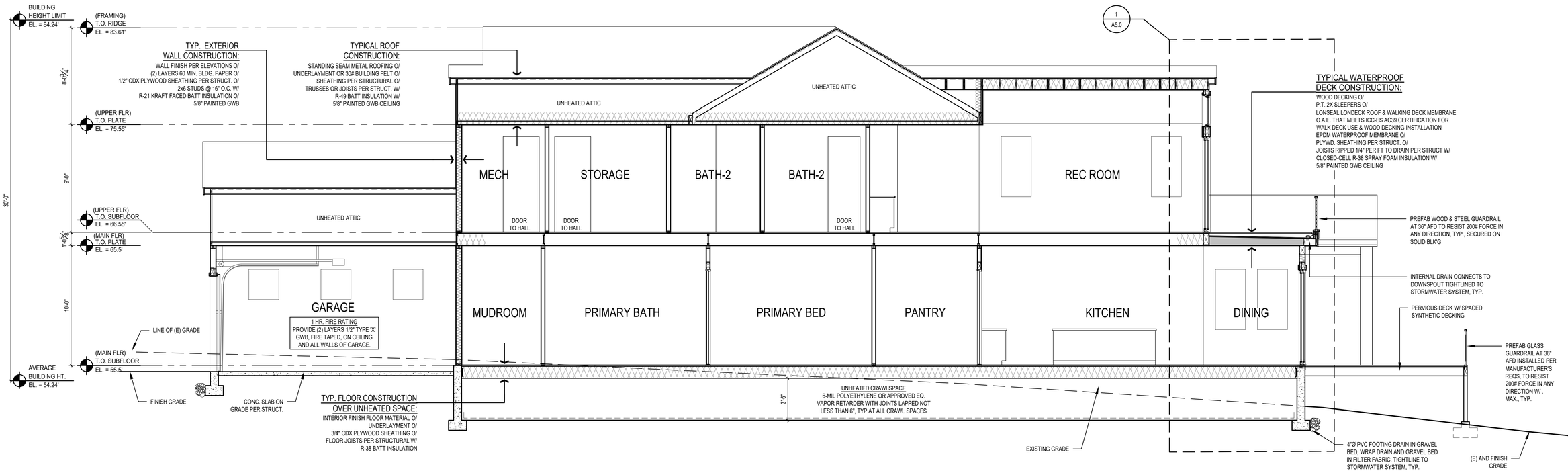
SHEET A3.1

PLOT DATE: 3/30/2023



1 BUILDING SECTION

SCALE: 1/4" = 1'



2 BUILDING SECTION

SCALE: 1/4" = 1'

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003
REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
1662
www.sturmanarchitects.com

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

BUILDING SECTIONS

REVISIONS:

DRAWN BY: KE

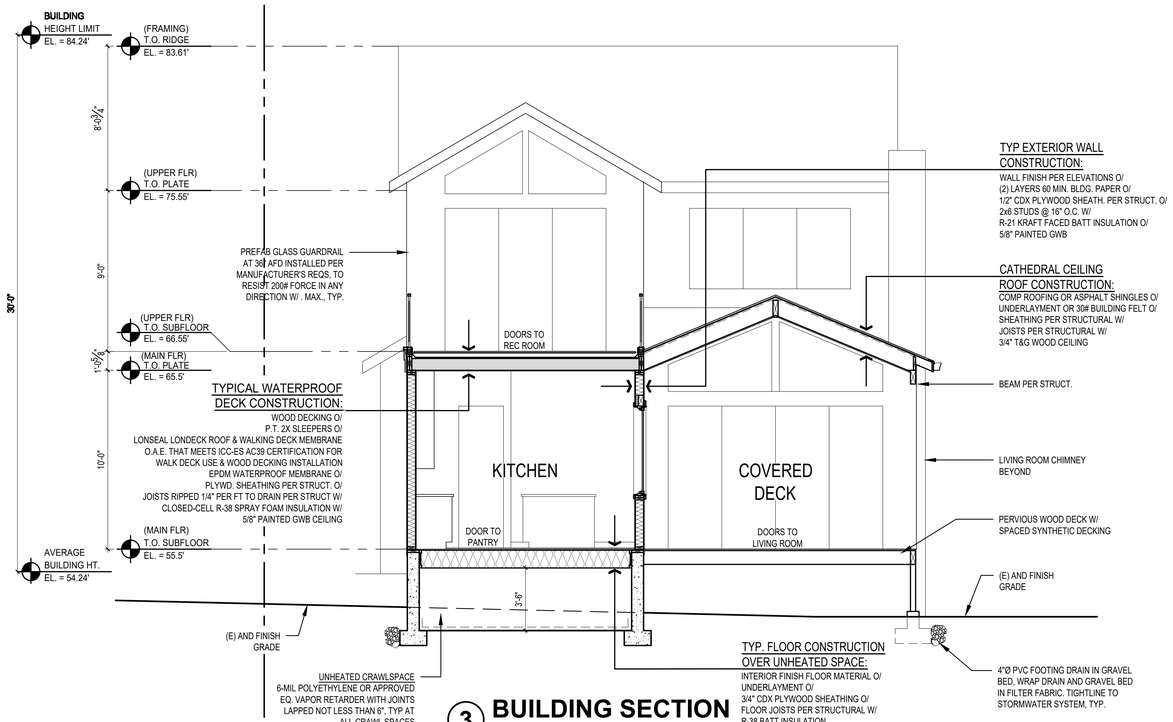
CHECKED BY: BJS

SHEET **A4.0**

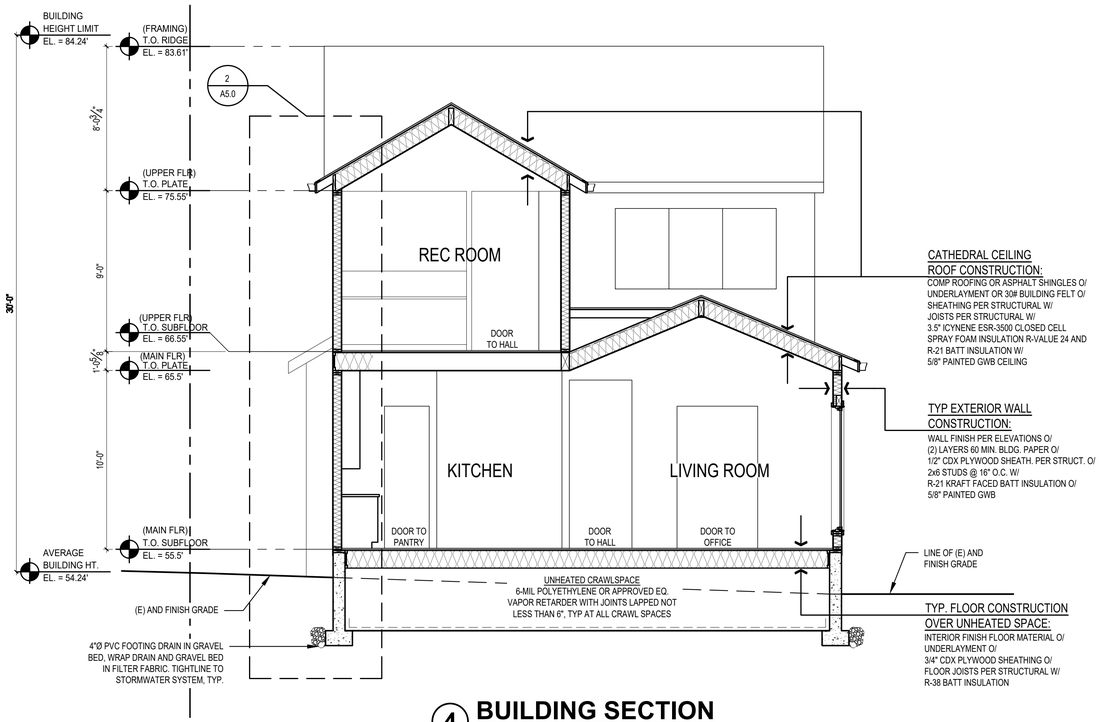
PLOT DATE: 3/30/2023

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

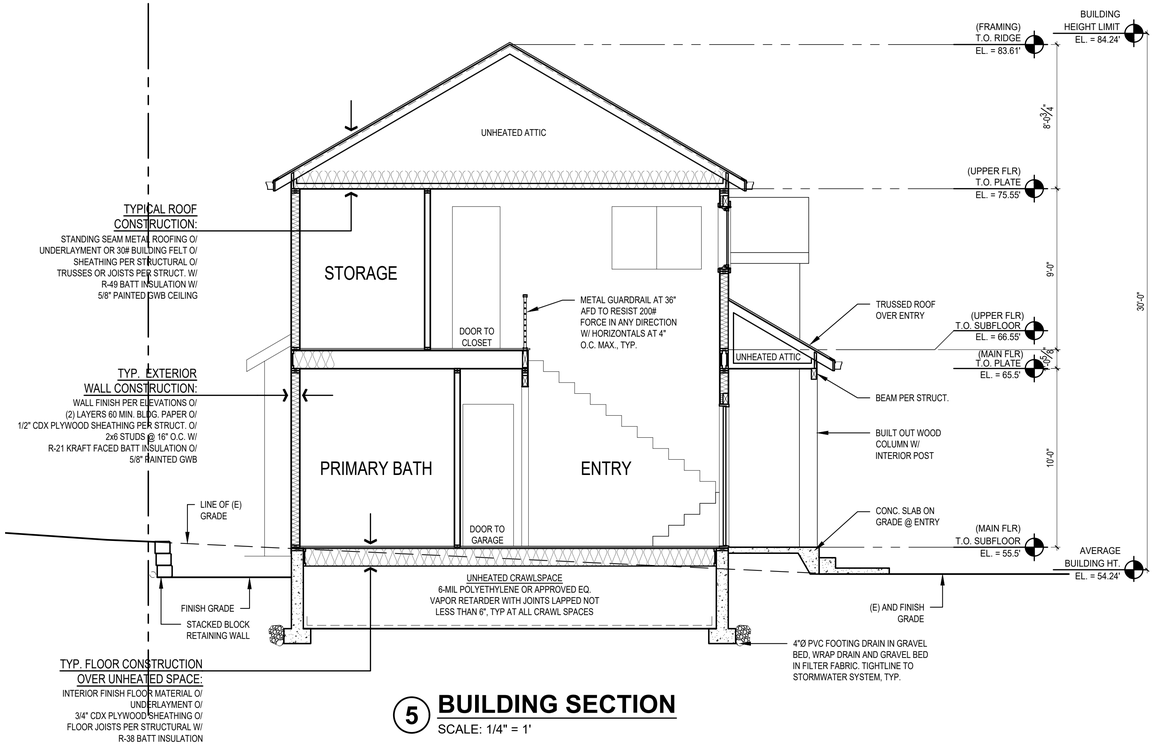
PERMIT SET 03/31/23



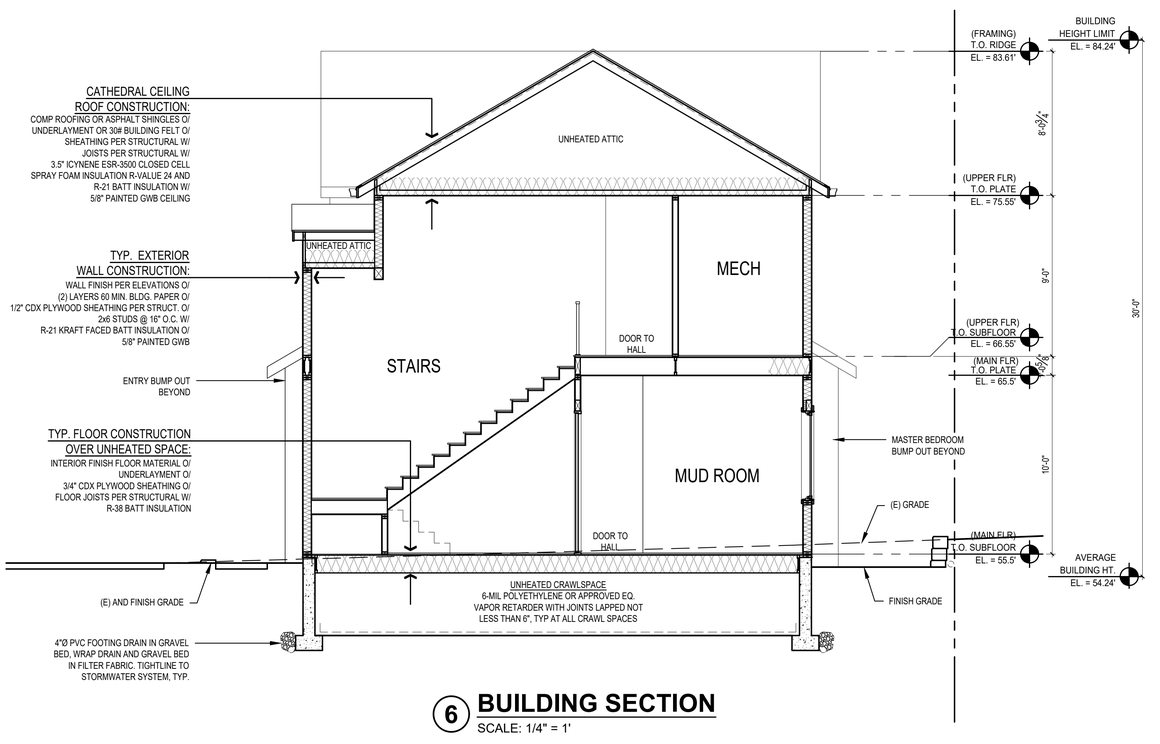
3 BUILDING SECTION
SCALE: 1/4" = 1'



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



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



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

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT 5662 BRADLEY J. STURMAN STATE OF WASHINGTON

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

BUILDING SECTIONS

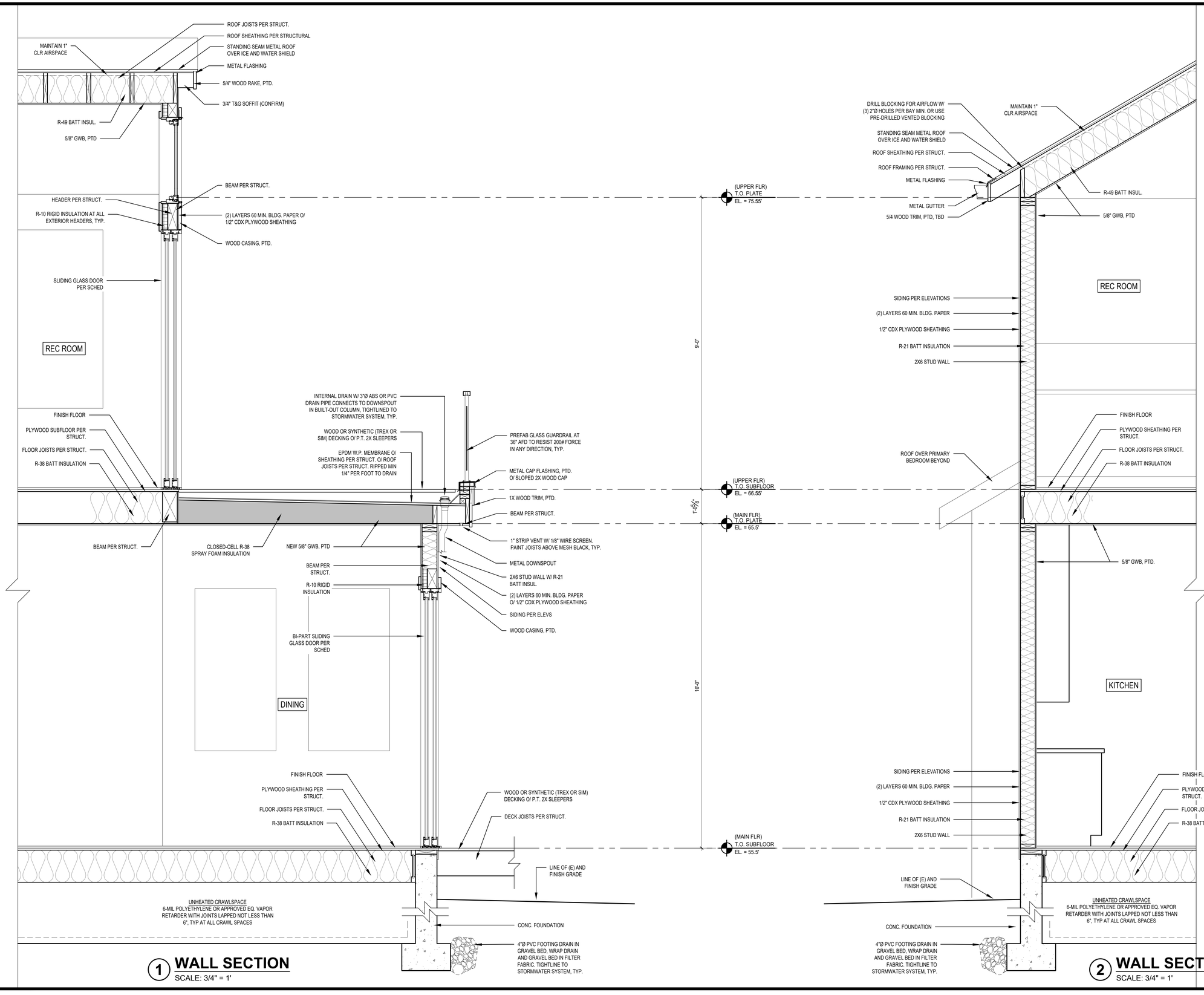
REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET
A4.1

PLOT DATE: 3/30/2023



1 WALL SECTION
SCALE: 3/4" = 1'

2 WALL SECTION
SCALE: 3/4" = 1'

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT
BRADLEY J. STURMAN
STATE OF WASHINGTON
5662

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

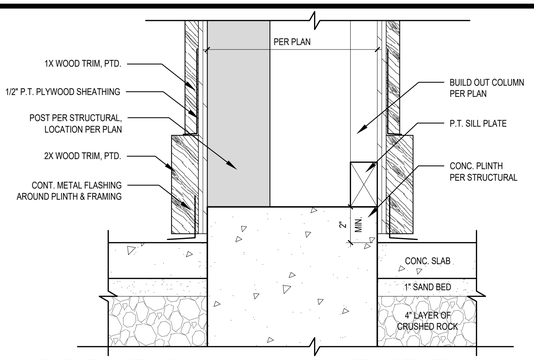
WALL SECTIONS

REVISIONS:

DRAWN BY: KE
CHECKED BY: BJS

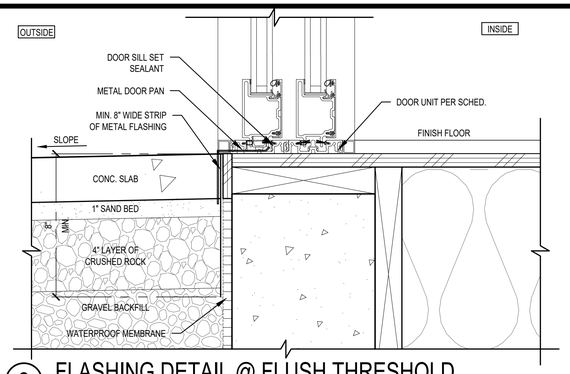
SHEET
A5.0

PLOT DATE: 3/30/2023



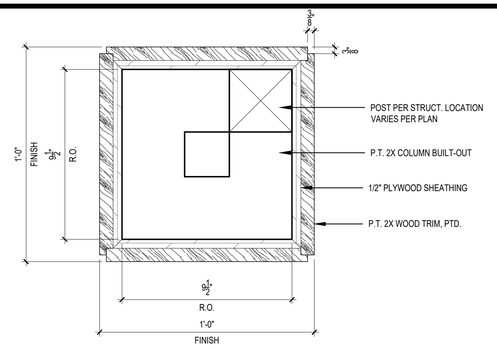
1 BUILT-OUT COLUMN CONC. PLINTH SECTION

SCALE: 3" = 1'-0"



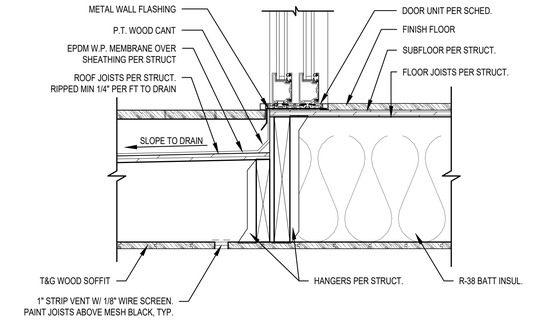
2 FLASHING DETAIL @ FLUSH THRESHOLD

SCALE: 3" = 1'-0"



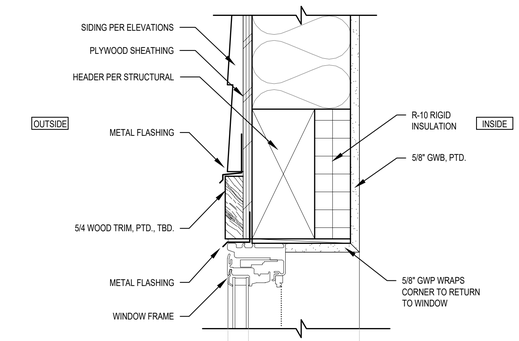
3 BUILT-OUT WOOD COLUMN PLAN

SCALE: 3" = 1'-0"



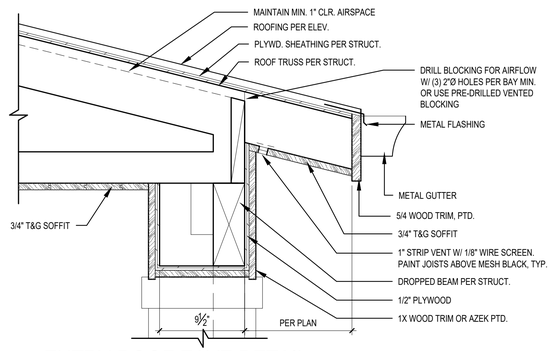
4 THRESHOLD @ DECK SECTION DETAIL

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



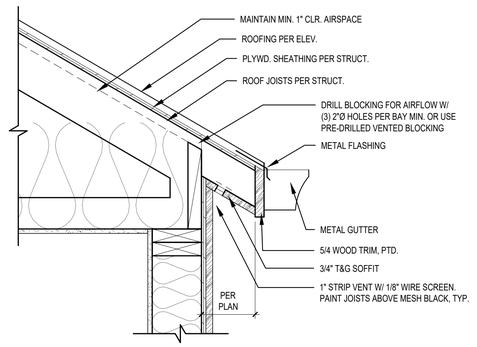
5 TYP. WINDOW HEAD DETAIL

SCALE: 3" = 1'-0" SIM. AT WINDOW JAMB



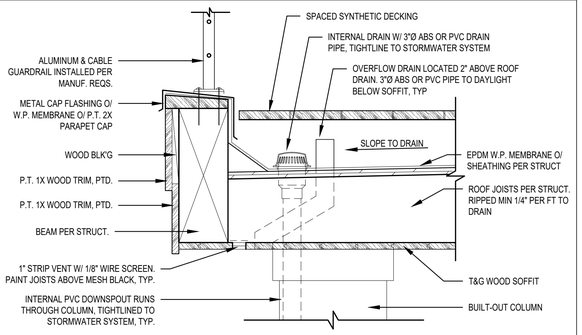
6 ENTRY ROOF EAVE DETAIL

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



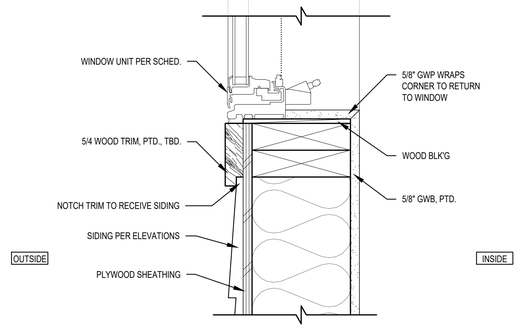
7 TYPICAL EAVE DETAIL

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



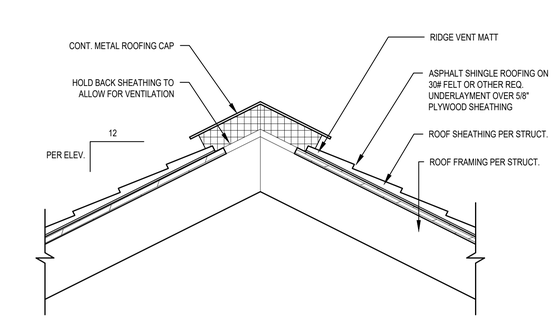
8 THRESHOLD @ DECK SECTION DETAIL

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



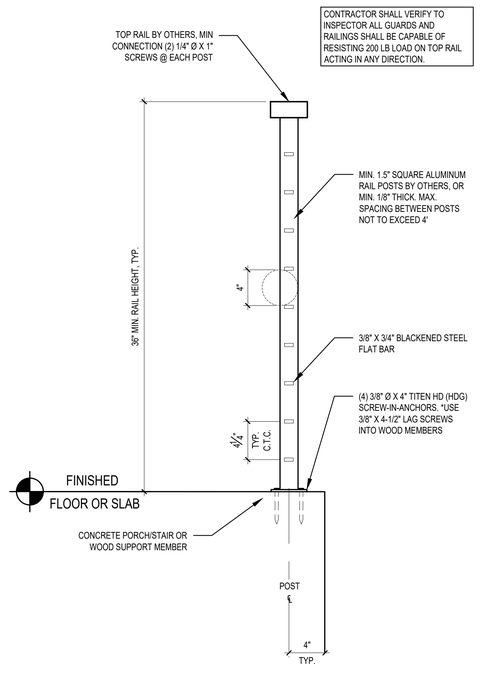
9 TYP. WINDOW SILL DETAIL

SCALE: 3" = 1'-0"



10 TYP. ROOF RIDGE VENT DETAIL

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

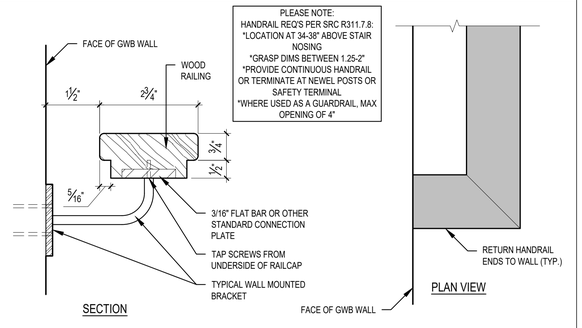


14 RAILING ATTACHMENT - TOP-MOUNTED

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

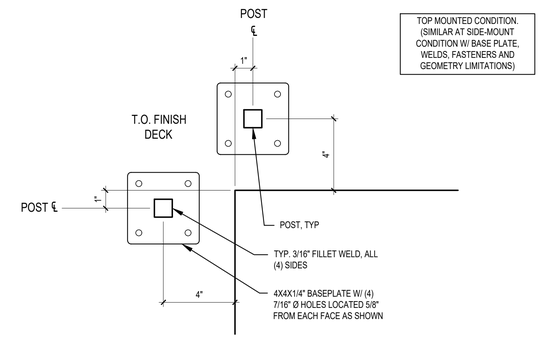
11 NOT USED

SCALE: 6" = 1'-0"



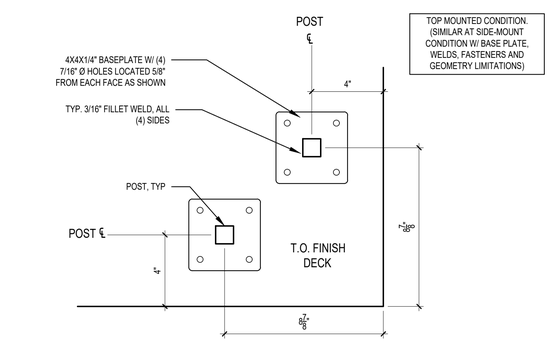
15 HANDRAIL DETAIL

SCALE: 6" = 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

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

PERMIT SET 03/31/23

STURMAN ARCHITECTS
9 - 103rd Avenue NE Suite 203
Bellevue, WA 98004
TEL: 425.451.7003

REGISTERED ARCHITECT BRADLEY J. STURMAN STATE OF WASHINGTON 5662

M. SMERSH RESIDENCE
PERMIT SET
2423 60TH AVE SE
MERCER ISLAND, WA 98040

ARCHITECTURAL DETAILS

REVISIONS:

DRAWN BY: KE

CHECKED BY: BJS

SHEET

A6.0

PLOT DATE: 3/30/2023

GENERAL NOTES

1.0 GENERAL

1.1 Construction shall conform to the 2018 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)

	Dead	Live	Snow
Truss Roof	19*		25
Stick-Framed Roof	18*		25
Roof Deck	18	60	
Upper Floor	14	40	
Main Floor	11	40	

*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: 47.5818°N, 122.2136°W
Mapped Spectral Response Acceleration: Ss=1.40, S1=0.49
Site Class: D (per Geotech Engr)
Spectral Response Coefficients: Sds=0.93
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=1.3
Over-strength Factor: Ω=2.5
Analysis Procedure Used: Equivalent Lateral Force Procedure

2.3 Wind Design Data (per the 2018 IBC)
Risk Category: II
Basic Wind Speed: 98 mph
Exposure Category: C
Topographic Factor: 1.00 (Per Mercer Island Wind Load Map)

3.0 INSPECTIONS

The construction work shall be inspected as required by the SRC 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

4.1 New foundations have been designed in accordance with recommendations in the Geotechnical Report. The design basis is as follows:

* Allowable Vertical Bearing Pressures:
  Dead + Live 2500 psf
  Dead + Live + Short Term 3325 psf
* Sliding Resistance:
  Passive Pressure 300 pcf
  Sliding Friction Coefficient 0.4

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 March 3rd, 2022. 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, 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 9$\frac{1}{2}$", and 1.3E for members with depth less than 9$\frac{1}{2}$". '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 for concrete exposed to weather and 2,500psi for concrete not exposed to weather. 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)
Rectangular Tube (HSS):	A500 Gr. B (Fy = 46 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. Construction 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) 1$\frac{1}{2}$" Where concrete is not exposed to earth or weather.

6.4 Slabs on Grade

6.4.1 Crack Control Joints

Cut crack control joints in top of slab @10'-0"o.c. (max.) each way. Joint depth shall be $\frac{1}{4}$ of the slab depth or 1", whichever is greater. Joints shall be conventional saw-cut within 4 to 12 hrs of concrete placement, or early-entry saw-cut within 1 to 4 hrs of concrete placement. Jointed panels shall be rectangular, as square as possible, with a max length-to-width ratio of 1$\frac{1}{2}$:1.

6.4.2 Slab Sub-Base

Slab sub-base shall be $\frac{5}{8}$" to $\frac{3}{4}$" clean, crushed drain rock, compacted to a firm and unyielding condition.

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.

7.2 Engineered Wood Framing

See TrusJoist "Installation Guide for Floor and Roof Framing" (TJ-9001)for allowable holes in engineered wood beams. Grade stamp info must be maintained on ripped engineered wood members; refer to TrusJoist Technical Bulletin TB-305 for requirements pertaining to re-sawn engineered wood.

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 SRC Section 317.3, or shall have equivalent corrosion resistance. Dissimilar metals & coatings shall not be in contact. Bolt holes shall be a minimum of $\frac{1}{32}$" to a maximum of $\frac{1}{16}$" 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 1$\frac{1}{2}$" minimum penetration into framing at all panel edge and field nailing, U.O.N. Nails shall be located at least $\frac{3}{8}$" from panel ends and edges. Stagger nails at adjoining panel edges. Drive nail heads flush with panel surface. Maintain $\frac{1}{8}$" gap between all adjoining panel edges. Center interior panel joints on framing members or blocking. Provide $\frac{1}{2}$" 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 $\frac{1}{2}$" 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 $\frac{1}{2}$" 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 4$\frac{1}{2}$" from each end of each piece. Holes in sills for bolts shall not be oversized. Sill anchor bolts shall be $\frac{5}{8}$"ø with 7" min. embed. into concrete. Sill anchor bolts into existing concrete shall be all-thread rod, drill and epoxy. 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 $\frac{1}{2}$" 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 $\frac{5}{8}$" 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 $\frac{3}{4}$" 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 $\frac{1}{4}$" 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:

Vertical Roof Loads – Top Chord
*Dead: 15 psf (Does not include truss self-weight)
*Snow: 25 psf
*Wind: -51 psf (uplift)

Vertical Ceiling Loads – Bottom Chord
*Dead: 5 psf (Does not include truss self-weight)
*Live: 10 psf (Does not act concurrently with roof live load)

Lateral Drag Truss Loads
Drag trusses shall be designed for a uniform unfactored seismic load acting longitudinally along the entire top chord length, and for a longitudinal reaction acting at the location at which the bottom chord is strapped to the adjacent collector element. The magnitude of the uniform top chord load and concentrated bottom chord load are indicated on plan. The bottom chord strap location is indicated on plan.

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

7.10.4 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.

7.10.5 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.

7.10.6 Truss design drawings and calculations, prepared by a civil or structural engineer licensed in the State of Washington in accordance with the SRC 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.

7.10.7 Attach top plates of interior, non-bearing partition walls to truss bottom chords with 'STC' clips, leaving a $\frac{1}{4}$" to $\frac{1}{2}$" 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.

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
	12-14-22	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT: Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

OWEN REMICK GOULD
STATE OF WASHINGTON
52797
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

ENGINEER OF RECORD

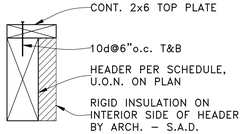
O.G. ENGINEERING, PLLC
3201 1st Ave S, Suite 101, Seattle, WA 98134
(206) 290-4608
owen@ogengineer.com

SHEET TITLE: GENERAL NOTES

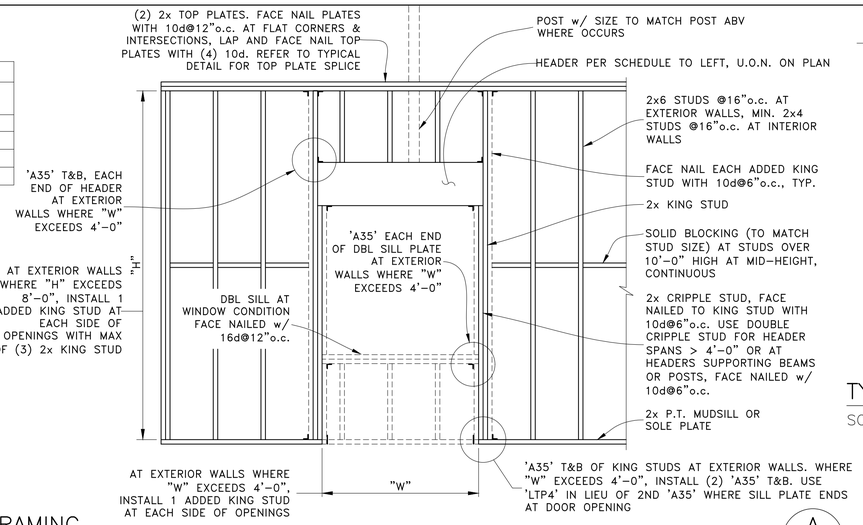
BUILDING DEPARTMENT APPROVAL STAMP:

SCALE: AS NOTED
JOB NO. 22004
SHEET. NO. S1

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

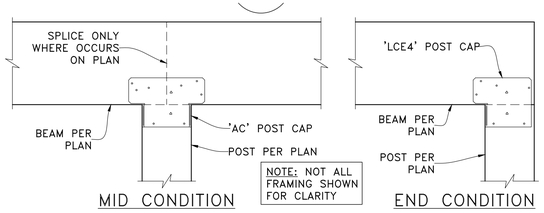


EXTERIOR HEADER @ 2x6 WALLS



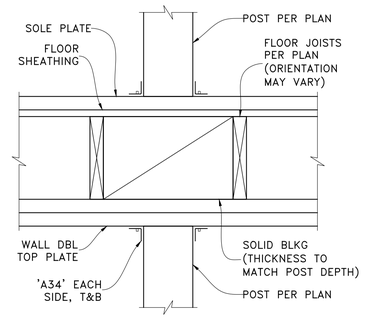
TYPICAL STUD WALL FRAMING (A)

SCALE: NTS



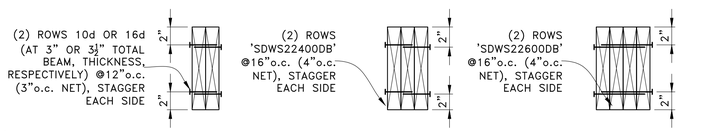
BEAM TO ISOLATED POST (E)

SCALE: NTS



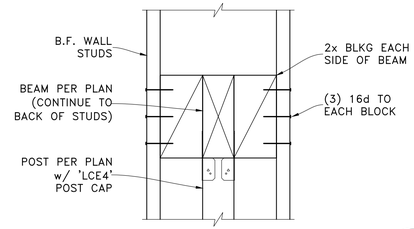
POST IN WALL AT FLOOR (F)

SCALE: NTS



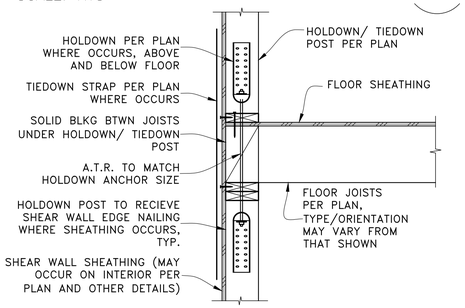
TYPICAL MULTI–PLY BEAM FASTENING (C)

SCALE: NTS



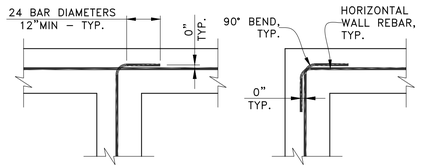
POST IN BALLOON–FRAMED WALL (G)

SCALE: NTS



TYPICAL UPPER FLOOR HOLDOWN OR TIEDOWN STRAP (J)

SCALE: NTS

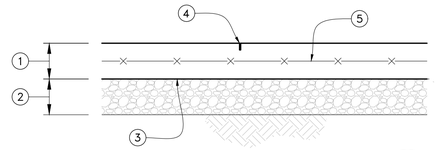


TYPICAL FOOTING AND WALL CORNERS (M)

SCALE: NTS

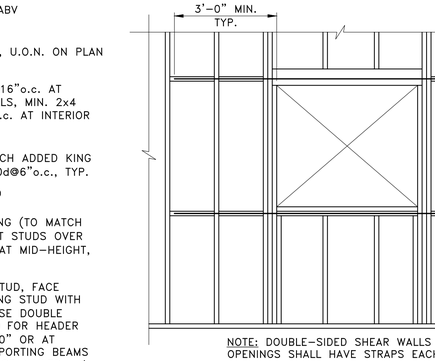
SLAB ON GRADE DETAIL KEY

1. SLAB ON GRADE PER PLAN
2. 4" SUB–BASE PER GENERAL NOTE 6.4.2
3. VAPOR RETARDER BY ARCHITECT (S.A.D.)
4. CRACK CONTROL JOINTS PER GENERAL NOTE 6.4.1
5. W.W.F. PER PLAN. USE SPACERS BELOW MESH TO MAINTAIN POSITION AT CENTER OF SLAB



TYPICAL SLAB ON GRADE (N)

SCALE: NTS

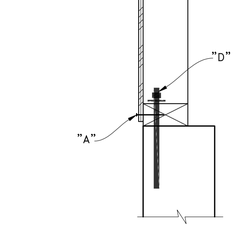


NOTE: DOUBLE–SIDED SHEAR WALLS WITH OPENINGS SHALL HAVE STRAPS EACH SIDE

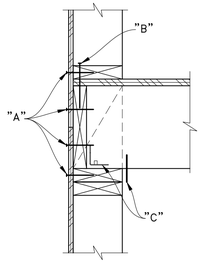
STRAP SCHEDULE	
SHEAR WALL MARK	STRAP
①	CS20
②	CS16
③	CS16
④	CS14

TYPICAL SHEARWALL STRAP AROUND OPENINGS (B)

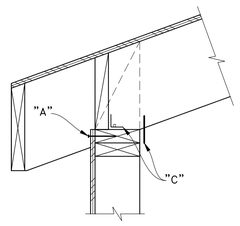
SCALE: NTS



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.

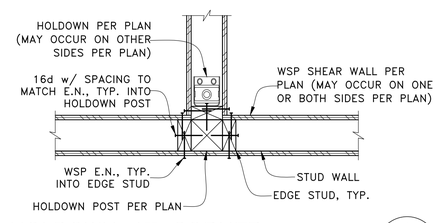
4) SCREWS SHALL HAVE MIN. 2" PENETRATION INTO RIM JOIST/ BLOCKING – USE LONGER SCREWS IF NECESSARY.

5) FRAMING CLIPS ARE ONLY REQUIRED WHERE SPECIFIED ON FRAMING DETAILS.

6) SEE GENERAL NOTES 7.6 & 7.8 FOR MORE INFORMATION.

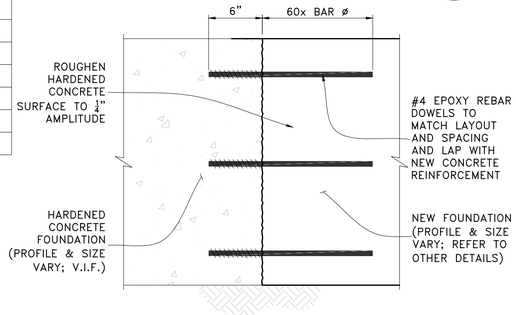
SHEAR WALL SCHEDULE (S.W.S.) (H)

SCALE: NTS



HOLDOWN AT CORNER (I)

SCALE: NTS

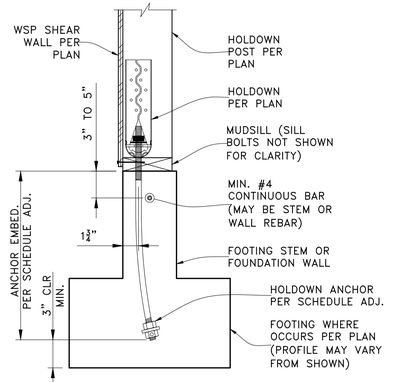


TYPICAL FRESH TO HARDENED CONCRETE (K)

SCALE: NTS

HOLDOWN SCHEDULE		
HOLDOWN	ANCHOR	ANCHOR EMBEDMENT
HDU2	SB⅝x24	18"
HDU4	SB⅝x24	18"
HDU5	SB⅝x24	18"
HDU8	SB⅝x24	18"
HDU11	SB1x30	24"

NOTES:
1) SEE GENERAL NOTE 7.7 FOR ADDITIONAL HOLDOWN SPECIFICATIONS NOT NOTED HEREIN.
2) NOT ALL FOUNDATION REINFORCEMENT SHOWN FOR CLARITY (REFER TO OTHER DETAILS)



TYPICAL HOLDOWN AT FOUNDATION (L)

SCALE: NTS

PERMIT SET

REV.	DATE	DESCRIPTION
	12–14–22	PERMIT SET

PROJECT: NEW SINGLE–FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT: Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

OWEN REMICK COLE — STATE OF WASHINGTON — 52757 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

ENGINEER OF RECORD

O.G. ENGINEERING, PLLC
3201 1st Ave S, Suite 101, Seattle, WA 98134
(206) 290–4408
owen@ogengineer.com

SHEET TITLE: TYPICAL DETAILS

SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S2

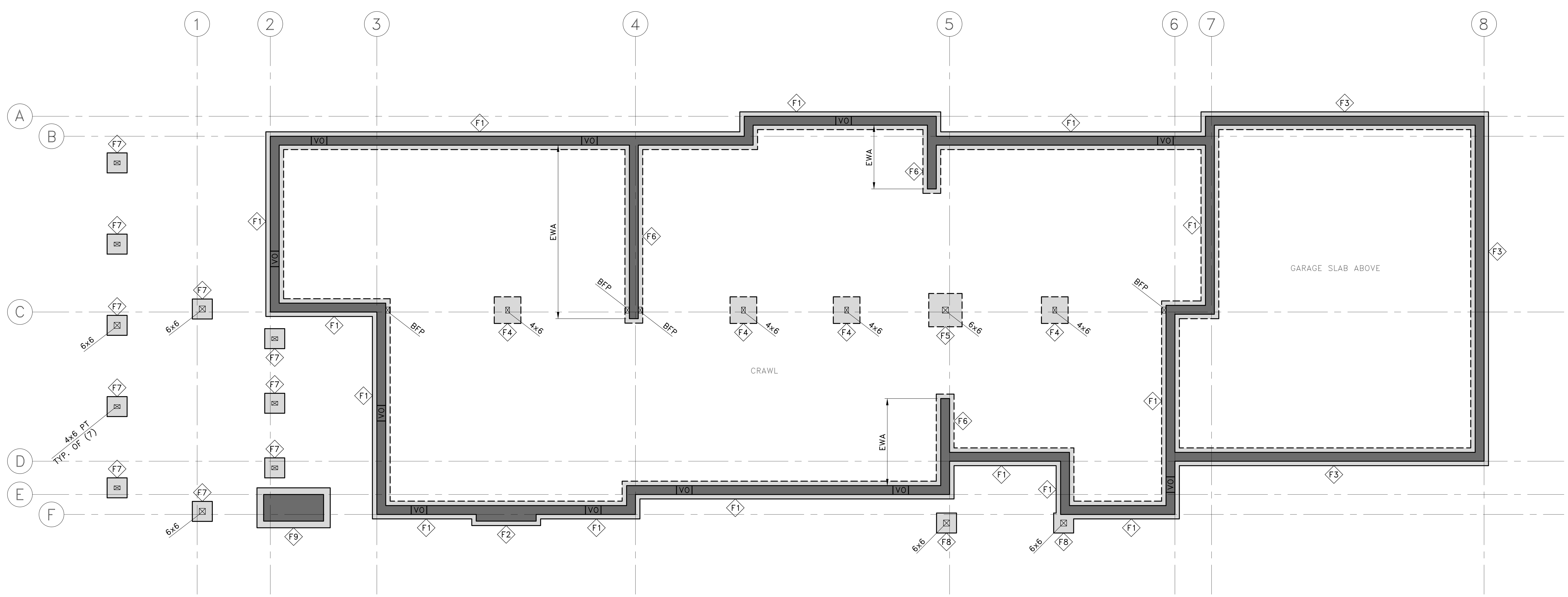
PLAN LEGEND

(concrete wall symbol)	CONCRETE FOUNDATION WALL PER FOUNDATION SCHEDULE BELOW		
(spread footing symbol)	CONCRETE SPREAD FOOTING PER FOUNDATION SCHEDULE BELOW		
4x4	POST ABOVE FOUNDATION PER C–E/S7		
BFP		BFP	4x6 POST FROM T.O. FOOTING TOE TO U/S MAIN FLOOR BEAM w/ 'LCE4Z' CAP & ½"ø EPOXY ANCHORS w/ 4" EMBED. INTO CONCRETE STEM WALL STARTING 6" FROM T.O. POST & @12"o.c. BTWN. CENTER VERT. ANCHOR ROW IN POST. PLACE W.P. BARRIER (BY OTHERS) BTWN UNTREATED WOOD AND CONCRETE. MAINTAIN ½" AIR GAP BTWN END OF SUPPORTED BEAM AND CONCRETE WALL
		VO	VENT OPENING AT T.O. FNDN WALL (S.A.D.). MUDSILL SHALL BE CONTINUOUS OVER OPENING AND FOR MIN. 16" BEYOND EACH SIDE. MAX VENT LENGTH = 14", TYP.

FOUNDATION SCHEDULE

F1	8" EXTERIOR CRAWLSPACE FOUNDATION WALL w/ 16" WIDE T-FOOTING PER A/S7
F2	14" CRAWLSPACE FOUNDATION WALL BLW FIREPLACE w/ 22" WIDE T-FOOTING PER A/S7 SIM, CONTINUE F1 HORIZ. BARS THROUGH F2 LENGTH (2 LAYERS OF HORIZ. BARS)
F3	8" SLAB ON GRADE FOUNDATION WALL w/ 16" WIDE T-FOOTING PER B/S7
F4	2'-0"SQ. CRAWLSPACE PAD FOOTING PER C/S7
F5	2'-6"SQ. CRAWLSPACE PAD FOOTING PER C/S7
F6	8" INTERIOR CRAWLSPACE FOUNDATION WALL w/ 16" WIDE T-FOOTING PER A/S7 SIM
F7	1'-6"SQ. DECK PAD FOOTING PER D/S7
F8	1'-6"SQ. EXTERIOR POST FOOTING PER E/S7
F9	EXTERIOR FIREPLACE PEDESTAL AND FOOTING PER G/S7

NORTH



PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT: Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

ENGINEER OF RECORD

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

SHEET TITLE: CRAWLSPACE FOUNDATION PLAN

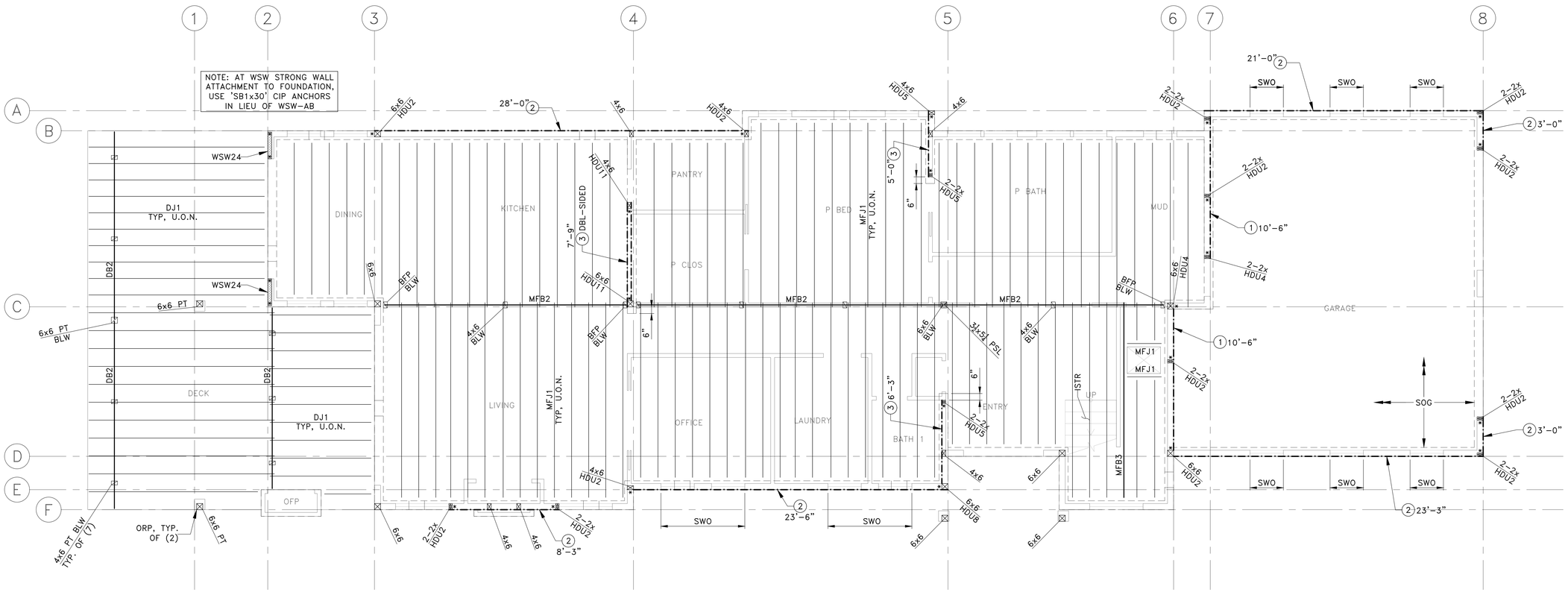
SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S3

PLAN LEGEND

	STUD WALL ABOVE FLOOR		
	WALL BELOW FLOOR	BFP	SEE SHEET S3 PLAN LEGEND
	WINDOW BY ARCH (S.A.D.)	ISTR	INTERIOR STAIR FRAMING PER (K/S7)
(X) 'L'	½" W.S.P. SHEAR WALL TYPE (X) w/ MIN. LENGTH 'L', PER (H/S2) AND DETAIL CALLOUTS ON PLAN	ORP	OUTDOOR ROOF POSTS CONTINUE THROUGH DECK w/ 2x6 PT LEDGER FACE-NAILED TO EACH SIDE w/ (4) 10d TO SUPPORT DECKING
4x4 OR 4x4 BLW	POST ABOVE OR BELOW FLOOR PER (E-F/S2) (C-E/S7)	SOG	4" CONCRETE SLAB ON GRADE w/ 6x6-W4.5xW4.5 W.W.F. PER (N/S2)
* 2-2x HDU2	POST & HOLDOWN PER (L/S2)	SWO	STRAP AROUND SHEAR WALL WITH OPENINGS PER (B/S2)
WSWXX	SIMPSON STRONG WALL WSWXX PER ATTACHED MANUFACTURER'S DETAIL SHEETS. AT ATTACHMENT TO FOUNDATION, USE 'SB1x30' CIP ANCHORS IN LIEU OF WSW-AB		
		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	11⅞ TJI 210 @16"o.c.	ITS2.06/11.88	(A/S7)
MFB2	5½x9 GLB (DROPPED)	N/A	(C/S7)
MFB3	1¾x11⅞ LVL (FLUSH)	ITS1.81/11.88	N/A
DJ1	2x10 PT @16"o.c.	LUS210Z	(E/S7)
DB2	6x10 PT (DROPPED)	N/A	(D/S7)



NORTH

PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT: Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

ENGINEER OF RECORD

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

SHEET TITLE: MAIN FLOOR FRAMING PLAN

SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S4

PLAN LEGEND

(stud wall symbol)	STUD WALL ABOVE FLOOR	APW	ALIGN SOUTH FACE OF POST w/ SOUTH FACE OF BEARING WALL BELOW
(dashed wall symbol)	WALL BELOW FLOOR	BBW	BLOCK SOLID BELOW END OF LRB2 DOWN TO T.O. WSW
(window symbol)	WINDOW BY ARCH (S.A.D.)	BFW	B.F. $1\frac{3}{4}$x$5\frac{1}{2}$ LVL EXTERIOR WALL STUDS @16"o.c. FROM MAIN FLOOR TO ROOF w/ 'A35' T&B @ EACH STUD & 'A35' T&B EACH SIDE OF MULTI-PLY STUDS & POSTS WITHIN WALL
(X) 'L'	$\frac{1}{2}$" W.S.P. SHEAR WALL TYPE (X) (H/S2) AND DETAIL w/ MIN. LENGTH 'L', PER CALLOUTS ON PLAN	ISTR	INTERIOR STAIR FRAMING PER (K/S7)
4x4 OR 4x4 BLW	POST ABOVE OR BELOW FLOOR PER (E–F/S2) U.O.N.	KPB	KING POST BEARS ON T.O. DROPPED BEAM w/ INV. 'AC' BASE
2-2x HDU2 OR 2-2x MSTC28	POST & HOLDOWN OR TIEDOWN STRAP PER (J/S2)	LOR	LOOKOUT RAFTER PER (E/S8) (B/S9)
OVF	OVER-FRAMING PER (K/S8)	SWO	STRAP AROUND SHEAR WALL WITH OPENINGS PER (B/S2)
WSWXX	SIMPSON STRONG WALL WSWXX PER ATTACHED MANUFACTURER'S DETAIL SHEETS AND (H/S8)	TCS	$1\frac{3}{4}$x$5\frac{1}{2}$ LVL CRIPPLE STUD (SUPPORTS TRANSOM HEADER ABOVE) w/ 16d@6"o.c. FACE-NAIL TO SIDE OF WSW
(dashed line)	METAL STRAP PER PLAN (PLACE o/ SHEATHING WHERE OCCURS). E.N. ROOF/ FLOOR SHEATHING TO FULL LENGTH OF ATTACHED BEAMS & JOISTS WHERE OCCURS		
UST1	'MSTC40' STRAP o/ T.O. BEAM TO ABUTTING BEAM		
UST2	'MSTC40' STRAP U/S BEAM TO T.O. ABUTTING TOP PLATE PER (I/S8)		
UST3	'CS16' STRAP 18" o/ LRR1 & CONTINUE MIN. 36" o/ BLKG BTWN UDJ1 (ADD LRR1 AS REQ'D TO ALIGN)	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)
UST4	'MSTA36' STRAP o/ LRR1 ATTACHED TO UST3&5 ACROSS RIDGE TO ABUTTING LRR1 (ADD LRR1 AS REQ'D TO ALIGN w/ STRAPS)		
UST5	'MSTA36' STRAP o/ LRR1 & UFB9 (ADD LRR1 AS REQ'D TO ALIGN)		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
UST6	'CS16' STRAP 18" o/ UFB5 & CONTINUE o/ $1\frac{1}{2}$ LSL BLKG BTWN UFJ1 FOR MIN (3) BAYS w/ (2) 'A35' CLIPS @ BLKG TO TOP PLATE BLW EACH BAY, MIN. (6) CLIPS TOTAL		

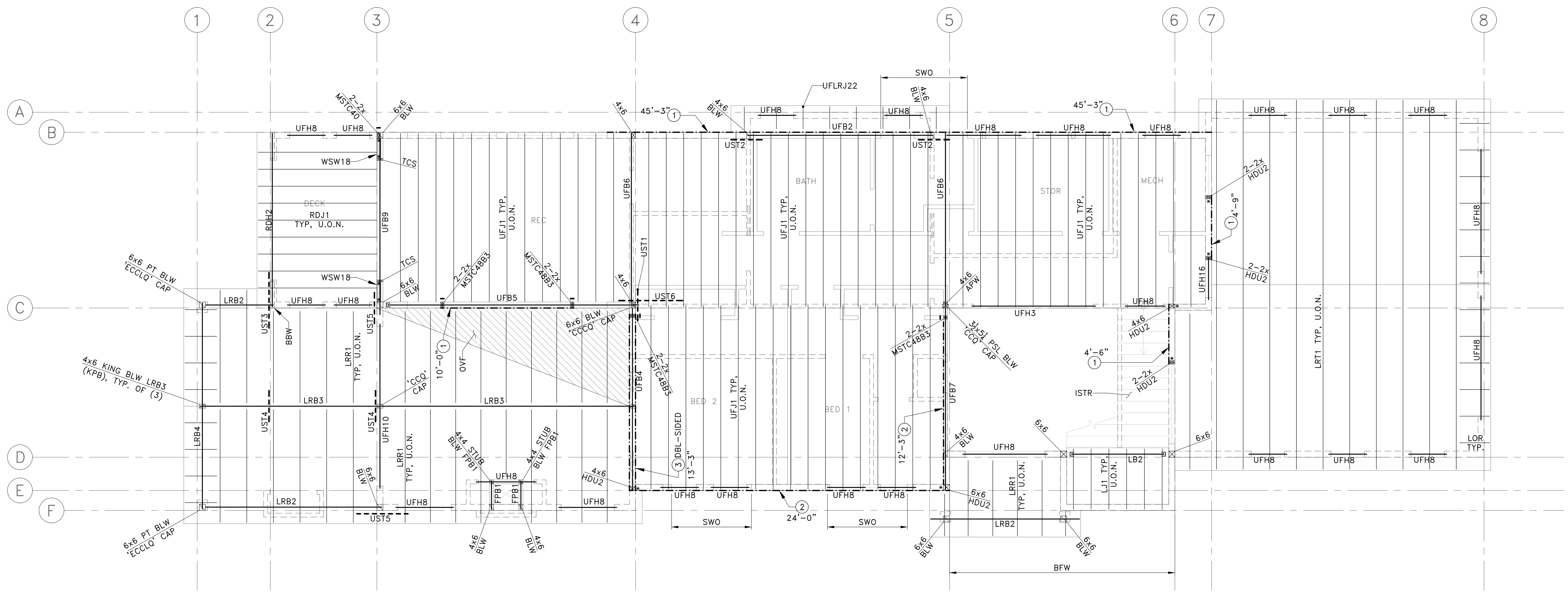
FRAMING SCHEDULE

CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
UFJ1	$11\frac{7}{8}$ TJI 210 @16"o.c.	IUS2.06/11.88	A/S8
UFB2	$5\frac{1}{4}$x$11\frac{7}{8}$ PSL (FLUSH w/ UFJ1)	N/A	J/S8
UFH3	4x10 (DROPPED HEADER)	N/A	A/S2
UFB4	$5\frac{1}{4}$x$11\frac{7}{8}$ PSL (FLUSH w/ UFJ1)	N/A	J/S8
UFB5	$5\frac{1}{4}$x$11\frac{7}{8}$ PSL (FLUSH w/ UFJ1)	HHUS5.50/10	J/S8 CONTINUE EAST END OF UFB5 MIN. 3" EAST OF 6x6 POST BLW
UFB6	$3\frac{1}{2}$x$11\frac{7}{8}$ LSL (FLUSH w/ UFJ1)	N/A	E.N. FLOOR SHEATHING TO FULL LENGTH OF UFB6
UFB7	$3\frac{1}{2}$x$11\frac{7}{8}$ PSL (FLUSH w/ UFJ1)	N/A	B–C/S8 SIM
UFH8	4x8 (DROPPED HEADER)	N/A	A/S2
UFB9	$5\frac{1}{4}$x$11\frac{7}{8}$ PSL (FLUSH w/ UFJ1)	N/A	H,L/S8 CONTINUE SOUTH END OF UFB9 MIN. 6" SOUTH OF 6x6 POST BLW
UFH10	$5\frac{1}{4}$x$9\frac{1}{2}$ PSL (HEADER BTWN DOOR & TRANSOM WINDOWS)	N/A	A/S2 INSTALL UFH8 ABOVE TRANSOM WINDOWS
RDJ1	$1\frac{3}{4}$x$9\frac{1}{2}$ LVL @16"o.c. (RIP TO SLOPE, S.A.D.)	HU7	L–M/S8 $7\frac{1}{4}$" MIN. JOIST DEPTH AT LOW END OF SLOPE
RDH2	$5\frac{1}{2}$x$9\frac{1}{4}$ PSL (DROPPED)	N/A	L/S8 CONTINUE RDB2 ALL THE WAY OVER WSWs

FRAMING SCHEDULE

CALLOUT	JOIST/BEAM	HANGER (U.O.N. ON PLAN)	REFER TO DETAIL(S) (OR SEE NOTES BLW)
LRR1	2x12 @24"o.c.	LRU212Z	D–F/S8
LRB2	$5\frac{1}{2}$x9 GLB (DROPPED)	N/A	N/S8
LRB3	$3\frac{1}{2}$x$11\frac{7}{8}$ PSL (FLUSH RIDGE)	N/A	G/S8
LRB4	$5\frac{1}{2}$x9 GLB (DROPPED)	N/A	N/A
LRT1*	COMMON GABLE TRUSSES @24"o.c.	N/A	A–B/S9
FPB1	4x6 (AT BOTTOM OF UPPER CHIMNEY CHASE WALLS)	N/A	J/S8

*ALL METAL-PLATE CONNECTED WOOD TRUSSES, STRUCTURAL FASCIAS AND THEIR CONNECTIONS TO OTHER MEMBERS ARE DESIGN-BUILD BY TRUSS SUPPLIER. REFER TO SHEET S1, GENERAL NOTE 7.10 FOR TRUSS DESIGN CRITERIA AND OTHER INFO.



NORTH

PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT: Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

ENGINEER OF RECORD

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

SHEET TITLE: UPPER FLOOR FRAMING PLAN

SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S5

PLAN LEGEND

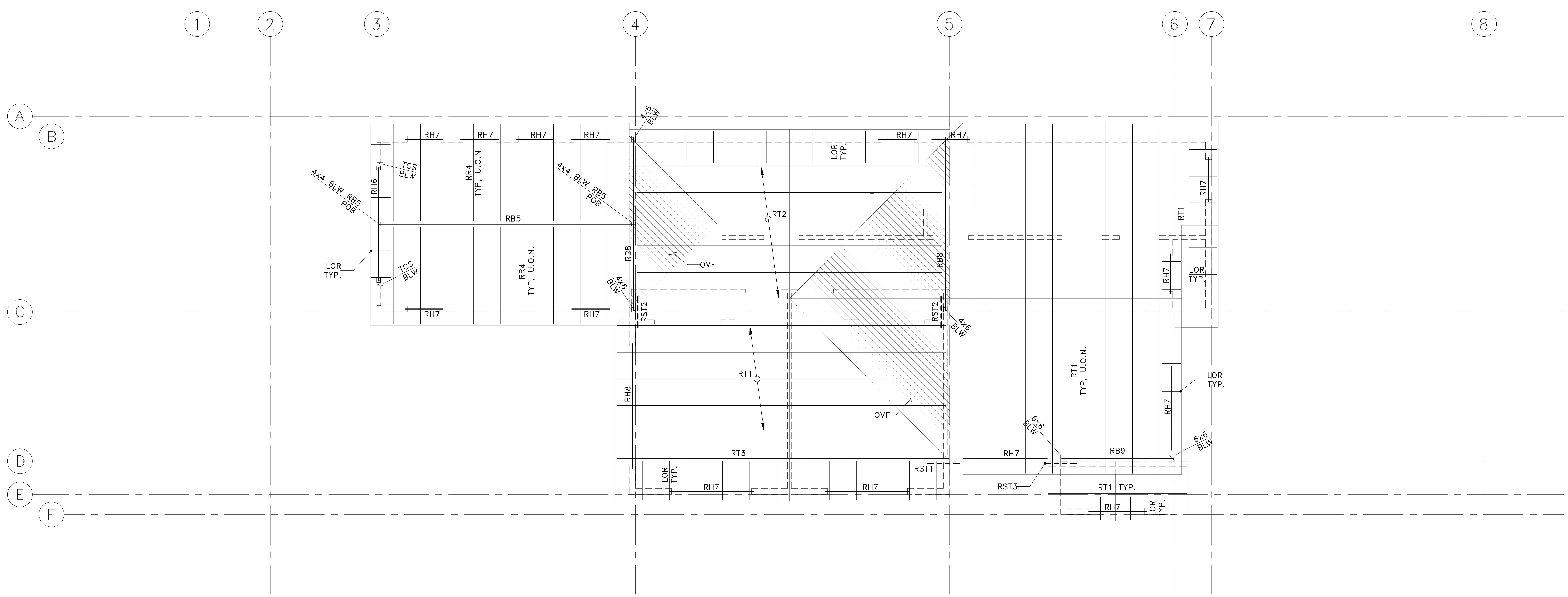
SYMBOL	DESCRIPTION
(stud wall symbol)	STUD WALL ABOVE ROOF
(dashed wall symbol)	WALL BELOW ROOF
4x4 BLW	POST BELOW ROOF PER E-F/S2
OVF	OVER-FRAMING PER K/S8
--------	METAL STRAP PER PLAN (PLACE o/ SHEATHING WHERE OCCURS). E.N. ROOF SHEATHING TO FULL LENGTH OF ATTACHED BEAMS & JOISTS WHERE OCCURS
RST1	'MSTC40' STRAP U/S DRAG TRUSS TO T.O. TOP PLATE, E.N. ROOF SHEATHING TO FULL LENGTH OF DRAG TRUSS TOP CHORD PER I/S8 SIM
RST2	'MSTC40' STRAP U/S BEAM TO T.O. ABUTTING TOP PLATE PER I/S8
RST3	'MSTA30' STRAP T.O. DROPPED BEAM TO T.O. ABUTTING TOP PLATE
LOR	LOOKOUT RAFTER PER E/S8 B/S9
POB	POST BEARS ON T.O. BEAM w/ INV. 'AC' BASE
TCS	1¾x5½ LVL CRIPPLE STUD (SUPPORTS TRANSOM HEADER) w/ 16d@6"o.c. FACE-NAIL TO SIDE OF WSW

SYMBOL	DESCRIPTION
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 TRUSSES @24"o.c.	N/A	A-B/S9
RT2*	COMMON GABLE TRUSSES @24"o.c.	BY SUPPLIER	A-B/S9
RT3*	GABLE DRAG TRUSS	N/A	B/S9 UNIFORM TOP CHORD LOAD = 250 PLF CONCENTRATED BOTTOM CHORD LOAD AT RST1 = 6000 LBS
RR4	2x12 @24"o.c.	LRU212Z	D-E/S8
RB5	3½x11⅞ PSL (FLUSH RIDGE)	N/A	G/S8
RH6	3½x9½ PSL (HEADER BTWN DOOR & TRANSOM WINDOWS)	HUCQ410 (TO SIDE OF WSW)	BEARS ON T.O. TCS & HANGS OFF WSW. INSTALL RH7 ABOVE TRANSOM WINDOWS.
RH7	4x8 (DROPPED EXTERIOR HEADER)	N/A	A/S2
RB8	3½x11⅞ PSL (UPSET, U/S FLUSH w/ PLATE HEIGHT)	N/A	BEVEL TOP OUTSIDE CORNERS 3" MAX. AS REQ'D TO FIT IN EAVES
RB9	5½x7½ GLB (DROPPED, TOP FLUSH w/ PLATE HEIGHT)	N/A	N/A

*ALL METAL-PLATE CONNECTED WOOD TRUSSES, STRUCTURAL FASCIAS AND THEIR CONNECTIONS TO OTHER MEMBERS ARE DESIGN-BUILD BY TRUSS SUPPLIER. REFER TO SHEET S1, GENERAL NOTE 7.10 FOR TRUSS DESIGN CRITERIA AND OTHER INFO.



NORTH

PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT: NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT: Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

OWEN REMICK GOULD
STATE OF WASHINGTON
52797
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

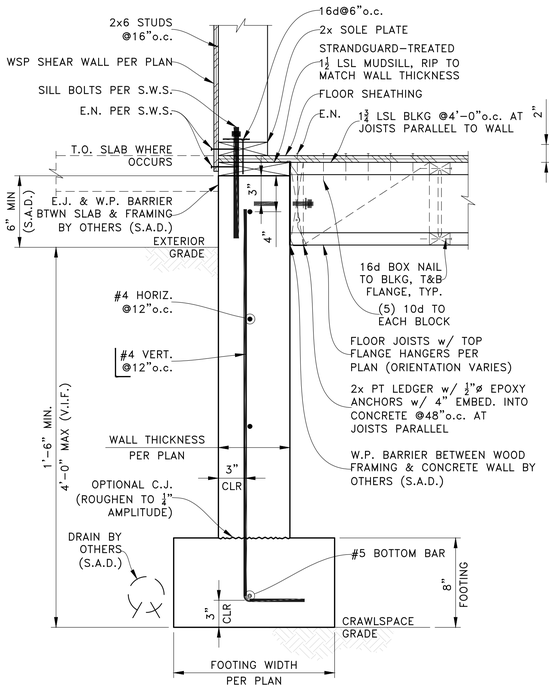
ENGINEER OF RECORD

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

SHEET TITLE: ROOF FRAMING PLAN

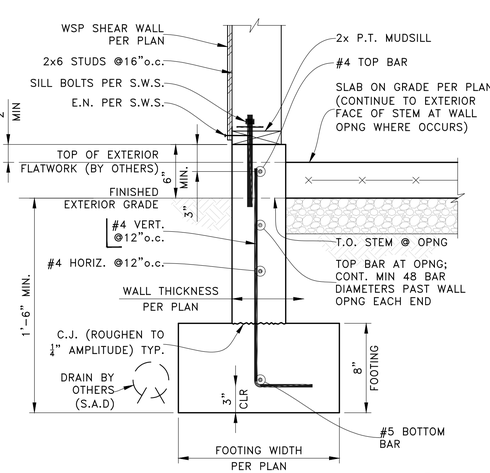
APPROVAL STAMP:

SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S6



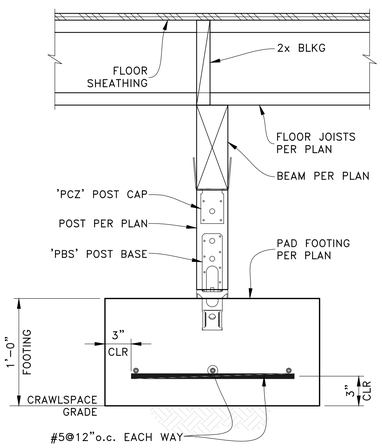
EXTERIOR CRAWLSPACE FOUNDATION WALL — A

SCALE: NTS



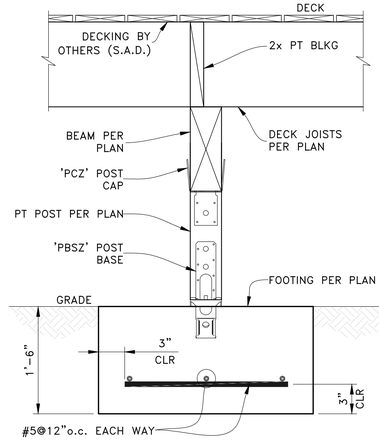
EXTERIOR SLAB ON GRADE FOUNDATION WALL — B

SCALE: NTS



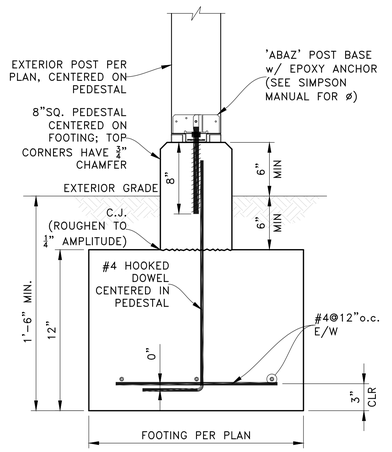
CRAWLSPACE PAD FOOTING — C

SCALE: NTS



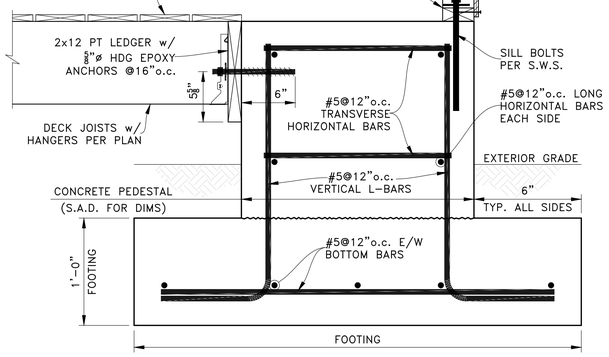
DECK PAD FOOTING — D

SCALE: NTS



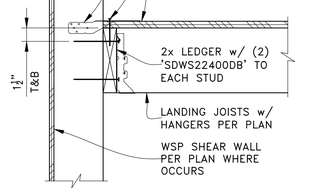
EXTERIOR POST FOOTING — E

SCALE: NTS



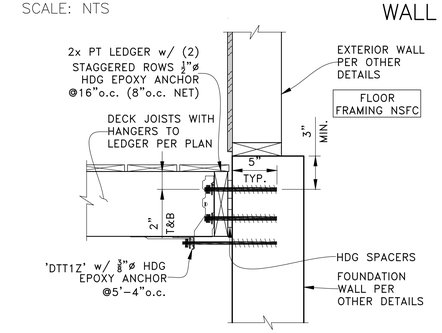
OUTDOOR FIREPLACE FOOTING — G

SCALE: NTS



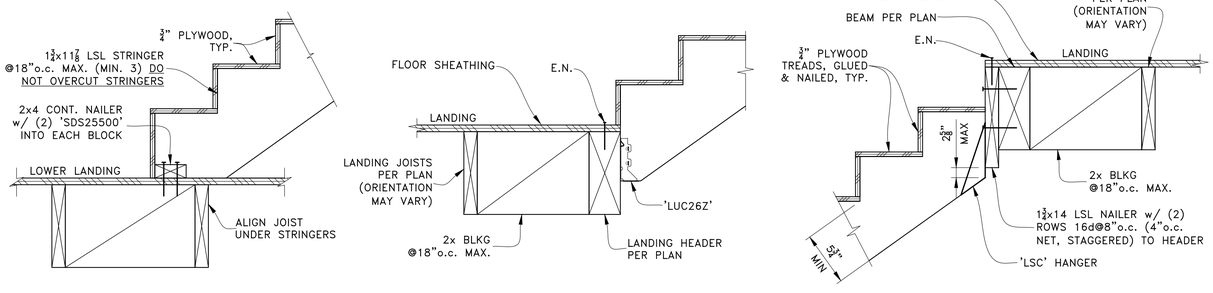
LANDING TO WALL — H

SCALE: NTS



DECK TO FOUNDATION — F

SCALE: NTS



BOTTOM OF RUN @ FLOOR — BOTTOM OF RUN @ LANDING — TOP OF RUN

INTERIOR STAIR — K

SCALE: NTS

PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT:
Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

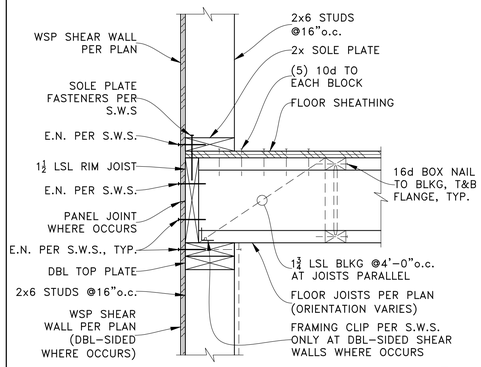
OWEN REMICK GOLL — STATE OF WASHINGTON — 52797 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

ENGINEER OF RECORD

O.G. ENGINEERING, PLLC
3201 1st Ave S, Suite 101, Seattle, WA 98134
(206) 390-4608
owen@ogengineer.com

SHEET TITLE:
SECTIONS & DETAILS

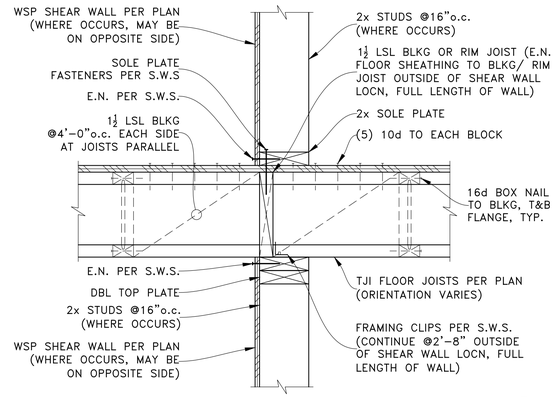
SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S7



EXTERIOR WALL AT FLOOR

A

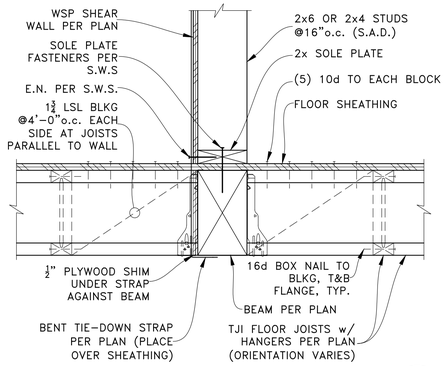
SCALE: NTS



INTERIOR SHEAR WALL AT FLOOR

B

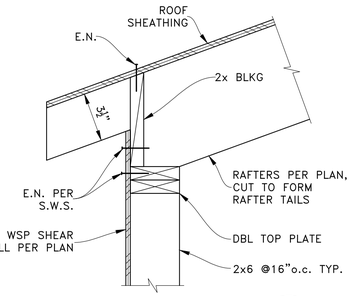
SCALE: NTS



INTERIOR SHEAR WALL ON BEAM

C

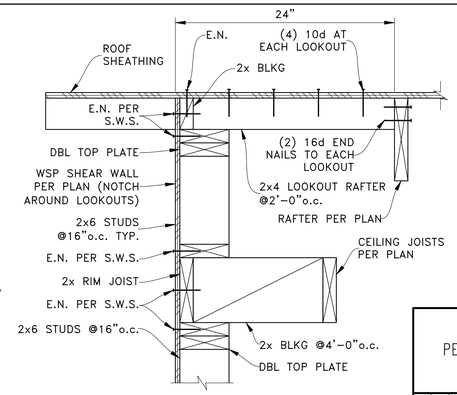
SCALE: NTS



STICK ROOF EAVE

D

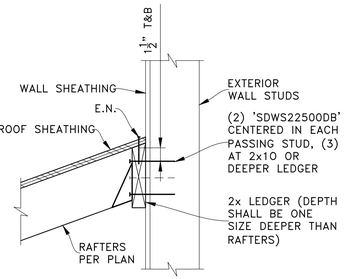
SCALE: NTS



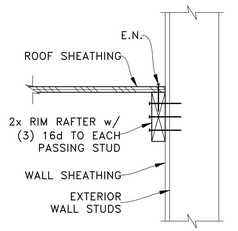
STICK ROOF RAKE

E

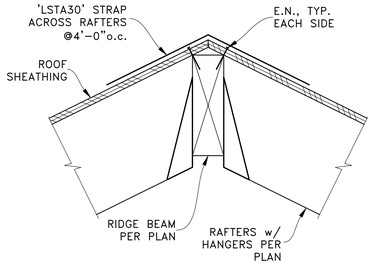
SCALE: NTS



RAFTERS PERPENDICULAR



RAFTERS PARALLEL



STICK ROOF TO EXTERIOR WALL

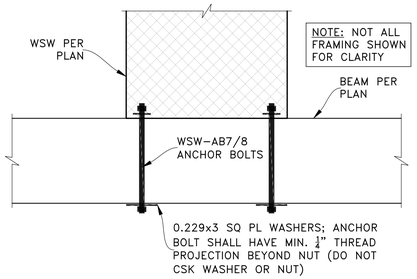
F

SCALE: NTS

RIDGE BEAM

G

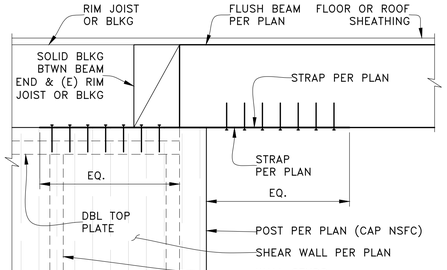
SCALE: NTS



WSW ON BEAM

H

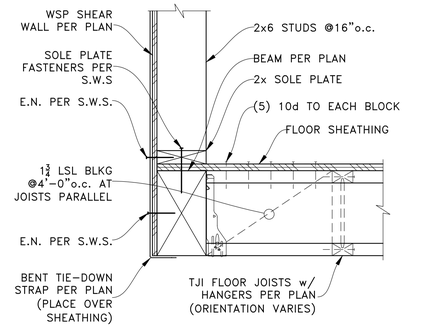
SCALE: NTS



BEAM STRAP TO SHEAR WALL

I

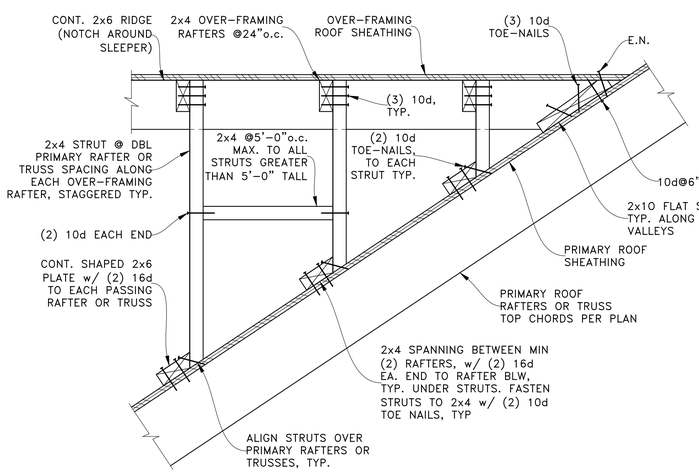
SCALE: NTS



SHEAR WALL ON BEAM

J

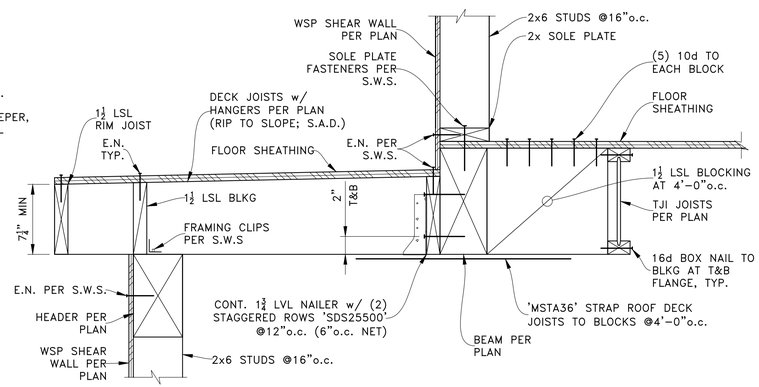
SCALE: NTS



TYPICAL OVER-FRAMING

K

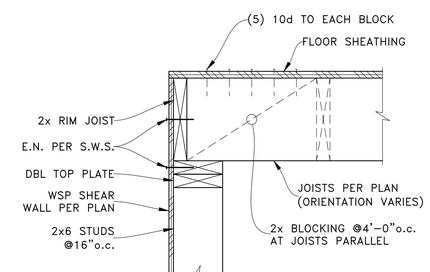
SCALE: NTS



ROOF DECK

L

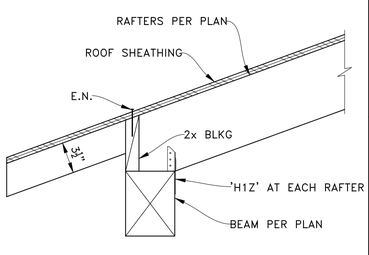
SCALE: NTS



ROOF DECK

M

SCALE: NTS



EAVE AT BEAM

N

SCALE: NTS

PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

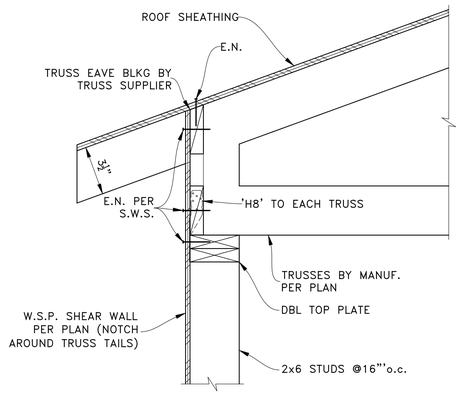
CLIENT:
Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040

ONEAN REMICK GOETZ
STATE OF WASHINGTON
32197
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
ENGINEER OF RECORD

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

SHEET TITLE:
SECTIONS & DETAILS

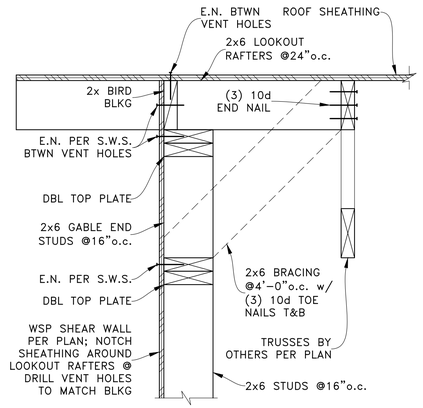
SCALE: AS NOTED
JOB NO. 22004
SHEET NO. S8



TRUSS ROOF EAVE

SCALE: NTS

A



TRUSS ROOF RAKE

SCALE: NTS

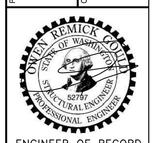
B

PERMIT SET

REV.	DATE	DESCRIPTION
	12-14-22	PERMIT SET

PROJECT:
NEW SINGLE-FAMILY DWELLING
2423 60th Ave SE
Mercer Island, WA 98040

CLIENT:
Mary Smersh
2423 60th Ave SE
Mercer Island, WA 98040



ENGINEER OF RECORD

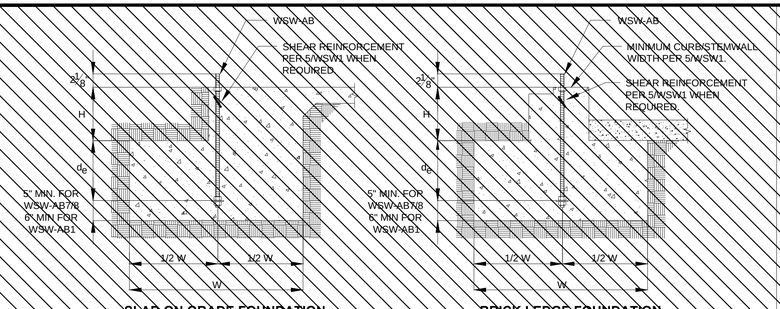
O.G. ENGINEERING, PLLC
3201 1st Ave S, Suite 101, Seattle, WA 98134
(206) 290-4608
owen@ogengineer.com

SHEET TITLE:
SECTIONS & DETAILS

SCALE: AS NOTED

JOB NO. 22004

SHEET NO.
S9

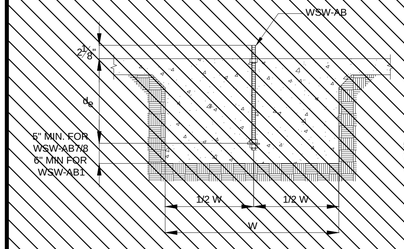


SLAB ON GRADE FOUNDATION

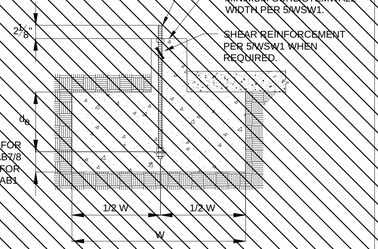
BRICK LEDGE FOUNDATION

NOTES:
1. SEE 2/WSW1 FOR DIMENSIONS AND ADDITIONAL NOTES.
2. SEE 5/WSW1 FOR SHEAR REINFORCEMENT WHEN REQUIRED.
3. MAXIMUM H = l_e - d_e. SEE 3/WSW1 AND 4/WSW1 FOR l_e.

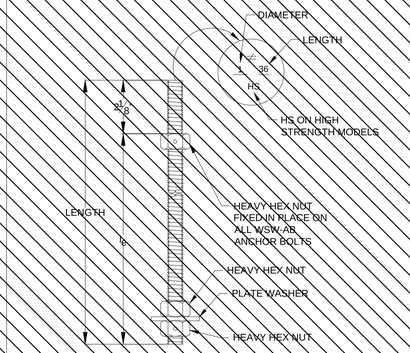
REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.



INTERIOR FOUNDATION



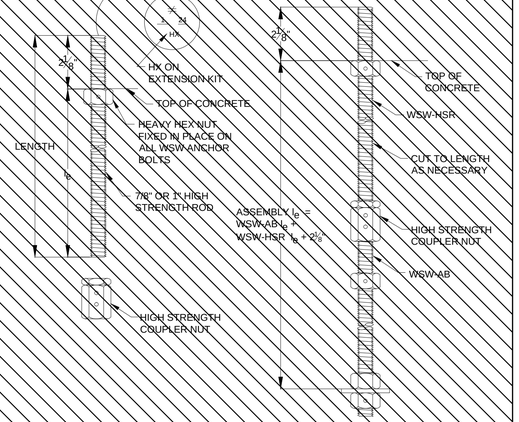
CURB OR STEMWALL FOUNDATION



WSW PANEL MODEL	MODEL NO.	DIAMETER	LENGTH	l_e
WSW12 AND WSW18	WSW-AB7/8x24	7/8"	24"	20"
	WSW-AB7/8x24HS	7/8"	24"	20"
	WSW-AB7/8x30	7/8"	30"	26"
	WSW-AB7/8x30HS	7/8"	30"	26"
	WSW-AB7/8x36HS	7/8"	36"	32"
WSW24	WSW-AB1x24	1"	24"	20"
	WSW-AB1x24HS	1"	24"	20"
	WSW-AB1x30	1"	30"	26"
	WSW-AB1x30HS	1"	30"	26"
	WSW-AB1x36HS	1"	36"	32"

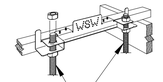
WSW-HSR_KT

WSW-HSR AND WSW-AB ASSEMBLY



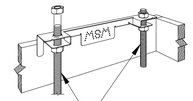
WSW PANEL MODEL	MODEL NO.	DIAMETER	LENGTH	l_e
WSW12 AND WSW18	WSW-HSR7/8x24KT	7/8"	24"	22"
	WSW-HSR7/8x36KT	7/8"	36"	34"
WSW24	WSW-HSR1x24KT	1"	24"	22"
	WSW-HSR1x36KT	1"	36"	34"

WSW-RT INTERIOR INSTALLATION

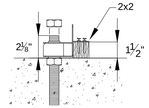


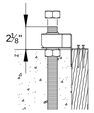
(2) 7/8" WSW-AB for WSW12 and WSW18
(2) 1" WSW-AB for WSW24

WSW-RT EXTERIOR INSTALLATION

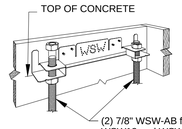


(2) 7/8" WSW-AB for WSW12 and WSW18
(2) 1" WSW-AB for WSW24



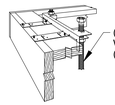


WSW-RTPF PANEL FORM INSTALLATION

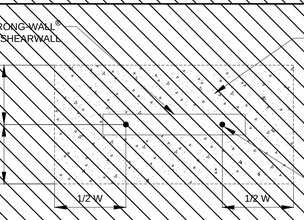


(2) 7/8" WSW-AB for WSW12 and WSW18
(2) 1" WSW-AB for WSW24

WSW-RTBL BRICK LEDGE INSTALLATION



(2) 7/8" WSW-AB for WSW12 and WSW18
(2) 1" WSW-AB for WSW24



FOUNDATION PLAN VIEW

WSW ANCHORAGE SOLUTIONS FOR 2500 PSI CONCRETE

DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	WSW-AB7/8 ANCHOR BOLT ASD ALLOWABLE TENSION (lb.)	WSW-AB7/8 ANCHOR BOLT W (in.)	WSW-AB7/8 ANCHOR BOLT d_e (in.)	WSW-AB1 ANCHOR BOLT ASD ALLOWABLE TENSION (lb.)	WSW-AB1 ANCHOR BOLT W (in.)	WSW-AB1 ANCHOR BOLT d_e (in.)
SEISMIC	CRACKED	STANDARD	11,900	27	9	16,100	33	11
		HIGH STRENGTH	13,100	29	10	17,100	35	12
	UNCRACKED	STANDARD	24,900	43	15	33,000	51	17
		HIGH STRENGTH	27,100	46	16	35,300	54	18
WIND	CRACKED	STANDARD	12,500	24	8	15,700	28	10
		HIGH STRENGTH	13,100	25	9	17,100	30	10
	UNCRACKED	STANDARD	25,300	38	13	32,400	44	15
		HIGH STRENGTH	27,100	40	14	35,300	47	16
	CRACKED	STANDARD	5,100	14	6	6,200	16	6
		HIGH STRENGTH	8,700	20	7	11,400	24	8
	UNCRACKED	STANDARD	13,100	27	9	17,100	32	11
		HIGH STRENGTH	15,900	30	10	21,100	36	12
			18,400	33	11	27,300	42	14
			23,100	38	13	31,800	46	16
			27,100	42	14	35,300	50	17
	CRACKED	STANDARD	5,800	12	6	6,400	14	6
			9,300	18	6	12,500	22	8
	UNCRACKED		13,100	23	8	17,100	28	10
			15,200	25	9	21,000	32	11
		HIGH STRENGTH	19,900	30	10	26,400	36	12
			24,800	34	12	31,500	40	14
			27,100	37	13	35,300	43	15

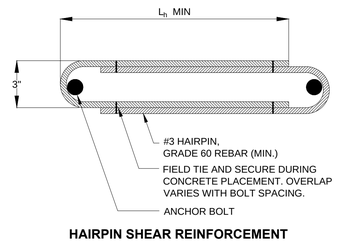
NOTES:
1. ANCHORAGE DESIGNS CONFORM TO ACI 318-11 APPENDIX D AND ACI 318-14 WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE, AS NOTED.
2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF WSW-AB ANCHOR BOLT. STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449).
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C - F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318-11 SECTION D.3.3.4.3 AND ACI 318-14 SECTION 17.2.3.4.3.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDS C.
5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS. THE REGISTERED DESIGN PROFESSIONAL MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
6. REFER TO 1/WSW1 FOR d_e.

WSW ANCHORAGE SOLUTIONS FOR 3000 PSI CONCRETE

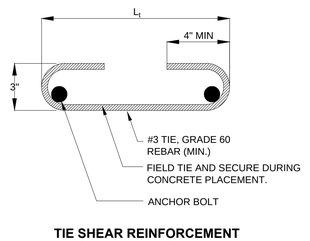
DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	WSW-AB7/8 ANCHOR BOLT ASD ALLOWABLE TENSION (lb.)	WSW-AB7/8 ANCHOR BOLT W (in.)	WSW-AB7/8 ANCHOR BOLT d_e (in.)	WSW-AB1 ANCHOR BOLT ASD ALLOWABLE TENSION (lb.)	WSW-AB1 ANCHOR BOLT W (in.)	WSW-AB1 ANCHOR BOLT d_e (in.)
SEISMIC	CRACKED	STANDARD	12,300	25	9	16,000	31	11
		HIGH STRENGTH	13,100	28	10	17,100	33	11
	UNCRACKED	STANDARD	25,300	41	14	32,700	48	16
		HIGH STRENGTH	27,100	43	15	35,300	51	17
WIND	CRACKED	STANDARD	12,000	22	8	16,300	27	9
		HIGH STRENGTH	13,100	24	8	17,100	28	10
	UNCRACKED	STANDARD	25,300	36	12	32,700	42	14
		HIGH STRENGTH	27,100	38	13	35,300	44	15
	CRACKED	STANDARD	5,000	13	6	5,600	14	6
		HIGH STRENGTH	8,800	19	7	10,200	21	7
	UNCRACKED	STANDARD	13,100	25	9	17,100	30	10
		HIGH STRENGTH	15,700	28	10	20,100	33	11
			19,200	32	11	25,300	38	13
			23,200	36	12	32,300	44	15
			27,100	40	14	35,300	47	16
	CRACKED	STANDARD	5,500	12	6	6,200	13	6
		HIGH STRENGTH	8,500	16	6	12,800	21	7
	UNCRACKED	STANDARD	13,100	22	8	17,100	26	9
		HIGH STRENGTH	16,600	25	9	21,800	30	10
			19,700	28	10	25,200	33	11
			24,900	32	11	31,700	38	13
			27,100	35	12	35,300	41	14

WSW ANCHORAGE SOLUTIONS FOR 4500 PSI CONCRETE

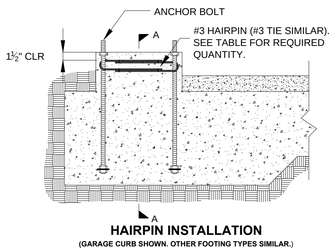
DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	WSW-AB7/8 ANCHOR BOLT ASD ALLOWABLE TENSION (lb.)	WSW-AB7/8 ANCHOR BOLT W (in.)	WSW-AB7/8 ANCHOR BOLT d_e (in.)	WSW-AB1 ANCHOR BOLT ASD ALLOWABLE TENSION (lb.)	WSW-AB1 ANCHOR BOLT W (in.)	WSW-AB1 ANCHOR BOLT d_e (in.)
SEISMIC	CRACKED	STANDARD	12,600	23	8	16,000	27	9
		HIGH STRENGTH	13,100	24	8	17,100	29	10
	UNCRACKED	STANDARD	24,800	36	12	32,100	42	14
		HIGH STRENGTH	27,100	38	13	35,300	45	15
WIND	CRACKED	STANDARD	12,700	20	7	15,700	23	8
		HIGH STRENGTH	13,100	21	7	17,100	25	9
	UNCRACKED	STANDARD	24,600	31	11	32,500	37	13
		HIGH STRENGTH	27,100	34	12	35,300	39	13
	CRACKED	STANDARD	5,400	12	6	6,800	14	6
		HIGH STRENGTH	8,300	16	6	11,600	20	7
	UNCRACKED	STANDARD	13,100	22	8	17,100	26	9
		HIGH STRENGTH	16,300	24	8	21,400	30	10
			19,300	28	10	25,800	34	12
			23,600	32	11	31,000	38	13
			27,100	36	12	35,300	42	14
	CRACKED	STANDARD	6,800	12	6	6,800	12	6
		HIGH STRENGTH	9,400	15	6	12,400	18	6
	UNCRACKED	STANDARD	13,100	19	7	17,100	23	8
		HIGH STRENGTH	16,800	22	8	21,600	26	9
			20,300	25	9	26,700	30	10
			24,100	28	10	32,200	34	12
			27,100	31	11	35,300	36	12



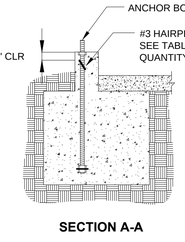
HAIRPIN SHEAR REINFORCEMENT



TIE SHEAR REINFORCEMENT



HAIRPIN INSTALLATION
(GARAGE CURB SHOWN. OTHER FOOTING TYPES SIMILAR.)



SECTION A-A

REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

STRONG-WALL® WOOD SHEARWALL SHEAR ANCHORAGE

MODEL	L_r OR L_{rh} (in.)	SEISMIC [3] SHEAR REINFORCEMENT	SEISMIC [3] MINIMUM CURB/ STEMWALL WIDTH (in.)	WIND [4] SHEAR REINFORCEMENT	WIND [4] MINIMUM CURB/ STEMWALL WIDTH (in.)	ASD ALLOWABLE SHEAR LOAD, V (lb.) [6] UNCRACKED	ASD ALLOWABLE SHEAR LOAD, V (lb.) [6] CRACKED
WSW12	10½	(1) #3 HAIRPIN	8[5]	SEE NOTE 6	6	1,035	740
WSW18	15	(1) #3 HAIRPIN	8[5]	(1) #3 HAIRPIN	6	HAIRPIN REINFORCEMENT ACHIEVES MAXIMUM ALLOWABLE SHEAR LOAD OF THE WSW	
WSW24	19	(2) #3 HAIRPINS	8[5]	(1) #3 HAIRPIN	6		

NOTES:
1. SHEAR ANCHORAGE DESIGNS CONFORM TO ACI 318-11 AND ACI 318-14 AND ASSUME MINIMUM 2,500 PSI CONCRETE.
2. SHEAR REINFORCEMENT IS NOT REQUIRED FOR INTERIOR FOUNDATION APPLICATIONS (PANEL INSTALLED AWAY FROM EDGE OF CONCRETE), OR BRACED WALL PANEL APPLICATIONS.
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C.
5. WHERE NOTED, MINIMUM CURB/STEMWALL WIDTH IS 6 INCHES WHEN STANDARD STRENGTH ANCHOR BOLT IS USED.
6. USE (1) #3 TIE FOR WSW12 WHEN PANEL DESIGN SHEAR FORCE EXCEEDS TABULATED ANCHORAGE ALLOWABLE SHEAR LOAD.
7. #4 GRADE 40 SHEAR REINFORCEMENT MAY BE SUBSTITUTED FOR WSW SHEAR ANCHORAGE SOLUTIONS.

REVISIONS		
NO.	DATE	
0	07/01/2016	FIRST RELEASE - 2015 IBC

SIMPSON STRONG-TIE COMPANY, INC.
HOME OFFICE: POSITAS BLVD.
5956 W. LAS POSITAS BLVD.
PLEASANTON, CA 94588
TEL: (800) 999-5099

SIMPSON Strong-Tie® THERE IS NO EQUAL

STRONG-WALL® WSW
ANCHORAGE DETAILS
ENGINEERED DESIGNS

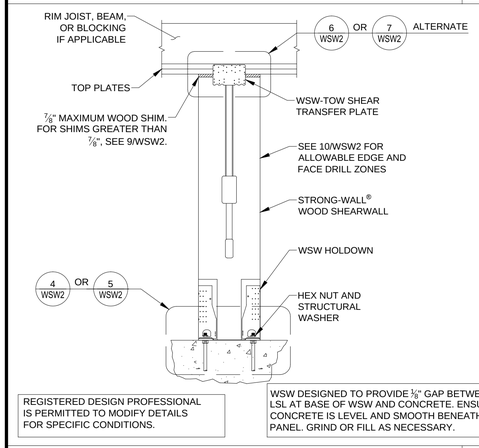
SIMPSON Strong-Tie® THERE IS NO EQUAL

NAME	
DATE	07-01-2016
SCALE	N.T.S.
CHECKED	
SHEET	WSW1
OF	SHEETS
JOB NO.	

STRONG-WALL® WOOD SHEARWALL MODELS

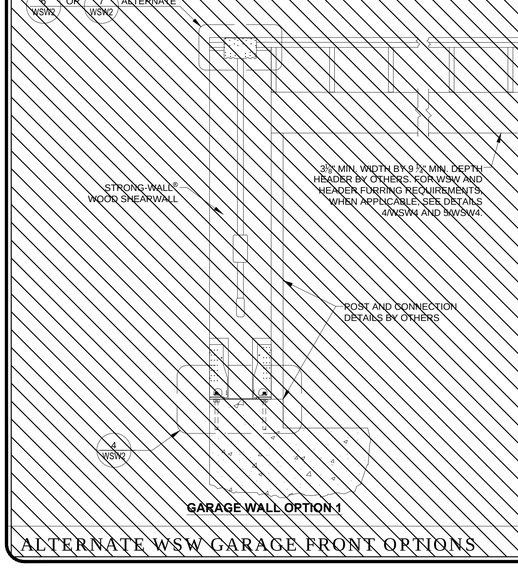
MODEL NO.	W (in.)	H (in.)	ANCHOR BOLTS		TOTAL WALL WEIGHT (lb.)
			QUANTITY	DIA. (in.)	
WSW12x7	12	78	2	7/8	100
WSW18x7	18	78	2	7/8	145
WSW12x7.5	12	85 1/2	2	7/8	110
WSW18x7.5	18	85 1/2	2	7/8	155
WSW12x8	12	93 1/4	2	7/8	115
WSW18x8	18	93 1/4	2	7/8	165
WSW24x8	24	93 1/4	2	1	225
WSW12x9	12	105 1/4	2	7/8	130
WSW18x9	18	105 1/4	2	7/8	185
WSW24x9	24	105 1/4	2	1	245
WSW12x10	12	117 1/4	2	7/8	140
WSW18x10	18	117 1/4	2	7/8	205
WSW24x10	24	117 1/4	2	1	270
WSW12x11	12	129 1/4	2	7/8	150
WSW18x11	18	129 1/4	2	7/8	220
WSW24x11	24	129 1/4	2	1	295
WSW12x12	12	141 1/4	2	7/8	165
WSW18x12	18	141 1/4	2	7/8	240
WSW24x12	24	141 1/4	2	1	320
WSW18x13	18	153 1/4	2	7/8	255
WSW24x13	24	153 1/4	2	1	345
WSW24x14	24	168	2	1	375
WSW24x16	24	192	2	1	425
WSW18x20	18	240	2	7/8	385
WSW24x20	24	240	2	1	520

NOTES:
1. FOR HEIGHTS NOT LISTED, ORDER THE NEXT TALLEST PANEL AND TRIM TO FIT. MINIMUM TRIMMED HEIGHT FOR ALL PANELS IS 74⅛".
2. ALL PANELS COME WITH TWO PRE-ATTACHED HOLDOWNS, TWO STANDARD HEX NUTS, TWO STRUCTURAL WASHERS, TWO WSW-TOW PLATES AND INSTALLATION INSTRUCTIONS.
3. ALL PANELS ARE 3½" THICK.



REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

WSW DESIGNED TO PROVIDE ⅛" GAP BETWEEN LSL AT BASE OF WSW AND CONCRETE. ENSURE CONCRETE IS LEVEL AND SMOOTH BENEATH PANEL. GRIND OR FILL AS NECESSARY.



REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

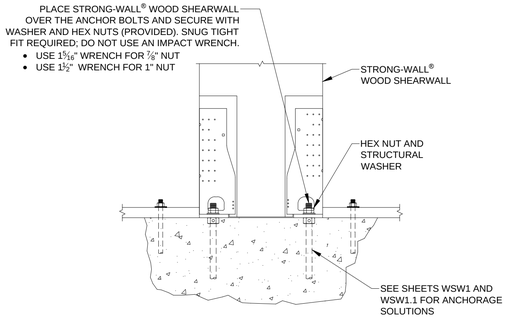
WHEN WSW-PS STRAPS OMITTED, ALLOWABLE SHEAR VALUES FOR STANDARD PANEL APPLY.

GARAGE HEADER ROUGH OPENING HEIGHT		
MODEL NO.	H CURB	ROUGH OPENING HEIGHT
WSW12x7	5½"	6'-11½"
WSW18x7	6"	7'-0"
WSW24x7		
WSW12x7.5	0"	7'-11½"
WSW18x7.5		
WSW24x7.5		
WSW12x8	5½"	8'-0½"
WSW18x8	6"	8'-0½"
WSW24x8		

NOTES:
1. IF REQUIRED ROUGH OPENING HEIGHT EXCEEDS TABLE VALUE, SPECIFY NEXT TALLER PANEL AND TRIM AS NECESSARY. THE STRONG-WALL® WOOD SHEARWALL MAY BE TRIMMED TO A MINIMUM HEIGHT OF 74⅛".
2. FINISHING DOWN GARAGE HEADER MAY BE REQUIRED FOR CORRECT ROUGH OPENING HEIGHT.

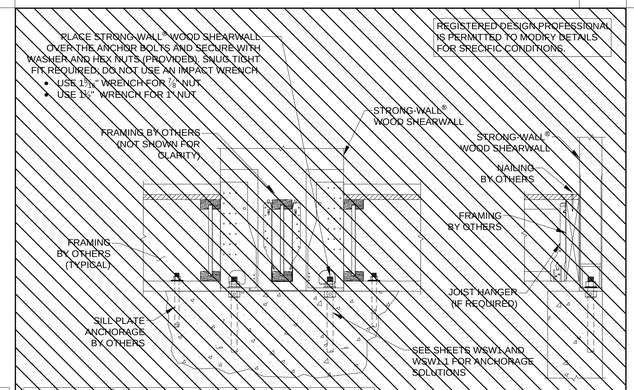
FOR GARAGE WALL OPTION 2, REGISTERED DESIGN PROFESSIONAL SHALL DESIGN AND DETAIL FOR :
1. SHEAR TRANSFER
2. OUT-OF-PLANE LOADING EFFECT
3. INCREASED OVERTURNING AND DRIFT DUE TO ADDITIONAL HEIGHT.

STANDARD INSTALLATION BASE CONNECTION



REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

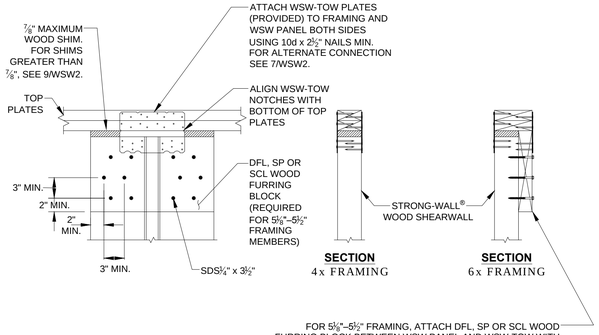
WOOD FLOOR SYSTEM BASE CONNECTION



STRONG-WALL® WOOD SHEARWALL HEIGHT TO INCLUDE THE DEPTH OF THE FLOOR SYSTEM AND SHALL BE INSTALLED DIRECTLY ON THE FOUNDATION. SPECIFY PANEL HEIGHT FROM TOP OF FOUNDATION TO UNDERSIDE OF TOP PLATES OR BEAM.

SECTION

STANDARD TOP CONNECTION



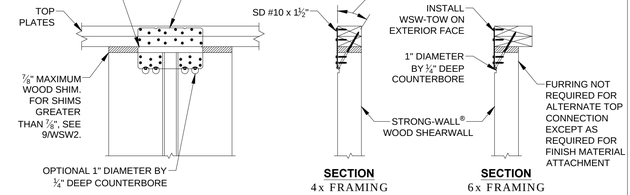
REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

FOR 5⅛"-5½" FRAMING, ATTACH DFL, SP OR SCL WOOD FURRING BLOCK BETWEEN WSW PANEL AND WSW-TOW WITH SDS ¼" x 3½" SCREWS (MIN.) OR 16d COMMON NAILS (8 TOTAL FASTENERS FOR WSW12, 10 FOR WSW18 AND 14 FOR WSW24). MINIMUM BLOCK SIZE IS 1¾" x 11⅞" x WSW PANEL WIDTH.

ALTERNATE TOP CONNECTION

WSW-TOW ALTERNATE CONNECTION KIT		
MODEL NO.	FASTENER QUANTITY	
	SD #10 x 1½"	SDS ¼" x 6"
WSW-TOW12KT	20	2
WSW-TOW18KT	28	4
WSW-TOW24KT	40	8

REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.



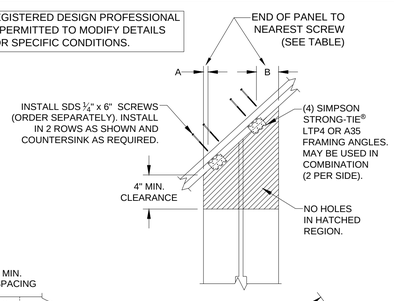
INSTALLATION NOTES :
1. ACTUAL CUT LENGTH (L) MUST BE GREATER THAN OR EQUAL TO PANEL WIDTH (W).
2. THIS DETAIL APPLICABLE FOR SLOPES UP TO 12:12.
3. PANELS TALLER THAN 12' MUST BE DESIGNED FOR THE APPLICATION.

QTY. OF SDS¼" x 6" SCREWS REQ'D.
WSW12	4
WSW18	8
WSW24	12

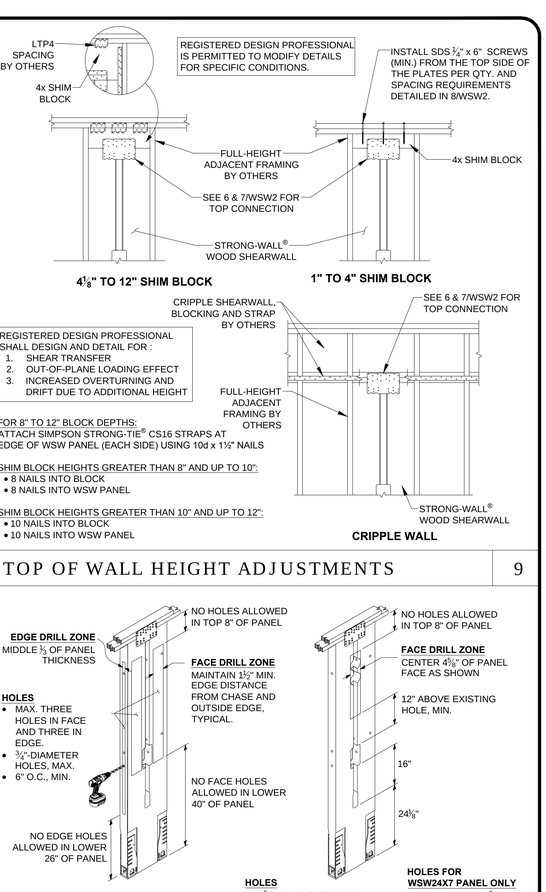
EDGE DISTANCE FOR SCREWS		
SLOPE	A (in.)	B (in.)
0:12-4:12	2	3
5:12-8:12	1 1/2	4 1/2
9:12-12:12	1/2	5 1/2

NOTES:
1. MAINTAIN END DISTANCES TO PREVENT SCREWS FROM PENETRATING THROUGH THE OUTER EDGES.
2. INSTALL SCREWS PERPENDICULAR TO THE TOP PLATE.
3. EDGE DISTANCES ASSUME DOUBLE TOP PLATE.

REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.



TOP OF WALL HEIGHT ADJUSTMENTS



REGISTERED DESIGN PROFESSIONAL SHALL DESIGN AND DETAIL FOR :
1. SHEAR TRANSFER
2. OUT-OF-PLANE LOADING EFFECT
3. INCREASED OVERTURNING AND DRIFT DUE TO ADDITIONAL HEIGHT

FOR 8" TO 12" BLOCK DEPTHS:
ATTACH SIMPSON STRONG-TIE® CS16 STRAPS AT EDGE OF WSW PANEL (EACH SIDE) USING 10d x 1½" NAILS

SHIM BLOCK HEIGHTS GREATER THAN 8" AND UP TO 10":
- 8 NAILS INTO BLOCK
- 8 NAILS INTO WSW PANEL

SHIM BLOCK HEIGHTS GREATER THAN 10" AND UP TO 12":
- 10 NAILS INTO BLOCK
- 10 NAILS INTO WSW PANEL

TRIM ZONE AND ALLOWABLE HOLES

ALLOWABLE SMALL HOLES
FACE AND EDGE DRILL ZONES

ALLOWABLE LARGE HOLES
IN ADDITION TO ALLOWABLE SMALL HOLES

NOTES

1. STRONG-WALL WOOD SHEARWALL IS MANUFACTURED AND TRADEMARKED BY "SIMPSON STRONG-TIE COMPANY INC."HOME OFFICE: 5956 W. LAS POSITAS BLVD. , PLEASANTON, CA 94588 TEL: (800) 999-5099, FAX: (925) 847-1597. "SIMPSON STRONG-TIE COMPANY INC." IS AN ISO 9001-2008 REGISTERED COMPANY.
2. USE OF THIS PRODUCT IS SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING DEPARTMENT.
3. THIS PRODUCT IS PART OF THE OVERALL LATERAL FORCE RESISTING SYSTEM OF THE STRUCTURE. DESIGN OF THE BUILDING'S LATERAL FORCE RESISTING SYSTEM, INCLUDING THE LOAD PATH TO TRANSFER LATERAL FORCES FROM THE STRUCTURE TO THE GROUND, IS THE RESPONSIBILITY OF THE DESIGNER.
4. ENGINEER OF RECORD IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, ELEVATIONS, ETC. PRIOR TO INSTALLATION OF ANY COMPONENTS FOR THE STRONG-WALL SB SYSTEM. IF ANY DISCREPANCIES ARE FOUND, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER FOR CLARIFICATION PRIOR TO CONSTRUCTION.
6. INSTALLATION OF PRODUCT SHALL BE DONE IN CONFORMANCE TO THESE DRAWINGS. THE PERFORMANCE OF MODIFIED PRODUCTS OR ALTERED INSTALLATION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE DESIGNER.
7. SIMPSON STRONG-TIE COMPANY INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, AND MODELS WITHOUT NOTICE OR LIABILITY FOR SUCH CHANGES.
8. ALL HARDWARE CALLED OUT IS SIMPSON STRONG-TIE.
9. SEE ICC-ES ESR-2652 OR CITY OF LOS ANGELES RR25730 AS APPLICABLE FOR ADDITIONAL INFORMATION.

REVISIONS	DATE	NO.
FIRST RELEASE - 2015 IBC	07/01/2016	0

SIMPSON STRONG-TIE COMPANY, INC.
HOME OFFICE: 5956 W. LAS POSITAS BLVD.
PLEASANTON, CA 94588
TEL: (800) 999-5099

SIMPSON Strong-Tie® THERE IS NO EQUAL

STRONG-WALL WSW

FRAMING DETAILS
ENGINEERED DESIGNS

NAME	
DATE	07-01-2016
SCALE	N.T.S.
CHECKED	
SHEET	WSW2
	OF SHEETS
JOB NO.	