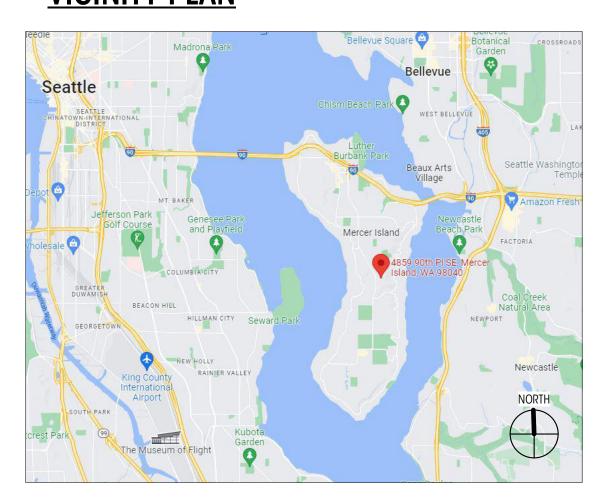
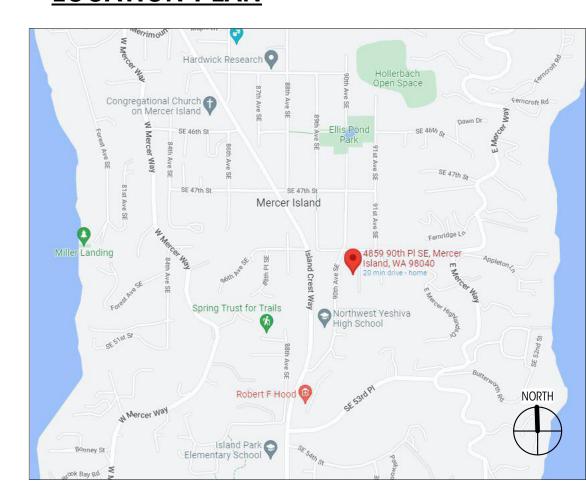
VICINITY PLAN



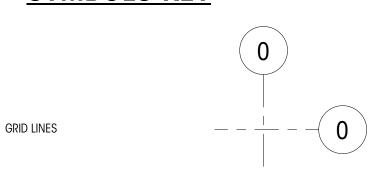
ABBREVIATIONS

ABOVE ABOVE FINISH FLOOR ADDITIONAL **ADJUSTABLE** ALTERNATE ARCHITECT, ARCHITECTURAL BELOW BASEMENT **BETWEEN** BUILDING CABINET CALCULATION CEILING CENTERLINE CLEAR COLUMN CONCRETE CONSTRUCTION CONT CONTINUOUS CONTR CONTRACTOR DEMOLISH DIAMETER DIMENSION DISHWASHER DOUBLE EACH **ELECTRIC, ELECTRICIAN ELEVATION** ENGINEER **EQUIVALENT EXISTING EXTERIOR** FINISH FLOOR GALVANIZED **GYPSUM WALL BOARD** HEADER HEIGHT INSULATION INSUL INTERIOR LOCATE, LOCATION MAXIMUM MANUFACTURER MECHANICAL METAL MINIMUM **NOT TO SCALE** ON CENTER PLYWOOD PRELIMINARY PRESSURE-TREATED PROPERTY LINE REFRIGERATOR REINFORCE, REINFORCING REQUIRED SCHEDULE SHEARWALL SIMILAR SQUARE FOOT **SPECIFICATIONS** SSTL STAINLESS STEEL STRUCT STRUCTURE, STRUCTURAL TEMP TEMPORARY TOP OF WALL TYPICAL **UNLESS NOTED OTHERWISE** VERIFY IN FIELD VERTICAL WATERPROOF, WEATHERPROOF WINDOW WITH WITHOUT WOOD

LOCATION PLAN



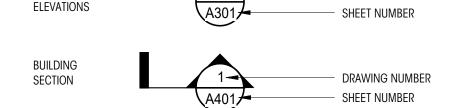
SYMBOLS KEY



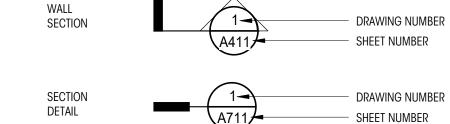
ROOM REFERENCE	ROOM NAME →	ROOM NAMEROOM NUMBER
DOOR REFERENCE	100Ā	ROOM NUMBERDOOR NUMBERPOOM NUMBER

ROOM NUMBER
WINDOW NUMBER

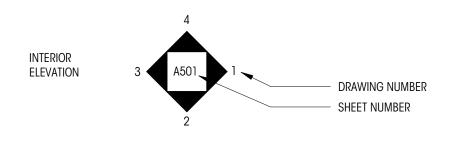
EXTERIOR



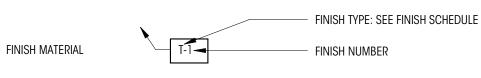
DRAWING NUMBER

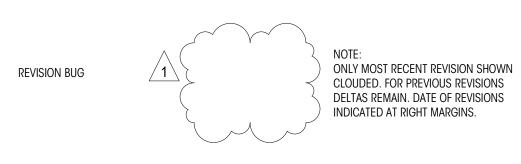


AREA DETAIL DRAWING NUMBER SHEET NUMBER









ASSEMBLY TYPE	W4a	R: ROOF TYPE W: WALL TYPE F: FLOOR TYPE SEE ASSEMBLIES FOR MORE INFO
EXHAUST FAN	\bigcirc	
SMOKE DETECTOR	(
SMOKE/CARBON MONOXIDE DETECTOR	\boxtimes	
CENTERLINE	0	

GENERAL NOTES

ALL WORK SHALL BE IN **COMPLIANCE** WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE AS ADOPTED AND MODIFIED BY THE CITY OF MERCER ISLAND, MERCER ISLAND LAND USE CODE, AND ALL OTHER LAWS, CODES, ORDINANCES AND REGULATIONS OF THE COUNTY, STATE, AND FEDERAL JURISDICTIONS. (LATEST EDITION AND AMENDMENTS)

ALL UNDERGROUND UTILITIES MUST BE VERIFIED AS TO EXACT LOCATIONS SO AS NO INTERFERENCE BY DISRUPTION WILL BE CAUSED. GENERAL CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES BY THE METHODS RECOMMENDED AT THE PRE-CONSTRUCTION SITE MEETING. DAMAGE THAT MAY BE CAUSED BY GENERAL CONTRACTOR OR SUBCONTRACTOR TO ANY OF THE ABOVE MENTIONED SHALL BE REPAIRED BY HIM AND LEFT IN AS

CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL **DIMENSIONS AND JOB CONDITIONS** RELATED TO THIS WORK. ALL DIMENSIONS SHALL BE CONSIDERED "NOMINAL" UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. DIMENSIONS ON LARGE SCALE DRAWINGS OR DETAILS WILL PREVAIL OVER SMALLER SCALED DRAWINGS. WRITTEN DIMENSIONS ARE DRAWN TO THE FACE OF STUD, U.N.O. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT, PROVIDE ALL BUCKOUTS, BLOCKING, AND JACKS AS REQUIRED BY THE DRAWINGS AND OTHER TRADES. ANY DISCREPANCY IN DIMENSIONS SHALL BE REPORTED IN WRITING TO THE PROJECT MANAGER/ DESIGNER FOR CLARIFICATION, OR APPROVAL OF MODIFICATION BEFORE COMMENCING WORK. THE RESPONSIBILITY TO THE PROJECT MANAGER/DESIGNER, SHALL REST WITH THE CONTRACTOR OR ANY OTHER PERSON APPROVING SUCH A CHANGE.

ALL **workmanship and materials** shall be guaranteed for a period of one year from the date of CERTIFICATE OF OCCUPANCY UNLESS SPECIFIED FOR A LONGER PERIOD OF TIME ON SPECIFIED ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING HIS OWN DEFECTIVE WORK AS WELL AS PAY ALL COSTS INCIDENTAL THERETO INCLUDING DAMAGE TO OTHER WORK, FURNISHINGS OR EQUIPMENT.

ALL **WARRANTIES OR GUARANTEES** AS TO MATERIALS OR WORKMANSHIP ON OR WITH RESPECT TO THE OWNER'S WORK SHALL BE CONTAINED IN THE CONTRACT OR SUBCONTRACT WHICH SHALL BE SO WRITTEN THAT SUCH GUARANTEE OR Warranties shall insure to the Benefit of Owner.

INSURANCE: PRIOR TO THE COMMENCEMENT OF WORK THE GENERAL CONTRACTOR SHALL DELIVER TO THE OWNER CERTIFICATES OF INSURANCE FOR BOTH COMPREHENSIVE GENERAL LIABILITY AND WORKMAN'S COMPENSATION INCLUDING THE TOTAL AMOUNT OF COVERAGE AND CONDITIONS STIPULATED AND AGREED BY BOTH PARTIES.

THE OWNER SHALL BE RESPONSIBLE FOR PAYING FOR THE BUILDING PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED OR NECESSARY FOR THE COMPLETION OF THE WORK FROM THE RESPECTIVE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE GOVERNING AGENCIES AS REQUIRED FOR SITE

ALL TRADES SHALL REFER TO THE ARCHITECTURAL DRAWINGS REGARDING LOCATIONS OF WORK TO BE INSTALLED.

UNLESS OTHERWISE NOTED, PROVIDE ALL MISCELLANEOUS FASTENERS, HARDWARE AND ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION. EVEN THOUGH SUCH ITEMS MAY NOT HAVE BEEN SPECIFICALLY MENTIONED IN THE DRAWINGS AND SPECIFICATIONS, NOTIFY THE ARCHITECT OF ANY REVISIONS OR ADDITIONAL INFORMATION OBTAINED FROM THE MANUFACTURER OF SPECIFIED MATERIALS OR EQUIPMENT WHICH MAY AFFECT THE CONTRACT TIME, COST OR QUALITY OF WORK.

THE GENERAL CONTRACTOR, ALL SUB-CONTRACTORS AND ALL MAJOR SUPPLIERS SHALL SUBMIT TO THE OWNER WITHIN 30 DAYS AFTER COMPLETION ALL "RELEASE OF LIENS" FOR ALL WORK PERFORMED PRIOR TO FINAL PAYMENT.

PARTIAL LIEN WAIVERS TO BE SUBMITTED WITH MONTHLY REQUISITION.

ALL MANUFACTURERS AND/OR SUPPLIERS SHALL SUBMIT SHOP DRAWINGS AND/OR MATERIAL SAMPLES TO THE DESIGNER/OWNER FOR APPROVAL PRIOR TO FABRICATION.

ALL OF THE GENERAL CONTRACTOR'S EQUIPMENT, SCAFFOLDING HOISTS, ETC., SHALL BE AVAILABLE TO THE OWNER/ DESIGNER AND THEIR STAFF FOR INSPECTION OF ANY AND ALL WORK DURING NORMAL WORKING HOURS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DELIVERY POINTS, HOISTS LOCATIONS, ACCESS TO AND FROM THE SITE OF THE BUILDING AND UTILITY SERVICES. BID TO INCLUDE ALL NECESSARY AND REQUIRED PERMITS, LICENSES, FEES, BONDS AND INSURANCE - EVIDENCE OF WHICH MUST BE SUBMITTED TO OWNER/ DESIGNER PRIOR TO ANY CONSTRUCTION.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBCONTRACTORS WORKING AT JOB SITE AND FOR ALL COORDINATION OF WORK.

THE MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTOR SHALL FULLY COORDINATE ALL EQUIPMENT WITH THE OTHER TRADES. THESE CONTRACTORS SHALL BE RESPONSIBLE FOR FINAL HOOK-UP OF ALL EQUIPMENT NOT FURNISHED BY THEM BUT REQUIRING THE SAME FOR FINAL COMPLETION.

GENERAL CONTRACTOR TO BE RESPONSIBLE FOR SECURITY OF ALL MATERIALS AT JOB SITE UNTIL FINAL ACCEPTANCE OF

ANY SUBCONTRACTOR CUTTING INTO WORK ALREADY COMPLETED, CUTTING CHASES AND TRENCHES FOR THE INTRODUCTION OF HIS WORK AND EQUIPMENT IN THE BUILDING SHALL DO OR PAY FOR ALL BACK FILLING, REPARATION OF WALLS, FLOOR, ETC., DAMAGE BY SUCH A COMPANY. ALL REPAIRS SHALL MATCH EXISTING SURFACES.

CONSTRUCTION SPECIFICATIONS

NO SUBSTITUTIONS ARE ALLOWED FOR MATERIALS WHERE SPECIFIC MANUFACTURERS ARE INDICATED, UNLESS APPROVED BY THE OWNER/ARCHITECT. REQUESTS FOR SUBSTITUTIONS SHALL BE MADE IN WRITING PRIOR TO ORDERING MATERIALS OR COMMENCING WORK. SUCH REQUESTS SHALL INCLUDE THE DATE, SCOPE OF WORK, ANY ADDITIONAL COSTS TO THE OWNER, AND ANY ANTICIPATED DELAYS CAUSED BY SUCH CHANGES.

NO EXTRA WORK OR CHANGE SHALL BE MADE UNLESS A WRITTEN CHANGE ORDER IS SUBMITTED AND SIGNED BY THE OWNER AND ARCHITECT. THE ORDER SHALL STATE THAT THE OWNER HAS AUTHORIZED THE EXTRA WORK OR CHANGE, AND NO CLAIM FOR AN ADDITIONAL SUM SHALL BE VALID UNLESS SO OFFERED AS DESCRIBED ABOVE.

ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.

WOOD SPECIFICATIONS TO CONFORM TO OUTLINE SPECIFICATIONS, STRUCTURAL PLANS, NOTES, AND GENERAL CONDITIONS.

CAULKING AND SEALANTS: INSTALLED SHALL BE GUARANTEED WATERTIGHT. EXTERIOR METAL WORK, INCLUDING WINDOWS AND DOOR FRAMES AND ALL JUNCTIONS BETWEEN MASONRY, CONCRETE AND METAL SHALL BE SEALED WITH NEOPRENE OR POLYURETHANE FILLER AND APPROVED SEALANT COMPOUNDS.

PROVIDE GALVANIC INSULATION BETWEEN ALL DISSIMILAR METALS.

PROVIDE WATERPROOFING MEMBRANE OVER PROTECTIVE BOARD AT ALL WALLS EXPOSED TO EARTH.

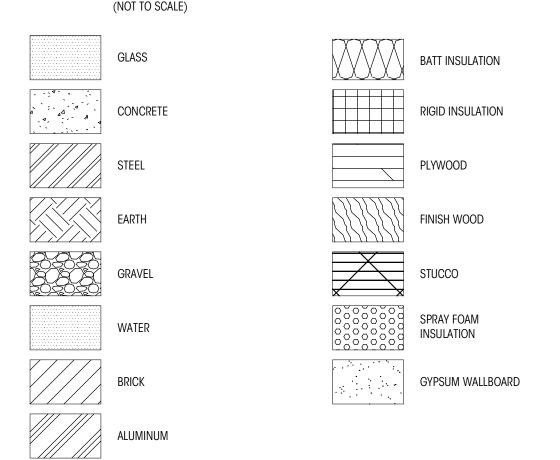
ALL PIPING AND CONDUIT UNDER SLAB SHALL BE A MINIMUM OF 2"-0' CLEAR OF UNDERSIDE OF FOOTING.

ALL FINAL SURFACE GRADING SHALL BE COMPLETED TO FACILITATE POSITIVE DRAINAGE AWAY FROM THE BUILDING UNLESS NOTED OTHERWISE.

PROVIDE AND INSTALL INSULATION AT EXTERIOR WALLS, ROOF, FLOOR LOCATIONS AS SHOWN, SPECIFIED AND IN ACCORDANCE WITH WASHINGTON STATE ENERGY CODE.

WATER PIPES TO BE INSULATED IN ALL UNHEATED AREAS.

INSULATE ALL ROUGH-IN PLUMBING IN WALLS, FLOORS, AND CEILINGS FOR SOUND TRANSMISSION.



GENERAL INFORMATION

PROJECT ADDRESS 4859 90TH PLACE SE MERCER ISLAND, WA 98040

PROJECT NUMBER ASSESSOR'S PARCEL # 7582300060

SCHAEFER ESTATES LOT 6 & N 20 FT OF 7 TGW UND INT LEGAL DESCRIPTION

PROJECT DESCRIPTION ADDITION TO EXISTING SINGLE FAMILY HOUSE

R-8.4 **BUILDING TYPE** SINGLE FAMILY RESIDENCE

PROJECT DATA

12,548 SF (PER SURVEY) GROSS LOT AREA ACCESS EASEMENTS 1,065 SF (PER SURVEY) NET LOT AREA 11,483 SF 5'-1 1/4" / 143'-9"" = 3.5% LOT SLOPE

TREE REMOVAL (E) TREES TO BE REMOVED (N) TREES TO BE PLANTED AS REPLACEMENT

LOT COVERAGE 40% (4,593.2 SF) ALLOWED LOT COVERAGE (E) RESIDENCE, GARAGE, AND OVERHANGS 3,040.25 SF (E) DRIVING SURFACES 407 SF (E) PORTABLE SHEDS 210 SF (ERECTED BETWEEN APRIL 2017 & SPRING 2019 PER MERCER ISLAND GIS)

(E) LOT COVERAGE 3,657.25 SF/11,483 SF = 31.8% OF LOT AREA PROPOSED (N) RESIDENCE ADDITION AND OVERHANGS (E) + (N) TOTAL OVERALL LOT COVERAGE 3,945.15 SF/11,483 SF = 34.4% OF LOT AREA

HARDSCAPE ALLOWED HARDSCAPE 9% (1,033.47 SF) + 648.05 BORROWED FROM LOT COVERAGE = 1,681.52

EXISTING PATIOS 690.02 SF (BUILT BEFORE APRIL 2017 PER MI GIS) WALKWAYS 241.8 SF (BUILT BEFORE APRIL 2017 PER MI GIS) HOT TUB DECK 118.5 SF HOT TUB 254 SF 1,390.7 SF (BUILT BEFORE APRIL 2017 PER MI GIS) - GRAVEL IN UTILITY EASEMENT 174.46 SF 1216.2 SF - GRAVEL ON-SITE

ARTICIFICIAL TURF 1,684 SF (BUILT BEFORE MARCH 2015 PER MI GIS) SITE WALLS 59.8 SF (BUILT BEFORE APRIL 2017 PER MI GIS) TOTAL EXISTING 4,310.3 SF/11,483 SF = 37.5% OF LOT AREA **DEMOLISHED**

232.72 SF PATIOS 3.47 SF HOT TUB DECK SITE WALLS 11.65 SF 43.49 SF GRAVFI TOTAL DEMOLISHED 291.33 SF 4018.97 SF/11,483 SF = 35% OF LOT AREA TOTAL OVERALL HARDSCAPE

GROSS FLOOR AREA ALLOWED GROSS FLOOR AREA 40% OF LOT AREA (4,593.2) EXISTING BUILDING AREA SUMMARY (GFA)

(E) MAIN LEVEL 1,935 SF (E) ATTACHED GARAGE 570 SF TOTAL EXISTING BUILDING AREA (GSF) 2.505 SF 2,505/11,483 = 21.8% OF LOT AREA EXISTING FLOOR AREA RATIO PROPOSED BUILDING AREA SUMMARY (GFA) 11,483 SF x 0.40 = 4,593.2 SF 40% ALLOWABLE GROSS FLOOR AREA:

(E) + (N) TOTAL FLOOR AREA RATIO

SIDE YARD (PER 19.02.20.C.1c) PER 19.16.010, LOT WIDTH IS THE DISTANCE BETWEEN THE TWO MIDPOINTS OF SIDE LOT LINES = 105'-0" TOTAL: 17% OF LOT WIDTH 105' * 0.17 = 17'-7" 17'-7" * 0.33 = 5'-10 3/4" MINIMUM: 33% OF SIDE YARD TOTAL: PROVIDED: 5'-11" / 11'-8" FRONT YARD 20'-0" REAR YARD 25'-0"

R-8.4

2,736.8/11,483 = 23.8% OF LOT AREA

OCCUPANCY SUMMARY EXISTING TYPE

(N) MAIN LEVEL ADDITION

OCCUPANT LOAD SINGLE FAMILY ENERGY CODE SUMMARY (2018 WASHINGTON ENERGY CODE, RESIDENTIAL PROVISIONS) CLIMATE ZONE 4C PER TABLE R301.1

PRESCRIPTIVE THERMAL ENVELOPE PER TABLE R402.1.1 EFFICIENT ENVELOPE OPTION 1.3 (SECTION R406) FENESTRATION U-FACTOR (VERTICAL): SKYLIGHT U-FACTOR (OVERHEAD): CEILING: R-49 **VAULTED CEILING:** R-38 WALL ABOVE GRADE: R-21 WALL BELOW GRADE (INT.): R-21 (INT.) OR R-10 (EXT.) FLOOR ABOVE GRADE: R-38 SLAB ON GRADE @ BASEMENT: R-10

EXISTING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING THE CONSTRUCTION PROVIDED THAT THESE CAVITIES ARE FILLED WITH INSULATION. 2x4 FRAMED WALLS SHALL BE INSULATED TO A MINIMUM OF R-15 AND 2x6 FRAMED WALLS SHALL BE INSULATED TO A MINIMUM OF R-21.

CONTRACTOR TO VERIFY CARBON MONOXIDE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 315.3. CONTRACTOR TO VERIFY SMOKE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 314.2.2

INSTALLED PER INTERNATIONAL MECHANICAL CODE, WORK TO BE COMPLETED UNDER A SEPARATE PERMIT.

FANS ON TIMERS, PER PLANS. VOLUME OF REQUIRED OUTDOOR VENTILATION AIR TO BE PROVIDED BASED ON TABLE 403.8.5.1 OF THE INTERNATIONAL MECHANICAL CODE. * PLUMBING, MECHANICAL, ELECTRICAL WORK TO BE PERMITTED SEPARATELY. SEE SHEET GO02 FOR VENTILATION & ENERGY CALCULATIONS.

PROJECT DIRECTORY

BRIAN AND DEBORAH LURIE 4859 90TH PLACE SE

MERCER ISLAND, WA 98040 COLIN BRANDT

ARCHITECT BRANDT DESIGN GROUP 66 BELL ST., UNIT 1 SEATTLE, WA 98121 206.239.0850

OWNER'S AGENT/CONTACT BREE MEDLEY

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GENERAL CONTRACTOR BRIAN AND DEBORAH LURIE 4859 90TH PLACE SE MERCER ISLAND, WA 98040

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SHEET INDEX

STRUCTURAL ENGINEER

CO	VERSHEET					
ENE	ERGY CODE /	VENTILATIO	ON CALCULA	TIONS		
ENE	ERGY CODE /	VENTILATIO	ON CALCULA	TIONS		

TOPOGRAPHIC & BOUNDARY SURVEY
<u>DEMOLITION</u>
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DEMOLITION LOT COVERAGE + HARDSCAPE
MAIN FLOOR DEMOLITION PLAN
ROOF DEMOLITION PLAN
DEMOLITION ELEVATIONS (N & E)
DEMOLITION ELEVATIONS (S & W)

10002	DEMOCRITION ELEVATIONS (O & W)
ARCHITECTURAL	
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WOOD FRAMING DETAILS

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A411	WALL SECTIONS
A601	DOOR / WINDOW SCHEDULES, LEGENDS, & NOTES
A701	ASSEMBLY DETAILS

PERMIT SET

DATE: 04/03/2023 SHEET SIZE: D (24X36)

DRAWN BY: MD

CHECKED BY:

COVERSHEET

As indicated

WHOLE HOUSE VENTILATION CALC

DWELLING UNIT	NUMBER OF BEDROOMS					
FLOOR AREA	0 - 1	2 - 3	4 - 5	6 - 7	> 7	
(square feet)		-	Airflow in CFM			
< 1,500	30	45	60	75	90	
1,501 - 3,000	45	60	75	90	105	
3,001 - 4,500	60	75	90	105	120	
4,501 - 6,000	75	90	105	120	135	
6,001 - 7,500	90	105	120	135	150	
> 7,500	105	120	135	150	165	

RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
Factor ^a	4	3	2	1.5	1.3	1.0

PROPOSED CONDITIONED SF = 183 SFNUMBER OF BEDROOMS = 1AIRFLOW IN CF REQUIRED FOR CONTINUOUS VENTILATION = 30 CFMRUN TIME PERCENTAGE IN EACH 4 HOUR SEGMENT = 25%FACTOR = 4

CALC 30 CFM X 4 = 120 CFM

(N) FAN IN PRIMARY BATH TO PROVIDE VENTILATION FOR NEW ADDITION

WA STATE ENERGY CODE FORMS

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

Ve

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and

Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

All Climate Zones (Table R402.1.1)						
	R-Value a	U-Factor ^a				
Fenestration U-Factor b	n/a	0.30				
Skylight U-Factor ^b	n/a	0.50				
Glazed Fenestration SHGC ^{b,e}	n/a	n/a				
Ceiling ^e	49	0.026				
Wood Frame Wall 8h	21 int	0.056				
Floor	30	0.029				
Below Grade Wall ^{c,h}	10/15/21 int + TB	0.042				
Slab df R-Value & Depth	10, 2 ft	n/a				

- a than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendable A101.4 shall not be less than the R-value specified in the table.

 b The fenestration U-factor column excludes skylights.
- "10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB"
- means R-5 thermal break between floor slab and basement wall.

 d R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.

 For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth
- e extends over the top plate of the exterior wall.

 R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall
- meet the requirements for thermal barriers protecting foam plastics.

 For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.
- Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard h framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10

2018 Washington State Energy Code-R

Contact Information

RANDT DESIGN GROUP

Width Height

Qt. Feet Inch Feet Inch

insulation.

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

Each dwelling unit *in a residential building* shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

1. Small Dwelling Unit: 3 credits

Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area. Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.

Medium Dwelling Unit: 6 credits
 All dwelling units that are not included in #1 or #3

Large Dwelling Unit: 7 credits
 Dwelling units exceeding 5,000 sf of conditioned floor area

 Additions less than 500 square feet: 1.5 credits All other additions shall meet 1-3 above

Before selecting your credits on this Summary table, review the details in Table 406.3 (Single Family), on page 4.

	Summary of Tab	le R406.2 and	406.3	
Heating Options	Fuel Normalization Descriptions		elect ONE option	User Notes
1	Combustion heating minimum NAECAb	0.0		
2	Heat pump ^c	1.0		
3	Electric resistance heat only - furnace or zonal	-1.0		
4	DHP with zonal electric resistance per option 3.4	0.5		
5	All other heating systems	-1.0		
Energy Options	Energy Credit Option Descriptions	energy option	elect ONE on from each gory ^d	
1.1	Efficient Building Envelope	0.5	•	
1.2	Efficient Building Envelope	1.0		
1.3	Efficient Building Envelope	0.5		
1.4	Efficient Building Envelope	1.0		
1.5	Efficient Building Envelope	2.0		
1.6	Efficient Building Envelope	3.0		
1.7	Efficient Building Envelope	0.5		
2.1	Air Leakage Control and Efficient Ventilation	0.5		
2.2	Air Leakage Control and Efficient Ventilation	1.0		
2.3	Air Leakage Control and Efficient Ventilation	1.5		
2.4	Air Leakage Control and Efficient Ventilation	2.0		
3.1 ^a	High Efficiency HVAC	1.0		
3.2	High Efficiency HVAC	1.0		
3.3°	High Efficiency HVAC	1.5		
3.4	High Efficiency HVAC	1.5		
3.5.1	High Efficiency HVAC	1.5		
3.5.2	High Efficiency HVAC	1.5		
3.6"	High Efficiency HVAC	2.0		
4.1	High Efficiency HVAC Distribution System	0.5	•	
4.2	High Efficiency HVAC Distribution System	1.0		

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

Summary of Table R406.2 (cont.)										
Energy Options	Energy Credit Option Descriptions (cont.)		elect ONE tion from tegory d	User No	tes					
5.1 ^d	Efficient Water Heating	0.5	V							
5.2	Efficient Water Heating	0.5								
5.3	Efficient Water Heating	1.0								
5.4	Efficient Water Heating	1.5								
5.5	Efficient Water Heating	2.0								
5.6	Efficient Water Heating	2.5								
6.1°	Renewable Electric Energy (3 credits max)	1.0								
7.1	Appliance Package	0.5								
	Total Credits		1.5	Calculate Total	Clear Form					

- a. An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W,
- whichever is bigger, may be installed in the dwelling unit.

 b. Equipment listed in Table C403.3.2(4) or C403.3.2(5)
- c. Equipment listed in Table C403.3.2(1) or C403.3.2(2)
- d. You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.
- 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max.
 See the complete Table R406.2 for all requirements and option descriptions.
- f. Use the single radiobutton in the upper right of the second column to deselect radiobuttons in that group.

ease print only pages 1 through 3 of this worksheet for submission to your building official

For Building Officials Only		

GLAZING SCHEDULE

Window, Skylight and Door Schedule

Exempt Swinging Door (24 sq. ft. max.)

Prescriptive Path - Single Family

Project Information

URIE RESIDENCE

859 90TH PLACE SE IERCER ISLAND, WA 98040 Prescriptive Path - Single Family

2018 Washington State Energy Code-R

Prescriptive Path - Single Family

2018 Washington State Energy Code-R

3

359 90th Place SE and, WA 98040

PERMIT SET

Brand

Design Group

66Bell Street

Unit 1

Seattle, WA

98121

206.239.0850

brandtdesigninc.com

DATE: 04/03/2023
SHEET SIZE: D (24X36)

REVISIONS

DRAWN BY: MD

CHECKED BY:

ENERGY CODE /

VENTILATION

CALCULATIONS

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

G001

DEDICATED APPROVAL TAMP SPACE

HEATING SIZING SYSTEM WORKSHEET

nergycode@energy.wsu.edu or (360) 956-2042 for assistance.

Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC) and ACCA Manuals J and S. This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads.

Please complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some

values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at

Contact Information
BREE MEDLEY
BRANDT DESIGN GROUP
O Heat Pump
he word "Instructions"
Design Temperature Difference (ΔT) 46
ΔT = Indoor (70 degrees) - Outdoor Design Temp
204
Conditioned Volume
8.5
U-Factor X Area = UA
0.280 54 15.12
U-Factor X Area = UA
0.50
H. Warranger W. J. C. 1995
U-Factor X Area = UA
No selection
U-Factor X Area UA
▼] 0.020 183 3.66
U-Factor X Area UA
0.056 360 20.15
U-Factor X Area UA
0.025 204 5.10
U-Factor X Area UA
No selection
F-Factor X Length UA
No selection
F Factor V Lorent 114
F-Factor X Length UA
No selection
Duct Leakage Coefficient
1.00
Sum of UA 44.03
Envelope Heat Load 2,025 Btu / Hou
Sum of UA x ∆T Air Leakage Heat Load 861 Btu / Hou
Volume x 0.6 x ΔT x 0.018
Building Design Heat Load 2,887 Btu / Hou
Air leakage + envelope heat loss
Building and Duct Heat Load 2,887 Btu / Hou Ducts in unconditioned space: sum of building heat loss x 1.10
Ducts in conditioned space: sum of building heat loss x 1.10 Ducts in conditioned space: sum of building heat loss x 1
Mandager Hant Fredmannt Output
Maximum Heat Equipment Output 4,041 Btu / Hou Building and duct heat loss x 1.40 for forced air furnace

ADDITION TO TIE INTO EXISTING SYSTEM

| Vertical Fenestration (Windows and doors)
| Component | Description | Ref. | U-factor | U-factor

Ref. U-factor

0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 Sum of Vertical Fenestration Area and UA Vertical Fenestration Area Weighted U = UA/Area Overhead Glazing (Skylights) Component Width Height Qt. Feet Inch Feet Inch Ref. U-factor Description 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 0.0 0.00 Sum of Overhead Glazing Area and UA Overhead Glazing Area Weighted U = UA/Area Total Sum of Fenestration Area and UA (for heating system sizing calculations) 0.00

SEE SHEET A601 FOR WINDOW + DOOR SCHEDULE

(07/01/13)

BASIS OF BEARINGS

ACCEPTED THE BEARING OF N 88°11'03" W BETWEEN MONUMENTS FOUND ALONG THE CENTERLINE OF SE 48TH ST, PER REFERENCE NO. 1.

REFERENCES

R1. SCHAEFER ESTATES, VOL. 83 OF PLATS, PG. 80 & 81, RECORDS OF KING COUNTY, WASHINGTON.

RECORDS OF KING COUNTY, WASHINGTON.

R2. CITY OF MERCER ISLAND SHORT PLAT SUB12-006, VOL. 305, PG. 38-40, RECORDS OF KING COUNTY, WASHINGTON. R3. RECORD OF SURVEY, REC. NO. 20170203900020,

VERTICAL DATUM

NAVD 88 PER CITY OF MERCER ISLAND BENCHMARK NO. 3064 DESCRIPTION: 3/8" BRASS PLUG W/ PUNCH IN CONC (DOWN 1.5') LOCATION: 300FT S INTX ISLAND CREST WAY & SE 48TH ST ELEVATION: 340.769'

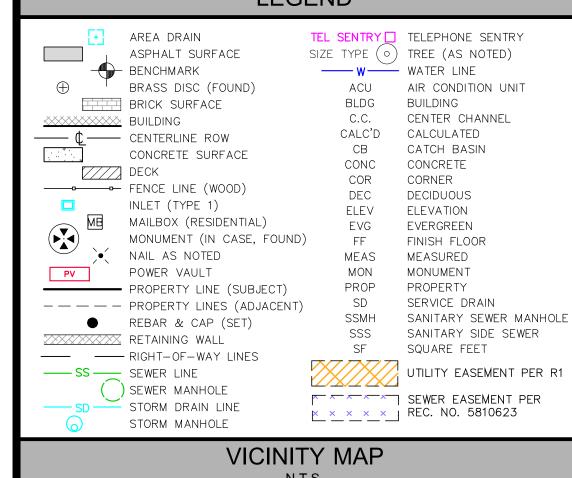
SITE TEMP. BENCHMARK

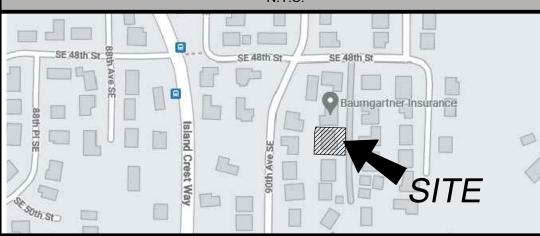
DESCRIPTION: PK NAIL W/ WASHER LOCATION: SET ON E. SIDE OF 90TH PL SE, ACROSS FROM SITE FLEVATION: 366.36'

SURVEYOR'S NOTES

- . THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN DECEMBER OF 2022. 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 FO CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
- 2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
- . 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. 7582300060
- 5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 12,548 S.F. (0.29 ACRES)
- 6. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM FIDELITY NATIONAL TITLE INSURANCE COMPANY'S "ALTA COMMITMENT FOR TITLE INSURANCE". ORDER NO. 611325237. 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 "ALTA COMMITMENT FOR TITLE INSURANCE". TERRANE, INC. HAS RELIED WHOLLY ON FIDELIT NATIONAL 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
- 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 5-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





SCHEDULE B ITEMS

. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: MERCER ISLAND SEWER DISTRICT PURPOSE: SEWER PIPE LINE RECORDING DATE: NOVEMBER 12, 1964 RECORDING NO.: 5810623 AFFECTS: EASTERLY PORTION OF SAID PREMISES

2. COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, ENCROACHMENTS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON THE PLAT OF SCHAEFER

RECORDING NO: 6268313 PLOTTED EASEMENT - SETBACKS NOT PLOTTED

3. SIDE SEWER EASEMENT

RECORDING DATE: FEBRUARY 13, 1968 RECORDING NO.: 6303726

WIDTH: 4 FEET AFFECTS: AN UNDISCLOSED PORTION OF SAID LAND ALONG THE LINE AS CONSTRUCTED

SAID EASEMENT CONTAINS A PROVISION FOR BEARING A PROPORTIONATE OR EQUAL COST OF MAINTENANCE, REPAIR OR RECONSTRUCTION OF SAID SIDE SEWER BY THE COMMON USERS. NOT PLOTTED - AS CONSTRUCTED

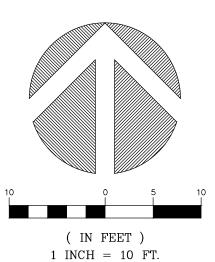
4. SIDE SEWER EASEMENT

RECORDING DATE: FEBRUARY 15, 1968 RECORDING NO.: 6305269

WIDTH: 4 FEET

AFFECTS: AN UNDISCLOSED PORTION OF SAID LAND ALONG THE LINE AS CONSTRUCTED

SAID EASEMENT CONTAINS A PROVISION FOR BEARING A PROPORTIONATE OR EQUAL COST OF MAINTENANCE, REPAIR OR RECONSTRUCTION OF SAID SIDE SEWER BY THE COMMON USERS. NOT PLOTTED - AS CONSTRUCTED

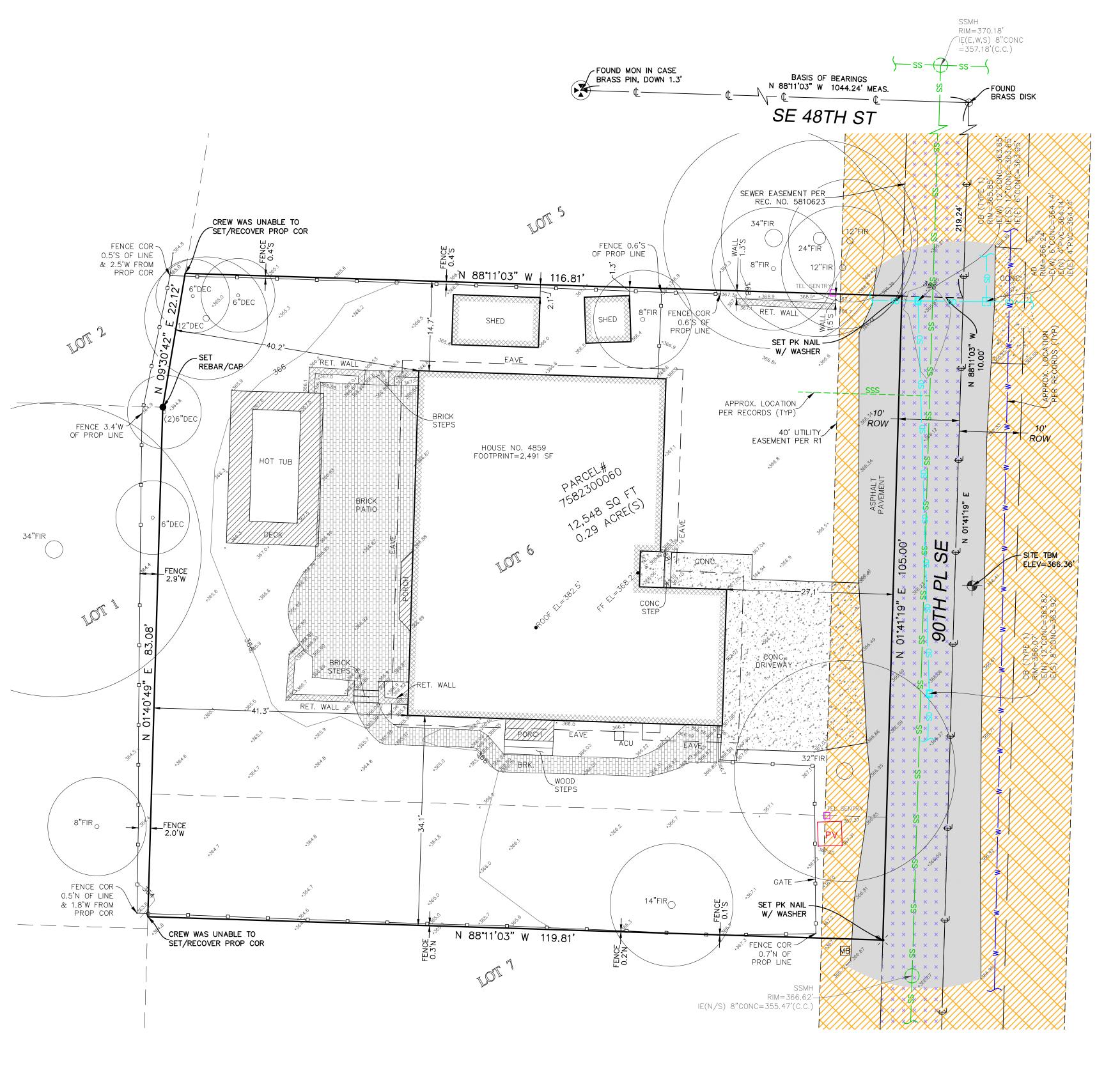


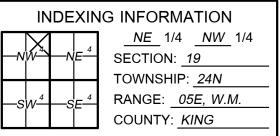
STEEP SLOPE/BUFFER DISCLAIMER:

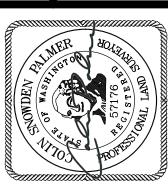
THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS; 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.

TOPOGRAPHIC & BOUNDARY SURVEY

SNOW ON SITE AT TIME OF SURVEY. FEATURES MAY EXIST WHICH COULD NOT BE OBSERVED.









JOB NUMBER: 12/29/22 DRAFTED BY: CSP/TLR CHECKED BY: 1" = 10' REVISION HISTORY

SHEET NUMBER

<u>LEGEND</u>

EL= 148.5' (+0'-0")

MAIN LEVEL FIN. FLR.

ELEVATION DATUM

SETBACK LINE

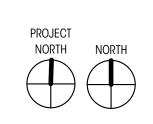
--- + --- Tree protection fence

(E) SITE WALL

ROOF OVERHANG

DEMOLITION SITE PLAN

1" = 10'-0"



(E) TREE TO BE REPLACED

CONTOUR MAJOR

CONTOUR MINOR

(E) HOUSE FOOTPRINT

(E) PATIO / WALKWAYS / CÓNCRETE DRIVE / PAVING

(E) SITE ELEMENTS TO BE DEMOLISHED

NOTES (E) EASEMENT 1. PROPERTY LINE METES & BOUNDS ARE SHOWN PER TOPGRAPHIC SURVEY BY TERRANE DATED 12/29/22 2.TREES AND CONTOURS ARE BASED ON TOPOGRAPHICS SURVEY BY TERRANE DATED 12/29/22 (E) TREE TO REMAIN

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Design Group

66Bell Street Unit 1

Seattle, WA 98121

206.239.0850

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RESIDENCE

PERMIT SET

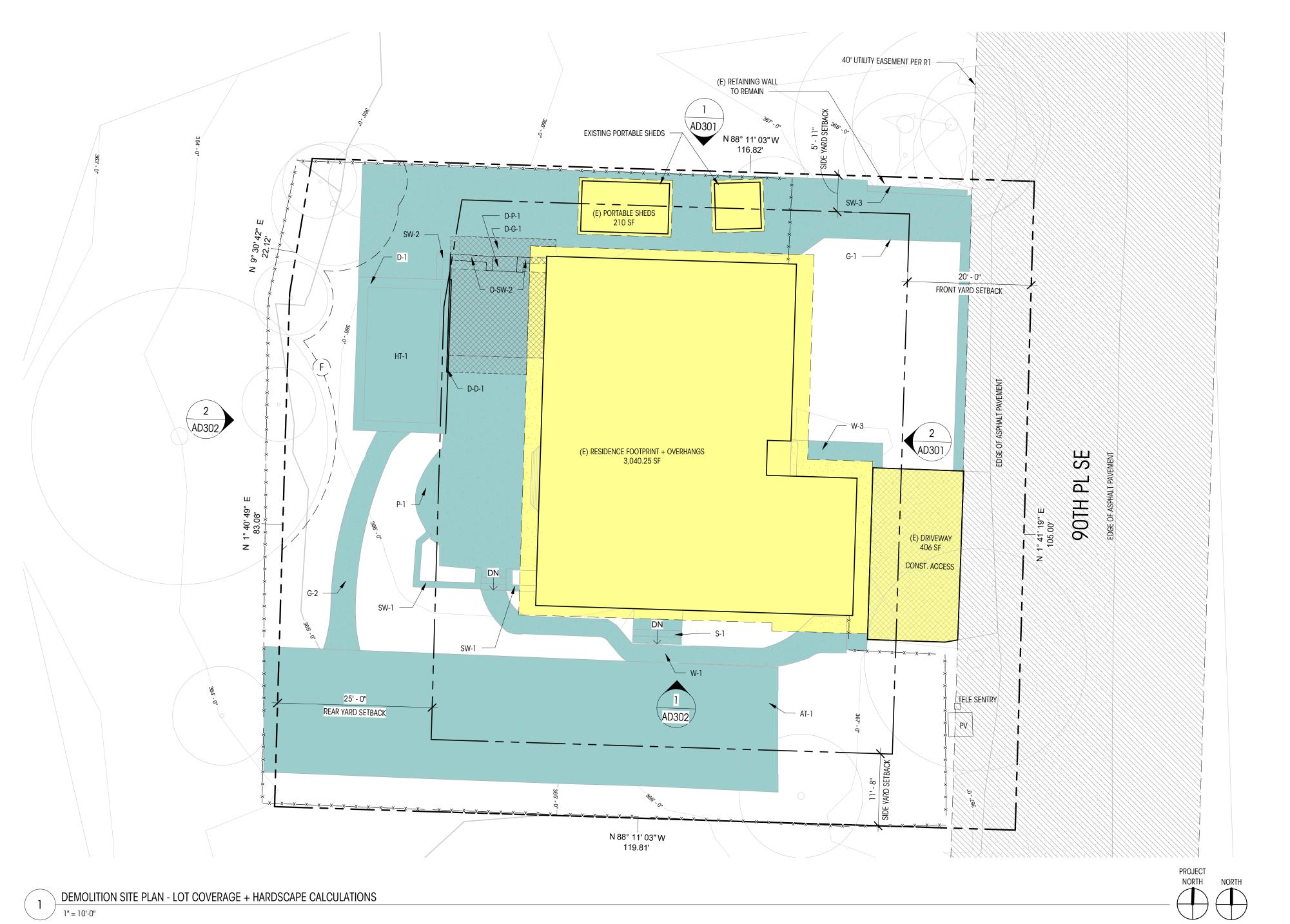
DATE: 04/03/2023 SHEET SIZE: D (24X36)

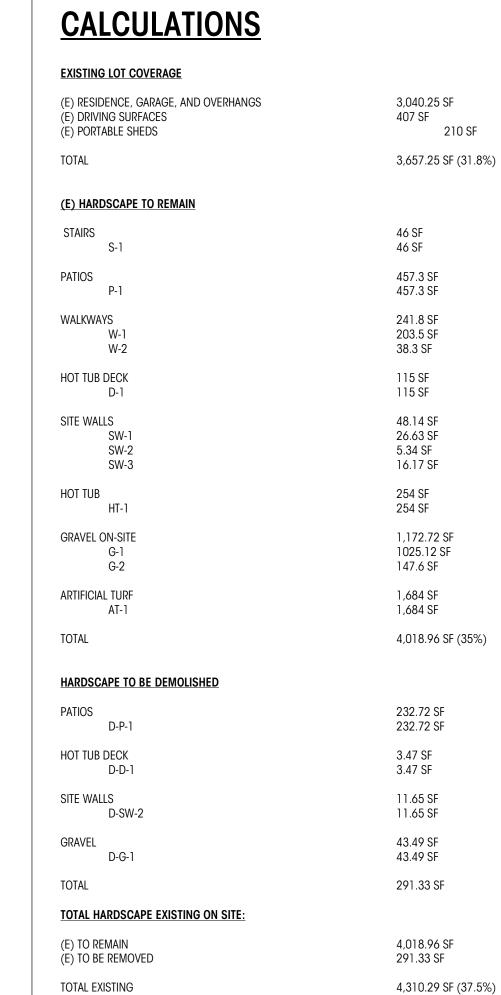
DRAWN BY: MD

CHECKED BY: SITE DEMOLITION PLAN

1" = 10'-0"

AD101





NOTES

- PROPERTY LINE METES & BOUNDS ARE SHOWN PER TOPGRAPHIC SURVEY BY TERRANE DATED 12/29/22
 TREES AND CONTOURS ARE BASED ON TOPOGRAPHICS SURVEY BY TERRANE DATED 12/29/22

LEGEND			
	PROPERTY LINE	LOT COVERAGE TO REMAIN	(E) TREE TO REMAIN
	SETBACK LINE		
	ROOF OVERHANG	HARDSCAPE TO REMAIN	
	CONTOUR MAJOR	DEMOLICIED HADDCCADE	
	CONTOUR MINOR	DEMOLISHED HARDSCAPE	
	(E) UTILITY EASEMENT		
4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4	(E) PATIO / WALKWAYS / CONCRETE DRIVE / PAVING		
	CONSTRUCTION ACCESS		

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RESIDENCE

PERMIT SET

DATE: 04/03/2023

SHEET SIZE: D (24X36) REVISIONS NO: DATE:

DRAWN BY: MD CHECKED BY: DEMOLITION LOT COVERAGE + HARDSCAPE

1" = 10'-0"

AD102



Design Group

66Bell Street Unit 1 Seattle, WA 98121

206.239.0850

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PERMIT SET

RESIDENCE

DATE: 04/03/2023 SHEET SIZE: D (24X36)

DRAWN BY: MD

CHECKED BY: MAIN FLOOR **DEMOLITION PLAN**

1/4" = 1'-0"

AD212

APPROVAL

<u>LEGEND</u>

ELEVATION DATUM

☐ ☐ ☐ ☐ ☐ WALL/FIXTURE TO BE REMOVED

FLOOR TO BE REMOVED

NOTES

ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.

CONCRETE, U.N.O.

ALL DIMENSIONS AT INTERIOR WALLS TO FACE OF FINISH (5/8" GWB
ASSUMED AT EA. SIDE OF WALL) OR TO FACE OF CONCRETE, U.N.O.
ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O.
ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED.
CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT
WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

WALL TO REMAIN



Design Group

66Bell Street Unit 1 Seattle, WA 98121

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206.239.0850



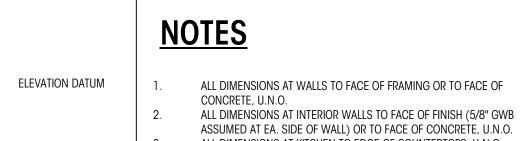
PERMIT SET

DATE: 04/03/2023 D (24X36)

DRAWN BY: MD

CHECKED BY: ROOF DEMOLITION PLAN

1/4" = 1'-0"



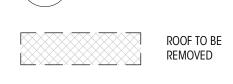
ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O.

ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED.
CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT
WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

EL= 148.5' (+0'-0")

MAIN LEVEL FIN. FLR. ELEVATION DATUM

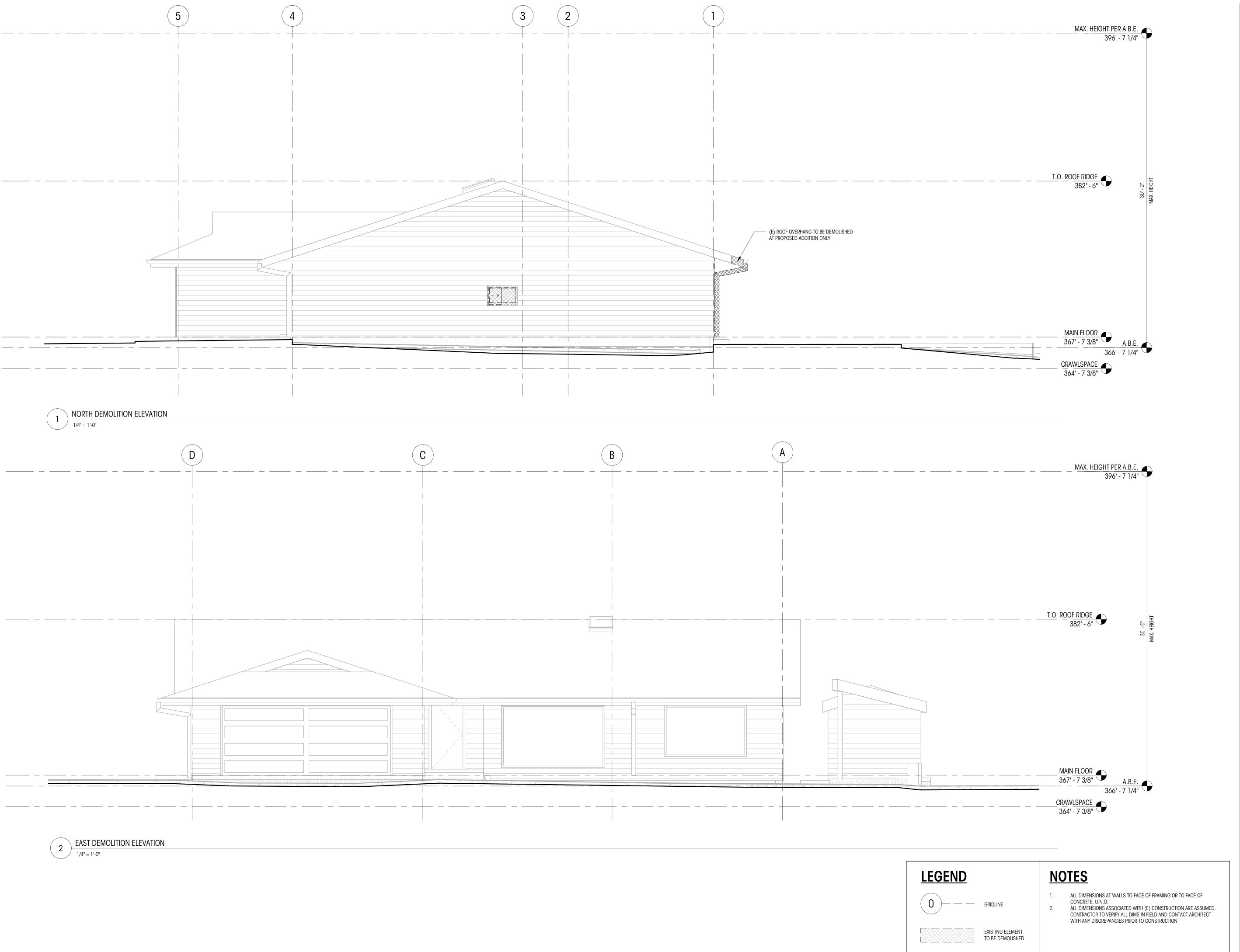
LEGEND





Existing roof to remain

EXISTING WALL TO REMAIN



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PERMIT SET

DATE: 04/03/2023 SHEET SIZE: D (24X36)

DRAWN BY: MD

CHECKED BY: DEMOLITION ELEVATIONS (N & E)

1/4" = 1'-0"

AD301

APPROVAL

Existing element to remain

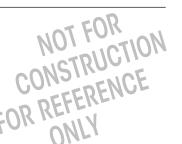
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Design Group

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PERMIT SET

DATE: 04/03/2023 SHEET SIZE: D (24X36)

DRAWN BY: MD CHECKED BY: DEMOLITION ELEVATIONS (S &

1/4" = 1'-0"

AD302

APPROVAL

EXISTING ELEMENT TO BE DEMOLISHED

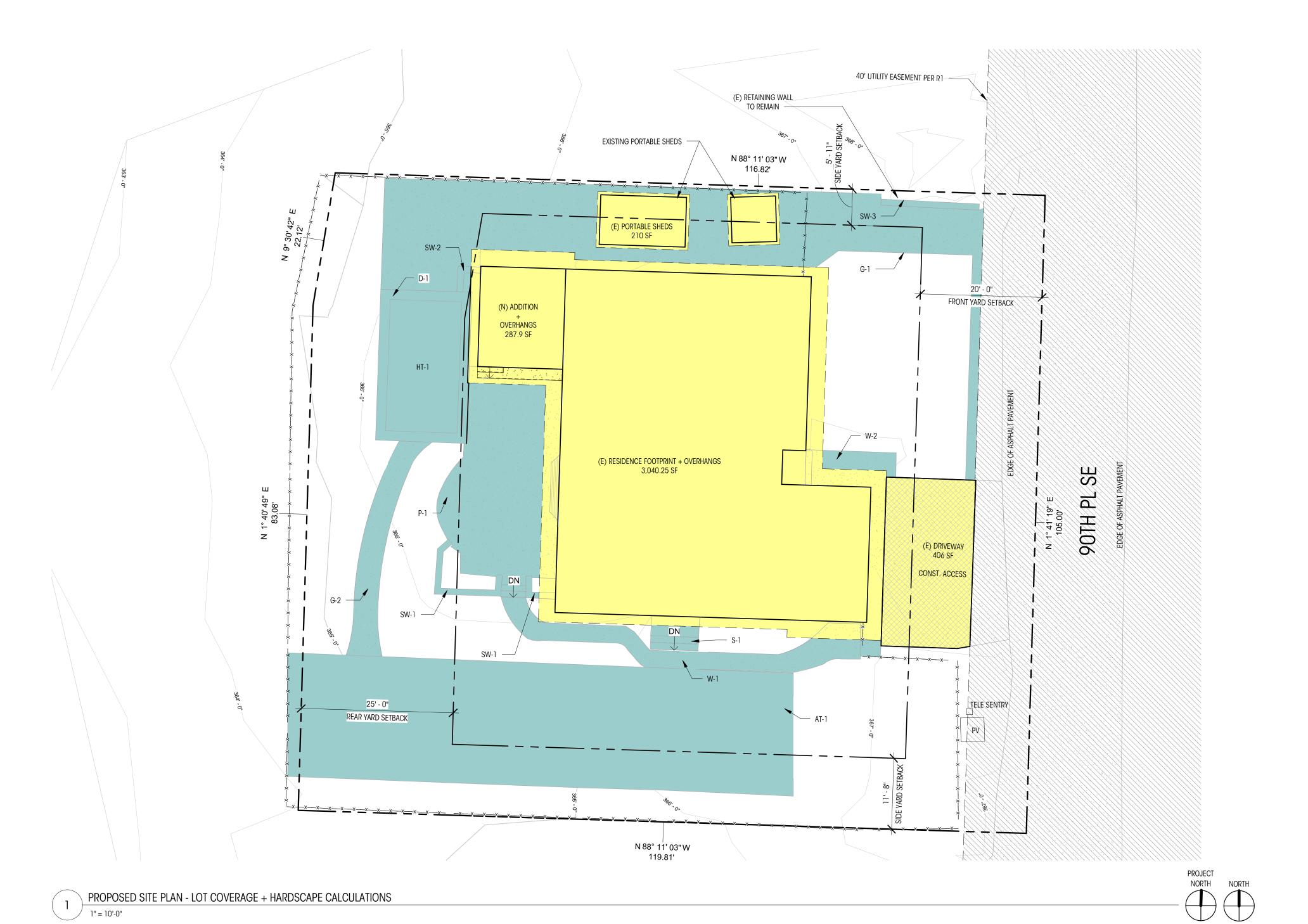
EXISTING ELEMENT

1. ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF

ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED.
CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT
WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

CONCRETE, U.N.O.

TO REMAIN



CALCULATIONS LOT COVERAGE ALLOWED LOT COVERAGE

4,593.2 SF (40%) EXISTING

(E) RESIDENCE, GARAGE, AND OVERHANGS
(E) DRIVING SURFACES
(E) PORTABLE SHEDS 3,040.25 SF 407 SF 210 SF 3,657.25 SF (31.8%) PROPOSED (LOT COVERAGE REPLACING HARDSCAPE PER MIC 19.01.050.F.3.B)
(N) MAIN FLOOR ADDITION 287.9 SF

3,945.15 SF (34.4%)

TOTAL (E) + (N)

HARDSCAPE TO REMAIN (NO ADDED HAR	DSCAPE)
STAIRS S-1	46 SF 46 SF
PATIOS P-1	457.3 SF 457.3 SF
WALKWAYS W-1 W-2	241.8 SF 203.5 SF 38.3 SF
HOT TUB DECK D-1	115 SF 115 SF
SITE WALLS SW-1 SW-2 SW-3	48.14 SF 26.63 SF 5.34 SF 16.17 SF
HOT TUB HT-1	254 SF 254 SF
GRAVEL ON-SITE G-1 G-2	1,172.72 SF 1025.12 SF 147.6 SF
ARTIFICIAL TURF AT-1	1,684 SF 1,684 SF
TOTAL	4,018.96 SF (35%)

NOTES

- PROPERTY LINE METES & BOUNDS ARE SHOWN PER TOPGRAPHIC SURVEY BY TERRANE DATED 12/29/22
 TREES AND CONTOURS ARE BASED ON TOPOGRAPHICS SURVEY BY TERRANE DATED 12/29/22

LEGEND			
	PROPERTY LINE	LOT COVERAGE TO REMAIN	(E) TREE TO REMAIN
	SETBACK LINE		
	ROOF OVERHANG	HARDSCAPE TO REMAIN	
	CONTOUR MAJOR	DEMOLISHED HARDSCAPE	
	CONTOUR MINOR	DEMOCIONED HANDOON E	
	(E) UTILITY EASEMENT		
4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4	(E) PATIO / WALKWAYS / CONCRETE DRIVE / PAVING		
	CONSTRUCTION ACCESS		

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Seattle, WA 98121 206.239.0850

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RESIDENCE

PERMIT SET

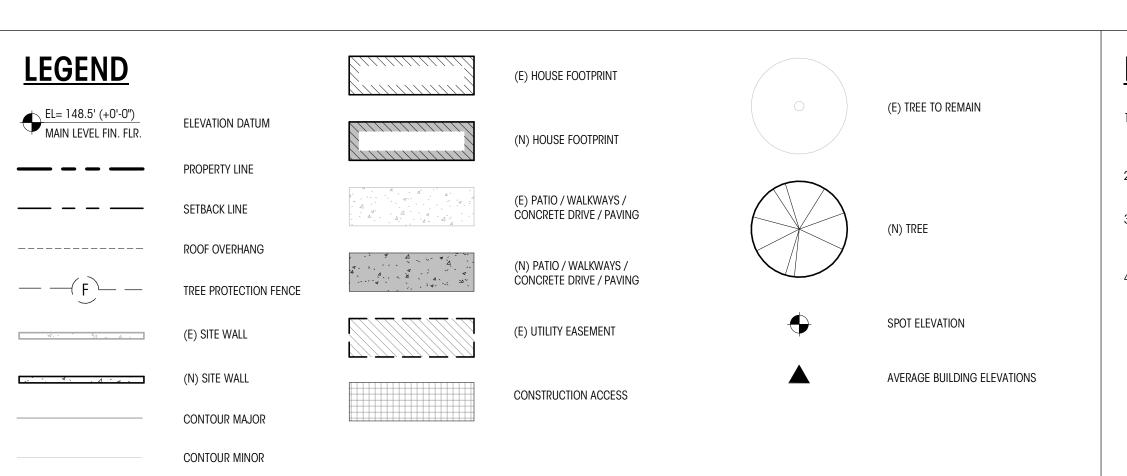
DATE: 04/03/2023 SHEET SIZE: D (24X36)

DRAWN BY: MD

CHECKED BY: LOT COVERAGE + HARDSCAPE

1" = 10'-0"

A101



NOTES

ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
PROPERTY LINES, COUNTOURS, TREES, ETC. ARE SHOWN PER SURVEY
PROPERTY LINE METES & BOUNDS ARE SHOWN PER TOPGRAPHIC SURVEY BY

	WN PER TOPGRAPHIC SURVEY BY PANE DATED 12/29/22
TOPO	S AND CONTOURS ARE BASED ON OGRAPHICS SURVEY BY TERRANE

TF	REES AND CONTOURS ARE BASED ON
TO	POGRAPHICS SURVEY BY TERRANE
D	ATED 12/29/22

AVERAGE BUILDING ELEVATION CALC

MIDPOINT ELEVATION	WALL SEGMENT LENGTH	<u>PRODUCT</u>
A = 366.25'	A = 54.3'	19887.38
B = 366.8'	B = 34.25'	12562.9
C = 368.1'	C = 3.8'	1398.78
D = 368.18'	D = 5.6'	2061.8
E = 367.3'	C = 14.66'	5384.6
F = 366.9'	D = 22.25'	8163.5
G = 366.25'	E = 51.25'	18770.3
H = 366.8'	F = 40'	14672
I = 366.8'	G = 12.5'	4585
J = 366.8'	H = 16.5'	6052.2
TOTALS	255.11'	93,528.5

AVERAGE BUILDING HEIGHT = 93,528.5'/255.11' = 366.6' MAXIMUM BUILDING ELEVATION = 366.6' + 30' MAXIMUM BUILDING HEIGHT = 396.6'

PROJECT DATA

EXISTING LOT AREA SUMMARY GROSS LOT AREA ACCESS EASEMENTS NET LOT AREA

LOT SLOPE

12,548 SF (PER SURVEY) 1,065 SF (PER SURVEY) 11,483 SF 5'-1 1/4" / 143'-9"" = 3.5%

40% (4,593.2 SF)

TREE REMOVAL
(E) TREES TO BE REMOVED (N) TREES TO BE PLANTED AS REPLACEMENT

LOT COVERAGE ALLOWED LOT COVERAGE

(E) RESIDENCE, GARAGE, AND OVERHANGS (E) DRIVING SURFACES (E) PORTABLE SHEDS

3,040.25 SF 407 SF 210 SF (ERECTED BETWEEN APRIL 2017 & SPRING 2019 PER MERCER ISLAND GIS) 3,657.25 SF/11,483 SF = 31.8% OF LOT AREA

(N) RESIDENCE ADDITION AND OVERHANGS
(E) + (N) TOTAL OVERALL LOT COVERAGE 3,945.15 SF/11,483 SF = 34.4% OF LOT AREA

HARDSCAPE ALLOWED HARDSCAPE

ARTICIFICIAL TURF

(N) MAIN LEVEL ADDITION

FRONT YARD

REAR YARD

SITE WALLS TOTAL EXISTING

(E) LOT COVERAGE

9% (1,033.47 SF) + 648.05 BORROWED FROM LOT COVERAGE = 1,681.52

EXISTING STAIRS PATIOS 690.02 SF (BUILT BEFORE APRIL 2017 PER MI GIS) WALKWAYS 241.8 SF (BUILT BEFORE APRIL 2017 PER MI GIS) HOT TUB DECK 118.5 SF HOT TUB 254 SF 1,390.7 SF (BUILT BEFORE APRIL 2017 PER MI GIS) - Gravel in utility easement 174.46 SF - GRAVEL ON-SITE

1216.2 SF 1,684 SF (BUILT BEFORE MARCH 2015 PER MI GIS) 59.8 SF (BUILT BEFORE APRIL 2017 PER MI GIS) 4,310.3 SF/11,483 SF = 37.5% OF LOT AREA

DEMOLISHED 232.72 SF PATIOS HOT TUB DECK 3.47 SF SITE WALLS 11.65 SF 43.49 SF GRAVEL TOTAL DEMOLISHED 291.33 SF TOTAL OVERALL HARDSCAPE 4018.97 SF/11,483 SF = 35% OF LOT AREA

GROSS FLOOR AREA ALLOWED GROSS FLOOR AREA 40% OF LOT AREA (4,593.2) **EXISTING BUILDING AREA SUMMARY (GFA)** 1,935 SF 570 SF 2,505 SF (E) MAIN LEVEL (E) ATTACHED GARAGE TOTAL EXISTING BUILDING AREA (GSF) 2,505/11,483 = 21.8% OF LOT AREA EXISTING FLOOR AREA RATIO PROPOSED BUILDING AREA SUMMARY (GFA) 11,483 SF x 0.40 = 4,593.2 SF40% ALLOWABLE GROSS FLOOR AREA:

(E) + (N) TOTAL FLOOR AREA RATIO 2,736.8/11,483 = 23.8% OF LOT AREA SIDE YARD (PER 19.02.20.C.1c)

PER 19.16.010, LOT WIDTH IS THE DISTANCE BETWEEN THE TWO MIDPOINTS OF SIDE LOT LINES = 105'-0" TOTAL: 17% OF LOT WIDTH 105' * 0.17 = 17'-7" MINIMUM: 33% OF SIDE YARD TOTAL: 17'-7" * 0.33 = 5'-10 3/4" 5'-11"/11'-8" 20'-0" 25'-0"

OCCUPANCY SUMMARY EXISTING TYPE OCCUPANT LOAD

R-8.4 SINGLE FAMILY Brandt

Design Group

66Bell Street Unit 1 Seattle, WA

98121 206.239.0850

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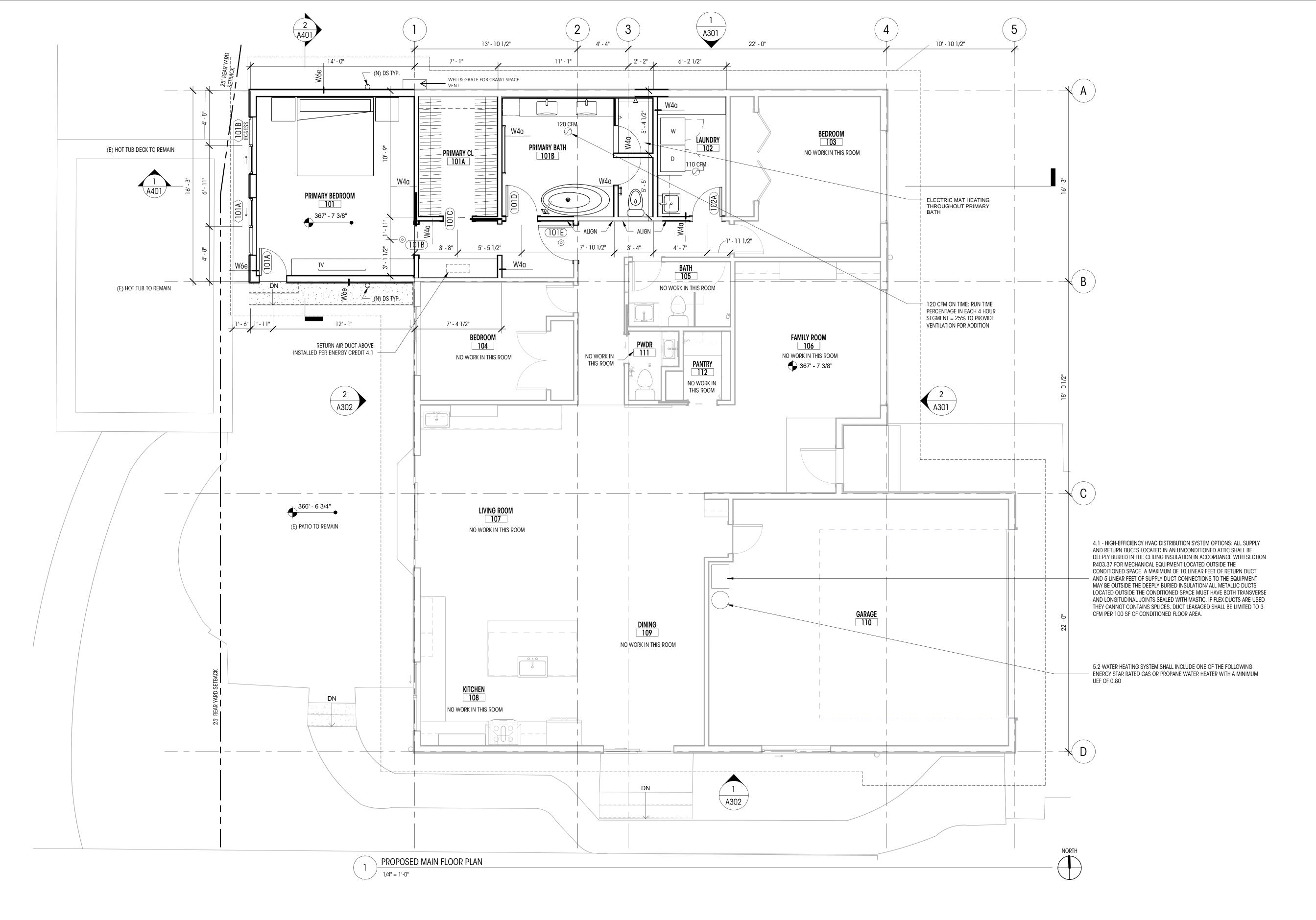
DATE: 04/03/2023 D (24X36) SHEET SIZE: **REVISIONS**

DRAWN BY: MD

CHECKED BY:

SITE PLAN

As indicated



LEGEND

200A WINDOW ID

100A FINISH ID

ROOM NAME ROOM ID

__W4a__ ASSEMBLY ID

FAN - 100 CFM U.N.O.

DOOR ID



ENERGY CODE COMPLIANCE SELECTIONS

CRAWLSPACE VENT CALCULATION

NOTES

LOCATIONS

SECTION 314.2.2.

—— — SETBACK LINE

SMOKE DETECTOR

SMOKE/CARBON

MONOXIDE DETECTOR

---- ROOF OVERHANG ABOVE

NEW FLOOR

ALL DIMENSIONS AT EXTERIOR WALLS TO FACE OF FRAMING AT EXT. FACE

ALL DIMENSIONS AT INTERIOR WALLS TO FACE OF FINISH (5/8" GWB

ASSUMED AT EA. SIDE OF WALL) OR TO FACE OF CONCRETE, U.N.O.

ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED.

CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT

CONTRACTOR TO VERIFY CARBON MONOXIDE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER

BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC

CONTRACTOR TO VERIFY SMOKE ALARMS ARE OUTSIDE OF EACH

9. FLOOR, CEILING, AND WALL ASSEMBLIES ARE LISTED ON SHEETS A701.

ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O.
SEE RCP FOR SMOKE / CARBON MONOXIDE DETECTOR AND EXHAUST FAN

OF WALL OR TO EXT. FACE OF CONCRETE, U.N.O.

ALL NEW WALLS TYPE W4A UNLESS NOTED OTHERWISE

WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

1 SF OF VENTING / 300 SF OF CRAWLSPACE REQUIRED

198.6 SF / 300 SF = 0.7 SF OF VENTING REQUIRED

(2) 0.5 SF CRAWLSPACE VENTS PROVIDED

1.3 - EFFICIENT BUILDING ENVELOPE OPTIONS:
PRECRIPTIVE COMPLIANCE BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS: VERTICAL FENESTRATION U = 0.28; FLOOR

4.1 - HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM OPTIONS:
ALL SUPPLY AND RETURN DUCTS LOCATED IN AN UNCONDITIONED ATTIC SHALL BE DEEPLY BURIED IN THE CEILING INSULATION IN

ALL SUPPLY AND RETURN DUCTS LOCATED IN AN UNCONDITIONED ATTIC SHALL BE DEEPLY BURIED IN THE CEILING INSULATION IN ACCORDANCE WITH SECTION R403.3.7

FOR MECHANICAL FOLIPMENT LOCATED OUTSIDE THE CONDITIONED SPACE. A MAXIMUM OF 10 LINEAR FEET OR RETURN DUCT AND

FOR MECHANICAL EQUIPMENT LOCATED OUTSIDE THE CONDITIONED SPACE, A MAXIMUM OF 10 LINEAR FEET OR RETURN DUCT AND 5 LINEAR FEET OF SUPPLY DUCT CONNECTIONS TO THE EQUIPMENT MAY BE OUTSIDE THE DEEPLY BURIED INSULATION. ALL METALIC DUCT CONNECTIONS TO THE EQUIPMENT MAY BE OUTSIDE THE DEEPLY BURIED INSULATION. ALL METALIC DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE MUST HAVE BOTH TRANSVERSE AND LONGITUDINAL JOINTS SEALED WITH MASTIC. IF FLEX DUCTS ARE USED THEY CANNOT CONTAIN SPLICES

DUCT LEAKAGED SHALL BE LIMITED TO 4 CFM PER 100 SF OF CONDITIONED FLOOR AREA

5.1 - Drain water heat recovery unit shall be installed, which captures waste water heat from all and only the showers and has a minimum efficiency of 40% if installed for equal flow or a minimum efficiency of 54% if installed for unequal flow. Such units shall be rated in accordance with CSA B551. Or IAPMO IGC 346-2017 and be so labelled

5.2 Water Heating System shall include one of the following: Energy Star Rated gas or propane water heater with a minimum uef of 0.80 A213

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MAIN FLOOR PLAN

1/4" = 1'-0"

CHECKED BY:

PERMIT SET

04/03/2023

D (24X36)

DATE:

SHEET SIZE:

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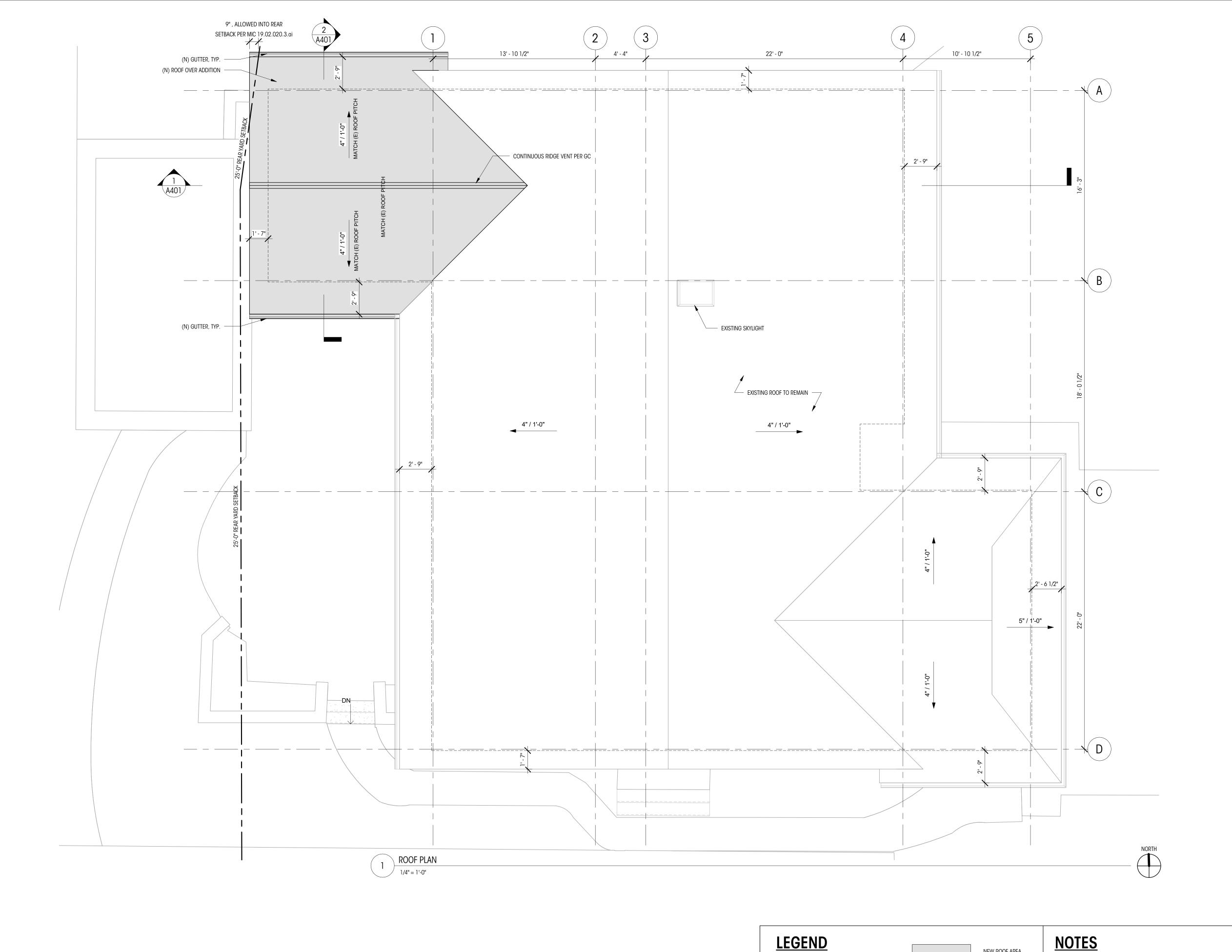
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DEDICATED APPROVAL TAMP SPACE





NEW ROOF PER IRC R806

ALL DIMENSIONS AT EXTERIOR WALLS TO FACE OF FRAMING AT EXT. FACE OF WALL OR TO EXT. FACE OF CONCRETE, U.N.O. ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED.

CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT

NEW ROOF PITCH TO MATCH (E) ROOF PITCH. CONTRACTOR TO VERIFY (E)

WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION ROOF ASSEMBLIES ARE LISTED ON SHEET A701.

PITCH IN FIELD

NEW ROOF AREA

EXISTING ROOF

TO REMAIN

SPOT SLOPE

---- BUILDING FOOTPRINT

 $\langle 200A \rangle$ WINDOW ID

EL= 148.5' (+0'-0")

MAIN LEVEL FIN. FLR.

ELEVATION DATUM

REQUIRED VENTILATION: 1 SF/300 SF OF TOTAL ROOF AREA

TOTAL ATTIC/CONDITIONED AREA = 299 SF REQUIRED VENTILATION = 299/300 = 0.99.6 SF = 143.52 Sq.in.

1.5" HOLE = 1.77 SQ. IN.; 143.52 SQ.IN/1.77 SQ.IN. = 81 REQUIRED 22.25' LF/ 81 HOLES = 1 HOLE PER 3.3" = 3.3" O.C.

PROPOSED VENTILATION - 81 HOLES @ 3.3" O.C.

SOFFIT VENTING:

TOTAL VENTING LINEAR FEET 25.5'
VENTS @ 12 SQ.IN. / FT NFVA : 25.5' X 12 306 SQ.IN.

COR-A-VENT REVOLUTION RIDGE VENT PROVIDES 12 SQ.IN. NFVA PER LINEAR FOOT

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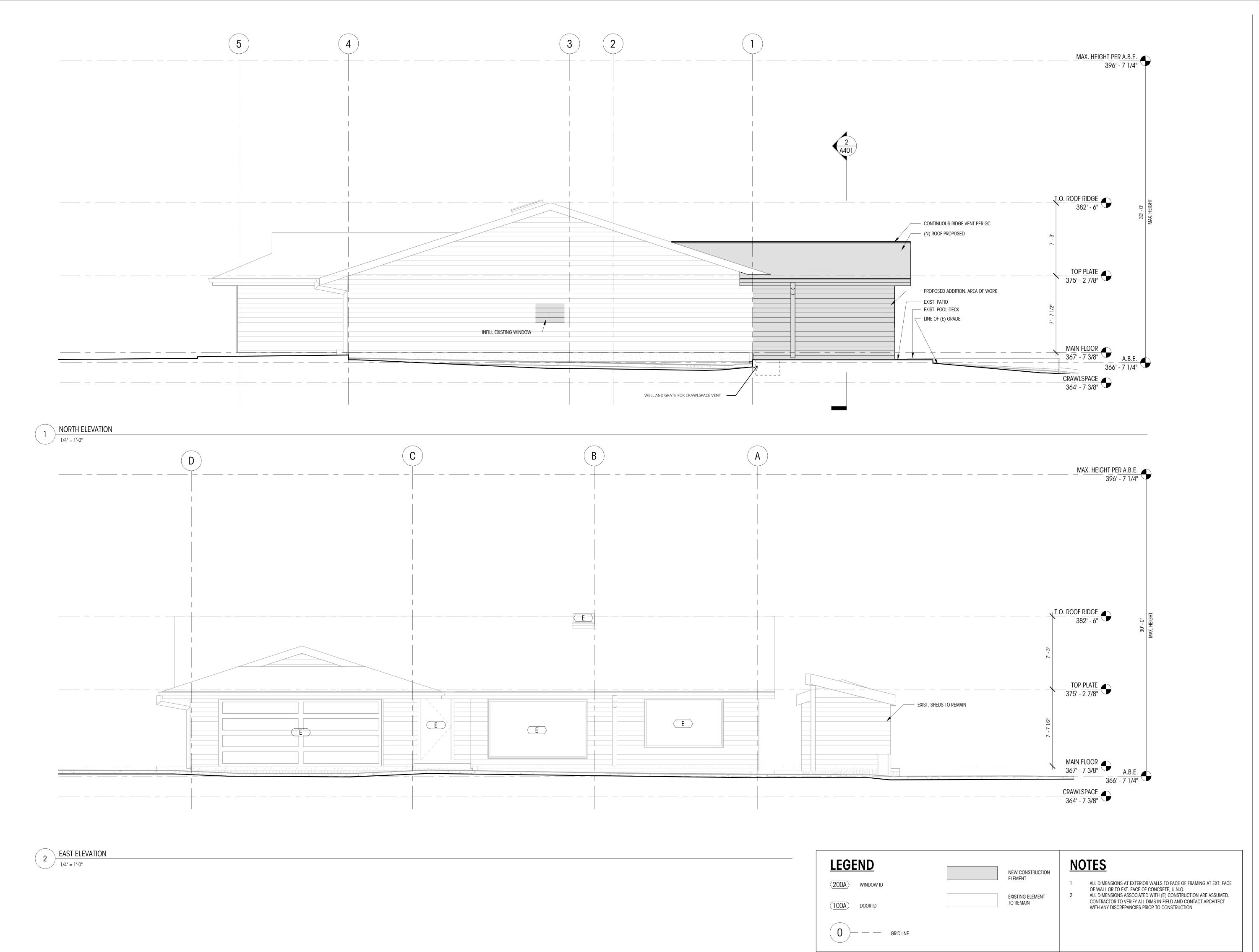
04/03/2023 DATE: SHEET SIZE: D (24X36)

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ROOF PLAN

1/4" = 1'-0"



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NOT FOR
CONSTRUCTION
OR REFERENCE
ONLY

REFERENCE

859 90th Figure 4 WA 9

RESIDENCE

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REVISIONS

DRAWN BY: MD

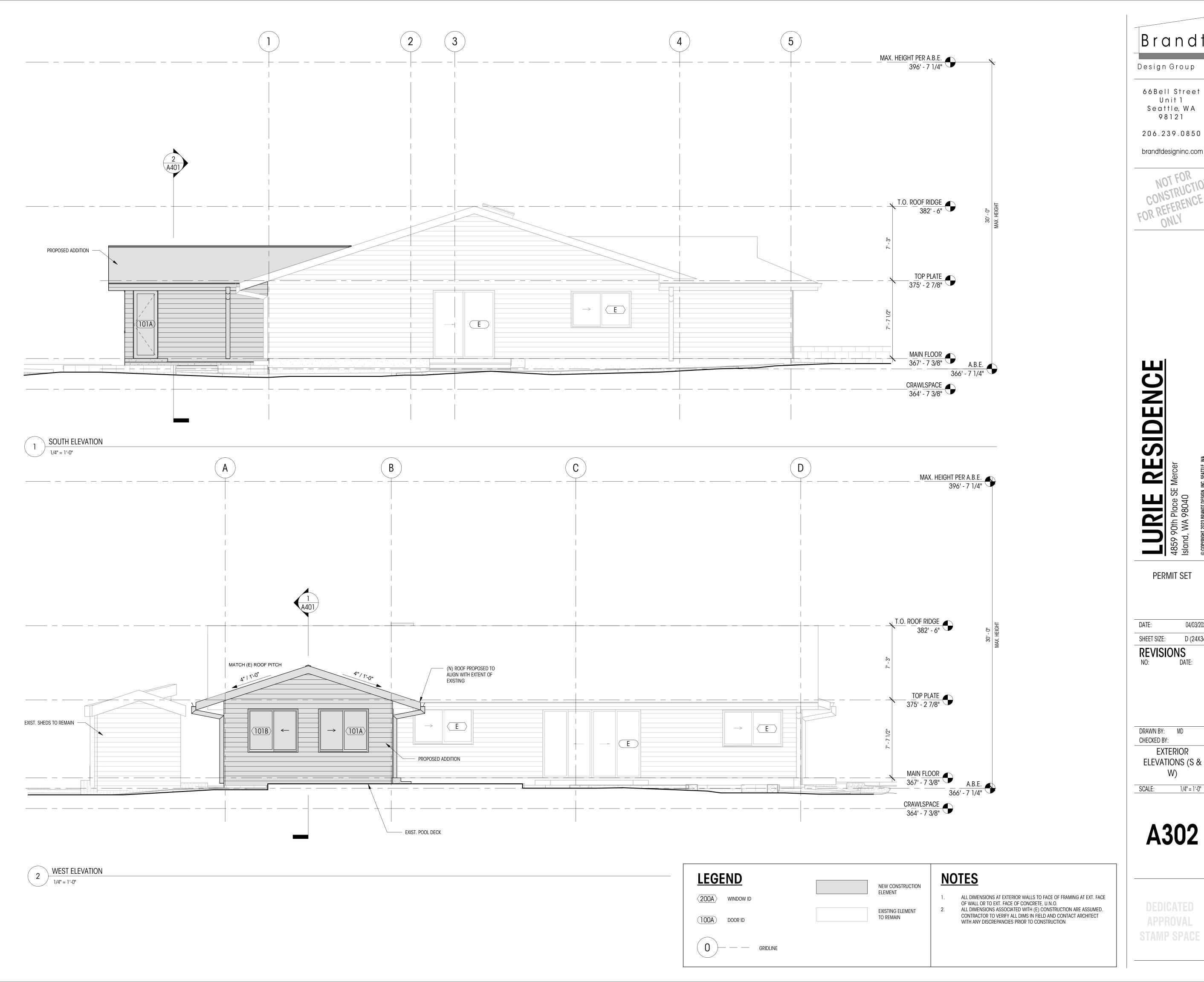
CHECKED BY:

EXTERIOR
ELEVATIONS (N & E)

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

A30

DEDICATED
APPROVAL
STAMP SPACE



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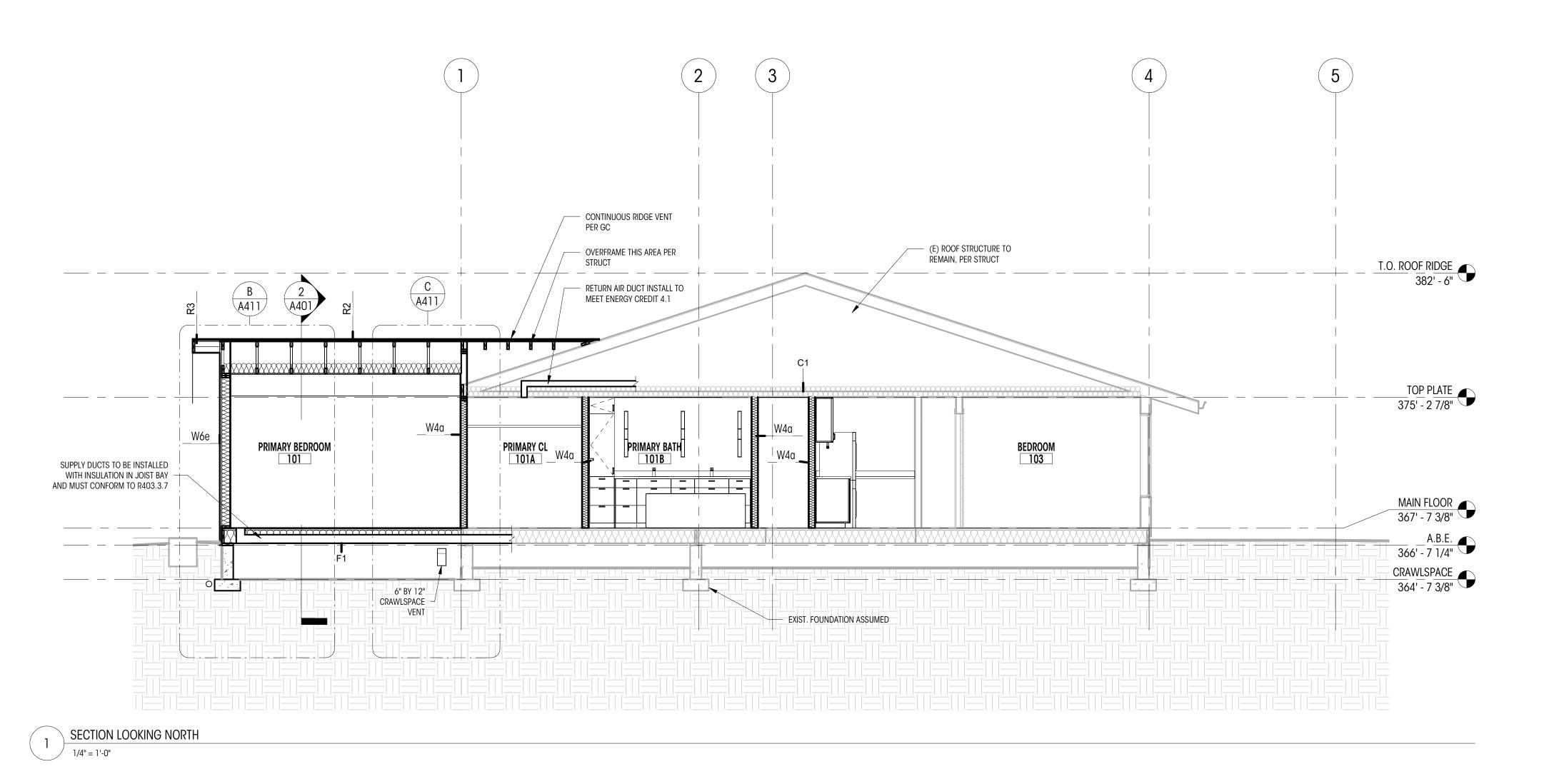
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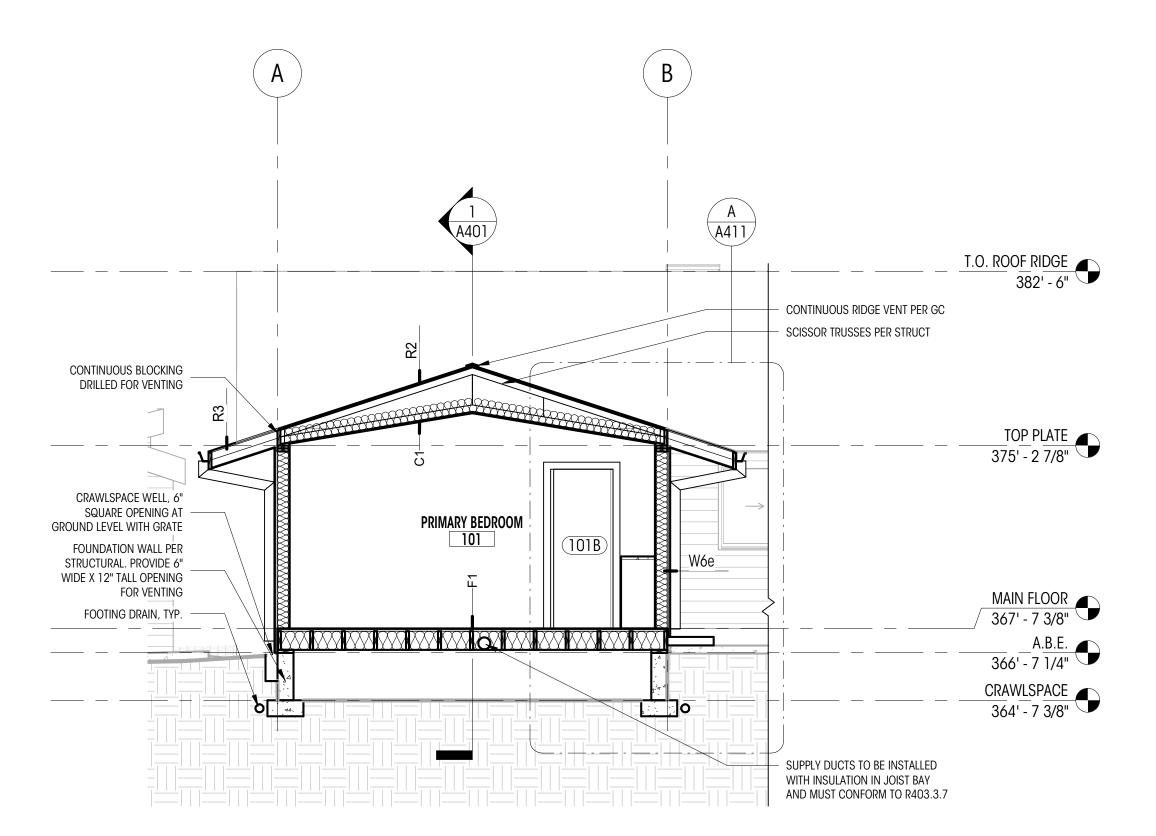
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1/4" = 1'-0"





SECTION LOOKING EAST

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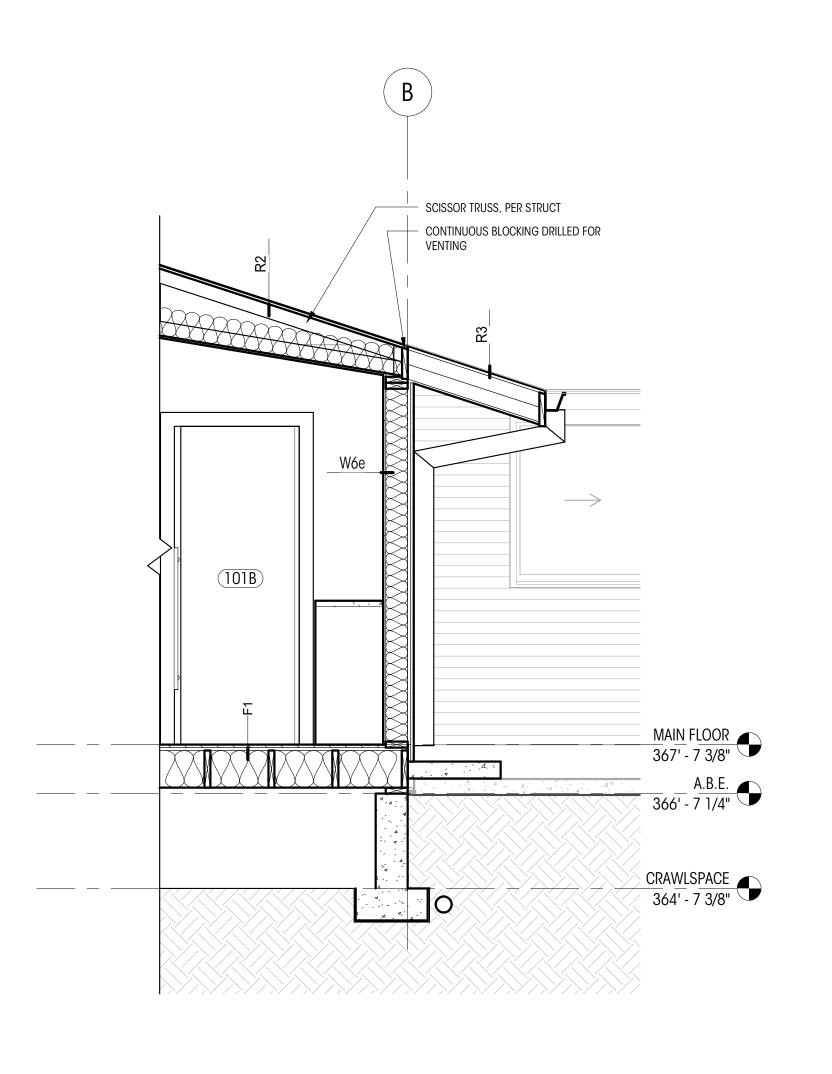
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DATE: 04/03/2023 SHEET SIZE: D (24X36)

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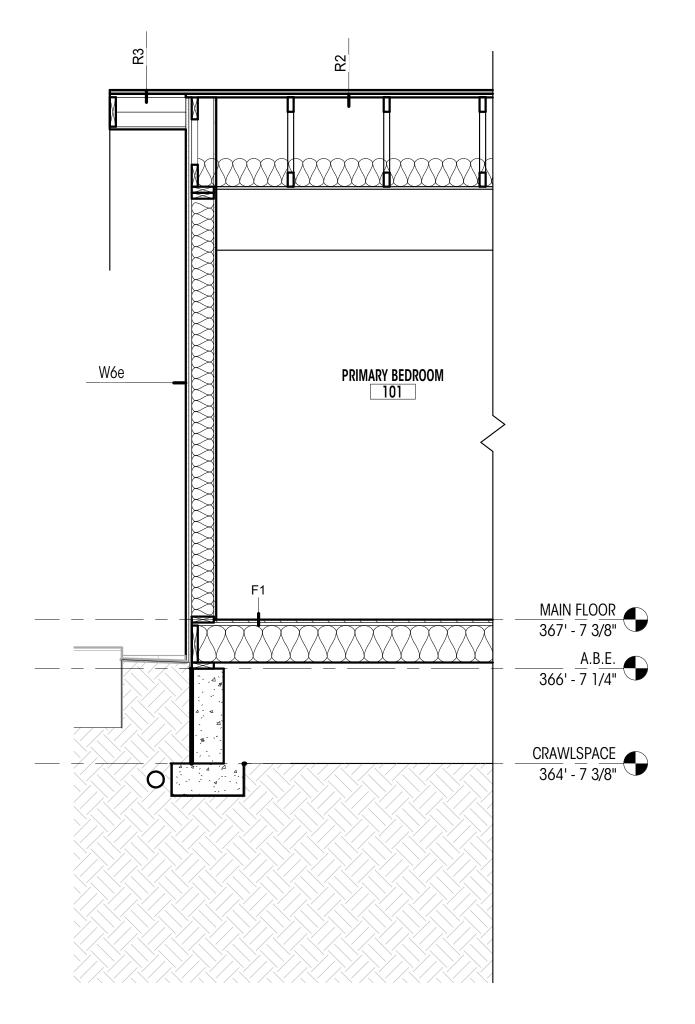
BUILDING SECTIONS

1/4" = 1'-0"



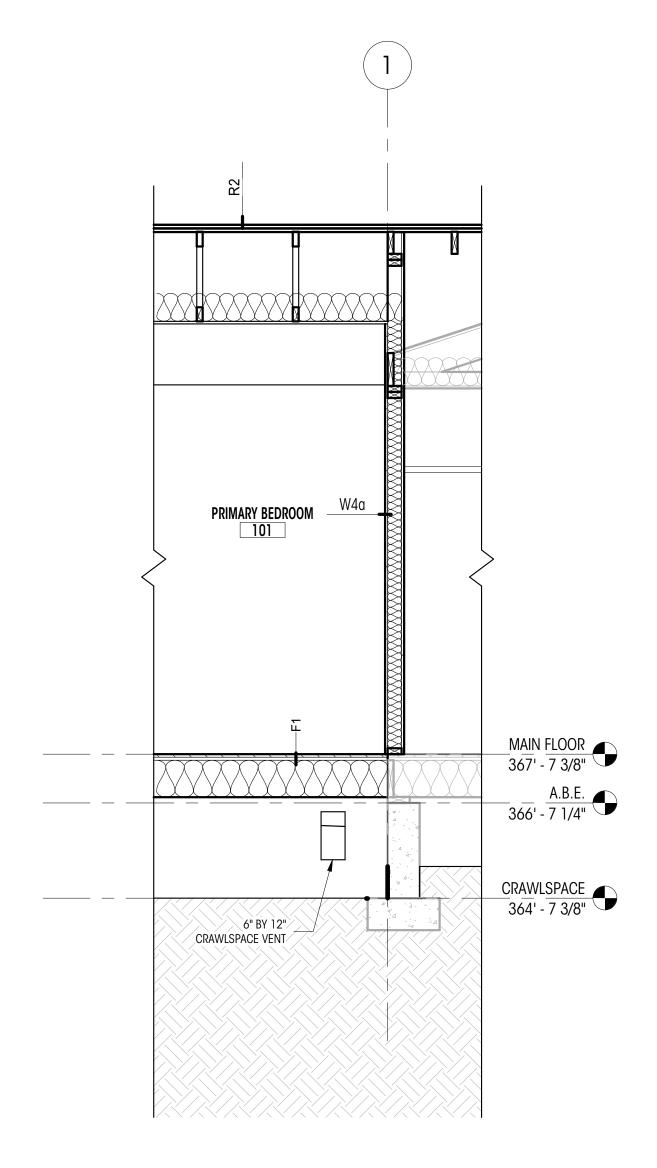
A WALL SECTION A

1/2" = 1'-0"



B WALL SECTION B

1/2" = 1'-0"



C WALL SECTION C
1/2" = 1'-0"

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LURIE 14859 90th Place SE N Island, WA 98040 PERMIT SET

RESIDENCE

DATE: 04/03/2023 SHEET SIZE: D (24

REVISIONS

NO: DATE: D (24X36)

DRAWN BY: MD CHECKED BY:

WALL SECTIONS

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

A411

WINDOW SCHEDULE													
PLAN ID	TYPE	WIDTH (ff)	HEIGHT (ff)	HEAD HT	UNIT AREA (sf)	U VALUE	UA	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	SAFETY GLAZING	EGRESS	NOTES
101A	A	4' - 10 3/4"	4' - 2 3/4"	6' - 8 3/4"	21 SF	0.28	6 SF					•	
101B	A	4' - 10 3/4"	4' - 2 3/4"	6' - 8 3/4"	21 SF	0.28	6 SF						

GENERAL NOTES

- ALL DIMENSIONS SHOWN ARE FINISHED DIMENSIONS, R.O. PER CONTRACTOR.
- CONTRACTOR TO VERIFY ALL SIZES AND DIMENSIONS IN FIELD WITH OWNER BEFORE ORDERING.
- ALL NEW WINDOWS TO BE NFRC CERTIFIED.
- ALL WINDOW WALL IS TEMPERED GLASS.
- REFER TO PLANS AND TAGS FOR LOCATION AND SWINGS.
- ALL ELEVATIONS ARE FROM THE EXTERIOR. ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE GUIDELINES FOR **EFFICIENT BUILDING**
- PER IBC 8310.2 ALL **EGRESS** OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SF, NET CLEAR HEIGHT OPENING SHALL NOT BE LESS THAN 24" AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20".
- THE WINDOW SILL SHALL HAVE HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR
- PER IRC R308.4.3, GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL NEEDS TO BE TEMPERED GLASS /
 - SAFETY GLAZING IN THE FOLLOWING HAZARDOUS LOCATIONS: The exposed area of an individual pane is larger than 9 Sf,
 - THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR,
 - THE TOP EDGE OF THE GLAZING IS MORE THAN 36 " AVOVE THE FLOOR, AND
 - ONE OR MORE WALKING SURFACES ARE WITHING 36", MEASURE HORIZONTALLY IN A STRAIGHT LINE OF THE GLAZING.

SPECIFIC NOTES

1. FROSTED / OPAQUE GLAZING



 \rightarrow



ARCH - WINDOW TYPES

1/4" = 1'-0"

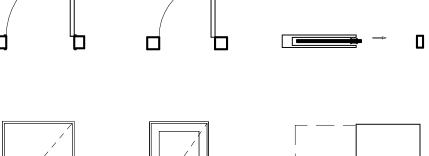
<u>DO(</u>	OR SCHED	<u>ULE</u>												
PLAN ID	ROOM NAME	TYPE	WIDTH (ff.)	HEIGHT (ft.)	AREA (sf.)	U VALUE	UA	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	EGRESS	CLOSER	RATED	NOTES
101A	PRIMARY BEDROOM	В	2' - 4"	6' - 8"	16 SF	0.28	5 SF							
101B	PRIMARY BEDROOM	С	2' - 8"	6' - 8"	18 SF									
101C	PRIMARY CL	С	2' - 6"	6' - 8"	17 SF									
101D	PRIMARY BATH	Α	2' - 8"	6' - 8"	18 SF									
101E	PRIMARY BEDROOM	Α	3' - 0"	6' - 8"	20 SF									
102A	LAUNDRY	А	2' - 6"	6' - 8"	17 SF									

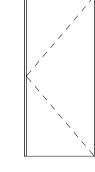
GENERAL NOTES

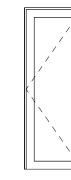
- ALL NEW DOORS TO BE NFRC CERTIFIED ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE GUIDELINES FOR **EFFICIENT BUILDING**
- **ENVELOPE OPTION 1A**
- ALL DOORS TO BE SOLID-CORE WOOD VENEER FLAT PANELS UNO ALL GLAZED DOORS TO RECEIVE TEMPERED / SAFTEY GLAZING

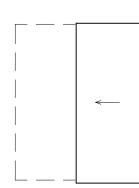
SPECIFIC NOTES

1. FROSTED / OPAQUE GLAZING









<u>a</u> Single flush

<u>B</u> Single Flush

<u>C</u> POCKET DOOR

ARCH - DOOR TYPES

1/4" = 1'-0"

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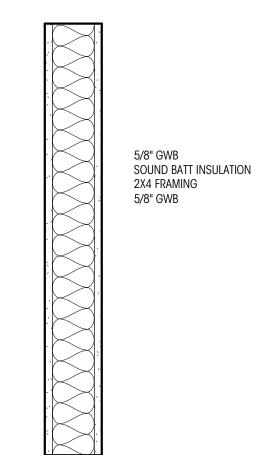
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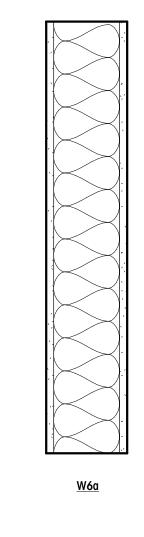
NO: DATE: D (24X36)

DRAWN BY: MD CHECKED BY: DOOR / WINDOW SCHEDULES, LEGENDS, & NOTES

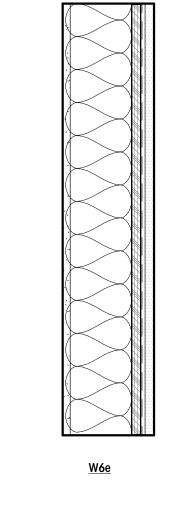
1/4" = 1'-0"

VERTICAL ASSEMBLIES



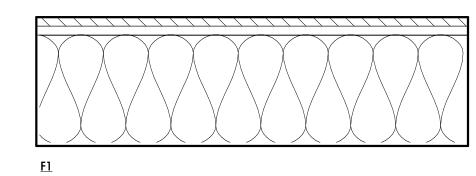


5/8" GWB SOUND BATT INSULATION 2X6 FRAMING 5/8" GWB

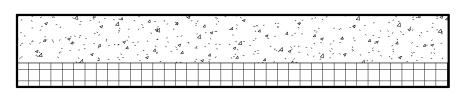


5/8" GWB 2X6 FRAMING R-21 MIN INSULATION 3/4" PLYWOOD SHEATHING 1X VERTICAL FURRING STRIP, PNT BLACK SIDING

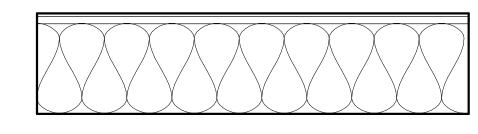
HORIZONTAL ASSEMBLIES



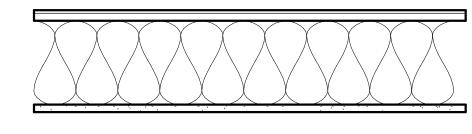
WOOD FINISH TBD SHEATHING PER STRUCT FLOOR JOISTS PER STRUCT R-38 INSULATION PER GC VAPOR BARRIER PER GC



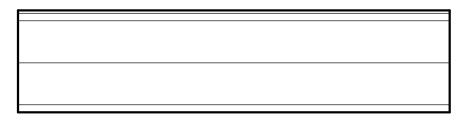
4" CONCRETE PER STRUCT VAPOR BARRIER PER GC 2" RIGID INSULATION PER GC



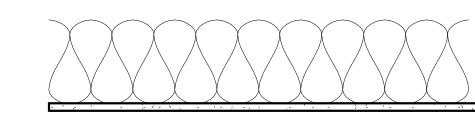
ASPHALT SHINGLES PER GC ROOFING MEMBRANE PER GC ROOFING MEMBRANE PER GC SHEATHING PER STRUCT R-38 INSULATION PER GC * FRAMING PER STRUCT * PROVIDE 1" AIRGAP AT VAULTED CEILING CONDITIONS FOR ROOF VENTING



ASPHALT SHINGLES PER GC ROOFING MEMBRANE PER GC SHEATHING PER STRUCT R-38 INSULATION PER GC *
ROOF TRUSS PER STRUCT
5/8" GWB, PAINTED * PROVIDE 1" AIRGAP AT VAULTED CEILING CONDITIONS FOR ROOF VENTING



ASPHALT SHINGLES PER GC ROOFING MEMBRANE PER GC SHEATHING PER STRUCT FRAMING PER STRUCT EAVE SHEATHING PER GC



R-49 MIN. BATT INSULATION PER GC 5/8" GWB, PAINTED

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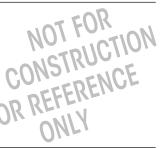
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CHECKED BY:

ASSEMBLY DETAILS

1 1/2" = 1'-0"

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE 12. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT 22. CONCRETE WALL REINFORCING--PROVIDE THE 36. WOOD FASTENERS DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2018) EDITION).

CRITERIA

2. DESIGN LOADING CRITERIA RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS ENVIRONMENTAL LOADS

SNOW Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pa=25 PSF, Pf=20 PSF WIND GCpi=0.18, 100 MPH, RISK CATEGORY II, EXPOSURE "B" EARTHQUAKE . . . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS, SITE CLASS=D, Ss=1. 437, Sds=1. 15, S1=0. 499, SD1=0. 60, Cs=0. 177 SDC D (DEFAULT), Ie=1.0, R=6.5

- 3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
- 4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION. AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION"
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- 8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.
- 9. ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED. SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY. HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
- 10. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

CONNECTOR PLATE WOOD ROOF TRUSSES

CONTRACTOR SHALL SUBMIT WALL ELEVATION DRAWINGS OF AT LEAST 1/8" = 1'-0" SCALE INDICATING LOCATIONS OF CONNECTION EMBEDMENT'S AND WALL OPENINGS FOR REVIEW PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WALL ELEVATION DRAWINGS WITH REINFORCEMENT SHOP DRAWINGS.

APPROVED SETS OF ALL SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT.

11. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS. METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY: REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE 21. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS: TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

QUALITY ASSURANCE

SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.

EXPANSION BOLTS AND THREADED EXPANSION INSERTS PER MANUFACTURER EPOXY GROUTED INSTALLATIONS PER MANUFACTURER

PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.

CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED

GEOTECHNICAL

13. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

RENOVATION

- 14. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.
- 15. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.
- 16. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED. SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED.
- A. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. CORNERS SHALL NOT BE OVERCUT.
- B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
- C. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING. D. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, DRILL AND EPOXY DOWELS MATCHING THE NEW REINFORCING INTO THE EXISTING CONCRETE WITH 6" EMBED, UNLESS OTHERWISE NOTED ON PLANS.
- 17. CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

CONCRETE

- 18. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 28. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS f'c = 2,500
- 19. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), THE DRAWINGS SHALL BE GRADE 40, FY = 40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, FY = 60,000 PSI.
- 20. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315R-18 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
- NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) 2" FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER). . 1-1/2" SLABS AND WALLS (INT. FACE). . . GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

#4 @ 16 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN 8" WALLS #4 @ 12 HORIZ. #4 @ 18 VERTICAL 1 CURTAIN 10" WALLS 2 CURTAINS #4 @ 18 HORIZ. #4 @ 18 VERTICAL 12" WALLS 2 CURTAINS #4 @ 16 HORIZ. #4 @ 18 VERTICAL

23. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

ANCHORAGE

- 24. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.
- 25. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE MANUFACTURED BY THE SIMPSON STRONG, TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2508. MINIMUM BASE MATERIAL TEMPERATURE IS 50 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.
- 26. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

WOOD

27. FRAMING LUMBER SHALL BE S-DRY. KD. OR MC-19. AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WWPA STANDARD, WESTERN LUMBER GRADING RULES 2017. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
BEAMS	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI
STUDS, PLA	TES & MISC. FRAMING:	DOUGLAS FIR-LARCH NO. 2 OR HEM-FIR NO. 2

- ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv =265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI.
- GRADE 60, FY = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON 29. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E WS) Fb = 2900 PSI, E = 2000 KSI, Fv = 290 PSILVL (2. 0E-2600FB WS) Fb = 2600 PSI, E = 2000 KSI, Fv = 285 PSI LSL (1.55E) Fb = 2325 PSI, E = 1550 KSI, Fv = 310 PSI

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

TOP CHORD LIVE LOAD 25 PSF 10 PSF TOP CHORD DEAD LOAD 5 PSF BOTTOM CHORD DEAD LOAD 40 PSF TOTAL LOAD 29 PSF WIND UPLIFT (TOP CHORD) BOTTOM CHORD LIVE LOAD 10 PSF (BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF LIVE LOAD)

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL) SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

DRAWINGS SHALL BE INSTALLED USING "SET-XP" HIGH STRENGTH EPOXY AS 31. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- 32. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.
- 33. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.
- 34. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE

NOTED.		
WOOD TREATMENT HAS NO AMMONIA CARRIER CONTAINS AMMONIA CARRIER	CONDITION INTERIOR DRY INTERIOR DRY	PROTECTION G90 GALVANIZED G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653
CONTAINS AMMONIA CARRIER CONTAINS AMMONIA CARRIER AZCA	INTERIOR WET EXTERIOR ANY	TYPE 304 OR 316 STAINLESS TYPE 304 OR 316 STAINLESS TYPE 304 OR 316 STAINLESS

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

- 35. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2021. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "ITS" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.
- WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM)AS MEMBERS CONNECTED.

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETE
	2"	
6d	_	0. 113"
8d	2-1/2"	0. 131"
10d	3"	0. 148"
12d	3-1/4"	0. 148"
16d B0X	3-1/2"	0. 135"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

37. NOTCHES AND HOLES IN WOOD FRAMING:

- A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.
- B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR
- C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

38. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE

- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.
- B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d @ 12" O.C.. LAP TOP PLATES AT JOINTS A MINIMUM 4'-0" AND NAIL WITH TWELVE 16d NAILS @ 4" O.C. EACH SIDE JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16d @12" ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W SCREWS @ 8" ON-CENTER. UNLESS INDICATED OTHERWISE, 1/2" (NOMINAL)APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UN-SUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING BETWEEN RAFTERS AND JOISTS AT ALL BEARING POINTS WITH A MINIMUM OF (3) 16d TOE NAILS EACH END. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOFNAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER. MINIMUM TWO NAILS PER BLOCK, UNLESS OTHERWISE NOTED.



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DESIGN:	LAN	
DRAWN:	NHD	
CHECKED:	BDM	
APPROVED:	BDM	

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Lurie Residence

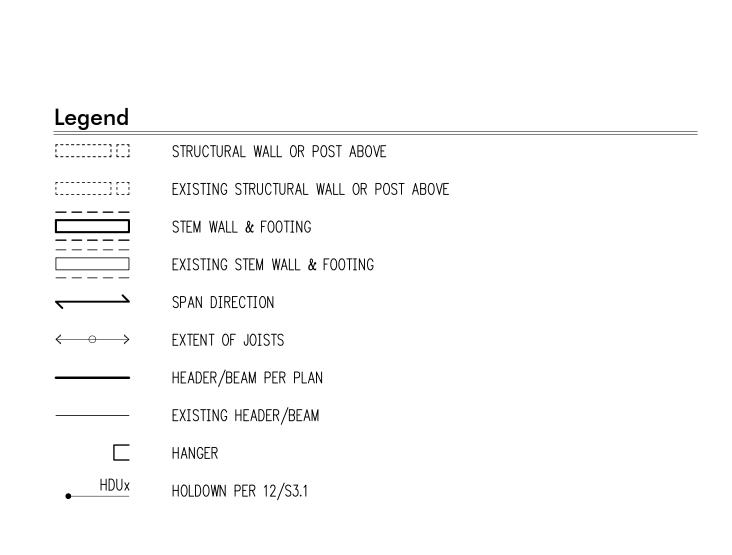
4859 90th PI SE Mercer Island, WA 98040

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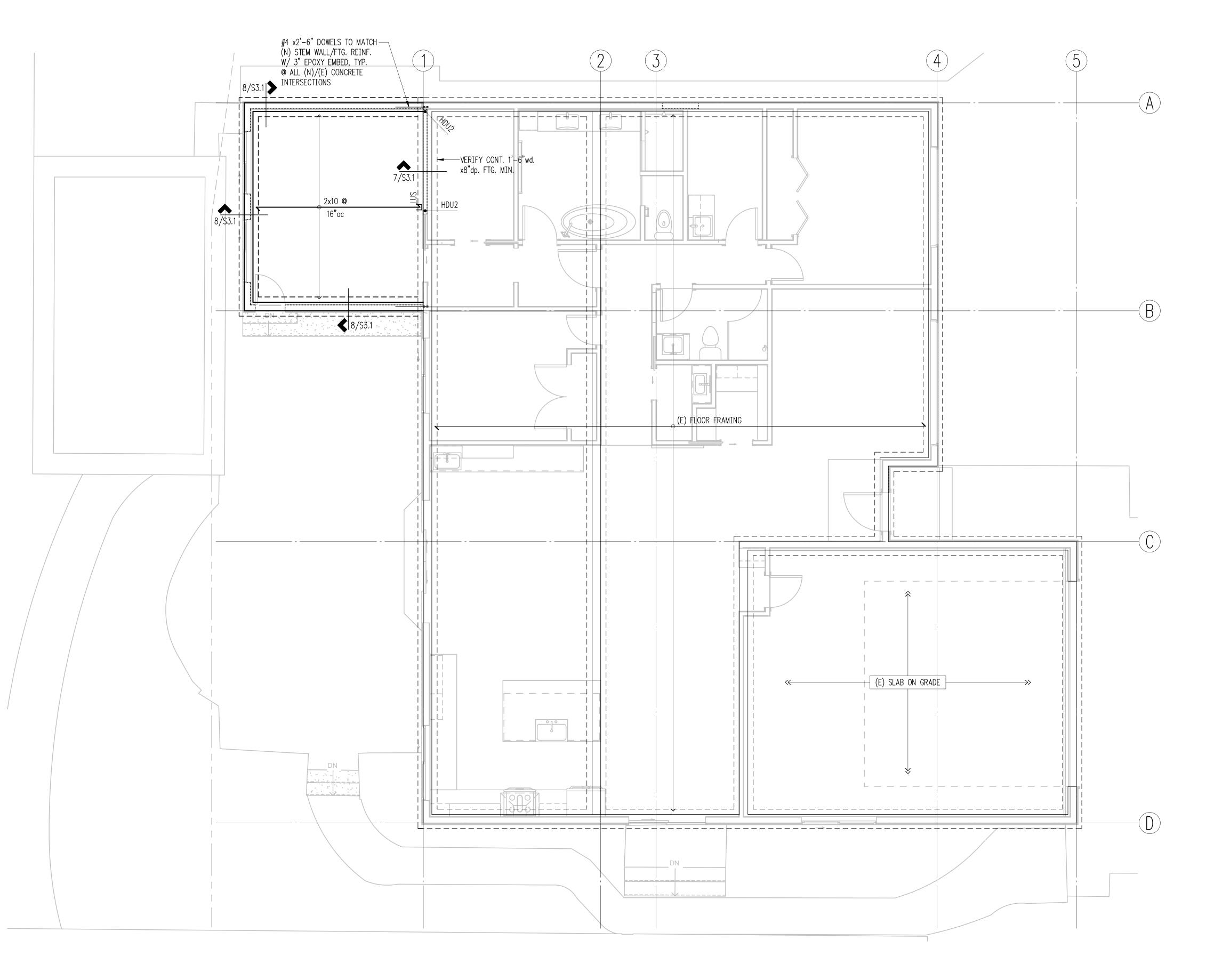
General Structural Notes

March 31, 2023 PROJECT NO: 01519-2023-02 SHEET NO:



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
- EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
- 4. THE BOTTOM OF ALL NEW EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW EXTERIOR
- 5. TYPICAL NEW FLOOR FRAMING CONSISTS OF FLOORING PER ARCHITECT OVER 3/4" T&G APA RATED PLYWOOD FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.N.O. NAIL FLOOR SHEATHING W/ 8D AT 6" OC AT FRAMED PANEL EDGES AND OVER SHEARWALLS AND COLLECTORS, AND AT 12" OC IN FIELD.









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DRAWN: CHECKED: APPROVED:

JURISDICTIONAL APPROVAL STAMP:

Lurie Residence

4859 90th PI SE Mercer Island, WA 98040

Brandt Design Group 66 Bell Street Unit 1

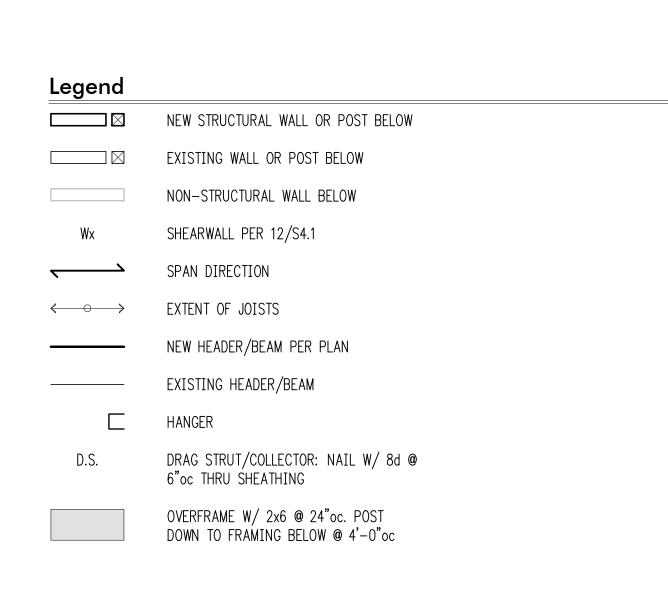
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Main Floor Framing/ **Foundation Plan**

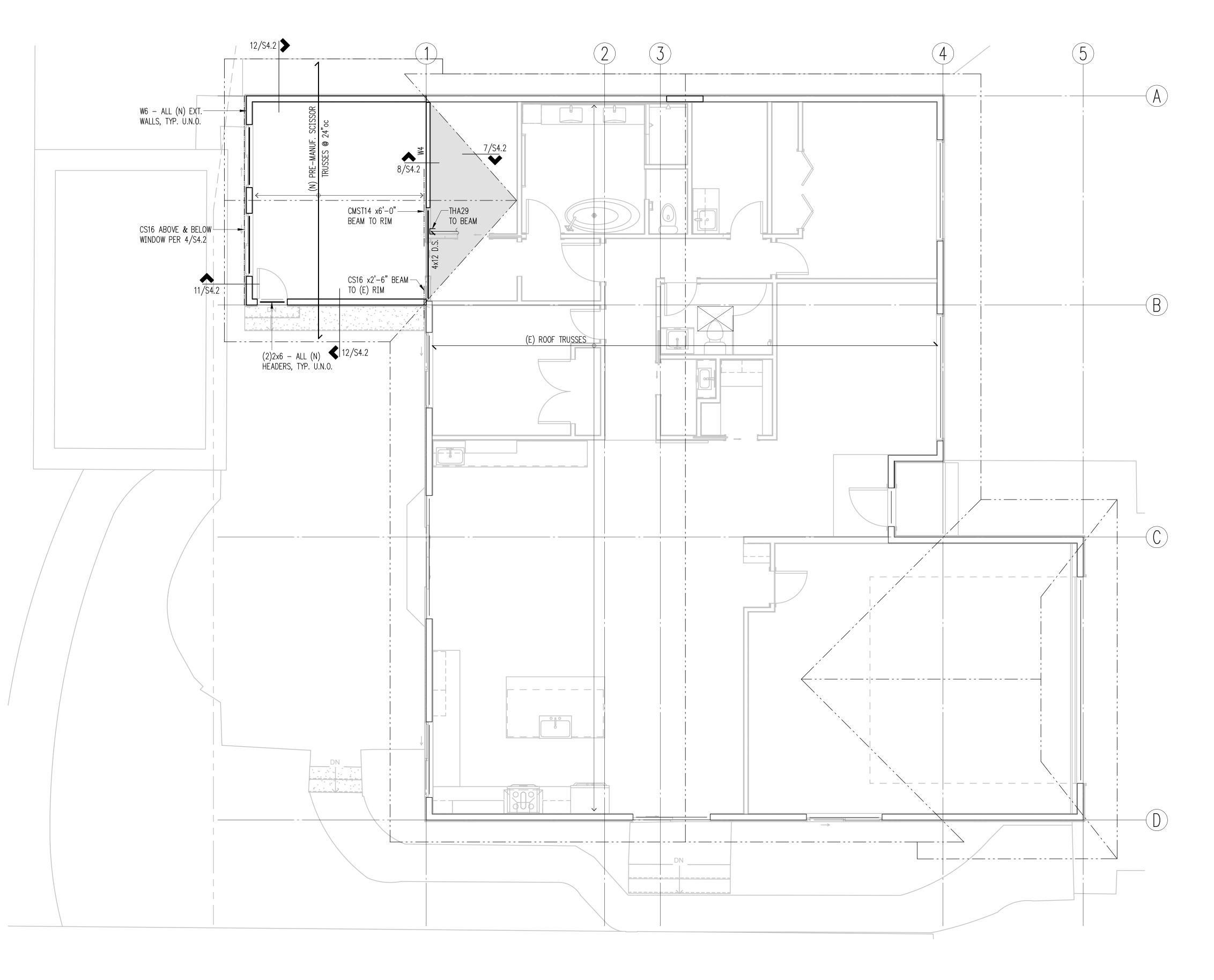
1/4" = 1'-0" U.N.O.

March 31, 2023 PROJECT NO: 01519-2023-02 SHEET NO:



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND
- EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT. 4. ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE
- FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION. 5. PROVIDE (2) BEARING STUDS AT EACH END OF ALL NEW HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.N.O.
- 6. "W_" INDICATES PLYWOOD SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL
- SCHEDULE FOR WALL ATTACHMENTS. ALL NEW EXTERIOR WOOD FRAMED WALLS ARE W6, U.N.O. 7. TYPICAL NEW ROOF FRAMING CONSISTS OF ROOFING PER ARCHITECTURAL DRAWINGS OVER 1/2" CDX APA RATED SHEATHING (EXPOSURE 1), FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.N.O. NAIL ROOF SHEATHING WITH 8D AT 6" O.C. AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS AND COLLECTORS, AND AT 12"O.C. FIELD.







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DRAWN: CHECKED: APPROVED:

JURISDICTIONAL APPROVAL STAMP:

Lurie Residence

4859 90th PI SE Mercer Island, WA 98040

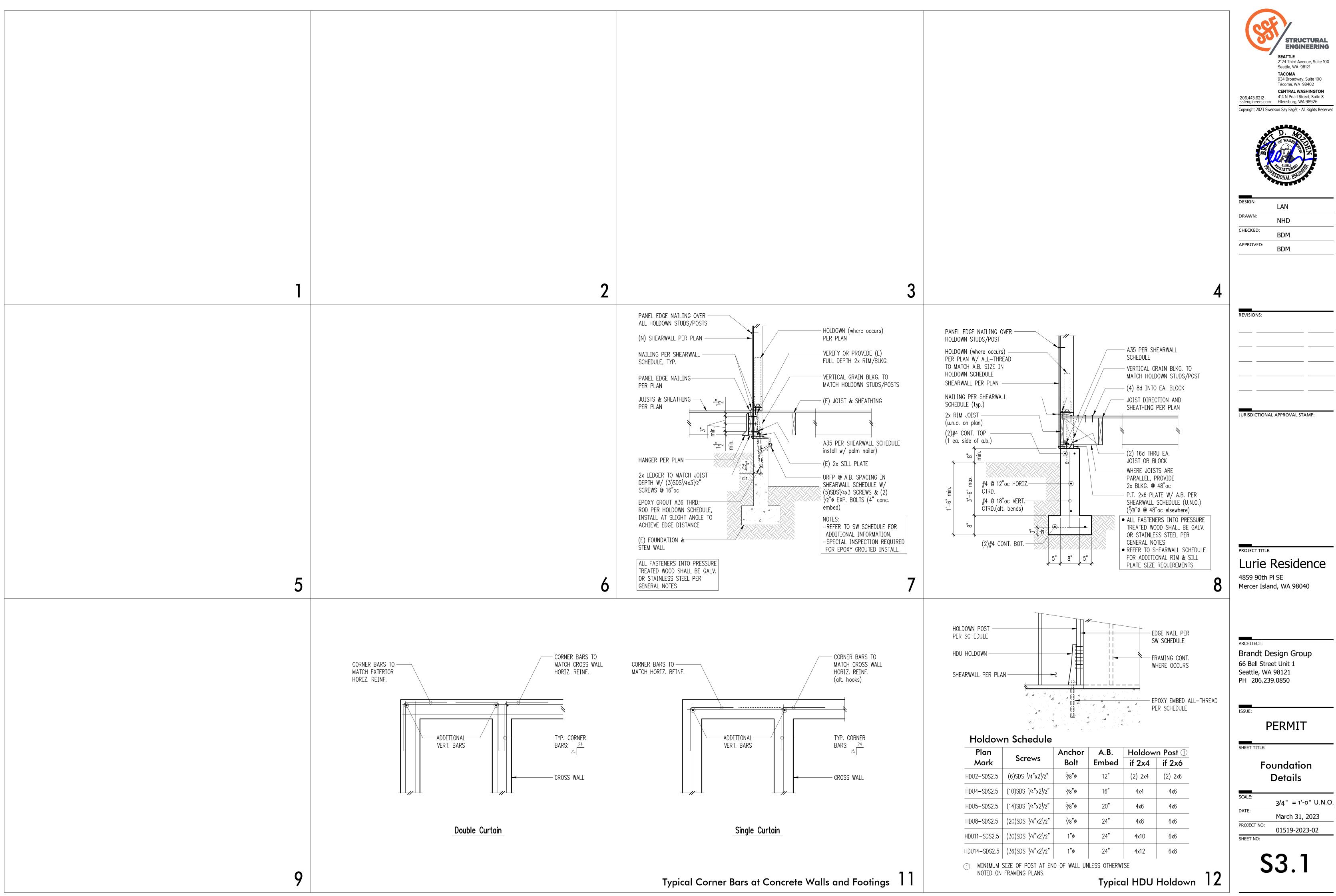
Brandt Design Group 66 Bell Street Unit 1 Seattle, WA 98121 PH 206.239.0850

PERMIT

Roof Framing Plan

1/4" = 1'-0" U.N.O.

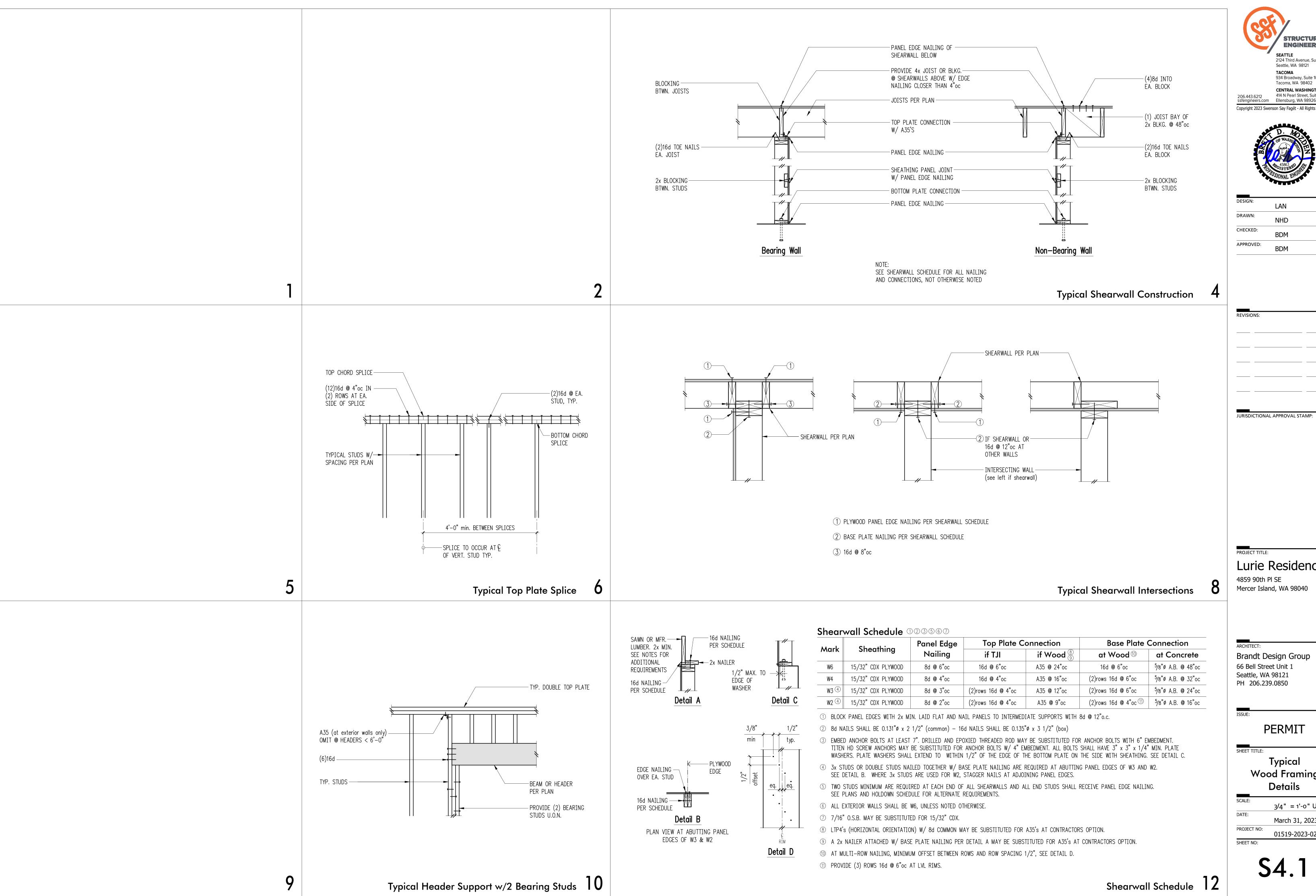
March 31, 2023 PROJECT NO: 01519-2023-02 SHEET NO:



ENGINEERING

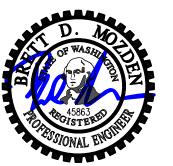
DESIGN:	LAN	
DRAWN:	NHD	
CHECKED:	BDM	
APPROVED:		

3/4" = 1'-0" U.N.O.



STRUCTURAL **ENGINEERING** SEATTLE 2124 Third Avenue, Suite 100

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DESIGN:	LAN
DRAWN:	NHD
CHECKED:	BDM
APPROVED:	BDM

PROJECT TITLE: Lurie Residence

Brandt Design Group 66 Bell Street Unit 1 Seattle, WA 98121 PH 206.239.0850

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Typical

Wood Framing Details

3/4" = 1'-0" U.N.O. March 31, 2023 01519-2023-02

S4.1

