

BUILD STUFF

BUILD STUFF LLC
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REVISION TABLE	
Revision #	Date

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

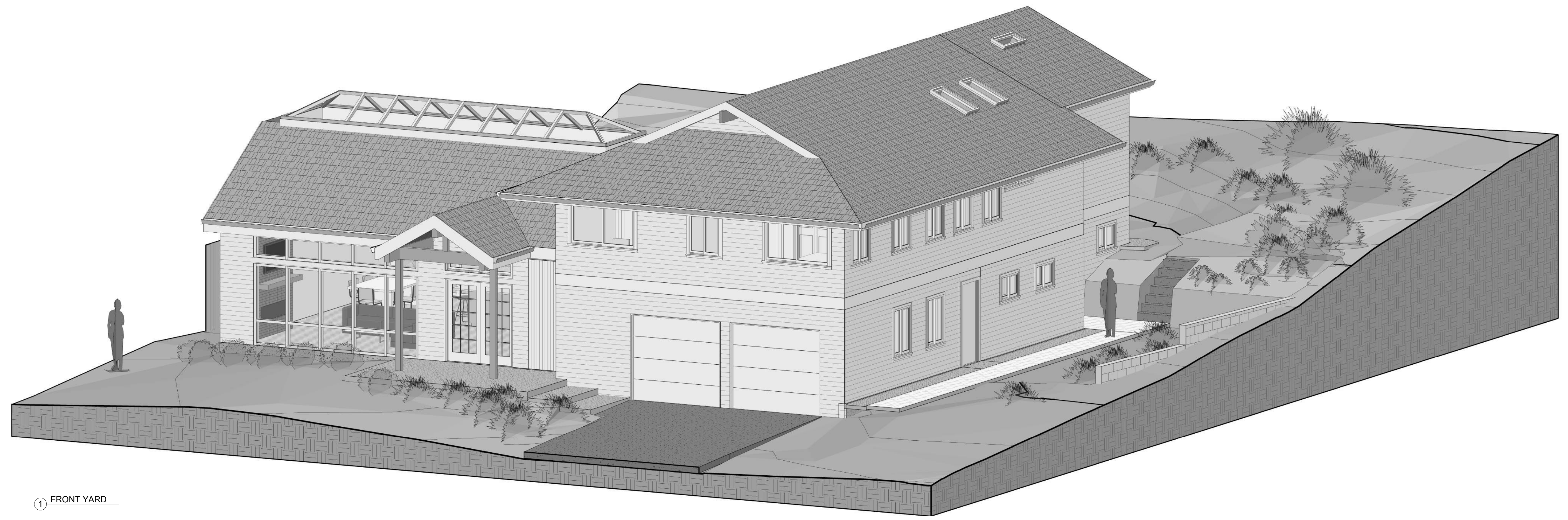
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Date: 09/19/24

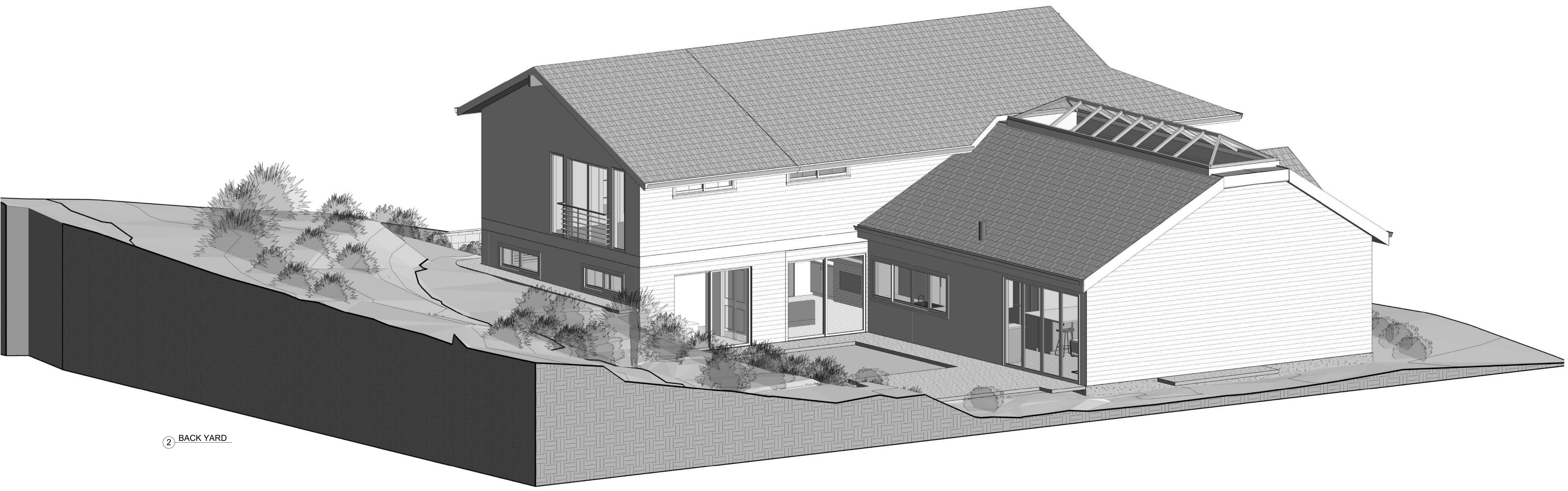
PROPOSED 3D AXON

A001

Scale:



① FRONT YARD



② BACK YARD

ABBREVIATIONS:

&	AND	M	MEN'S
<	ANGLE	MATL	MATERIAL
@	MAXIMUM	MAX	MAXIMUM
∅	AT	MC	MEDICINE CABINET
#	DIAMETER	MECH	MECHANICAL
(E)	POUND OR NUMBER	MEMB	MEMBRANE
CL	EXISTING	MFR	MANUFACTURER
	CENTERLINE	MIN	MINIMUM
		MIR	MIRROR
A.B.	ANCHOR BOLT	MISC	MISCELLANEOUS
ABV	ABOVE	MO	MANHOLE
AC	AIR CONDITIONING	MH	MASONRY OPENING
ACT	ACOUSTIC CEILING TILE	MTD	MOUNTED
ACU	AIR CONDITION UNIT	MTL	METAL
ADJ	ADJUSTABLE	MTL	MULLION
AFF	ABOVE FINISHED FLOOR		
ALT	ALTERNATE	NA	NORTH
ALUM	ALUMINUM	N	NOT APPLICABLE
APPROX	APPROXIMATELY	NIC	NOT IN CONTRACT
		NOM	NOMINAL
BLDG	BUILDING	NTS	NOT TO SCALE
BLW	BELOW	NR	NOT RATED
B.O.	BOTTOM OF		
		OA	OVERALL
CB	CATCH BASIN	OBS	OBSCURE
CBB	CEMENT BACKER BOARD	O.C.	ON CENTER
CEM	CEMENT	O.D.	OUTSIDE DIAMETER
CJ	CONTROL JOINT	OH	OVERHANG
CL	CENTERLINE	OFF	OFFICE
CLG	CEILING	OPNG	OPENING
CLR	CLEAR	OPP	OPPOSITE
CO	CLEAN OUT	PC	PRECAST CONCRETE
COL	COLUMN	PL	PLATE
CONC	CONCRETE	PLAS	PLASTER
COND	CONDITION	PLY	PLYWOOD
CONT	CONTINUOUS	P.LAM	PLASTIC LAMINATE
CPT	CARPET	PNT	PAINT
CT	CERAMIC TILE	PR	PAIR
CS	COMPOSITE SIDING	PSL	PARALLEL STRAND LUMBER
		PT	PRESSURE TREATED
		PTN	PARTITION
		QT	QUARRY TILE
DBL	DOUBLE	R, RAD	RADIUS
DEMO	DEMOLISH	RB	RESILIENT BASE
DF	DRINKING FOUNTAIN	RCP	REFLECTED CEILING PLAN
DIA	DIAMETER	RD	ROOF DRAIN
DIFF	DIFFUSER	REF	REFERENCE
DIM	DIMENSION	REFR	REFRIGERATOR
DISP	DISPENSER	REINF	REINFORCED
DN	DOWN DOOR	RELOC	RELOCATE
DRDS	DOWNSPOUT	REQ'D	REQUIRED
DTL	DETAIL	RES	RESILIENT
DW	DISHWASHER	RM	ROOM
		RO	ROUGH OPENING
E	EAST	RV	ROOF VENT
EA	EACH	RL	RAIN WATER LEADER
EF	EXHAUST FAN		
EJ	EXPANSION JOINT	S	SOUTH
EL	ELEVATION	SA	SMOKE ALARM
ELEC	ELECTRICAL	SC	SOLID CORE
ELEV	ELEVATOR	SCHED	SCHEDULE
EMERG	EMERGENCY	SECT	SECTION
EQ	EQUAL	SG	SAFETY GLASS
EXP	EXPANSION	SHT	SHEET
		SIM	SIMILAR
FBP	FIBER BOARD PANEL	SPEC	SPECIFICATION
FD	FLOOR DRAIN	SQ	SQUARE
FE	FIRE EXTINGUISHER	S.S.	STAINLESS STEEL
FF	FINISH FLOOR	STA	STATION
FH	FIRE HYDRANT	STD	STANDARD
FIN	FINISH	STL	STEEL
FLR	FLOOR	STN	STAIN
F.O.	FACE OF	STOR	STORAGE
FOIC	FURNISHED BY OWNER,	STRUCT	STRUCTURE
	INSTALL BY CONTRACTOR	SOG	SLAB ON GRADE
FOIO	FURNISHED BY OWNER	SUSP	SUSPENDED
	INSTALL BY OWNER	SYM	SYMMETRICAL
FR	FIRE RESISTANT		
FS	FLOOR SINK	T, TMP	TEMPERED
		T&G	TONGUE & GROOVE
GA	GAUGE	TEL	TELEPHONE
GALV	GALVANIZED	TER	TERRAZZO
GB	GRAB BAR	THK	THICK
GL	GLASS	T.O.	TOP OF
GLB	GLU-LAM BEAM	TS	TUBE STEEL
GND GR	GROUND GRADE GROUTED	TV	TELEVISION
GRT'D		TYP	TYPICAL
GWB	GYPSPUM WALL BOARD		
		UNO	UNLESS NOTED OTHERWISE
HB	HOSE BIBB	VCT	VINYL COMPOSITION TILE
HC	HANDICAP	VERT	VERTICAL
HCMU	HOLLOW CLAY MASONRY UNIT	VEST	VESTIBULE
HDWD	HARDWOOD	VIF	VERIFY IN FIELD
HDWE	HARDWARE	VTR	VENT THRU ROOF
HT	HEIGHT		
HM	HOLLOW METAL	W	WEST
HR	HOUR	W/	WITH
HORIZ	HORIZONTAL	WC	WATER CLOSET
I.D.	INSIDE DIAMETER	WD	WOOD
INSUL	INSULATION	WF	WIDE FLANGE
INT	INTERIOR	W/O	WITHOUT
JAN	JANITOR	WOM	WALK OFF MAT
JT	JOINT	WM	WOMEN'S
KIT	KITCHEN	WP	WATERPROOFING
LAB	LABORATORY	WR	WATER RESISTANT
LAM	LAMINATE	WSCT	WAINSCOT
LAV	LAVATORY	WT	WEIGHT
LKR	LOCKER		
LOC	LOCATE		
LT	LIGHT		
LVL	LAMINATED VENEER LUMBER		

GENERAL CODE REQUIREMENTS:

CODES:

ALL WORK SHALL COMPLY WITH THE CURRENT CODES:

-2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
 -2018 INTERNATIONAL MECHANICAL CODE (IMC)
 -2018 UNIFORM PLUMBING CODE (UPC)
 -2020 WASHINGTON CITIES ELECTRICAL CODE (WCEC)
 -2018 INTERNATIONAL FIRE CODE (IFC)
 -2018 WASHINGTON STATE ENERGY CODE (WSEC)
 -ALL OTHER APPLICABLE CODES WITH LOCAL AMENDMENTS

PRESCRIPTIVE INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT: (TABLES R402.1.1 AND 402.1.3 AND 40353 FOR PIPING) CLIMATE ZONE 5 AND MARINE 4

FENESTRATION U-FACTOR----- .30
 WINDOWS VERTICAL U-FACTOR----- .30
 DOORS SOLID U-FACTOR----- .30
 SKYLIGHTS U-FACTOR----- .50

INSULATION VALUES

CEILING W/ ATTICS----- R49
 CEILING VAULTED - SCISSOR TRUSSES----- R38
 CEILING VAULTED - SINGLE RAFTER----- R38
 WALLS ABOVE GRADE (2X6)----- R21 INT
 WALLS BELOW GRADE----- 10/15/21 INT + 5TB
 FLOORS----- R30
 SLAB ON GRADE----- R10, 2FT PERIMETER
 EXT. WALL HEADERS----- R10 WHERE HEADERS ARE NOT FULL WIDTH

MECHANICAL PIPE INSULATION----- R-6 (WRAPPED)
 HOT WATER PIPE (ALL LOCATIONS)----- R-3 (OK DISCONT. THROUGH STRUCT. MEMBERS (PER 403.5.3)

ALL FENESTRATION TO BE NFRC-CERTIFIED.
 FOR SINGLE RAFTER OR JOIST-VAULTED CEILINGS, THE INSULATION MAY BE REDUCED TO R-38 IF THE FULL INSULATION DEPTH EXTENDS OVER THE TOP PLATE OF THE EXTERIOR WALL.

MODIFIED PRESCRIPTIVE VALUES AT ADDITION PER CREDIT OPTION (1.3) VERTICAL FENESTRATION = U-FACTOR: (.28)

FLOORS - R-38
 SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB BELOW GRADE
 SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB

ENERGY CODE REQUIREMENTS (PER 2018 WSEC RESIDENTIAL PROVISIONS) PRESCRIPTIVE REQUIREMENTS (CREDIT OPT. PER COVERSHEET A000):

401.3 A PERMANENT ENERGY COMPLIANCE CERTIFICATE SHALL BE POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED, A UTILITY ROOM, OR AN APPROVED LOCATION INSIDE THE BUILDING AND INCLUDING THE FOLLOWING: PREDOMINATE R-VALUES, U-VALUE, OR FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING, AND EFFICIENCIES OF HTG/COOLING/WATER HEATING EQUIPMENT.

AIR LEAKAGE TESTING PER (WSEC R402.4.1.2) THE DWELLING SHALL BE TESTED AND VERIFIED AIR LEAKAGE RATE OF NOT EXCEEDING 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 0.2" w.g. (50 PASCALS). JOINTS AND SEAMS SHALL COMPLY WITH (IRC SECTION M1601.4). PROVIDE A WRITTEN REPORT OF THE TEST RESULTS, SIGNED BY THE TESTING PARTY, TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.

SOILS & EXCAVATION WORK:

REFER TO GEOTECH REPORT DATED 08.22.23 FOR GEO-HAZARD MITIGATION STRATEGIES AND RECOMMENDATIONS ON EXCAVATION, AND FOUNDATION BACKFILL.

TREE REQUIREMENTS:

REFER TO ARBORIST REPORT DATED 11.10.23 FOR TREE PROTECTION PLAN, TREE INVENTORY, AND REPLACEMENT REQUIREMENTS. TREE RETENTION AND REPLACEMENT PLANS PER SHEET L102 & L103

HAZMAT:

HAZARDOUS MATERIAL REMOVAL & DISPOSAL: BEFORE COMMENCING ANY DEMOLITION OR OTHER WORK, COMPLY WITH DOCUMENTS PREPARED BY THE OWNER'S HAZARDOUS MATERIALS CONSULTANT. APPLIES TO DEMOLITION, DISPOSAL AND CONSTRUCTION OPERATIONS ASSOCIATED WITH THE PROJECT.

DEMOLITION:

ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

PLUMBING | MECHANICAL | ELECTRICAL INSTALLATION

ALL PLUMBING, MECHANICAL, AND ELECTRICAL PERMITS SHALL BE OBTAINED SEPARATELY FROM THE BUILDING PERMIT AS NECESSARY AND SHALL COORDINATE REQUIRED INSPECTIONS.

FIRE AND DRAFT STOPS (PER IRC R302.11 AND R302.12)

FIREBLOCKING PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS AND TO FORM A FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET. FIRE BLOCKS SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS, INCLUDING STAIRS, TUBS, SHOWERS, FIREPLACES, BALLOON FRAMED WALLS, FURRED WALLS, VOIDS, SOFFITS, ETC.

NATURAL LIGHT (PER IRC R303):

ALL HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF MINIMUM 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. EXCEPT, IN ROOMS WHERE ARTIFICIAL LIGHT IS PROVIDED WITH AN AVERAGE ILLUMINATION OF 6 FOOTCANDLES (65 LUX) OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL.

GENERAL CODE REQUIREMENTS:

BUILDING SEPARATION REQUIREMENTS: (PER IRC R302.1)

ONE HOUR WALL IS REQUIRED IF LESS THAN 5' FROM THE PROPERTY LINE. NO OPENINGS ALLOWED IN WALLS LESS THAN 3' FROM PROPERTY LINE. EAVES CAN EXTEND NO CLOSER THAN 2' TO PROPERTY LINE. WHERE EAVES EXTEND AT 5' OR LESS TO PROPERTY LINE FIRE-BLOCKING SHALL BE PROVIDED FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING. GABLES ENDING AT 5' OR LESS TO PROPERTY LINE SHALL NOT HAVE GABLE VENT OPENINGS INSTALLED. EAVES/SOFFIT VENTS NOT ALLOWED AT 5' OR LESS FROM PROPERTY LINE.

GARAGE / HOUSE REQUIREMENTS (PER IRC R302.5 AND TABLE R302.6)

1/2" REGULAR GYP BOARD SHALL BE INSTALLED ON THE GARAGE SIDE AT WALLS SEPERATING GARAGE AND DWELLING. GARAGE CEILINGS WITH DWELLING ABOVE REQUIRES INSTALLATION OF 5/8" "TYPE X" GYPSUM BOARD. SUPPORTING STRUCTURE REQ. 1/2" REGULAR GYP BOARD.DOOR (PER IRC R302.5.1) 1-3/8" THICK SOLID CORE OR 20 MIN. DOOR SHALL BE INSTALLED BETWEEN GARAGE AND DWELLING

CEILING HEIGHT (PER IRC R305):

HABITABLE SPACE, HALLWAYS AND BASEMENTS CONTAINING THESE SPACES SHALL HAVE A MINIMUM CEILING HEIGHT OF 7 FEET. BATHROOMS, TOILET ROOMS AND LAUNDRY ROOMS SHALL HAVE A MIN CEILING HEIGHT OF 6 FEET 8 INCHES. EXCEPTIONS: ROOMS WITH SLOPED CEILINGS, FLOOR AREA OF THE ROOM TO HAVE A MIN CEILING HEIGHT OF 5 FEET AND MIN 50 PERCENT OF THE FLOOR AREA SHALL HAVE A MIN CEILING HEIGHT OF 7 FEET.

BATH FIXTURE SPACE REQUIRED (PER IRC R307.1)

FIXTURES SHALL BE SPACED IN ACCORDANCE WITH FIGURE R307.1, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE PLUMBING CODE SECTION 402.5.

BATHTUB AND SHOWER SPACES (PER IRC R307.2)

TUB/SHOWER SURROUND WALLS TO HAVE FIBER-CEMENT BACKER BOARD AND FINISHED WITH A SMOOTH NON-ABSORBENT SURFACE TO A MINIMUM HEIGHT OF 72" ABOVE THE FLOOR.

SAFETY GLAZING (PER IRC R308.1)

ALL SIDE-LITES, SLIDING GLASS DOORS, AND TUB/SHOWER ENCLOSURE IN WET AREAS TO COMPLY WITH SAFETY GLAZING REQUIREMENTS.

GLAZING AND WET SURFACES (PER IRC R308.4.5)

GLAZING IN WALLS, ENCLOSURES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND SIMILAR, WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE CONSIDERED A HAZARDOUS LOCATION. APPLIES TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

EMERGENCY ESCAPE AND RESCUE OPENINGS (PER IRC R310)

REQ'D IN BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE A MINIMUM OF ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. OPENING MUST BE OPERABLE EXTERIOR WINDOW, DOOR OR SIMILAR. EGRESS WINDOW: MINIMUM NET CLEAR OPENING OF 5.7 SF SQFT. MIN NET CLEAR HEIGHT SHALL BE 24". MIN NET CLEAR WIDTH SHALL BE 20". MAX FINISHED SILL HEIGHT ABOVE FLOOR SHALL BE 44". WHERE THE SILL OF A WINDOW IS GREATER THAN 72" ABOVE FINISHED GRADE, MINIMUM SILL HEIGHT ABOVE FINISH FLOOR SHALL BE 24" OR BE PROVIDED WITH A WINDOW FALL PREVENTION DEVICE (PER IRC R312.2). DOORS SHALL BE A SIDE-HINGED DOOR OR A SLIDER. WINDOW WELLS AND AREA WELLS FOR DOORS REQUIRED WHEN THE OPENING IS BELOW THE ADJACENT GRADE.

EGRESS DOORS (PER IRC R311.2)

MINIMUM ONE EGRESS DOOR PROVIDED FOR EACH DWELLING UNIT. SHALL BE SIDE-HINGED, AND PROVIDE A CLEAR WIDTH OF MIN 32 INCHES. MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES (1.57 RAD). CLEAR HEIGHT OF DOOR OPENING SHALL BE MIN 78 INCHES MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP. EGRESS DOORS SHALL BE READILY OPENABLE FROM INSIDE THE DWELLING WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

STAIRWAYS (PER IRC R311.7)

HEADROOM IN STAIRWAYS SHALL BE MINIMUM 6 FEET 8 INCHES. MIN WIDTH IS 36". MAX RISER IS 7-3/4". MIN TREAD RUN IS 10". MIN HEAD CLEARANCE IS 6'-8". HANDRAIL SHALL BE BETWEEN 34" TO 38" ABOVE TREAD NOSING. NOSING AT TREADS, LANDINGS, AND FLOORS OF STAIRWAYS PER R311.7.5.3 TYPE I. HANDRAILS: CIRCULAR HANDRAIL W/ DIAMETER OF MIN 1 1/4 INCHES AND MAX 2 INCHES. NON CIRCULAR HANDRAIL W/ PERIMETER OF MIN 4 INCHES AND MAX 6 1/4 INCHES, AND CROSS SECTION OF MAX 2 1/4 INCHES. EDGE RADIUS OF MIN 0.01 INCH.

GUARDS (PER IRC R312.1)

GUARDS PROVIDED FOR OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS AND LANDINGS. LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. REQUIRED HEIGHT: MAX 36 INCHES AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE NOSINGS. MAX OPENINGS: FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER. MAX OPENINGS AT STAIRS: THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF STAIR, FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER. GUARDS ON THE OPEN SIDE OF STAIRS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 43/8 INCHES IN DIAMETER.

GYPSPUM WALL BOARD (PER IRC R702.3)

PER TABLE R702.3.5 MINIMUM THICKNESS AND APPLICATION OF GYPSPUM BOARD AND GYPSPUM PANEL PRODUCTS. SUPPORTS AND FASTENERS SHALL COMPLY WITH TABLE R702.3.5. SHALL BE APPLIED AT RIGHT ANGLES OR PARALLEL TO FRAMING MEMBERS. INTERIOR GYPSPUM BOARD SHALL NOT BE INSTALLED WHERE IT IS DIRECTLY EXPOSED TO THE WEATHER OR TO WATER.

FACTORY BUILT FIREPLACES (PER IMC SECTION 903)

SHALL BE LISTED, LABELED AND INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. SHALL BE TESTED IN ACCORDANCE WITH UL 127. OUTSIDE COMBUSTION AIR REQ'D. (MIN 6 SQ. IN.) DUCTED DIRECTLY TO THE FIREBOX W/OPERABLE OUTSIDE DAMPER, TIGHTLY FITTING FLUE DAMPER, AND TIGHT FITTING GLASS OR METAL DOORS OR FLUE DRAFT INDUCTION FAN.

GENERAL CODE REQUIREMENTS:

NFPA 72 MONITORED FIRE ALARM SYSTEM:

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

CARBON MONOXIDE ALARM & COMBINED ALARMS (PER IRC R315):

CO ALARM SHALL MEET UL LISTING 2034. COMBINATION CO-SMOKE ALARM SHALL ALSO MEET UL 217. TO BE POWERED BY INTERCONNECTED BUILDING WIRING AND PROVIDED W/ BATTERY BACKUP AND INSTALLED PER MFG LISTING. TO BE PROVIDED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

CRAWL SPACE VENTILATION (PER IRC R408)

MINIMUM NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 S.F. FOR EACH 300 S.F. OF UNDER FLOOR AREA. VENTILATION OPENINGS SHALL PROVIDE INSECT AND CORROSION PROTECTION WHERE THE LEAST DIM OF THE COVERING SHALL NOT EXCEED 1/4". ONE SUCH VENTILATING OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING. VENTILATION OPENINGS NOT REQ'D GIVEN, AN APPROVED GLASS | VAPOR RETARDER MATERIAL SHALL BE INSTALLED OVER THE GROUND SURFACE AND CONTINUOUSLY OPERATED MECHANICAL EXHAUST VENTILATION IS PROVIDED AT A RATE EQUAL TO 1 CUBIC FOOT PER MINUTE FOR EACH 50 SQUARE FEET OF CRAWLSPACE FLOOR AREA.

ROOF VENTILATION (PER IRC R806)

ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES: (PER R806.1)

OPENINGS DIMENSION MIN 1/16 INCH AND MAX 1/4 INCH. OPENINGS LARGER THAN 1/4 INCH PROVIDED WITH CORROSION-RESISTANT WIRE CLOTH SCREENING, HARDWARE CLOTH, PERFORATED VINYL OR SIMILAR WITH MIN OPENINGS DIMENSION OF 1/16 INCH MINIMUM AND 1/4 INCH MAX. VENTILATION OPENINGS SHALL OPEN DIRECTLY TO THE OUTSIDE AIR AND BE PROTECTED TO PREVENT THE ENTRY OF CREATURES. MIN NET FREE VENTILATION AREA SHALL BE 1/300 PROVIDED: NOT LESS THAN 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQ'D VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. SHALL BE LOCATED NOT MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, BALANCE OF REQ'D VENTILATION IN THE BOTTOM ONE-THIRD OF THE ATTIC SPACE. WHERE THE LOCATION OF WALL OR ROOF FRAMING MEMBERS CONFLICTS WITH THE INSTALLATION OF UPPER VENTILATORS, INSTALLATION MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE. EAVE BAFFLES PROVIDING MIN 1" CLEARANCE SHALL BE PROVIDED FOR FREE FLOW OF AIR BETWEEN THE INSULATION AND THE ROOF SHEATHING AND THE LOCATION OF THE VENT. CROSS VENTILATION REQ'D.

UNVENTED ENCLOSED ROOF FRAMING ASSEMBLIES: (PER R806.5)

IN CLIMATE ZONES 5, 6, 7 AND 8, ANY AIR-IMPERMEABLE INSULATION SHALL BE A CLASS II VAPOR RETARDER, OR SHALL HAVE A CLASS II VAPOR RETARDER COATING OR COVERING IN DIRECT CONTACT WITH THE UNDERSIDE OF THE INSULATION.

ATTIC ACCESS (PER IRC R807)

ATTIC AREAS WITH A VERTICAL HEIGHT OF 30" OR GREATER OVER AN AREA OF 30 S.F. MIN. MUST HAVE A MINIMUM ATTIC ACCESS OPENING OF 22" X 30"

EXHAUST SYSTEMS - OUTDOOR DISCHARGE (PER M1501.1)

AIR REMOVED BY EVERY MECHANICAL EXHAUST SYSTEM SHALL BE DISCHARGED TO THE OUTDOORS IN ACCORDANCE WITH SECTION M1504.3. AIR SHALL NOT BE EXHAUSTED INTO AN ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE.

M1504.3 EXHAUST OPENINGS:

AIR EXHAUST OPENINGS TERMINATION: NOT LESS THAN 3 FEET FROM PROPERTY LINES. NOT LESS THAN 3 FEET FROM GRAVITY AIR INTAKE OPENINGS, OPERABLE WINDOWS AND DOORS.

NOT LESS THAN 10 FEET FROM MECHANICAL AIR INTAKE OPENINGS UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER'S INSTRUCTIONS

M1505.4 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM:

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4.

M1505.4.3 MECHANICAL VENTILATION RATE

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(1) OR EQUATION 15-1.

M1505.4.4 LOCAL EXHAUST RATES

LOCAL EXHAUST SYSTEMS SHALL HAVE THE MINIMUM AIRFLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1505.4.4(1). LOCAL EXHAUST FANS INCLUDED IN THE WHOLE-HOUSE VENTILATION SYSTEM, IN ACCORDANCE WITH SECTION 1505.4.1, THE EXHAUST FAN SHALL BE CONTROLLED TO OPERATE AS SPECIFIED IN SECTION M1505.4.2.PRESCRIPTIVE EXHAUST DUCT SIZING PER TABLE M1505.4.4(2)

OWNER/CONTRACTOR NOTES:

- CONTRACTOR / OWNER TO INSPECT SITE PRIOR TO STARTING CONSTRUCTION AND SHALL REPORT ANY DISCREPANCY TO THE DESIGNER. ANY QUESTIONS SHOULD BE DIRECTED TO THE DESIGNER TO CROSS REFERENCE WITH CITY APPROVED PLANS FOR ANY CHANGES AND/ OR ADDITIONAL REQUIREMENTS BY CITY.
- ALL WORK SHALL COMPLY WITH THE STATE AND LOCAL ORDINANCES AND SHALL BE DONE TO THE HIGHEST STANDARDS OF CRAFTSMANSHIP.
- NO DEVIATIONS FROM THESE DOCUMENTS SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM DESIGNER. ANY CHANGES CAN AFFECT THE STRUCTURAL INTEGRITY AND CODE COMPLIANCE.
- DIMENSIONS. DIMENSIONS THAT ARE NOT STATED AS "MAXIMUM" OR "MINIMUM" ARE ABSOLUTE. ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL TOLERANCES. VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO CONSTRUCTION. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED LENGTHS AND HEIGHTS IN ALL CASES. DO NOT SCALE DRAWINGS.
- IN THE EVENT OF DISCREPANCIES OR CONTRADICTORY INFORMATION IN THE DRAWINGS, NOTES, OR SPECIFICATIONS, THE CONTRACTOR/OWNER TO NOTIFY THE DESIGNER TO OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

PROJECT CONTACTS:

PROJECT OWNER / CONTRACTOR:

RODOLFO HERNANDEZ MCINTYRE
 206-291-8329
 SHANNON HERNANDEZ MCINTYRE
 206-240-9332
 7520 MERCER TERRACE DR
 MERCER ISLAND WA, 98040

DESIGNER:

BUILD STUFF LLC
 31212 1ST PL SW
 FEDERAL WAY, WA 98023
 CONTACT: DIEGO PINEDA
 (206) 771-5014

SURVEYOR:

TERRANE LLC
 10801

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

LOT 10, BLOCK 1, MERCER TERRACE, ACCORDING TO THE PLAT RECORDED IN VOLUME 72 OF PLATS, PAGE 86, IN KING COUNTY, WASHINGTON.

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

ACCEPTED THE BEARING OF N 32°22'39" W, BETWEEN MONUMENTS FOUND ALONG THE CENTERLINE OF MERCER TERRACE DR, PER REFERENCE NO. 1.

REFERENCES

R1. MERCER TERRACE, VOL. 72 OF PLATS, PG. 86, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD 88 PER CITY OF MERCER ISLAND BENCHMARK NO. 2332 DESCRIPTION: 3/4" COPPER PLUG IN CONC IN CASE LOCATION: MERCER TERRACE DR, OPP HSE #7449 ELEVATION: 250.006'

SURVEYOR'S NOTES

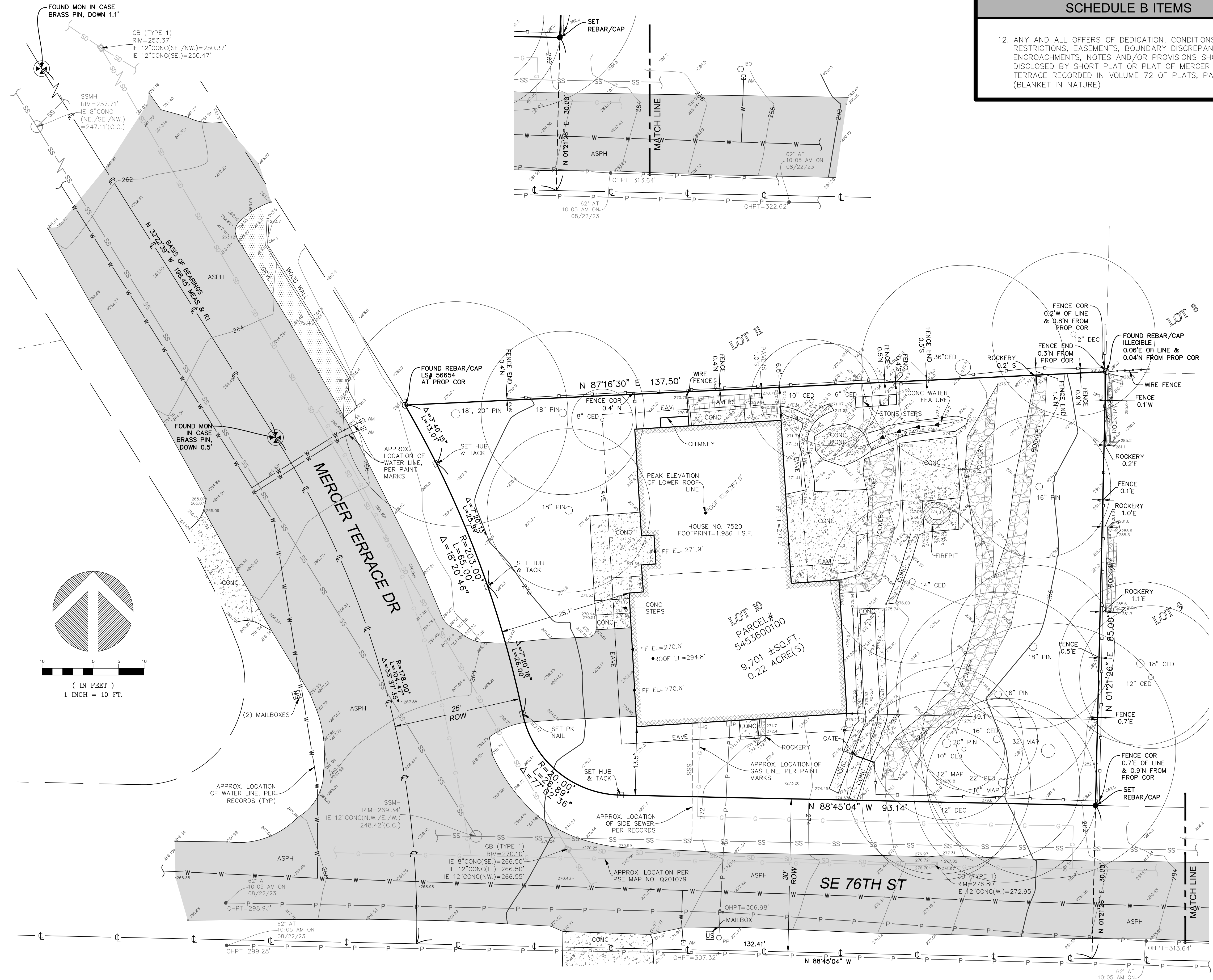
1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN AUGUST OF 2023. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 545360-0100
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 9,701 ±S.F. (0.22 ACRES)
6. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM FIRST AMERICAN TITLE INSURANCE COMPANY'S "COMMITMENT", ORDER NO. 4209-4091530, DATED JULY 31, 2023. IN PREPARING THIS MAP, TERRANE, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS TERRANE, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED "COMMITMENT". TERRANE, INC. HAS RELIED WHOLLY ON FIRST AMERICAN TITLE INSURANCE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND TERRANE, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE OF THE SIDING UNLESS OTHERWISE NOTED.
8. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 3-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

LEGEND

	ASPHALT SURFACE		OHPT TRANSMISSION ELEVATION
	BLOW OFF		PAVER SURFACE
	BUILDING		POWER METER
	CENTERLINE ROW		POWER (OVERHEAD)
	CONCRETE SURFACE		POWER POLE
	DITCH (FLOWLINE)		REBAR & CAP (SET)
	FENCE LINE (CHAIN LINK)		REBAR AS NOTED (FOUND)
	FENCE LINE (WOOD)		RETAINING WALL
	GAS LINE		ROCKERY
	GAS METER		SEWER LINE
	GRAVEL SURFACE		SEWER MANHOLE
	INLET (TYPE 1)		STORM DRAIN LINE
	LINESTAKES (AS NOTED)		TREE (AS NOTED)
	MAILBOX (RESIDENTIAL)		WATER LINE
	MAILBOX (US POSTAL)		WATER METER
	MONUMENT (IN CASE, FOUND)		

VICINITY MAP

N.T.S.



STEEP SLOPE/BUFFER DISCLAIMER:
 THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

SCHEDULE B ITEMS

12. ANY AND ALL OFFERS OF DEDICATION, CONDITIONS, RESTRICTIONS, EASEMENTS, BOUNDARY DISCREPANCIES OR ENCROACHMENTS, NOTES AND/OR PROVISIONS SHOWN OR DISCLOSED BY SHORT PLAT OR PLAT OF MERCER TERRACE RECORDED IN VOLUME 72 OF PLATS, PAGE(S) 86. (BLANKET IN NATURE)

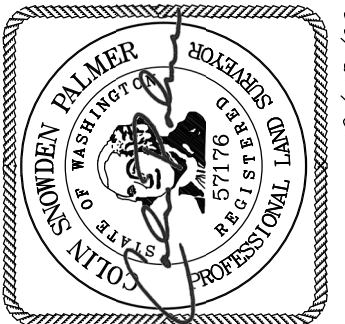
INDEXING INFORMATION	
	NW 1/4 SE 1/4
	SECTION: 25
	TOWNSHIP: 24N
	RANGE: 04E, W.M.
	COUNTY: KING

TOPOGRAPHIC & BOUNDARY SURVEY

PARCEL NO. 5453600100

HERNANDEZ RESIDENCE

7520 MERCER TERRACE DR
 MERCER ISLAND, WA 98040



TERRANE

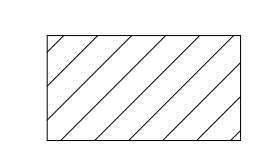
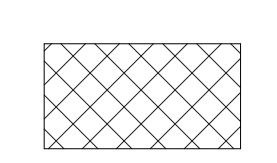
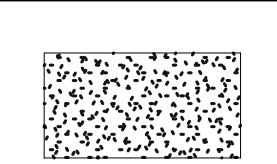
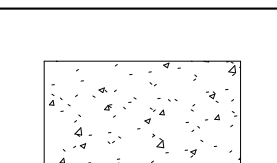
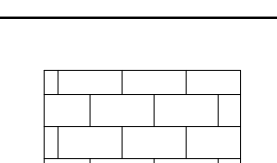
10801 Main Street, Suite 102
 Bellevue, WA 98004
 p: 425-458-4488 | e: info@terrane.net

JOB NUMBER:	231287
DATE:	09/01/23
DRAFTED BY:	IDV / RPM
CHECKED BY:	CSP / TLR
SCALE:	1" = 10'

REVISION HISTORY	

We are the measure | terrane.net

SITE PLAN LEGEND

	EXISTING FOOTPRINT
	ADDITION FOOTPRINT
	GRAVEL / DRAIN ROCK
	CONCRETE HARDSCAPE
	PAVERS

STRUCTURAL ALTERATION CALCULATION:
 PER MICC 19.01.050 (D)(1)(b)(iii)
 REFERENCE DEMO PLANS ON SHEET A101 & A103 FOR DIMENSIONS OF STRUCTURALLY ALTERED WALLS

PERCENTAGE OF EXTERIOR WALLS ALTERED =
 (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED) ÷ (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS)

$(65.4 \text{ FEET}) \div (204.21 \text{ FEET}) = 32\%$

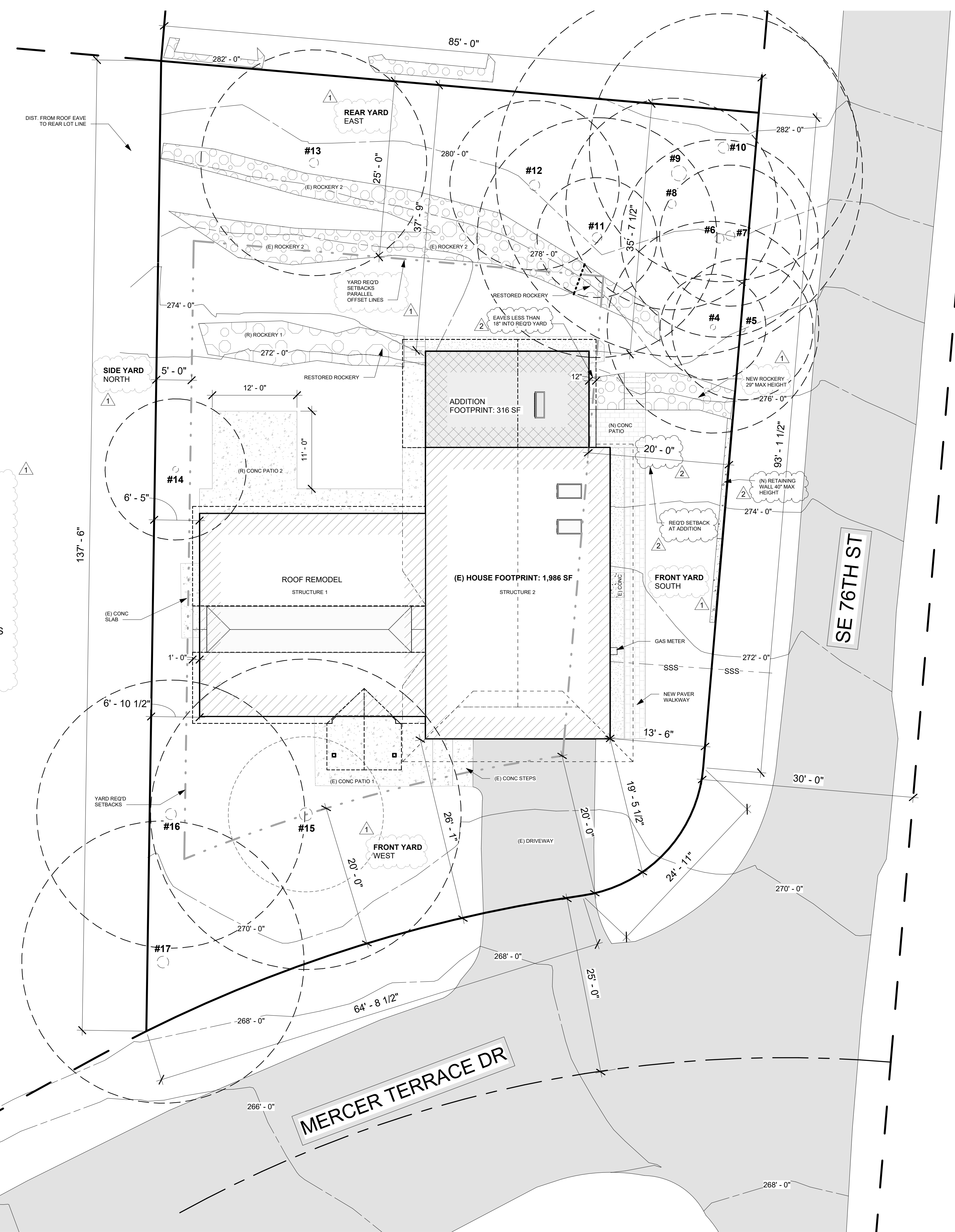
(A) THE "SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED" IS THE SUM OF EACH WALL SEGMENT THAT IS COMPLETELY DEMOLISHED.
 (B) THE "SUM OF THE LENGTH OF EXTERIOR WALLS" IS THE SUM OF THE LENGTHS OF EACH EXTERIOR WALL SEGMENT OF A STRUCTURE OR BUILDING.

YARD REQUIREMENTS:
 PER MICC 19.02.020(C)(3)(b)
 ALL HARDSCAPE IN REQUIRED YARDS SHALL NOT EXCEED 30" IN HEIGHT FROM EXISTING OR FINISHED GRADE, WHICHEVER IS LOWER.

PER MICC 19.02.020(C)(2)(a)(ii)
IF FRONT YARD — CORNER LOTS. ON CORNER LOTS THE FRONT YARD SHALL BE MEASURED FROM THE NARROWEST DIMENSION OF THE LOT ABUTTING A STREET.
 THE YARD ADJACENT TO THE WIDEST DIMENSION OF THE LOT ABUTTING A STREET SHALL BE A SIDE YARD;
 PROVIDED:
 (A) IF A SETBACK EQUIVALENT TO OR GREATER THAN REQUIRED FOR A FRONT YARD IS PROVIDED ALONG THE PROPERTY LINES ABUTTING BOTH STREETS, THEN ONLY ONE OF THE REMAINING SETBACKS MUST BE A REAR YARD.

PROPOSED LOT CONFIGURATION:
 WEST=FRONT, SOUTH=FRONT, EAST=REAR, NORTH=SIDE

INTRUSIONS INTO REQUIRED YARDS:
 PER MICC 19.02.020(C)(3)(a)(i)
 EXCEPT AS PROVIDED IN SUBSECTION (C)(3)(a)(ii) OF THIS SECTION... EAVES SHALL NOT PROTRUDE MORE THAN 18 INCHES INTO ANY REQUIRED YARD.



PROJECT DATA:

- PROJECT ADDRESS:** 7520 MERCER TERRACE DR, MERCER ISLAND WA, 98040
- PARCEL #:** 545360-0100
- LEGAL DESCRIPTION:** MERCER TERRACE ADD PLAT BLOCK: 1 PLAT LOT: 10
- NET LOT AREA:** 9,701 SF
- ZONE:** R-9.6 SINGLE FAMILY RESIDENTIAL
- PRESENT USE:** SINGLE FAMILY RESIDENTIAL
- YEAR BUILT:** 1965
- BUILDING AREA:** 1,986 SF
- SITE SLOPE:** 12.05 %
- GENERAL DEVELOPMENT STANDARDS:**
 FRONT SETBACK: 20'-0"
 SIDE SETBACK: 15'-0" SUM, MINIMUM 5'-0" EACH SIDE
 REAR SETBACK: 25'-0"
 HEIGHT LIMIT: 30'-0" TO HIGHEST POINT OF ROOF EXISTING BUILDING HEIGHT = 25'
- ALLOWABLE LOT COVERAGE**
 (FOR LOTS <15 % SLOPE - MAX 40% OF LOT AREA)
 LOT AREA: 9,701 SF
 ALLOWED LOT COVERAGE: 3,880 SF
- REFER TO SITE CALCULATION SHEETS A101.1 - A101.4 FOR LOT COVERAGE, HARDSCAPE, GROSS FLOOR AREA, AND AVERAGE BUILDING ELEVATION CALCULATIONS.

PROJECT DESCRIPTION:

SCOPE:
 ROOF REMODEL & ADDITION W/ ADU

PROJECT NARRATIVE:
 THE SCOPE OF WORK INCLUDES A ROOF REMODEL OF EXISTING "STRUCTURE 1" AND AN ADDITION OF 316 SF TO "STRUCTURE 2" WITH PROPOSED INTERIOR MODIFICATIONS TO LEVEL 1 AND LEVEL 2 OF THE HOUSE. REFER TO PLANS FOR LABELS OF "STRUCTURE 1" AND "STRUCTURE 2". THESE LABELS SPLIT UP THE HOUSE INTO 2 SECTIONS DIFFERENTIATING BETWEEN THE SINGLE-STORY AND THE DOUBLE-STORY STRUCTURE.

REMODEL OF THE LOWER ROOF LINE AND 2-STORY ADDITION WITH ADU. THE ROOF REMODEL ENTAILS A COMPLETE DEMO OF THE EXISTING LOWER ROOF LINE AND RECONSTRUCTION MAINTAINING THE EXISTING FOOTPRINT WITH A NEW DESIGN. THE ADDITION IS 632 SF OF CONDITIONED GROSS FLOOR AREA AND 316 SF TOTAL LOT COVERAGE. 316 SF ADU ON LEVEL 1 AND 316 SF ADDITION TO THE EXISTING PRIMARY BEDROOM ON LEVEL 2. THE PROPOSED ADDITION IS IN A GEO-HAZARD AREA ON THE SITE.
 THE PROPOSAL INCLUDES MINOR MODIFICATIONS TO HARDSCAPE AREAS AND INTERIOR SPACES. MODIFICATIONS/NEW INTERIOR PARTITION WALLS, PLUMBING FIXTURES, APPLIANCES, AND WINDOWS.



VICINITY MAP

NOT TO SCALE

BUILD STUFF

BUILD STUFF LLC
 206-771-5014
 diego@buildstuffstudios.com

REVISION TABLE		
Revision #	Date	Revision Description
1	5/22/2024	Revision 1
2	9/19/2024	Revision 2

HERNANDEZ RESIDENCE
 7520 MERCER TERRACE DR
 MERCER ISLAND WA, 98040

Project Status: PERMIT DRAWINGS SET

Project Owner: RODOLFO HERNANDEZ & SHANNON MCINTYRE

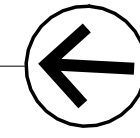
Record #: 2402-026
 Date: 09/19/24

SITE PLAN

A100

Scale: As indicated

1 Site
 1/8" = 1'-0"



BUILD STUFF

BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

REVISION TABLE	
Revision #	Revision Description

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

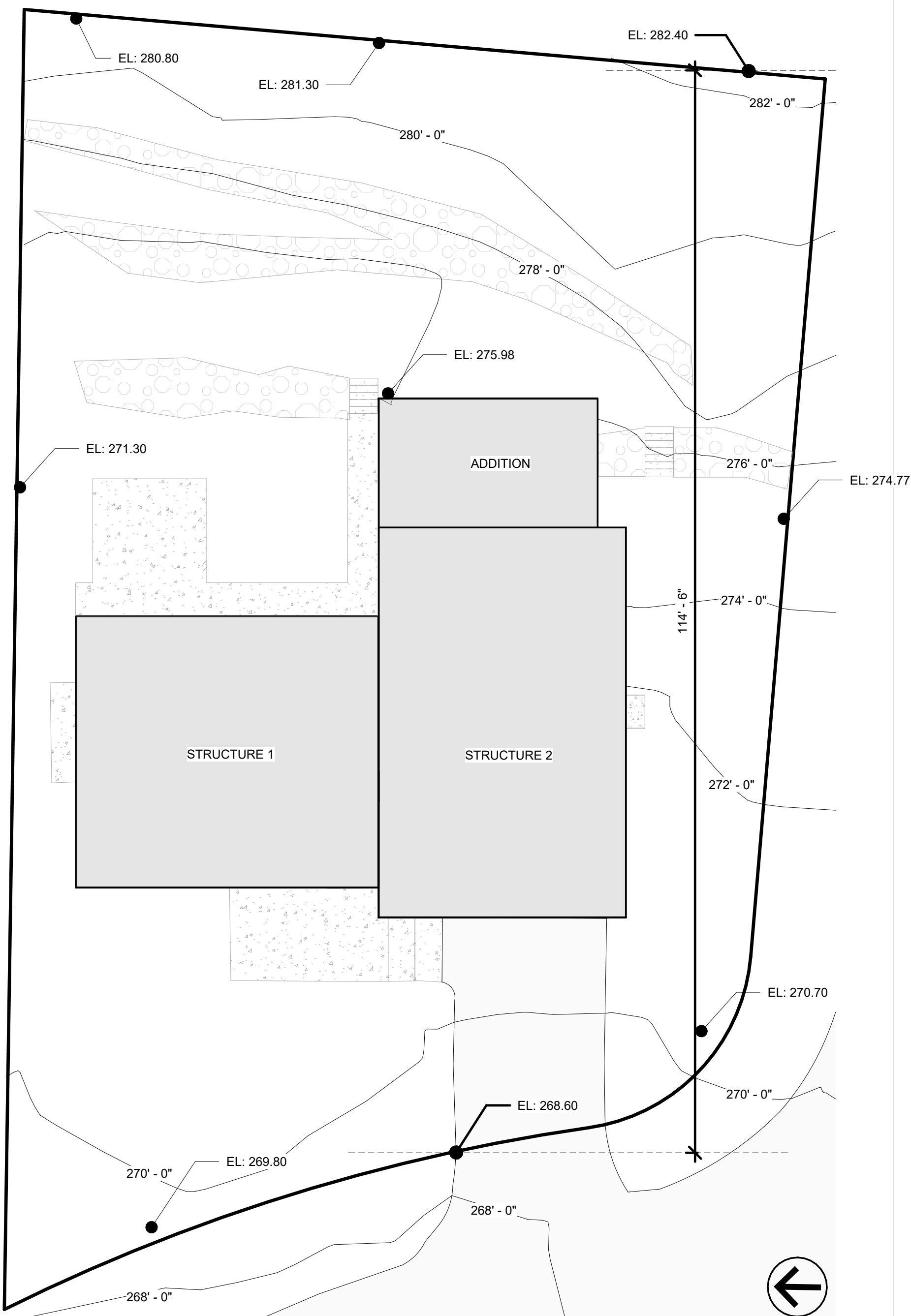
Record #: 2402-026

Date: 09/19/24

**SLOPE / ABE / GFA
CALCULATIONS**

A100.1

Scale: As indicated



③ SITE SLOPE CALCULATION
1" = 10'-0"

SITE SLOPE CALCULATION

ELEVATION POINTS REFERENCED FROM SITE SURVEY ATTACHED TO THIS PLAN SET

HIGHEST ELEVATION POINT OF LOT: **282.40 FT**

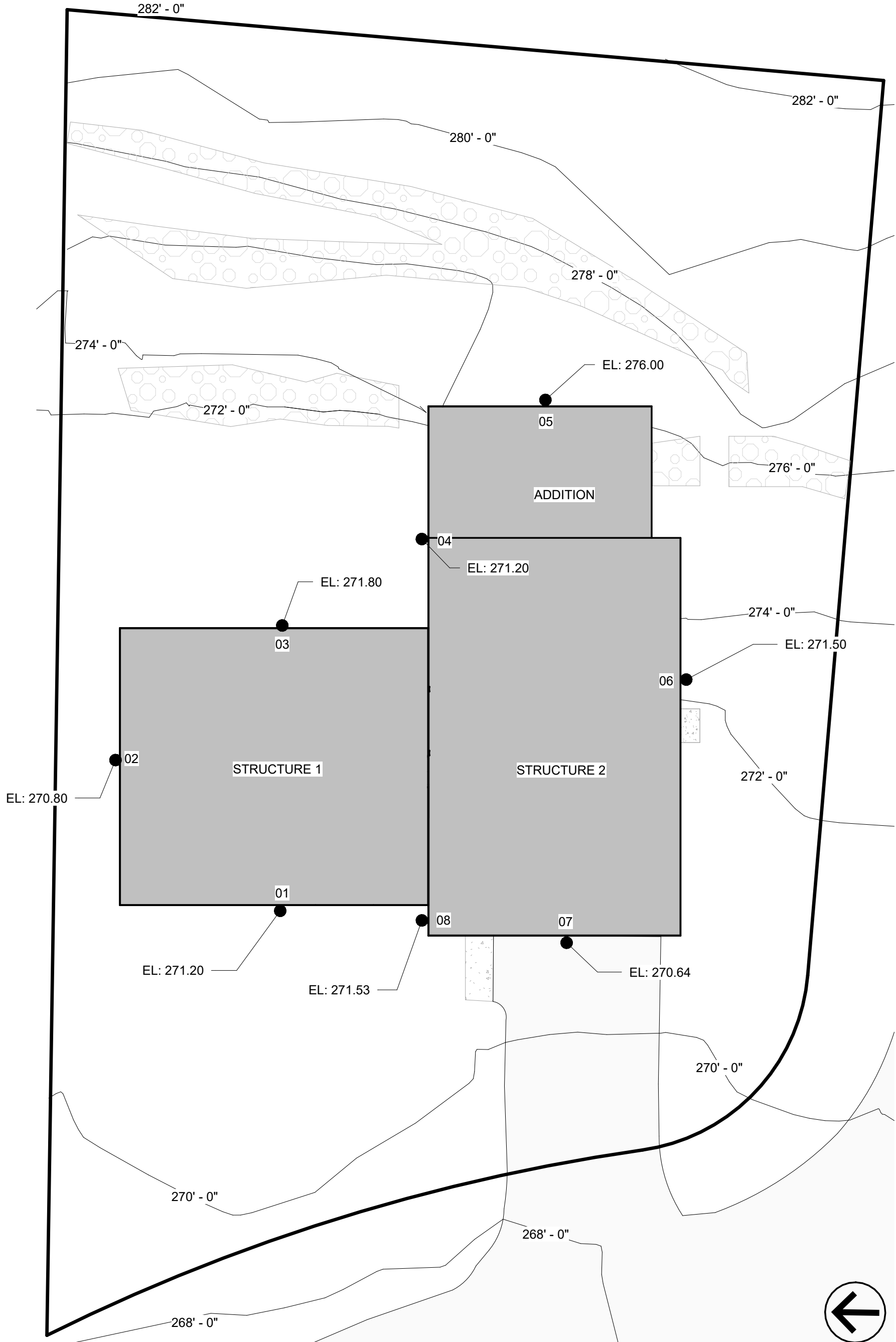
LOWEST ELEVATION POINT OF LOT: **268.60 FT**

ELEVATION DIFFERENCE: **13.80 FT**

HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS: **114.50 FT**

LOT SLOPE = ELEVATION DIFFERENCE / HORIZONTAL DISTANCE X 100

LOT SLOPE = **12.05 %**
(13.80 / 114.50) * 100



② ABE CALCULATIONS
1" = 10'-0"

ABE CALCULATIONS

WALL	MIDPOINT ELEVATION	WALL LENGTH	ME x WL
01	271.20	32.00	8678.40
02	270.80	28.75	7785.50
03	271.80	32.00	8697.60
04	271.20	21.42	5809.10
05	276.00	26.17	7222.92
06	271.50	53.33	14479.10
07	270.64	26.17	7082.65
08	271.53	3.17	860.75
TOTAL	2174.67	223.01	60616.02

TOTAL MIDPOINT ELEVATION * WALL LENGTH: 60616.02
TOTAL LENGTH OF WALLS: 223.01

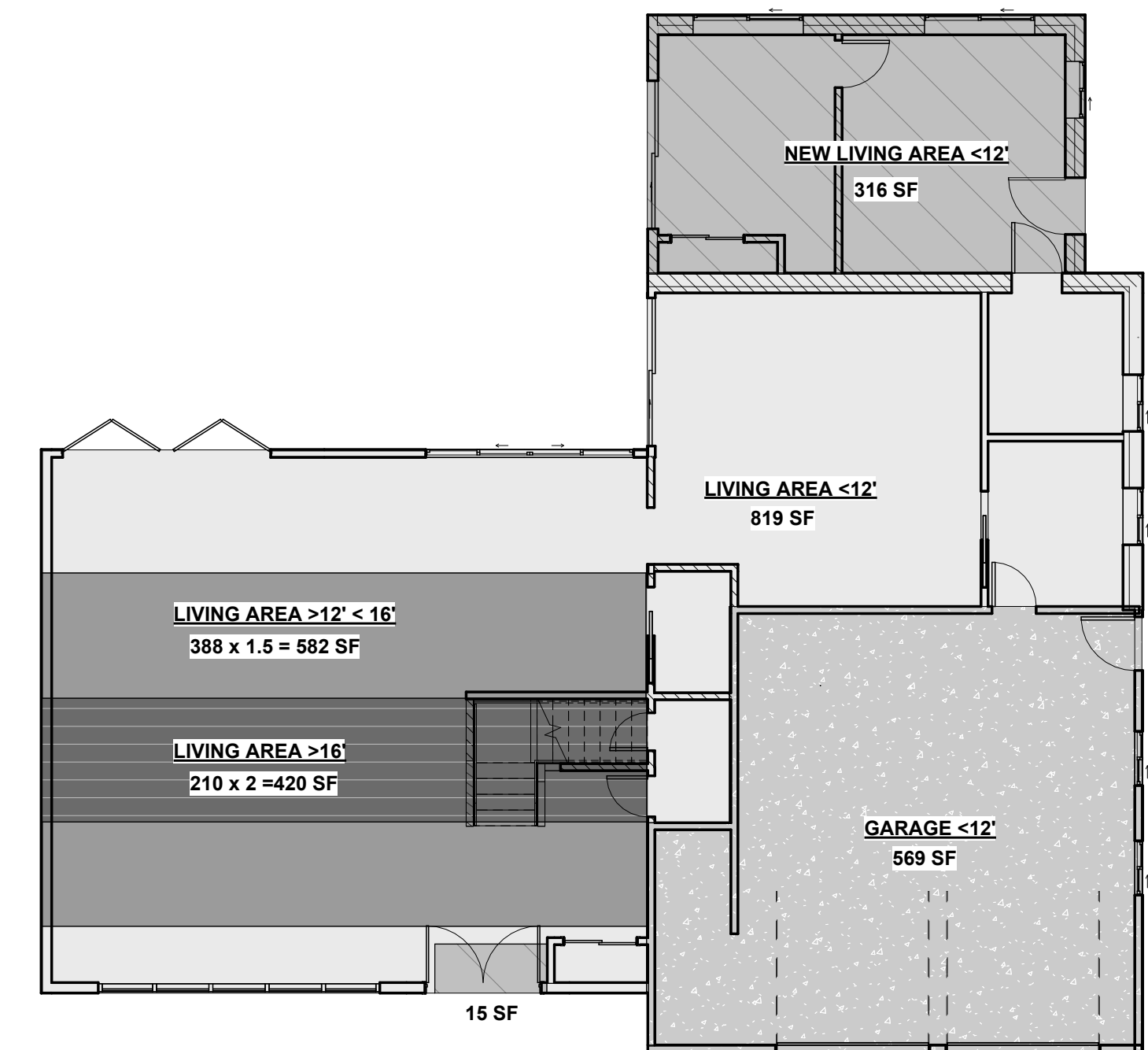
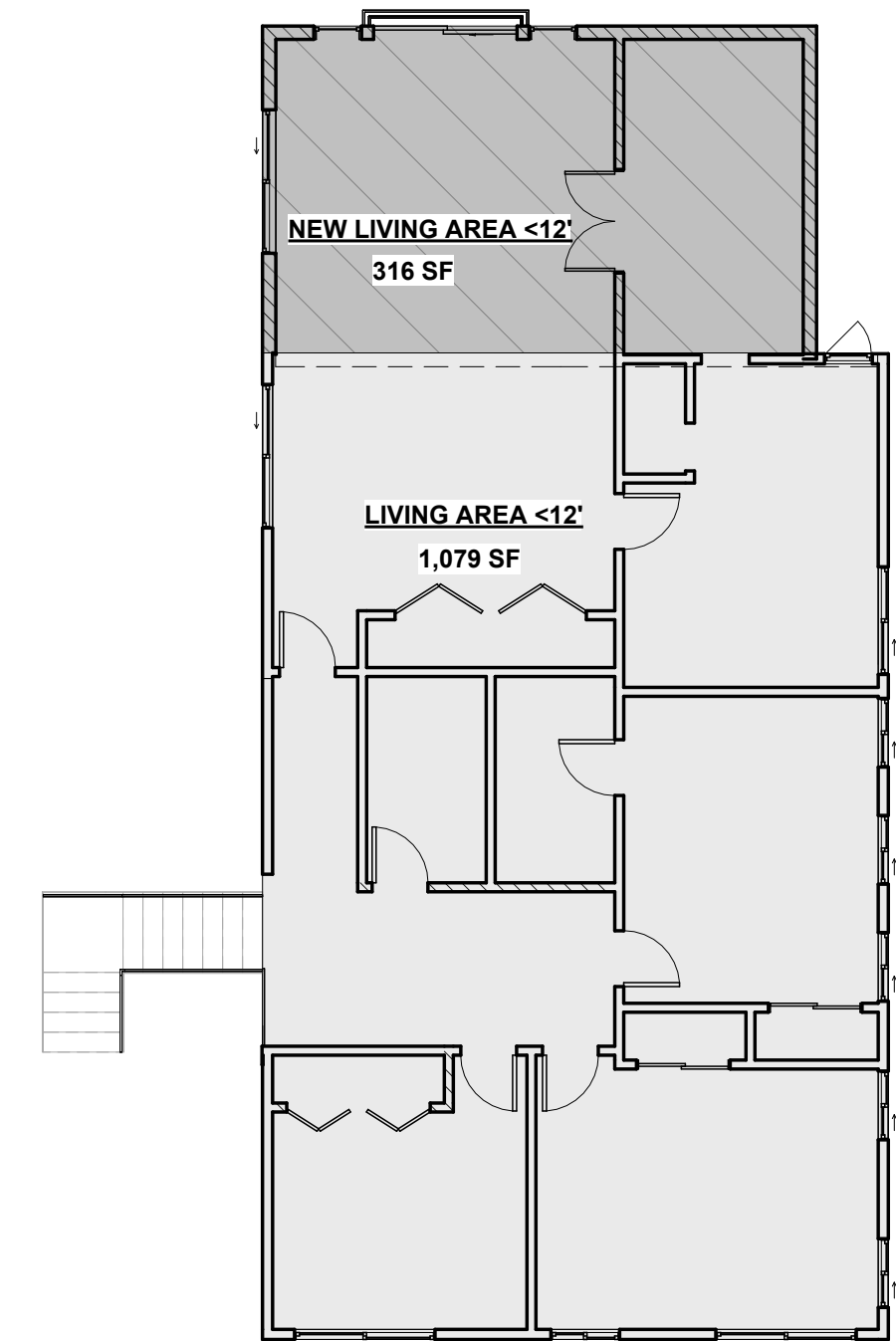
AVERAGE BUILDING ELEVATION (ABE) **271.81**

FT-IN 271' - 9 3/4"

GROSS FLOOR AREA

	EXISTING LIVING AREA < 12'
	EXISTING LIVING AREA > 12' < 16'
	EXISTING LIVING AREA > 16'
	EXISTING GARAGE < 12'
	NEW LIVING AREA < 12'

④ LEVEL 2 - GFA
1/8" = 1'-0"



① LEVEL 1 - GFA
1/8" = 1'-0"

ALLOWABLE GFA:

NET LOT AREA: 9,701 SF

GROSS FLOOR AREA: (40% OF NET LOT AREA):
ALLOWABLE GROSS FLOOR AREA: **3,880 SF**
PER MICC 19.02.020.D.1

ALLOWABLE INCREASE OF GROSS FLOOR AREA W/ADU:
PER MICC 19.02.020.D.3.b
LESSER OF FIVE PERCENTAGE POINTS OR THE ACTUAL FLOOR AREA
OF THE PROPOSED ACCESSORY DWELLING UNIT
ALLOWABLE GROSS FLOOR AREA (45%): **4,365 SF**
ALLOWABLE GROSS FLOOR AREA (40% + ADU SF): **4,196 SF**

PROVIDED:
II. THE LOT WILL CONTAIN AN ACCESSORY DWELLING UNIT
ASSOCIATED WITH THE APPLICATION FOR A NEW OR REMODELED
SINGLE-FAMILY HOME; AND
III. THE TOTAL GROSS FLOOR AREA SHALL NOT EXCEED 4,500 SQUARE
FEET OR 45 PERCENT OF THE LOT AREA, WHICHEVER IS LESS.

GFA CALCULATION HEIGHT MODIFIERS:

< 12' = 100% GFA MODIFIER
> 12' < 16' = 150% GFA MODIFIER
> 16' = 200% GFA MODIFIER

GFA CALCULATIONS:

LEVEL 1:	2,720 SF
EXISTING LIVING AREA < 12'	819 SF
EXISTING GARAGE < 12'	569 SF
EXISTING LIVING AREA > 12' < 16'	582 SF
EXISTING LIVING AREA > 16'	420 SF
NEW LIVING AREA (ADU) < 12'	316 SF
NEW LIVING AREA < 12'	15 SF

LEVEL 2:	1,395 SF
EXISTING LIVING AREA < 12'	1,079 SF
NEW LIVING AREA < 12'	316 SF

GRAND TOTAL **4,116 SF**

LOT COVERAGE CALCULATIONS

ALLOWABLE LOT COVERAGE
(FOR LOTS <15% SLOPE - MAX 40% OF LOT AREA)
GROSS LOT AREA: 9,701 SF
NET LOT AREA (B): 9,701 SF
ALLOWABLE LOT COVERAGE AREA: 3,880 SF

TOTAL EXISTING LOT COVERAGE AREA: (E5)
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 1,560 SF

(E) TOTAL ROOF AREA: 2,783 SF
(E) DRIVEWAY: 326 SF
TOTAL: 3,109 SF

TOTAL LOT COVERAGE AREA REMOVED: (F)
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 327 SF
(E) ROOF STRUCTURE 2: 38 SF

TOTAL: 1,588 SF

TOTAL NEW/REPLACED LOT COVERAGE: (I5)
(R) ROOF STRUCTURE 1: 1,024 SF
(R) ROOF STRUCTURE 2: 312 SF
(N) ROOF STRUCTURE 2: 331 SF


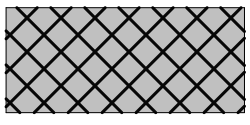
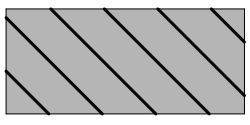


MAIN STRUCTURE ROOF AREA:
TOTAL: 1,667 SF

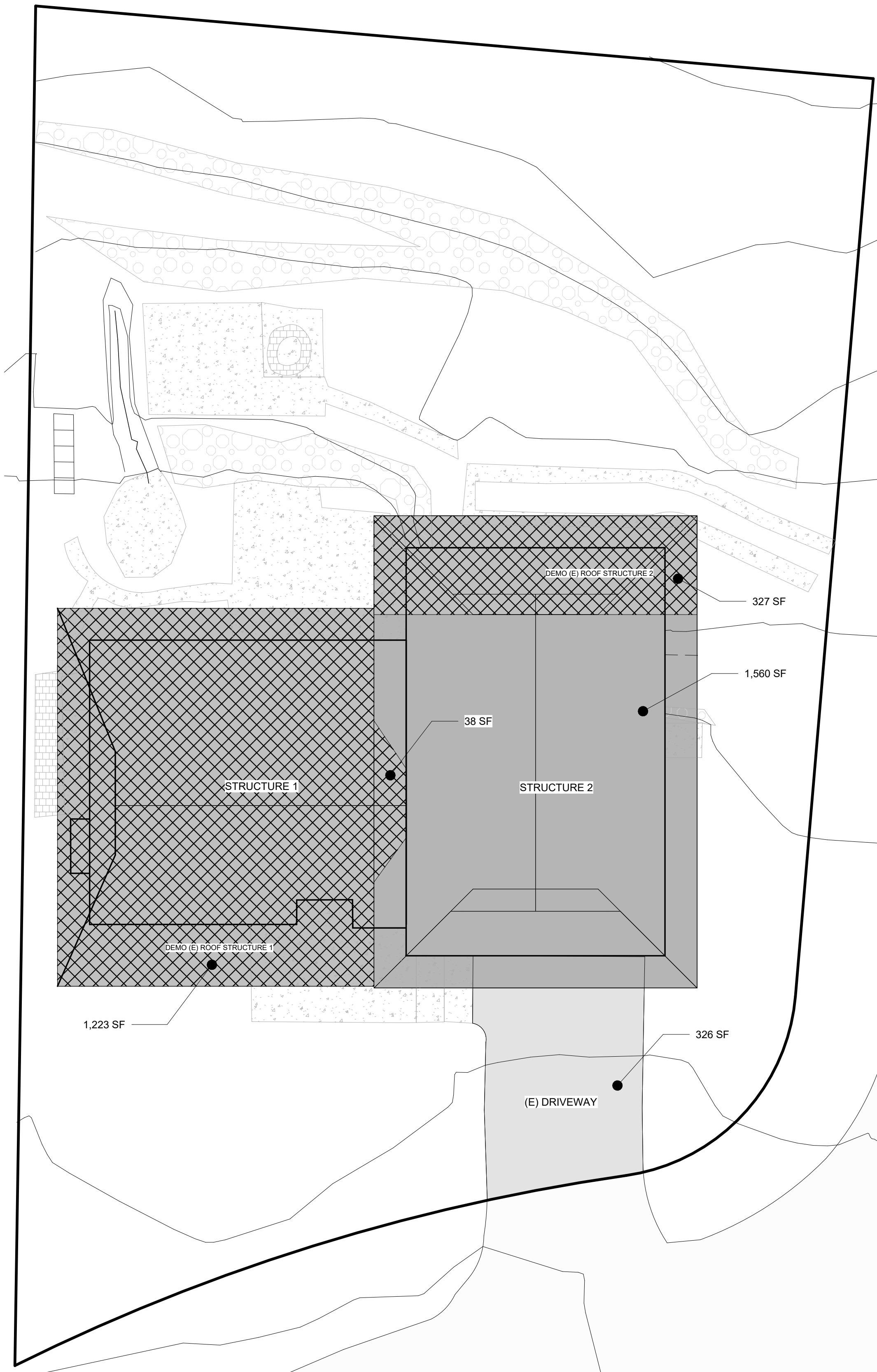
TOTAL PROJECT LOT COVERAGE AREA: (E5 - F) + I5
(3,109 - 1,588) + 1,667
TOTAL: 3,188 SF

PROPOSED LOT COVERAGE % : (J/B) X 100
(3,188 / 9,701) X 100
= 32.86 %

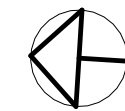
REMAINING ALLOWABLE LOT COVERAGE:
ALLOWED LOT COVERAGE (-) PROPOSED LOT COVERAGE
3,880 - 3,188 = **692 SF**

LOT COVERAGE

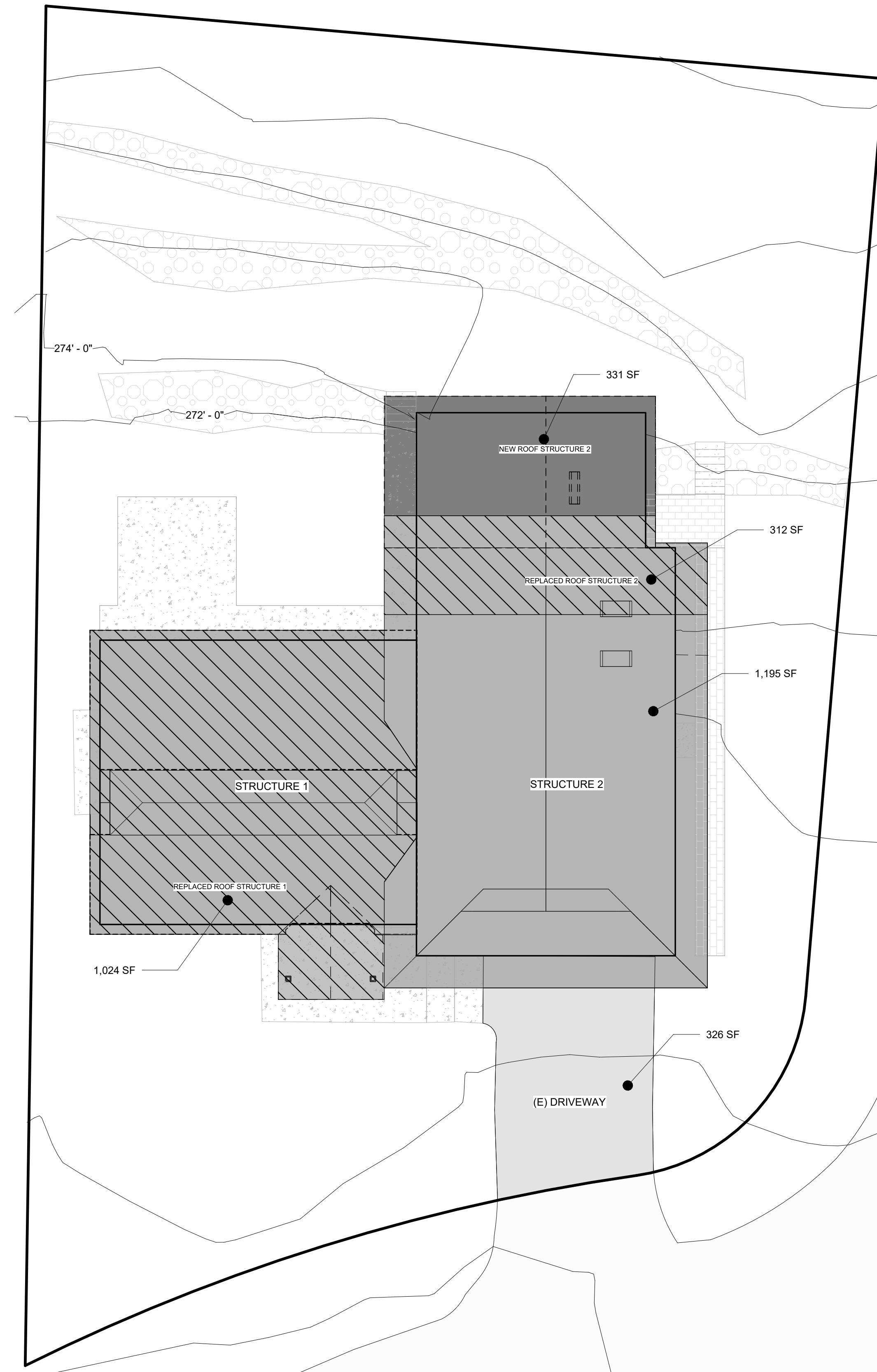
	EXISTING ROOF AREA TO REMAIN
	DEMO (E) LOT COVERAGE
	REPLACED EXISTING ROOF AREA
	NEW ROOF AREA
	VEHICULAR USE AREA TO REMAIN



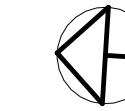
1 EXISTING - LOT COVERAGE
1/8" = 1'-0"



(E) - EXISTING
(R) - REPLACED
(N) - NEW



2 PROPOSED - LOT COVERAGE
1/8" = 1'-0"



REVISION TABLE	
Revision #	Date
2	9/19/2024
	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026

Date: 09/19/24

**LOT COVERAGE
CALCULATIONS**

A100.2

Scale: As indicated

REVISION TABLE	
Revision #	Revision Description
2	9/19/2024 Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
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Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026

Date: 09/19/24

HARDSCAPE CALCULATIONS

A100.3

Scale: As indicated

HARDSCAPE CALCULATIONS

HARDSCAPE CALCULATIONS (MAX 9% OF LOT AREA)
NET LOT AREA : **9,701 SF**
ALLOWABLE HARDSCAPE 9%: **873 SF**
AREA BORROWED FROM LOT COVERAGE: **692 SF**
TOTAL ALLOWED LOT COVERAGE SF: **1,565 SF**
TOTAL ALLOWED LOT COVERAGE %: **16.1 %**

EXISTING HARDSCAPE AREA: W/ EXISTING ROOFLINE
(E) CONC PATIO 1: 58 SF
(E) CONC PATIO 2: 199 SF
(E) CONC PATIO 3: 225 SF
(E) CONC WALKWAY 1: 97 SF
(E) CONC WALKWAY 2: 23 SF
(E) PAVER WALKWAY: 33 SF
(E) CONC SLAB: 10
(E) CONC STEP: 10 SF
(E) STONE STEPS: 16 SF
(E) ROCKERY 1: 130 SF
(E) ROCKERY 2: 528 SF
(E) CONC POND: 66 SF

TOTAL EXISTING HARDSCAPE AREA: (F7)
UNCOVERED PATIOS: 482 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 36 SF
ROCKERIES & RETAINING WALLS: 658 SF
OTHER - (CONC POND): 66 SF
TOTAL: 1,395 SF

REMOVED HARDSCAPE:

(E) CONC PATIO 3: 225 SF
(E) CONC PATIO 2: 199 SF
(E) CONC WALKWAY 1: 97 SF
(E) CONC WALKWAY 2: 23 SF
(E) PAVER WALKWAY: 33 SF
(E) STONE STEPS: 16 SF
(E) ROCKERY 1: 130 SF
(E) ROCKERY 2: 100 SF
(E) CONC POND: 66 SF

TOTAL HARDSCAPE AREA REMOVED: (G)
UNCOVERED PATIOS: 424 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 230 SF
OTHER - (CONC POND): 66 SF
TOTAL: 889 SF

NEW/REPLACED HARDSCAPE: W/ UPDATED ROOFLINE

(R) CONC PATIO 2: 201 SF
(N) CONC PATIO: 35 SF
(N) PAVER WALKWAY: 70 SF
(N) STONE STEPS: 16 SF
(R) ROCKERY 1: 145 SF
(R) ROCKERY 2: 46 SF
(N) ROCKERY: 79 SF
(N) RETAINING WALL: 18 SF
(EU) (UNCOVERED CONC SLAB): 17 SF

TOTAL NEW/REPLACED HARDSCAPE: (H7)
UNCOVERED PATIOS: 236 SF
WALKWAYS: 70 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 288 SF
OTHER - (UNCOVERED CONC SLAB): 17 SF

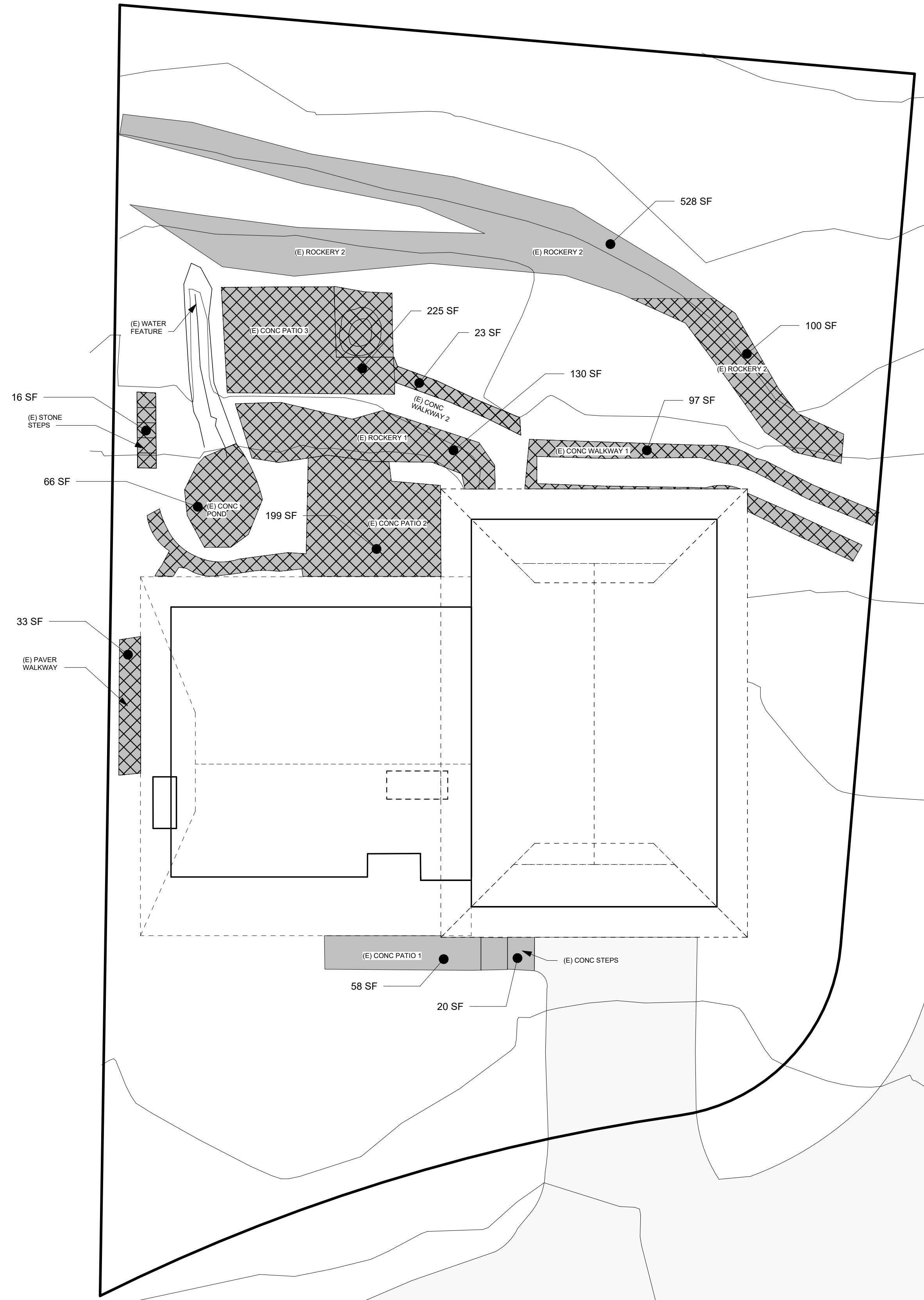
TOTAL: 627 SF

TOTAL PROJECT HARDSCAPE AREA: (F7 - G) + H7

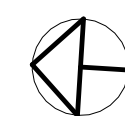
(1,395 - 889) + 627
TOTAL: 1,133 SF

PROPOSED HARDSCAPE % : (J/B) X100

(1,133 / 9,701) X 100
= 11.67 %

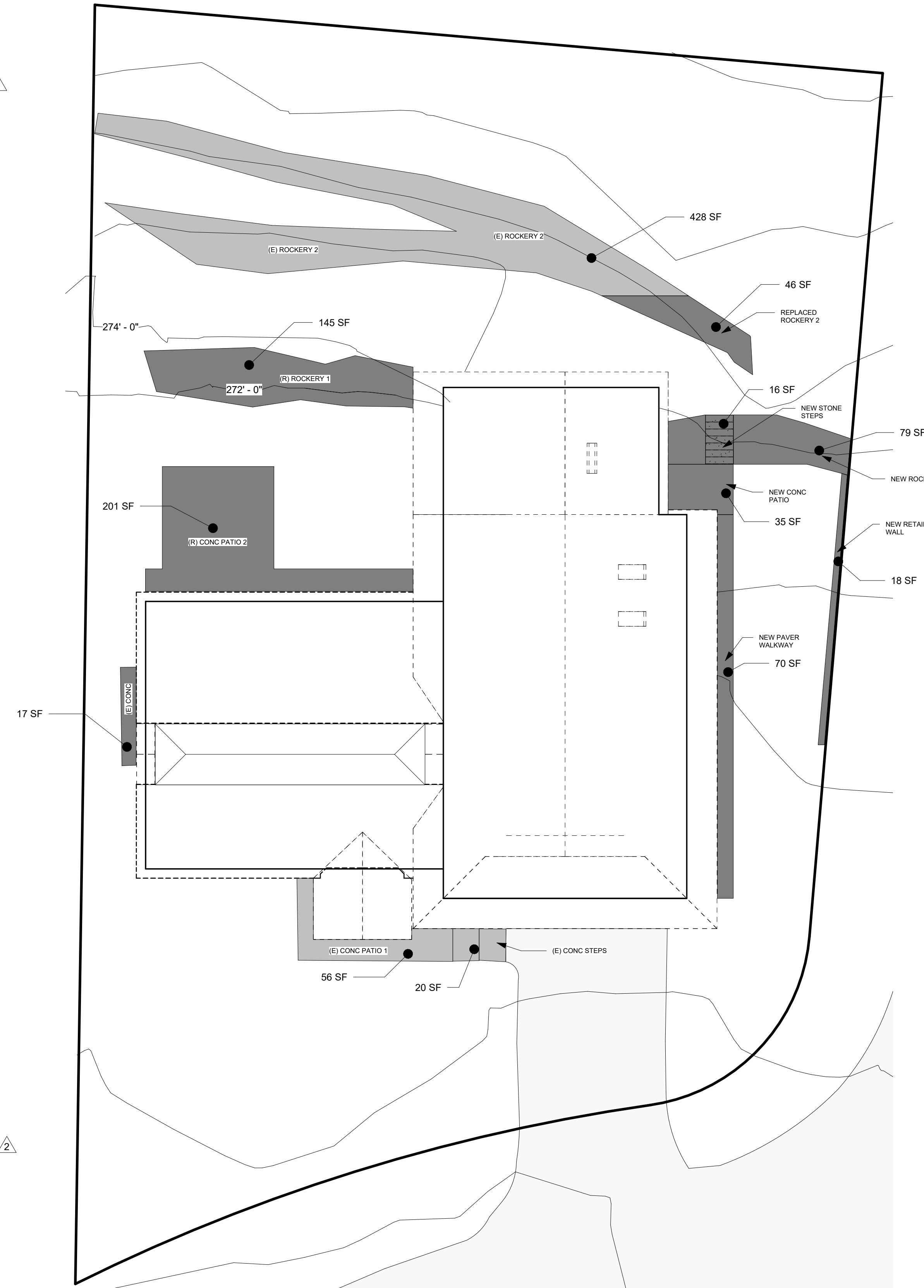


1 EXISTING - HARDSCAPE
1/8" = 1'-0"



(E) - EXISTING
(R) - REPLACED
(N) - NEW
(EU) - EXISTING UNCOVERED

HARDSCAPE	
	EXISTING HARDSCAPE TO REMAIN
	DEMO (E) HARDSCAPE
	NEW/REPLACED HARDSCAPE UNCOVERED HARDSCAPE UNDER NEW ROOF OVERHANGS



2 PROPOSED - HARDSCAPE
1/8" = 1'-0"



STORM WATER CALCULATIONS

REVISION TABLE	
Revision #	Revision Description
2	9/19/2024 Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

STORMWATER CALCULATIONS

A100.4

Scale: As indicated

NET INCREASE IMPERVIOUS SURFACE: (<500 SF)

EXISTING IMPERVIOUS SURFACE AREA: (A)

ROOF & DRIVEWAY: 3,109 SF
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 1,560 SF
(E) DRIVEWAY: 326 SF

OTHER SURFACES: 1,395 SF
UNCOVERED PATIOS: 482 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 36 SF
ROCKERIES & RETAINING WALLS: 658 SF
OTHER - (CONC POND): 66 SF

TOTAL: 4,504 SF

REMOVED IMPERVIOUS SURFACE AREA: (B)

ROOF & DRIVEWAY: 1,588 SF
(E) ROOF STRUCTURE 1: 1,223 SF
(E) ROOF STRUCTURE 2: 327 SF
(E) ROOF STRUCTURE 2: 38 SF

OTHER SURFACES: 889 SF
UNCOVERED PATIOS: 424 SF
WALKWAYS: 153 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 230 SF
OTHER - (CONC POND): 66 SF

TOTAL: 2,477 SF

NEW IMPERVIOUS SURFACE AREA: (C)

ROOF & DRIVEWAY: 1,667 SF
(R) ROOF STRUCTURE 1: 1,024 SF
(R) ROOF STRUCTURE 2: 312 SF
(N) ROOF STRUCTURE 2: 331 SF

OTHER SURFACES: 627 SF
UNCOVERED PATIOS: 236 SF
WALKWAYS: 70 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 288 SF
OTHER - (UNCOVERED CONC SLAB): 17 SF

TOTAL: 2,294 SF

TOTAL PROPOSED IMPERVIOUS SURFACE AREA:

CALCULATION: (A - B) + C
(4,504 - 2,477) + 2,294

TOTAL: 4,321 SF

NET IMPERVIOUS SURFACE CALCULATION:

= PROPOSED (-) EXISTING:
4,321 - 4,504 = **-183 SF**


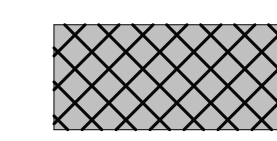

NEW + REPLACED HARD SURFACE AREA: (<2,000 SF)

NEW ROOF STRUCTURE 2: 331 SF
REPLACED ROOF STRUCTURE 1: 1,024 SF

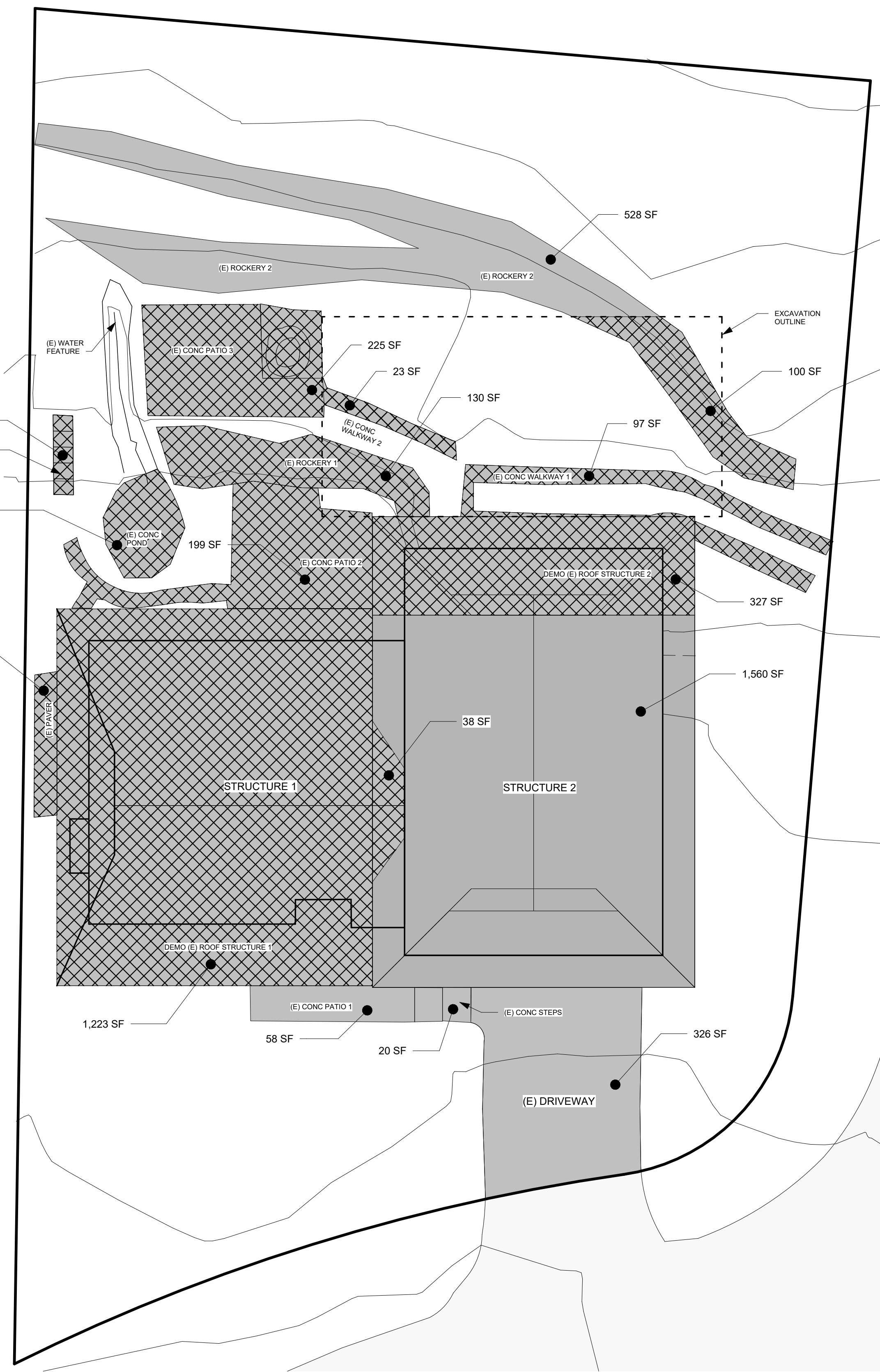
OTHER HARD SURFACES: 627 SF
UNCOVERED PATIOS: 236 SF
WALKWAYS: 70 SF
STAIRS / STEPS: 16 SF
ROCKERIES & RETAINING WALLS: 288 SF
OTHER - (UNCOVERED CONC SLAB): 17 SF

TOTAL: 1,982 SF

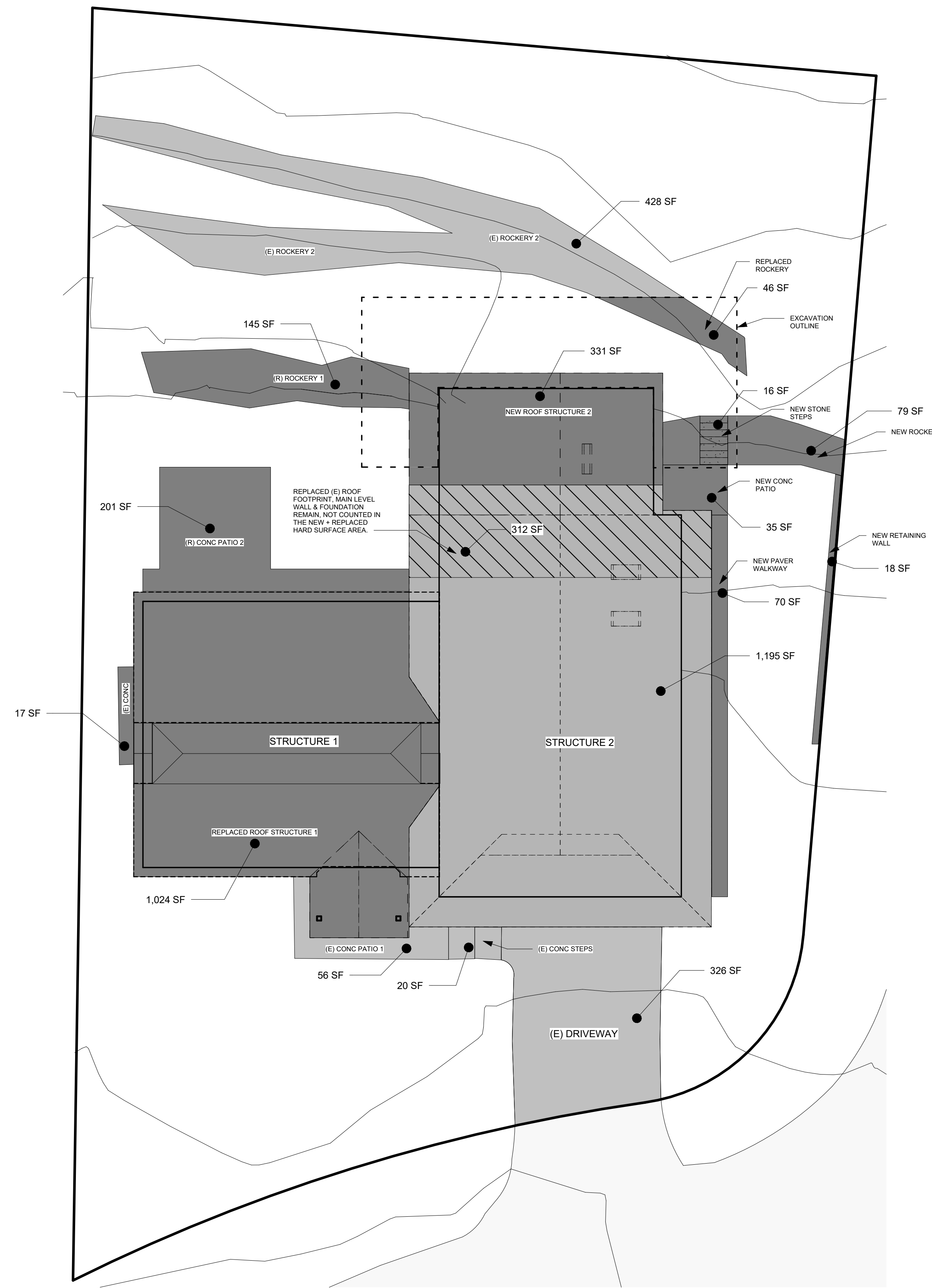
HARD SURFACES

	EXISTING HARD SURFACES TO REMAIN
	DEMO EXISTING HARD SURFACES
	NEW/REPLACED HARD SURFACES

(E) - EXISTING
(R) - REPLACED
(N) - NEW

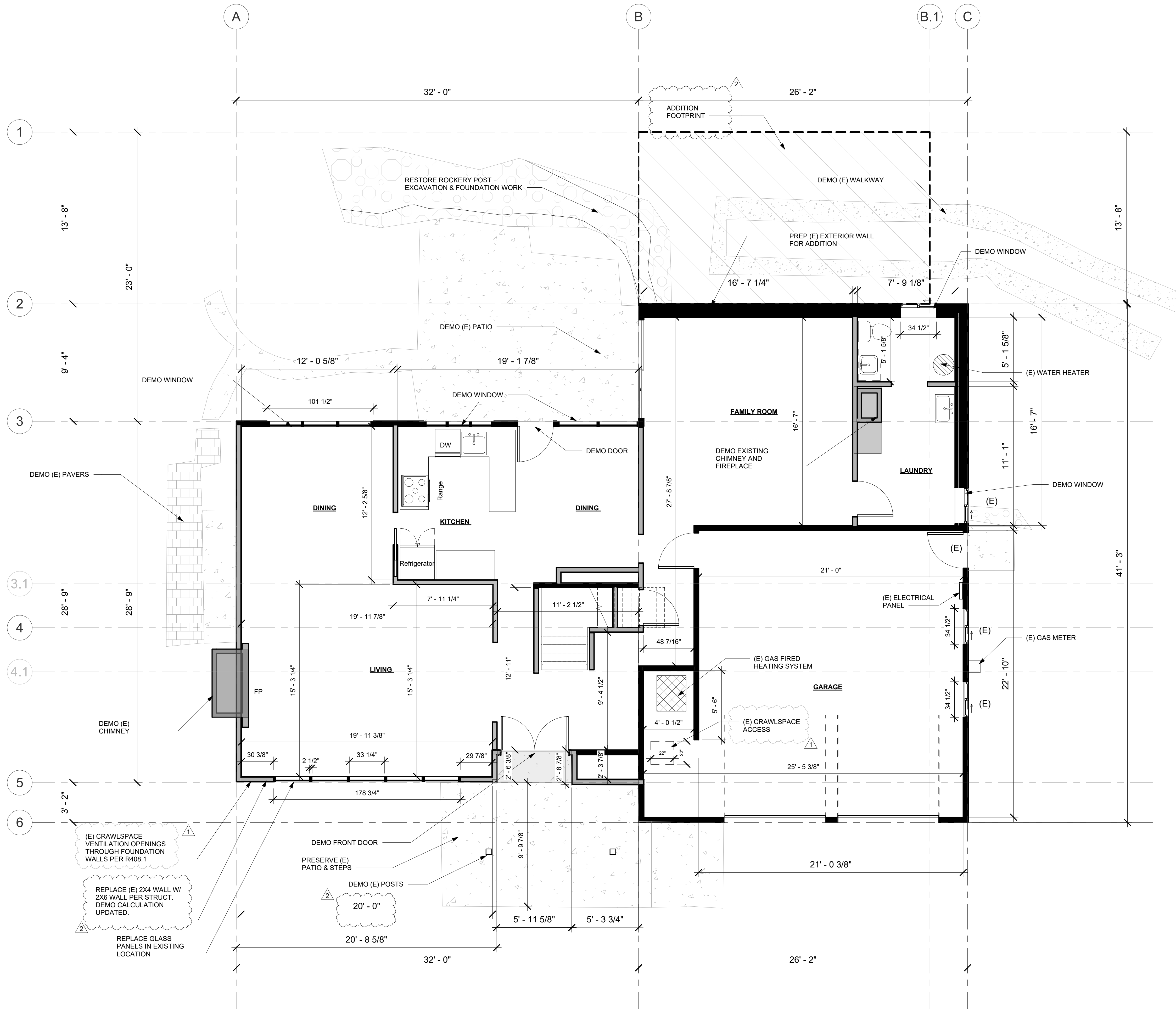


2 EXISTING - IMPERVIOUS SURFACE
1/8" = 1'-0"



1 PROPOSED - IMPERVIOUS SURFACE
1/8" = 1'-0"

REVISION TABLE		Revision	Description
Revision #	Date	Revision 1	
1	5/22/2024	Revision 1	
2	9/19/2024	Revision 2	



DEMO PLAN NOTES:

1. CONTRACTOR TO VERIFY MEASUREMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.
3. DEMO ALL EXISTING BRICK FIREPLACES.
4. DEMOLITION: ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

EXISTING CONDITION NOTES:

1. (E) EXTERIOR WALLS: 2X4 STUD @16" O.C. 8" CONCRETE FOUNDATION WALLS WITH FOOTINGS.
2. (E) FLOOR STRUCTURE: WOOD FRAMED CRAWLSPACE FLOOR AT MAIN LEVEL, SLAB ON GRADE AT GARAGE, AND WOOD FRAMED FLOOR AT SECOND LEVEL.
3. (E) ROOF STRUCTURE: SITE-CUT ROOF TRUSSES.
4. (E) HEATING: CENTRAL FORCED AIR HEATING - NATURAL GAS - PUBLIC SUPPLY, GAS METER.
5. (E) HOT WATER UNIT: GAS FUELED.
6. (E) ATTIC: VENTED THROUGH SOFFIT AND ROOF VENTS.

STRUCTURAL ALTERATION CALCULATION:

PER MICC 19.01.050 (D)(1)(b)(iii)
REFERENCE DEMO PLANS ON SHEET A101 & A103 FOR DIMENSIONS OF STRUCTURALLY ALTERED WALLS

PERCENTAGE OF EXTERIOR WALLS ALTERED =
(SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED) ÷ (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS)

$(65.4 \text{ FEET}) \div (204.21 \text{ FEET}) = 32\%$

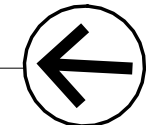
(A) THE "SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED" IS THE SUM OF EACH WALL SEGMENT THAT IS COMPLETELY DEMOLISHED.

(B) THE "SUM OF THE LENGTH OF EXTERIOR WALLS" IS THE SUM OF THE LENGTHS OF EACH EXTERIOR WALL SEGMENT OF A STRUCTURE OR BUILDING.

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

1 LEVEL 1 - DEMO
1/4" = 1'-0"



HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026

Date: 09/19/24

DEMO LEVEL 1

A101

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

REVISION TABLE		Revision #	Date	Revision Description
1	5/22/2024	Revision 1		
2	9/19/2024	Revision 2		

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status: PERMIT DRAWINGS SET
Project Owner: RODOLFO HERNANDEZ & SHANNON MCINTYRE
Record #: 2402-026
Date: 09/19/24

PROPOSED LEVEL 1
A102
Scale: 1/4" = 1'-0"

PLAN NOTES:

- CONTRACTOR TO VERIFY MEASUREMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION. DIMENSIONS SUBJECT TO CONVENTIONAL TOLERANCES.
- REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES INCLUDING UNIT SIZE.
- GAS INSERT FIREPLACE, VERIFY REQUIRED FRAMING WIDTH, HEIGHT, AND DEPTH PER MANUFACTURER SPECIFICATIONS.
- REPLACE (E) GLASS PANELS IN NEW 2X6 WALL - CONTRACTOR TO VERIFY THE (E) GLASS FRAME AND PANEL DIMENSIONS FOR REPLACEMENT.
- STAIR DIMENSIONS PER IRC R311.7, MAIN INTERIOR STAIR SHALL BE REBUILT AND NEW GUARDS WILL BE INSTALLED TO COMPLY WITH IRC R312.
- AIR EXHAUST OPENINGS SHALL TERMINATE NOT LESS THAN 3 FEET FROM OPERABLE AND NONOPERABLE OPENINGS INTO THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES EXCEPT WHERE THE OPENING IS LOCATED 3 FEET ABOVE THE AIR INTAKE.
- PROVIDE FIREBLOCKING FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING.
- SAFETY GLAZING REQUIRED AT WET SURFACES (PER IRC R308.4.5) GLAZING IN WALLS, ENCLOSURES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND SIMILAR, WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE CONSIDERED A HAZARDOUS LOCATION. APPLIES TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

ENERGY & FUEL NORMALIZATION CREDITS:
2018 WASHINGTON STATE ENERGY CODE - RESIDENTIAL

CREDITS REQUIRED
SMALL DWELLING UNIT: 3.0 CREDITS REQUIRED

PROPOSED:
HEATING OPTIONS:
DHP WITH ZONAL ELECTRIC RESISTANCE (4) PER OPT. (3.4) : 0.5 CREDITS
ENERGY OPTIONS:
EFFICIENT BUILDING ENVELOPE OPTION (1.3) : 0.5 CREDITS
HIGH EFFICIENCY HVAC OPTION (3.4) : 1.5 CREDITS
APPLIANCE PACKAGE (7.1) : 0.5 CREDITS

CREDIT OPTION (1.3): EFFICIENT BUILDING ENVELOPE

PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS:

VERTICAL FENESTRATION = U-FACTOR: (.28)
FLOORS - R-38
SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB
BELOW GRADE SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB
OR COMPLIANCE BASED ON SECTION R402.1.4: REDUCE THE TOAL CONDUCTIVE UA BY 5%

CREDIT OPTION (3.4): DUCTLESS MINI SPLIT SYSTEM SPECS

DUCTLESS MINI HEAT SPLIT SYSTEM
HEATING SEASONAL PERFORMANCE FACTOR: 11.5 HSPF
MODEL: BLUERIDGE BMM5519-9C-9C-12C-18C
HEATING CAPACITY: 55,000 BTU (4.5 TON)
ENERGY EFFICIENCY RATIO: 10.5 EER
SEER: 19.0 SEER
ZONES: 5

CREDIT OPTION (7.1): APPLIANCE PACKAGE

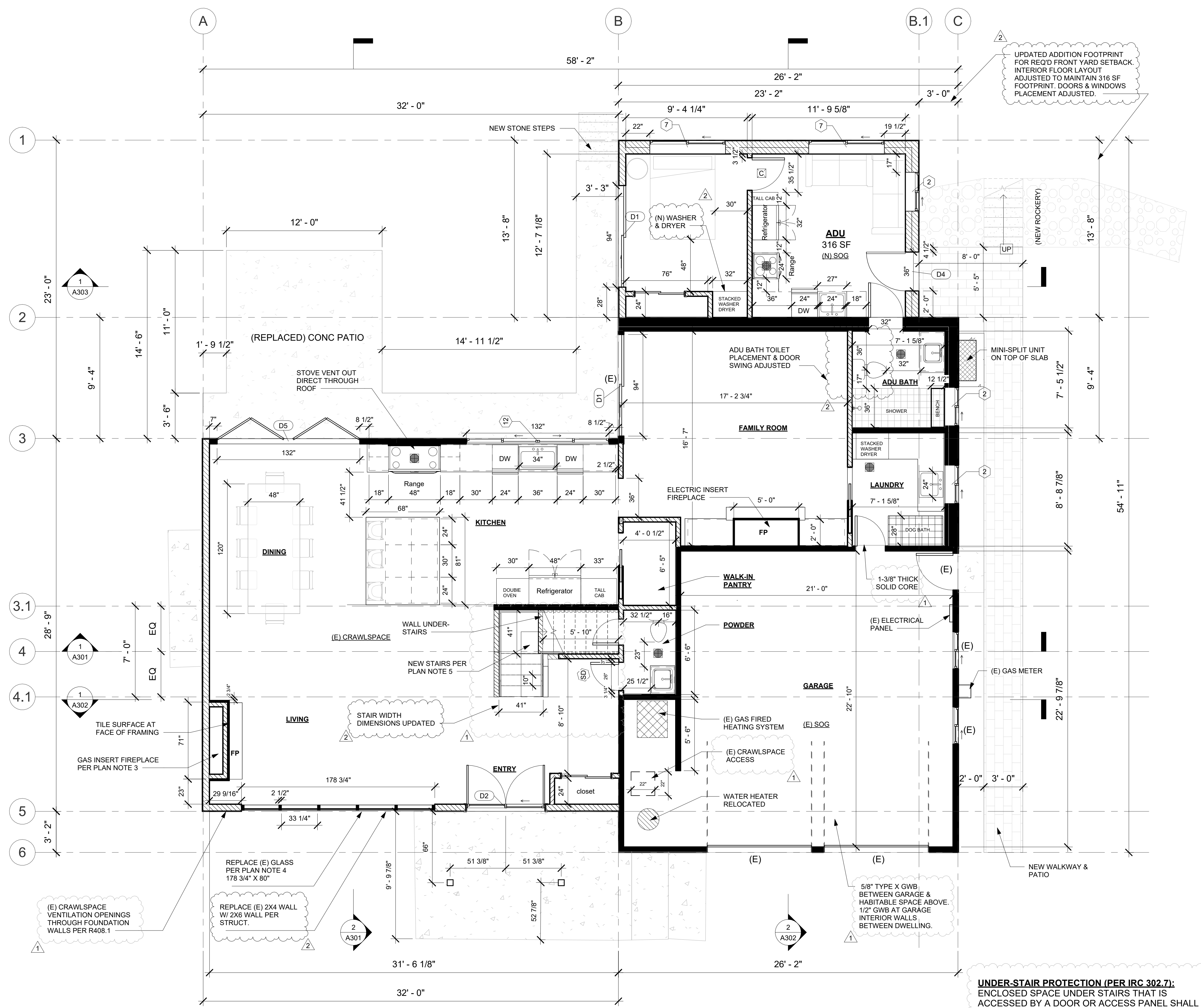
ALL OF THE FOLLOWING APPLIANCES SHALL BE NEW AND INSTALLED IN THE DWELLING UNIT AND SHALL MEET THE FOLLOWING STANDARDS:
DISHWASHER - ENERGY STAR RATED
REFRIGERATOR (IF PROVIDED) - ENERGY STAR RATED
WASHING MACHINE - ENERGY STAR RATED
DRYER - ENERGY STAR RATED, VENTLESS DRYER WITH MINIMUM CEF RATING OF 5.2

FLOOR PLAN LEGEND

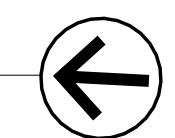
SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	FAN MIN 50 CFM, BATH, TOILET ROOM & LAUNDRY FAN MIN 100 CFM, KITCHEN
	COMBINED CARBON MONOXIDE DETECTOR & SMOKE DETECTORS
	SMOKE DETECTOR INTERCONNECTED AND HARDWIRED W/ BATTERY BACKUP
	CARBON MONOXIDE DETECTOR, INTERCONNECTED AND HARDWIRED W/BATTERY BACKUP
	WHOLE HOUSE VENTILATION 35 CFM CONTINUOUSLY



1 LEVEL 1
1/4" = 1'-0"



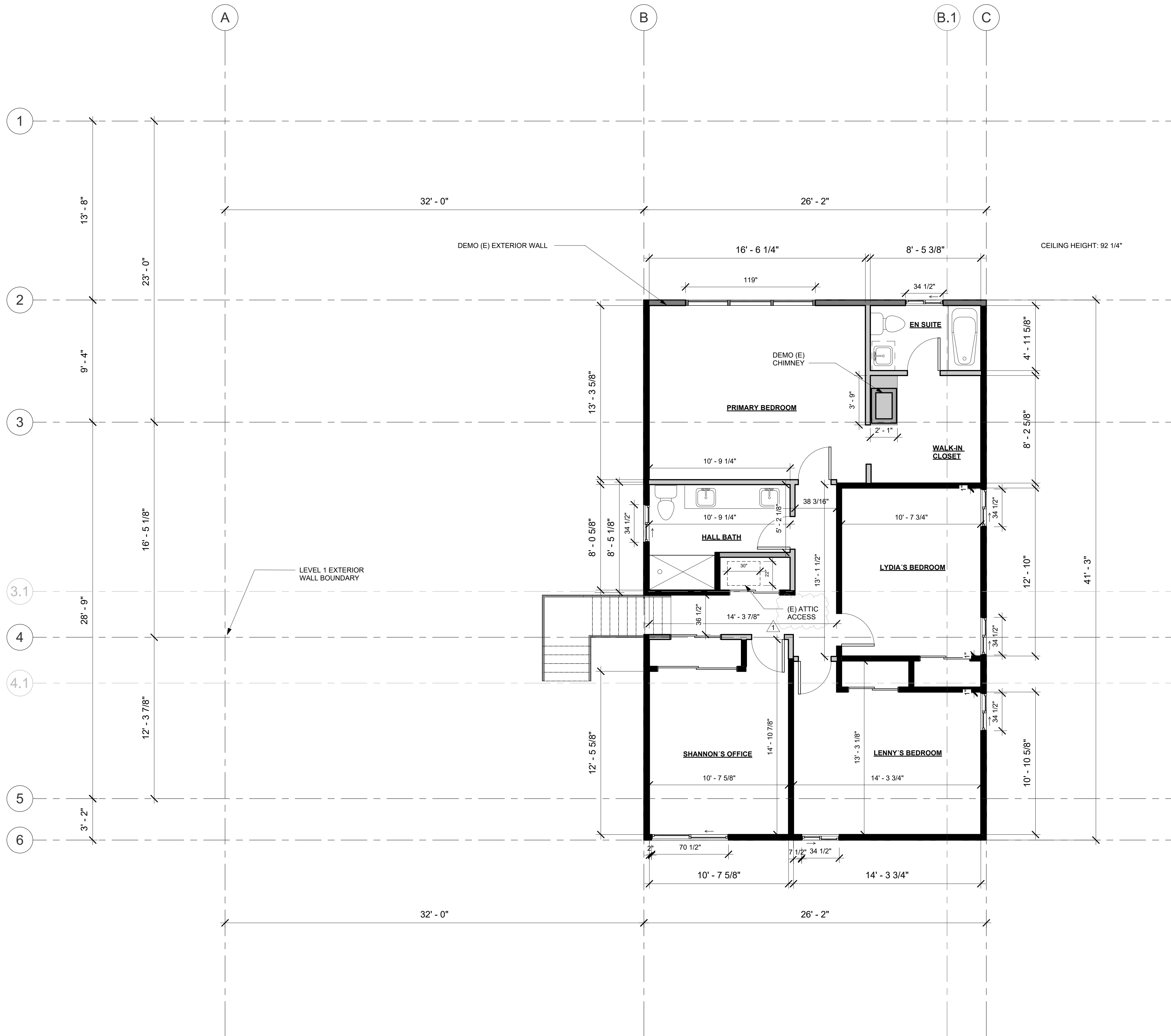
UNDER-STAIR PROTECTION (PER IRC 302.7):
ENCLOSED SPACE UNDER STAIRS THAT IS ACCESSED BY A DOOR OR ACCESS PANEL SHALL HAVE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2-INCH GWB.

WHOLE HOUSE VENTILATION:
CALCULATION PER TABLE M1505.4.3(1)

PROPOSED ADDITION CONDITIONED SF: 632 SF
NUMBER OF BEDROOMS: 2
VENTILATION AIRFLOW RATE (CFM): 35 CFM

WHOLE HOUSE VENTILATION: 35 CFM CONTINUOUSLY

REVISION TABLE	
Revision #	Date
1	5/22/2024
	Revision 1



DEMO PLAN NOTES:

1. CONTRACTOR TO VERIFY MEASUREMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.
3. DEMO ALL EXISTING BRICK FIREPLACES.
4. DEMOLITION: ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

EXISTING CONDITION NOTES:

1. (E) EXTERIOR WALLS: 2X4 STUD @16" O.C. 8" CONCRETE FOUNDATION WALLS WITH FOOTINGS.
2. (E) FLOOR STRUCTURE: WOOD FRAMED CRAWLSPACE FLOOR AT MAIN LEVEL, SLAB ON GRADE AT GARAGE, AND WOOD FRAMED FLOOR AT SECOND LEVEL.
3. (E) ROOF STRUCTURE: SITE-CUT ROOF TRUSSES.
4. (E) HEATING: CENTRAL FORCED AIR HEATING - NATURAL GAS - PUBLIC SUPPLY, GAS METER.
5. (E) HOT WATER UNIT: GAS FUELED.
6. (E) ATTIC: VENTED THROUGH SOFFIT AND ROOF VENTS.

STRUCTURAL ALTERATION CALCULATION:

PER MICC 19.01.050 (D)(1)(b)(iii)
REFERENCE DEMO PLANS ON SHEET A101 & A103 FOR DIMENSIONS OF STRUCTURALLY ALTERED WALLS

PERCENTAGE OF EXTERIOR WALLS ALTERED =

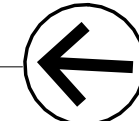
(SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED) ÷ (SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS)

(65.4 FEET) ÷ (204.21 FEET) = **32%**

- (A) THE "SUM OF THE LENGTH OF EXISTING EXTERIOR WALLS TO BE STRUCTURALLY ALTERED" IS THE SUM OF EACH WALL SEGMENT THAT IS COMPLETELY DEMOLISHED.
(B) THE "SUM OF THE LENGTH OF EXTERIOR WALLS" IS THE SUM OF THE LENGTHS OF EACH EXTERIOR WALL SEGMENT OF A STRUCTURE OR BUILDING.

FLOOR PLAN LEGEND		
SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

1 LEVEL 2 - DEMO
1/4" = 1'-0"



HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026

Date: 09/19/24

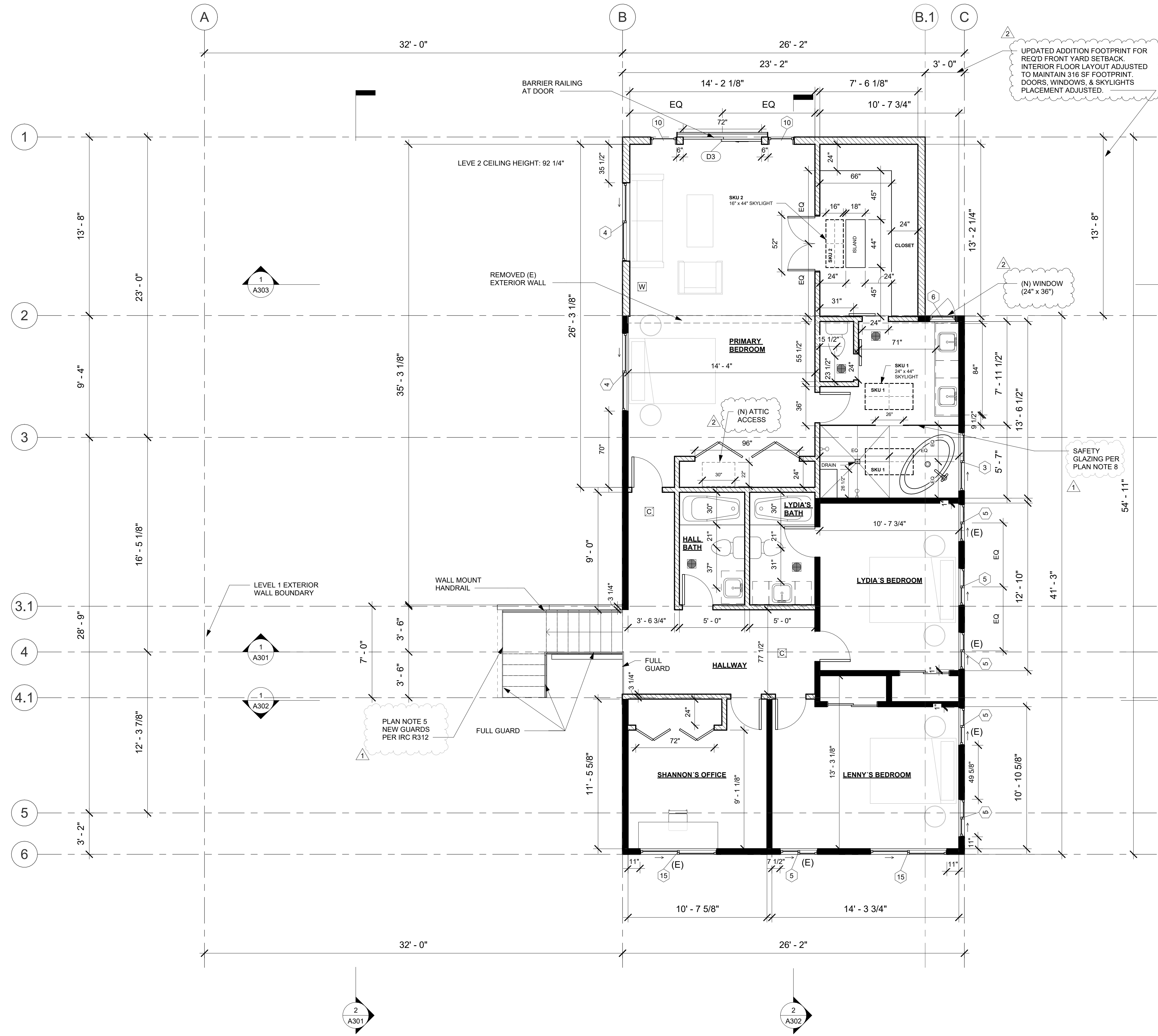
DEMO LEVEL 2

A103

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

BUILD STUFF

BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com



PLAN NOTES:

- CONTRACTOR TO VERIFY MEASUREMENTS OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION. DIMENSIONS SUBJECT TO CONVENTIONAL TOLERANCES.
- REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES INCLUDING UNIT SIZE.
- GAS INSERT FIREPLACE. VERIFY REQUIRED FRAMING WIDTH, HEIGHT, AND DEPTH PER MANUFACTURER SPECIFICATIONS.
- REPLACE (E) GLASS PANELS IN NEW 2X6 WALL - CONTRACTOR TO VERIFY THE (E) GLASS FRAME AND PANEL DIMENSIONS FOR REPLACEMENT.
- STAIR DIMENSIONS PER IRC R311.7, MAIN INTERIOR STAIR SHALL BE REBUILT AND NEW GUARDS WILL BE INSTALLED TO COMPLY WITH IRC R312.
- AIR EXHAUST OPENINGS SHALL TERMINATE NOT LESS THAN 3 FEET FROM OPERABLE AND NONOPERABLE OPENINGS INTO THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKES EXCEPT WHERE THE OPENING IS LOCATED 3 FEET ABOVE THE AIR INTAKE.
- PROVIDE FIREBLOCKING FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING.
- SAFETY GLAZING REQUIRED AT WET SURFACES (PER IRC R308.4.5) GLAZING IN WALLS, ENCLOSURES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND SIMILAR, WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE CONSIDERED A HAZARDOUS LOCATION. APPLIES TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

GUARDS (PER IRC R312.1)

REQUIRED HEIGHT: MAX 36 INCHES AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE NOSINGS.
MAX OPENINGS: FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
MAX OPENINGS AT STAIRS: THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF STAIR, FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER.
GUARDS ON THE OPEN SIDE OF STAIRS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 4 3/8 INCHES IN DIAMETER.

WHOLE HOUSE VENTILATION:

CALCULATION PER TABLE M1505.4.3(1)

PROPOSED ADDITION CONDITIONED SF: 632 SF
NUMBER OF BEDROOMS: 2
VENTILATION AIRFLOW RATE (CFM): 35 CFM

WHOLE HOUSE VENTILATION: 35 CFM CONTINUOUSLY

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION	NOTES
	EXISTING WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O) 8" CONCRETE WALL (EXT.)
	NEW WALL	2X6 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)
	DEMO WALL	2X4 STUD @ 16" O.C. (EXT. U.N.O) 2X4 STUD @ 16" O.C. (INT. U.N.O)

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	FAN MIN 50 CFM, BATH, TOILET ROOM & LAUNDRY FAN MIN 100 CFM, KITCHEN
	COMBINED CARBON MONOXIDE DETECTOR & SMOKE DETECTORS
	SMOKE DETECTOR INTERCONNECTED AND HARDWIRED W/ BATTERY BACKUP
	CARBON MONOXIDE DETECTOR, INTERCONNECTED AND HARDWIRED W/BATTERY BACKUP
	WHOLE HOUSE VENTILATION 35 CFM CONTINUOUSLY

REVISION TABLE	
Revision #	Date
1	5/22/2024
2	9/19/2024

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026

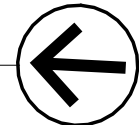
Date: 09/19/24

PROPOSED LEVEL 2

A104

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

1 LEVEL 2
1/4" = 1'-0"



REVISION TABLE	
Revision #	Revision Description

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

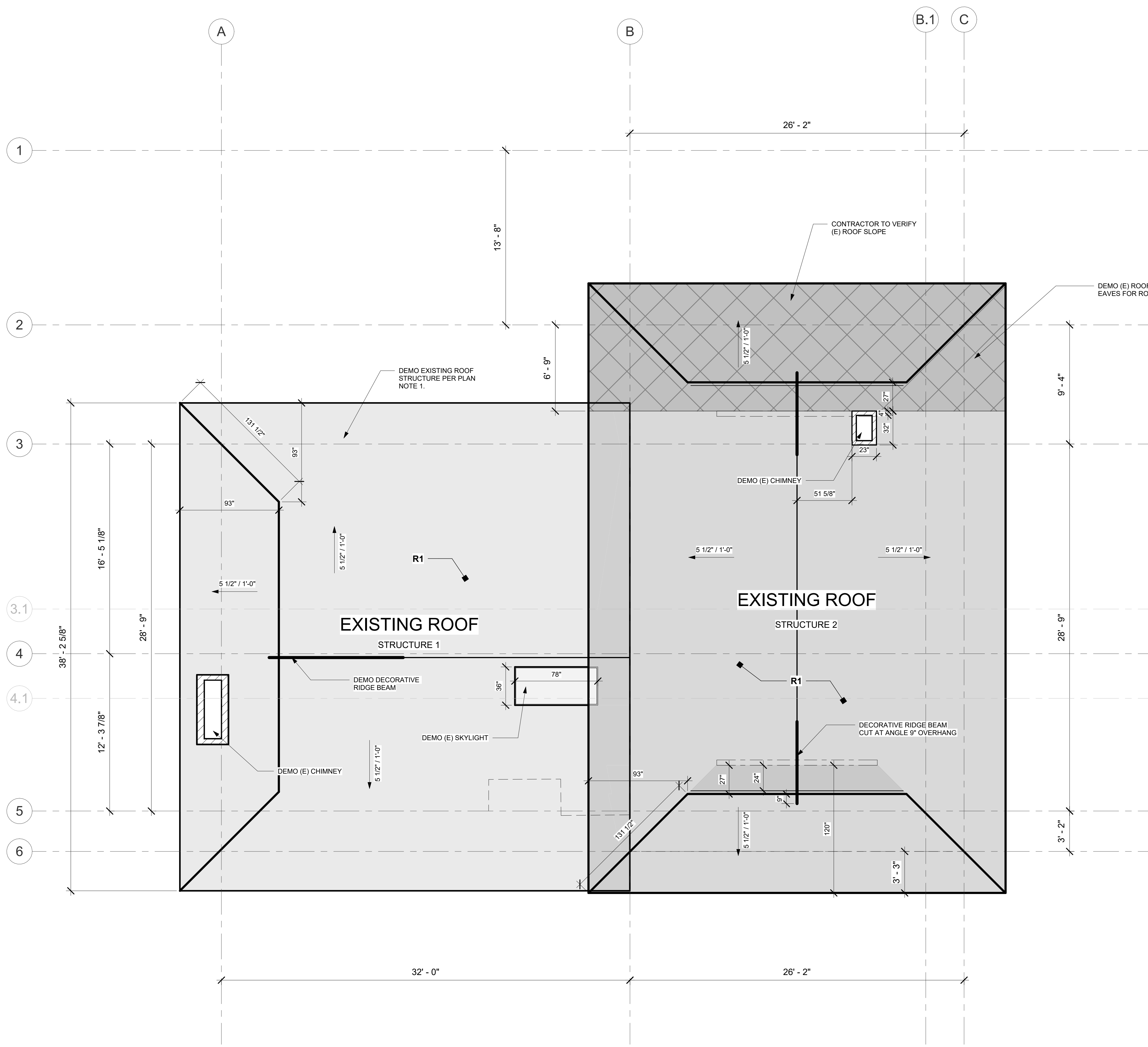
Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

DEMO ROOF PLAN

A105

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



PLAN NOTES:

1. DEMO EXISTING ROOF OF MAIN LEVEL STRUCTURE. SPECIAL PRECAUTIONS MUST BE TAKEN WHEN CLIPPING EXISTING DUCTWORK AND ELECTRICAL WIRES DURING DEMOLITION.
2. EXISTING END HIP ROOF TO BE VERIFIED ON-SITE TO MATCH EXACT EXISTING CONDITIONS ONCE ROOFING MATERIAL HAS BEEN REMOVED AND EXISTING STRUCTURE IS EXPOSED.
3. DEMOLITION: ITEMS INDICATED ON PLANS TO BE DEMOLISHED, SHALL BE COMPLETELY REMOVED AND DISPOSED UNLESS NOTED OTHERWISE. CONTRACTOR/OWNER RESPONSIBLE FOR REVIEW OF THE HAZARDOUS MATERIALS ABATEMENT, REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS IF APPLICABLE FOR CUTTING AND PATCHING WORK.

EXISTING CONDITION NOTES:

1. (E) EXTERIOR WALLS: 2X4 STUD @16" O.C.
2. 8" CONCRETE FOUNDATION WALLS WITH FOOTINGS.
3. (E) FLOOR STRUCTURE: WOOD FRAMED CRAWLSPACE FLOOR AT MAIN LEVEL, SLAB ON GRADE AT GARAGE, AND WOOD FRAMED FLOOR AT SECOND LEVEL.
4. (E) ROOF STRUCTURE: SITE-CUT ROOF TRUSSES.
5. (E) HEATING: CENTRAL FORCED AIR HEATING - NATURAL GAS - PUBLIC SUPPLY, GAS METER.
6. (E) HOT WATER UNIT: GAS FUELED.
7. (E) ATTIC: VENTED THROUGH SOFFIT AND ROOF VENTS.

ROOF ASSEMBLIES		
TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER SRCTUCT. -2 X 12 RAFTERS PER SRCTUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER SRCTUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

1 ROOF - DEMO
1/4" = 1'-0"

REVISION TABLE		Revision #	Date	Revision Description
1		1	9/19/2024	Revision 2
2		2		

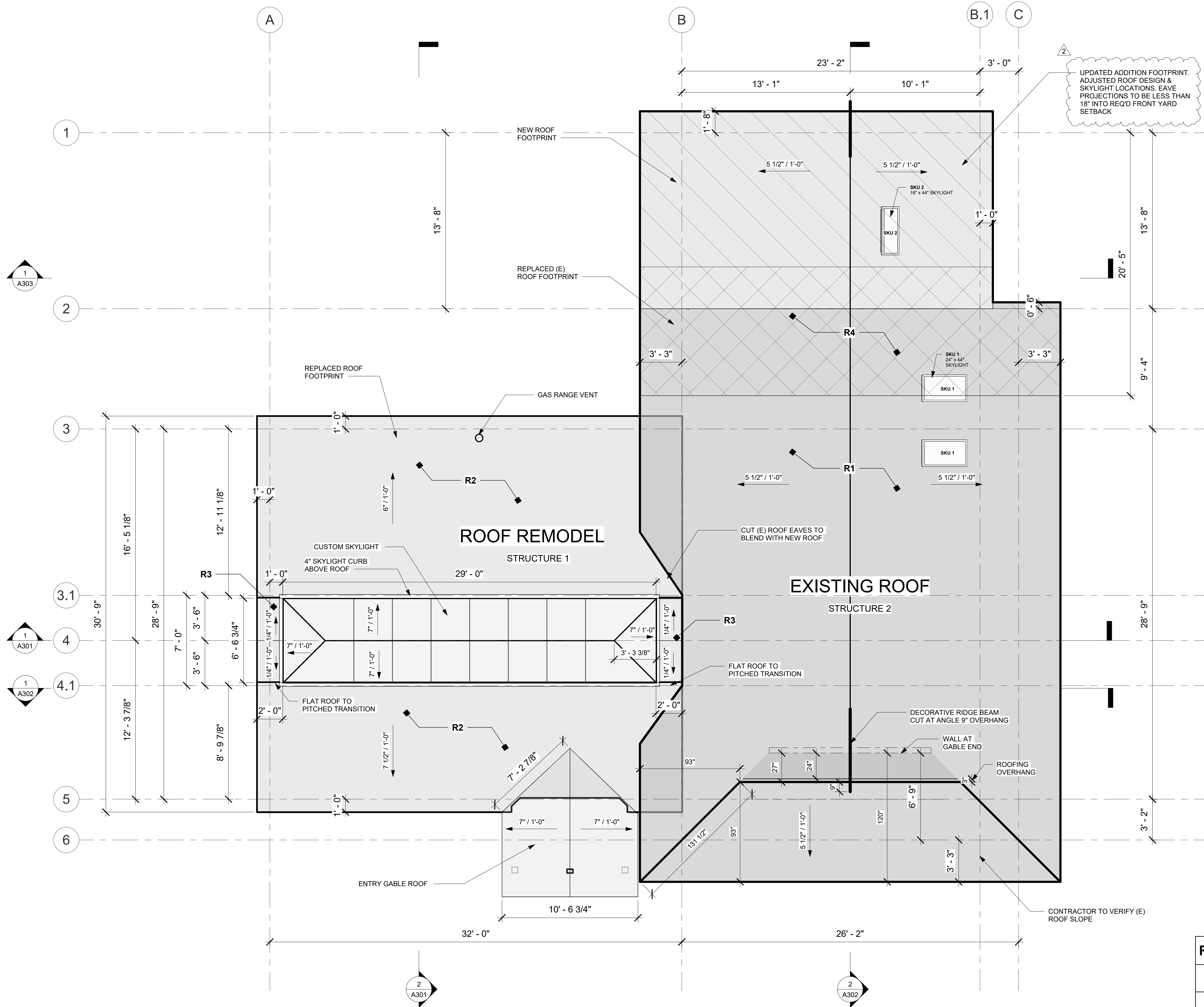
HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status: PERMIT DRAWINGS SET
Project Owner: RODOLFO HERNANDEZ & SHANNON MCINTYRE
Record #: 2402-026
Date: 09/19/24

PROPOSED ROOF PLAN

A106

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



PLAN NOTES:

- STRUCTURAL SPECIFICATIONS PER STRUCTURAL PLANS.
- THERMOSET SINGLE-PLY MEMBRANE ROOFS SHALL HAVE A DESIGN SLOPE OF NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE.
- CEILINGS VAULTED - SINGLE RAFTER MUST HAVE A MIN INSULATION VALUE OF R38 WITH THE FULL INSULATION DEPTH EXTENDING OVER THE TOP PLATE OF THE EXTERIOR WALL.
- CEILINGS W/ ATTICS MINIMUM INSULATION VALUE OF R-49. PROVIDE FIREBLOCKING FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING.
- ROOF PITCH PER PLAN UNLESS NOTED OTHERWISE.

SKYLIGHTS AND SLOPED GLAZING (PER IRC R308.6)

R308.6.2 MATERIALS: MORE THAN 12 FEET ABOVE A WALKING SURFACE THE INTERLAYER THICKNESS SHALL BE NOT LESS THAN: LAMINATED GLASS WITH POLYVINYL BUTYRAL INTERLAYER THICKNESS NOT LESS THAN 0.030 INCH (0.76 MM).

CURBS FOR SKYLIGHTS (PER IRC R308.6.8)

UNIT SKYLIGHTS INSTALLED IN A ROOF WITH A PITCH OF LESS THAN THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE) SHALL BE MOUNTED ON A CURB EXTENDING NOT LESS THAN 4 INCHES ABOVE THE PLANE OF THE ROOF, UNLESS SPECIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

UNIT SKYLIGHTS TESTING AND LABELING (PER IRC R308.6.9)

SHALL BE TESTED BY AN APPROVED INDEPENDENT LABORATORY, AND BEAR A LABEL IDENTIFYING MANUFACTURER, PERFORMANCE GRADE RATING AND APPROVED INSPECTION AGENCY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF AAMA/WDMA/CSA 101/I.S.2/A440.

THERMOSET SINGLE-PLY ROOFING (PER IRC R905.12)

INSTALLATION OF THERMOSET SINGLE-PLY ROOFING SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION. SHALL HAVE A DESIGN SLOPE OF MINIMUM ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE. R905.12.3 APPLICATION: THERMOSET SINGLE-PLY ROOFS SHALL BE INSTALLED IN ACCORDANCE WITH THIS CHAPTER AND THE MANUFACTURER'S INSTRUCTIONS.

ROOF VENTILATION CALCULATIONS: (PER IRC R806)

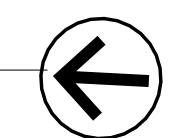
ATTIC VENTILATION REQUIRED:
1 SF OF VENTILATION AREA FOR EACH 300 SF OF ATTIC AREA.
EXISTING VENTED ATTIC: VENTED THROUGH SOFFIT AND ROOF VENTS.

NEW VENTED ATTIC AREA: 493 SQ.FT
493 / 300 = 1.6 SQ.FT OF NFVA

50% INTAKE		50% OUTLET	
REQUIRED INTAKE (SQ.FT)	0.8	REQUIRED OUTLET (SQ.FT)	0.8
SQ.IN PER (SQ.FT)	144	SQ.IN PER (SQ.FT)	144
REQUIRED INTAKE (SQ.IN)	115.2	REQUIRED OUTLET (SQ.IN)	115.2
LINEAR FT OF INTAKE	63.8	LINEAR FT OF OUTLET	12.1
INTAKE VENT SQ.IN PER LINEAR FT	1.8	OUTLET VENT SQ.IN PER LINEAR FT	9.5
INTAKE VENT SPECS: COR-A-VENT SOFFIT VENT R5-400 18.75 SQ.IN NFVA/LF OR SIMILAR		OUTLET VENT SPECS: COR-A-VENT RIDGE VENT V-300 13.5 SQ.IN NFVA/LF OR SIMILAR	

ROOF ASSEMBLIES		
TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER STRUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

1 PROPOSED ROOF
1/4" = 1'-0"



BUILD STUFF

BUILD STUFF LLC
206-771-5014
diego@buildstuffstudios.com

REVISION TABLE		Revision	Description
2	9/19/2024	Revision 2	

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

N-S ELEVATIONS

A201

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

WINDOW AND DOOR NOTES:

- ALL FENESTRATION TO BE NFRC-CERTIFIED.
- CONTRACTOR TO VERIFY (E) WINDOW ROUGH OPENING MEASUREMENTS PRIOR TO PROCURMENT. VERIFY ROUGH OPENING DIMENSIONS AND FINISH REQUIREMENTS OF NEW WINDOWS.
- HEADER SIZING PER STRUCTURAL PLANS.
- REPLACE ALL EXISTING WINDOWS WITH UPDATED WINDOWS, IN EXISTING ROUGH OPENING U.N.O
- (E) - REPLACE ALL EXISTING WINDOWS WITH U-FACTOR OF .30.
- WINDOWS AT ADDITION TO HAVE A U-FACTOR OF .28 PER ENERGY CODE CREDIT OPTION 1.3.
- THE ADDITION'S SIDING, ROOFING, & ARCHITECTURAL DETAILS TO MATCH EXISTING CONDITIONS.
- AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS SHALL BE PERMITTED TO SATISFY THE U-FACTOR REQUIREMENTS PER R402.3.1.
- SAFETY GLAZING SHALL BE PROVIDED ON ALL WINDOWS AND GLAZED DOORS AT HAZARDOUS LOCATIONS PER IRC 308.4 (IRC R310); EGRESS WINDOWS TO PROVIDE 5.7 SF MINIMUM NET OPENING; 20" MINIMUM CLEAR WIDTH; 24" MINIMUM CLEAR HEIGHT; SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT USE OF KEYS OR TOOLS.

ELEVATION LEGEND

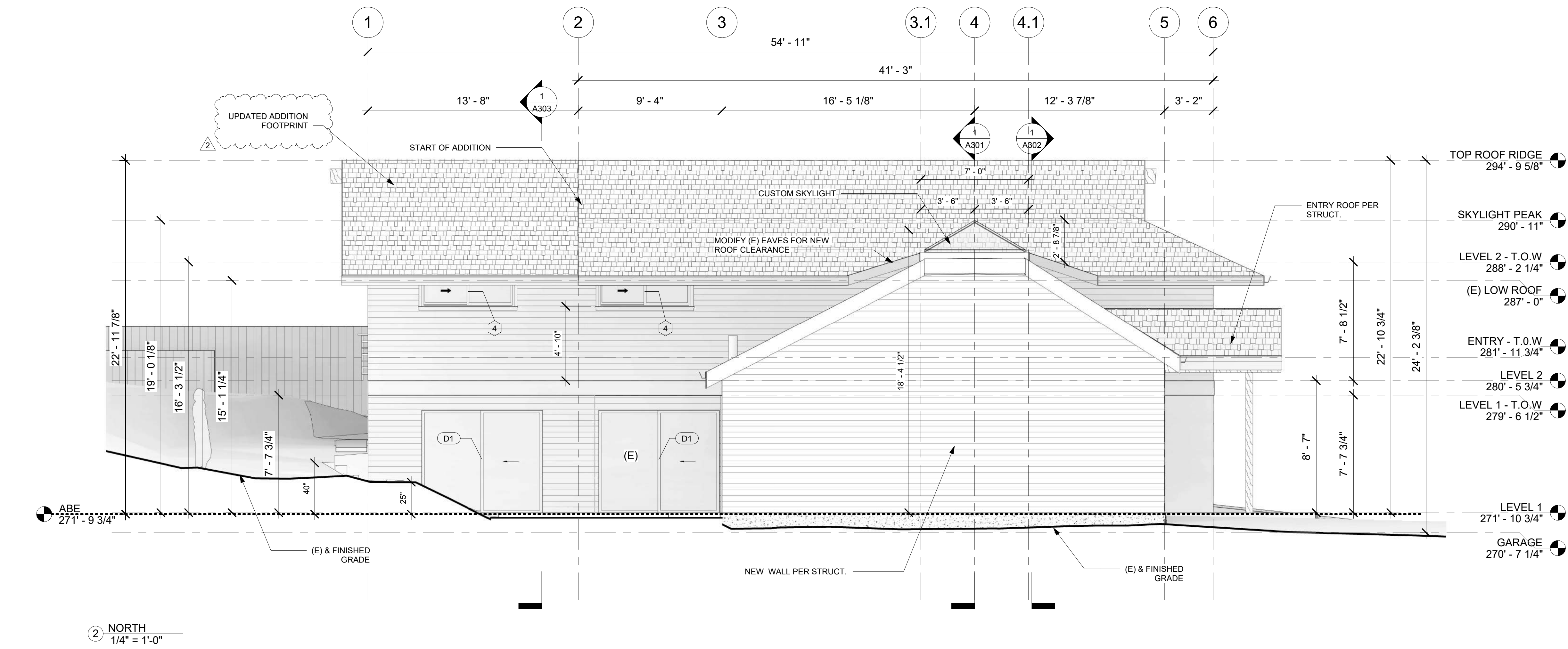
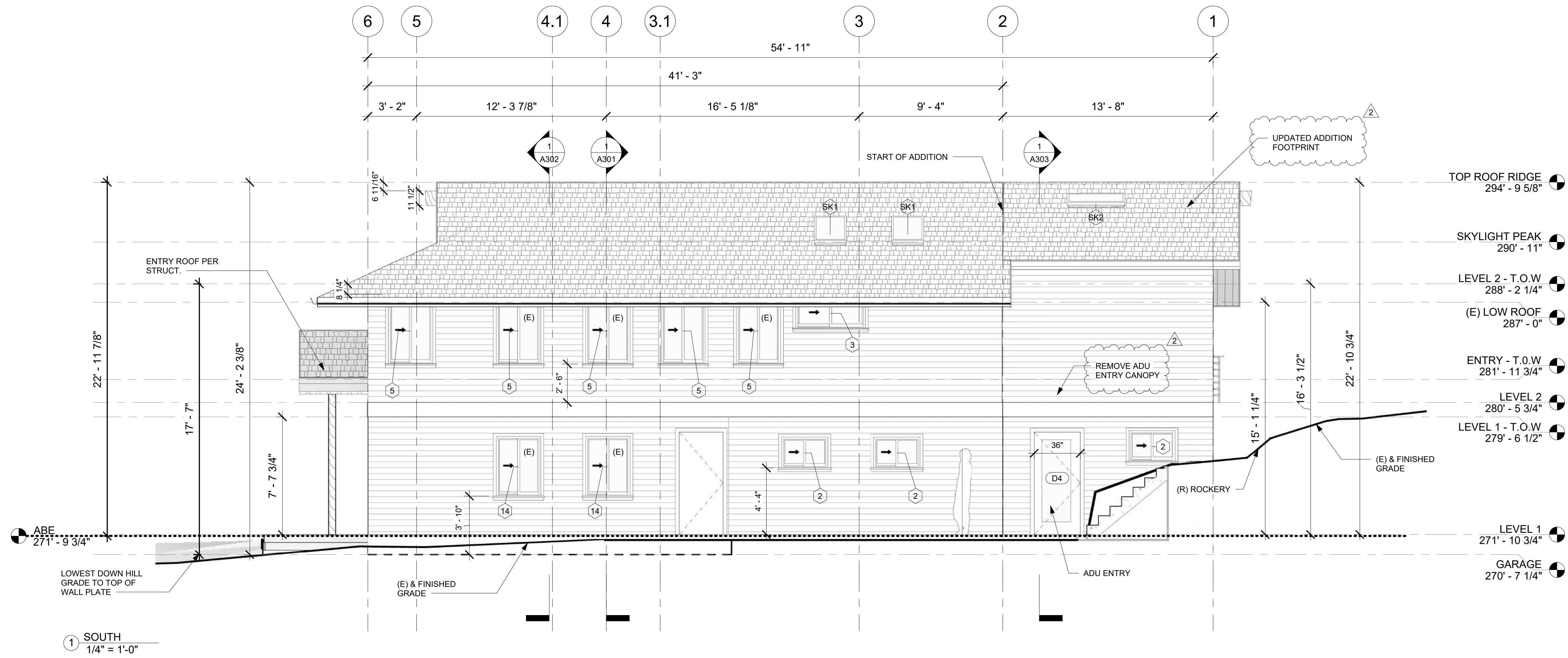
SYMBOL	DESCRIPTION	NOTES
	(E) 4.5" CEDAR LAP SIDING	MATCH (E) SIDING AT ADDITION & NEW EXT. WALLS
	3" WOOD SLAT SIDING	NEW AT ENTRY ACCENT WALL
	(E) ASPHALT ROOF SHINGLES	MATCH EXISTING SHINGLES AT NEW & REPLACED ROOF

Window Schedule

Type Mark	Type	Width	Height
2	36"x24"	3' - 0"	2' - 0"
3	54" x 24"	4' - 6"	2' - 0"
4	72" x 24"	6' - 0"	2' - 0"
5	34" x 52"	2' - 10 1/2"	4' - 4 1/2"
6	24" x 36"	2' - 0"	3' - 0"
7	70" x 22"	5' - 10"	1' - 10"
10	24" x 84"	2' - 0"	7' - 0"
11	36" x 48"	3' - 0"	4' - 0"
12	132" x 40"	11' - 0"	3' - 4"
14	34" x 46"	2' - 10 1/2"	3' - 10 1/2"
15	70" x 52"	5' - 10 1/2"	4' - 4 1/2"
16	72" x 18"	6' - 0"	1' - 6"
SK1	44" x 24"	3' - 8"	2' - 0"
SK2	44" x 16"	3' - 8"	1' - 4"

Exterior Door Schedule

Type Mark	Type	Width	Height
D1	Exterior Double Sliding Door 94" x 80"	7' - 10"	6' - 8"
D2	Exterior Double Front Entry Door 72" x 80"	6' - 0"	6' - 8"
D3	Exterior Double Sliding Door 72" x 82"	6' - 0"	6' - 10"
D4	Exterior Single Entry Door 36" X 80"	3' - 0"	6' - 8"
D5	Bifold Door Full Glass 132" x 90"	11' - 0"	7' - 6"



② NORTH
1/4" = 1'-0"

① SOUTH
1/4" = 1'-0"

BUILD STUFF

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REVISION TABLE		Revision	Description
2	9/19/2024	Revision 2	

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

W-E ELEVATIONS

A202

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

WINDOW AND DOOR NOTES:

- ALL FENESTRATION TO BE NFRC-CERTIFIED.
- CONTRACTOR TO VERIFY (E) WINDOW ROUGH OPENING MEASUREMENTS PRIOR TO PROCURMENT. VERIFY ROUGH OPENING DIMENSIONS AND FINISH REQUIREMENTS OF NEW WINDOWS.
- HEADER SIZING PER STRUCTURAL PLANS.
- REPLACE ALL EXISTING WINDOWS WITH UPDATED WINDOWS, IN EXISTING ROUGH OPENING U.N.O
- (E) - REPLACE ALL EXISTING WINDOWS WITH U-FACTOR OF .30
- WINDOWS AT ADDITION TO HAVE A U-FACTOR OF .28 PER ENERGY CODE CREDIT OPTION 1.3.
- THE ADDITION'S SIDING, ROOFING, & ARCHITECTURAL DETAILS TO MATCH EXISTING CONDITIONS.
- AN AREA-WEIGHTED AVERAGE OF FENESTRATION PRODUCTS SHALL BE PERMITTED TO SATISFY THE U-FACTOR REQUIREMENTS PER R402.3.1.
- SAFETY GLAZING SHALL BE PROVIDED ON ALL WINDOWS AND GLAZED DOORS AT HAZARDOUS LOCATIONS PER IRC 308.4 (IRC R310); EGRESS WINDOWS TO PROVIDE 5.7 SF MINIMUM NET OPENING; 20" MINIMUM CLEAR WIDTH; 24" MINIMUM CLEAR HEIGHT; SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT USE OF KEYS OR TOOLS.

ELEVATION LEGEND

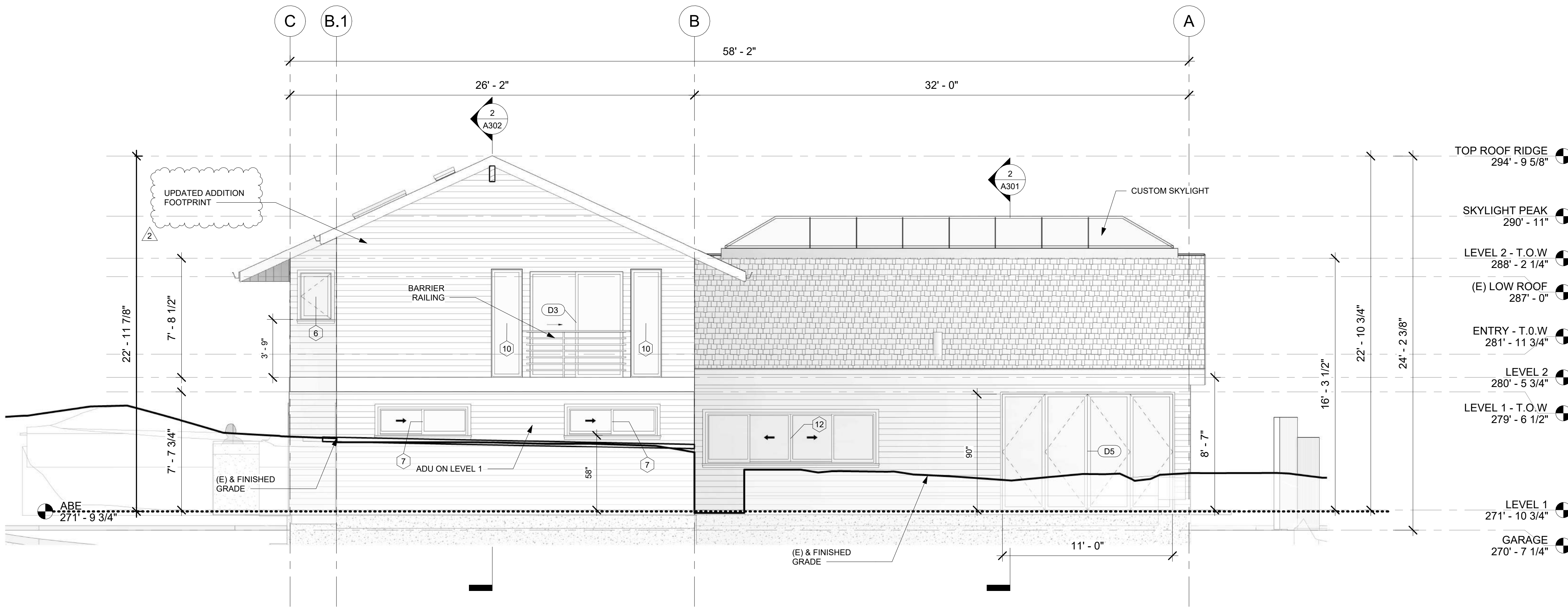
SYMBOL	DESCRIPTION	NOTES
	(E) 4.5" CEDAR LAP SIDING	MATCH (E) SIDING AT ADDITION & NEW EXT. WALLS
	3" WOOD SLAT SIDING	NEW AT ENTRY ACCENT WALL
	(E) ASPHALT ROOF SHINGLES	MATCH EXISTING SHINGLES AT NEW & REPLACED ROOF

Window Schedule

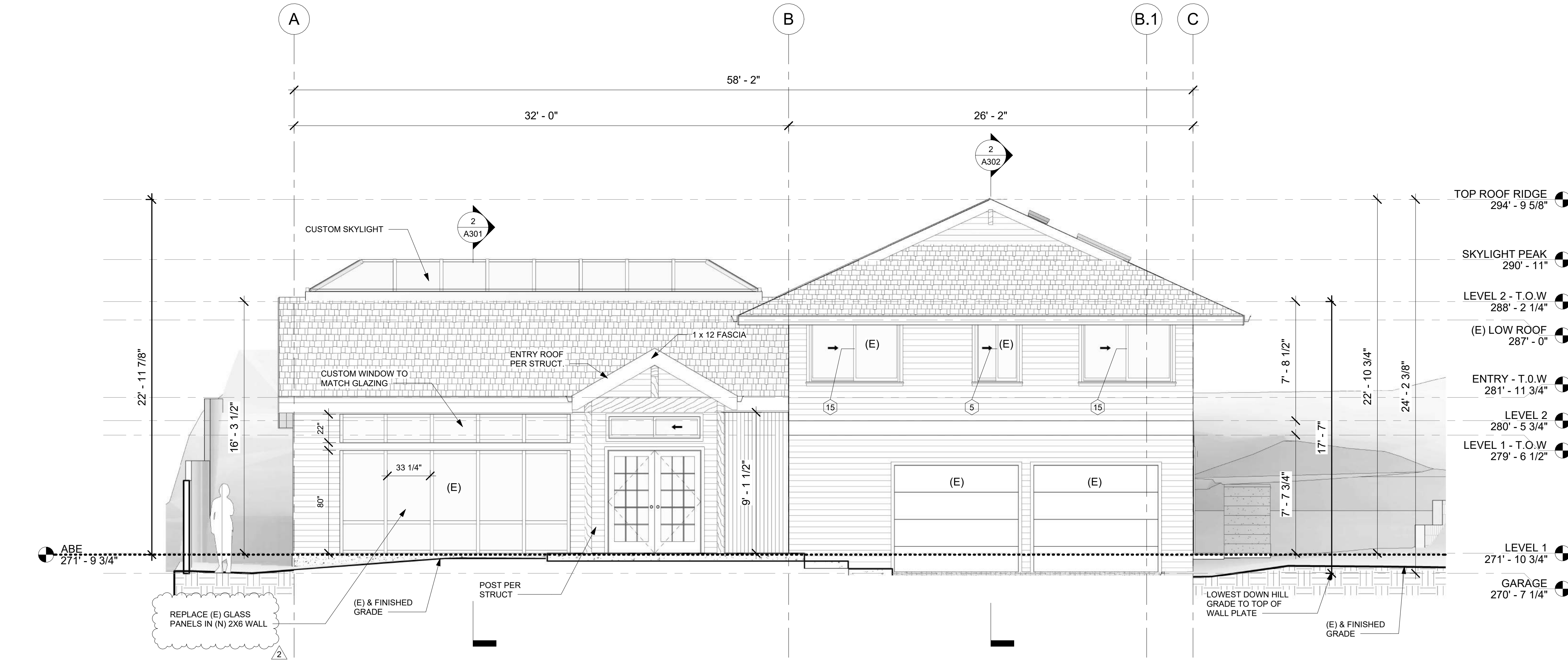
Type Mark	Type	Width	Height
2	36"x24"	3'-0"	2'-0"
3	54" x 24"	4'-6"	2'-0"
4	72" x 24"	6'-0"	2'-0"
5	34" x 52"	2'-10 1/2"	4'-4 1/2"
6	24" x 36"	2'-0"	3'-0"
7	70" x 22"	5'-10"	1'-10"
10	24" x 84"	2'-0"	7'-0"
11	36" x 48"	3'-0"	4'-0"
12	132" x 40"	11'-0"	3'-4"
14	34" x 46"	2'-10 1/2"	3'-10 1/2"
15	70" x 52"	5'-10 1/2"	4'-4 1/2"
16	72" x 18"	6'-0"	1'-6"
SK1	44" x 24"	3'-8"	2'-0"
SK2	44" x 16"	3'-8"	1'-4"

Exterior Door Schedule

Type Mark	Type	Width	Height
D1	Exterior Double Sliding Door 94" x 80"	7'-10"	6'-8"
D2	Exterior Double Front Entry Door 72" x 80"	6'-0"	6'-8"
D3	Exterior Double Sliding Door 72" x 82"	6'-0"	6'-10"
D4	Exterior Single Entry Door 36" X 80"	3'-0"	6'-8"
D5	Bifold Door Full Glass 132" x 90"	11'-0"	7'-6"



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

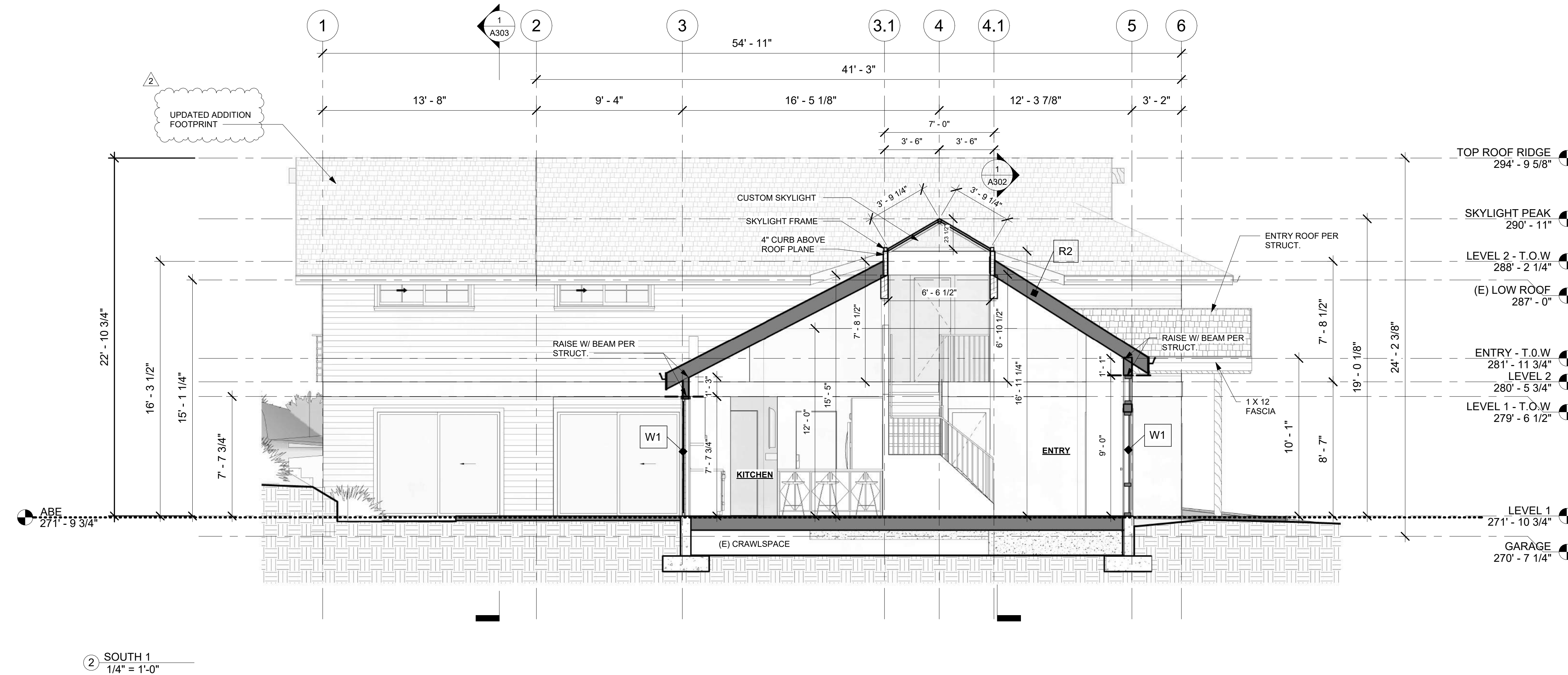
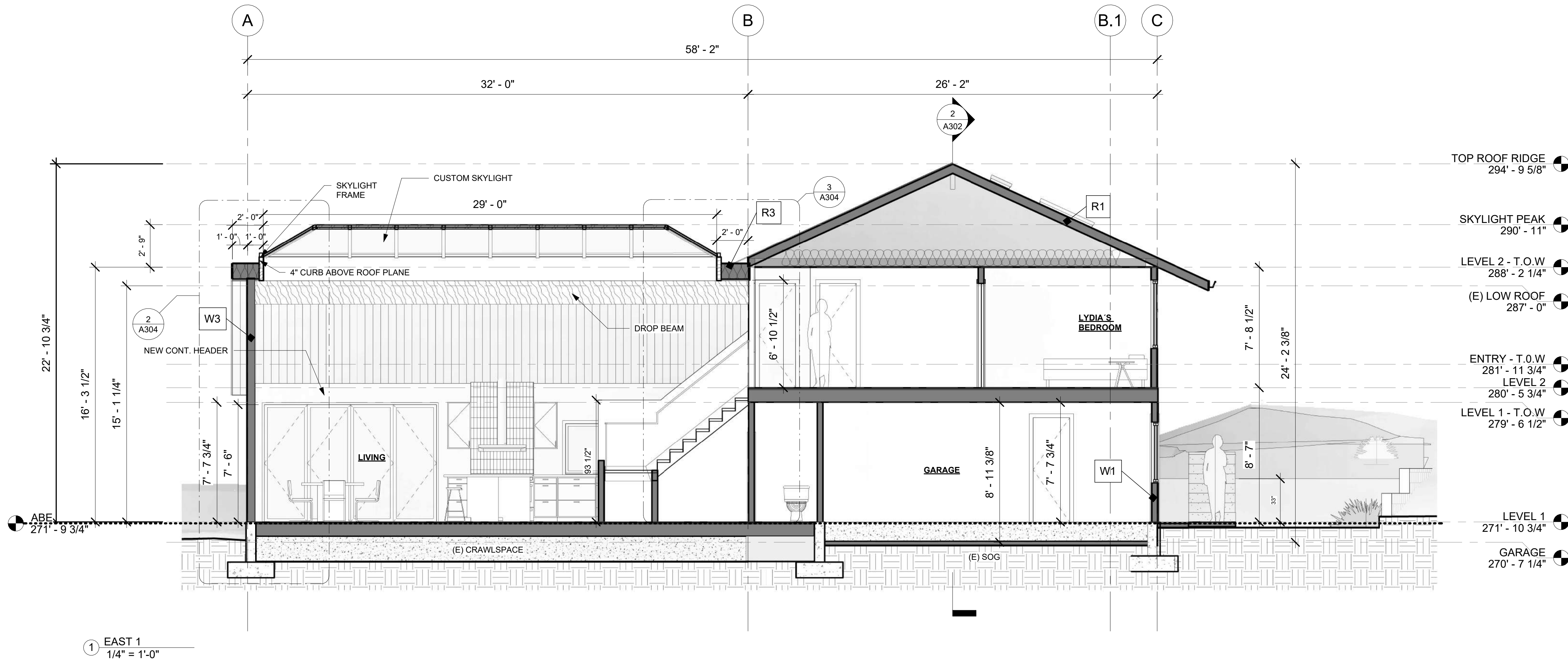


2 WEST
1/4" = 1'-0"

REVISION TABLE		Revision	Description
Revision #	Date	9/19/2024	Revision 2
2			

SECTION NOTES:

- REFER TO STRUCTURAL PLANS FOR STRUCTURAL SPECIFICATIONS.
- REFER TO PROPOSED FLOOR AND ROOF PLANS FOR WALL AND ROOF ASSEMBLIES.
- REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.



HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

BUILDING SECTIONS
1

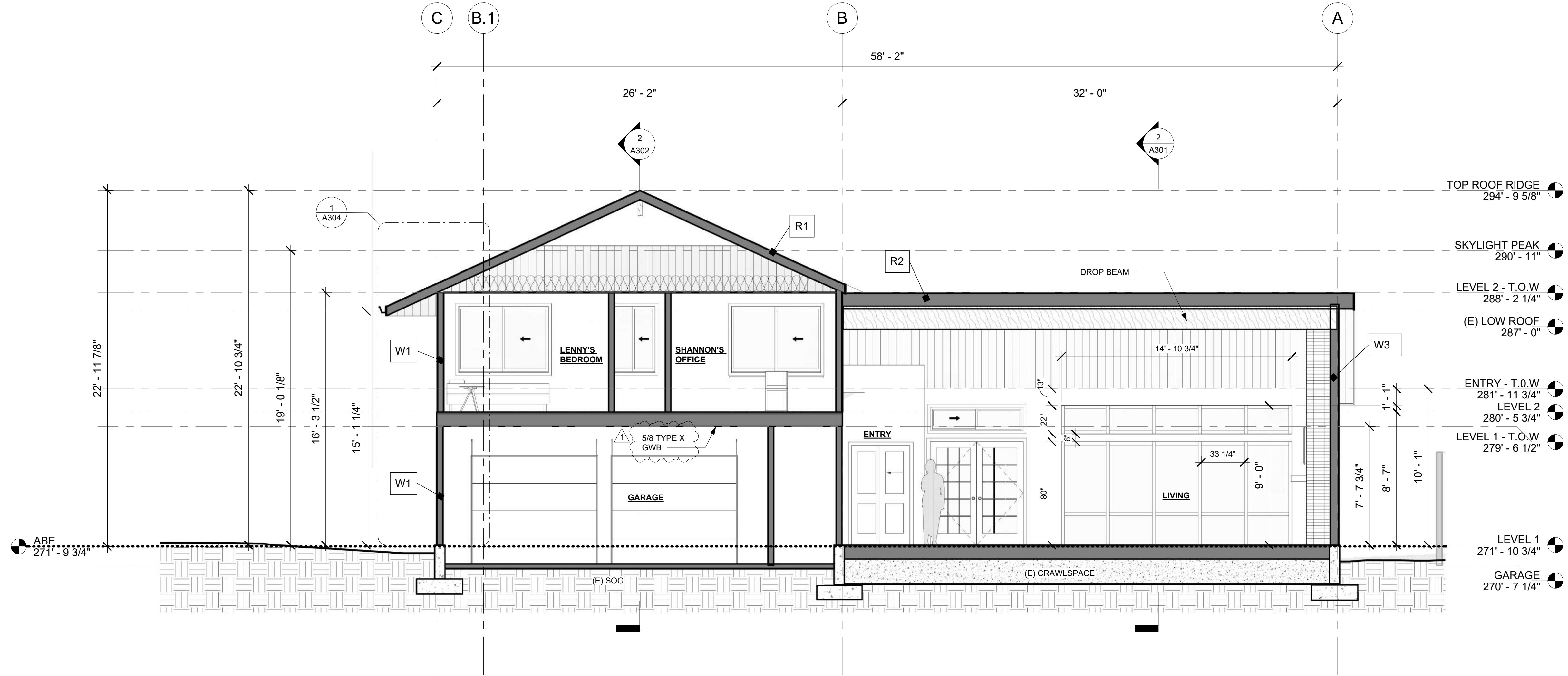
A301

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

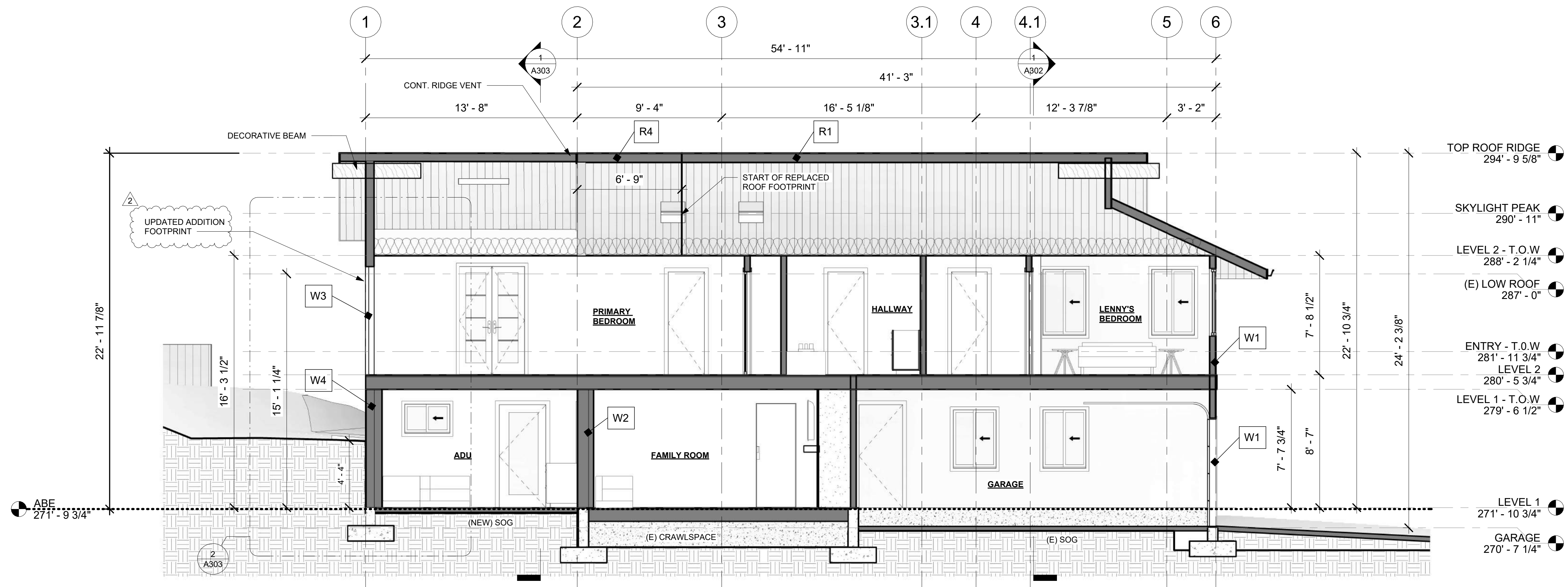
SECTION NOTES:

1. REFER TO STRUCTURAL PLANS FOR STRUCTURAL SPECIFICATIONS.
2. REFER TO PROPOSED FLOOR AND ROOF PLANS FOR WALL AND ROOF ASSEMBLIES.
3. REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.

REVISION TABLE		Revision	Description
Revision #	Date	Revision 1	Revision 2
1	5/22/2024		
2	9/19/2024		



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



2 SOUTH 2
1/4" = 1'-0"

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ &
SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

BUILDING SECTIONS
2

A302

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

BUILD STUFF

BUILD STUFF LLC
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diego@buildstuffstudios.com

REVISION TABLE		Revision #	Date	Revision Description
1	5/22/2024	Revision 1		
2	9/19/2024	Revision 2		

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

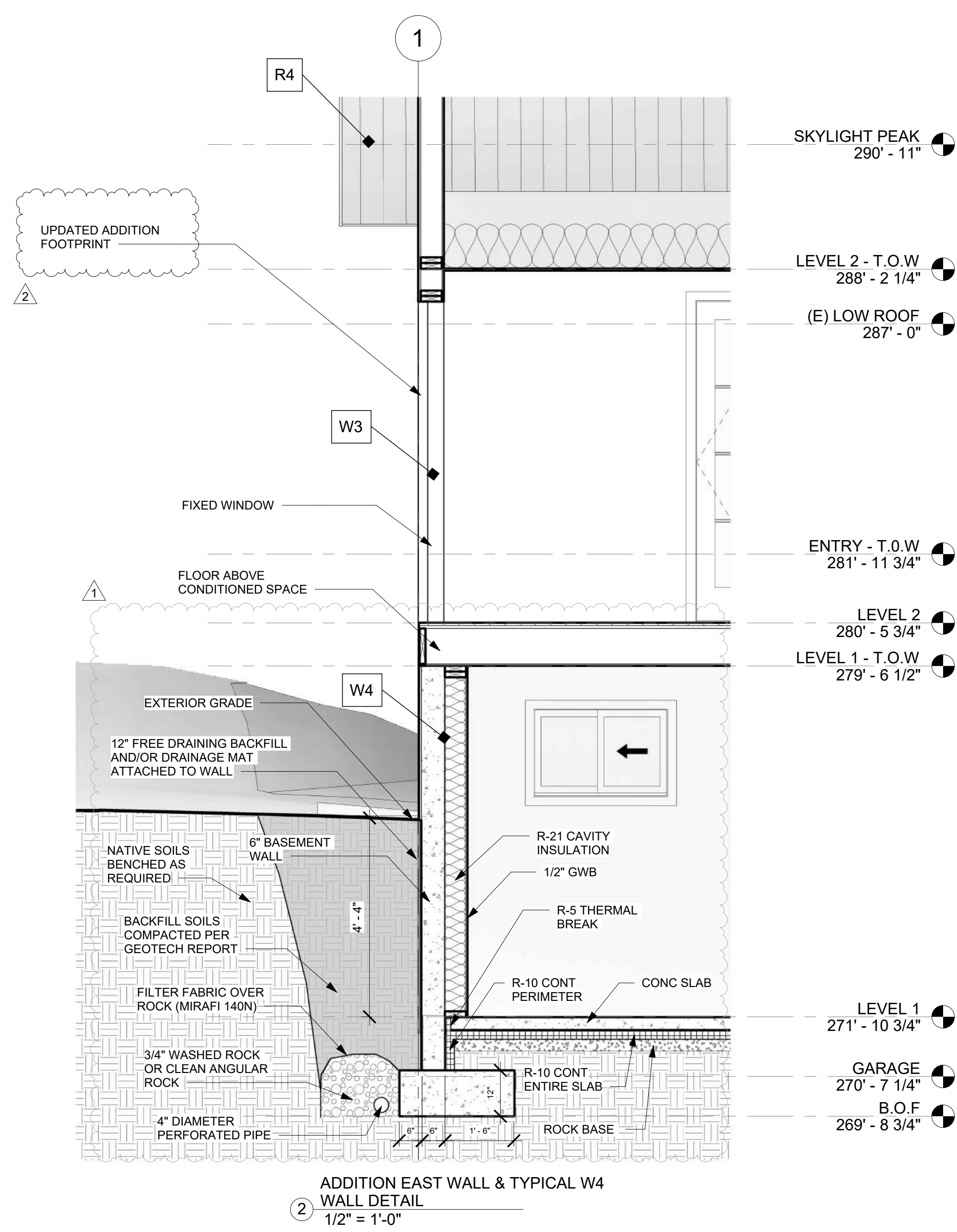
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Date: 09/19/24

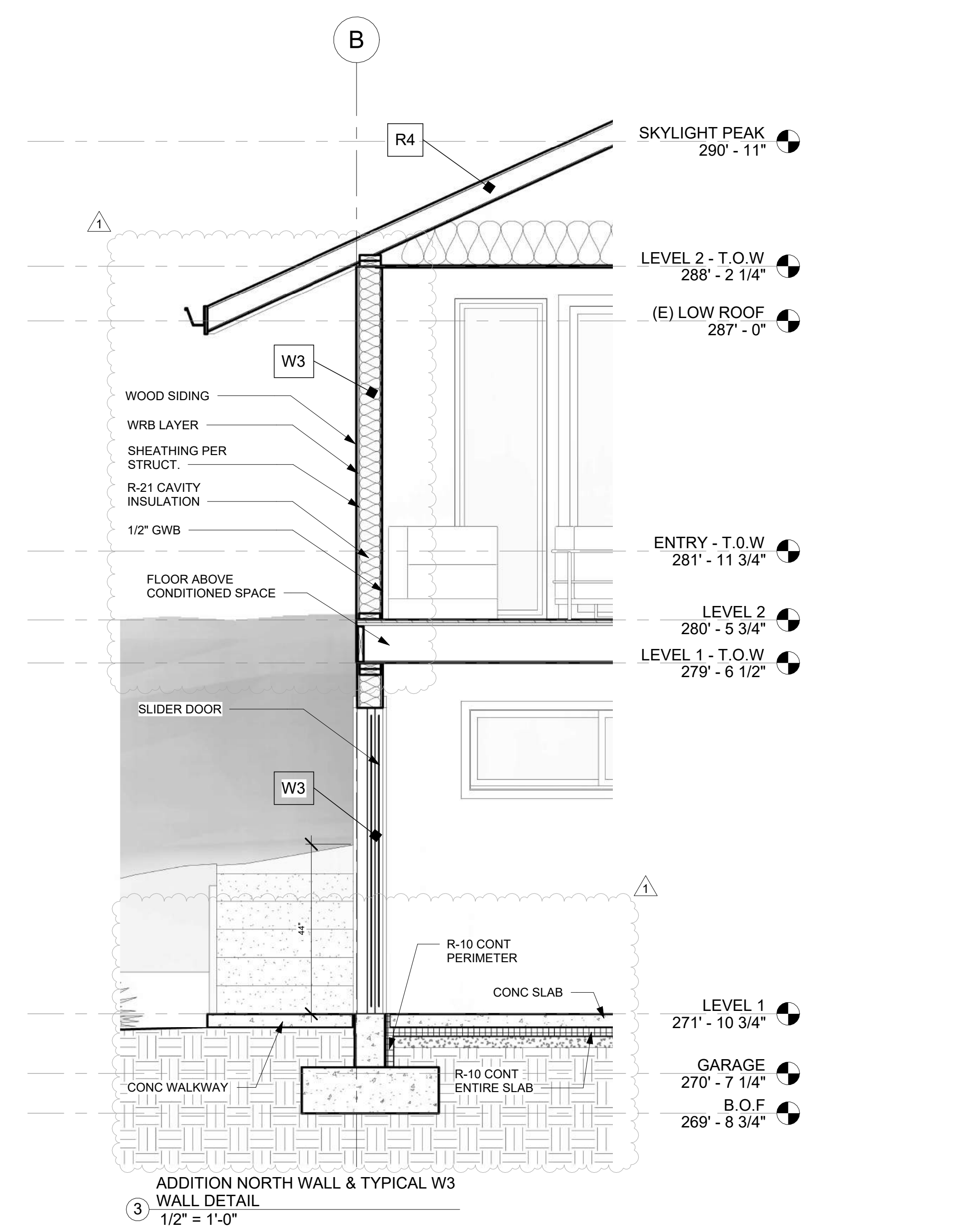
**ADDITION SECTION &
DETAILS**

A303

Scale: As indicated



ADDITION EAST WALL & TYPICAL W4
WALL DETAIL
1/2" = 1'-0"



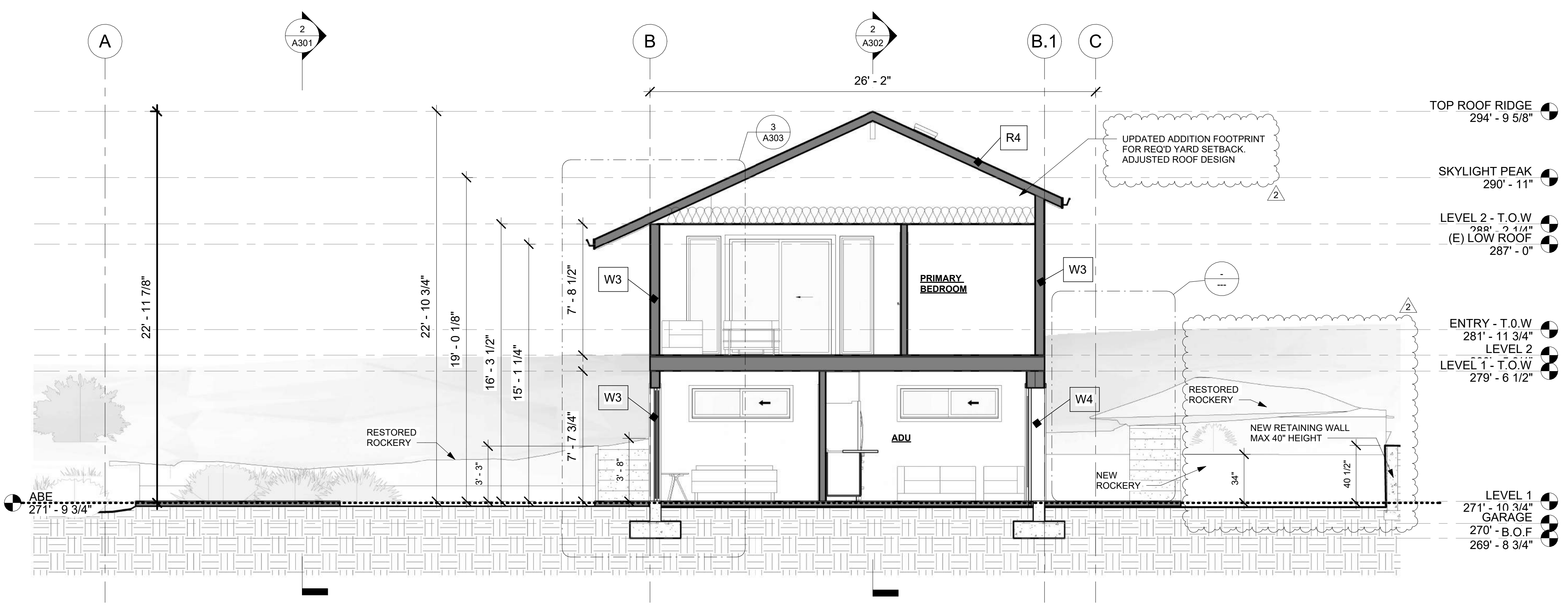
ADDITION NORTH WALL & TYPICAL W3
WALL DETAIL
1/2" = 1'-0"

SECTION NOTES:

- REFER TO STRUCTURAL PLANS FOR STRUCTURAL SPECIFICATIONS.
- REFER TO PROPOSED FLOOR AND ROOF PLANS FOR WALL AND ROOF ASSEMBLIES.
- REFER TO ELEVATIONS FOR WINDOW AND EXTERIOR DOOR SCHEDULES.

WALL ASSEMBLIES		
TYPE	RATING	ASSEMBLY
W1 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C. -BATT INSULATION, 1/2" GWB
W2 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C., 8" CONCRETE RETAINING WALL -BATT INSULATION, 1/2" GWB
W3	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C. -BATT INSULATION R-21 INT, 1/2" GWB
W4	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C., 6" CONCRETE RETAINING WALL -BATT INSULATION R-21 INT + R-5 THERMAL BREAK, 1/2" GWB

ROOF ASSEMBLIES		
TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER STRUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING



EAST 2
1/4" = 1'-0"

REVISION TABLE		
Revision #	Date	Revision Description
1	5/22/2024	Revision 1

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
SHANNON MCINTYRE

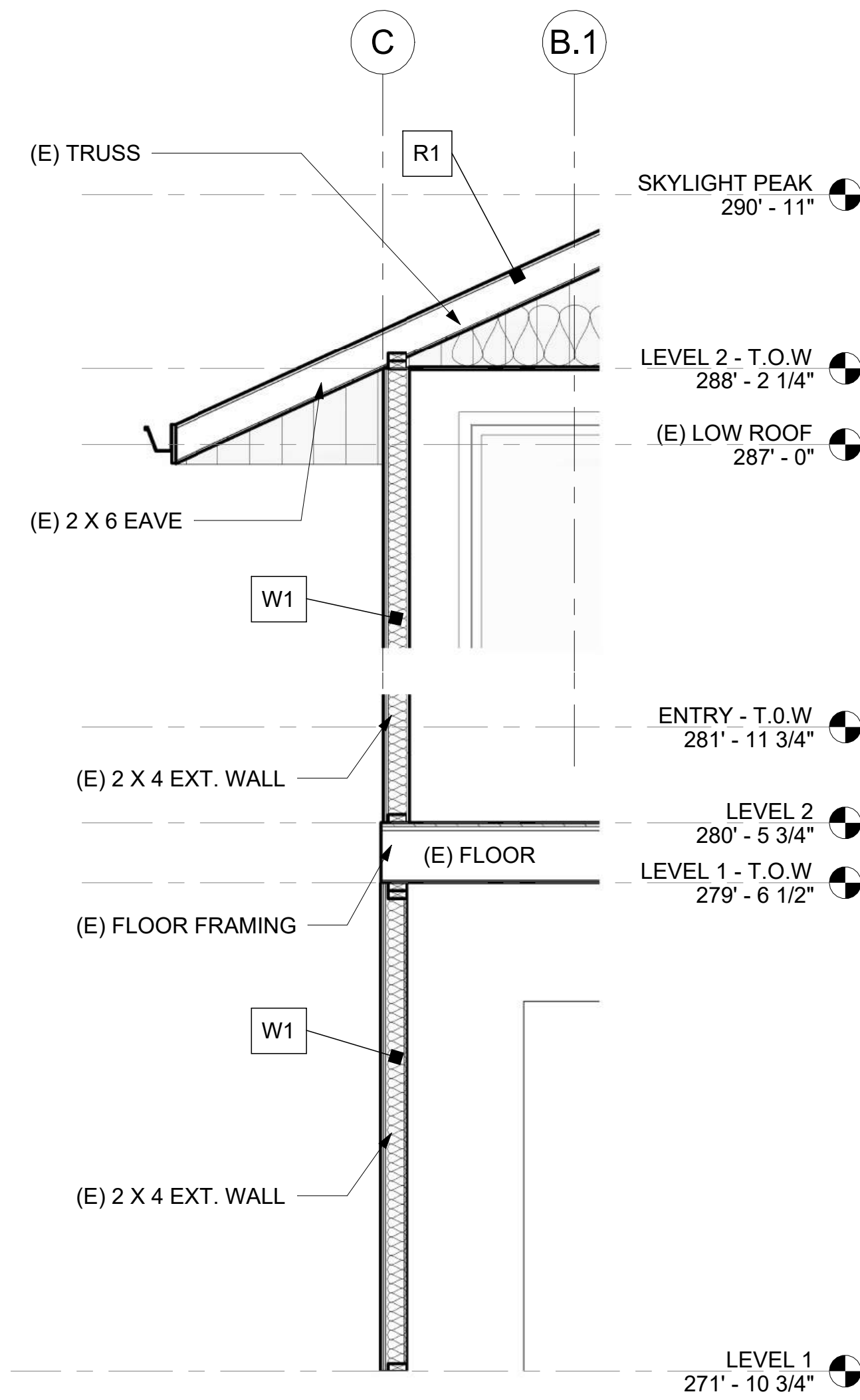
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Date: 09/19/24

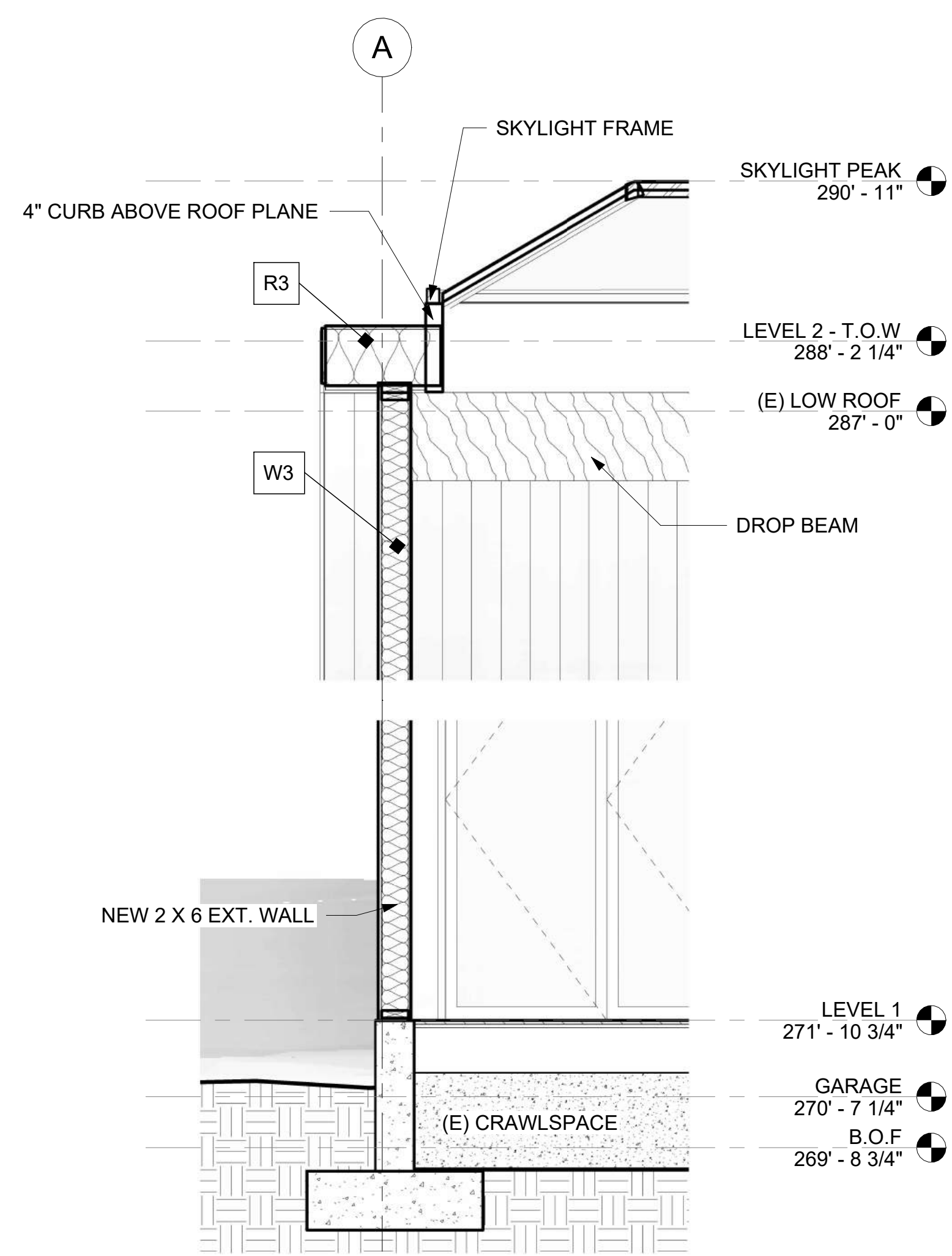
SECTION DETAILS

A304

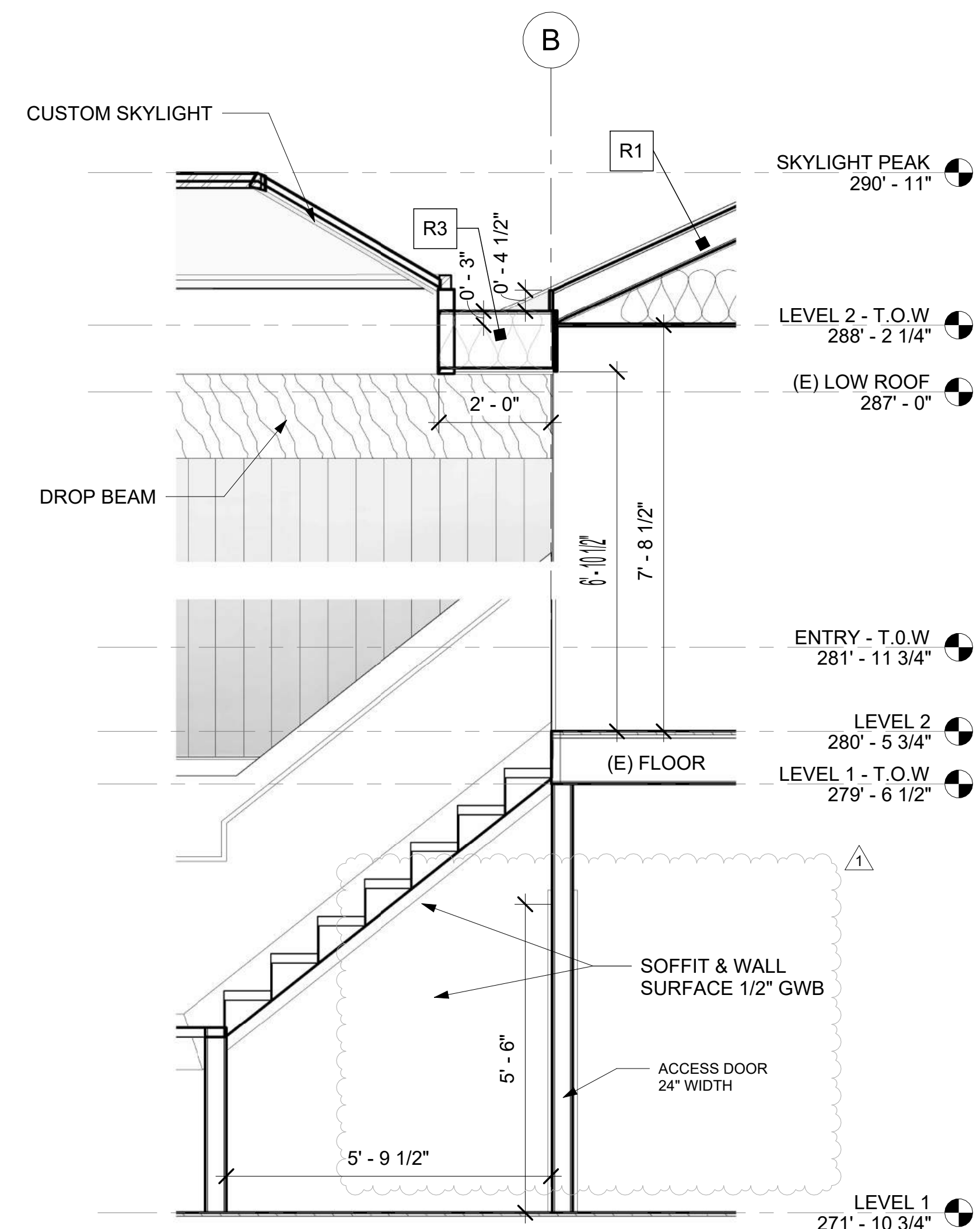
Scale: 1/2" = 1'-0"



1 (E) TYP. EXT 2-STORY WALL
1/2" = 1'-0"



2 NEW 2 X 6 WALL @ MAIN LEVEL
1/2" = 1'-0"



3 NEW ROOF & (E) ROOF INTERSECTION
1/2" = 1'-0"

WALL ASSEMBLIES		
TYPE	RATING	ASSEMBLY
W1 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C. -BATT INSULATION, 1/2" GWB
W2 - (E)	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING -2X4 @ 16" O.C., 8" CONCRETE RETAINING WALL -BATT INSULATION, 1/2" GWB
W3	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C. -BATT INSULATION R-21 INT, 1/2" GWB
W4	0-HR	-CEDAR 4.5" HORIZ. SIDING, WRB LAYER, SHEATHING PER STRUCT. -2X6 @ 16" O.C., 6" CONCRETE RETAINING WALL -BATT INSULATION R-21 INT + R-5 THERMAL BREAK, 1/2" GWB

ROOF ASSEMBLIES		
TYPE	RATING	ASSEMBLY
R1 - (E)	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING -SITE-CUT TRUSSES -BATT INSULATION, 1/2" GWB CEILING
R2	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HIGH PERFORM. BATT INSULATION R-38, 1/2" GWB CEILING
R3	0-HR	-TPO, ICE AND WATER BARRIER, SHEATHING PER STRUCT. -2 X 12 RAFTERS PER STRUCT. -10-1/4" HP BATT INSULATION R-38, 1/2" GWB CEILING
R4	0-HR	-ASPHALT SHINGLES, UNDERLAYMENT, SHEATHING PER STRUCT. -PREFABRICATED TRUSSES OR RAFTERS PER STRUCT. -BATT INSULATION MIN R-49, 1/2" GWB CEILING

TYP VENTED ROOF ASSEMBLY:
- ROOFING PER ROOF ASSEMBLY TYPE
- 30 LB BUILDING PAPER
- SHEATHING PER STRUCTURAL
- TRUSSES PER STRUCTURAL
- MIN 1" VENT SPACE (2" IF POSSIBLE),
BAFFLES WHERE NEEDED
- R49 BATT OR CELLULOSE INSULATION
- KRAFT FACE CLASS 2 VAPOR RETARDER
- 1/2" GWB

TYP UNVENTED ROOF ASSEMBLY:
- ROOFING PER ROOF ASSEMBLY TYPE
- 30 LB BUILDING PAPER
- SHEATHING PER STRUCTURAL
- RAFTERS PER STRUCTURAL
- R38 INSULATION/ CLASS II VAPOR RETARDER
APPLIED DIRECTLY TO UNDERSIDE OF
STRUCTURAL SHEATHING
- 1/2" GWB W/ CLASS 3 PVA PRIMER

TREE PROTECTION AREA (TPZ)

KEEP OUT!

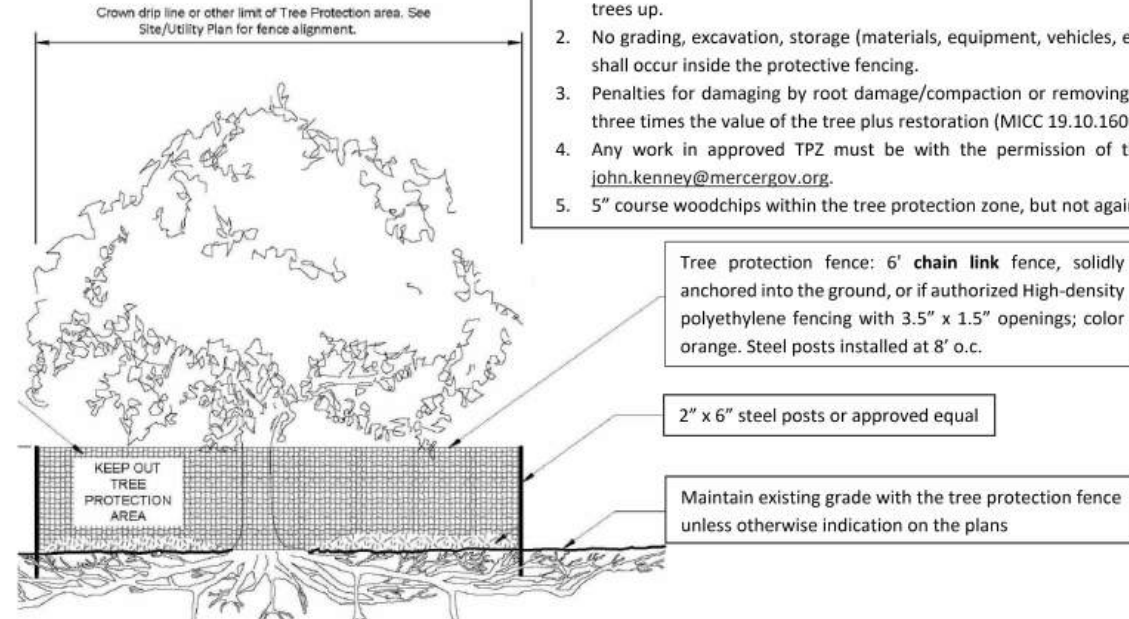
DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

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

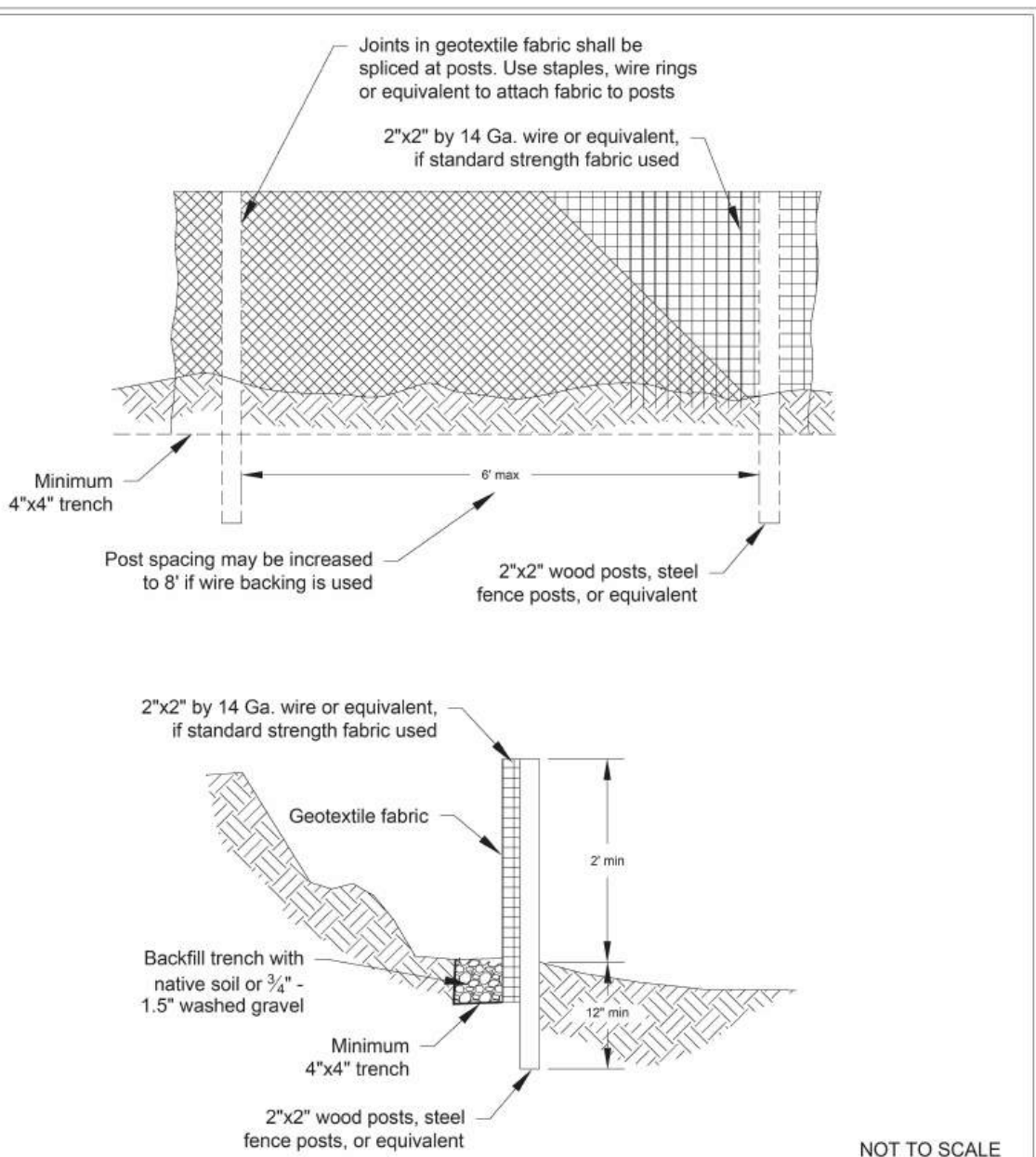
1. Correction Notices or Stop Work Orders until compliance is achieved
2. RE Inspection Fees/financial penalties
3. Arborist reports recommending mitigation

Notes

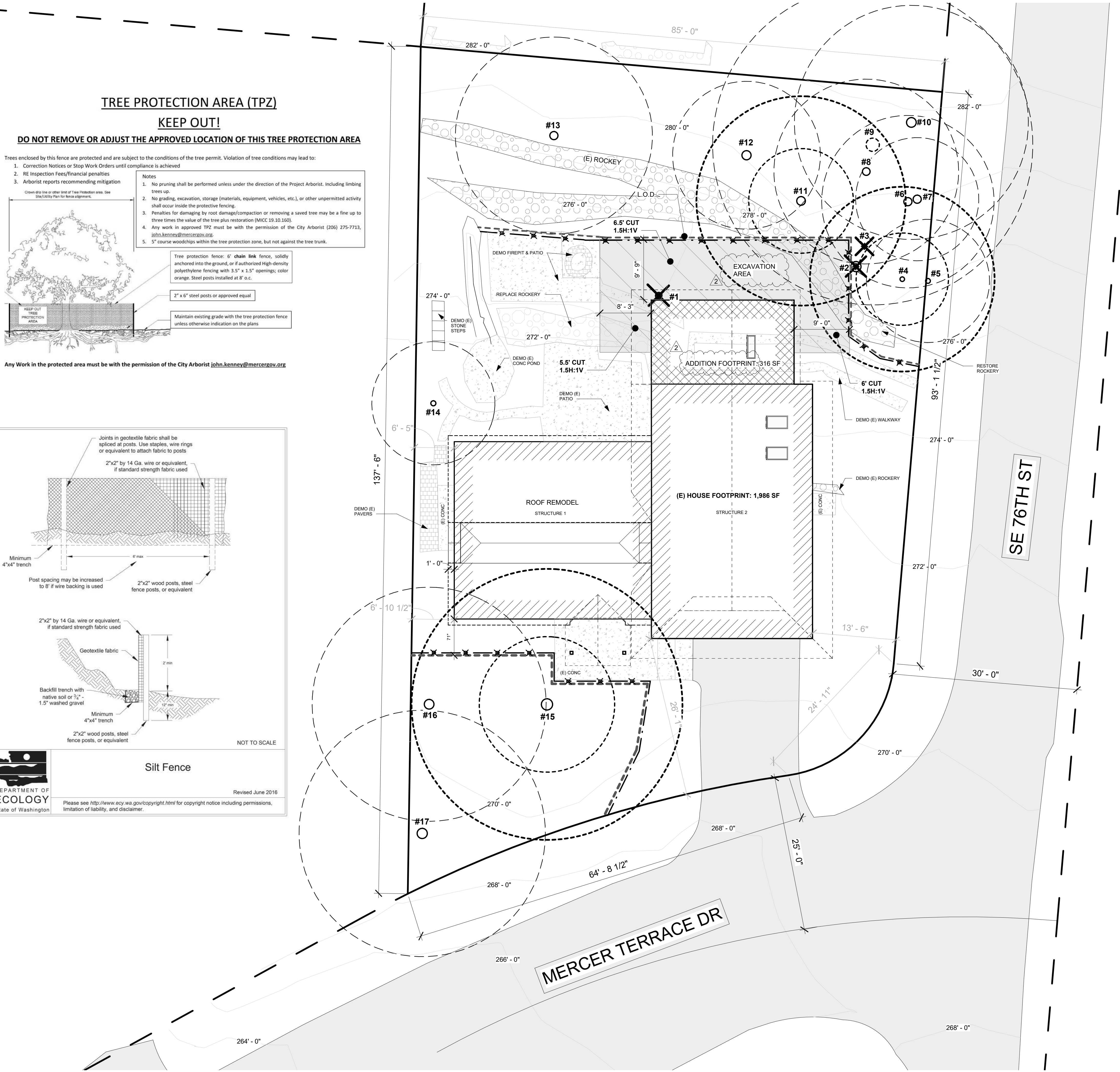
1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MIRC 19-10.160).
4. Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kenny@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 City Arborist john.kenny@mercergov.org



Silt Fence
 DEPARTMENT OF ECOLOGY
 State of Washington
 Revised June 2016
 Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.



PLAN NOTES:

1. TREE RETENTION PLAN PER ARBORIST REPORT DATED 11/10/2023 REFER TO REPORT FOR INFORMATION ON TREE PROTECTION PLAN AND SPECIFICATIONS. OUTLINE OF TREES SHOWN IN PLAN REPRESENTS RECOMMENDED LIMIT OF DISTURBANCE SHOWN ON TREE INVENTORY TABLE PROVIDED IN ARBORIST REPORT. INTERIOR CRITICAL ROOT ZONE DRAWN FOR TREES TO BE RETAINED AND MONITORED DURING CONSTRUCTION.
2. PER GEOTECH REPORT DATED 08/22/23 - TEMPORARY EXCAVATIONS DEEPER THAN 3 FEET SHOULD BE SLOPED NO STEEPER THAN 1.5H:1V (HORIZONTAL:VERTICAL) IN LOOSE NATIVE SOILS AND FILL AND 1H:1V IN MEDIUM DENSE NATIVE SOILS. IF AN EXCAVATION IS SUBJECT TO HEAVY VIBRATION OR SURCHARGE LOADS, WE RECOMMEND THAT THE EXCAVATIONS BE SLOPED NO STEEPER THAN 2H:1V, WHERE ROOM PERMIT
3. TEMPORARY CUTS SHOULD BE IN ACCORDANCE WITH THE WASHINGTON ADMINISTRATIVE CODE (WAC) PART N.
4. EXCAVATION CUT DEPTHS ARE BASED ON ELEVATION POINTS SHOWN IN THE ABE DIAGRAM ON SHEET A100.1 AND DEPTH TO THE BOTTOM OF FOUNDATION FOOTINGS PER STRUCTURAL PLANS.

Client: McIntyre
 Assignment: Tree Protection Plan

TABLE OF TREES
 7520 Mercer Terrace Drive

Inventory Date: 10/11/2023
 Report Date: 11/10/2023

Tree Tag	Common Name	Botanical Name	DSH*	Dripline**	Health	Recommended Limits of Disturbance (RLOD) (feet)
1	Sawara cypress	<i>Chamaecyparis pisifera 'Filifera'</i>	13	13	Good	tree within footprint of addition, REMOVE
2	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	20	Good	encroachment into CRZ exceeds allowable threshold, REMOVE
3	Western reccedar	<i>Thuja plicata</i>	9	6	Poor	encroachment into CRZ exceeds allowable threshold, REMOVE
4	Bigleaf maple	<i>Acer macrophyllum</i>	9	18	Fair	18 on sides N, E, and S; 7 on W side
5	English hawthorn	<i>Crataegus laevigata</i>	9.5	13	Good	10
6	Western reccedar	<i>Thuja plicata</i>	16	9	Good	14
7	Bigleaf maple	<i>Acer macrophyllum</i>	16	10	Fair	10
8	Western reccedar	<i>Thuja plicata</i>	15	8	Good	15
9	Bigleaf maple	<i>Acer macrophyllum</i>	26	15	Fair	26
10	Western reccedar	<i>Thuja plicata</i>	19	6	Good	19
11	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	20	Good	20 on sides E, S and W; 8 on NW side
12	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	12	Good	12
13	Noble fir	<i>Abies procera</i>	16	12	Good	16
14	Sawara cypress	<i>Chamaecyparis pisifera 'Filifera'</i>	10	8	Good	10
15	Blue Atlas Cedar	<i>Cedrus atlantica 'Glauca'</i>	22	25	Good	22
16	Austrian pine	<i>Pinus nigra</i>	19	14	Good	19
17	Deodar cedar	<i>Cedrus deodara</i>	20	18	Good	20

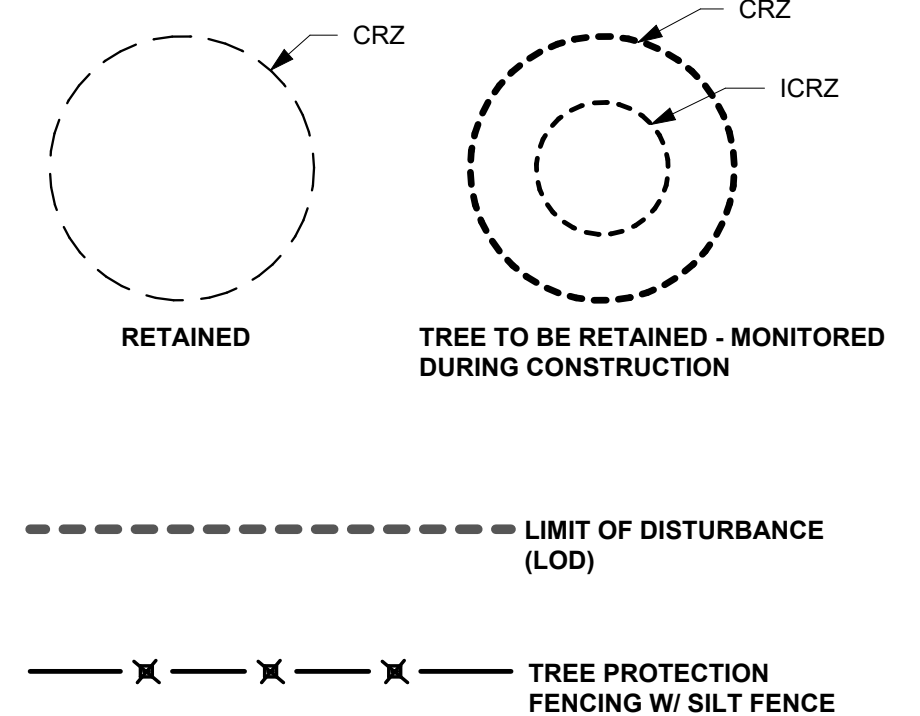
*DSH is Diameter at Standard Height (inches)

**Dripline was measured from the center of the trunk to the outermost limits of the canopy on the side of construction (feet).

TREE TRUNK SYMBOLS

- #15 ○ EXISTING TREE TO BE RETAINED <24"
- #9 ○ EXISTING TREE TO BE RETAINED >24"
- #2 ✕ EXISTING TREE TO BE REMOVED

TREE OUTLINE SYMBOLS



BUILD STUFF

BUILD STUFF LLC
 206-771-5014
 diego@buildstuffstudios.com

REVISION TABLE	
Revision #	Date
2	9/19/2024
1	Revision 2

HERNANDEZ RESIDENCE
 7520 MERCER TERRACE DR
 MERCER ISLAND WA, 98040

Project Status:

PERMIT DRAWINGS SET

Project Owner:

RODOLFO HERNANDEZ &
 SHANNON MCINTYRE

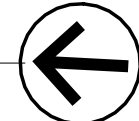
Record #: 2402-026

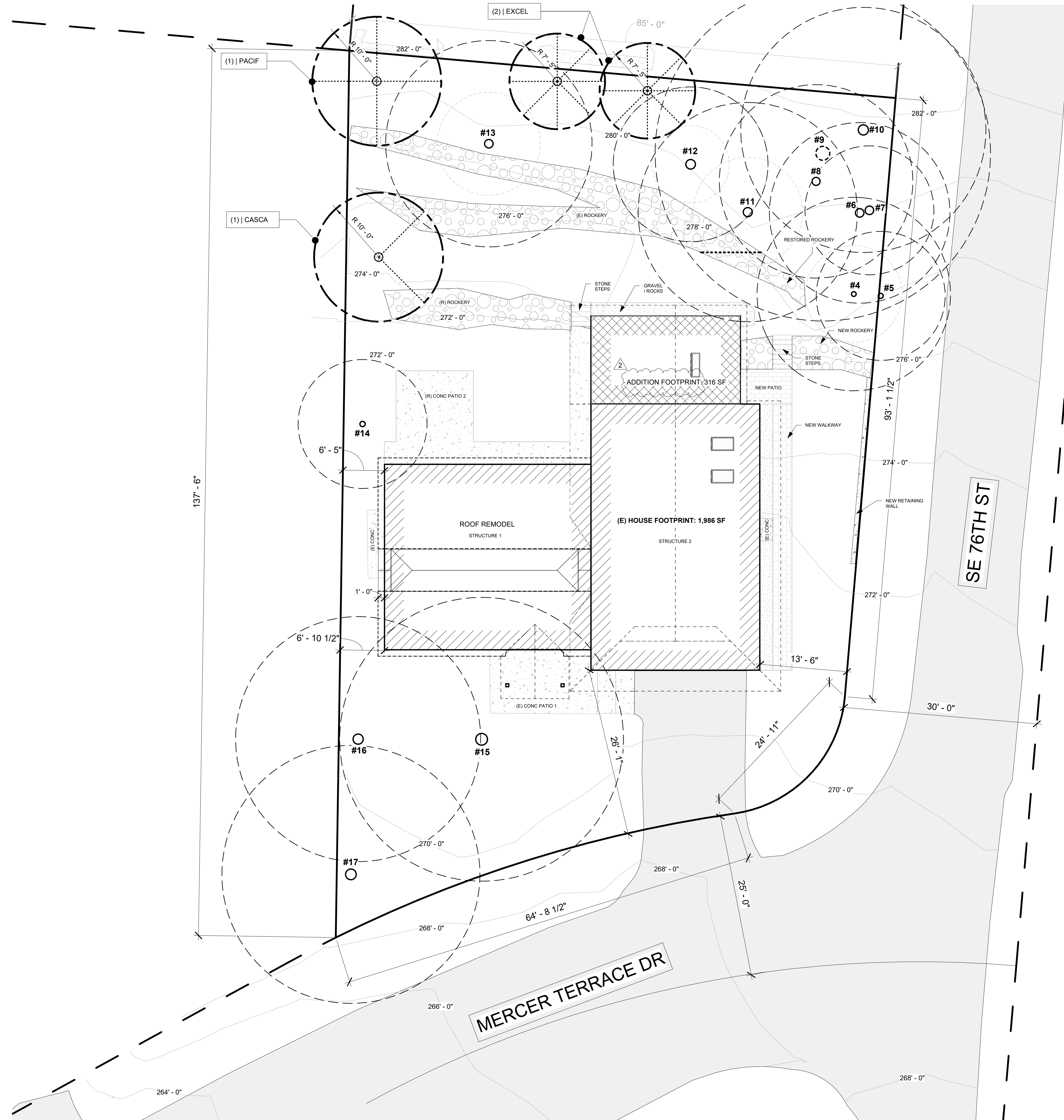
Date: 09/19/24

**TREE RETENTION &
 SITE DEMO PLAN**

L102

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



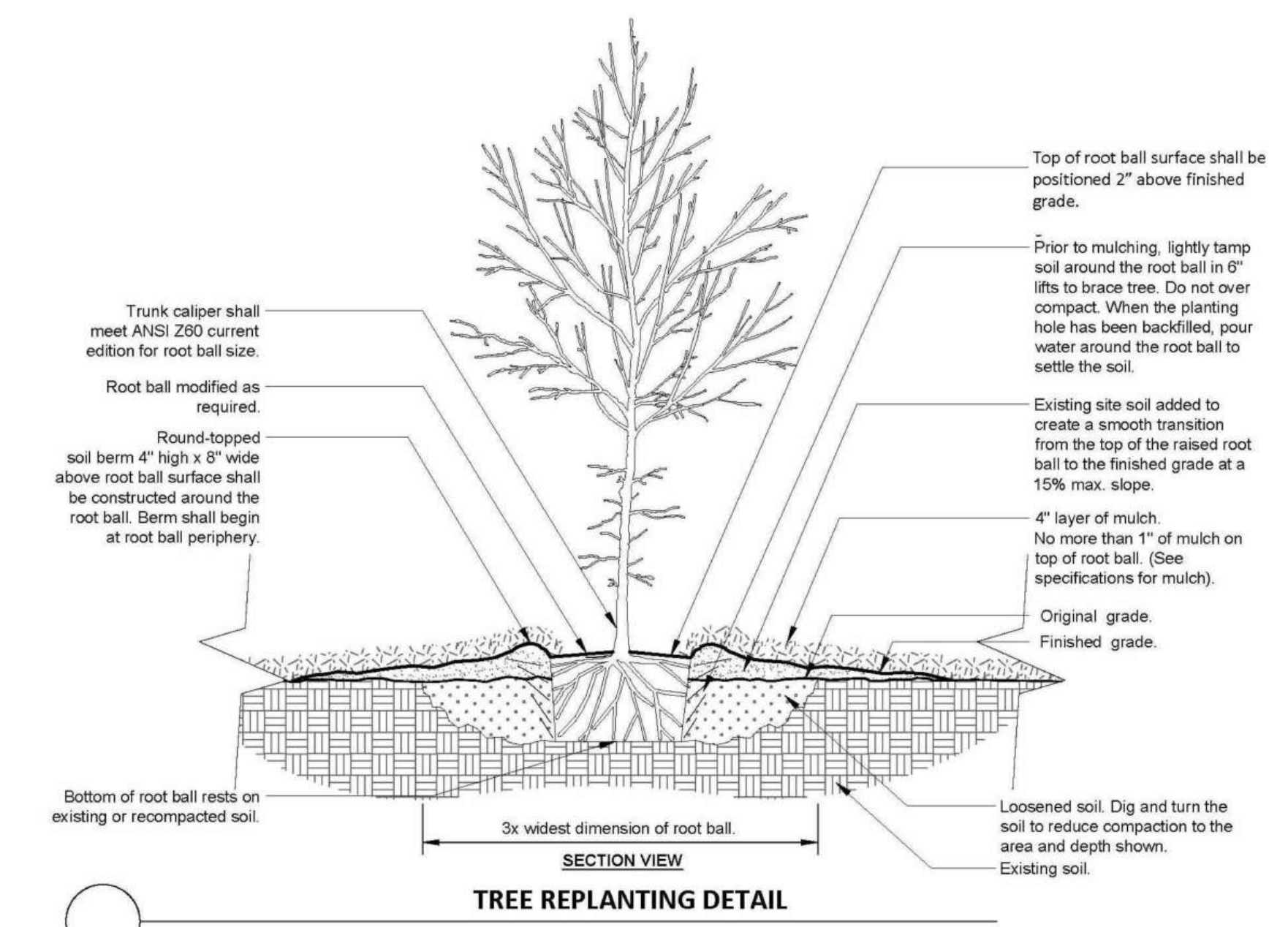
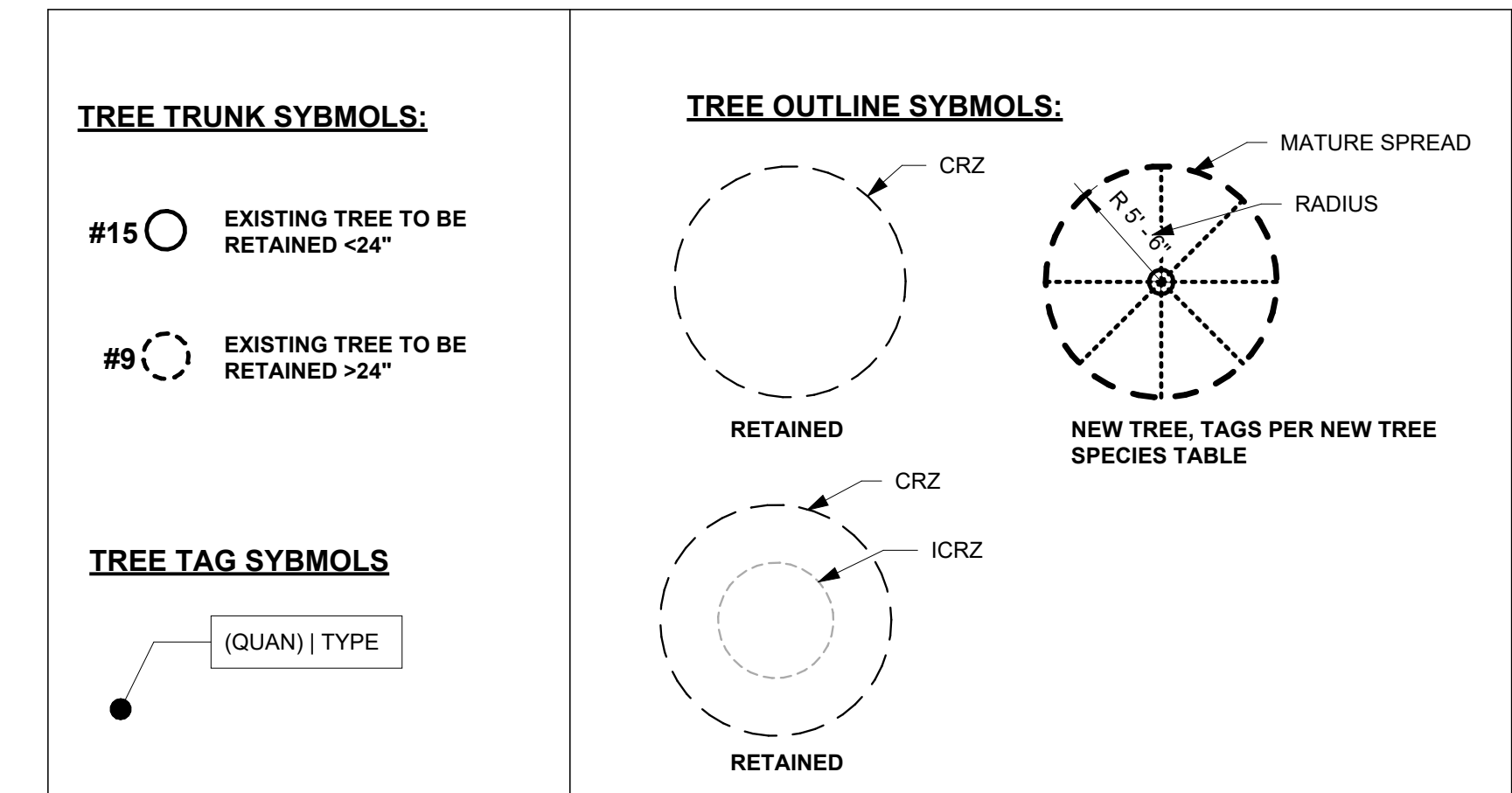


PLAN NOTES:

1. TREE RETENTION PLAN PER ARBORIST REPORT DATED 11/10/2023 REFER TO REPORT FOR INFORMATION ON TREE PROTECTION PLAN AND SPECIFICATIONS. OUTLINE OF TREES SHOWN IN PLAN REPRESENTS RECOMMENDED LIMIT OF DISTURBANCE SHOWN ON TREE INVENTORY TABLE PROVIDED IN ARBORIST REPORT. INTERIOR CRITICAL ROOT ZONE DRAWN FOR TREES TO BE RETAINED AND MONITORED DURING CONSTRUCTION.
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NEW TREES: SPECIES TABLE

QUAN.	SYMBOL	SPECIES NAME	MATURE SPREAD
1	PACIF	PACIFIC YEWE, TAXUS BREVIFOLIA	20 FEET
2	EXCEL	EXCELSA WESTERN RED CEDAR	15 FEET
1	CASCA	CASCARA RHAMNUS PURSHIANA	20 FEET



BUILD STUFF

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206-771-5014
diego@buildstuffstudios.com

REVISION TABLE	
Revision #	Date
2	9/19/2024
1	Revision 2

HERNANDEZ RESIDENCE
7520 MERCER TERRACE DR
MERCER ISLAND WA, 98040

Project Status:
PERMIT DRAWINGS SET

Project Owner:
RODOLFO HERNANDEZ & SHANNON MCINTYRE

Record #: 2402-026
Date: 09/19/24

TREE REPLACEMENT PLAN

L103

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

Structural Notes:

Applicable Codes and Standards:

2018 International Building Code (IBC) and other applicable local building codes.
 ASCE/SEI 7-16 - "Minimum Design Loads for Buildings and Other Structures"
 2018 NDS for wood structures.
 American Wood Preservers Bureau - AWPB Standards for Pressure Treated Material.
 American Concrete Institute - ACI 315, ACI 318, ACI 301, ACI 307.

Structural design shall be in accordance with the latest edition of above codes and standards. Contractor shall comply with the latest edition of all applicable codes and standards.

Special Inspections:

Special Inspections are required for:
 Epoxy Grouted Anchor Bolt Installation

Design Loads:

Live load: roof 25 psf (snow)
 floors 40 psf
 Dead load: as required 15 psf

Wind load: Basic wind speed 110 mph, exposure C, KzT=L6
 Building Category: Enclosed, Wind Important Factor Iw = 1.0
 Refer to calculation page L1 for design wind forces.
 Internal pressure 5 psf, Components and cladding design per 1609.6.4.4.1

Seismic loading per IBC Section 1613, Site Class D.
 The basic structural type is a bearing wall system with light framed walls with shear panels. Rw = 6.5 (wood structural panels), soil type D.
 Seismic importance factor I.0, Seismic Use Group I
 Design and Analysis by Simplified Design Procedure
 Peak Ground Accelerations (PGA) based on USGS Hazards Program, by lat/long.
 PGA 1 sec = .508 PGA .2 sec = 1.472
 Seismic base shear = 0.181 * Dead Load

Foundations:
 Soil parameters per the geotechnical report prepared by Cobaly Geosciences, dated August 22, 2023.

The subgrade should be prepared as follows, unless otherwise noted by the geotechnical report:

All soil conditions are to be field verified during construction. Footings shall bear on firm natural soils or on structural fill placed over firm natural soils, and inspected in place. Footings shall extend 18 inches minimum below adjacent exterior finished grade and shall extend 12 inches minimum below existing interior grade unless otherwise noted on plans. Structural fill shall be placed in 12-inch maximum horizontal lifts (loose thickness) and compacted to 95 percent of maximum dry density in accordance with ASTM D-1557. Imported structural fill shall be granular material containing no more than 5 percent fines, passing no. 200 sieve. Structural fill in place shall be tested by a licensed soil engineer or approved by the building inspector.

Drainage behind the concrete walls shall be provided conforming to the construction details.

Cast in Place Concrete:

Concrete shall attain a minimum compressive strength of 2,500 psi at 28 days (5-1/2 sack mix). An alternate mix provided by the concrete supplier and pre-approved by the building department is acceptable.

Reinforcing steel shall conform to ASTM A-615, Grade 60 (Fy=60,000 psi) for all bars. Provide all wall and footing horizontal bars with 2'-0" x 2'-0" corner bars of the same size at all corners and wall intersections. Minimum lap splice 48 bar diameters.

Concrete protection for reinforcement shall be:
 Concrete exposed to earth or weather 1.5" (#5 & smaller) 2" (#6 & larger)
 Concrete cast against earth 3"
 Slabs 0.75"

Bolts:

Anchor bolts shall conform to F1554. All other bolts shall conform to ASTM A307. Minimum anchor bolt size and spacing shall be 1/2" diameter bolts @ 6' o.c. Shear wall anchor bolts per the shear wall schedule.

For cast-in-place anchors, provide 7" minimum embedment into the new concrete foundation. For retrofitted anchors, provide 5" minimum embedment into the existing concrete foundation. Epoxy grout with Simpson SET epoxy. Provide 3"x3" square x 0.229" thick bolt washers where anchor bolts connect the sill plate to the concrete foundation.

Wood Framing Specifications:

All sill plates and other wood framing which is in contact with concrete or masonry must be preservative-treated in accordance with AWPA U1 and M4 standards. For anchor bolts connecting wood sill plates to concrete or masonry, provide galvanized steel washers and nuts on top of the sill, minimum washer size 3" x 3" x 1/4" thick.

Where toenails are used for stud wall construction, a minimum of (2) toenails at top and bottom of each stud shall be provided. Toenails shall be 16d nails driven at approximately a 45 degree angle, with a minimum of 1-1/2" of the nail shank shall be embedded in both the stud and the plate. End nails driven through the plate and into the stud end grain are not permitted. Simpson A34 clips at top and bottom of each stud are permitted where correct toenailing is not provided.

Wherever joists bear on a wall or beam, either a continuous rim joist or solid wood blocking must be provided. Blocking shall be connected to the joists with A35 angles at each end. Individual blocks may be omitted to allow for ducting or other openings. Consult with the engineer of record if more than 25% of the blocking is omitted.

Where a post aligns with a header on the floor below, provide full depth blocking through the floor framing and a full sized post above the header in the wall below. Unless noted otherwise, the following grades and species shall be used for structural lumber:

2x joists Hem-Fir #2
 2x, 3x, and 4x studs DF/L standard for plywood or WSP shear walls
 Hem-Fir standard for other walls
 4x and 6x beams DF-L #2
 Glu-lam lumber 24F-V4 for simple span beams, 24F-V8 for cantilever beams

All framing connections shall be per Table 2304.10.1 of the IBC, unless otherwise noted.

Preservative-Treated Wood and Fasteners:

All wood in contact with concrete or masonry shall be preservative-treated, in accordance with AWPA U1 and M4 standards.

All fasteners installed in preservative-treated wood shall be hotdipped zinc-coated galvanized with a minimum coating weight complying with ASTM A 153.

Fasteners other than nails and timber rivets are permitted to be mechanically deposited zinc-coated with coating weights complying with ASTM B 695, Class 55 minimum. Plain carbon steel fasteners in wood preservative-treated with SBX/DO1 or zinc borate are not required to be galvanized.

Plywood Thickness, Grade, and Nailing:

Install plywood sheets with face grain perpendicular to framing. Stagger joints in adjacent sheets. If not otherwise noted, use nailing schedule, Table 2304.6.1 of the IBC.

Manufactured Trusses:

Manufactured trusses specified on the plans are prefabricated products manufactured by a truss manufacturer. The contractor shall submit shop drawings and stamped structural design calculations for review. The manufacturer's installation instructions shall be available on the job site at the time of inspection. Truss design and shop drawings shall include location and weight of all equipment being supported by these trusses.

The truss live loading shall be per IRC Section 301.5 and Table 301.5, especially noting footnotes b and g.

The truss design shall be per IRC Sections 502.11.1 and 802.10.2, especially indicating the truss design and manufacturing shall be per ANSI/TPI 1.

The truss temporary and permanent bracing shall be per IRC Sections 502.11.2 and 802.10.3 as well as the Truss Plate Institute's Building Component Safety Information.

Truss alterations shall not occur unless the approval of a design professional as indicated in IRC Sections 502.11.3 and 802.10.4.

Metal Framing Connectors:

Unless otherwise noted: Metal framing connectors shall be manufactured by the Simpson company, or approved equal. Unless noted otherwise, use U-series joist hangers to match joist size (e.g., U210 for 2x10 joist). Provide H1 or H2.5 hurricane ties, or other connectors with similar capacity, at every roof joist or truss, and I16 or H7 at ends of roof beams and girder trusses. Where supported by wood posts, wood beams shall be connected to the tops of the posts using Simpson AC, PCZ or EPCZ post caps, and to the bottoms of the posts bearing on wood framing using Simpson AC connectors or A35 clips. Where supported by perpendicular beams, wood beams shall be connected by HU-series face mount beam hangers. Provide Simpson AB or PB post bases to connect posts to concrete foundations. Unless otherwise specified, the maximum number of nails or screws should always be installed on any connector.

Bearing Walls:

All walls supported by continuous concrete footings shall be connected to the foundation per 2018 IRC section 403.1.6. 1/2" diameter anchor bolts shall be provided at 4' o.c., or two per wall segment, minimum. Anchor bolts shall penetrate 7" into the concrete foundation.

Connection of New Foundation to Existing, Note NF:

At each location where the new concrete foundation abuts the existing foundation, connect the new to the existing using minimum (3) #4 by 18" long rebar dowels, epoxy grouted into 5/8" diameter by 5" deep holes drilled into the existing foundation. Each dowel shall be no closer than 3" to any edge or corner

of concrete. Minimum spacing between dowels shall be 6". For concrete wall intersections longer than 3'-0" in any direction, additional dowels shall be located at 12" o.c. for the full height or length of the new foundation concrete.

Contact the engineer (prior to construction) for evaluation and approval of the existing foundation system, if there are any significant cracks in the existing foundation within 6 feet of the new foundation, or if there is any indication that the existing foundation is in poor condition, including visible rock pockets, non-uniform concrete, spalling, noticeable settlement of the existing footing, or other distress.

Roof Over Framing Note, Note OF:

The new roof area shown in dashed lines consists of new roof framing constructed over the existing roof framing below. The over built framing shall be constructed in such a way as to distribute the roof loads from the new framing uniformly to the existing roof structure (for example, no new concentrated loads, such as from a beam, shall be added to the existing roof structure). This equal distribution may be accomplished by constructing the new overbuild roof using framed 2x4 cripple walls spaced at 2 feet on center, located on top of and perpendicular to the existing roof sheathing supported by the existing roof framing. No sheathing is required for these cripple walls.

The new cripple walls and roof rafters (spanning 2 feet, perpendicular to the cripple walls) may be constructed using 2x4 lumber, stud grade at minimum. The new plates shall be nailed to each existing rafter with (2) 16d nails minimum. New roof sheathing shall be per the diaphragm schedule.

A new 2x_ plate shall be constructed along the new valley lines, and nailed to each existing rafter, along its entire length, with (2) 16d nails per existing rafter.

If desired, an alternate method for distributing the loads may be submitted to the structural engineer of record, for review and approval prior to construction.

Hold Down Notes

Convention for showing shear walls and hold downs: Shear walls are shown on the framing plan for the floor above. (For example, first floor shear walls will be shown on the second floor framing plan, and the shear walls for the topmost floor will be shown on the roof framing plan.) Hold downs are located at the bottom of that shear wall, and connect the end of the shear wall to wall framing or a structural beam located in the floor below the shear wall. Contact the engineer of record for clarification if needed.

Hold downs for each floor must be continuously connected to hold downs on the floor below (or to other intermediate wood framing where so indicated), until they are finally connected to the concrete foundation.

Hold downs shall be installed so as to be as far apart as is reasonable. Hold downs may be located on either the near side or the far side of the post or double stud to which they are attached. In no case shall a hold down bolt be located farther than 6" from the end of the shear wall, except with prior written approval of the engineer. Refer to the latest edition of the Simpson Catalog for details.

Where multiple studs are called out at a hold down, nail studs together with (2) 16d nails at 8" o.c. or 1/4" x 3" Simpson SDS Screws at 12" o.c.

Where a hold down post lands on a rim joist, provide full depth vertically oriented blocking under the post.

Strap Hold Downs:

Provide a vertically oriented strap hold down consisting of one or two of the Simpson vertical strap ties listed below, connecting the end stud or post of the shear wall indicated to new or existing studs in the wall framing below, or to a wood beam supporting the shear wall, where applicable. Straps shall be installed so that the minimum end length is provided to both connected posts or studs. Where a strap is connected to a beam below, the strap shall be wrapped around the beam until the minimum end length is reached.

See Strap Hold Down Typical Detail.

CMSTC16 denotes a Simpson CMSTC16 strap, with a minim end length of 25", and (29) 16d sinker nails each end.

Rod Hold Downs:

HDUx denotes a Simpson HDU(2,4,5,8,or 11)-SDS2.5 hold down. For hold down bolts at existing concrete foundations, use the following bolts:

For HDU2.4.5: 5/8" diameter A307 threaded steel rod may be used, which shall be epoxy grouted into a 3/4" diameter hole with a minimum embedment of 10". See Retrofit HDU Typical Detail.

For hold downs at new concrete foundations, provide the following bolts.

For HDU2.4.5: Simpson SB5/8x24 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature.
 5/8" diameter A307 threaded steel rod may be used, which shall be embedded 8" into the concrete foundation.

For HDU11: Simpson SB1x30 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature.

Where the hold down is too high off of the concrete foundation to adequately connect to the specified anchor, A 1" diameter threaded rod and ASTM A194-2H coupler connecting to the specified anchor may be used.

Special Note:

All holes for hold down bolts which are installed into existing foundations must be inspected during the installation of the hold down. Either the building inspector, the structural engineer of record, or the special inspection agency must perform the inspection and approve it before the bolts may be epoxy grouted into the holes. The epoxy grout used must be Simpson SET-XP unless otherwise noted by the engineer of record.

For drilled holes into existing concrete, no less than 2" must be provided between the edge of the hole and the face of concrete. The Engineer of Record or Special Inspector must witness the installation of hold down bolts, including cleaning the holes with compressed air and a wire brush before the anchor is installed. The hole shall be filled with enough epoxy that when the anchor is inserted, the epoxy rises to the top of the concrete. Care shall be taken that no air bubbles persist in the epoxy.

The contractor must verify that the existing foundation stem wall is uncracked and continuous, and is sound and in good condition, within 5 feet of any retrofitted shear wall or hold down, in any direction, except with prior written approval of the engineer. The existing concrete foundation stem wall shall be at least 6" thick and 2'-6" in height. The concrete shall be of good quality, hard and uniform, with appropriate aggregate type, size and distribution, and with no visible rock pockets or other similar deficiencies.

Any existing cracks located within 10' of any hold down must be completely filled with an appropriate epoxy based concrete repair product. The product to be used shall be approved in writing by the engineer prior to filling the cracks.

Contact the engineer of record prior to proceeding if any of these requirements are not met, or if the installation of the hold downs results in any visible damage to the existing foundation.

SHEAR WALL SCHEDULE

(Lumber for shear walls is HF#2 or better, unless otherwise noted.)

Type	Material	Edge Nailing	Field Nailing	A.B. Size/Spacing	Plate Nailing	Plates	A35 Spacing	Shear Capacity
SW1	15/32" WSP one side	8d @ 6"	8d @ 12"	1/2"Ø @ 48"	(2) 16d @ 9"	2x_	24"	230 plf
SW2	15/32" WSP one side	8d @ 4"	8d @ 12"	1/2"Ø @ 32"	(2) 16d @ 6"	2x_	16"	350 plf
SW3	15/32" WSP one side	10d @ 3"	10d @ 12"	5/8"Ø @ 24"	(2) 16d @ 4"	3x_	12"	550 plf
SW3X	15/32" WSP one side	10d @ 2"	10d @ 12"	5/8"Ø @ 24"	5/8"Ø x 8" Lag @ 24"	3x_	9"	710 plf
SW5	15/32" WSP two sides	8d @ 3"	8d @ 12"	5/8"Ø @ 16"	5/8"Ø x 8" Lag @ 16"	3x_	8"	910 plf

For shear wall callouts on the Structural Framing Plans: SW x (y') denotes a shear wall type "x" with a minimum length of "y" feet. See Exterior Shear Wall Typical Detail.

• For SW3 and greater, studs, plates, and blocking where two WSP panels abut shall have a minimum 3" nominal thickness. Double 2x_ members may be used if the members are connected by plate nailing. Note 10d nails at WSP panel edges.

• "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.

• Provide double stud minimum at both ends of all shear walls.

• Provide blocking at all panel edges to match the depth of framing, unless otherwise noted.

• At the roof or top level of any shear wall, "A35 spacing", and all other relevant connector specifications, apply to assemblies at both the top and bottom of the shear wall. At lower levels, apply to the bottom of the wall only.

• Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates (whichever applies) of all shear walls.

• Provide 3x_ plates, and 4x_ rim joists, minimum, where lag screws are specified for plate nailing.

• Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members receiving edge nailing from abutting panels shall not be less than a single 3x_ member.

• Provide 4x_ or double 2x_ framing where A35 angles are used on both sides of one piece of wood.

• Where a shear wall terminates above the foundation level (no shear wall below), provide minimum 4x_ blocking or double joist framing (as applicable) below the shear wall."&" Plate nailing per this schedule shall be nailed into this blocking at the bottom of the shear wall.

• Shear wall nails shall be placed no closer than 3/8" from a panel edge or perpendicular face of stud.

• Maximum spacing between nails shall not exceed 12".

• Shear wall nailing shall be common or galvanized box nails, unless lag screws are noted. Galvanized nails shall be hot dipped or tumbled.

• Lag screw plate connectors shall penetrate 3.5" minimum, and plates or beams receiving lag screws shall have a minimum width of 3.5".

• Where hold downs are specified, the shear wall bolt shall be located within 6 inches of the end of the shear wall, unless otherwise approved by the engineer of record. Minimum end studs shall be as specified in the most recent Simpson catalog.

• Shear wall edge nailing through shear wall sheathing shall be provided into all studs attached to a hold down.

• Retrofit anchor bolts shall have a minimum embedment of 5" into the concrete foundation.

• Cast in place anchor bolts shall have a minimum embedment of 7" into the concrete foundation.

• For SW3 and greater, foundation anchor bolt plate washers shall extend to within 1/2" of the edge of the sheathing.

• Plate nails shall be nailed into a solid wood rim joist.

• 2x_ plates may be substituted for 3x_ plates if panels are nailed with edge nailing directly to the rim joist.

• Where 3x_ plates are used, (2) 20d common nails must be used instead of (2) 16d common nails to connect studs to the bottom plate.

• For SW3 and greater at existing walls, Retrofit High Strength Shear Wall Typical Detail may be used.

• Where Roof ventilation is required over a shear wall, see roof ventilation detail.

Diaphragm Schedule

(Lumber for diaphragm construction is HF#2 or better, unless otherwise noted.)

Type	Material	Edge Nailing	Field Nailing	Edge Blocking	Remarks
Roof	15/32" CDX 24/0	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard
Floor	23/32" CDX 48/24	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard

• "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.

• Rim joists at exterior walls shall be continuous for tension. At rim joist splice locations, provide (2) CS16 horizontal straps, minimum 24"

• Where roof or floor framing is cantilevered over an exterior wall below, provide solid blocking with Diaphragm edge nailing between joists.

• This is the minimum required diaphragm construction. Where otherwise noted on the plans, additional blocking or nailing may be required.



Consulting Structural Engineering Services
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MACINTYRE
 7520 MERCER TERRACE DR
 MERCER ISLAND WA, 98040

Revisions:

△ 04-19-24

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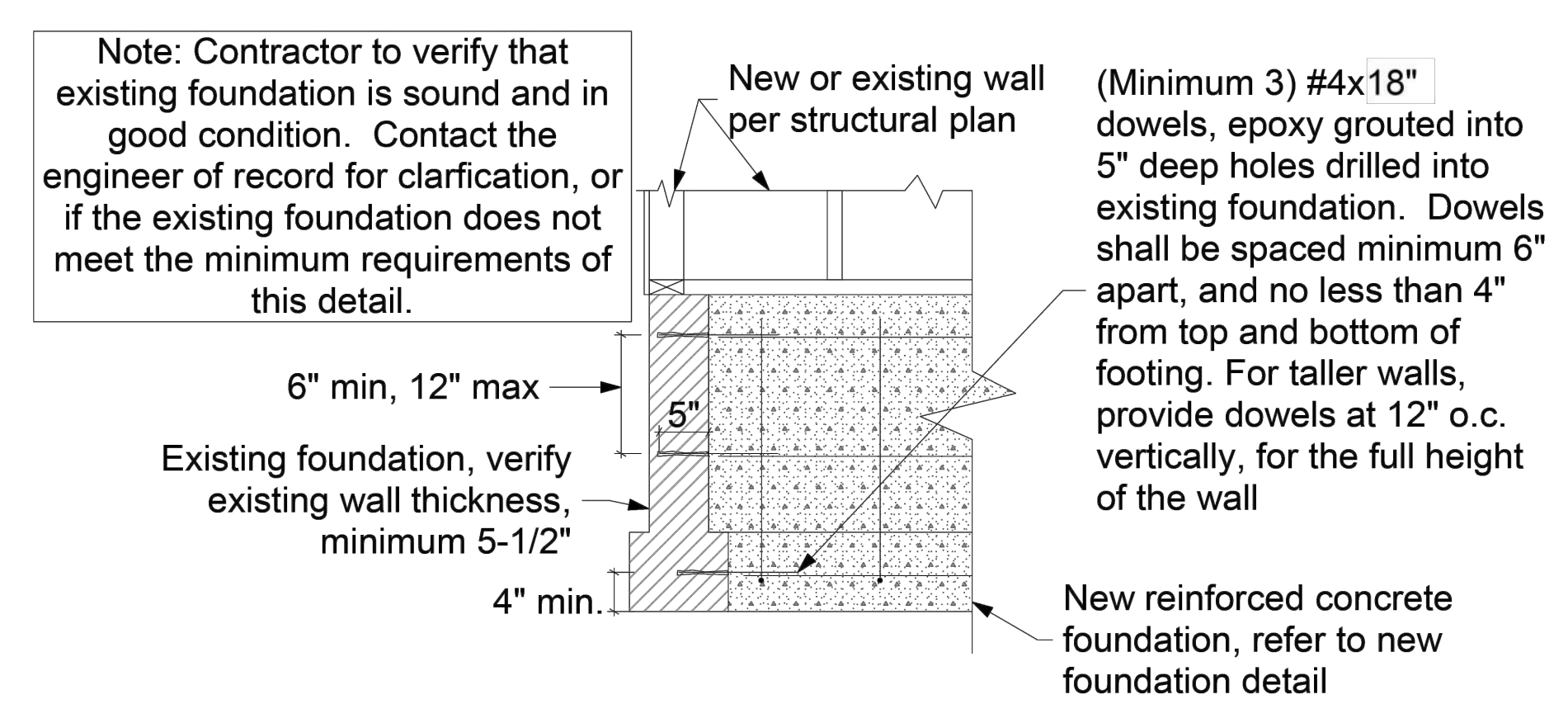
Consulting Structural Engineering Services
 6311 17th Ave NE, Seattle, WA 98115
 Phone: 206-527-1288
 Email: john@cse-engineering.com

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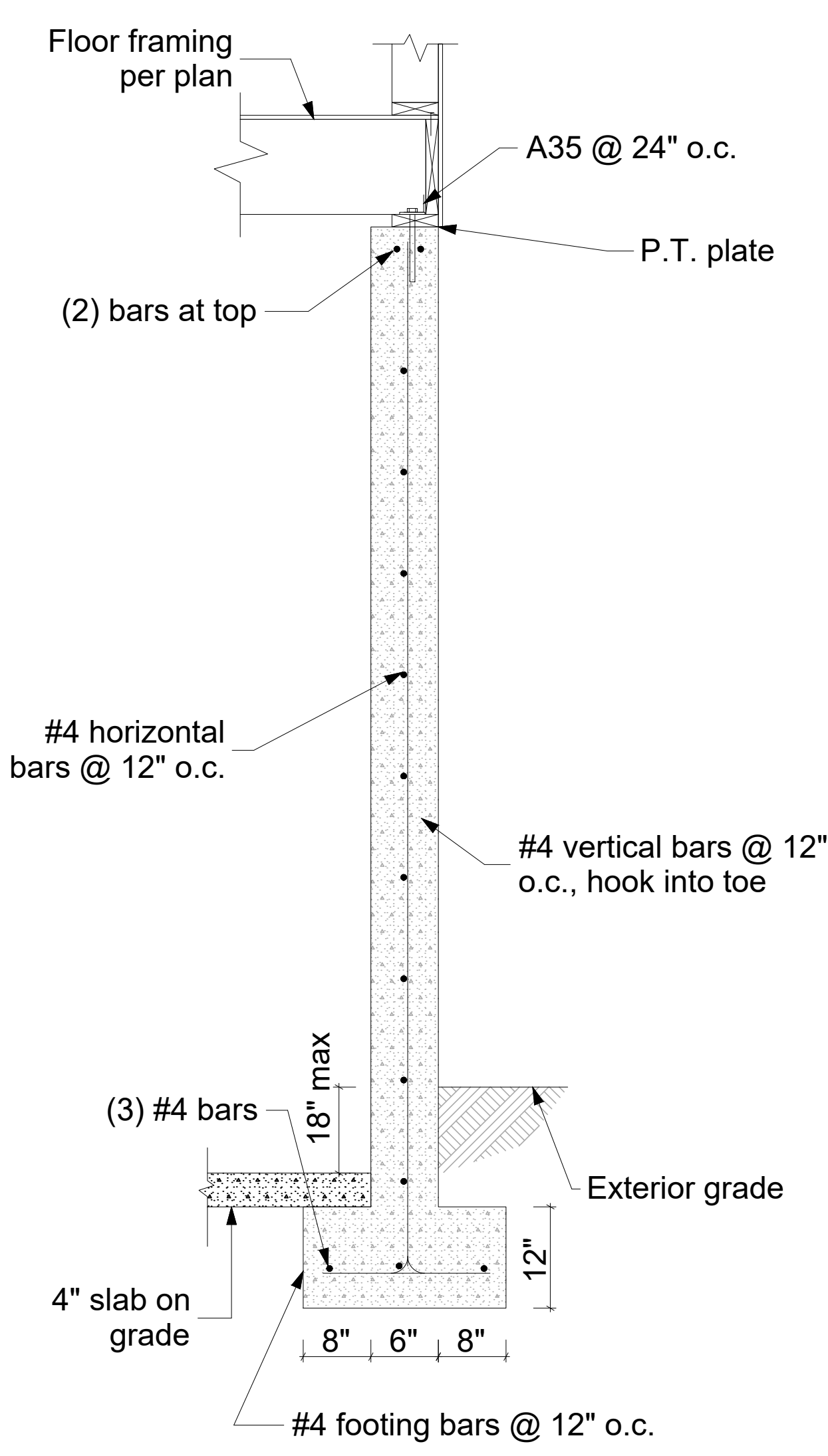
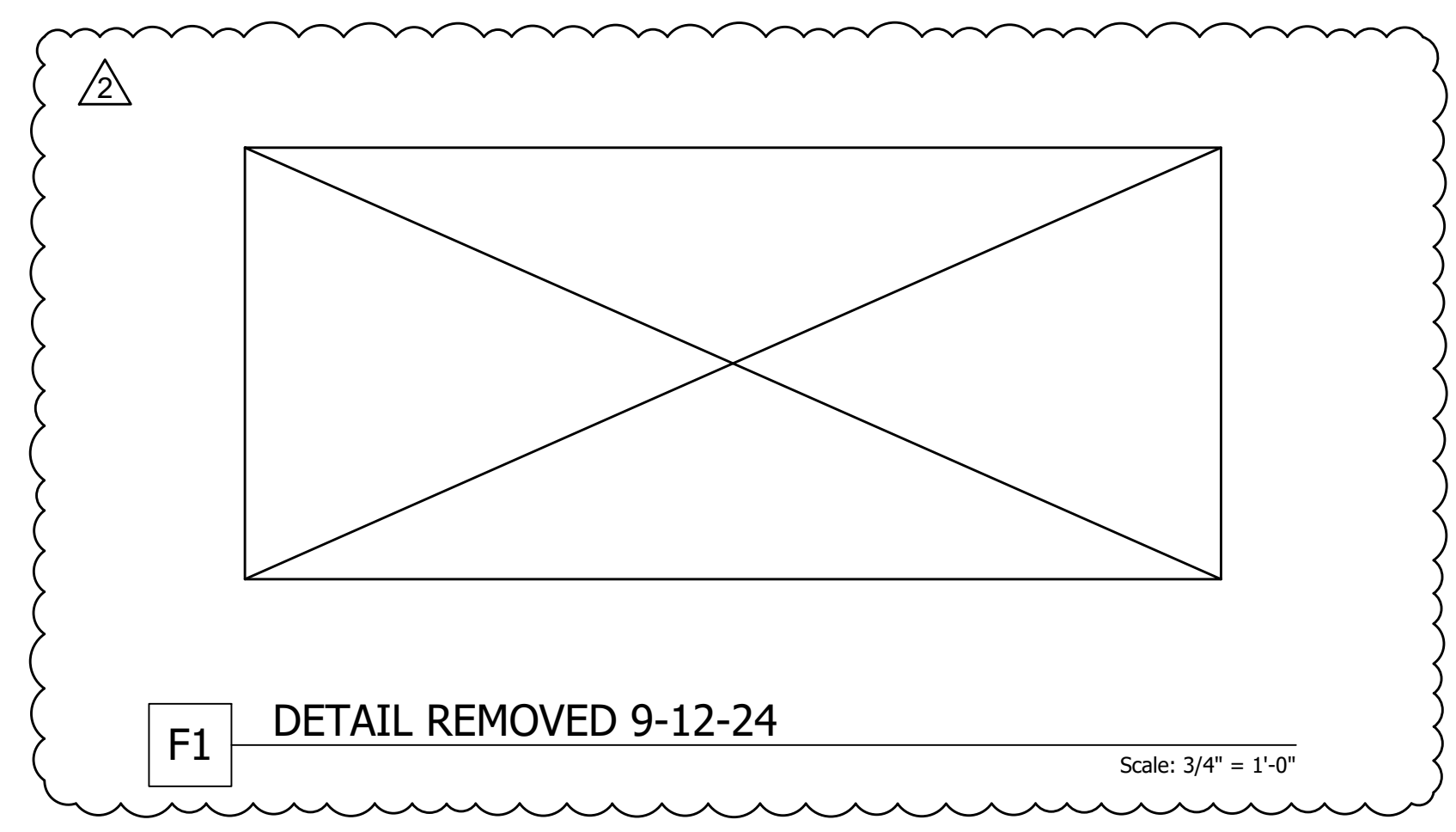
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 A 04-19-24
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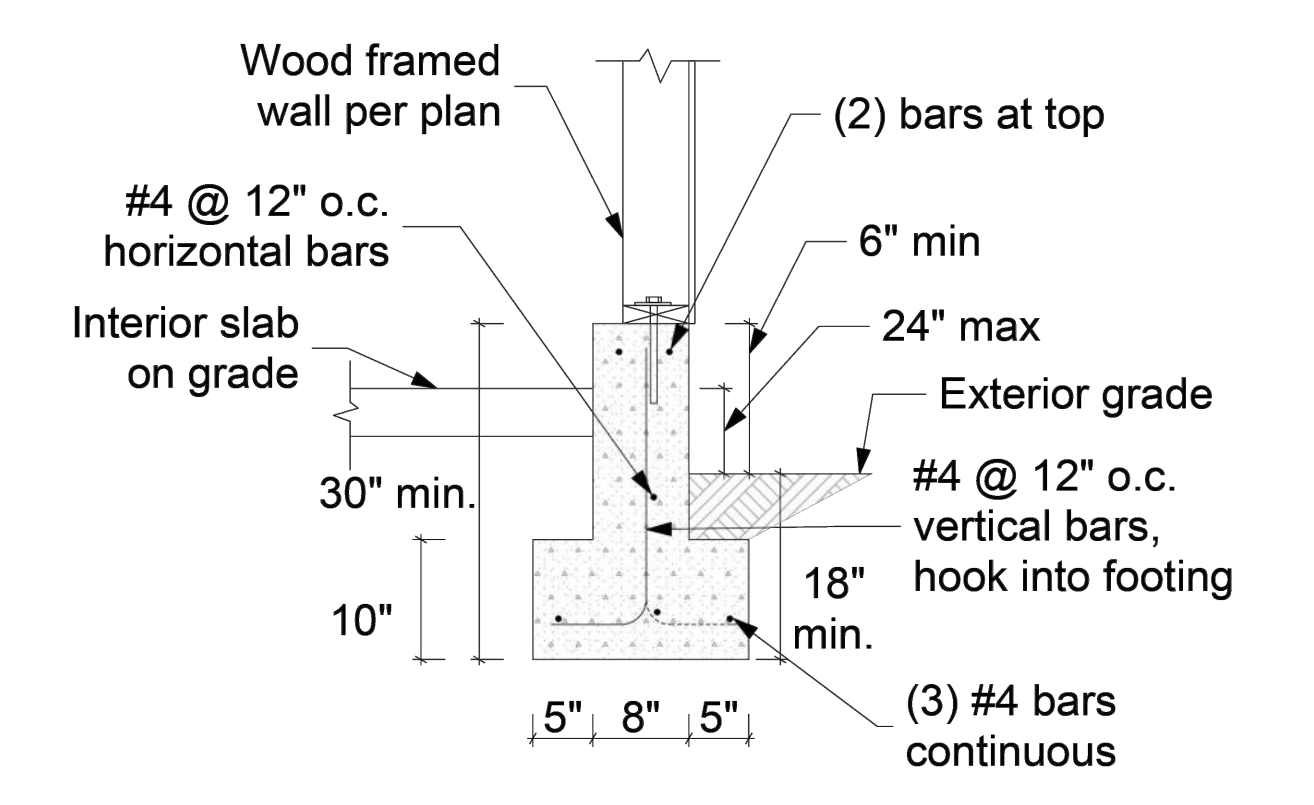
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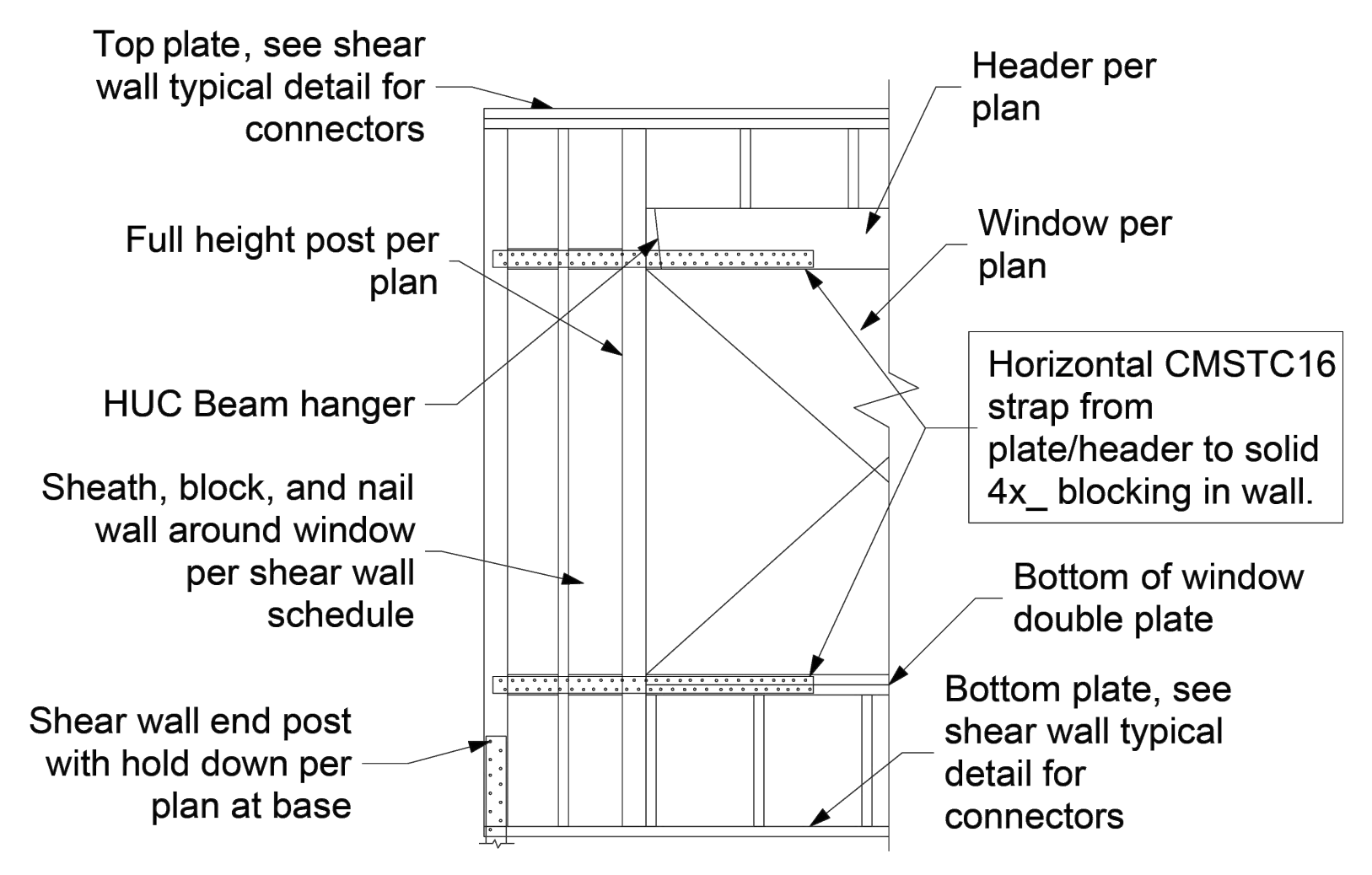
NF New Foundation to Existing Detail Scale: 3/4" = 1'-0"



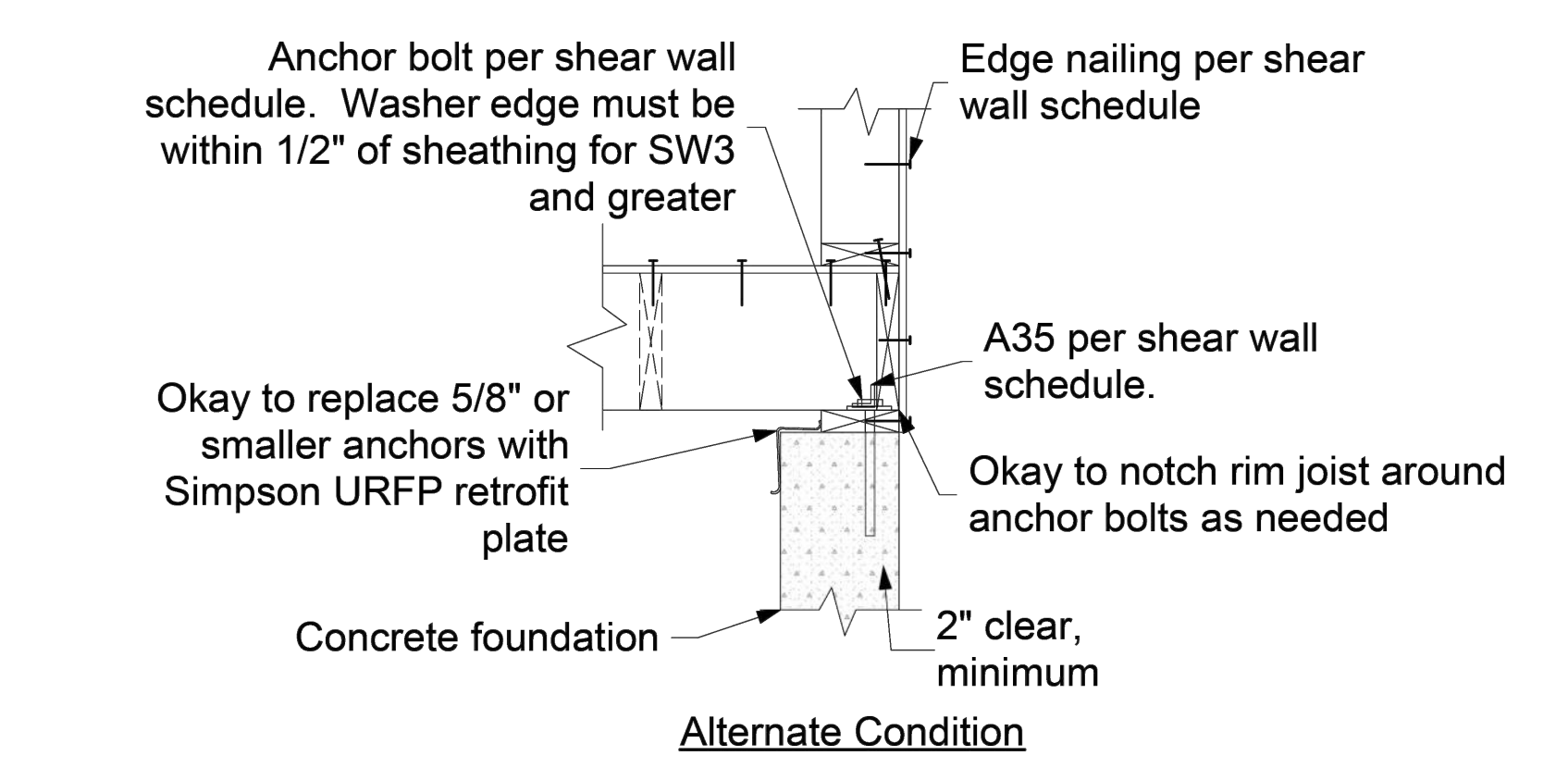
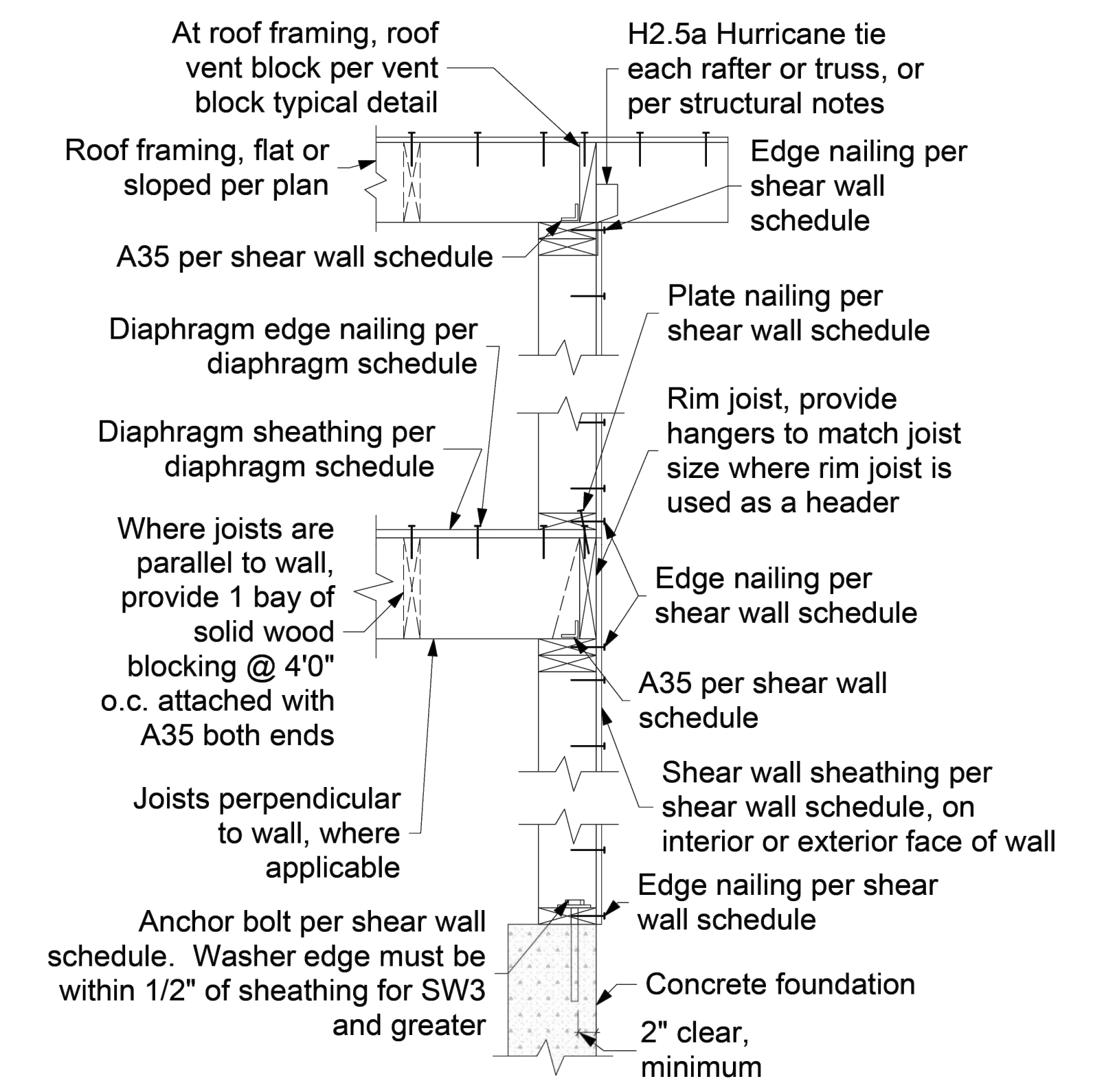
F2 Concrete Basement Wall Detail Scale: 1/2" = 1'-0"



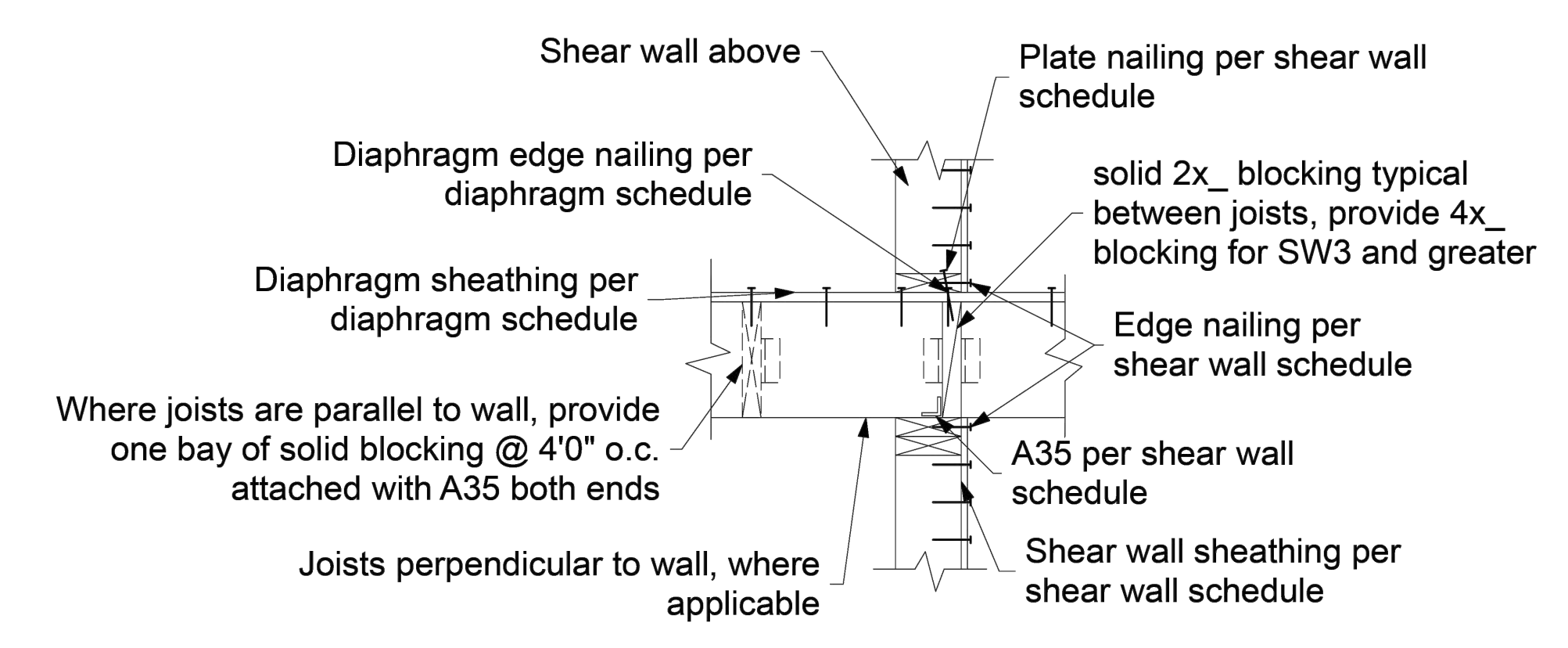
F3 Exterior Footing With Slab Detail Scale: 3/4" = 1'-0"



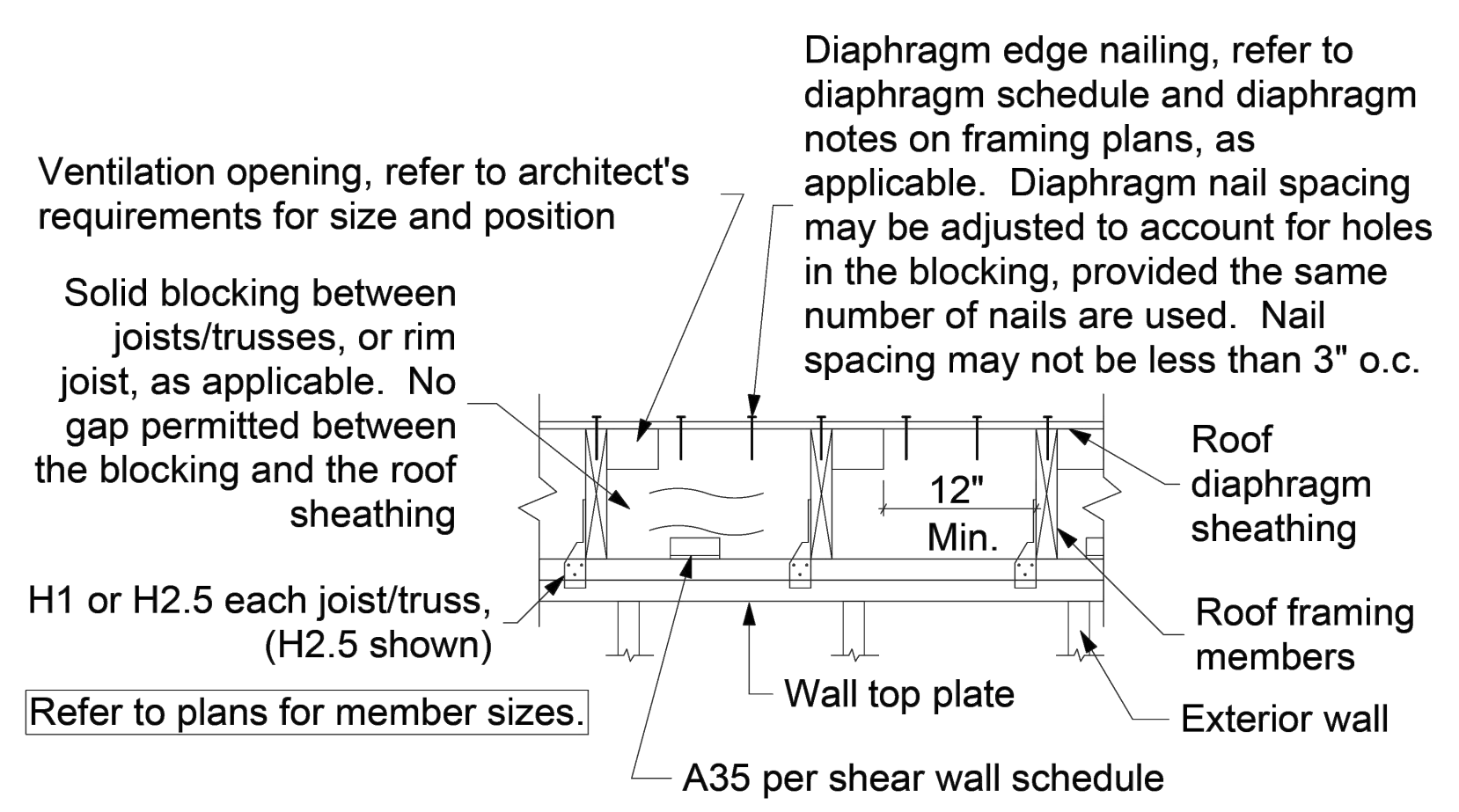
SW1 Shear Wall Around Opening Detail Scale: 1/2" = 1'-0"



SW2 Exterior Shear Wall Typical Detail Scale: 1" = 1'-0"



SW3 Interior Shear Wall Typical Detail Scale: 1" = 1'-0"



R1 Roof Ventilation Typical Detail Scale: 1" = 1'-0"



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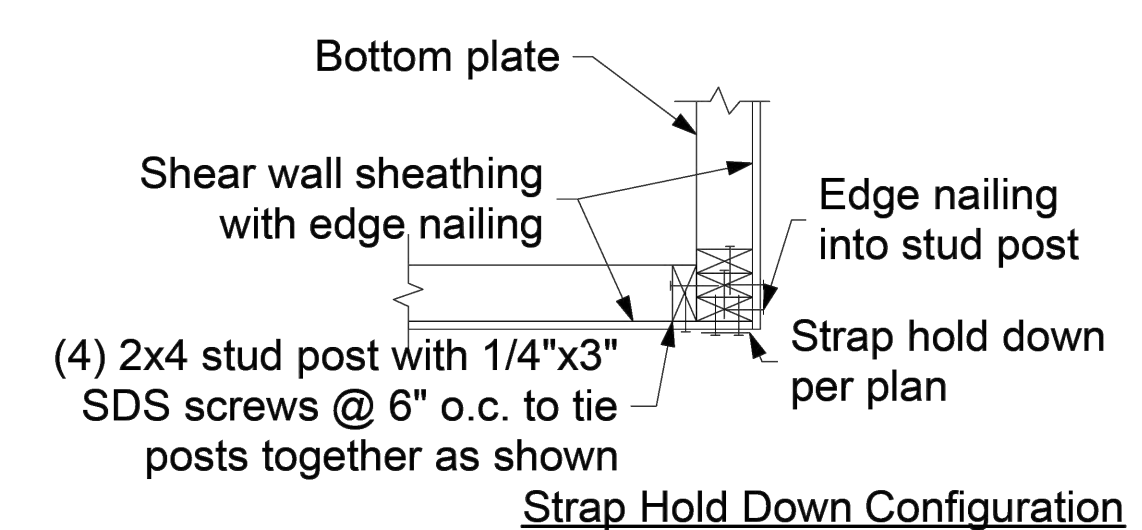
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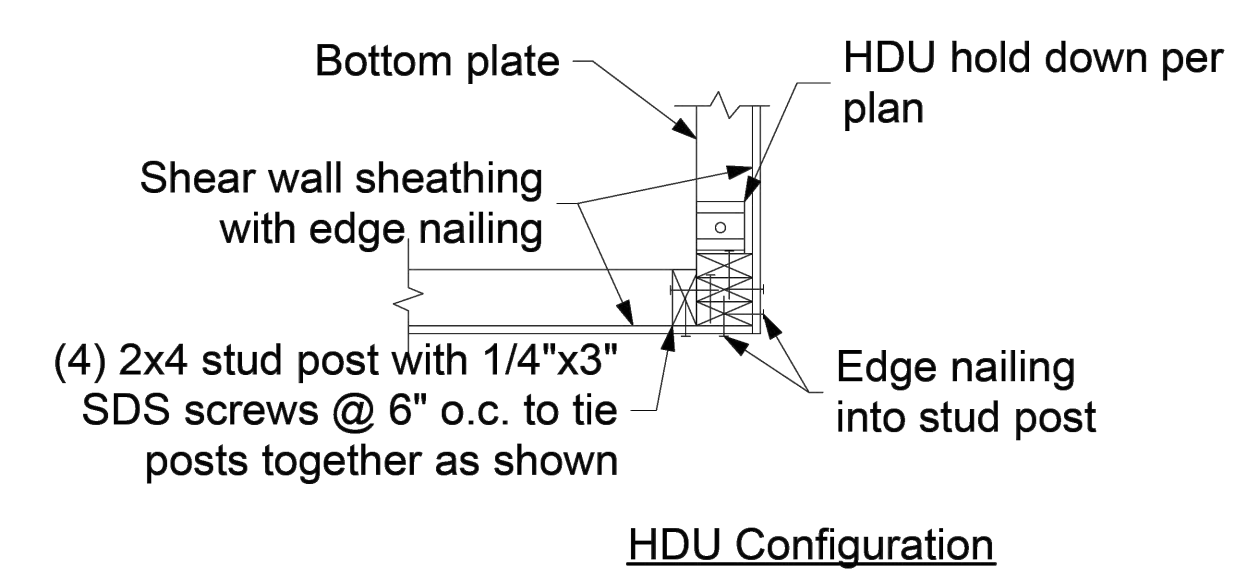
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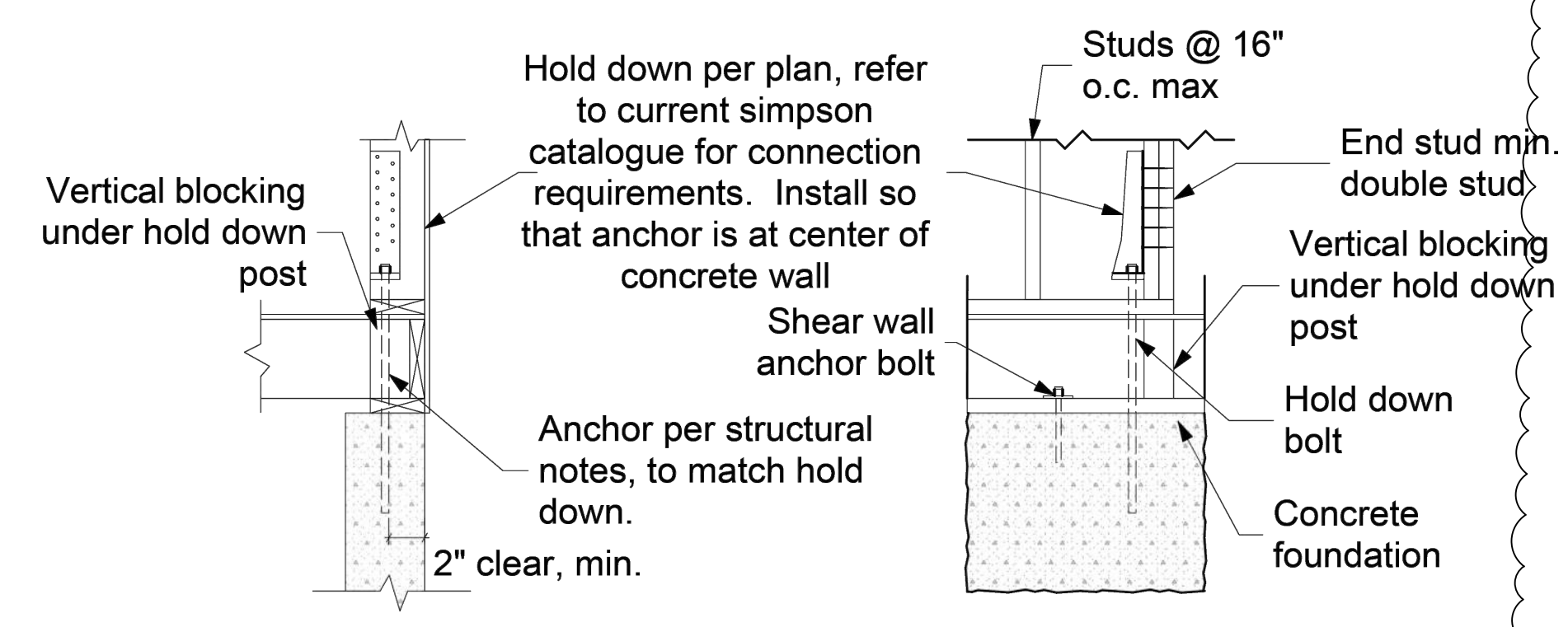
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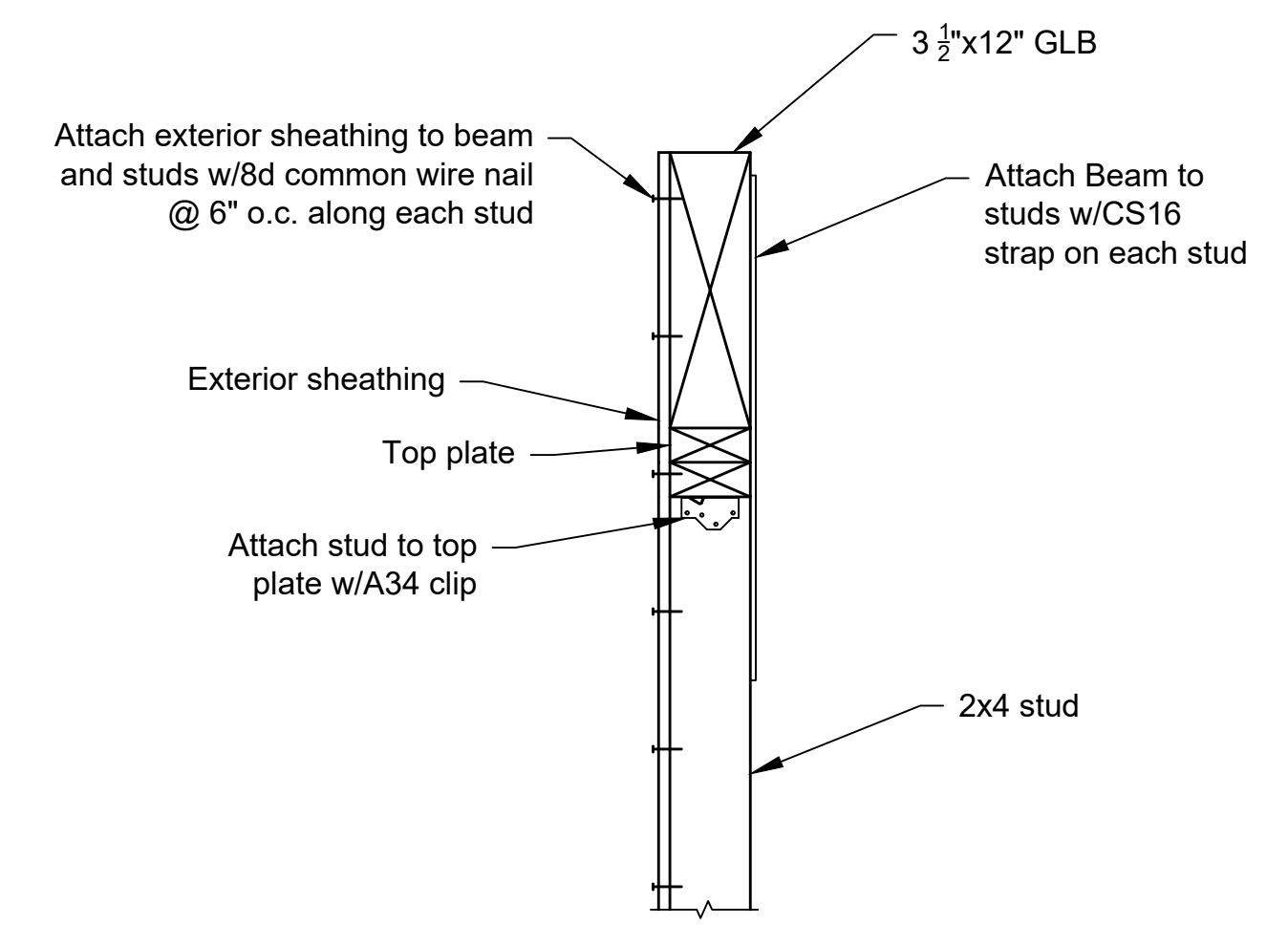
H1 Corner Hold Down Detail
 Scale: 1" = 1'-0"



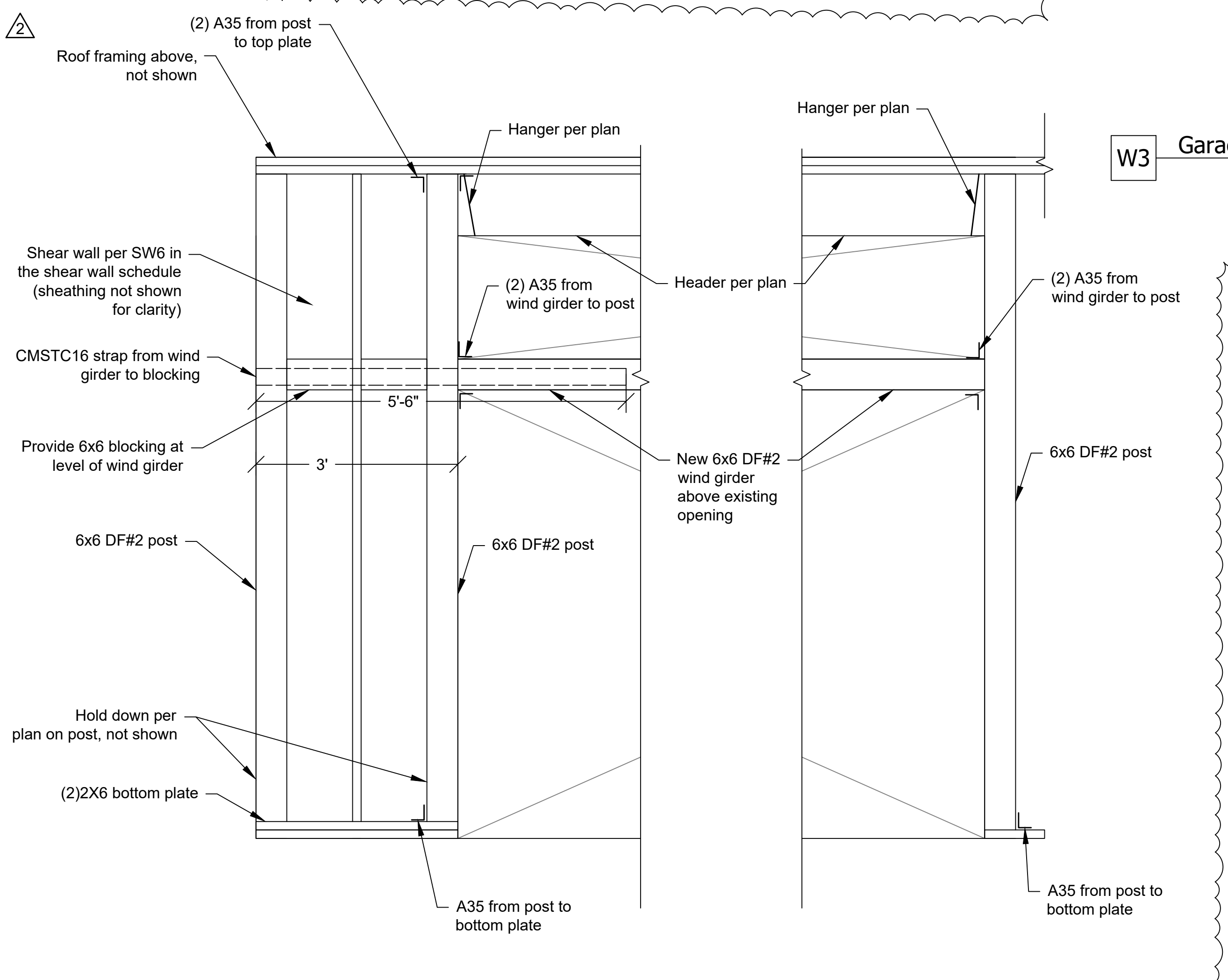
H2 Strap Hold Down Typical Detail
 Scale: 3/4" = 1'-0"



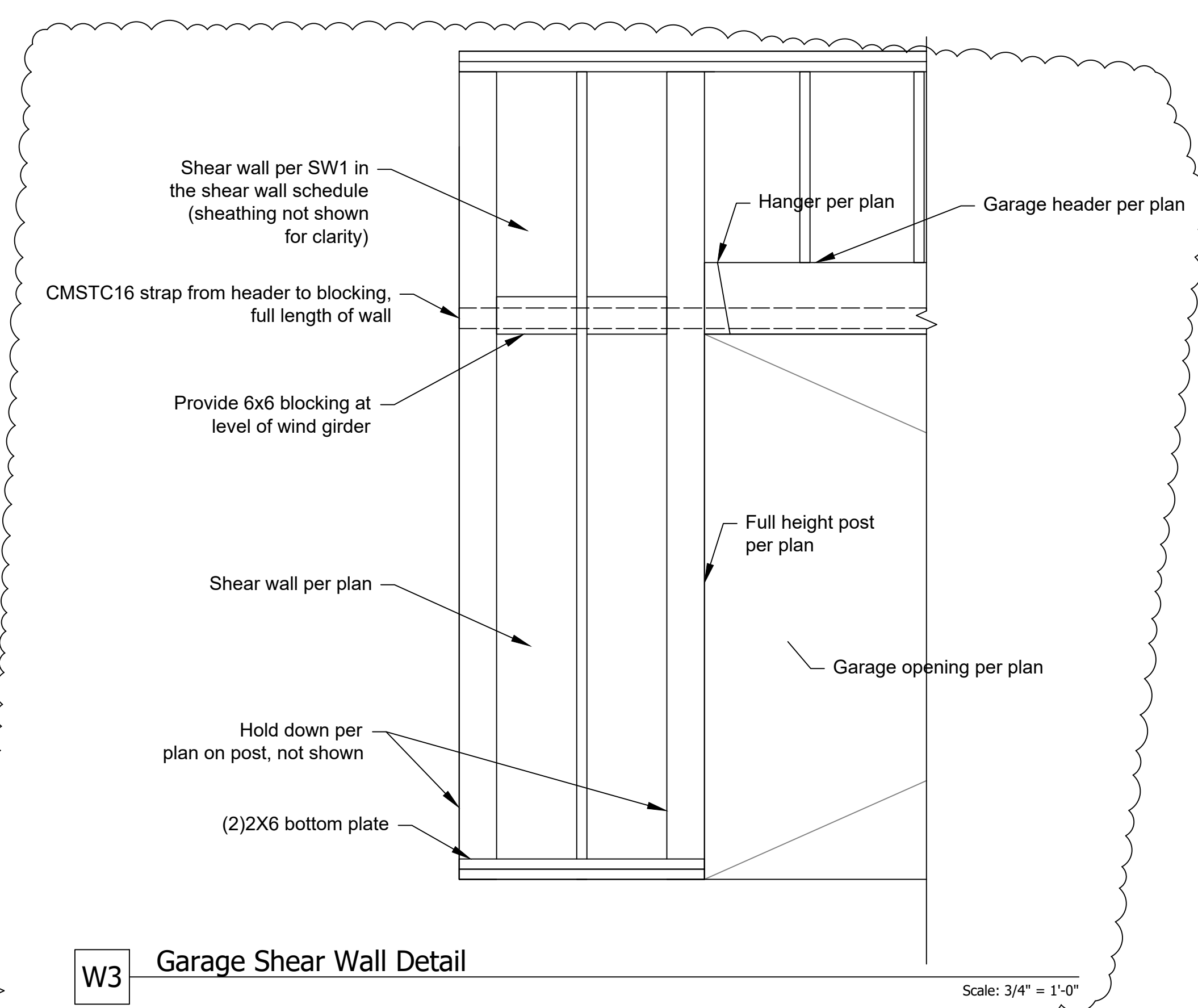
H3 Retrofit HDU Typical Detail
 Scale: 3/4" = 1'-0"



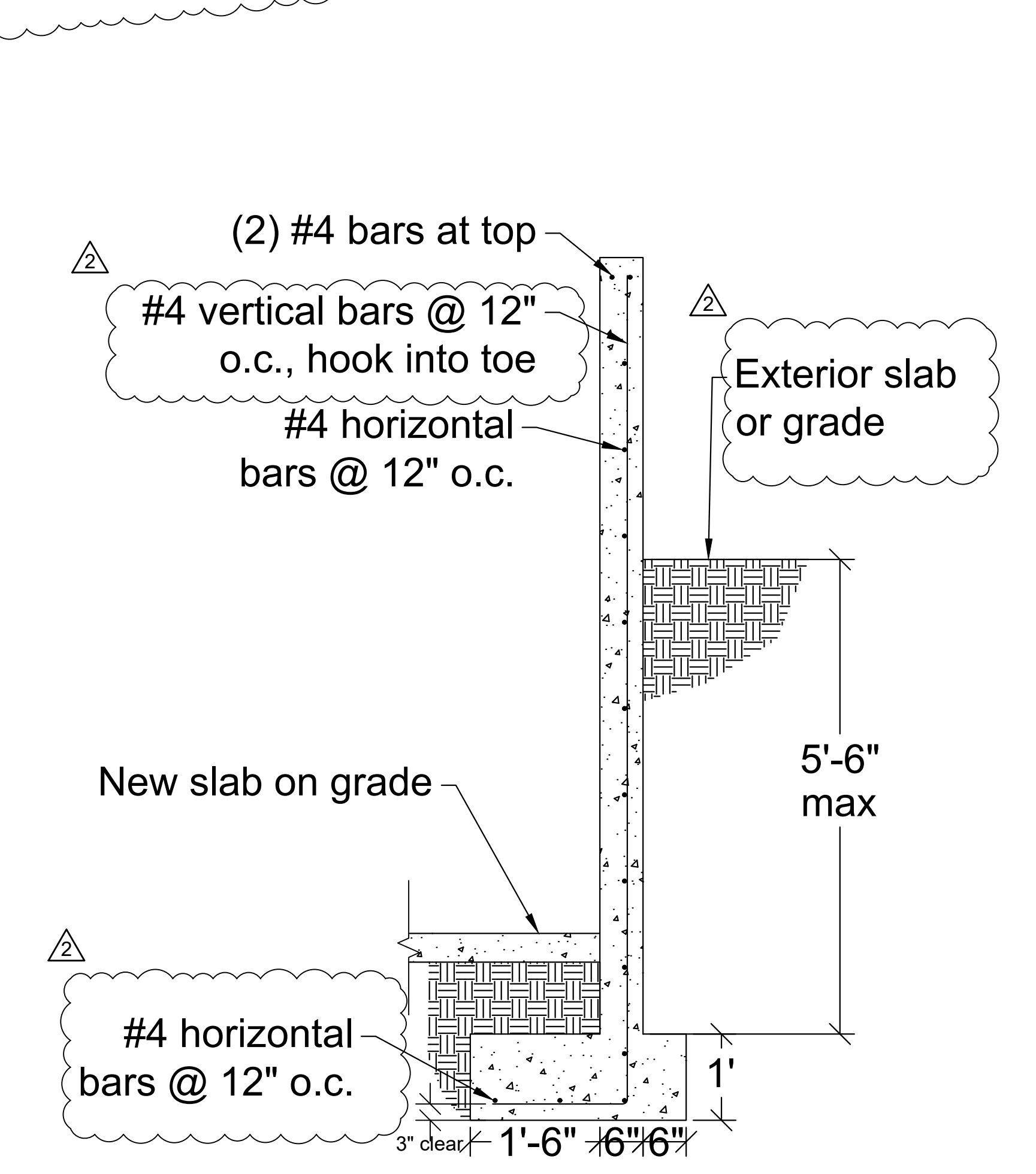
W1 East Wall Beam to Stud Connection
 Scale: 1-1/2" = 1'-0"



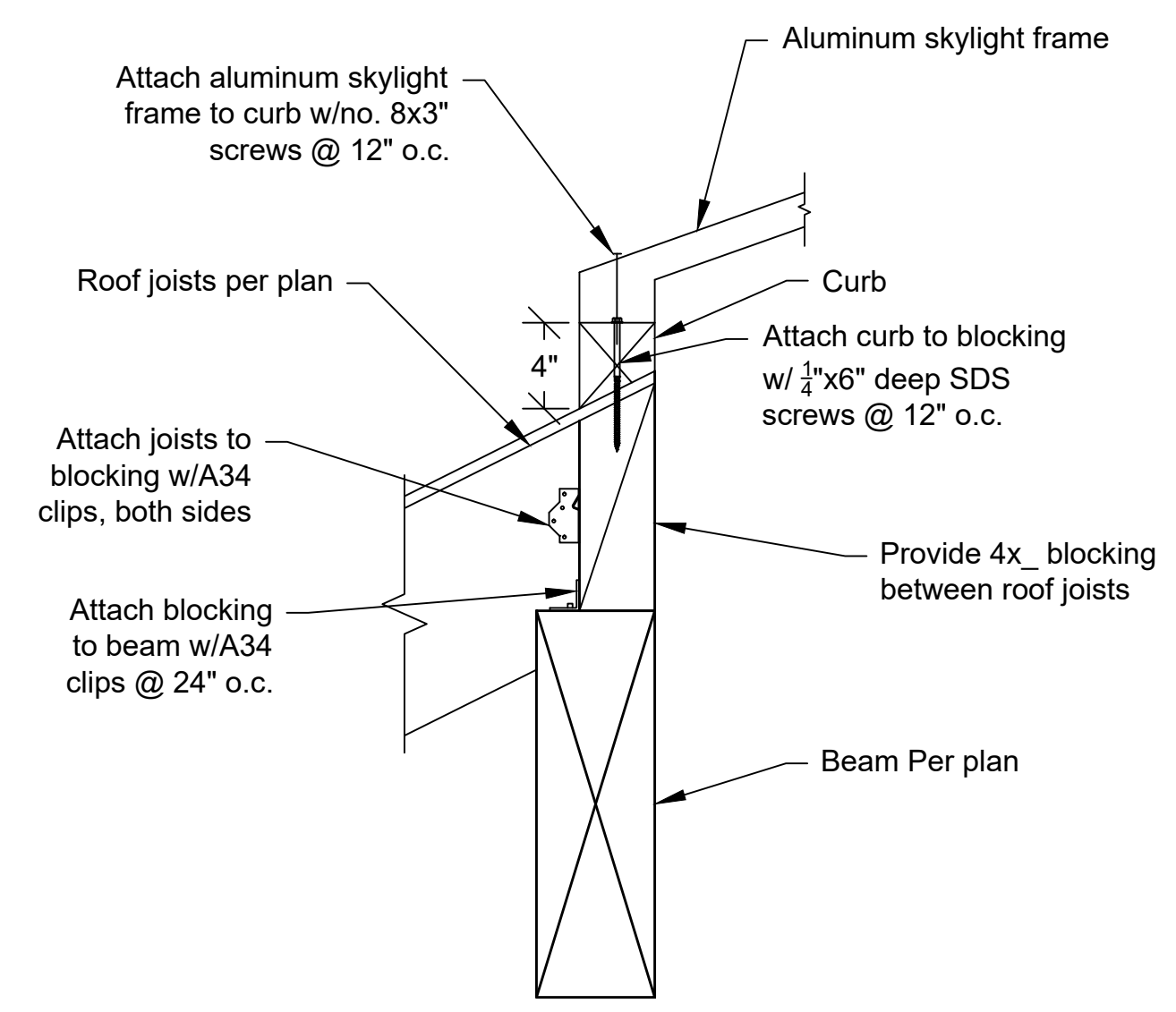
W2 West Wall Shear Wall & Wind Girder Detail
 Scale: 3/4" = 1'-0"



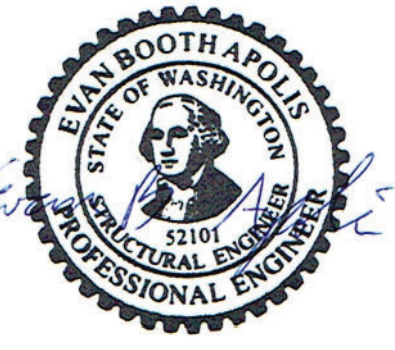
W3 Garage Shear Wall Detail
 Scale: 3/4" = 1'-0"



F4 East Retaining Wall Detail
 Scale: 3/4" = 1'-0"

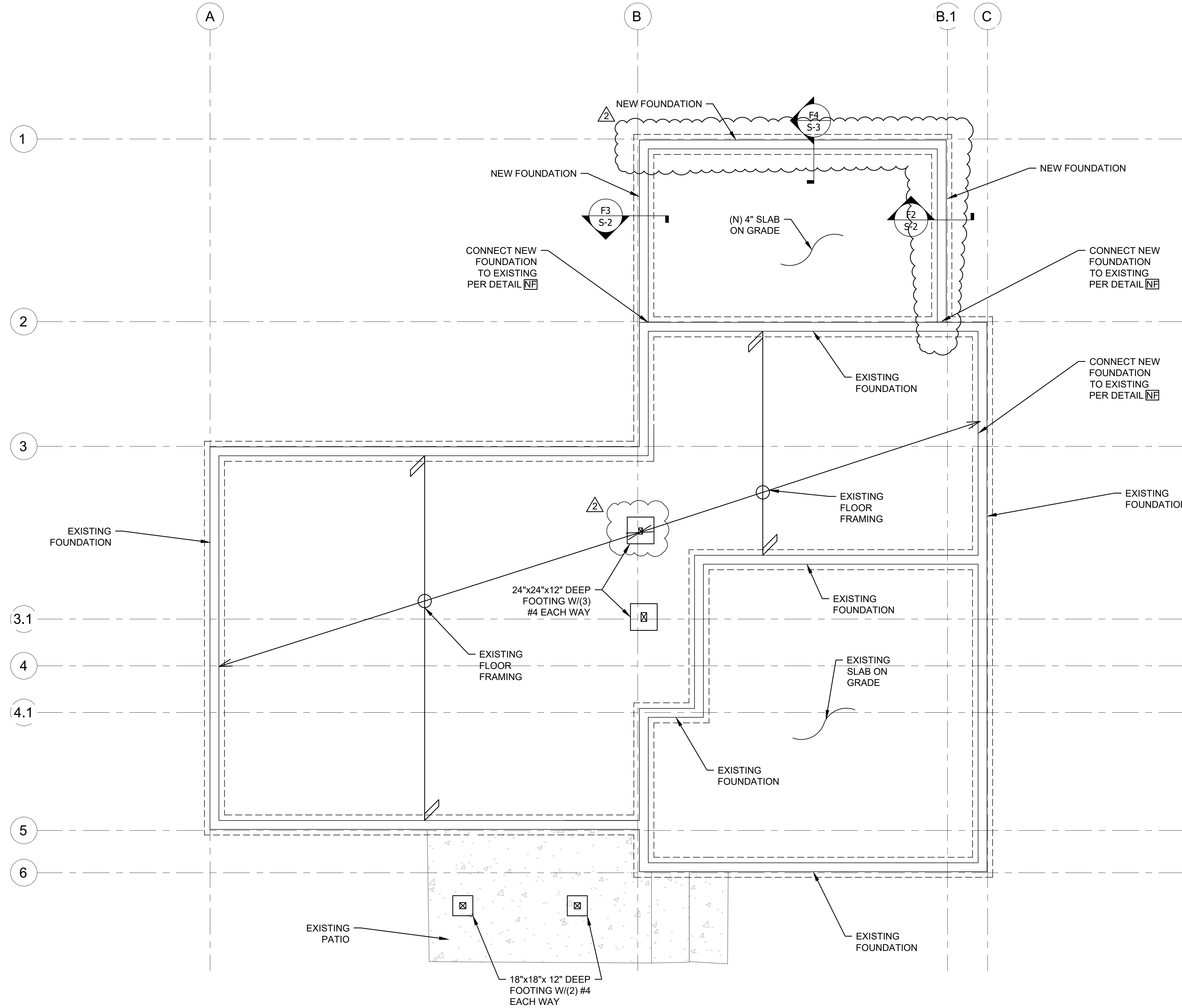


L1 Skylight Frame to Roof Framing Connection Detail
 Scale: 1-1/2" = 1'-0"



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1 MAIN FLOOR FRAMING AND FOUNDATION PLAN

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

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