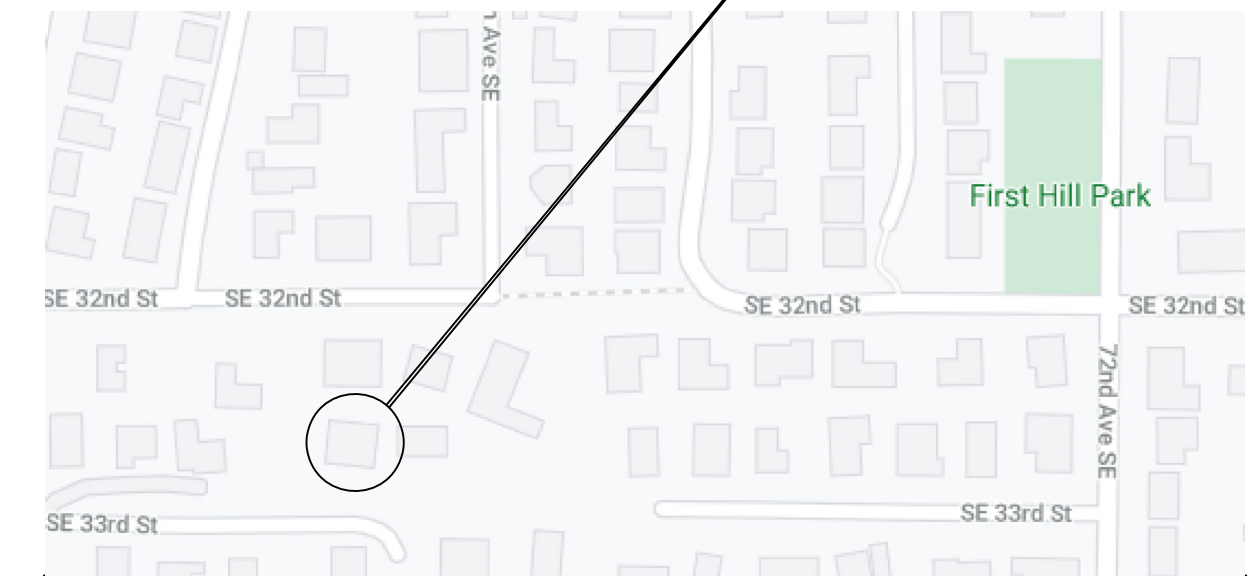


VICINITY MAP



PROJECT LOCATION

LEGAL DESCRIPTION

PROPERTY ADDRESS: 6829 SE 32ND ST. MERCER ISLAND, WA 98040 TAX ID #: 949470-0007

LEGAL DESCRIPTION:

WHITE AND NOBLES 1ST TO E SEATTLE LOT 3 MERCER ISLAND SP#SUB13-010 REC # 2014091190007SD SP DAF-LOTS 1 THRU 8 TGV LOTS43 THRU SO SD BLK 2 TGV VAC STS PER SCC #01-2-09774-1.

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF A BATHROOM AND BEDROOM RENOVATION AND EXPANSION. AN EXISTING DECK WILL BE REDUCED BY 237 FT. SQ. TO ACCOMMODATE THE 237 FT. SQ. ADDITIONAL CONDITIONED SPACE. THE 96 FT. SQ. DECK WILL REMAIN.

ZONING INFORMATION

ZONING - R8.4

LOT AREA - 12575 SF

OCCUPANCY - R-3

LOT AREA CALCULATIONS

EXISTING LOT COVERAGE (2374) SF INCLUDES HOUSE (669) SF INCLUDES DRIVEWAY 3043/11895 = 25.58%
EXISTING LOT COVERAGE.

PROPOSED LOT COVERAGE (2407) SF INCLUDES HOUSE (651) SF INCLUDES DRIVEWAY 3058/11895 = 25.71% (MAX 35% ALLOWED)

BUILDING SETBACKS

FRONT YARD SETBACK 20'-0"
SIDE YARD SETBACKS 33% OF 15'-0 MIN. FOR > 90'-0" WIDE LOT.
REAR YARD SETBACK 25'-0"

HEIGHT LIMIT 30'-0" ABOVE AVERAGE GRADE

DRAWING INDEX

A0.1	TITLE SHEET, SITE PLAN
A1.1	PLAN LOWER LEVEL-EXISTING
A1.2	PLAN MAIN LEVEL-EXISTING
A1.3	PLAN UPPER LEVEL-EXISTING
A1.4	PLAN ROOF-EXISTING
A1.5	PLAN UPPER LEVEL-PROPOSED
A1.6	PLAN ROOF 1-PROPOSED
A2.1	BUILDING ELEVATIONS
A2.2	BUILDING ELEVATIONS
A3.1	BUILDING SECTION
A3.2	BUILDING SECTION
A4.1	WALL SECTION, AVG. GRADE DIAGRAM
A4.1	WALL SECTION, AVG. GRADE DIAGRAM

BUILDING CODE

DESIGN PROFESSIONALS ASSUME NO CLAIM THAT BUILDING IS OR WAS IN CONFORMANCE WITH CURRENT BUILDING CODE AT THE TIME OF CONSTRUCTION.

ALL WORK TO BE MODIFIED OR ADJUSTED SHALL BE IN COMPLIANCE WITH THE LATEST LOCAL CODES AND ORDINANCES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: 2018 IRC, 2018 WSEC, 2018 IFC.



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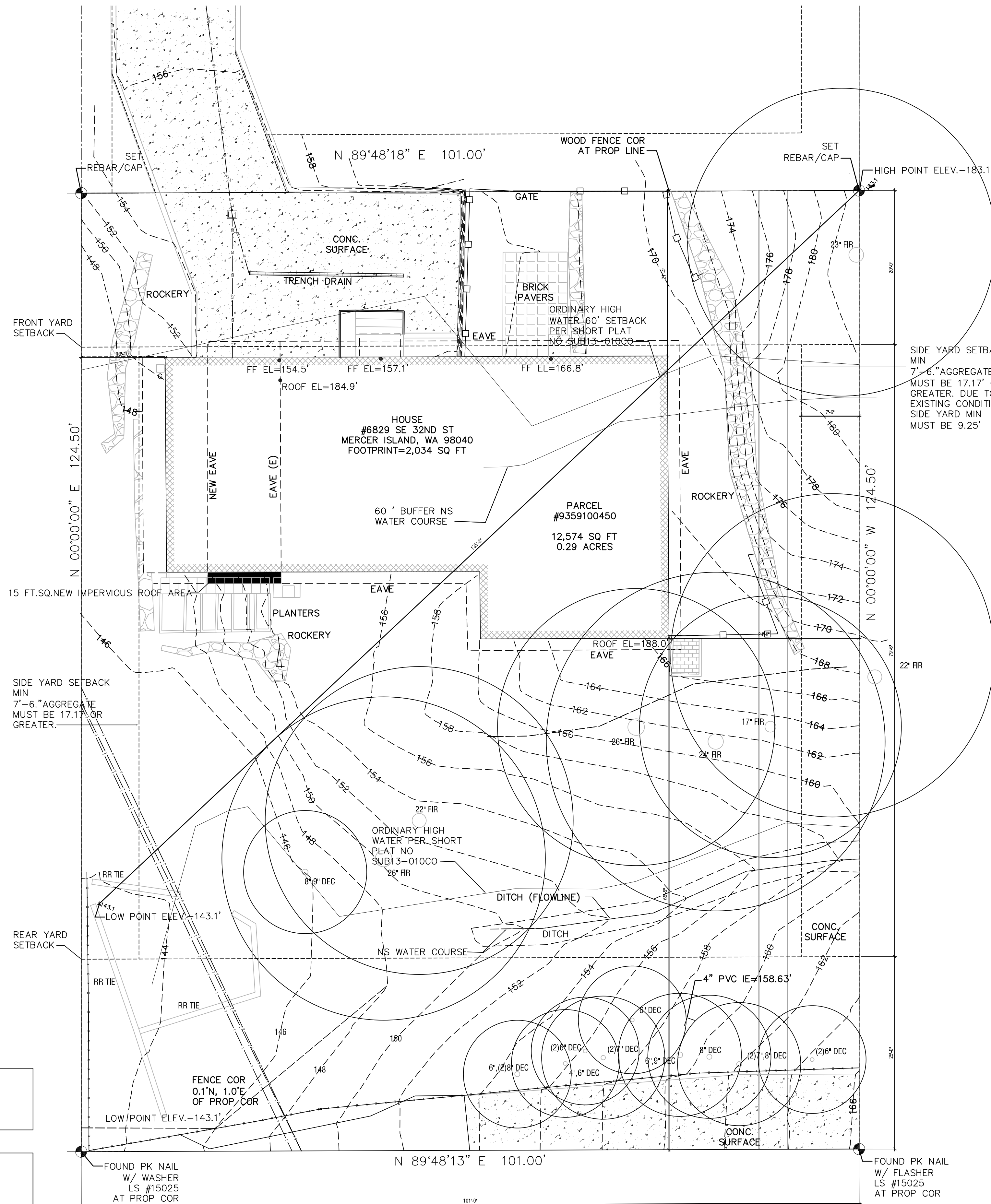
SEAL	
REVISION	
DATE	
NO.	

SITE PLAN

MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

TITLE	PROJECT
FILE	FILE
SCALE	SCALE 1/8"=1'-0"
DATE	DATE 06/04/21

SHEET NO
A-0.1

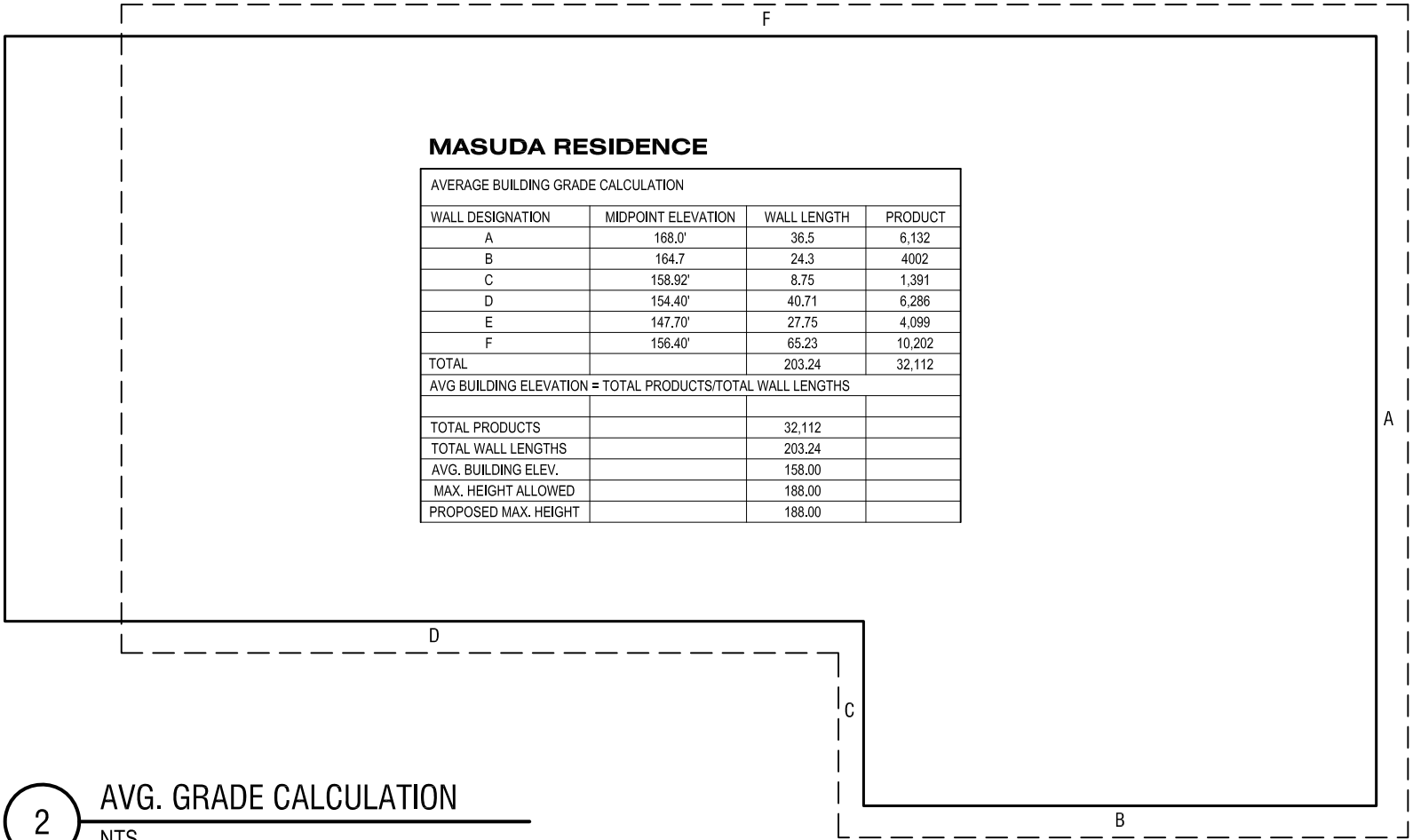


MASUDA RESIDENCE

AVERAGE BUILDING GRADE CALCULATION

WALL DESIGNATION	MIDPOINT ELEVATION	WALL LENGTH	PRODUCT
A	156.0	36.5	6,132
B	156.7	24.3	4,002
C	158.92	8.75	1,391
D	156.47	40.71	6,388
E	147.77	27.75	4,089
F	156.47	65.23	10,202
TOTAL		203.24	32,112
AVG BUILDING ELEVATION = TOTAL PRODUCTS/TOTAL WALL LENGTHS			
TOTAL PRODUCTS		32,112	
TOTAL WALL LENGTHS		203.24	
AVG. BUILDING ELEV.		158.00	
MAX HEIGHT ALLOWED		188.00	
PROPOSED MAX HEIGHT		188.00	

2 AVG. GRADE CALCULATION



LOT SLOPE CALCULATION

HIGH POINT ELEVATION-183.1
LOW POINT ELEVATION-143.1
DISTANCE BETWEEN POINTS-158.25 PER SURVEY
183.1-143.1 = 40' GRADE DIFFERENCE
40/158.25 X 100 = 25.37% GRADE

2018 WSEC & VENTILATION RESIDENTIAL COMPLIANCE

COMPLIANCE TO BE ACCOMPLISHED THROUGH THE PRESCRIPTIVE PATH REQUIREMENTS.

VERTICAL GLAZING UFACTOR	0.28
SOLID DOOR UFACTOR	0.20

INSULATION REQUIREMENTS

UNGLAZED CEILING	R-38
WALLS ABOVE GRADE	R-21
WALLS BELOW GRADE (INTERIOR)	R-21
WALLS BELOW GRADE (EXTERIOR)	R-10
FLOOR	
SLAB ON GRADE	R-10

VAPOR RETARDER

FLOORS	4 MIL POLY
WALLS	4 MIL POLY OR PVA PRIMER
CEILING	4 MIL POLY OR PVA PRIMER

HEATING SYSTEM TO REMAIN EXISTING HYDROIC RADIANT FLOOR HEAT SYSTEM WITH 50% EFFICIENT HOT WATER HEATER.

EXHAUST VENTILATION AS REQUIRED PER CODE EXHAUST FANS WITH CFM AS NOTED AT LOCATIONS ON PLANS.

PROVIDE SOURCE SPECIFIC VENTILATION IN EACH KITCHEN, BATHROOM, W.C. AND LAUNDRY ROOM. FAN SIZES AS NOTED ON PLAN. MIN. AIR FLOW: KITCHEN: 100 CFM, BATH: 50 CFM. MIN. AIR FLOW: BATH: 100 CFM. MIN. AIR FLOW: LAUNDRY: 100 CFM. SYSTEM IS REQUIRED FOR KITCHEN EXHAUST EXCEEDING 400 CFM PER REC. SECTION M150.4.

A PERMANENT CERTIFICATE SHALL BE POSTED IN THE MECHANICAL ROOM OR OTHER APPROVED LOCATION. THE CERTIFICATE SHALL SET THE PRESCRIBED R-VALUES OF INSULATION INSTALLED IN OR ON CEILING, ROOF, WALLS, FOUNDATION (BEAR BELOW GRADE WALLS AND ON FLOOR), AND THE RESULTS FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TESTING.

DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH W502-3 USING THE MAXIMUM DUCT LEAKAGE WATER SPECIFIED. A WRITTEN REPORT OF THE RESULTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL PROVIDED TO THE BUILDING INSPECTOR AND HOME OWNER PRIOR TO FINAL INSPECTION.

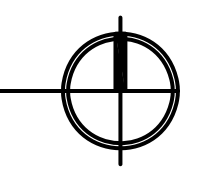
A MINIMUM OF 90 PERCENT OF LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH EFFICACY LAMPS. PER (WSEC R 404.1)

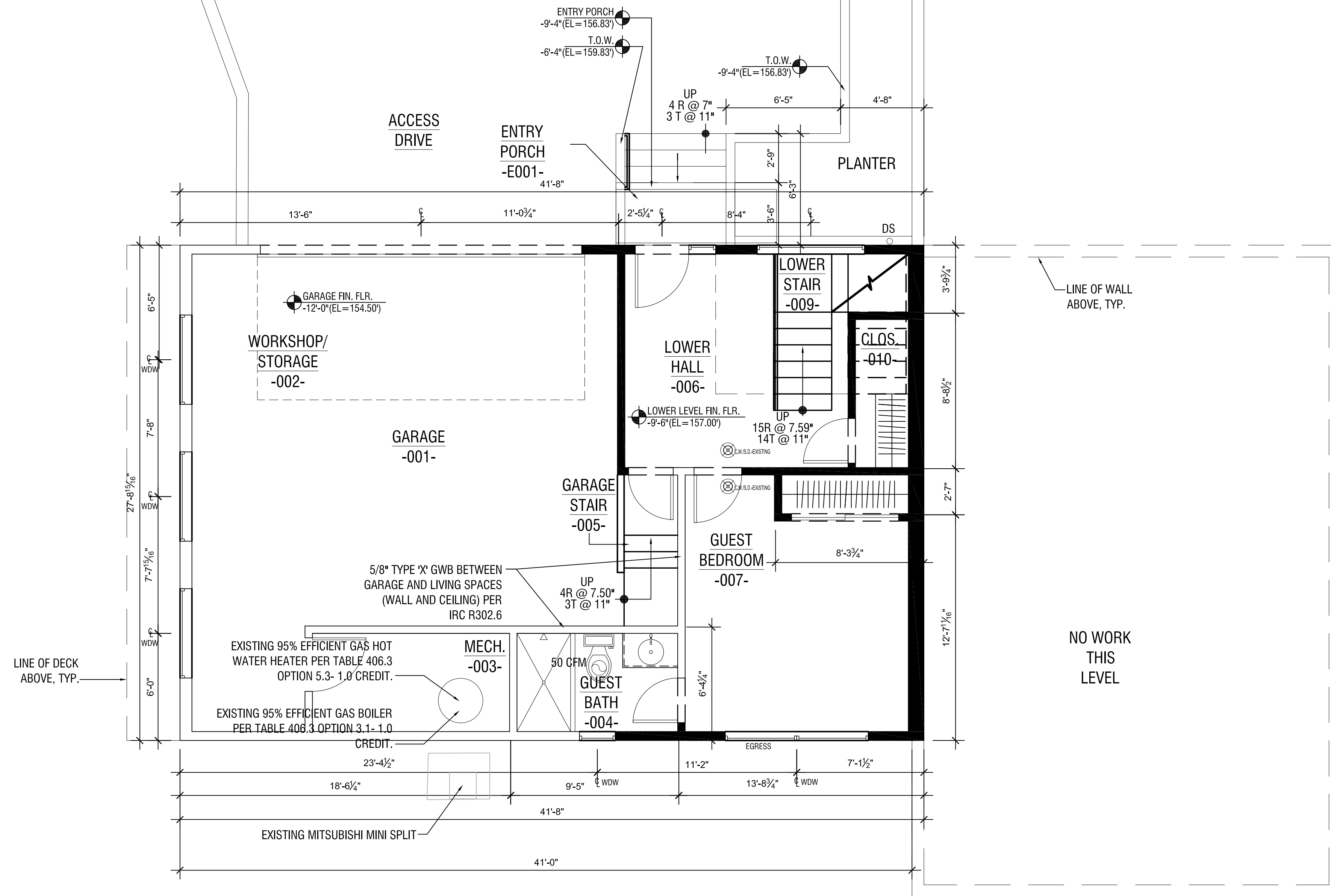
BUILDING AIR LEAKAGE TESTING COMPLIANCE BASED ON R402.4.1.2 REDUCE THE TESTED AIR LEAKAGE TO 30 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALS.

PRIOR TO FINAL INSPECTION, THE TEST RESULTS SHALL BE POSTED ON THE RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE.

1 SITE PLAN

1/8"=1'-0"





1 LOWER LEVEL-PLAN (EXISTING)-NO CHANGES
1/4" = 1'-0"

THIS SHEET PROVIDED FOR REFERENCE ONLY-NO WORK THIS SHEET



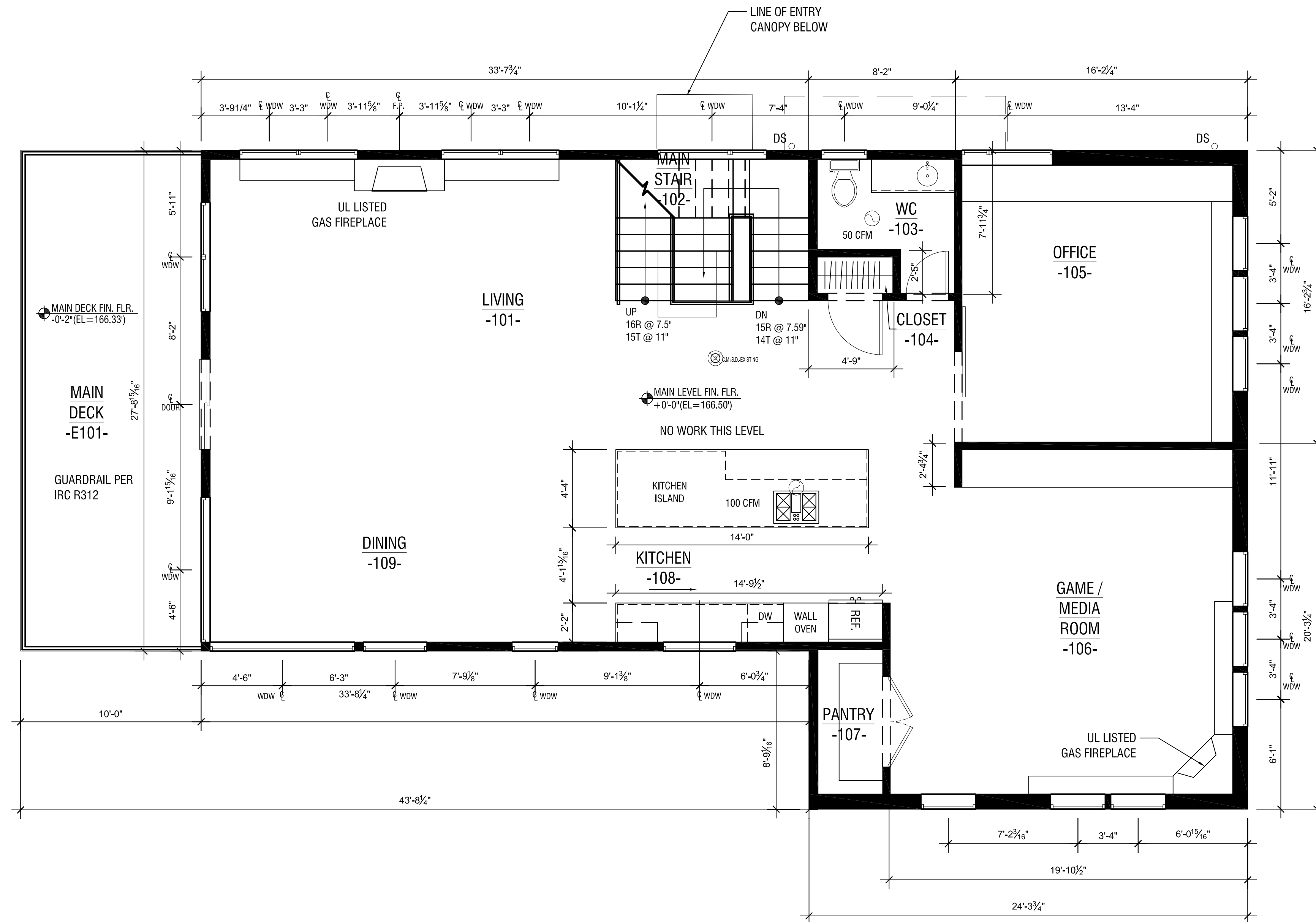
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NO.	DATE	REVISION

BUILDING PLAN-LOWER LEVEL (EXISTING)
MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

FILE PROJECT
SCALE SCALE 1/4"=1'-0"
DATE DATE 06/04/21

SHT NO
A-1.1



1 MAIN LEVEL-PLAN (EXISTING)-NO CHANGES
1/4" = 1'-0"

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DATE

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BUILDING PLAN-MAIN LEVEL (EXISTING)

MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

FILE PROJECT

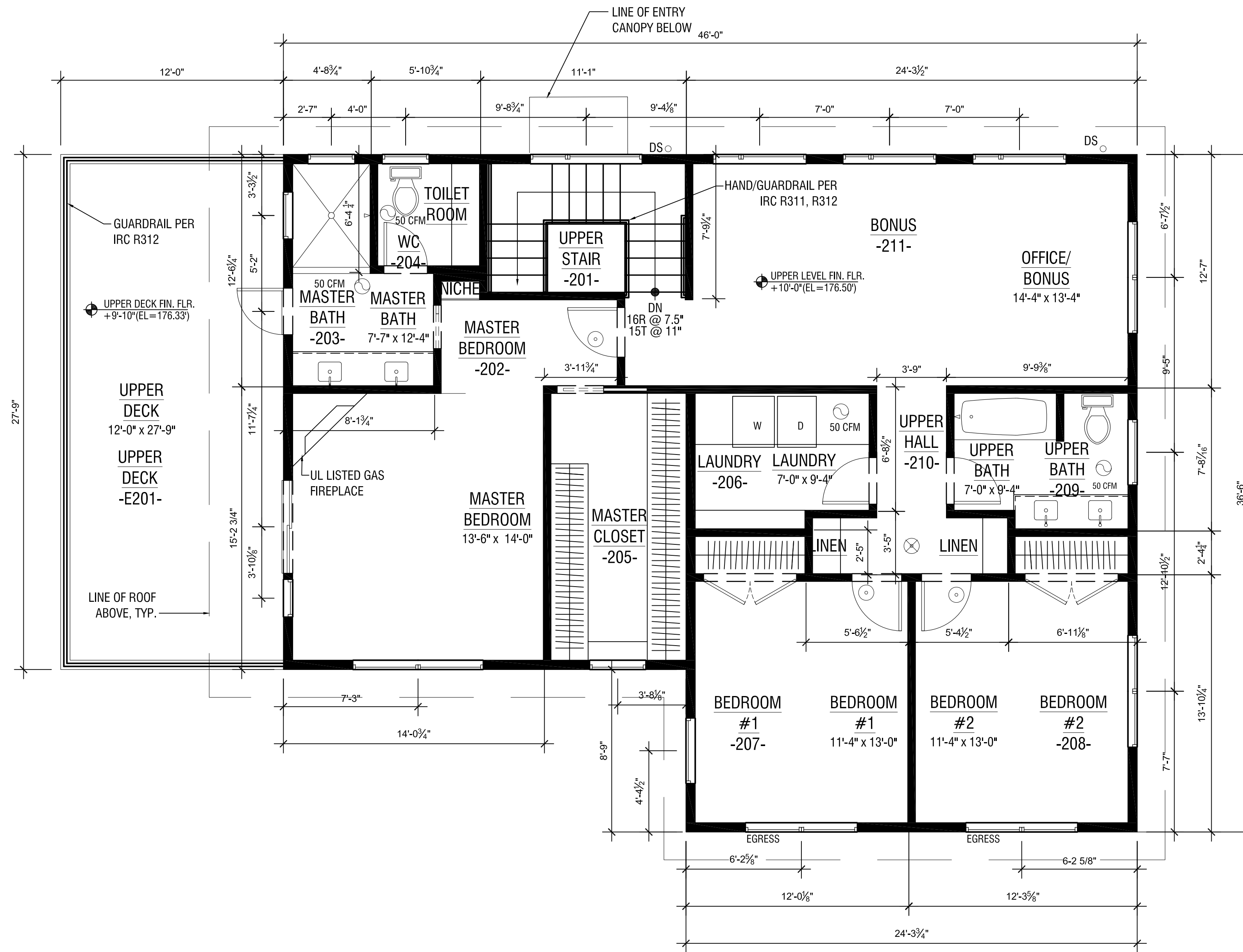
FILE

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

DATE DATE 06/04/21

SHT NO

A-1.2



1 UPPER LEVEL-PLAN (EXISTING)
1/4" = 1'-0"

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BUILDING PLANS-UPPER LEVEL (EXISTING)

MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

PROJECT

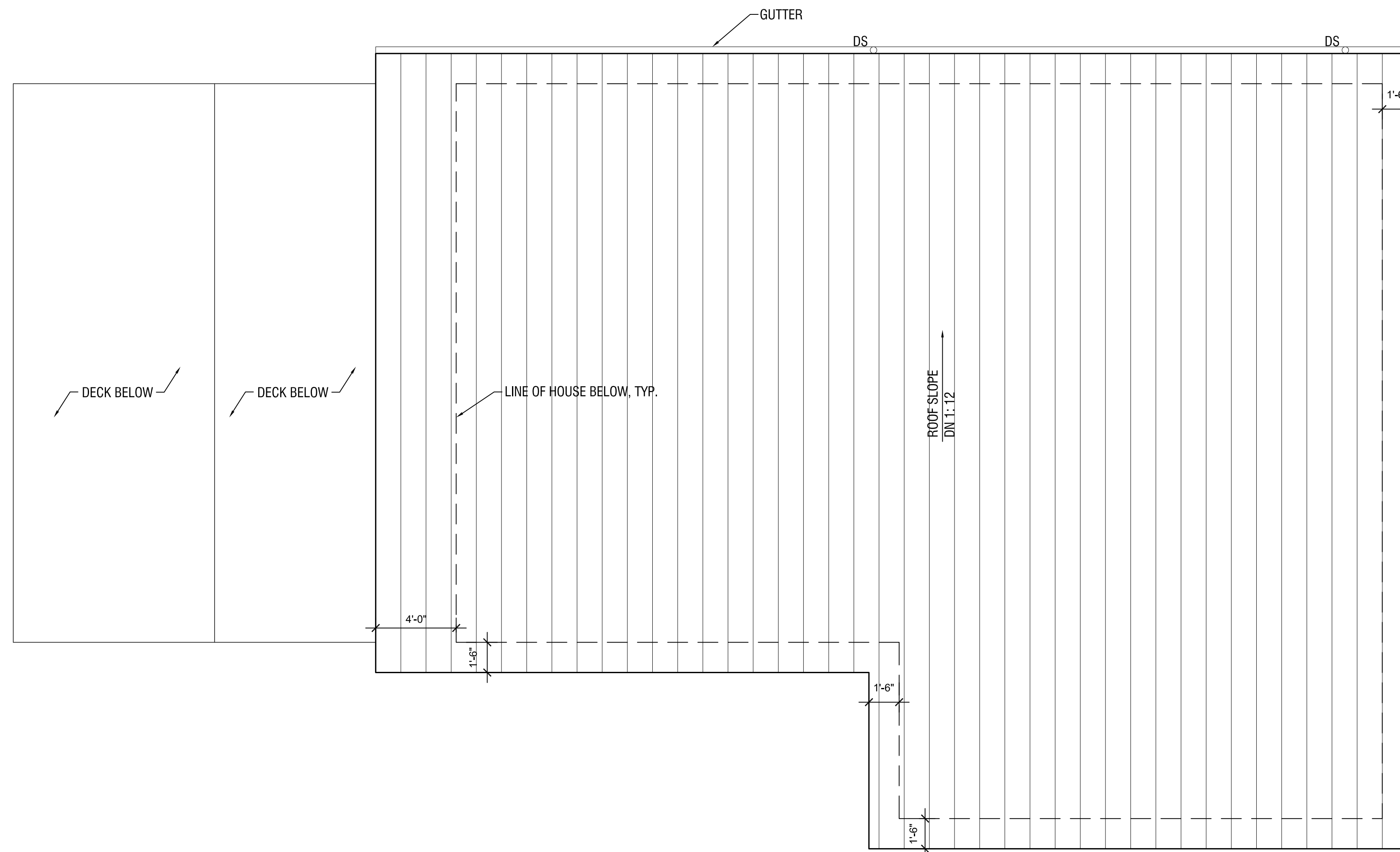
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SCALE SCALE 1/4"=1'-0"

DATE DATE 06/04/21

SHT NO

A-1.3



1 ROOF-PLAN (EXISTING)
1/4" = 1'-0"

THIS SHEET PROVIDED FOR REFERENCE ONLY-NO WORK THIS SHEET



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ROOF-PLAN (EXISTING)
MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

TITLE

PROJECT

FILE

SCALE

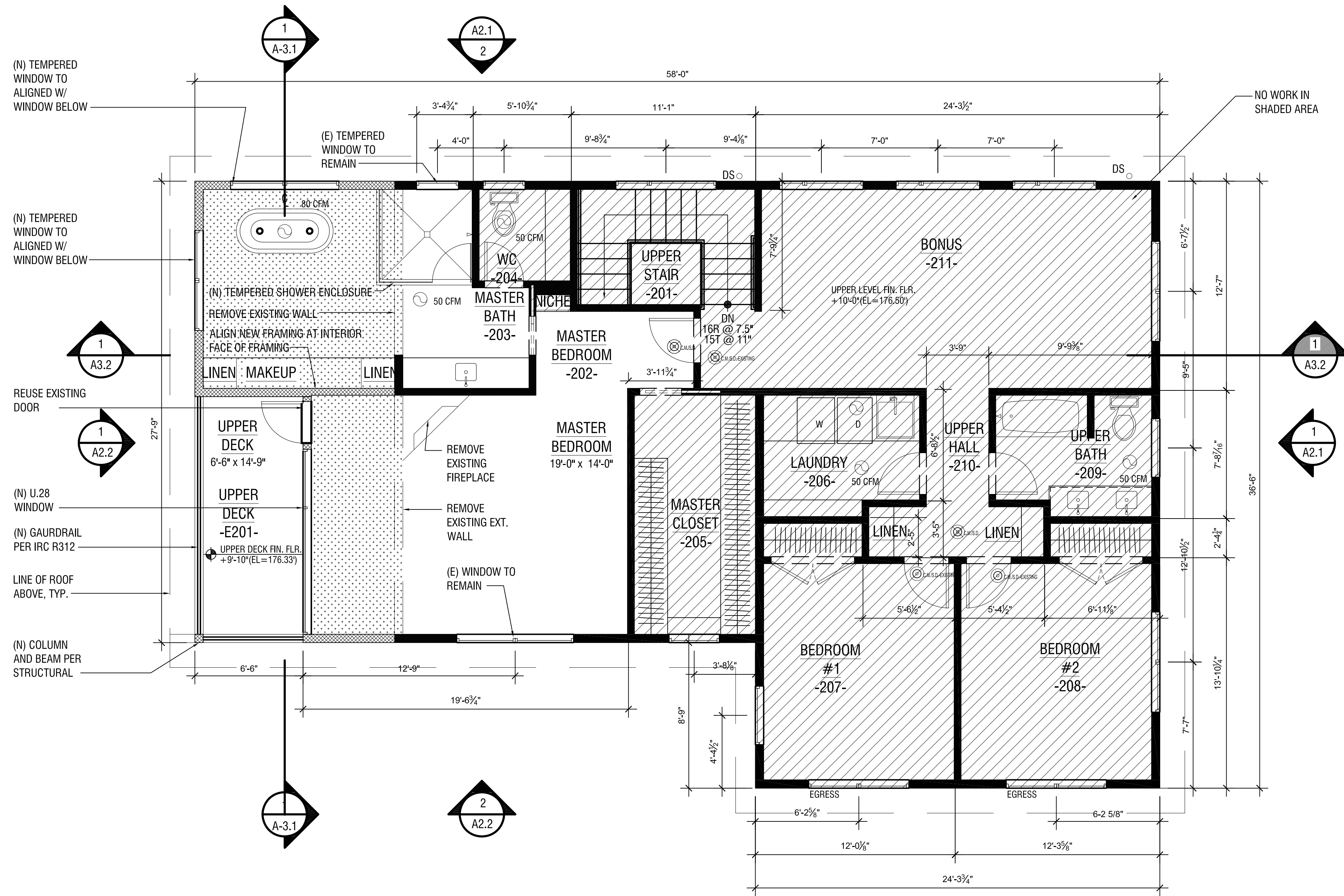
SCALE 1/4"=1'-0"

DATE

DATE 06/04/21

SHT NO

A-1.4



(N) TEMPERED WINDOW TO ALIGNED W/ WINDOW BELOW

(E) TEMPERED WINDOW TO REMAIN

(N) TEMPERED WINDOW TO ALIGNED W/ WINDOW BELOW

REUSE EXISTING DOOR

(N) U-28 WINDOW

(N) GAURDRAIL PER IRC R312

LINE OF ROOF ABOVE, TYP.

(N) COLUMN AND BEAM PER STRUCTURAL

NO WORK IN SHADED AREA

1 UPPER LEVEL-PLAN (PROPOSED)
1/4" = 1'-0"

- NO WORK IN THIS AREA
- NEW WALLS
- EXISTING WALLS
- NEW CONDITIONED SPACE



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BUILDING PLANS-UPPER LEVEL (PROPOSED)

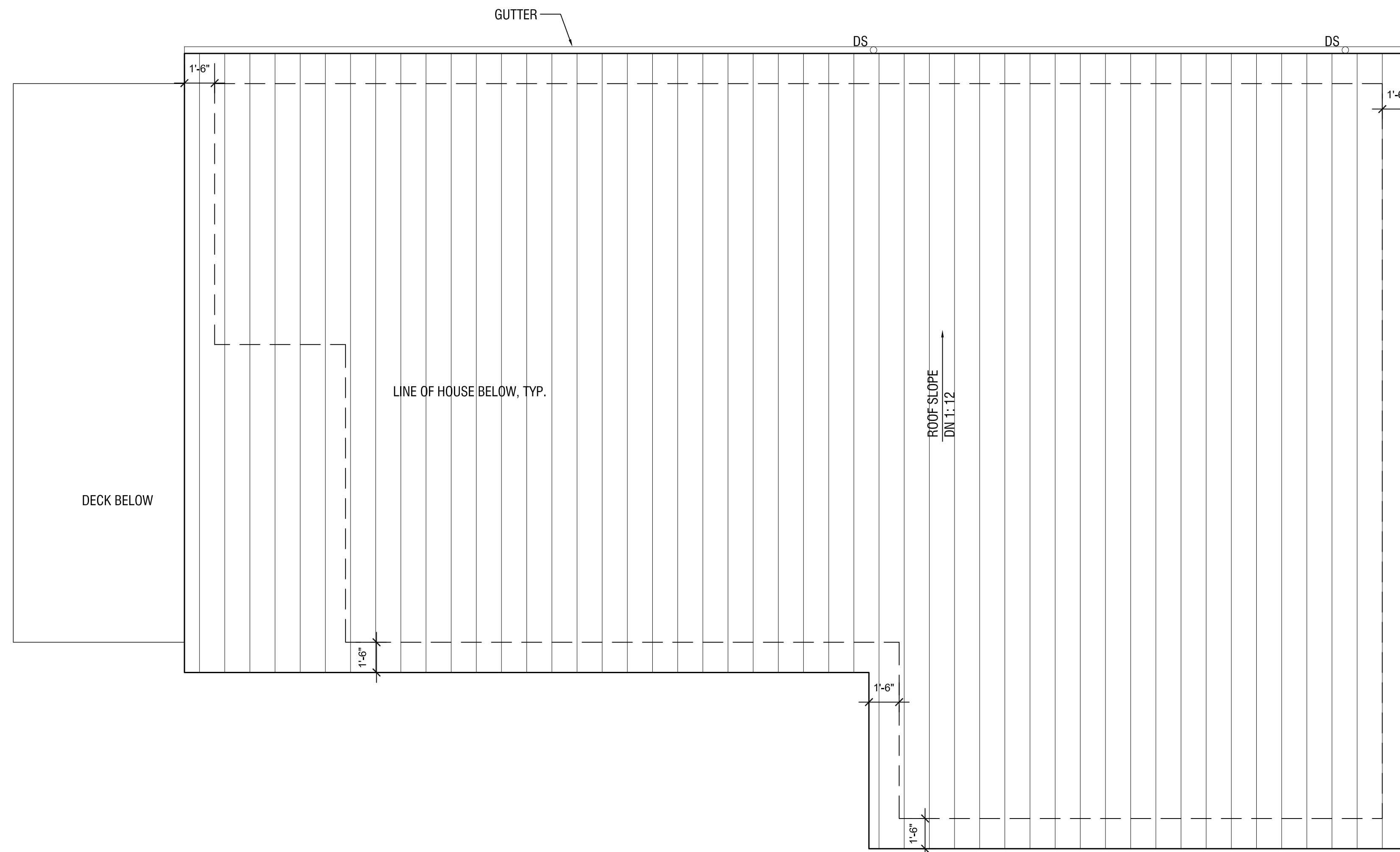
PROJECT: **MASUDA RESIDENCE**
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

FILE: FILE

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

DATE: DATE 06/04/21

SHT NO: **A-1.5**



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



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ROOF PLAN-(PROPOSED)

MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

TITLE PROJECT

FILE FILE

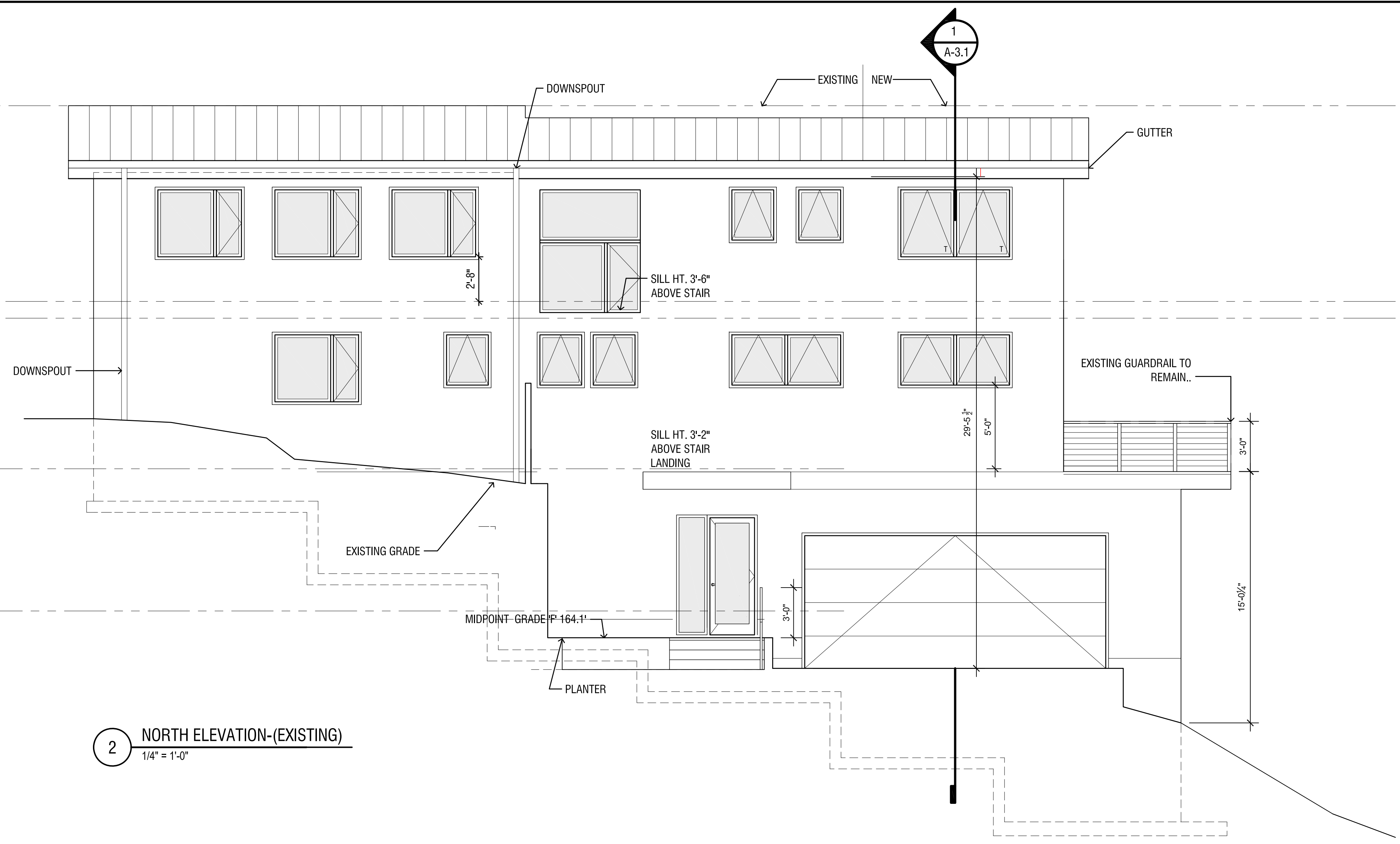
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DATE DATE 06/04/21

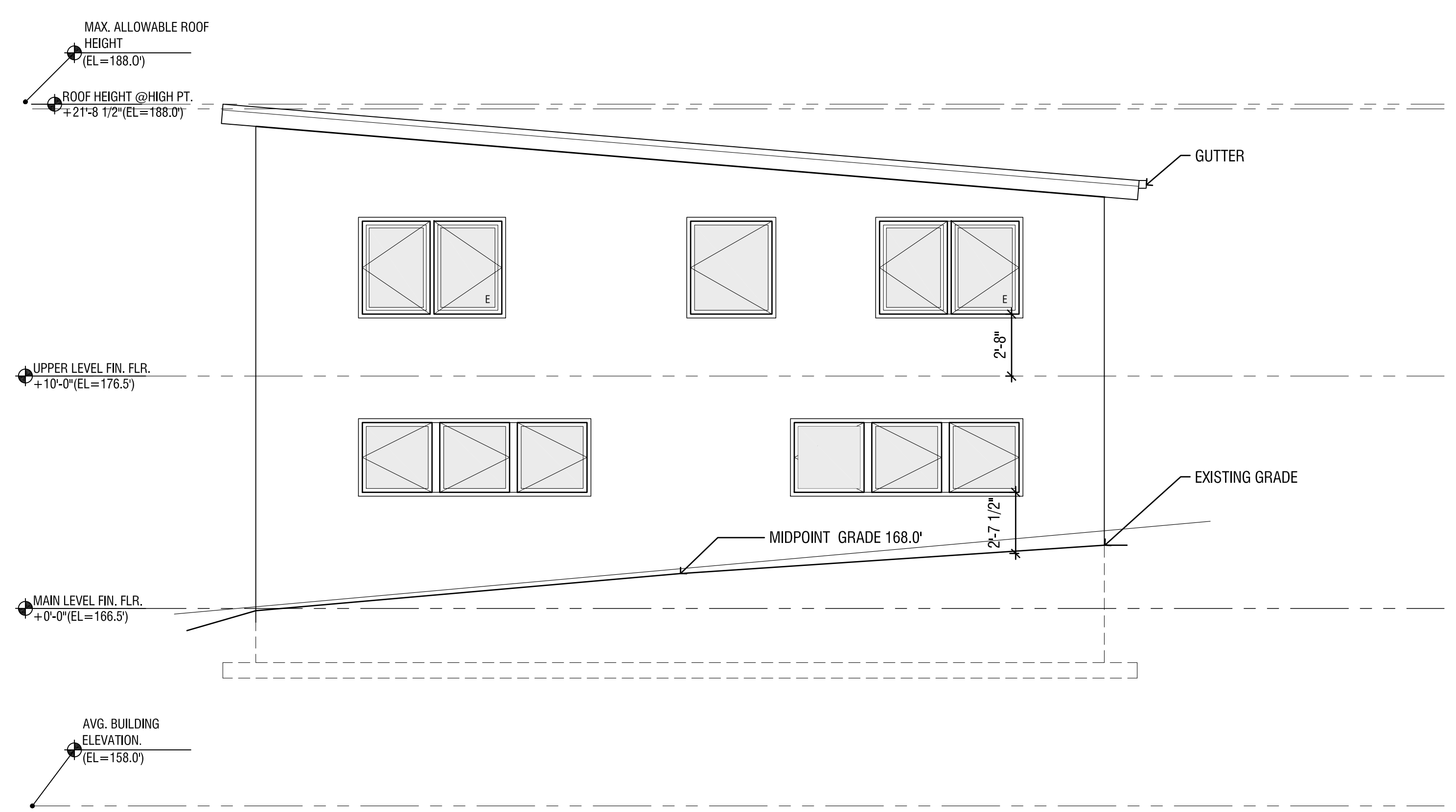
SHT NO

A-1.6

MAX. ALLOWABLE ROOF HEIGHT (EL=188.0')
 ROOF HEIGHT @HIGH PT. +21'-8 1/2" (EL=188.0')
 UPPER LEVEL FIN. FLR. +10'-0" (EL=176.5')
 MAIN LEVEL FIN. FLR. +0'-0" (EL=166.5')
 AVG. BUILDING ELEVATION (EL=158.0')



2 NORTH ELEVATION-(EXISTING)
 1/4" = 1'-0"



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



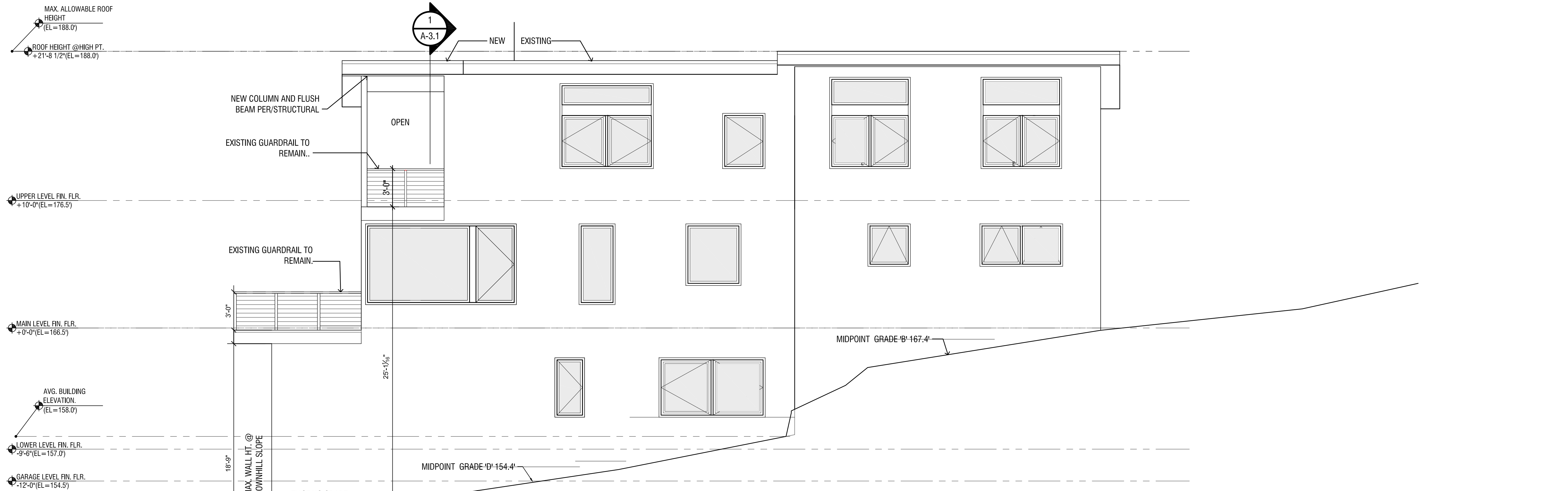
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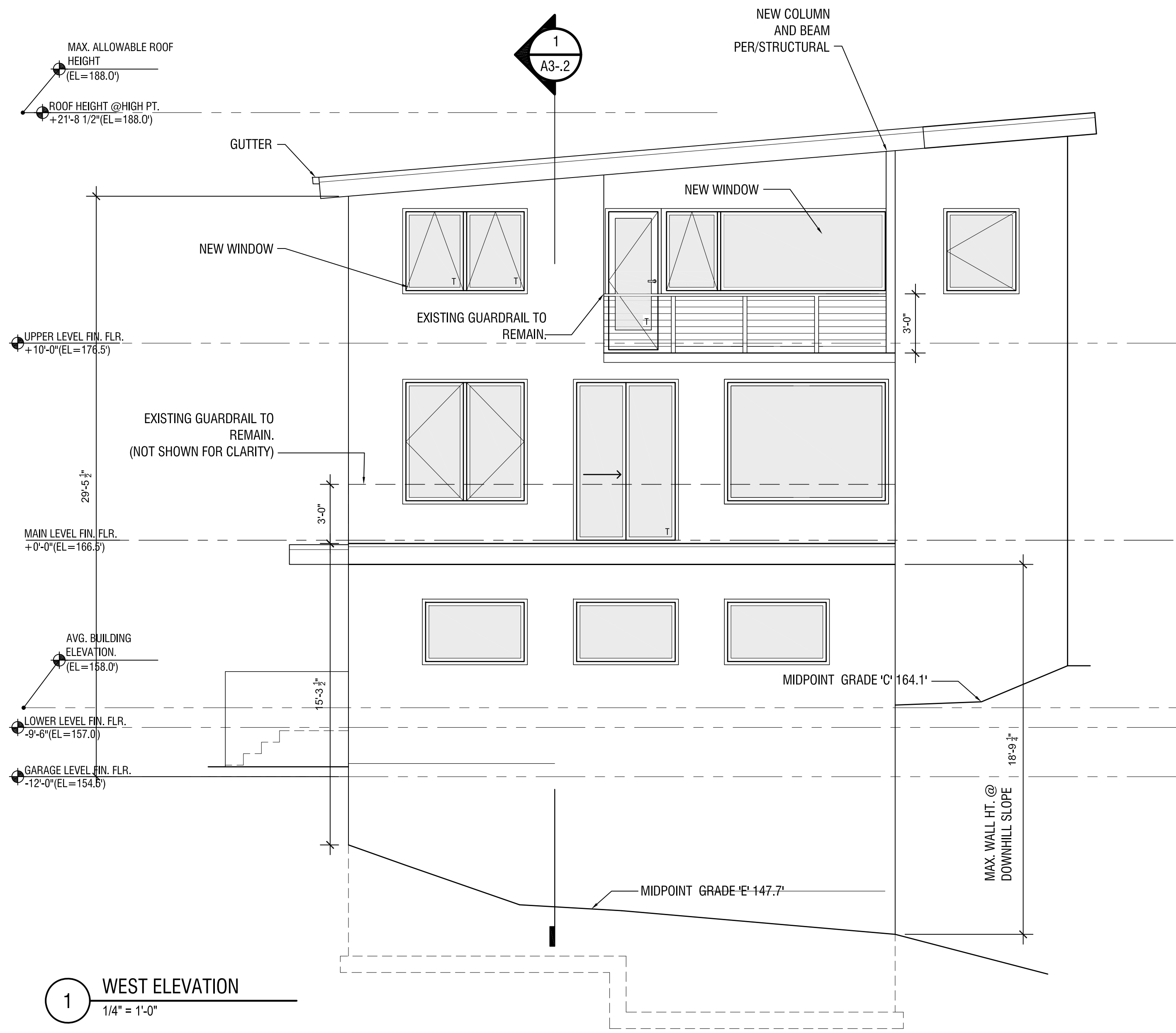
BUILDING ELEVATIONS
MASUDA RESIDENCE
 6829 SE 32ND ST.
 MERCER ISLAND, WA 98040

TITLE PROJECT
 FILE FILE
 SCALE SCALE 1/4"=1'-0"
 DATE DATE 06/04/21

SHT NO
A-2.1



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



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



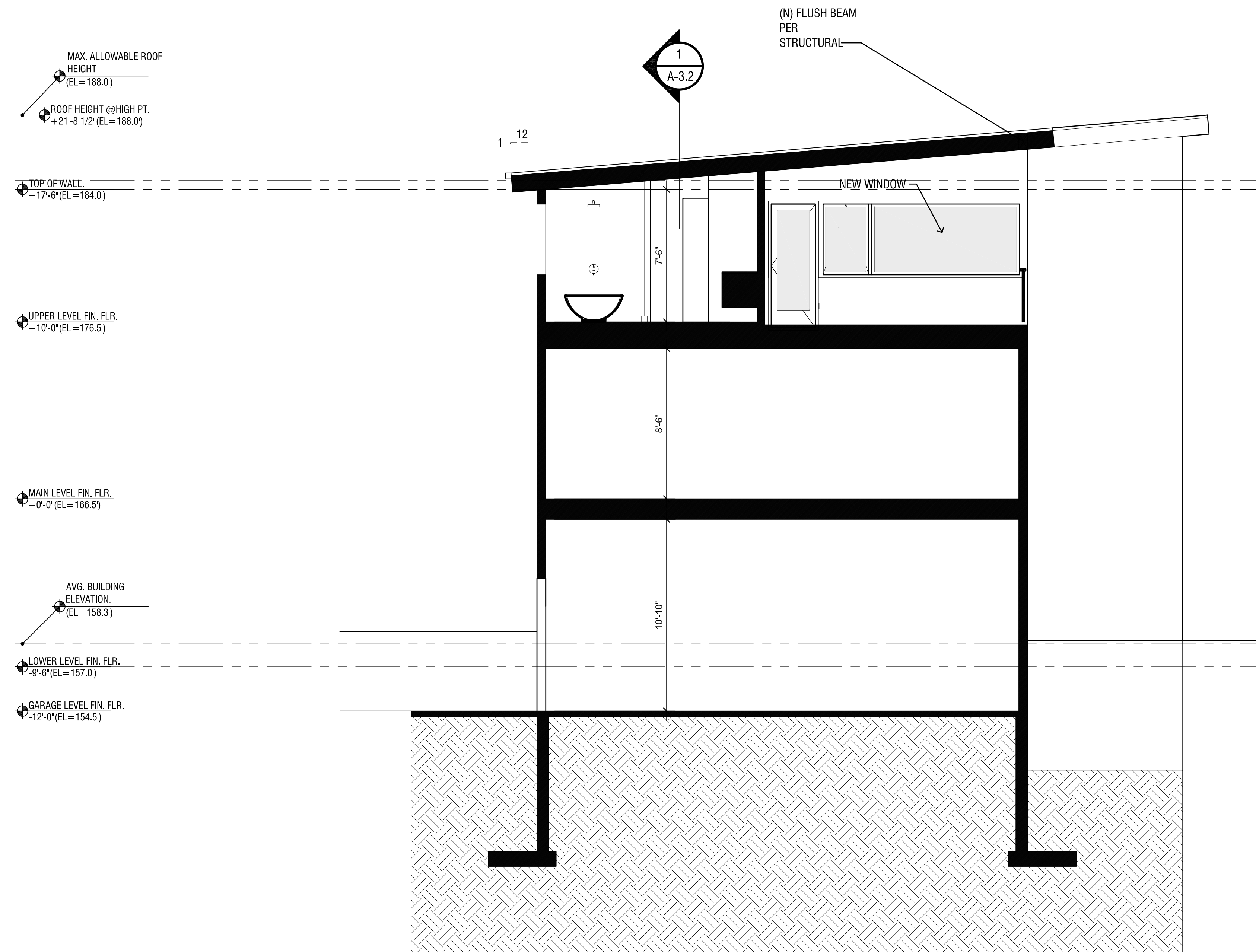
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BUILDING ELEVATIONS
MASUDA RESIDENCE
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FILE FILE
SCALE SCALE 1/4"=1'-0"
DATE DATE 06/04/21

SHT NO
A-2.2



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



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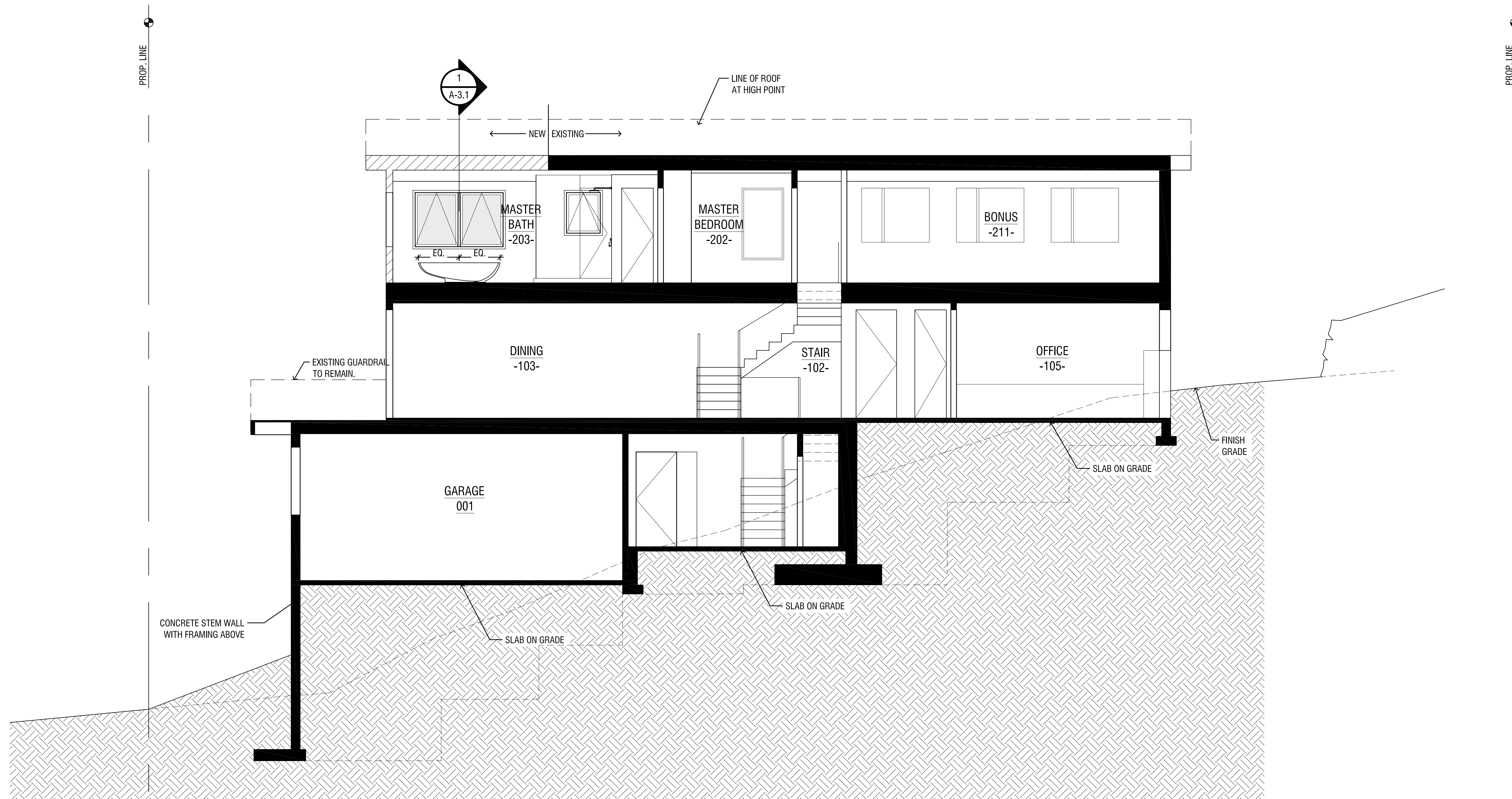
NO.	DATE	REVISION

BUILDING SECTIONS
MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

FILE	PROJECT

SCALE SCALE 1/4"=1'-0"
DATE DATE 06/04/21

SHT NO
A-3.1



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



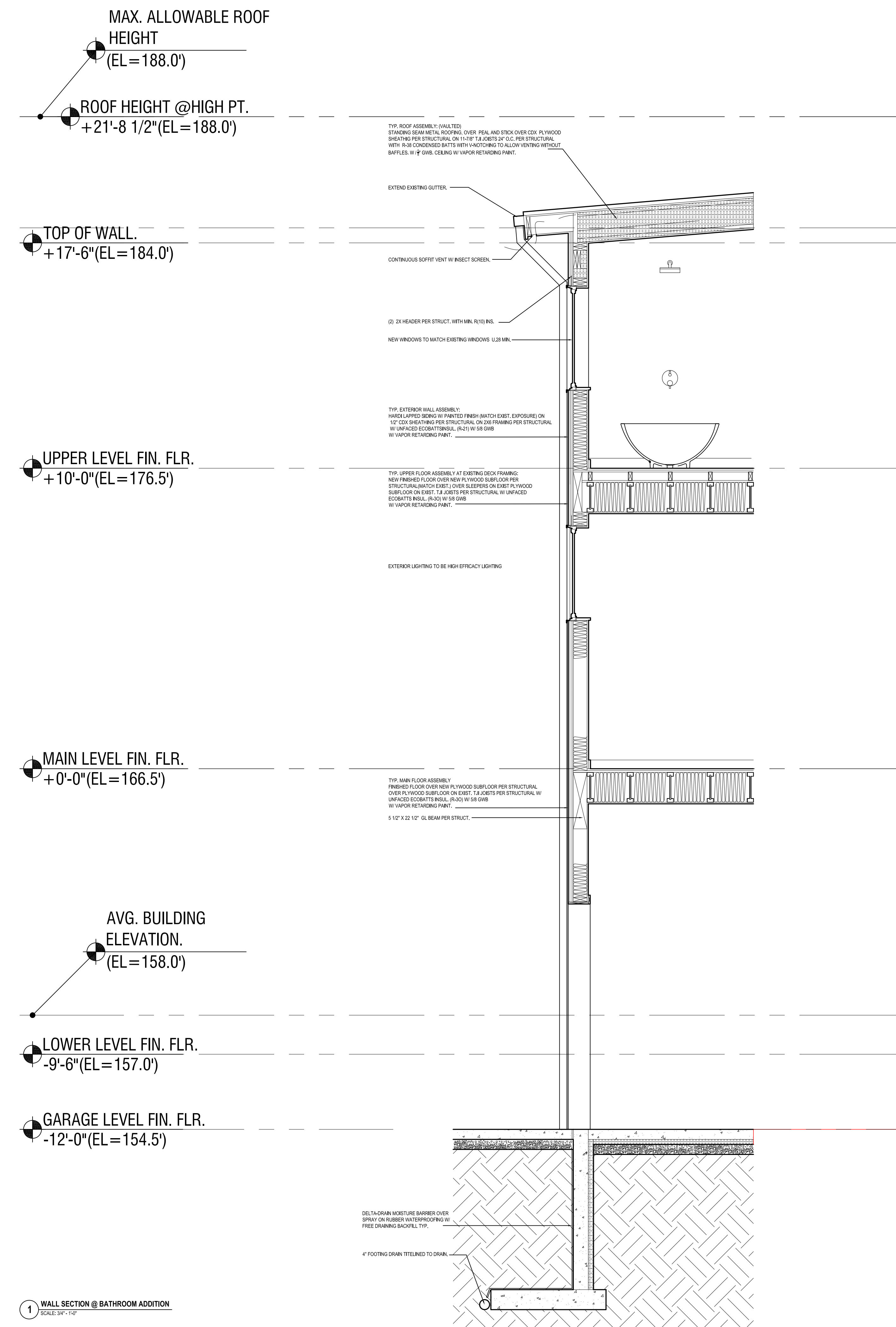
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NO.	DATE	REVISION

BUILDING SECTIONS
MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

TITLE PROJECT
FILE FILE
SCALE SCALE 1/4"=1'-0"
DATE DATE 06/04/21

SHT NO
A-3.2



1 WALL SECTION @ BATHROOM ADDITION
SCALE: 3/4" = 1'-0"



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NO.	DATE	REVISION

WALL SECTION, AVG GRADE CALC.
MASUDA RESIDENCE
6829 SE 32ND ST.
MERCER ISLAND, WA 98040

TITLE PROJECT
FILE FILE
SCALE SCALE 1/2" = 1'-0"
DATE DATE 06/04/21

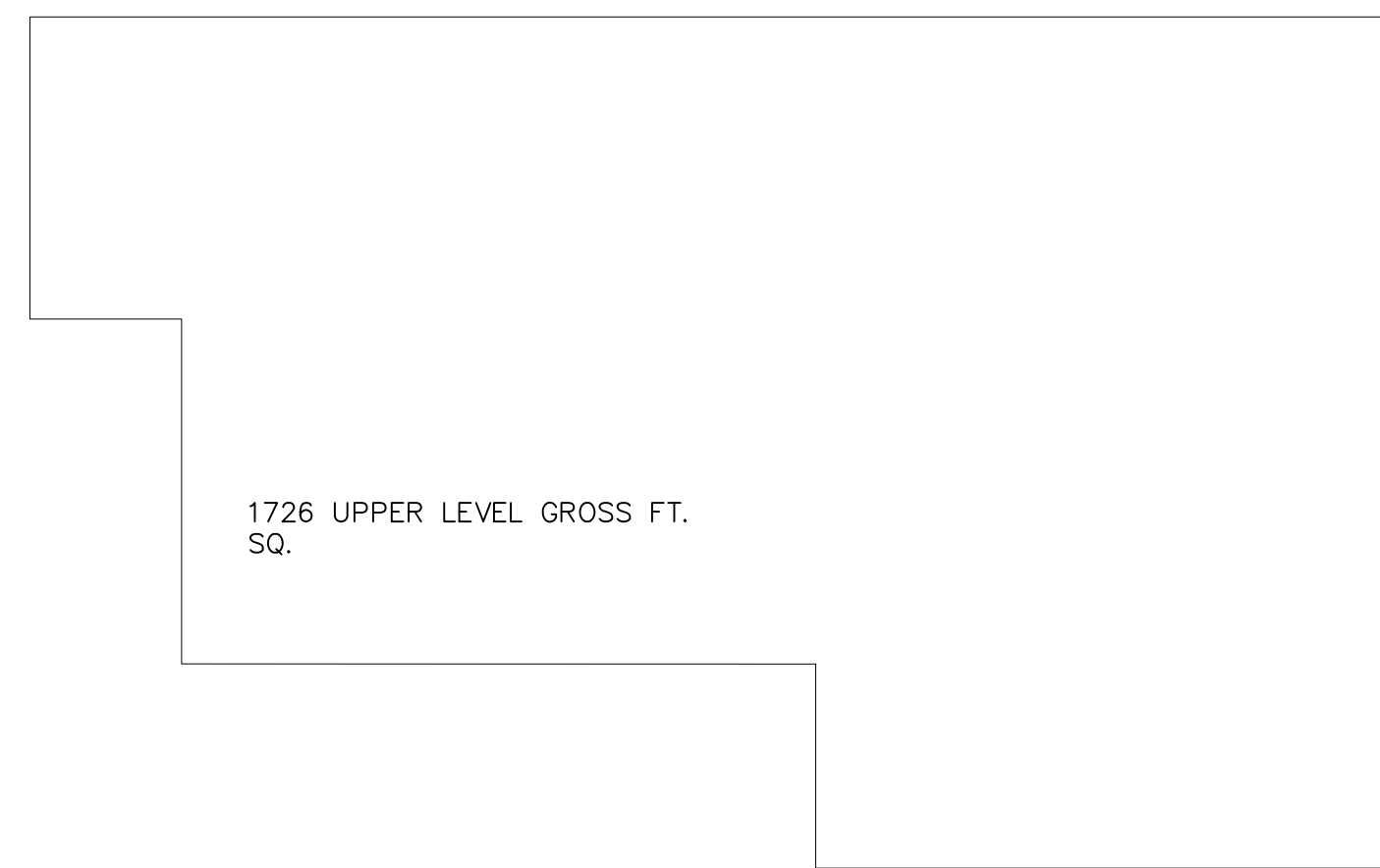
SHT NO
A-4.1

96 DECK GROSS FT. SQ.

278 DECK GROSS FT. SQ.

9 COVERED DECK
1/8"=1'-0"

8 UNCOVERED DECK
1/8"=1'-0"



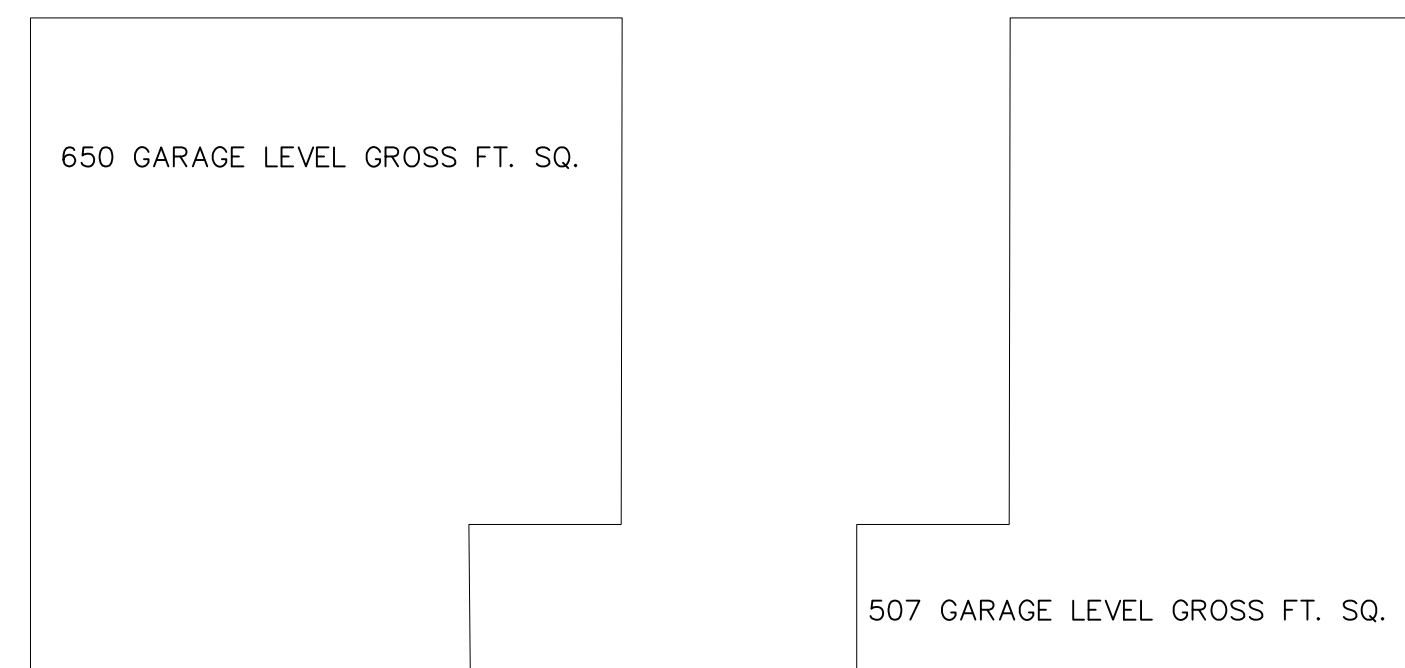
1726 UPPER LEVEL GROSS FT. SQ.

7 UPPER FLOOR
1/8"=1'-0"



1822 MAIN LEVEL GROSS FT. SQ.

6 MAIN FLOOR
1/8"=1'-0"



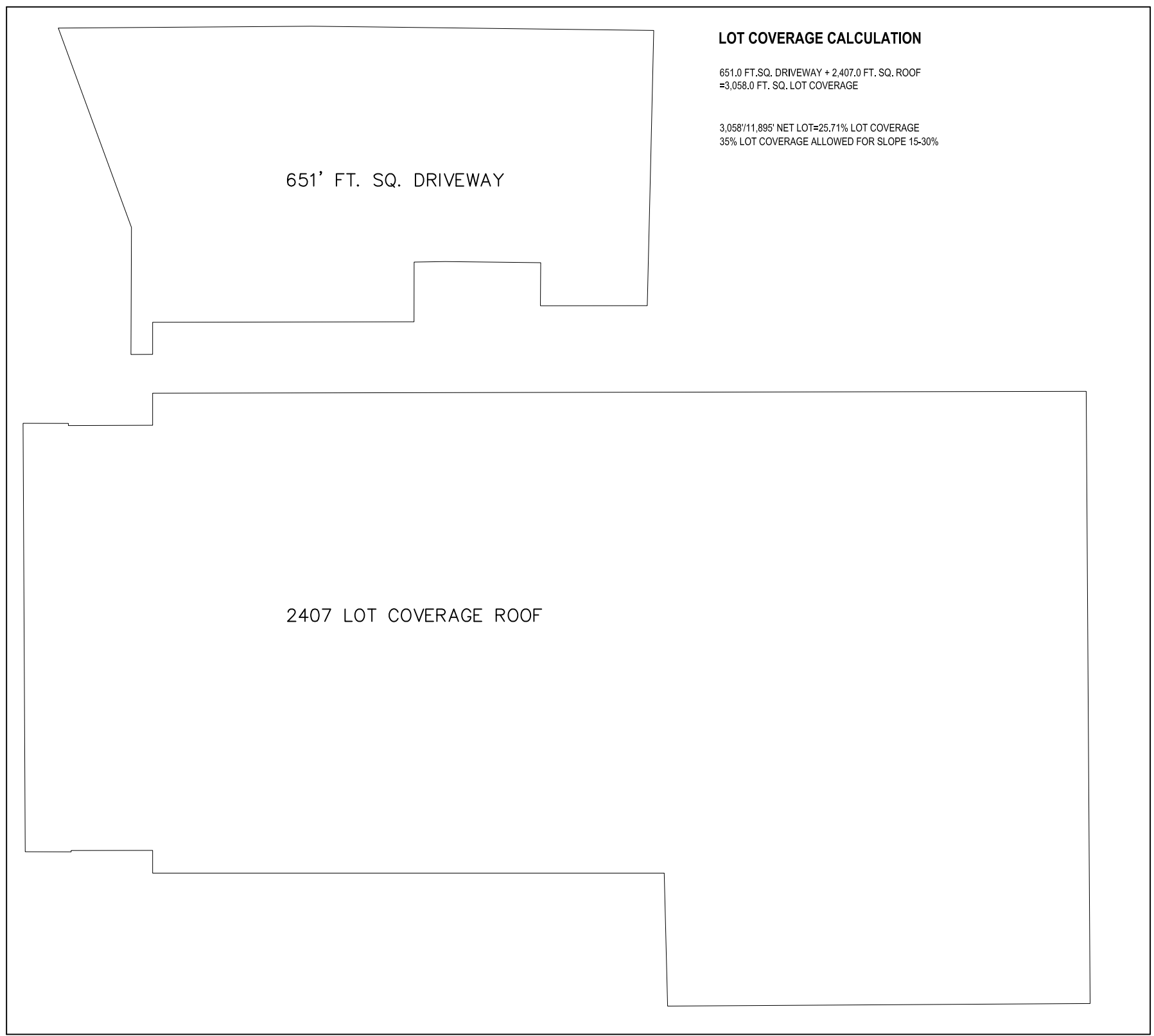
650 GARAGE LEVEL GROSS FT. SQ.

GFA CALCULATION
1726+1822+650+507+964+801

507 GARAGE LEVEL GROSS FT. SQ.

5 GARAGE
1/8"=1'-0"

4 LOWER LEVEL
1/8"=1'-0"



LOT COVERAGE CALCULATION
651.0 FT. SQ. DRIVEWAY + 2407 FT. SQ. ROOF
= 3,058.0 FT. SQ. LOT COVERAGE
3,058.0 / 10,000 = 30.58% LOT COVERAGE
30% LOT COVERAGE ALLOWED FOR SLOPE 15-30%

3 IMPERVIOUS SURFACE CALCULATION
1/8"=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)

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

Project Information: 6629 SE 32ND ST, MERCER ISLAND 98040
Contact Information: CHRIS LEWIS, CHRIS.LEWIS@MERCERBUILDERS.COM

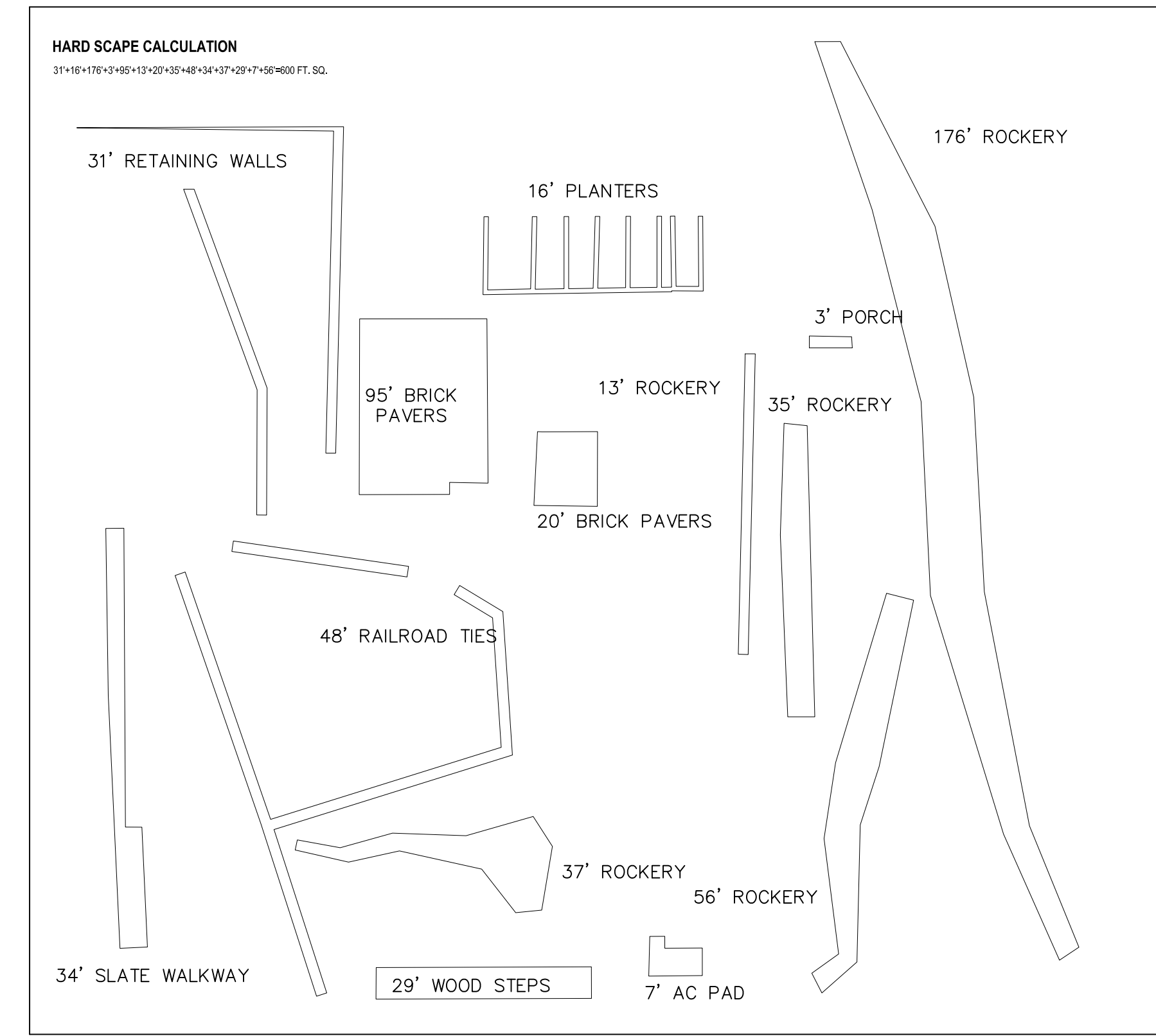
Authorized Representative: CHRIS LEWIS, Date: 02/11/2021

All Climate Zones (Table R402.1.1)	R-Value *	U-Factor *
Fenestration U-Factor *	n/a	0.30
Skylight U-Factor *	n/a	0.50
Glazed Fenestration SHGC **	n/a	n/a
Ceiling *	49 ¹	0.026
Wood Frame Wall **	21 Int	0.056
Floor	30	0.029
Below Grade Wall **	10/15/21 Int + TB	0.042
Slab ** R-Value & Depth	10, 2 ft	n/a

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of 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.

1 WASHINGTON ENERGY CODE COMPLIANCE
1/8"=1'-0"



HARD SCAPE CALCULATION
31'x18'x3' RETAINING WALLS
16'x16' PLANTERS
95' BRICK PAVERS
13' ROCKERY
20' BRICK PAVERS
3' PORCH
35' ROCKERY
48' RAILROAD TIES
37' ROCKERY
56' ROCKERY
34' SLATE WALKWAY
29' WOOD STEPS
7' AC PAD

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

2018 Washington State Energy Code - Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington

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 Units: 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.

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

3. Large Dwelling Units: 7 credits
Dwelling units exceeding 5,000 sf of conditioned floor area.

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

Energy Credit	Description	Value	Checked
1.1	Combustion heating minimum NAECA ^a	0.0	<input type="checkbox"/>
2	Heat pump ^b	1.0	<input type="checkbox"/>
3	Electric resistance heat only - furnaces or zonal	-1.0	<input type="checkbox"/>
4	DHP with zonal electric resistance per option 3.4	0.5	<input type="checkbox"/>
5	All other heating systems	-1.0	<input type="checkbox"/>
1.1	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.2	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.3	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.4	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.5	Efficient Building Envelope	2.0	<input type="checkbox"/>
1.6	Efficient Building Envelope	3.0	<input type="checkbox"/>
1.7	Efficient Building Envelope	0.5	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	0.5	<input type="checkbox"/>
2.2	Air Leakage Control and Efficient Ventilation	1.0	<input type="checkbox"/>
2.3	Air Leakage Control and Efficient Ventilation	1.5	<input type="checkbox"/>
2.4	Air Leakage Control and Efficient Ventilation	2.0	<input type="checkbox"/>
3.1*	High Efficiency HVAC	1.0	<input checked="" type="checkbox"/> Existing 85% efficient boiler
3.2	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.3*	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.4	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.5	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.6*	High Efficiency HVAC	2.0	<input type="checkbox"/>
4.1	High Efficiency HVAC Distribution System	0.5	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input type="checkbox"/>

2018 Washington State Energy Code - Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington

Energy Credit	Description	Value	Checked
5.1*	Efficient Water Heating	0.5	<input checked="" type="checkbox"/>
5.2	Efficient Water Heating	0.5	<input type="checkbox"/>
5.3	Efficient Water Heating	1.0	<input type="checkbox"/> existing 55% efficiency HW heater
5.4	Efficient Water Heating	1.5	<input type="checkbox"/>
5.5	Efficient Water Heating	2.0	<input type="checkbox"/>
5.6	Efficient Water Heating	2.5	<input type="checkbox"/>
6.1*	Renewable Electric Energy (3 credits max)	1.0	<input type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>

a. An alternative heating source sized at a maximum of 0.5 W/ft² (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.
e. 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.

MERCER BUILDERS LLC
3026 78th Ave SE
Mercer Island, WA 98040
(206) 275.1234
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NO.	DATE	REVISION

AREA & ENERGY CALCULATIONS
MASUDA RESIDENCE
6629 SE 32ND ST.
MERCER ISLAND, WA 98040

SCALE 1/8"=1'-0"
DATE 06/04/21

SHEET NO. A-4.2

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

- 1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2018 EDITION).
2. DESIGN LOADING CRITERIA:
GARAGES
FLOOR LIVE LOAD (PASSENGER VEHICLES) 40 PSF
FLOOR CONCENTRATED LOAD (PASSENGER VEHICLES) 3000 LBS
HANDRAILS AND GUARDS
GUARDRAILS/BALCONY RAILS 50 PLF
GUARDRAILS/BALCONY RAILS CONCENTRATED LOAD 200 LBS
RESIDENTIAL - ONE AND TWO-FAMILY DWELLINGS
FLOOR LIVE LOAD 40 PSF
ROOF
ROOF LIVE LOAD 25 PSF
MISCELLANEOUS LOADS
STAIR AND CORRIDOR LIVE LOAD (UNLESS OTHERWISE INDICATED) . . . 100 PSF
DECKS 1.5 x AREA SERVED
ENVIRONMENTAL LOADS
SNOW Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pg=25 PSF, Pf=20 PSF
WIND Gcpi=0.18, 110 MPH, RISK CATEGORY II, EXPOSURE "C"
EARTHQUAKE . ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS
SITE CLASS=0, Ss=150, Sds=1.46, S1=0.50, SD1=0.5, Cs=0.15
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.

- 5. 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.

- 6. 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".

- 7. 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 ERRECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

QUALITY ASSURANCE

- 10. UNLESS OTHERWISE NOTED, THE FOLLOWING ELEMENTS COMPRISE THE SEISMIC-FORCE-RESISTING SYSTEM AND ARE SUBJECT TO SPECIAL INSPECTION FOR SEISMIC RESISTANCE IN ACCORDANCE WITH SECTION 1705.12 OF THE INTERNATIONAL BUILDING CODE.
A. STRUCTURAL WOOD SHEAR WALL SYSTEMS REQUIRE PERIODIC INSPECTION FOR FIELD GLUEING, NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE SEISMIC FORCE, RESISTING SYSTEM INCLUDING SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLDDOWNS.

GEOTECHNICAL

- 11. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH OR COMPACTED STRUCTURAL FILL AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

ALLOWABLE SOIL PRESSURE (NATIVE SOILS / STRUCTURAL FILL). 3000 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED). . . 40 PCF + 10H PSF/40 PCF 4" DIA. PILE CAPACITY (COMPRESSION) 10 T

SOILS REPORT REFERENCE:
PROPOSED THREE LOT SHORT-PLAT
6829 SE 32ND ST
MERCER ISLAND, WA

PREPARED BY: GEOTECH CONSULTANTS, INC. ON NOVEMBER 27, 2013
JN 13451

RENOVATION

- 12. 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.

- 13. 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.

- 14. 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.

WOOD

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

Table with 4 columns: JOISTS AND BEAMS, MEMBERS, DOUGLAS FIR-LARCH NO., MINIMUM BASE VALUE, Fb or Fc = 850, 1000, 1350 PSI

- 16. 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:

Table with 4 columns: PSL (2.0E WS), LVL (2.0E-2600FB WS), LSL (1.55E), Fb, E, Fv = 2900, 2600, 2325 PSI, 2000, 2000, 1550 KSI, 290, 285, 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.

- 17. PREFABRICATED PLYWOOD WEB JOISTS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. DESIGN SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF WASHINGTON. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.

THE DESIGN SHOWN ON THE PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION, IN ACCORDANCE WITH ICC-ES REPORT ESR-1157. ALTERNATE PLYWOOD WEB JOIST 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.

- 18. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION, IN ACCORDANCE WITH ICC-ES REPORT ESR-1157. ALTERNATE PLYWOOD WEB JOIST 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.

- 19. 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.

- 20. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2019. 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 T1J JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" 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.

- 21. WOOD FASTENERS

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

Table with 3 columns: SIZE, LENGTH, DIAMETER. 8d: 2-1/2", 0.131"; 16d BOX: 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.

- 22. 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 NOTCH.

- C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

- 23. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

- 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.

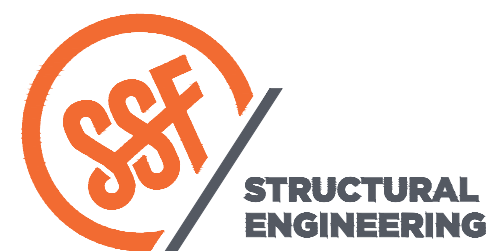
- B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS 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. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 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 AT ALL BEARING POINTS. 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. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER UNLESS OTHERWISE NOTED.



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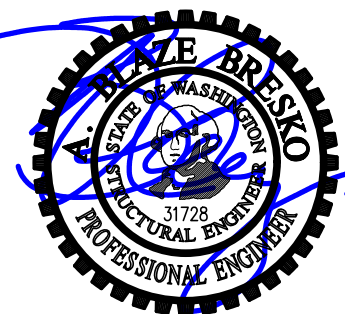


Table with 2 columns: DRAWN: SJB, DESIGN: SLW, CHECKED: ABB, APPROVED: ABB

Table with 2 columns: REVISIONS: 1 PERMIT REVISIONS MAY 28, 2021

JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:

6829 SE 32nd St Remodel
6829 SE 32nd St
Mercer Island, WA

ARCHITECT:
Mercer Builders LLC
3026 78th Ave SE
Mercer Island, WA 98040

ISSUE:

Permit

SHEET TITLE:

General Structural Notes

SCALE:

DATE: June 4, 2021

PROJECT NO: 11641-2020-05

SHEET NO:

S1.1



DRAWN:	SJB
DESIGN:	SLW
CHECKED:	ABB
APPROVED:	ABB

REVISIONS:	
1	PERMIT REVISIONS MAY 28, 2021

JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:
6829 SE 32nd St Remodel
 6829 SE 32nd St
 Mercer Island, WA

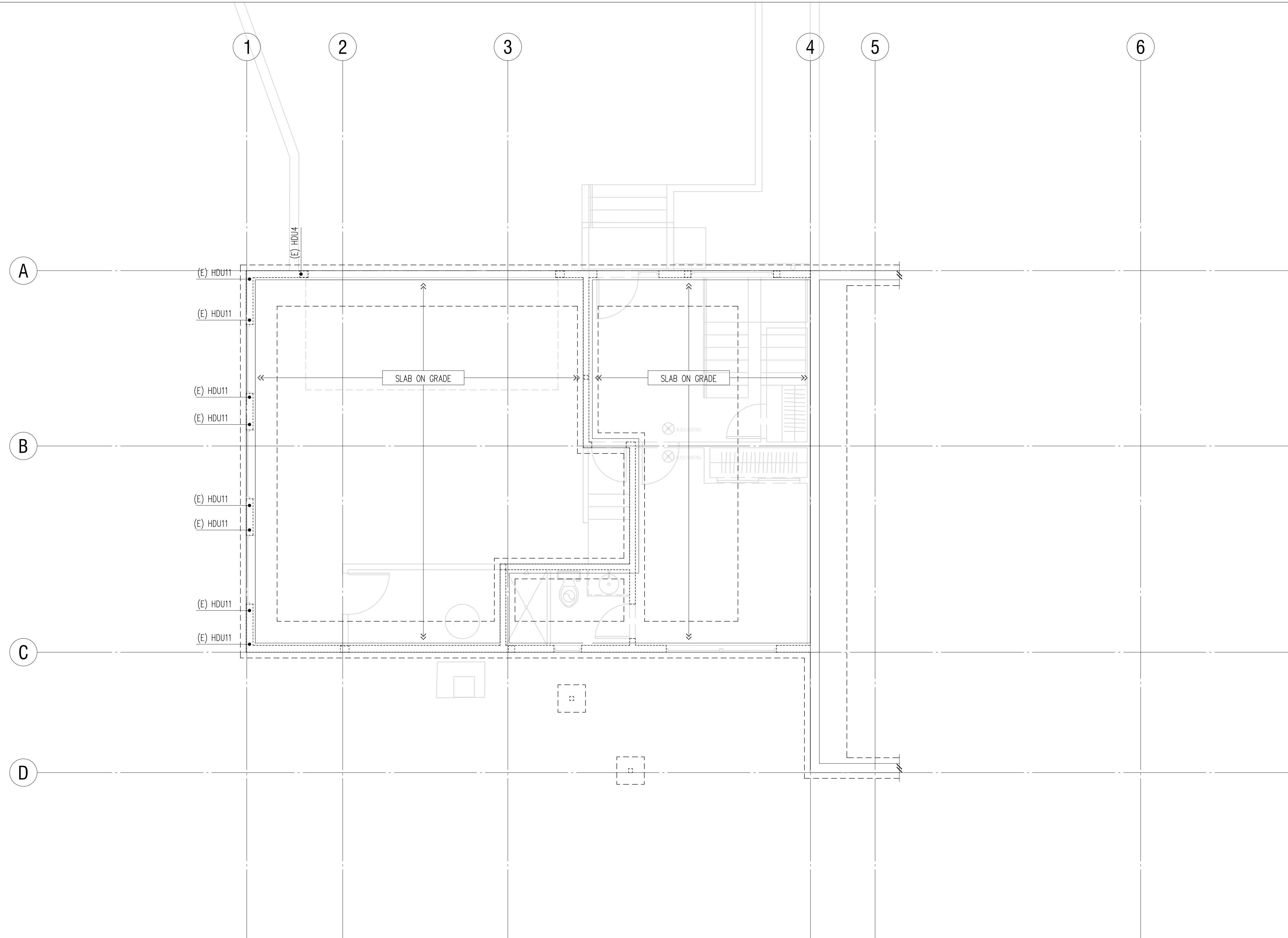
ARCHITECT:
Mercer Builders LLC
 3026 78th Ave SE
 Mercer Island, WA 98040

ISSUE:
Permit

SHEET TITLE:
Foundation Plan

SCALE: 1/4" = 1'-0"
 DATE: June 4, 2021
 PROJECT NO: 11641-2020-05
 SHEET NO:


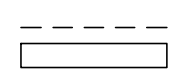
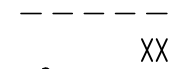
S2.1



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO THE FOUNDATION.
- THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW GRADE.
- STEP FOOTINGS AS REQUIRED TO ACCOMMODATE CHANGES IN GRADE PER DETAIL 10/S3.1.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Legend

-  (E) STRUCTURAL WALL OR POST ABOVE
-  EXISTING STEM WALL & FOOTING
-  HOLDOWN

Foundation Plan

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





DRAWN: SJB
DESIGN: SLW
CHECKED: ABB
APPROVED: ABB

REVISIONS:
1 PERMIT REVISIONS MAY 28, 2021

JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:
6829 SE 32nd St Remodel
6829 SE 32nd St
Mercer Island, WA

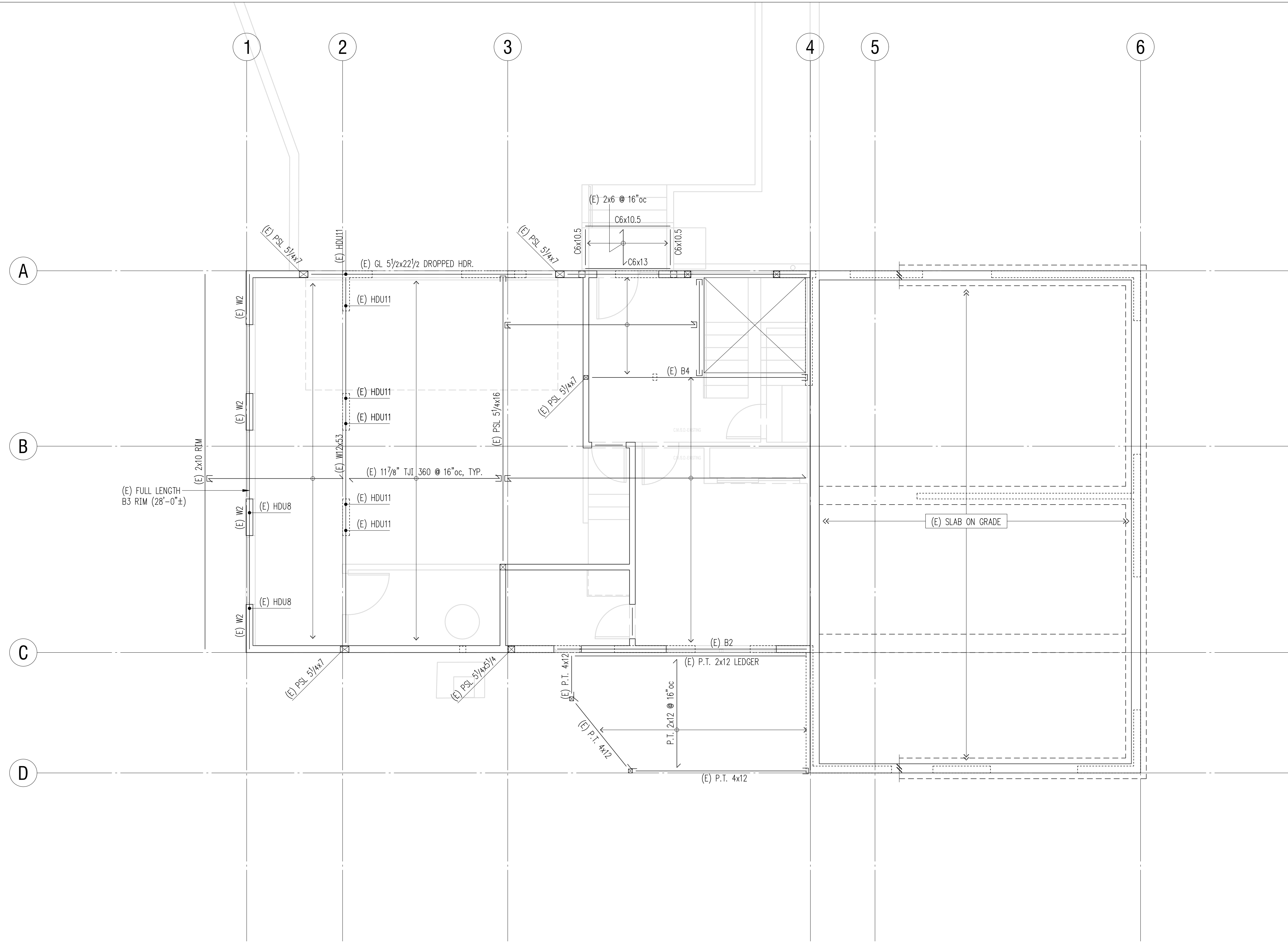
ARCHITECT:
Mercer Builders LLC
3026 78th Ave SE
Mercer Island, WA 98040

ISSUE:
Permit

SHEET TITLE:
Main Floor Framing Plan

SCALE: 1/4" = 1'-0"
DATE: June 4, 2021
PROJECT NO: 11641-2020-05
SHEET NO:

S2.2



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- FLOOR SHEATHING SHALL BE 3/4" TONGUE AND GROOVE A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 48/24). GLUE AND NAIL AT ALL FRAMED PANEL EDGES WITH 8d AT 6"oc AND TO ALL INTERMEDIATE FRAMING AT 12"oc.
- FLOOR JOISTS SHALL BE 11-7/8" TJI AT 16"oc. SEE PLAN FOR SIZE AND DEPTH. FULL DEPTH BLOCKING/BRIDGING AT 8'-0"oc.
- HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2) 2x6 MINIMUM. PROVIDE (2) TRIMMER STUDS (MINIMUM) AT EACH END OF ALL HEADERS UNLESS NOTED OTHERWISE ON PLANS. SEE DETAIL 6/S4.1 FOR TYPICAL INSTALLATION.
- PROVIDE (2) STUDS (MINIMUM) AT EACH END OF ALL BEAMS UNLESS NOTED OTHERWISE ON PLANS. BEAR BEAM FULLY ON BUILT UP COLUMN AND PROVIDE AC, PC, OR LPC CAP.
- "W#" INDICATES SHEARWALL. SEE SHEARWALL SCHEDULE FOR CONSTRUCTION REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE ON PLANS.
- MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) 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%.

- ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO THE FOUNDATION.
- SPLICE ALL TOP PLATE SPLICES PER DETAIL 10/S4.1.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Beam Schedule

MARK	BEAM	HANGER	BRG. STUDS
B1	LSL 1 3/4x11 7/8	HU11	2
B2	PSL 3 1/2x11 7/8	HHUS410	3
B3	PSL 5 1/4x11 7/8	HGUS5.50/12	4
B4	PSL 7x11 7/8	HGUS7.25/12	5

Legend

- (E) STRUCTURAL WALL OR POST ABOVE
- NON-STRUCTURAL WALL BELOW
- EXISTING WALL OR POST BELOW
- SHEARWALL PER
- SPAN DIRECTION
- EXTENT OF JOISTS
- EXISTING HEADER/BREAM
- HANGER
- HOLDOWN

Main Floor Framing Plan

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





DRAWN: SJB
DESIGN: SLW
CHECKED: ABB
APPROVED: ABB

REVISIONS:
1 PERMIT REVISIONS MAY 28, 2021

JURISDICTIONAL APPROVAL STAMP:

PROJECT TITLE:
6829 SE 32nd St Remodel
6829 SE 32nd St
Mercer Island, WA

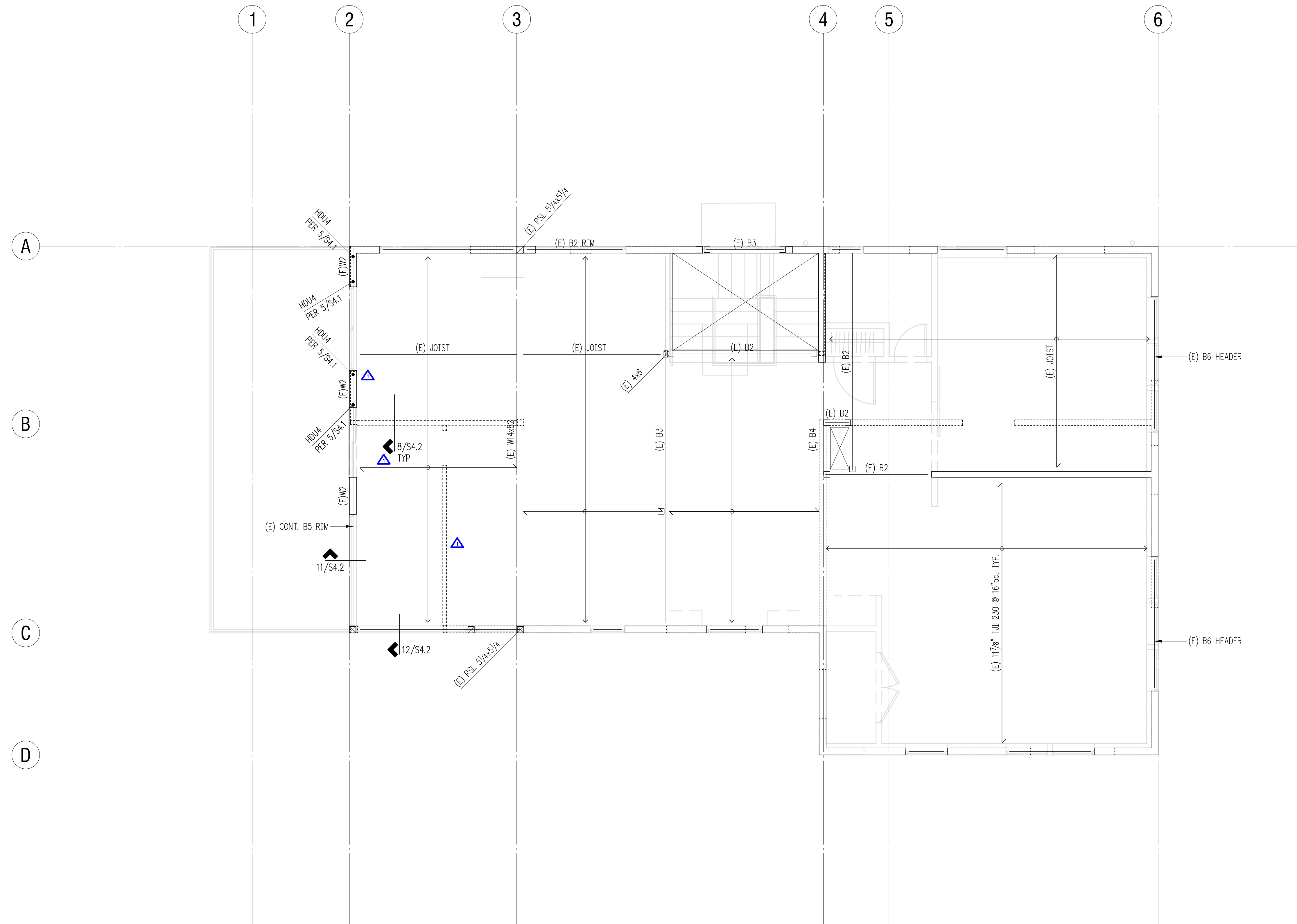
ARCHITECT:
Mercer Builders LLC
3026 78th Ave SE
Mercer Island, WA 98040

ISSUE:
Permit

SHEET TITLE:
Upper Floor Framing Plan

SCALE: 1/4" = 1'-0"
DATE: June 4, 2021
PROJECT NO: 11641-2020-05
SHEET NO:

S2.3



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- FLOOR SHEATHING SHALL BE 3/4" TONGUE AND GROOVE A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 48/24). GLUE AND NAIL AT ALL PANEL EDGES WITH 8d AT 6"oc AND TO ALL INTERMEDIATE FRAMING AT 12"oc.
- FLOOR JOISTS SHALL BE TJI AT 16"oc. SEE PLAN FOR SIZE AND DEPTH. FULL DEPTH BLOCKING/BRIDGING @ 8'-0"oc.
- HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE 2x8 MINIMUM. PROVIDE (2) TRIMMER STUDS (MINIMUM) AT EACH END OF ALL HEADERS UNLESS NOTED OTHERWISE ON PLANS. SEE DETAIL 6/S4.1 FOR TYPICAL INSTALLATION.
- PROVIDE (2) STUDS (MINIMUM) AT EACH END OF ALL BEAMS UNLESS NOTED OTHERWISE ON PLANS. BEAR BEAM FULLY ON BUILT UP COLUMN AND PROVIDE AC, PC, OR LPC CAP.
- "W#" INDICATES SHEARWALL. SEE SHEARWALL SCHEDULE FOR CONSTRUCTION REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE ON PLANS.
- MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) 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%.
- ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE CONTINUOUS FULL BEARING THROUGH FLOORS TO THE FOUNDATION.
- SPLICE ALL TOP PLATE SPLICES PER DETAIL 10/S4.1.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Beam Schedule

MARK	BEAM	HANGER	BRG. STUDS
B1	LSL 1 3/4x16	HU14	2
B2	PSL 3/2x16	HU416	3
B3	PSL 5/4x16	HGUS5.50	4
B4	LSL 7x16	HGUS7.25	5
B5	LSL 1 3/4x11 7/8	HU11	2
B6	LSL 3 1/2x11 7/8	HU412	2

Legend

- STRUCTURAL WALL OR POST ABOVE
- NON-STRUCTURAL WALL BELOW
- EXISTING WALL OR POST BELOW
- SHEARWALL PER
- SPAN DIRECTION
- EXTENT OF JOISTS
- EXISTING HEADER/BEAM
- HANGER

Upper Floor Framing Plan

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





DRAWN: SJB
 DESIGN: SLW
 CHECKED: ABB
 APPROVED: ABB

REVISIONS:
 1 PERMIT REVISIONS MAY 28, 2021

JURISDICTIONAL APPROVAL STAMP:

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 6829 SE 32nd St
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ARCHITECT:
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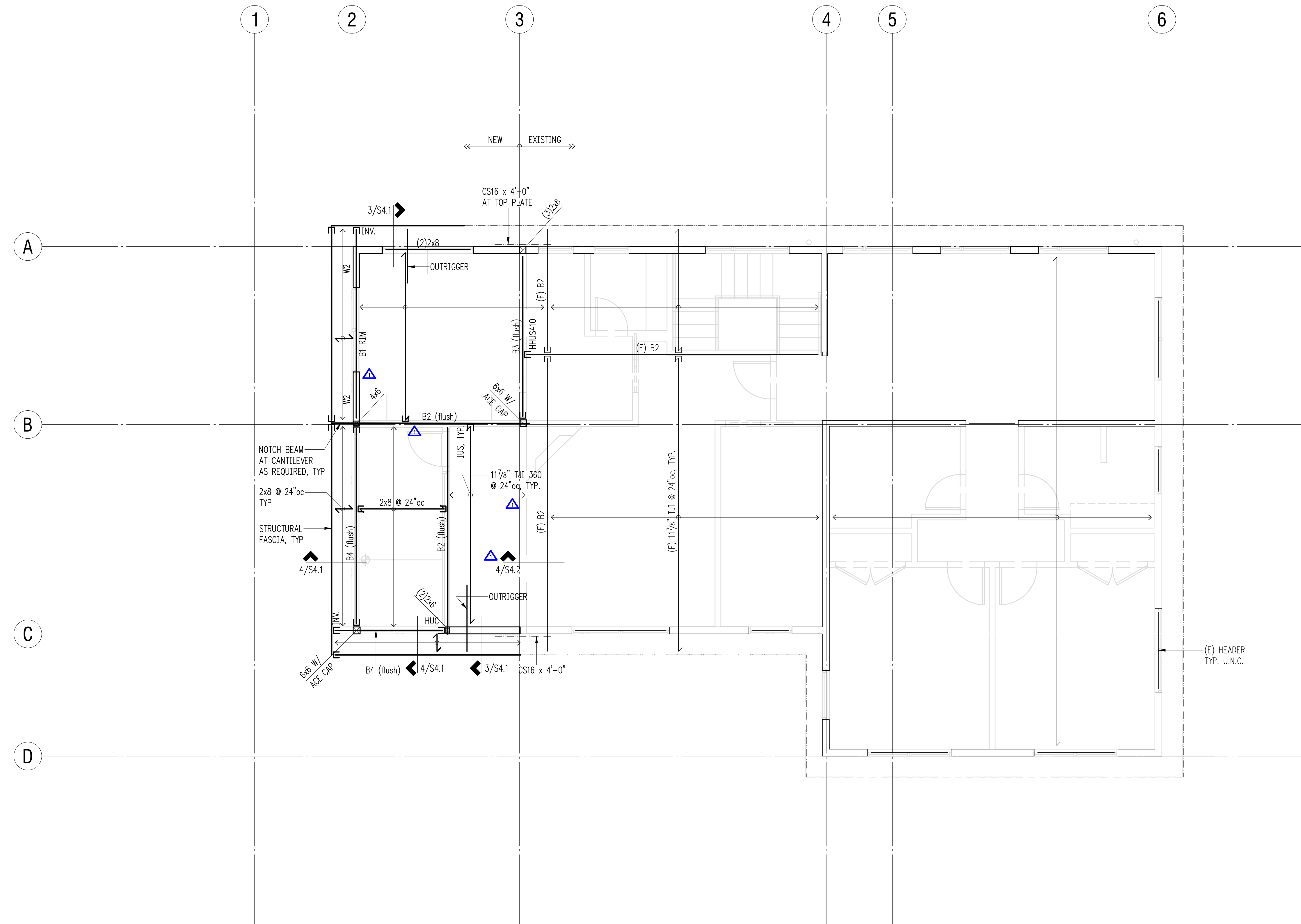
ISSUE:
 Permit

SHEET TITLE:

Roof Framing Plan

SCALE: 1/4" = 1'-0"
 DATE: June 4, 2021
 PROJECT NO: 11641-2020-05
 SHEET NO:

S2.4



Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- ROOF SHEATHING SHALL BE 1/2" A.P.A. RATED PANELS (EXPOSURE 1, SPAN RATING 32/16). FACE GRAIN PERPENDICULAR TO SUPPORTS OVER ROOF FRAMING PER PLAN. NAIL SHEATHING AT ALL FRAMED PANEL EDGES WITH 8d AT 6"oc AND TO ALL INTERMEDIATE FRAMING AT 12"oc.
- ROOF FRAMING SHALL BE TJI AT 24"oc. SEE PLAN FOR DEPTH.
- HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE 2x8 MINIMUM. PROVIDE (2) TRIMMER STUDS (MINIMUM) AT EACH END OF ALL HEADERS UNLESS NOTED OTHERWISE ON PLANS. SEE DETAIL 6/S4.1 FOR TYPICAL INSTALLATION.
- PROVIDE (2) STUDS (MINIMUM) AT EACH END OF ALL BEAMS UNLESS NOTED OTHERWISE ON PLANS. BEAR BEAM FULLY ON BUILT UP COLUMN AND PROVIDE AC, PC, OR LPC CAP.
- "W#" INDICATES SHEARWALL. SEE SHEARWALL SCHEDULE FOR CONSTRUCTION REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE ON PLANS.
- PROVIDE H2.5 HURRICANE TIE AT EACH TRUSS/RAFTER WHERE IT BEARS ON EXTERIOR WALL.
- MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) 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%.
- SPLICE ALL TOP PLATE SPLICES PER DETAIL 10/S4.1.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

Beam Schedule

MARK	BEAM	HANGER	BRG. STUDS
B1	LSL 1 3/4x11 7/8	HU14	2
B2	PSL 3 1/2x11 7/8	HU416	3
B3	PSL 5 1/4x11 7/8	HGUS5.50	4
B4	6x8 DF#1	HU68/HUC68	3

Legend

- STRUCTURAL WALL OR POST BELOW
- NON-STRUCTURAL WALL BELOW
- EXISTING WALL OR POST BELOW
- SHEARWALL PER
- SPAN DIRECTION
- EXTENT OF JOISTS
- HEADER/BEAM PER PLAN
- EXISTING HEADER/BEAM
- HANGER

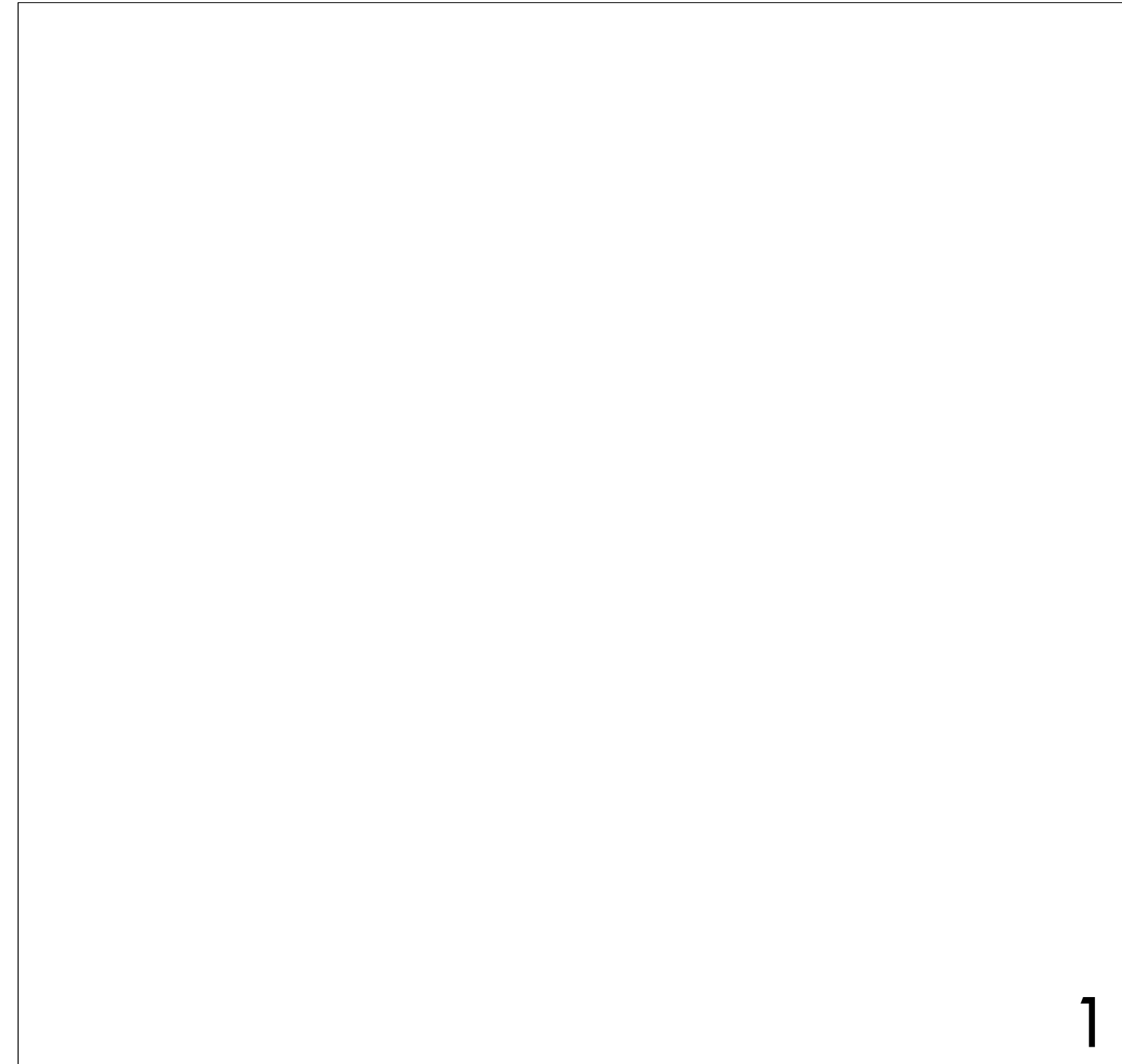
Roof Framing Plan

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





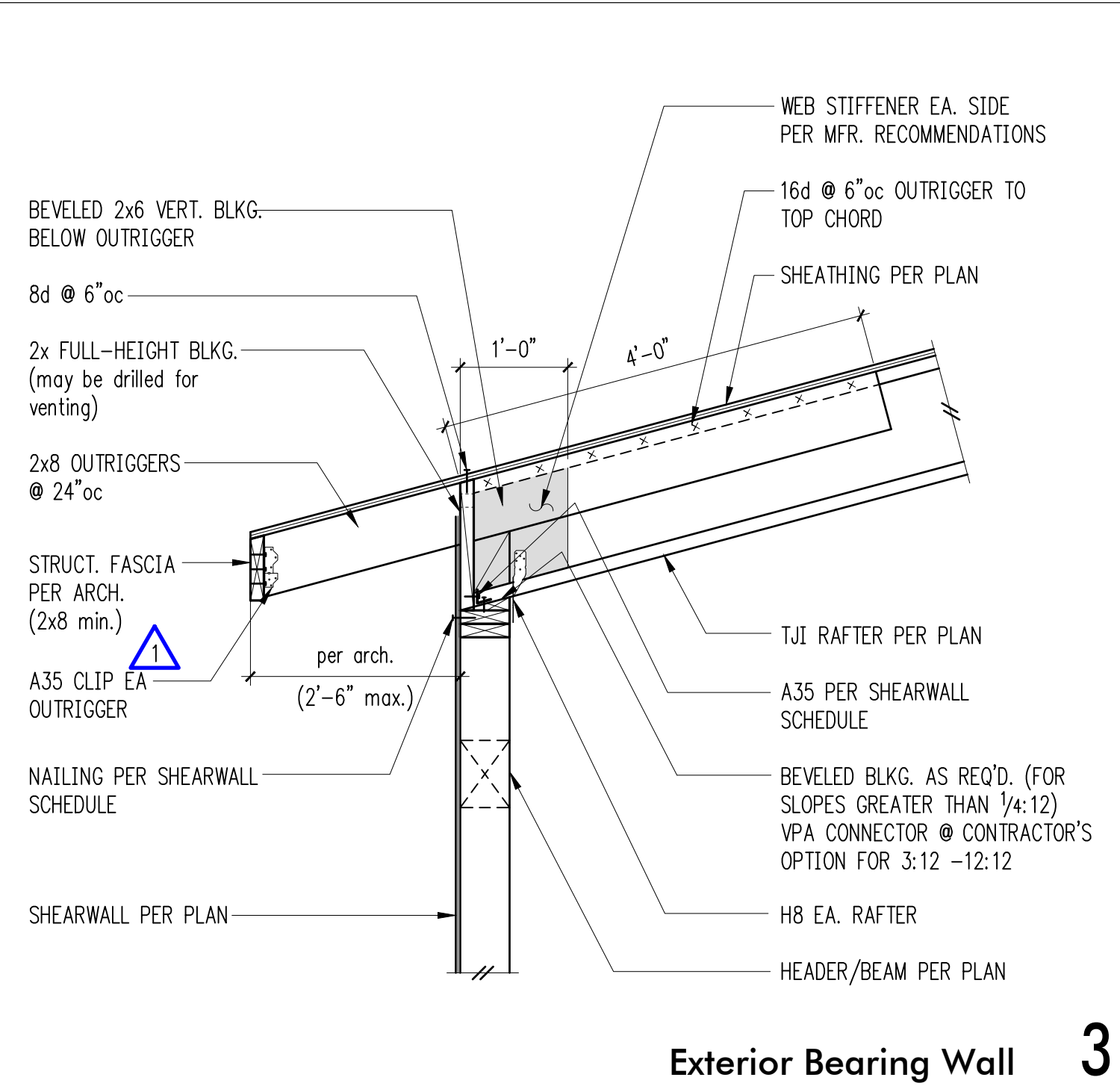
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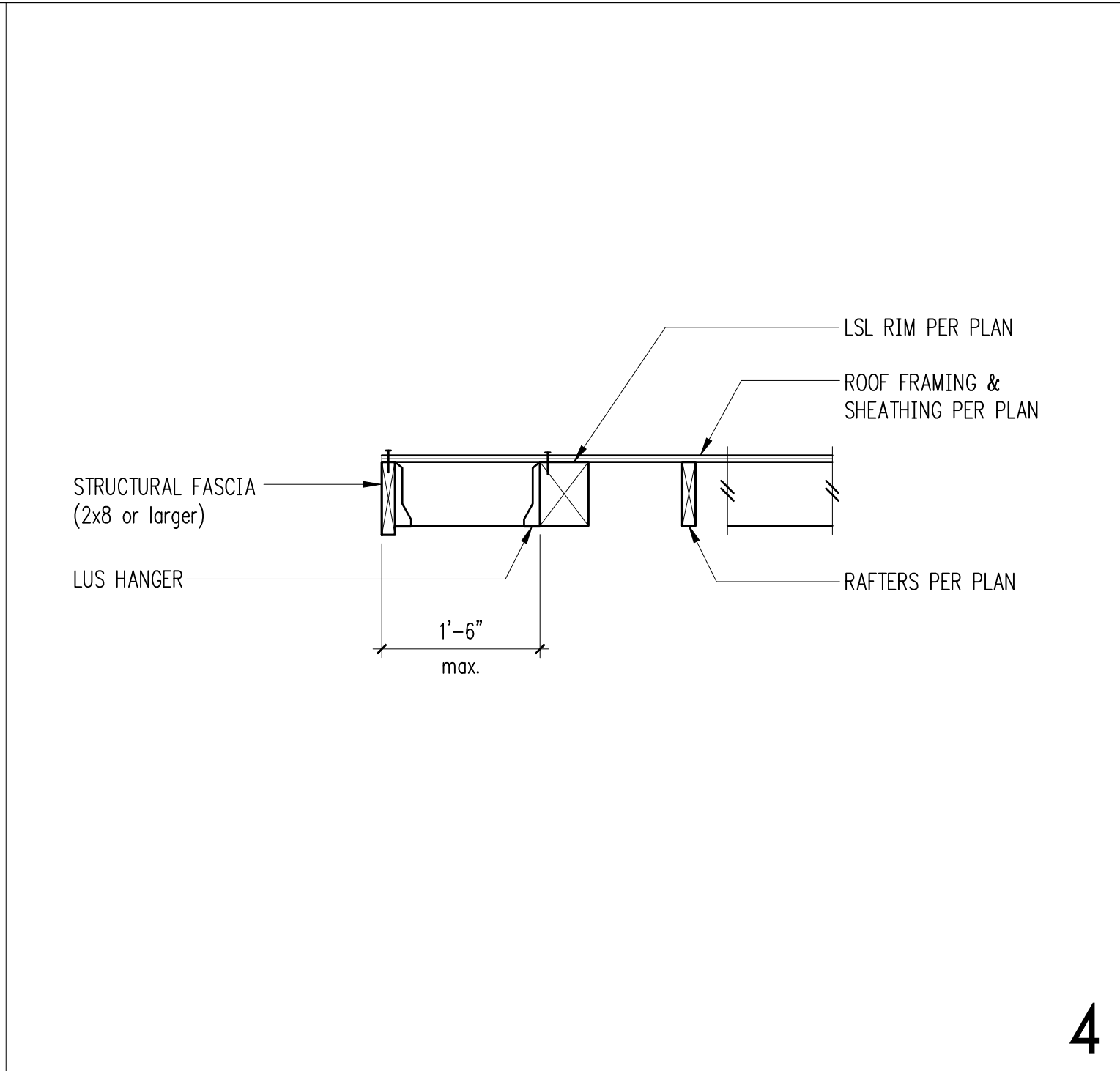
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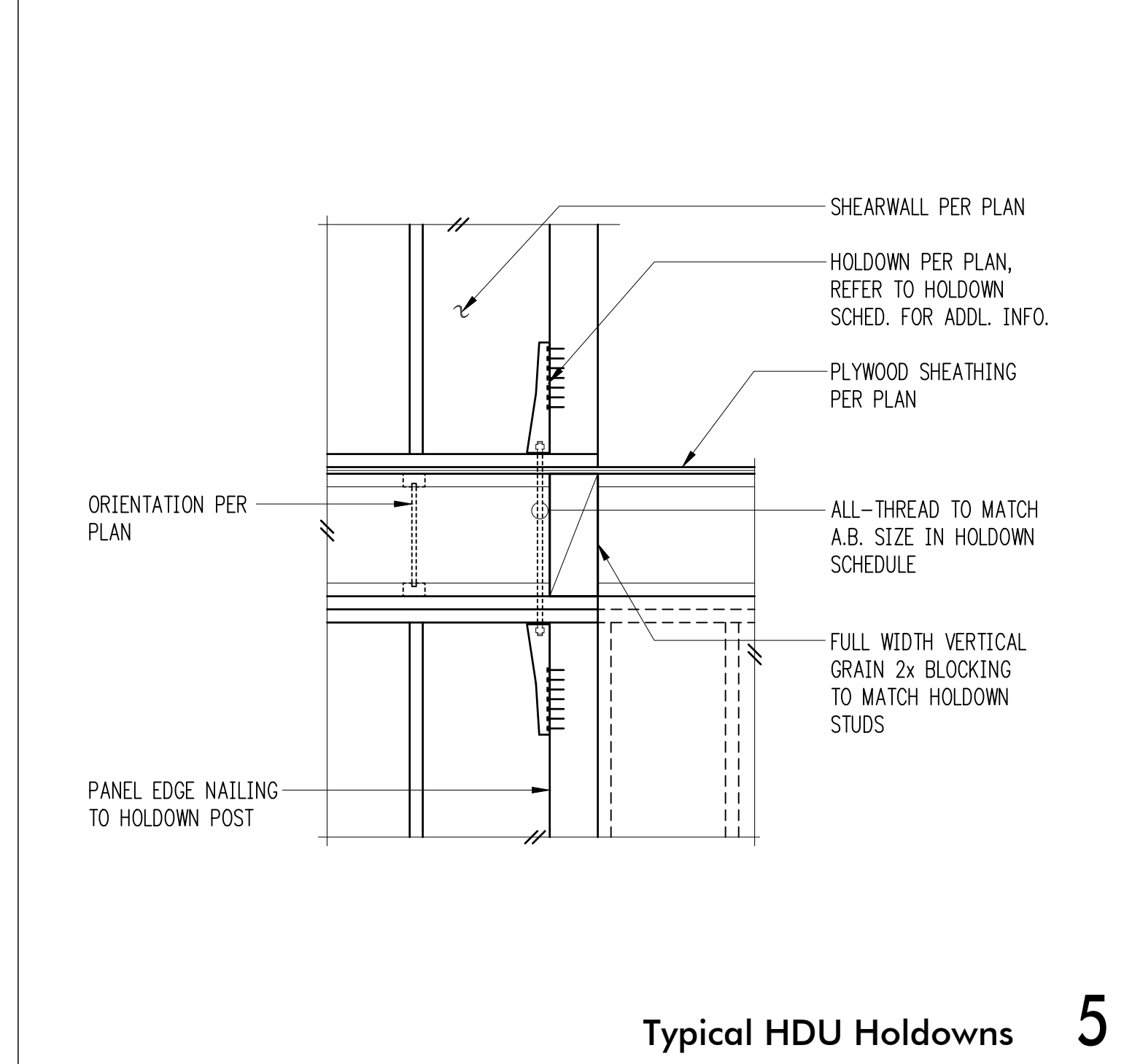
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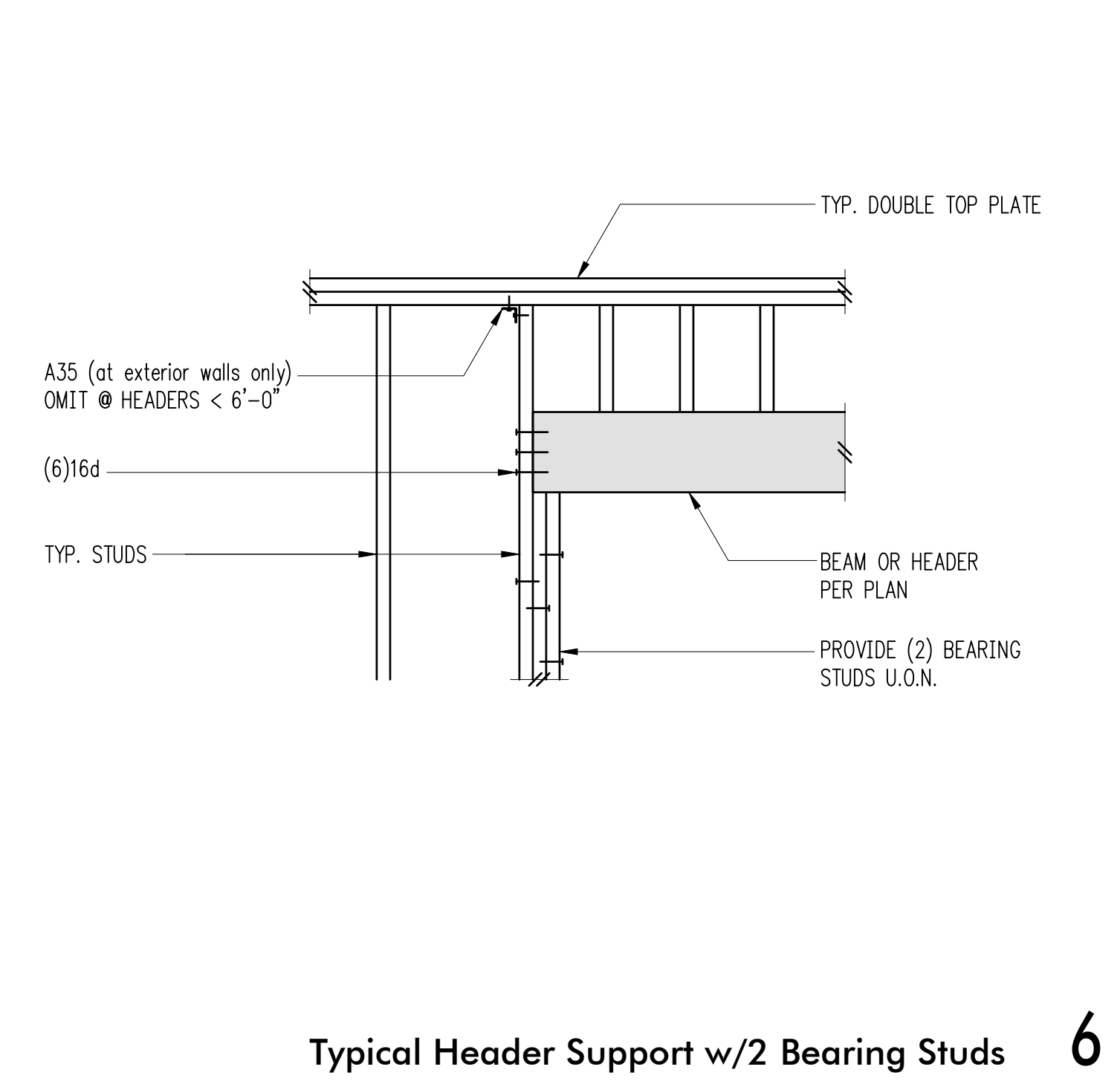
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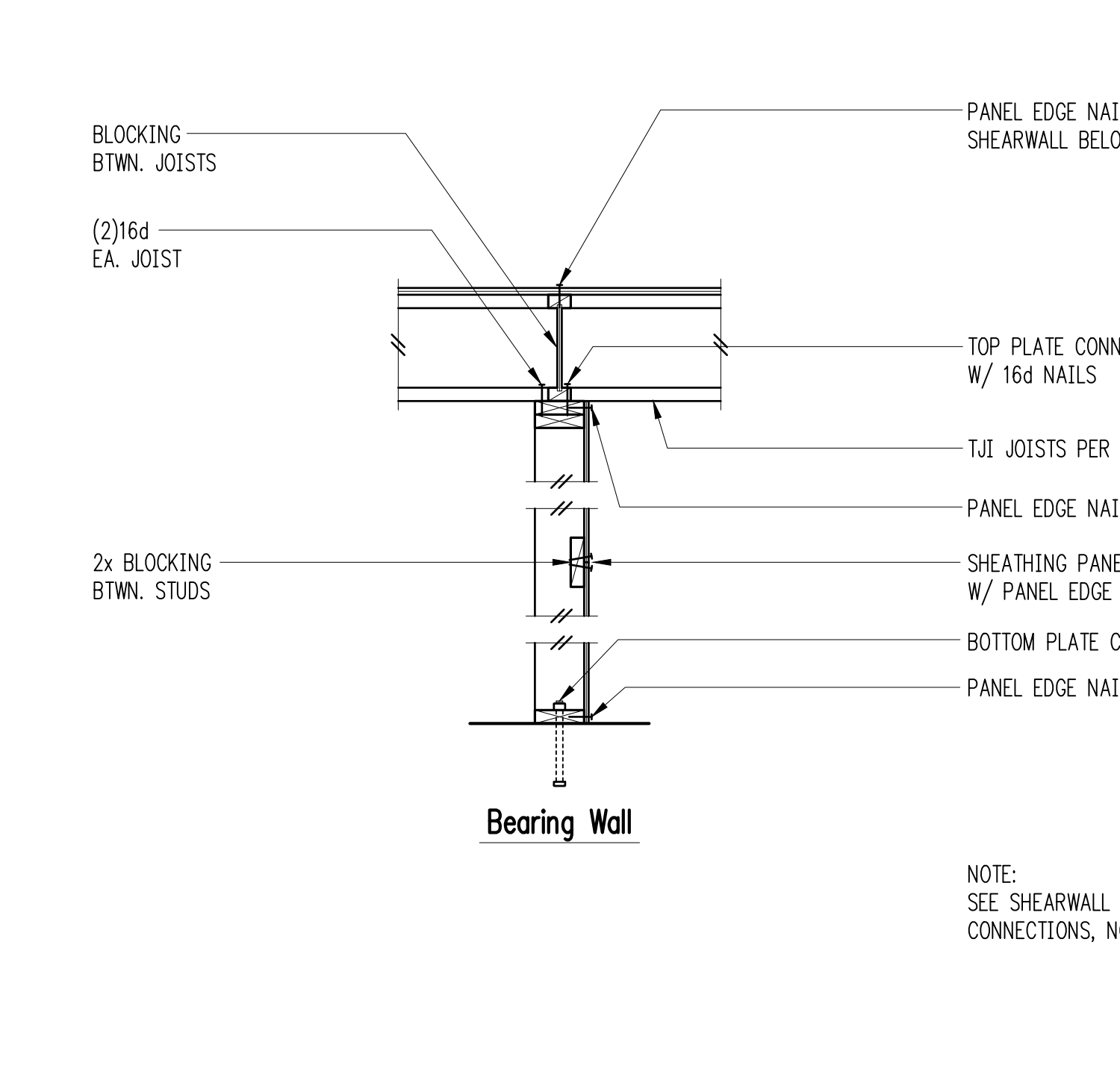
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Typical HDU Holdowns 5



Typical Header Support w/2 Bearing Studs 6

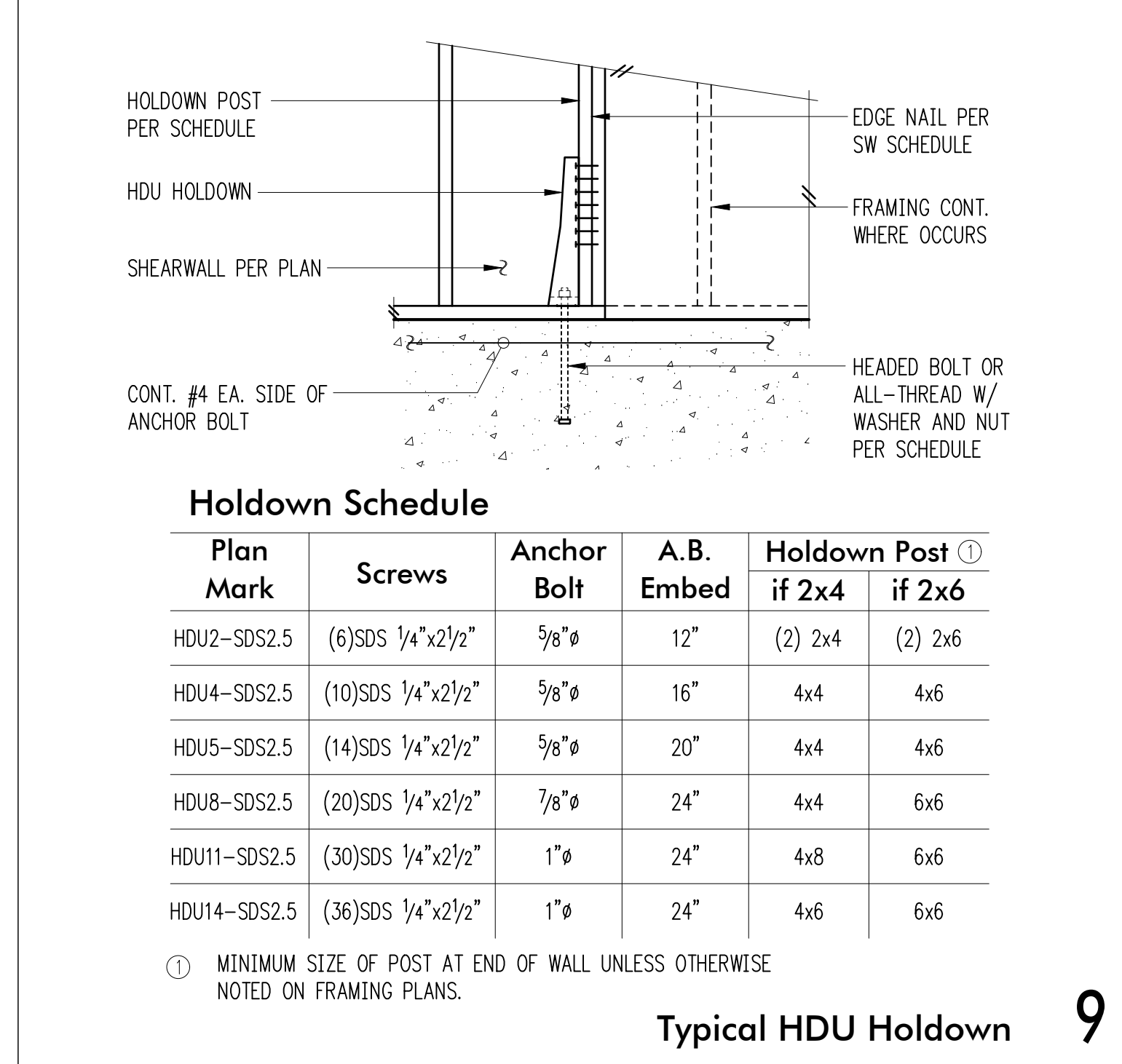


Bearing Wall

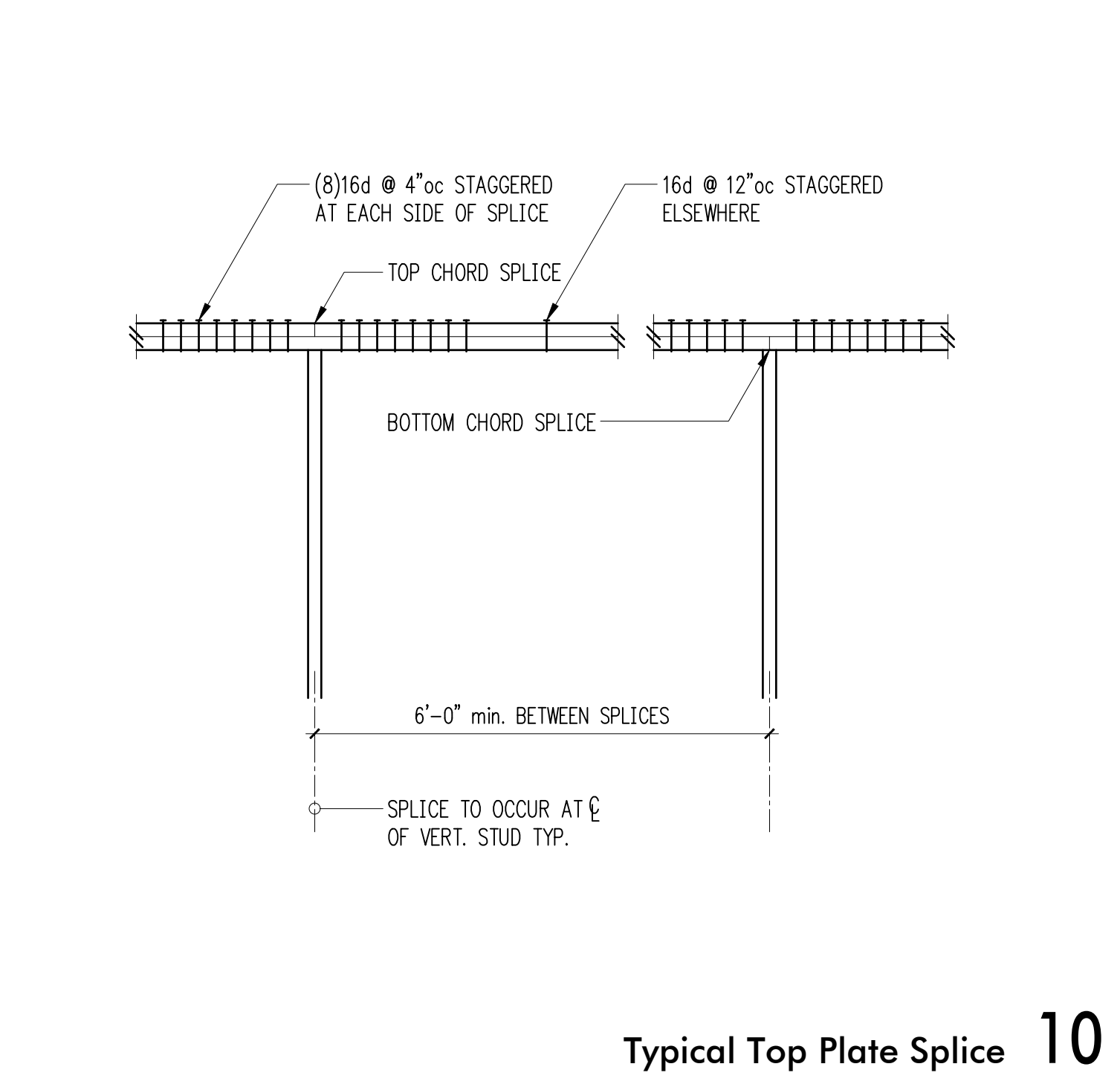
Non-Bearing Wall

NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND CONNECTIONS, NOT OTHERWISE NOTED

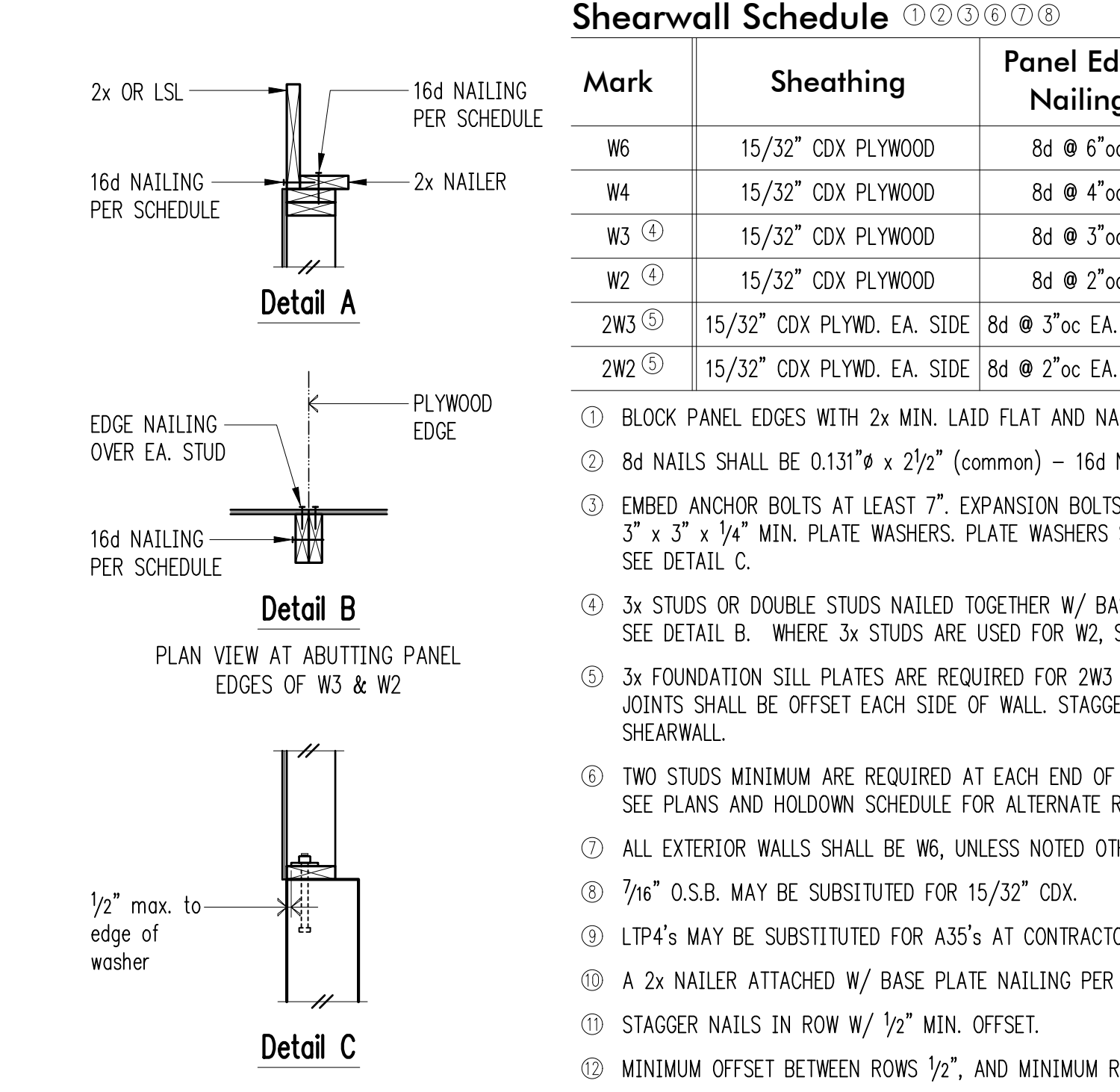
Typical Shearwall Construction 8



Typical HDU Holdown 9



Typical Top Plate Splice 10



Shearwall Schedule 11

Mark	Sheathing	Panel Edge Nailing	Top Plate Connection		Base Plate Connection	
			if TJI	if 2x or LSL	at Wood	at Concrete
W6	15/32" CDX PLYWOOD	8d @ 6"oc	16d @ 6"oc	A35 @ 24"oc	16d @ 6"oc	5/8" A.B. @ 48"oc
W4	15/32" CDX PLYWOOD	8d @ 4"oc	16d @ 4"oc	A35 @ 16"oc	16d @ 4"oc	5/8" A.B. @ 32"oc
W3	15/32" CDX PLYWOOD	8d @ 3"oc	(2)rows 16d @ 6"oc	A35 @ 12"oc	16d @ 3"oc	5/8" A.B. @ 16"oc
W2	15/32" CDX PLYWOOD	8d @ 2"oc	(2)rows 16d @ 4 1/2"oc	A35 @ 9"oc	(2)rows 16d @ 4 1/2"oc	5/8" A.B. @ 12"oc
2W3	15/32" CDX PLYWOOD, EA. SIDE	8d @ 3"oc EA. SIDE	n/a	A35 @ 6"oc	(2)rows 16d @ 3"oc	5/8" A.B. @ 16"oc
2W2	15/32" CDX PLYWOOD, EA. SIDE	8d @ 2"oc EA. SIDE	n/a	HGA10 @ 8"oc	(2)rows 16d @ 2"oc	5/8" A.B. @ 12"oc

- BLOCK PANEL EDGES WITH 2x MIN. LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d @ 12"oc.
- 8d NAILS SHALL BE 0.131" x 2 1/2" (common) - 16d NAILS SHALL BE 0.135" x 3 1/2" (box)
- EMBED ANCHOR BOLTS AT LEAST 7". EXPANSION BOLTS MAY BE SUBSTITUTED FOR ANCHOR BOLTS WITH 4" EMBEDMENT. ALL BOLTS SHALL HAVE 3" x 3" x 1/4" MIN. PLATE WASHERS. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE(S) WITH SHEATHING. SEE DETAIL C.
- 3x STUDS OR DOUBLE STUDS NAILED TOGETHER W/ BASE PLATE NAILING ARE REQUIRED AT ABUTTING PANEL EDGES OF W3 AND W2. SEE DETAIL B. WHERE 3x STUDS ARE USED FOR W2, STAGGER NAILS AT ADJOINING PANEL EDGES.
- 3x FOUNDATION SILL PLATES ARE REQUIRED FOR 2W3 AND 2W2. 3x STUDS ARE REQUIRED AT ABUTTING PANEL EDGES AND PANEL JOINTS SHALL BE OFFSET EACH SIDE OF WALL. STAGGER NAILS AT ADJOINING PANEL EDGES. 3x STUD, MIN., REQUIRED AT END OF SHEARWALL.
- TWO STUDS MINIMUM ARE REQUIRED AT EACH END OF ALL SINGLE-SIDED SHEARWALLS. ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING. SEE PLANS AND HOLDOWN SCHEDULE FOR ALTERNATE REQUIREMENTS.
- ALL EXTERIOR WALLS SHALL BE W6, UNLESS NOTED OTHERWISE.
- 7/8" O.S.B. MAY BE SUBSTITUTED FOR 15/32" CDX.
- LTP4'S MAY BE SUBSTITUTED FOR A35'S AT CONTRACTOR'S OPTION.
- A 2x NAILER ATTACHED W/ BASE PLATE NAILING PER DETAIL A MAY BE SUBSTITUTED FOR A35'S AT CONTRACTOR'S OPTION.
- STAGGER NAILS IN ROW W/ 1/2" MIN. OFFSET.
- MINIMUM OFFSET BETWEEN ROWS 1/2", AND MINIMUM RIM OR JOIST 3 1/2" WIDE.

REVISIONS:
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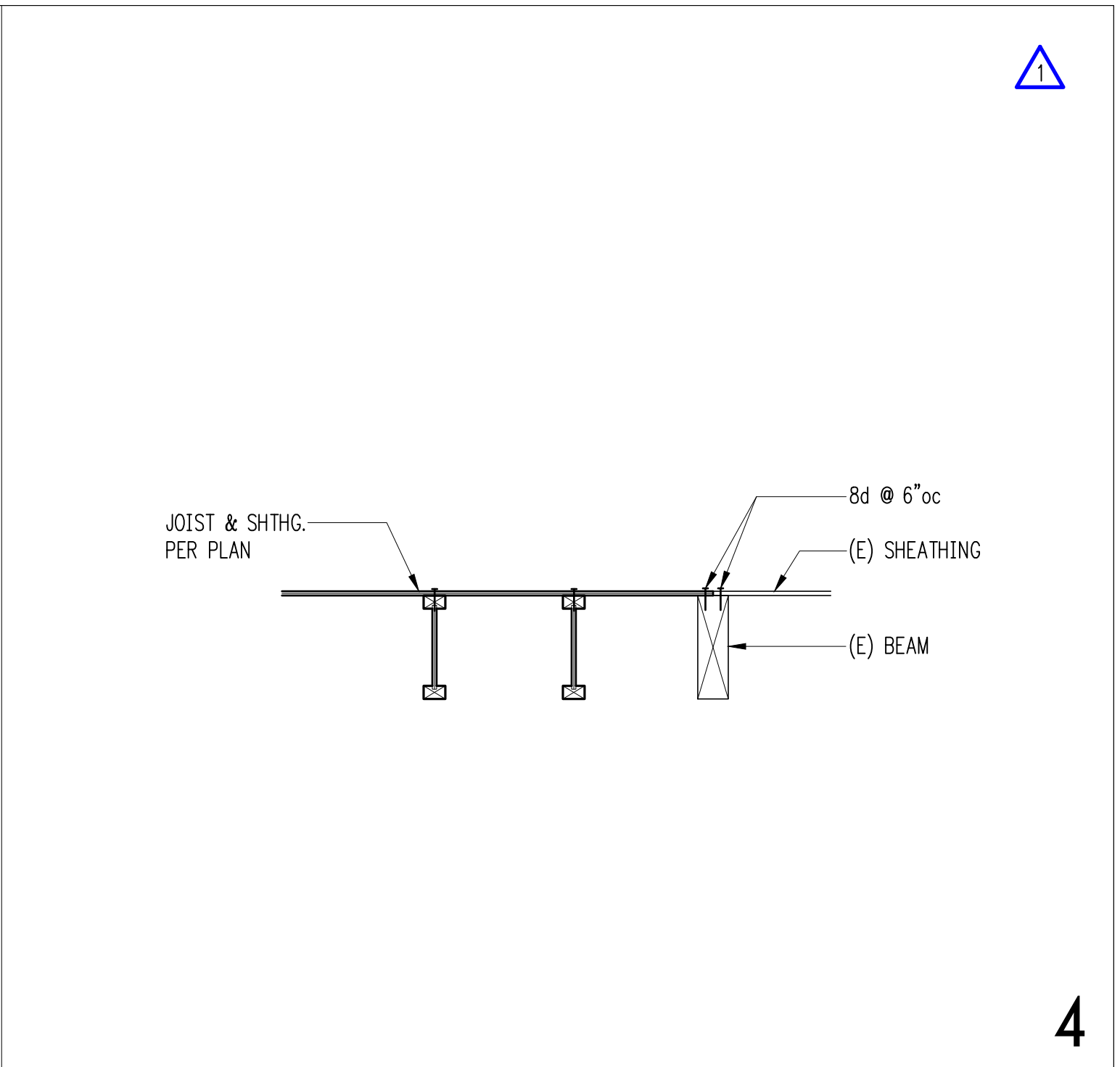
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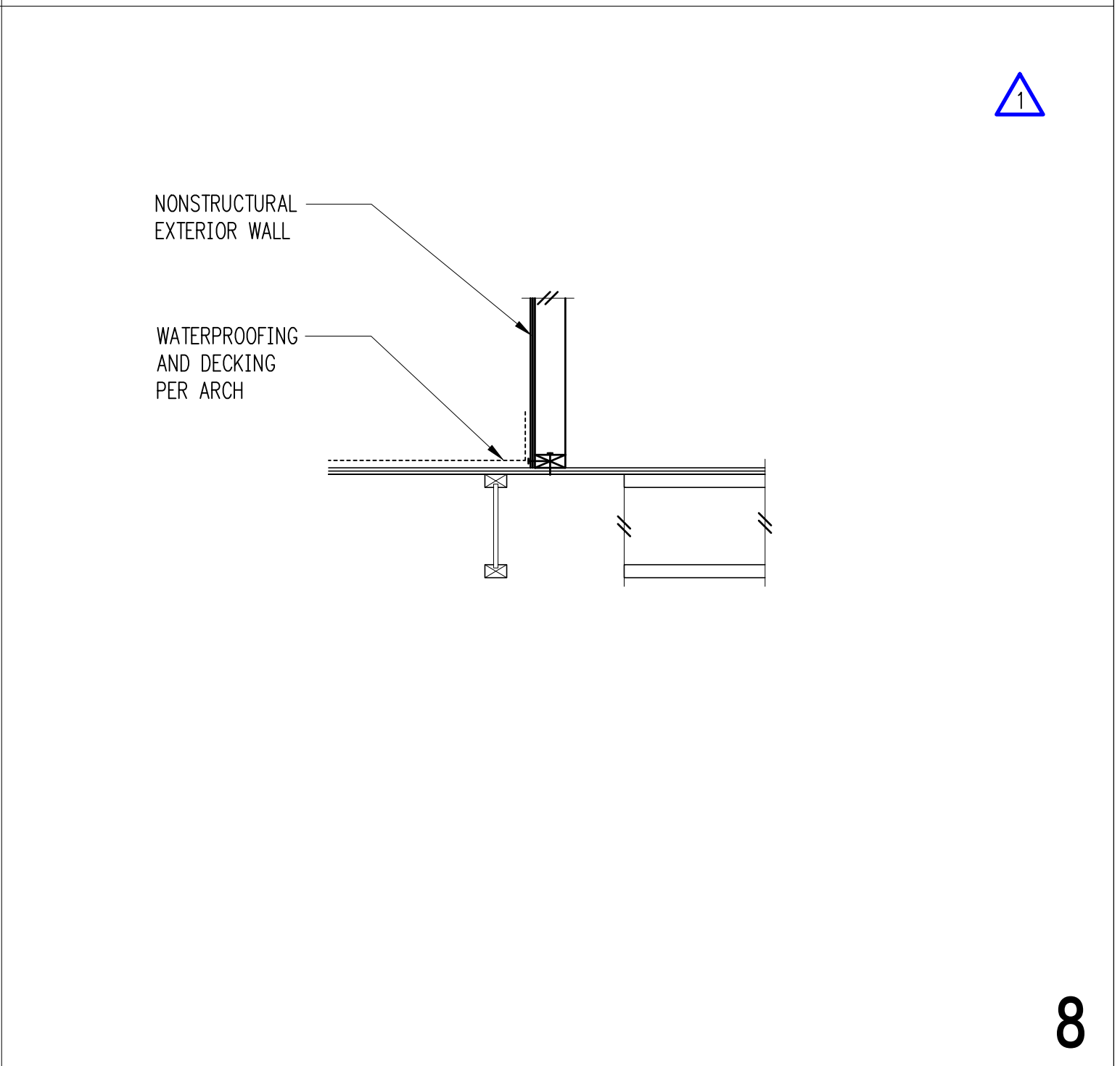
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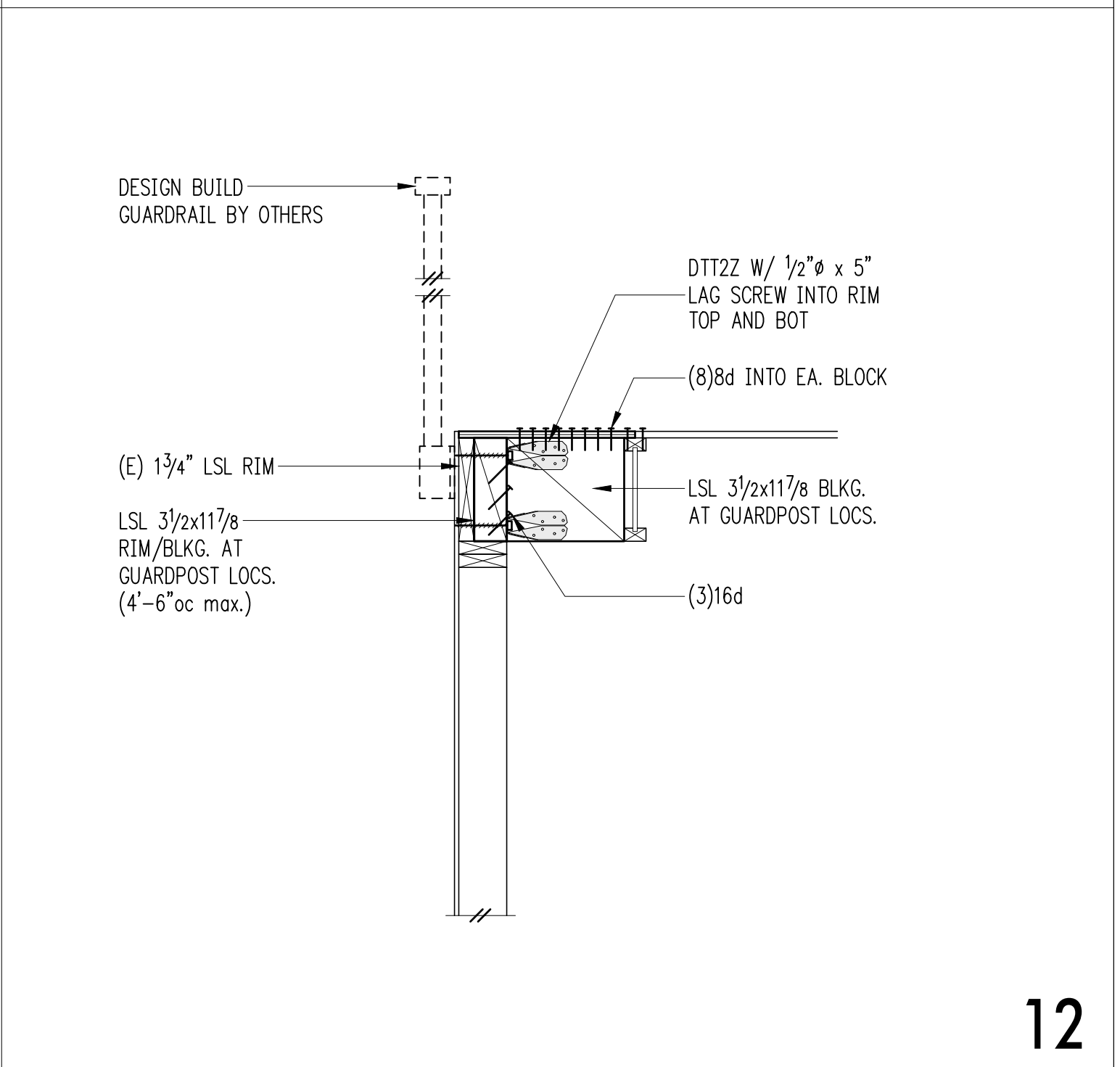
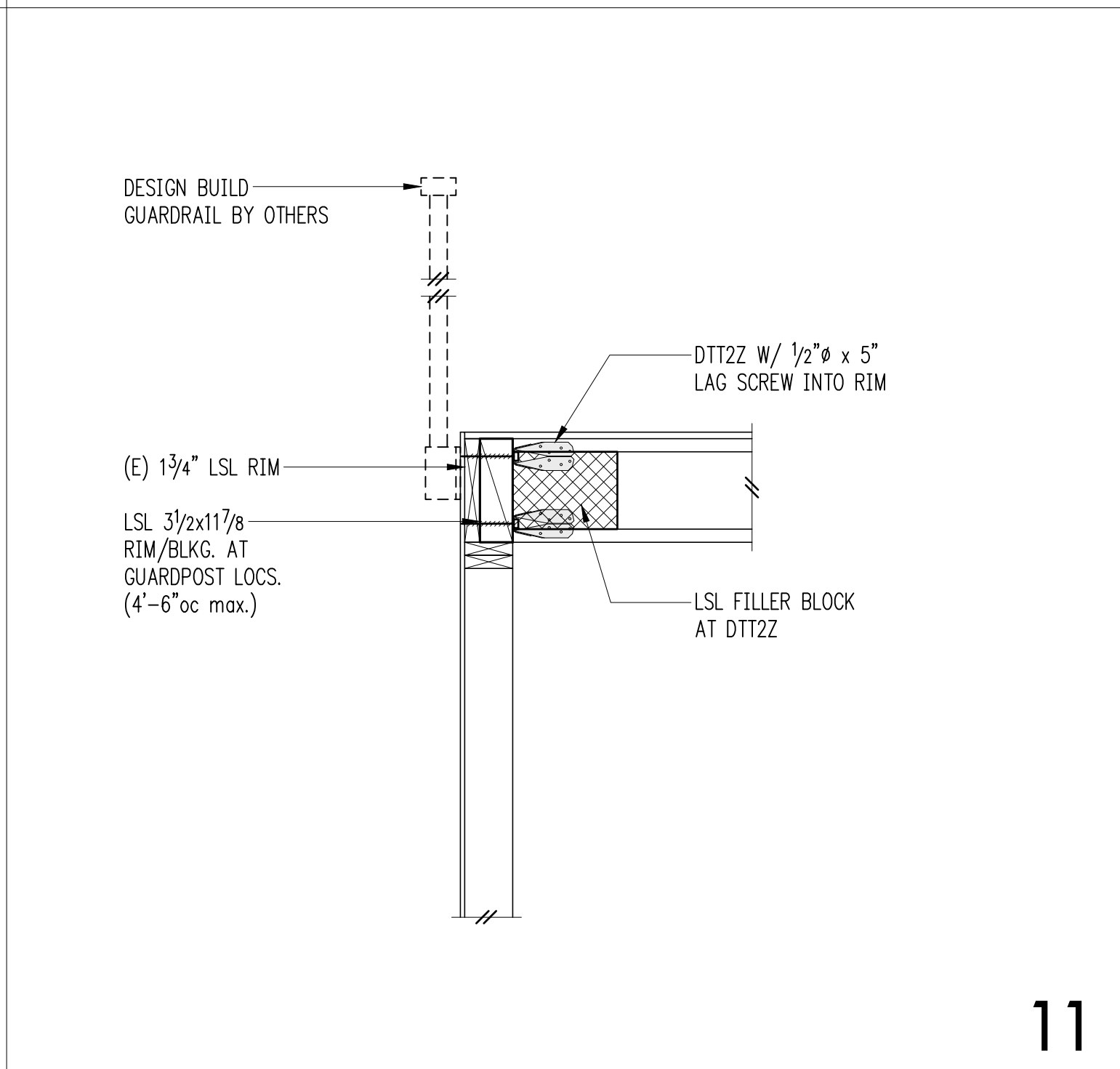
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DRAWN: SJB
 DESIGN: SLW
 CHECKED: ABB
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Wood Details
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S4.2