

LI RESIDENCE CUSTOM

WEAVER CONSTRUCTION

4657 86TH AVE. SE
MERCER ISLAND, WA 98040
PARCEL NUMBER #759810-0545

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

PERSPECTIVE IMAGE



PROJECT PARTICIPANTS

OWNER: PAUL LI
PH: (703) 965-9722

CONTRACTOR: WEAVER CONSTRUCTION
WILLIAM WEAVER
PH: (408) 348-3095

ENGINEERING: CS&S
EVAN APOLIS
6311 17TH AVE NE
SEATTLE, WA 98115
PH: 206-527-1288

DESIGNER / DRAFTSMAN: LURE DESIGN SOLUTIONS
SHAWN SULLIVAN
4402 242ND PLACE SW
MOUNTLAKE TERRACE, WA 98043
PH: (425) 870-0383

CIVIL ENGINEER: CANON
KATIE ROLLINS
PH: (310) 382-5133

ARBORIST: BENJAMIN MARK
11415 NE 128TH ST, SUITE 110
KIRKLAND, WA 98034
PH: (425)-820-3420

PROJECT DATA

JURISDICTION: MERCER ISLAND

PROJECT ADDRESS: 4657 86TH AVE SE
MERCER ISLAND, WA 98040

TAX ACCOUNT NO.: #759810-0545

PROPERTY TYPE: RESIDENTIAL (R)

ZONING: R 9.6

LOT SIZE: 10,000 SF -- .23 ACRES

OCCUPANCY GROUP: R

CONSTRUCTION TYPE: TYPE V-NR

SEWER: IN STREET

WATER: IN STREET

GAS: IN STREET

ENVIRONMENTAL: NONE

DRAINAGE: DOWNSPOUT TO TIGHTLINE/SANITARY SEWER

DRAWING INDEX

ARCHITECTURAL

- A0 COVER
- A1.0 SITE PLAN
- A1.1 EXCLUDED GFA -DIAGRAM AND CALCS
- A1.2 GFA -DIAGRAM AND CALCS
- A1.3 LOT COVERAGE -DIAGRAM AND CALCS
- A1.4 HARDSCAPE -DIAGRAM AND CALCS
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- A2.2 UPPER FLOOR PLAN
- A2.3 ROOF PLAN
- A3.1 EXTERIOR ELEVATIONS
- A3.2 EXTERIOR ELEVATIONS
- A4.1 BUILDING SECTIONS
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- A4.4 BUILDING SECTIONS
- A5.1 WALL SECTIONS
- A5.2 WALL SECTIONS
- A5.3 WALL SECTIONS
- A6.1 WINDOW AND DOOR SCHEDULE
- A6.2 WINDOW AND DOOR SYSTEMS / TYPES

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- S2 UPPER FLOOR FRAMING AND GROUND FLOOR WALL PLAN
- S3 ROOF FRAMING AND UPPER FLOOR WALL PLAN
- S4 STRUCTURAL DETAILS
- S5 STRUCTURAL DETAILS
- S6 STRUCTURAL DETAILS /SHEAR WALL SCHEDULE

CIVIL * (DEFERRED SUBMITTAL)

- C1 TITLE SHEET
- C2 DRAINAGE AND BMP PLAN
- C3 UTILITY CONNECTIONS PLAN
- C4 GRADING AND DRAINAGE DETAILS
- C5 TESC PLAN
- C6 TESC NOTES
- C7 TESC DETAILS
- C8 TESC DETAILS

TREE REPLANTING PLAN

- L1.0 TREE REPLANTING PLAN

SQUARE FOOTAGE

LOWER FLOOR (INCLUDES 82 SF / 500 SF ADU)	2364 SF
UPPER FLOOR	1623 SF
TOTAL	3987 SF
GARAGE	580 SF
REAR COVERED PATIO	334 SF

PROJECT DESCRIPTION

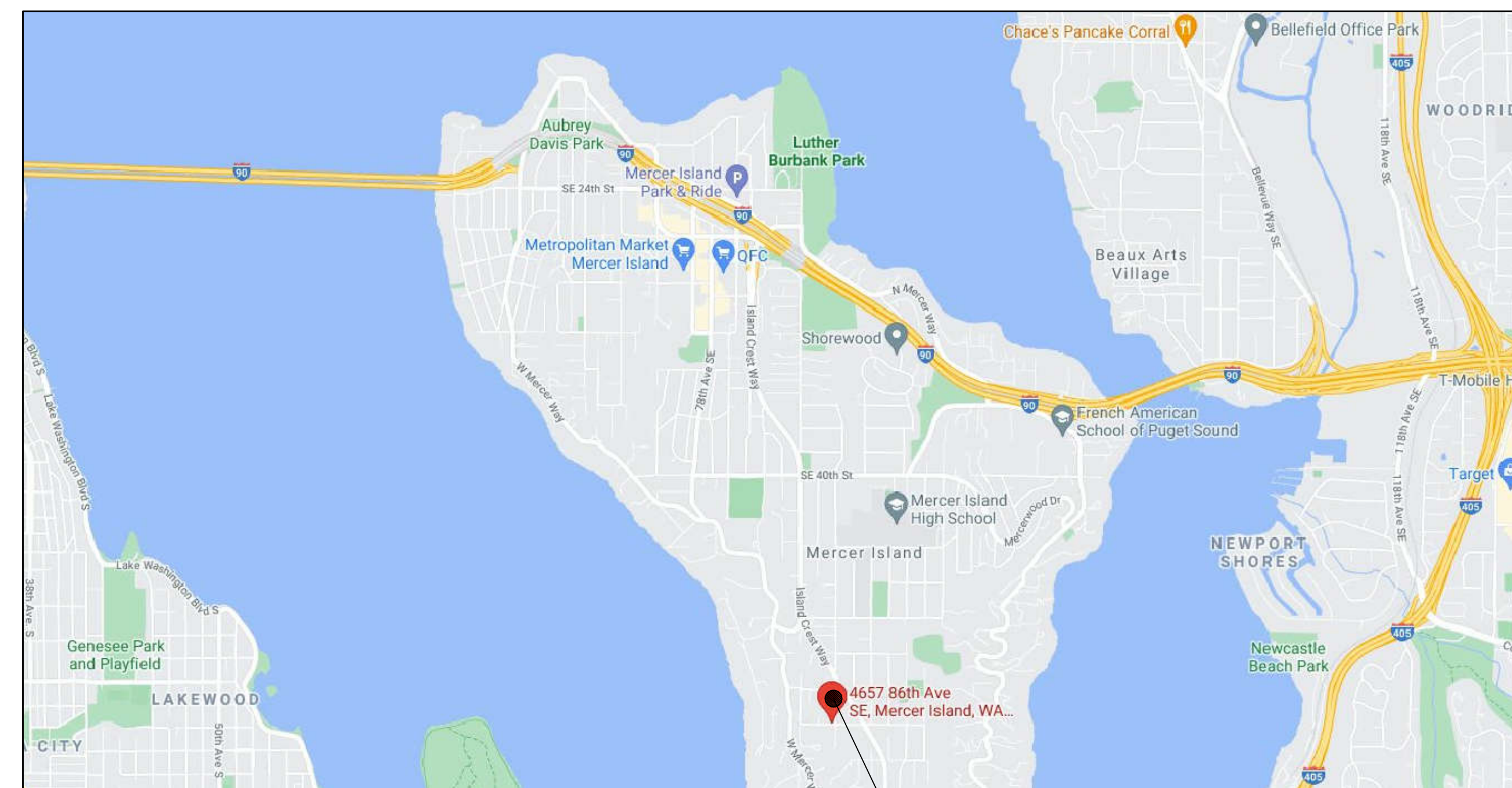
DEMO / REMOVE AN EXISTING SINGLE STORY RESIDENCE WITH ATTACHED GARAGE. THE EXISTING FOUNDATION AND LOWER FLOOR CONCRETE SLAB WILL BE REMAIN AND BE MODIFIED AS REQUIRED TO ACCOMMODATE THE NEW STRUCTURE. TREES ARE PROPOSED TO BE REMOVED AND ARE IDENTIFIED IN THE ARBORIST REPORT.

A PROPOSED NEW 3987 SQUARE TWO STORY RESIDENCE W/ AN ATTACHED (2) CAR GARAGE, REAR COVERED PATIO AND A 500 SF ADU WILL BE CONSTRUCTED. SITE IMPROVEMENTS TO INCLUDE A NEW CONCRETE DRIVEWAY AND A NEW SIDEWALK ACCESSING THE MAIN ENTRY TO THE HOME.

LEGAL DESCRIPTION

SCHMIDS VITUS E SEATTLE ACRE TRS S 80 FT OF E 125 FT
PLAT BLOCK: 14
PLAT LOT: 5

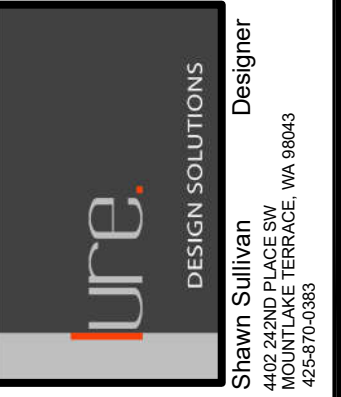
VICINITY MAP



PROJECT LOCATION

SYMBOLS

BUILDING SECTION OR WALL SECTION REFERENCE		DRAWING NUMBER		REVISION NUMBER		MASONRY	
EXTERIOR ELEVATION REFERENCE		DRAWING NUMBER		REVISION NUMBER		CONCRETE	
INTERIOR ELEVATION REFERENCE		DRAWING NUMBER		REVISION NUMBER		INSULATION (LOOSE OR BATT)	
DETAIL REFERENCE		DRAWING NUMBER		REVISION NUMBER		INSULATION (RIGID)	
DOOR REFERENCE		REFERENCE LETTER		REVISION NUMBER		EARTH	
WINDOW REFERENCE		REFERENCE NUMBER		REVISION NUMBER		SAND / PLASTER / MORTAR	
WALL TYPE		WALL TYPE		REVISION NUMBER		ROCK FILL	
KEY NOTE REFERENCE		REFERENCE NUMBER		REVISION NUMBER		METAL (LARGE SCALE)	
CASEWORK REFERENCE		SCHEDULE NUMBER		REVISION NUMBER		GYPSUM WALLBOARD	

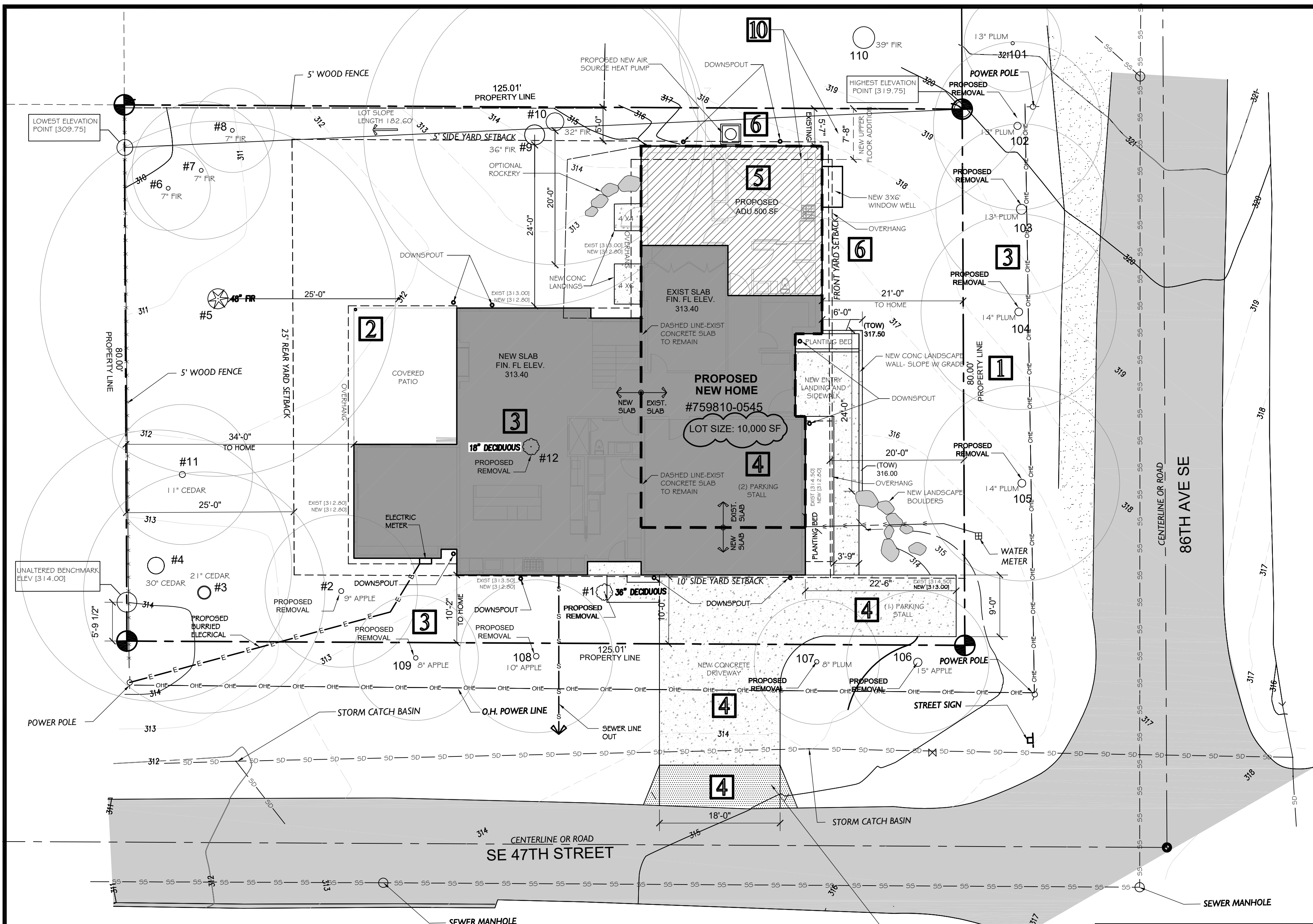


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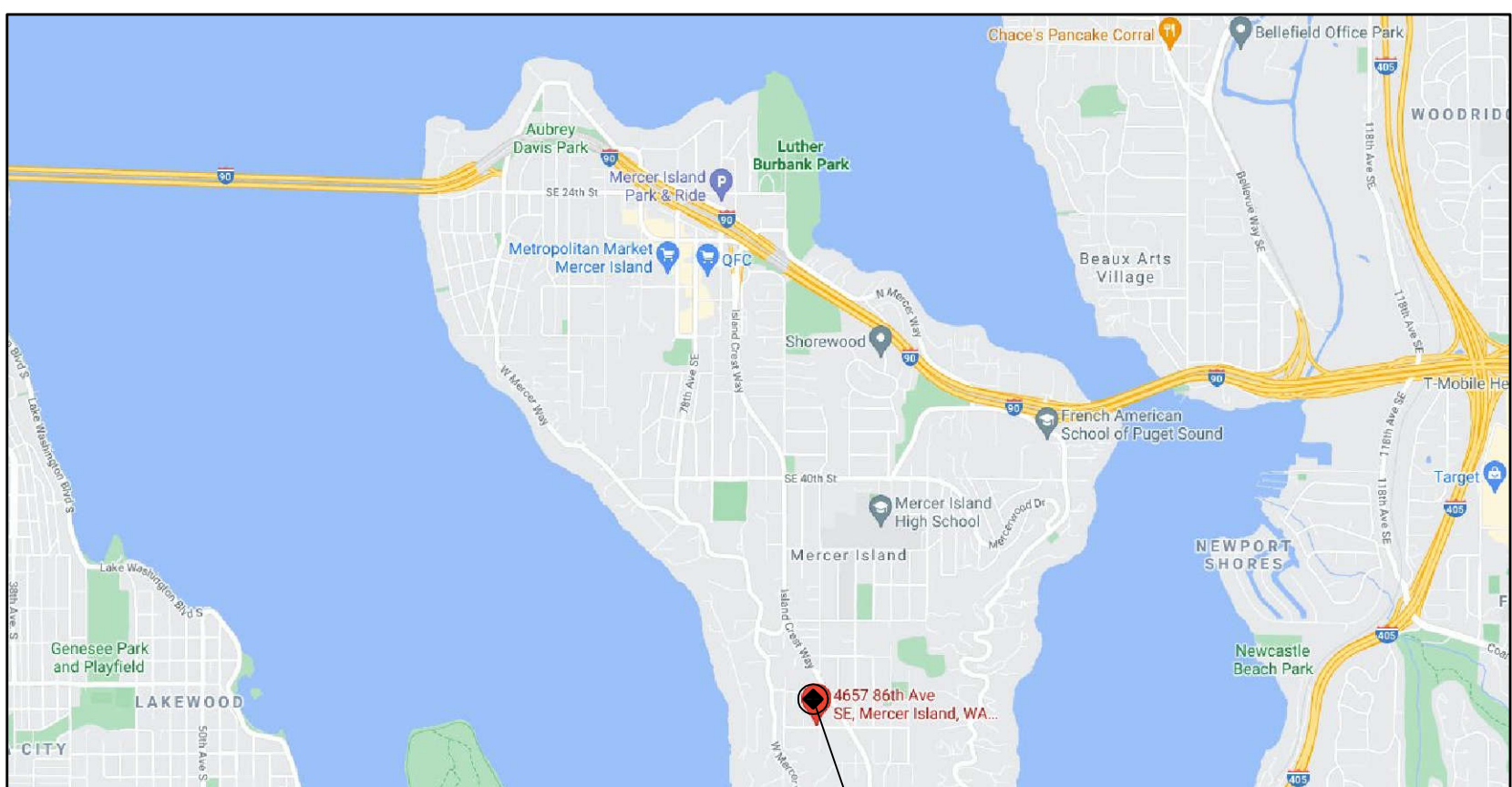
COVER SHEET

DATE:	01-04- 2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	A0

A0



VICINITY MAP



PROJECT SITE

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OCCUPANCY GROUP: R

ENVIRONMENTAL: NONE

WATER: IN STREET

SEWER: IN STREET

SQUARE FOOTAGE INFO.

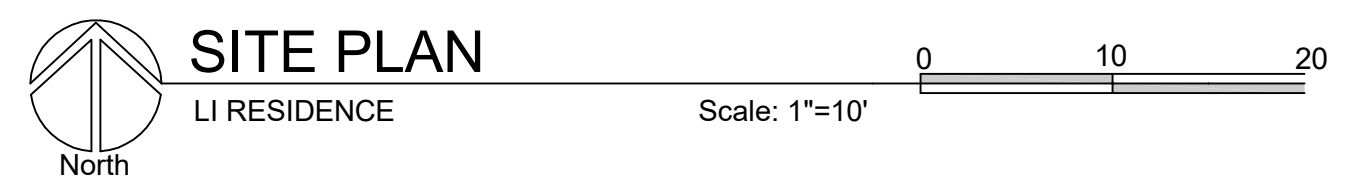
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TOTAL	3987 SF
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LEGAL DESCRIPTION

SCHMIDS VITUS E SEATTLE ACRE TRS S 80 FT OF E 125 FT
PLAT BLOCK: 14
PLAT LOT: 5

KEY DESIGN POINTS SEE SHEETS A1.1 AND A 1.2 FOR CODE STUDY INFORMATION

- 1** YARD REQUIREMENTS:
 - 86TH AVE SE IS THE FRONT YARD
 - BUILDING SET BACKS: - THE GROSS FLOOR AREA = 40% MAX OF LOT SIZE
 - 20FT FRONT, 25FT REAR AND TOTAL SUM OF 15FT FOR SIDE YARDS
- 2** NEW CONCRETE FOUNDATION, LANDING WITHIN EXISTING TREE DRIP LINE:
 - AN ARBORIST REPORT HAS BEEN OBTAINED TO ADDRESS THE FOLLOWING ITEMS BELOW AS WELL AS TO ESTABLISH THE LIMITS OF DISTURBANCE PARAMETERS.
 - THE PROPOSED NEW NORTHWEST CORNER OF THE NEW COVERED PATIO IS LOCATED WITHIN THE DRIP LINE OF THE ADJACENT EXISTING FIR TREE #5
 - SEE ATTACHED ARBORIST REPORT FOR DETAILED INFORMATION
- 3** EXISTING TREES / PROPOSED TREE REMOVAL
 - TREES PROPOSED TO BE REMOVED: (#1, 2, 12, 101, 102, 103, 104, 105, 106, 107, 108, 109)
 - THESE TREES WILL BE REPLACED WITH NEW TREE / PLANTINGS
 - ALL OTHER EXISTING TREES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
 - SEE ATTACHED ARBORIST REPORT FOR DETAILED INFORMATION
- 4** DRIVEWAY ACCESS / PARKING:
 - THE EXISTING DRIVEWAY WILL BE REMOVED / DEMOED AND A NEW 18' WIDE CONC. DRIVEWAY INSTALLED.
 - NEW DRIVEWAY ACCESS IS PROPOSED AT 18' WIDE AND IN SIMILAR LOCATION TO EXISTING DRIVEWAY.
 - A NEW ASPHALT APRON WILL BE INSTALLED AS REQUIRED. SEE CIVIL ENGINEER DRAWINGS FOR DETAILED INFORMATION.
 - (2) PARKING STALLS ARE PROVIDED INSIDE GARAGE
 - (1) EXTERIOR PARKING STALL IS PROVIDED AS SHOWN
- 5** PROPOSED ADU
 - ADU UNITS MUST NOT EXCEED 500 SF
 - A 500 SF ADU IS PROPOSED TO BE LOCATED IN THE NORTH EAST PORTION OF THE LOWER FLOOR.
 - A SEPARATE ENTRANCE IS NOT PROPOSED
 - ALLOWABLE GFA CAN BE INCREASED BY TO 45% THUS 4500 SF
- 6** GROSS FLOOR AREA (GFA): (SEE SHEET A1.2 FOR DIAGRAMS AND CALCULATIONS)
 - THE GROSS FLOOR AREA = 40% MAX OF LOT SIZE
 - GFA ALLOWABLE INCREASE TO 45% TO ACCOMMODATE=45%
 - LOT SIZE IS 10000 SF. 10000 X .45 = 4500 SF
 - MAX ADU OF 500 SF ALLOWED.
 - EXCLUDED GFA : (SEE SHEET 1.1 FOR DIAGRAMS AND CALCULATIONS)
 - A PORTION OF THE LOWER FLOOR IS UNDER GRADE AT THE NORTH EAST CORNER OF THE HOME.
 - PROPOSED ADU : LOT COVERAGE INCREASE BY 500 SF
 - ALLOWABLE GFA : 4500 + 238 = **4738 SF**
 - PROPOSED GFA : **4698 SF**
- 7** LOT COVERAGE: (SEE SHEET A1.3 FOR DIAGRAMS AND CALCULATIONS)
 - LOT SIZE IS 10000 SF.
 - SITE SLOPE WAS CALCULATED TO BE LESS THAN
 - 15% THUS 40% LOT COVERAGE MAX
 - ALLOWABLE LOT COVERAGE: 10000 X .40 = **4000 SF OR 40%**
 - ALLOWABLE LOT COVERAGE: **3997 SF OR 39.9%**
- 8** HARDSCAPE: (SEE SHEET A1.4 FOR DIAGRAMS AND CALCULATIONS)
 - HARDSCAPE= REQUIRED TO BE MAX. OF 9% (LOT IS 10,000 SF)
 - 60% LANDSCAPE AREA REQ'D...DRIVEWAYS AND DRIVING SURFACES PROHIBITED IN LANDSCAPE AREA
 - ALLOWABLE HARDSCAPE: 10000 X .09 = **900 SF OR 9%**
 - PROPOSED HARDSCAPE: **255 SF OR 3%**
- 9** BUILDING HEIGHT LIMITS - (SEE SHEET A1.5 FOR DIAGRAMS AND CALCULATIONS)
 - NO BUILDING SHALL EXCEED 30 FT IN HEIGHT ABOVE THE AVERAGE BUILDING ELEVATION TO THE HIGHEST POINT OF THE ROOF
 - THE MAX BUILDING FACADE HEIGHT ON THE DOWN HILL SIDE OF A SLOPING LOT SHALL NOT EXCEED 30 FEET IN HEIGHT. THE BUILDING FACADE HEIGHT SHALL BE MEASURED FROM THE EXISTING GRADE, WHICHEVER IS LOWER, AT THE FURTHEST DOWNHILL EXTENT OF THE PROPOSED BUILDING, TO THE TOP OF THE EXTERIOR WALL FACADE SUPPORTING THE ROOF FRAMING, RAFTERS, TRUSSES ETC.
 - AVERAGE BUILDING ELEVATION = **313.89 (ABE)**
 - MAX BUILDING HEIGHT = **343.89 (MAX)**
- 10** SIDE YARD DEPTH REQUIREMENTS
 - THE EXISTING FOUNDATION OF THE LOWER FLOOR IS TO REMAIN. THE PROPOSED NON-GABBLED (NO OVERHANG) ROOF HEIGHT IS (23') FROM LOWEST GRADE. THIS IS OVER THE 15 FT ALLOWED THUS THE PROPOSED SECOND STORY WILL STEP BACK 2'-0" TO ACCOMMODATE THE REQUIRED 7'-6" SETBACK.



SITE PLAN

LI RESIDENCE

Scale: 1"=10'

WATER METER / SUPPLY

PROVIDE NEW OR UPSIZED WATER AND OR WATER SUPPLY LINE

- 1" MIN. METER SIZE
- 1.25" MIN. SUPPLY LINE
- CONSULT W/ FIRE SPRINKLER CONTRACTOR FOR SIZING REVIEW

SURVEYS REQUIRED

- 1) AN IMPERVIOUS SURFACE, LOT COVERAGE AND OR HARD SURFACE SURVEY IS REQ'D PRIOR TO FINAL INSPECTION
- 2) A PROPERTY LINE /SETBACK SURVEY IS REQ'D PRIOR TO FINAL INSPECTION

SITE WALLS

FALL PROTECTION WILL BE PROVIDED IF A VERTICAL HAZARD OF 30" OR GREATER IS WITHIN 36" HORIZONTAL OF A WALKING SURFACE

CIVIL ENGINEERING

-SEE ATTACHED CIVIL ENGINEERING PLANS FOR DRAINAGE / ADDITIONAL SITE WORK INFORMATION

LOT SLOPE

-HIGHEST POINT	319.75'
-LOWEST POINT	309.75'
- DIFFERENCE IN ELEVATION	10.00'
- HORIZONTAL DIFFERENCE	182.60'
-SLOPE:	10' / 182.60' = .054 5.4%

NOXIOUS WEED REMOVAL

DEVELOPMENT PROPOSALS FOR A NEW SF HOME SHALL REMOVE JAPANESE KNOTWEED (POLYGONUM CUSPIDATUM) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION 19.02.020(F)(3)(A). NEW LANDSCAPING ASSOCIATED WITH NEW SF HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AMENDED. PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

FIRE SPRINKLER / ALARM

-A FIRE SPRINKLER SYSTEM IS REQUIRED PER NFPA 13D

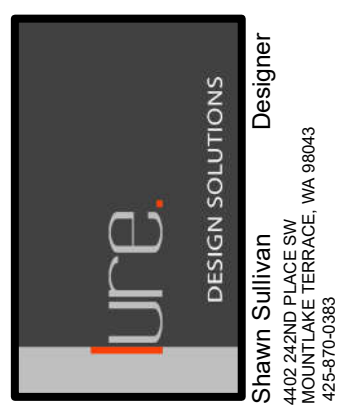
- A MONITORED HOUSEHOLD FIRE ALARM IS REQUIRED PER NFPA 72

- NOR-TECH FIRE SYSTEMS WILL BE DESIGNING THE SYSTEM AND APPLYING FOR A SEPARATE PERMIT

PROVIDE NEW ASPHALT DRIVEWAY APRON. SEE CIVIL ENGINEERING DRAWINGS FOR DESIGN / DETAILS

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SITE PLAN

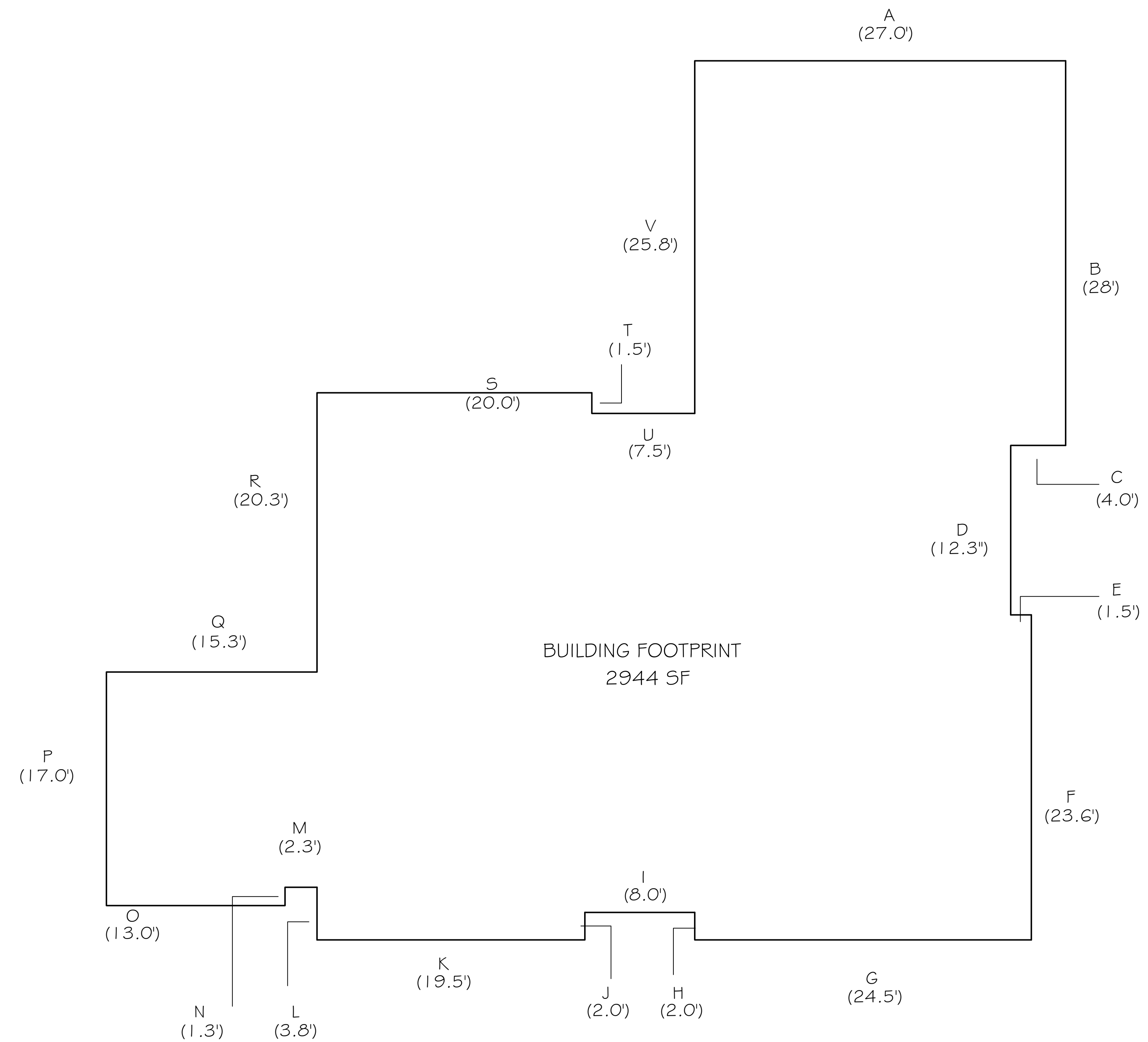
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A1.0

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TABLE OF WALL LENGTHS AND COVERAGES

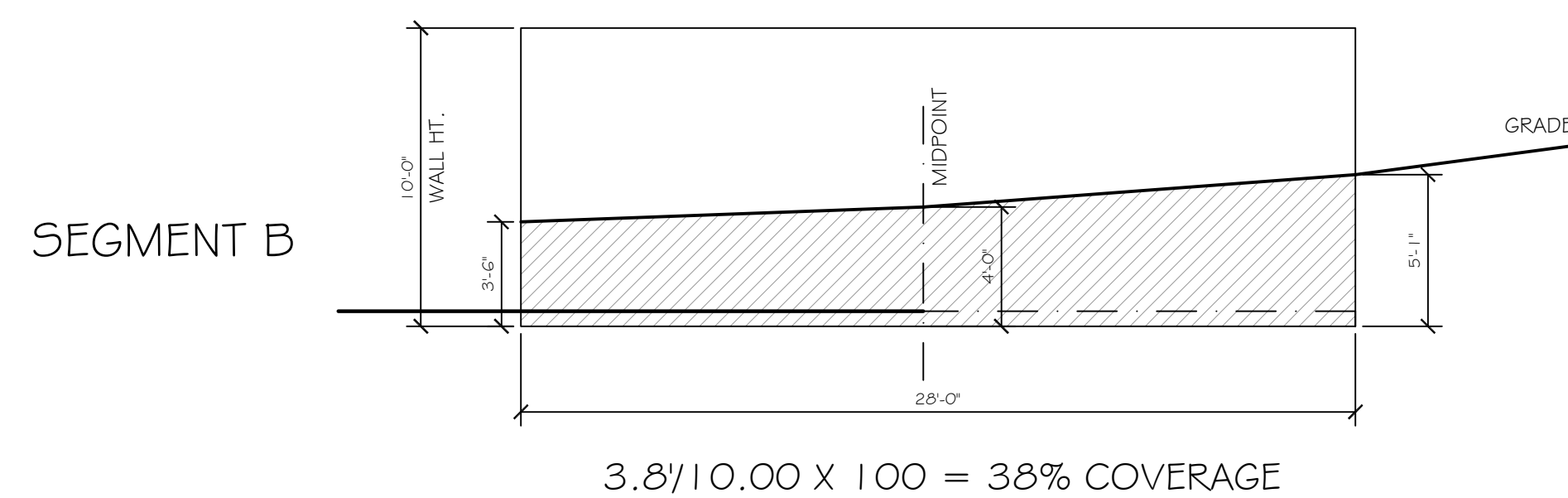
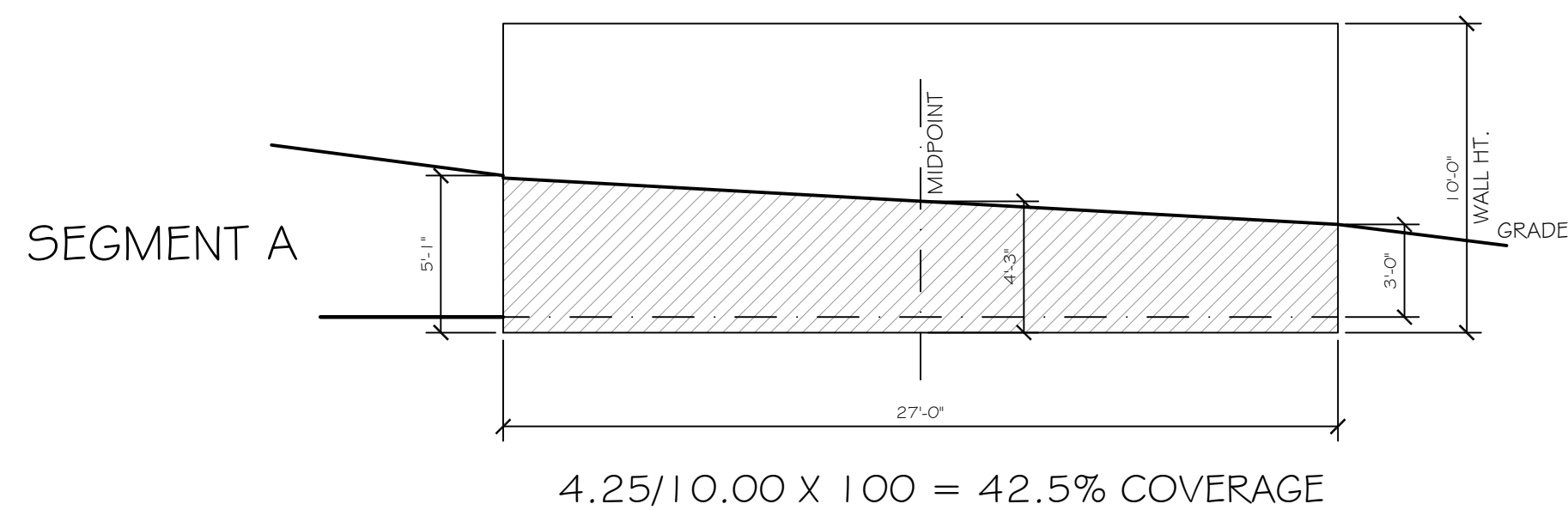
WALL SEGMENTS	WALL LENGTH X COVERAGE = RESULTS		
A	27.0'	42.5%	11.47
B	28.0'	40%	11.20
C	4.0'	0%	0%
D	12.3'	0%	0%
E	1.5'	0%	0%
F	23.6'	0%	0%
G	24.5'	0%	0%
H	2.0'	0%	0%
I	8.0'	0%	0%
J	2.0'	0%	0%
K	19.5'	0%	0%
L	3.8'	0%	0%
M	2.3'	0%	0%
N	1.3'	0%	0%
O	13.0'	0%	0%
P	17.0'	0%	0%
Q	15.3'	0%	0%
R	20.3'	0%	0%
S	20.0'	0%	0%
T	1.5'	0%	0%
U	7.5'	0%	0%
V	25.8'	0%	0%
TOTAL	280.20'	N/A'	22.67% OF WALLS BELOW GRADE



MAIN FLOOR FOOTPRINT- DIAGRAM

Li Residence- Custom Residence

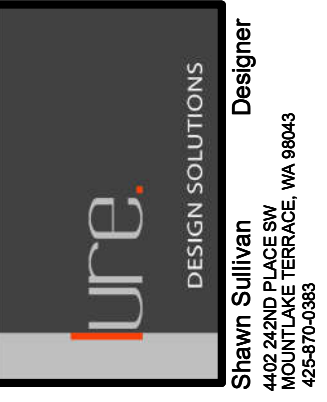
SCALE: 3/16"=1'-0"



EXLUDED GFA CACULATIONS

FORMULA			
TOTAL BASEMENT AREA	X	$\frac{\text{SUM OF (WALL SEGMENT COVERAGE X WALL SEGMENT LENGTH)}}{\text{TOTAL OF ALL WALL LENGTHS}}$	= PORTION OF EXCLUDED BASEMENT FLOOR AREA
2944 SF	X	$\frac{22.67}{280.2}$	
2944 SF	X	.0667	= 238.18

238 SF EXCLUDED FROM THE GFA



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**EXCLUDED GFA
 CALCULATIONS**

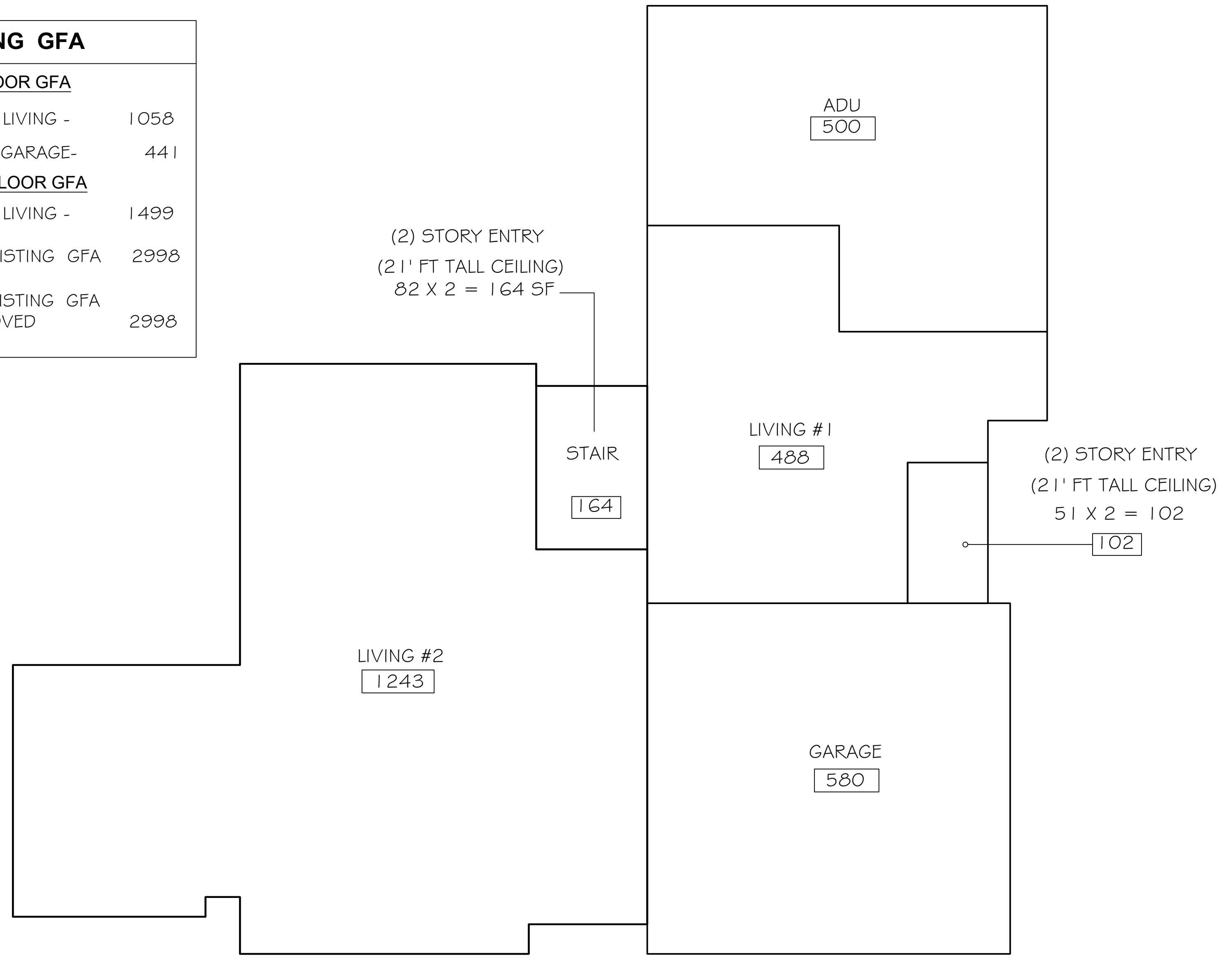
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A.1.1

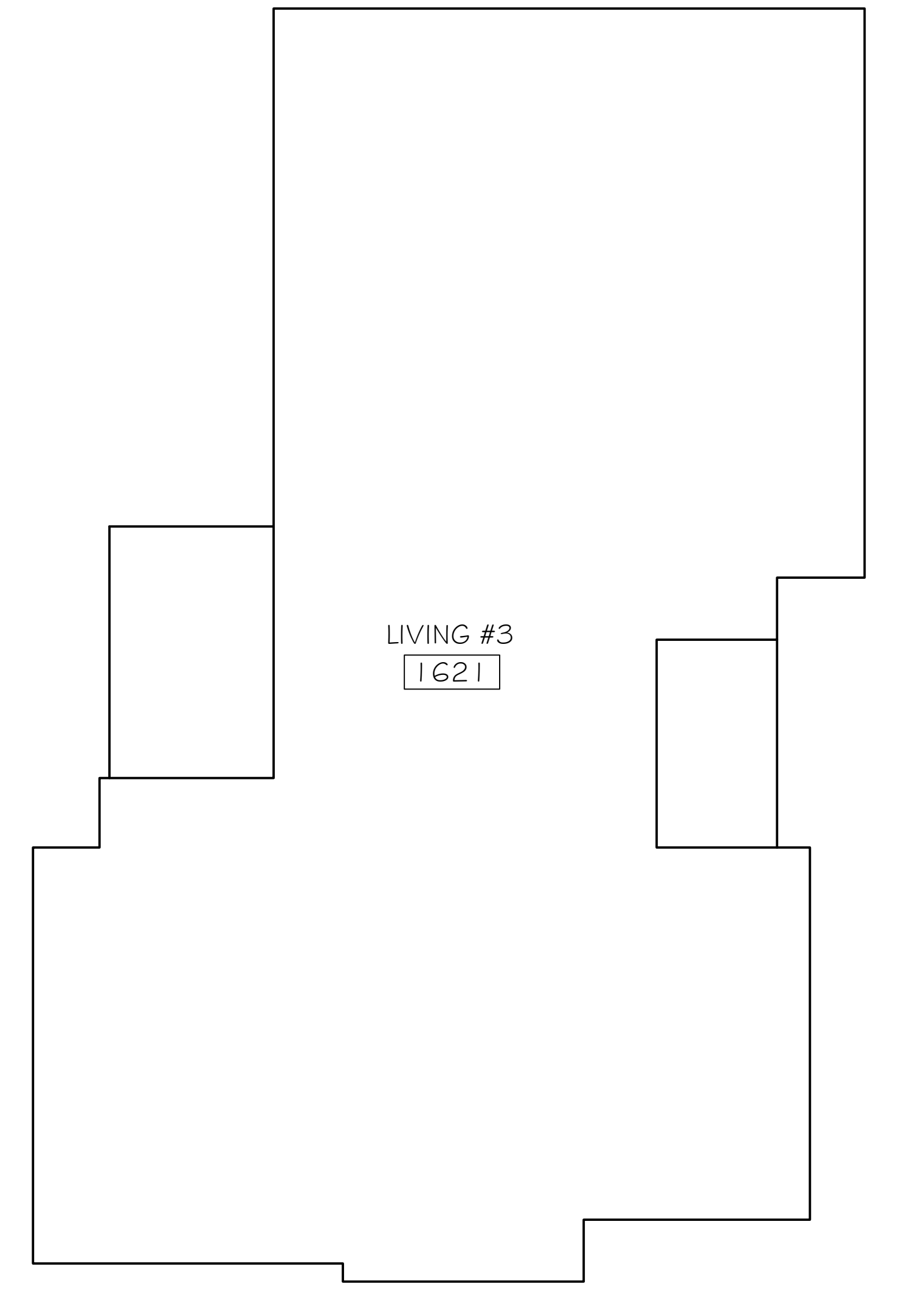
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ZONING
ZONING - R9.6
ALLOWABLE GFA
ALLOWABLE GFA IS 40% OF LOT AREA -
10,000 X .40 = 4000 SF
ADDITIONAL ALLOWED (ADU) + 500 SF
EXCLUDED GFA (SEE SHT A1.1 FOR CLACS)
TOTAL EXCLUDED= 238 SF
TOTAL ADJUSTED ALLOWBALE GFA
4000 + 500 + 238 = 4738 SF
GFA CALCULATIONS
MAIN FLOOR GFA
LIVING #1 - 488
LIVING #2 - 1243
ENTRY - 102
STAIR - 164
GARAGE- 580
ADU- 500
3077 SF
UPPER FLOOR GFA
LIVING #3 - 1621 SF
TOTAL GFA
3077 + 1621 = 4698 SF
TOTAL GFA 4698 SF
ALLOWABLE GFA 4738 SF
4698 < 4738 THUS OK
40 SF REMAINS

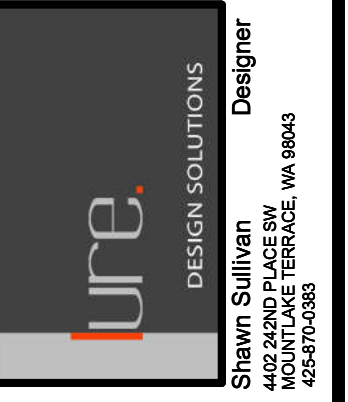
EXISTING GFA
MAIN FLOOR GFA
EXISTING LIVING - 1058
EXISTING GARAGE- 441
UPPER FLOOR GFA
EXISTING LIVING - 1499
TOTAL EXISTING GFA 2998
TOTAL EXISTING GFA TO REMOVED 2998



MAIN FLOOR PLAN- GFA DIAGRAM
Li Residence- Custom Residence SCALE: 3/16"=1'-0"



UPPER FLOOR PLAN- GFA DIAGRAM
Li Residence- Custom Residence SCALE: 3/16"=1'-0"



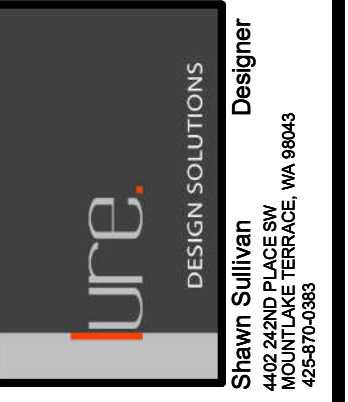
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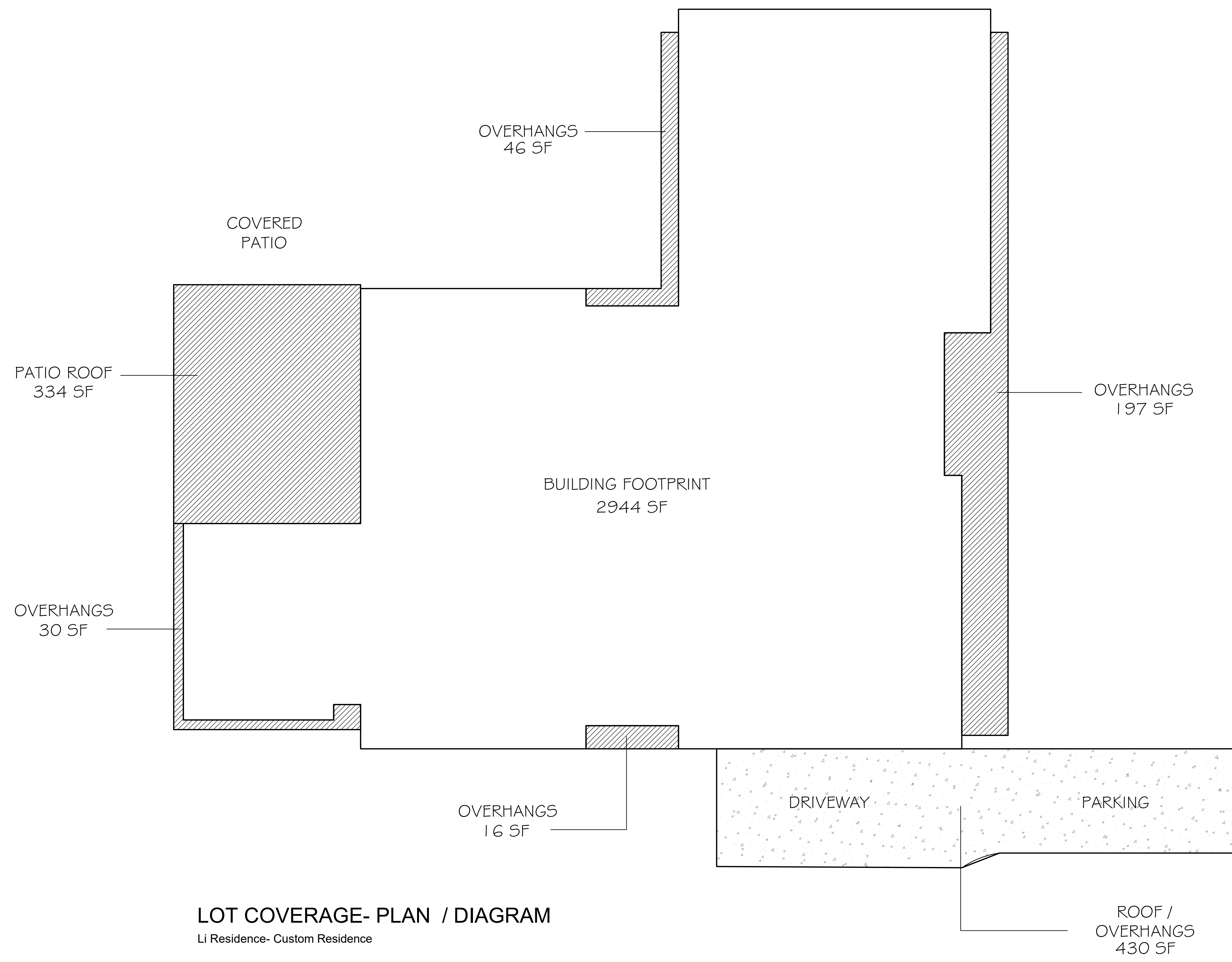


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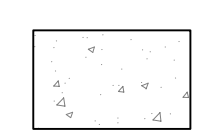
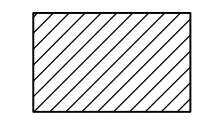
**LOT COVERAGE
 DIAGRAM / CALCS**

DATE:	01-04-2022
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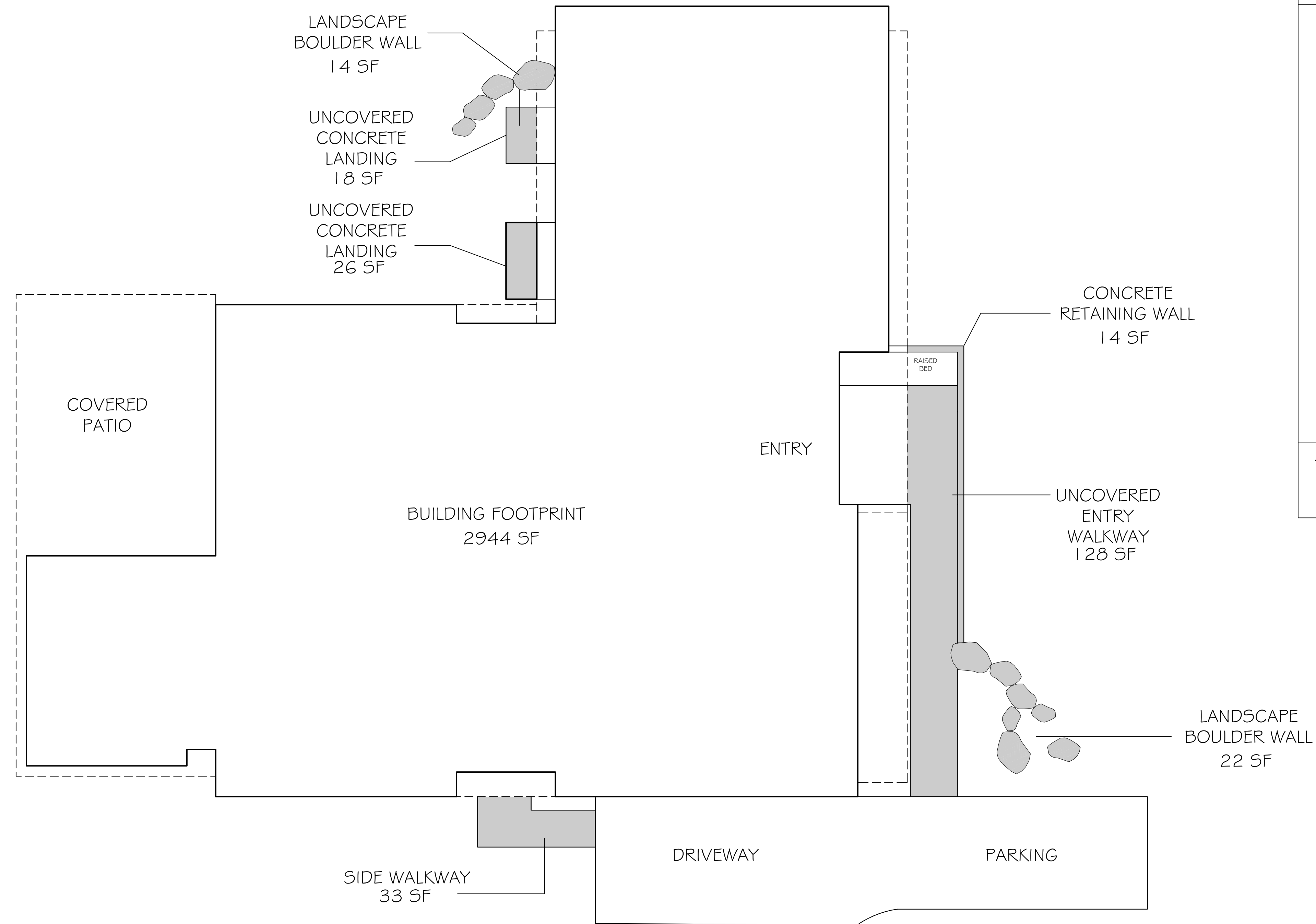
A1.3



LOT COVERAGE- PLAN / DIAGRAM
 Li Residence- Custom Residence

-  HATCH REPRESENTS DRIVEWAY / PARKING
-  HATCH REPRESENTS (ROOF OVERHANGS AND BUILDING CANTILEVERS ETC.)

LOT COVERAGE	
LOT AREA -	10,000 SF
ALLOWABLE LOT COVERAGE -	40%
10,000 X .40=	4000 SF
EXISTING LOT COVERAGE -	
EXIST. MAIN STRUCTURE ROOF AREA (FOOTPRINT + OVERHANGS)	1834 SF
EXIST. DRIVEWAY	294 SF
COVED PATIO	130 SF
TOTAL EXISTING=	2258 SF
TOTAL LOT COVERAGE AREA TO BE REMOVED=	2258 SF
PROPOSED LOT COVERAGE -	
MAIN STRUCTURE ROOF AREA (FOOTPRINT + OVERHANGS)	3233 SF
REAR COVERED PATIO ROOF	334 SF
DRIVEWAY / PAVED ACCESS-	430 SF
TOTAL PROPOSED=	3997 SF
3997 / 10,000 =	39.9%
REQUIRED LANDSCAPE	
LOT AREA -	10,000 SF
ALLOWABLE LOT COVERAGE -	60%
10,000 X .60=	6000 SF



HARDSCAPE	
LOT AREA -	10,000 SF
ALLOWABLE HARDSCAPE -	9%
10,000 X .09=	900 SF
<u>EXISTING HARDSCAPE -</u>	
UNCOVERED PATIO	68 SF
UNCOVERED DECK	302 SF
TOTAL HARDSCAPE AREA	370 SF
TOTAL HARDSCAPE AREA TO BE REMOVED	370 SF
<u>PROPOSED HARDSCAPE -</u>	
UNCOVERED WALKWAYS	161 SF
REAR CONCRETE LANDINGS (PATIO)	44 SF
BOULDER WALLS /RETAINING WALLS	50 SF
TOTAL PROPOSED=	255 SF
255 / 1000= .025....03	3%

HARDSCAPE- PLAN / DIAGRAM

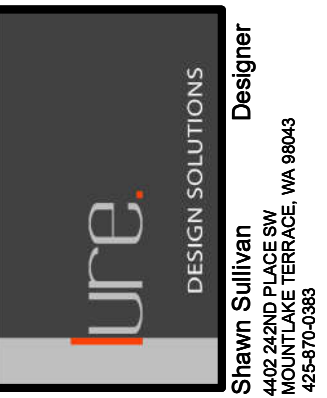
Li Residence- Custom Residence

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

HATCH REPRESENTS HARDSCAPE AREA

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5.



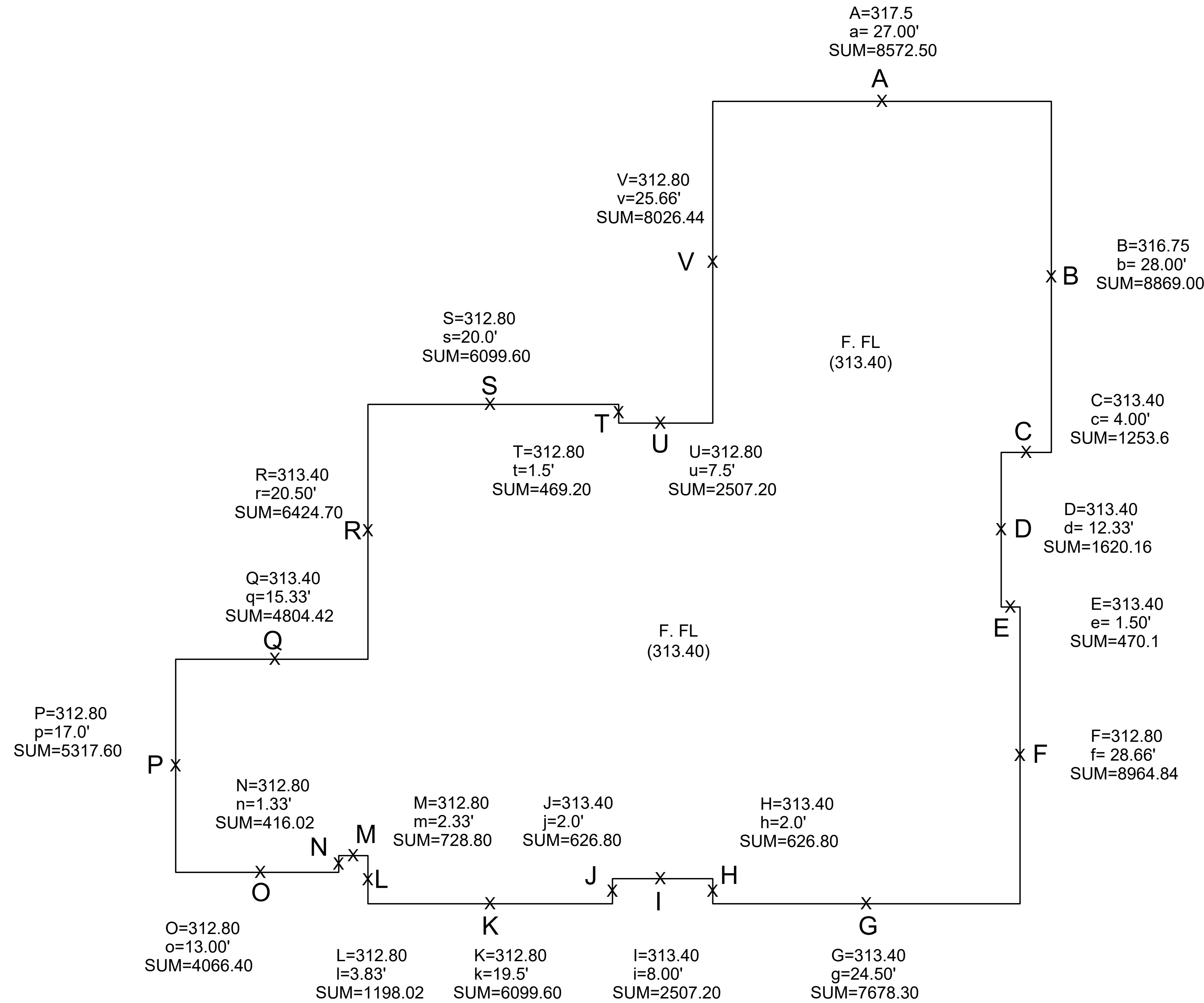
LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

**HARDSCAPE COVERAGE
 DIAGRAM / CALCS**

DATE:	01-04- 2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

A1.4

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.



CHART

ELEV X WALL LENGTH = SUM

SEGMENT	ELEV	WALL LENGTH	SUM
A	317.5	27.00'	8572.50
B	316.75	28.00'	8869.00
C	313.40	4.00'	1253.6
D	313.40	12.33'	3864.22
E	313.40	1.5'	470.10
F	312.80	28.66'	8964.84
G	313.40	24.50'	7678.30
H	313.40	2.0'	626.80
I	313.40	8.00'	2507.20
J	313.40	2.0'	626.80
K	312.80	19.5'	6099.60
L	312.80	3.83'	1198.02
M	312.80	2.33'	728.82
N	312.80	1.33'	416.02
O	312.80	13.0'	4066.40
P	312.80	17.0'	5317.60
Q	313.40	15.33'	4804.42
R	313.40	20.50'	6424.70
S	312.80	20.0'	6256.00
T	312.80	1.50'	469.20
U	312.80	7.5'	2346.00
V	312.80	25.66'	8026.44
TOTALS		285.47'	89606.58

FORMULA(AVERAGE BUILDING ELEV)

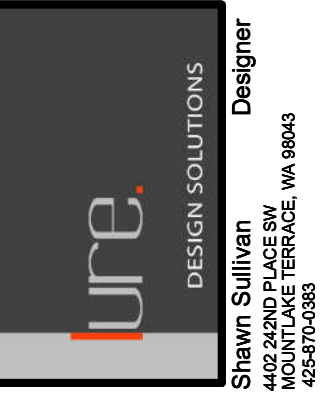
WEIGHTED SUM OF MID-POINT ELEVATION / SUM OF WALL SEGMENT LENGTHS = ABE

$$\frac{89606.58}{285.47} = 313.89 \text{ (ABE)}$$

ALLOWABLE BUILDING HEIGHT MAX

ALLOWABLE BUILDIN HT + 30' ABOVE (ABE)

$$313.89 \text{ (ABE)} + 30 = \text{ELEV } 343.89$$



LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

AVERAGE BUILDING ELEV
 DIAGRAM / CALCS

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

A1.5

GENERAL NOTES.

1. PROVIDE ROOF DRAINS, FLOOR DRAINS AND GUTTERS PER ROOF PLAN
2. DOWNSPOUTS TO BE TIGHTLINED TO PERIMETER DRAIN SYSTEM PER CIVIL ENGINEER
3. SLOPE GRADE AWAY FROM FOUNDATION
4. PROVIDE WATERPROOF MEMBRANE AT ALL FLAT/LOW SLOPE ROOF CONDITIONS. CONSULT ROOFING CONTRACTOR / WATERPROOFING CONSULTANT FOR WATERPROOF SYSTEMS
5. WRAP CONTINUOUS WATERPROOF MEMBRANE UP ALL VERTICAL SURFACES A MIN OF 12". PROVIDE CONTINUOUS WRAP UP AND OVER TOP OF ALL CURB LOCATIONS
6. PROVIDE METAL FLASHING CAPS AT ALL ROOF CURB LOCATIONS
7. PROVIDE ICE AND WATER-SHIELD MEMBRANE AT SLOPES 1/2 OR LESS IF COMP SHINGLES ARE PROVIDED.
8. ALL OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR STUD WALL OR EDGE OF BEAM TO EXTERIOR EDGE OR RAFTER TAIL
9. PROVIDE STANDING SEAM METAL ROOFING W/ CONCEALED FASTENERS AND HIGH TEMP ICE & WATER-SHIELD AT UPPER FLOOR ROOF.
10. PROVIDE R-49 SPRAY FOAM INSULATION AT ROOF RAFTERS- (ALL CEILING/ ROOF) SEE PLANS FOR SPECIFIC NOTES
11. ALL TOP PLATE HEIGHTS ARE NOTED BY []
12. CONTRACTOR IS RESPONSIBLE FOR ALL FOR PROPER FLASHING AND WATERPROOFING METHODS AT ROOF, WALLS, COVERED DECKS AND CANOPIES.
13. SEE EXTERIOR ELEVATIONS FOR GENERAL EXTERIOR MATERIAL TYPE
14. DRAWING REVISIONS ARE INDICATED BY Δ
15. CENTER DOORS IN ROOMS OR PROVIDE 4" MIN. WALL RETURN UNLESS OTHERWISE NOTED
16. SMOKE DETECTOR (PLACED IN EVERY BEDROOM AND IN HALLWAY OUTSIDE OF BEDROOM DOOR) SIGNIFIED BY ☉
17. CARBON MONOXIDE DETECTORS PLACED IN HALLWAY OUTSIDE OF BEDROOM DOOR) SIGNIFIED BY ☉

18. LANDINGS / IRC R311.4.3

Door Width	36" MIN
Max Drop	7-3/4" MAX DROP

19. EGRESS:
 - BEDROOM SILLS AT 44" MAX ABOVE FIN FLOOR
 - MIN. 20" W X 24" HIGH OPENING
 - MIN. 5.7 SF FT CLEAR OPENING SIZE
20. STAIRWAY REQUIREMENTS (INTERIOR AND EXTERIOR)
 - MAX. 7-3/4" RISE AND MIN. 10" RUN
 - MIN. 6'-8" HEADROOM CLEARANCE
 - HANDRAILS AT 34-38" ABOVE THE STAIR NOSING
 - HANDRAIL GRASP DIMENSIONS BETWEEN 1-1/4" - 2"
 - PROVIDE CONTINUOUS HANDRAIL OR TERMINATE AT NEWEL POSTS OR SAFETY TERMINAL
 - WHERE HANDRAIL IS USED AS GUARDRAIL, 4" CLEAR MAX. OPENINGS
 - ALL GUARDRAIL TO BE A MIN OF 36" HT.

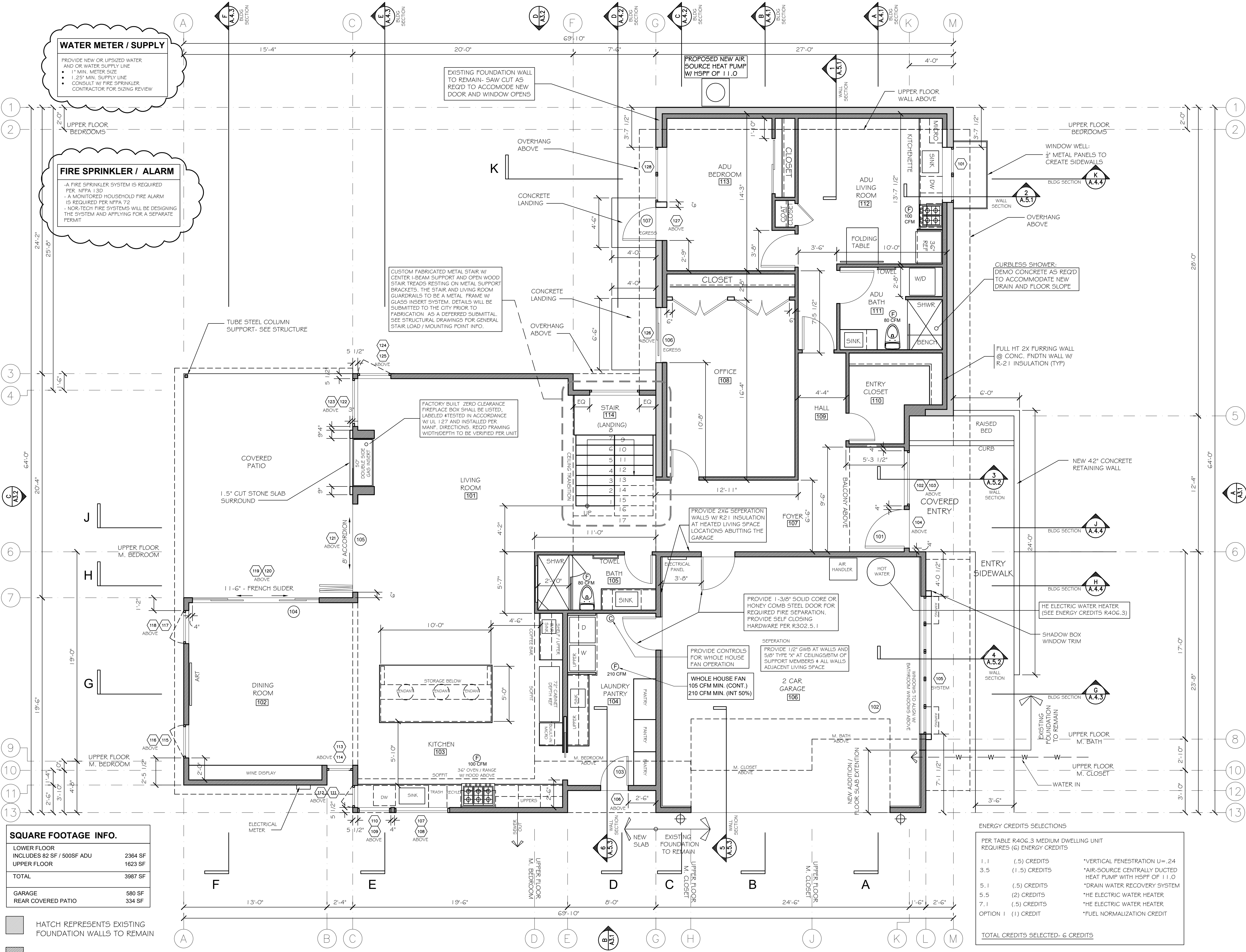
21. DUCT TESTING: CONTRACTOR TO PROVIDE A COPY OF THE "DUCT LEAKAGE AFFIDAVIT FOR NEW CONSTRUCTION" TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.
22. BLOWER DOOR TESTING: AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/ HOUR, AND SHALL BE TESTED PER R402.4.1.2. PROVIDE A WRITTEN REPORT OF THE TEST RESULTS, SIGNED BY THE TESTING PARTY, TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.
23. INSULATION CERTIFICATE: CONTRACTOR SHALL COMPLETE AND POST A "INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITHIN 3' OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.
24. PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.1.1
25. A MIN. OF 75% OF PERMANENTLY INSTALLED LAMPS IN LIGHT FIXTURES SHALL BE HIGH EFFICACY LAMPS.
26. ALL EXHAUST FANS TO VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M1501.1
27. PROVIDE WHOLE HOUSE FAN EQUIPPED WITH THE OPTION TO OPERATE: INTERMITTENT / CONTINUOUSLY WITH AUTO / MANUAL TIMER CONTROLS
 CONTINUOUS PROVIDE FAN SIZE PER TABLE M1507.3.3(1) DWELLING UNIT 3001 SF - 4500 SF W/ 6-7 BEDROOMS = 105 CFM MIN. CONTINUOUS OR
 INTERMITTENT PROVIDE FAN SIZE PER TABLE M1507.3.3(2) (50% MIN. RUN - TIME EA. 4 HR SEGMENT) 105 CFM X 2 = 210 CFM MIN

28. ALL PROPOSED EXTERIOR LIGHTING WILL SHIELD LIGHTING AND DIRECT IT AWAY FROM ADJACENT PROPERTIES
29. THE PROPOSED PRIMARY HEATING SYSTEM IS A FORCED AIR FURNACE WITH AIR SOURCE HEAT PUMP. ALL DUCTS AND FURNACE LOCATED INSIDE CONDITIONS SPACE
29. SAFETY GLASS (S.G.): PROVIDE SAFETY GLASS IN ALL WINDOWS THAT MEASURE LARGER THAN 9 SF OR THE BOTTOM EDGE IS LESS THAN 18 ABOVE FINISH FLOOR. (SEE WINDOW SCHEDULE OR TYPES)
30. SEE SHEET A1.1 - A1.5 FOR CODE STUDY INFORMATION

SQUARE FOOTAGE INFO.

LOWER FLOOR	2364 SF
INCLUDES 82 SF / 500SF ADU	
UPPER FLOOR	1623 SF
TOTAL	3987 SF
GARAGE	580 SF
REAR COVERED PATIO	334 SF

- HATCH REPRESENTS EXISTING FOUNDATION WALLS TO REMAIN
- ▨ HATCH REPRESENTS NEW WALLS



ENERGY CREDITS SELECTIONS

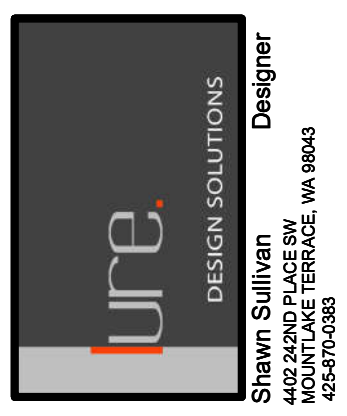
PER TABLE R406.3 MEDIUM DWELLING UNIT REQUIRES (6) ENERGY CREDITS

1.1	(.5) CREDITS	*VERTICAL PENETRATION U=.24
3.5	(1.5) CREDITS	*AIR-SOURCE CENTRALLY DUCTED HEAT PUMP WITH HSPF OF 11.0
5.1	(.5) CREDITS	*DRAIN WATER RECOVERY SYSTEM
5.5	(2) CREDITS	*HE ELECTRIC WATER HEATER
7.1	(.5) CREDITS	*HE ELECTRIC WATER HEATER
OPTION 1	(1) CREDIT	*FUEL NORMALIZATION CREDIT
TOTAL CREDITS SELECTED- 6 CREDITS		

LOWER FLOOR PLAN
 LI Residence- Custom Residence
 SCALE: 1/4"=1'-0"
 North

Misc. Info:

1. FINAL CD SET	10-14-2022
2.	
3.	
4.	
5.	



LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

PROPOSED LOWER FLOOR PLAN

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

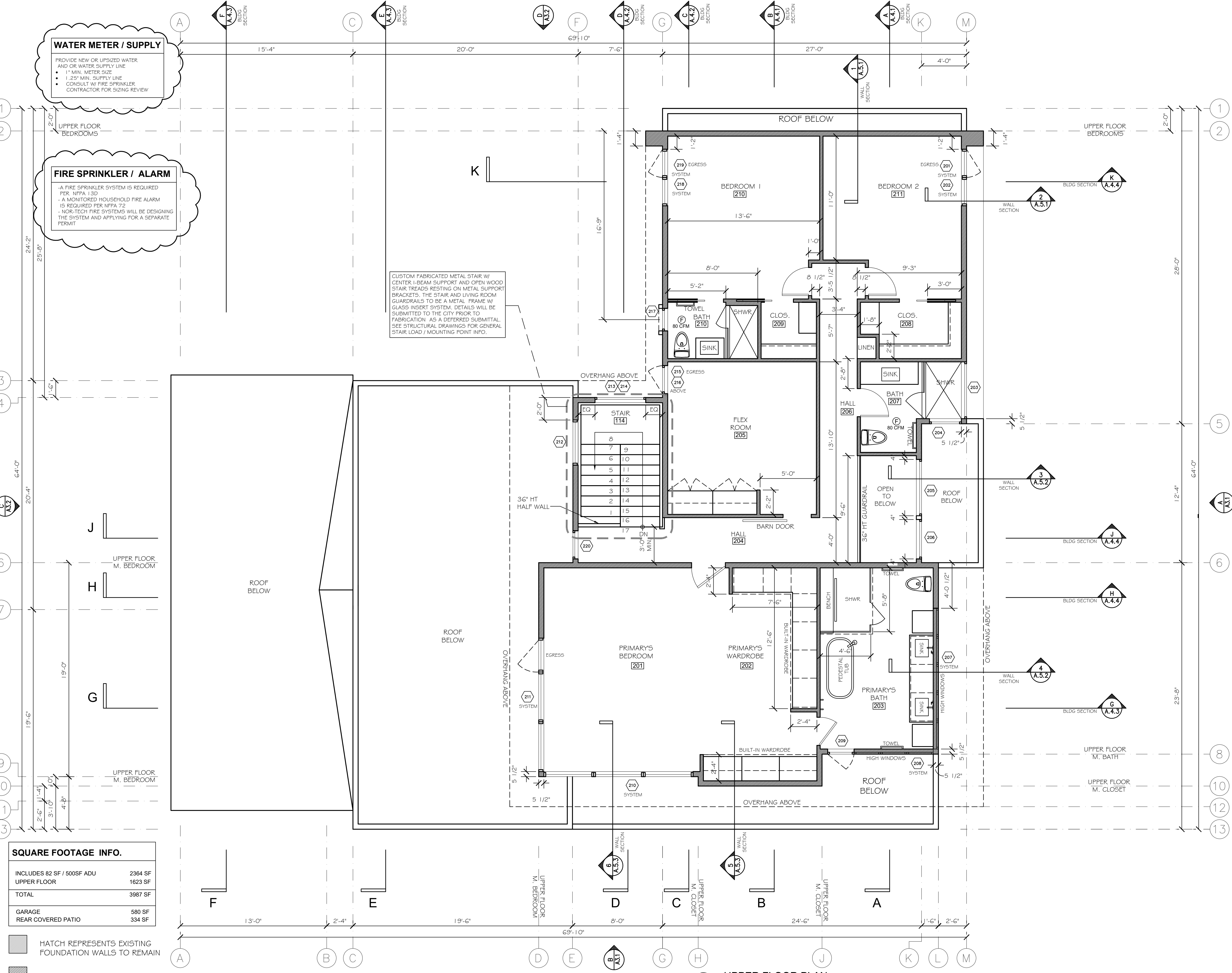
A2.1

- GENERAL NOTES.**
1. PROVIDE ROOF DRAINS, FLOOR DRAINS AND GUTTERS PER ROOF PLAN
 2. DOWNSPOUTS TO BE TIGHTLINED TO PERIMETER DRAIN SYSTEM PER CIVIL ENGINEER
 3. SLOPE GRADE AWAY FROM FOUNDATION
 4. PROVIDE WATERPROOF MEMBRANE AT ALL FLAT/LOW SLOPE ROOF CONDITIONS. CONSULT ROOFING CONTRACTOR / WATERPROOFING CONSULTANT FOR WATERPROOF SYSTEMS
 5. WRAP CONTINUOUS WATERPROOF MEMBRANE UP ALL VERTICAL SURFACES A MIN OF 12". PROVIDE CONTINUOUS WRAP UP AND OVER TOP OF ALL CURB LOCATIONS
 6. PROVIDE METAL FLASHING CAPS AT ALL ROOF CURB LOCATIONS
 7. PROVIDE ICE AND WATER-SHIELD MEMBRANE AT SLOPES $\frac{1}{2}$ OR LESS IF COMP SHINGLES ARE PROVIDED.
 8. ALL OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR STUD WALL OR EDGE OF BEAM TO EXTERIOR EDGE OR RAFTER TAIL
 9. PROVIDE STANDING SEAM METAL ROOFING W/ CONCEALED FASTENERS AND HIGH TEMP ICE & WATER-SHIELD AT UPPER FLOOR ROOF.
 10. PROVIDE R-49 SPRAY FOAM INSULATION AT ROOF RAFTERS- (ALL CEILING/ ROOF) SEE PLANS FOR SPECIFIC NOTES
 11. ALL TOP PLATE HEIGHTS ARE NOTED BY []
 12. CONTRACTOR IS RESPONSIBLE FOR ALL FOR PROPER FLASHING AND WATERPROOFING METHODS AT ROOF, WALLS, COVERED DECKS AND CANOPIES.
 13. SEE EXTERIOR ELEVATIONS FOR GENERAL EXTERIOR MATERIAL TYPE
 14. DRAWING REVISIONS ARE INDICATED BY Δ
 15. CENTER DOORS IN ROOMS OR PROVIDE 4" MIN. WALL RETURN UNLESS OTHERWISE NOTED
 16. SMOKE DETECTOR (PLACED IN EVERY BEDROOM AND IN HALLWAY OUTSIDE OF BEDROOM DOOR) SIGNIFIED BY \odot
 17. CARBON MONOXIDE DETECTORS PLACED IN HALLWAY \odot OUTSIDE OF BEDROOM DOOR) SIGNIFIED BY \odot
 18. LANDINGS / IRC R311.4.3
 - Door Width $\geq 36"$ MIN
 - 7-3/4" MAX DROP
 19. EGRESS:
 - BEDROOM SILLS AT 44" MAX ABOVE FIN FLOOR
 - MIN. 20" W X 24" HIGH OPENING
 - MIN. 5.7 SF FT CLEAR OPENING SIZE
 20. STAIRWAY REQUIREMENTS (INTERIOR AND EXTERIOR)
 - MAX. 7-3/4" RISE AND MIN. 10" RUN
 - MIN. 6'-8" HEADROOM CLEARANCE
 - HANDRAILS AT 34-38" ABOVE THE STAIR NOSING
 - HANDRAIL GRASP DIMENSIONS BETWEEN 1-1/4" - 2"
 - PROVIDE CONTINUOUS HANDRAIL OR TERMINATE AT NEWEL POSTS OR SAFETY TERMINAL
 - WHERE HANDRAIL IS USED AS GUARDRAIL, 4" CLEAR MAX. OPENINGS
 - ALL GUARDRAIL TO BE A MIN OF 36" HT.
 21. DUCT TESTING:
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 22. BLOWER DOOR TESTING:
 AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/ HOUR, AND SHALL BE TESTED PER R402.4.1.2. PROVIDE A WRITTEN REPORT OF THE TEST RESULTS, SIGNED BY THE TESTING PARTY, TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.
 23. INSULATION CERTIFICATE:
 CONTRACTOR SHALL COMPLETE AND POST A "INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITHIN 3' OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.
 24. PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN EACH DWELLING UNIT PER SEC R403.1.1
 25. A MIN. OF 75% OF PERMANENTLY INSTALLED LAMPS IN LIGHT FIXTURES SHALL BE HIGH EFFICACY LAMPS.
 26. ALL EXHAUST FANS TO VENT DIRECTLY TO THE EXTERIOR OF THE BUILDING PER M150.1
 27. PROVIDE WHOLE HOUSE FAN EQUIPPED WITH THE OPTION TO OPERATE INTERMITTENT / CONTINUOUSLY WITH AUTO / MANUAL TIMER CONTROLS
 CONTINUOUS PROVIDE FAN SIZE PER TABLE M1507.3.3(1)
 DWELLING UNIT 3001 SF-4500 SF W/ 6-7 BEDROOMS = 105 CFM MIN. CONTINUOUS OR
 INTERMITTENT PROVIDE FAN SIZE PER TABLE M1507.3.3(2)
 (50% MIN. RUN-TIME EA. 4 HR SEGMENT)
 105 CFM X 2 = 210 CFM MIN
 28. ALL PROPOSED EXTERIOR LIGHTING WILL SHIELD LIGHTING AND DIRECT IT AWAY FROM ADJACENT PROPERTIES
 29. THE PROPOSED PRIMARY HEATING SYSTEM IS A FORCED AIR FURNACE WITH AIR SOURCE HEAT PUMP. ALL DUCTS AND FURNACE LOCATED INSIDE CONDITIONS SPACE
 29. SAFETY GLASS (S.G.):
 PROVIDE SAFETY GLASS IN ALL WINDOWS THAT MEASURE LARGER THAN 9 SF OR THE BOTTOM EDGE IS LESS THAN 18 ABOVE FINISH FLOOR. (SEE WINDOW SCHEDULE OR TYPES)
 30. SEE SHEET A.1.1 - A.1.5 FOR CODE STUDY INFORMATION

WATER METER / SUPPLY
 PROVIDE NEW OR UPSIZED WATER AND/OR WATER SUPPLY LINE
 • 1" MIN. METER SIZE
 • 1.25" MIN. SUPPLY LINE
 • CONSULT W/ FIRE SPRINKLER CONTRACTOR FOR SIZING REVIEW

FIRE SPRINKLER / ALARM
 - A FIRE SPRINKLER SYSTEM IS REQUIRED PER NFPA 13D
 - A MONITORED HOUSEHOLD FIRE ALARM IS REQUIRED PER NFPA 72
 - NOR-TECH FIRE SYSTEMS WILL BE DESIGNING THE SYSTEM AND APPLYING FOR A SEPARATE PERMIT

CUSTOM FABRICATED METAL STAIR W/ CENTER I-BEAM SUPPORT AND OPEN WOOD STAIR TREADS RESTING ON METAL SUPPORT BRACKETS. THE STAIR AND LIVING ROOM GUARDRAILS TO BE A METAL FRAME W/ GLASS INSERT SYSTEM. DETAILS WILL BE SUBMITTED TO THE CITY PRIOR TO FABRICATION AS A DEFERRED SUBMITTAL. SEE STRUCTURAL DRAWINGS FOR GENERAL STAIR LOAD / MOUNTING POINT INFO.



SQUARE FOOTAGE INFO.

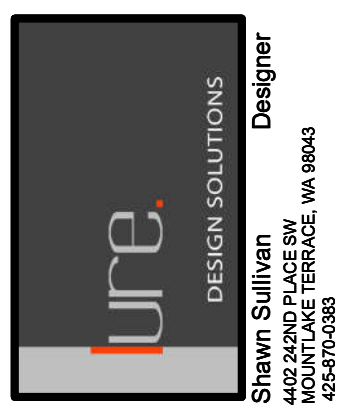
INCLUDES 82 SF / 500SF ADU UPPER FLOOR	2364 SF
TOTAL	3987 SF
GARAGE	580 SF
REAR COVERED PATIO	334 SF

- HATCH REPRESENTS EXISTING FOUNDATION WALLS TO REMAIN
- HATCH REPRESENTS NEW WALLS

UPPER FLOOR PLAN
 LI Residence - Custom Residence
 SCALE: 1/4"=1'-0"

Misc. Info:

1. FINAL CD SET	10-14-2022
2.	
3.	
4.	
5.	



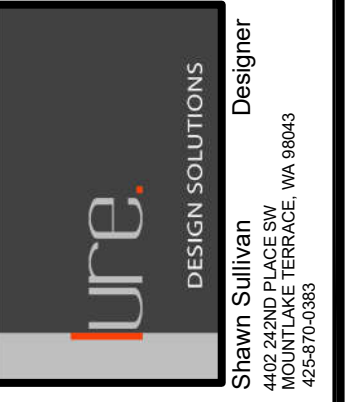
LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

PROPOSED UPPER FLOOR PLAN

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

A2.2

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

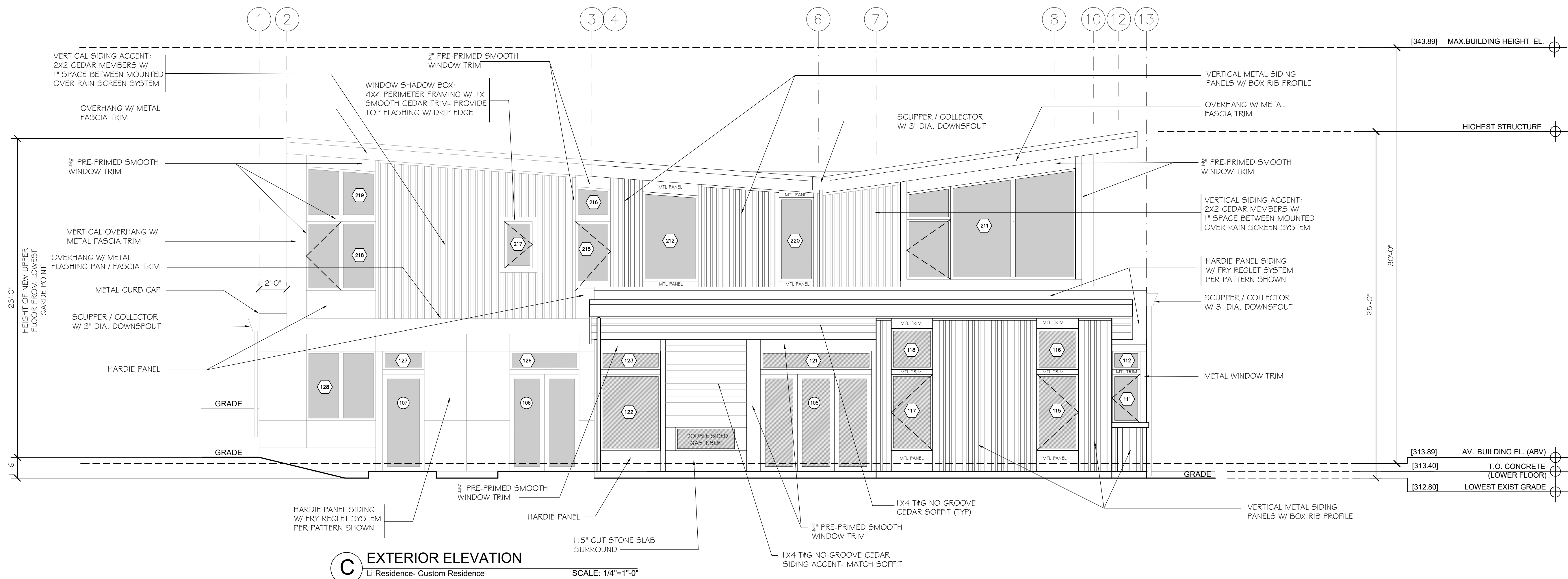


LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

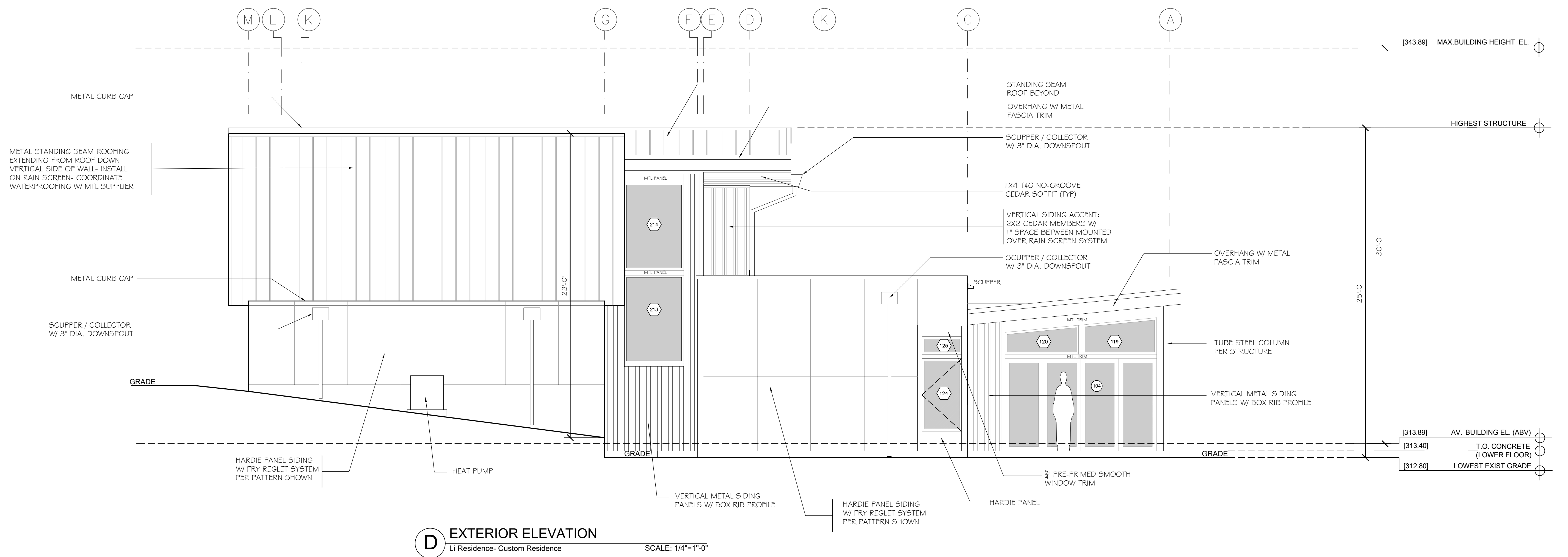
**PROPOSED
 EXTERIOR ELEVATIONS**

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO.:	2022- 01
SHEET:	

A3.2

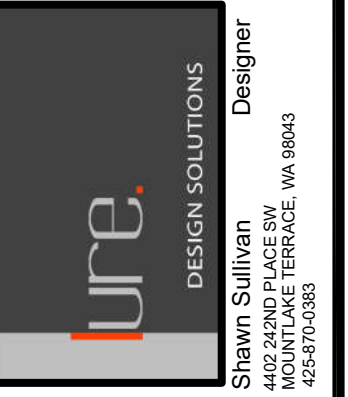


C EXTERIOR ELEVATION
 Li Residence- Custom Residence SCALE: 1/4"=1'-0"



D EXTERIOR ELEVATION
 Li Residence- Custom Residence SCALE: 1/4"=1'-0"

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

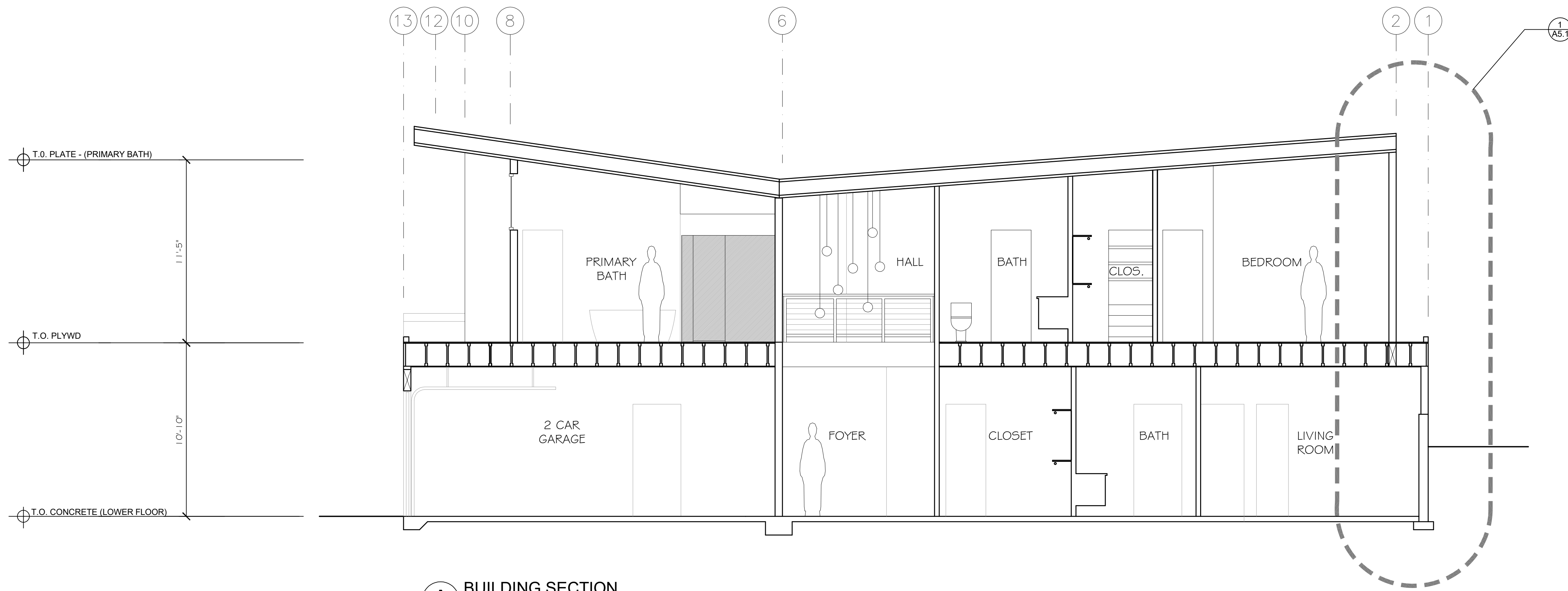


LI RESIDENCE
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 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

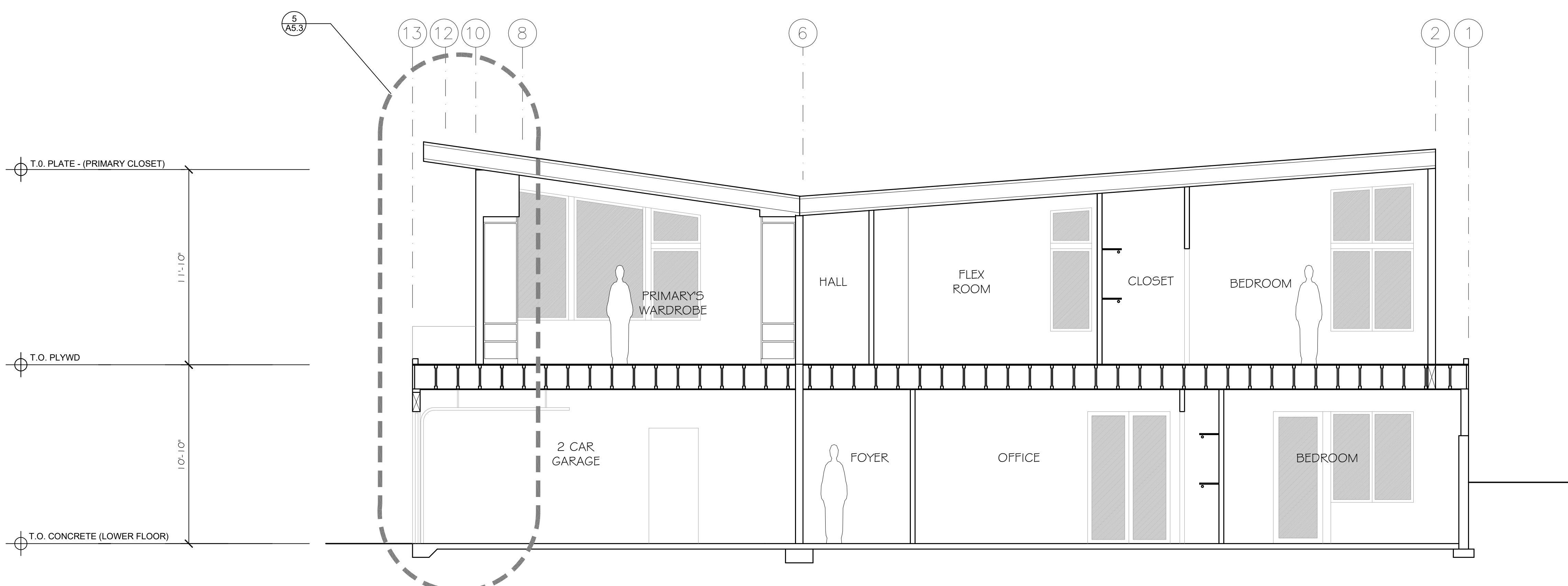
**PROPOSED
 BUILDING SECTIONS**

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO.:	2022-01
SHEET:	

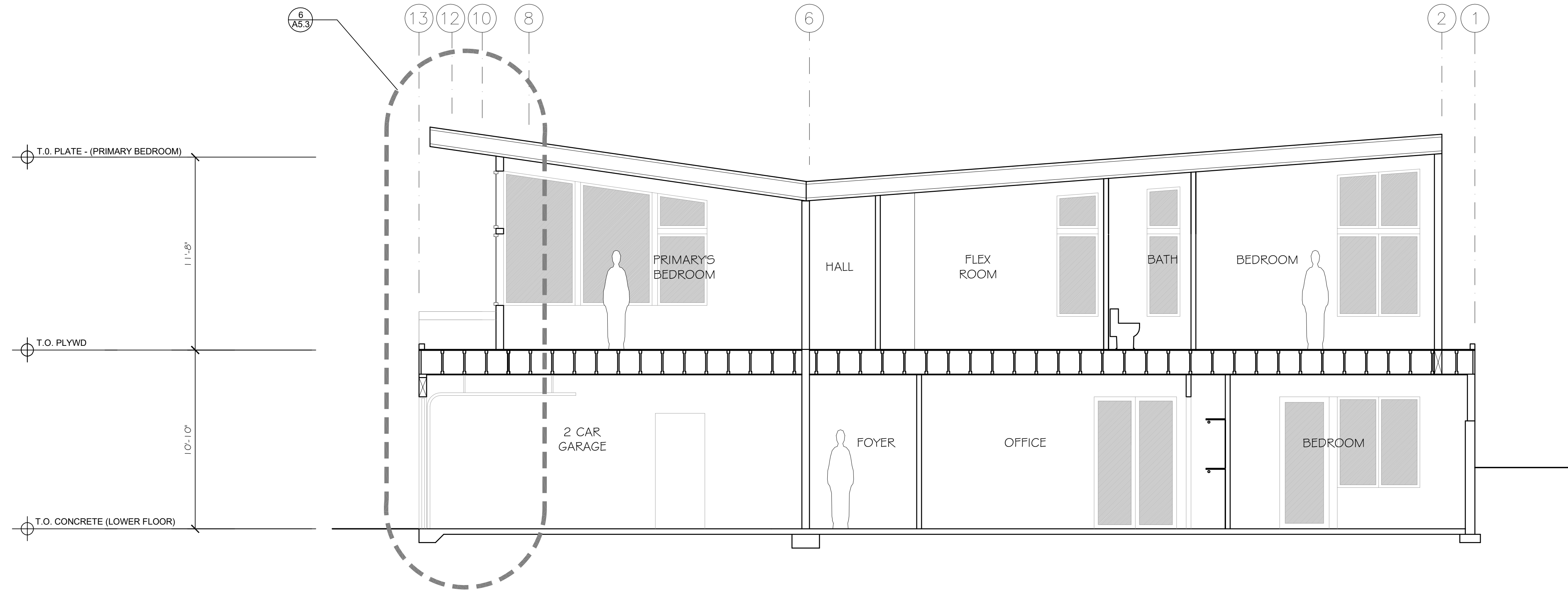
A4.1



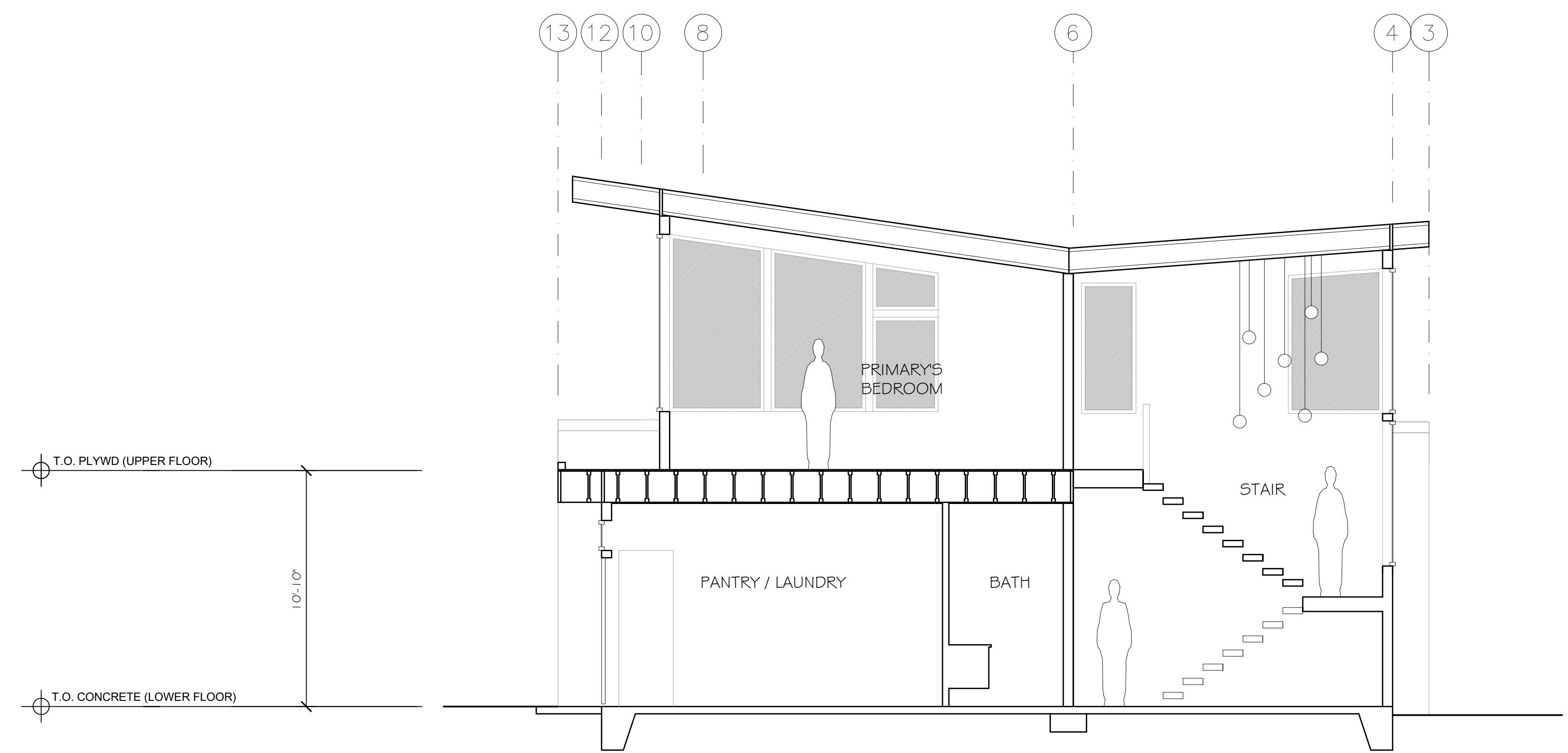
A BUILDING SECTION
 Li Residence- Custom Residence SCALE: 1/4"=1'-0"



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



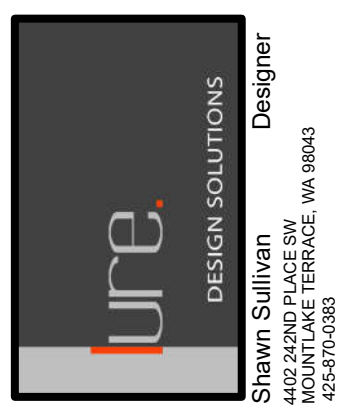
C BUILDING SECTION
 LI Residence- Custom Residence SCALE: 1/4"=1'-0"



D BUILDING SECTION
 LI Residence- Custom Residence SCALE: 1/4"=1'-0"

Misc. Info:

1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

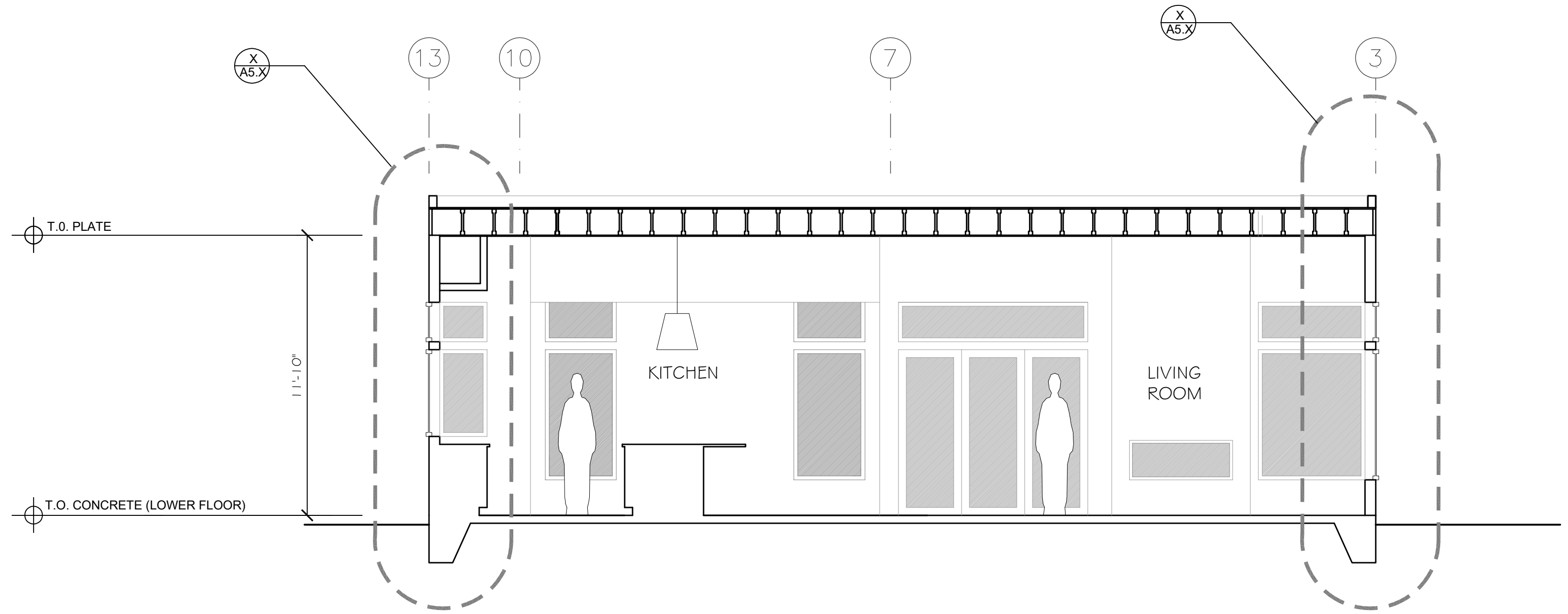


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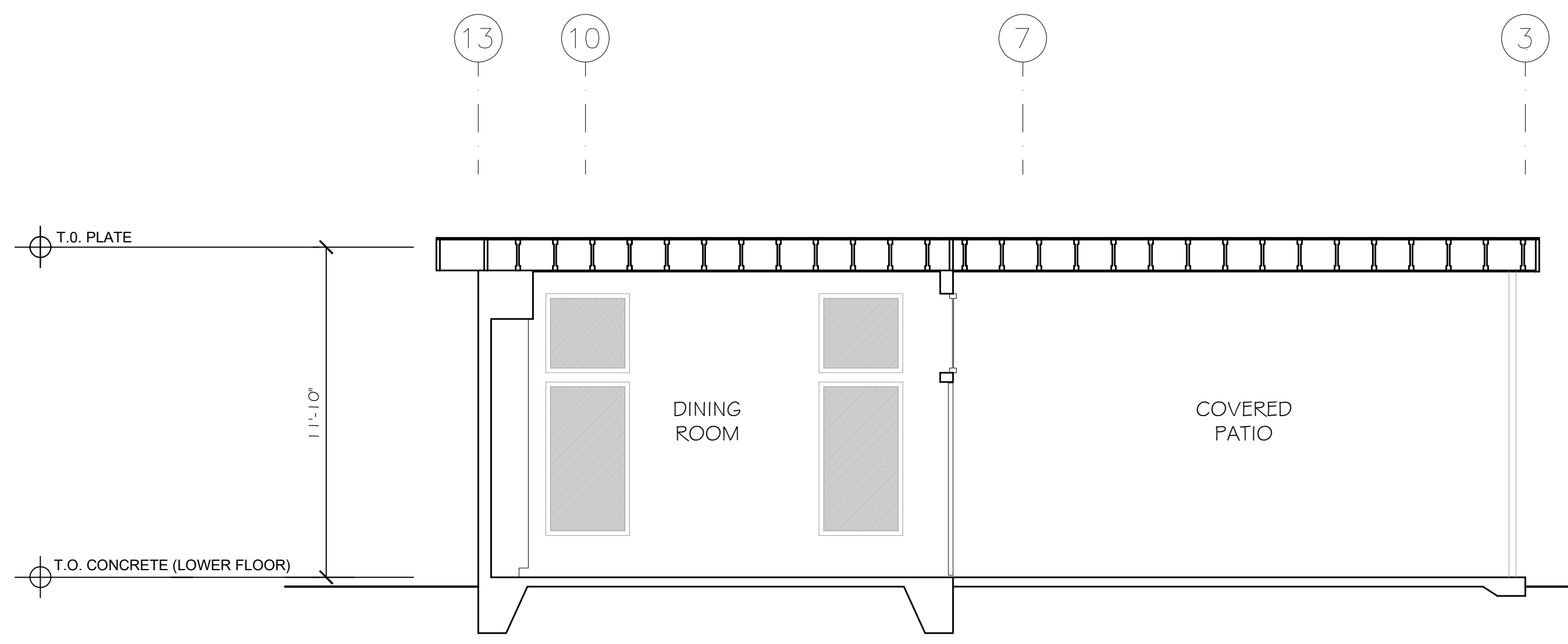
**PROPOSED
 BUILDING SECTIONS**

DATE: 01-04-2022
DESIGNED: SLS
DRAWN: SLS
JOB NO: 2022- 01
SHEET:

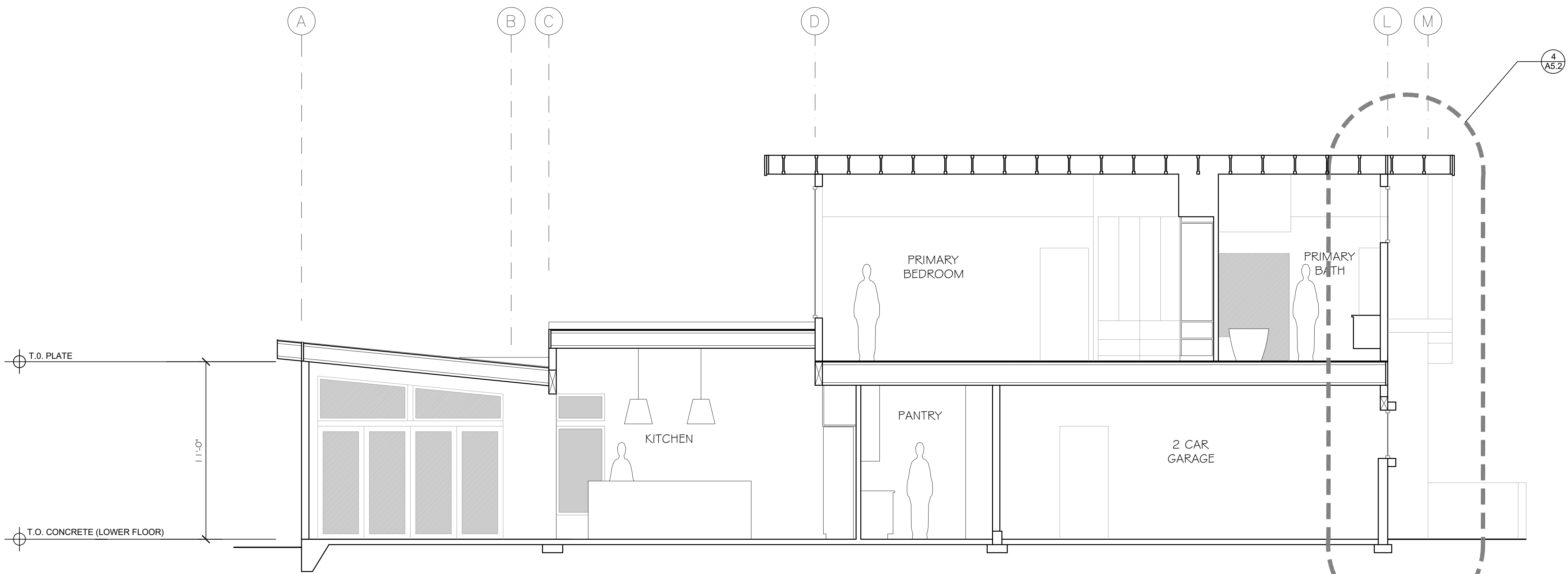
A4.2



E BUILDING SECTION
Li Residence- Custom Residence SCALE: 1/4"=1'-0"



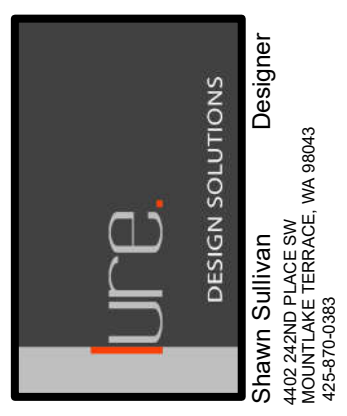
F BUILDING SECTION
Li Residence- Custom Residence SCALE: 1/4"=1'-0"



G BUILDING SECTION
Li Residence- Custom Residence SCALE: 1/4"=1'-0"

Misc. Info:

1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

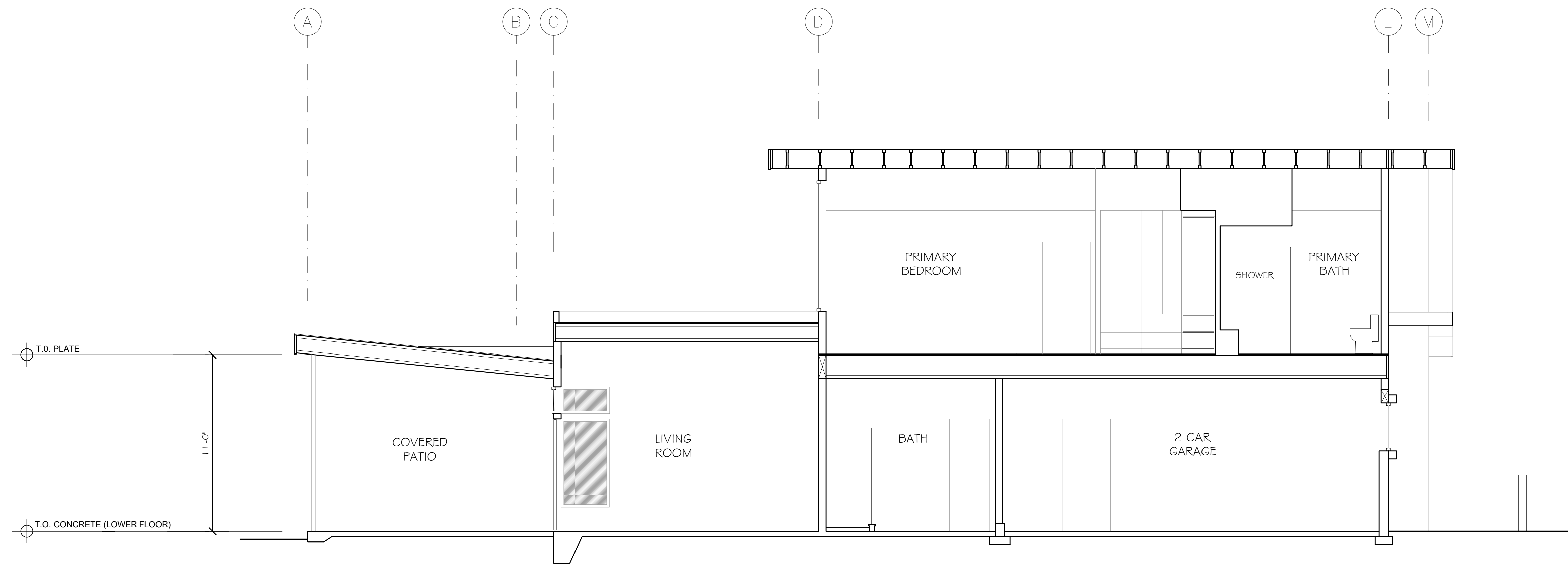


LI RESIDENCE
CUSTOM RESIDENCE
4657 86TH AVE. SE
MERCER ISLAND, WA 98040

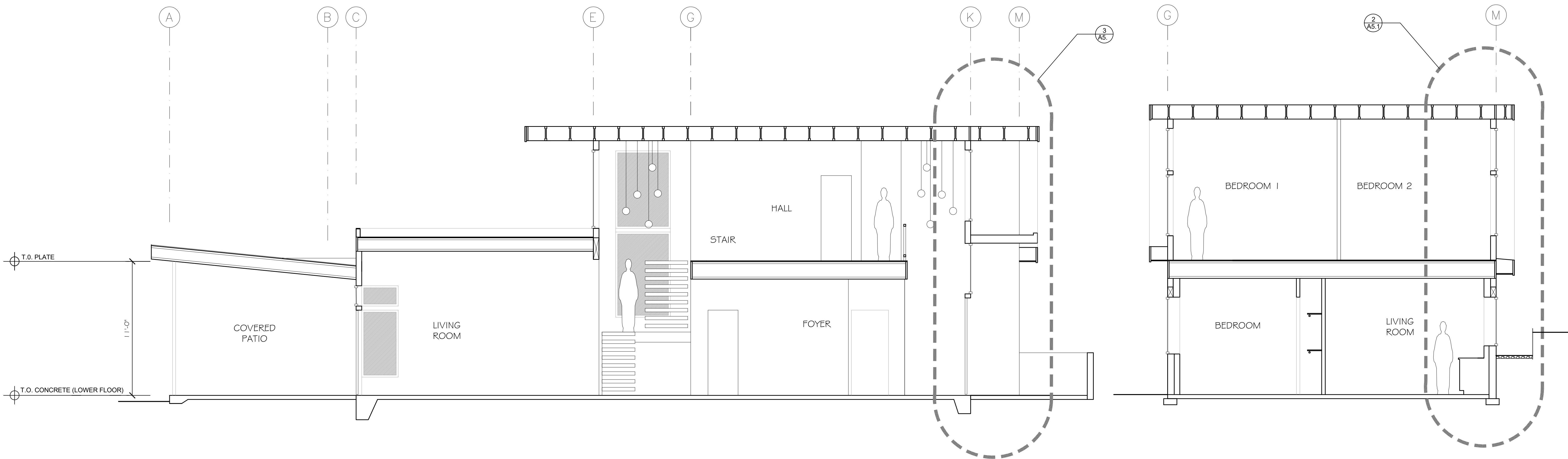
**PROPOSED
BUILDING SECTIONS**

DATE: 01-04-2022
DESIGNED: SLS
DRAWN: SLS
JOB NO: 2022- 01
SHEET:

A4.3



H BUILDING SECTION
 Li Residence- Custom Residence SCALE: 1/4"=1'-0"

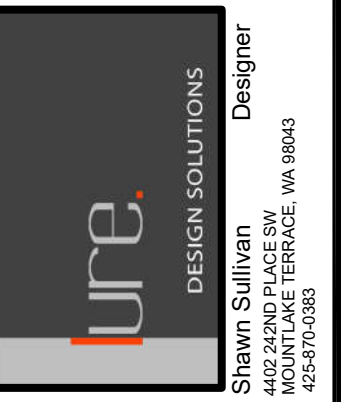


J BUILDING SECTION
 Li Residence- Custom Residence SCALE: 1/4"=1'-0"

K BUILDING SECTION
 Li Residence- Custom Residence SCALE: 1/4"=1'-0"

Misc. Info:

1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

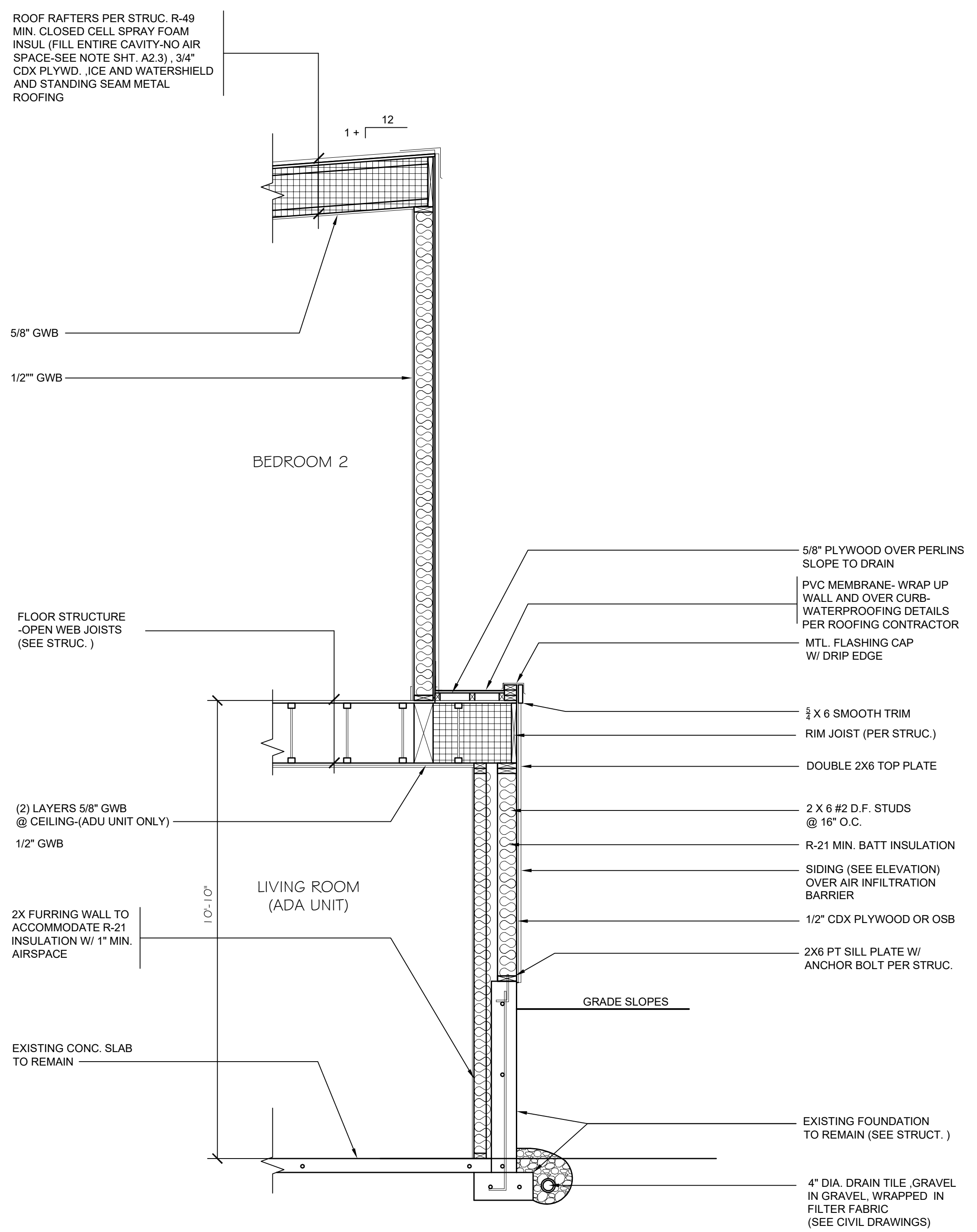


LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

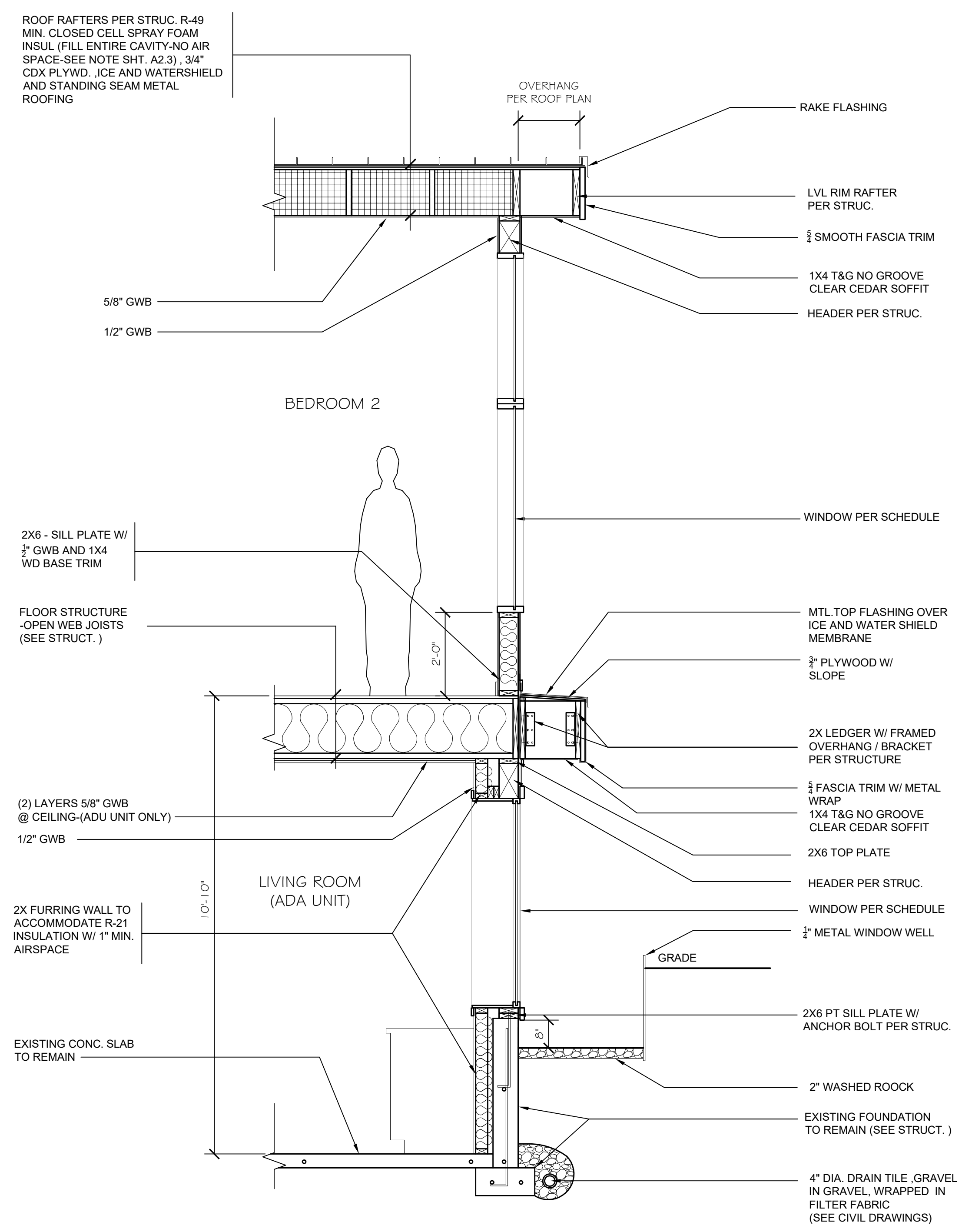
**PROPOSED
 BUILDING SECTIONS**

DATE: 01-04-2022
DESIGNED: SLS
DRAWN: SLS
JOB NO: 2022- 01
SHEET:

A4.4



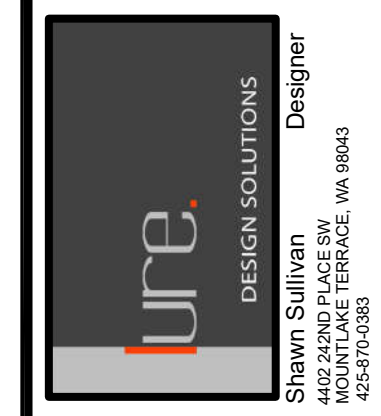
1 WALL SECTION
Li Residence- Custom Residence SCALE: 1/2"=1'-0"



2 WALL SECTION
Li Residence- Custom Residence SCALE: 1/2"=1'-0"

Misc. Info:

1. FINAL CD SET 10-14-2022
2.
3.
4.
5.



LI RESIDENCE
CUSTOM RESIDENCE
4657 86TH AVE. SE
MERCER ISLAND, WA 98040

PROPOSED WALL SECTIONS

DATE:	01-04- 2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

A5.1

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

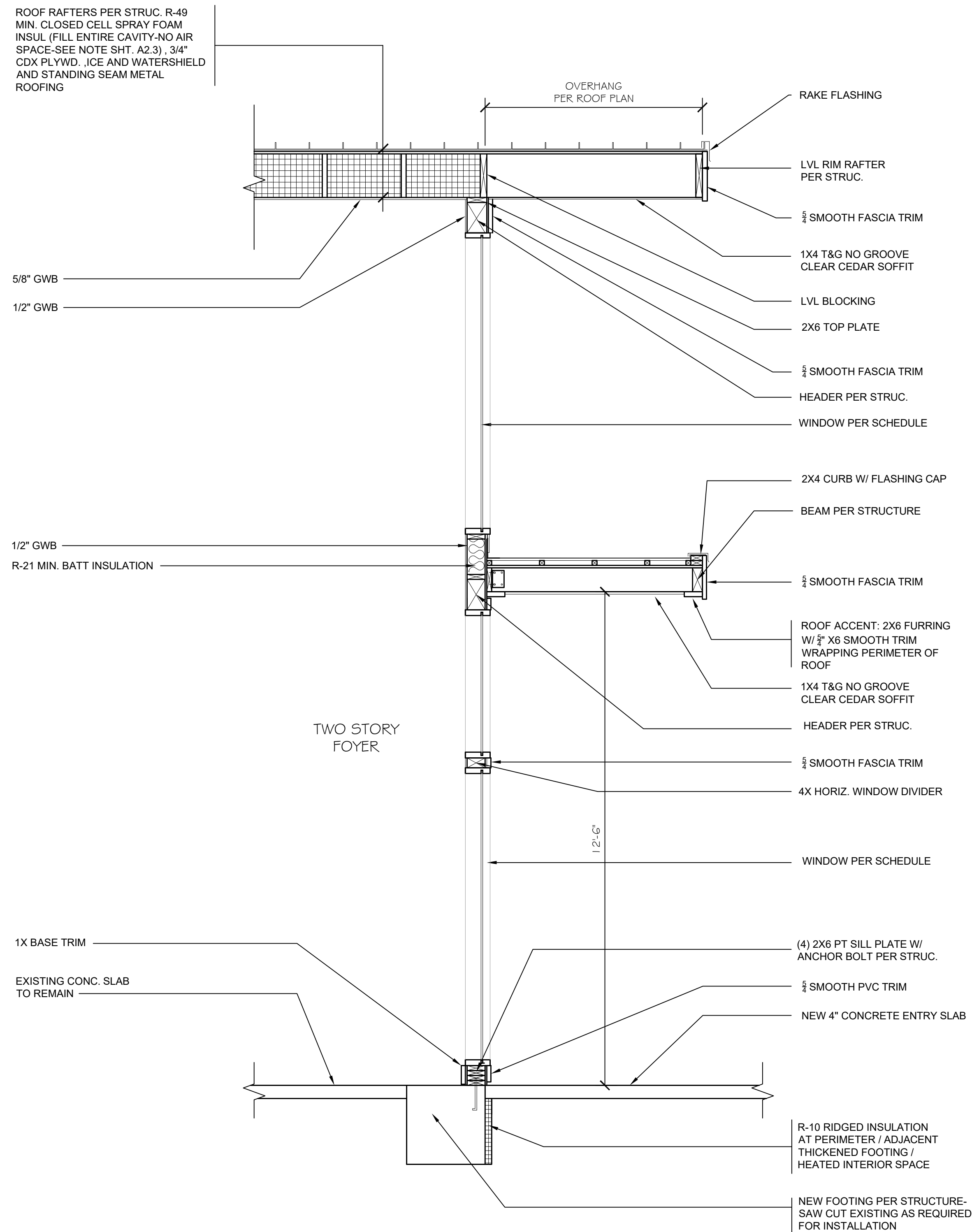


LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

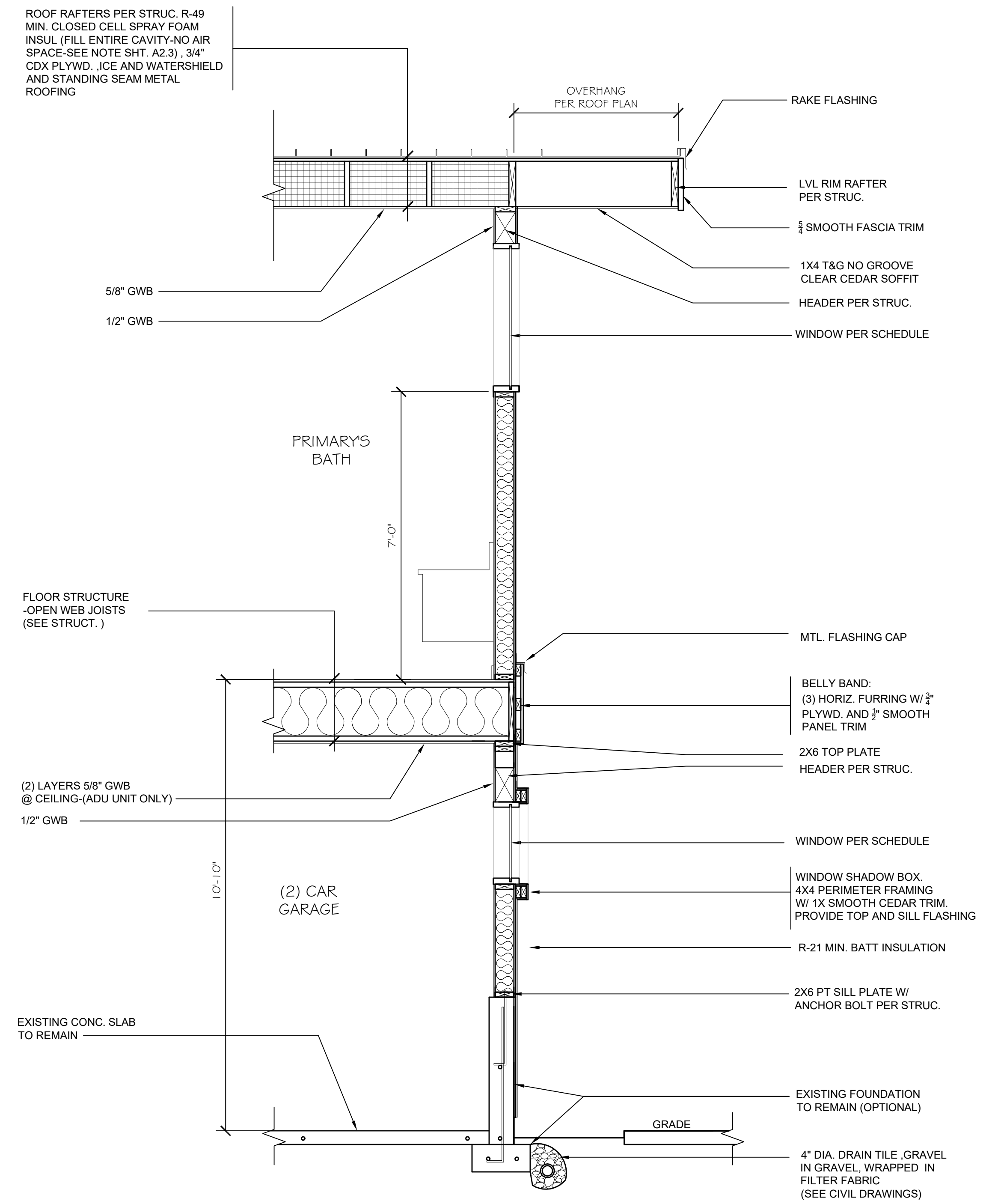
**PROPOSED
 WALL SECTIONS**

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022-01
SHEET:	

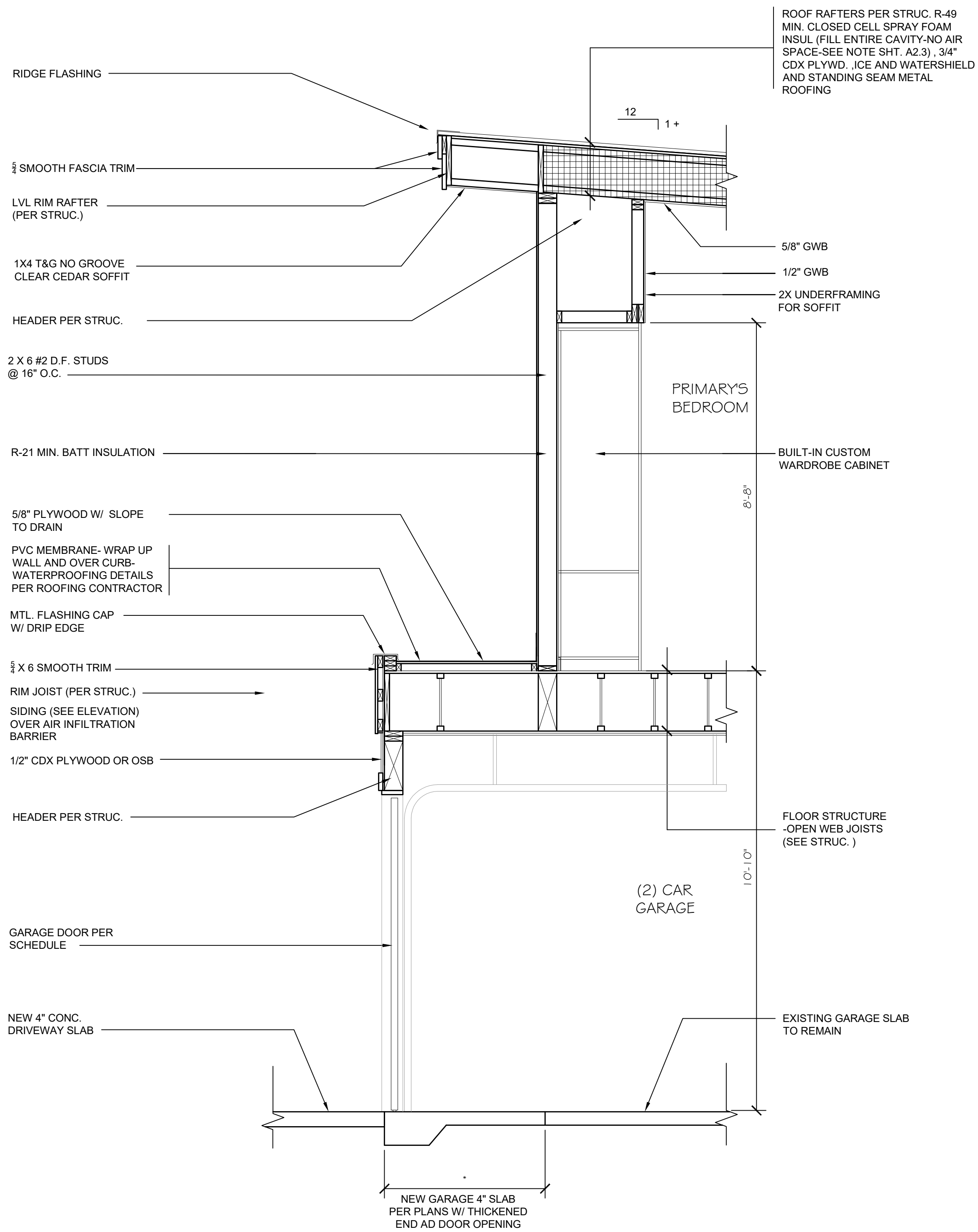
A5.2



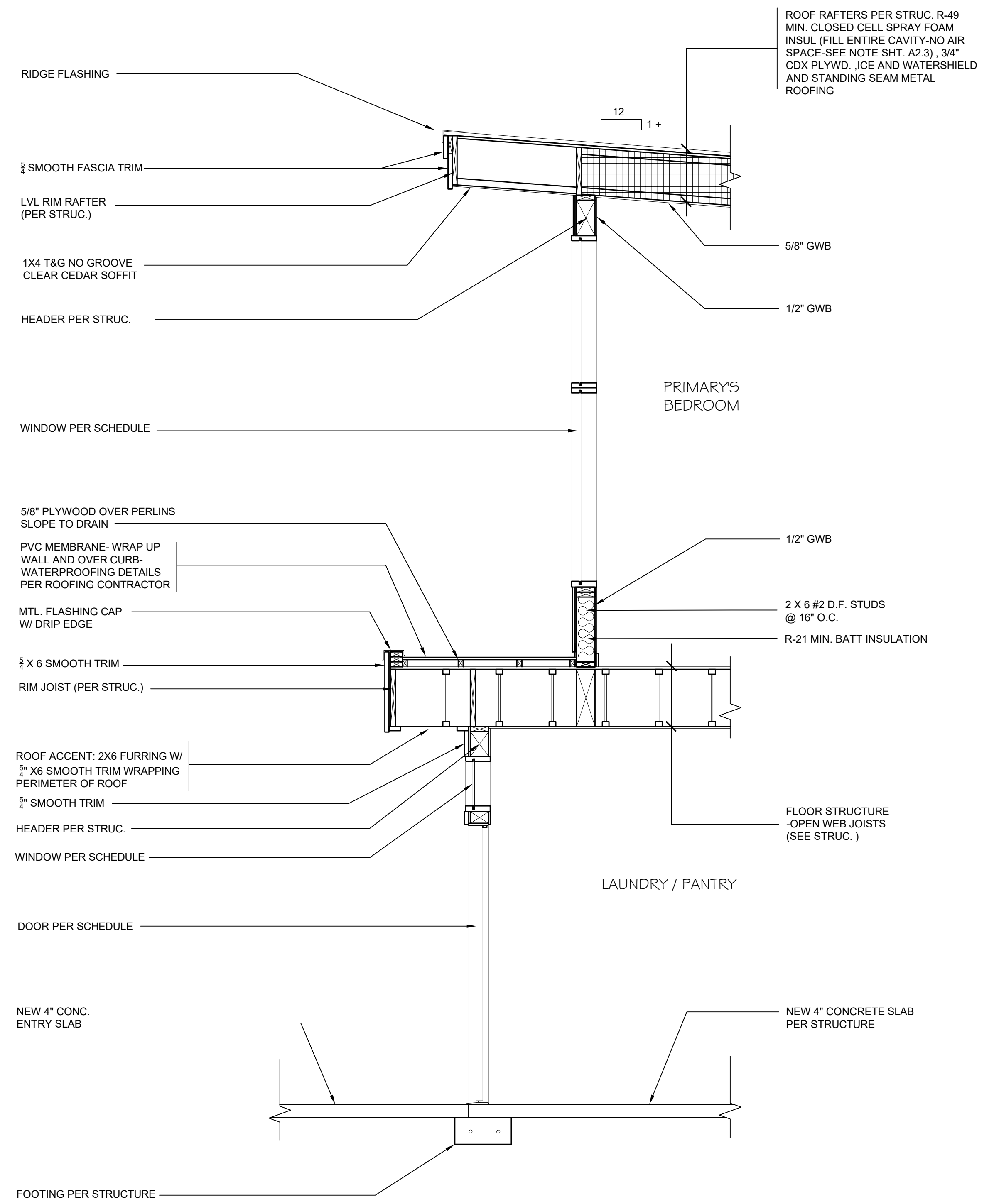
3 WALL SECTION
 Li Residence- Custom Residence SCALE: 1/2"=1'-0"



4 WALL SECTION
 Li Residence- Custom Residence SCALE: 1/2"=1'-0"



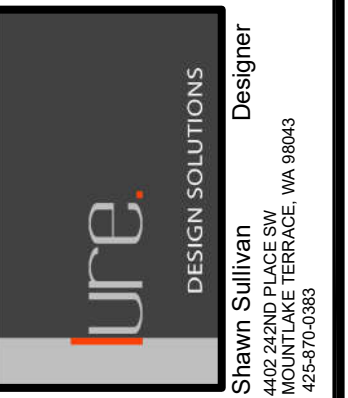
5 WALL SECTION
Li Residence - Custom Residence SCALE: 1/2"=1'-0"



6 WALL SECTION
Li Residence - Custom Residence SCALE: 1/2"=1'-0"

Misc. Info:

1. FINAL CD SET 10-14-2022
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LI RESIDENCE
CUSTOM RESIDENCE
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MERCER ISLAND, WA 98040

PROPOSED
WALL SECTIONS

DATE:	01-04-2022
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JOB NO:	2022-01
SHEET:	


A5.3

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.

WINDOW SCHEDULE (APPROX. R.O.SIZES)

LOWER FLOOR


WNDW NO.	ROOM NAME	R.O. SIZE W X H	MATERIAL	TYPE	SYSTEM / GROUP	STYLE	OPERATION	NOTES	U-FACTOR	GLAZING AREA
101	ADU- LIVING ROOM	5' X 5'	ALUMINUM	A		SLIDER		SAFETY GLAZING	.24 MIN.	
102	FOYER	5' X 7'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
103	FOYER	5' X 4'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
104	FOYER	2' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
105	GARAGE	SEE WINDOW SYSTEM 105	ALUMINUM		SEE SYSTEM 105			SAFETY GLAZING	.24 MIN.	
106	LAUNDRY /PANTRY	2' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
107	KITCHEN	5' X 3'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
108	KITCHEN	5' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
109	KITCHEN	3' X 3'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
110	KITCHEN	3' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
111	KITCHEN	2' X 3'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
112	KITCHEN	2' X 1'	ALUMINUM	C		CASEMENT	TBD	SAFETY GLAZING	.24 MIN.	
113	DINING ROOM	1' X 5'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
114	DINING ROOM	1' X 1' (SLOPED TOP)	ALUMINUM	D		PICTURE		SAFETY GLAZING	.24 MIN.	
115	DINING ROOM	3' X 5'	ALUMINUM	C		CASEMENT	TBD	SAFETY GLAZING	.24 MIN.	
116	DINING ROOM	3' X 3'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
117	DINING ROOM	3' X 5'	ALUMINUM	C		CASEMENT	TBD	SAFETY GLAZING	.24 MIN.	
118	DINING ROOM	3' X 3'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
119	DINING ROOM	5' X 2' (SLOPED TOP)	ALUMINUM	E		PICTURE		SAFETY GLAZING	.24 MIN.	
120	DINING ROOM	5' X 2' (SLOPED TOP)	ALUMINUM	E		PICTURE		SAFETY GLAZING	.24 MIN.	
121	LIVING ROOM	8' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
122	LIVING ROOM	4' X 5'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
123	LIVING ROOM	4' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
124	LIVING ROOM	3' X 5'	ALUMINUM	C		CASEMENT	TBD	SAFETY GLAZING	.24 MIN.	
125	LIVING ROOM	3' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
126	OFFICE	5' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
127	ADU-BEDROOM	3' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
128	ADU-BEDROOM	5' X 5'	ALUMINUM	A		SLIDER		SAFETY GLAZING	.24 MIN.	

*VERIFY /MEASURE ALL R.O. FOR ACCURATE WINDOWS SIZES PRIOR TO ORDERING / MANUFACTURING
 *WINDOW SIZES ABOVE REFLECT APPROXIMATE R.O. (ROUGH OPENINGS). WINDOWS TO BE SIZED ACCORDINGLY
 * SEE PLANS AND ELEVATIONS FOR WINDOW TAG LOCATION 
 * SAFETY GLAZING TO BE PROVIDE PER LOCAL CODE REQUIREMENTS

WINDOW SCHEDULE (APPROX. R.O.SIZES)

UPPER FLOOR

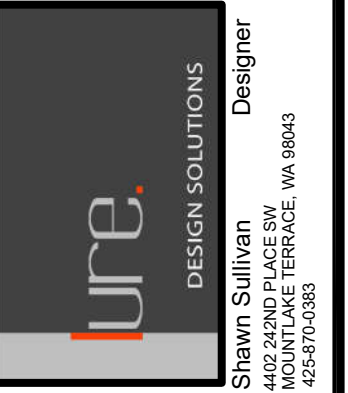
WNDW NO.	ROOM NAME	R.O. SIZE W X H	MATERIAL	TYPE	SYSTEM / GROUP	STYLE	OPERATION	NOTES	U-FACTOR	GLAZING AREA
201	BEDROOM	SEE WINDOW SYSTEM 201	ALUMINUM		SEE SYSTEM 201			SAFETY GLAZING	.24 MIN.	
202	BEDROOM	SEE WINDOW SYSTEM 202	ALUMINUM		SEE SYSTEM 202			SAFETY GLAZING	.24 MIN.	
203	BATHROOM	6' X 1'	ALUMINUM	A		SLIDER		SAFETY GLAZING	.24 MIN.	
204	BATHROOM	2' X 1'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
205	FOYER	5' X 6' (SLOPED TOP)	ALUMINUM	E		PICTURE		SAFETY GLAZING	.24 MIN.	
206	FOYER	3' X 5' (SLOPED TOP)	ALUMINUM	E		PICTURE		SAFETY GLAZING	.24 MIN.	
207	PRIMARY'S BATH	SEE WINDOW SYSTEM 207	ALUMINUM		SEE SYSTEM 207			SAFETY GLAZING	.24 MIN.	
208	PRIMARY'S BATH	SEE WINDOW SYSTEM 208	ALUMINUM		SEE SYSTEM 208			SAFETY GLAZING	.24 MIN.	
209	PRIMARY'S BATH	2' X 4'	ALUMINUM	C		CASEMENT	TBD	SAFETY GLAZING	.24 MIN.	
210	PRIMARY'S BEDROOM	SEE WINDOW SYSTEM 210	ALUMINUM		SEE SYSTEM 210			SAFETY GLAZING	.24 MIN.	
211	PRIMARY'S BEDROOM	SEE WINDOW SYSTEM 211	ALUMINUM		SEE SYSTEM 211			SAFETY GLAZING	.24 MIN.	
212	STAIR	6' X 6' (SLOPED TOP)	ALUMINUM	D		PICTURE		SAFETY GLAZING	.24 MIN.	
213	STAIR	4' X 6'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
214	STAIR	4' X 6'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	
215	FLEX ROOM	2' X 5'	ALUMINUM	C		CASEMENT	TBD	SAFETY GLAZING	.24 MIN.	
216	FLEX ROOM	2' X 2' (SLOPED TOP)	ALUMINUM	D		PICTURE		SAFETY GLAZING	.24 MIN.	
217	BATHROOM	2' X 3'	ALUMINUM	C		CASEMENT		SAFETY GLAZING	.24 MIN.	
218	BEDROOM	SEE WINDOW SYSTEM 218	ALUMINUM		SEE SYSTEM 218			SAFETY GLAZING	.24 MIN.	
219	BEDROOM	SEE WINDOW SYSTEM 219	ALUMINUM		SEE SYSTEM 219			SAFETY GLAZING	.24 MIN.	
220	STAIR	2' X 6'	ALUMINUM	B		PICTURE		SAFETY GLAZING	.24 MIN.	

*VERIFY /MEASURE ALL R.O. FOR ACCURATE WINDOWS SIZES PRIOR TO ORDERING / MANUFACTURING
 *WINDOW SIZES ABOVE REFLECT APPROXIMATE R.O. (ROUGH OPENINGS). WINDOWS TO BE SIZED ACCORDINGLY
 * SEE PLANS AND ELEVATIONS FOR WINDOW TAG LOCATION 
 * SAFETY GLAZING TO BE PROVIDE PER LOCAL CODE REQUIREMENTS

EXTERIOR DOOR SCHEDULE)

LOWER FLOOR

WNDW NO.	ROOM NAME	R.O. SIZE W X H	MATERIAL	TYPE	OPERATION	NOTES	U-FACTOR
101	FOYER	3' X 6'	ALUMINUM	A	LH SWING		
102	GARAGE	18' X 8'	ALUMINUM	C	OVER HEAD	(16) RELITES	.24 MIN.
103	LAUNDRY / PANTRY	2' X 7'	ALUMINUM	B	RH SWING	FULL LITE	.24 MIN.
104	DINING ROOM	1' X 7'	ALUMINUM	D	FENCH SLIDER	FULL LITE	.24 MIN.
105	LIVING ROOM	8' X 7'	ALUMINUM	E	ACCORDION	FULL LITE-(3) PANEL	.24 MIN.
106	OFFICE	5' X 7'	ALUMINUM	E	SLIDING DOOR	FULL LITE	.24 MIN.
107	ADU BEDROOM	3' X 7'	ALUMINUM	B	RH-R SWING	FULL LITE	.24 MIN.




LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

PROPOSED
 WINDOW AND EXTERIOR
 DOOR SCHEDULES

DATE: 01-04- 2022
 DESIGNED: SLS
 DRAWN: SLS
 JOB NO: 2022- 01
 SHEET:

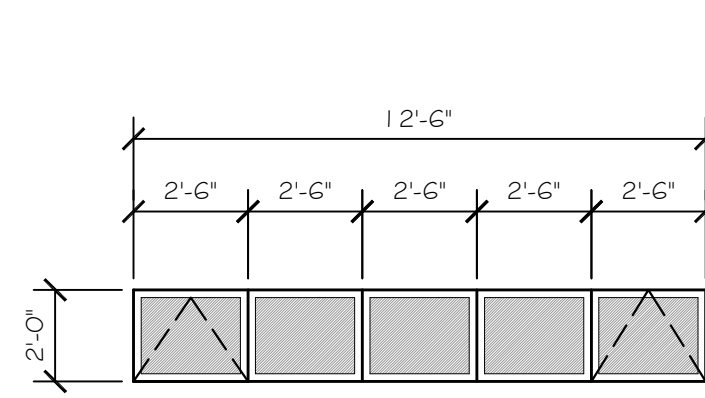
A6.1

WINDOW SYSTEMS

*VERIFY ALL R.O. FOR WINDOWS SIZE PRIOR TO ORDERING / MANUFACTURING
 * SEE PLANS AND ELEVATIONS FOR WINDOW TAG LOCATION 
 * SAFETY GLAZING TO BE PROVIDED PER LOCAL CODE REQUIREMENTS

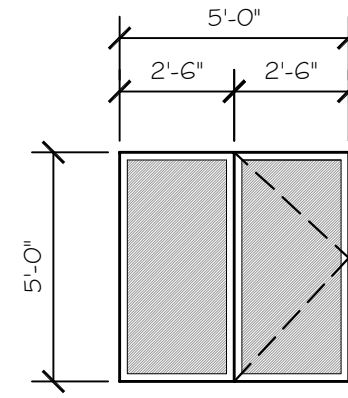
ENERGY CODE INFO

* SEE SCHEDULE FOR GLAZING SIZES
 * PROVIDE GLAZING U-FACTOR OF .30 OR BETTER



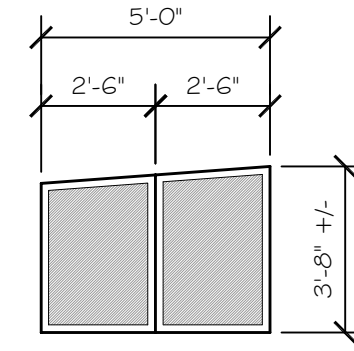
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (3)
- * CASEMENT (2)- AWNING
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 




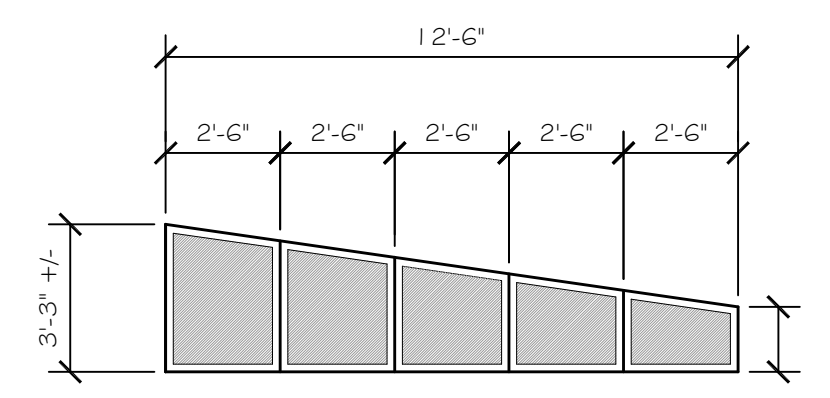
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (3)
- * CASEMENT (1)- EGRESS
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 




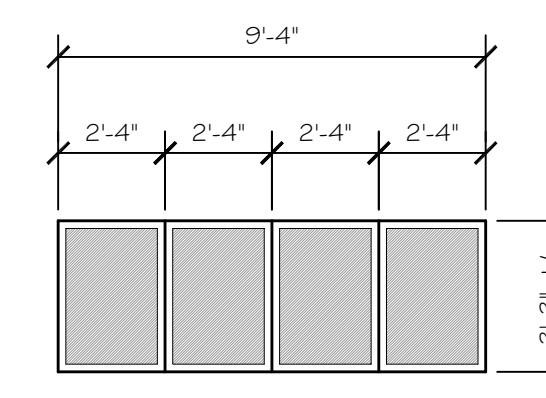
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (4)
- * TRAPEZOID (SLOPED TOP)
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 



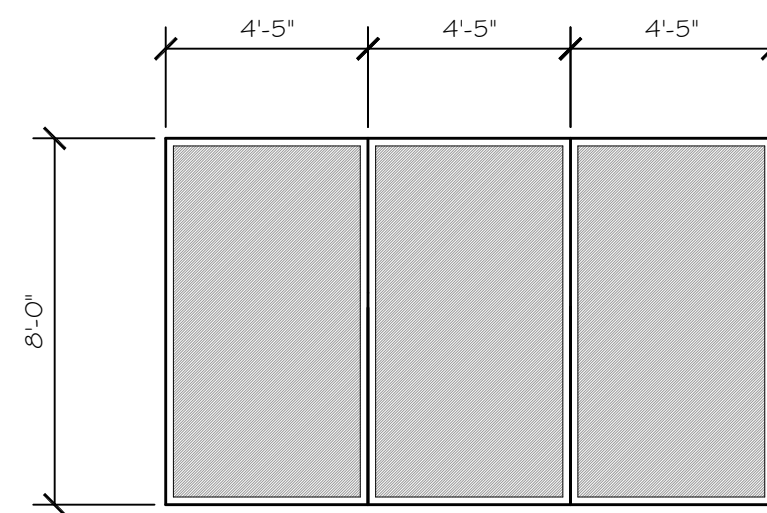
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (5)
- * TRAPEZOID (SLOPED TOP)
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 



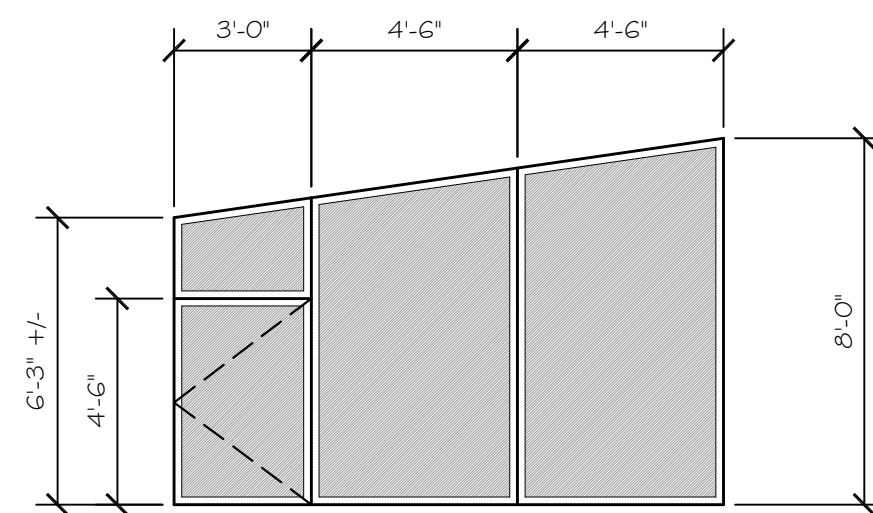
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (4)
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 



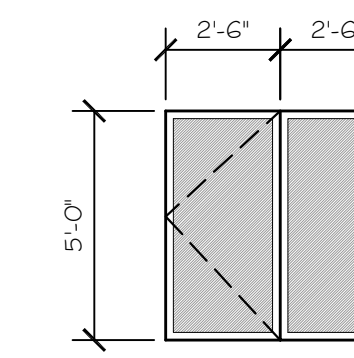
- * ALUMINUM CLAD
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- * PICTURE (3)
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 



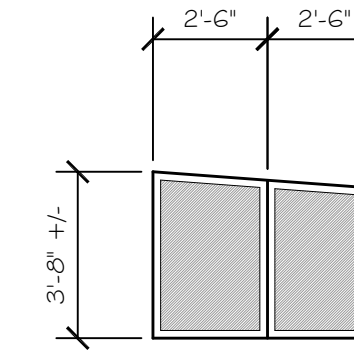
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (3)
- * CASEMENT (1)
- * TRAPEZOID (SLOPED TOP)
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

WINDOW SYSTEM 



- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (3)
- * CASEMENT (1)- EGRESS
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

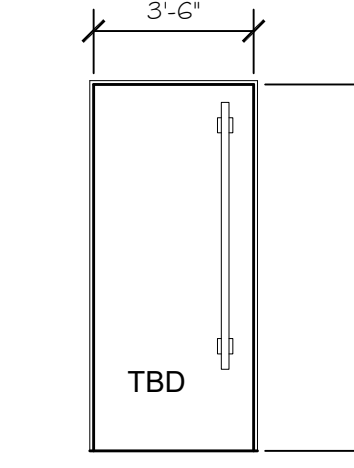
WINDOW SYSTEM 



- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE (4)
- * TRAPEZOID (SLOPED TOP)
- * MULLED W/ VERTICAL FLAT STEEL 1X4
- * SAFETY GLAZING

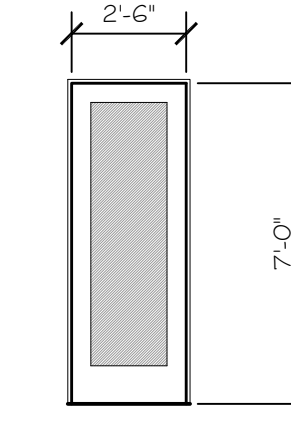
WINDOW SYSTEM 

EXTERIOR DOOR TYPES



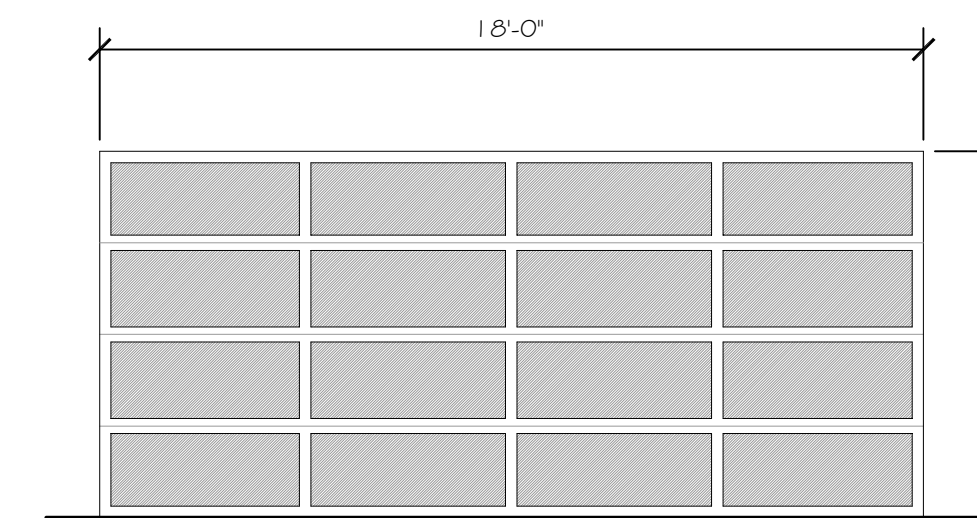
- * WOOD
- * NO PANEL
- * LARGE VERTICAL HANDLE

TYPE A



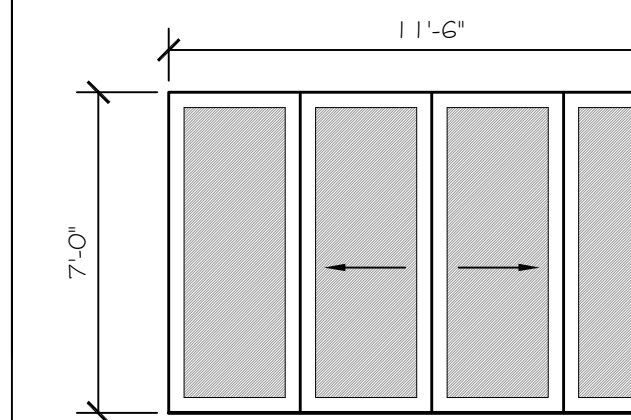
- * ALUMINUM
- * FULL LITE
- * SAFETY GLAZING

TYPE B



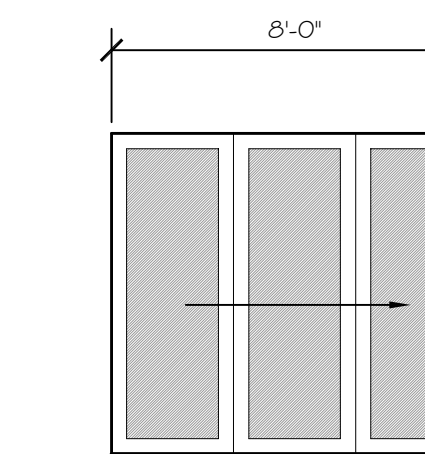
- * ALUMINUM
- * RELITES (16)
- * RELITES FROSTED GLASS

TYPE C



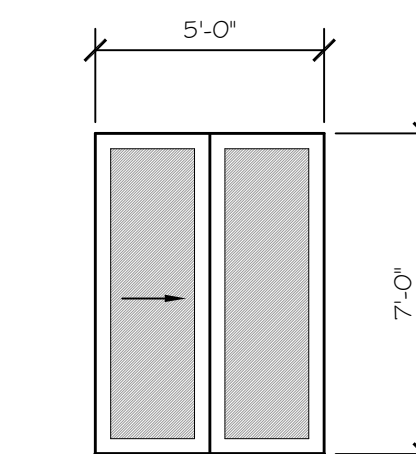
- * FRENCH SLIDER
- * ALUMINUM
- * FULL LITE
- * SAFETY GLAZING

TYPE D



- * ACCORDION DOOR
- * ALUMINUM
- * FULL LITE
- * PANELS (3)
- * SAFETY GLAZING
- * STACKING TO EXTERIOR


TYPE E



- * SLIDING DOOR
- * ALUMINUM
- * FULL LITE
- * SAFETY GLAZING

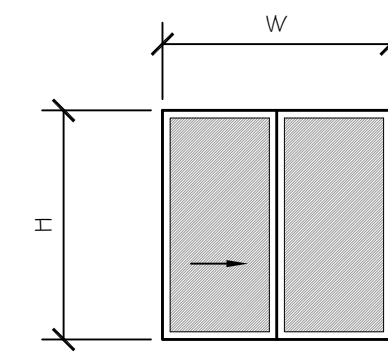
TYPE F

WINDOW TYPES

*VERIFY ALL R.O. FOR WINDOWS SIZE PRIOR TO ORDERING / MANUFACTURING
 * SEE PLANS AND ELEVATIONS FOR WINDOW TAG LOCATION 
 * SAFETY GLAZING TO BE PROVIDED PER LOCAL CODE REQUIREMENTS

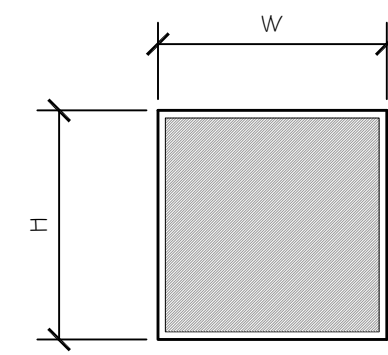
ENERGY CODE INFO

* SEE SCHEDULE FOR GLAZING SIZES
 * PROVIDE GLAZING U-FACTOR OF .30 OR BETTER



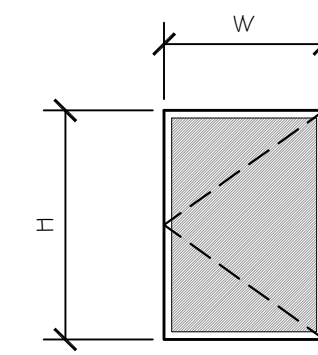
- * ALUMINUM CLAD
- * COLOR BLACK
- * SLIDER

TYPE A



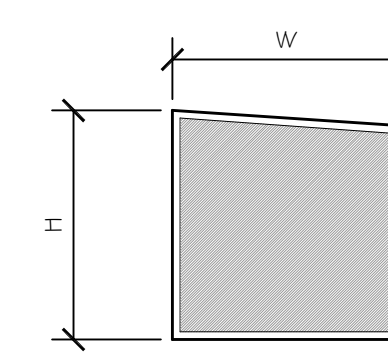
- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE

TYPE B



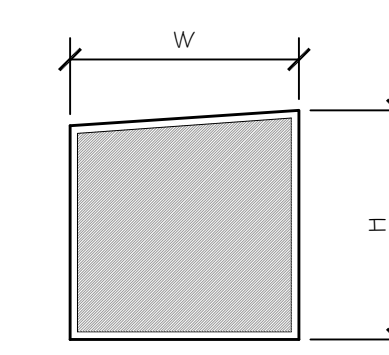
- * ALUMINUM CLAD
- * COLOR BLACK
- * CASEMENT

TYPE C



- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE
- * TRAPEZOID (SLOPED TOP)

TYPE D

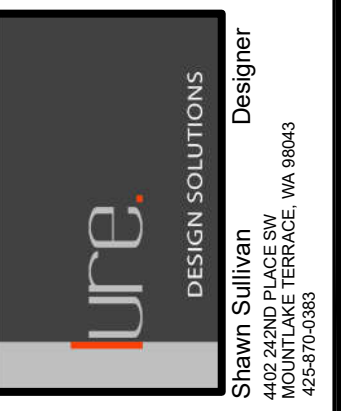


- * ALUMINUM CLAD
- * COLOR BLACK
- * PICTURE
- * TRAPEZOID (SLOPED TOP)

TYPE E

Misc. Info:

1. FINAL CD SET	10-14-2022
2.	
3.	
4.	
5.	



LI RESIDENCE
 CUSTOM RESIDENCE
 4657 86TH AVE. SE
 MERCER ISLAND, WA 98040

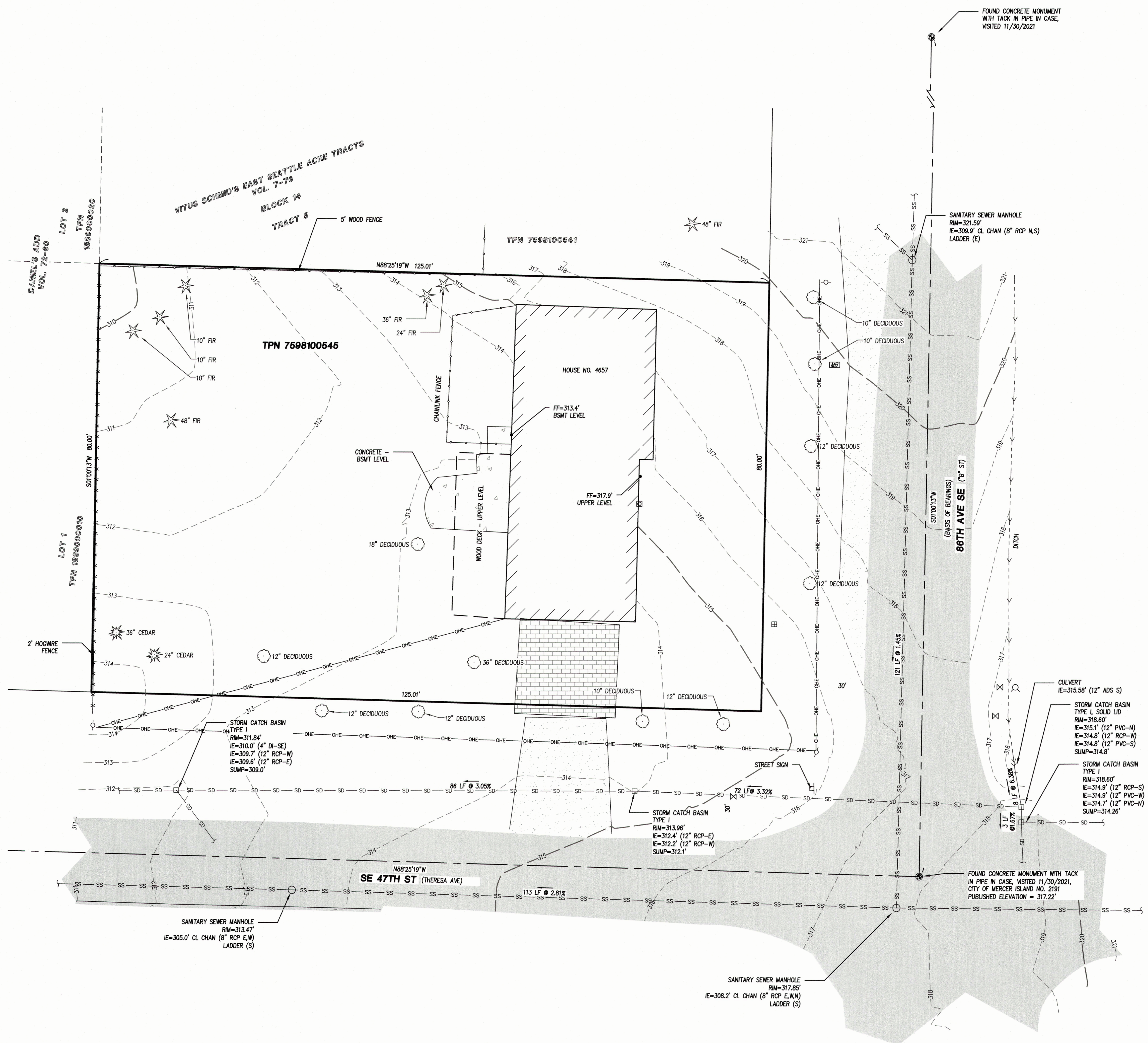
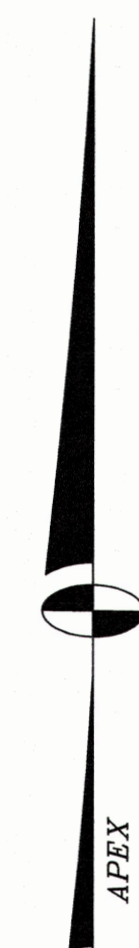
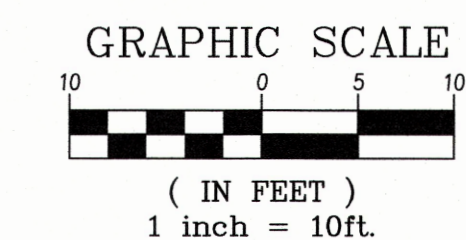
PROPOSED WINDOW AND DOOR SYSTEMS AND TYPES

DATE:	01-04- 2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

A6.2

WEAVER TOPO TOPOGRAPHIC SURVEY

A PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M.
KING COUNTY, WASHINGTON



LEGAL DESCRIPTION

(PER STATUTORY WARRANTY DEED, KING CO, REC. NO. 20211005001771)

THE SOUTH 80 FEET OF THE EAST 125 FEET OF TRACT 5 IN BLOCK 14 OF THE VITUS SCHMID'S EAST SEATTLE, ACRE TRACTS, AS PER PLAT RECORDED IN VOLUME 7 OF PLATS, PAGE 76, RECORDS OF KING COUNTY AUDITOR;
SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

HORIZONTAL DATUM

WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD 83/2011) BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK.

VERTICAL DATUM

NAVD 88 BASED ON MERCER ISLAND MONUMENT NO. 2191 AT THE INTERSECTION OF SE 47TH ST AND 86TH AVE SE WITH A PUBLISHED ELEVATION OF 317.22 FEET.

SURVEY NOTES

- DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION, AND MEETS OR EXCEEDS ACCURACY REQUIREMENTS CONTAINED IN W.A.C. 332.130.090. ALL MEASURING INSTRUMENTS EMPLOYED IN THIS SURVEY HAVE BEEN MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- THIS MAP GRAPHICALLY REPRESENTS CONDITIONS AND FEATURES EXISTING AT THE TIME OF THIS SURVEY ONLY, WHICH WAS PERFORMED DURING NOVEMBER, 2021.
- THE CERTIFICATION OF THIS SURVEY AND MAP IS EXCLUSIVE TO THE NAMED CLIENT WHO REQUESTED THIS SURVEY. IT WAS SPECIFICALLY DESIGNED TO MEET THEIR STATED NEED(S). THAT CERTIFICATION DOES NOT EXTEND TO ANY OTHER PARTIES OR FOR ANY ALTERNATIVE USE OF THIS MAP WITHOUT THE EXPRESS RECERTIFICATION BY THE SURVEYOR NAMING THOSE PARTIES.
- THE PURPOSE OF THIS SURVEY IS TO PROVIDE A TOPOGRAPHIC MAP OF THE EXISTING CONDITIONS WITHIN PARCEL NO. 7598100545 FOR PLANNING, DESIGN AND CONSTRUCTION.
- UTILITIES OTHER THAN SHOWN MAY EXIST ON THE SITE. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY. THE SURVEYOR DOES CERTIFY THAT THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM FIELD SURVEY INFORMATION.
- KING COUNTY PARCEL NO. 7598100545.
- PARCEL AREA: 10,000 SQUARE FEET (.23 ACRES).
- ALL DISTANCES AND DIMENSIONS SHOWN ARE U.S. SURVEY FEET GROUND MEASUREMENTS.
- CONTOUR INTERVALS ARE 1-FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.
- WE HAVE USED GRAPHIC SYMBOLS TO REPRESENT SOME FEATURES ON THIS MAP, SUCH AS UTILITIES, TREES AND FENCES. THE DEFAULT SIZE OF THOSE SYMBOLS MAY NOT REFLECT THE TRUE SIZE OF THE FEATURE THAT WAS MAPPED.
- BUILDINGS ARE MEASURED AT THE OUTSIDE COVERING/SIDING.
- THE PROPERTY LINES SHOWN HEREON ARE NOT THE RESULT OF AN OFFICIAL BOUNDARY SURVEY BY APEX ENGINEERING AND SHOULD BE USED FOR GENERAL REFERENCE ONLY.

REFERENCES

- VITUS SCHMID'S EAST SEATTLE ACRE TRACTS, VOL. 7, OF PLATS, PG. 76, KING CO. AFN. 78513.
- DANIEL'S ADDITION, VOL. 72 OF PLATS, PAGE 60, KING CO. AFN. 5540769.
- RECORD OF SURVEY, BK. 105 OF SURVEYS, PG. 294, KING CO. REC. NO. 9510179009.
- RECORD OF SURVEY, BK. 153 OF SURVEYS, PG. 014, KING CO. REC. NO. 20020612900029.
- SHORT PLAT, BK. 289, PG. 281 OF SURVEYS, KING CO. REC. NO. 20120731900002.

LEGEND

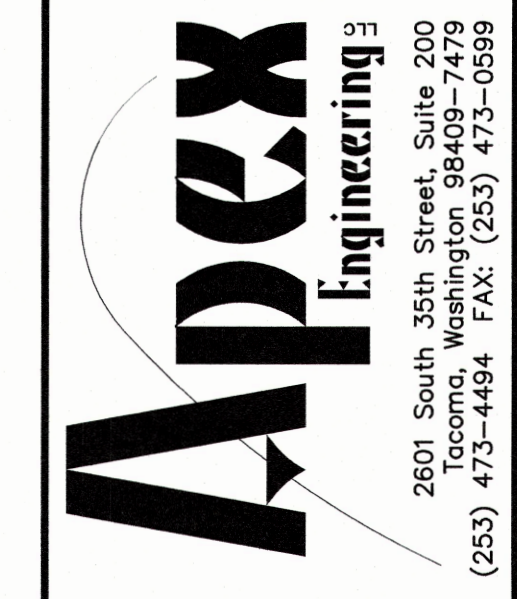
- FOUND MONUMENT AS DESCRIBED
- STORM CATCH BASIN
- STORM CULVERT
- SANITARY SEWER MANHOLE
- FIRE HYDRANT
- ⊕ WATER VALVE
- ⊕ WATER METER
- ⊕ GAS METER
- UTILITY POLE
- ⊕ SIGN
- ⊕ MAIL BOX
- DECIDUOUS TREE (DIAMETER AS NOTED)
- CEDAR TREE (DIAMETER AS NOTED)
- FIR TREE (DIAMETER AS NOTED)
- IE INVERT ELEVATION
- FF FINISH FLOOR ELEVATION
- TPN TAX PARCEL NUMBER
- CL CENTERLINE
- RCP REINFORCED CONCRETE PIPE
- DI DUCTILE IRON PIPE
- ADS CORRUGATED PLASTIC PIPE
- PVC PLASTIC PIPE
- WOOD FENCE (AS NOTED)
- CHAIN LINK FENCE (AS NOTED)
- WIRE FENCE (AS NOTED)
- STORM DITCH LINE
- OVERHEAD POWER LINE
- BURIED STORM DRAIN LINE
- BURIED SANITARY SEWER LINE
- MINOR CONTOUR
- MAJOR CONTOUR
- ASPHALT SURFACE
- CONCRETE SURFACE
- GRAVEL SURFACE
- BRICK SURFACE

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC SURVEY MADE BY ME OR UNDER MY DIRECTION AND TO THE BEST OF MY KNOWLEDGE REPRESENTS THE TOPOGRAPHIC FEATURES AS THEY EXIST ON THE GROUND AS OF 11/30/2021.

Kurt A. Parcher 12/17/2021
KURT A. PARCHER P.L.S. NO. 49286 DATE

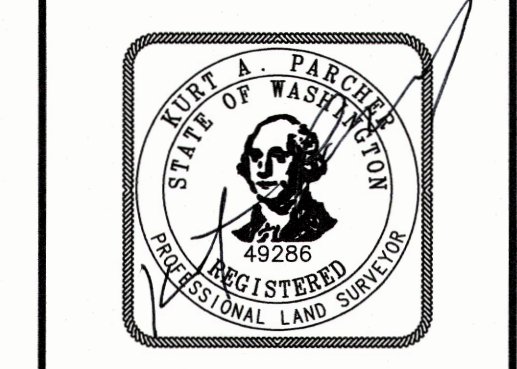
REV. NO.	REVISION DESCRIPTION	DATE BY



**WEAVER TOPO
TOPOGRAPHIC SURVEY**
4657 - 86TH AVE SE
MERCER ISLAND, WA 98040

CAMERON WEAVER
23651 - 140TH AVE SE
KENT, WA 98042

TITLE
DATE SEALED 12/17/2021



PROJECT MANAGER
KURT A. PARCHER

DESIGN
DRAWN **WEL**

CHECKED
SEC 18 T 24N R 05E

FILE NO 35969-SV

DATE 12/17/2021

SCALE 1"=10'

SHEET 1 OF 1

FILE NO 35969

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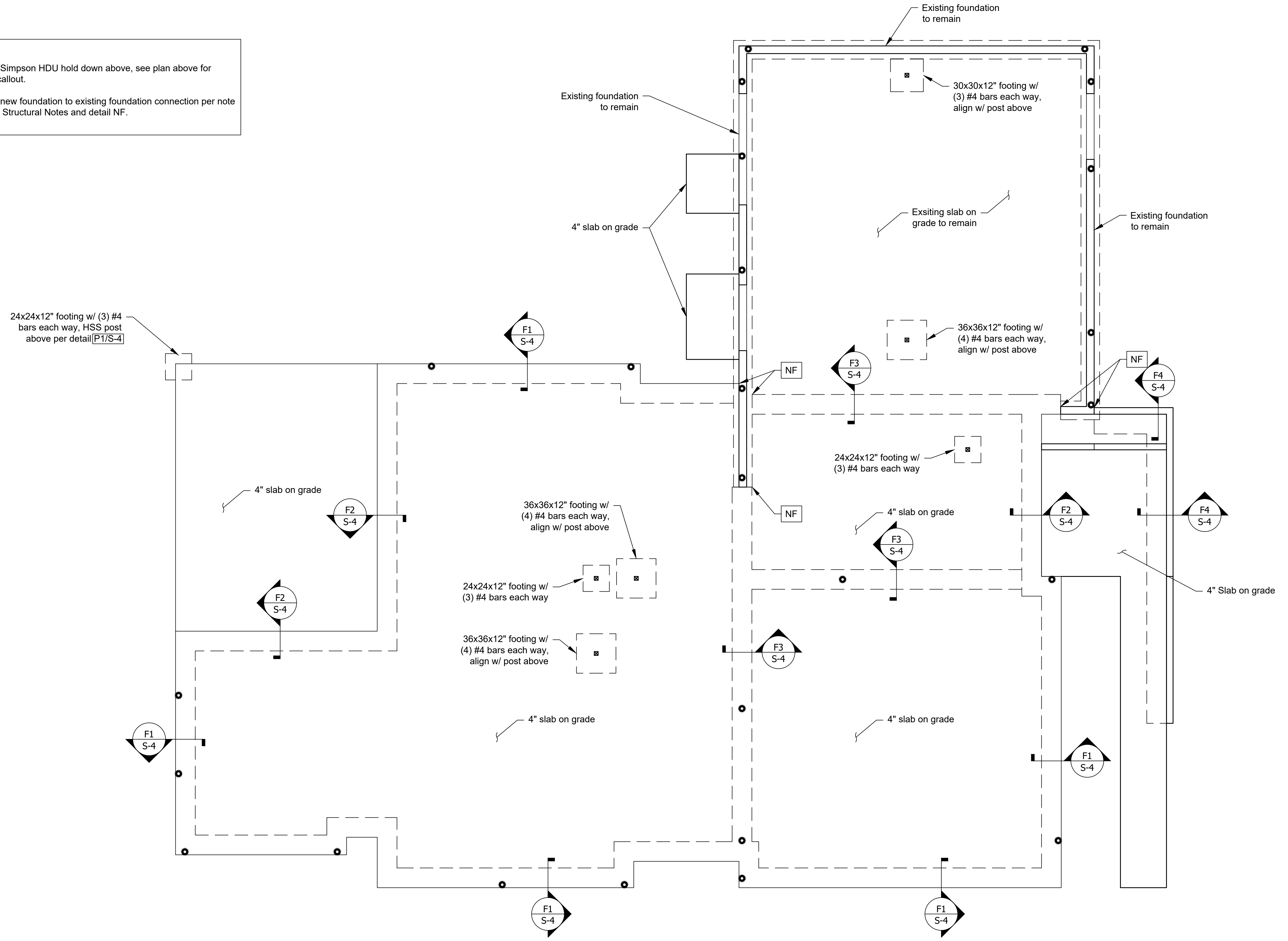
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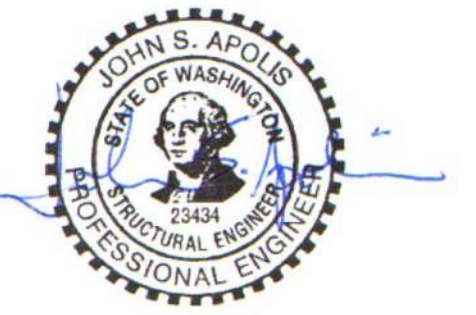
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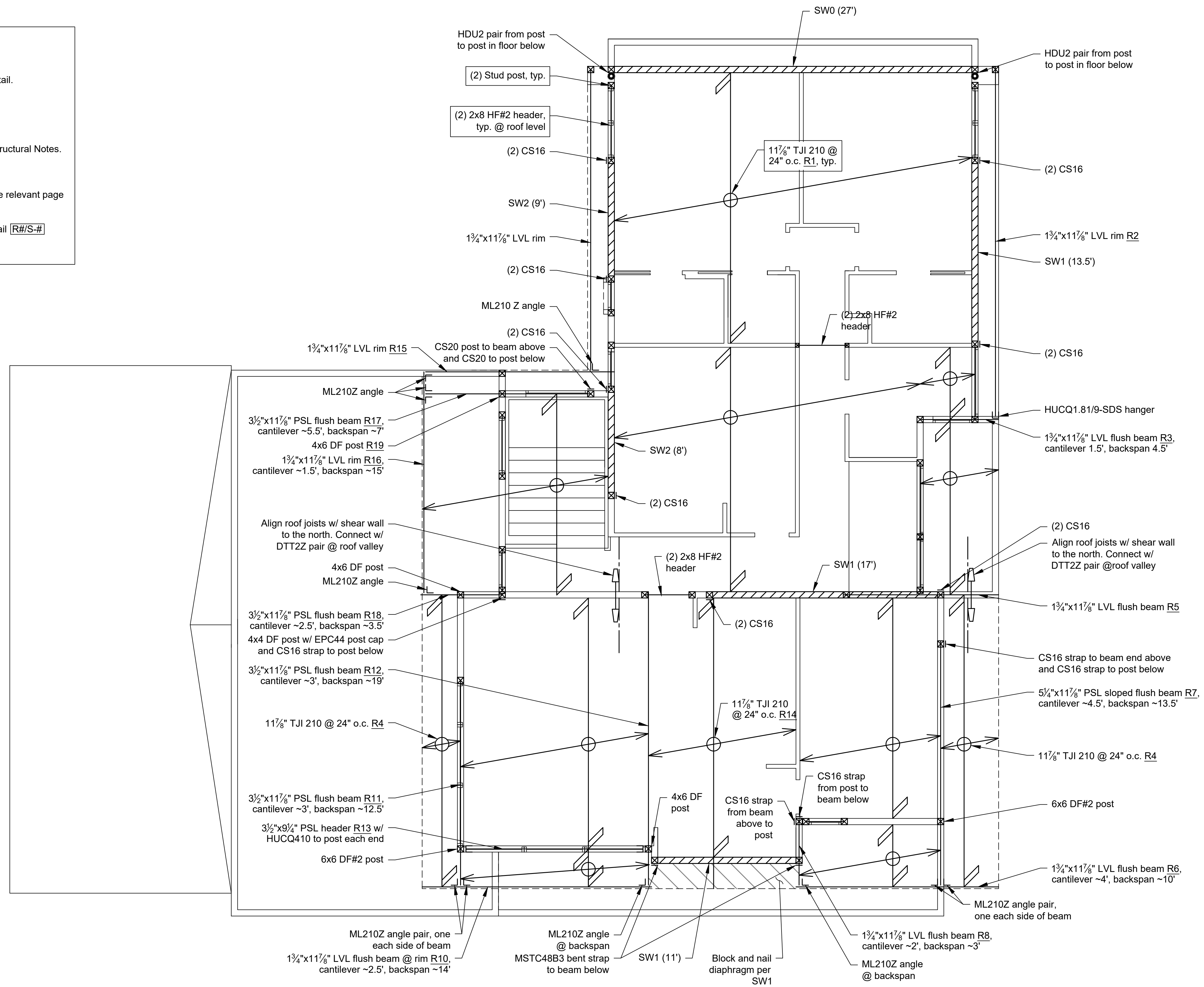
S-1

NOTES:
 ● Denotes a Simpson HDU hold down above, see plan above for hardware callout.
 NF Denotes a new foundation to existing foundation connection per note "NF" in the Structural Notes and detail NF.





- NOTES:
- ☒ Denotes a (2) stud post, typical.
 - ☐ Denotes a DTT2Z pair per Deck End Connection Detail.
 - ☐ Denotes a Simpson hanger as noted.
 - Denotes a Simpson HDU hold down as noted.
 - — — Denotes a horizontal drag strut per note DS in the Structural Notes.
 - ☒ Denotes a vertical strap as noted.
 - R# The designation R# in a member callout indicates the relevant page of the structural calculations for a member.
 - R#/S# Relevant details will be called out specifically as Detail R#/S# which indicates the detail number/sheet number.



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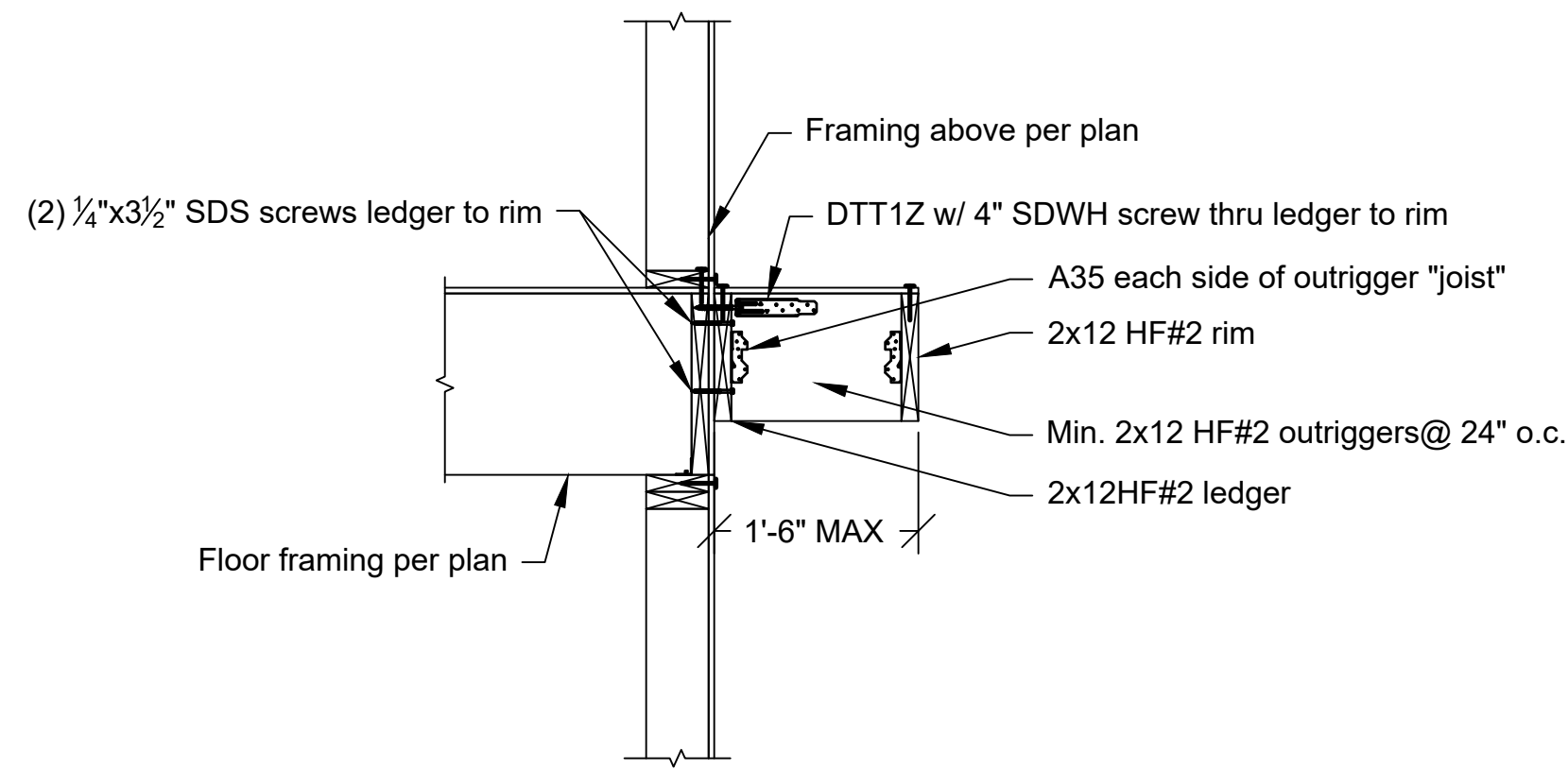
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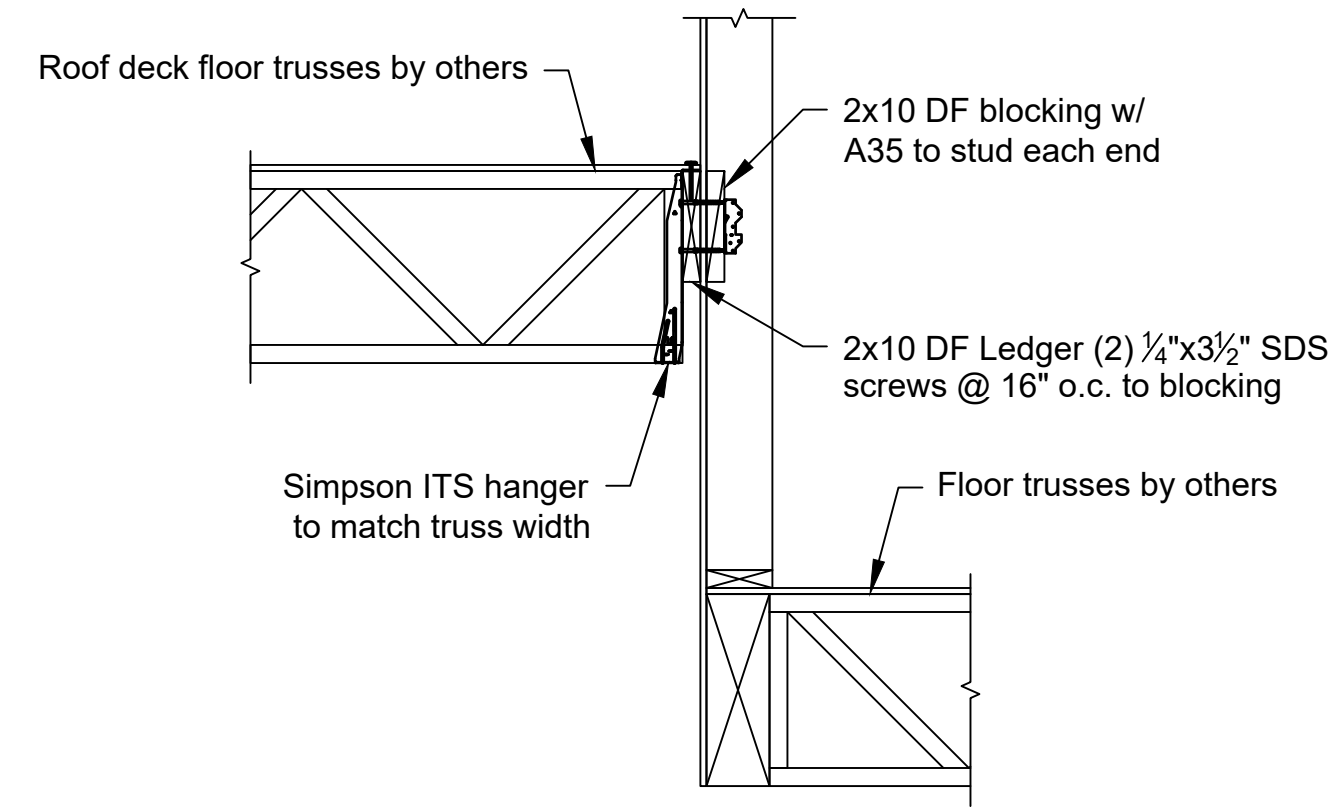
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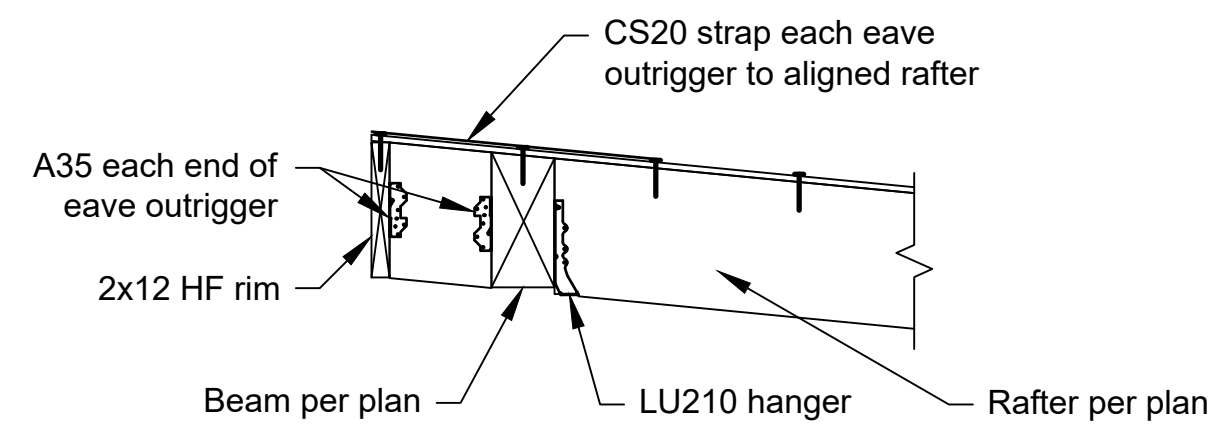
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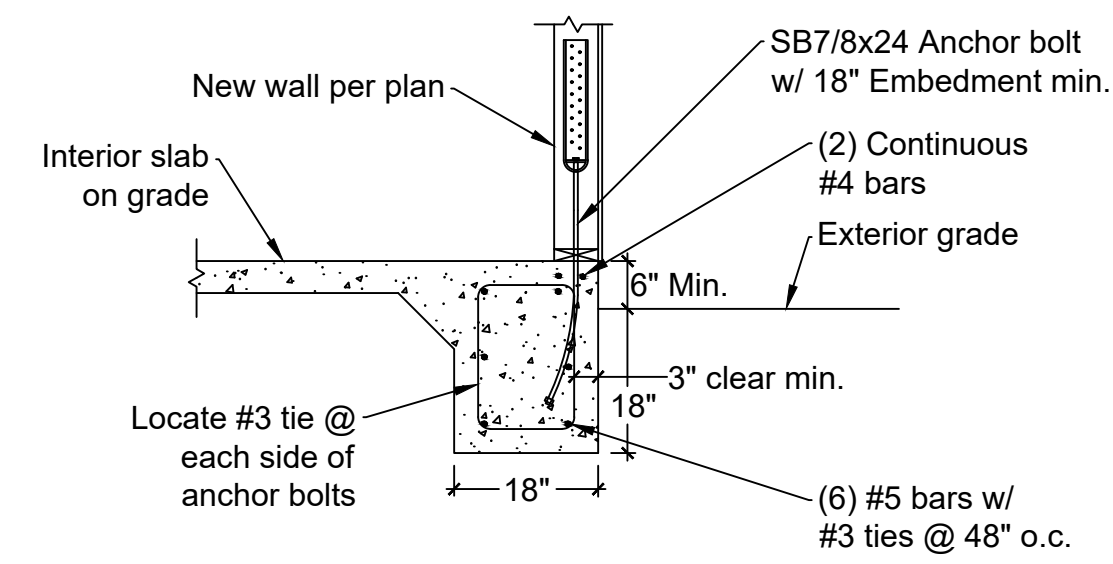
R1 Roof Accent Eave Detail Scale: 3/4" = 1'-0"



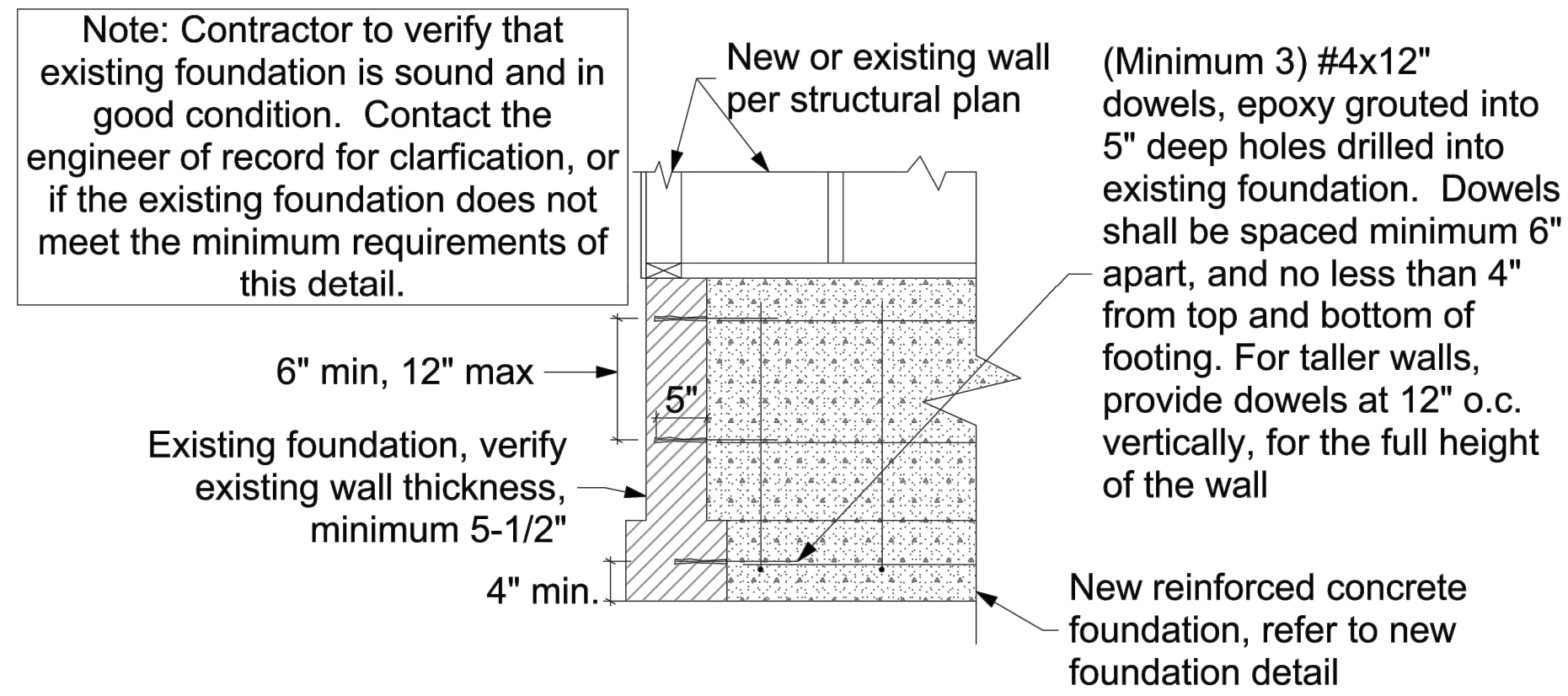
R2 Roof Deck Ledger Attachment Detail Scale: 1-1/2" = 1'-0"



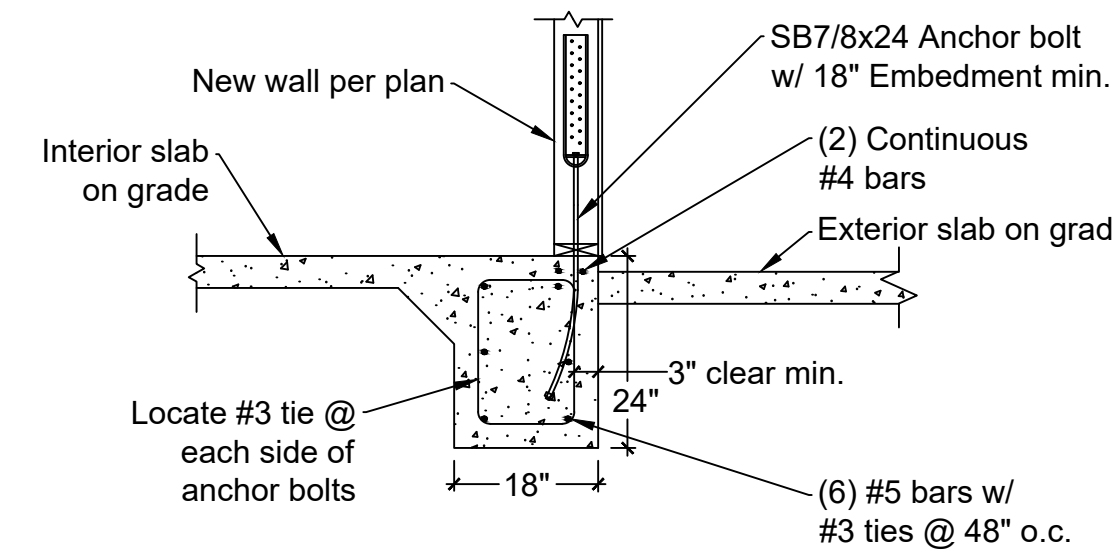
R3 West Roof Eave Detail Scale: 3/4" = 1'-0"



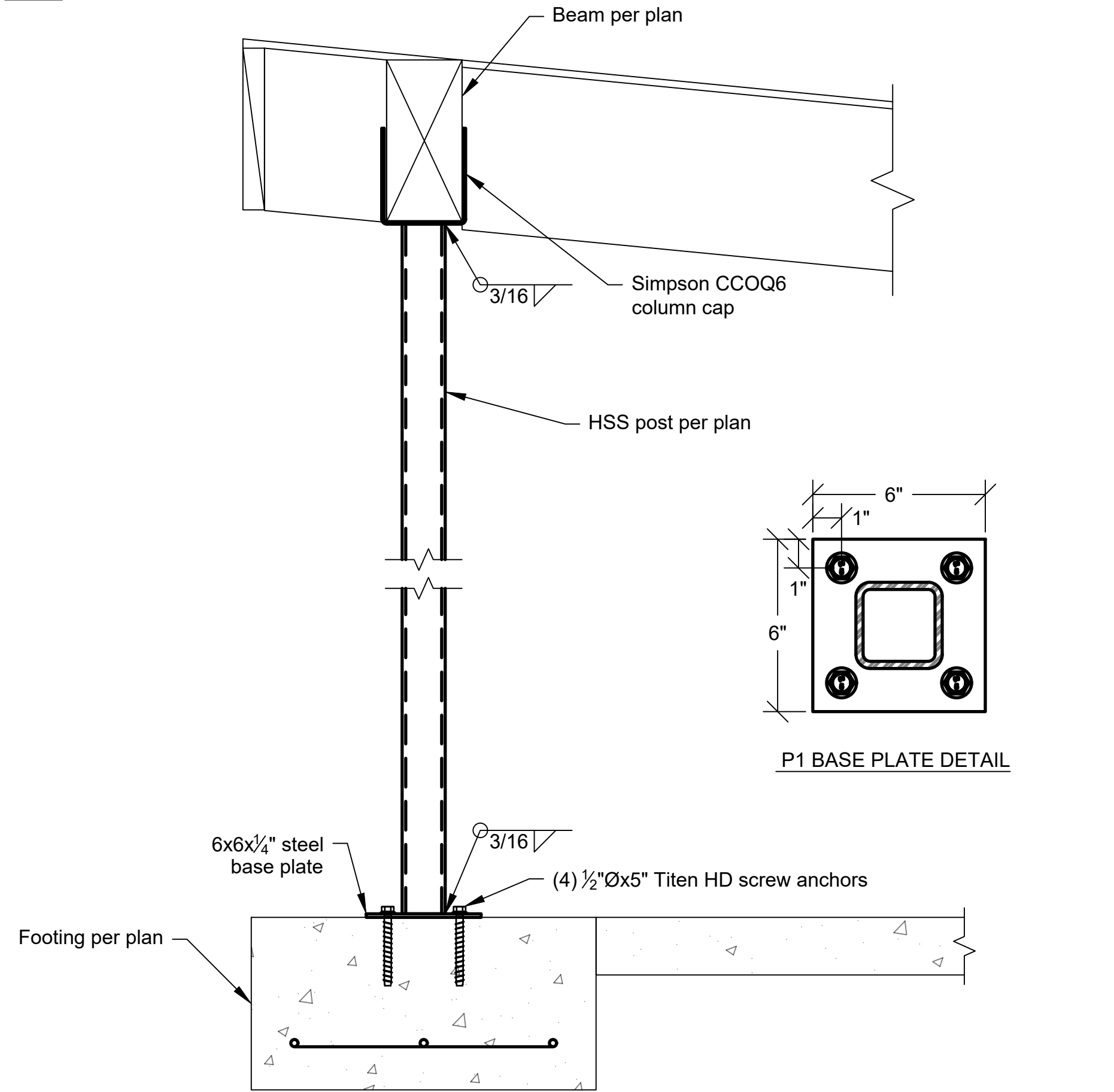
F1 Exterior Footing Detail Scale: 1/2" = 1'-0"



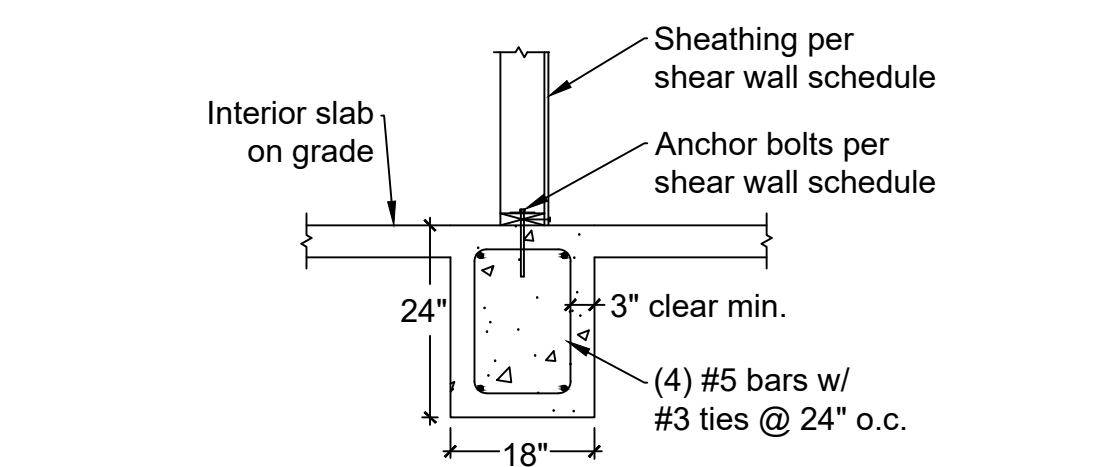
NF New Foundation Connection to Existing Detail Scale: 3/4" = 1'-0"



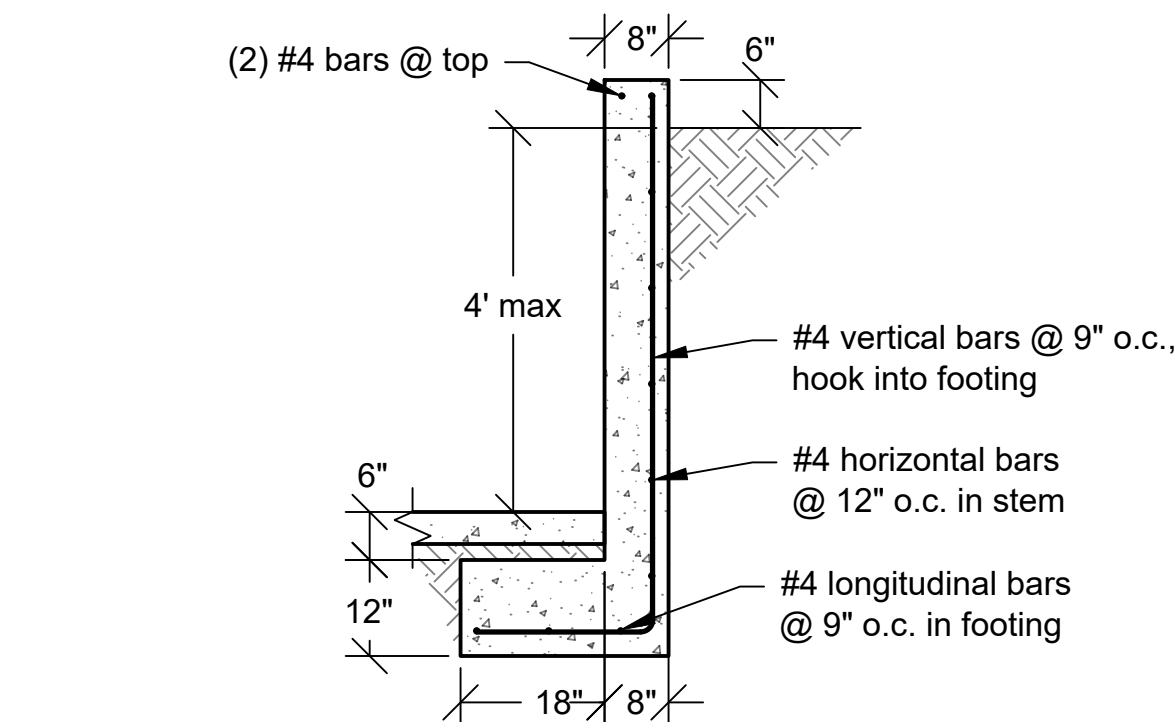
F2 Exterior Footing Detail Scale: 1/2" = 1'-0"



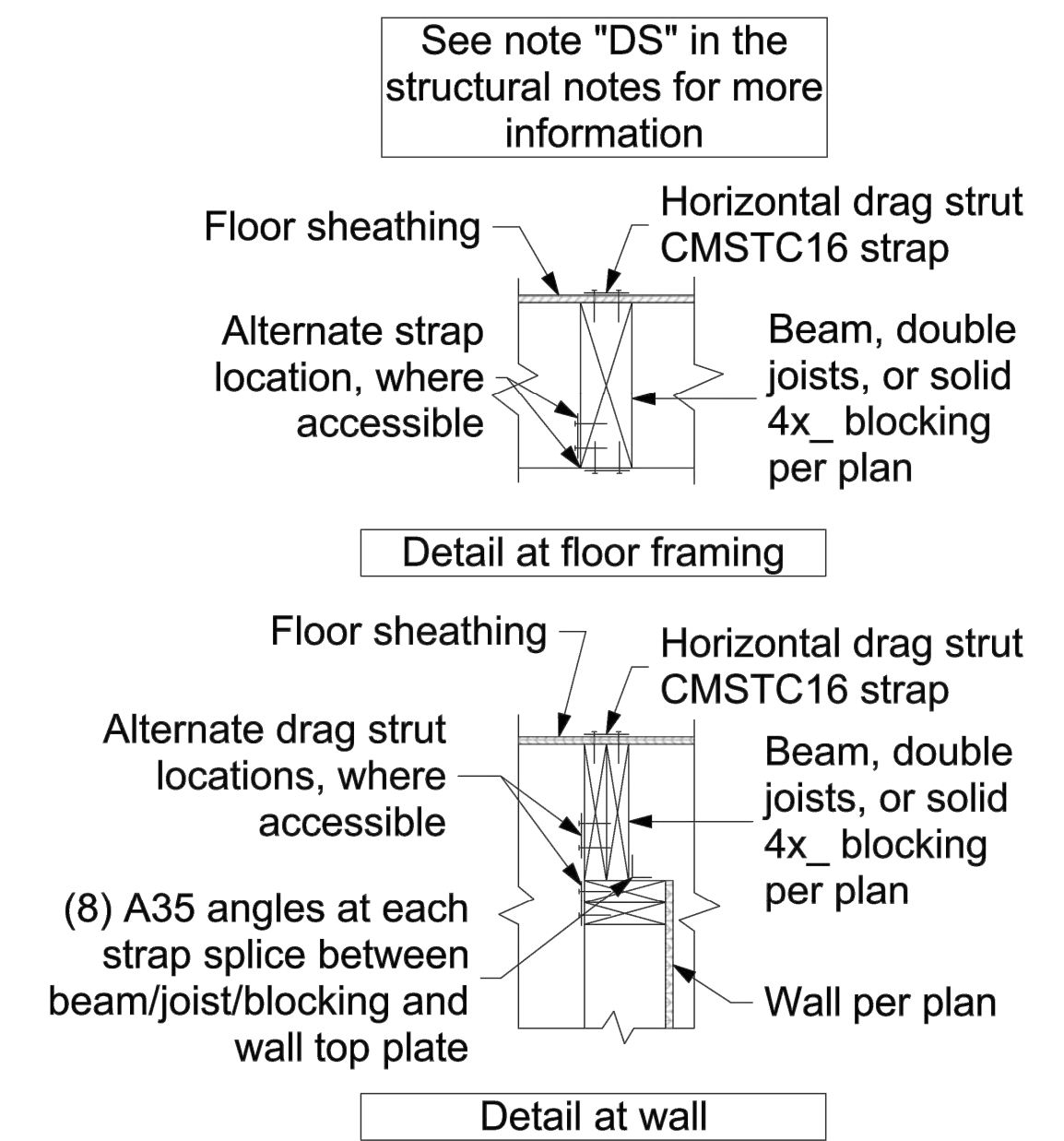
P1 Patio Steel Post Detail Scale: 1-1/2" = 1'-0"



F3 Grade Beam Detail Scale: 1/2" = 1'-0"



F4 Entry Retaining Wall Detail Scale: 1/2" = 1'-0"



DS Drag Strut Typical Detail Scale: 1" = 1'-0"

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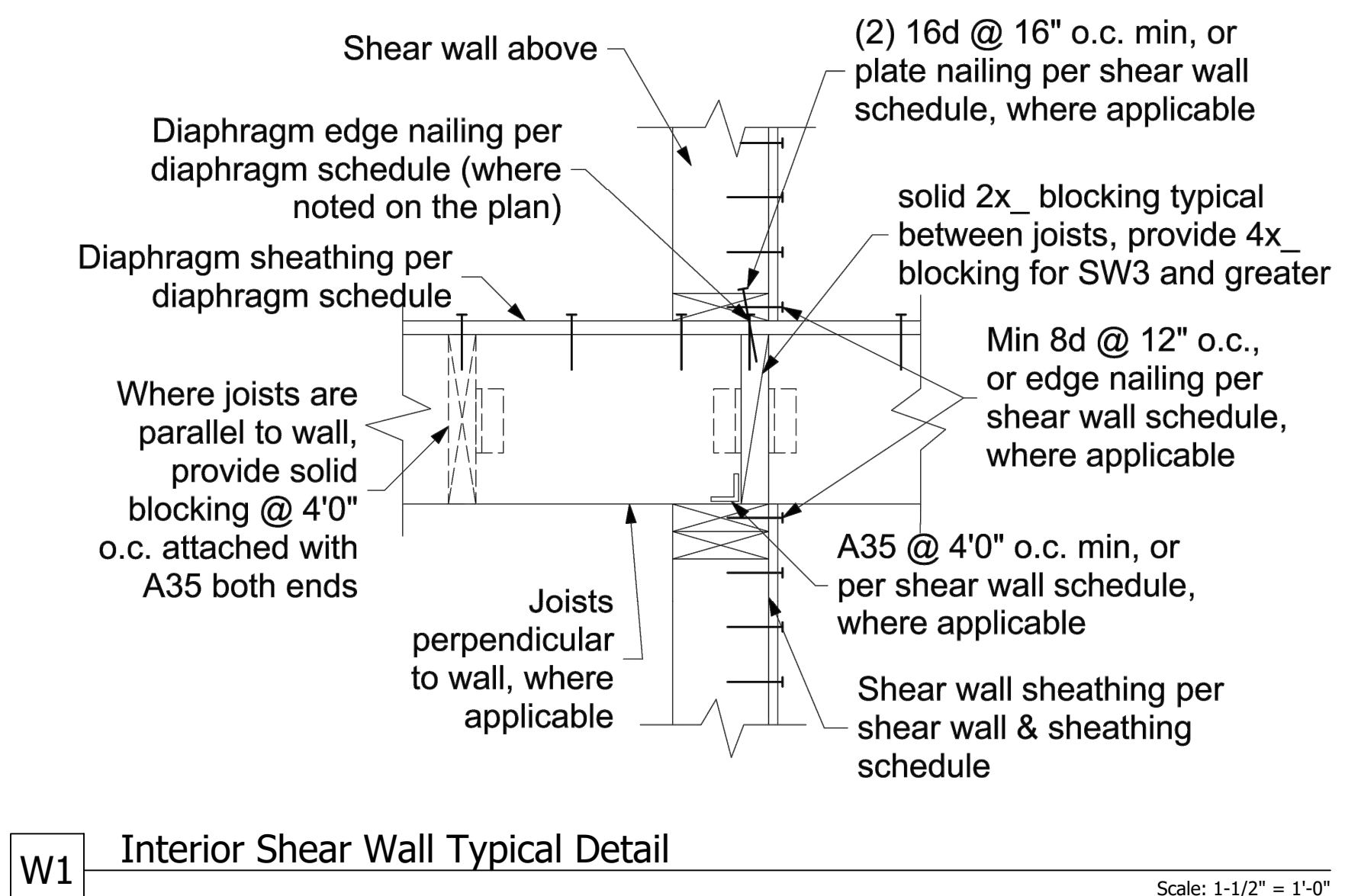
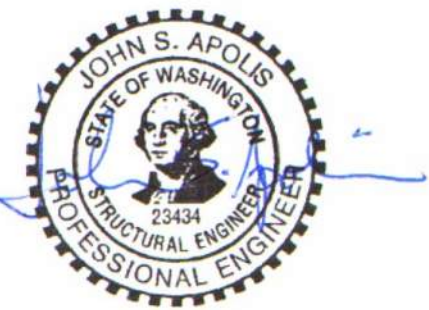
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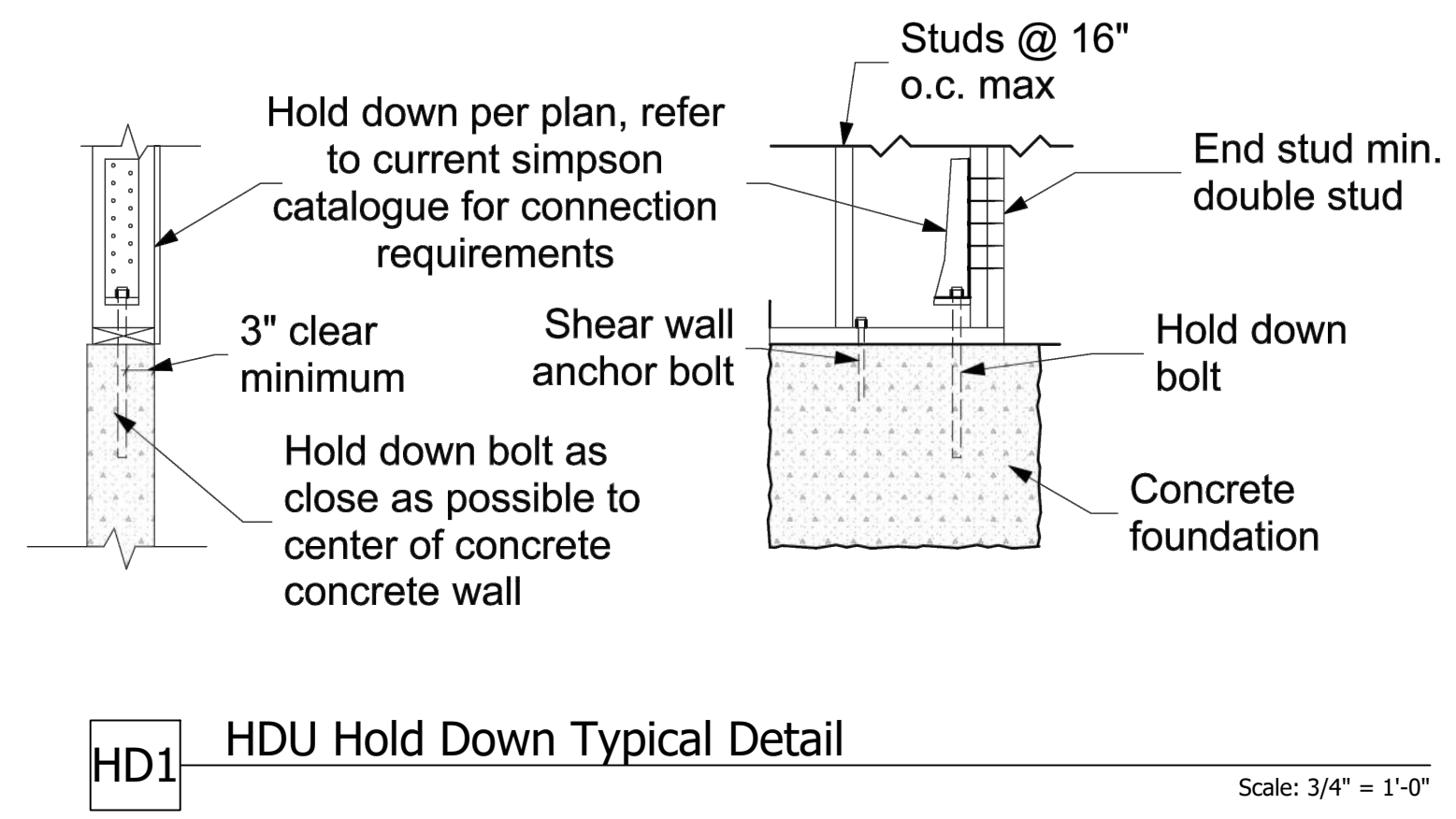
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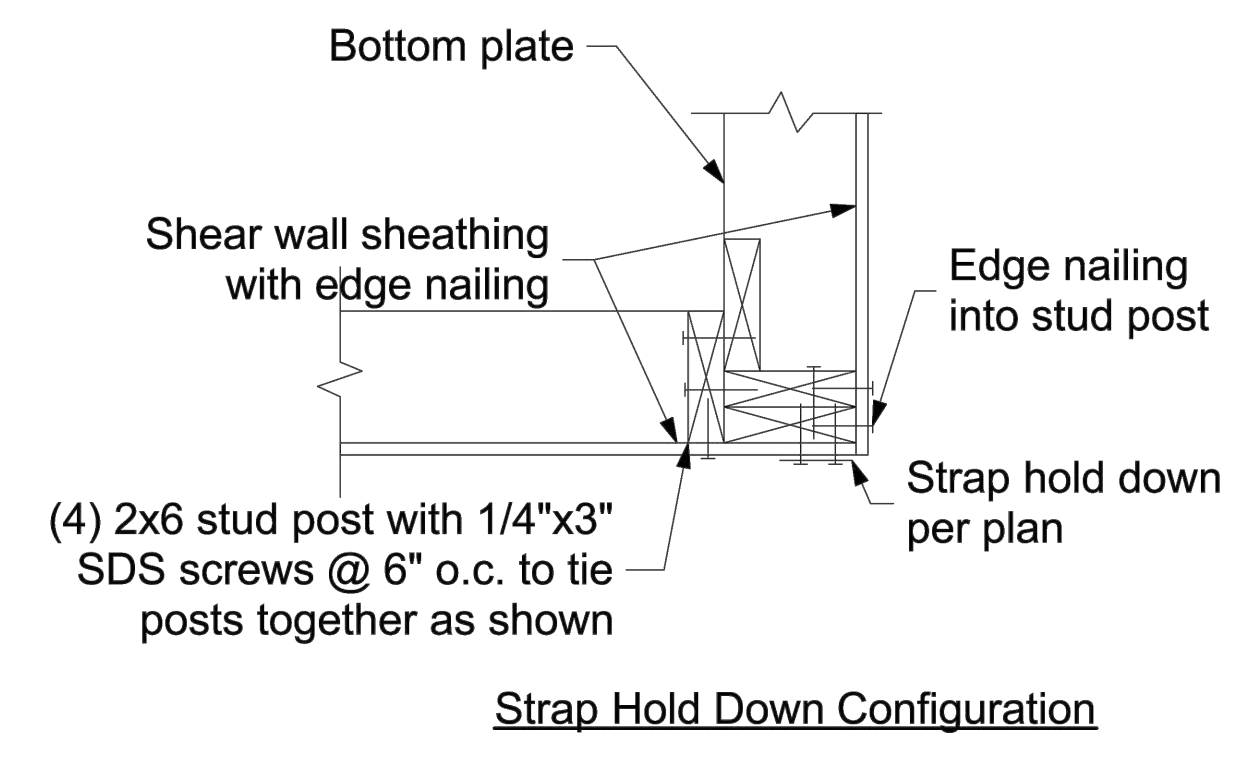
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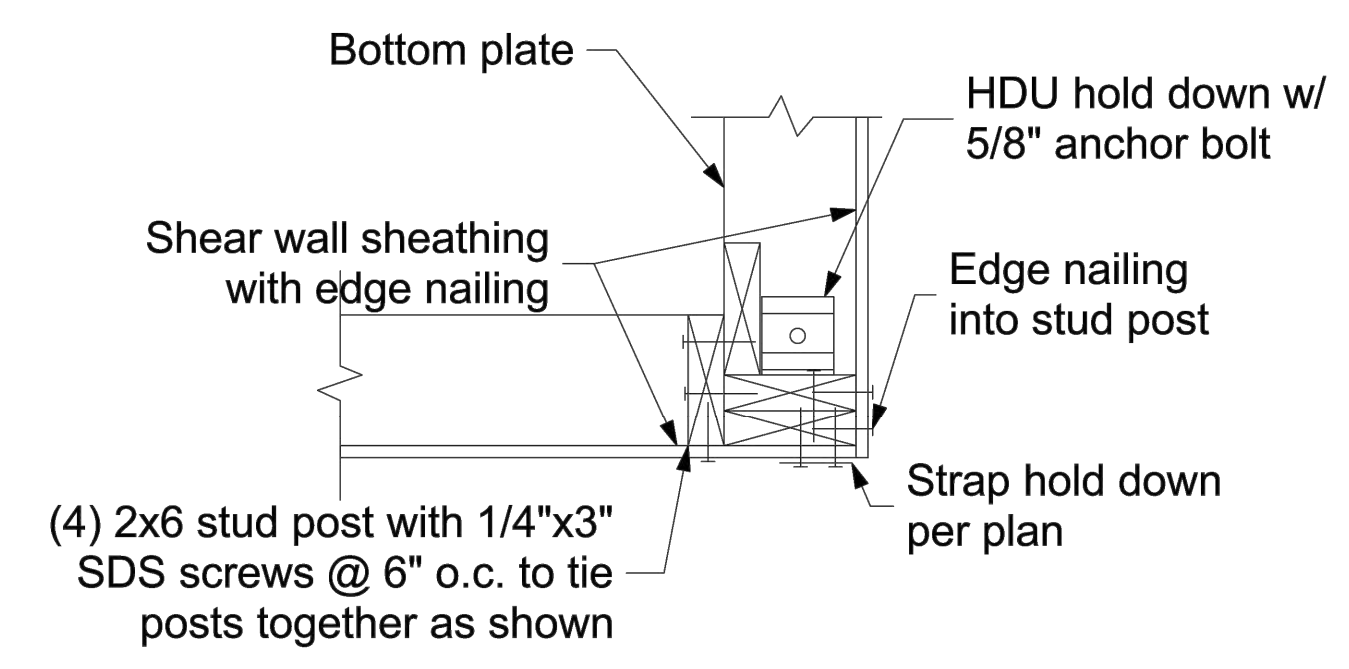
W1 Interior Shear Wall Typical Detail
Scale: 1-1/2" = 1'-0"



HD1 HDU Hold Down Typical Detail
Scale: 3/4" = 1'-0"

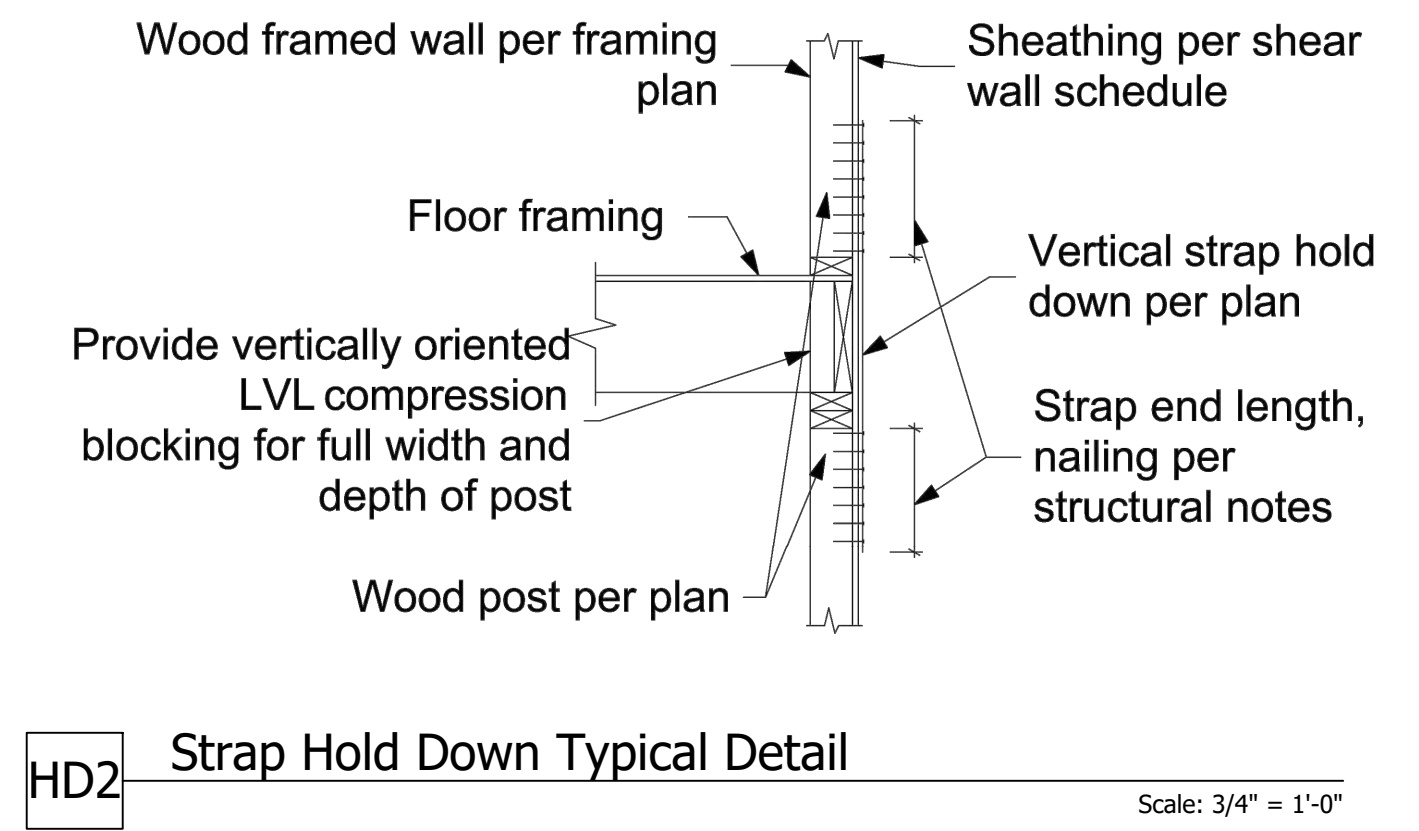


Strap Hold Down Configuration

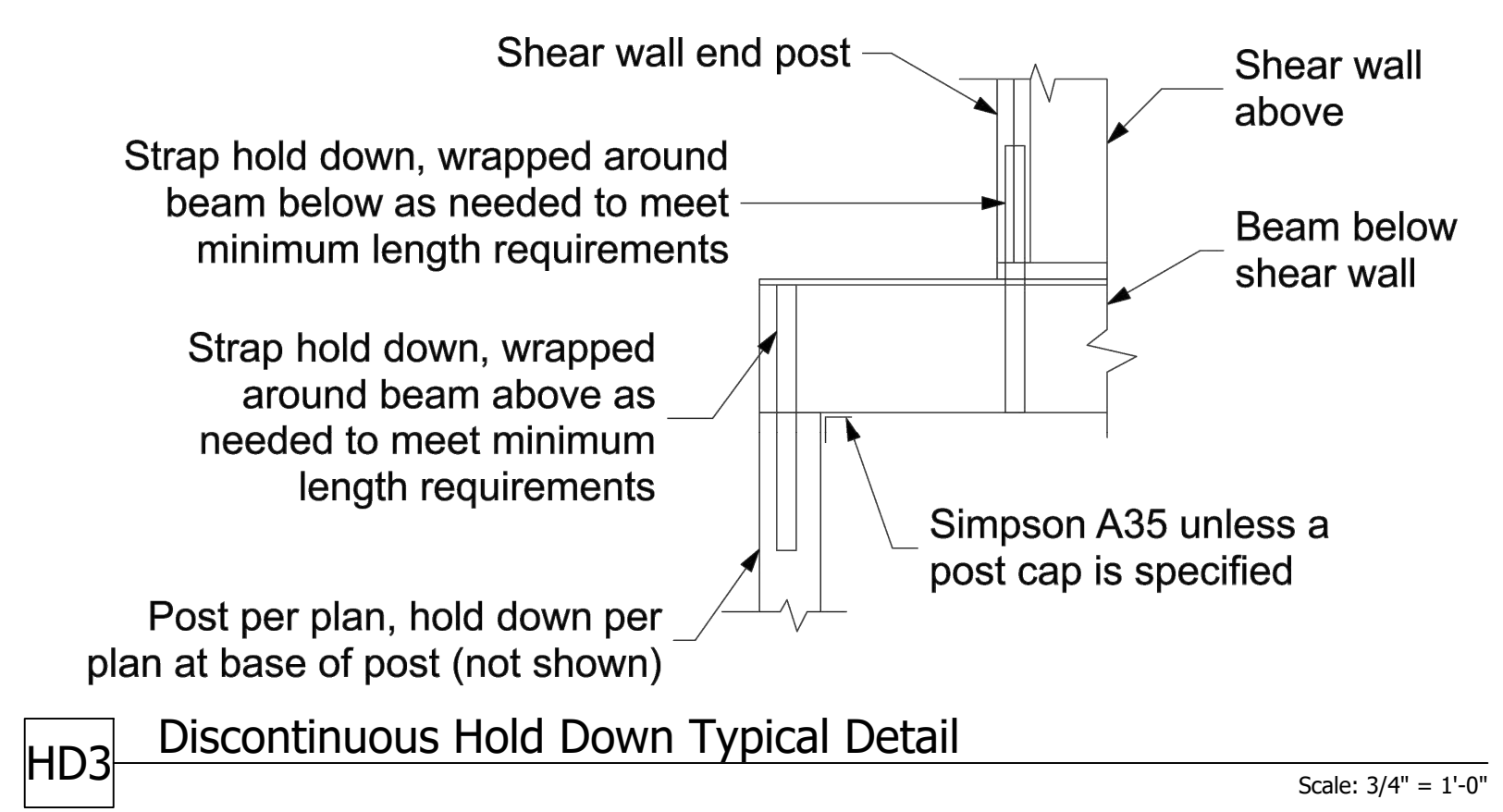


HDU Configuration

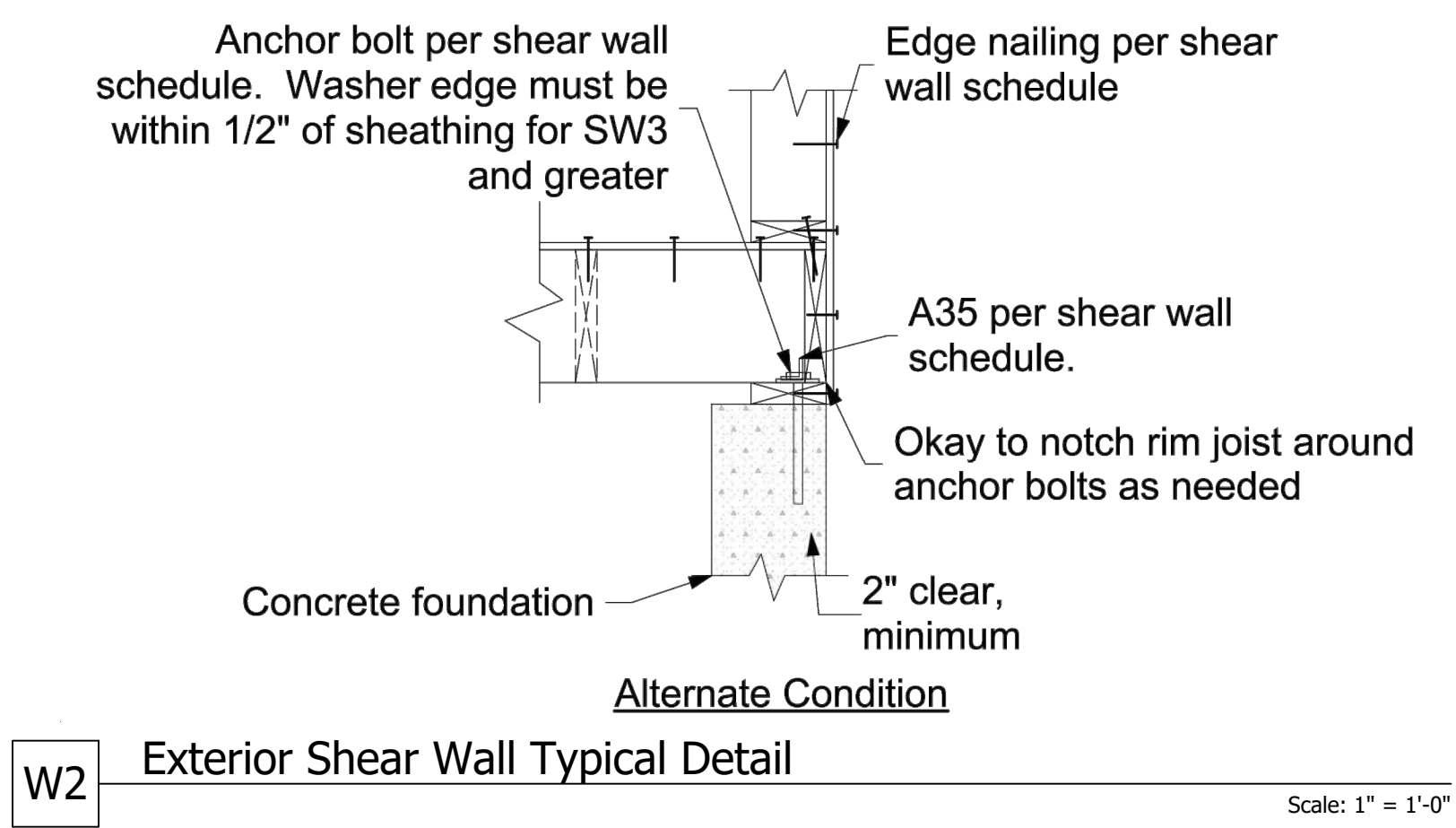
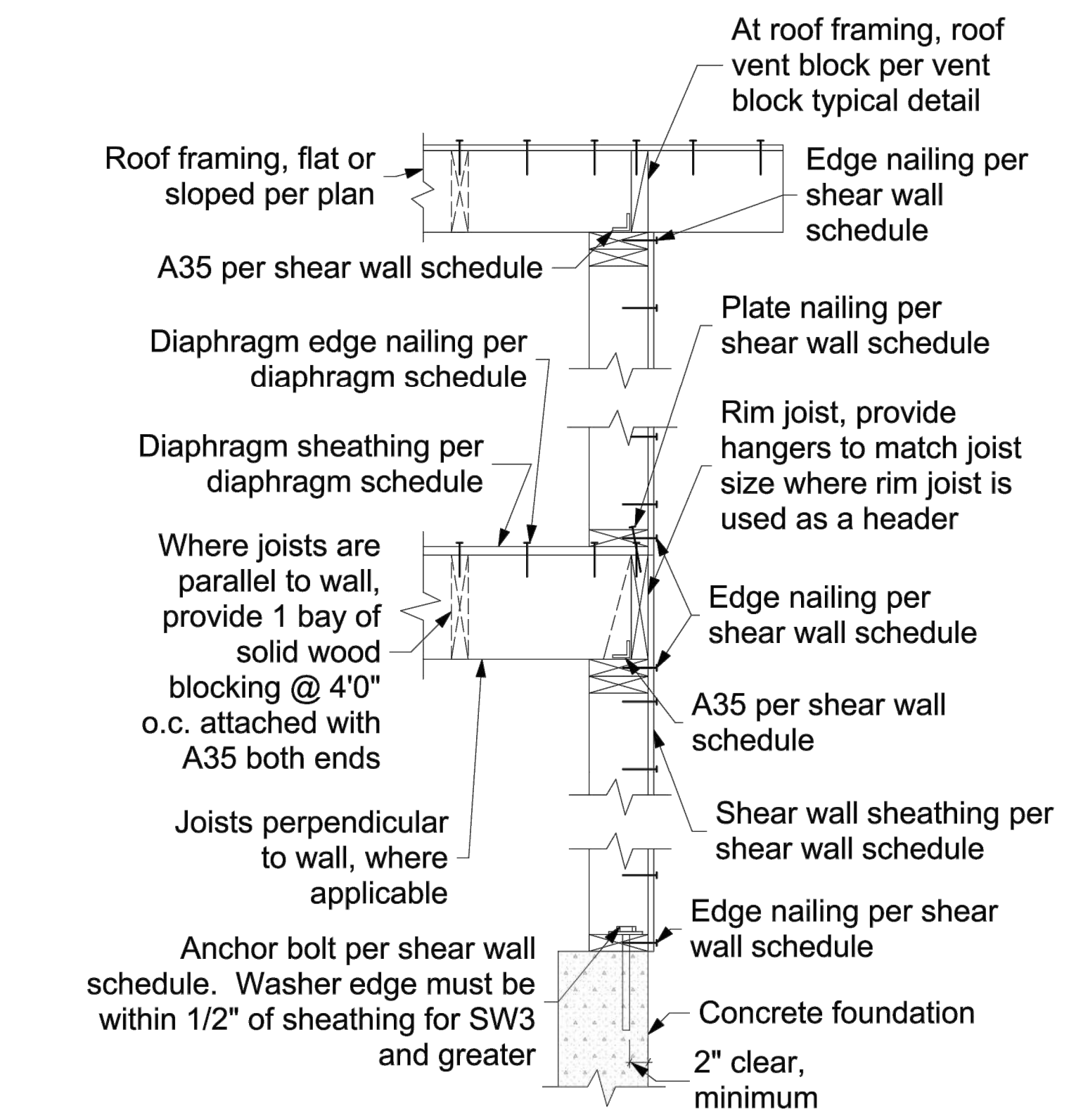
HD4 Corner Hold Down Typical Detail
Scale: 1-1/2" = 1'-0"



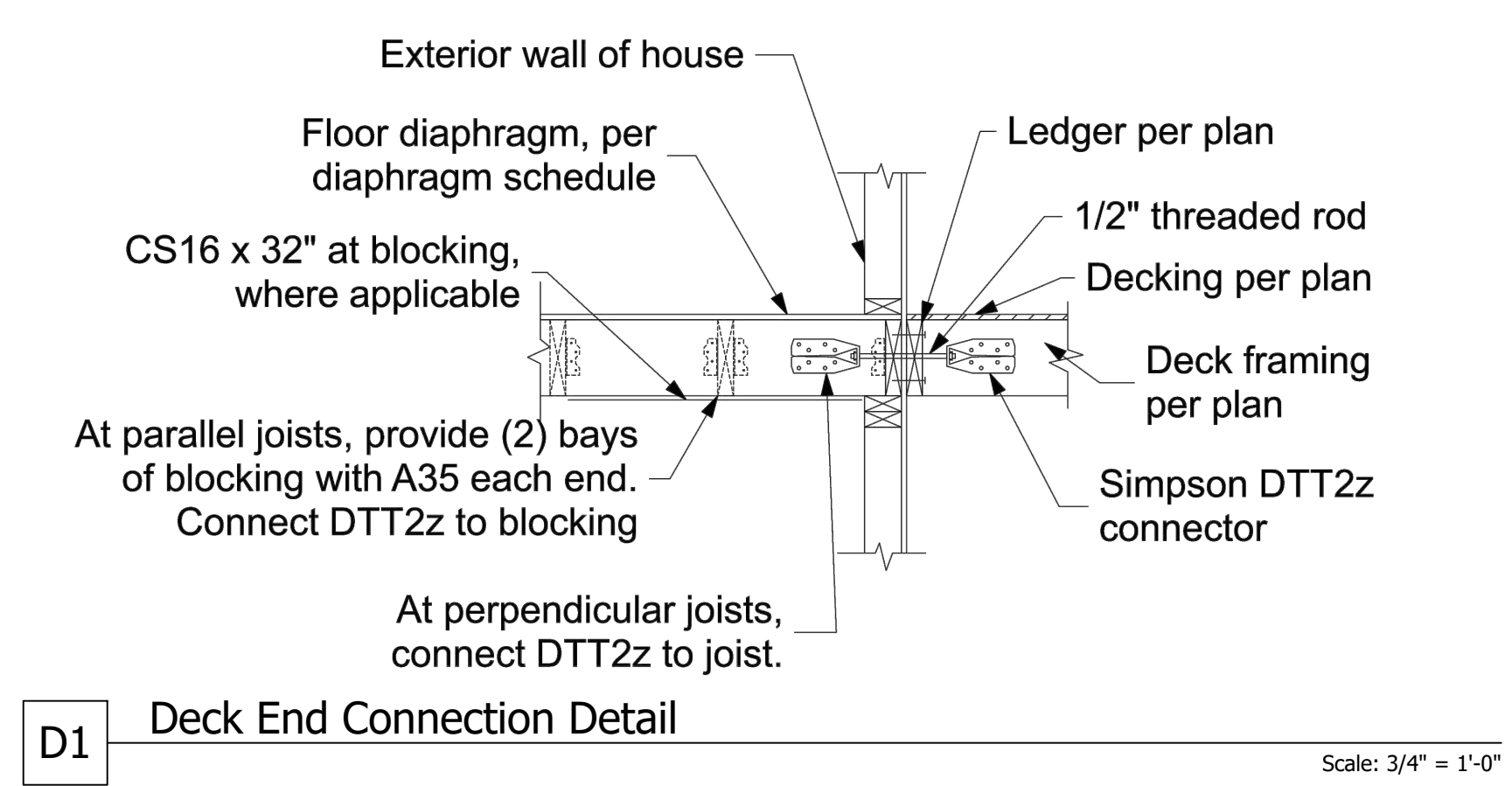
HD2 Strap Hold Down Typical Detail
Scale: 3/4" = 1'-0"



HD3 Discontinuous Hold Down Typical Detail
Scale: 3/4" = 1'-0"



W2 Exterior Shear Wall Typical Detail
Scale: 1" = 1'-0"



D1 Deck End Connection Detail
Scale: 3/4" = 1'-0"

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Date:
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Sheet:

S-5

Structural Notes:

Applicable Codes and Standards:

2018 International Building Code (IBC) and other applicable local building codes.
ASCE/SEI 7-16 - "Minimum Design Loads for Buildings and Other Structures"
2018 NDS for wood structures.

American Wood Preservers Bureau - AWPB Standards for Pressure Treated Material.
American Concrete Institute - ACI 315, ACI 318, ACI 301, ACI 307.

American Institute of Steel Construction - "Specification for the Design, Fabrication, and Erection of Structural Steel."

American Welding Society - AWS Structural Welding Code.

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

Design Loads:

Live load:	roof	25 psf (snow)
	floors	40 psf (60 psf decks)
Dead load:	solar panels	4 psf

Wind load: Basic wind speed 110 mph, exposure B, KzT=1.60
Building Category: Enclosed, Wind Important Factor Iw = 1.0
Refer to calculation page L1 for design wind forces.
Internal pressure 5 psf, Components and cladding design per 1609.6.4.4.1

Seismic loading per IBC Section 1613, Site Class D.

The basic structural type is a bearing wall system with light framed walls with shear panels. Rw = 6.5 (wood structural panels), soil type D.
Seismic importance factor I_s, Seismic Use Group I
Design and Analysis by Simplified Design Procedure
Peak Ground Accelerations (PGA) based on USGS Hazards Program, by lat/long.
PGA 1 sec = .499 PGA .2 sec = 1.436
Seismic base shear = 0.147 * Dead Load

Foundations:

Soil parameters (assumed): Vertical allowable soil pressure: 1,500 psf
All soil conditions are to be field verified during construction. Footings shall bear on firm natural soils or on structural fill placed over firm natural soils, and inspected in place. Footings shall extend 18 inches minimum below adjacent exterior finished grade and shall extend 12 inches minimum below existing interior grade unless otherwise noted on plans. Structural fill shall be placed in 12-inch maximum horizontal lifts (loose thickness) and compacted to 90 percent of maximum dry density in accordance with ASTM D-1557. Imported structural fill shall be granular material containing no more than 5 percent fines, passing no. 200 sieve. Structural fill in place shall be tested by a licensed soil engineer or approved by the building inspector.

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

Cast in Place Concrete:

Concrete shall attain a minimum compressive strength of 2,500 psi at 28 days (5-½ sack mix). An alternate mix provided by the concrete supplier and pre-approved by the building department is acceptable.
Reinforcing steel shall conform to ASTM A-615, Grade 60 (Fy=60,000 psi) for all bars. Provide all wall and footing horizontal bars with 2'-0" x 2'-0" corner bars of the same size at all corners and wall intersections. Minimum lap splice 48 bar diameters.

Concrete protection for reinforcement shall be:

Concrete exposed to earth or weather	1.5" (#5 & smaller) 2" (#6 & larger)
Concrete cast against earth	3"
Slabs	0.75"

Structural steel:

Plates, ASTM A36, Fy=36 ksi. Shapes, ASTM A992, Fy=50 ksi. Structural Steel Tube (HSS) per ASTM A500, Fy=46 ksi. Structural Steel Pipe per ASTM A53, Fy=35 ksi.

Bolts:

Bolts which are used in connections of steel beams to other steel beams or to the concrete supporting structure shall conform to ASTM A325. Anchor bolts shall conform to F1554. All other bolts shall conform to ASTM A307.

Minimum anchor bolt size and spacing shall be ½" diameter bolts @ 6' o.c. Shear wall anchor bolts per the shear wall schedule.

For cast-in-place anchors, provide 7" minimum embedment into the new concrete foundation.

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

Welding:

Use E70xx electrodes for welding. All fillet welds shall be 3/16" or equal to minimum thickness of member being welded, whichever is greater, unless otherwise shown. All welding shall conform to the provisions of AWS and shall be performed by welders certified in accordance with AWS and WABO.

Wood Framing Specifications:

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

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

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

Where LVLs are specified with a thickness greater than 1-3/4", the beam may be built up out of multiple 1-3/4" LVL beams connected per truss-joist TJ-9000 specifier's guide.

Unless noted otherwise, the following grades and species shall be used for structural lumber:

2x joists Hem-Fir #2

2x, 3x, and 4x studs	DF/L standard for plywood or WSP shear walls Hem-Fir standard for other walls DF-L #2
4x and 6x beams	LVL 1.9E, Fb = 2600 psi, Fv = 285 psi (minimums)
Microlam LVL lumber	2.0 WS, Fb = 2900 psi, Fv = 290 psi (minimums)
Parallam lumber	24F-V4 for simple span beams, 24F-V8 for cantilever beams
Glu-lam lumber	

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

Preservative-Treated Wood and Fasteners:

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

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

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

Plywood Thickness, Grade, and Nailing:

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

Manufactured Trusses:

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

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

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

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

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

Manufactured Joists:

"TJI" Joists specified on the plans are prefabricated products manufactured by the Weyerhaeuser Corporation. The contractor shall submit shop drawings and stamped structural design calculations for review. Joist design and shop drawings shall include location and weight of all equipment being supported by these joists. The manufacturer's installation instructions shall be available on the job site at the time of inspection. Other suppliers may be used, upon approval by the engineer of record.

Provide solid blocking between TJI joists at 8' o.c. along the span.

Blocking shall be solid engineered lumber to match the joist depth. TJI blocking is not permitted.

See the TJ-9001 Installation Guide for connection and framing requirements.

Metal Framing Connectors:

Unless otherwise noted: Metal framing connectors shall be manufactured by the Simpson company, or approved equal. Unless noted otherwise, use U-series joist hangers to match joist size (e.g., U210 for 2x10 joist). Provide H1 or H2.5 hurricane ties, or other connectors with similar capacity, at every roof joist or truss, and H6 or H7 at ends of roof beams and girder trusses. Where supported by wood posts, wood beams shall be connected to the tops of the posts using Simpson AC, PCZ or EPCZ post caps, and to the bottoms of the posts bearing on wood framing using Simpson AC connectors or A35 clips. Where supported by perpendicular beams, wood beams shall be connected by HU-series face mount beam hangers. Provide Simpson AB_ or PB post bases to connect posts to concrete foundations. Unless otherwise specified, the maximum number of nails or screws should always be installed on any connector.

Bearing Walls:

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

Drag Strut Note "DS"

Provide a continuous horizontal connection between the indicated beams, walls, and blocking, using the following method.

Connect the beams, blocking, rim joist, or top plates in the line specified, using a horizontal Simpson CMSTC16 strap or alternate strap specified on the plans. Individual members must be connected together, with the strap extending 3' onto each member. Where blocking is used, the strap must be continuous across all blocking members. The strap must be nailed using 16d sinkers, with a nailing pattern per the Simpson specifications.

The strap may be installed either on top of the plywood floor diaphragm, or connecting a beam or joist, as applicable and feasible.

Beams or joists may be connected to a wall top plate by (8) A35s.

Where no parallel members occur below the strap, provide 3-1/2" wide by 5-1/2" deep (minimum) solid wood blocking in the floor or roof framing, below the strap, for nailing. The blocking should be attached to the perpendicular joists with Simpson A34 framing anchors at both ends of each block.

Straps may be installed on top of a ridge, but not on the bottom.

Refer to the latest edition of the Simpson Catalog for required nailing and other requirements.

Refer to the Drag Strut Typical Detail provided with these plans.

Connection of New Foundation to Existing, Note "NF":

At each location where the new concrete foundation abuts the existing foundation, connect the new to the existing using minimum (3) #4 by 18" long rebar dowels, epoxy grouted into 5/8" diameter by 5" deep holes drilled into the existing foundation. Each dowel shall be no closer than 3" to any edge or corner of concrete. Minimum spacing between dowels shall be 6". For concrete wall intersections longer than 3'-0" in any direction, additional dowels shall be located at 12" o.c. for the full height or length of the new foundation concrete.

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

Hold Down Notes

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

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

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

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

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

Strap Hold Downs:

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

CS16 denotes a Simpson CS16 strap, with a minim end length of 14", and (13) 8d nails each end.

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

CMST14 denotes a Simpson CMST14 strap, with a minim end length of 34", and (38) 10d nails each end.

CMST12 denotes a Simpson CMST12 strap, with a minim end length of 44", and (49) 10d nails each end.

Rod Hold Downs:

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

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

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

For HDU2.4.5: Simpson SB5/8x24 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature.

For HDU8: Simpson SB7/8x24 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature.

Where the hold down is too high off of the concrete foundation to adequately connect to the specified anchor, A 7/8" diameter threaded rod and ASTM A194-2H coupler connecting to the specified anchor may be used.

Special Note:

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

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

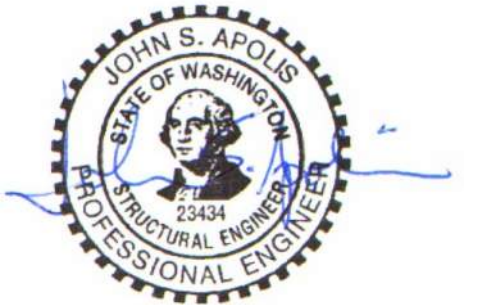
The contractor must verify that the existing foundation stem wall is uncracked and continuous, and is sound and in good condition, within 5 feet of any retrofitted shear wall or hold down, in any direction, except with prior written approval of the engineer. The existing concrete foundation stem wall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

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

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

SHEAR WALL SCHEDULE								
(Lumber for shear walls is HF#2 or better, unless otherwise noted.)								
Type	Material	Edge Nailing	Field Nailing	A.B. Size/Spacing	Plate Nailing	Plates	A35 Spacing	Shear Capacity
SW0	15/32" WSP one side, unblocked	8d @ 6"	8d @ 12"	1/2"Ø @ 72"	(2) 16d @ 12"	2x_	24"	100 plf
SW1	15/32" WSP one side	8d @ 6"	8d @ 12"	1/2"Ø @ 48"	(2) 16d @ 9"	2x_	24"	230 plf
SW2	15/32" WSP one side	8d @ 4"	8d @ 12"	1/2"Ø @ 32"	(2) 16d @ 6"	2x_	16"	350 plf
SW3	15/32" WSP one side	10d @ 3"	10d @ 12"	5/8"Ø @ 24"	(2) 16d @ 4"	3x_	12"	550 plf
SW3X	15/32" WSP one side	10d @ 2"	10d @ 12"	5/8"Ø @ 24"	5/8"Ø x 8" Lag @ 24"	3x_	9"	710 plf
For shear wall callouts on the Structural Framing Plans: SW x (y') denotes a shear wall type "x" with a minimum length of "y" feet. See Exterior Shear Wall Typical Detail.								
* For SW3 and greater, studs, plates, and blocking where two WSP panels abut shall have a minimum 3" nominal thickness. Double 2x_ members may be used for studs if the members are connected by plate nailing. Note 10d nails at WSP panel edges.								
* "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.								
* Provide double stud minimum at both ends of all shear walls.								
* At the roof or top level of any shear wall, "A35 spacing", and all other relevant connector specifications, apply to assemblies at both the top and bottom of the shear wall. At lower levels, apply to the bottom of the wall only.								
* Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates (whichever applies) of all shear walls.								
* Provide 3x_ plates, and 4x_ rim joists, minimum, where lag screws are specified for plate nailing.								
* Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members receiving edge nailing from abutting panels shall not be less than a single 3x_ member.								
* Provide 4x_ or double 2x_ framing where A35 angles are used on both sides of one piece of wood.								
* Where a shear wall terminates above the foundation level (no shear wall below), provide minimum 4x_ blocking or double joist framing (as applicable) below the shear wall. &" Plate nailing per this schedule shall be nailed into this blocking at the bottom of the shear wall.								
* Shear wall nails shall be placed no closer than 3/8" from a panel edge or perpendicular face of stud.								
* Maximum spacing between nails shall not exceed 12".								
* Shear wall nailing shall be common or galvanized box nails, unless lag screws are noted. Galvanized nails shall be hot dipped or tumbled.								
* Lag screw plate connectors shall penetrate 3.5" minimum, and plates or beams receiving lag screws shall have a minimum width of 3.5".								
* Where hold downs are specified, the shear wall bolt shall be located within 6 inches of the end of the shear wall, unless otherwise approved by the engineer of record. Minimum end studs shall be as specified in the most recent Simpson catalog.								
* Shear wall edge nailing through shear wall sheathing shall be provided into all studs attached to a hold down.								
* Retrofit anchor bolts shall have a minimum embedment of 5" into the concrete foundation.								
* Cast in place anchor bolts shall have a minimum embedment of 7" into the concrete foundation.								
* For SW3 and greater, foundation anchor bolt plate washers shall extend to within 1/2" of the edge of the sheathing.								
* Plate nails shall be nailed into a solid wood rim joist.								
* 2x_ plates may be substituted for 3x_ plates if panels are nailed with edge nailing directly to the rim joist.								
* Where 3x_ plates are used, (2) 20d common nails must be used instead of (2) 16d common nails to connect studs to the bottom plate.								
* For SW3 and greater at existing walls, Retrofit High Strength Shear Wall Typical Detail may be used.								
* Where Roof ventilation is required over a shear wall, see roof ventilation detail.								

Diaphragm Schedule					
(Lumber for diaphragm construction is HF#2 or better, unless otherwise noted.)					
Type	Material	Edge Nailing	Field Nailing	Edge Blocking	Remarks
Roof	15/32" CDX 24/0	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard
Floor	23/32" CDX 48/24	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard
* "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.					
* Rim joists at exterior walls shall be continuous for tension. At rim joist splice locations, provide (2) CS16 horizontal straps, minimum 24"					
* Where roof or floor framing is cantilevered over an exterior wall below, provide solid blocking with Diaphragm edge nailing between joists.					
* This is the minimum required diaphragm construction. Where otherwise noted on the plans, additional blocking or nailing may be required.					



Consulting Structural Engineering Services
6311 17th Ave NE, Seattle, WA 98115
Phone: 206-527-1288

Email: john@cses-engineering.com

Li Residence
4657 86th Ave SE
Mercer Island, WA 98040

Revisions:

Date:
10-13-22

Sheet:

S-6

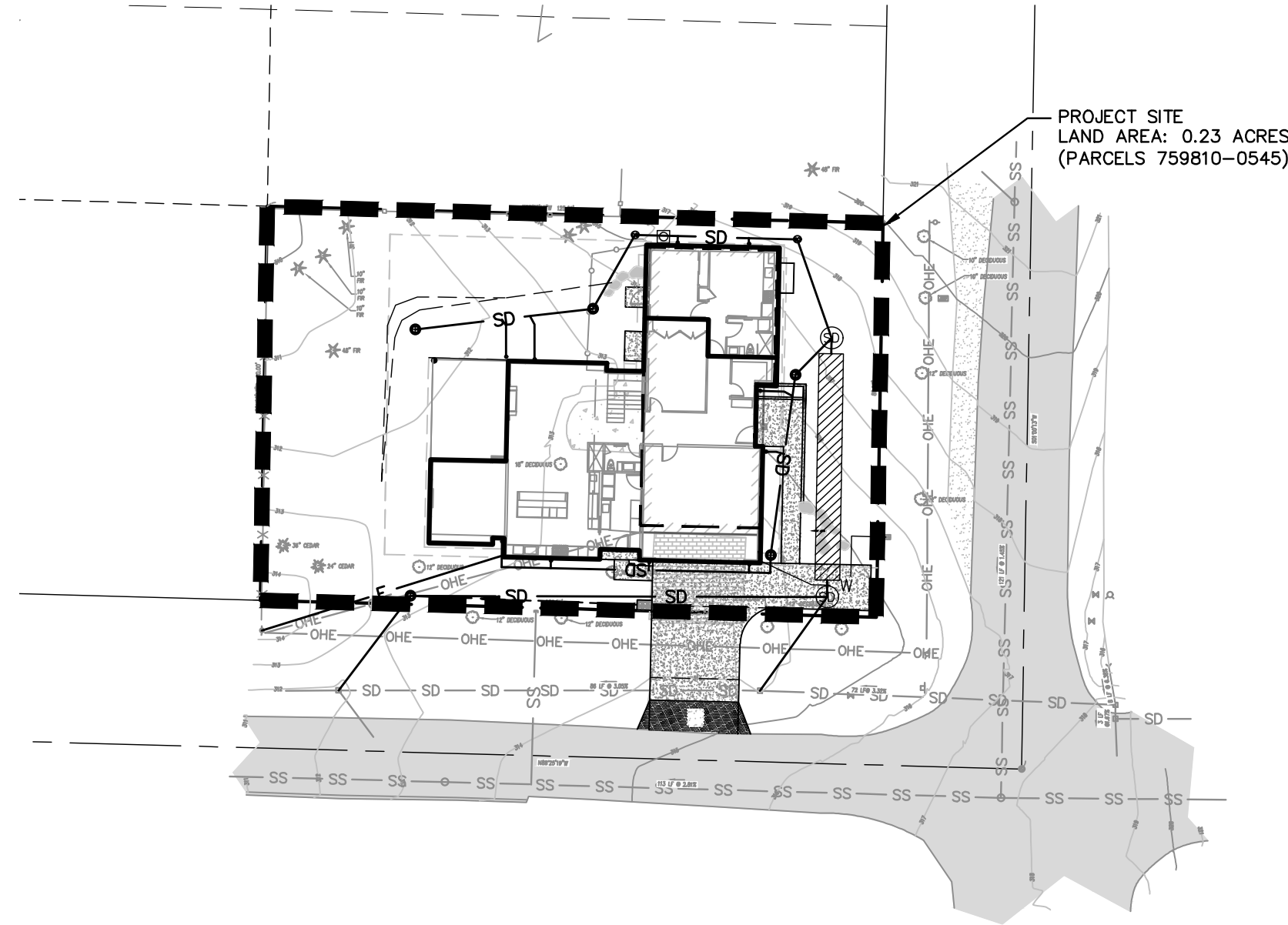
GENERAL SITE NOTES

- EXISTING FEATURES, TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN ON THESE PLANS ARE FROM TOPOGRAPHIC SURVEY PROVIDED BY APEX, DATED 12/17/2021
- ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING:
 - STANDARDS OF THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, OFFICE OF STANDARDS AND RULES OF THE STATE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH,
 - THE REQUIREMENTS OF ALL PERMITS ISSUED FOR WORK BY THE CITY OF MERCER ISLAND, WHERE CONFLICTS EXIST BETWEEN ANY OF THE ABOVE LISTED SPECIFICATIONS, THE MOST STRINGENT LISTED SPECIFICATION SHALL APPLY.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SECURE ALL PERMITS NECESSARY TO PERFORM WORK, INCLUDING BUT NOT LIMITED TO WORK WITHIN THE PUBLIC RIGHT-OF-WAY, GRADING, TREE REMOVAL, AND UTILITY MODIFICATIONS.
- CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, LABOR, AND MATERIALS NECESSARY TO PERFORM THE WORK SHOWN ON THE APPROVED PLANS.
- IT SHALL BE THE RESPONSIBILITY OF THE VARIOUS CONTRACTORS TO COORDINATE THEIR WORK SO AS TO ELIMINATE CONFLICTS AND WORK TOWARD THE GENERAL GOOD AND COMPLETION OF THE ENTIRE PROJECT.
- ALL WORKMANSHIP AND MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE OF GOOD QUALITY AND NEW, NEITHER FINAL ACCEPTANCE NOR FINAL PAYMENT BY THE OWNER SHALL RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR FAULTY MATERIALS OR WORKMANSHIP.
- IN THE EVENT OF ANY CONFLICT OF INFORMATION SHOWN ON THE APPROVED PLANS OR ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE INTENT OF A CONSISTENT AND FUNCTIONAL PRODUCT, THE CONTRACTOR SHALL SO NOTIFY THE OWNER IN WRITING, UPON WHICH NOTICE THE OWNER SHALL RESOLVE THE CONFLICTS BY THE ISSUANCE OF A WRITTEN ORDER, REVISED PLANS, OR BOTH. THE CONTRACTOR SHALL BEAR FULL COST AND RESPONSIBILITY FOR WORK AFFECTED BY SUCH CONFLICTS AND PERFORMED BY CONTRACTOR PRIOR TO SUCH NOTICE TO THE OWNER AND ISSUANCE OF SUCH ORDER AND/OR REVISED PLANS.
- CONTRACTOR SHALL EXERCISE ALL NECESSARY CAUTION TO AVOID DAMAGE TO ANY EXISTING TREES, OR SURFACE IMPROVEMENTS, OR TO ANY EXISTING DRAINAGE STRUCTURE, WATER STRUCTURE, SEWER CLEANOUTS, MANHOLES, OR JUNCTION BOXES FOR UNDERGROUND ELECTRIC, GAS, TELEPHONE, CABLE TV, STORM, SANITARY, WATER OR OTHER UTILITIES WHICH ARE TO REMAIN IN PLACE AND SHALL BEAR FULL RESPONSIBILITY FOR ANY DAMAGE THERETO.
- ALL KNOWN EXISTING UTILITY LINES ARE SHOWN FOR INFORMATION ONLY, CONTRACTOR SHALL EXERCISE ALL NECESSARY CAUTION TO ANY EXISTING UTILITY LINES OR FACILITIES TO REMAIN IN PLACE, WHETHER OR NOT SUCH FACILITIES APPEAR ON THE APPROVED PLANS, AND SHALL BEAR FULL RESPONSIBILITY FOR ANY DAMAGE THERETO.
- CONTRACTOR SHALL CONTACT THE "CALL BEFORE YOU DIG" UNDERGROUND UTILITY LOCATING SERVICE (811) AND THE AFFECTED UTILITY COMPANY PRIOR TO STARTING WORK TO REQUEST AND OBTAIN MARKING OF EXISTING UNDERGROUND FACILITIES.
- CONTRACTORS SHALL HIRE A LICENSED LAND SURVEYOR TO PROVIDE CONSTRUCTION STAKING IN ORDER TO ENSURE THE PROJECT IS CONSTRUCTED TO THE LINES AND GRADES INDICATED ON THE APPROVED PLANS.
- INSPECTION OF WORK: CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF REQUIRE INSPECTIONS WITH THE APPROPRIATE AGENCIES AND UTILITY COMPANIES AND CITY OF MEDINA STANDARDS.
- ENGINEER OF RECORD SHALL BEAR NO RESPONSIBILITY FOR METHODS AND PROCEDURES OF WORK ESTABLISHED BY CONTRACTOR, JOBSITE CONDITIONS, JOBSITE SAFETY, OR CONFORMANCE WITH SAFETY PROCEDURES AND REQUIREMENTS.
- IN CONFORMANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS BOTH THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER OF RECORD.
- ALL UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE PROJECT AND BE PLACED AT A SUITABLE DISPOSAL SITE.

LI RESIDENCE

4657 86TH AVE. SE

MERCER ISLAND, WASHINGTON



PROJECT SITE
1" = 30'

PROJECT INFORMATION:

SITE ADDRESS: 4657 86TH AVE. SE,
MERCER ISLAND, WA 98040

PARCEL NUMBER: 7598100545

LEGAL DESCRIPTION: (PER STATUTORY WARRANTY DEED, KING CO, REC. NO. 20211005001771)

THE SOUTH 80 FEET OF THE EAST 125 FEET OF TRACT 5 IN BLOCK 14 OF THE VITUS SCHMID'S EAST SEATTLE, ACRE TRACTS, AS PER PLAT RECORDED IN VOLUME 7 OF PLATS, PAGE 76, RECORDS OF KING COUNTY AUDITOR.

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

UTILITIES:

WATER:
CITY OF MERCER ISLAND
611 SE 36TH STREET,
MERCER ISLAND, WA 98040
(206) 275-7602

SEWER:
CITY OF MERCER ISLAND
611 SE 36TH STREET,
MERCER ISLAND, WA 98040
(206) 275-7602

FIRE:
MERCER ISLAND FIRE DEPARTMENT

ELECTRIC/GAS:
PSE

OWNER:

PAUL LI
(703)965-9722

DEVELOPER:

CAMERON WEAVER
WW SUSTAINABLE, LLC
23815 140TH AVE. SE
KENT, WA 98042

CIVIL ENGINEER:

CANNON
ATTN: KATIE ROLLINS
PE: ED COLLINS
PHONE: (425) 677-2325
1700 NW GILMAN BLVD, SUITE 100
ISSAQUAH, WA 98027

SURVEYOR:

APEX ENGINEERING LLC
2601 SOUTH 35TH STREET, SUITE 200
TACOMA, WA 98409
253 473-0599

ARCHITECT:

LURE DESIGN SOLUTIONS
13842 NE 8TH STREET, #E102
BELLEVUE, WA 98005
(425) 870-0383



VICINITY MAP
NTS

ABBREVIATIONS

ASPHALT CONCRETE	AC	EDGE OF PAVEMENT	EP
CENTERLINE	CL / E	MANHOLE RIM ELEVATION	RM
BACK OF WALK	BOW	MATCH EXISTING	ME
EACH WAY	E.W.	ON CENTER	O.C.
EXISTING GRADE	EG	RIGHT OF WAY	ROW
EXISTING	(E)	STANDARD	STD
FINISHED SURFACE	FS	STORM DRAIN	SD
FINISHED GRADE	FG	SANITARY SEWER	SS
HIGH POINT	HP	TOP OF CURB	TC
INVERT	INV	TOP OF GATE	TG
MINIMUM	MIN	BOTTOM OF WALL	BW
PROPERTY LINE	PL / R	TOP OF WALL	TW
PUBLIC UTILITY EASEMENT	PUE	UNLESS NOTED OTHERWISE	U.N.O.
		UNIFORM PLUMBING CODE	UPC

LEGEND

	EXISTING	PROPOSED
LOT BOUNDARY	---	---
PROPERTY LINE	---	---
EASEMENT/SETBACK	---	---
STREET CENTERLINE	---	---
BUILDING	[Hatched Box]	[Hatched Box]
GRADE BREAK	---	---
CONTOURS	[Dashed Line]	[Dashed Line]
WATER MAIN OR LATERAL	W	W
SANITARY SEWER	SS	SS
STORM DRAIN LINE	SD	SD
GAS LINE	G	G
FOUNDATION DRAIN	FD	FD
DRY UTILITY LATERAL	---	---
AC PAVING	[Pattern]	[Pattern]
CONCRETE	[Pattern]	[Pattern]
STORM DRAIN INLET	[Symbol]	[Symbol]
CLEANOUT TO GRADE	[Symbol]	[Symbol]
YARD DRAIN	[Symbol]	[Symbol]
JUNCTION BOX	[Symbol]	[Symbol]
CATCH BASIN	[Symbol]	[Symbol]
DOWNSPOUT SPLASH	[Symbol]	[Symbol]

SHEET INDEX

No.	SHEET TITLE
C1	TITLE SHEET
C2	DRAINAGE & BMP PLAN
C3	UTILITY CONNECTIONS PLAN
C4	GRADING AND DRAINAGE DETAILS
C5	GRADING AND DRAINAGE DETAILS
C6	TESC PLAN
C7	TESC NOTES AND STANDARD DETAILS
C8	TESC DETAILS
C9	TESC DETAILS



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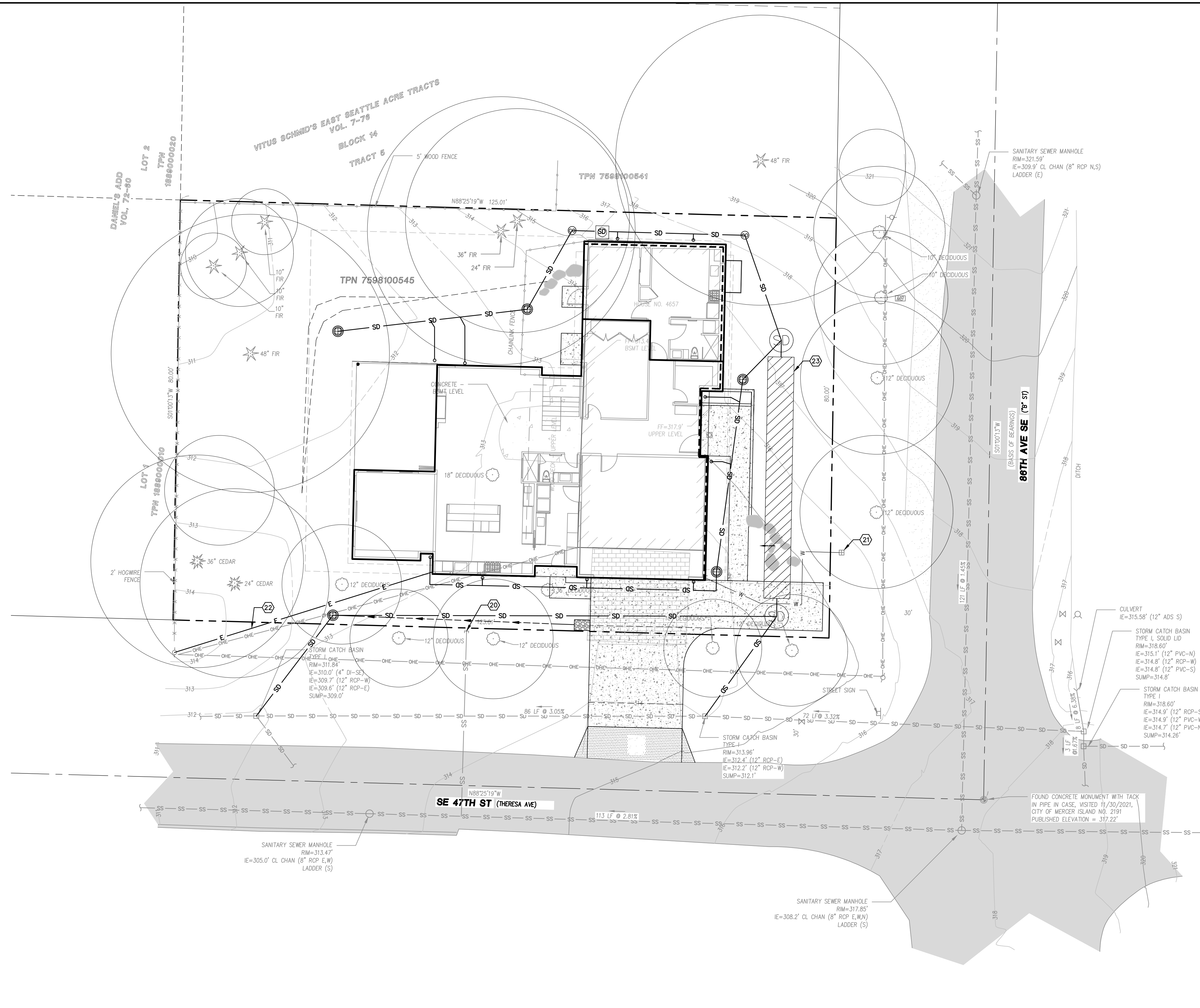
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TITLE SHEET		
MERCER ISLAND, WASHINGTON		
DRAWN BY SEM	DATE 10/11/2022	CA JOB NO. 220418
CHECKED BY KR	SCALE AS SHOWN	SHEET C1 OF 8

EXISTING UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS IS BASED UPON A COMBINATION OF SOURCES INCLUDING FIELD TOPOGRAPHIC SURVEY AND CITY SYSTEM MAPS. CONTRACTOR SHALL BE ADVISED THAT UNDERGROUND UTILITIES NOT IDENTIFIED ON THESE PLANS MAY EXIST WITHIN THE PROJECT SITE, AND SHALL EXERCISE APPROPRIATE CARE DURING EXCAVATION ACTIVITIES. CONTRACTOR SHALL POT HOLE AND FIELD VERIFY EXISTING UNDERGROUND UTILITY SIZE AND LOCATIONS AT CRITICAL LOCATIONS PRIOR TO CONSTRUCTION, AND NOTIFY ENGINEER IF DISCREPANCIES EXIST.

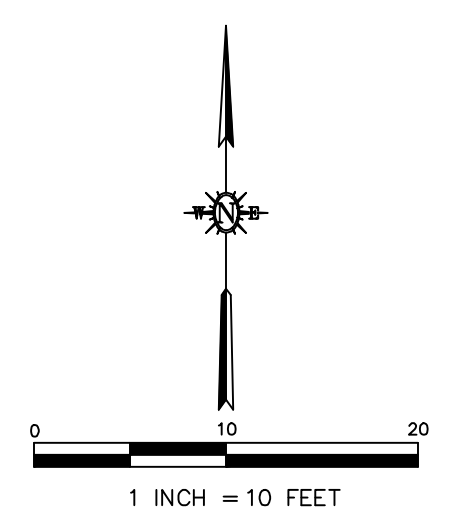
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CONSTRUCTION NOTES

- (20) CONNECT PROPOSED SEWER TO EXISTING SEWER LATERAL.
- (21) EXISTING 5/8" WATER METER. UPSIZING PER CITY REQUIREMENTS.
- (22) PROPOSED UNDERGROUND ELECTRICAL SERVICE.
- (23) ON-SITE DETENTION SYSTEM.



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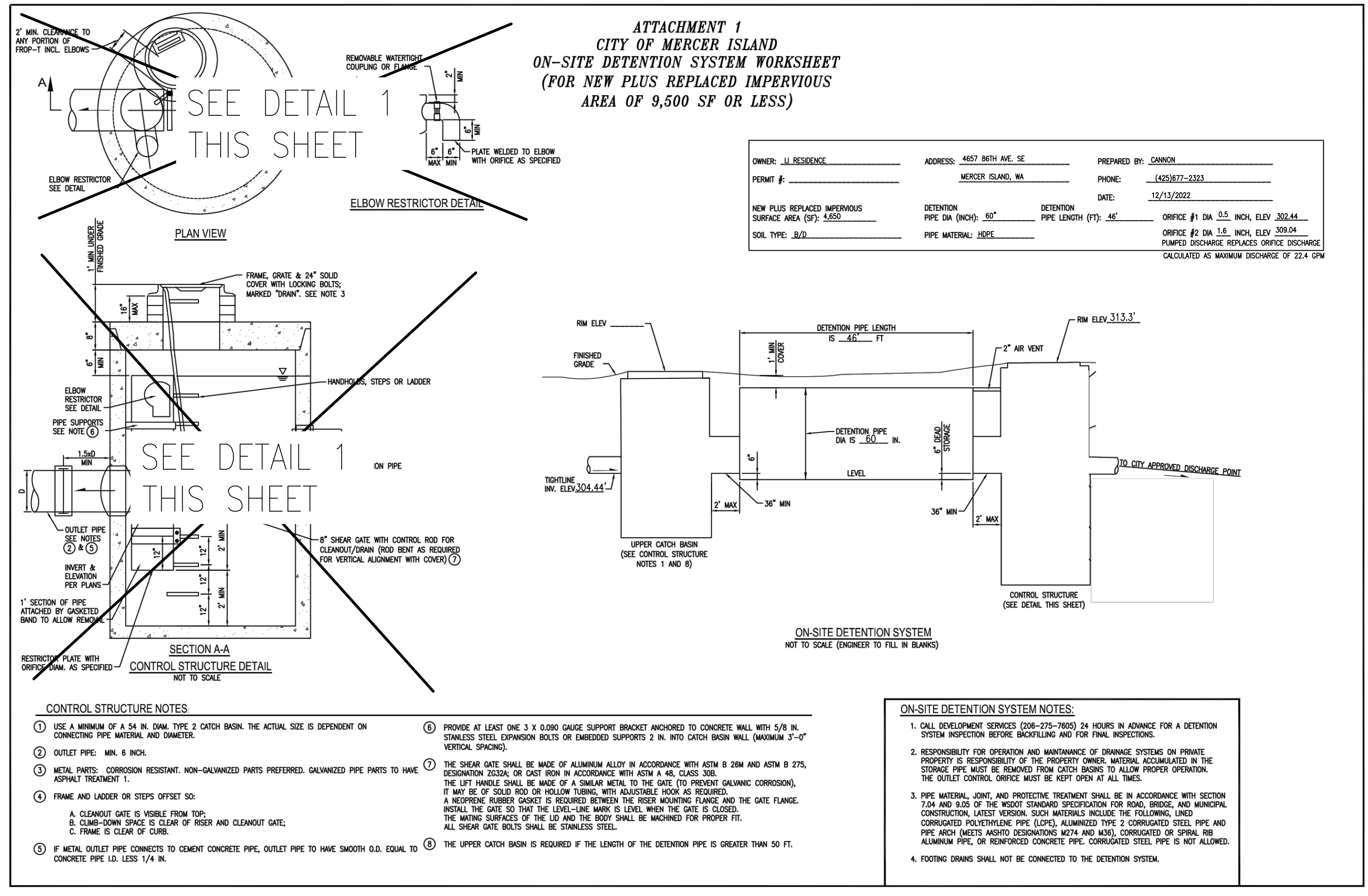


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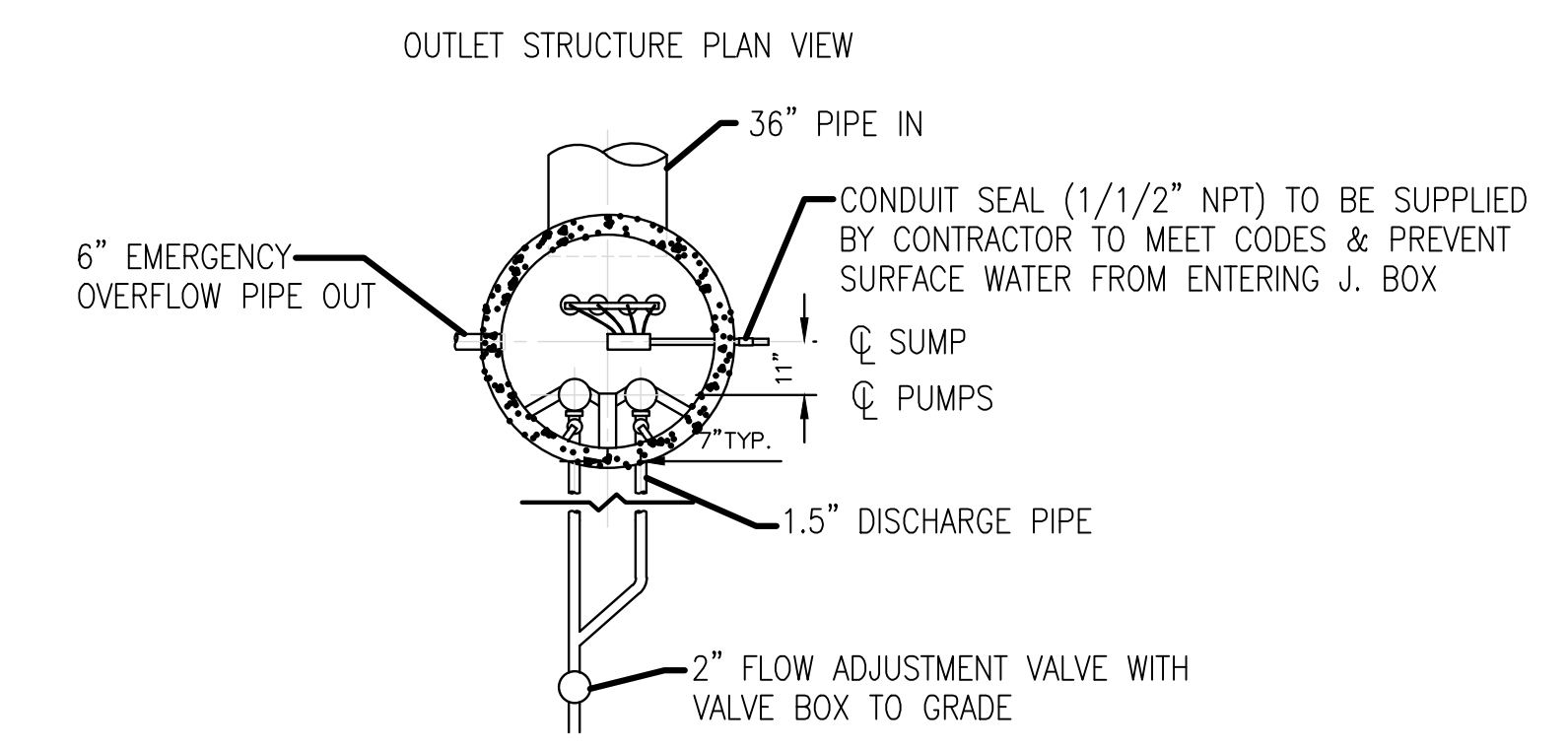
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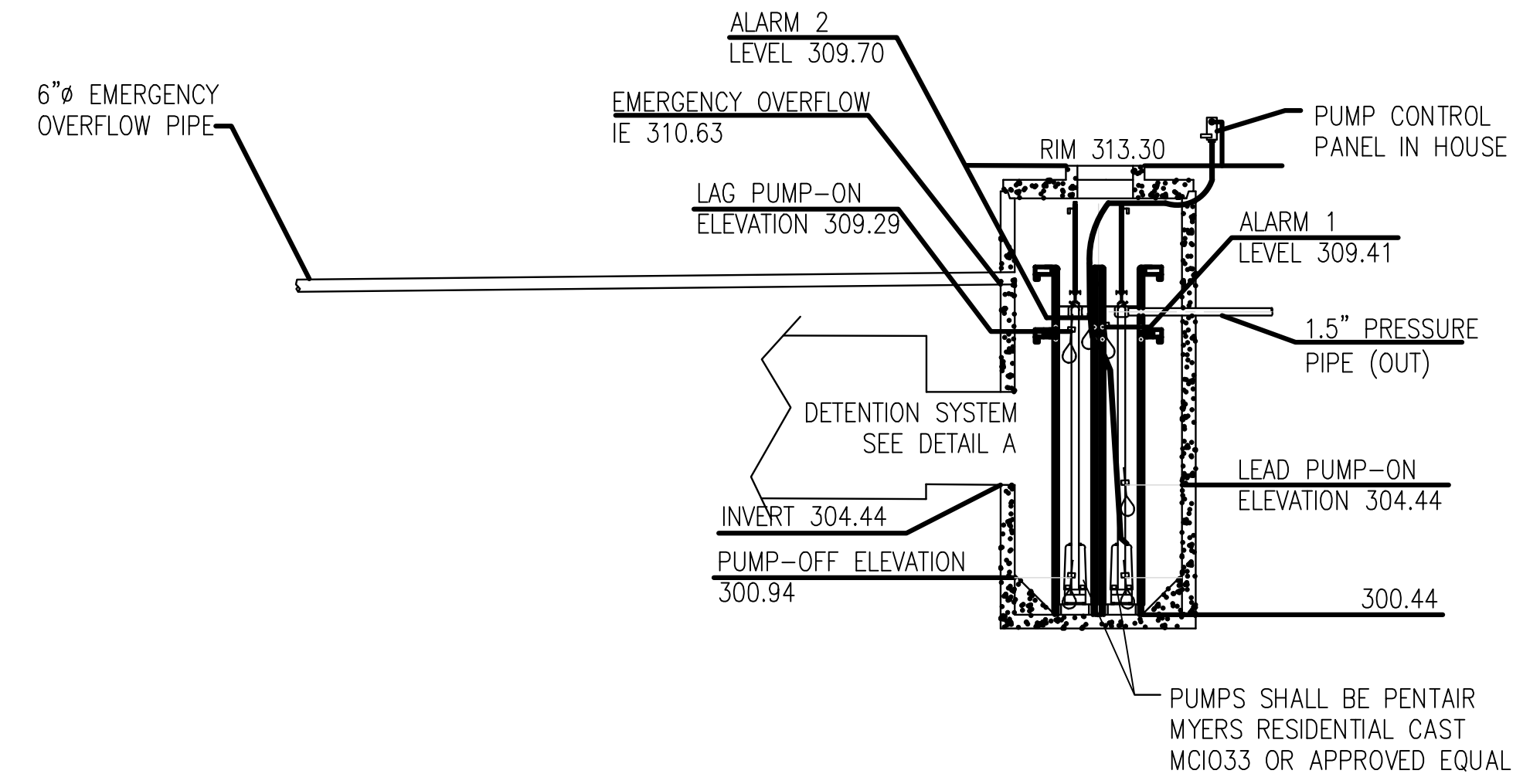
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- SPECIFICATIONS:**
- PROVIDE DUPLEX PUMP SYSTEM
 - TOTAL ESTIMATED HEAD LOSS (INCLUDING ELEVATION, FRICTION FITTINGS) = 13.74 FT - WITH ADJUSTMENT VALVE OPEN
 - PUMPS SHALL HAVE VARIABLE OUTPUT CAPABILITY WITH 22.4 GPM TO STORM DRAIN SYSTEM.
 - PUMPS AND CONTROLS SHALL HAVE 5 YEAR MINIMUM WARRANTY
 - PUMPS SHALL BE PENTAIR MYERS RESIDENTIAL CAST MCI033, OR APPROVED EQUAL PER MANUFACTURER'S ENGINEERED DESIGN.
 - SUPPLIER SHALL CONFIRM TOTAL DYNAMIC HEAD BASED ON PIPING PLAN AND PROVIDE PUMP SYSTEM DESIGN AND EQUIPMENT DATA FOR APPROVAL PRIOR TO INSTALLATION.
 - ANY CONTROLS LOCATED IN PUMP STRUCTURE SHALL BE WATER AND EXPLOSION PROOF.
 - CONTROL PANEL SHALL BE SJE/RHOMBUS DUPLEX ALTERNATING WITH NEMA 4X ENCLOSURE, HIGH WATER ALARM, MOTOR CONTRACTOR, RUN LIGHTS, H-O-A SWITCH (OR APPROVED EQUAL).
 - POWER SUPPLY FROM HOUSE PANEL BY CONTRACTOR SUBJECT TO BUILDING ELECTRICAL INSPECTION. COORDINATE PUMP SELECTION WITH POWER SUPPLY.



ON-SITE DETENTION SYSTEM **A**



STORMWATER DETENTION AND PUMP STATION **1**

NOT TO SCALE

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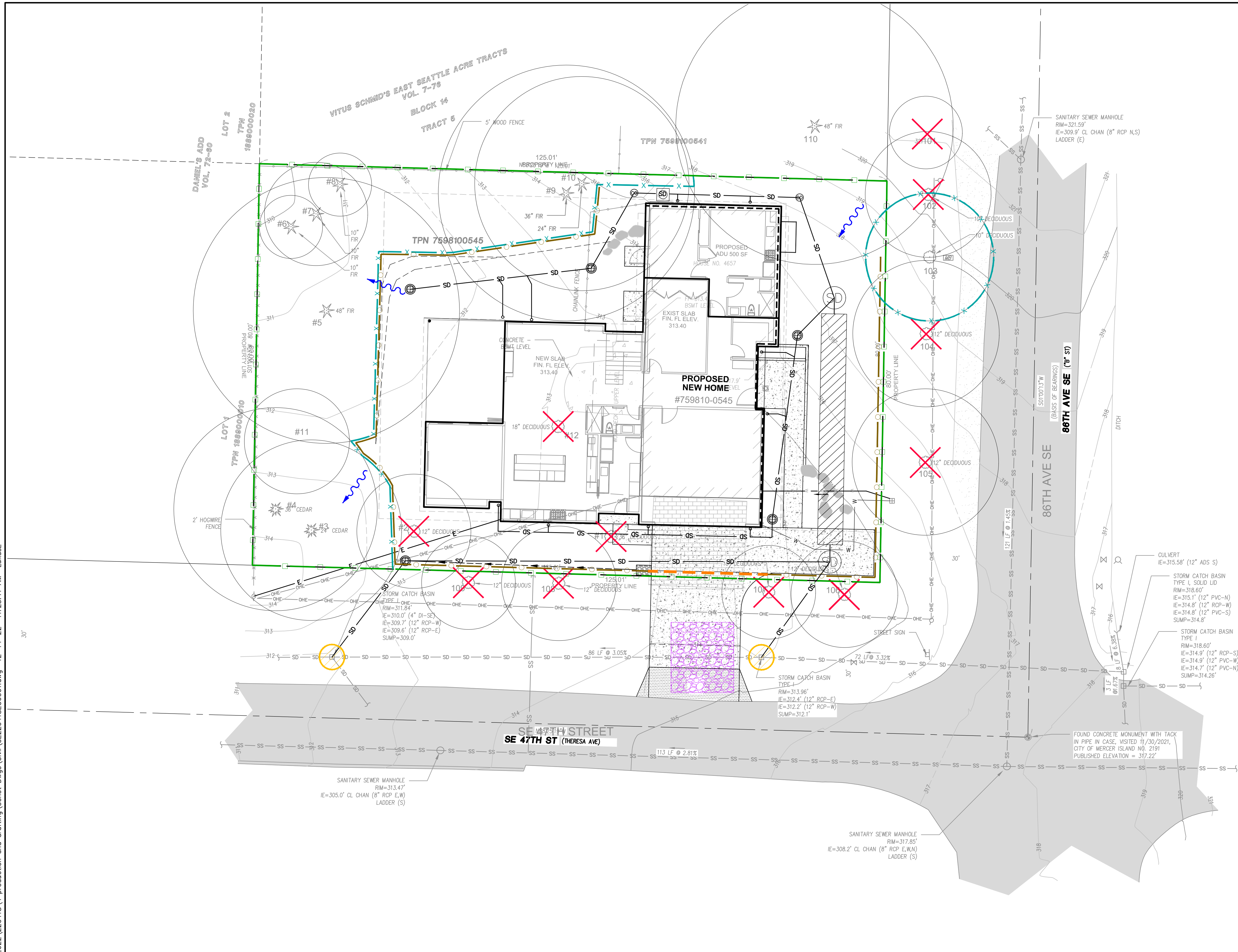
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T.E.S.C. LEGEND

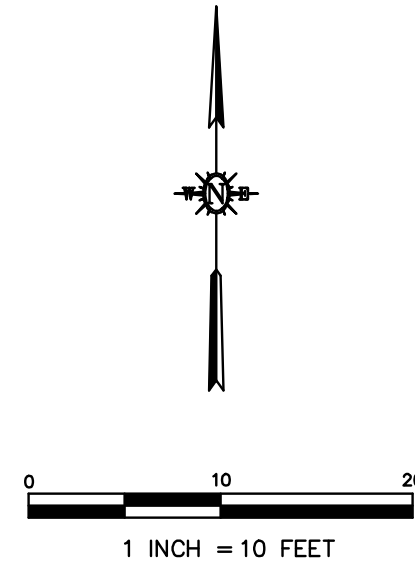
- LIMIT OF DISTURBANCE FENCE
- REINFORCED SILT FENCING PER DETAIL 4 SHEET C9
- WATTLES PER DETAIL 2 SHEET C8
- TEMPORARY CONSTRUCTION ENTRANCE PER DETAIL 1 SHEET C8
- DIRECTION OF SURFACE FLOW
- TREE PROTECTION, INSTALL HIGH VISIBILITY FENCING PER DETAIL 5 SHEET C9
- STORM DRAIN PROTECTION PER DETAIL 3 SHEET C8
- REMOVE TREE, COORDINATE WITH LANDSCAPE PLANS & ARBORIST

ALL DISTURBED SOIL AREAS SHALL BE TREATED WITH SOIL AMENDMENT PER DETAIL B ON SHEET C4.

CONTRACTOR TO INSTALL AND MAINTAIN ALL EROSION CONTROL BMP'S AS SHOWN ON THIS PLAN IN ACCORDANCE WITH DEPARTMENT OF ECOLOGY STORMWATER POLLUTION PREVENTION REQUIREMENTS SUMMARIZED ON SHEETS C7 & C9. IF BMP INSTALLATION AND MAINTENANCE IS INADEQUATE TO MEET THESE REQUIREMENTS CONTRACTOR TO PROVIDE ADDITIONAL BMP'S AT NO ADDITIONAL COST TO OWNER.

CONFIRM TREES TO BE PROTECTED, REMOVED, AND PRESERVATION MEASURES WITH PROJECT ARBORISTS.

DISCHARGE CLEAN, NON-TURBID DEWATERING WATER DIRECTLY TO SURFACE WATER. DEWATERING WATER WHICH HAS SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE SHOULD BE DISCHARGED TO SEDIMENT TRAP.

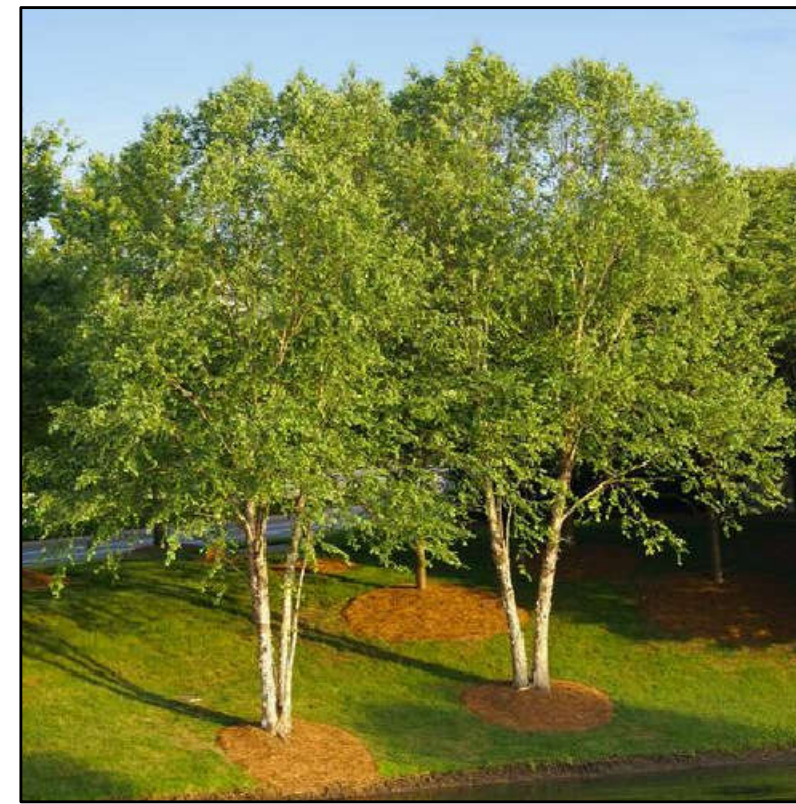


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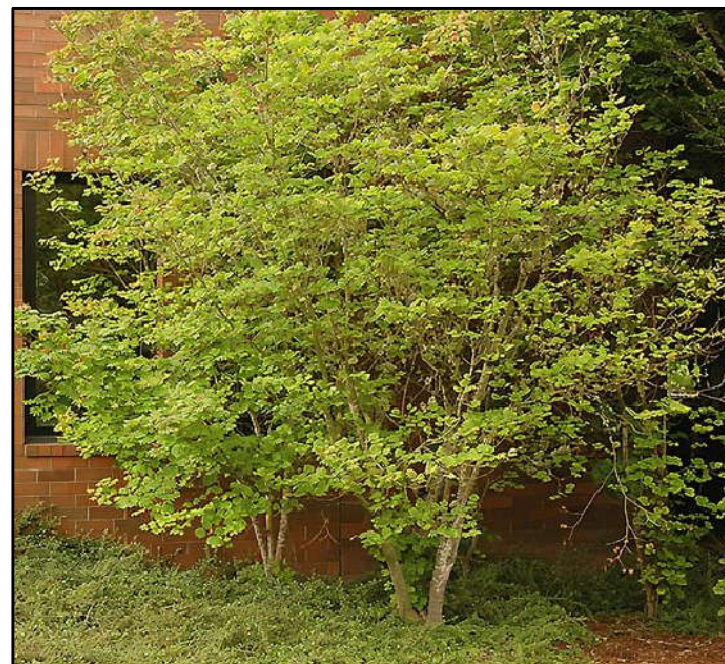
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TESC PLAN		
MERCER ISLAND, WASHINGTON		
DRAWN BY SEM	DATE 10/11/2022	CA JOB NO. 220418
CHECKED BY KR	SCALE AS SHOWN	SHEET C6 OF 8



A HERITAGE RIVER BIRCH

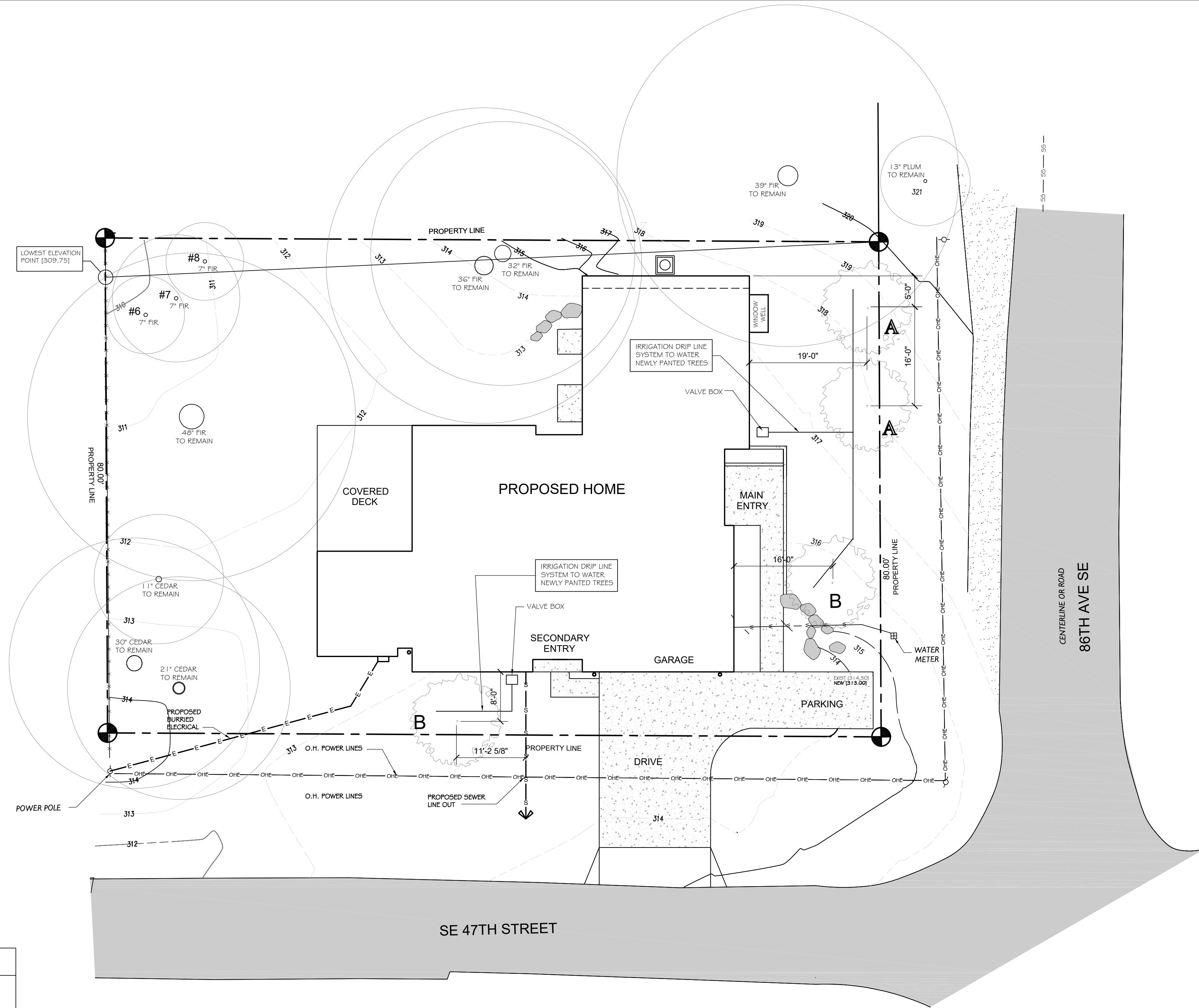


B VINE MAPLE

REQUIRED TREE REPLACEMENT PER ARBORIST REPORT
(8) REPLACEMENT TREES IN "ROW"
(3) TREES REQUIRED IN ROW
50% OF REPLACEMENT TREES TO NATIVE SPECIES

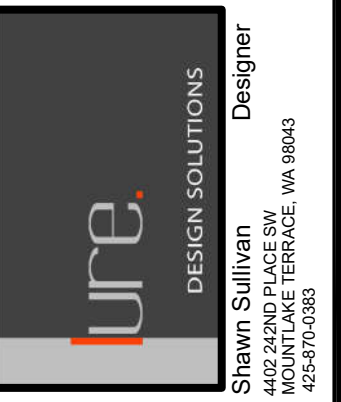
FEE IN LIEU OF REPLACEMENT
A POWER LINE EXISTS IN THE CENTER OF THE "ROW" THUS IT IS NOT CONDUCTIVE TO REPLANTING THE (8) REQ'D TREES. THE FEE IN LIEU OF REPLACEMENT WILL BE THE ONLY OPTION.

TREE WATERING
AN IRRIGATION DRIP LINE SYSTEM IS PROVIDED FOR WATERING NEWLY PLANTED TREES



PLAN ID	QUANTITY	REPLANTING TREE LIST (ON PROPERTY)	SIZE	
A	2	HERITAGE RIVER BIRCH	1.5 INCH DIA MIN	NOT NATIVE
B	2	VINE MAPLE - ACER CIRCINATUM	1.5 INCH DIA MIN	NATIVE
TOTAL	5			

Misc. Info:
1. FINAL CD SET 10-14-2022
2.
3.
4.
5.



LI RESIDENCE
CUSTOM RESIDENCE
4657 86TH AVE. SE
MERCER ISLAND, WA 98040

TREE REPLANTING PLAN

DATE:	01-04-2022
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2022- 01
SHEET:	

L1.0