4450 84th Ave SE SF House + Existing Accessory Structure

MERCER ISLAND, WA 98040

ABBREVIATIONS

ABV	ABOVE
ACT	ACOUSTIC CEILING TILE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
ARCH	ARCHITECTURAL
ASPH	ASPHALT
AVG	AVERAGE
BLDG	BUILDING
BLKG	BLOCKING
BSMT	BASEMENT
BTW	BETWEEN
BYND	BEYOND
BO	BOTTOM OF
BOT	BOTTOM
CAB	CABINET
CB	CATCH BASIN
CIP	CAST IN PLACE
CHNL	CHANNEL
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CPT	CARPET
CTR	CENTER
DBL	DOUBLE
DEMO	DEMOLISH
DIA	DIAMETER
DIM	DIMENSION
DIR	DIRECTION
DN	DOWN
DW	DISHWASHER
EA	EACH
EG	EGRESS
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR OR ELEVATION
EQ	EQUAL
EXIST, (E)	EXISTING
EXT	EXTERIOR
FAR	FLOOR AREA RATIO
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FLR	FLOOR
FO	FACE OF
FND	FOUNDATION
GA	GAUGE
GALV	GALVANIZED
GWB	GYPSUM WALL BOARD
HB	HOSE BIB
HC	HOLLOW CORE
HORIZ	HORIZONTAL
HR	HOUR
INSUL	INSULATION
INT	INTERIOR
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MTL	METAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER OR OVERFLOW DRAIN
OPP	OPPOSITE
PL	PROPERTY LINE
PLY	PLYWOOD
PT	PRESSURE TREATED
PNT	PAINT OR PAINTED
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REQD	REQUIRED
RM	ROOM
R.O.W.	RIGHT OF WAY
SF	SQUARE FEET
SIM	SIMILAR
SPEC	SPECIFIED
SPK	SPRINKLER
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STL	STEEL
STRUCT	STRUCTURE OR STRUCTURAL
T&G	TONGUE & GROOVE
TELE	TELEPHONE
TEMPERED	TEMPERED
TO	TOP OF
T/D	TELEPHONE/DATA
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VIF	VERIFY IN FIELD
VP	VISION PANEL
W/	WITH
WD	WOOD

SYMBOLS

DOOR DESIGNATION 1.1

WINDOW DESIGNATION 1.1 — 3'-0" WINDOW WIDTH, 5'-0" WINDOW HEIGHT

XX / X.X — DETAIL NUMBER / SHEET NUMBER

1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 X 4 FRAMING

1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 x 6 FRAMING

CAST-IN-PLACE CONCRETE WALL

PROVIDE (1) LAYER 5/8" EXTERIOR GWB AT OVERHANG

PROVIDE CMU WALL

W/D — WASHING/ DRYER MACHINE (COMBO)

W — WASHING MACHINE

D — CLOTHES DRYER

XX / X.X — SECTION MARKER

HWH — ON-DEMAND HOT WATER HEATER

SD — IRC R314 AND IFC 907.2.10.2: SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING INCLUDING BASEMENTS BUT NOT INCLUDING CRAWL SPACES.
4. PER IRC R314.3.1 SMOKE ALARMS SHALL BE: INSTALLED 20' MIN FROM KITCHEN APPLIANCES OR 10' MIN WITH AN ALARM-SILENCING SWITCH; 3' MIN FROM BATHROOM DOORS
5. SMOKE ALARMS REQUIRED TO BE INSTALLED, HARDWIRED AND INTERCONNECTED, TYP.

SD_SW — SMOKE ALARM WITH SWITCH, PER ITEM 4 ABOVE

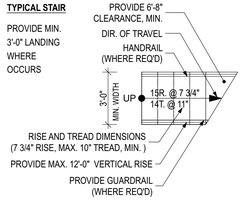
HD — HEAT DETECTOR/HEAT ALARM PER IRC R314.2.1. SHALL BE CONNECTED TO AN ALARM THAT IS INSTALLED IN THE DWELLING PER R314.4.1

FAN LOCATION (IRC TABLE M 1505.4.4(1) AND IMC TABLE 403.4.7)
1. AT BATHROOMS AND LAUNDRY, PROVIDE 50 CFM FAN W/ TIMER AT 0.25 W.G. OR GREATER
2. AT KITCHENS, PROVIDE 100 CFM FAN AT 0.25 W.G. OR GREATER
3. VENT ALL EXHAUST FANS TO THE OUTSIDE
4. EXHAUST DUCTS ARE TO BE CONST. OF SMOOTH BORE NONCOMBUSTIBLE MATERIAL AND ARE TO BE INSUL. AS REQUIRED PER WSEC.

CO — IRC R315: AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING. SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034.

FLOOR STEP DOWN

SOFFIT STEP DOWN



GENERAL NOTES

01 ALL WORK SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE 2021 WASHINGTON STATE ENERGY CODE (WSEC), 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) , 2021 INTERNATIONAL MECHANICAL CODE (IMC) AND APPLICABLE CODES.

02 CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND VERIFY LOCATION OF WORK WITH THE ARCHITECT. NO SCALE MEASUREMENTS SHALL BE USED AS DIMENSIONS FOR WORK. LARGE SCALE DETAILS AND DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER. NOTIFY ARCHITECT WHENEVER DIMENSION DISCREPANCIES ARISE.

03 CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITION OF THE JOB SITE, INCLUDING SAFETY, PROTECTION OF PROPERTY AND THE LIKE DURING THE PERFORMANCE OF THE WORK.

04 CONTRACTOR SHALL PROVIDE METHODS, MEANS, AND FACILITIES REQUIRED TO PREVENT CONTAMINATION OF SOIL, WATER, OR ATMOSPHERE.

05 DIMENSIONS ARE TO:
- FACE OF STRUCTURE, UNLESS NOTED OTHERWISE (UNO)
- DIMENSIONS INDICATED AS CLEAR (CLR) OR FINISH (FIN) ARE TO FINISH FACE.

06 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE OWNER'S WORK AND/OR SUPPLIED ITEMS THAT ARE "FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR" OR ARE "NOT IN CONTRACT", BUT ARE ATTACHED TO THE CONTRACTOR'S WORK.

07 DESTINATION OF EXCAVATED SOILS TO BE DETERMINED. SDCI WILL BE NOTIFIED OF DISPOSAL SITE AFTER CONFIRMATION BY EARTHWORK SUBCONTRACTOR.

08 DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

09 FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY. THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER.

10 DRAWINGS ISSUED FOR CONSTRUCTION PRIOR TO FINAL PERMITTING APPROVAL ARE SUBJECT TO REVISION. VERIFY CONSTRUCTION DOCUMENTS CONFORM TO PERMIT DRAWINGS BEFORE PROCEEDING WITH WORK. NOTIFY ARCHITECT WHENEVER DISCREPANCIES ARISE.

11 SURVEYOR TO LOCATE BELOW GRADE AND ABOVE GRADE STRUCTURES ON SITE.

12 TOP OF CONCRETE ELEVATIONS AND FINISHED GRADE TO BE VERIFIED IN FIELD, CONTRACTOR TO INFORM ARCHITECT, CIVIL AND STRUCTURAL ENGINEERS IF THERE ARE INCONSISTENCIES WITH THE CONTRACT DOCUMENTS.

13. PER WSEC TABLE R402.1.3 FOOTNOTE H, ALL HEADERS ARE REQUIRED TO BE INSULATED TO A MINIMUM OF R-10, REFER TO SECTION SHEETS, A4.00.

14. NOTE THAT ALL ELEVATIONS PROVIDED WITHIN THE PLAN SET REFERENCE VERTICAL DATUM PER LICENSED SURVEYOR, REFER TO LICENSED SURVEY IN PLAN SET.

15. ALL FLOOR ELEVATIONS ARE TO SEA LEVEL AND MEASURE TO THE TOP OF THE STRUCTURE. AT CONCRETE FLOORS THAT IS MEASURED TO THE TOP OF THE STRUCTURAL CONCRETE SLAB. AT WOOD FLOORS THAT IS MEASURED TO THE TOP OF THE PLYWOOD SHEATHING. THE GYPCRETE TOPPING SLAB IS ON TOP OF THE STRUCTURE.

16. CONTRACTOR TO CONFIRM ALL CIVIL COMPONENTS BELOW THE FIRST FLOOR SLAB DO NOT UNDERMINE ANY STRUCTURAL ELEMENTS; CONTACT ARCHITECT, GEOTECHNICAL ENGINEER, STRUCTURAL ENGINEER AND CIVIL ENGINEER IF ANY CONFLICTS ARISE.

17. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

18. STORY LEVELS ARE TO THE T.O. STRUCTURE ON THE WOOD-FRAMED FLOORS AND THE T.O. CONCRETE ON CONCRETE FLOORS

SHEET INDEX

SHEET INDEX

ID	SHEET NAME
A0.00	General Notes
A0.11	Land Use Code - Lot Coverage
A0.12	Land Use Code - Average Building Elevation
A0.14	Land Use Code - FAR / Use Diagrams
A0.20	Arborist Report
C1.0	Civil - CSWPP Plan
C2.0	Civil - Stormwater Site Plan
C3.0	Civil - Details
C4.0	Civil - Details
C5.0	Civil - Amended Soil Plan
DR.01	Rendered Elevation
DR.02	Rendered Elevation
A1.00	Survey
A1.01	Demo Plan
A1.02	Excavation Plan
A1.10	Site Plan
A2.00	Architectural Foundation Plan
A2.01	First Floor Plan
A2.02	Second Floor Plan
A2.03	Roof Plan
A3.10	Elevations
A3.11	Elevations
A3.20	Sections
A3.21	Sections
A8.00	Wall Types
A8.01	Floor Types
A8.10	Windows Schedule
A8.20	Door Schedule
A9.31	Penetration Details
A9.32	Window Installation Details
S-0.0	Structural Notes
S-1.0	Foundation Plan
S-2.0	Upper Floor Framing Plan
S-3.0	Roof Framing Plan
SD-1	Structural Details
SD-2	Structural Details
SD-3	Structural Details
SD-4	Structural Details
SD-5	Structural Details

WASHINGTON STATE ENERGY CODE

PER WSEC R401.3 - A RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE COMPLYING W/ WSEC W401.3 IS REQ'D TO BE COMPLETED BY THE DESIGN PROFESSIONAL OR BUILDER AND PERMANENTLY POSTED.

PER WSEC R403.1.1 - EACH DWELLING UNIT IS REQ'D TO BE PROVIDED W/ CONTROLS TO MINIMIZE SUPPLEMENTAL HEAT USAGE DURING START-UP, SET-UP AND DEFROST CONDITIONS.

PER WSEC R404.1. - ALL PERMANENTLY INSTALLED LIGHTING FIXTURES, EXCLUDING KITCHEN APPLIANCE LIGHTING FIXTURES, SHALL CONTAIN ONLY HIGH-EFFICACY LIGHTING SOURCES.

PER WSEC R402.4 - BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED, TESTED AND VERIFIED TO LIMIT AIR LEAKAGE TO A MAXIMUM OF 3 AIR CHANGES PER HOUR PER SELECTED CREDIT OPTION 2.1 FROM TABLE R406.3.

WHOLE HOUSE VENTILATION

A. INSTALL FAN IN PRIMARY BATH. REFER TO PLAN SHEETS FOR LOCATION. INSTALL 24 HOUR TIMER TO CONTROL EXHAUST FAN. FAN TO OPERATE CONTINUOUSLY. REFER TO SHEET NOTE 7 ON FLOOR PLAN SHEET, A2.01-A2.02.

B. EXHAUST FAN TO BE MIN 75 CFM RUNNING CONTINUOUSLY, AT 1.0 SONE, AT .25 WG

C. ALL EXHAUST DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED TO A MINIMUM OF R-8.

BUILDING AREAS

*** NOTE: FOR OWNER USE ONLY. THESE AREAS ARE MEASURED TO THE OUTSIDE FACE OF FRAMING.

NEW SF RESIDENCE - AREA PER FLOOR		
STORY	LOCATION	GROSS AREA
FIRST FLOOR		
	EXISTING STRUCTURE	600.01
	GARAGE	469.84
	SF	839.94
SECOND FLOOR		
	SF	1,554.18
		3,463.97 ft²

BUILDING AREAS - FLOOR AREA PER MIMC

FAR/GROSS SCHEDULE - TOTAL				
	STORY	FAR AREA	GROSS AREA	CODE EXEMPTION
ACCESSORY STRUCTURE - EXISTING				
	FIRST FLOOR	600.01	600.01	
		600.01 ft²		
GARAGE				
	FIRST FLOOR	469.84	469.84	
		469.84 ft²		
SF				
	FIRST FLOOR	656.95	656.95	
	SECOND FLOOR	0.00	73.94	MIMC 19.02.010.D.2.c
	SECOND FLOOR	1,480.24	1,480.24	
		2,137.19 ft²		
		3,207.04 ft²		

WASHINGTON STATE ENERGY CODE

SINGLE FAMILY RESIDENCE AND ACCESSORY STRUCTURE TO COMPLY PER R406.3.2 UNIT SIZE DESIGNATION

PER WSEC R406.3: PROVIDE 8 CREDITS FOR A MEDIUM DWELLING UNIT

TABLE R406.2 SYSTEM 4 : HEATING SOURCE (3 CREDITS)
FOR HEATING USING A HEAT PUMP THAT MEETS FEDERAL STANDARDS FOR THE EQUIPMENT LISTED IN TABLE C403.3.2(2) OR C403.3.2(9)

TABLE R406.3 SECTION 2.1: AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION OPTIONS (1.0 CREDITS)
COMPLIANCE IS BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 2.0 AIR CHANGES PER HOUR AT 50 PASCALS

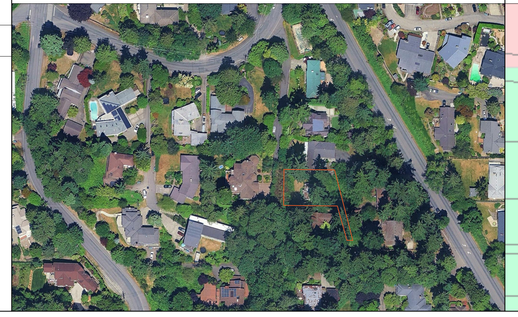
TABLE 406.3 SECTION 3.7: HVAC (2 CREDITS)
DUCTLESS SPLIT SYSTEM HEAT PUMPS WITH NO ELECTRIC RESISTANCE HEATING IN THE PRIMARY LIVING AREAS. A DUCTLESS HEAT PUMP SYSTEM WITH A MINIMUM HSPF2 OR 9 (HSPF OF 10) SHALL BE SIZED AND INSTALLED TO PROVIDE HEAT TO ENTIRE DWELLING UNIT AT THE DESIGN OUTDOOR AIR TEMPERATURE.

TABLE 406.3 SECTION 5.6: WATER HEATER (2 CREDITS)
WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION

PER SEC R402.1.2 - THE BUILDING THERMAL ENVELOPE SHALL MEET THE REQUIREMENTS OF TABLE R402.1.2. ASSEMBLIES SHALL HAVE A U-FACTOR EQUAL OR LESS THAN THAT SPECIFIED. FENESTRATION SHALL HAVE A U-FACTOR EQUAL OR LESS THAN THE SPECIFIED VALUE.

FENESTRATION U-FACTOR:	0.30	REFER TO A8.10 - A8.20
CEILING U-FACTOR:	0.024	R-63, REFER TO A8.01 FOR ASSEMBLIES
ABOVE GRADE WALL U-FACTOR:	0.056	R-20, REFER TO A8.00 FOR ASSEMBLIES
FLOOR U-FACTOR:	0.029	R-38 (AT CANTILEVER), REFER TO A8.01 FOR ASSEMBLIES
SLAB ON GRADE F-FACTOR:	0.54	2 FOOT PERIMETER INSULATION, REFER TO A3.20 - A3.30
BELOW GRADE WALL U-FACTOR:	0.035	R-25, REFER TO A8.00 FOR ASSEMBLIES
BELOW GRADE SLAB F-FACTOR:	0.50	N/A

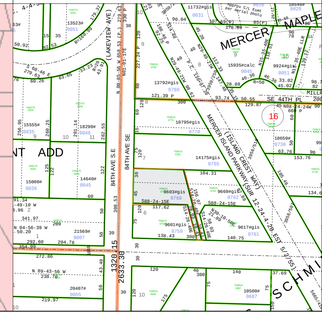
AERIAL MAP (NOT TO SCALE)



ZONING MAP (NOT TO SCALE)



VICINITY MAP (NOT TO SCALE)



PROJECT SUMMARY

ADDRESS: 4450 84TH AVE SE
MERCER ISLAND, WA 98040

OWNER: MERCER PARTNERS LLC
8015 SE 60TH ST
MERCER ISLAND, WA 98040

ARCHITECT: b9 ARCHITECTS, INC.
400 E PINE STREET
SEATTLE, WA 98122
TEL. 206.297.1284

STRUCTURAL ENGINEER: Mulhern + Kulp
7220 TRADE STREET
SUITE 295
SAN DIEGO, CA 92121

CIVIL ENGINEER: OFFE ENGINEERS
13932 SE 159TH PL
RENTON, WA 98058

LEGAL DESCRIPTION: THE PORTION OF LOTS 6 AND 7, BLOCK 16, VITUS SCHMID'S EAST SEATTLE ACRE TRACTS ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS, PAGE 76, RECORDS OF KING COUNTY, WASHINGTON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT ON THE SOUTH LINE OF SAID LOT 6, WHICH IS SOUTH 88°24'15" EAST 138.43 FEET FROM THE SOUTHWEST CORNER THEREFROM; THENCE SOUTH 88°24'15" EAST ALONG SOUTH LINE FOR A DISTANCE OF 10.41 FEET; THENCE NORTH 14°26'40" WEST 156.07 FEET TO THE SOUTH LINE OF THE NORTH 90 FEET OF SAID LOT 7; THENCE NORTH 88°24'15" WEST ALONG SAID SOUTH LINE OF NORTH 90 FEET FOR A DISTANCE OF 107.22 FEET TO THE WEST LINE OF SAID LOT 6 FOR A DISTANCE OF 75.00 FEET TO A POINT WHICH IS 75.00 FEET FROM SAID SOUTHWEST CORNER OF LOT 6; THENCE SOUTH 88°24'15" EAST PARALLEL TO SAID SOUTH LINE OF LOT 6 FOR A DISTANCE OF 117.62 FEET TO A POINT WHICH IS NORTH 14°26'40" WEST FROM THE POINT OF BEGINNING; THENCE SOUTH 14°26'40" EAST 78.03 FEET TO THE POINT OF BEGINNING.
SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

APN: 759810-0760

PROJECT DESCRIPTION: A NEW 2 STORY PRIMARY RESIDENCE WITH TWO CAR GARAGE WILL BE CONSTRUCTED. A 1 STORY 600SF SFR CURRENTLY EXISTS AND WILL BECOME AN ACCESSORY STRUCTURE.

APPLICABLE CODES: MERCER ISLAND LAND USE CODE
2021 INTERNATIONAL RESIDENTIAL CODE
2021 WASHINGTON STATE ENERGY CODE

ZONING SUMMARY

ZONE	R9.6
TOTAL LOT AREA	9,601
GROSS FLOOR AREA RATIO	MIMC 19.02.020.D.1 R9.6: FAR OF 0.40 9,601 x 0.40 = 2,699.73 SF ALLOWED
DENSITY/SITE USAGE	MIMC 19.02.010.A SINGLE-FAMILY DWELLING ALLOWED
YARD REQUIREMENTS:	MIMC 19.02.020.C **FRONT:** 20' MIN **SIDE:** 5' MIN, 17% OF TOTAL LOT WIDTH **REAR:** 25' MIN
LOT COVERAGE	MIMC 19.02.020.F FOR LOTS WITH LESS THAN 15% SLOPE, MAXIMUM LOT COVERAGE: 40% OF NET LOT AREA 5,999.4 x 0.40 = 2,399.76 SF LOT COVERAGE ALLOWED MAXIMUM ADDITIONAL HARDSCAPE ALLOWED: 12% OF NET LOT AREA 5,999.4 x 0.12 = 719.93 SF HARDSCAPE ALLOWED
STRUCTURE HEIGHT	MIMC 19.02.020.E.1 HEIGHT LIMIT: 30
LANDSCAPING AND SCREENING:	MIMC 19.02.020.F FOR LOTS WITH LESS THAN 15% SLOPE, MINIMUM LANDSCAPE COVERAGE: 60% OF NET LOT AREA PROJECT MUST COMPLY WITH MIMC 19.10.070 FOR TREE REPLACEMENT PER MIMC 19.10.060.A.1.b, TREE RETENTION IS NOT REQUIRED FOR A NEW SINGLE FAMILY DWELLING ON A LOT WITH LESS THAN 6,000 SQ FT
PARKING	MIMC 19.02.020.G.2. REQUIRED: 2 PROPOSED: 2
ACCESS	DRIVEWAY PROPOSED FROM SE 45TH ST

FIRE SPRINKLER NOTES

02

PER MERCER ISLAND FIRE DEPARTMENT: EACH DWELLING UNIT SHALL HAVE AN NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D (FULL COVERAGE) AND COMI STANDARDS AND SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

1) PROVIDE DWELLING UNITS WITH AN INDIVIDUAL **NFPA 13D SPRINKLER SYSTEM** PER 2021 INTERNATIONAL RESIDENTIAL CODE SECTION R313.2 AND 2021 INTERNATIONAL FIRE CODE SECTION 903.3.1.3. NO SPRINKLER RISER ROOM IS REQUIRED.
2) PROJECT WILL HAVE SMOKE ALARMS INSTALLED IN ALL LOCATIONS PER 2018 IRC SECTION 907.2.10.2. AND IN ALL INTERIOR CORRIDORS SERVING SLEEPING UNITS PER IRC 907.2.8.2.
3)PROJECT WILL HAVE A CENTRAL MONITORING SYSTEM PER NFPA - REFER TO NOTE #5
4) SMOKE ALARMS SHALL BE INTERCONNECTED PER IRC 907.2.10.5.
5) PROVIDE NFPA 72 "CHAPTER 29" MONITORED FIRE ALARM SYSTEM. SEPARATE PERMITS REQUIRED. NOTE THAT THE PERMITTED INSTALLATION OF THE NFPA 72 "CHAPTER 29" FIRE ALARM SYSTEM MAY TAKE THE PLACE OF THE TYPICAL "LINE VOLTAGE" SMOKE DETECTORS. THE MITIGATION OF THE FIRE ALARM SYSTEM EXCEEDS THE LINE VOLTAGE SYSTEM AND IS ALLOWED BY INTERNATIONAL RESIDENTIAL CODE.
6) CONNECT THE INDIVIDUAL SPRINKLER SYSTEM TO AN APPROVED EXTERIOR WATER FLOW ALARM DEVICE
7) SUBMIT CONTRACTORS SHOP DRAWINGS FOR REVIEW BY MERCER ISLAND BUILDING DEPARTMENT
8) FOR INFORMATION REGARDING FIRE DEPARTMENT INSPECTIONS CALL THE FIRE MARSHAL'S OFFICE, ENGINEERING SECTION AT 206-275-7605
9) THE SPRINKLER SYSTEM CAN BE SUPPLIED BY A DOMESTIC SERVICE IN ACCORDANCE WITH 2021 INTERNATIONAL FIRE CODE SECTION 903.3.5.1

Architect of Record

b9 architects
400 E Pine Street
Suite 215
Seattle, WA 98122
206.297.1284
www.b9architects.com

Project:

4450 84th Ave SE SF House + Existing Accessory Structure

Location:

4450 84TH AVE SE
MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT Brad Kuan BRADLEY G. KHOURI STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

General Notes

A0.00

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LOT COVERAGE LEGEND

- STRUCTURE FOOTPRINT AT GRADE
- CANTILEVERED FLOOR SPACE ABOVE GRADE
- WEATHER PROTECTION OUTLINE
- PAVERS - HARDSCAPE SURFACE
- CONCRETE WALKWAY/DRIVEWAY
- LANDSCAPING AT GRADE

02

LOT COVERAGE - SITE SLOPE

HIGHEST SITE ELEVATION: 306 FEET
LOWEST SITE ELEVATION: 292 FEET
306 FT - 292 FT
ELEVATION DIFFERENCE = 14 FEET

SITE DISTANCE: 156.06 FT

14 FT / 156.06 FT = .0897
9% = LOT SLOPE

< 15% LOT SLOPE = 40% LOT COVERAGE ALLOWED PER MIMC 19.02.020.F.3.a
PER MIMC 19.02.020.F.e.ii.(b) - A DEVELOPMENT PROPOSAL ON A FLAG LOT THAT, AFTER OPTIMIZING DRIVEWAY ROUTING AND MINIMIZING DRIVEWAY WIDTH, REQUIRES A DRIVEWAY THAT OCCUPIES MORE THAN 25 PERCENT OF THE OTHERWISE ALLOWED LOT COVERAGE AREA. THE ALLOWED REDUCTION IN THE REQUIRED LANDSCAPING AREA AND INCREASE IN MAXIMUM LOT COVERAGE SHALL NOT EXCEED FIVE PERCENT, OR THE AREA OF THE DRIVEWAY IN EXCESS OF 25% OF THE LOT COVERAGE, WHICHEVER IS LESS

DRIVEWAY OCCUPIED LOT COVERAGE = 1,373 SF / [9,601.41 SF X 40%] = 1,373 SF / 3,840.56 SF = .3575 OR 35.75%
DRIVEWAY IS IN EXCESS OF 25% BY 10.75%, WHICH IS GREATER THAN FIVE PERCENT

TOTAL ALLOWED LOT COVERAGE = 45% (40% PER MIMC + 5% ALLOWED BY MIMC 19.02.020.F.e.ii.(b)

A MAXIMUM OF 9% OF NET LOT AREA MAY CONSIST OF HARDSCAPE IMPROVEMENTS PER MIMC 19002.020.F.b.i

LOT COVERAGE AREA	
	AREA
LOT COVERAGE (EXISTING) - ACCESSORY STRUCT.	600.01
LOT COVERAGE - EXISTING CARPORT	196.93
LOT COVERAGE - MODIFIED DRIVEWAY	1,310.77
LOT COVERAGE-DRIVEWAY	187.36
SF - OVERHANG	13.08
SF - OVERHANG	54.28
SF - OVERHANG	190.11
SFR - FOOTPRINT	1,309.79
	3,862.33 ft²

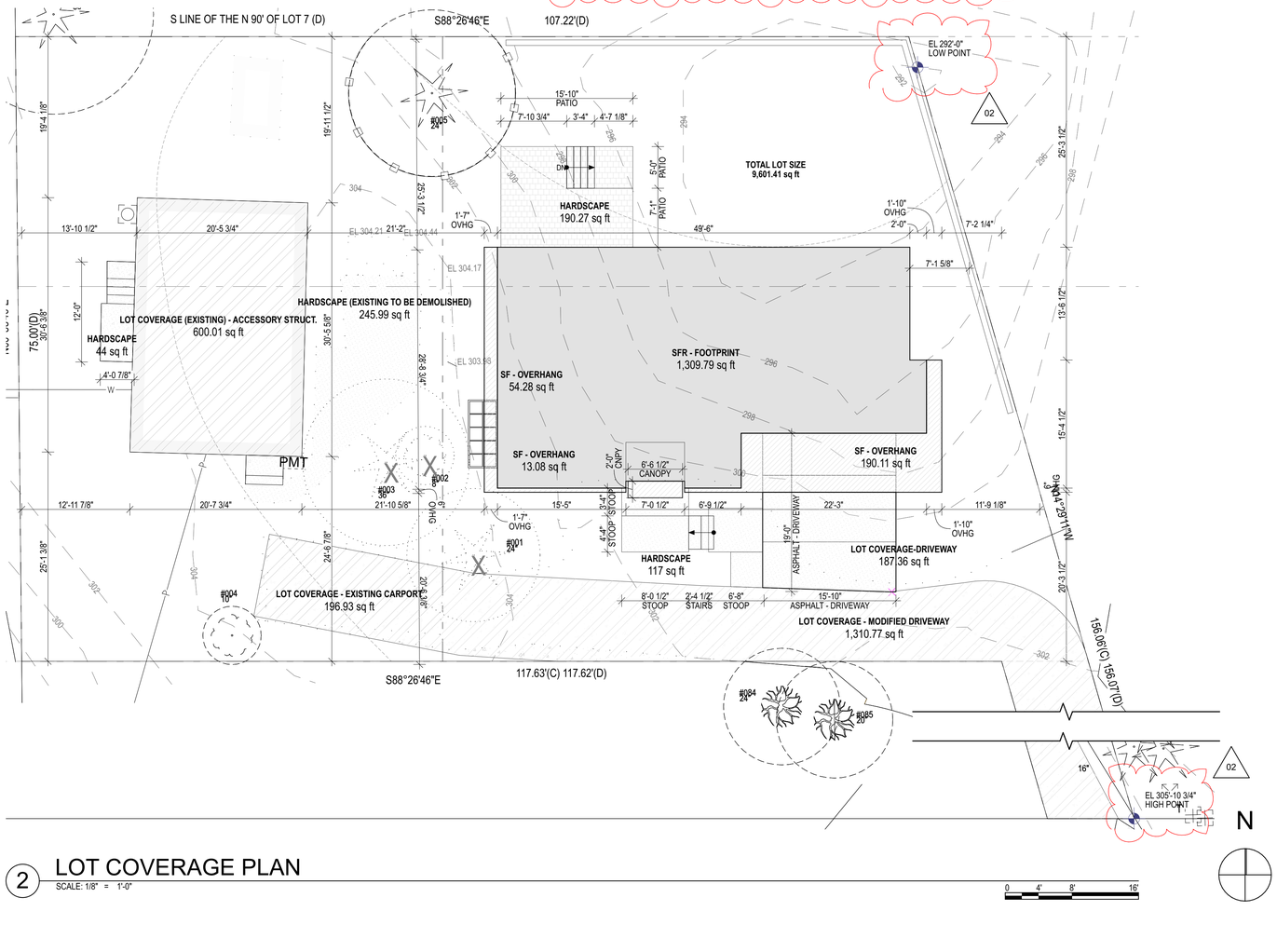
TOTAL LOT SIZE: 9,601.41
9,601.41 SF X 45% =
4,320 SQ FT = 45% (MAXIMUM LOT COVERAGE)

3,862.33 SF / 9,601.41 S FT = 40.23%

NOTE HARDSCAPE COVERAGE AREA	
	AREA
HARDSCAPE	44.00
HARDSCAPE	117.00
HARDSCAPE	190.27
HARDSCAPE (EXISTING TO BE DEMOLISHED)	245.99
	597.26 ft²

TOTAL LOT SIZE: 9,601.41
9,601.41 SF X 9% =
864.13 SQ FT = 9% (MAXIMUM HARDSCAPE)

597.26 SF - 245.99 (TO BE DEMOLISHED) = 351.27
351.27 / 9,601.41 SF = 3.66%



2 LOT COVERAGE PLAN
SCALE: 1/8" = 1'-0"

Architect of Record

b9 architects
400 E Pine Street
Suite 215
Seattle, WA 98122
206.297.1284
www.b9architects.com

Project:

4450 84th Ave SE SF House + Existing Accessory Structure

Location:
4450 84TH AVE SE
MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT BRADLEY G. ICHOURI STATE OF WASHINGTON
Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

Land Use Code - Lot Coverage

A0.11

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AVERAGE BUILDING ELEVATION	
POINT A	303.18
POINT B	294.42
POINT C	294.96
POINT D	295.98
POINT E	297.62
POINT F	301.27
DIMENSION 'a'	29.50
DIMENSION 'b'	50.92
DIMENSION 'c'	13.54
DIMENSION 'd'	3.83
DIMENSION 'e'	15.87
DIMENSION 'f'	54.92
(A x a)	8943.81
(B x b)	14991.87
(C x c)	3993.76
(D x d)	1133.60
(E x e)	4723.23
(F x f)	16545.75
(A x a) + (B x b) + (C x c) + (D x d) + (E x e) + (F x f)	21268.98
a + b + c + d + e + f	70.79
AVERAGE GRADE	300.45
HEIGHT LIMIT (FT)	30.00
MAXIMUM ALLOWABLE HEIGHT	330.45

AVERAGE BUILDING ELEVATION LEGEND

NEW STRUCTURE FOOTPRINT AT GRADE

RECTANGLE: BUILDING PERIMETER

PROPERTY LINE

DISTANCE a — BUILDING PERIMETER LENGHT

POINT A 332.20' — MID POINT ELEVATION

AVERAGE BUILDING ELEVATION MEASUREMENT

AVERAGE BUILDING ELEVATION MEASUREMENT CALCULATION BASED ON MIMC 19.02.010.E.4:

$$\frac{(A \times a) + (B \times b) + (C \times c) + (D \times d) + (E \times e) + (F \times f)}{a + b + c + d + e + f}$$

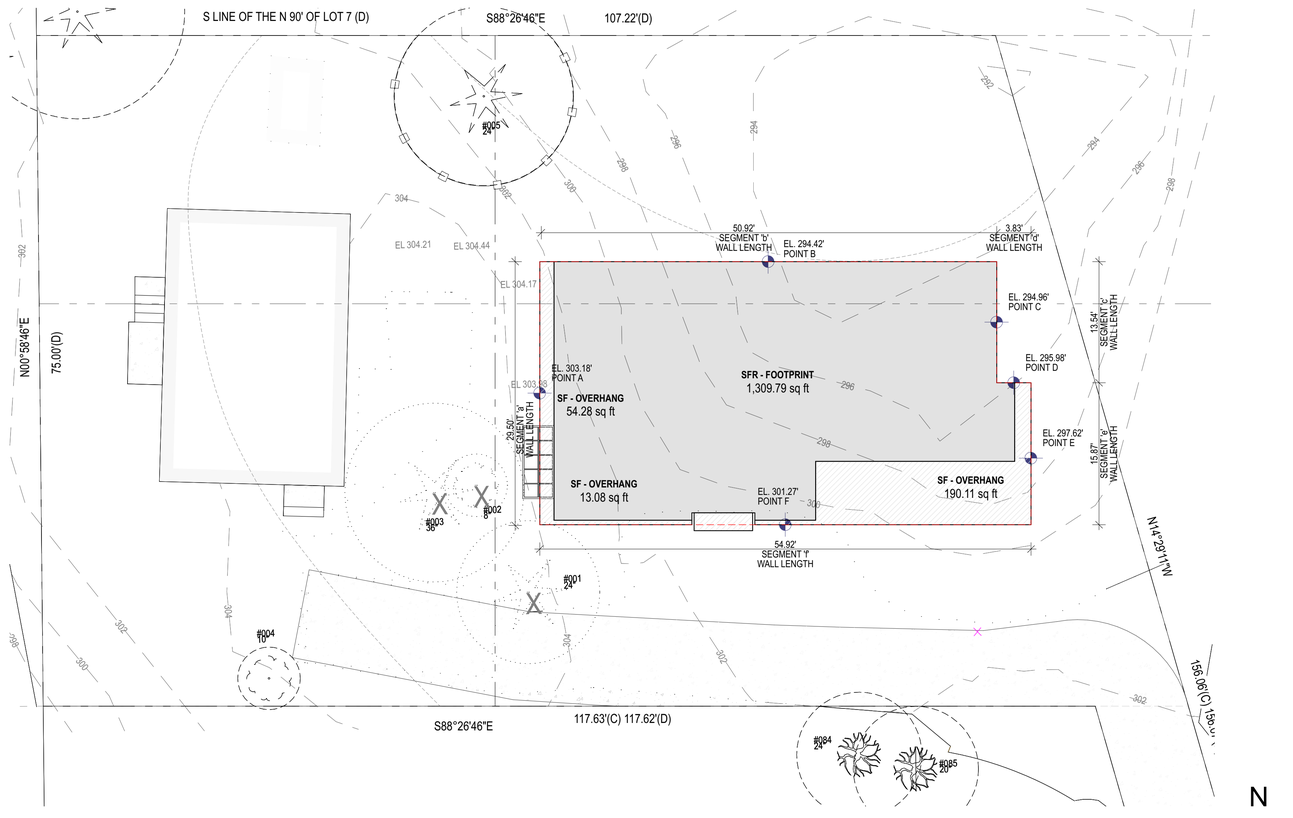
$$\frac{(303.18 \times 29.50) + (294.42 \times 50.92) + (294.96 \times 13.54) + (295.98 \times 3.83) + (297.62 \times 15.87) + (301.27 \times 54.92)}{29.50 + 50.92 + 13.54 + 3.83 + 15.87 + 54.92}$$

$$\frac{21,268.98}{70.79}$$

= 300.45' = AVERAGE BUILDING ELEVATION

MAXIMUM ALLOWABLE HEIGHT:
300.45' + 30.00' = 330.45' or 330'-5 1/2" MIMC 19.02.010.E.1

NOTE - PER MIMC 19.02.010.E.3, EXEMPTIONS TO THE HEIGHT ARE ALLOWED FOR ANTENNAS, LIGHTNING RODS, PLUMBING STACKS, FLAGPOLES, ELECTRICAL SERVICE LEADS, CHIMNEYS AND FIREPLACES, SOLAR PANELS, AND SIMILAR APPURTENANCES WHICH ALLOW SUCH ITEMS TO EXTEND TO A MAXIMUM OF FIVE FEET ABOVE THE HEIGHT ALLOWED FOR THE MAIN STRUCTURE



1 AVERAGE BUILDING ELEVATION PLAN
SCALE: 1/8" = 1'-0"

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Seattle, WA 98122
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Project:

4450 84th Ave SE SF House + Existing Accessory Structure

Location:

4450 84TH AVE SE
MERCER ISLAND, WA 98040

8914 REGISTERED ARCHITECT BRADLEY G. KHOURI STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Land Use Code - Average Building Elevation

A0.12

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PLAN LEGEND

- PROPERTY LINE
- TOTAL BASEMENT FLOOR AREA
- WALL SEGMENT AREA COVERAGE
- 3'-0" WALL SEGMENT LENGTHS
- BASEMENT CEILING

BASEMENT FLOOR AREA NOTES AND CALCULATIONS

CITY OF MERCER ISLAND CODE: 19.02.020.F
APPENDIX B BASEMENT FLOO AREA CALCULATION

WALL SEGMENT COVERAGE PERCENTAGE:
(EXISTING GRADE & FINISHED GRADE)

SINGLE FAMILY RESIDENCE

WALL SEGMENT	LENGTH (FEET)	WALL HEIGHT COVERAGE	PERCENTAGE COVERED	RESULT
A	20.13	0/8.5 x 100	0.00%	0%
B	29.25	2.73/8.5 x 100	32.12%	9%
C	22.25	0/8.5 x 100	0.00%	0%
D	29.13	3.76/8.5 x 100	44.24%	13%
SUM	100.76			22%

TOTAL BASEMENT AREA x ∑ (WALL SEGMENT COVERAGE % x WALL SEGMENT LENGTH
TOTAL OF ALL WALL SEGMENT LENGTHS

839.94 x 22 = 183
100.76

BASEMENT FLOOR AREA EXCLUDED FROM GROSS FLOOR AREA = 183

FAR/GROSS SCHEDULE - TOTAL

STORY	FAR AREA	GROSS AREA	CODE EXEMPTION
ACCESSORY STRUCTURE - EXISTING			
FIRST FLOOR	600.01	600.01	
	600.01 ft²		
GARAGE			
FIRST FLOOR	469.84	469.84	
	469.84 ft²		
SF			
FIRST FLOOR	656.95	656.95	
SECOND FLOOR	0.00	73.94	MIMC 19.02.010.D.2.c
SECOND FLOOR	1,480.24	1,480.24	
	2,137.19 ft²		
	3,207.04 ft²		

FAR SCHEDULE - ACCESSORY STRUCTURE

STORY		AREA	EXEMPTION
FIRST FLOOR			
	ACCESSORY STRUCTURE - EXISTING	600.01	

PLAN LEGEND

- CHARGEABLE GROSS FLOOR AREA FOR FAR
- EXEMPT GROSS FLOOR AREA MIMC 19.02.010.D.2.c FOR FAR

FAR REQUIREMENTS

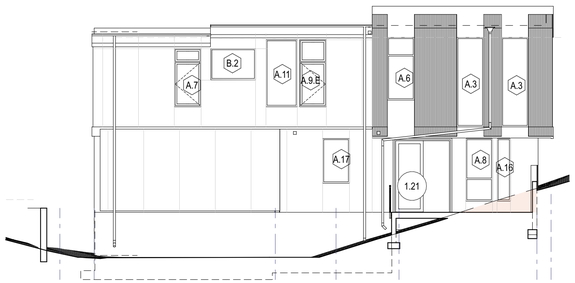
ZONE: R9.6

LOT AREA: 9,601

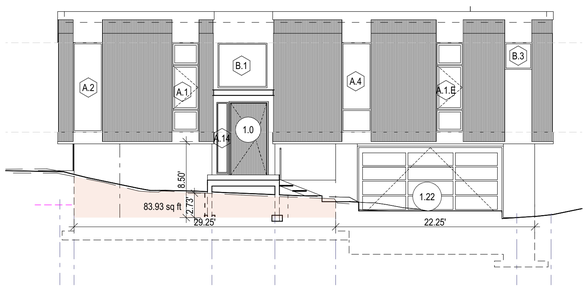
FLOOR AREA RATIO ALLOWED: 0.40

9,601 X 0.40 = 3,840.4 SF
EXISTING AREA = 600 SF
600 SF + 2,790 SF (PROPOSED)

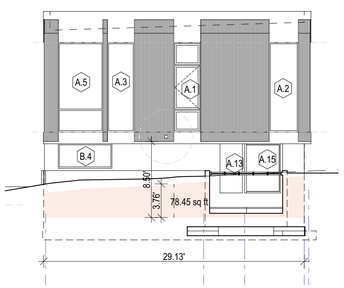
FLOOR AREA RATIO PROPOSED: 3,207.04 SF /9,601 = **0.33 <** 0.40 **FAR**



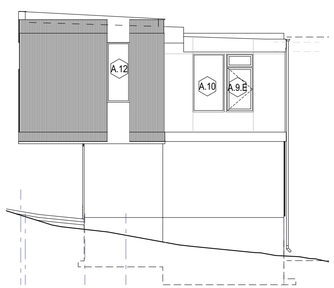
8 NORTH ELEVATION
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



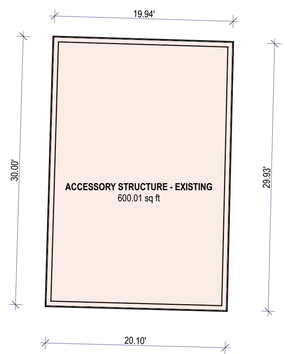
7 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



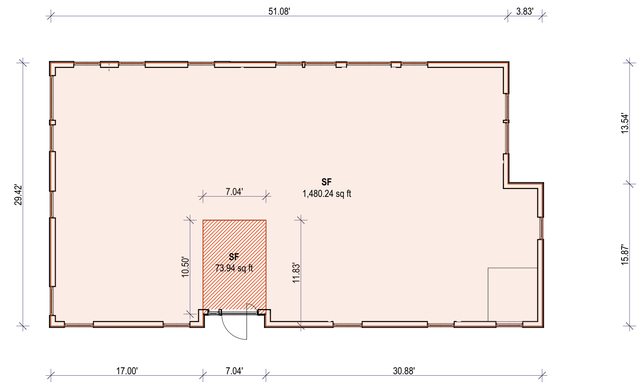
6 WEST ELEVATION
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



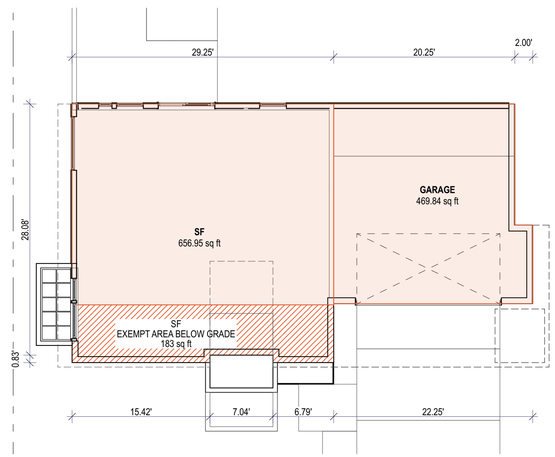
5 EAST ELEVATION
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



2 FIRST FLOOR - ACCESSORY STRUCT.
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



3 SECOND FLOOR
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



1 FIRST FLOOR
SCALE: 1/8" = 1'-0"
0 4' 8' 16'

N

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8914 REGISTERED ARCHITECT
BRADLEY G. ICHOURI
STATE OF WASHINGTON
Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Land Use Code - FAR / Use Diagrams

A0.14

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ARBORIST REPORT

Bruce Mac Coy (PN – 0159A / 10828)
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02-07-2025
Prepared for Vann Lanz
Mercer Partners LLC
8015 SE 60th St, Mercer Island, WA 98040

Site inventory of Trees over 6" DBH: 4450 84th Ave SE, Mercer Island, WA 98040

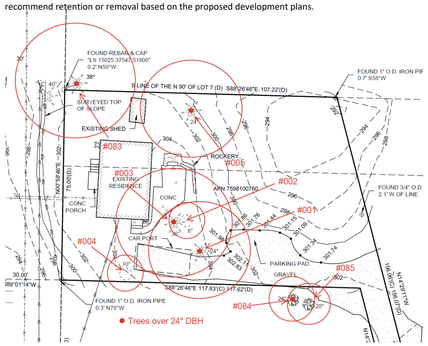
Notes: 1) DBH = Diameter at Breast Height / 54" from ground
2) T = Tall – Approximate by ground observation
3) DL = Drip Line / Canopy width / diameter at widest measurable points

Tools used: Tape and Laser Measure. Visual Ground Level Observation.

---

1. Introduction

This arborist report has been prepared to assess the existing trees on the development site located at 4450 84th Ave SE, Mercer Island, WA. The scope of the project involves the construction of a single-family home. The purpose of this report is to provide a tree inventory, assess tree health, and recommend retention or removal based on the proposed development plans.



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consultingarborist@msn.com
Cell: 425-246-5778

2. Tree Inventory

The following table summarizes the trees assessed on site:

Tree ID	Species	DSH (in)	Exceptional	Height	Drip Zone Diameter	Condition	Comments	Retention
001	Douglas FIR (Pseudotsuga menziesii)	28"	No	65'	16'	Good	Conflict with building area	Remove
002	English Holly (Ilex aquifolium) SHRUB						Shrub/ Bush	Remove
003	Douglas FIR (Pseudotsuga menziesii)	40"	**Yes**	70'	20'	Poor	Laminated Root Rot	Remove
004	English Holly (Ilex aquifolium) SHRUB						Shrub/ Bush	Save
005	Douglas FIR (Pseudotsuga menziesii)	34"	**Yes**	60'	20'	Fair	Significant lean to the North	Save
083	Douglas FIR (Pseudotsuga menziesii)	42"	Yes	70'	24'	Good	**Off Site**	Save
084	Douglas FIR (Pseudotsuga menziesii)	24"	No	50'	14'	Good	**Off Site**	Save
085	Douglas FIR (Pseudotsuga menziesii)	20"	No	50'	14'	Fair	**Off Site**	Save

3. Tree Health Assessment

Each tree has been evaluated for structural integrity, health (disease, pests, decay), and potential to thrive post-development. Trees selected for retention will require protection during construction.

4. Disturbance allowance

The Critical Root Zone is measured as one foot of radius for every inch of trunk diameter measured at 4.5 feet from grade. Measurements are calculated from DSH and may not be an accurate representation of the actual dimensions of the root zone of the trees in the field. Factors may limit root growth and expansion such as slope, hardscape or compacted areas, or tree health.

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5. Protection Measures

For the retained trees, the following steps are recommended:

Tree Protection Zone (TPZ) Fencing:

- Install tree protection fencing at least 4' high and construction from chain link fence for exceptional trees and/ or high visibility safety fencing materials around the drip line of all trees that are to be retained prior to construction.
- Install tree protection fencing at least 4' high and construction from chain link fence for exceptional trees and/ or high visibility safety fencing materials around the drip lines of trees that extend over the subject property.
- "Tree Protection Area - Keep Out" or similar signs must be posted at regular intervals along the tree protection fencing.
- Limits of Disturbance (LODs) should be designed in such a way that they cannot be easily moved or dismantled.
- LODs must remain intact throughout the duration of the project and can only be removed, either temporarily or permanently, with authorization from an ISA-certified arborist, following submission and approval of a removal request.
- No work or access is allowed within the LOD of retained trees. This includes the storage of materials, parking, or contamination of the soil through equipment washout.
- No excavation or material storage within the protected zones.
- Ensure periodic inspections during construction.

Soil Protection:

- In addition to tree protection barriers, additional care measures are recommended for preserved trees. These include mulching around the dripline, providing supplemental fertilization for stressed trees, irrigation as needed, soil amendments, soil aeration, and pruning to remove deadwood or create necessary clearance for protection.

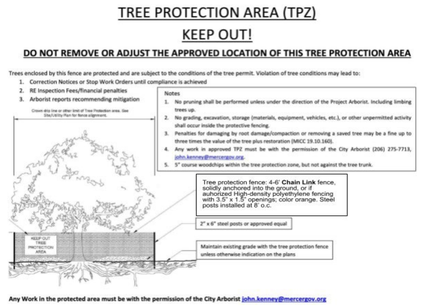
Construction Activity Restrictions:

- No grading, excavation, or heavy equipment within TPZ areas

Monitoring and Inspections:

Bruce Mac Coy (PN – 0159A / 10828)
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MS Forestry – Entomology – Plant Pathology
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Cell: 425-246-5778

A qualified site arborist should be retained for the entire project to perform periodic inspections, ensure compliance with tree protection measures, and assess the health and condition of the trees during construction



6. Tree Replacement

The suggested location for tree replacement is dependent on the desired of the new housing structures and hardscaping. Generally, the replacement plantings shall be native to the Pacific Northwest. Coniferous trees shall be at least six feet tall and deciduous trees shall be at least one and one-half inches in caliper. Replacement trees shall be planted in the wet season (October 1 through April 1), following the applicable tree removal or, in the case of a development proposal, completion of the development work.

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Tree planting and maintenance are crucial components of ensuring healthy, thriving trees in urban, suburban, and rural landscapes. The specification for tree planting and maintenance typically involves a set of guidelines, procedures, and standards to follow to ensure the long-term health, safety, and aesthetic value of trees. Below is an overview of the key aspects related to tree planting and maintenance specifications:

Tree Planting Specifications

Site Selection and Preparation

- Soil Testing: Before planting, soil should be tested for its pH, texture, drainage, and nutrient levels to determine the best tree species for the location.
- Space Requirements: Ensure sufficient space for the tree's root system to grow. Consider the mature size of the tree and its potential impact on structures (e.g., sidewalks, buildings) and utilities.
- Drainage: The planting site should have adequate drainage to avoid waterlogging, which could harm the roots. Proper drainage can be ensured by creating a raised bed or installing drainage pipes, if necessary.
- Sunlight and Wind Exposure: Choose a planting site that provides the appropriate sunlight and wind exposure for the specific species being planted.

Planting Process

- Root System: Ensure the tree is planted at the correct depth, with the root collar (where the trunk meets the roots) level with the surrounding soil surface.
- Soil Amendments: If necessary, amend the soil with organic material to enhance nutrient content, but avoid over-amending, which could lead to weak root growth.
- Watering: After planting, water thoroughly to settle the soil around the roots. Water should be applied slowly to avoid washing away the soil.
- Mulching: Apply a 2-4 inch layer of organic mulch around the base of the tree (but not directly on the trunk) to retain moisture and suppress weeds.
- Stake/Support: Stake the tree only if necessary to prevent leaning, and ensure that the stakes don't damage the tree trunk. Remove stakes after the first growing season to allow the tree to establish itself.

Spacing and Layout

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- Ensure adequate spacing (10 feet minimum) between trees to allow for full canopy development.
- Maintain sufficient space from obstacles like buildings, sidewalks, and power lines.

Tree Maintenance Specifications

Watering

- Initial Watering: Newly planted trees need consistent watering for the first 1-2 years until they establish a deep root system. Water deeply and infrequently to encourage deep root growth.
- Ongoing Watering: Established trees should be watered during dry periods, particularly in the summer months. Regular watering helps trees cope with stress and prevent drought damage.
- Watering Methods: Use a soaker hose, drip irrigation, or deep root watering techniques to ensure the water reaches the root zone.

Pruning

- Young Tree Pruning: In the early years, prune trees to establish a strong central leader (main trunk) and remove any dead, damaged, or crossing branches.
- Pruning Season: The best time for pruning is typically during the tree's dormant season (late winter or early spring) to avoid stressing the tree and promoting unwanted growth.
- Proper Pruning Cuts: Use clean, sharp tools to make smooth cuts just outside the branch collar, avoiding damaging the tree.

Mulching

- Replenish Mulch: Mulch should be replenished annually to maintain a consistent 2-4 inch layer, ensuring it doesn't touch the tree's trunk.
- Avoid Over-Mulching.

Fertilization

- Soil Testing: Conduct soil tests regularly to determine if additional fertilization is needed. Apply organic fertilizers or slow-release nutrients according to tree species requirements.
- Timing: Fertilizer should be applied during the active growing season (typically in spring or early summer) to support growth.

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- Balanced Fertilization: Use a balanced fertilizer (e.g., NPK: Nitrogen, Phosphorus, Potassium) to promote healthy root, stem, and leaf development.

Weeding and Grass Control

- Weeding: Remove competing weeds and grasses from around the tree's root zone, especially during the first few years of growth, to reduce competition for water and nutrients.
- Grass: Grass around trees can be detrimental if it competes with roots for nutrients. Avoid allowing grass to grow right up to the tree base, and use mulch to minimize competition.

7. Tree Removal

The proposed tree removals of 001 and 003 on this site will not adversely affect any other nearby trees.

8. Conclusion

This report provides a detailed tree inventory and recommendations for the development site at 2740 61st Ave. S.E., Mercer Island. Of the trees evaluated, one tree is recommended for retention, while two trees are to be removed. Proper protection measures must be enforced to preserve the health of retained trees throughout construction.

About Bruce MacCoy:

I obtained a Master of Science degree in Forestry, Entomology, and Plant Pathology from Michigan State University in 1974. I was elected to an honorary forestry fraternity (Xi Sigma Pi) for high academic achievement. I started work on a Ph.D. in Plant Pathology before accepting a job with a national tree service Bartlett Tree Experts) as the representative for their New Haven, Connecticut office. While there, I obtained a second Master's Degree in Business Management with an emphasis in finance. I became certified by the state of Connecticut as an Arborist. I am a graduate of the Davey Institute of Tree Surgery.

I am certified by the International Society of Arboriculture as an Arborist: PN-0159A, 10828. I am a graduate of the academy for the American Society of Consulting Arborist's (ASCA).

Architect of Record

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MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT Brad Khouri BRADLEY G. KHOURI STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Arborist Report

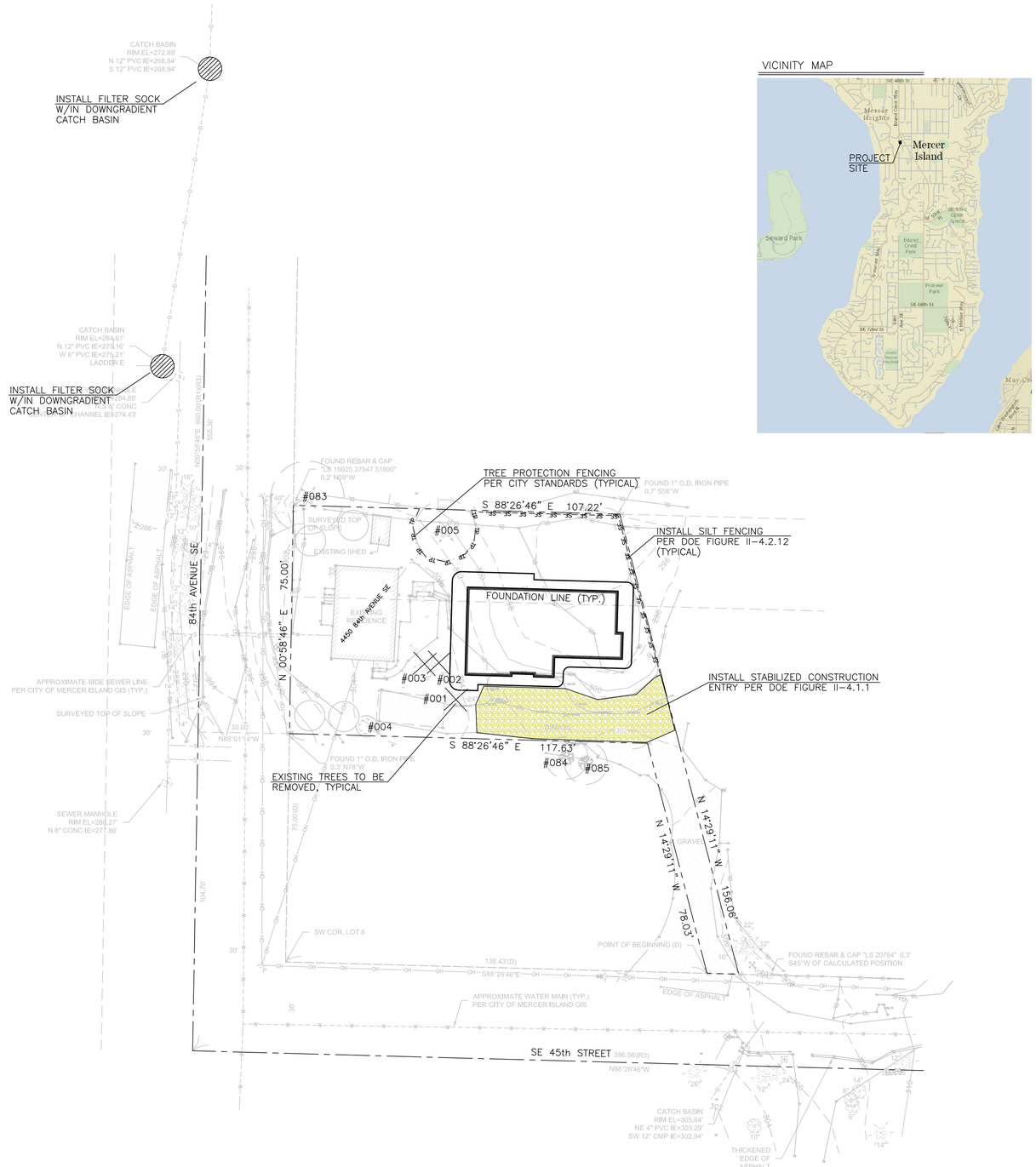
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NW 1/4 OF THE SW 1/4 OF SECTION 18, TOWNSHIP 24 NORTH., RANGE 05 EAST, W.M., KING COUNTY, WA.

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILIITES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

CALL BEFORE YOU DIG: 811



VICINITY MAP

LEGEND

- ASPHALT SURFACE
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CO CLEANOUT
- CULVERT PIPE
- CONCRETE SURFACE
- RETAINING WALL
- DECK
- FENCE LINE (CHAIN LINK)
- FENCE LINE (WOOD)
- G GAS METER
- GRAVEL SURFACE
- HEDGE FOLIAGE LINE
- INLET (TYPE 1)
- MB MAILBOX (RESIDENTIAL)

EXISTING SPOT ELEVATIONS

- MONUMENT IN CASE (FOUND)
- P POWER METER
- POWER (OVERHEAD)
- PP POWER POLE
- REBAR AS NOTED (FOUND)
- REBAR & CAP (SET)
- ROCKERY
- SEWER LINE
- SEWER MANHOLE
- STORM DRAIN LINE
- TELEPHONE (OVERHEAD)
- TEL SENTRY TELEPHONE SENTRY
- WM WATER METER
- POWER TRANSFORMER POLE
- SIZE TYPE TREE (AS NOTED)

DATUM

VERTICAL DATUM – NAVD '88, PER RTK GPS TIES

HORIZONTAL DATUM – NAD83(2011); NORTH ZONE; PER RTK GPS TIES AND THE WASHINGTON STATE REFERENCE NETWORK (WSRN). UNITS OF MEASUREMENT ARE U.S. SURVEY FEET.

The following table summarizes the trees assessed on site:

Tree ID	Species	DSH (in)	Exceptional	Height	Drip Zone Diameter	Condition	Comments	Retention
001	Douglas FIR (Pseudotsuga menziesii)	28"	No	65'	16'	Good	Conflict with building area	Remove
002	English Holly (Ilex aquifolium)	8"	No	15'	7'	Good	Conflict with building area	Remove
003	Douglas FIR (Pseudotsuga menziesii)	40"	**Yes**	70'	20'	Poor	Laminated Root Rot	Remove
004	English Holly (Ilex aquifolium)	10"	No	20'	7'	Good		Save
005	Douglas FIR (Pseudotsuga menziesii)	34"	**Yes**	60'	20'	Fair	Significant lean to the North	Save
083	Douglas FIR (Pseudotsuga menziesii)	42"	Yes	70'	24'	Good	**Off Site**	Save
084	Douglas FIR (Pseudotsuga menziesii)	24"	No	50'	14'	Good	**Off Site**	Save
085	Douglas FIR (Pseudotsuga menziesii)	20"	No	50'	14'	Fair	**Off Site**	Save

DISTURBANCE ACREAGE: 0.107 ACRES

PROJECT PARCEL NUMBER: 759810-0760
PROJECT ADDRESS: 4450 84th AVENUE SE
MERCER ISLAND, WASHINGTON 98040

SECTION/TOWNSHIP/RANGE: 18-24N-05E

TOTAL SITE ACREAGE: 0.2204 ACRES
TOTAL NEW PLUS REPLACED IMPERVIOUS AREA: 2,046 SQUARE FEET

TABLE OF CONTENT

SHEET #	DESCRIPTION
1	CSWPP PLAN
2	STORMWATER SITE PLAN
3	DETAILS
4	DETAILS
5	AMENDED SOILS PLAN

GRAPHIC SCALE

0 10 20 40

1 inch = 20 feet

PERMIT #: 2504-104

NO.	DESCRIPTION	DATE	REV. NO.
		10/14/2025	

OFFE ENGINEERS
13932 SOUTHEAST 159TH PLACE
RENTON, WASHINGTON 98058
PHONE: 425-260-3412
CONTACT: DARRELL OFFE, P.E.

DRAWN BY SL$ | CHECKED BY DLO
DESIGNED BY DLO

PROJECT: 4450 84th Avenue SE
CLIENT: Mercer Partners, LLC
SHEET CONTENT: CSWPP Plan

DATE 10/14/2025
JOB NO.
DWG NO.

SHEET 1 OF 5

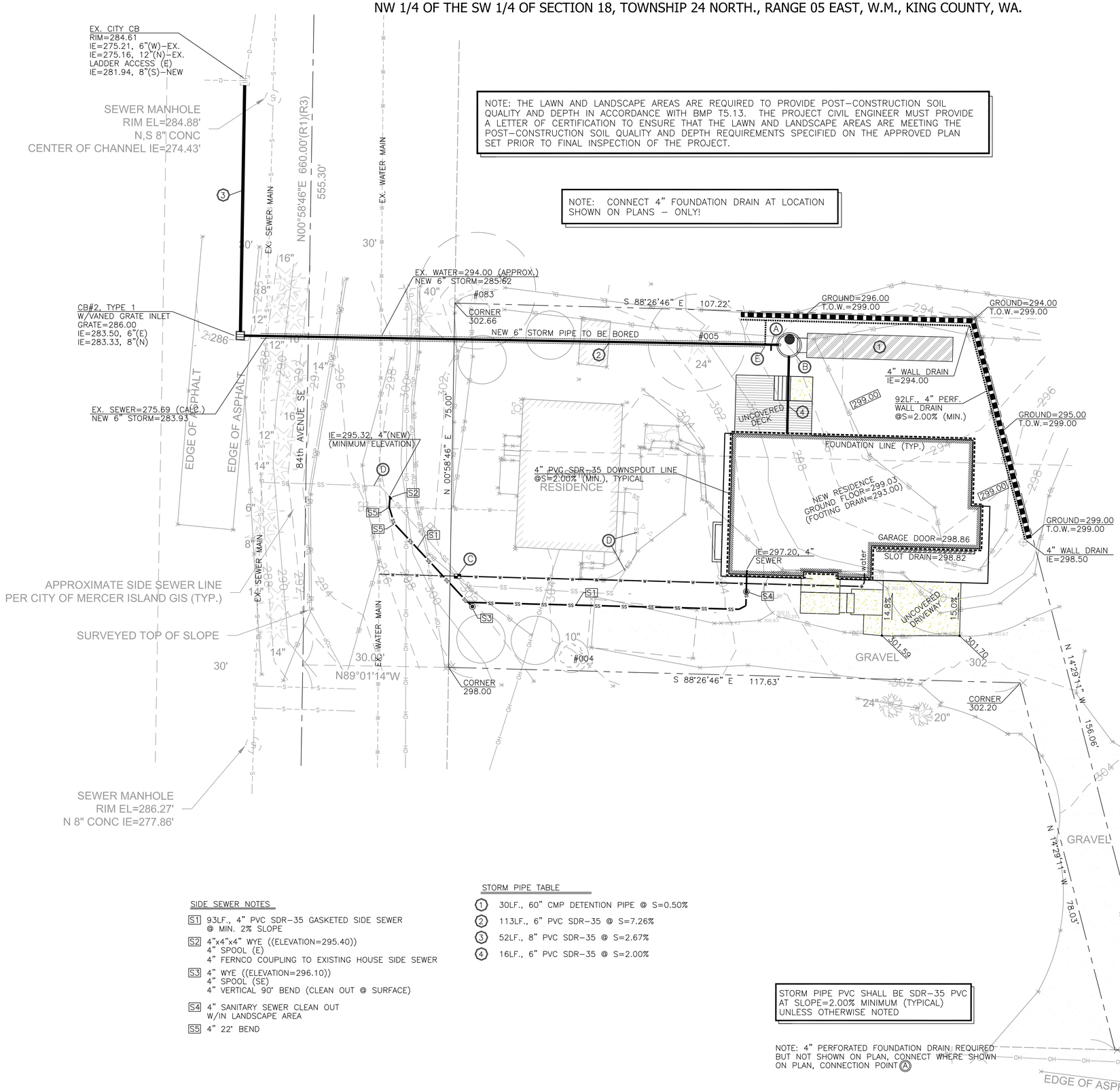
NW 1/4 OF THE SW 1/4 OF SECTION 18, TOWNSHIP 24 NORTH., RANGE 05 EAST, W.M., KING COUNTY, WA.

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILIITES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

CALL BEFORE YOU DIG: 811

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

NOTE: CONNECT 4" FOUNDATION DRAIN AT LOCATION SHOWN ON PLANS – ONLY!



LEGEND

- ASPHALT SURFACE
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CLEANOUT
- CULVERT PIPE
- CONCRETE SURFACE
- RETAINING WALL
- DECK
- FENCE LINE (CHAIN LINK)
- FENCE LINE (WOOD)
- GAS METER
- GRAVEL SURFACE
- HEDGE FOLIAGE LINE
- INLET (TYPE 1)
- MAILBOX (RESIDENTIAL)

EXISTING SPOT ELEVATIONS

- MONUMENT IN CASE (FOUND)
- POWER METER
- POWER (OVERHEAD)
- POWER POLE
- REBAR AS NOTED (FOUND)
- REBAR & CAP (SET)
- ROCKERY
- SEWER LINE
- SEWER MANHOLE
- STORM DRAIN LINE
- TELEPHONE (OVERHEAD)
- TELEPHONE SENTRY
- WATER METER
- POWER TRANSFORMER POLE
- TREE (AS NOTED)

DATUM

VERTICAL DATUM – NAVD '88, PER RTK GPS TIES

HORIZONTAL DATUM – NAD83(2011); NORTH ZONE; PER RTK GPS TIES AND THE WASHINGTON STATE REFERENCE NETWORK (WSRN). UNITS OF MEASUREMENT ARE U.S. SURVEY FEET.

CONSTRUCTION NOTES:

(A) 6"x4" TEE – FOUNDATION DRAIN CONNECTION
IE=291.60

(B) CB#1, 54" TYPE-II, CONTROL STRUCTURE
RIM=299.00
IE=296.50, 2" VENT
TOP OF 6" RISER=296.86, OVERFLOW
IE=297.00, 6"(S)
IE=291.70, 6"(W), 36"(E)
BOTTOM OF 6" RISER=289.70
INSIDE FLOOR OF CB=287.70
((SEE DETAIL SHEET 4))

(C) INSTALL 1-1/2" METER AND 2" SERVICE LINE
PER CITY OF MERCER ISLAND STANDARD PLAN W-14.
NOTE: CONTRACTOR TO COORDINATE FINAL LOCATION OF NEW METER WITH CITY OF MERCER ISLAND INSPECTOR AT TIME OF CONSTRUCTION

(D) APPROXIMATE LOCATION OF EXISTING SIDE SEWER
PER CITY OF MERCER ISLAND SIDE SEWER CARD #4132

(E) 6"x4" TEE – WALL DRAIN CONNECTION
IE=291.00

SIDE SEWER NOTES

[S1] 93LF., 4" PVC SDR-35 GASKETED SIDE SEWER @ MIN. 2% SLOPE

[S2] 4"x4"x4" WYE ((ELEVATION=295.40))
4" SPOOL (E)
4" FERNCO COUPLING TO EXISTING HOUSE SIDE SEWER

[S3] 4" WYE ((ELEVATION=296.10))
4" SPOOL (SE)
4" VERTICAL 90° BEND (CLEAN OUT @ SURFACE)

[S4] 4" SANITARY SEWER CLEAN OUT
W/IN LANDSCAPE AREA

[S5] 4" 22° BEND

STORM PIPE TABLE

(1) 30LF., 60" CMP DETENTION PIPE @ S=0.50%
(2) 113LF., 6" PVC SDR-35 @ S=7.26%
(3) 52LF., 8" PVC SDR-35 @ S=2.67%
(4) 16LF., 6" PVC SDR-35 @ S=2.00%

STORM PIPE PVC SHALL BE SDR-35 PVC AT SLOPE=2.00% MINIMUM (TYPICAL) UNLESS OTHERWISE NOTED

NOTE: 4" PERFORATED FOUNDATION DRAIN REQUIRED BUT NOT SHOWN ON PLAN, CONNECT WHERE SHOWN ON PLAN, CONNECTION POINT (A)

NEW PLUS REPLACED IMPERVIOUS SURFACES:
ROOF AREA (UNDER EAVES) = 1,554 SQ. FEET
UNCOVERED DRIVEWAY AREA = 178 SQ. FEET
UNCOVERED WALKWAY = 148 SQ. FEET
UNCOVERED DECK = 166 SQ. FEET

TOTAL IMPERVIOUS AREAS = 2,046 SQ. FEET

LANDSCAPE AREAS NOTE:

DISTURBED LANDSCAPE AREAS SHALL BE TREATED AS AMENDED SOILS PER DOE FIGURE V-5.3.3, TYPICAL

GRAPHIC SCALE

0 10 20 40

1 inch = 20 feet

PERMIT #: 2504-104

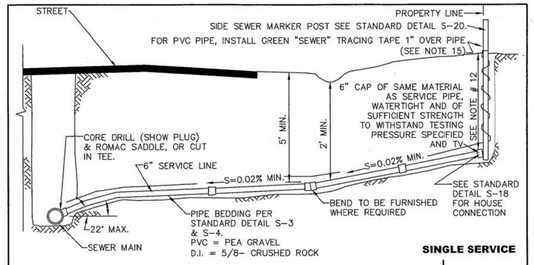
NO.	DESCRIPTION	DATE
REV.		10/14/2025

OFFE ENGINEERS
13932 SOUTHEAST 159TH PLACE
RENTON, WASHINGTON 98058
PHONE: 425-260-3412
CONTACT: DARRELL OFFE, P.E.

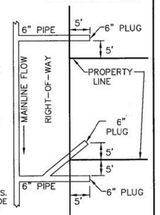
DRAWN BY SLS
CHECKED BY DLO
DESIGNED BY DLO

PROJECT: 4450 84th Avenue SE
CLIENT: Mercer Partners, LLC
SHEET CONTENT: Stormwater Site Plan

DATE 10/14/2025
JOB NO.
DWG NO.
SHEET 2 OF 5



SINGLE SERVICE



DOUBLE SERVICE

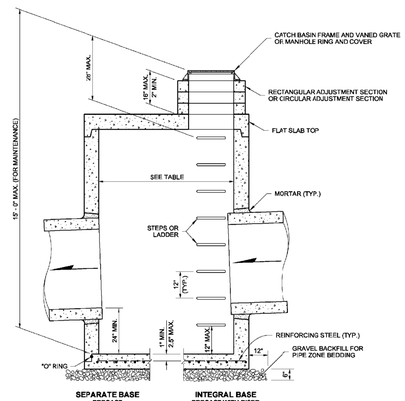
NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. RIGHT-OF-WAY RESTORATION SHALL MATCH OR EXCEED THE ORIGINAL CONDITION AND BE IN ACCORDANCE WITH CITY STANDARDS.
4. ALL TRENCH BACKFILL IN PUBLIC RIGHT-OF-WAY OR ROADWAY AREAS SHALL BE CRUSHED SURFACING PER WSDOT 9-09.9(3) OR BANK RUN GRAVEL PER WSDOT 9-03.19, COMPACTED IN 6" LIFTS OR MAY BE CDF WHEN DIRECTED BY THE CITY ENGINEER (SEE DETAIL S-3).
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 6" SEWER PIPE MINIMUM SIZE IN RIGHT-OF-WAY, AND ELSEWHERE AS DIRECTED BY ENGINEER. 2% MIN. GRADE (UNLESS DIRECTED BY ENGINEER). 50% MAXIMUM.
7. ALL A.C. MAINS TO BE TAPPED IN ACCORDANCE WITH WAC 296-62-00775 STATE/FEDERAL GUIDELINES AND CERTIFICATION.
8. CONSTRUCTION IN RIGHT-OF-WAY MUST BE DONE BY A REGISTERED AND LICENSED CONTRACTOR.
9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT CITY SEWER ORDINANCES.
10. WHERE CITY ENGINEER ALLOWS SIDE SEWER CONNECTIONS TO MANHOLE, INVERT OF SIDE SEWER SHALL BE EQUAL TO OR ABOVE MAIN SEWER CROWN, BUT NOT TO EXCEED 18" ABOVE INVERT OF MAIN SEWER.
11. UNLESS OTHERWISE INDICATED ON PLAN, SIDE SEWER SHALL BE MIN. OF 6' DEEP AT PROPERTY LINE, OR 5' LOWER THAN THE LOWEST ELEVATION, WHICH EVER IS LOWER.
12. ALL PIPE MATERIALS NOT TO STANDARDS WILL BE ABANDONED AND REPLACED WITH DUCTILE IRON OR PVC PIPE OF THE SAME SIZE.
13. IF A BUILDING SEWER IS TO SERVE MORE THAN ONE PROPERTY, BY JOINT AGREEMENT OF THE OWNERS, AN APPROVED EASEMENT INSURING THAT ALL PROPERTIES INVOLVED SHALL HAVE PERPETUAL USE OF THE SIDE SEWER, HAVING PROVISIONS FOR OPERATION, MAINTENANCE, RECONSTRUCTION AND FOR ACCESS FOR REPAIR PURPOSES, SHALL BE SIGNED BY THE OWNERS. THIS EASEMENT SHALL BE RECORDED WITH THE COUNTY AUDITOR. A SIX INCH (MINIMUM) DIAMETER PIPE SHALL BE USED FOR THE COMMON LINE AND A SIX INCH CLEANOUT EXTENDING TO WITHIN 12 INCHES OF THE GROUND SURFACE SHALL BE PROVIDED AT THE WYE WHERE THE UPPER GRADE CONNECTIONS ARE MADE. BACKWATER VALVES SHALL BE INSTALLED ON SERVICE LINES UPSTREAM OF THE CONNECTION TO THE SHARED SIDE SEWER.
14. THE CITY ENGINEER MAY REQUIRE BACKWATER VALVES ON SIDE SEWERS WHEN DEEMED NECESSARY. THE EFFECTIVE OPERATION AND MAINTENANCE OF ANY BACKWATER VALVE SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE SIDE SEWER.
15. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
SIDE SEWER CONNECTION AND STUB

REV	DATE								
						6-5-2009	NO SCALE	**S-17**	APPROVED

DRAWN BY: LISA CYFORD



SEPARATE BASE PRECAST

INTEGRAL BASE PRECAST WITH RISER (48" - 72" ONLY)

NOTES

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

CATCH BASIN DIMENSIONS

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

PIPE ALLOWANCES

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

① Corrugated Polyethylene Storm Sewer Pipe **(Standard Specification 9-05.20)**
② **(Standard Specification 9-05.12(1))**
③ **(Standard Specification 9-05.12(2))**

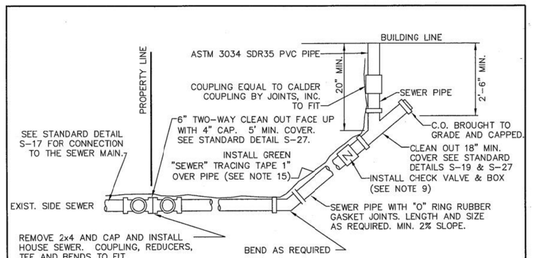


CATCH BASIN TYPE 2

STANDARD PLAN B-10.20-01

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 02-07-12
STATE DESIGN ENGINEER — DATE
Washington State Department of Transportation



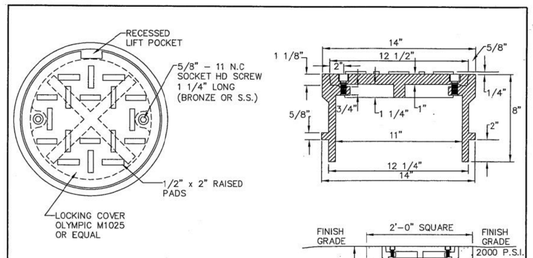
BUILDING CONNECTION

NOTES

1. ELBOWS SHALL NOT BE GREATER THAN 45 DEGREES.
2. CLEAN OUT IS REQUIRED FOR EACH PIPE LENGTH GREATER THAN 100' AND FOR EACH 90° ACCUMULATED ELBOW/100'.
3. ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SEWER. NO DOWN SPOUTS OR STORM DRAINAGE MAY BE CONNECTED TO THE SEWER SYSTEM.
4. 18" MINIMUM COVERAGE OVER PIPE.
5. LAY PIPE IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGES IN GRADE OR LINE WITH 1/8 BEND OR WYE. 90° CHANGE WITH 1/8 BEND AND WYE.
6. 4" SEWER PIPE MINIMUM SIZE ON PROPERTY. 2% MINIMUM GRADE.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT SEWER ORDINANCES.
8. ALL CONSTRUCTION REQUIRES A PLAN SHOWING PROPERTY AND DIMENSIONS AND COMPLETION OF SIDE SEWER APPLICATION AND MAINTENANCE AGREEMENT, AS NEEDED.
9. BACK WATER VALVE (CHECK VALVE) IS REQUIRED:
   A. IF CONNECTED TO A SHARED SIDE SEWER.
   B. IF CONNECTION AT HOUSE IS LOWER THAN BOTH UPSTREAM AND DOWNSTREAM MANHOLE.
   C. SEE S-23 & S-24 FOR LAKE LINE REQUIREMENTS.
10. AS-BUILT DRAWING SHOWING LOCATION OF SIDE SEWER & ALL BENDS, C.O. ETC., IN RELATION TO THE HOUSE IS REQUIRED AFTER INSPECTION & INSTALLATION. SEE STANDARD DETAIL S-38 FOR A TYPICAL "AS BUILT".
11. THE MINIMUM PIPE SIZE FOR SIDE SEWERS SHALL BE:
    6" – WITHIN THE PUBLIC RIGHT-OF-WAY.
    4" – SINGLE FAMILY RESIDENCES.
    6" – 2 TO 6 SINGLE FAMILY RESIDENCES.
    6" – BUILDINGS OTHER THAN SINGLE FAMILY RESIDENCES.
12. UTILITY PIPE TRACER TAPE SHALL BE DETECTABLE BELOW GROUND SURFACE, COLOR CODED, WITH UTILITY NAME PRINTED ON TAPE. CONDUCTIVE WARNING TAPE REQUIRED OVER ALL WATER PIPE. TAPE SHALL BE MANUFACTURER'S STANDARD PERMANENT, BRIGHT-COLORED, CONTINUOUS PRINTED PLASTIC TAPE, ALUMINUM BACKED, INTENDED FOR DIRECT-BURIAL SERVICE. TAPE SHALL BE NOT LESS THAN 6" WIDE X 4 MILS THICK.

CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
HOUSE SEWER CONNECTION

REV	DATE								
						6-5-2009	NO SCALE	**S-18**	APPROVED



FOR PVC PIPE

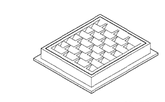
NOTES

1. SEE S-27 FOR INSTALLATION DETAILS.

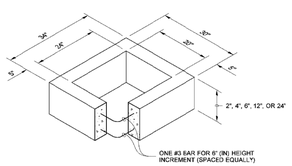
CITY OF MERCER ISLAND
STANDARD DETAILS
SEWER
CLEAN OUT DETAIL

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

DRAWN BY: FERN LIDDELL



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION

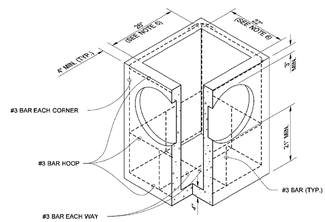
PIPE ALLOWANCES

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

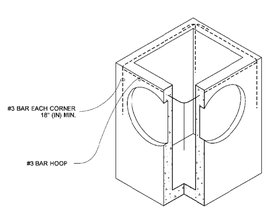
★ CORRUGATED POLYETHYLENE STORM SEWER PIPE

NOTES

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



PRECAST BASE SECTION



(SEE NOTE 1)

ALTERNATIVE PRECAST BASE SECTION



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

CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Roark, Steve Digitally signed by Roark, Steve Date: 2020.09.09 09:55:23 -07'00'
STATE DESIGN ENGINEER
Washington State Department of Transportation

PERMIT #: 2504-104

REV. NO.	DATE	DESCRIPTION

OFFE ENGINEERS
13932 SOUTHEAST 159TH PLACE
RENTON, WASHINGTON 98058
PHONE: 425-260-3412
CONTACT: DARRELL OFFE, P.E.

DARRELL J.R. OFFE — STATE OF WASHINGTON — 19990 — REGISTERED PROFESSIONAL ENGINEER — 10/14/2025

DRAWN BY: SLS | CHECKED BY: DLO | DESIGNED BY: DLO

PROJECT: 4450 84th Avenue SE
CLIENT: Mercer Partners, LLC
SHEET CONTENT: Details

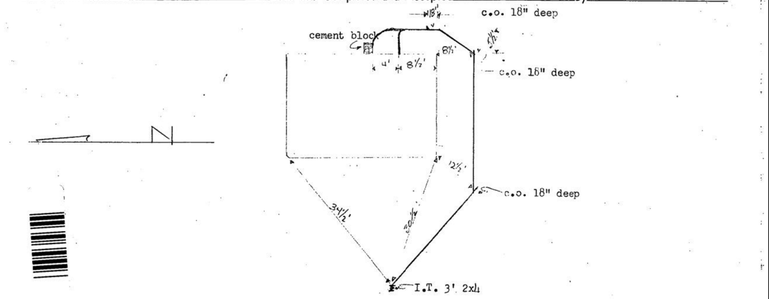
DATE 10/14/2025
JOB NO.
DWG NO.

SHEET 3 OF 5

MERCER ISLAND SEWER DISTRICT — SIDE SEWER PLAT — PERMIT No. 4132

Owner Ann Tatlow — Address 4450 84th Ave. S.E. — Contractor Sires

Date Permit Issued 11/13/67 — Date Job Completed and Accepted 11/14/67 — By Cunningham



84th Ave. S.E.

1. Commercial or Domestic ____ Joint ____
2. Dist. from property line to sewer main ____
3. Dist. from house bldg. line to property line ____
4. Min. grade from main to property line ____ From property line ____
5. Dist. of M. H. No. ____ to Wye ____
6. Depth of sewer main to wye ____
7. Basement ____ Basement connection ____
8. Depth of pipe at house connection ____
9. Type of pipe PVC Size of pipe 4"
10. Remarks ____

COMMERCIAL ONLY

1. Name ____
2. Type ____
3. Frontage ____
4. No. of Floors ____
5. Remarks ____

PERMIT No. ____

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

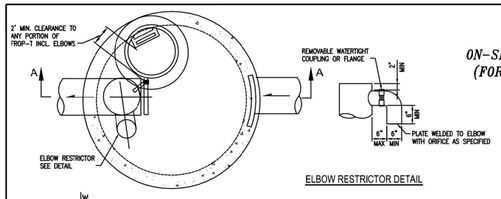
OWNER: ____ ADDRESS: ____ PREPARED BY: OFFE ENGINEERS, PLLC

PERMIT #: ____ PHONE: 425-260-3412

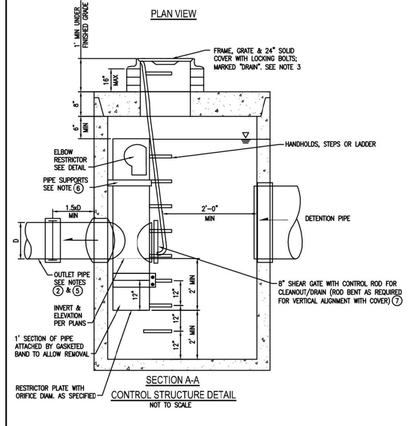
DATE: MARCH 15, 2025

NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 3,000 — DETENTION PIPE DIA (INCH): 60" — DETENTION PIPE LENGTH (FT): 30 — ORIFICE #1 DIA 1/2" INCH, ELEV 289.70

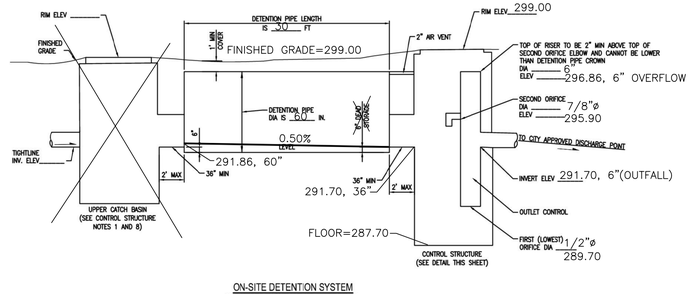
SOIL TYPE: CLASS B — PIPE MATERIAL: CMP — ORIFICE #2 DIA 7/8" INCH, ELEV 295.90



PLAN VIEW — ELBOW RESTRICTOR DETAIL



SECTION A-A
CONTROL STRUCTURE DETAIL
NOT TO SCALE



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

CONTROL STRUCTURE NOTES:

1. USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
2. OUTLET PIPE: MIN. 6 INCH.
3. METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
4. FRAME AND LADDER OR STEPS OFFSET SO:
   A. CLEANOUT GATE IS VISIBLE FROM TOP;
   B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
   C. FRAME IS CLEAR OF CURB.
5. IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
6. PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
7. THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION 2632A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION). IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
8. THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

1. CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

PERMIT #: 2504-104

REV. NO.	DATE	DESCRIPTION

10/14/2025

OFFE ENGINEERS
13932 SOUTHEAST 159TH PLACE
RENTON, WASHINGTON 98058
PHONE: 425-260-3412
CONTACT: DARRELL OFFE, P.E.

DRAWN BY: SLS — CHECKED BY: DLO — DESIGNED BY: DLO

PROJECT: 4450 84th Avenue SE

CLIENT: Mercer Partners, LLC

SHEET CONTENT: Details

DATE 10/14/2025

JOB NO. ____

DWG NO. ____

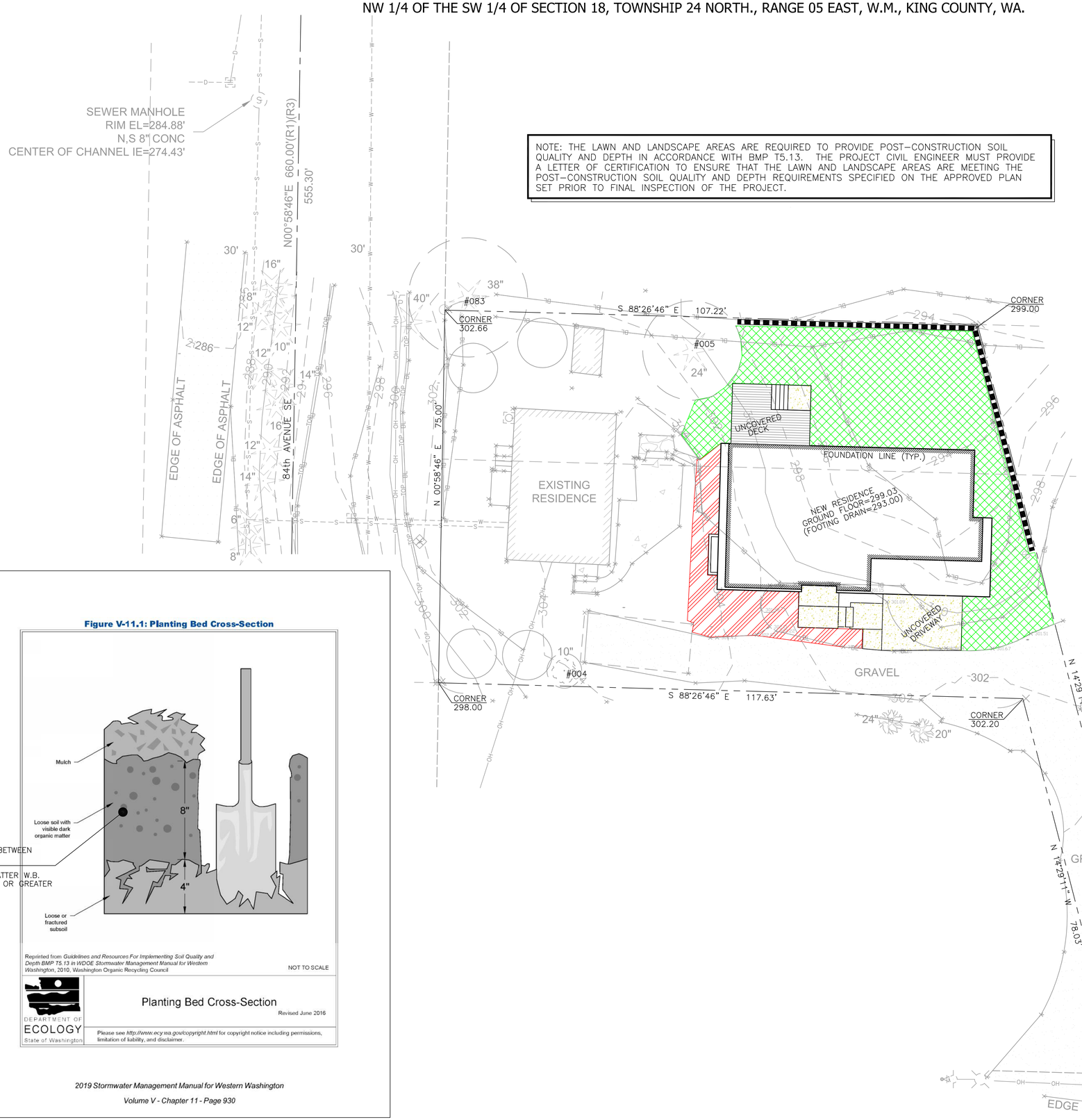
SHEET 4 OF 5

NW 1/4 OF THE SW 1/4 OF SECTION 18, TOWNSHIP 24 NORTH., RANGE 05 EAST, W.M., KING COUNTY, WA.

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILIITES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

CALL BEFORE YOU DIG: 811

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



LEGEND

- ASPHALT SURFACE
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CLEANOUT
- CULVERT PIPE
- CONCRETE SURFACE
- RETAINING WALL
- DECK
- FENCE LINE (CHAIN LINK)
- FENCE LINE (WOOD)
- GAS METER
- GRAVEL SURFACE
- HEDGE FOLIAGE LINE
- INLET (TYPE 1)
- MAILBOX (RESIDENTIAL)

EXISTING SPOT ELEVATIONS

- MONUMENT IN CASE (FOUND)
- POWER METER
- POWER (OVERHEAD)
- POWER POLE
- REBAR AS NOTED (FOUND)
- REBAR & CAP (SET)
- ROCKERY
- SEWER LINE
- SEWER MANHOLE
- STORM DRAIN LINE
- TELEPHONE (OVERHEAD)
- TELEPHONE SENTRY
- WATER METER
- POWER TRANSFORMER POLE
- TREE (AS NOTED)

AMENDED SOIL MAP

1,512 SQUARE FEET – TURF AREA
AMENDED 8" DEEP (37 CU. YDS.)

376 SQUARE FEET – PLANTER AREA
AMENDED 6" DEEP (7 CU. YDS.)

Figure V-11.1: Planting Bed Cross-Section

pH TO BE BETWEEN 6–10

ORGANIC MATTER W.B. TO BE 10% OR GREATER

Reprinted from *Guidelines and Resources For Implementing Soil Quality and Depth BMP T5.13 in WDOE Stormwater Management Manual for Western Washington*, 2010, Washington Organic Recycling Council

NOT TO SCALE

DEPARTMENT OF ECOLOGY State of Washington

Planting Bed Cross-Section

Revised June 2016

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2019 Stormwater Management Manual for Western Washington

Volume V - Chapter 11 - Page 930

GRAPHIC SCALE

0 10 20 40

1 inch = 20 feet

PERMIT #: 2504-104

NO.	DATE	DESCRIPTION

10/14/2025

OFFE ENGINEERS
13932 SOUTHEAST 159TH PLACE
RENTON, WASHINGTON 98058
PHONE: 425-260-3412
CONTACT: DARRELL OFFE, P.E.

CHECKED BY DLO

DRAWN BY SLS

DESIGNED BY DLO

PROJECT 4450 84th Avenue SE

CLIENT Mercer Partners, LLC

SHEET CONTENT Amended Soil Plan

DATE 10/14/2025

JOB NO.

DWG NO.

SHEET 5 OF 5

SD MATERIAL SCHEDULE

ID	MATERIAL IMAGE	TYPE	PRODUCT	EXT/ INT	PRODUCT DIMENSIONS	COLOR/FINISH	NOTES/ DESCRIPTIONS
CONCRETE							
CN.01		CONCRETE WALL	PER GENERAL CONTRACTOR	EXT	PER STRUCTURAL DRAWINGS	CLEAR/NATURAL FINISH	PATCH AND SEAL WHERE VISIBLE AND EXPOSED; REFER TO STRUCTURAL SPECIFICATIONS
FIBER CEMENT PANEL							
CP.01		FACADE CLADDING	JAMES HARDIE PANEL	EXT	4' X 10' OR PER ELEVATION	SW 7018 DOVETAIL	TBD
CP.02		FACADE CLADDING	JAMES HARDIE PANEL	EXT	4' X 10' OR PER ELEVATION	SW 7069 IRON ORE	TBD
METAL							
MT.01		CANOPY/ METAL FEATURE	PER GENERAL CONTRACTOR	EXT	PER ELEVATIONS AND PLAN DRAWINGS	PRE-FINISHED MATTE BLACK	REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR CANOPY, FINISH EDGES TO BE METAL CHANNEL
TRANSITIONS & TRIMS							
TS.01		METAL FLASHING	PER GENERAL CONTRACTOR	EXT	PER ELEVATION	PRE-FINISHED MATTE BLACK	INSTALL AT FLOOR LINES AND MATERIAL TRANSITIONS
WOOD SIDING							
WD.01		WOOD CLADDING	LUNAWOOD - LUNA FEMMA PANEL	EXT	26 X 92 MM X 4.5 M	FINISH PER MANUFACTURER - MAINTAIN NATURAL FINISH	INSTALL OVER VERTICAL BATTENS PER MANUFACTURER



2 WEST RENDERED ELEVATION
SCALE: 1/4" = 1'-0"
0 2' 4' 8'



1 SOUTH RENDERED ELEVATION
SCALE: 1/4" = 1'-0"
0 2' 4' 8'

Architect of Record

b9 architects

400 E Pine Street
Suite 215
Seattle, WA 98122
206.297.1284
www.b9architects.com

Project:

4450 84th Ave SE SF House + Existing Accessory Structure

Location:

4450 84TH AVE SE
MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT BRADLEY G. ICHOURI STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

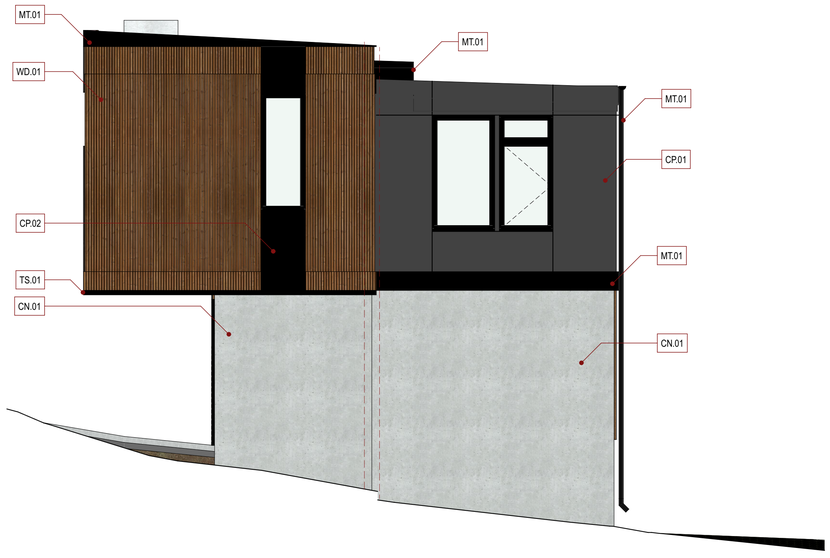
Rendered Elevation

DR.01

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SD MATERIAL SCHEDULE

ID	MATERIAL IMAGE	TYPE	PRODUCT	EXT/ INT	PRODUCT DIMENSIONS	COLOR/FINISH	NOTES/ DESCRIPTIONS
CONCRETE							
CN.01		CONCRETE WALL	PER GENERAL CONTRACTOR	EXT	PER STRUCTURAL DRAWINGS	CLEAR/NATURAL FINISH	PATCH AND SEAL WHERE VISIBLE AND EXPOSED; REFER TO STRUCTURAL SPECIFICATIONS
FIBER CEMENT PANEL							
CP.01		FACADE CLADDING	JAMES HARDIE PANEL	EXT	4' X 10' OR PER ELEVATION	SW 7018 DOVETAIL	TBD
CP.02		FACADE CLADDING	JAMES HARDIE PANEL	EXT	4' X 10' OR PER ELEVATION	SW 7069 IRON ORE	TBD
METAL							
MT.01		CANOPY/ METAL FEATURE	PER GENERAL CONTRACTOR	EXT	PER ELEVATIONS AND PLAN DRAWINGS	PRE-FINISHED MATTE BLACK	REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR CANOPY, FINISH EDGES TO BE METAL CHANNEL
TRANSITIONS & TRIMS							
TS.01		METAL FLASHING	PER GENERAL CONTRACTOR	EXT	PER ELEVATION	PRE-FINISHED MATTE BLACK	INSTALL AT FLOOR LINES AND MATERIAL TRANSITIONS
WOOD SIDING							
WD.01		WOOD CLADDING	LUNAWOOD - LUNA FEMMA PANEL	EXT	26 X 92 MM X 4.5 M	FINISH PER MANUFACTURER - MAINTAIN NATURAL FINISH	INSTALL OVER VERTICAL BATTENS PER MANUFACTURER



2 EAST RENDERED ELEVATION
SCALE: 1/4" = 1'-0"
0 2' 4' 8'



1 NORTH RENDERED ELEVATION
SCALE: 1/4" = 1'-0"
0 2' 4' 8'

Architect of Record

b9 architects

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Location:

4450 84TH AVE SE
MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT
BRADLEY G. ICHOURI
STATE OF WASHINGTON
Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Rendered Elevation

DR.02

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TOPOGRAPHIC SURVEY

LEGAL DESCRIPTION

THE PORTION OF LOTS 6 AND 7, BLOCK 16, VITUS SCHMID'S EAST SEATTLE ACRE TRACTS ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS, PAGE 76, RECORDS OF KING COUNTY, WASHINGTON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF SAID LOT 6, WHICH IS SOUTH 88°24'15" EAST 138.43 FEET FROM THE SOUTHWEST CORNER THEREFROM; THENCE SOUTH 88°24'15" EAST ALONG SOUTH LINE FOR A DISTANCE OF 10.41 FEET; THENCE NORTH 14°26'40" WEST 156.07 FEET TO THE SOUTH LINE OF THE NORTH 90 FEET OF SAID LOT 7; THENCE NORTH 88°24'15" WEST ALONG SAID SOUTH LINE OF NORTH 90 FEET FOR A DISTANCE OF 107.22 FEET TO THE WEST LINE OF SAID LOT 6 FOR A DISTANCE OF 75.00 FEET TO A POINT WHICH IS 75.00 FEET FROM SAID SOUTHWEST CORNER OF LOT 6; THENCE SOUTH 88°24'15" EAST PARALLEL TO SAID SOUTH LINE OF LOT 6 FOR A DISTANCE OF 117.62 FEET TO A POINT WHICH IS NORTH 14°26'40" WEST FROM THE POINT OF BEGINNING; THENCE SOUTH 14°26'40" EAST 78.03 FEET TO THE POINT OF BEGINNING.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

SURVEYOR'S NOTES

1. THE PURPOSE OF THIS SURVEY IS TO DETERMINE THE LOCATION OF THE BOUNDARIES AND PROVIDE TOPOGRAPHIC INFORMATION OF THE PARCEL AS DESCRIBED HEREON.
2. THIS SURVEY WAS MADE BY FIELD TRAVERSE USING A GEOMAX ZOOM 90 2" ROBOTIC TOTAL STATION AND TOPCON HIPER SR GPS WITH RESULTING CLOSURES EXCEEDING THE MINIMUM ACCURACY STANDARDS AS SET FORTH BY WAC 332-130.
3. THE BOUNDARY CORNERS AND LINES DEPICTED ON THIS MAP REPRESENT DEED LINES ONLY. THEY DO NOT PURPORT TO SHOW OWNERSHIP LINES THAT MAY OTHERWISE BE DETERMINED BY A COURT OF LAW.
4. THE LEGAL DESCRIPTION IS PER RECORDS OF KING COUNTY RECORDER'S OFFICE, RECORDING NO. 20140627001866, DATED JUNE 27, 2014.
5. FIELD WORK FOR THIS PROJECT WAS PERFORMED IN OCTOBER, 2024 & JANUARY, 2025 AND IS THEREFORE A REFLECTION OF THE CONDITIONS AT THAT TIME. ALL MONUMENTS WERE VISITED OR SET IN OCTOBER, 2024.
6. THIS SURVEY DOES NOT PURPORT TO SHOW EASEMENTS OF RECORD, IF ANY.
7. OVERHEAD UTILITY LINES SHOWN ON THIS MAP ARE INTENDED TO SHOW THE DIRECTION OF THE OVERHEAD UTILITY LINES ONLY AND DO NOT REPRESENT THE ACTUAL WIDTH, NUMBER OR LOCATION OF LINE(S) ON THE UTILITY POLES.
8. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE DERIVED FROM MAPPING VISIBLE SURFACE APPURTENANCES, AND FROM RECORD UTILITIES DATA WHERE NOTED. THE LOCATION OF UNDERGROUND UTILITIES HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT INCUR DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. INFORMED LAND SURVEY ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES. CALL 1-800-424-5555 BEFORE YOU DIG.

REFERENCE SURVEYS

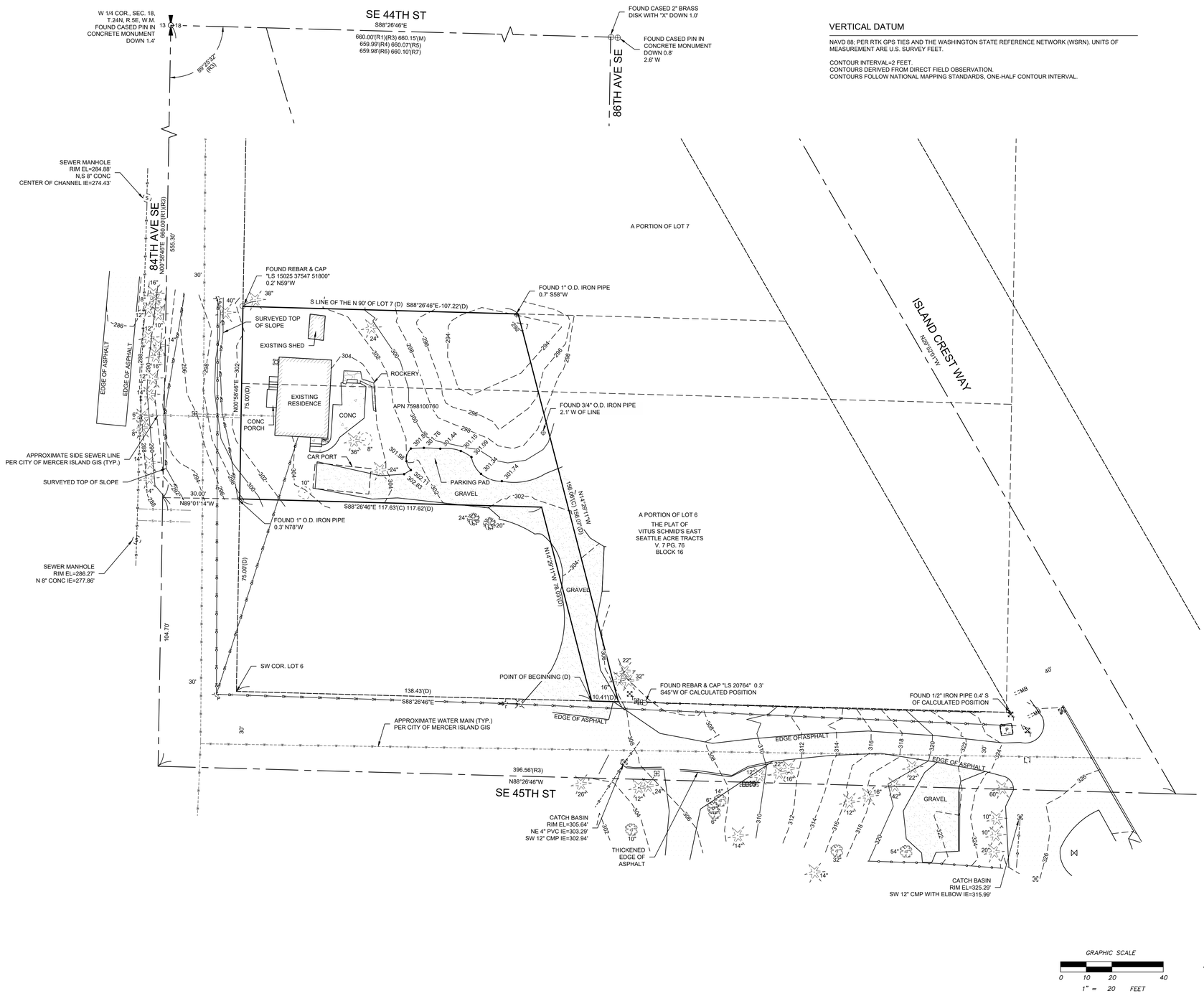
R1) THE PLAT OF VITUS SCHMID'S EAST SEATTLE ACRE TRACTS, RECORDED IN VOLUME 7 OF PLATS, PAGE 76
R2) THE PLAT OF MERCER MAPLE LANE, RECORDED IN VOLUME 60 OF PLATS, PAGE 61
R3) RECORD OF SURVEY RECORDING NO. 20200910900071
R4) RECORD OF SURVEY, RECORDING NO. 20050525900002
R5) RECORD OF SURVEY, RECORDING NO. 19991116900001
R6) RECORD OF SURVEY, RECORDING NO. 20040310900004
R7) RECORD OF SURVEY, RECORDING NO. 20150130900004

RECORDS OF KING COUNTY RECORDER'S OFFICE

LEGEND

- FOUND SECTION QUARTER CORNER (AS SHOWN)
- FOUND CASED MONUMENT (AS SHOWN)
- FOUND REBAR & CAP (AS SHOWN)
- FOUND IRON PIPE (AS SHOWN)
- IRRIGATION CONTROL BOX
- WATER METER
- WATER VALVE
- SEWER MANHOLE
- STORM DRAIN CATCH BASIN
- GAS METER
- GAS VALVE
- POWER VAULT
- POWER POLE
- POWER POLE W/LIGHT, TRANSFORMER & DROP
- POWER METER
- COMMUNICATION PEDESTAL
- MAIL BOX
- SPOT ELEVATION
- CEDAR TREE
- HOLLY TREE
- MAPLE TREE
- CONIFER TREE
- (D) DISTANCE PER DEED
- (R) DISTANCE OR ANGLE PER REFERENCE
- (C) DISTANCE AS CALCULATED

WOOD FENCE
OVERHEAD UTILITY LINE
STORM DRAIN LINE
SEWER LINE
APPROXIMATE SIDE SEWER LINE PER GIS
APPROXIMATE WATER LINE PER GIS



GRAPHIC SCALE
0 10 20 40
1" = 20 FEET

HORIZONTAL DATUM

NAD83(2011);NORTH ZONE; PER RTK GPS TIES AND THE WASHINGTON STATE REFERENCE NETWORK (WSRN). UNITS OF MEASUREMENT ARE U.S. SURVEY FEET.

VERTICAL DATUM

NAVD 88; PER RTK GPS TIES AND THE WASHINGTON STATE REFERENCE NETWORK (WSRN). UNITS OF MEASUREMENT ARE U.S. SURVEY FEET.

CONTOUR INTERVAL=2 FEET.
CONTOURS DERIVED FROM DIRECT FIELD OBSERVATION.
CONTOURS FOLLOW NATIONAL MAPPING STANDARDS, ONE-HALF CONTOUR INTERVAL.

SHT. 1 OF 1

A PORTION OF THE NW 1/4 OF THE SW 1/4 OF SECTION 18, T24N, R5E, W.M., KING COUNTY, WA

FOR: LNL BUILDS LLC

CITY OF MERCER ISLAND, KING COUNTY, WA

TOPOGRAPHIC SURVEY

DRAFTED: AG | CHECKED: EW
FIELD CREW: ES, SC | SCALE: 1"=20'
JOB NO.: LNLBU-240913 | DATE: 2/6/2025

4450 84TH AVE SE
MERCER ISLAND, WA 98040
TAX PARCEL NO. 7598100760

EVAN W. STROM — CERTIFICATE NUMBER 20764 — REGISTERED PROFESSIONAL LAND SURVEYOR — STATE OF WASHINGTON
2/6/2025

INFORMED LAND SURVEY
PO Box 5137
Tacoma, WA 98415-0137
Phone: 253-627-2070
evan@informedsurvey.com
www.informedsurvey.com

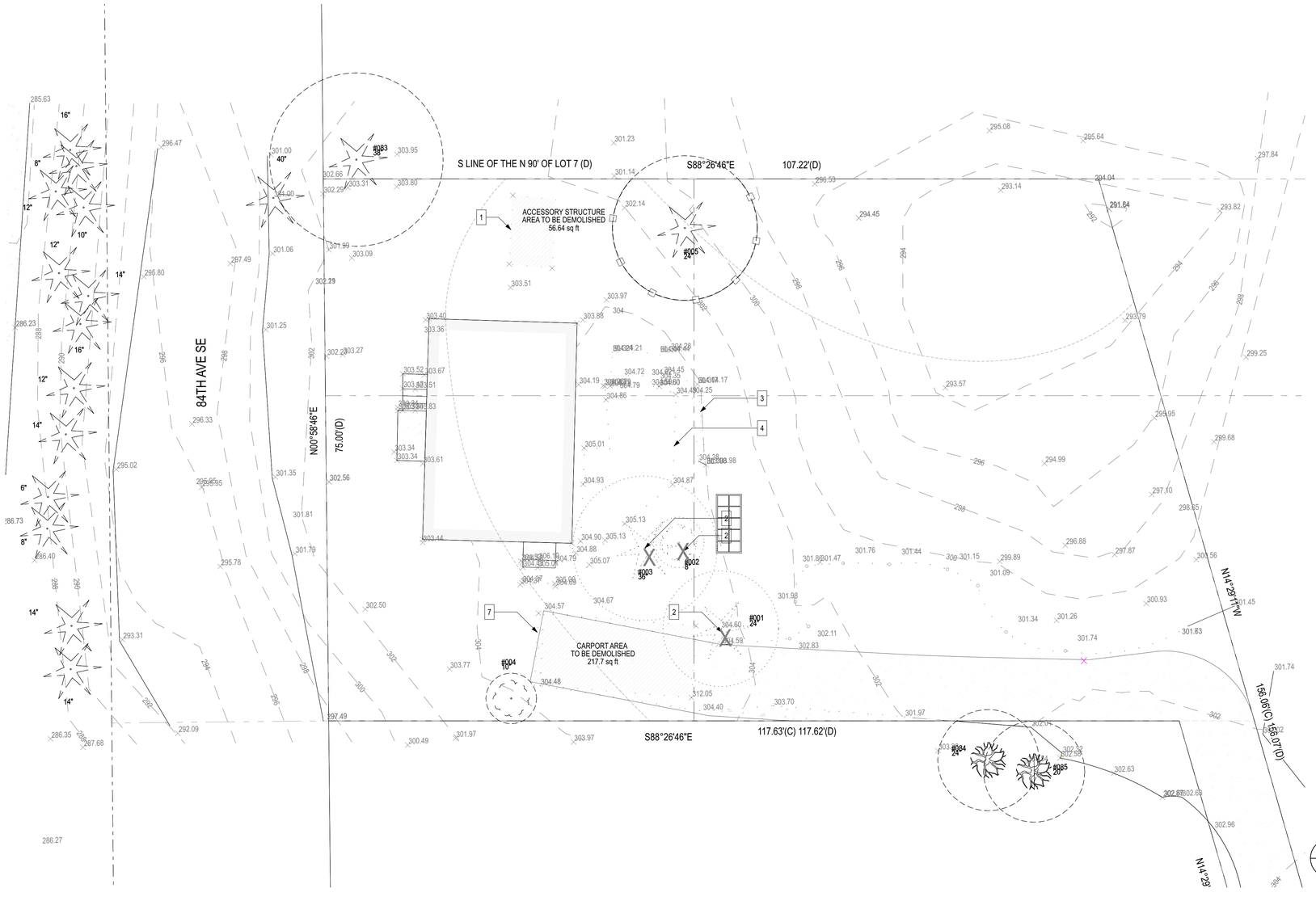
LAND SURVEYING • MAPPING • CONSTRUCTION LAYOUT

DEMOLITION PLAN LEGEND

- EXISTING STRUCTURE TO BE DEMOLISHED
- EXISTING TREE TO BE REMOVED

DEMOLITION PLAN NOTES

1. EXISTING STRUCTURE TO BE DEMOLISHED
2. EXISTING TREE TO BE REMOVED, TYP. REFER TO ARBORIST REPORT, REFER TO A1.10
3. EXISTING ROCKERY TO BE DEMOLISHED
4. EXISTING WALKWAY AND STAIRS TO BE DEMOLISHED
5. NO GROUND DISTURBANCE IS PROPOSED UNDER THIS DEMOLITION PERMIT
6. BELOW GRADE FOUNDATION AND SLAB TO REMAIN UNTIL CONSTRUCTION PERMIT IS ISSUED.
7. EXISTING CARPORT TO BE DEMOLISHED



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

0 4' 8' 16'

Architect of Record

b9 architects

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Suite 215
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206.297.1284
www.b9architects.com

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Location:

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MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT BRADLEY G. ICHOURI STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Bulding Permit Set	4/3/25

City Stamp

Demo Plan

A1.01

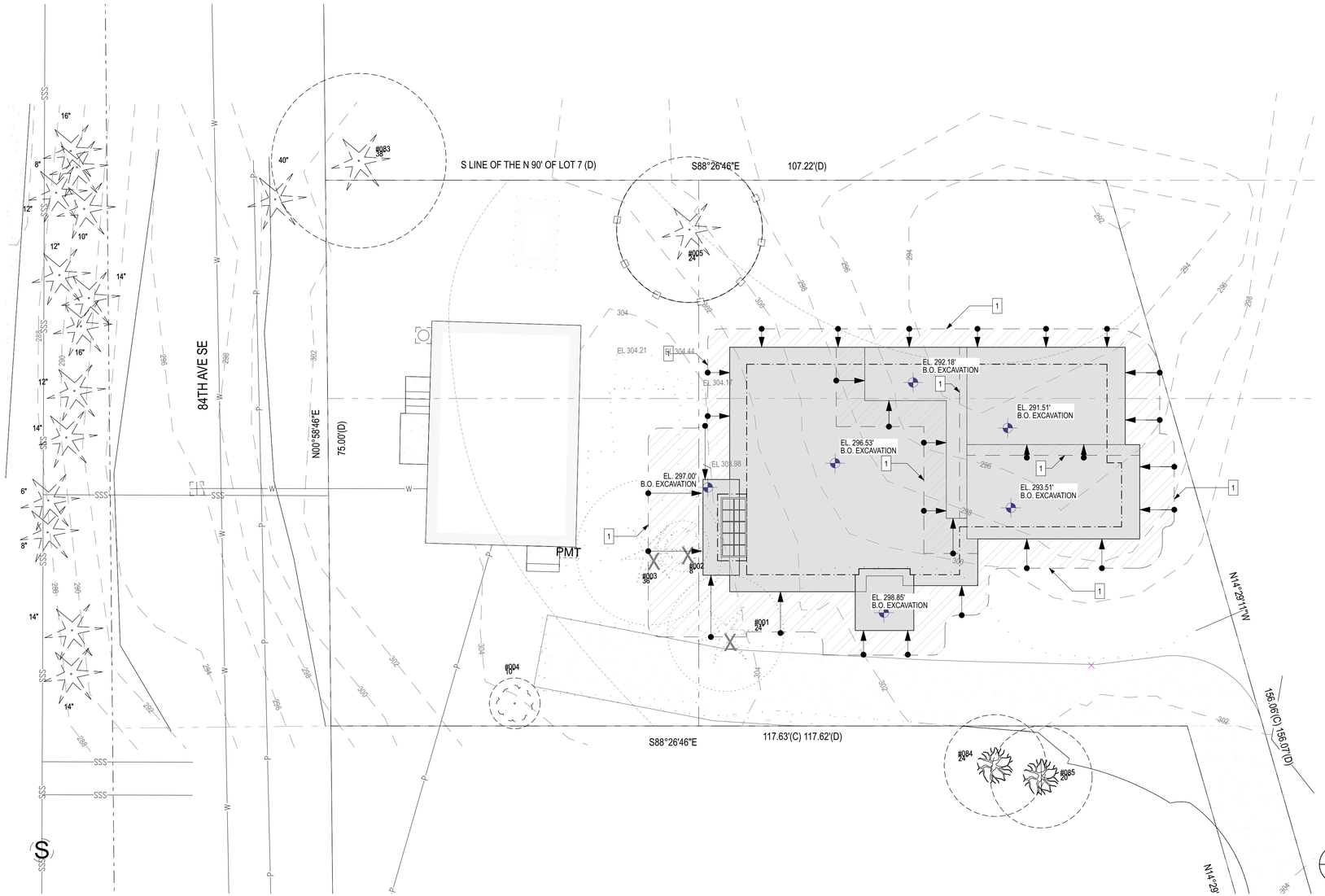
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EXCAVATION PLAN LEGEND

- 1:1 CUT TO FIRM SOIL
- BOTTOM OF EXCAVATION TO BE AT FIRM SOIL. WHERE NECESSARY, SEE NOTES ABOVE
- OUTLINE OF STRUCTURE AT GRADE
- DIRECTION OF CUT

EXCAVATION PLAN NOTES

1. PROVIDE 1:1 CUT TO SOIL
2. AN ESTIMATED 85 CUBIC YARDS OF SOIL WILL BE EXCAVATED OUTSIDE OF THE BUILDING FOOTPRINT, AND AN ESTIMATED 65 CUBIC YARDS OF SOIL WILL BE NEEDED FOR FILL FOR THE BUILDING FOOTPRINT TO BE CONSTRUCTED AT GRADE



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

0 4' 8' 16'

Architect of Record

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8914 REGISTERED ARCHITECT Bradley G. Ichouri STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Excavation Plan

A1.02

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02

TREE PROTECTION AREA

TREE PROTECTION AREA (TPZ)

KEEP OUT!

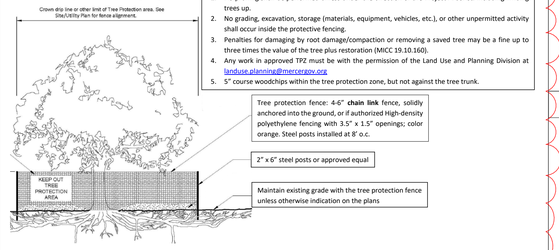
DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation

Notes

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. Any work in approved TPZ must be with the permission of the Land Use and Planning Division at landuse.planning@mercergov.org
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.



Any Work in the protected area must be with the permission of the Land Use and Planning Division at landuse.planning@mercergov.org

LOT COVERAGE LEGEND

- STRUCTURE FOOTPRINT AT GRADE
- CANTILEVERED FLOOR SPACE ABOVE GRADE
- WEATHER PROTECTION OUTLINE
- PAVERS - HARDSCAPE SURFACE
- CONCRETE WALKWAY/DRIVEWAY
- LANDSCAPING AT GRADE

SITE PLAN NOTES

1. EXISTING PROPERTY LINE
2. PRIMARY RESIDENTIAL ENTRY
3. EXISTING STRUCTURE TO BE DEMOLISHED
4. PEDESTRIAN ACCESS
5. VEHICULAR ACCESS
6. UTILITY POLE
7. PROJECT IS SQUARE TO SOUTH PROPERTY LINE
8. EXISTING TREE TO BE REMOVED. REFER TO ARBORIST REPORT ON SHEET A0.20
9. PROVIDE CANOPY PROJECTION PROVIDING WEATHER PROTECTION IN THE SETBACK PER MIMC 19.02.020.C.3.a.i. MAXIMUM OF 18 INCHES
10. PER ARBORIST REPORT, TREE TO BE RETAINED, PROVIDE PROTECTION AREA.
11. TREE DRIP LINE, REFER TO ARBORIST REPORT, SHEET A0.20
12. VERIFY EXISTING BASEMENT CONDITION.
13. ACCESSORY STRUCTURE ENTRY
14. PROVIDE 1.5 CALIPER INCH TREE PER TREE INVENTORY AND REPLACEMENT SUBMITTAL
15. WINDOW WELL
16. NO HARDSCAPES AND DRIVEWAY WITHIN REQUIRED YARDS MAY EXCEED 30" IN HEIGHT FROM EXISTING OR FINISHED GRADE, WHICHEVER IS LOWER. MIMC 19.02.020.C.3.a.i.
17. TREE PROTECTION PLAN PER CIVIL PLANS, REFER TO CIVIL SHEETS
18. PROVIDE NEW SITE WALL WITH 6' TALL FENCE ALONG PROPERTY LINE
19. MAXIMUM EXPOSED WALL HEIGHT DOES NOT EXCEED 25 FEET PER MIMC 19.02.020.E.2
20. MAPPED EROSION/POTENTIAL SLIDE GEOLOGIC HAZARD PER MI GIS

02

YARD NOTES

YARD REQUIREMENTS:

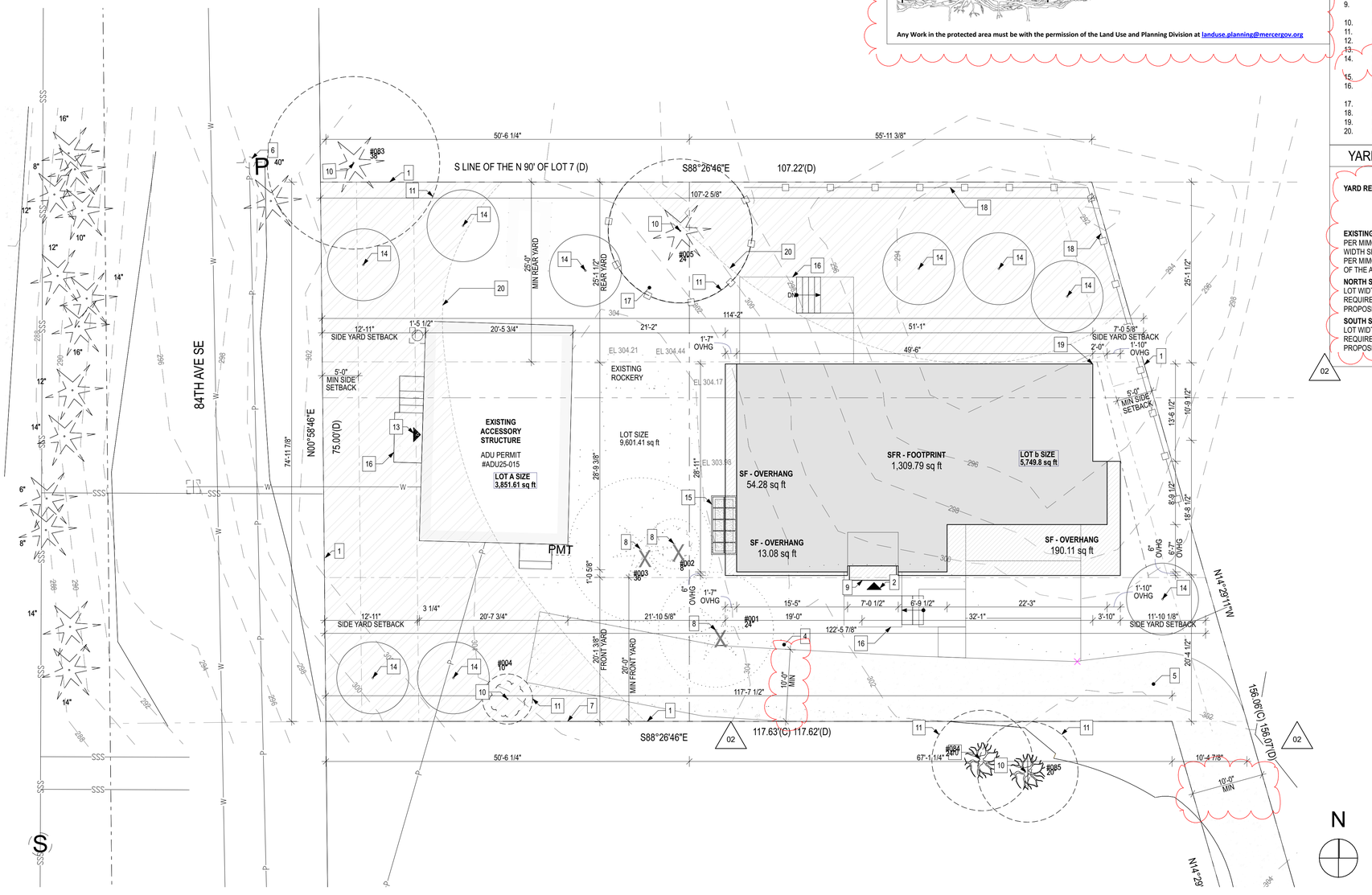
MIMC 19.02.020.C
FRONT: 20' MIN
SIDE: 5' MIN, 17% OF TOTAL LOT WIDTH
REAR: 25' MIN

EXISTING SIDE SETBACK = 12.92' WEST SETBACK TO EXISTING STRUCTURE
PER MIMC 19.02.020.C.1.c.ii.(b), FOR LOTS WITH A LOT WIDTH OF MORE THAN 90 FEET, THE SUM OF THE SIDE YARDS' WIDTH SHALL BE A WIDTH THAT IS EQUAL TO AT LEAST 17 PERCENT OF THE LOT WIDTH.
PER MIMC 19.02.020.C.1.c.ii, MINIMUM SIDE YARD WIDTH. THE MINIMUM SIDE YARD WIDTH IS FIVE FEET OR 33 PERCENT OF THE AGGREGATE SIDE YARD TOTAL WIDTH, WHICHEVER IS GREATER.

NORTH SIDE SETBACK:
LOT WIDTH: 114.16'
REQUIRED: 17% X 114.16' = 19.41' - 12.92' = 6.49' MIN EAST SIDE SETBACK
PROPOSED: **7.05'**

SOUTH SIDE SETBACK:
LOT WIDTH: 122.49'
REQUIRED: 17% X 122.49' = 20.82' - 12.92' = 7.90' MIN EAST SIDE SETBACK
PROPOSED: **11.83'**

02



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

0 4' 8' 16'

Architect of Record

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Location:

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Professional Stamp

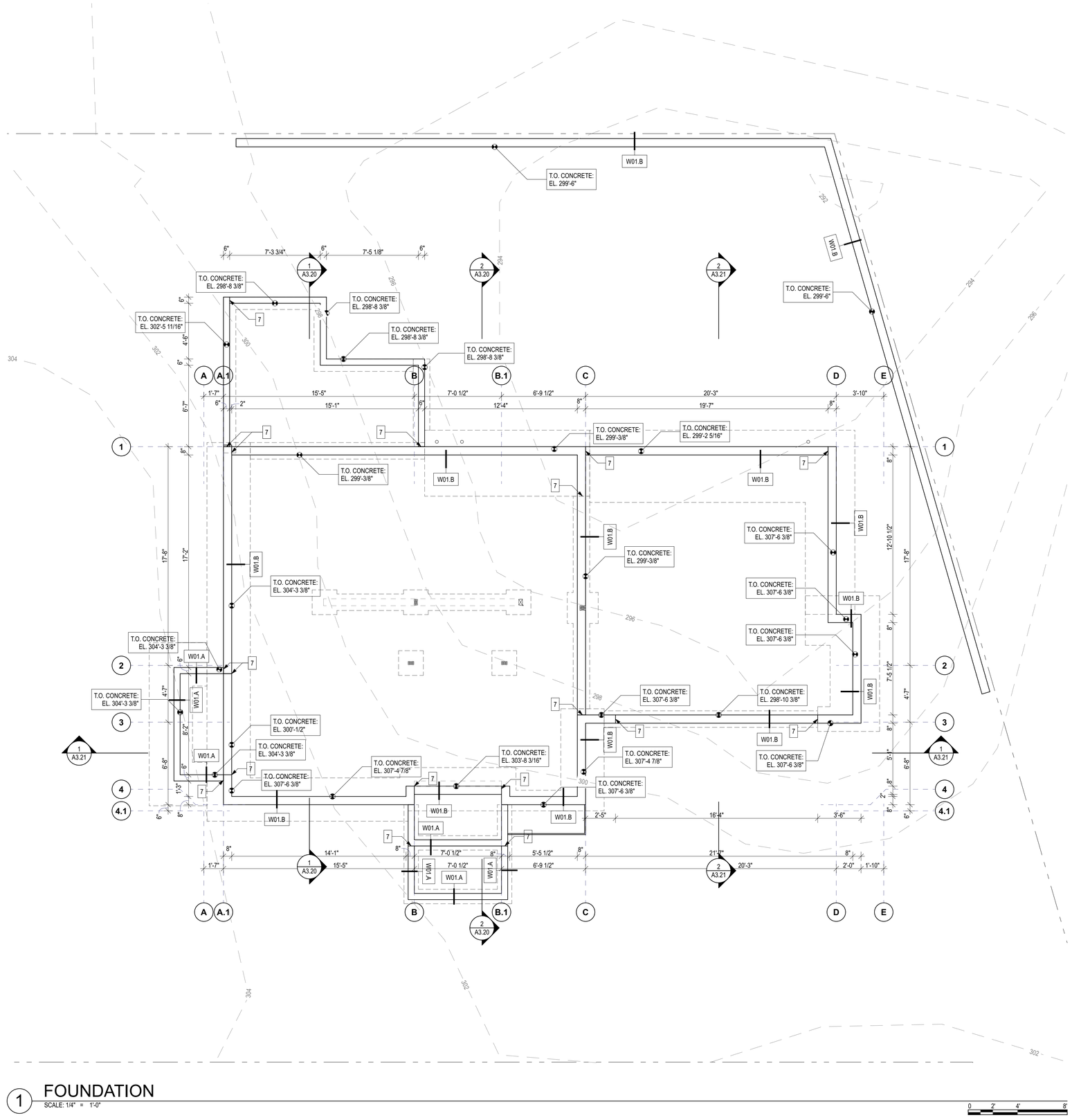
Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

Site Plan

A1.10

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1 FOUNDATION

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

0 2' 4' 8'

FOUNDATION PLAN NOTES

1. GENERAL CONTRACTOR TO VERIFY EXISTING/FINISHED GRADE AND TOP OF CONCRETE WALL ELEVATIONS SHOWN ON THE ARCHITECTURAL FOUNDATION PLAN. IF FIELD CONDITIONS VARY FROM DIMENSIONS IN THE PLANS, CONTRACTOR TO CONTACT ARCHITECT FOR CLARIFICATION.
2. PROVIDE INSULATION EXTENDING DOWNWARD FROM THE TOP OF THE SLAB TO THE TOP OF THE FOOTING, PER WSEC R402.2.9, TYP.
3. REFER TO STRUCTURAL DRAWINGS FOR ALL CONCRETE FOUNDATION WALLS AND FOOTINGS. LOCATE ALL WALLS AND FOOTING BASED ON DIMENSIONS ON THIS SHEET.
4. PROJECT AND GRIDS IS SQUARE TO SOUTH PROPERTY LINE.
5. NOT USED
6. NOT USED
7. STEP IN SLAB/STEP, TYP.
8. CONCRETE STAIR ON GRADE.
9. WHERE T.O. MUDSILL ELEVATION IS NOTED, REFER TO STRUCTURAL DRAWINGS FOR MUDSILL THICKNESS AND CALCULATE TOP OF CONCRETE ELEVATION

PLAN LEGEND

DOOR DESIGNATION 1.1

WINDOW DESIGNATION 1.1 — 3'-0" WINDOW WIDTH, 5'-0" WINDOW HEIGHT

XX / X.X — DETAIL NUMBER / SHEET NUMBER

1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 X 4 FRAMING

1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 x 6 FRAMING

CAST-IN-PLACE CONCRETE WALL

PROVIDE (1) LAYER 5/8" EXTERIOR GWB AT OVERHANG

PROVIDE CMU WALL

W/D — WASHING/ DRYER MACHINE (COMBO)

W — WASHING MACHINE

D — CLOTHES DRYER

XX / X.X — SECTION MARKER

HWH — ON-DEMAND HOT WATER HEATER

SD — IRC R314 AND IFC 907.2.10.2: SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING INCLUDING BASEMENTS BUT NOT INCLUDING CRAWL SPACES.
4. PER IRC R314.3.1 SMOKE ALARMS SHALL BE: INSTALLED 20' MIN FROM KITCHEN APPLIANCES OR 10' MIN WITH AN ALARM-SILENCING SWITCH; 3' MIN FROM BATHROOM DOORS
5. SMOKE ALARMS REQUIRED TO BE INSTALLED, HARDWIRED AND INTERCONNECTED, TYP.

SD SW — SMOKE ALARM WITH SWITCH, PER ITEM 4 ABOVE

HD — HEAT DETECTOR/HEAT ALARM PER IRC R314.2.1. SHALL BE CONNECTED TO AN ALARM THAT IS INSTALLED IN THE DWELLING PER R314.4.1

FAN LOCATION (IRC TABLE M 1505.4.4(1) AND IMC TABLE 403.4.7)
1. AT BATHROOMS AND LAUNDRY, PROVIDE 50 CFM FAN W/ TIMER AT 0.25 W.G. OR GREATER
2. AT KITCHENS, PROVIDE 100 CFM FAN AT 0.25 W.G. OR GREATER
3. VENT ALL EXHAUST FANS TO THE OUTSIDE
4. EXHAUST DUCTS ARE TO BE CONST. OF SMOOTH BORE NONCOMBUSTIBLE MATERIAL AND ARE TO BE INSUL. AS REQUIRED PER WSEC.

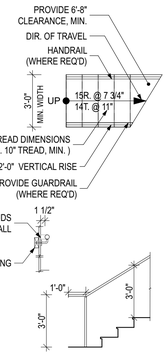
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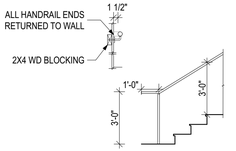
FLOOR STEP DOWN

SOFFIT STEP DOWN

TYPICAL STAIR

PROVIDE MIN. 3'-0" LANDING WHERE OCCURS





PROVIDE GUARDRAIL WHERE REQ'D TO BE INSTALLED PER 2021 IRC R312.1 - GUARDS TO BE NO LESS THAN 36" TALL AND TO NOT HAVE OPENINGS ANY GREATER THAN TO ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER

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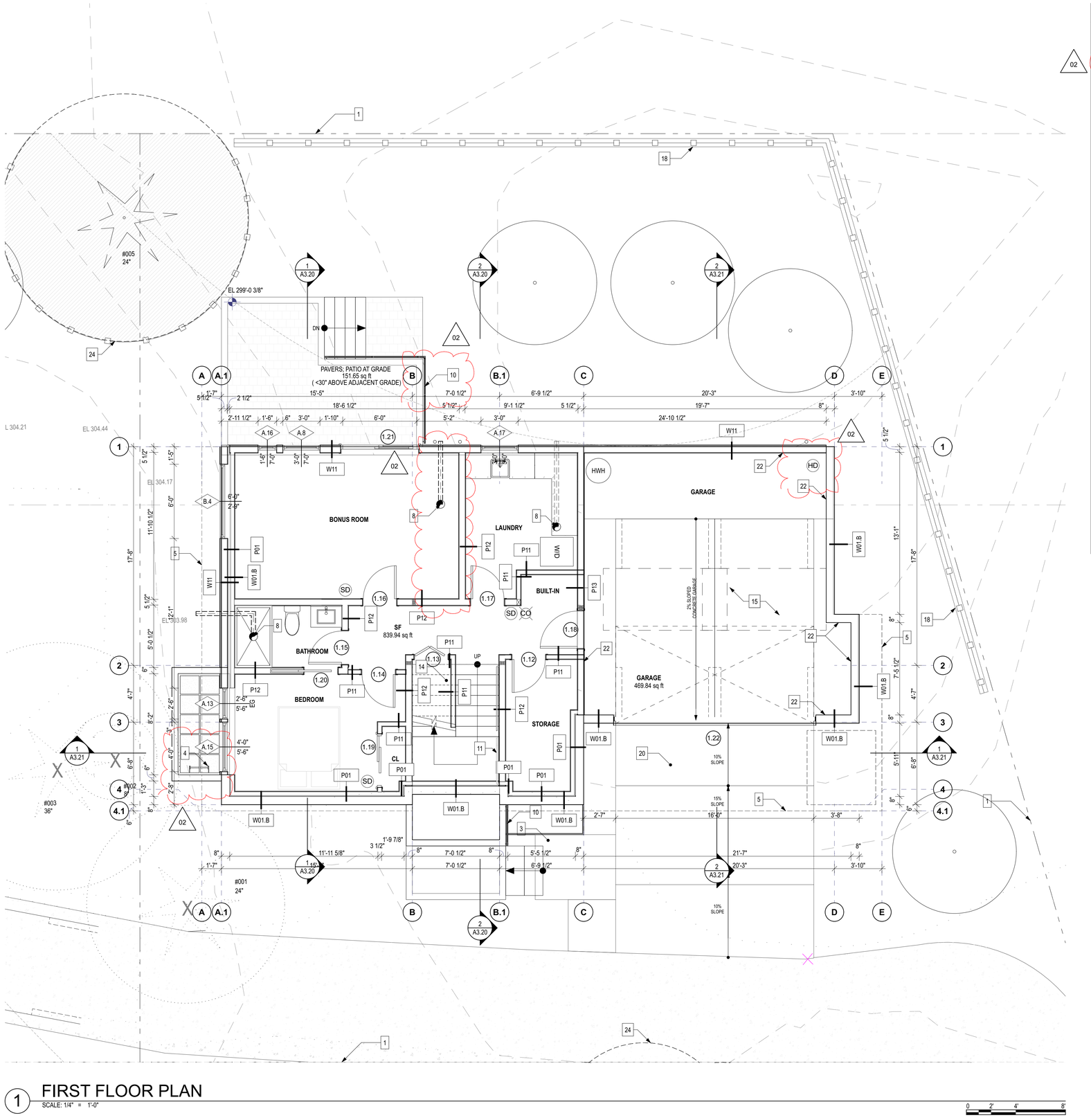
Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Architectural Foundation Plan

A2.00

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1 FIRST FLOOR PLAN

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

0 2' 4' 8'

PLAN NOTES

1. PROPERTY LINE
2. ROOF/DECK ABOVE
3. PEDESTRIAN ACCESS
4. PROVIDE LADDER FOR EMERGENCY ESCAPE WHERE WINDOW WELL DEEPER THAN 44" PER IRC R310.4.2
5. STRUCTURE ABOVE, TYP.
6. STRUCTURE BELOW, TYP.
7. PROVIDE WHOLE HOUSE EXHAUST FAN WITH A NOISE RATING OF SONE 1.0 OR LESS THAT MEETS THE REQUIREMENTS OF IRC M1505.4. SEE A0.00 WHOLE HOUSE VENTILATION NOTE.
8. PROVIDE ENVIRONMENTAL AIR EXHAUST OUTLETS AT FAN LOCATIONS. THEY SHALL BE PROVIDED A MIN OF 3 FEET FROM OPERABLE OPENINGS INTO THE BUILDING AND PROPERTY LINES PER IRC 501.3.1
9. PER IRC TABLE M1505.4.4, AT KITCHENS, PROVIDE 100 CFM LOCAL EXHAUST FAN AT 0.25 W.G. OR GREATER, TO RUN INTERMITTENTLY; WHERE HOOD EXHAUST HAS EXHAUST RATE OF 401 CFM OR GREATER, MAKEUP AIR REQUIRED PER IRC M1503.6
10. PROVIDE GUARDRAIL AT MIN 36" A.F.F. PER PER IRC 312.1.2. OPENINGS SHALL BE 4" MAX PER IRC 312.1.3, TYP. REFER TO STRUCTURAL DRAWINGS 11/S4.3 FOR CONNECTION DETAIL AT EXTERIOR ATTACHMENTS TO THE STRUCTURE. AT ALL EXTERIOR LOCATIONS PROVIDE CONNECTION THROUGH VERTICAL WALL SURFACE ONLY, DO NOT PROVIDE CONNECTION THROUGH ROOF MEMBRANE OR PARAPET CAP OR OTHER FLASHING AT TOP OF WALL.
11. PROVIDE HANDRAIL AT 34" - 38" ABOVE TREAD PER IRC 311.7.8.1, 1 1/4" MIN - 1 1/2" MAX GRASP DIMENSION PER IRC R311.7.8.5, 1 1/2" CLEARANCE BETWEEN WALL AND HANDRAIL PER IRC 311.7.8.3 AND CONTINUITY PER IRC 311.7.8.4, TYP.
12. NOT USED
13. PROVIDE 6'-8" MIN VERTICAL CLEARANCE TO FINISH AT ALL STAIRS PER IRC 311.7.2, TYP.
14. PER IRC 302.7, PROVIDE MIN 1/2" GYPSUM BOARD BENEATH STAIR AT ACCESSIBLE SPACE, TYP.
15. PROVIDE (1) LAYER 5/8" TYPE 'X' GWB AT CEILING, FOR SEPARATION BETWEEN HABITABLE AREA AND GARAGE, TYP FOR 1 HOUR PROTECTION; REFER TO SHEET A8.01 FC48.C.
16. PROVIDE NON-COMBUSTIBLE STEEL CANOPY PROVIDED BY OTHERS OVER ENTRY DOOR FOR WEATHER PROTECTION, TYP. CANOPY TO PROJECT NO CLOSER THAN 3-FEET TO ANY PROPERTY LINE, PER IRC R302.6
17. SKYLIGHT ABOVE, REFER TO ROOF PLAN A2.03 AND WINDOW SCHEDULE ON A8.00
18. PROVIDE NEW SITE WALL WITH 6' TALL FENCE ALONG PROPERTY LINE
19. NOT USED
20. VEHICULAR ENTRY.
21. NOT USED
22. MIN 1/2" GYPSUM WALLBOARD WRAPPING WALLS SUPPORTING GARAGE OR COMMON AREA PER IRC R302.6
23. TREE PROTECTION AREA, REFER TO PROTECTION PLAN, SHEET A1.10, AND ARBORIST REPORT, SHEET A0.16
24. TREE DRIP LINE, REFER TO TREE PROTECTION PLAN, SHEET A1.10, PLOT PLAN, SHEET A1.10, AND ARBORIST REPORT, SHEET A0.16
25. INSTALL ACCENT WALL FINISH PER GENERAL CONTRACTOR

PLAN LEGEND

DOOR DESIGNATION 1.1

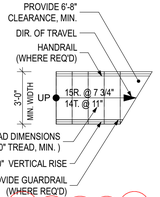
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XX / X.X — DETAIL NUMBER / SHEET NUMBER

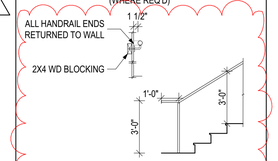
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- W — WASHING MACHINE
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- XX / X.X — SECTION MARKER
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- FLOOR STEP DOWN
- SOFFIT STEP DOWN

TYPICAL STAIR

PROVIDE MIN. 3'-0" LANDING WHERE OCCURS



02



PROVIDE GUARDRAIL WHERE REQ'D TO BE INSTALLED PER 2021 IRC R312.1 - GUARDS TO BE NO LESS THAN 36" TALL AND TO NOT HAVE OPENINGS ANY GREATER THAN TO ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER

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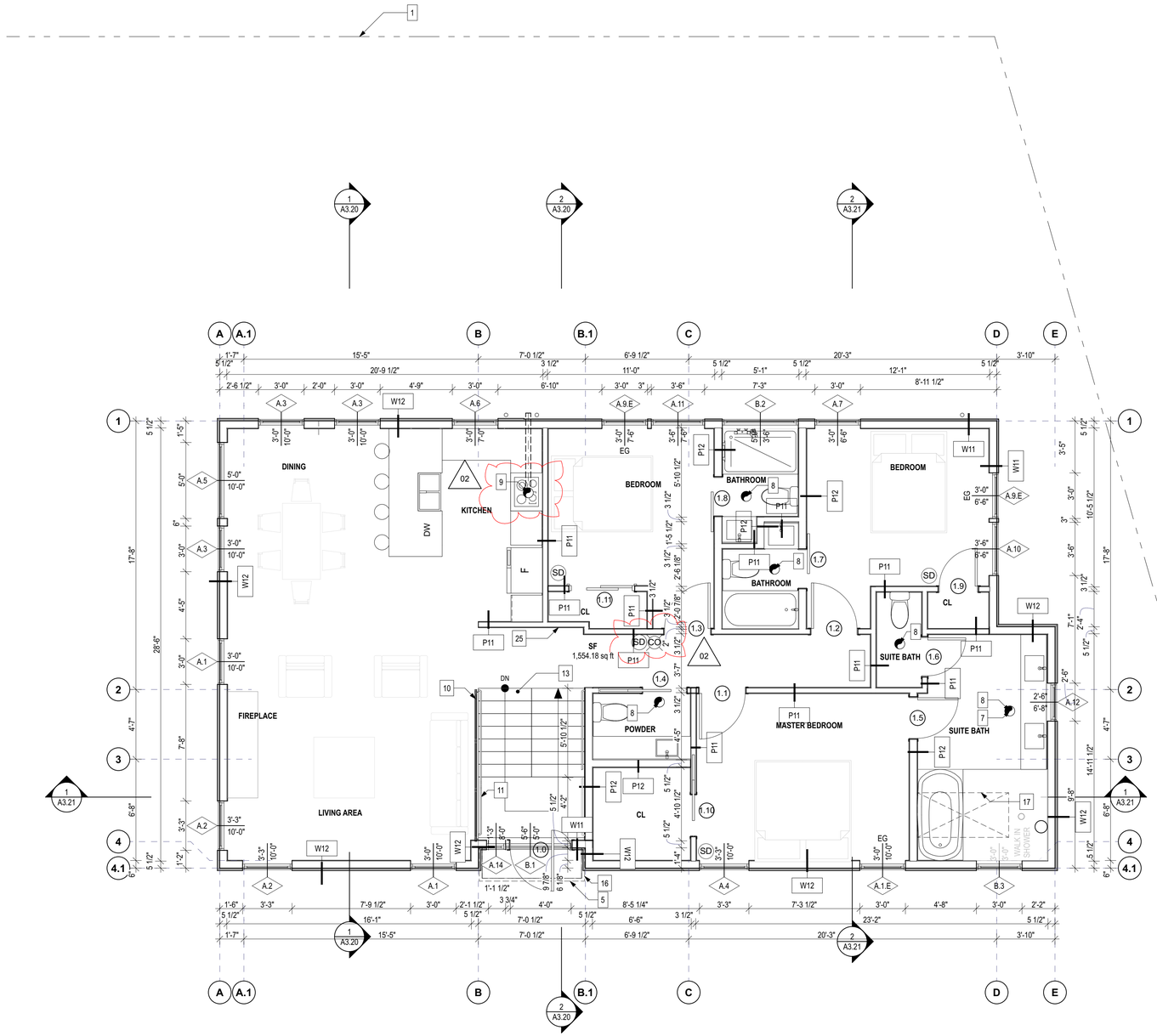
Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

First Floor Plan

A2.01

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2 SECOND FLOOR PLAN

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

0 2' 4' 8'

PLAN NOTES

1. PROPERTY LINE
2. ROOF/DECK ABOVE
3. PEDESTRIAN ACCESS
4. PROVIDE LADDER FOR EMERGENCY ESCAPE WHERE WINDOW WELL DEEPER THAN 44" PER IRC R310.4.2
5. STRUCTURE ABOVE, TYP
6. STRUCTURE BELOW, TYP
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11. PROVIDE HANDRAIL AT 34" - 38" ABOVE TREAD PER IRC 311.7.8.1, 1 1/4" MIN - 1 1/2" MAX GRASP DIMENSION PER IRC R311.7.8.5, 1 1/2" CLEARANCE BETWEEN WALL AND HANDRAIL PER IRC 311.7.8.3 AND CONTINUITY PER IRC 311.7.8.4, TYP.
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14. PER IRC 302.7, PROVIDE MIN 1/2" GYPSUM BOARD BENEATH STAIR AT ACCESSIBLE SPACE, TYP.
15. PROVIDE (1) LAYER 5/8" TYPE 'X' GWB AT CEILING, FOR SEPARATION BETWEEN HABITABLE AREA AND GARAGE, TYP FOR 1 HOUR PROTECTION; REFER TO SHEET A8.01 FC48.C.
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25. INSTALL ACCENT WALL FINISH PER GENERAL CONTRACTOR

PLAN LEGEND

DOOR DESIGNATION 1.1

WINDOW DESIGNATION 1.1 — 3'-0" WINDOW WIDTH, 5'-0" WINDOW HEIGHT

XX / X.X DETAIL NUMBER / SHEET NUMBER

1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 X 4 FRAMING

1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 x 6 FRAMING

CAST-IN-PLACE CONCRETE WALL

PROVIDE (1) LAYER 5/8" EXTERIOR GWB AT OVERHANG

PROVIDE CMU WALL

W/D WASHING/ DRYER MACHINE (COMBO)

W WASHING MACHINE

D CLOTHES DRYER

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HWH ON-DEMAND HOT WATER HEATER

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FLOOR STEP DOWN

SOFFIT STEP DOWN

TYPICAL STAIR

PROVIDE MIN. 3'-0" LANDING WHERE OCCURS

PROVIDE 6'-8" CLEARANCE, MIN.

DIR. OF TRAVEL

HANDRAIL (WHERE REQ'D)

3'-0" MIN WIDTH

UP — 15R. @ 7 3/4", 14T. @ 11"

RISE AND TREAD DIMENSIONS (7 3/4" RISE, MAX. 10" TREAD, MIN.)

PROVIDE MAX. 12'-0" VERTICAL RISE

PROVIDE GUARDRAIL (WHERE REQ'D)

02

ALL HANDRAIL ENDS RETURNED TO WALL

1 1/2"

2X4 WD BLOCKING

1'-0"

3'-0"

3'-0"

PROVIDE GUARDRAIL WHERE REQ'D TO BE INSTALLED PER 2021 IRC R312.1 - GUARDS TO BE NO LESS THAN 36" TALL AND TO NOT HAVE OPENINGS ANY GREATER THAN TO ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER

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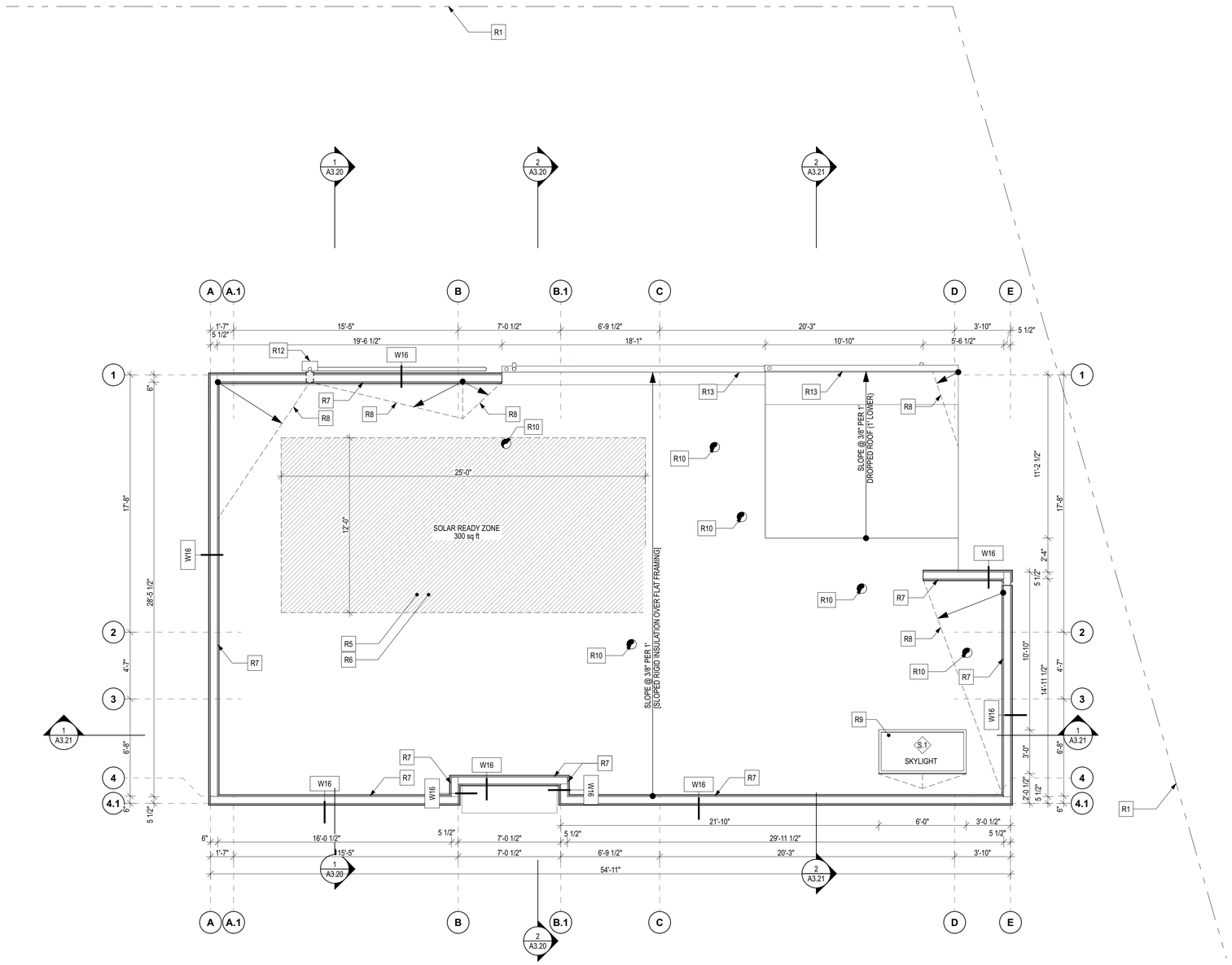
Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

Second Floor Plan

A2.02

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4 THIRD FLOOR PLAN

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

0 2' 4' 8'

ROOF PLAN NOTES

R1. PROPERTY LINE
R2. PENTHOUSE SHED ROOF ABOVE
R3. PROVIDE 2X6 PARAPET ON ROOF. REFER TO PARAPET HEIGHT PLAN AND ELEVATION DRAWINGS FOR HEIGHT, TYP.
R4. PROVIDE PROTECTION BOARD ABOVE ROOF MEMBRANE BELOW COMPOSITE/WOOD DECKING AT ROOF
R5. THE MAIN ELECTRICAL SERVICE OR FEEDER PANEL FOR EACH DWELLING UNIT SHALL HAVE A RESERVED SPACE TO ALLOW INSTALLATION OF A DUAL POLE CIRCUIT BREAKER FOR FUTURE SOLAR ELECTRIC INSTALLATION AND SHALL BE LABELED 'FOR FUTURE SOLAR ELECTRIC'
R6. A PERMANENT CERTIFICATE, INDICATING THE BOUNDARIES AND STRUCTURAL PROVISIONS OF THE SOLAR-READY ZONE, SHALL BE POSTED NEAR THE ELECTRICAL DISTRIBUTION PANEL, WATER HEATER OR OTHER CONSPICUOUS LOCATION
R7. ROOFING MEMBRANE. PROVIDE MIN 18" UP WALL WITH 12" LAP OF WRB.
R8. PROVIDE CRICKET WITH RIGID INSULATION, 3.5" MIN PER ROOF ASSEMBLIES, REFER TO FC06, A8.01. SLOPE TO DRAIN, MIN. 3/8" PER FOOT
R9. SKYLIGHT ON 2X10 CURB, WITH CRICKET FOR ROOF DRAINAGE
R10. VENT PENETRATION AT ROOF - PROVIDE RUBBER BOOT TRANSITION AT MECHANICAL EXHAUST VENT PER MFTR INSTRUCTIONS
R11. NOT USED
R12. PROVIDE THROUGH-WALL SCUPPER AT PARAPET AND DOWNSPOUT WITH SECONDARY OVERFLOW PER IRC R903.4.1, TYP. CONNECT TO ON-SITE STORMWATER MANAGEMENT ELEMENTS, SEE CIVIL DRAWINGS.
R13. PROVIDE 4" SEMI-ROUND GUTTER AT FASCIA, CONNECT TO DOWNSPOUT, TYP. CONNECT TO ON-SITE STORMWATER MANAGEMENT ELEMENTS, SEE CIVIL DRAWINGS.
R14. LOCATE PLUMBING VENT PENETRATION AT ROOF 10' MIN FROM EDGE OF OCCUPIABLE ROOF DECK PER IPC 903.1.2. OTHERWISE EXTEND VENT 7' ABOVE WALKING SURFACE PER IRC 903.1.3.

PLAN LEGEND

DOOR DESIGNATION 1.1
WINDOW DESIGNATION 1.1 — 3'-0" WINDOW WIDTH, 5'-0" WINDOW HEIGHT
XX / X.X DETAIL NUMBER / SHEET NUMBER

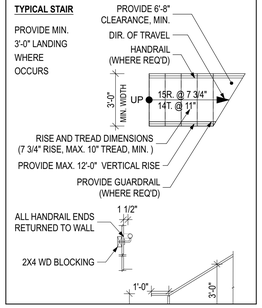
1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 X 4 FRAMING
1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION 2 x 6 FRAMING
CAST-IN-PLACE CONCRETE WALL
PROVIDE (1) LAYER 5/8" EXTERIOR GWB AT OVERHANG
PROVIDE CMU WALL
W/D WASHING/ DRYER MACHINE (COMBO)
W WASHING MACHINE
D CLOTHES DRYER
XX / X.X SECTION MARKER
HWH ON-DEMAND HOT WATER HEATER

SD IRC R314 AND IFC 907.2.10.2: SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING INCLUDING BASEMENTS BUT NOT INCLUDING CRAWL SPACES.
4. PER IRC R314.3.1 SMOKE ALARMS SHALL BE: INSTALLED 20' MIN FROM KITCHEN APPLIANCES OR 10' MIN WITH AN ALARM-SILENCING SWITCH; 3' MIN FROM BATHROOM DOORS
5. SMOKE ALARMS REQUIRED TO BE INSTALLED, HARDWIRED AND INTERCONNECTED, TYP.

SD SW SMOKE ALARM WITH SWITCH, PER ITEM 4 ABOVE
HD HEAT DETECTOR/HEAT ALARM PER IRC R314.2.1. SHALL BE CONNECTED TO AN ALARM THAT IS INSTALLED IN THE DWELLING PER R314.4.1
FAN LOCATION (IRC TABLE M 1505.4.4(1) AND IMC TABLE 403.4.7)
1. AT BATHROOMS AND LAUNDRY, PROVIDE 50 CFM FAN W/ TIMER AT 0.25 W.G. OR GREATER
2. AT KITCHENS, PROVIDE 100 CFM FAN AT 0.25 W.G. OR GREATER
3. VENT ALL EXHAUST FANS TO THE OUTSIDE
4. EXHAUST DUCTS ARE TO BE CONST. OF SMOOTH BORE NONCOMBUSTIBLE MATERIAL AND ARE TO BE INSUL. AS REQUIRED PER WSEC.
CO IRC R315: AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING. SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034.

FLOOR STEP DOWN
SOFFIT STEP DOWN

TYPICAL STAIR



N

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Location:
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8814 REGISTERED ARCHITECT BRADLEY G. ICHOURI STATE OF WASHINGTON
Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25

City Stamp

Roof Plan

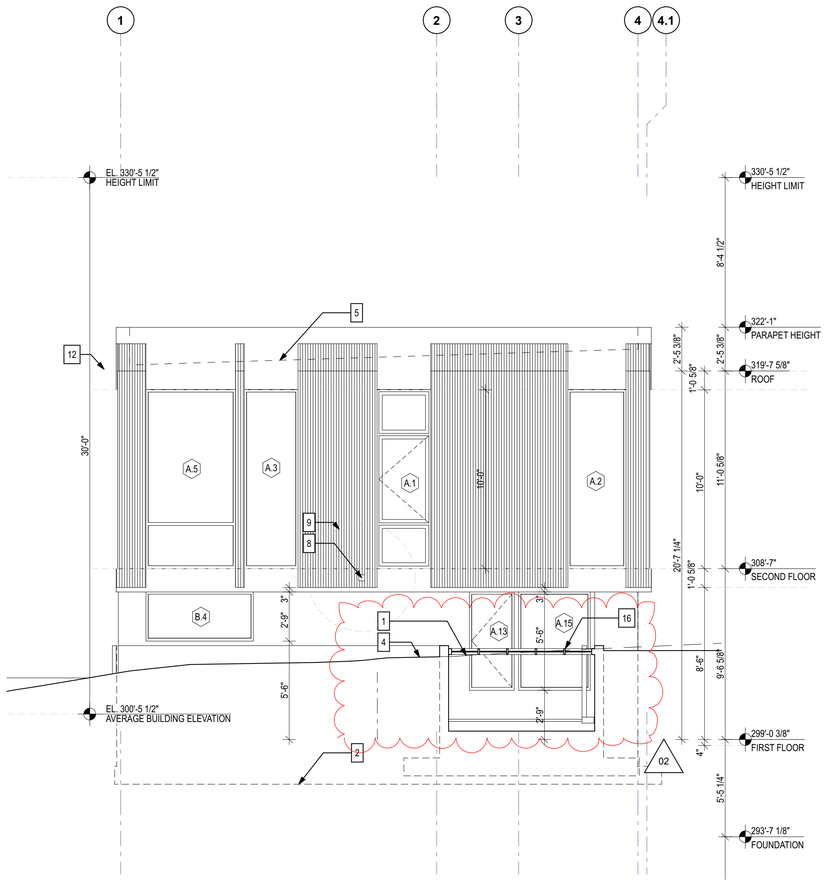
A2.03

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ELEVATION NOTES

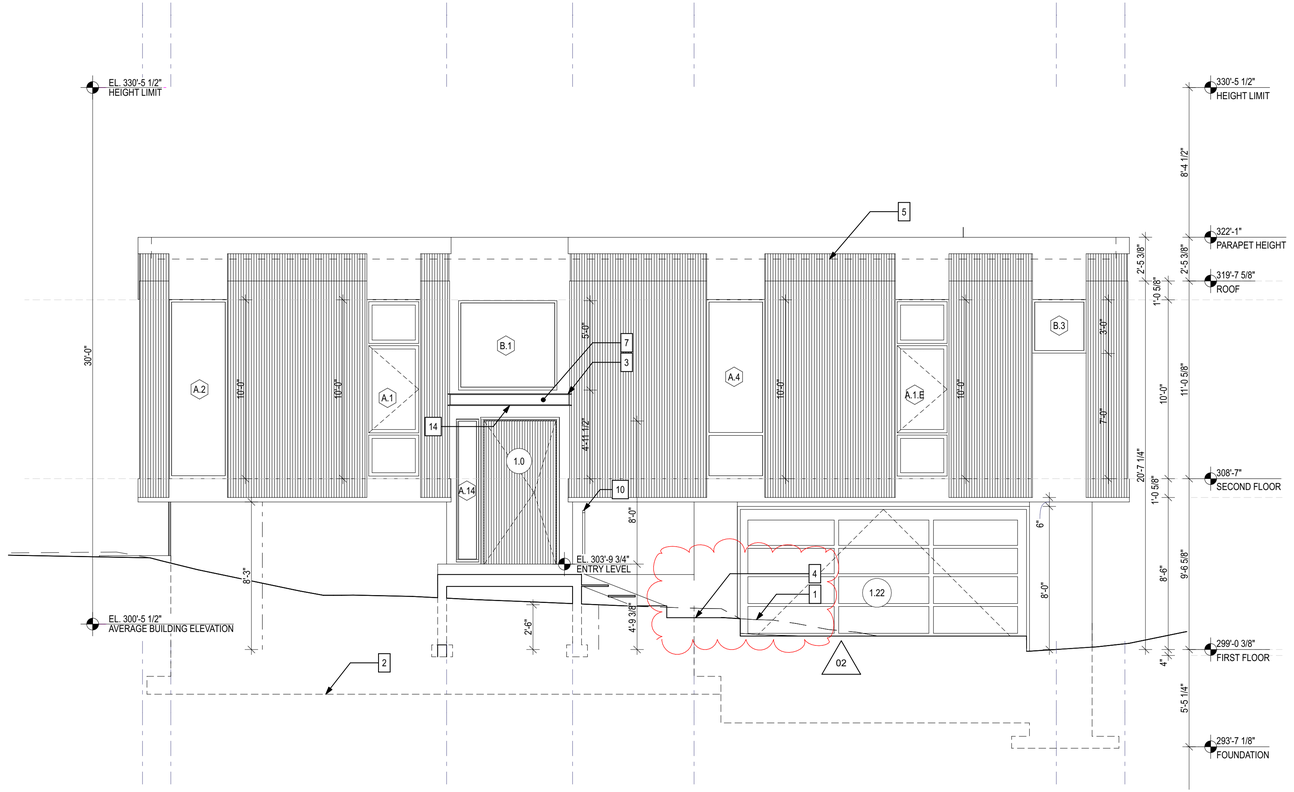
1. EXISTING GRADE, TYP.
2. DENOTES FOOTING BEYOND, TYP.
3. PROVIDE NON-COMBUSTIBLE STEEL CANOPY PROVIDED BY OTHERS OVER ENTRY DOOR FOR WEATHER PROTECTION, TYP. CANOPY TO PROJECT NO CLOSER THAN 3-FEET TO ANY PROPERTY LINE, PER PER IRC TABLE R302.1(1). PAINT PER ELEVATIONS.
4. FINISH GRADE, TYP
5. DENOTES TOP OF ROOF SHEATHING BEHIND PARAPET, TYP.
6. PROVIDE ADDRESS NUMBERS FOR STREET FACING UNITS.
7. PROVIDE ADDRESS NUMBERS FOR UNITS INTERIOR TO SITE.
8. PROVIDE ENVIRONMENTAL AIR EXHAUST OUTLET AT EXTERIOR WALL PER IRC M1504.3, TYP.
9. PROVIDE MINIMUM 3-FOOT CLEARANCE BETWEEN OPERABLE OPENINGS INTO THE BUILDING AND PROPERTY LINES PER IRC 501.3.1 AND M1504.3.
10. PROVIDE GUARDRAIL AT MIN 36" A.F.F. PER IRC 312.1.2. OPENING SHALL BE 4" MAX PER IRC 312.1.3, TYP. AT ALL EXTERIOR LOCATIONS PROVIDE CONNECTION THROUGH VERTICAL WALL SURFACE ONLY, DO NOT PROVIDE CONNECTION THOUGH ROOF MEMBRANE OR PARAPET CAP OR OTHER FLASHING AT TOP OF WALL.
11. ROOF EAVE IN SETBACK PER MIMC 19.02.020.C.3.a.i
12. PROVIDE THROUGH-WALL SCUPPER AT PARAPET AND DOWNSPOUT WITH SECONDARY OVERFLOW PER IRC R903.4.1, TYP. CONNECT TO ON SITE STORMWATER MANAGEMENT ELEMENTS, SEE CIVIL DRAWINGS.
13. PROVIDE 4" SEMI ROUND GUTTER AT FASCIA, CONNECT TO DOWNSPOUT, TYP. CONNECT TO ON SITE STORMWATER MANAGEMENT ELEMENTS, SEE CIVIL DRAWINGS.
14. PROVIDE EXTERIOR LIGHTING AT DOOR ENTRY TO EACH UNIT, TYP.
15. MAXIMUM EXPOSED WALL HEIGHT DOES NOT EXCEED 25 FEET PER MIMC 19.02.020.E.2
16. WINDOW WELL COVERING; PER IRC R310.4.4 COVERS/SCREENS PLACED OVER EMERGENCY ESCAPE AND RESCUE OPENINGS MUST PROVIDE MINIMUM NET CLEAR OPENING SIZE PER IRC R310.2 AND BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL OR FORCE GREATER THAN THAT REQUIRED FOR THE NORMAL OPERATION OF THE ESCAPE AND RESCUE OPENING; LADDER PER IRC R310.4.2.1 TO REMAIN USABLE AND MAINTAINED PER CODE REQUIREMENTS

02



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

0 2' 4' 8'



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

0 2' 4' 8'

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Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

Elevations

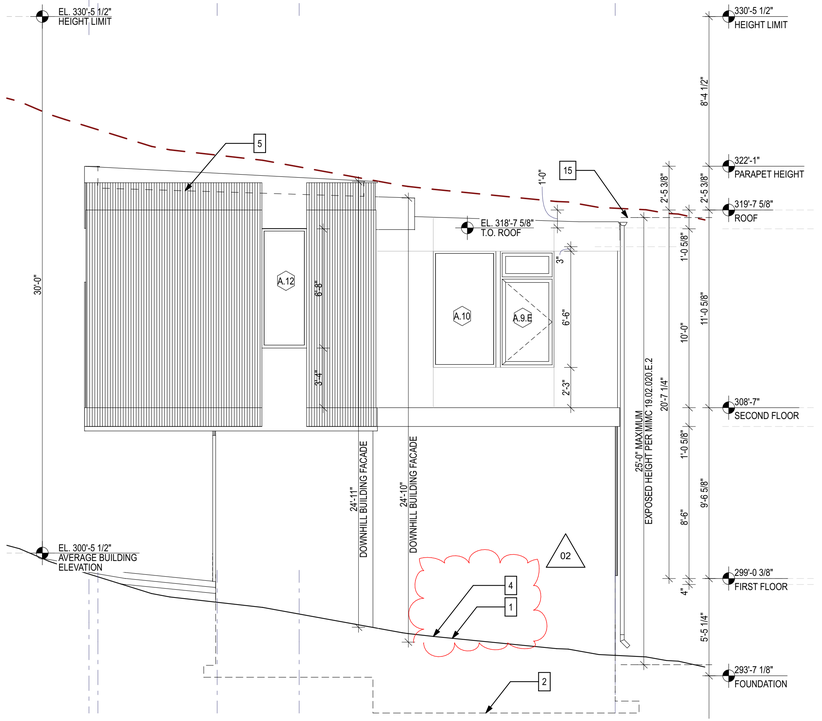
A3.10

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ELEVATION NOTES

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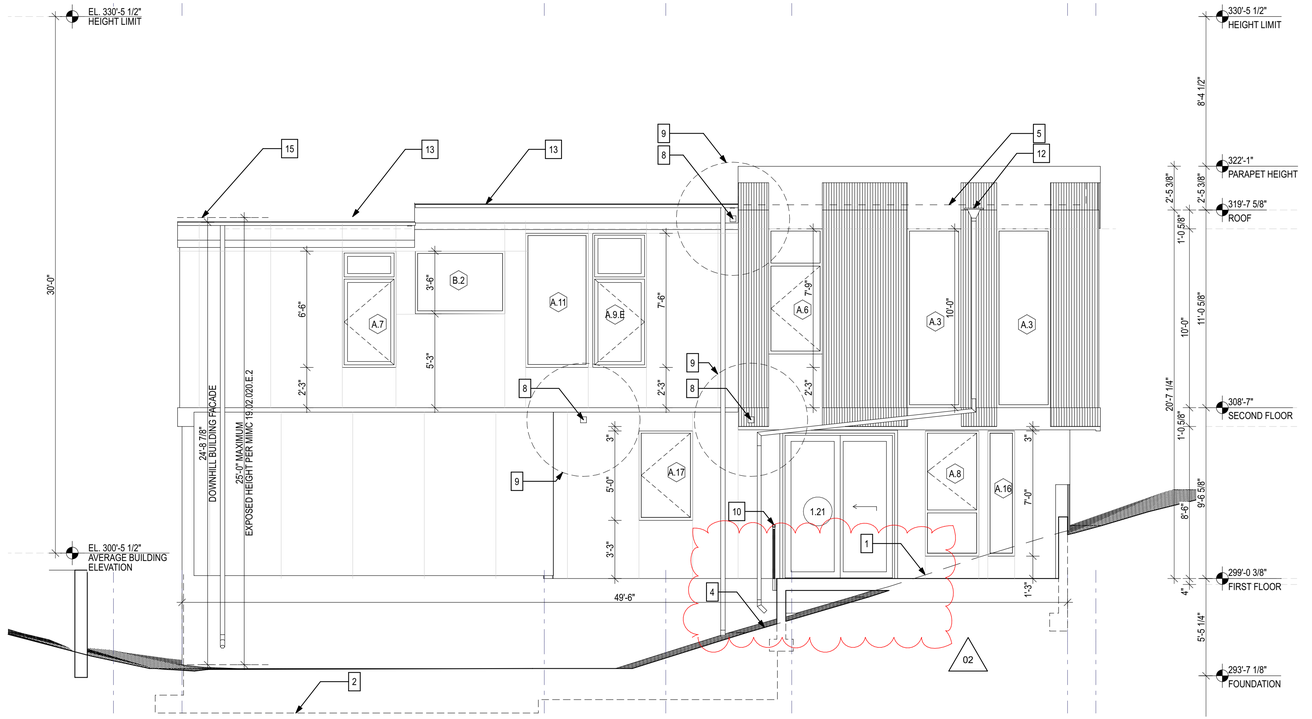
02



2 EAST ELEVATION

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

0 2' 4' 8'



1 NORTH ELEVATION

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

0 2' 4' 8'

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Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

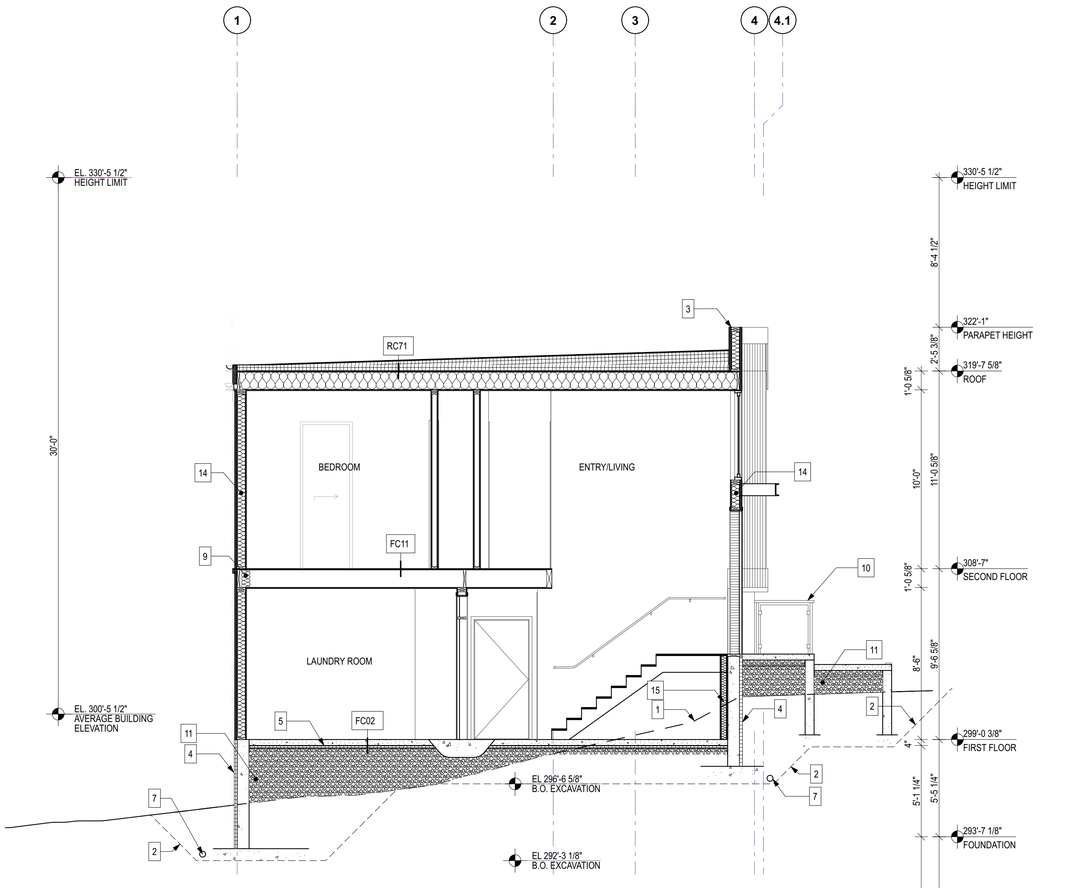
Elevations

A3.11

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SECTION NOTES

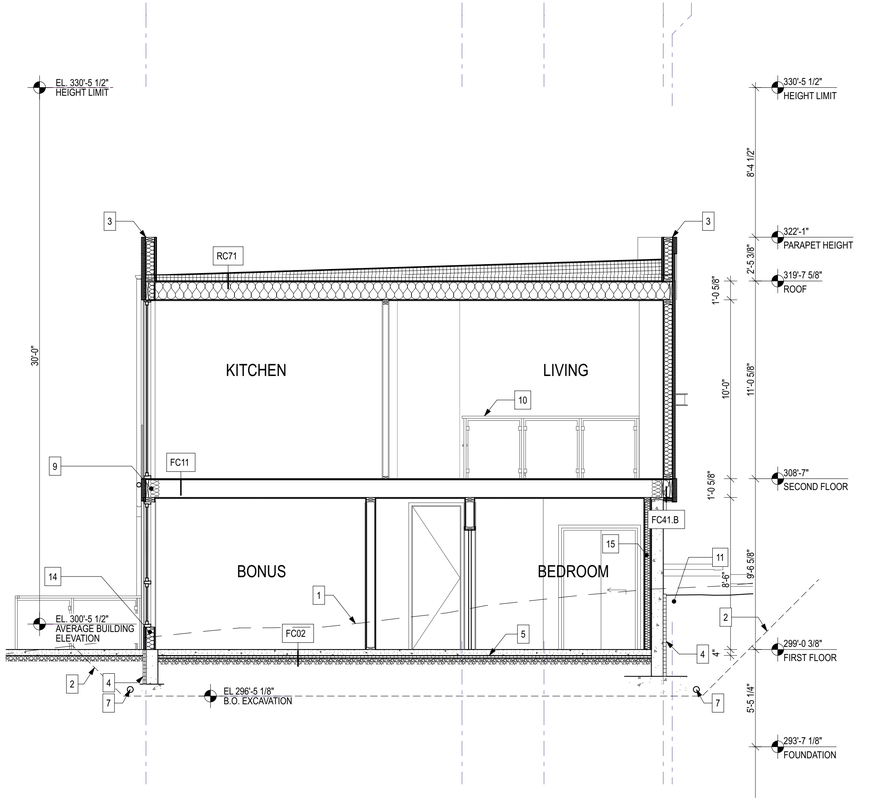
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2. PROVIDE 1H:1V CUT WITHIN PROPERTY BOUNDARIES, REFER TO GEOTECHNICAL REPORT, TYP.
3. PROVIDE 2X6 PARAPET ON ROOF. REFER PARAPET HEIGHT PLAN AND ELEVATION DRAWINGS FOR HEIGHT, TYP.
4. PROVIDE INSULATION, EXTENDING DOWNWARD FROM THE TOP OF THE SLAB TO THE TOP OF THE FOOTING, PER WSEC R402.2.9, TYP.
5. PROVIDE INSULATION BELOW SLAB ON GRADE PER FLOOR ASSEMBLY; MIN 2' PERIMETER PER WSEC
6. PROVIDE CONTINUOUS (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD, TYP. FOR 1-HOUR PROTECTION.
7. PROVIDE FOOTING DRAIN, TYP. REFER TO GEOTECHNICAL REPORT.
8. PER IRC 302.7, PROVIDE MIN 1/2" GYPSUM BOARD BENEATH STAIR AT ACCESSIBLE SPACE, TYP.
9. PROVIDE R-21 INSULATION AT EDGE OF FLOOR, TYP.
10. PROVIDE GUARDRAIL AT MIN 36" A.F.F. PER IRC 312.1.2. OPENINGS SHALL BE 4" MAX PER IRC 312.1.3, TYP. REFER TO STRUCTURAL DRAWINGS A/SD-2 FOR CONNECTION DETAIL AT EXTERIOR ATTACHMENTS TO THE STRUCTURE. AT ALL EXTERIOR LOCATIONS PROVIDE CONNECTION THROUGH VERTICAL WALL SURFACE ONLY, DO NOT PROVIDE CONNECTION THOUGH ROOF MEMBRANE OR PARAPET CAP OR OTHER FLASHING AT TOP OF WALL.
11. BACKFILL REQUIRED, PROVIDE STRUCTURAL FILL PER GEOTECHNICAL REPORT RECOMMENDATIONS
12. PROVIDE SKYLIGHT ON 2X10 CURB, REFER TO WINDOW SCHEDULE
13. NOT USED
14. PROVIDE R-21 INSULATION AT EXTERIOR WALLS, TYP. REFER TO WALL ASSEMBLIES ON SHEET A8.00.
15. PROVIDE R-21 INSULATION AT INTERIOR OF CONCRETE WALL. REFER TO WALL ASSEMBLIES ON SHEET A8.00.
16. FILL CAVITY WITH INSULATION, PROVIDE 3" MIN. SPRAY FOAM INSULATION AT FACE OF RIM/BLOCKING AT OVERHANG, REFER TO FLOOR ASSEMBLIES ON SHEET A8.01.



2 N/S SECTION

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

0 2' 4' 8'



1 N/S SECTION

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

0 2' 4' 8'

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01	Building Permit Set	4/3/25

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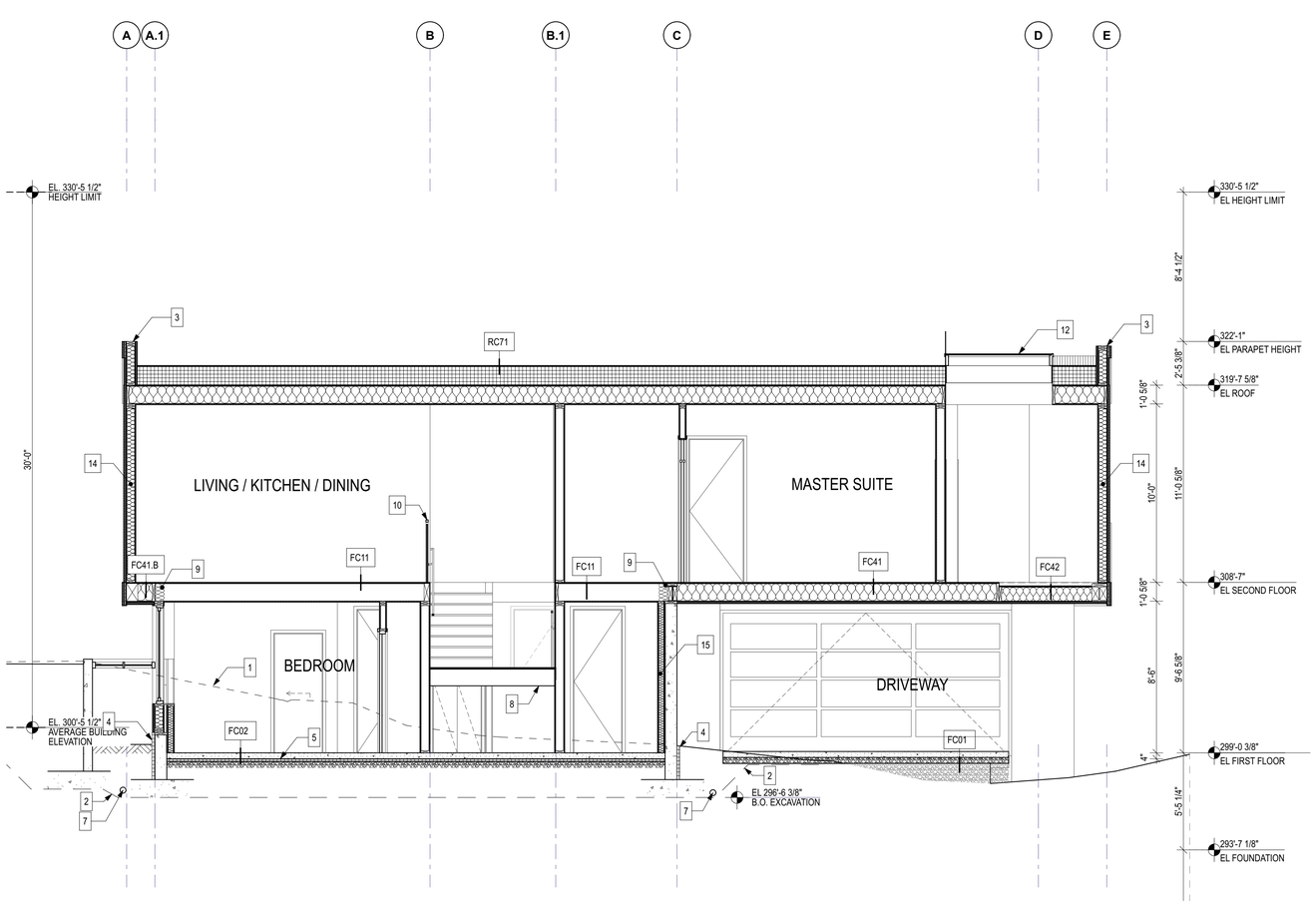
Sections

A3.20

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SECTION NOTES

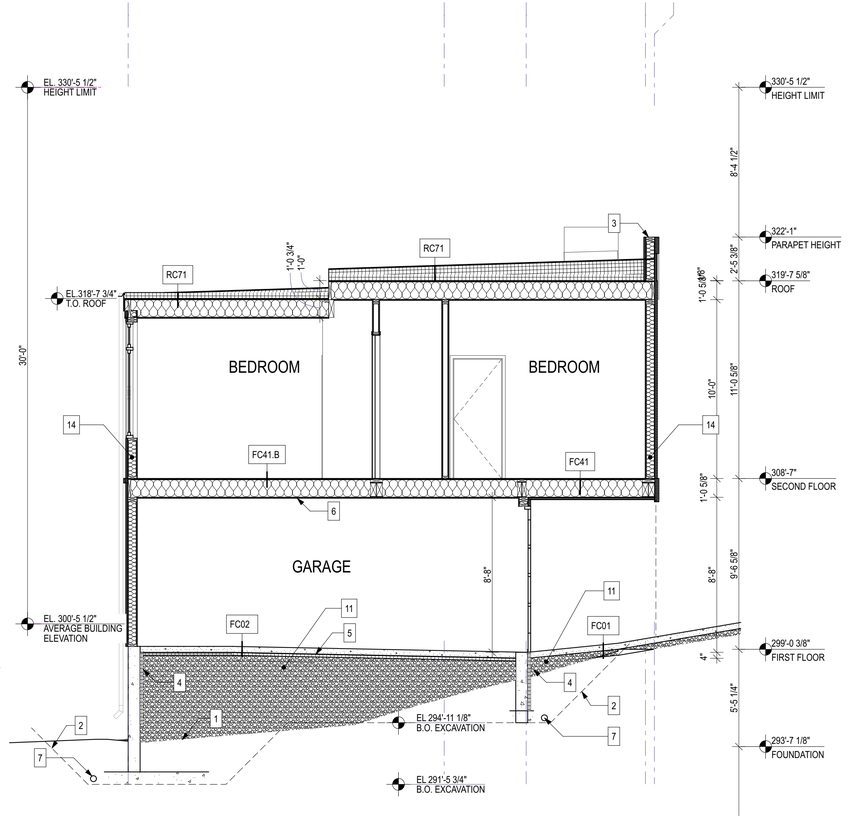
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1 LONGITUDINAL SECTION - ALT

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

0 2' 4' 8'



2 LONGITUDINAL SECTION - ALT

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

0 2' 4' 8'

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Sections

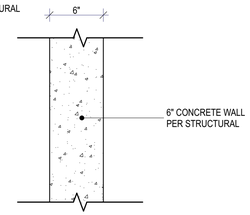
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EXTERIOR WALL TYPES

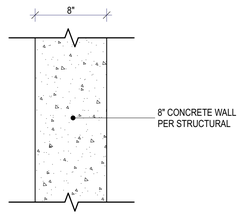
W01.A

6" CONCRETE WALL PER STRUCTURAL



W01.B

8" CONCRETE WALL PER STRUCTURAL



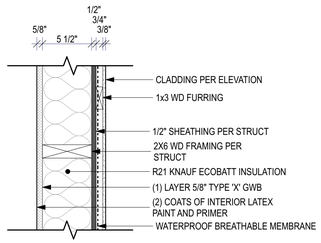
EXTERIOR WALL TYPES

W11

WD 2X6 EXT WALL
INSTULATED
R-20 CAVITY

FIBER CEMENT SIDING PER
RENDERED ELEVATION

(1) LAYER OF 5/8" TYPE 'X' GWB
AT THE INSIDE PER
REQUESTED FIRE CODE
ALTERNATIVE

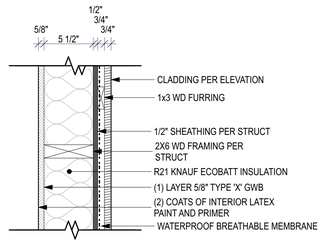


W12

WD 2X6 EXT WALL
INSULATED
R-20 CAVITY

WOOD SIDING PER RENDERED
ELEVATION

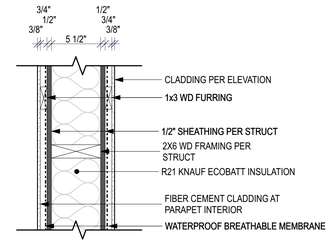
(1) LAYER OF 5/8" TYPE 'X' GWB
AT THE INSIDE PER
REQUESTED FIRE CODE
ALTERNATIVE



W16

WD 2X6 EXT WALL
PARAPET
INSULATED
R-20 CAVITY

SIDING PER RENDERED ELEVATION
FIBER CEMENT AT PARAPET
INTERIOR

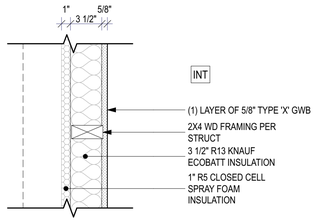


INTERIOR WALL TYPES

P01

2X4 INTERIOR FURRING WALL
R13 CAVITY + 5 TB

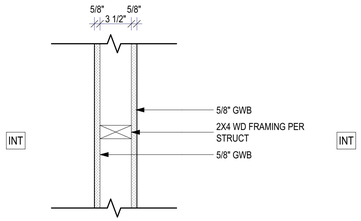
(1) LAYER OF 5/8" TYPE 'X' GWB
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P11

2X4 INTERIOR WALL

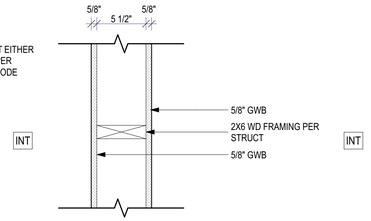
5/8" TYPE 'X' GWB AT EITHER
SIDE OF FRAMING PER
REQUESTED FIRE CODE
ALTERNATIVE



P12

2X6 INTERIOR WALL

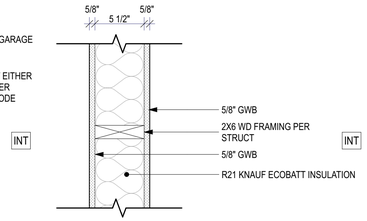
5/8" TYPE 'X' GWB AT EITHER
SIDE OF FRAMING PER
REQUESTED FIRE CODE
ALTERNATIVE



P12

2X6 INTERIOR WALL
INSULATED
SEPARATION FROM GARAGE
PER IRC R302.6

5/8" TYPE 'X' GWB AT EITHER
SIDE OF FRAMING PER
REQUESTED FIRE CODE
ALTERNATIVE



02

Architect of Record

b9 architects

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Suite 215
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206.297.1284
www.b9architects.com

Project:

4450 84th Ave SE SF House + Existing Accessory Structure

Location:

4450 84TH AVE SE
MERCER ISLAND, WA 98040

8814 REGISTERED ARCHITECT
BRADLEY G. ICHOURI
STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

Wall Types

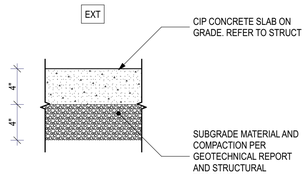
A8.00

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FC TYPES

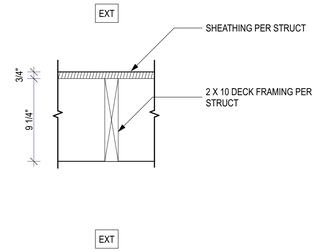
FC01

CONCRETE SLAB ON GRADE
UNINSULATED



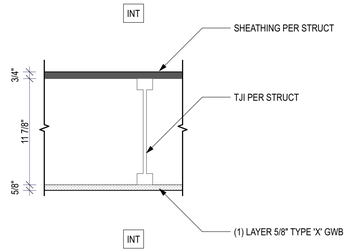
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2 X 10 WOOD FRAMED DECK
EXTERIOR



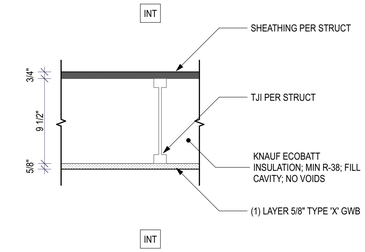
FC11

TJI 11 7/8" INT



FC12

TJI 9 1/2" INT

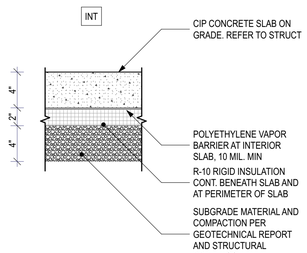


02

FC TYPES

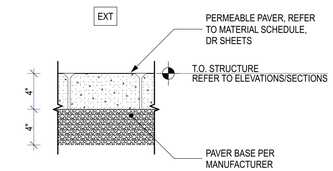
FC02

CONCRETE SLAB ON GRADE
INSULATED



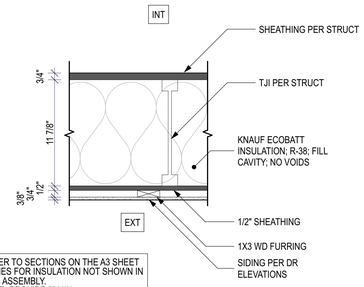
FC03

PERMEABLE PAVER



FC41

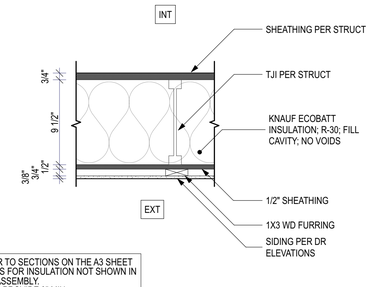
TJI 11 7/8" INT
R-30 MIN
EXTERIOR OVERHANG



REFER TO SECTIONS ON THE A3 SHEET SERIES FOR INSULATION NOT SHOWN IN THIS ASSEMBLY.
NOTE: PROVIDE 3" MIN.
SPRAY FOAM INSULATION AT FACE OF RIM / BLOCKING AT OVERHANG.

FC12

TJI 9 1/2" EXT
R-30 MIN
EXTERIOR OVERHANG

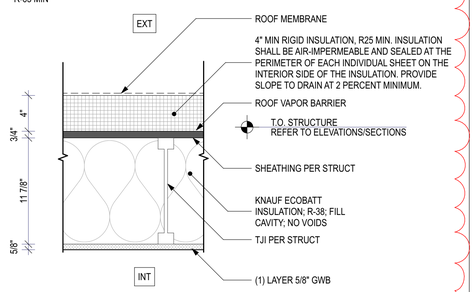


REFER TO SECTIONS ON THE A3 SHEET SERIES FOR INSULATION NOT SHOWN IN THIS ASSEMBLY.
NOTE: PROVIDE 3" MIN.
SPRAY FOAM INSULATION AT FACE OF RIM / BLOCKING AT OVERHANG.

RC TYPES

RC71

TJI 11 7/8" ROOF
R-63 MIN

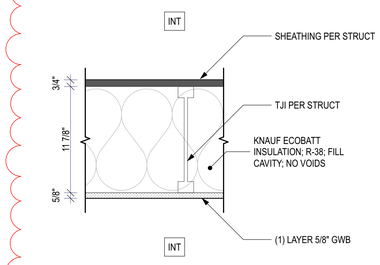


02

FC TYPES

FC41.B

TJI 11 7/8" INT
R-30 MIN
1-HR RATING OVER GARAGE



02

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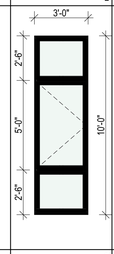
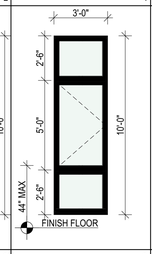
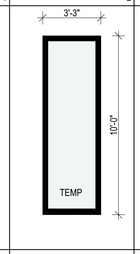
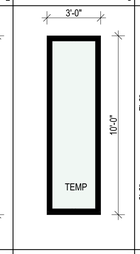
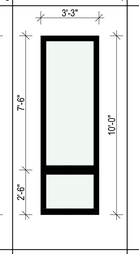
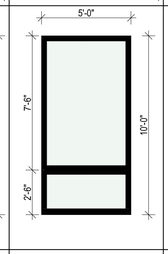
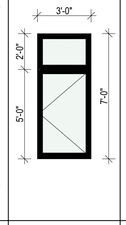
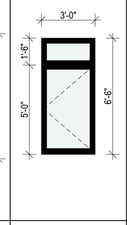
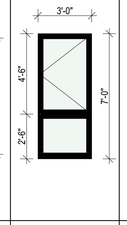
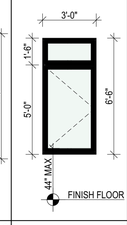
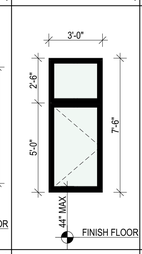
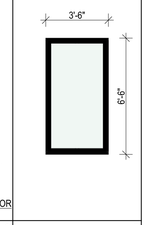
City Stamp

Floor Types

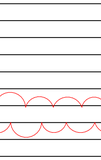
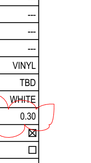
A8.01

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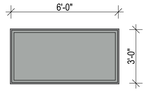
WINDOW TYPES

WINDOW NUMBER	A.1	A.1.E	A.2	A.3	A.4	A.5	A.6	A.7	A.8	A.9.E	A.9.E	A.10
QUANTITY	2	1	2	3	1	1	1	1	1	1	1	1
ELEVATION												
WINDOW TYPE	C	C	F	F	F	F	C	C	C	C	C	F
LOCATION	LIVING	MASTER BEDROOM	LIVING	LIVING/DINING	MASTER BEDROOM	LIVING/DINING	KITCHEN	BEDROOM	BONUS	BEDROOM	BEDROOM	BEDROOM
HEIGHT	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	7'-0"	6'-6"	7'-0"	6'-6"	7'-6"	6'-6"
WIDTH	3'-0"	3'-0"	3'-3"	3'-0"	3'-3"	5'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-6"
SILL HEIGHT	0"	0"	0"	0"	0"	0"	3'-0"	2'-3"	1'-3"	2'-3"	2'-3"	2'-3"
WINDOW AREA	30.00	30.00	32.50	30.00	32.50	50.00	21.00	19.50	21.00	19.50	22.50	22.75
FRAME MATERIAL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL
FRAME EXTERIOR FINISH	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
FRAME INTERIOR FINISH	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
U-VALUE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
TEMPERED	☐	☐	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐
EGRESS	☐	☒	☐	☐	☐	☐	☐	☐	☐	☒	☒	☐
NOTES		EGRESS	TEMPERED	TEMPERED						EGRESS	EGRESS	

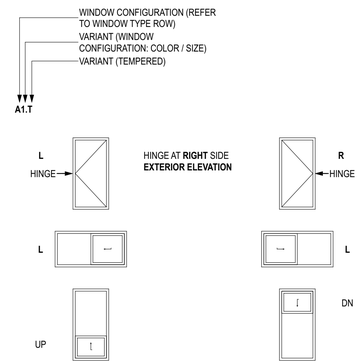
WINDOW TYPES

WINDOW NUMBER	A.11	A.12	A.13	A.14	A.15	A.16	A.17	B.1	B.2	B.3	B.4
QUANTITY	1	1	1	1	1	1	1	1	1	1	1
ELEVATION											
WINDOW TYPE	F	F	C	F	F	F	C	F	F	F	F
LOCATION	BEDROOM	MASTER BATH	BEDROOM	ENTRY	BEDROOM	BONUS ROOM	LAUNDRY ROOM	ENTRY	BATHROOM	MASTER BATH	BONUS ROOM
HEIGHT	7'-6"	6'-8"	5'-6"	8'-0"	5'-6"	7'-0"	5'-0"	5'-0"	3'-6"	3'-0"	2'-9"
WIDTH	3'-6"	2'-6"	2'-6"	1'-3"	4'-0"	1'-6"	3'-0"	5'-6"	5'-0"	3'-0"	6'-0"
SILL HEIGHT	2'-3"	3'-4"	2'-9"	1 3/8"	2'-9"	1'-3"	6'-3 5/8"	9'-8 3/4"	5'-3"	7'-0"	5'-6"
WINDOW AREA	26.25	16.67	13.75	10.00	22.00	10.50	15.00	27.50	17.50	9.00	16.50
FRAME MATERIAL	VINYL	VINYL	VINYL	TBD	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL	VINYL
FRAME EXTERIOR FINISH	BLACK	BLACK	BLACK	TBD	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
FRAME INTERIOR FINISH	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
U-VALUE	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
TEMPERED	☐	☒	☐	☒	☐	☒	☐	☐	☒	☐	☐
EGRESS	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
NOTES		TEMPERED	EGRESS	SIDELIGHT ASSOCIATED WITH DOOR 1.0, TEMPERED		TEMPERED					

WINDOW TYPES

WINDOW NUMBER	S.1
QUANTITY	1
ELEVATION	
WINDOW TYPE	F
LOCATION	MASTER BATH
HEIGHT	---
WIDTH	---
SILL HEIGHT	---
WINDOW AREA	---
FRAME MATERIAL	VINYL
FRAME EXTERIOR FINISH	TBD
FRAME INTERIOR FINISH	WHITE
U-VALUE	0.30
TEMPERED	☒
EGRESS	☐
NOTES	SKYLIGHT

WINDOW TYPES NAMING CONVENTION



WINDOW NUMBER ID:

OPERABILITY:

HINGE AT **LEFT** SIDE **EXTERIOR ELEVATION**

HINGE AT **RIGHT** SIDE **EXTERIOR ELEVATION**

NOTE: WHERE WINDOW IDS HAVE THE SAME LETTER+NUMBER, SILL HEIGHT IS NOTED SEPARATELY. REFER TO SILL HEIGHT LISTED IN SCHEDULE

NOTE: ALL INTERIOR WINDOW FRAMES ARE TO BE WHITE VINYL, REFER TO WINDOW SCHEDULE FOR EXTERIOR FRAME COLOR

WINDOW GROUPING DESIGNATIONS

CONFIGURATION (PER NAMING CONVENTION):		TYPES (AS LISTED IN WINDOW SCHEDULE):	
VERTICAL WINDOW FIXED OR OPERABLE PANE	**A**	FIXED/ PICTURE	**F**
HORIZONTAL WINDOW FIXED OR OPERABLE PANE	**B**	SLIDING	**SL**
COMBINATION	**C**	AWNING	**A**
STOREFRONT	**S**	CASEMENT	**C**
		SINGLE HUNG	**SH**
		DOUBLE HUNG	**DH**

GENERAL WINDOW NOTES

1. ALL WINDOW SIZES DENOTE **ROUGH OPENING**
2. CONTRACTOR IS RESPONSIBLE FOR ORDERING THE CORRECT WINDOW SIZES, CONTRACTOR SHALL VERIFY ALL ROUGH OPENINGS DURING CONSTRUCTION.
3. **SEE PLANS AND ELEVATIONS FOR HINGE LOCATIONS AND DIRECTIONS.**
4. ALL GLAZING TO BE LOW-E, INSULATED GLAZING, U.O.N.
5. U-FACTORS SHALL BE LABELED AND NFRC CERTIFIED.
6. ALL EMERGENCY ESCAPE AND RESCUE OPENINGS FOR EGRESS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24" AND THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20".
7. HAZARDOUS GLAZING LOCATIONS PER **2021 IRC SECTION R308.4**
   1. GLAZING IN DOORS: GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING, AND BIFOLD DOORS.
      EXCEPTIONS:
      a. GLAZED OPENINGS OF A SIZE THROUGH WHICH A 3-INCH DIAMETER SPHERE IS UNABLE TO PASS.
      b. DECORATIVE GLAZING
   2. GLAZING ADJACENT TO DOORS: GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE.
      EXCEPTIONS:
      a. DECORATIVE GLAZING.
      b. WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND GLAZING.
   3. GLAZING ADJACENT TO WINDOWS: GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
      EXCEPTIONS:
      a. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQUARE FEET, AND
      b. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOOR, AND
      c. THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES ABOVE THE FLOOR, AND
      d. ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.
   4. GLAZING IN GUARDRAILS AND RAILINGS: ALL GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.
   5. GLAZING AND WET SURFACES: GLAZING IN ENCLOSURES FOR OR WALLS FACING BATHTUBS AND SHOWERS WHERE THE EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.
      EXCEPTION: GLAZING THAT IS MORE THAN 60 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE FROM THE WATER'S EDGE OF A BATHTUB.
   6. GLAZING ADJACENT TO STAIRWAYS AND RAMPS: GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAT 60 INCHES ABOVE THE PLANE OF THE ADJACENTWALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS SHALL BE CONSIDERED TO BE HAZARDOUS LOCATIONS.
      EXCEPTIONS:
      a. THE SIDE OF THE STAIRWAY, LANDING, OR RAMPTHAT HAS GUARD COMPLYING WITH SECTIONS 1015 AND 1607.8, AND THE PLANE OF THE GLASS IS GREATER THAN 18 INCHES FROM THE RAILING.
      b. GLAZING 36 INCHES OR MORE MEASURED HORIZONTALLY FROM THE WALKING SURFACES.
   7. GLAZING ADJACENT TO THE BOTTOM STAIRWAY LANDING: GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 60 INCHES ABOVE THE LANDING AND WITHIN A 60-INCH HORIZONTAL ARC THAT IS LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.
      EXCEPTION: GLAZING THAT IS PROTECTED BY A GUARD COMPLYING WITH SECTIONS 1015 AND 1607.8 WHERE THE PLANE OF THE GLASS IS GREATER THAN 18 INCHES FROM THE GUARD
   8. FIRE DEPARTMENT ACCESS PANELS: FIRE DEPARTMENT GLASS ACCESS PANELS SHALL BE OF TEMPERED GLASS. FOR INSULATING GLASS UNITS, ALL PANES SHALL BE TEMPERED.
9. **REFER TO FLOOR PLAN FOR ALL EGRESS WINDOWS.**

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Windows Schedule

A8.10

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PRIMARY DWELLING DOOR SCHEDULE

DOOR NUMBER	TYPE	LOCATION	HEIGHT	WIDTH	GLAZING AREA	U-VALUE	NOTES
1.0	S	ENTRY	8'-0"	4'-0"			PIVOT DOOR WITH SIDELIGHT - REFER TO WINDOW SCHEDULE FOR SIDELIGHT
1.1	D	BEDROOM	8'-0"	3'-0"			SOLID-CORE DOOR REQUIRED PER FIRE CODE ALTERNATIVE
1.2	D	BEDROOM	8'-0"	3'-0"			SOLID-CORE DOOR REQUIRED PER FIRE CODE ALTERNATIVE
1.3	D	BEDROOM	8'-0"	3'-0"			SOLID-CORE DOOR REQUIRED PER FIRE CODE ALTERNATIVE
1.4	P	POWDER	8'-0"	2'-10"			
1.5	D	SUITE BATH	6'-8"	2'-8"			
1.6	D	SUITE BATH	6'-8"	2'-6"			
1.7	B	BATHROOM	8'-0"	2'-6"			
1.8	B	BATHROOM	8'-0"	2'-6"			
1.9	D	BED CLOSET	6'-8"	2'-6"			
1.10	P	MASTER CLOSET	8'-0"	2'-8"			
1.11	T	BED CLOSET	8'-0"	4'-0"			
1.12	D	STORAGE	8'-0"	2'-8"			SOLID-CORE DOOR REQUIRED PER FIRE CODE ALTERNATIVE (IF USED FOR MECHANICAL EQUIPMENT STORAGE)
1.13	F	UNDER-STAIR CLOSET	8'-0"	2'-8"			
1.14	D	BEDROOM	8'-0"	2'-8"			
1.15	D	BATHROOM	8'-0"	2'-8"			
1.16	D	BONUS ROOM	8'-0"	2'-8"			
1.17	D	LAUNDRY	8'-0"	2'-8"			SOLID-CORE DOOR REQUIRED PER FIRE CODE ALTERNATIVE
1.18	D	GARAGE TO UNIT	6'-8"	3'-0"			20 MIN FIRE RATED AND SELF CLOSING; SOLID-CORE DOOR
1.19	T	BED CLOSET	6'-8"	4'-0"			
1.20	P	BATHROOM	6'-8"	2'-8"			
1.21	T	EXTERIOR SLIDING DOOR	8'-0"	6'-0"	48 SF	0.30	TEMPERED
1.22	O	GARAGE DOOR	8'-0"	16'-0"			AUTOMATIC GARAGE DOOR OPENER TO CONFORM WITH IRC R309.4; SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 325

02

DOOR TYPES

B	BARN DOOR
D	SINGLE SWING DOOR
F	BI-FOLD DOORS - (1) LEAF
FF	BI-FOLD DOORS - (2) LEAVES
O	OVERHEAD/GARAGE DOOR
P	POCKET DOOR
T	UNIT SLIDING DOORS
S	EXTERIOR ENTRY DOOR

GENERAL DOOR NOTES

1. SEE ARCHITECTURAL PLANS AND ELEVATIONS FOR HINGE DIRECTIONS
2. SWING ESTABLISHED FACING HINGE SIDE OF DOOR (CONTRACTOR TO VERIFY SWING DIRECTION)
3. ALL WIDTHS AND HEIGHTS DENOTE DOOR LEAF SIZES, EXCEPT DOUBLE DOOR UNITS WHICH ARE NOTED AS DOUBLE LEAF SIZE. U.N.O. IN KEY NOTES
4. ALL DOORS WITH GLAZING TO HAVE LOW-E, INSULATED TEMPERED SAFETY GLASS
5. EGRESS DOORS NOTED IN KEY NOTES
6. U-FACTORS SHALL BE LABELED AND NFRC CERTIFIED

Architect of Record

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Project:

4450 84th Ave SE SF House + Existing Accessory Structure

Location:

4450 84TH AVE SE
MERCER ISLAND, WA 98040

8914 REGISTERED ARCHITECT
BRADLEY G. ICHOURI
STATE OF WASHINGTON

Professional Stamp

Issue ID	Issue Name	Issue Date
01	Building Permit Set	4/3/25
02	Building Permit Correction Cycle 1 Set	10/21/25

City Stamp

Door Schedule

A8.20

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SLAB ON GRADE

4" CONC. SLAB ON GRADE ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GARAGE SLAB

4" CONC. SLAB ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

PORCH SLAB

4" CONC. SLAB ON GRADE ON 10 MIL VAPOR BARRIER ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- DESIGN LOADS:
  SOIL 1,500 PSF ALLOWABLE BEARING PRESSURE
- CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
  f'_c = 3,000 psi:* ..... FOUNDATION WALLS
  3,000 psi:* ..... FOOTINGS
  2,500 psi: ..... INTERIOR SLABS ON GRADE
  3,500 psi:* ..... GARAGE & EXT. SLABS ON GRADE
  f_y = 60,000 psi
  * ALL CONCRETE HAS BEEN DESIGNED FOR 2500 PSI, ANYTHING GREATER THAN THIS SPECIFICATION IS FOR WEATHERING ONLY.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- FOUNDATION WALL DESIGN IS BASED ON BACKFILL SOIL PRESSURE OF 55 PCF AT-REST, 35 PCF ACTIVE & 7H SEISMIC SURCHARGE.
- TYPICAL REINFORCEMENT DETAILS: LAP ALL REBAR 24" MIN.; BEND BARS AND LAP AT CORNERS; PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT; PROVIDE 3" MINIMUM COVER AT THE BOTTOM BARS AND 1 1/2" COVER AT THE SIDES.
- FOUNDATION WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY EITHER ADEQUATE TEMPORARY BRACING OR INSTALLATION OF FIRST FLOOR DECK.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE. CONSULT SOILS REPORT/ LOCAL MUNICIPALITY FOR MINIMUM DEPTH BELOW GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP. (15'-0" O.C.)
- FASTEN SILL PLATES TO FOUNDATION WALLS WITH 5/8" DIA. ANCHOR BOLTS w/ MIN. 3"x3"x 1/4" PLATE WASHERS (EDGE OF WASHER TO BE LOCATED WITHIN 1/2" OF EXTERIOR EDGE OF SILL PLATE) PROVIDE A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAXIMUM FROM PLATE ENDS, U.N.O. (SEE FND. DETAILS).
- ALL LUMBER EXPOSED TO WEATHER, OR IN CONTACT W/ CONCRETE OR MASONRY FOUNDATION SHALL BE PRESERVATIVE TREATED HEM FIR #2.
- ARCH/BUILDER TO VERIFY ALL DIMENSIONS

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HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON STHD14 (R.) HOLD-DOWN
HD-5	SIMPSON CS16 STRAP TIE (14" END LENGTH)
HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO, FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO M&K FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

TRUSSES SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES OR GIRDER TRUSSES DOES NOT EXCEED THE FOLLOWING:

A. ROOF TRUSSES:
   1/4" DEAD LOAD
B. FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:
   1/8" DEAD LOAD
C. FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS:
   LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)

LOADING AND DESIGN PARAMETERS

GRAVITY DESIGN LOADS:
DEAD LOAD (PSF):
- ROOF (RAFTERS) : 15
- FLOOR (JOISTS) : 10
- TILE FLOORS : 10
- SOLAR READY ZONE: 4

LIVE LOAD (PSF):
- ROOF : 20
- RESIDENTIAL LIVING AREAS : 40
- RESIDENTIAL SLEEPING AREAS : 30
- RESIDENTIAL WOOD DECKS/ROOFTOP DECK: 60
- GARAGE : 50

SNOW LOAD:
- GROUND SNOW LOAD (P_g) (PSF) : 25
- ROOF SNOW LOAD (P_f) (PSF) : 25
- SNOW EXPOSURE FACTOR (C_e) : 0.9
- SNOW LOAD IMPORTANCE FACTOR (I) : 1.0
- THERMAL FACTOR (C_t) : 1.2

LATERAL DESIGN LOADS:
WIND LOAD: (IBC 1609)
- SPEED (V_{ult}) (MPH) : 100
- WIND RISK CATEGORY : II
- IMPORTANCE FACTOR (I_w) : 1.0
- EXPOSURE CATEGORY : C
- INTERNAL PRESSURE COEFF. (GC_{pi}) : ±0.18
- TOPOGRAPHIC FACTOR (K_{zt}) : 1.0

SEISMIC LOAD: (IBC 1613)
- SEISMIC RISK CATEGORY : II
- SEISMIC IMPORTANCE FACTOR (I_e) : 1.0
- MAPPED SPECTRAL RESPONSE : S_s= 1.43, S_1= 0.447
- SITE CLASS : D
- SPECTRAL RESPONSE COEFF. : S_{DS}= 1.144, S_{D1}= 0.597
- SEISMIC DESIGN CATEGORY: D
- BASIC SEISMIC-FORCE-RESISTING SYS : LIGHT FRAMED WALLS w/ WOOD STRUCTURAL PANELS
- ULTIMATE BASE SHEAR: TRANS: 10k LONG: 10k
- SEISMIC RESPONSE COEFF. (C_s) : TRANS: 0.176 LONG: 0.176
- RESPONSE MODIFICATION FACTOR (R) : WOOD STRUCTURAL PANELS: TRANS: 6.5 LONG: 6.5
- PROCEDURE USED: EQUIVALENT LATERAL FORCE

LATERAL BRACING NOTES

THIS HOME HAS BEEN ENGINEERED TO RESIST LATERAL FORCES RESULTING FROM:
100 MPH WIND SPEED, EXP. C
(ASCE 7-16 WIND MAP, PER IRC R301.2.1.1)
RISK CAT. 2 & SEISMIC CAT. D2.

100 MPH WIND IN 2021 IRC MAP

ENGINEERED DESIGN WAS COMPLETED PER 2021 IBC (SECTION 1609 & 1613) & ASCE 7-16, AS PERMITTED BY R301.1.3 OF THE 2021 IRC. ACCORDINGLY, THIS HOME, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES, AND DOES NOT NEED TO CONFORM TO THE PRESCRIPTIVE PROVISIONS OF R602.10.

STANDARD EXTERIOR WALL SHEATHING SPECIFICATIONS

(INTERIOR WALL SPECIFICATION WHERE NOTED ON PLANS)

- 7/16" OSB OR 15/32" PLYWOOD:
  FASTEN SHEATHING w/ 2½"x0.131" NAILS @ 6"o.c. AT ALL SUPPORTED PANEL EDGES AND 12" O.C. IN THE PANEL FIELD. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED PER THIS SPECIFICATION U.N.O. ON PLANS.

3" o.c. EDGE NAILING

(WHERE NOTED ON PLANS)

- 7/16" OSB OR 15/32" PLYWOOD:
  ONLY AT LOCATIONS INDICATED ON PLANS - SHEATHE WALL SHOWN WITH 7/16" OSB. FASTEN SHEATHING w/ 2½"x0.131" NAILS @ 3" O.C. AT EDGES AND 12" O.C. AT CENTER. ALL SHEATHING SHEET PANEL EDGES SHALL OCCUR OVER WALL FRAMING MEMBERS OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT PANEL EDGE AND 3" O.C. FASTENING.

NOTES:

1. LATERAL ANALYSIS ASSUMES STUD SPACING @ 16" o.c.
2. ALL SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES. FASTENED TOGETHER w/ 3"x0.131" NAILS @ 8" O.C. USE (12)8"x0.131" NAILS AT EACH LAP SPLICE, (6) EACH SIDE OF JOINT (TYP. U.N.O.)
3. ALL EXTERIOR WALLS ARE CONTINUOUSLY SHEATHED.
4. ALL INTERIOR SHEAR WALLS AND EXTERIOR WALLS ARE SHEATHED ABOVE AND BELOW OPENINGS.

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.), OR SHEARWALL ABOVE (S.W.A.)
- BEAM / HEADER
- INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING
- AREA OF OVERFRAMING
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLDDOWN.

GENERAL STRUCTURAL NOTES

DESIGN PARAMETERS

- DESIGN IS BASED ON 2021 INTERNATIONAL RESIDENTIAL CODE & 2021 INTERNATIONAL BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

GENERAL FRAMING

- EXTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (w/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, U.N.O.
- INTERIOR BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. (w/ DOUBLE TOP PLATE) HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, U.N.O.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX.)
- ALL WALLS TALLER THEN TYP. PLATE HEIGHT SHALL BE CONSIDERED BALLOON FRAMED & SHALL BE CONSTRUCTED FROM FLOOR TO UNDERSIDE OF FRAMING AT NEXT LEVEL. B.F. WALLS SHALL BE 2x6 HEM FIR (HF) #2 GRADE LUMBER, OR BETTER, U.N.O.
- ALL SHEATHING AND LEDGERS ARE TO BE DIRECTLY APPLIED AND FASTENED TO FRAMING. DO NOT PROVIDE CONTINUOUS INSULATION BETWEEN FRAMING AND SHEATHING/LEDGERS
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM.
  - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, U.N.O..
- BUILT-UP POSTS SHALL BE 2x4 OR 2x6 HEM FIR (HF) "STUD" GRADE LUMBER, OR BETTER, U.N.O. & SOLID WOOD COLUMNS SHALL BE SPRUCE PINE FIR (SPF) #2 GRADE LUMBER, OR BETTER, U.N.O.
- ALL 2x6 AND LARGER SOLID SAWN BEAMS/HEADERS SHALL BE HEM FIR #2 (HF #2) OR BETTER. ALL 4x6 AND LARGER SOLID SAWN LUMBER SHALL BE DOUG FIR #2 (DF #2) OR BETTER.
- ALL FRAMING LUMBER SHALL BE KILN DRIED TO 15% MC (KD-15).
- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN GENERAL NOTES, IN DETAILS, OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- FASTEN ALL BEAMS TO COLUMNS, OR FLUSH BEAMS TO SUPPORTING BEAMS, w/ (4) 3"x0.131" TOENAILS (MIN.), TYP. U.N.O.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS & HOLD-DOWNS CONTINUOUS TO FOUNDATION/BEARING. BLOCKING TO MATCH POST ABOVE.
- ENGINEERED LUMBER TO MEET OR EXCEED THE FOLLOWING:
  - LSL MEMBERS - Fb=2325 PSI; Fv=310 PSI; E=1.55x10^6 PSI
  - LVL MEMBERS - Fb=2600 PSI; Fv=285 PSI; E=2.0x10^6 PSI
  - GLB MEMBERS - Fb(+)=2400 PSI; Fb(-)=1850 PSI; Fv=265 PSI; E=1.8x10^6 PSI; DF/DF; 24F-V4 (U.N.O.)
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
  - LVL MEMBERS - Fb=2400 PSI; Fc⊥=2500 PSI; E=1.8x10^6 PSI
- FACE NAIL MULTI-PLY 2x BEAMS & HEADERS W/ 3-ROWS OF 3"x0.131" NAILS (MIN.) @ 12" O.C. STAGGERED. APPLY NAILING FROM BOTH FACES @ 3-PLY OR MORE CONDITIONS. UTILIZE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- TRUSS SHOP DWGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PROPOSED CONSTRUCTION SHALL BE SUBMITTED TO BUILDING DESIGNER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY IN ACCORDANCE WITH TPI-1 2.3.2.3 & 2.3.4.3.
- REFER TO IRC FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. U.N.O.
- BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653, TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA AND SHALL RUN CONTINUOUS OVER SUPPORTS WHEREVER POSSIBLE. ALL LOADS SHOWN ON PLAN FOR MANUF. DESIGNS ARE ASD LEVEL LOADS, U.N.O. (EXCLUDES STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT M&K FOR EXCLUDED DESIGNS).
- ALL METAL I-JOIST/TRUSS HANGERS SHALL BE SPECIFIED BY I-JOIST/TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.
- 2x FLOOR JOISTS HAVE BEEN DESIGNED TO MEET OR EXCEED L/360 LIVE LOAD DEFLECTION CRITERIA.
- TYPICAL 2x JOIST HANGERS (U.N.O. ON PLANS):
  SINGLE PLY: SIMPSON LUS210
  DOUBLES: SIMPSON LUS210-2
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED "STURD-I-FLOOR" 24" O.C, EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND 2 ½" x 0.131" NAILS @ 6"o.c. @ PANEL EDGES & @ 12"o.c. FIELD.
- ALL FLUSH CONNECTIONS SHALL BE CONNECTED WITH HANGER APPROPRIATE FOR MEMBER SIZE. U.N.O.
- FASTEN HANGERS TO SINGLE PLY FLUSH BEAMS W/ ½" LONG NAILS.

ROOF FRAMING

- FASTEN EACH ROOF TRUSS TO TOP PLATE W/ (4) 3"x0.131" TOENAILS (MIN.) & (1) 'SIMPSON' H2.5T CLIP. PROVIDE (2) H2.5T CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- FASTEN EACH ROOF RAFTER TO TOP PLATE WITH (1) 'SIMPSON' H2.5T CLIP. PROVIDE (2) 'SIMPSON H2.5T CLIPS AT FLUSH BEAMS IN THE ROOF - AT ALL BEARING POINTS.
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS W/ 2 ½" x 0.131" NAILS @ 6"o.c. AT PANEL EDGES & @ 6" O.C. AT INTERMEDIATE SUPPORTS. ROOF SHEATHING SHALL EXTEND BELOW ALL INSTANCES OF OVERFRAMING. BLOCKING SHALL BE INSTALLED AS REQUIRED TO LIMIT ROOF SHEATHING SPANS TO 24" MAX.
- ALL METAL HANGERS SHALL BE SPECIFIED BY THE TRUSS MANUFACTURER, UNLESS OTHERWISE NOTED.
- ROOF TRUSS SHOP DRAWINGS & CALCULATIONS SHALL BE DESIGNED FOR UNBALANCED SNOW LOADING PER ASCE 7-16, SECTION 7.6.
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI 1-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- FASTEN OVER-FRAMED TRUSS SETS TO TRUSSES BELOW W/ (2) 3"x0.131" TOENAILS AT EA. TRUSS.
- FASTEN ALL INTERIOR NON-BEARING PARTITION WALLS TO TRUSS BOTTOM CHORD ABOVE WITH SIMPSON STC CLIPS AT 24" o.c. MAX. PROVIDE BLOCKING BETWEEN THE TRUSS BOTTOM CHORDS AS REQUIRED FOR THE PARALLEL CONDITIONS.

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seal:

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03-28-2025	MPM
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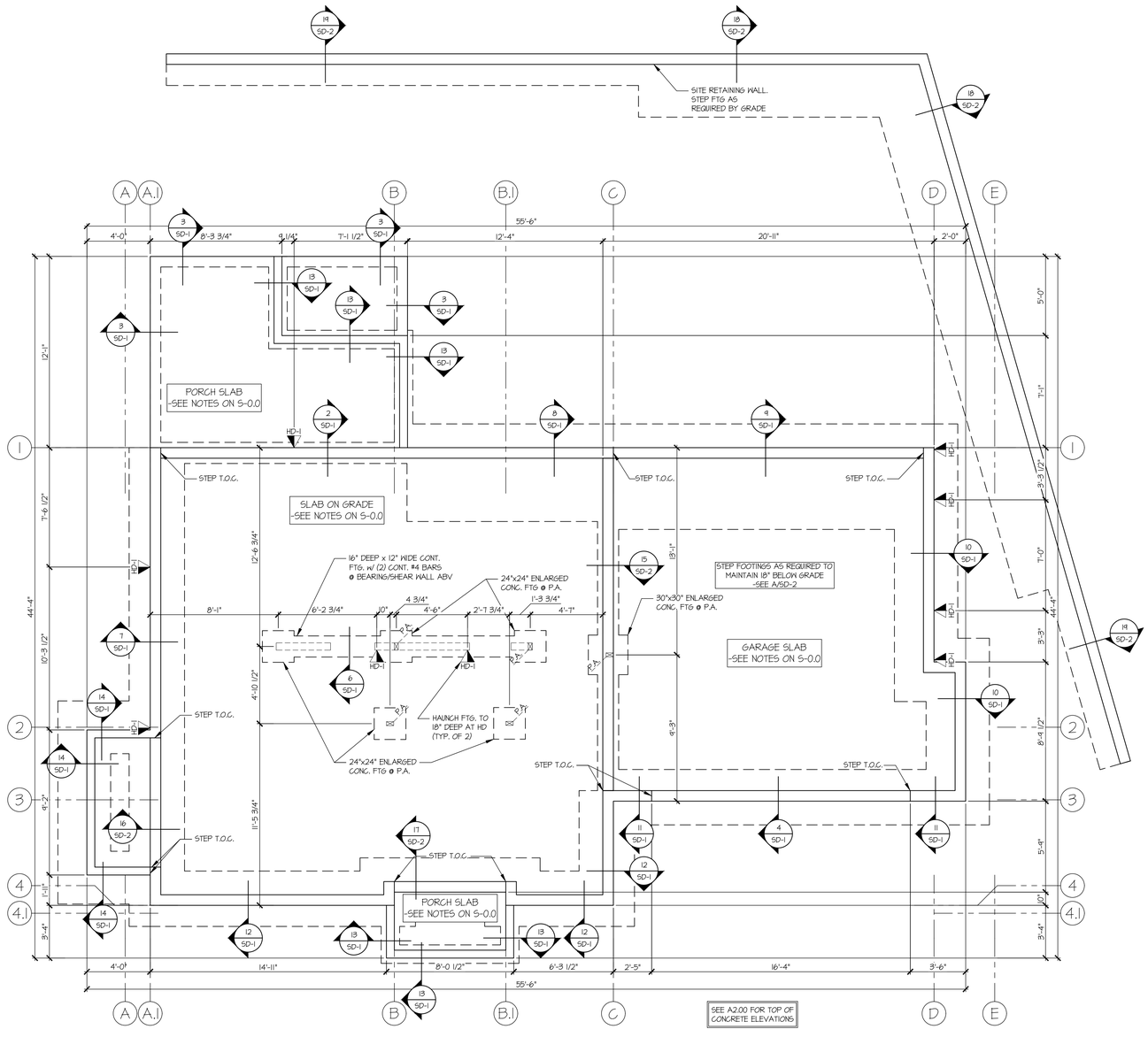
LNL BUILDS

STRUCTURAL NOTES

4450 84TH AVE SE
MERCER ISLAND, WA

sheet:

S-0.0



1 FOUNDATION PLAN

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

REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.), OR SHEARWALL ABOVE (S.W.A.)
- BEAM / HEADER
- INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING
- AREA OF OVERFRAMING
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLDOWN.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON STHD14 (R.J) HOLD-DOWN
HD-5	SIMPSON CS16 STRAP TIE (14" END LENGTH)
HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)

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LNL BUILDS

FOUNDATION PLAN

4450 84TH AVE SE
MERCER ISLAND, WA

sheet: S-1.0

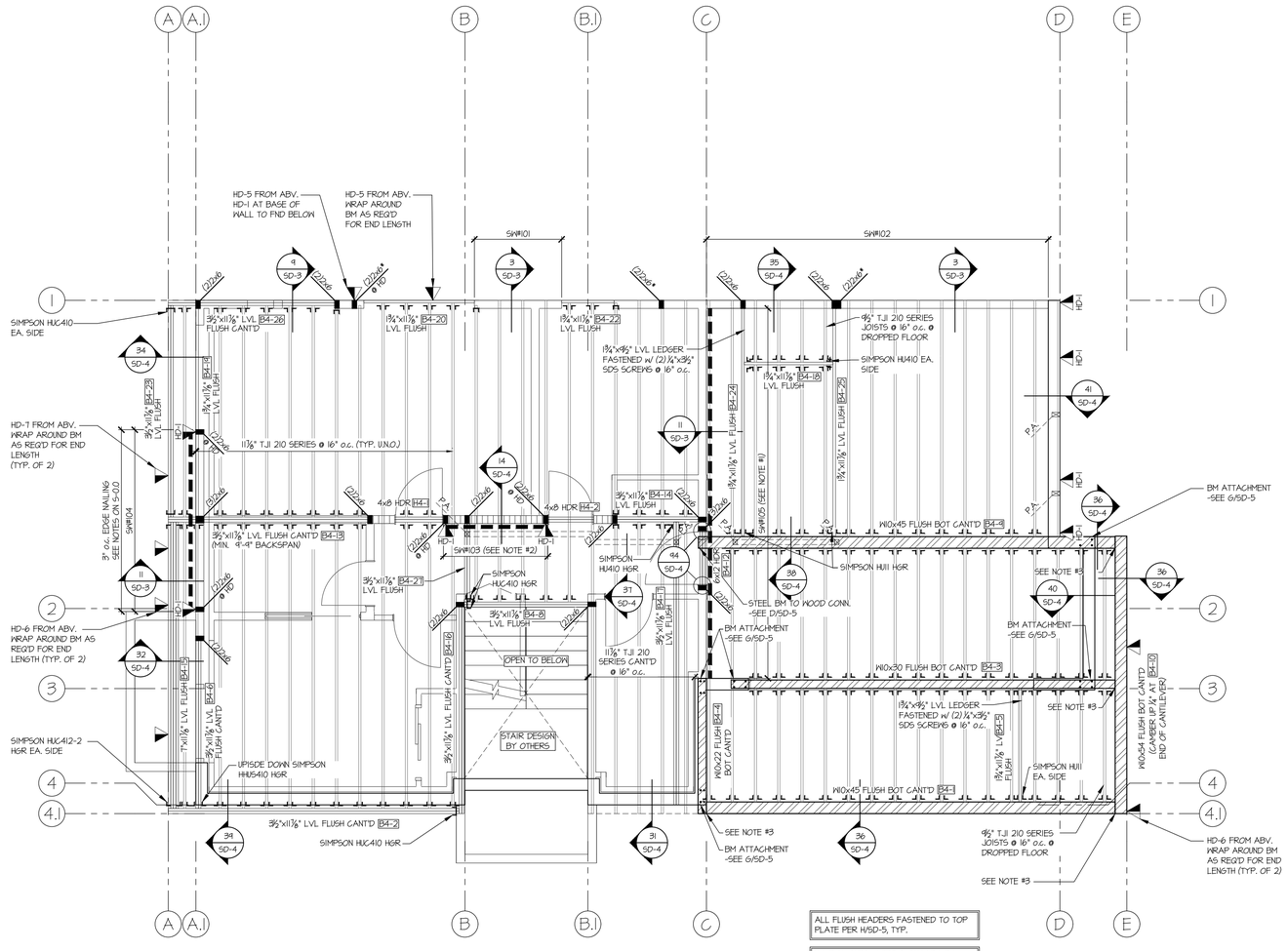
REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.), OR SHEARWALL ABOVE (S.W.A.)
- BEAM / HEADER
- INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING
- AREA OF OVERFRAMING
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLDOWN.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON STHD14 (R.I) HOLD-DOWN
HD-5	SIMPSON CS16 STRAP TIE (14" END LENGTH)
HD-6	SIMPSON MSTC40 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)
HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)



1 UPPER FLOOR FRAMING PLAN

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

ALL FLUSH HEADERS FASTENED TO TOP PLATE PER H/SD-5, TYP.

NOTE #1. SHEATH PER STANDARD EXT. WALL SPEC. (SEE NOTES ON S-0.0)

NOTE #2. SHEATH PER 3" o.c. EDGE NAILING SPEC. (SEE NOTES ON S-0.0)

NOTE #3. PROVIDE FULL DEPTH DBL. ANGLE SHEAR CONNECTION w/ (2) ¾" DIA. A325 BOLTS PER ANGLE, SEE E/SD-5

AT ALL STL BMS, FASTEN 2x PACKOUT TO WEB OF STEEL BEAMS w/ ½" DIAM. BOLTS @ 24" o.c., STAGGERED

AT ALL STL BMS, PROVIDE 2x TOP PLATE FASTENED w/ ½" DIAM. BOLTS @ 48" o.c. STAGGERED

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M&K project number: 300-25001

project mgr: NJM
drawn by: MPM
issue date: 02-06-25

REVISIONS:

date:	initial:
03-28-2025	MPM
10-14-2025	MPM

LNL BUILDS

UPPER FLOOR FRAMING PLAN

4450 84TH AVE SE
MERCER ISLAND, WA

sheet: S-2.0

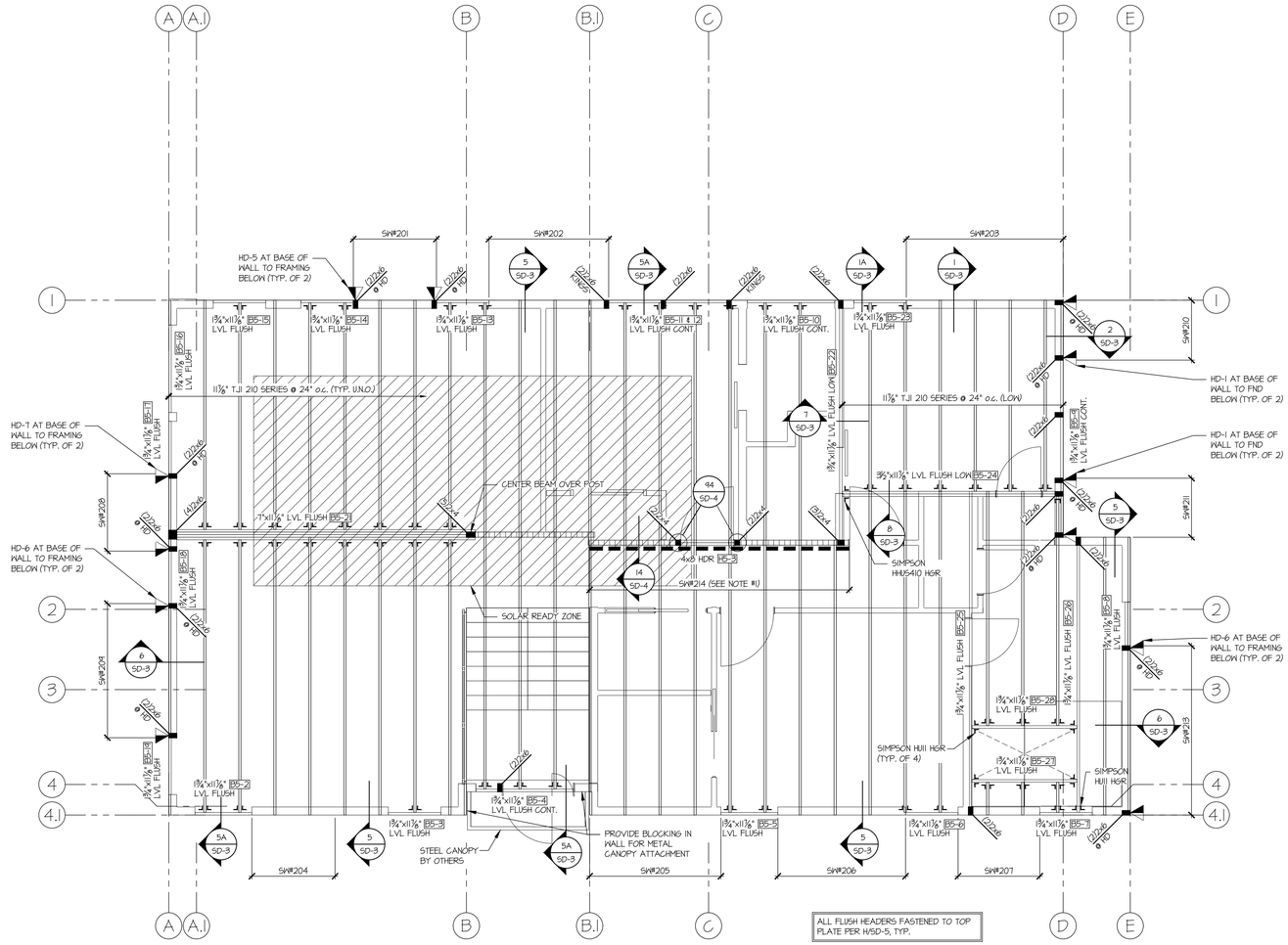
REFER TO S-0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.), OR SHEARWALL ABOVE (S.W.A.)
- BEAM / HEADER
- INTERIOR SHEAR WALL PANEL OR EXTERIOR SHEAR WALL w/ 3" o.c. EDGE NAILING
- AREA OF OVERFRAMING
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLDOWN.

HOLD-DOWN SCHEDULE

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HD-7	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.)



1 ROOF FRAMING PLAN

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

seal:

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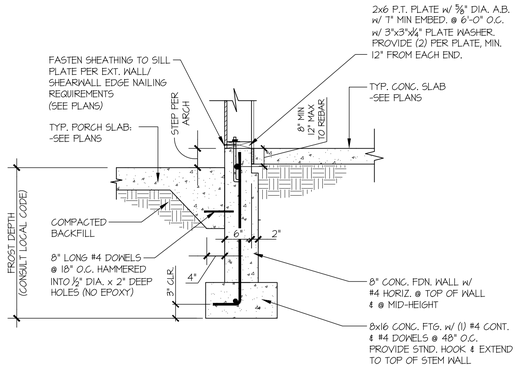
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LNL BUILDS

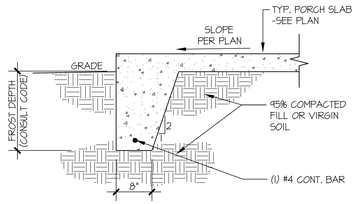
ROOF FRAMING PLAN

4450 84TH AVE SE
MERCER ISLAND, WA

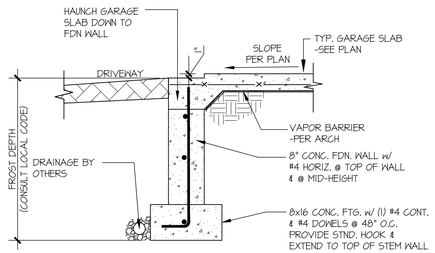
sheet: S-3.0



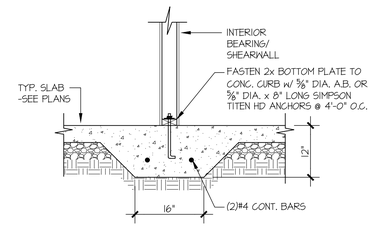
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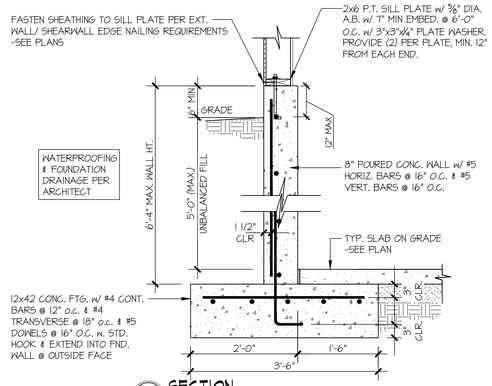
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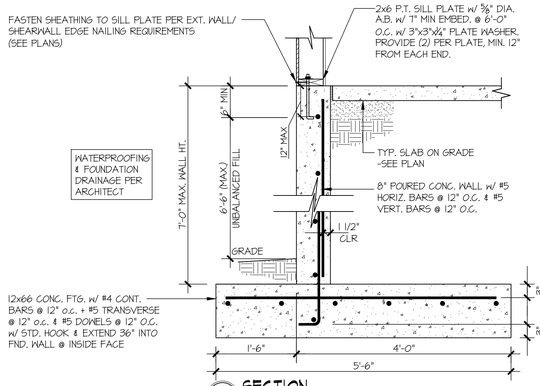
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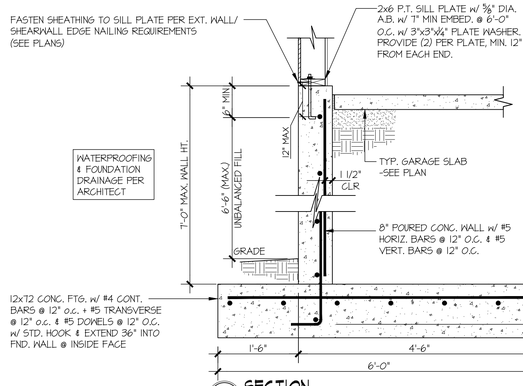
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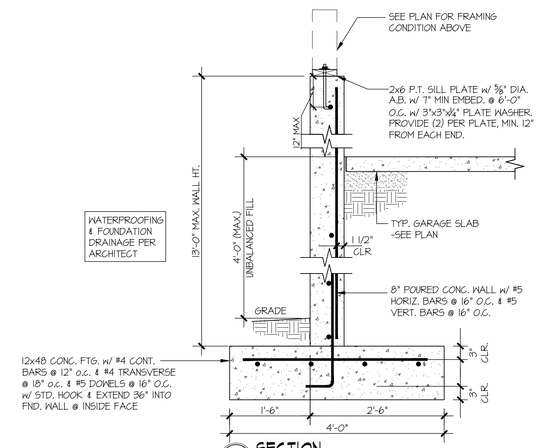
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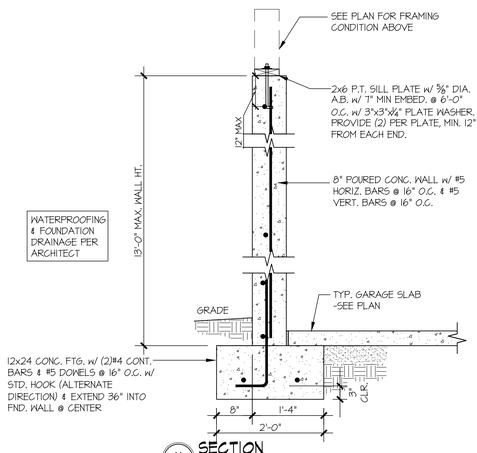
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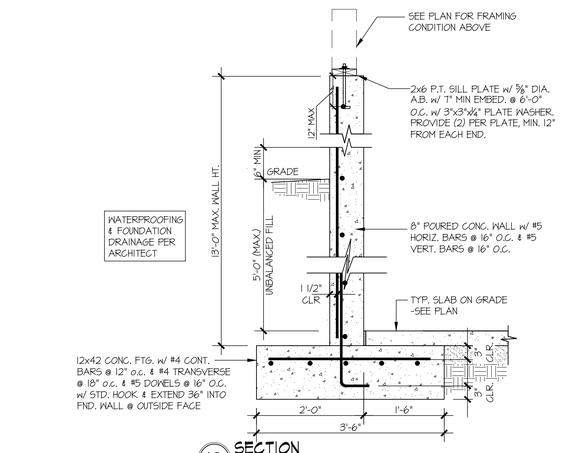
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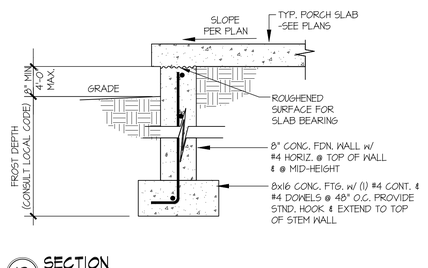
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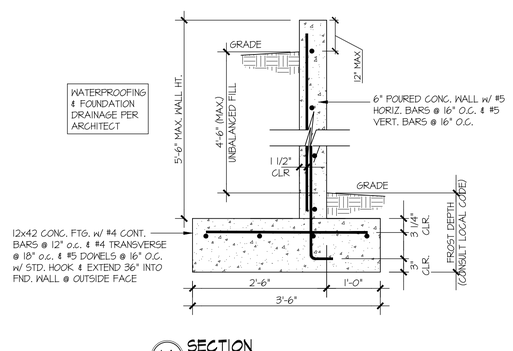
11 SECTION
SCALE: 3/4"=1'-0"



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



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



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

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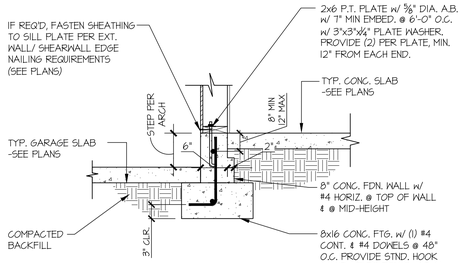
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LNL BUILDS

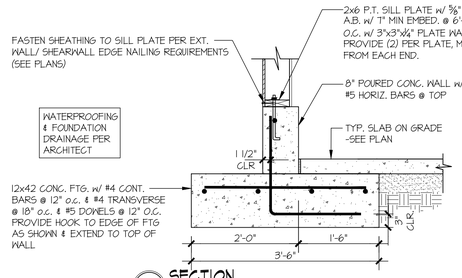
STRUCTURAL DETAILS

4450 84TH AVE SE
MERCER ISLAND, WA

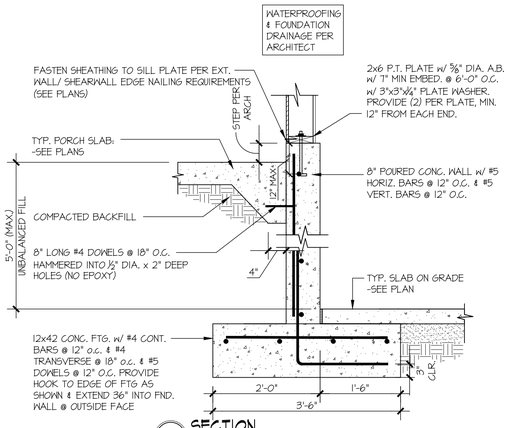
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SD-1



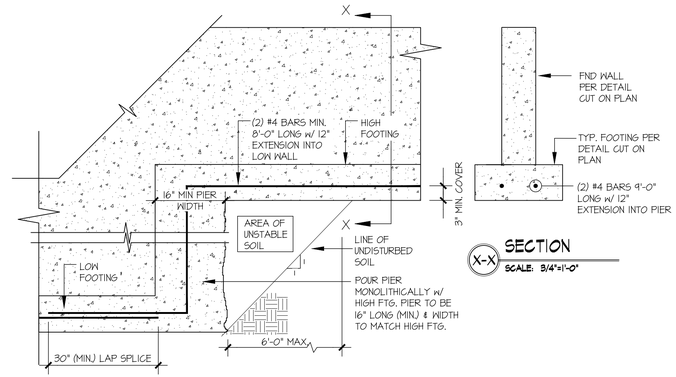
15 SECTION
SCALE: 3/4"=1'-0"



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

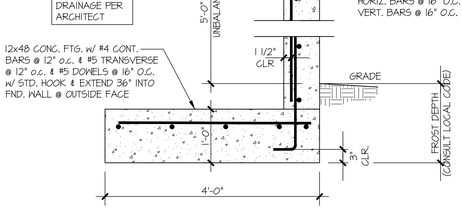


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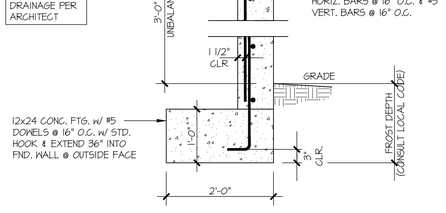


X-X SECTION
SCALE: 3/4"=1'-0"

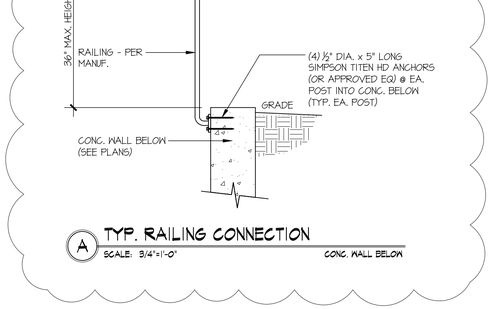
A TYPICAL STEPPED FOOTING
SCALE: 3/4"=1'-0"



18 SITE RETAINING WALL
SCALE: 3/4"=1'-0"



19 SITE RETAINING WALL
SCALE: 3/4"=1'-0"



A TYP. RAILING CONNECTION
SCALE: 3/4"=1'-0"
CONC. WALL BELOW

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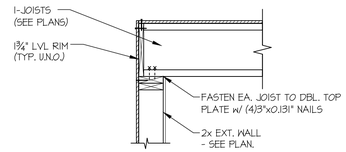
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LNL BUILDS

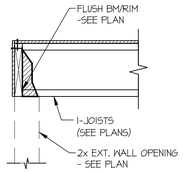
STRUCTURAL DETAILS

4450 84TH AVE SE
MERCER ISLAND, WA

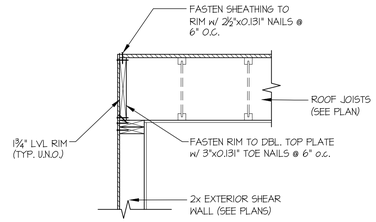
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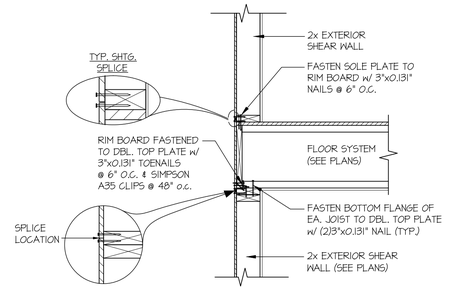
1 SECTION
SCALE: 3/4"=1'-0"



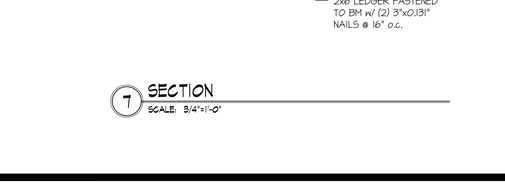
1A SECTION
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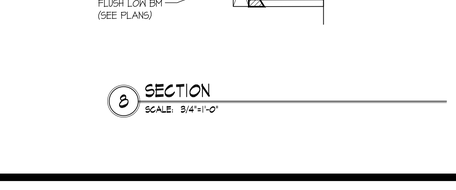
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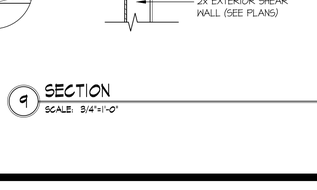
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PERPENDICULAR FRAMING



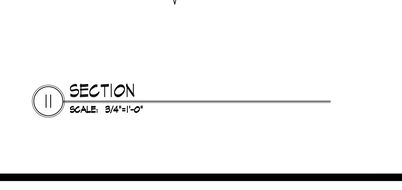
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SCALE: 3/4"=1'-0"
PARALLEL FRAMING



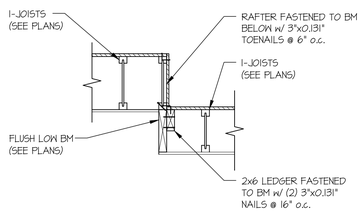
5 SECTION
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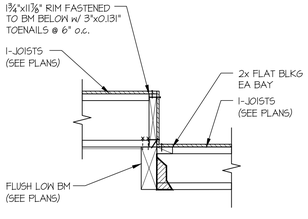
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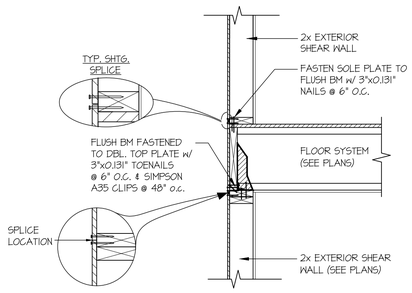
6 SECTION
SCALE: 3/4"=1'-0"



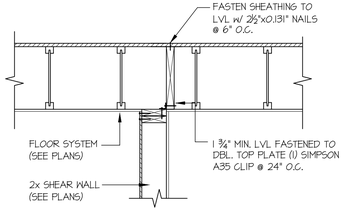
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SCALE: 3/4"=1'-0"



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

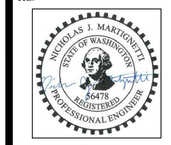


9 SECTION
SCALE: 3/4"=1'-0"



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

seal:



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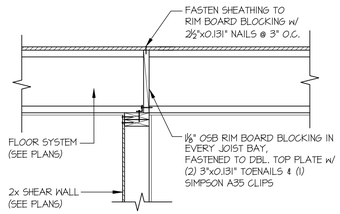
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LNL BUILDS

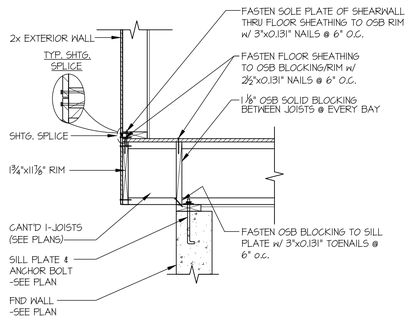
STRUCTURAL DETAILS

4450 84TH AVE SE
MERCER ISLAND, WA

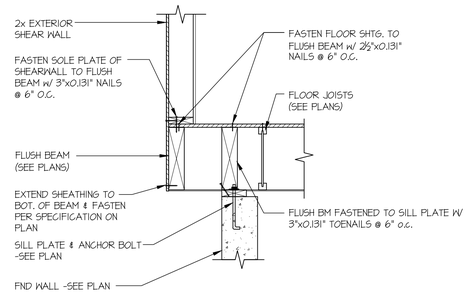
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SD-3



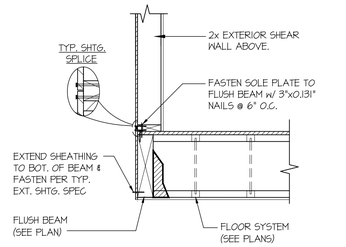
14 SECTION
SCALE: 3/4"=1'-0"



31 SECTION
SCALE: 3/4"=1'-0"
PERPENDICULAR FRAMING



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



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

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

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

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

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

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

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

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

- DETAIL SIMILAR AT BOTTOM CORNERS OF WINDOWS.
- ONLY REQUIRED WHERE SPECIFIED ON STRUCTURAL PLANS
- IF MIN LENGTH IS NOT PROVIDED RUN STRAP TO END OF WALL

EXT. WALL & INT. SHEARWALL OPENING ELEVATION
SCALE: NTS

seal:

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56478
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project mgr:	NJM
drawn by:	MPM
issue date:	02-06-25

REVISIONS:

date:	initial:
03-28-2025	MPM
10-14-2025	MPM

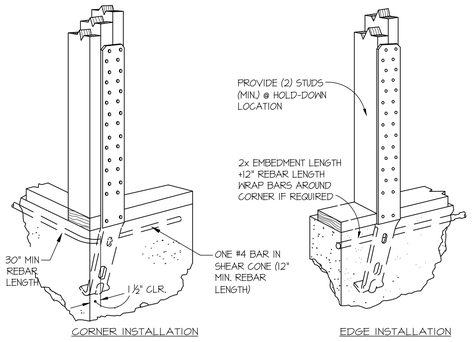
LNL BUILDS

STRUCTURAL DETAILS

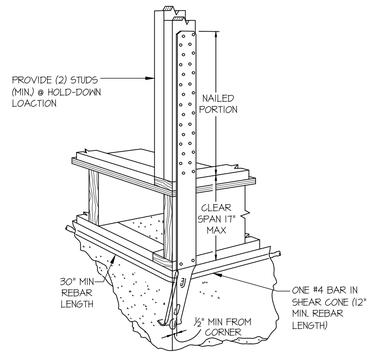
4450 84TH AVE SE
MERCER ISLAND, WA

sheet:

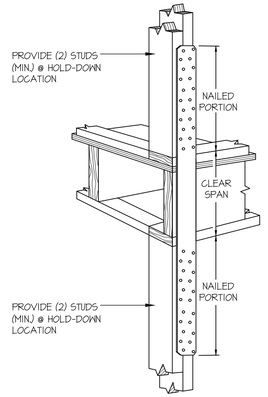
SD-4



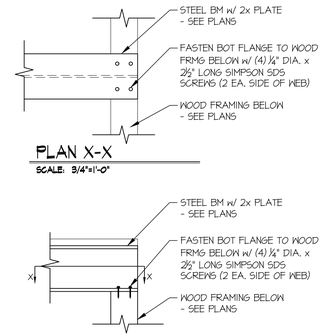
A TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE
SIMPSON STHD HD @ FOUNDATION



B TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE
SIMPSON STHD HD @ FLOOR FRAMING



C TYPICAL HOLD-DOWN INSTALLATION
NOT TO SCALE
SIMPSON STRAP HD @ FLOOR FRAMING



D STL BM TO WOOD FRMG CONNECTION
SCALE: 3/4"=1'-0"

E DOUBLE ANGLE STEEL CONNECTION
SCALE: 3/4"=1'-0"

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

H FLUSH HDR CONNECTION @ ROOF
SCALE: 3/4"=1'-0"

seal:

NICHOLAS J. MARTINOTTI
STATE OF WASHINGTON
56478
REGISTERED
PROFESSIONAL ENGINEER

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M&K project number: 300-25001

project mgr: NJM
drawn by: MPM
issue date: 02-06-25

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date:	initial:
03-28-2025	MPM
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LNL BUILDS

STRUCTURAL DETAILS

4450 84TH AVE SE
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sheet: SD-5