

PROJECT INFORMATION

ZONING DISTRICT	R-8.4
PROPERTY OWNER	SUNNY INVESTMENTS LLC
PARCEL NUMBER	509330-0650
LOT AREA	8,290
OCCUPANCY CLASSIFICATION	R-3 / U
CONSTRUCTION TYPE	V-B

PROJECT DESCRIPTION

THE WORK INCLUDES ADDITION OF SECOND FLOOR LEVEL TO EXISTING HOUSE.

FLOOR AREA SUMMARIES

(E) BASEMENT FLOOR TO REMAIN	954 SF
(E) 1ST FLOOR TO REMAIN	1,722 SF
(E) TOTAL FINISHED FLOOR AREA	2,676 SF
PROPOSED 2ND FLOOR ADDITION	1,361 SF
PROPOSED TOTAL FINISHED FLOOR AREA	4,037 SF
PROPOSED DECK	461 SF
(E) DECK TO BE REPLACED NEW	540 SF
(E) OPEN CARPORT TO REMAIN	392 SF
PRIMARY RESIDENCE	
FIRST FLOOR	1,722 SF
SECOND FLOOR	1,361 SF
TOTAL FINISHED FLOOR AREA	3,083 SF
ADU	
FIRST FLOOR (NOT INCLUDING STAIRWELL)	853 SF

DRAWING INDEX

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TREE RETENTION

NO.	CALIPER (IN.)	SPECIES	RETAIN?
1	6"	DECIDUOUS	Y
2	6"	DECIDUOUS	Y
3	16"	DECIDUOUS	N
4	20"	DECIDUOUS	Y
5	6"	DECIDUOUS	Y

TOTAL CALIPER OF EXISTING TREES	54 IN
PROPOSED REMAINED TREES	38 IN
PERCENTAGE OF TREE RETENTION (MIN. 30%)	70 %

CODE COMPLIANCE

- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 UNIFORM PLUMBING CODE
- 2021 INTERNATIONAL FIRE CODE
- 2021 NATIONAL ELECTRICAL CODE
- 2021 WASHINGTON STATE ENERGY CODE

(ALL CODES ABOVE INCLUDE WASHINGTON STATEWIDE AMENDMENTS)

AVERAGE BUILDING ELEVATION

$$\frac{(267.9 \times 28.4) + (270.1 \times 37.75) + (271.8 \times 2) + (271.8 \times 30.4) + (265.9 \times 24.4) + (263.2 \times 16.83) + (263.3 \times 6) + (263.2 \times 51.3) / (28.4 + 37.75 + 2 + 30.4 + 24.4 + 16.83 + 6 + 51.3)}{\rightarrow 267'$$

SEE SHEET A4 & A5 FOR PROPOSED BUILDING HEIGHT

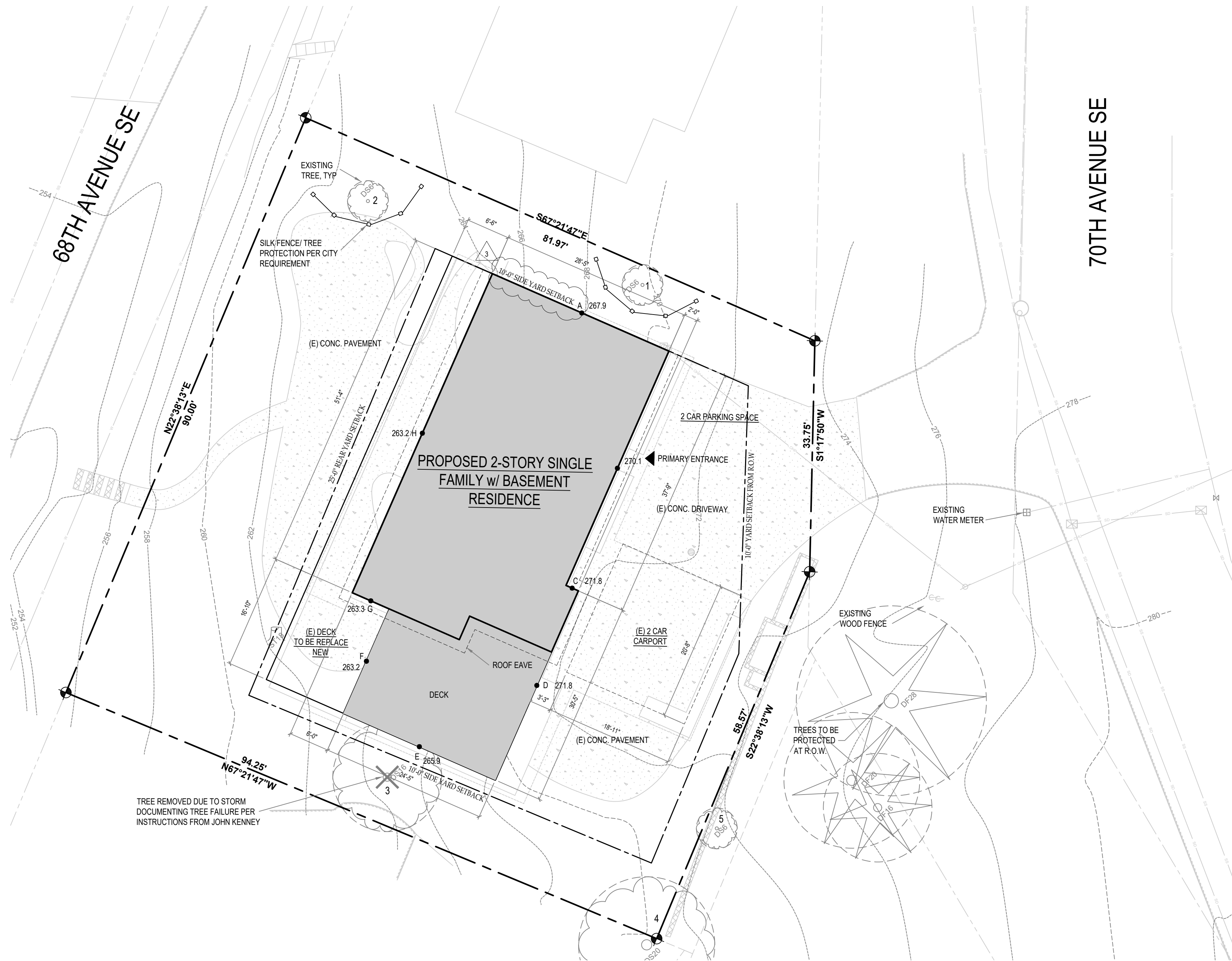
LEGAL DESCRIPTION

LOTS 15, 16 AND 17, BLOCK 3, MAPLE GROVE PARK SUBDIVISION OF EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 37, RECORDS OF KING COUNTY, WASHINGTON;

EXCEPT THAT PORTION OF LOTS 15 AND 16, BLOCK 3, MAPLE GROVE PARK SUBDIVISION OF EAST SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 37, RECORDS OF KING COUNTY, WASHINGTON, AS DEPICTED ON THE RECORD OF SURVEY FILED UNDER RECORDING NUMBER 20150302800014, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHERLY MOST CORNER OF SAID LOT 15;
 THENCE NORTH 67°21'47" WEST, ALONG THE COMMON LINE OF LOTS 14 AND 15, A DISTANCE OF 5.75 FEET;
 THENCE NORTH 22°38'13" EAST, PARALLEL WITH THE COMMON LINE OF LOTS 24 AND 15, AS SHOWN ON THE AFOREMENTIONED RECORD OF SURVEY, A DISTANCE OF 58.57 FEET, TO THE WESTERLY MARGIN OF 70TH AVENUE SE;
 THENCE SOUTH 01°17'50" WEST, ALONG SAID WESTERLY MARGIN, A DISTANCE OF 11.08 FEET TO AN ANGLE POINT IN SAID RIGHT OF WAY;
 THENCE SOUTH 30°43'16" EAST, ALONG SAID WESTERLY MARGIN, A DISTANCE OF 2.14 FEET TO AN INTERSECTION WITH THE COMMON LINE BETWEEN LOTS 24 AND 16 OF SAID SUBDIVISION;
 THENCE SOUTH 22°38'13" WEST, ALONG SAID COMMON LINE, A DISTANCE OF 46.97 FEET TO THE POINT OF BEGINNING.

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



ABBREVIATIONS

BLKG	BLOCKING	HORIZ	HORIZONTAL
CL	CENTER LINE	MAX	MAXIMUM
CLR	CLEAR	MFR	MANUFACTURER
CONT	CONTINUOUS	MIN	MINIMUM
CS	CASEMENT WINDOW	OV	OVER
DBL	DOUBLE	O.C.	ON CENTER
DS	DOWNSPOUT	SD	SMOKE DETECTOR
EL	ELEVATION	SG	SAFETY GLASS
EQ	EQUAL	SF	SQUARE FEET
EXIST	EXISTING	SIM	SIMILAR
FTG	FOOTING	SLD	SLIDING WINDOW
FX	FIXED WINDOW	TYP	TYPICAL
HDR	HEADER	UNO	UNLESS NOTED OTHERWISE
HWD	HARDWOOD	W	WITH
HGR	HANGER		

LEGEND

	AREA OF WORK
	SILK FENCE

SITE PLAN
SCALE: 1" = 10'-0"

A PUBLIC NOTICE SIGN MUST BE POSTED FOR THIS PROJECT. UPON RECEIPT OF A COMPLETE APPLICATION, THE CITY WILL POST THE PUBLIC NOTICE SIGN. SIGNAGE MUST REMAIN POSTED AND VISIBLE FROM THE PUBLIC RIGHT-OF-WAY FOR A PERIOD OF 30 DAYS. THE CITY WILL ALSO PREPARE AND MAIL OUT A NOTICE OF APPLICATION TO ALL PROPERTY OWNERS WITHIN 300 FEET OF THE PROPERTY.

TREE PROTECTION AREA (TPZ)

KEEP OUT!

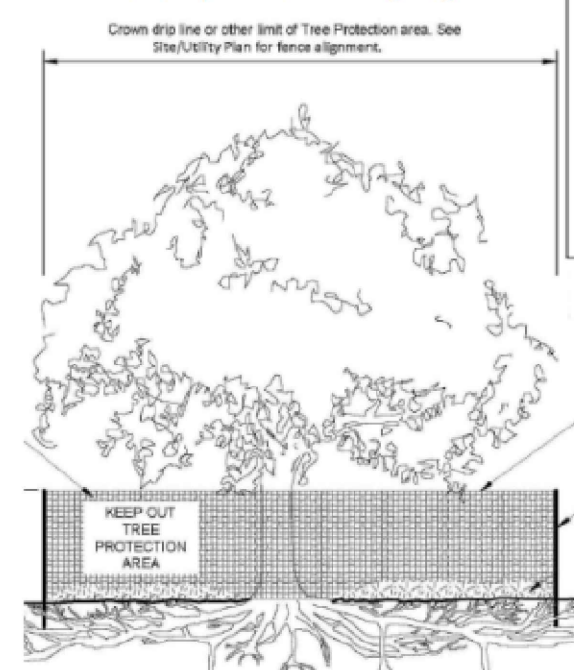
DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

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

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

Notes

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.166).
4. Any work in approved TPZ must be with the permission of the Land Use and Planning Division at landuse.planning@mercer.gov
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.



Tree protection fence: 4'-0" chain link fence, solidly anchored into the ground, or if authorized High-density polyethylene fencing with 3.5" x 1.5" openings; color orange. Steel posts installed at 8' o.c.

2" x 6" steel posts or approved equal

Maintain existing grade with the tree protection fence unless otherwise indication on the plans

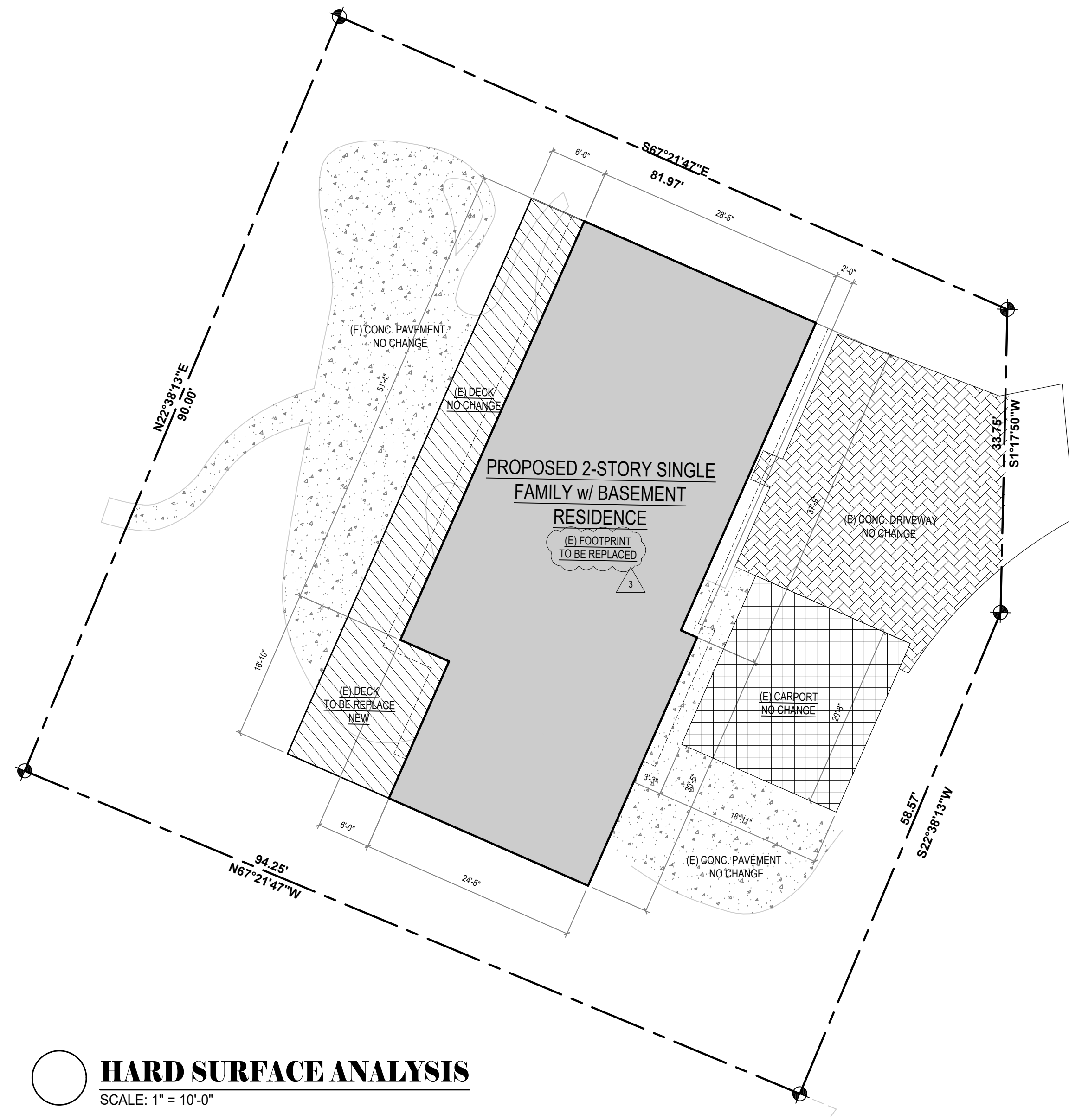
Any Work in the protected area must be with the permission of the Land Use and Planning Division at landuse.planning@mercer.gov

PROJECT
2707 RESIDENCE - REMODEL
2707 70TH AVE SE
MERCER, WA 98040

ISSUE	DATE	PERMIT SET	RESPONSE TO CITY COMMENTS
1	03.24.2025	PERMIT SET	RESPONSE TO CITY COMMENTS
2	04.16.2025		RESPONSE TO CITY COMMENTS
3	09.02.2025		RESPONSE TO CITY COMMENTS
3	11.10.2025		RESPONSE TO CITY COMMENTS

SHEET TITLE
• SITE PLAN

A0



HARD SURFACE ANALYSIS
SCALE: 1" = 10'-0"

HARD SURFACE AREA

(E) HOUSE FOOTPRINT TO BE REPLACED	1,895 S.F.
(E) DECK TO BE REPLACE NEW	541 S.F.
(E) CONCRETE DRIVEWAY (NO CHANGE)	684 S.F.
(E) CARPORT (NO CHANGE)	392 S.F.
(E) CONCRETE PAVEMENT (NO CHANGE)	1,219 S.F.
(E) TOTAL HARD SURFACE AREA W/ NO CHANGE (27.7%)	2,295 S.F.
(E) TOTAL HARD SURFACE AREA TO BE REPLACED (29.4%)	2,436 S.F.

LOT COVERAGE

LOT AREA	8,290 S.F.
MAX LOT COVERAGE (35%)	2,902 S.F.
EXISTING LOT COVERAGE W/ NO CHANGE (42.3%)	3,512 S.F.
(E) HOUSE FOOTPRINT (NO CHANGE)	1,895 S.F.
(E) DECK TO BE REPLACE NEW (NO CHANGE)	541 S.F.
(E) CONCRETE DRIVEWAY (NO CHANGE)	684 S.F.
(E) CARPORT (NO CHANGE)	392 S.F.

LOT SLOPE CALCULATION

HIGHEST POINT = 274 FT
 LOWEST POINT = 256 FT
 ELEVATION DIFFERENCE = 18 FT
 HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS = 97.75 FT
 $18 / 97.75 = 184 \times 100 = 18\%$ LOT SLOPE
 35% MAXIMUM LOT COVERAGE

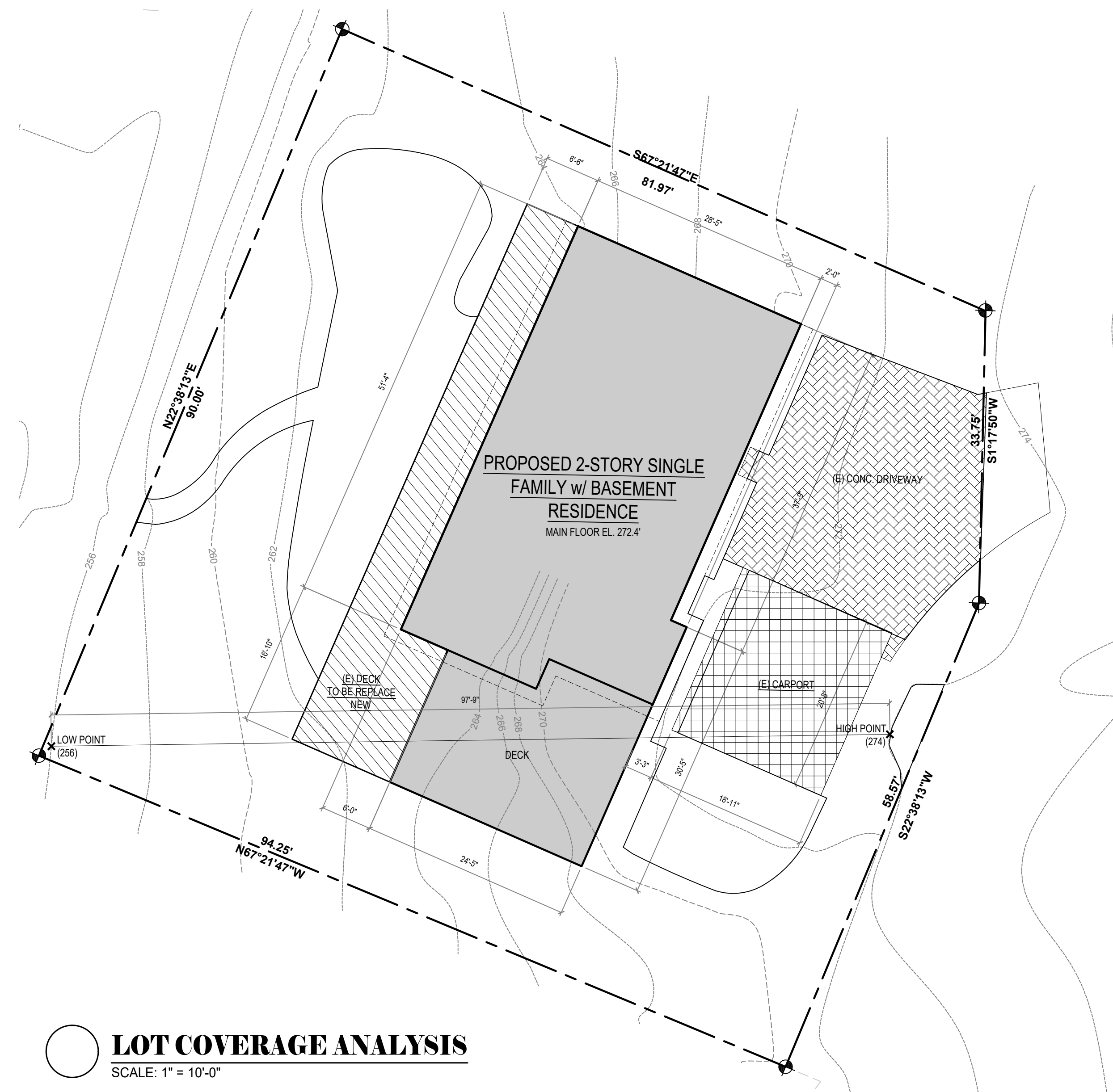
GROSS FLOOR AREA

LOT AREA	8,290 S.F.
GROSS FLOOR AREA (40%)	3,316 S.F.
ADU BONUS (5%)	+ 415 S.F.
TOTAL ALLOWED GFA (45%)	3,731 S.F.
1 BASEMENT	1,084 S.F.
2 1ST FLOOR	1,895 S.F.
3 2ND FLOOR (ADDITION)	1,435 S.F.
* BASEMENT AREA EXEMPTION	-563 S.F.
* BASEMENT STAIR EXEMPTION	-123 S.F.
PROPOSED GROSS FLOOR AREA (44.9%)	3,728 S.F. (OK)

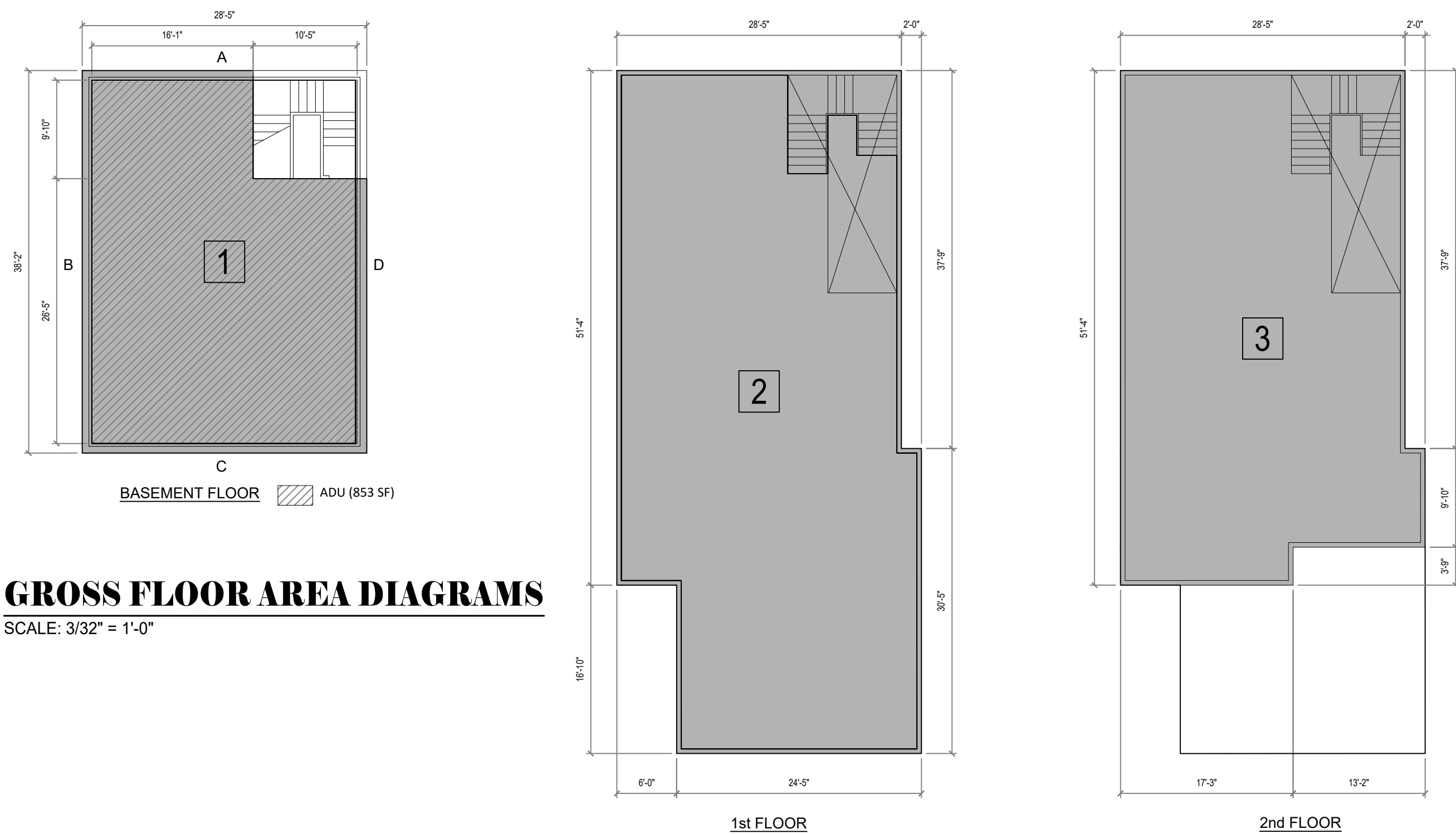
*** BASEMENT AREA EXEMPTION CALCULATION**

LENGTH	COVERAGE	RESULT	
A	28.41	63%	17.90
B	38.16	0%	0
C	28.41	48%	13.64
D	38.16	100%	38.16
	133.14		69.70

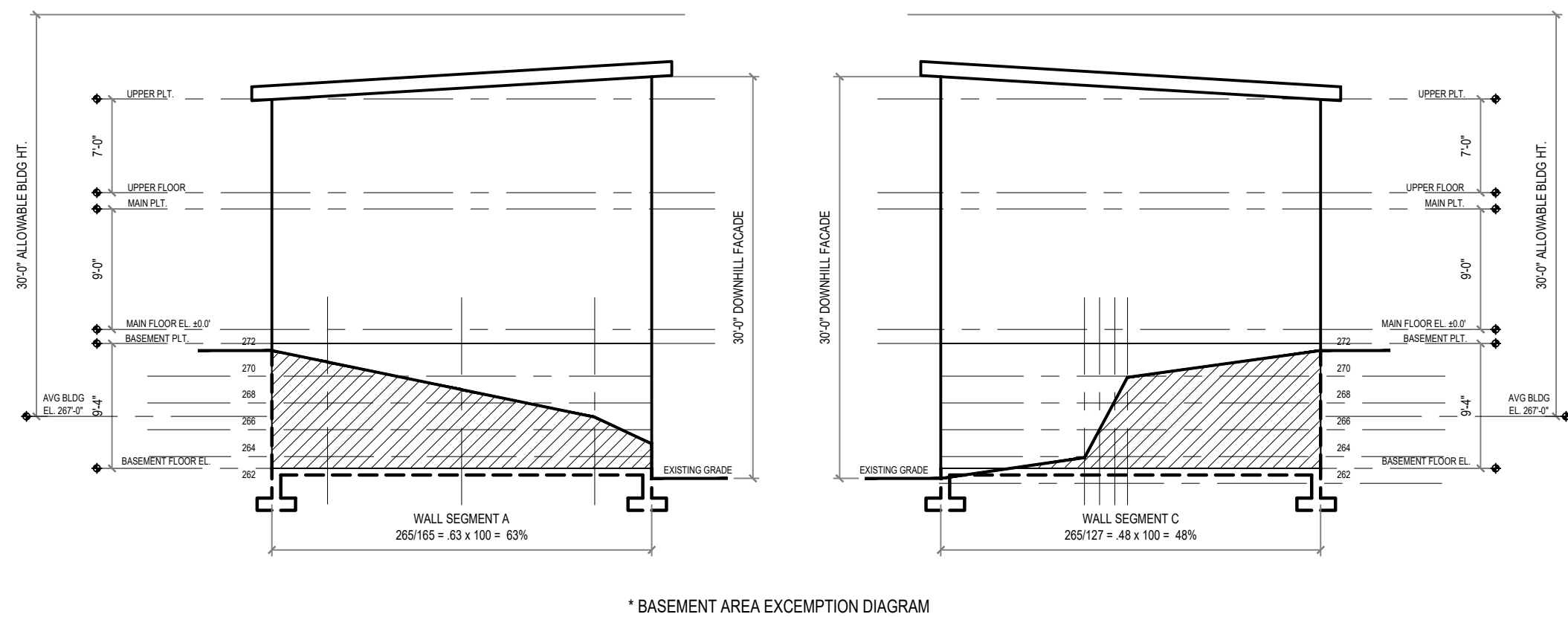
TOTAL AVERAGE RESULT 69.70 / 133.14 = .52
 BASEMENT = 1,084 S.F.
 EXCLUDED AREA = 1,084 x .52 = 563 S.F.



LOT COVERAGE ANALYSIS
SCALE: 1" = 10'-0"



GROSS FLOOR AREA DIAGRAMS
SCALE: 3/32" = 1'-0"



* BASEMENT AREA EXEMPTION DIAGRAM

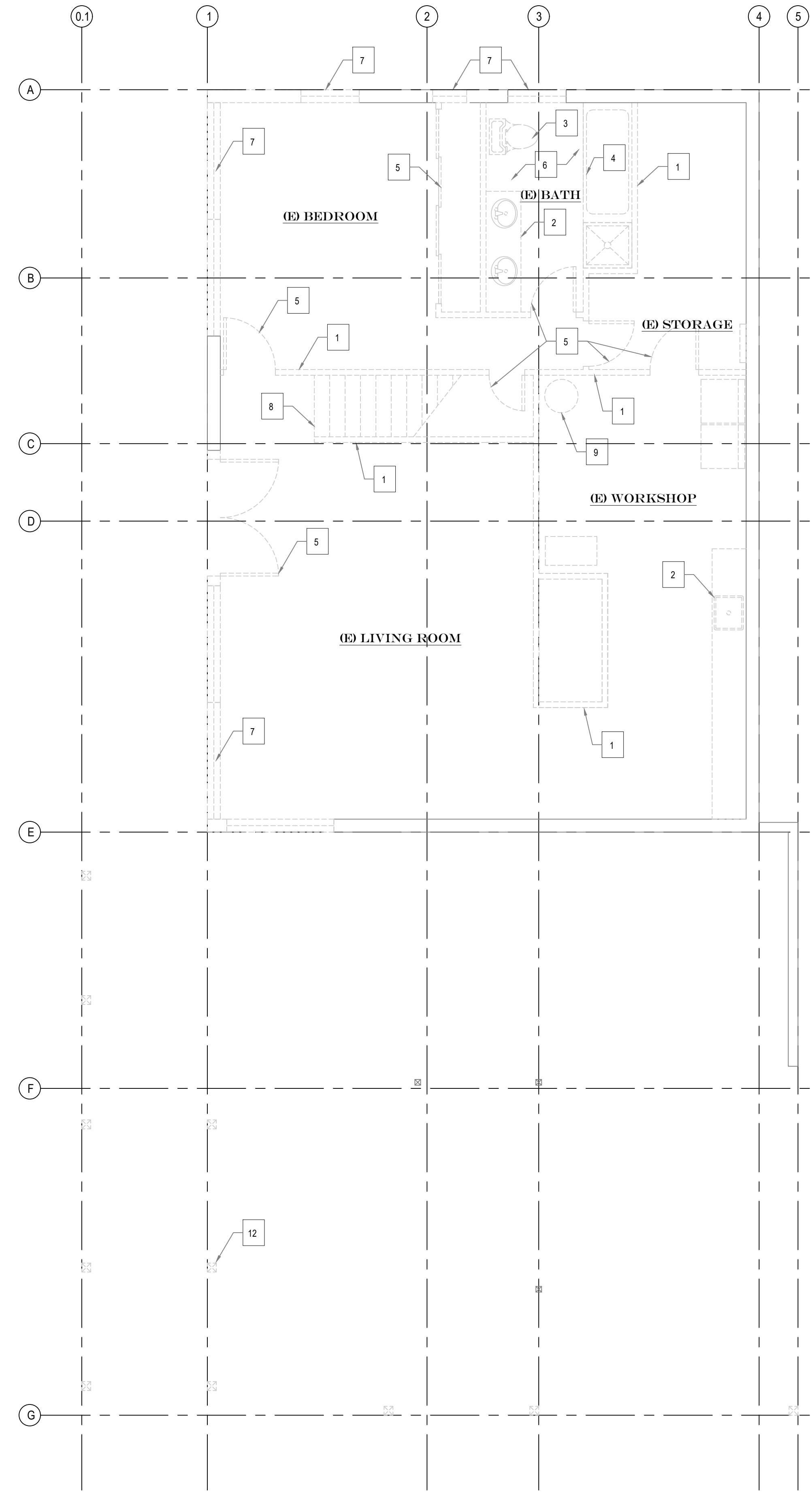
PROJECT
 2707 RESIDENCE - REMODEL
 2707 70TH AVE SE
 MERCER, WA 98040

ISSUE

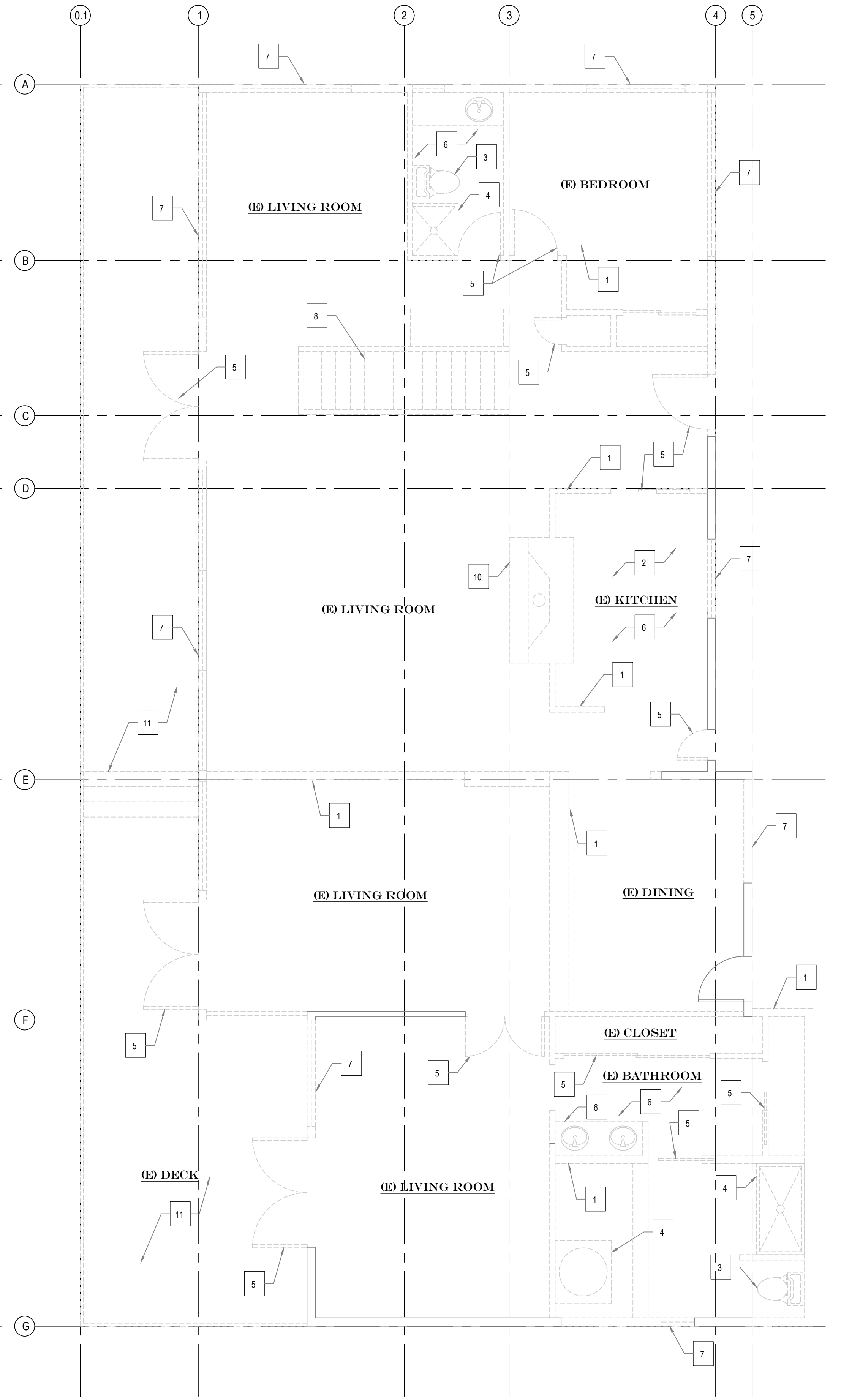
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SHEET TITLE
 • LAND USE ANALYSIS

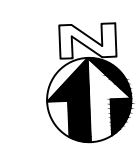
A0.1



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



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



LEGEND

	EXIST. WALL
	NEW WALL

DEMOLITION KEY NOTES

1	DEMOLISH WALL
2	REMOVE COUNTER AND SINK
3	REMOVE TOILET
4	REMOVE TUB AND SHOWER
5	REMOVE DOOR
6	REMOVE FLOORING AS NECESSARY
7	REMOVE WINDOW
8	DEMOLISH STAIR
9	REMOVE WATER HEATER
10	DEMOLISH FIREPLACE
11	DEMOLISH DECK
12	DEMOLISH DECK COLUMN TYP

ALL OF INFORMATION FOR EXISTING HOUSE ARE APPROXIMATE. CONTRACTOR TO VERIFY ALL OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION. REPORT TO ARCHITECT FOR ANY DISCREPENCIES FOUND.

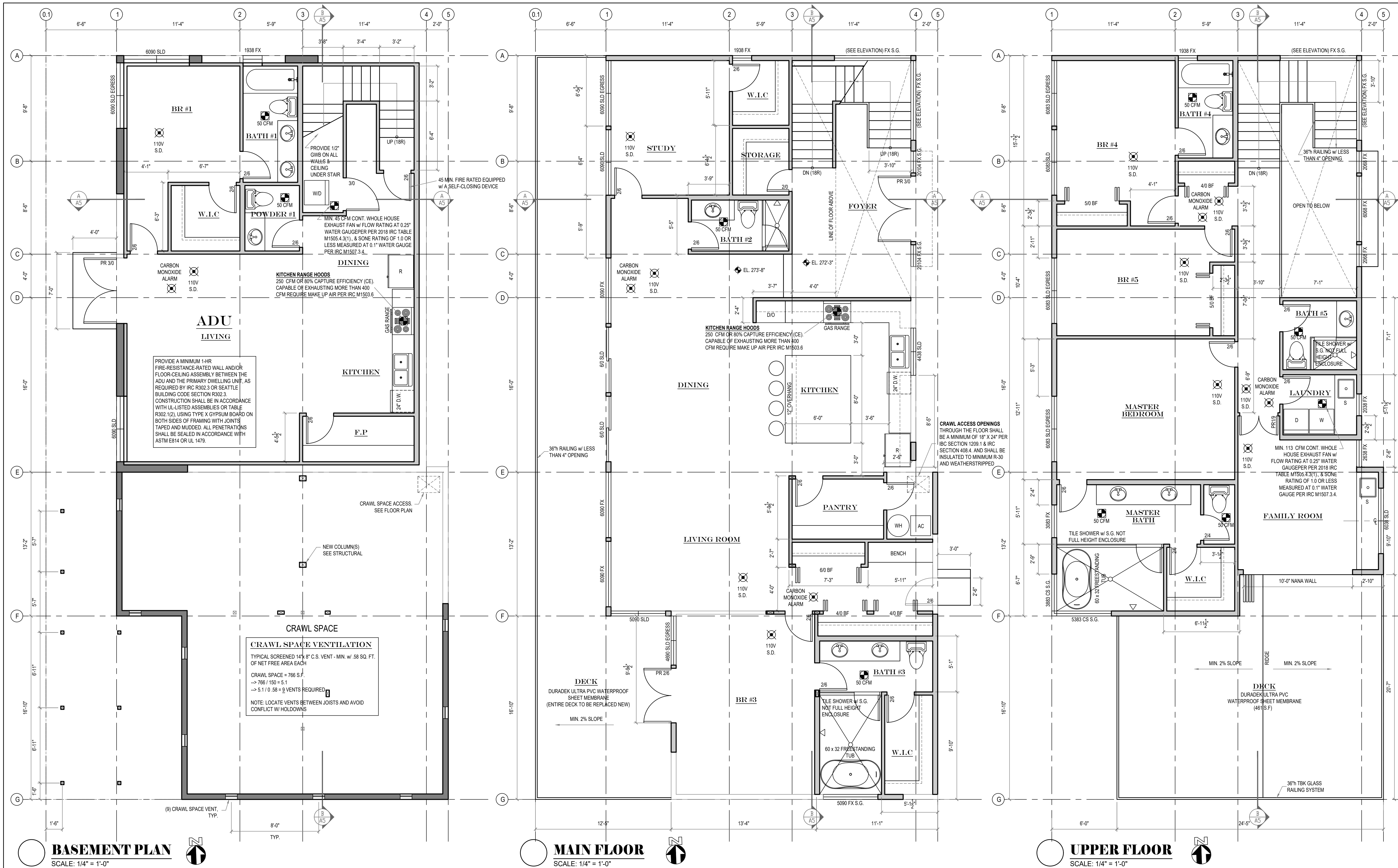
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SHEET TITLE
EXISTING/DEMOLITION FLOOR PLANS

A1



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

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

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

- PLAN NOTES:**
- USE CONVENTIONAL FRAMING AND SHEATHING U.N.O.
 - ALL EXTERIOR WALLS TO BE 2x6 FRAMING U.N.O.
 - ALL INTERIOR WALLS TO BE 2x4 FRAMING U.N.O.
 - ALL DOOR JAMBS TO BE SET OFF WALLS 6" TYP. U.N.O.

- PLAN NOTES:**
- ALL DIMENSIONS ARE TO FACE OF FRAMING U.N.O.
 - ALL WINDOW HEADS TO BE 8'-0" TO FINISH FLOOR AT THIS FLOOR, U.N.O.
 - ALL EXHAUST FANS ARE TO VENTED TO OUTSIDE.
 - DOOR HT. AT THIS FLOOR IS 8'-0", TYP.

- PLAN NOTES:**
- ALL SMOKE DETECTORS MUST BE PROVIDED w/ PRIMARY POWER FROM BUILDING WIRING, PROVIDED w/ BATTERY BACKUP, AND BE INTERCONNECTED.
 - ESCAPE (EGRESS) WINDOW MUST HAVE A CLEAR OPENABLE AREA OF 5.7 S.F. w/ A MINIMUM NET CLEAR HEIGHT OF 24" AND WIDTH DIMENSION OF 20". THE SILL HEIGHT MUST NOT BE MORE THAN 44" ABOVE THE FLOOR.
 - ALL EXTERIOR COLUMNS, BEAMS, AND JOISTS THAT ARE EXPOSED TO THE WEATHER MUST BE PRESSURE-TREATED.

- PLAN NOTES:**
- OPENINGS IN THE COMMON FIRE-RESISTANCE-RATED WALL ASSEMBLY LOCATED BETWEEN UNITS OF A TWO-FAMILY DWELLING SHALL BE EQUIPPED WITH NO LESS THAN A 45-MINUTE FIRE-RATED DOOR ASSEMBLY EQUIPPED WITH A SELF-CLOSING OR AUTOMATIC-CLOSING DEVICE PER IRC 302.3.4.
 - PENETRATIONS OF WALL OR FLOOR-CEILING ASSEMBLIES REQUIRED TO BE FIRE-RESISTANCE RATED IN ACCORDANCE WITH SECTION R302.2 OR R302.3 SHALL BE PROTECTED IN ACCORDANCE WITH SECTION R302.4.

LEGEND

---	EXIST. WALL
---	NEW WALL

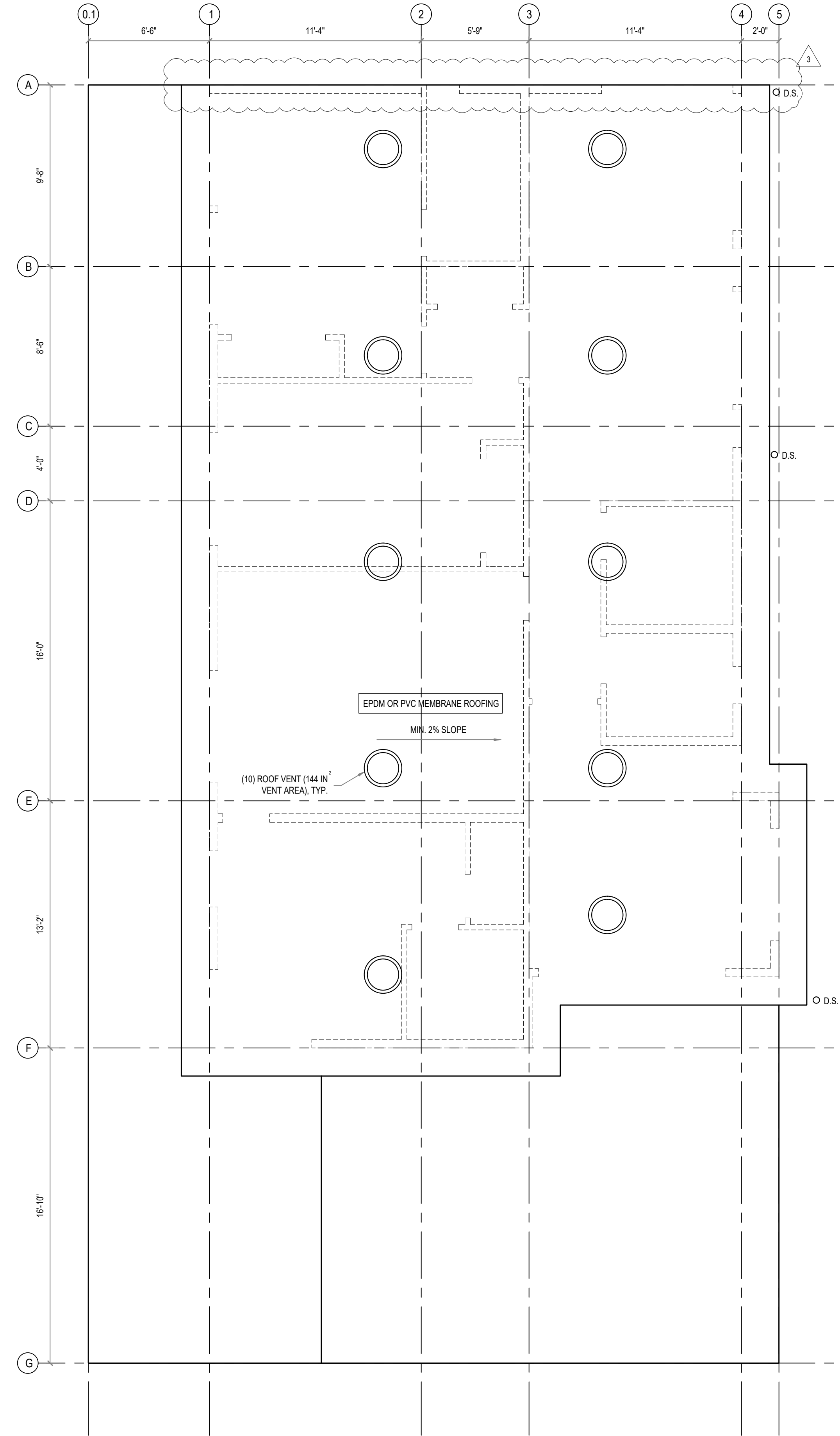
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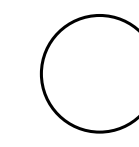
ISSUE

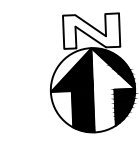
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SHEET TITLE
PROPOSED FLOOR PLANS

A2




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

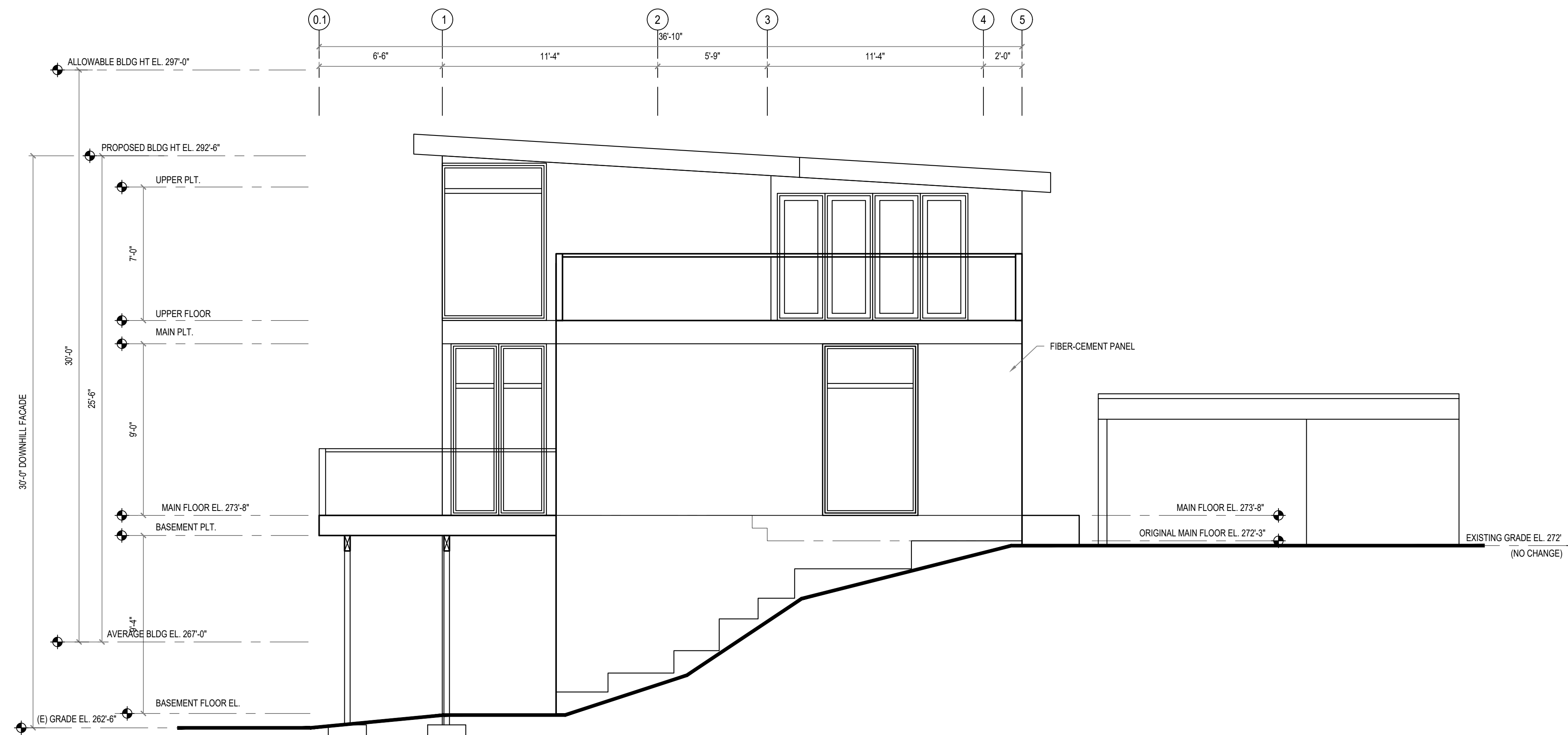


ROOF VENTILATION
 ATTIC AREA = 1,361 S.F.
 REQUIRED VENTILATION = 1361 / 150 = 9.07 S.F. (1,307 IN²)
 PROPOSED ROOF VENTS: (1,307 / 144 IN²) = **[10]**
 (B-144 METAL DOME BY AIR VENT INC OR SIMILAR)

SHEET TITLE • PROPOSED ROOF PLAN	ISSUE 03.24.2025 PERMIT SET 1 04.16.2025 RESPONSE TO CITY COMMENTS 2 09.02.2025 RESPONSE TO CITY COMMENTS 3 11.10.2025 RESPONSE TO CITY COMMENTS	PROJECT 2707 RESIDENCE - REMODEL 2707 70TH AVE SE MERCER, WA 98040
	A3	



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



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

FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
 - 1.1. VERTICALLY AT THE CEILING AND FLOOR LEVELS.
 - 1.2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET (3048 MM).
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN. ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.2.
4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E 136 REQUIREMENTS.

ENERGY NOTES:

PER WSEC R402.4, THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE. THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL (R402.4.1.2).

PER WSEC R403.2.2, DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. PER WSEC R404.1, A MINIMUM OF 75 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.

AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/ HOUR AND SHALL BE TESTED AS SUCH. A WRITTEN REPORT OF THE TEST RESULTS, SHALL BE SIGNED BY THE TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR, PRIOR TO CALL FOR FINAL INSPECTION. THE AIR LEAKAGE TEST RESULT SHALL BE DOCUMENTED ON THE FORM WHICH IS AVAILABLE ONLINE AT [HTTP://WWW.ENERGY.WSU.EDU/BUILDINGEFFICIENCY/ENERGYCODE.ASPX](http://www.energy.wsu.edu/buildingefficiency/energycode.aspx)

THE DESIGN PROFESSIONAL OR BUILDER SHALL COMPLETE AND POST AN "INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITHIN 3' OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION. A SINGLE BLANK FORM SHOULD BE INCLUDED ON THE PLAN DRAWINGS. THESE ARE AVAILABLE ONLINE AT [HTTP://WWW.ENERGY.WSU.EDU/DOCUMENTS/WSEC-2015-AVERY-6876_4_PER_SHEET.PDF](http://www.energy.wsu.edu/documents/wsec-2015-avery-6876_4_per_sheet.pdf)

WINDOW AND DOOR HEADERS SHALL BE INSULATED WITH A MINIMUM OF R-10 INSULATION.

ALL NEW FENESTRATION ARE NFRC CERTIFIED.

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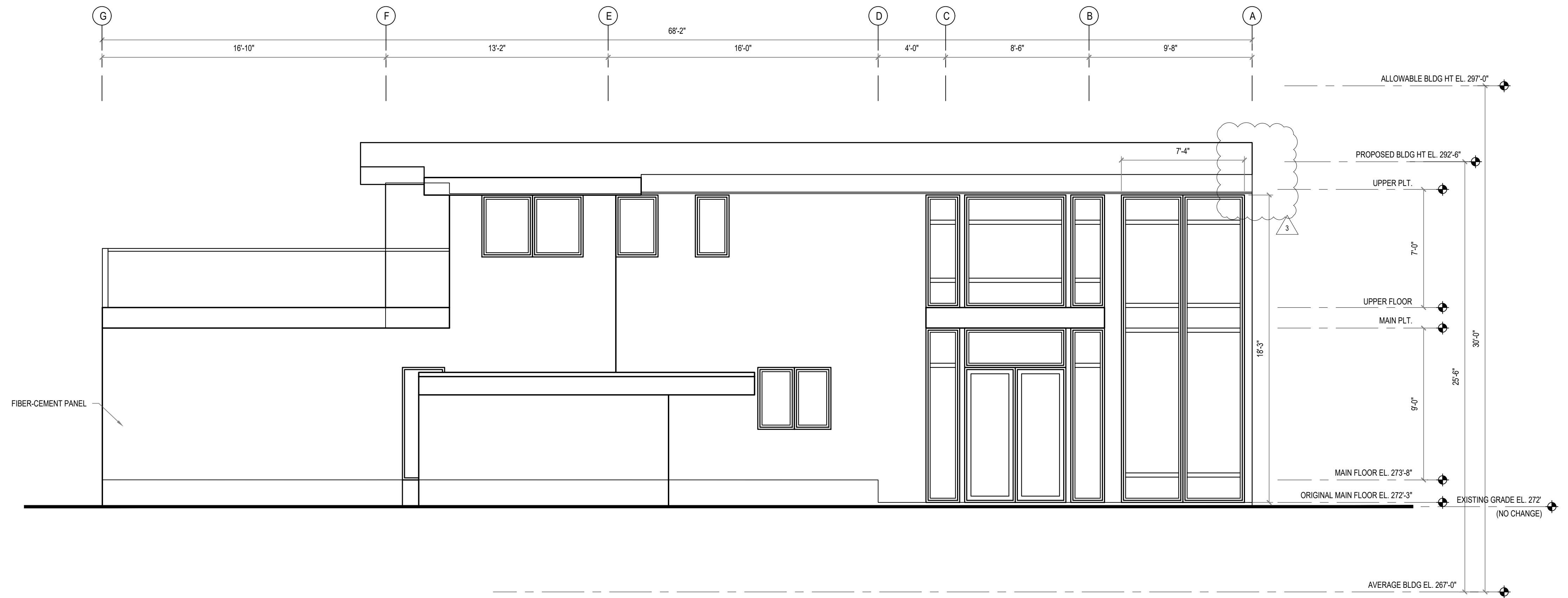
ISSUE

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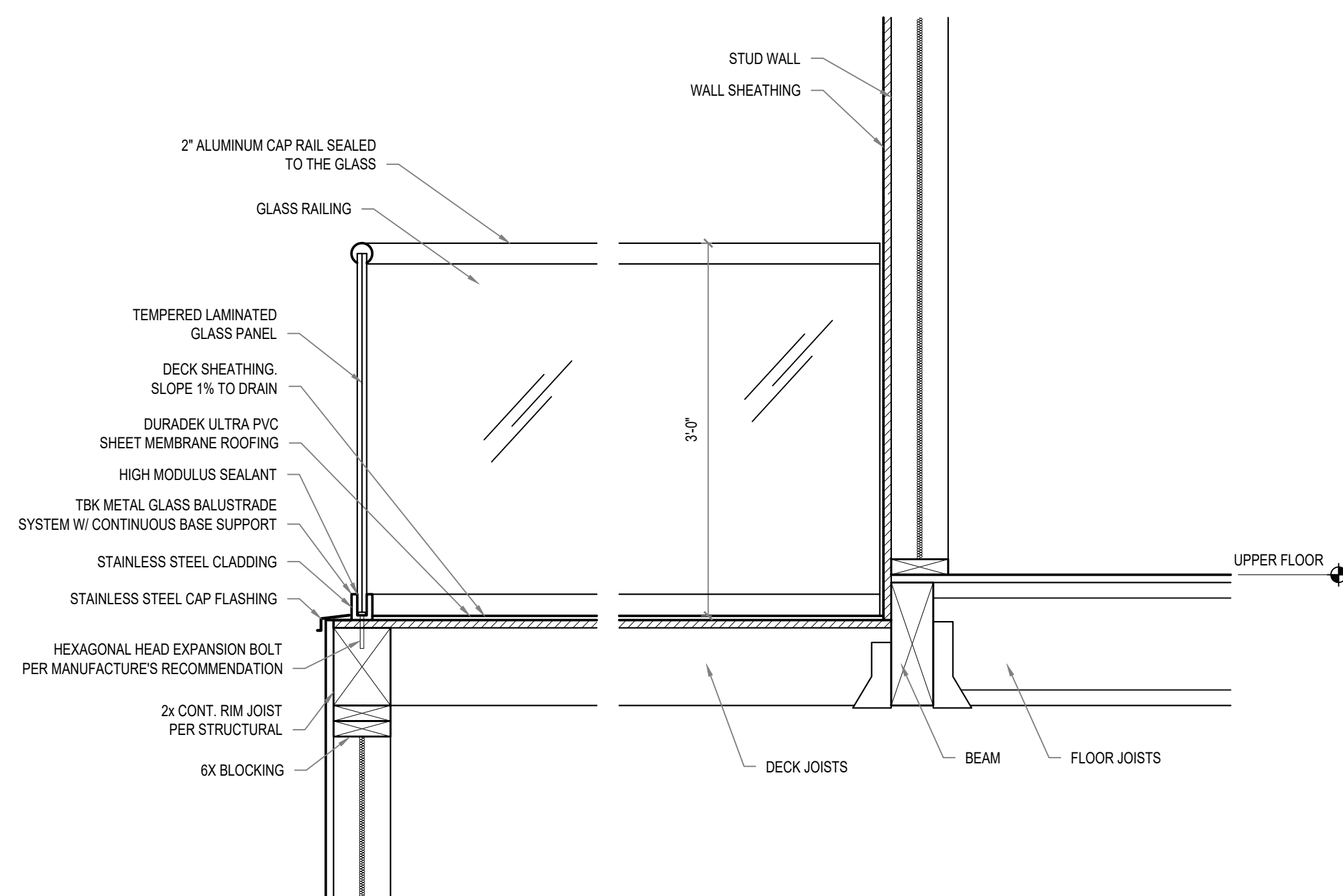
SHEET TITLE

• BUILDING ELEVATIONS

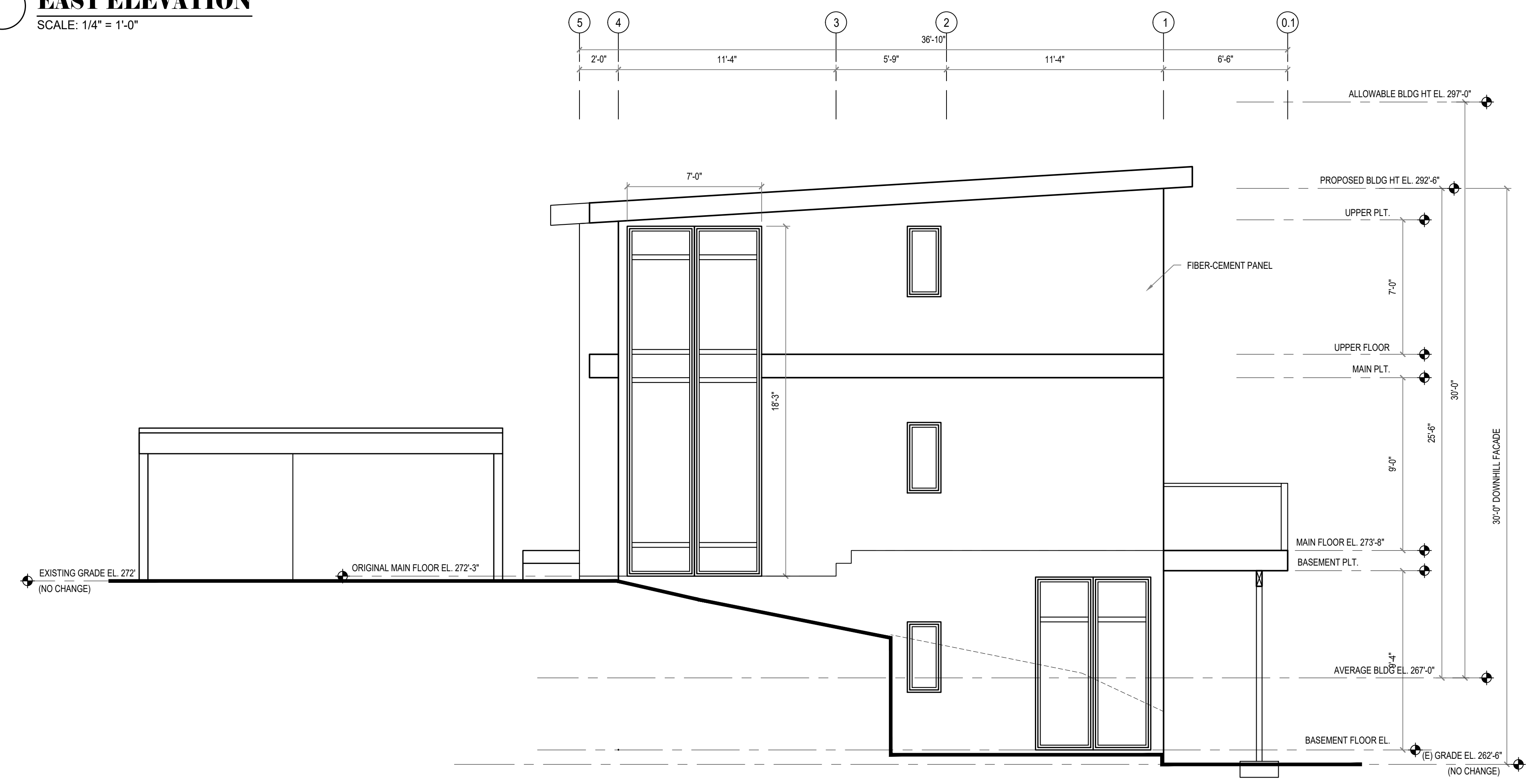
A4



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



AT DECK RAILING DETAIL
SCALE: 1" = 1'-0"



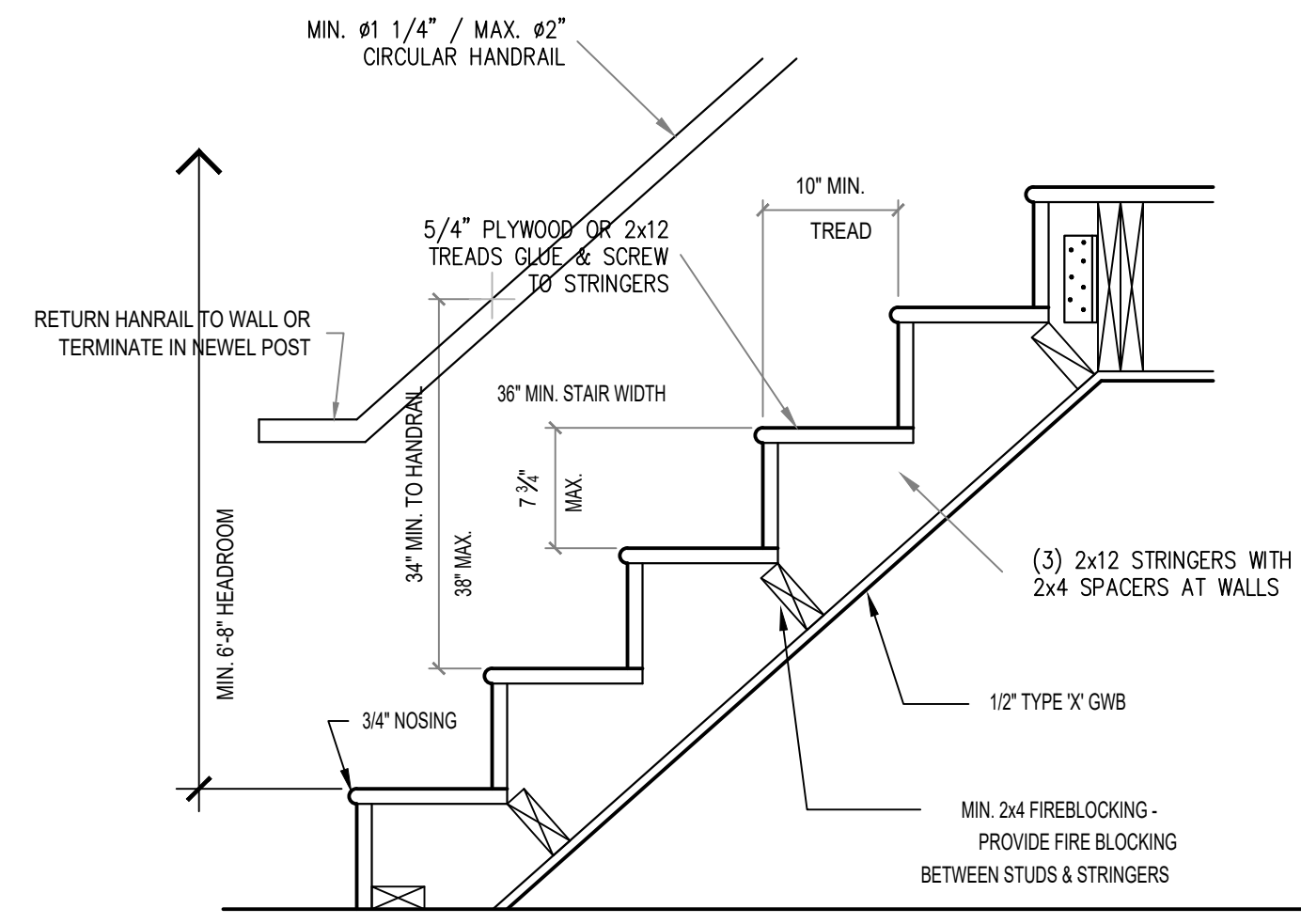
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

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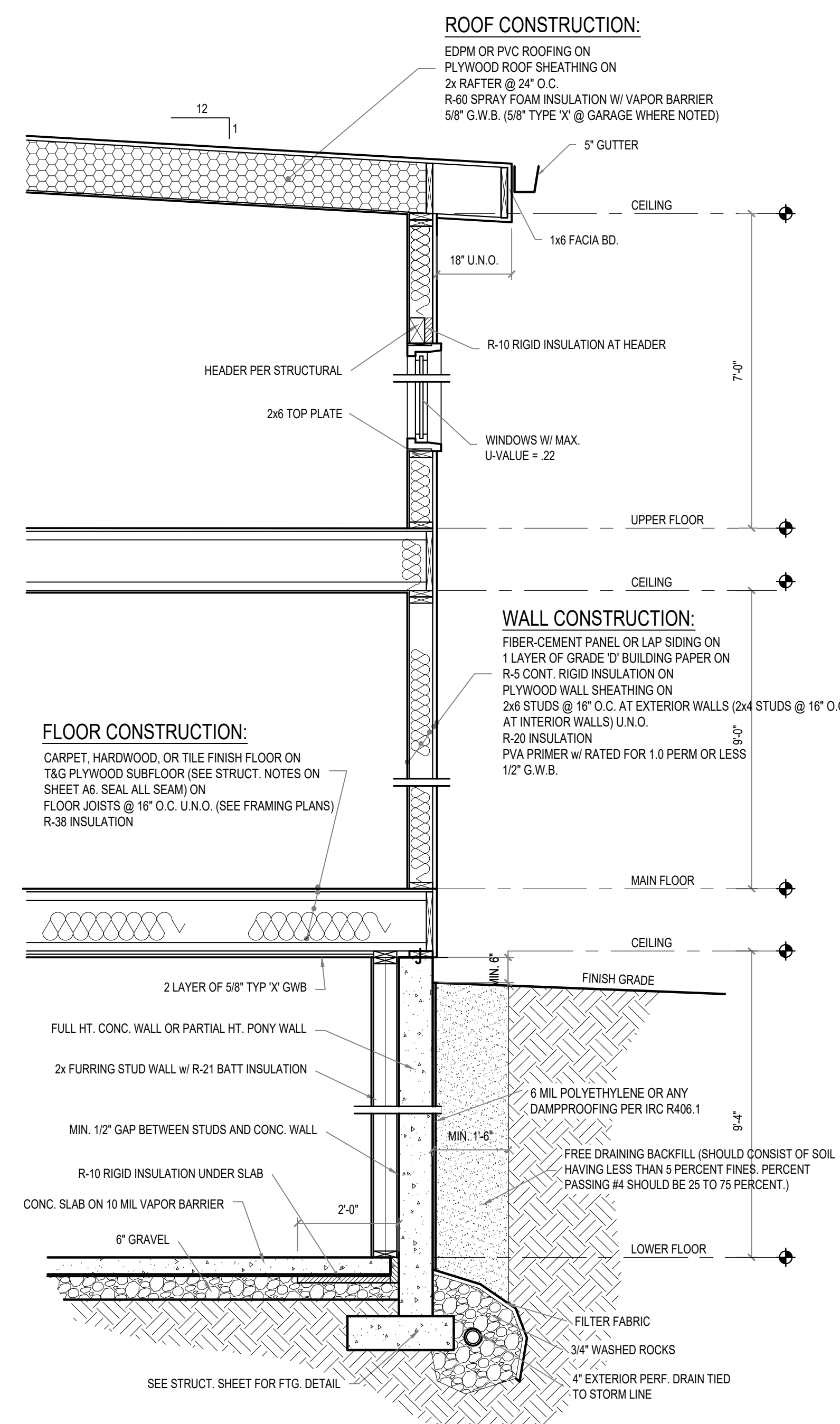
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• BUILDING ELEVATIONS

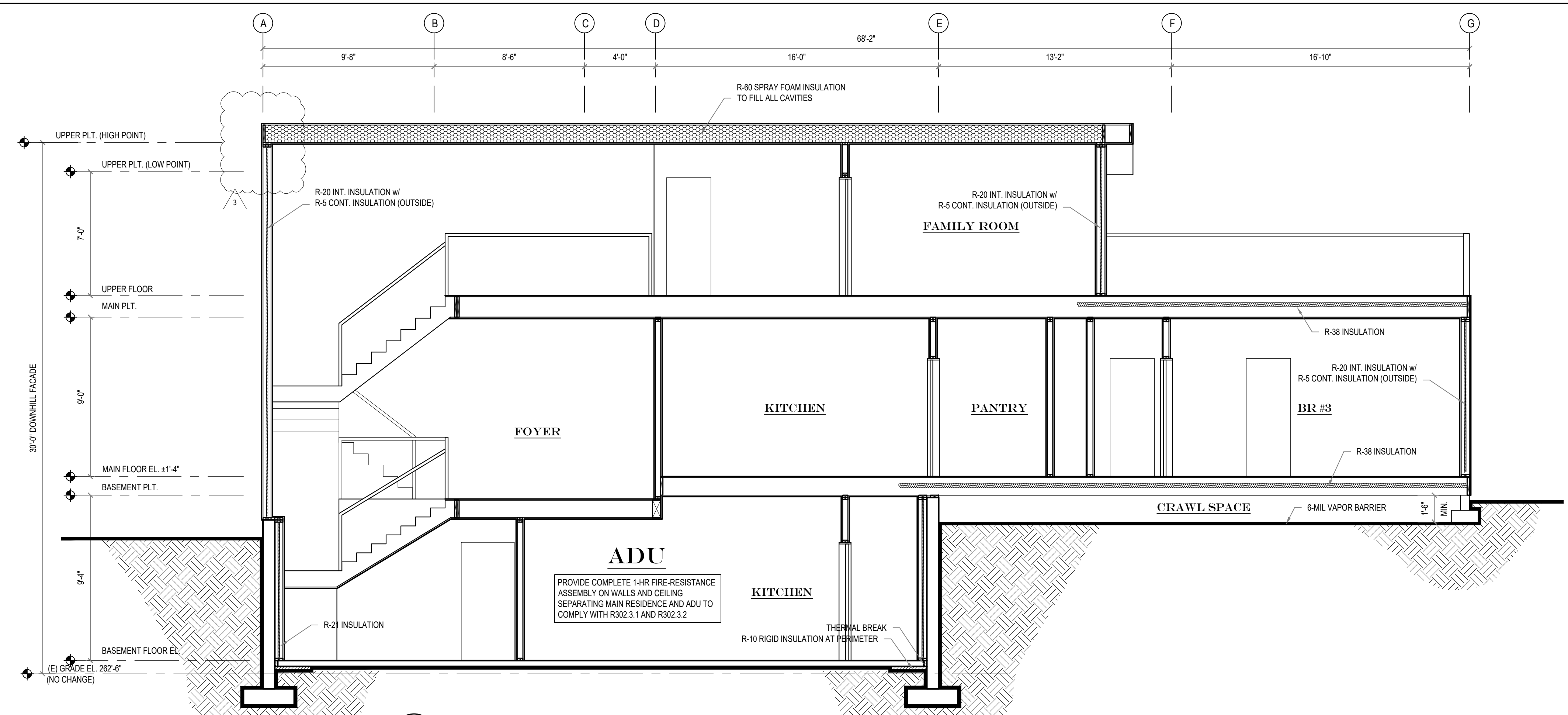
A5



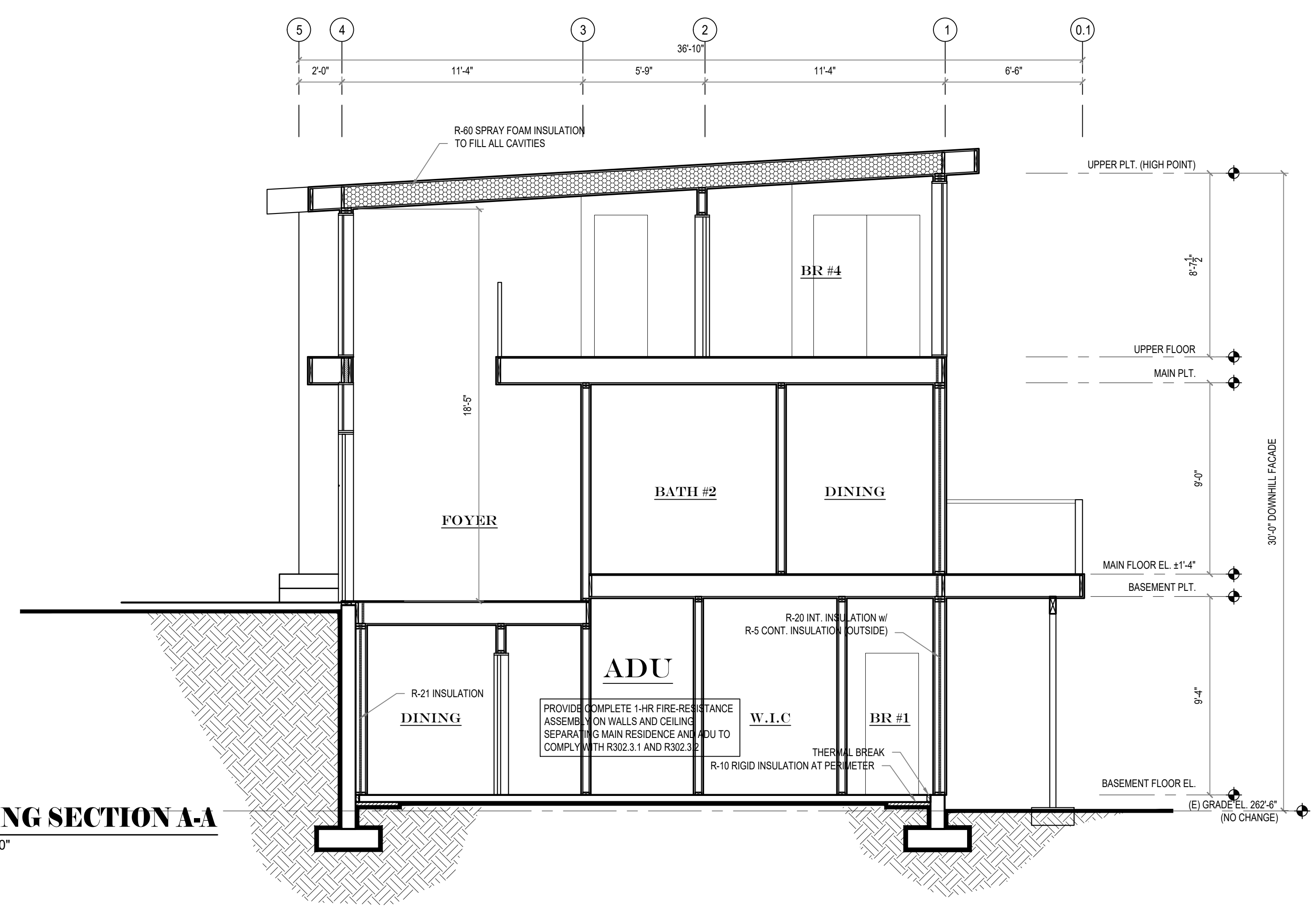
TYP. STAIR DETAIL
SCALE: 1" = 1'-0"



TYP. WALL SECTION
SCALE: 1/2" = 1'-0"



BUILDING SECTION B-B
SCALE: 1/4" = 1'-0"



BUILDING SECTION A-A
SCALE: 1/4" = 1'-0"

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	2707 70TH AVE SE MERCER, WA 98040		
ISSUE	03.24.2025	PERMIT SET	
	04.16.2025	RESPONSE TO CITY COMMENTS	1
	09.02.2025	RESPONSE TO CITY COMMENTS	2
	11.10.2025	RESPONSE TO CITY COMMENTS	3
SHEET TITLE	SECTIONS AND DETAILS		
	A6		

WSU Code Compliance Calculator, WSEC 2021

THERMAL ENVELOPE DETAILS - Proposed Design

Conditioned Floor Area of Addition, Proposed Design: 853 sq ft
 Classification: Small Dwelling Unit

Notes:

Plan ID	Component Description	Ref.	U	Qt	Width Feet	Height Feet	Area	UA
Exempt	Code Baseline, U=0.30		0.30	1	0	0	40	12.0
Sum of Area and UA								40
Exterior Doors Area Weighted U								0.300

Plan ID	Component Description	Ref.	U	Qt	Width Feet	Height Feet	Area	UA
Sum of Area and UA								0.0
Overhead Glazing Area Weighted U								0.0

Plan ID	Component Description	Ref.	U	Qt	Width Feet	Height Feet	Area	UA
Exempt								
1	U=0.22 (2021 1.1, 2018 1.5)	Table 406.2	0.22	3	0	0	152.0	33.54
2	U=0.22 (2021 1.1, 2018 1.5)	Table 406.2	0.22	1	0	0	45.0	9.90
3	U=0.22 (2021 1.1, 2018 1.5)	Table 406.2	0.22	1	1	9	6.4	1.41
4	U=0.22 (2021 1.1, 2018 1.5)	Table 406.2	0.22	1	0	2	14.0	3.08
Sum of Area and UA								227.4
Vertical Glazing Area Weighted U								0.220
Vertical Glazing and Doors Area Weighted U								0.222

Plan ID	Component Description	Ref.	U	Area	UA	
Sum of Area and UA					0	0.0
Area Weighted U-Value						

Plan ID	Component Description	Ref.	U	Net Area	UA	
Sum of Area and UA						
Area Weighted U-Value						

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WSU Code Compliance Calculator, WSEC 2021

Conditioned Volume: 7,933 cu ft
 Average ceiling height: 9.3 ft. Volume = 7933 cu ft

Component: Heat Pump

Location of HVAC Distribution System: Unducted

Sum of UA, including exempt door and window: 201

Envelope Heat Load: 8,065 Btu / Hour

Air Leakage Heat Load: 3,855 Btu / Hour

Building Design Heat Load: 12,920 Btu / Hour

Building and Duct Heat Load: 12,920 Btu / Hour

Maximum Heat Equipment Output: 16,181 Btu / Hour

WSU_C32021_20241009-Memor Lot 6 v1m, Version 10/9/2024 4:07:13 PM 10/16/2024 4

WSU Code Compliance Calculator, WSEC 2021

Option	Description	Value	Requirement	Energy Credits
0.3-0.8	Efficient Water Heating	Option 5.6	2.0	Electric heat pump water heater meeting NEA Tier 3
6	Renewable Electric Energy	3.000 kWh	0.0	
7	Appliance Package	Not Selected	0.0	
Energy Credits				2.0

*Refer to WSEC 2021 Table R406.3 for complete option descriptions and requirements. <https://www.wsu.edu/gov/standards/regulations-guidelines/building-code/energy-code>

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WSU Code Compliance Calculator, WSEC 2021

Plan ID	Component Description	Ref.	Floor U	Area	UA
Sum of Area and UA					0
Area Weighted U-Value					

Plan ID	Component Description	Ref.	Slab F	Slab Perim	FP	UA
1	R10 2" vertical (Code Baseline)	10-2	0.540	128	69	89
Sum of Perimeter and FP						128
Area Weighted U-Value						0.540

Plan ID	Component Description	Ref.	Slab Depth	Wall U	Wall Area	Wall UA	Slab F	Slab Perim	Slab UA
1	R21 Batt w/TF	F depth	WSU	0.034	923	31.4	0.304	128	39
Sum of Area, Length and UA									923
Weighted U- and F-values									0.034

Links to Download Forms, Checklists and Other Resources

Compliance Certificate: [Compliance Certificate](#)
 Insulation Certificate: [Insulation Certificate](#)
 Duct Testing Affidavits: [Existing Construction Affidavit](#), [New Construction Affidavit](#)
 Prescriptive Checklist for 2018 WSEC: [Prescriptive Checklist](#)
 Alterations (Remodel) Worksheet: [Worksheet](#)
 EER SEER COP HSPF Converter: <https://www.aecsystems.com/eeer-seer-cop-hspf2-3-ton-converter>

Show Ventilation Calculator? Show

Conditioned Floor Area: 853 sq ft
 Number of Bedrooms: 1
 Run-Time Percent in Each 4-Hour Segment: 100%
 Is the system Balanced? Unbalanced
 Is the system Distributed? Not Distributed
 Ventilation Code Section: IRC, Chapter 15
 Whole House Mechanical Ventilation Airflow Rate: 42 CFM

Show Distribution System Calculator? Show

Download RS-33 (2018) <https://www.energy.wa.gov/Document/Download/2018RS33>

Is this a hydronic heating system? No
 Location of Ducts: Unducted
 Location of Air Handler: Conditioned Space
 For Existing Construction: Are Any of These Exceptions True?
 Are such systems documented to have been previously tested as confirmed through field verification and diagnostic testing per RS-33? No
 Is there less than 40 linear feet in unconditioned spaces? (not exempt under WSEC 2021) No
 Are existing duct systems constructed, insulated or sealed with asbestos? No
 Is the project an Addition less than 750 sf of conditioned floor area? No
 Is Duct Testing Required? No

Show Heating System Sizing? Show

Heating System Sizing - Proposed Design: Try Out BetterBuildNW's HVAC Sizing Tool: <https://betterbuildnw.com/resources/hvac-sizing-tool>

Nearest Weather Station: [Weather Station](#)
 Indoor Design Temperature: 70 F
 Outdoor Design Temperature: 25 F
 Design Temperature Difference (ΔT): 45 F
 Conditioned Floor Area of Addition, Proposed Design: 853 sq ft

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WSU Code Compliance Calculator, WSEC 2021

Project Information: 2707 ADU

Messages / Comments: **RESULT PASS**
 UA Reduction = 18.1%. Proposed UA is better than baseline by 8%
 Window area is 27% of floor area
 Whole House Mechanical Ventilation Airflow Rate: 45 CFM with Run Time Percent of 100%, Unbalanced, Not Distributed
 Results assume your inputs are complete and correct. Results do not constitute an approval. Analysis should be reviewed by your AEC.

ANALYSIS SET UP

What code compliance pathway are you using? **U-Factor Compliance Path**
 Project Building Type? **Addition**
 Occupancy Type? **R1 Single family dwellings and townhouses**
 Code Version? **WSEC 2021**
 Classification: **Small Dwelling Unit - 853 sq. ft.**
 Baseline Description: **Code Baseline - Baseline and proposed window areas are equal**
 About Your Selection: **Up to 15 if exempt window and 24 if exempt door allowable**

RESULTS - Comparison of Baseline and Proposed Design

Component Performance, R occupancies	Baseline Design Area	UA	Proposed Design Area	UA
Doors U =	0.300	40	12.0	
Overhead Glazing U =	0.300	0	0.0	
Vertical Glazing U =	0.300	227	66.2	
Flat/Vaulted Ceilings U =	0.024	0	0.0	
Wall (above grade) U =	0.056	0	0.0	
Floors over Crawlspace U =	0.028	0	0.0	
Slab on Grade F =	0.540	128	69.1	
Below Grade Wall U =	0.034	923	31.4	
Below Grade Slab F =	0.304	128	38.9	
Baseline UA Total	219.3			
Proposed UA Total	201.4			
Required Credits	5.0			
Proposed Credits	5.0			
UA Reduction	8%			
UA Reduction	18.2%			

If the Proposed UA is the Target UA, and the Proposed Credits from Table 406 are 2 or more required in Section R406, then the home meets the WSEC.

Table R406.2 Energy Equalization Credits

System No.	Full Description	Select System Type	Fuel Normalization Credits (406.2)	Energy Credits (406.3)	Total Credits (406.2 & 406.3)
4	For heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) or Table C403.3.2(9) OR Air to Water heat pump units that are configured to provide both heating and cooling and are rated in accordance with AHRI 5505/530	Variable Refrigerant Heat Pump or Air-to-Water Heat Pump	3.0	2.0	5.0

Table R406.3 Energy Credits

Option No.	Category	Select Options	Energy Credits	Brief Description of Selected Options*
1	Efficient Building Envelope	Not Selected	0.0	
2	Air Leakage Control and Efficient Ventilation			
3.1-3.10	High Efficiency HVAC		0.0	
3.11	High Efficiency HVAC: Smart Thermostat	Not Selected	0.0	
4	High Efficiency HVAC Distribution System	Not Selected	0.0	
5.1	Efficient Water Heating: Drain Heat Recovery	Not Selected	0.0	
5.2	Efficient Water Heating: Compact Hot Water Distribution	Not Selected	0.0	

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WSU Code Compliance Calculator, WSEC 2021

Plan ID	Component Description	Ref.	U	Area	UA
Sum of Net Area and UA					0
Gross Wall Area					267.07
Area Weighted U-Value					

WSU_C32021_20241009-Memor Lot 6 v1m, Version 10/9/2024 4:07:13 PM 10/16/2024 4

PROJECT

2707 RESIDENCE - REMODEL

2707 70TH AVE SE
 MERCER, WA 98040

ISSUE

03.24.2025 PERMIT SET

04.16.2025 RESPONSE TO CITY COMMENTS

09.02.2025 RESPONSE TO CITY COMMENTS

11.10.2025 RESPONSE TO CITY COMMENTS

SHEET TITLE

ENERGY CALCULATION - ADU

A8

ENERGY STAR CERTIFIED
Residential Refrigerators

GE : GTE19JTN****

Specifications

Brand Name:	GE
Model Number:	GTE19JTN****
Type:	Top Freezer
Defrost Type:	Automatic
Compact:	No
Built-in:	No
Thru the Door Dispenser:	No
Ice Maker:	No
Counter Depth:	No
Height (in):	66.4
Width (in):	29.7
Capacity (Total Volume) (ft3):	19.2
Annual Energy Use (kWh/yr):	379
US Federal Standard (kWh/yr):	423
Connected Functionality:	No
Date Available On Market:	2019-12-01
Date Certified:	2019-11-08
Markets:	United States, Canada
ENERGY STAR Certified:	Yes

Additional Model Information

Captured On:
08/13/2021

ENERGY STAR CERTIFIED
Residential Clothes Dryers

Samsung - DV22N680*H* : DV22N680*H*

Specifications

CB Model Identifier:	ES_1023593_DV22N680*H*_09102018024207_70196935
Brand Name:	Samsung
Model Name:	DV22N680*H*
Model Number:	DV22N680*H*
Type:	Ventless Electric Compact 240V
Heat Pump Technology:	Heat Pump
Laundry Center:	No
Drum Capacity (cu-ft):	4.0
Height (inches):	33.5
Width (inches):	23.6
Depth (inches):	25.6
Combined Energy Factor (CEF):	5.85
Estimated Annual Energy Use (kWh/yr):	145
Estimated Energy Test Cycle Time (min):	60
Paired ENERGY STAR Clothes Washer Available:	No
Additional Dryer Features:	Drum light,Wrinkle prevention option
Vented or Ventless:	Ventless
Connected:	No
Date Available on Market:	2018-10-15
Date Certified:	2018-09-07
Markets:	United States, Canada
ENERGY STAR Certified:	Yes

Additional Model Information

Captured On:
08/13/2021

ENERGY STAR CERTIFIED
Residential Dishwashers

GE : GDP69***N***

Specifications

Brand Name:	GE
Model Number:	GDP69***N***
Type:	Standard
Annual Energy Use (kWh/yr):	270
US Federal Standard (kWh/yr):	307
% Better than US Federal Standard (kWh/yr):	12
Water Use (gallons/cycle):	3.5
US Federal Standard (gallons/cycle):	5
% Better than US Federal Standard (gallons/cycle):	30
Connected Functionality:	No
Markets:	United States, Canada
ENERGY STAR Certified:	Yes

Additional Model Information

Captured On:
08/13/2021

ENERGY STAR CERTIFIED
Residential Clothes Washers

GE : GFW510S*N***

Specifications

Brand Name:	GE
Model Number:	GFW510S*N***
Load Configuration:	Front Load
Laundry Center:	No
Combination All-in-One Washer-Dryer:	No
Volume (cu. ft.):	4.5
Width (inches):	28.0
Integrated Modified Energy Factor (IMEF):	2.76
US Federal Standard (IMEF):	1.84
Annual Energy Use (kWh/yr):	150
Integrated Water Factor (IWF):	3.0
US Federal Standard (IWF):	4.7
Annual Water Use (gallons/yr):	3983
Connected:	No
Paired ENERGY STAR Clothes Dryer Available:	Yes
Paired ENERGY STAR Clothes Dryer ENERGY STAR Model Identifier:	ES_1123206_GFV55ES*N***_03112020143611_7371251, ES_1123206_GFV55ES*N***_03112020143651_7351317
Date Certified:	2019-12-18
Markets:	United States, Canada
ENERGY STAR Model Identifier:	ES_1123206_GFW510S*N***_12182019134400_6640243
ENERGY STAR Certified:	Yes

Additional Model Information

.GFW510SCNWW.Color: White; UPC 084691849377

Captured On:
08/13/2021

PROJECT
2707 RESIDENCE - REMODEL

2707 70TH AVE SE
MERCER, WA 98040

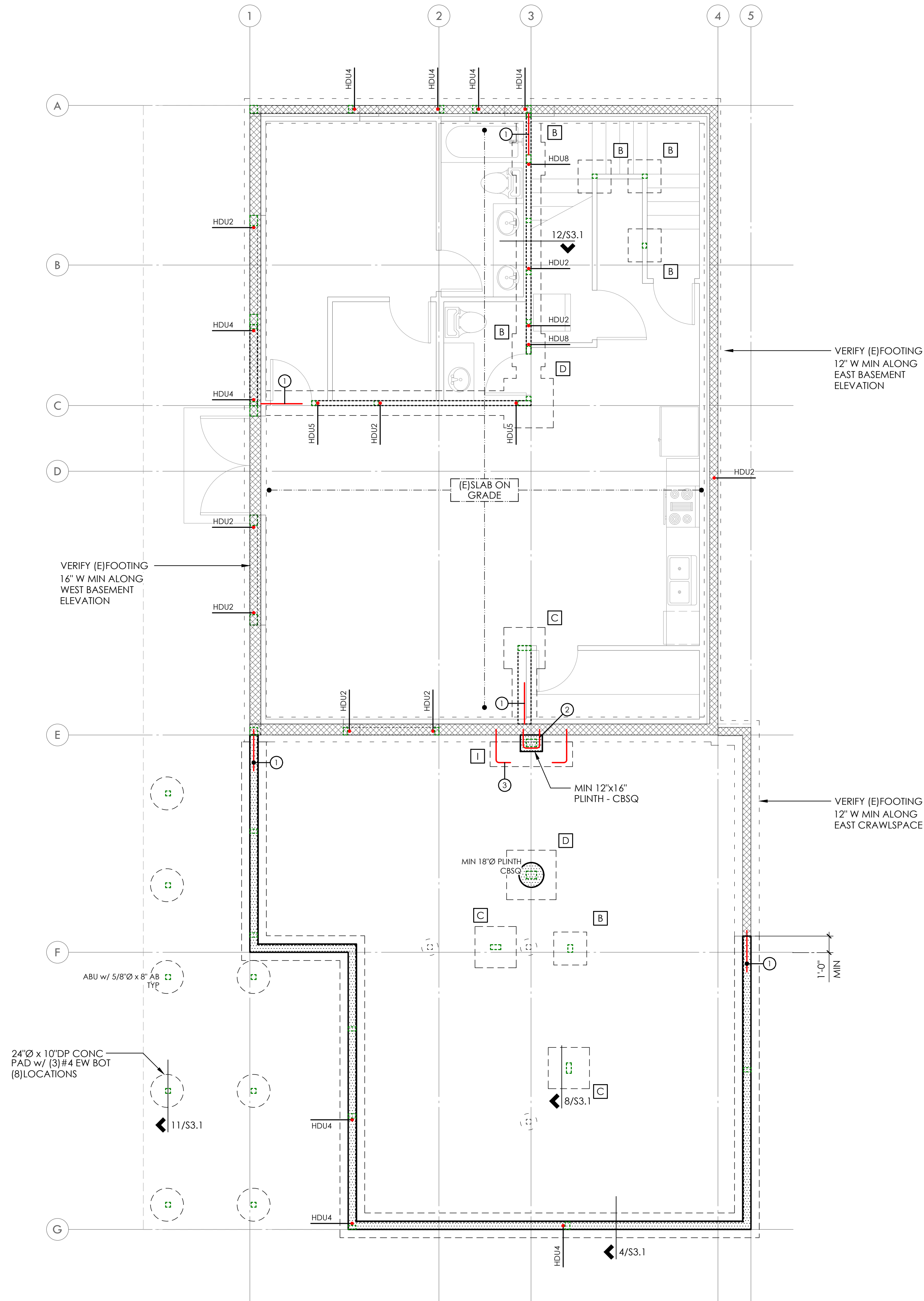
ISSUE
03.24.2025 PERMIT SET
04.16.2025 RESPONSE TO CITY COMMENTS
09.02.2025 RESPONSE TO CITY COMMENTS
11.10.2025 RESPONSE TO CITY COMMENTS

SHEET TITLE
• APPLIANCE SPEC

A9

PLAN NOTES

1. BOTTOM OF ALL NEW FOOTINGS SHALL BE 18" MINIMUM BELOW LOWEST ADJACENT GRADE, UNO.
2. REFER TO SHEET S3.0 FOR TYPICAL FOUNDATION AND CONCRETE DETAILS.
3. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
4. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.



FOOTNOTES

1. #4 x 2'-6" DOWELS TO MATCH HORIZ WALL AND FOOTING REINFORCING - EPOXY GROUT EMBED 4" MIN. NO SPECIAL INSPECTION REQUIRED.
2. #4 DOWELS AT 12"oc - EPOXY GROUT 4" MIN INTO (E)FOUNDATION WALL. NO SPECIAL INSPECTION REQUIRED.
3. #4 DOWELS TO MATCH TRANSV FOOTING REINFORCING - EPOXY GROUT EMBED 4" MIN INTO (E)FOUNDATION WALL. NO SPECIAL INSPECTION REQUIRED.

LEGEND

- CONCRETE WALL BELOW
- (E)CONCRETE WALL BELOW
- STRUCTURAL WALL ABOVE
- PLUMBING PENETRATION ABOVE

FOOTING SCHEDULE

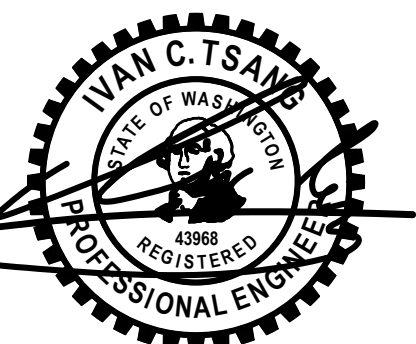
MARK	SIZE	REINFORCING
A	1'-6" SQ x 8" DP	(2) #4 EW BOT
B	2'-0" SQ x 8" DP	(3) #4 EW BOT
C	2'-6" SQ x 12" DP	(4) #4 EW BOT
D	3'-0" SQ x 12" DP	(4) #4 EW BOT
E	3'-6" SQ x 12" DP	(5) #4 EW BOT
F	4'-0" SQ x 16" DP	(7) #4 EW BOT
I	1'-6"W x 5'-0"L x 16" DP	(3) #4 LONG & #4 AT 9"oc TRANSV

MATERIALS

- SAWN LUMBER
- TRUSSES
- ENGINEERED
- GLU-LAM
- STEEL MEMBER

FOUNDATION PLAN

FIRST FLOOR WALLS SHOWN DASHED



PROJECT NO 0527.2025.01.01
PROJECT MANAGER RAF
DRAWN JSD
ENGINEER NATE MOORE
206.602.9537
NATEM@MALSAM-TSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	2.7.25
△	PLAN REVISIONS	8.28.25

ARCH V SQUARED
206.657.7297

FOUNDATION PLAN

S2.0
SCALE - 1/4" = 1'-0"



PLAN NOTES

1. TYPICAL FLOOR FRAMING CONSISTS OF 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI JOISTS PER SCHEDULE. UNO. PROVIDE DBL JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH.
2. TYPICAL WATER PROOF DECK FRAMING CONSISTS OF DECKING OER ARCH (5 PSF MAX) OVER 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 2x10's AT 16"oc. UNO. JOISTS CAN BE TAPERED TO A MIN DEPTH OF 7-1/4".
3. GLUE AND NAIL FLOOR AND DECK SHEATHING w/ 8d AT 4"oc AT FRAMED PANEL EDGES AND OVER SHEAR-WALLS AND AT 12"oc IN FIELD. UNO.
4. "SW" INDICATES SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 4/54.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW6. UNO.
5. ALL REQUIRED HEADERS ARE SHOWN ON PLAN. REFER TO DETAIL 8/54.0 FOR ADDITIONAL REQUIREMENTS.
6. PROVIDE (2) BEARING (TRIMMER) STUDS AT EACH END OF ALL HEADERS AND BEAMS 6'-0" IN LENGTH AND OVER. UNO.
7. WHERE POSTS OCCUR, PROVIDE SOLID VERTICAL GRAIN BLOCKING THRU FLOOR TO MATCHING SUPPORTS BELOW. UNO.
8. TYPICAL WALL FRAMING CONSISTS OF 2x6's AT 16"oc AT EXTERIOR WALLS AND 2x4's or 2x6's AT 16"oc AT INTERIOR WALLS PER ARCH DRAWINGS. UNO.
9. REFER TO SHEET S4.0 FOR TYPICAL WOOD FRAMING DETAILS.
10. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
11. DO NOT SCALE DRAWINGS. REFER TO ARCH DRAWINGS FOR ALL DIMENSIONS.

FLUSH BEAM SCHEDULE

MARK	SIZE	BRG STUDS	HANGER - UNO
B1	LSL 1-3/4 x 11-7/8	2	HUS1.81/10
B2	GL 3-1/2 x 11-7/8 OR LSL 3-1/2 x 11-7/8	2	HHUS410/2 HHUS410
B3	GL 5-1/2 x 11-7/8 OR PSL 5-1/4 x 11-7/8	3	HGUS5.50/10 HGUS5.50/10
B4	PSL 7 x 11-7/8	4	HGUS7.25/10

- ① ALL GLULAM BEAMS ARE 24F-V4 - UNO
- ② PROVIDE HUC410 WHERE REQUIRED - UNO

JOIST SCHEDULE

MAX LENGTH	SIZE	SPACING	FACE MOUNT HANGER	TOP FLANGE HANGER
13'-6"	11-7/8" TJI 110	16"oc	IUS1.81/11.88	ITS1.81/11.88
14'-0"	11-7/8" TJI 210	16"oc	IUS2.06/11.88	ITS2.06/11.88
14'-6"	11-7/8" TJI 230	16"oc	IUS2.37/11.88	ITS2.37/11.88
15'-3"	11-7/8" TJI 360	16"oc	IUS2.37/11.88	ITS2.37/11.88
17'-3"	11-7/8" TJI 560	16"oc	IUS3.56/11.88	ITS3.56/11.88

- ① DESIGN BASED ON DL=15 PSF, LL=40 PSF. ΔLL < L/480. T3-PRO RATING OF 55
- ② SHEETROCK CEILING APPLIED TO BOTTOM FACE OF JOISTS

FOOTNOTES

- ① NOTCH AND TAPER END OF BEAM TO MATCH DEPTH OF DECK FRAMING - 7-1/4" MIN DEPTH, NO OVERCUTS
- ② BREAK TOP PLATE AND BEAR DIRECTLY TO POST
- ③ VERTICAL HTS30C - BEAM TO POST BELOW
- ④ HGA10 BEAM TO PLATE
- ⑤ PROVIDE FULL BEARING DIRECTLY UNDER END OF (E) BEAM TO NEW OR (E) FOUNDATION
- ⑥ PROVIDE 1/2" Ø x 8" TITEN HD AT 8"oc INTO (E) FOUNDATION WALL (4" MIN EMBED) - (3) SCREWS MIN
- ⑦ ALIGN HEADER DIRECTLY BELOW TOP PLATE TO ACCEPT STRAP FROM LOW B2 - PROVIDE (4) LTP4 HEADER TO TOP PLATE AND TOP PLATE TO HIGH B2 DS
- ⑧ LANDING FRMG CONSISTS OF 3/4" T&G APA RATED SHTG (SPAN RATING 48/24) OVER 2x8's AT 16"oc w/ LUS HGR'S TO 2x8 LEDGER w/ (3) 10d INTO EA STUD
- ⑨ POCKET BEAM INTO WALL w/ (2) BEARING STUDS AND (1) FULL HEIGHT STUD EACH SIDE
- ⑩ PROVIDE 2x BLOCKING BELOW WALL WITH LUS HANGER EACH END
- ⑪ NAIL SHEARWALL BOTTOM PLATE TO (E) JOIST OR PROVIDE CONT FLAT 2x4

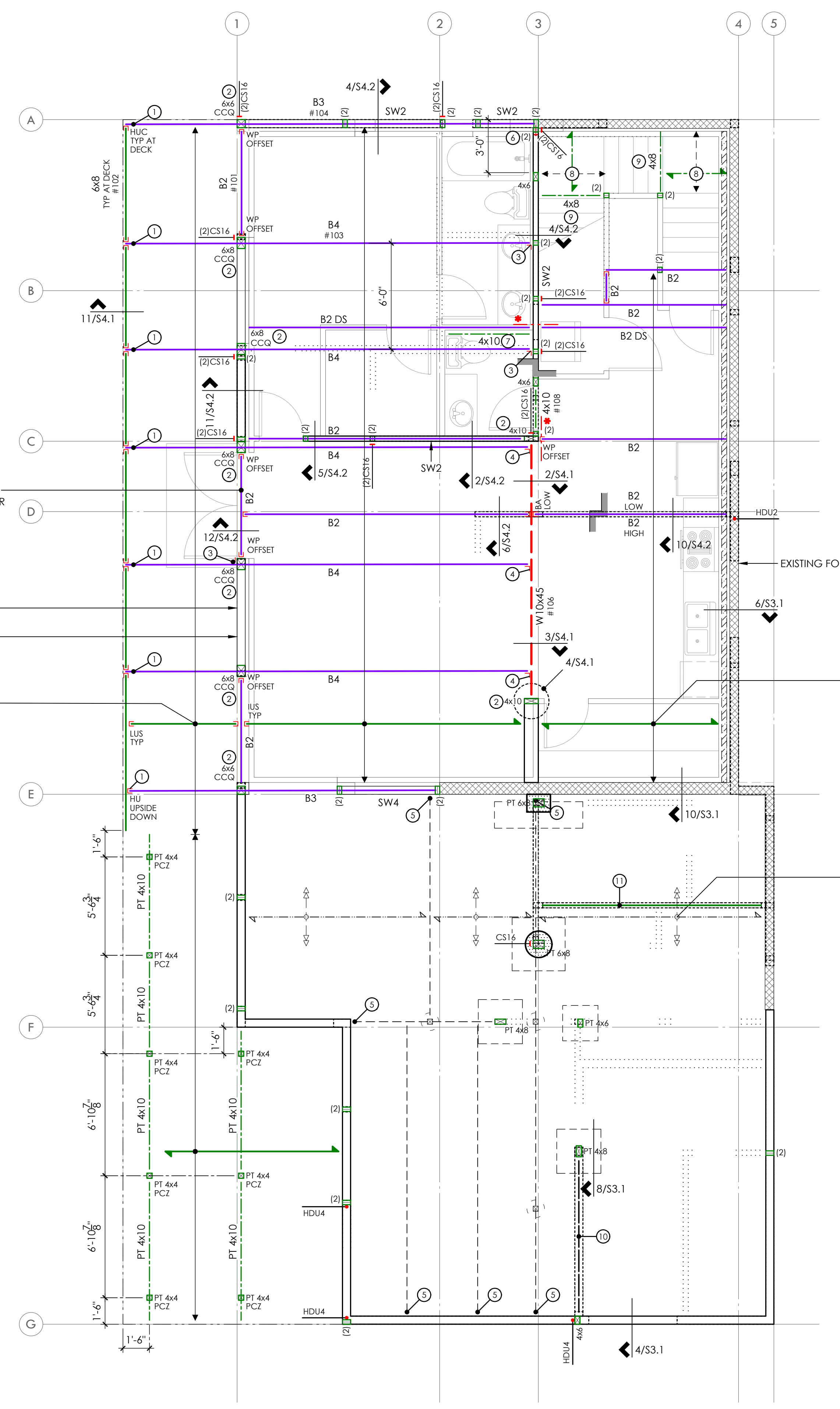
LEGEND

- CONCRETE WALL BELOW
- (E) CONCRETE WALL BELOW
- STRUCTURAL WALL BELOW
- STRUCTURAL WALL ABOVE
- (E) STRUCTURAL WALL BELOW
- FRAME FUR WALL w/ (2) 2x6 STUDS AT 16"oc
- STEP PER ARCH
- SPAN AND EXTENTS
- HEADER/BEAM BELOW FRAMING - TYP
- (x) NUMBER OF BUILT UP STUDS
- PLUMBING PENETRATION ABOVE
- HORIZ CS16 x 3'-0" - BEAM TO BEAM
- DS DRAG STRUT - NAIL THRU SHEATHING w/ 8d AT 4"oc INTO ENTIRE LENGTH OF MEMBER

ALL REQUIRED HEADERS ARE SHOWN ON PLAN PER PLAN NOTE 5. TRUSS MFR TO DESIGN RIM TRUSS TO SPAN OVER EXT OPENINGS AND HANG TRUSSES TO RIM TRUSS OR BEAM WHERE HEADERS ARE NOT PROVIDED. UNO PROVIDE CS16 x 30" AT ALL RIM JOIST SPLICES

ALL EXTERIOR WALLS SW6 PER PLAN NOTE 4. UNO
TYPICAL WALL FRAMING PER PLAN NOTE 8. UNO

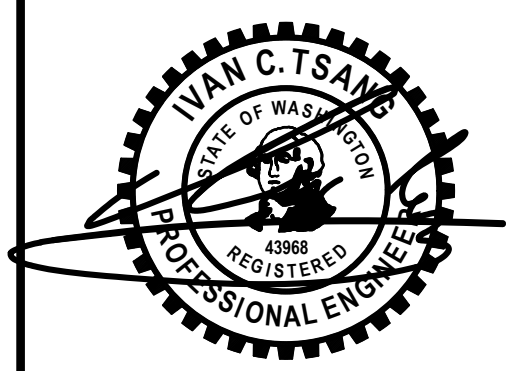
TYPICAL WATERPROOF DECK FRAMING PER PLAN NOTE 2. UNO



FIRST FLOOR FRAMING PLAN

FIRST FLOOR WALLS SHOWN DASHED
BASEMENT WALLS SHOWN SOLID

- MATERIALS**
- SAWN LUMBER
 - TRUSSES
 - ENGINEERED
 - GLU-LAM
 - STEEL MEMBER



PROJECT NO 0527.2025.01.01
PROJECT MANAGER RAF
DRAWN JSD
ENGINEER NATE MOORE
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REV	DESCRIPTION	DATE
	PERMIT SET	2.7.25
	PLAN REVISIONS	8.28.25

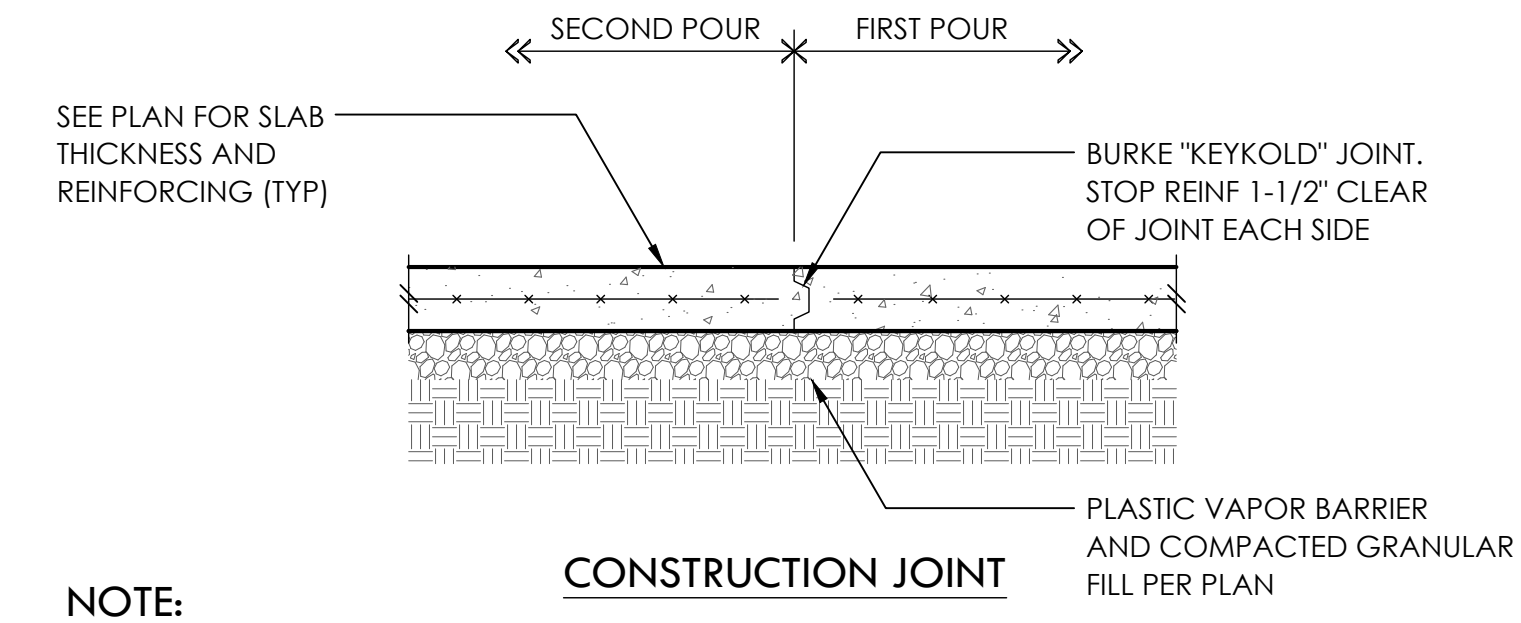
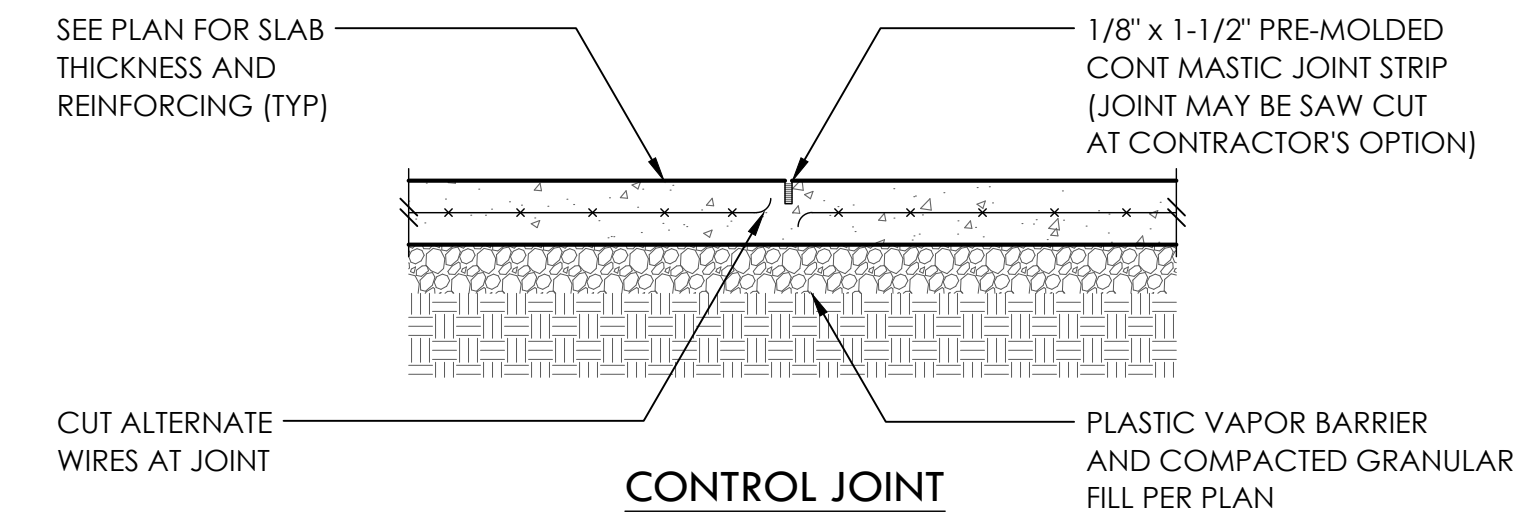
ARCH V SQUARED
206.657.7297

FIRST FLOOR FRAMING PLAN

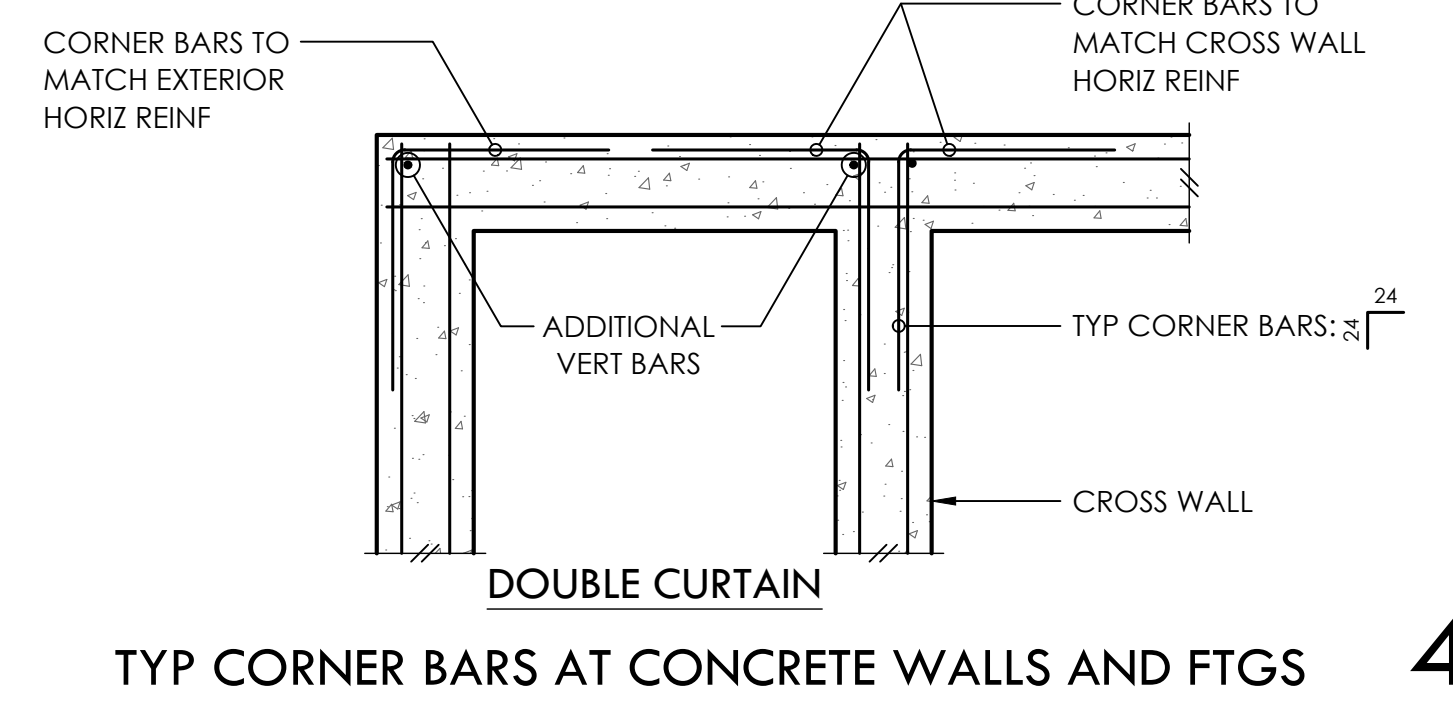
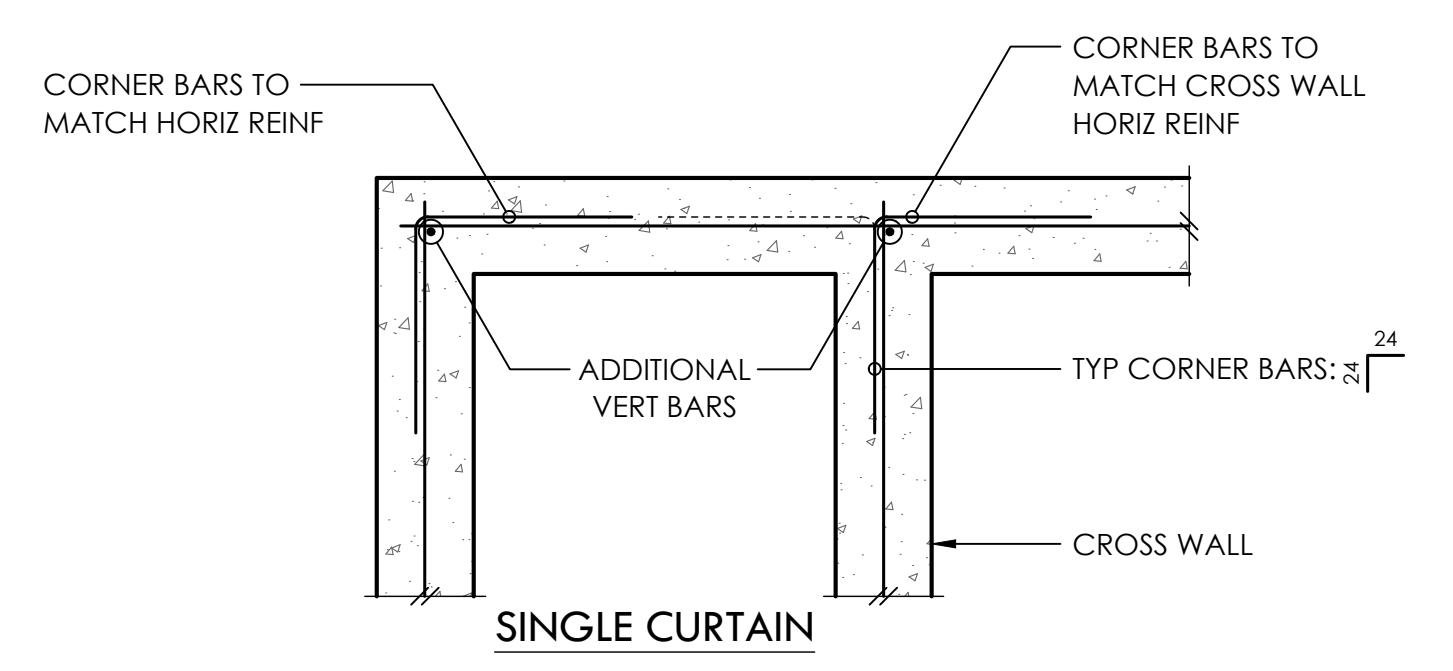
S2.1
SCALE - 1/4" = 1'-0"

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Revised by: nms
Printed on: 08/28/2025 - 11:20am



NOTE:
PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 200 SQUARE FEET OR LESS. AREAS TO BE APPROX SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

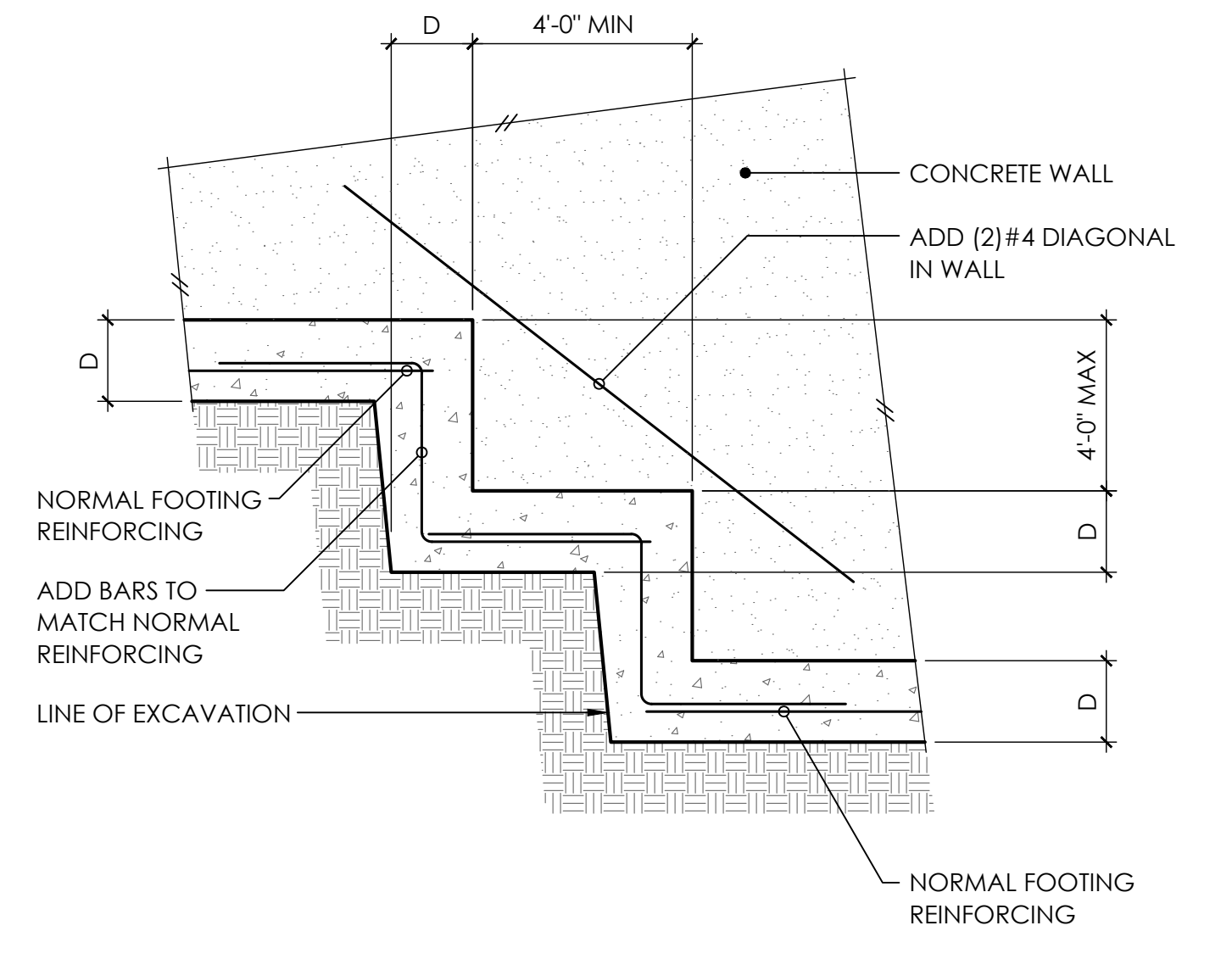
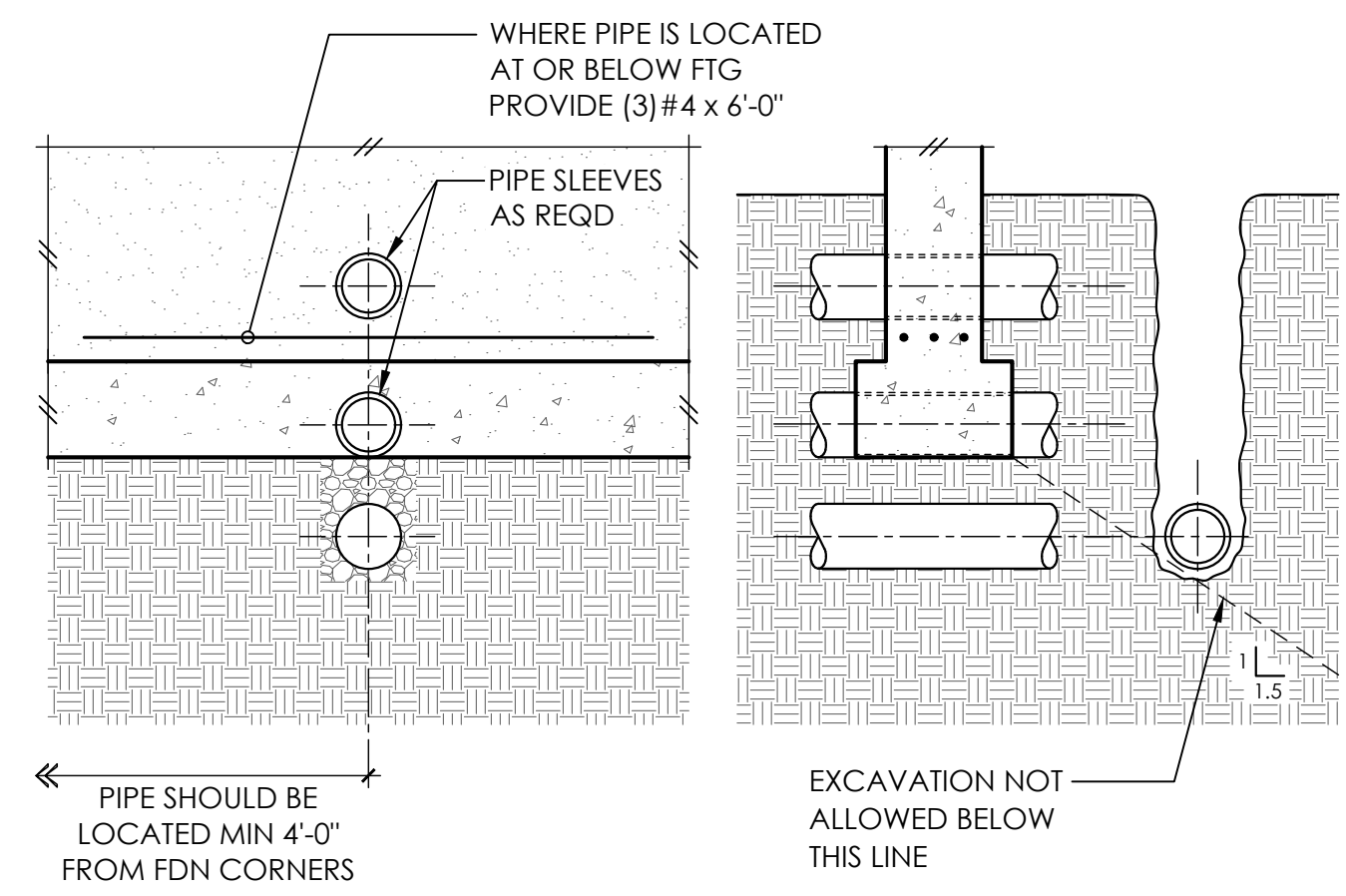


1

2

3

TYP CORNER BARS AT CONCRETE WALLS AND FTGS 4

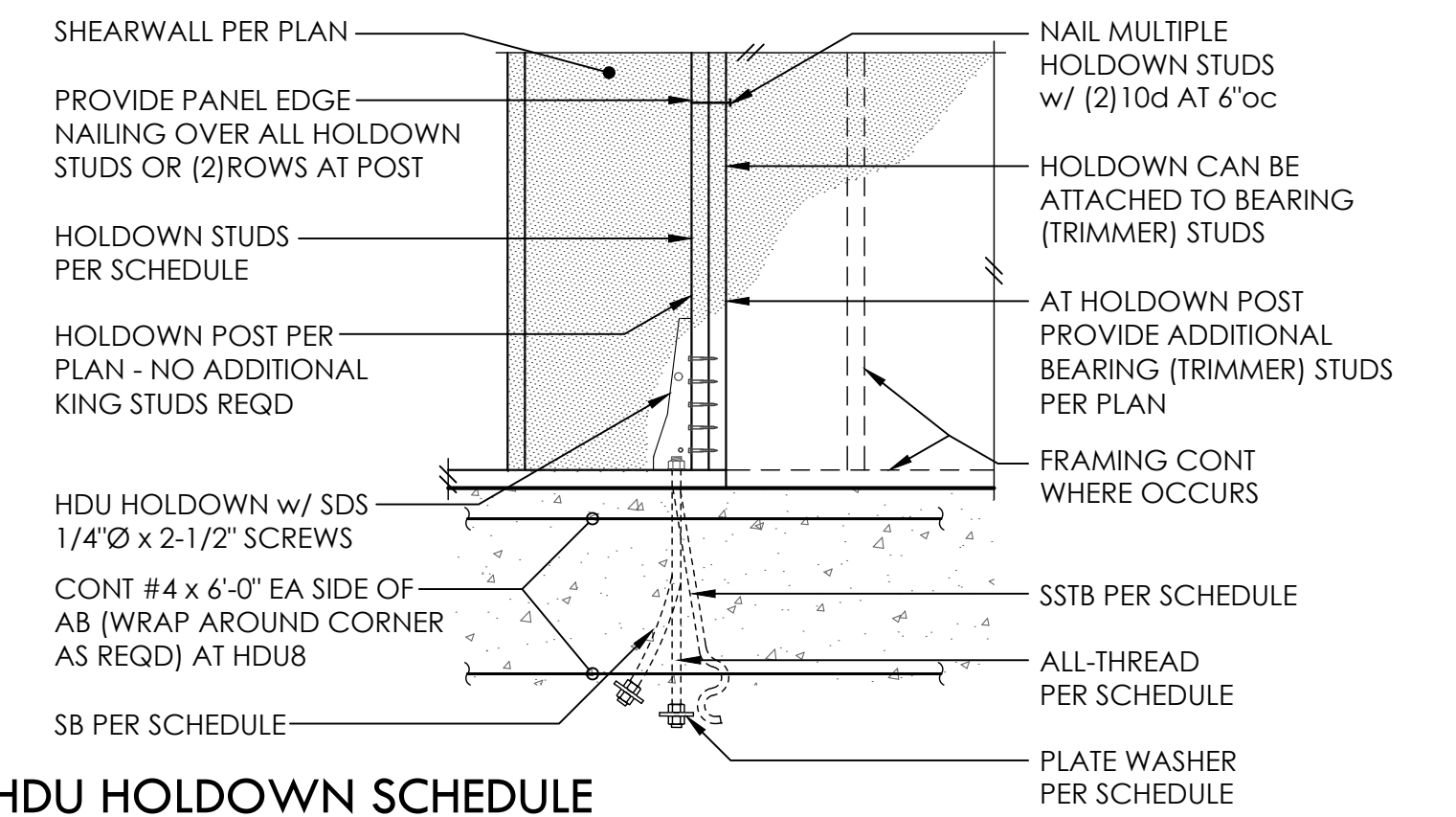


5

6

7

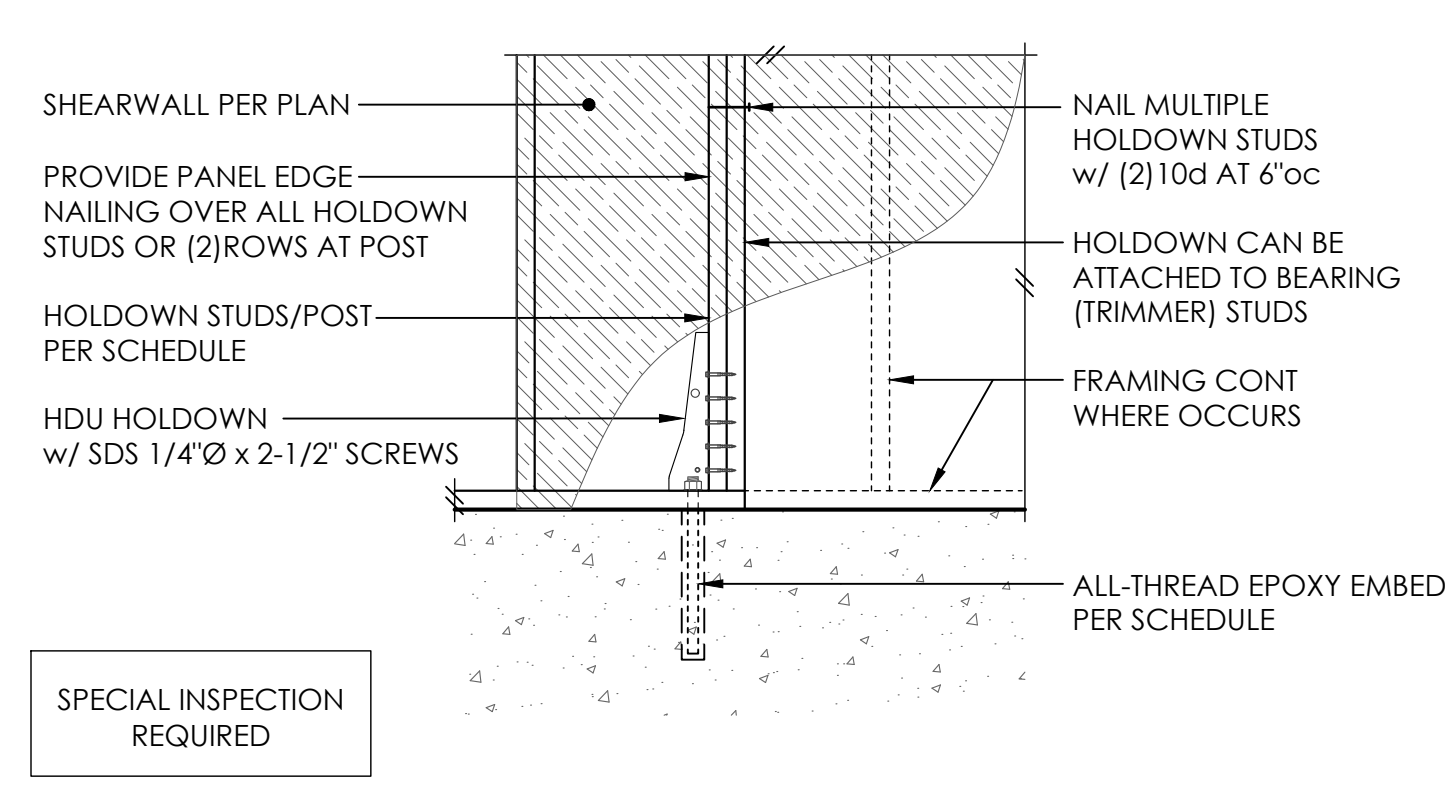
TYPICAL STEPPED FOOTING 8



HDU HOLDOWN SCHEDULE

PLAN MARK	AT STEMWALL		AT FOOTING		HD POST	
	AB	EMBED	ALL-THREAD	WASHER	EMBED	4x WALL / 6x WALL
HDU2	5/8"Ø - SSTB16(L)	12-5/8"	5/8"Ø	1-3/4"SQ x 1/2	9"	(2)2x4 / (2)2x6
HDU4	5/8"Ø - SB5/8 x 24	18"	5/8"Ø	1-3/4"SQ x 1/2	9"	(2)2x4 / (2)2x6
HDU5	5/8"Ø - SB5/8 x 24	18"	5/8"Ø	1-3/4"SQ x 1/2	9"	(2)2x4 / (2)2x6
HDU8	7/8"Ø - SB7/8 x 24	18"	7/8"Ø	2-1/2"SQ x 1/2	12"	4x6 / 6x6

- Ⓚ ALL HOLDOWN ANCHOR BOLTS THAT NEED TO BE EMBEDDED INTO FOOTING ARE SPECIFICALLY SHOWN ON PLAN
- Ⓛ A307 ALL-THRD w/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOT OR EQUIVALENT SIMPSON PAB
- Ⓜ MINIMUM SIZE OF POST UNO ON FRAMING PLANS



HDU HOLDOWN SCHEDULE

PLAN MARK	AT STEMWALL		AT FOOTING		HD POST	
	AB	EMBED	ALL-THREAD	EMBED	4x WALL	6x WALL
HDU2	5/8"Ø ALL-THREAD	12"	5/8"Ø	9"	(2)2x4	(2)2x6
HDU4	5/8"Ø ALL-THREAD	12"	5/8"Ø	9"	(2)2x4	(2)2x6
HDU5	5/8"Ø ALL-THREAD	12"	5/8"Ø	9"	(2)2x4	(2)2x6

- Ⓚ A307 ALL-THREAD AND MAINTAIN 1-3/4" MIN EDGE DISTANCE - 12" MIN END DISTANCE TO STEMWALL END/CORNER
- Ⓛ MINIMUM SIZE OF POST UNO ON FRAMING PLANS
- Ⓜ MINIMUM 1'-6" WIDE x 1'-0" DEEP FOOTING



PROJECT NO: 0527.2025.01.01
PROJECT MANAGER: RAF
DRAWN: JSD
ENGINEER: NATE MOORE
NATEM@MALSAM-TSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	2.7.25
	PLAN REVISIONS	8.28.25

ARCH: V SQUARED 206.657.7297

TYPICAL CONCRETE DETAILS

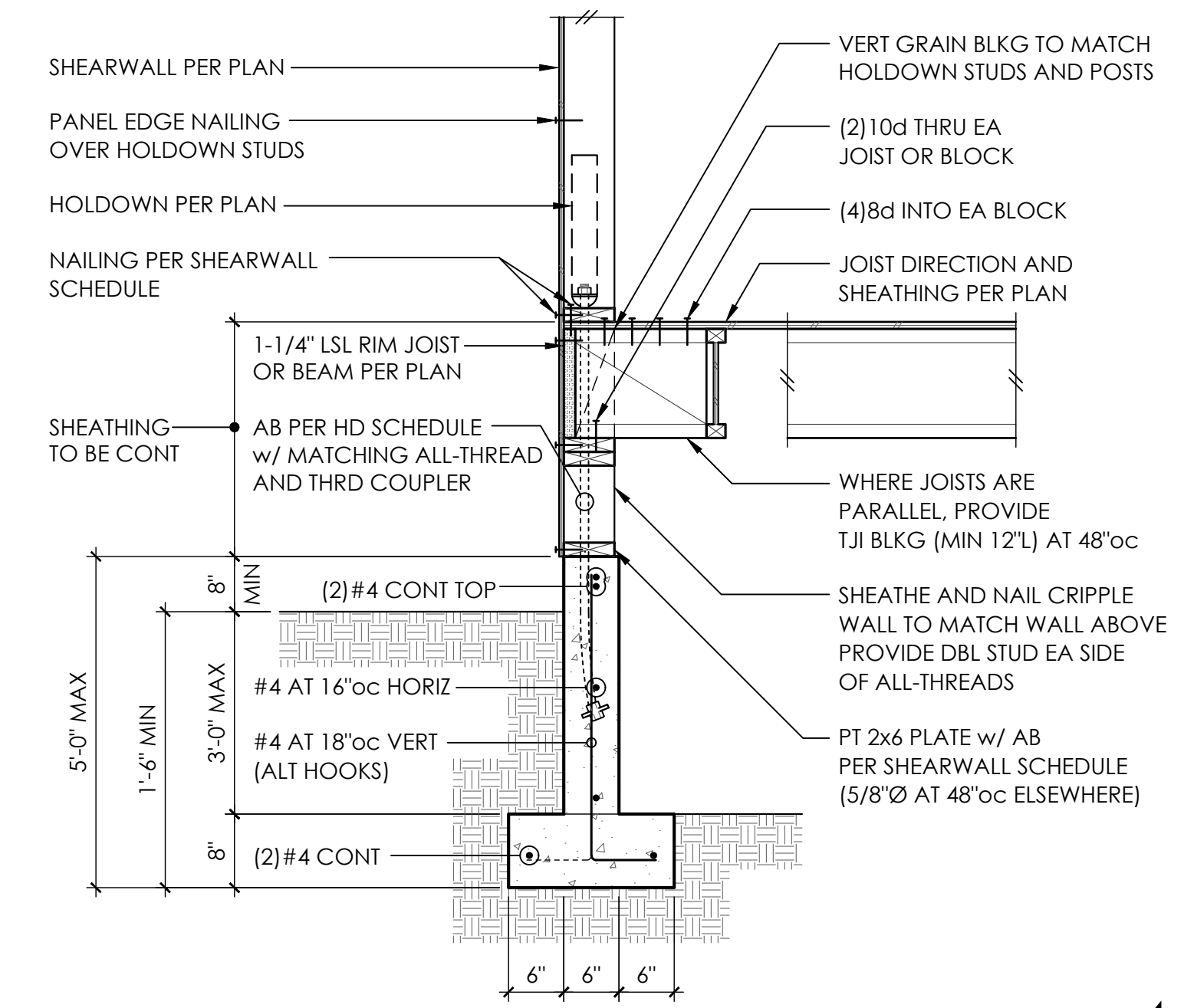
S3.0
SCALE - 3/4" = 1'-0"

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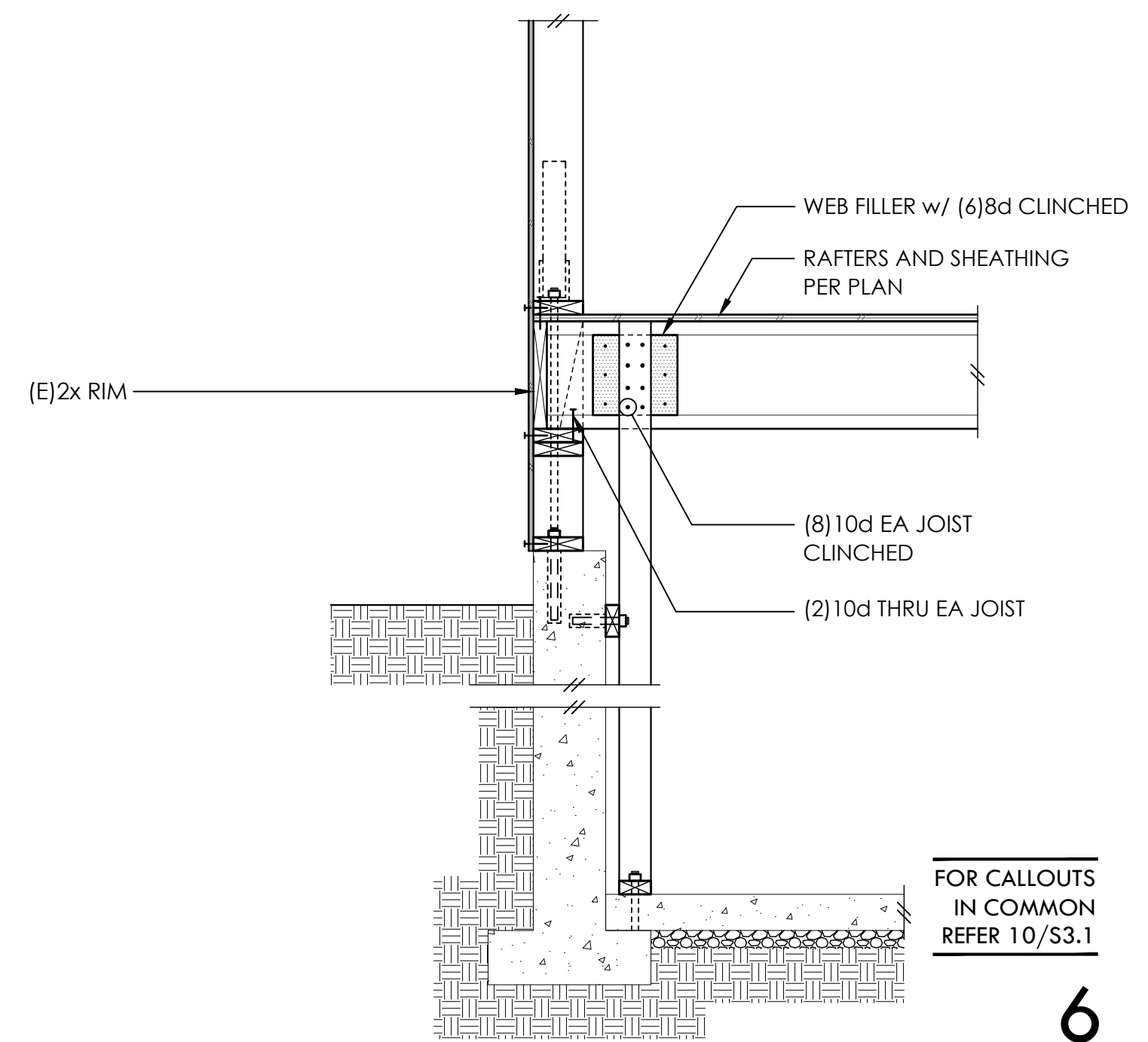


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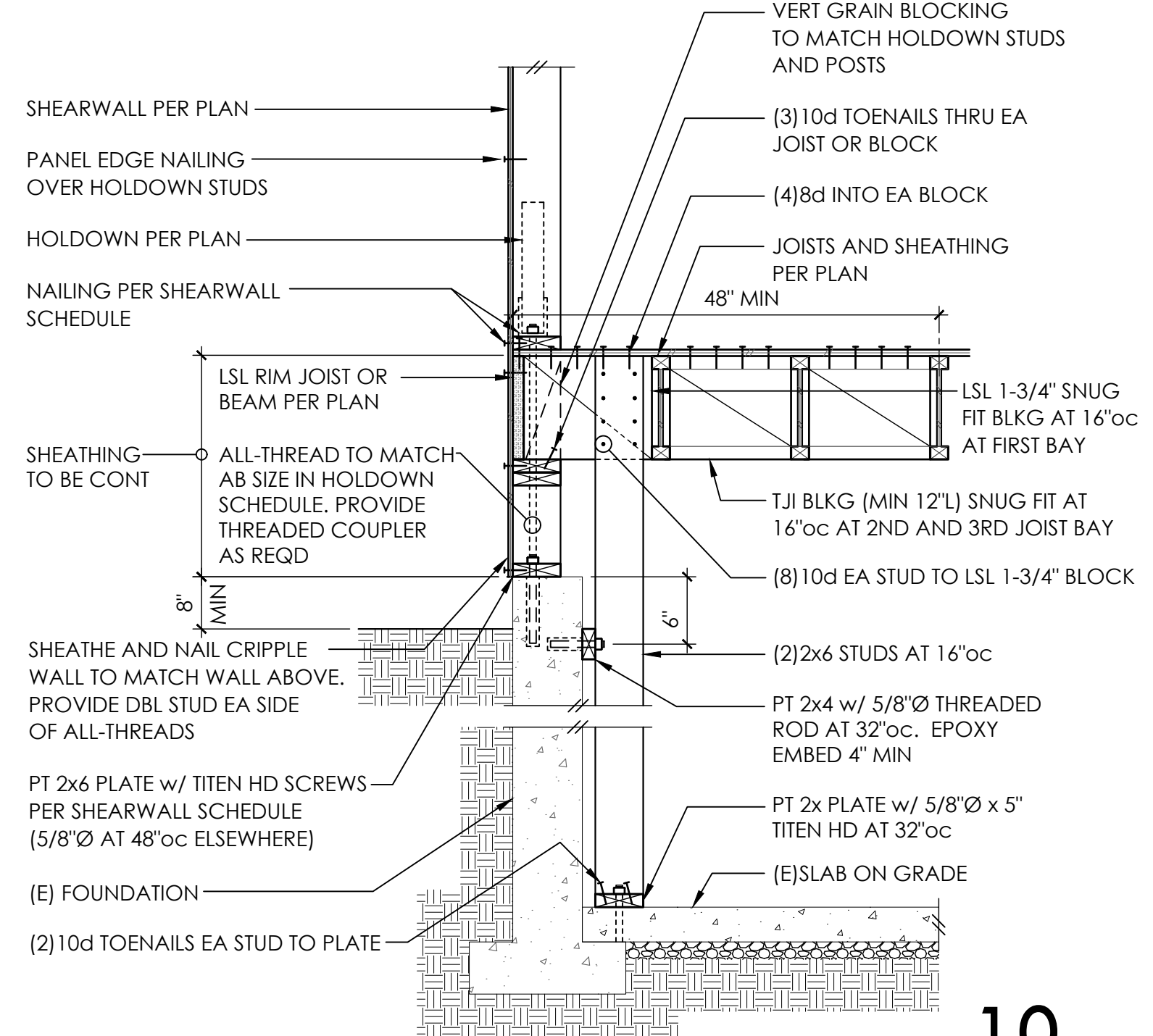


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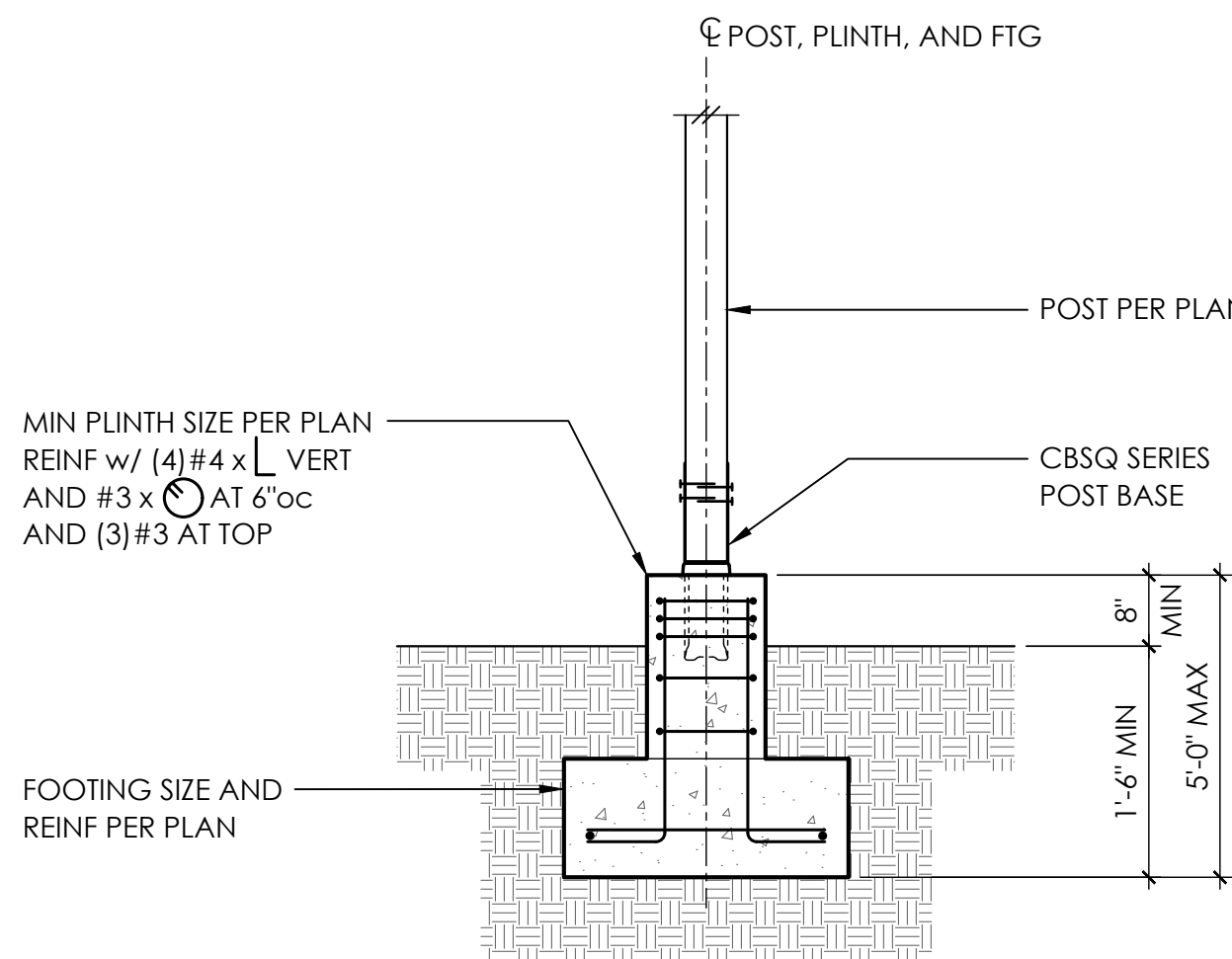
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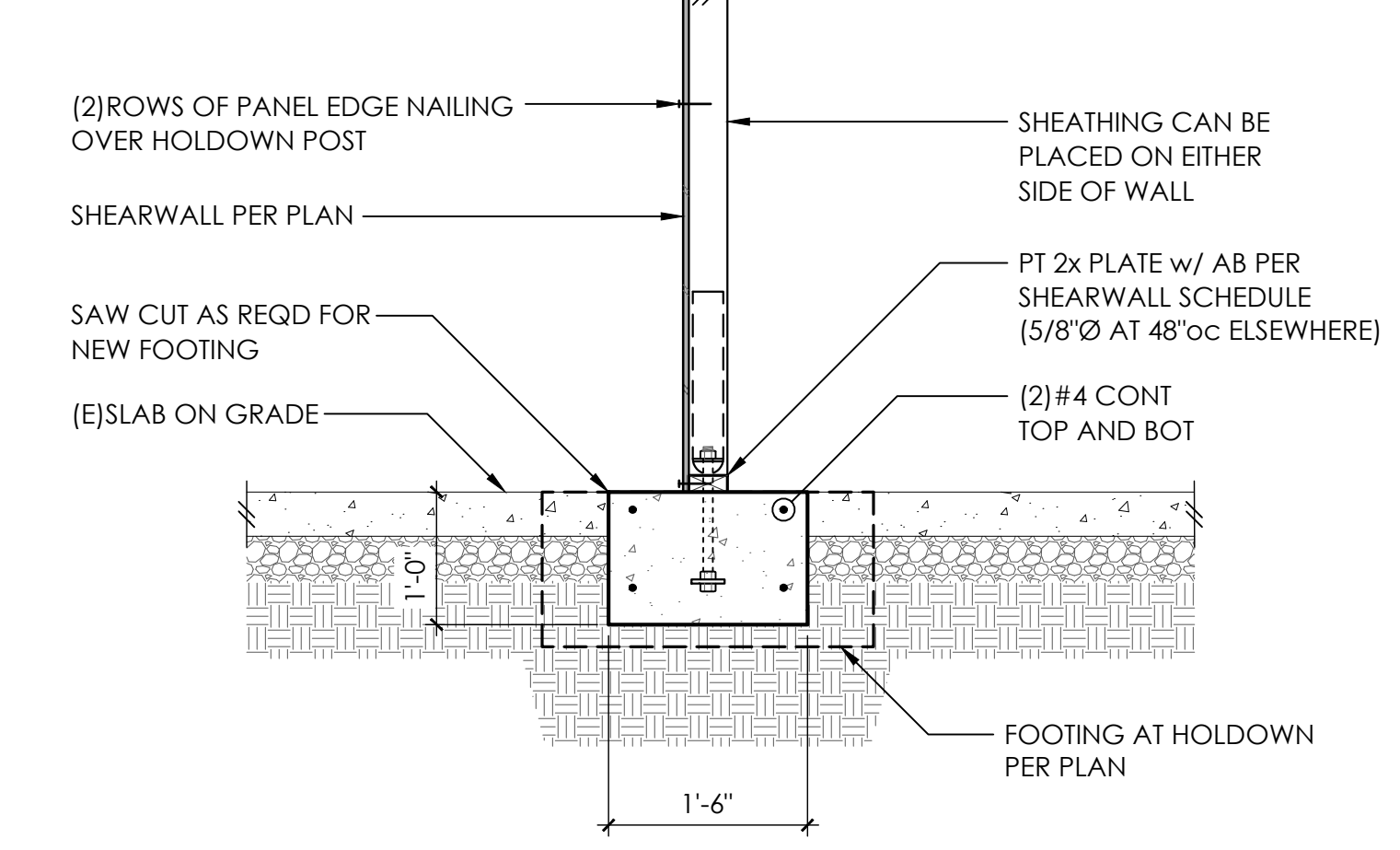
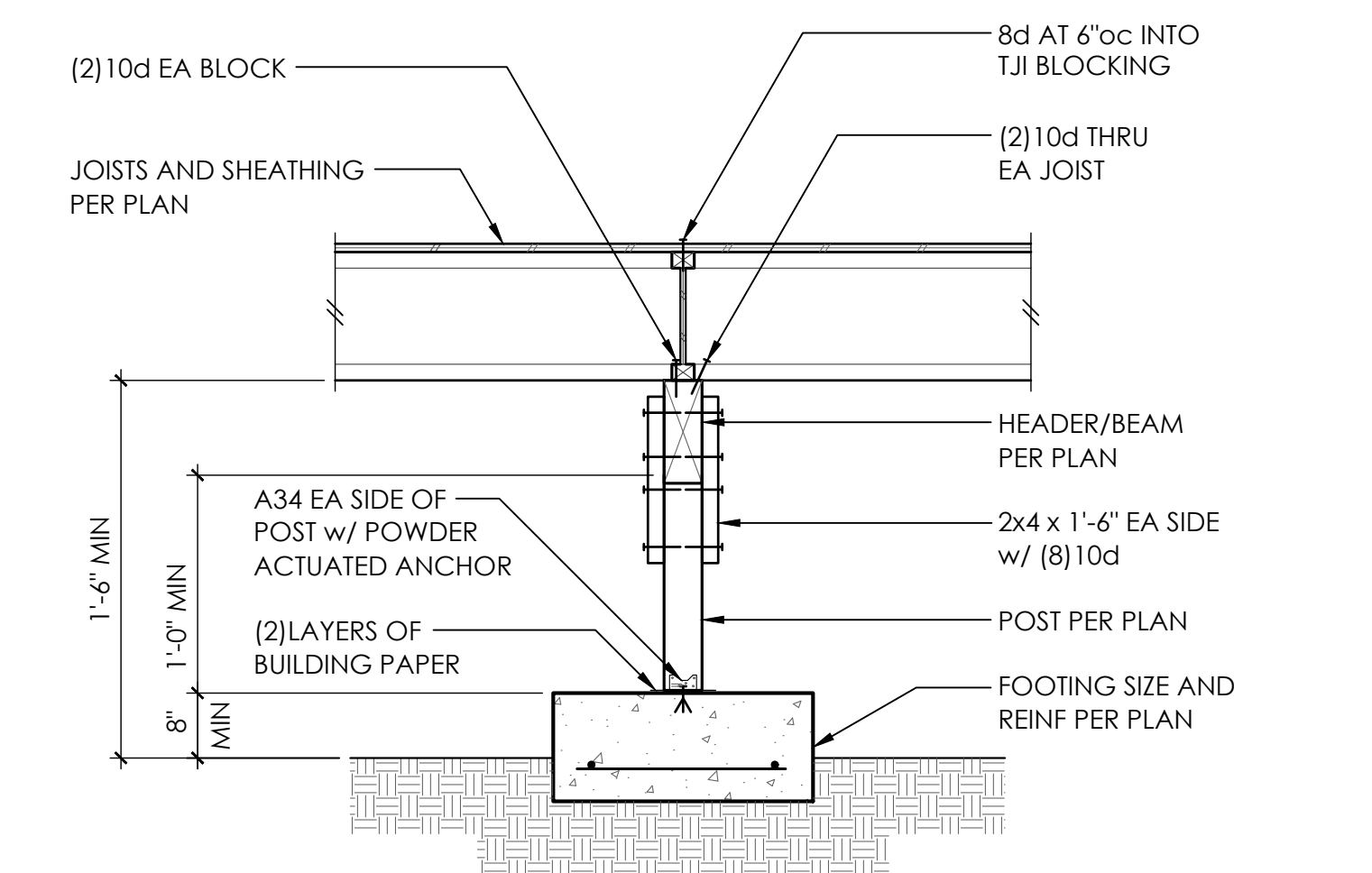


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PROJECT NO	0527.2025.01.01	
PROJECT MANAGER	RAF	
DRAWN	JSD	
ENGINEER	NATE MOORE	
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	NATEM@MALSAM-TSANG.COM	
REV	DESCRIPTION	DATE
	PERMIT SET	2.7.25
△	PLAN REVISIONS	8.28.25
ARCH	V SQUARED	206.657.7297

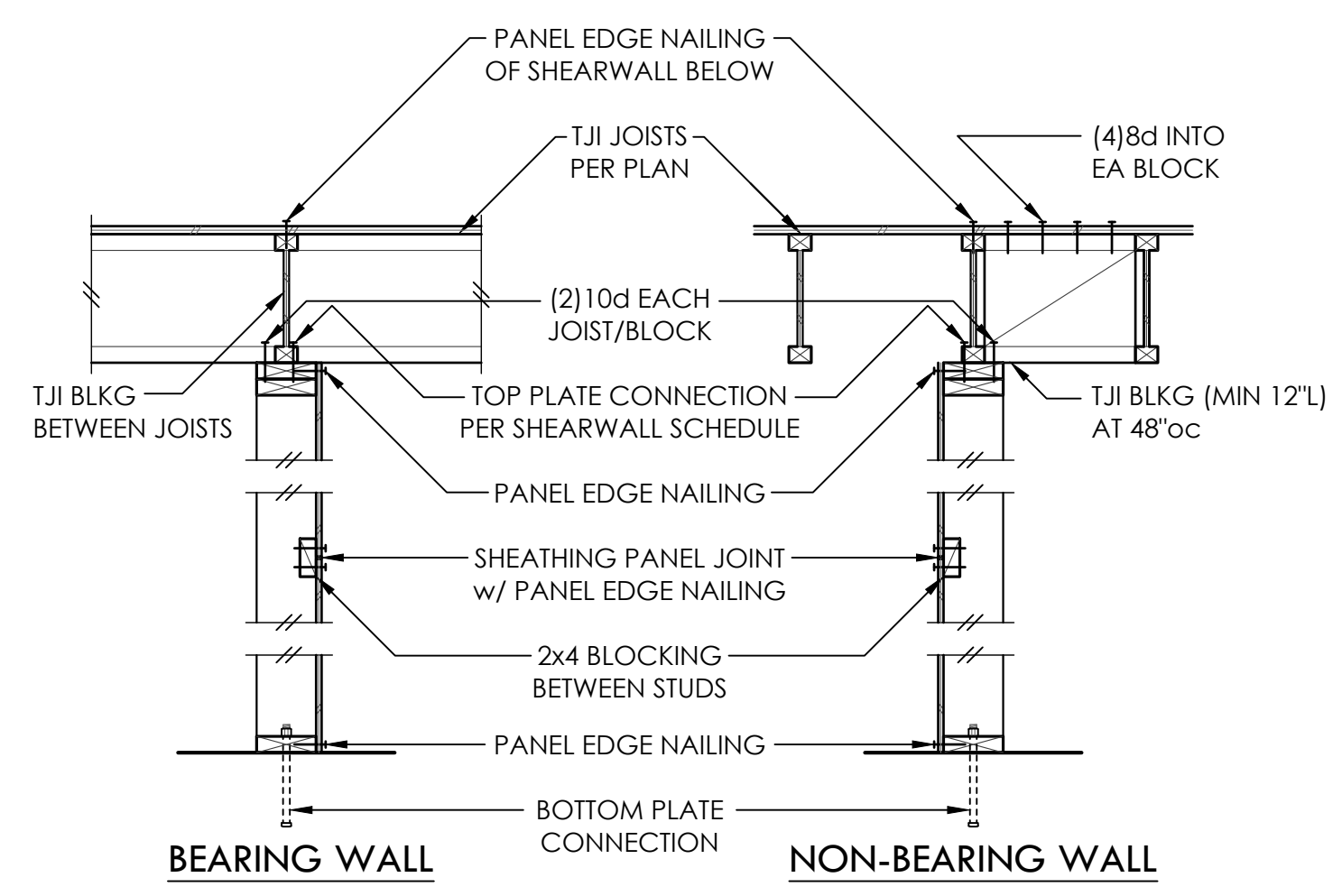
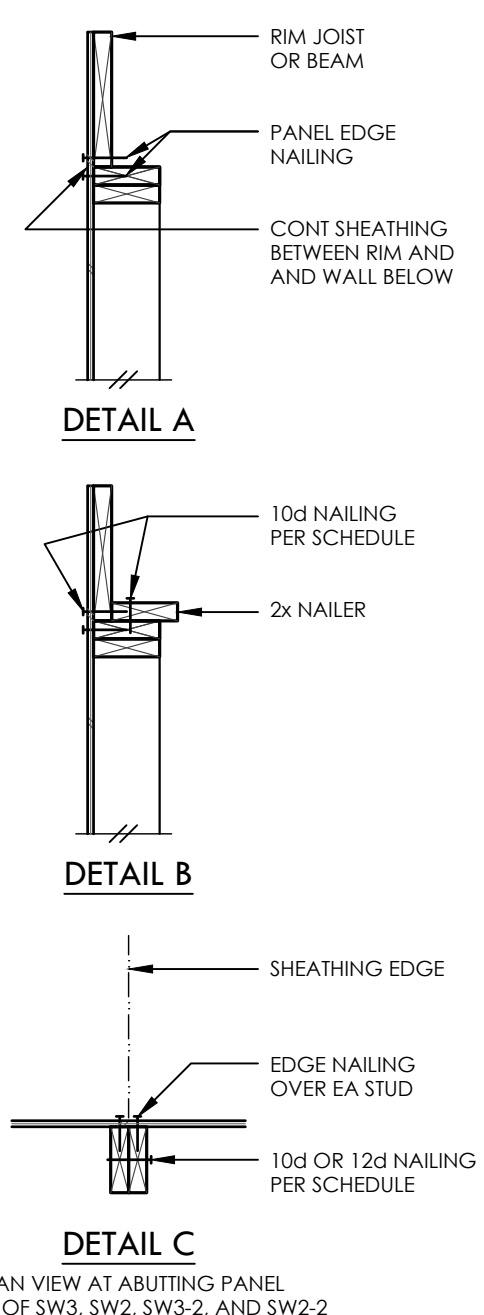
CONCRETE DETAILS

S3.1
SCALE - 3/4" = 1'-0"

SHEARWALL SCHEDULE ○○○○○○○○

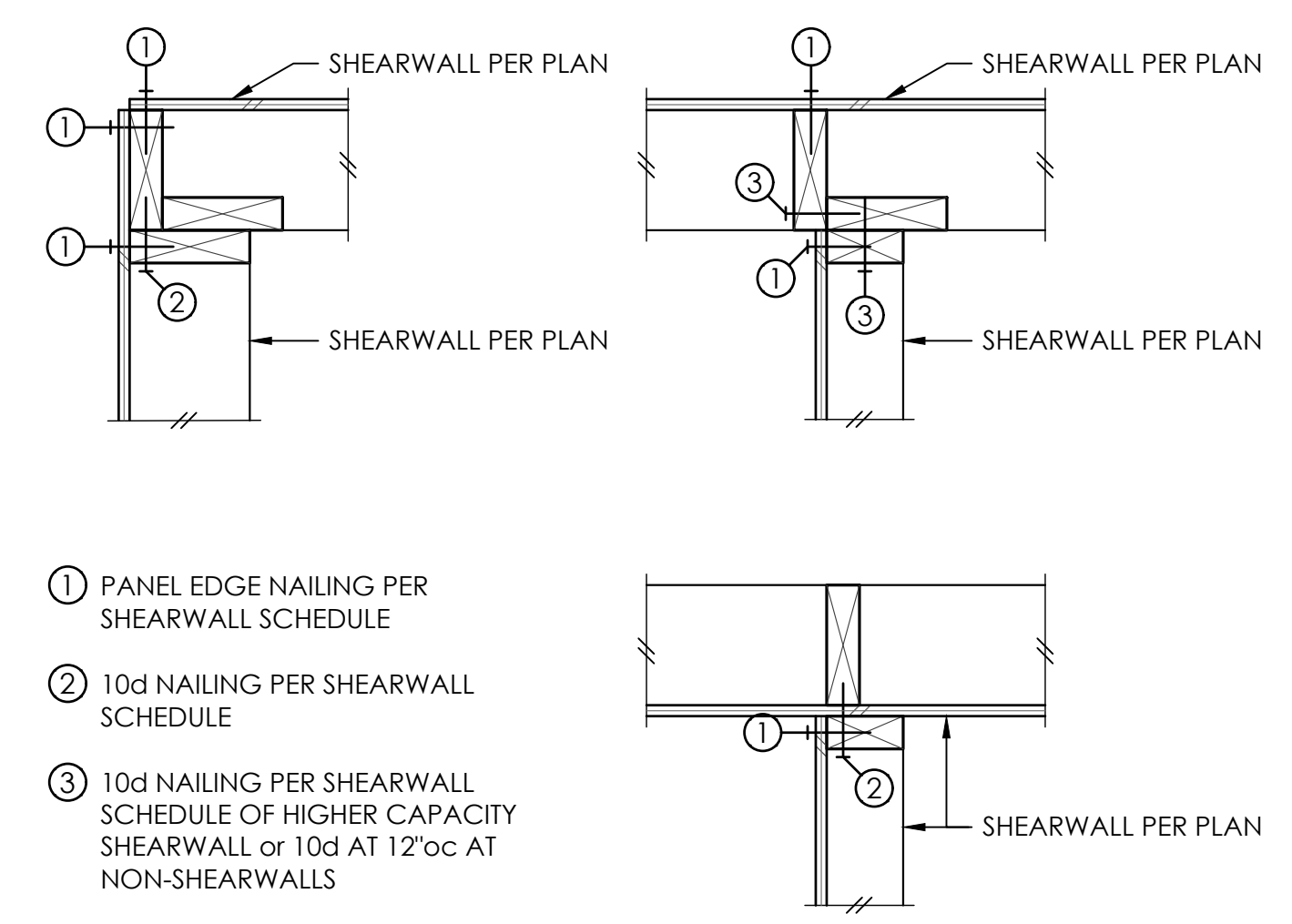
MARK	SHEATHING	PANEL EDGE NAILING	TOP PLATE CONNECTION		BASE PLATE CONNECTION	
			TJI	RIM/BEAM ○	AT WOOD	AT CONCRETE
SW6	1/2" PLY or 7/16" OSB	8d AT 6"oc	10d AT 6"oc	A35 AT 30"oc ○	12d AT 6"oc	5/8"Ø AB AT 48"oc
SW4	1/2" PLY or 7/16" OSB	8d AT 4"oc	10d AT 4"oc	A35 AT 18"oc ○	12d AT 4"oc	5/8"Ø AB AT 42"oc
SW3 ○	1/2" PLY or 7/16" OSB	8d AT 3"oc	(2)ROWS 10d AT 6"oc	A35 AT 16"oc ○	(2)ROWS 12d AT 6"oc	5/8"Ø AB AT 36"oc
SW2 ○	1/2" PLY or 7/16" OSB	8d AT 2"oc	(2)ROWS 10d AT 4"oc	A35 AT 12"oc ○	(2)ROWS 12d AT 4"oc	5/8"Ø AB AT 24"oc
SW3-2 ○	1/2" PLY or 7/16" OSB EA SIDE	8d AT 3"oc EA SIDE	N/A	A35 AT 8"oc	(2)ROWS 12d AT 3"oc	5/8"Ø AB AT 18"oc
SW2-2 ○	1/2" PLY or 7/16" OSB EA SIDE	8d AT 2"oc EA SIDE	N/A	A35 AT 6"oc	(3)ROWS 12d AT 3"oc	5/8"Ø AB AT 12"oc

- BLOCK PANEL EDGES WITH 2x4 LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d AT 12"oc.
- 8d NAILS SHALL BE 0.131"Ø x 2-1/2" x 0.281"Ø, 10d NAILS SHALL BE 0.131"Ø x 3" x 0.281"Ø, AND 12d NAILS SHALL BE 0.131"Ø x 3-1/4" x 0.281"Ø, UNO.
- EMBED ANCHOR BOLTS AT LEAST 7". ALL BOLTS SHALL HAVE 3" x 3" x 0.229" PLATE WASHERS. THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE(S) w/ SHEATHING. AT 2x6 SW3-2 AND SW2-2 WALLS, PROVIDE 4-1/2" x 3" x 0.229" PLATE WASHERS CENTERED ON PLATE.
- 3x STUDS OR DBL STUDS NAILED TOGETHER w/ 10d OR 12d NAILING IS REQD AT ABUTTING PANEL EDGES OF SW3, SW2, SW3-2, AND SW2-2. REFER TO DETAIL C. WHERE 3x STUDS ARE USED, STAGGER NAILS AT ADJOINING PANEL EDGES. ABUTTING PANEL EDGES SHALL BE OFFSET EACH SIDE OF WALL AT SW3-2 AND SW2-2.
- TWO STUDS MINIMUM OR POST PER PLAN ARE REQUIRED AT EACH END OF ALL SHEARWALLS AND ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING.
- ALL EXTERIOR WALLS SHALL BE SW6, UNLESS NOTED OTHERWISE.
- NAILS SHALL NOT BE SPACED LESS THAN 3/8" FROM EDGES OF SHEATHING. SHEATHING NAILS SHALL BE DRIVEN SO THEIR HEADS ARE FLUSH WITH SHEATHING (NOT COUNTERSUNK).
- LTP4's INSTALLED OVER SHEATHING WITH 8d (0.131"Ø x 2-1/2" x 0.281"Ø) NAILS MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.
- A35's OR LTP4's MAY BE ELIMINATED PER DETAIL A OR DETAIL B.

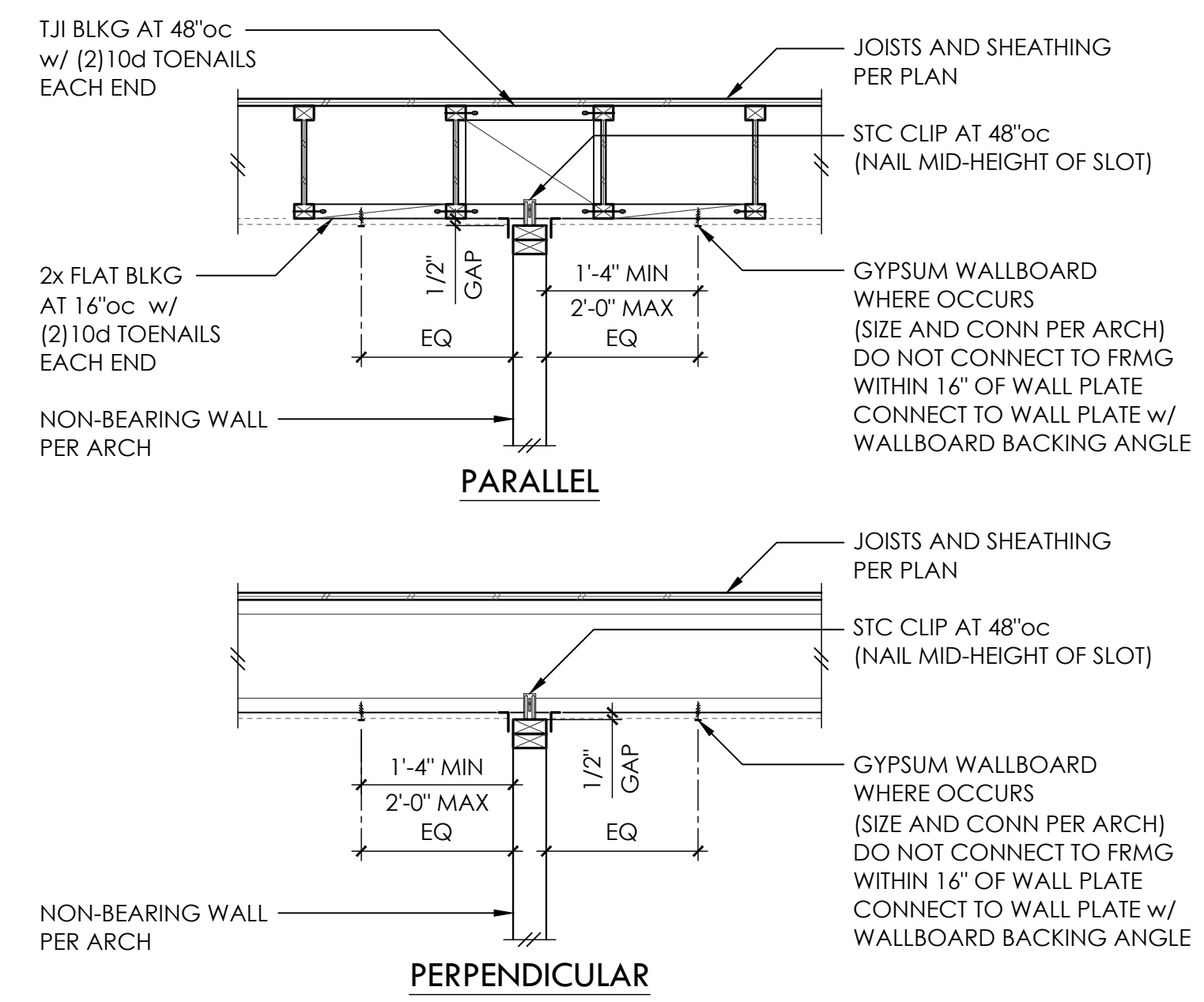


NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND CONNECTIONS, UNO

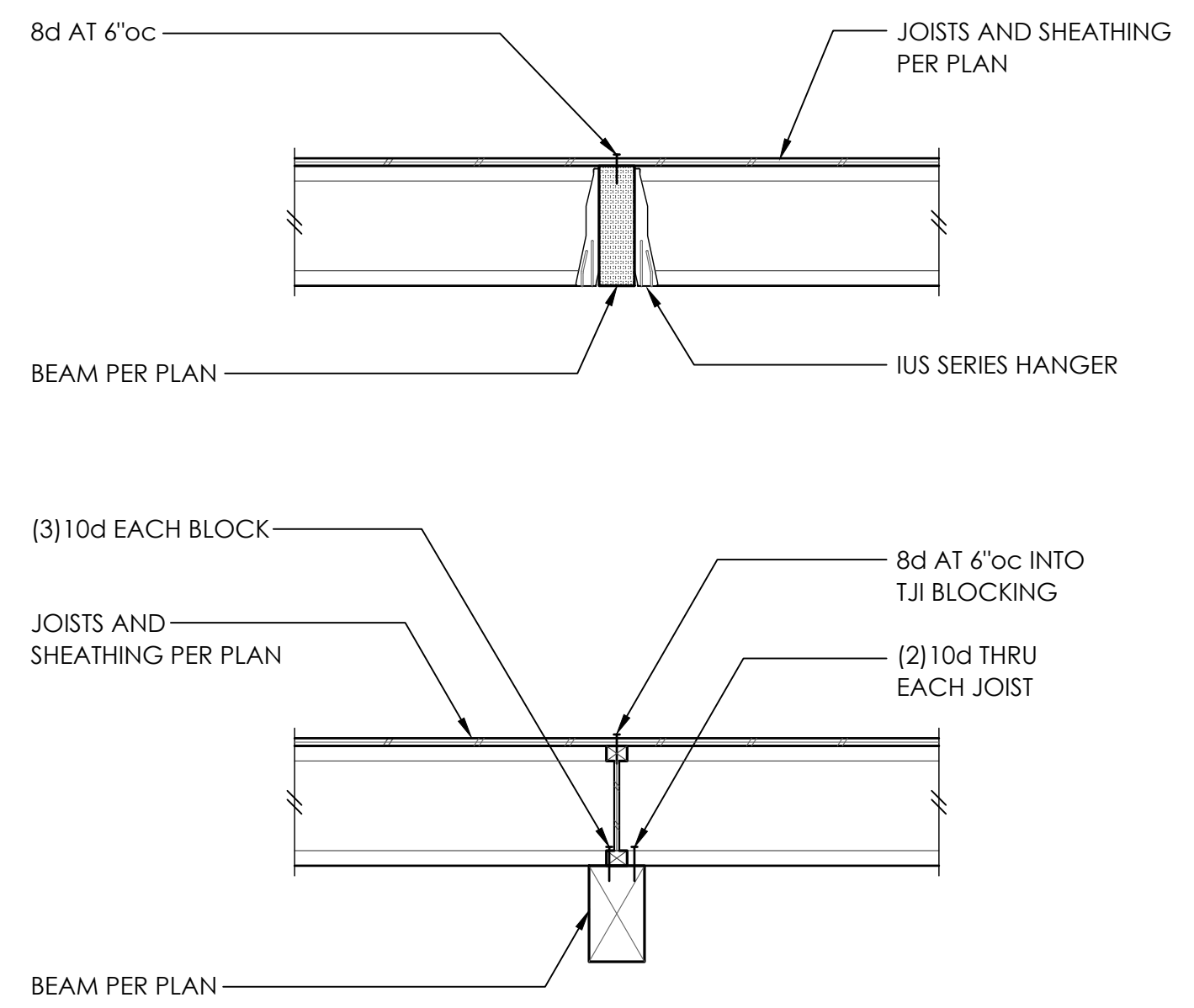
TYPICAL SHEARWALL CONSTRUCTION 2



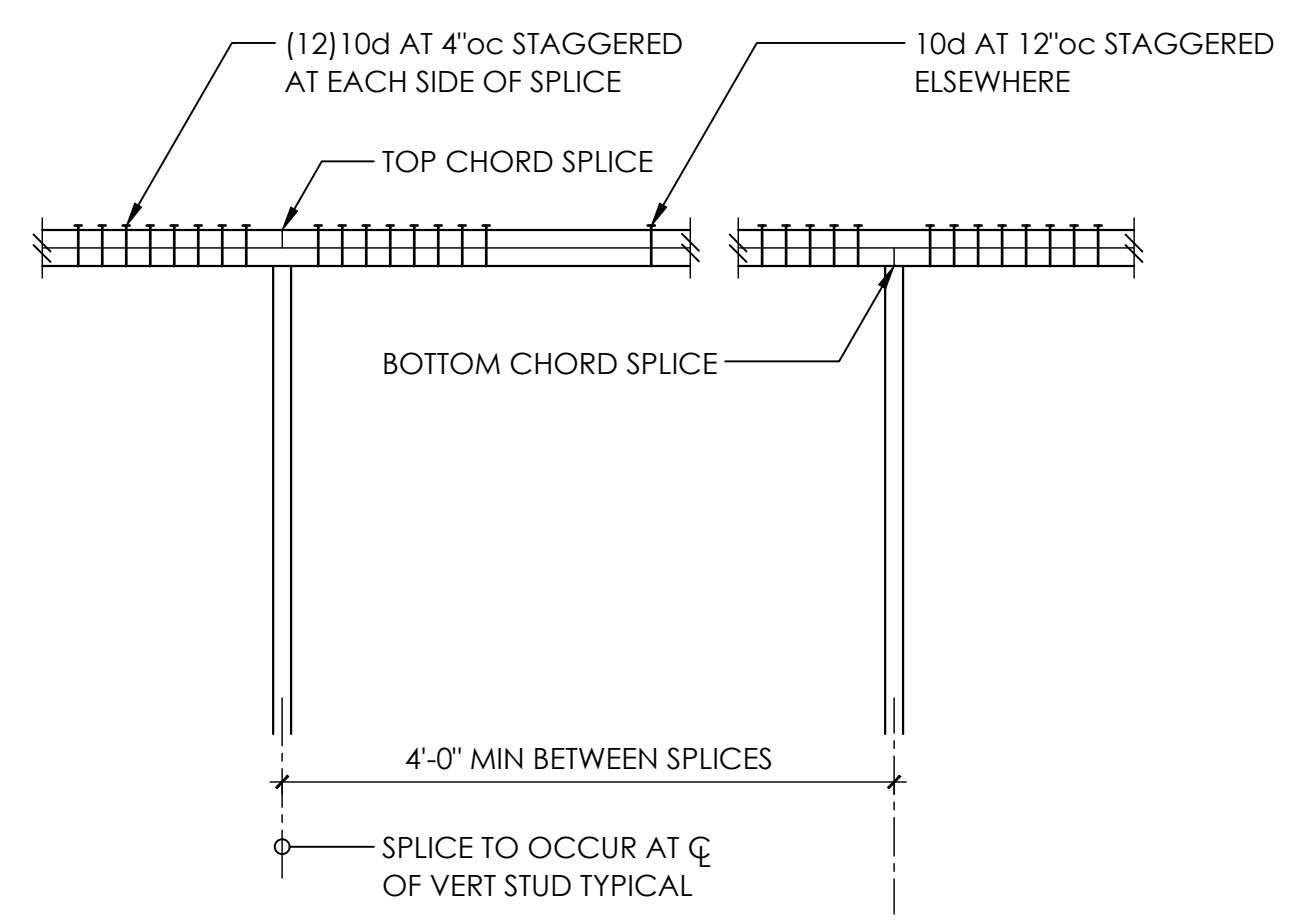
TYPICAL SHEARWALL INTERSECTIONS 1



NON-STRUCTURAL WALL CONNECTION TO TJI FRAMING 5

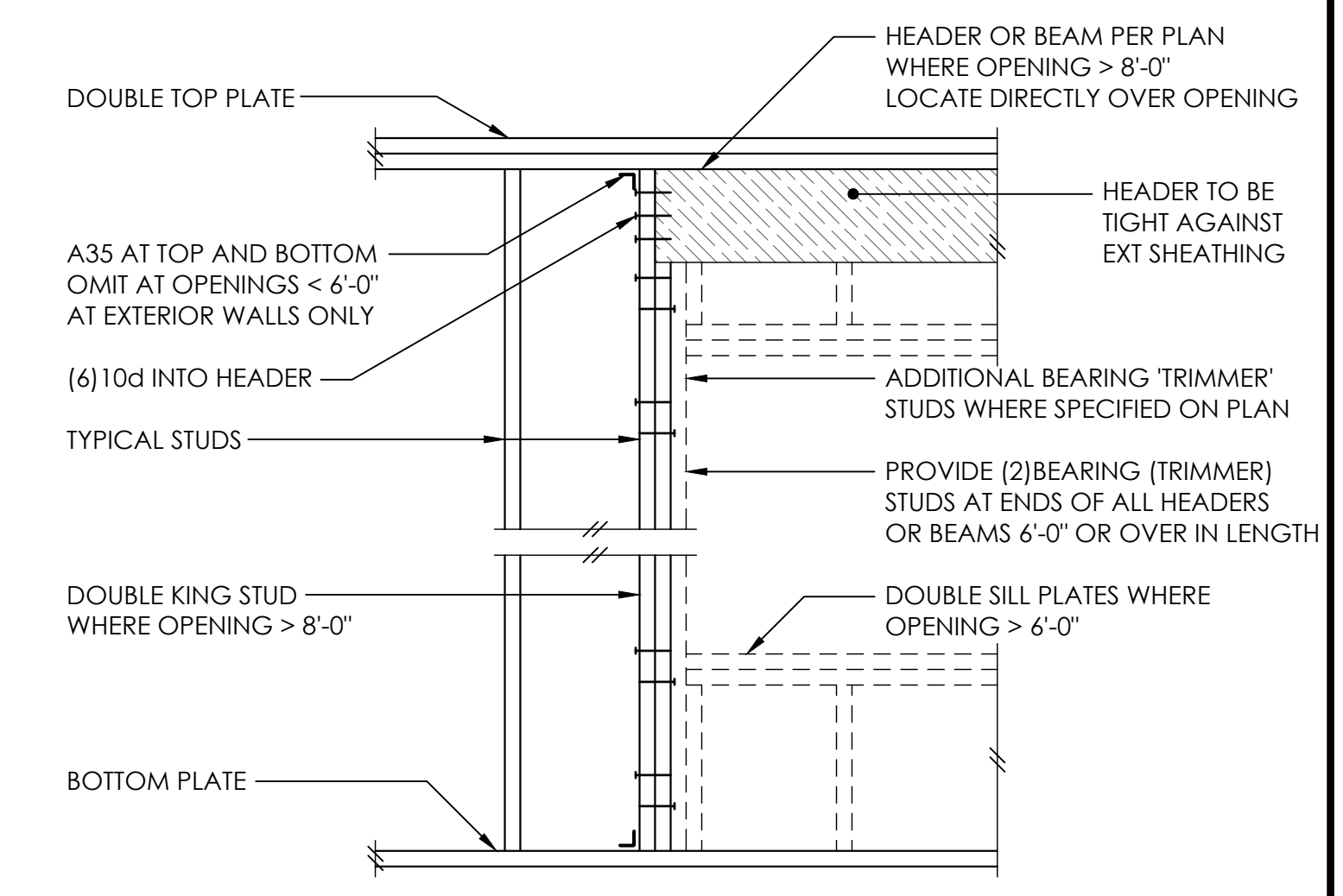


TYPICAL FLUSH AND DROPPED BEAM 6

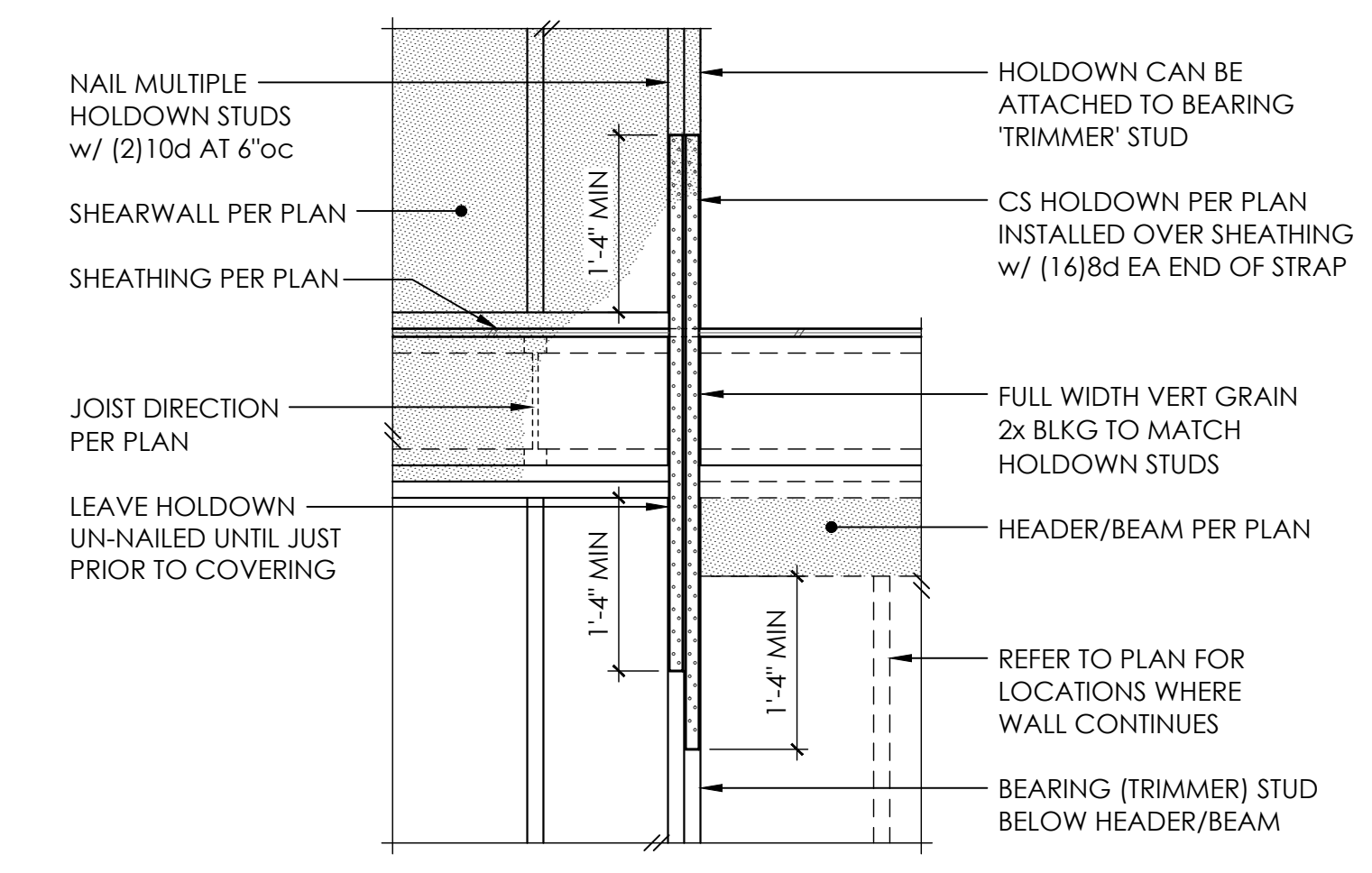


- NOTE:**
- NAILING AT TOP PLATE SPLICES MAY BE ELIMINATED w/ CS16 x 30"
 - WHERE VERTICAL PENETRATIONS THRU PLATE EXCEED 1" FOR A 4x WALL OR 3" FOR A 6x WALL - PROVIDE CS16 x 30" AT TOP PLATE
 - MINIMUM EDGE DISTANCE FOR VERTICAL PENETRATIONS THRU TOP PLATE IS 1-1/4"

TYPICAL TOP PLATE SPLICE 7



TYPICAL HEADER SUPPORT 8



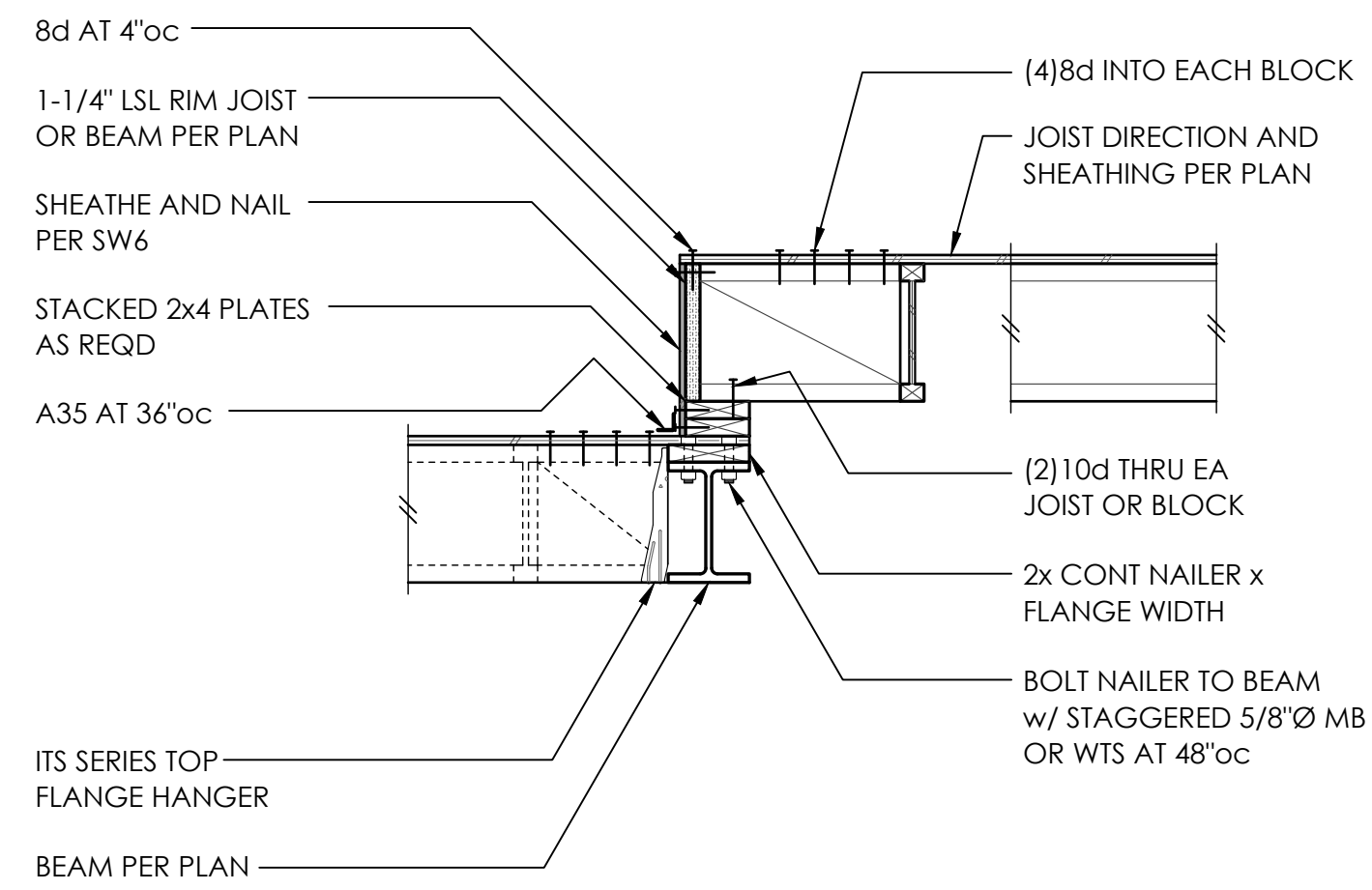
TYPICAL CS16 HOLDOWN 12



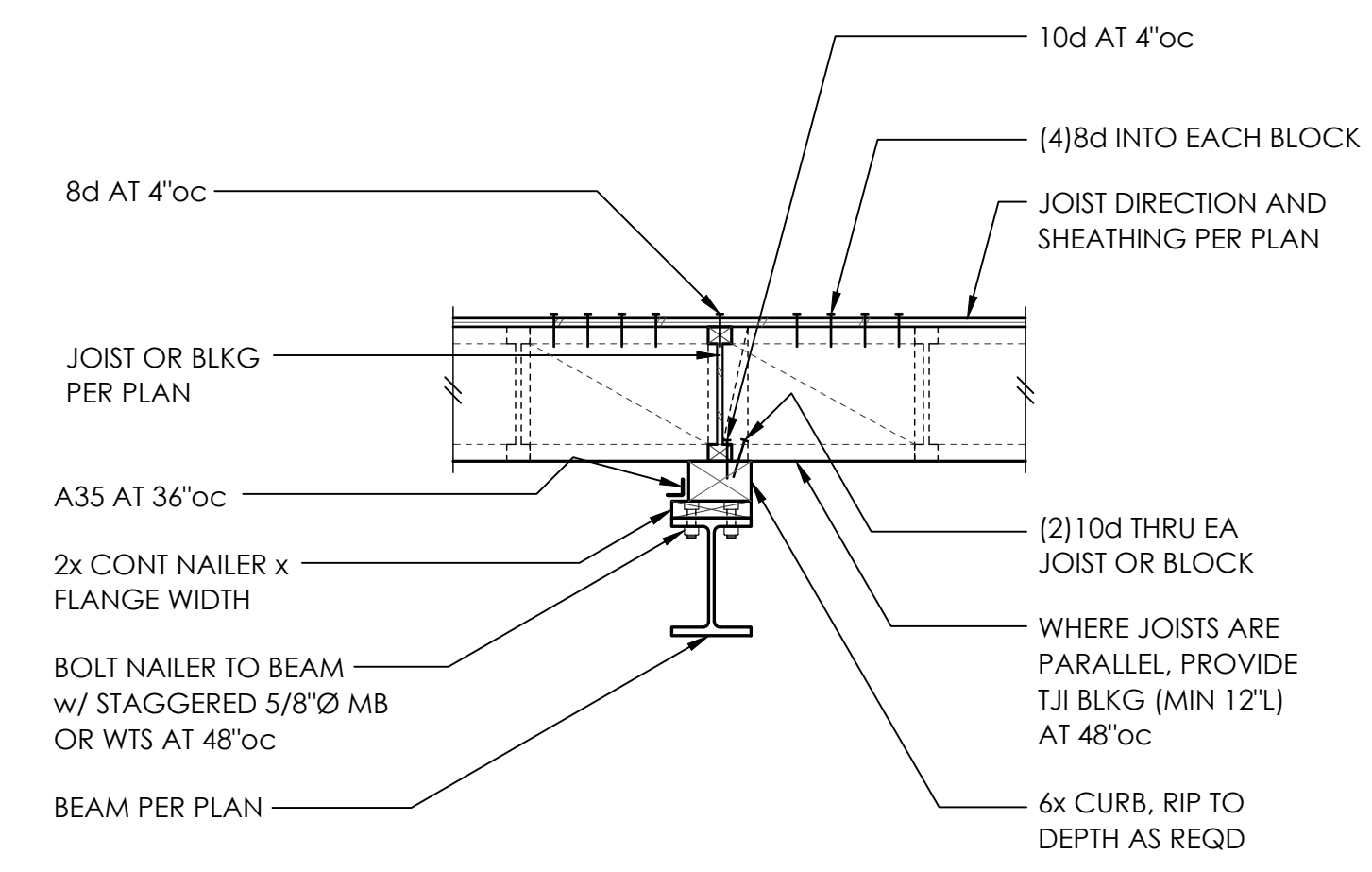
PROJECT NO	0527.2025.01.01	
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DRAWN	JSD	
ENGINEER	NATE MOORE	
	206.602.9537	
	NATEM@MALSAM-TSANG.COM	
REV	DESCRIPTION	DATE
	PERMIT SET	2.7.25
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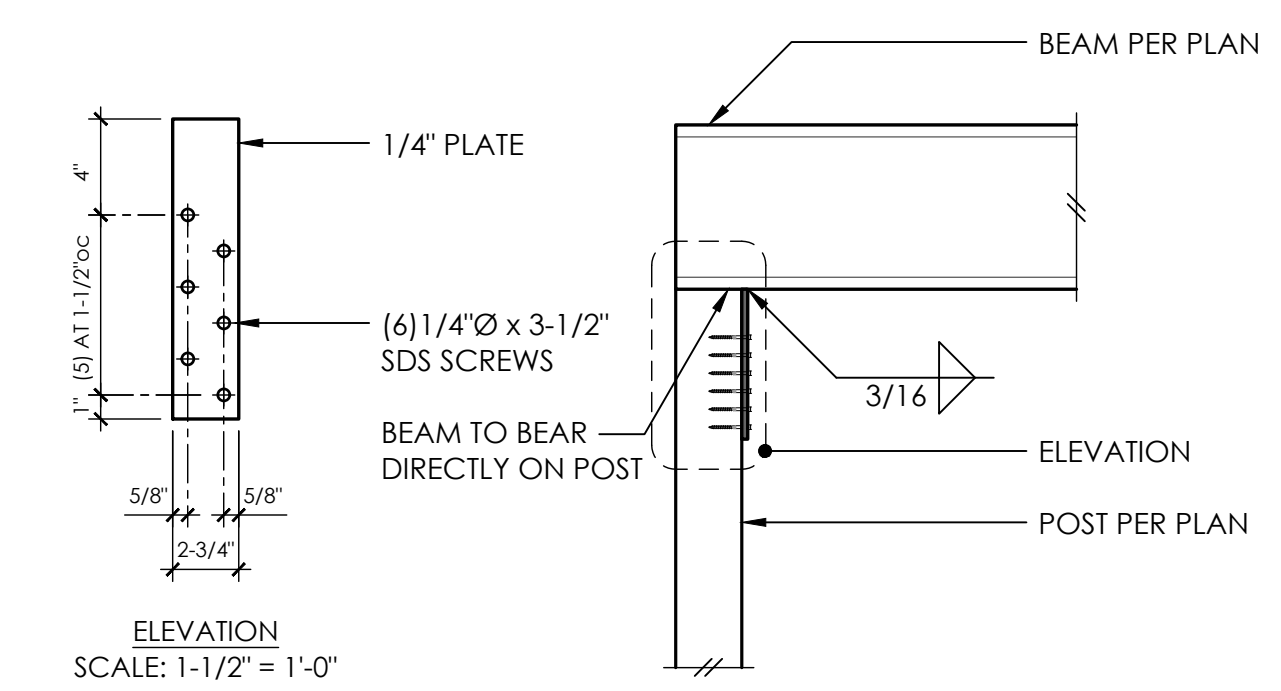
TYPICAL WOOD FRAMING DETAILS



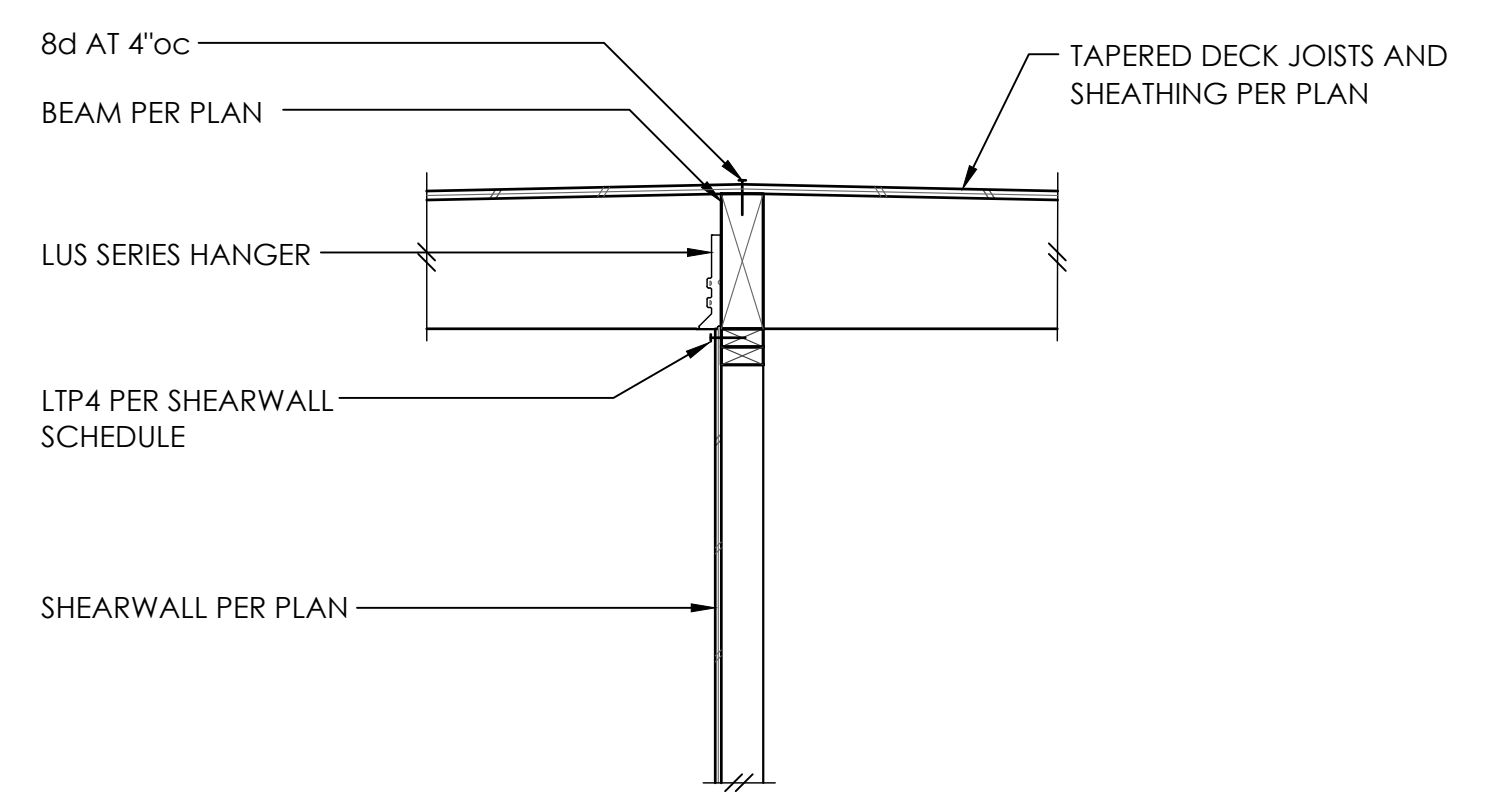
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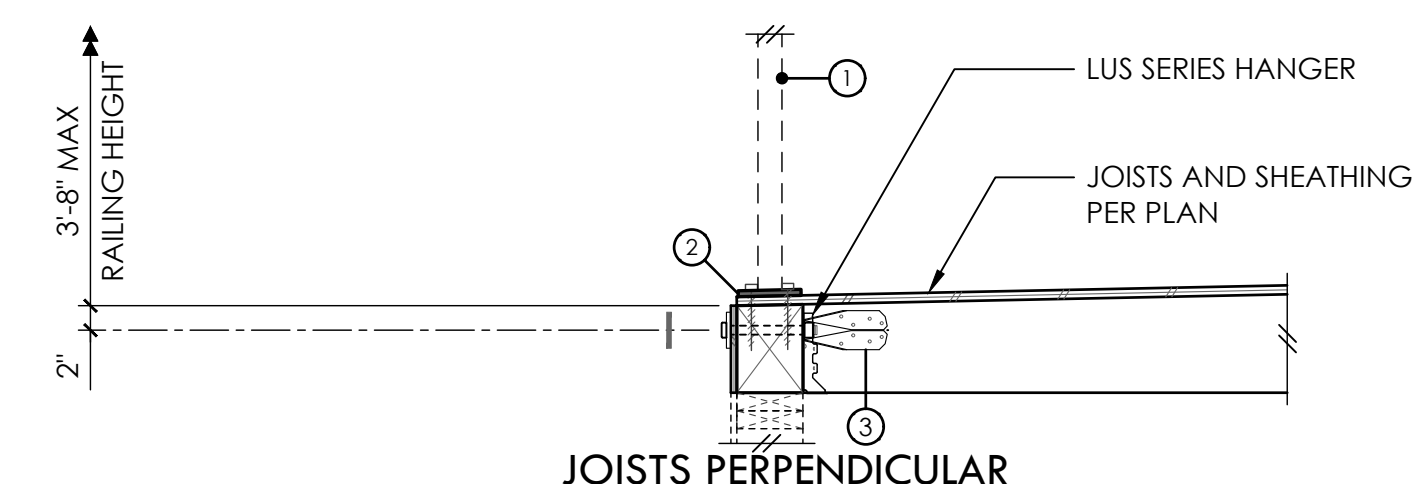
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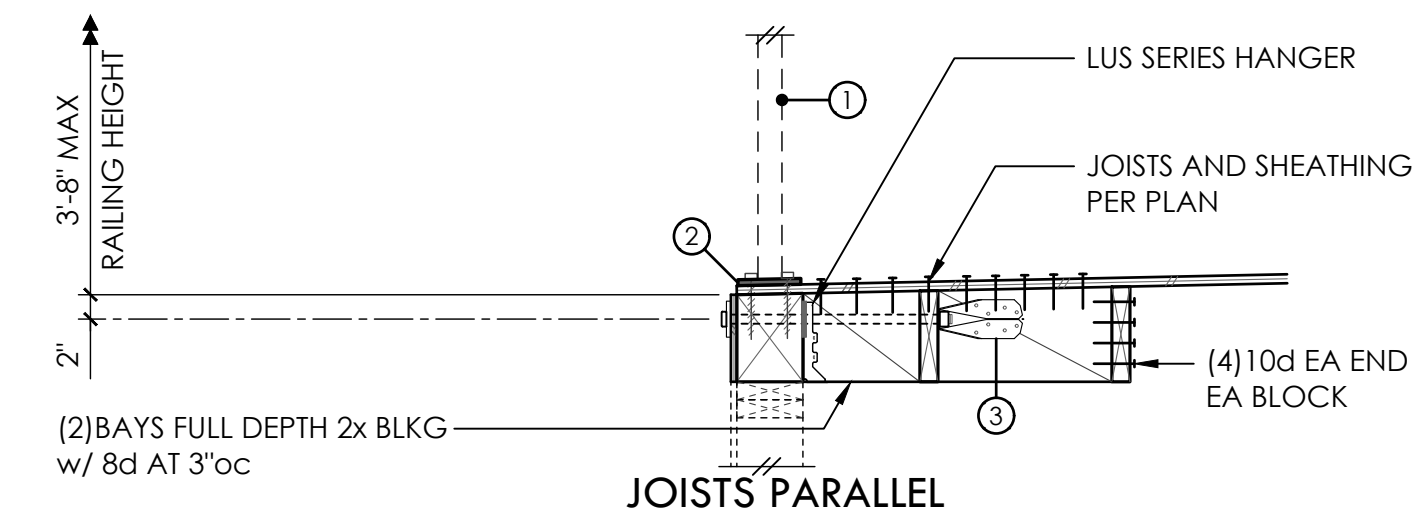
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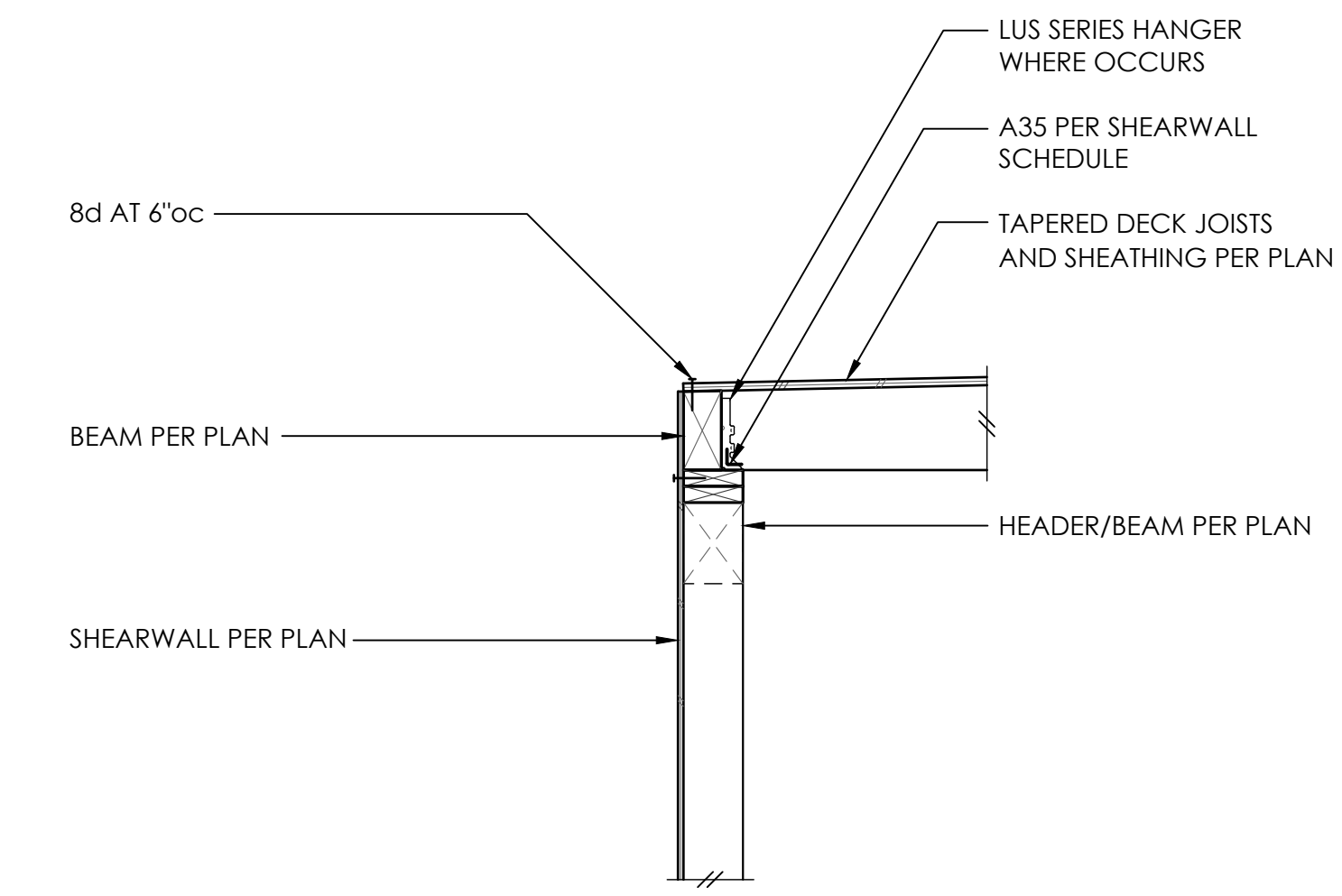
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- ① DESIGN BUILD RAILING SYSTEM BY OTHERS
- ② BASE PL 3/8" x 4-1/2" x 4-1/2" w/ (4) 3/8" Ø x 5" GALV LAG SCREWS AT 3"oc
- ③ DIT22 TOP w/ 1/2" Ø THREADED ROD w/ 3" SQ WASHER AT 4'-0"oc - ATTACH TO SECOND BAY OF BLKG AT PARALLEL CASE

12



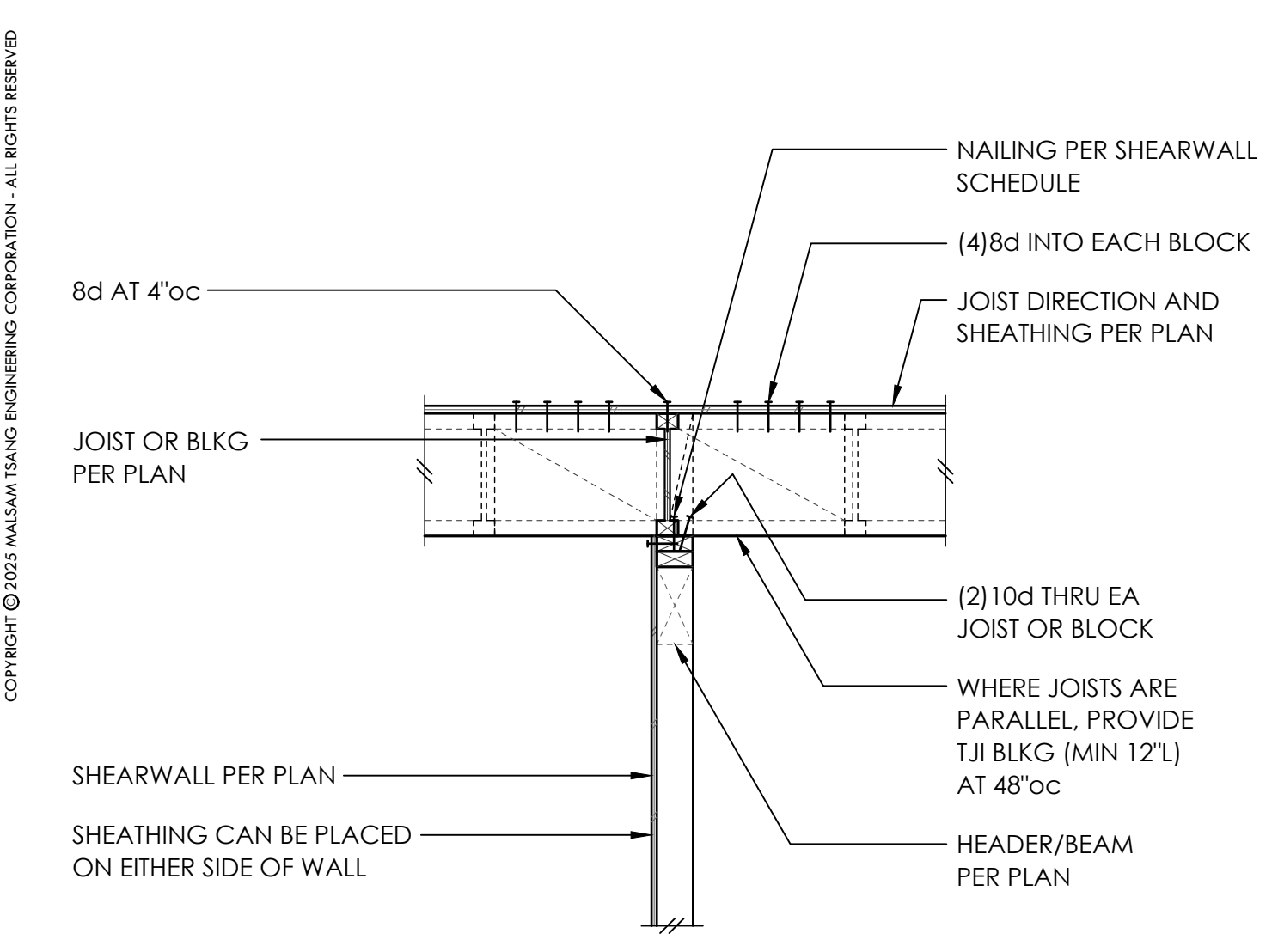
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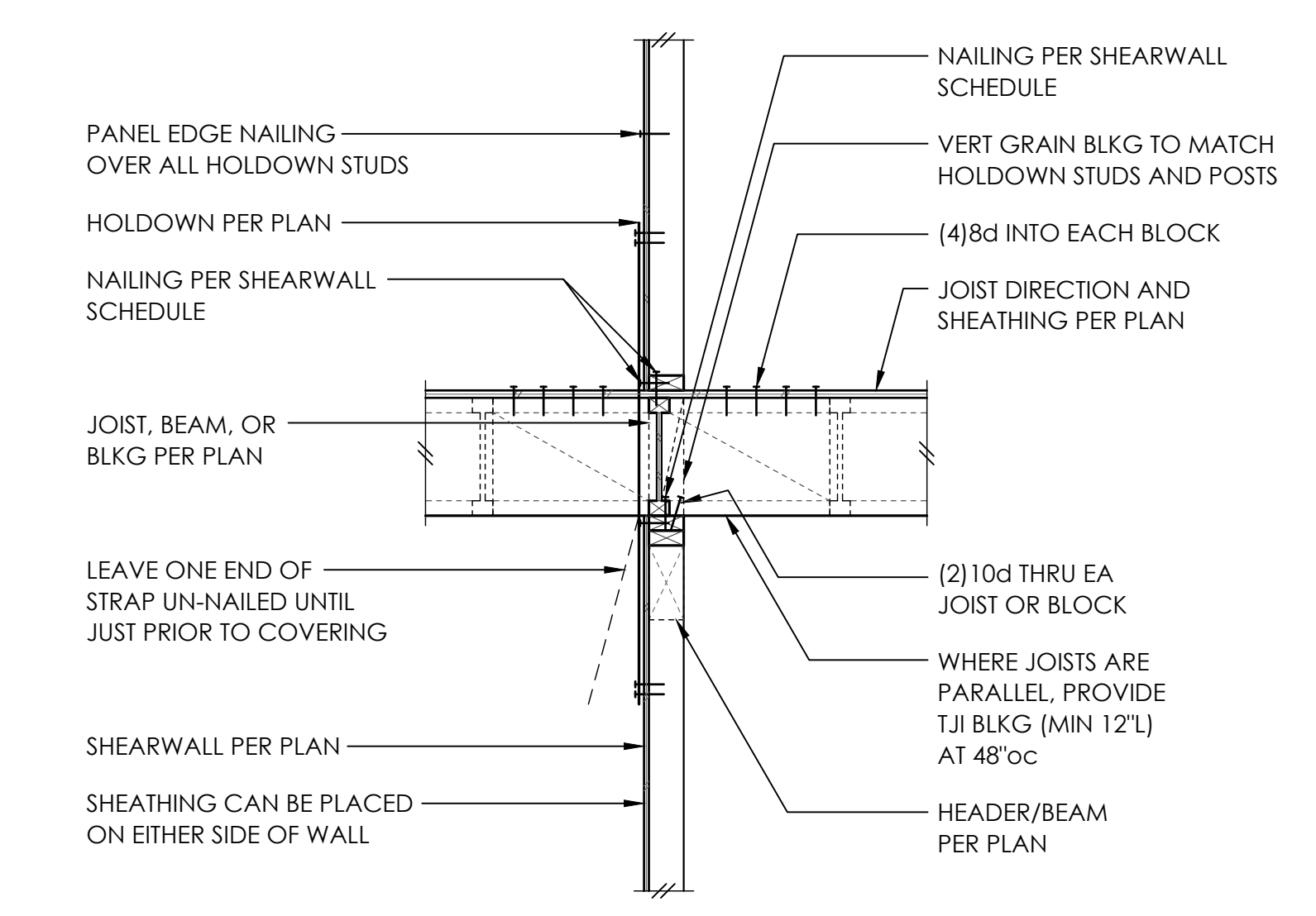
**WOOD FRAMING
DETAILS**

S4.1
SCALE - 3/4" = 1'-0"

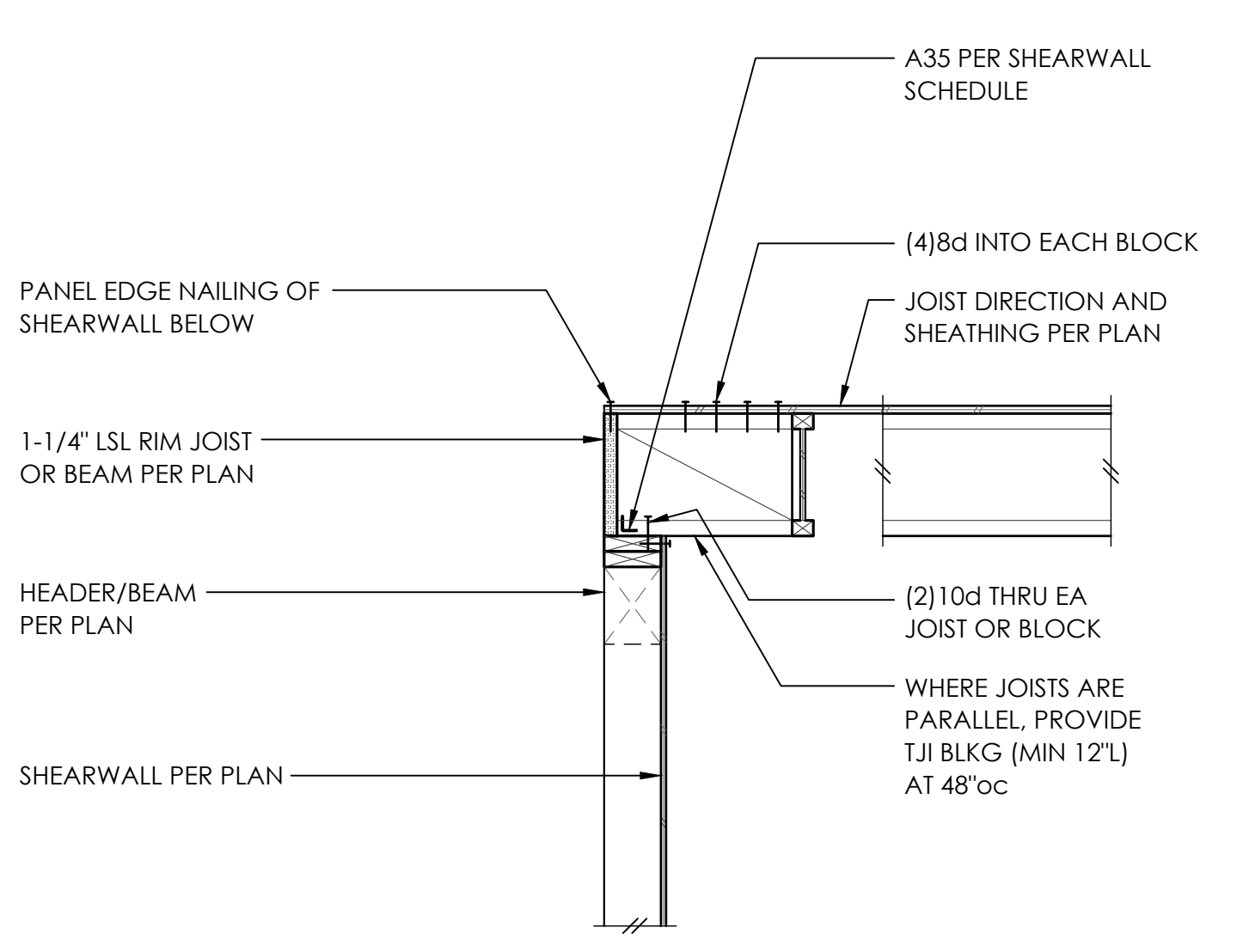
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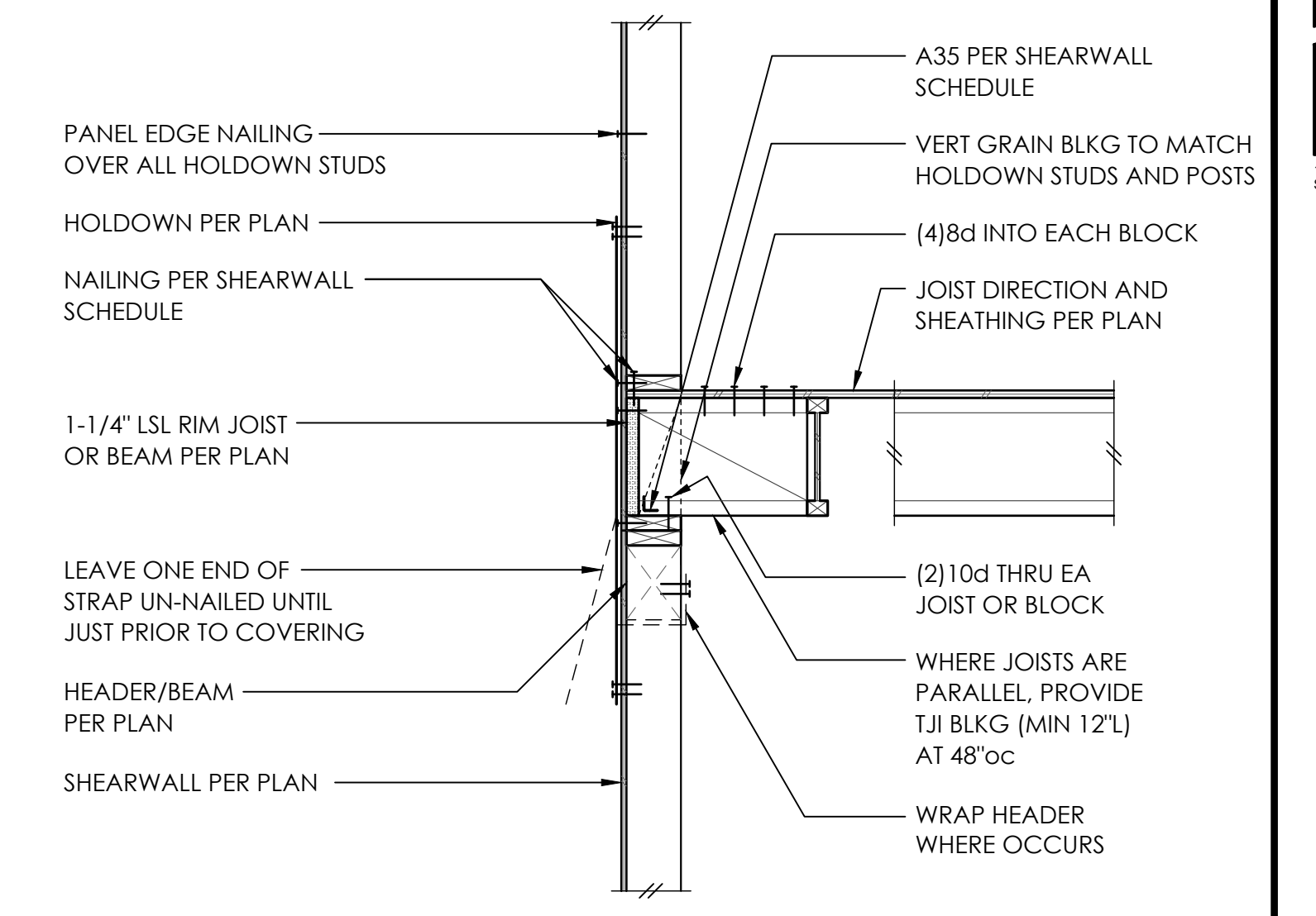
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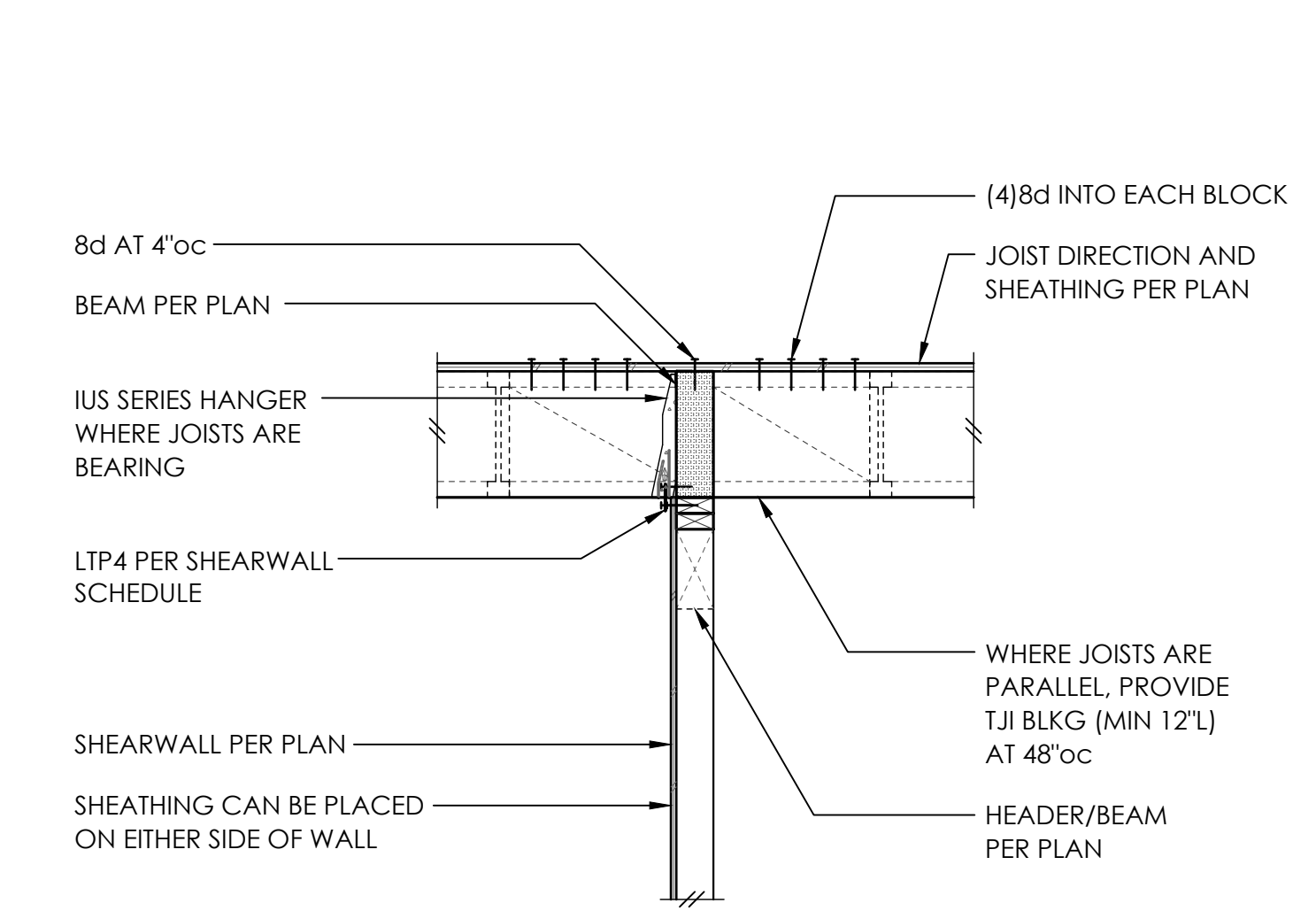
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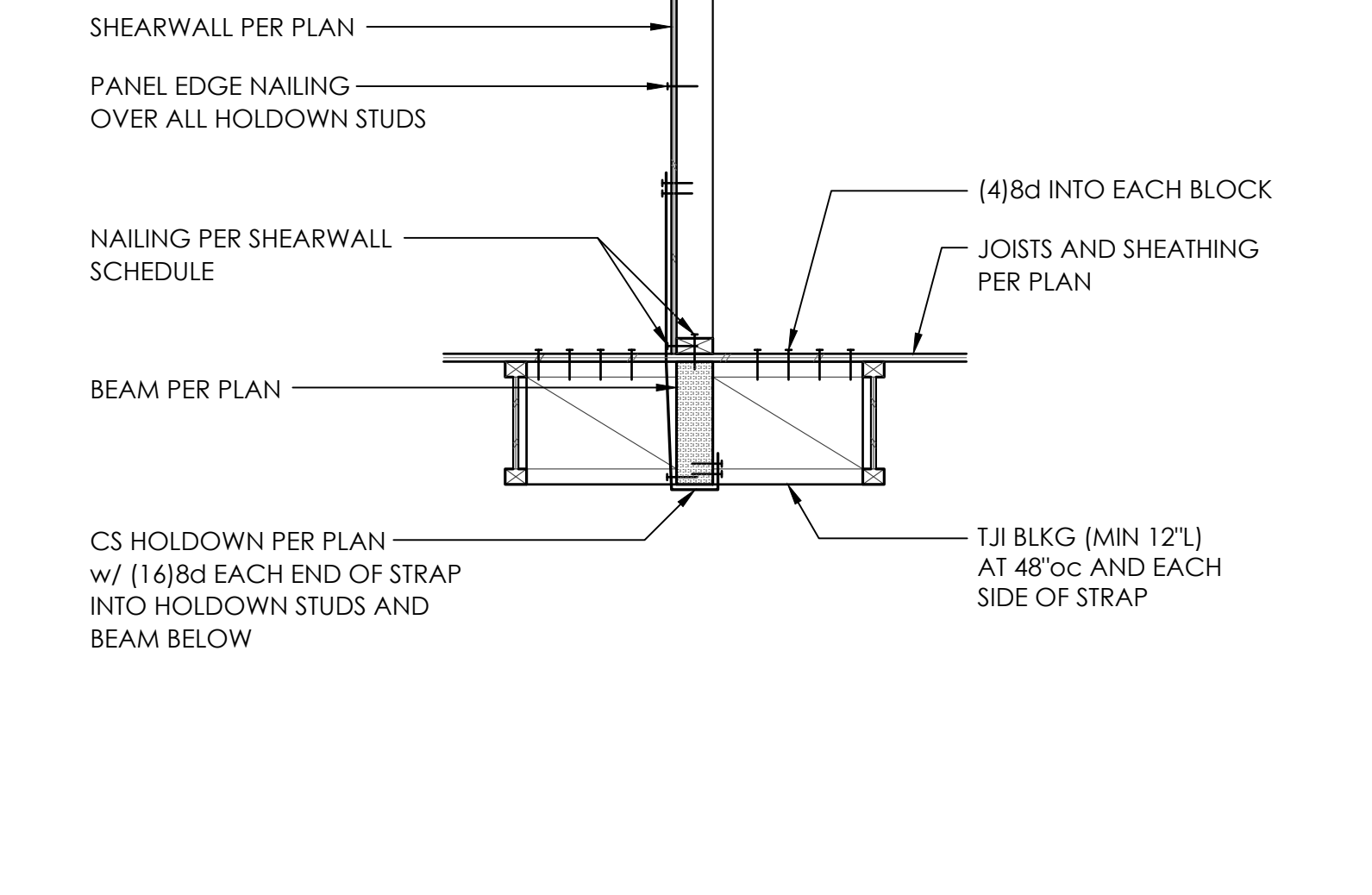
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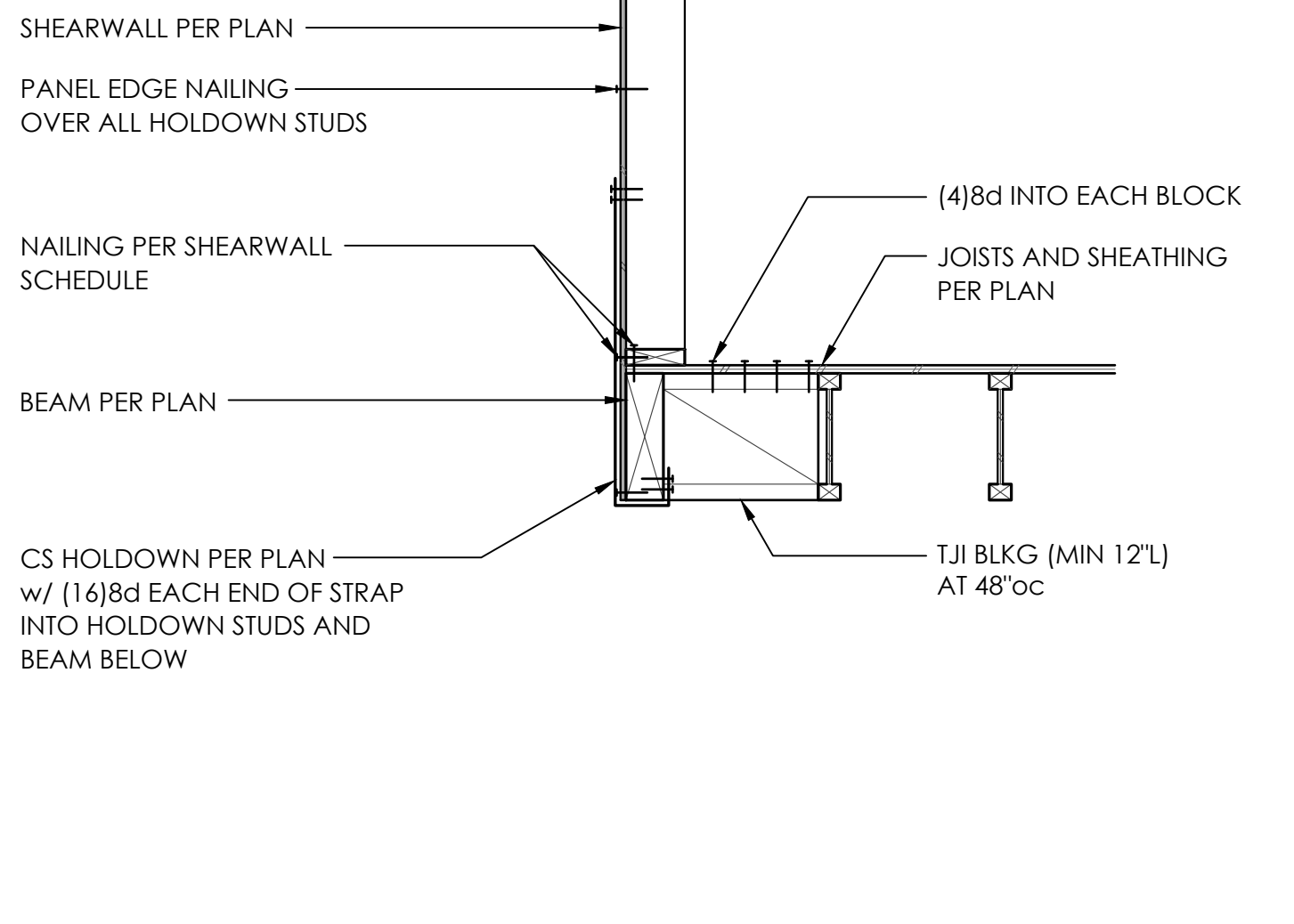
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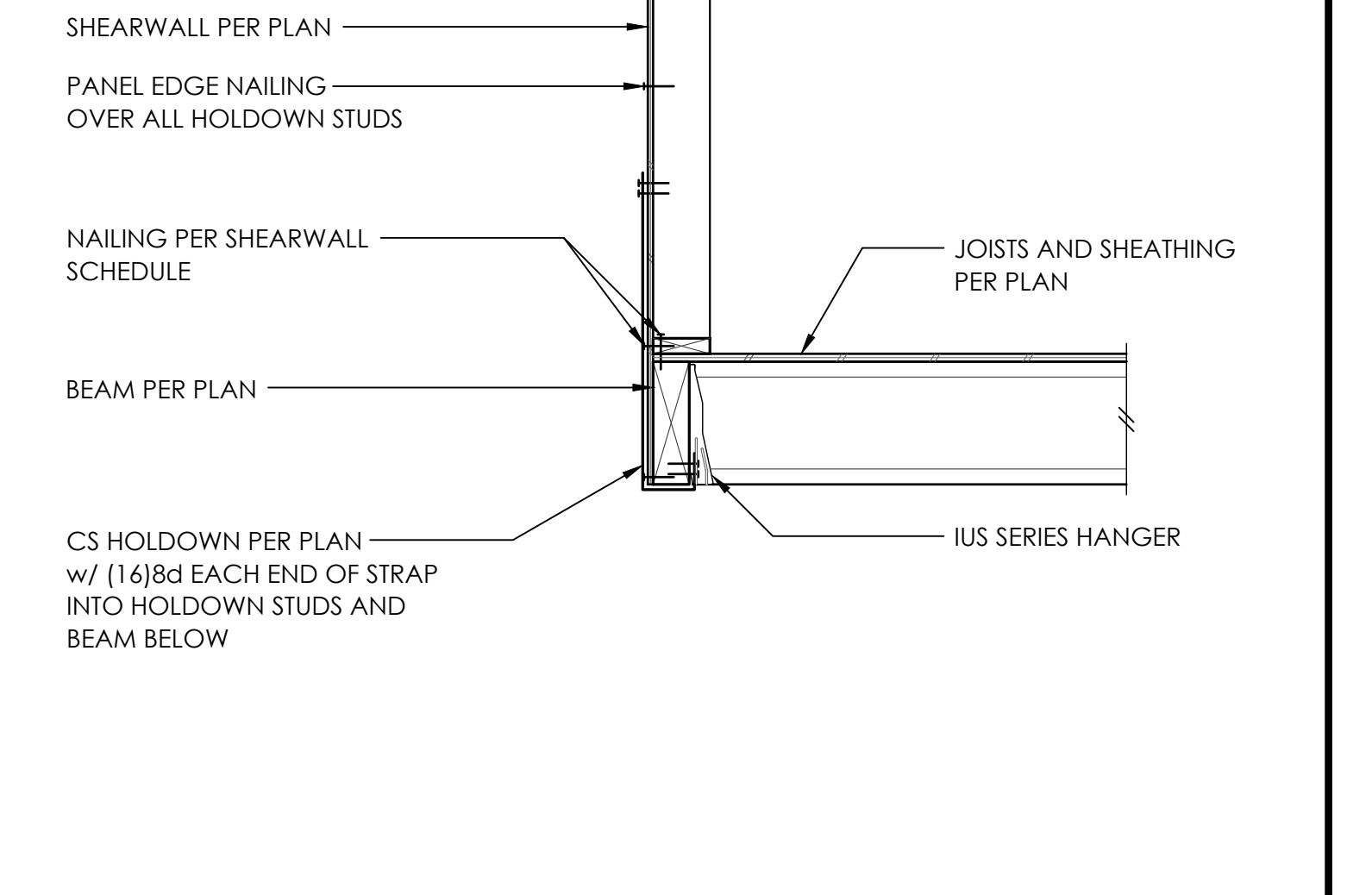
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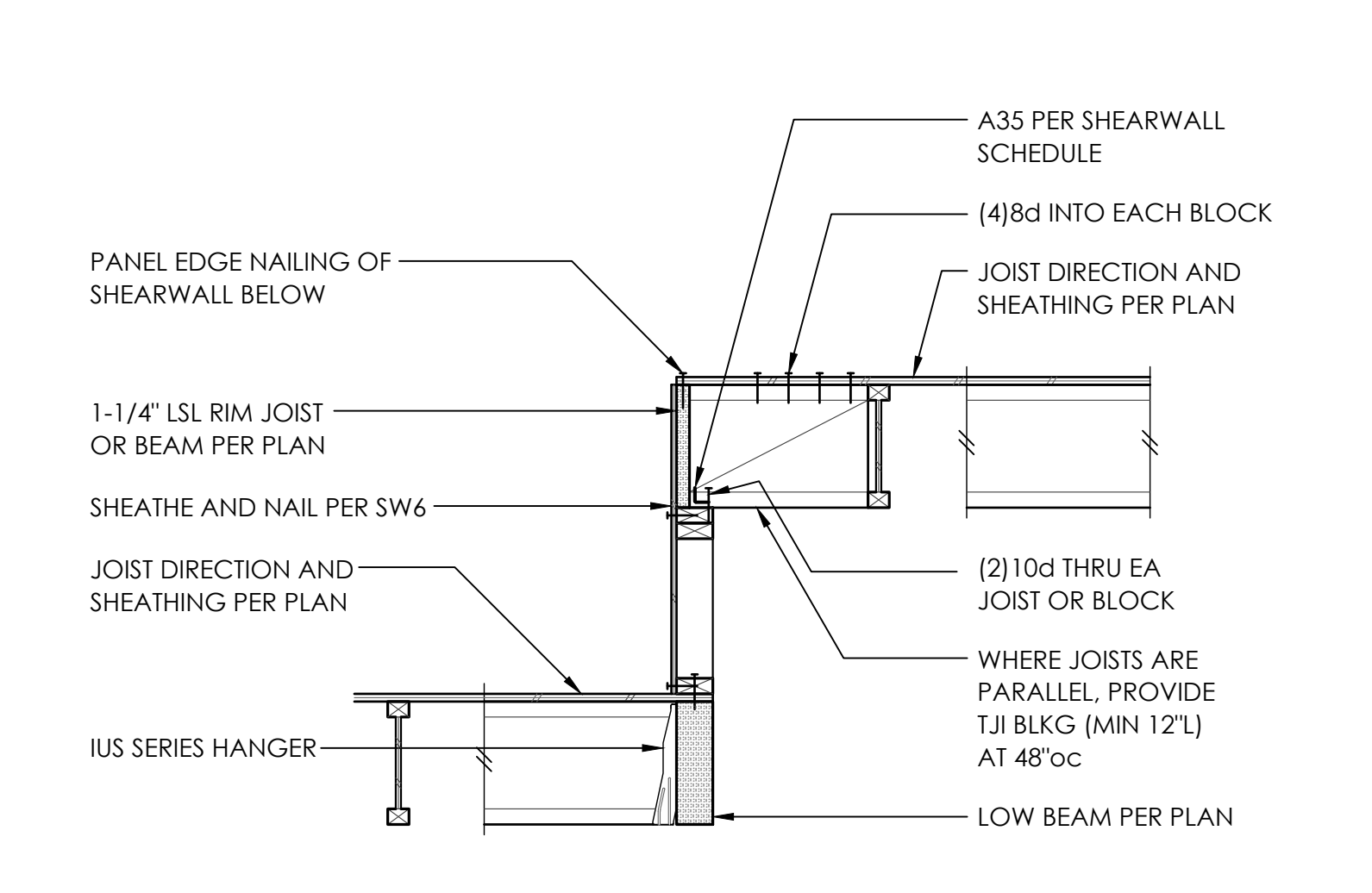
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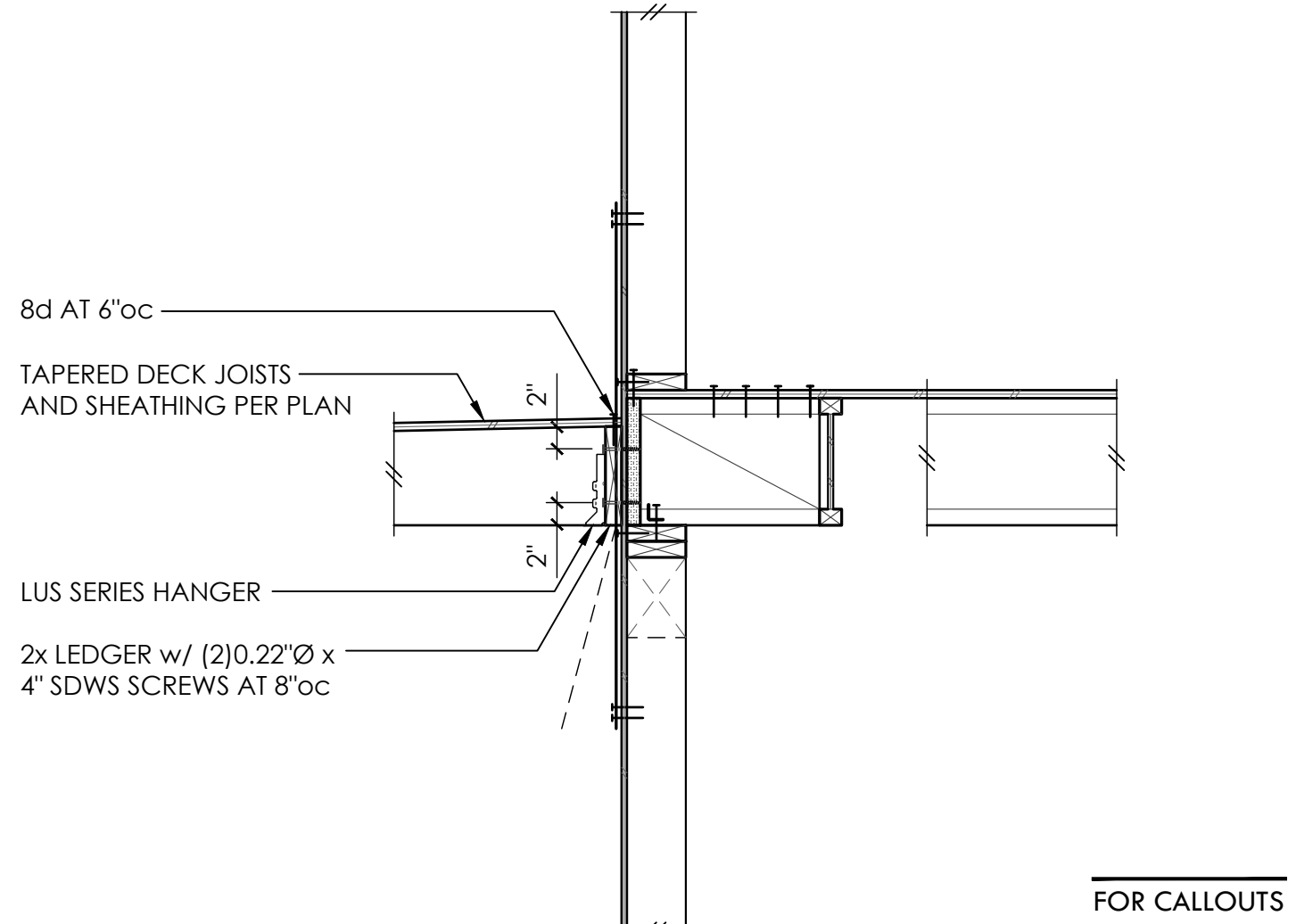
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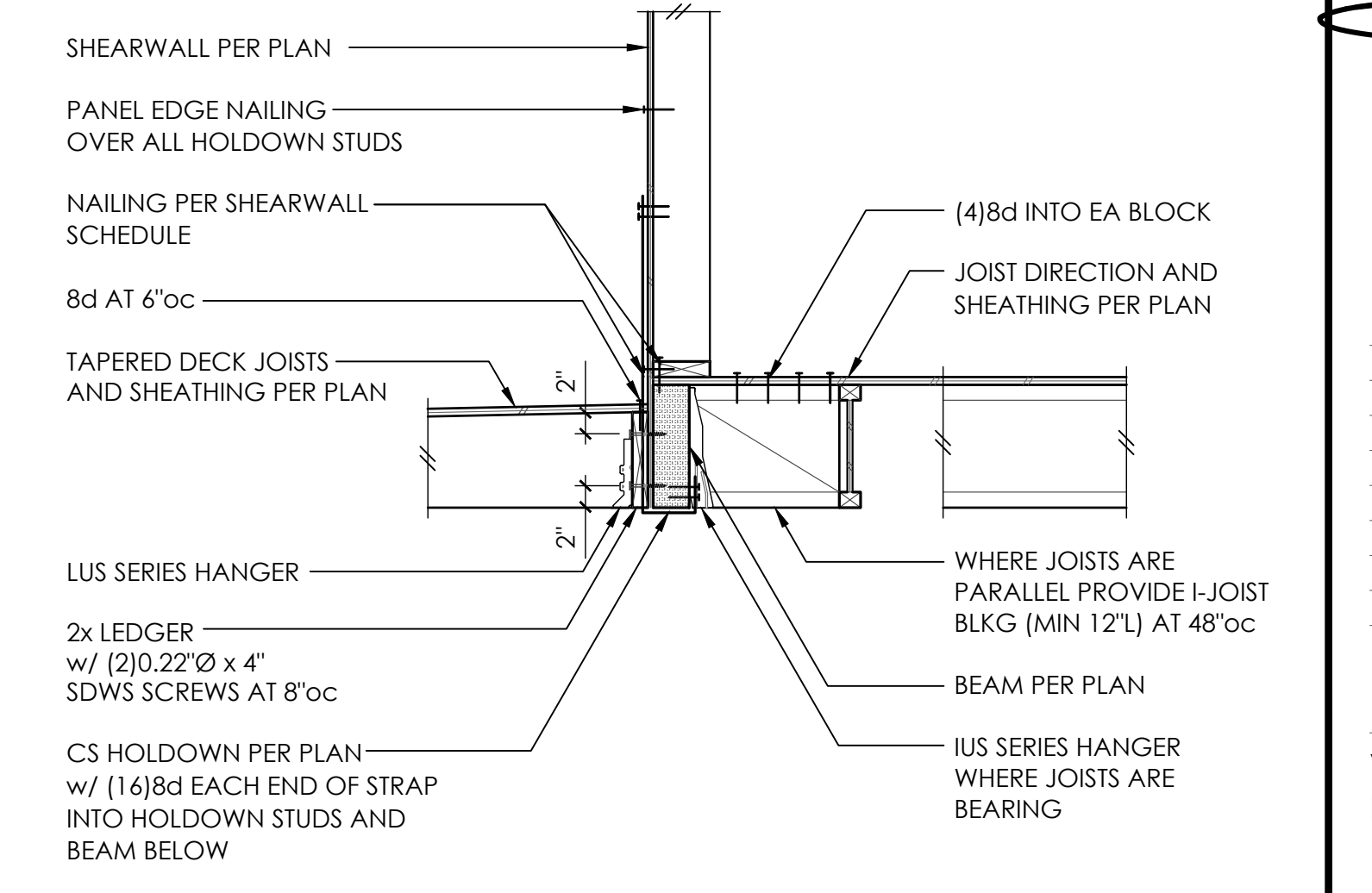


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FOR CALLOUTS
IN COMMON
REFER 4/S4.2

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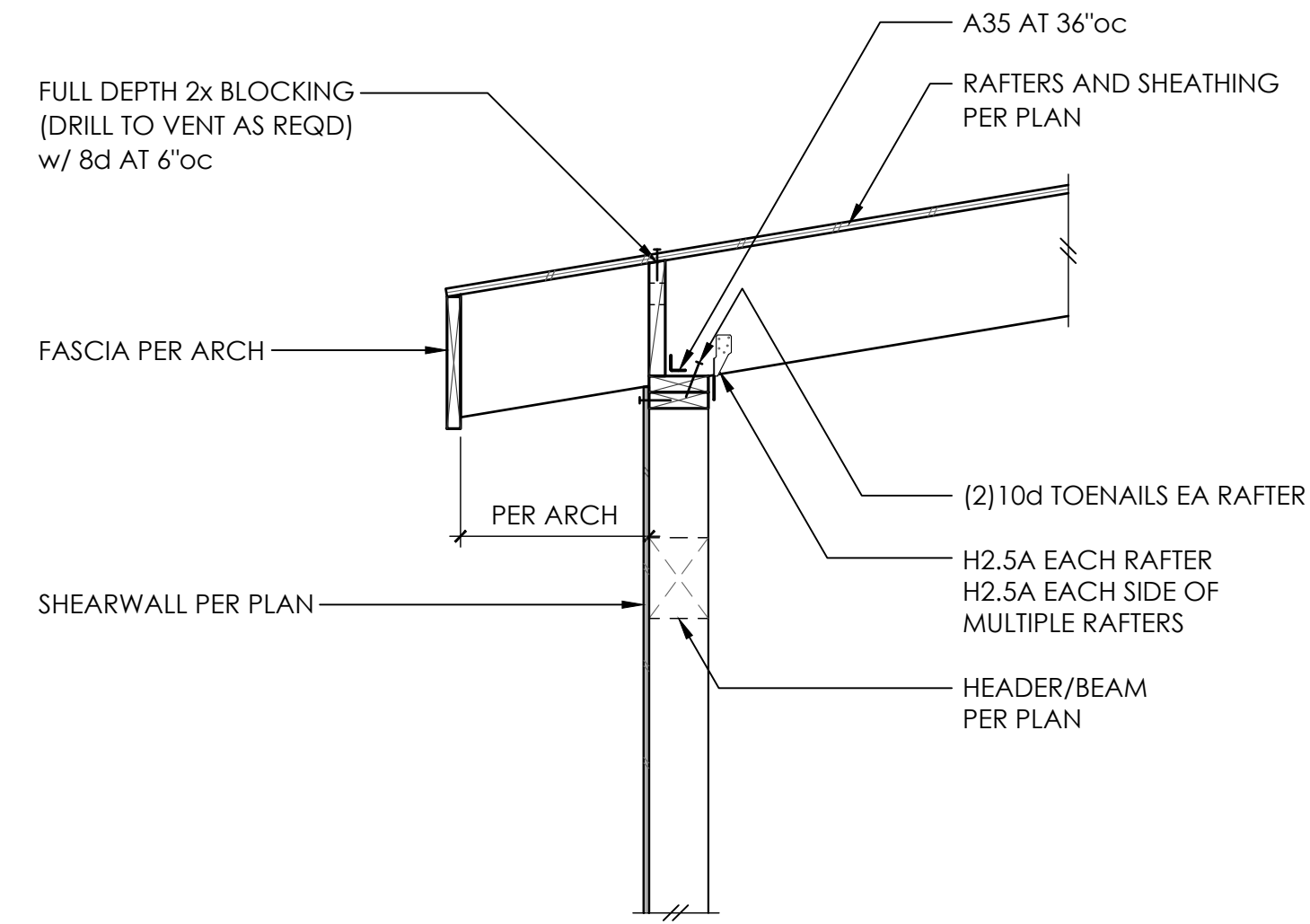
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**WOOD FRAMING
DETAILS**

S4.2
SCALE - 3/4" = 1'-0"

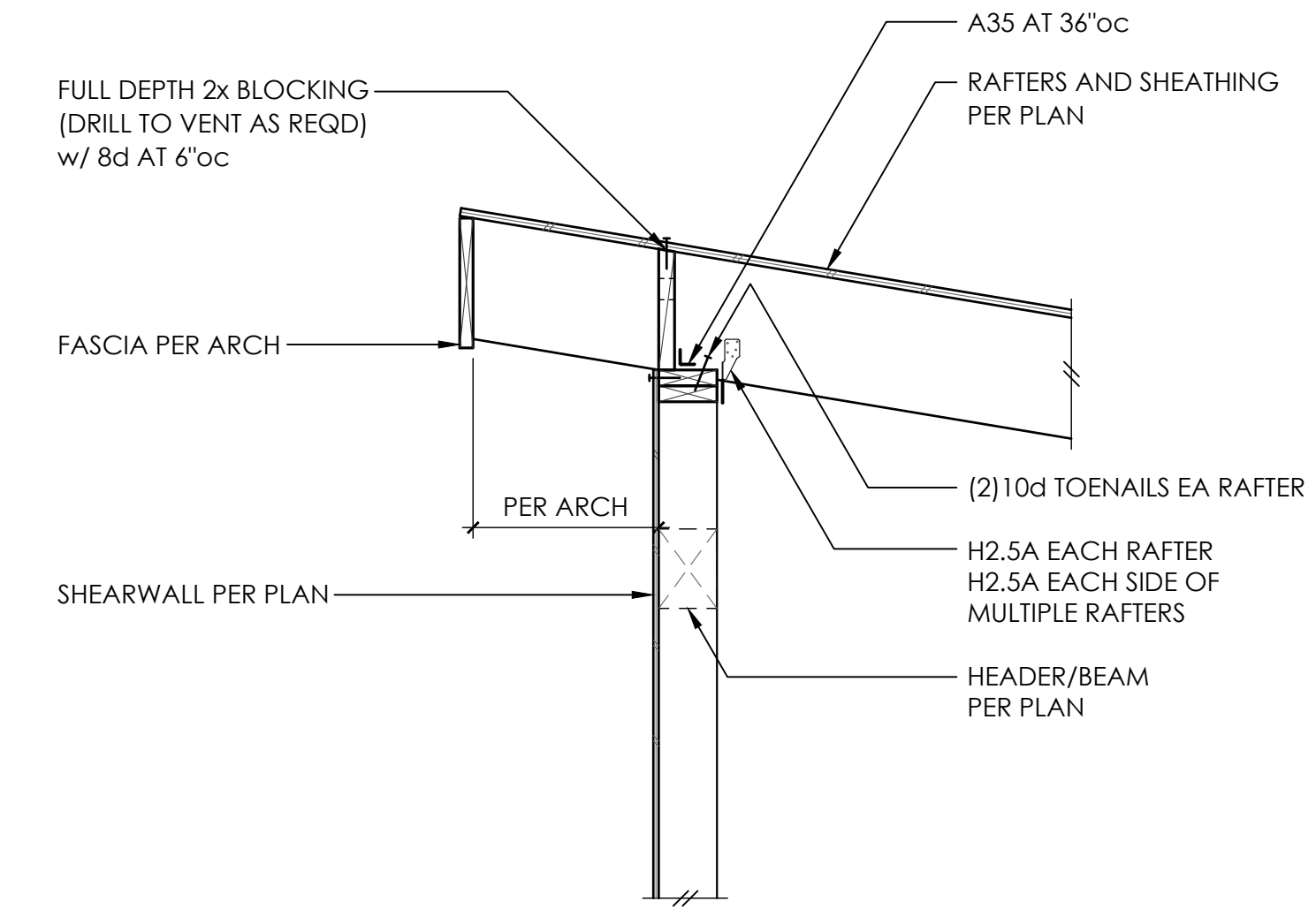
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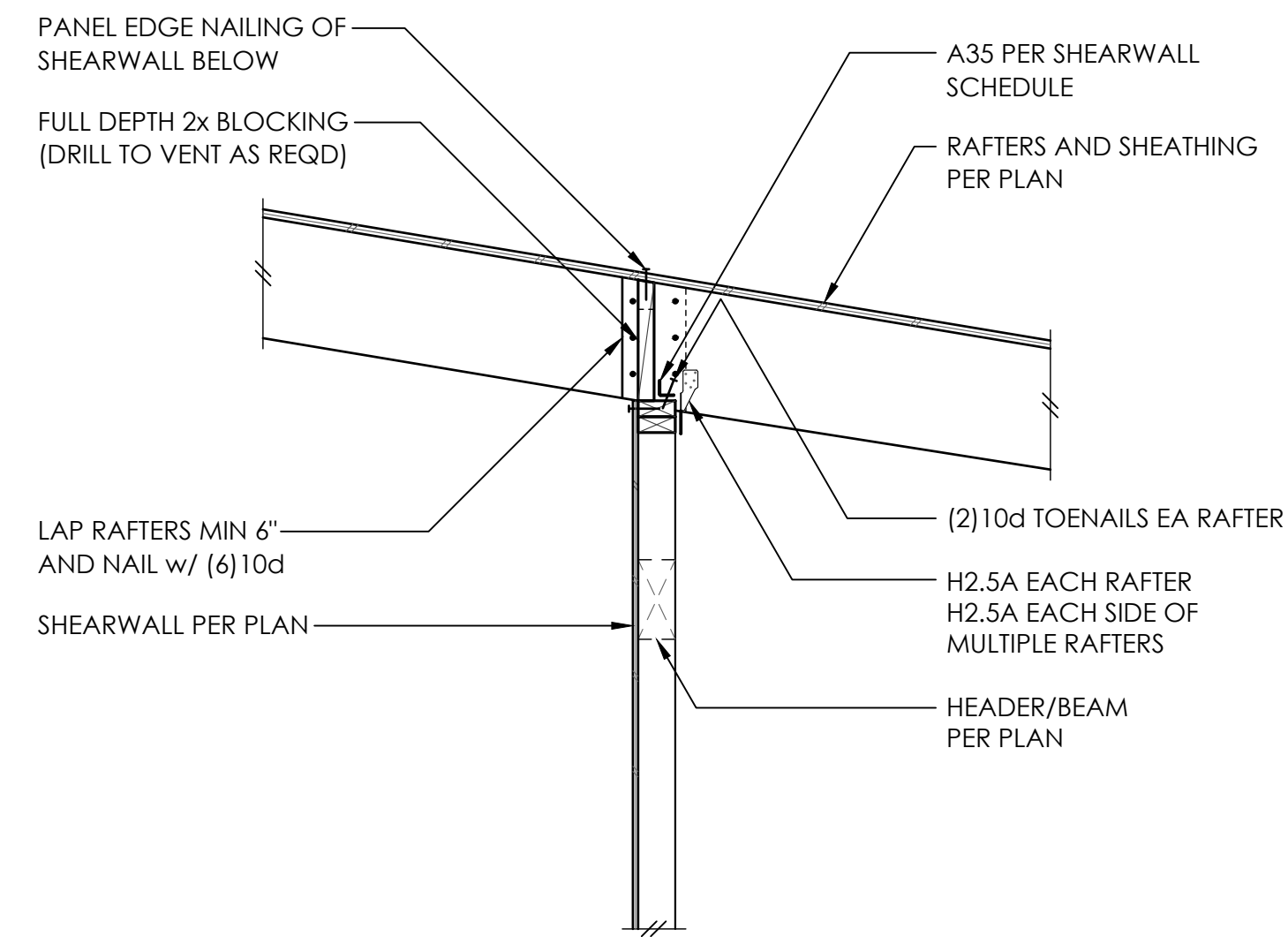
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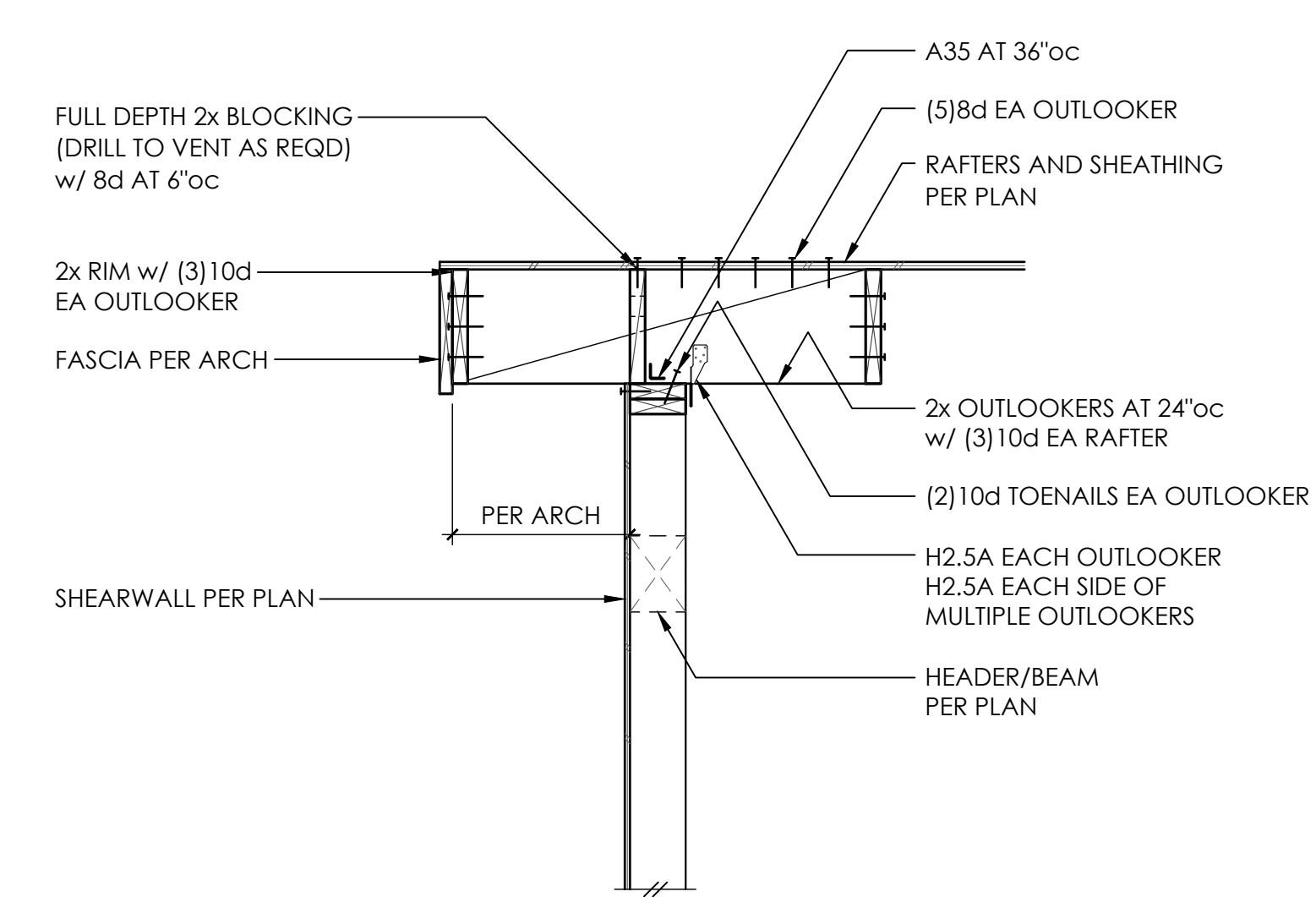
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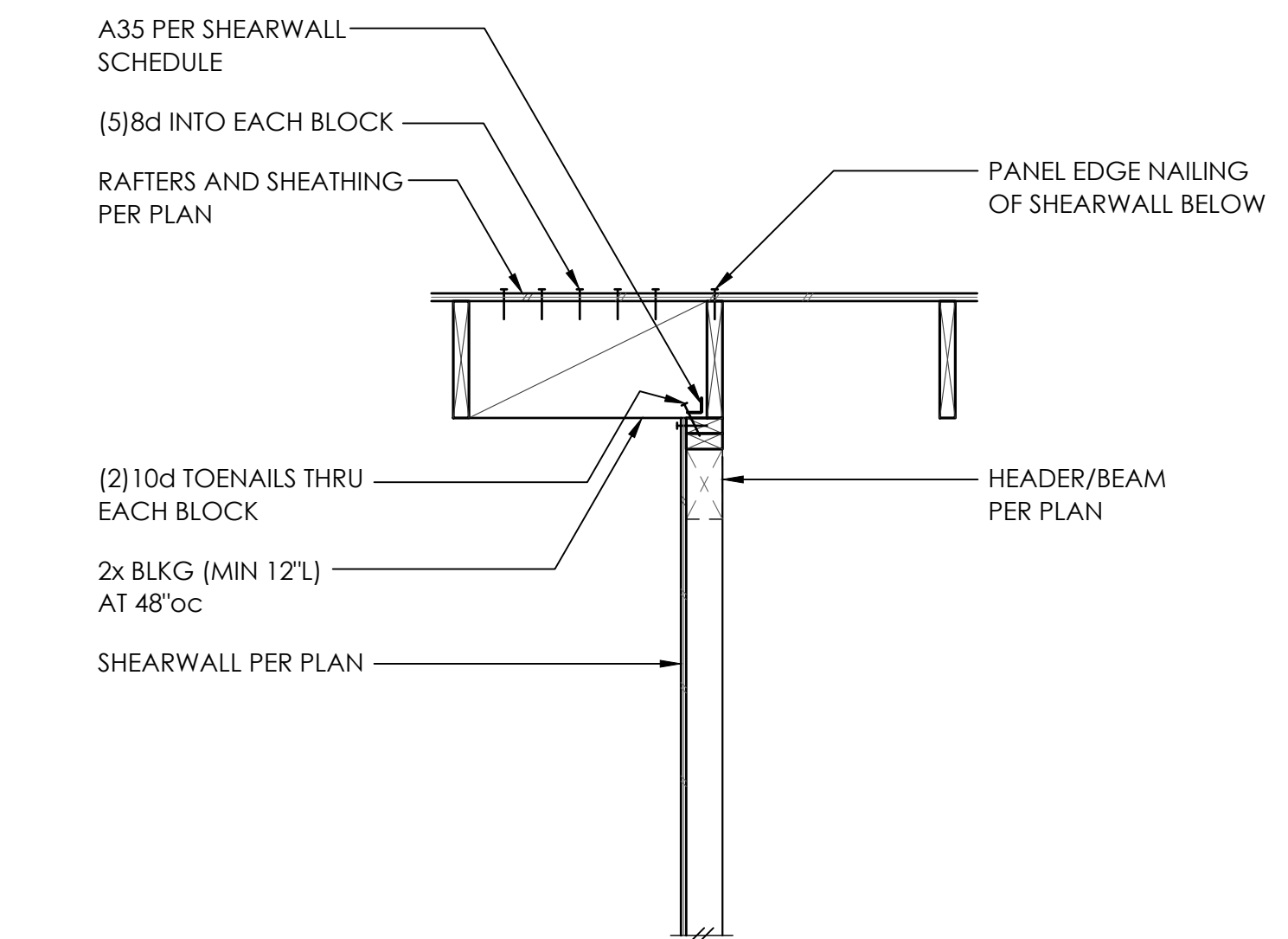
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**WOOD FRAMING
DETAILS**

S4.3
SCALE - 3/4" = 1'-0"

