

TODA CUSTOM RESIDENCE

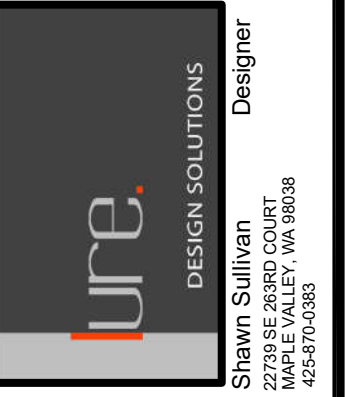
WEAVER CONSTRUCTION

2262 78TH AVE SE
MERCER ISLAND, WA 98040
PARCEL NUMBER 531510-1697

Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	08-28-2025
8.		

PERMIT SET



PERSPECTIVE IMAGE



PROJECT PARTICIPANTS

OWNER:	JOHN AND JUNG TODA PH: 206-818-7452
CONTRACTOR:	WEAVER CONSTRUCTION WILLIAM WEAVER PH: (408) 348-3095
STRUCTURAL ENGINEER:	CSES EVAN APOLIS 6311 17TH AVE NE SEATTLE, WA 98115 PH: 206-527-1288
DESIGNER / DRAFTSMAN:	LURE DESIGN SOLUTIONS SHAWN SULLIVAN 22739 SE 263RD CT MAPLE VALLEY, WA 98038 PH: (425) 870-0383
CIVIL ENGINEER:	ESM CONSULTING ENGINEERS BRANDON LOUCKS 33400 8TH AVE S STE 205 FEDERAL WAY, WA 98003 PH: (253) 838-6113
ARBORIST:	BENJAMIN MARK 11415 NE 128TH ST, SUITE 110 KIRKLAND, WA 98034 PH: (425)-820-3420.

PROJECT DATA

JURISDICTION:	MERCER ISLAND
PROJECT SITE:	2262 78TH AVE SE MERCER ISLAND, WA 98040
PARCEL NO.:	531510-1697
PRESENT USE:	SINGLE FAMILY RESIDENCE
ZONING.:	R8.4
LOT SIZE:	12,197 SF.....28 ACRES
PROPERTY TYPE:	R
ENVIRONMENTAL :	STREAM / DITCH
WATER :	WATER DISTRICT
SEWER/SEPTIC:	PUBLIC
DRAINAGE	PER CIVIL ENGINEER

DRAWING INDEX

ARCHITECTURAL

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A5.1	WALL SECTIONS
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A5.3	WALL SECTIONS
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A6.2	DOOR SCHEDULE AND TYPES

LEGAL DESCRIPTION

MC GILVARAS ISLAND ADD LOT B CITY OF
MERCER ISLAND PLAT 77-1-021 REC AF
#770801 OG 12 SD PLAT DAF
LOT 2 BLK 21 L555 N 105 FT OF W 100 FT
PLAT BLOCK: 21
PLAT LOT: 2

SURVEY

SHT-1 TOPO-SURVEY

STRUCTURAL

S0	STRUCTURAL NOTES
S1	FOUNDATION AND SHEAR WALL PLAN
S2	MAIN FLOOR FRAMING PLAN
S3	MAIN FLOOR SHEAR WALL AND BEAM PLAN
S4	LOWER ROOF FRAMING PLAN
S5	HIGH ROOF FRAMING PLAN
S6	MISC DETAILS AND SHEAR WALL SCHEDULE
S7	MISC. DETAILS
S8	MISC. DETAILS

CIVIL

C1	DEMO & TESC PLAN
C2	DRAINAGE & GRADING PLAN
C3	NOTES AND DETAILS

EXISTING SQUARE FOOTAGE

EXISTING LOWER FLOOR (FNDTN TO REMAIN)	1046 SF
EXISTING UPPER FLOOR (TO BE REMOVED)	480 SF
TOTAL LIVING	1526 SF
EXISTING GARAGE	616 SF
EXISTING GARAGE SIDEWALK (TO BE REMOVED)	75 SF
EXISTING ENTRY SIDEWALK / STEPS (TO BE REMOVED)	158 SF
EXISTING REAR PATIO (TO BE REMOVED)	221 SF
EXISTING DRIVEWAY (TO BE REMOVED)	840 SF

PROJECT DESCRIPTION

DEMO / REMOVE AN EXISTING RESIDENCE WITH ATTACHED GARAGE. THE EXISTING FOUNDATION AND GARAGE SLAB WILL BE REMAIN AND BE MODIFIED AS REQUIRED TO ACCOMMODATE THE NEW HOME'S FOOTPRINT.

A NEW ONE STORE RESIDENCE WITH 2 CAR GARAGE WILL BE CONSTRUCTED ON THE EXISTING FOUNDATION WITH MODIFICATIONS. A NEW ADDITION WILL BE ADDED TO THE NORTH SIDE OF THE HOME W/ RELATED FOUNDATION/CRAWLSPACE.

THE SITES DRAINAGE WILL BE UPGRADED PER THE ATTACHED CIVIL ENGINEERING DESIGNS.

TREES ARE PROPOSED TO BE REMOVED AND ARE IDENTIFIED IN THE ARBORIST REPORT.

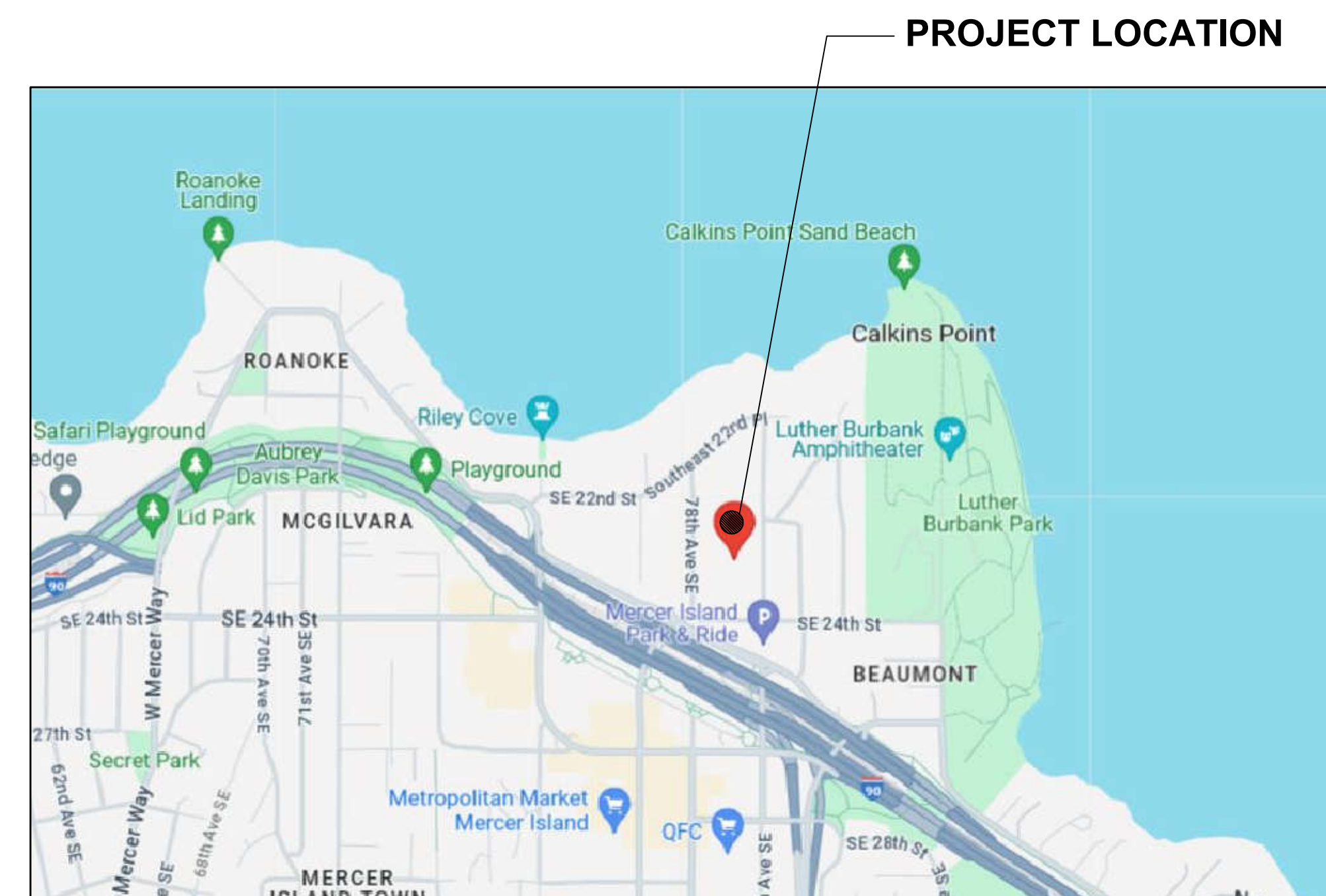
CODE SUMMARY

- MERCER ISLAND CITY CODE (MICC)
- 2021 INTERNATIONAL BUILDING CODE (IRC)
- 2018 INTERNATIONAL MECHANICAL CODE (IMC)
- 2018 INTERNATIONAL FIRE CODE (IFC)
- WASHINGTON STATE ENERGY CODE (WSEC)
- 2018 UNIFORM PLUMBING CODE (UPC)

PROPOSED SQUARE FOOTAGE

EXISTING LOWER FLOOR (FOOTPRINT)	1046 SF
NEW 3' WEST SIDE ADDITION / EXTENSION	84 SF
NEW ENTRY ADDITION / MODIFICATION	11 SF
NEW LARGE REAR ADDITION	1734 SF
REMOVE SMALL ENTRY AREA	-5 SF
TOTAL LIVING (ONE STORY)	2870 SF
GARAGE (MODIFIED)	538 SF
NEW COVERED PATIO W/ STEPS	293 SF
NEW DRIVEWAY	657 SF
NEW ENTRY STEPS / SIDEWALK	220 SF
NEW COURTYARD STEPS / LANDING	34 SF

VICINITY MAP



SYMBOLS

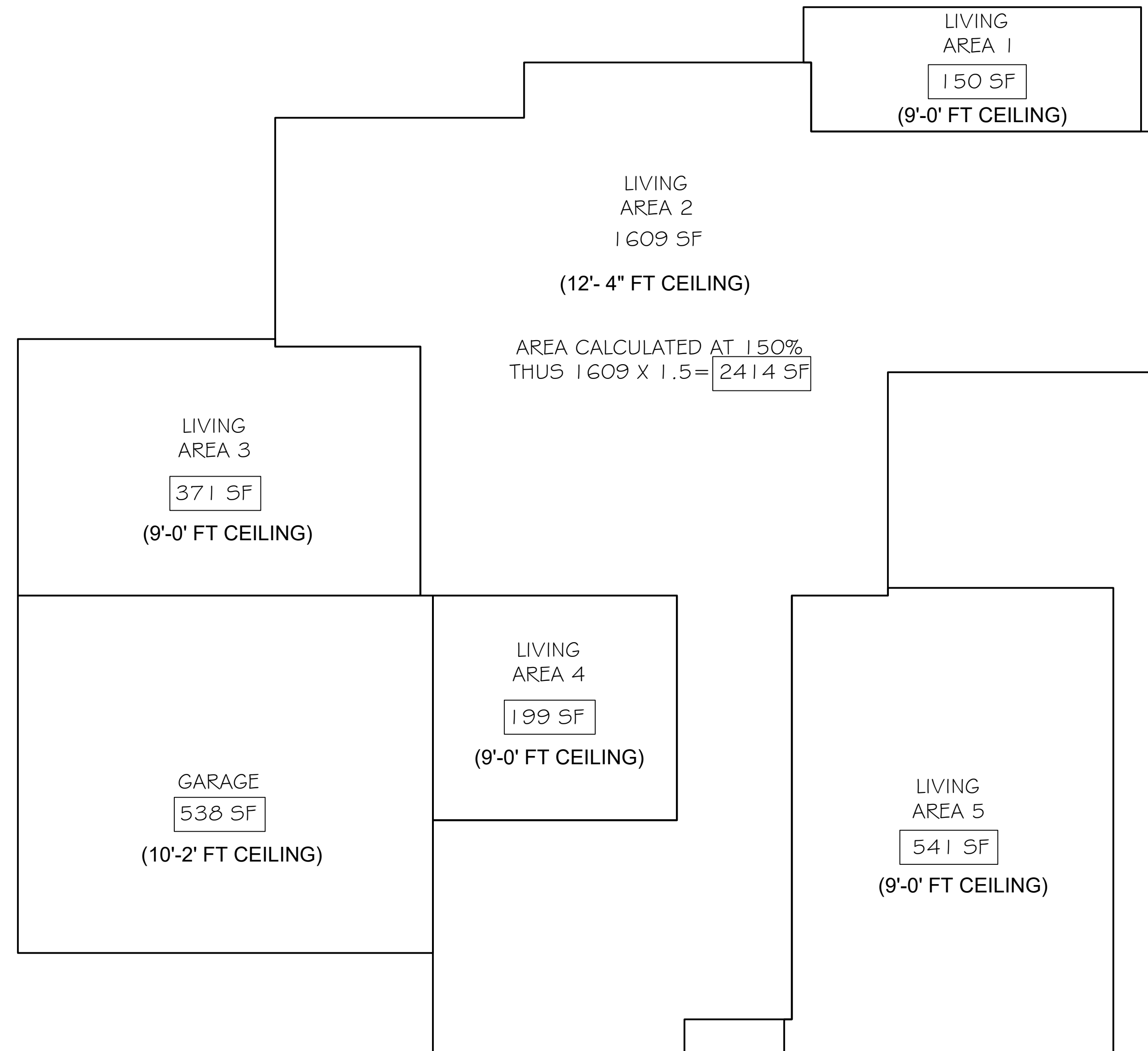
BUILDING SECTION OR WALL SECTION REFERENCE		DRAWING NUMBER		REVISION NUMBER		MASONRY
EXTERIOR ELEVATION REFERENCE		DRAWING NUMBER		REVISION NUMBER		CONCRETE
INTERIOR ELEVATION REFERENCE		DRAWING NUMBER		REVISION NUMBER		INSULATION (LOOSE OR BATT)
DETAIL REFERENCE		DRAWING NUMBER		REVISION NUMBER		INSULATION (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

Toda Residence
REMODEL / FNDTN UPGRADES
2262 78TH AVE SE 98040
MERCER ISLAND, WA 98040

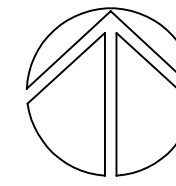
COVER SHEET

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO.:	2024- 06
SHEET:	

A0



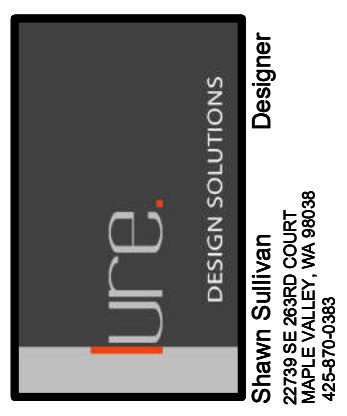
ZONING	
ZONING -	R8.4
ALLOWABLE GFA	
ALLOWABLE GFA IS 40% OF LOT AREA -	
12,197 X .40 =	4878 SF
OR MAX 5000 SF	
GFA CALCULATIONS	
<u>MAIN FLOOR GFA</u>	
LIVING AREA #1 -	150 SF
LIVING AREA #2 -	2414 SF
LIVING AREA #3 -	371 SF
LIVING AREA #4 -	199 SF
LIVING AREA #5 -	541 SF
<hr/>	
GARAGE -	538 SF
<hr/>	
TOTAL PROPOSED GFA =	4213 SF
4213 SF < ALLOWABLE 4878 SF THUS OK	


GFA DIAGRAM
 Weaver Construction- Toda Residence SCALE: 3/16"=1"-0"

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8.		

PERMIT SET

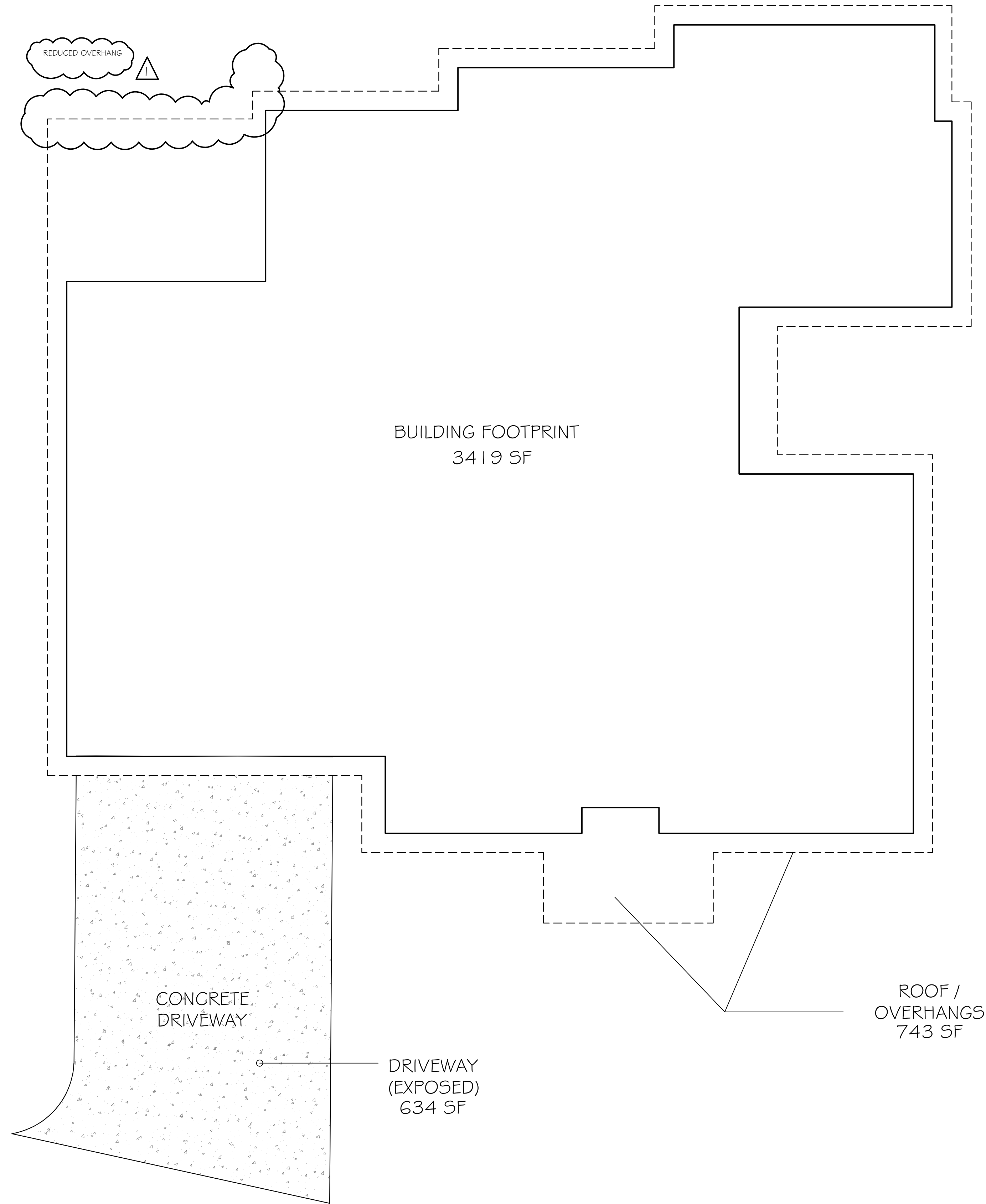


Toda Residence
 REMODEL / FNDTN UPGRADES
 2262 78TH AVE SE 98040
 MERCER ISLAND, WA 98040

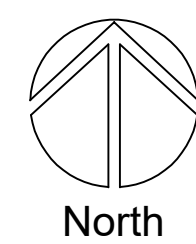
PROPOSED GFA CALCULATIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A.1.1



LOT COVERAGE	
LOT AREA -	12,197 SF
ALLOWABLE LOT COVERAGE -	40%
12,197 X .40=	4878 SF
PROPOSED LOT COVERAGE -	
HOME FOOTPRINT (INCLUDES GARAGE)	3410 SF
OVER HANGS	718 SF
DRIVEWAY / PAVED ACCESS-	634 SF
TOTAL PROPOSED=	4762 SF
4762 SF < ALLOWABLE 4878 SF THUS OK	



LOT COVERAGE DIAGRAM

Weaver Construction- Toda Residence

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

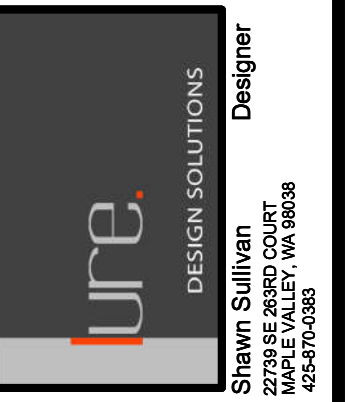
 HATCH REPRESENTS
DRIVEWAY / PARKING

 HATCH REPRESENTS
(ROOF OVERHANGS AND BUILDING CANTILEVERS ETC.)

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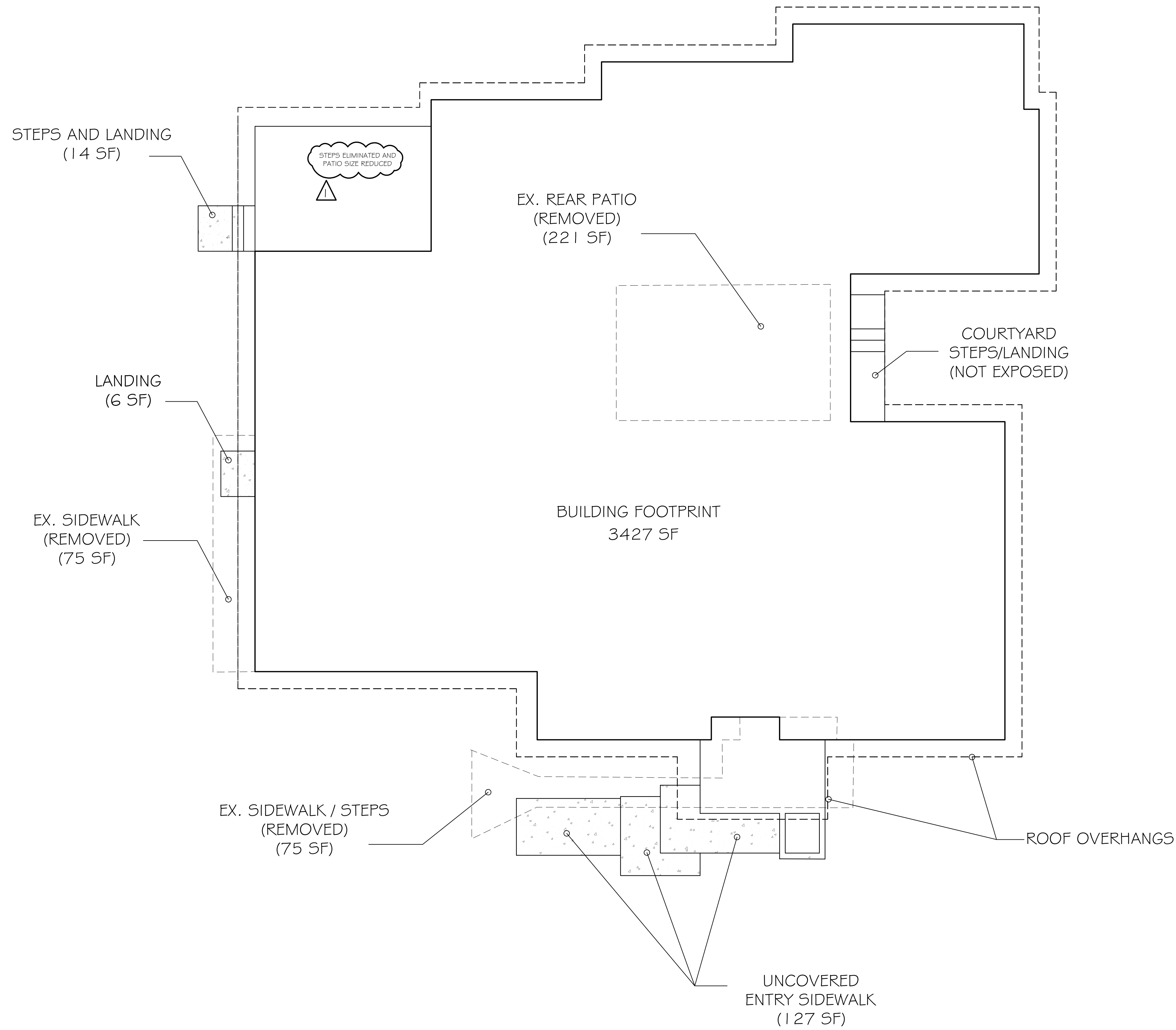


Toda Residence
REMODEL / FNDTN UPGRADES
2262 78TH AVE SE 98040
MERCER ISLAND, WA 98040

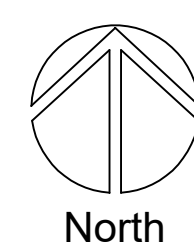
LOT COVERAGE
DIAGRAM / CALCS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A1.2



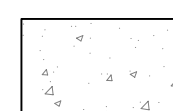
HARDSCAPE	
LOT AREA -	12,197 SF
ALLOWABLE HARDSCAPE -	9%
	12,197 X .09= 1097 SF
EXISTING HARDSCAPE (ALL TO BE REMOVED)	
SIDEWALK (GARAGE)	75 SF
REAR PATIO	221 SF
ENTRY SIDEWALK / STEPS	158 SF
TOTAL =	454 SF
PROPOSED HARDSCAPE -	
UNCOVERED ENTRY SIDEWALK/STEPS	127 SF
UNCOVERED REAR STEPS OFF PATIO	14 SF
UNCOVERED LANDING AT GARAGE MAN DOOR	6 SF
TOTAL PROPOSED=	147 SF
147 / 12,197= .012 1.2% THUS OK	



HARDSCAPE DIAGRAM

Weaver Construction- Toda Residence

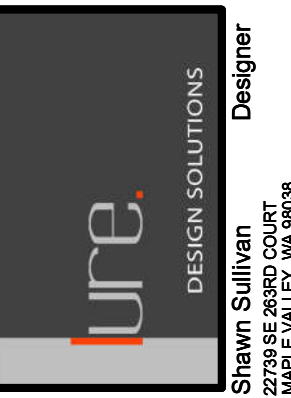
SCALE: 3/16"=1"-0"



PROPOSED EXPOSED HARDSCAPE

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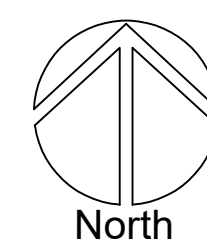
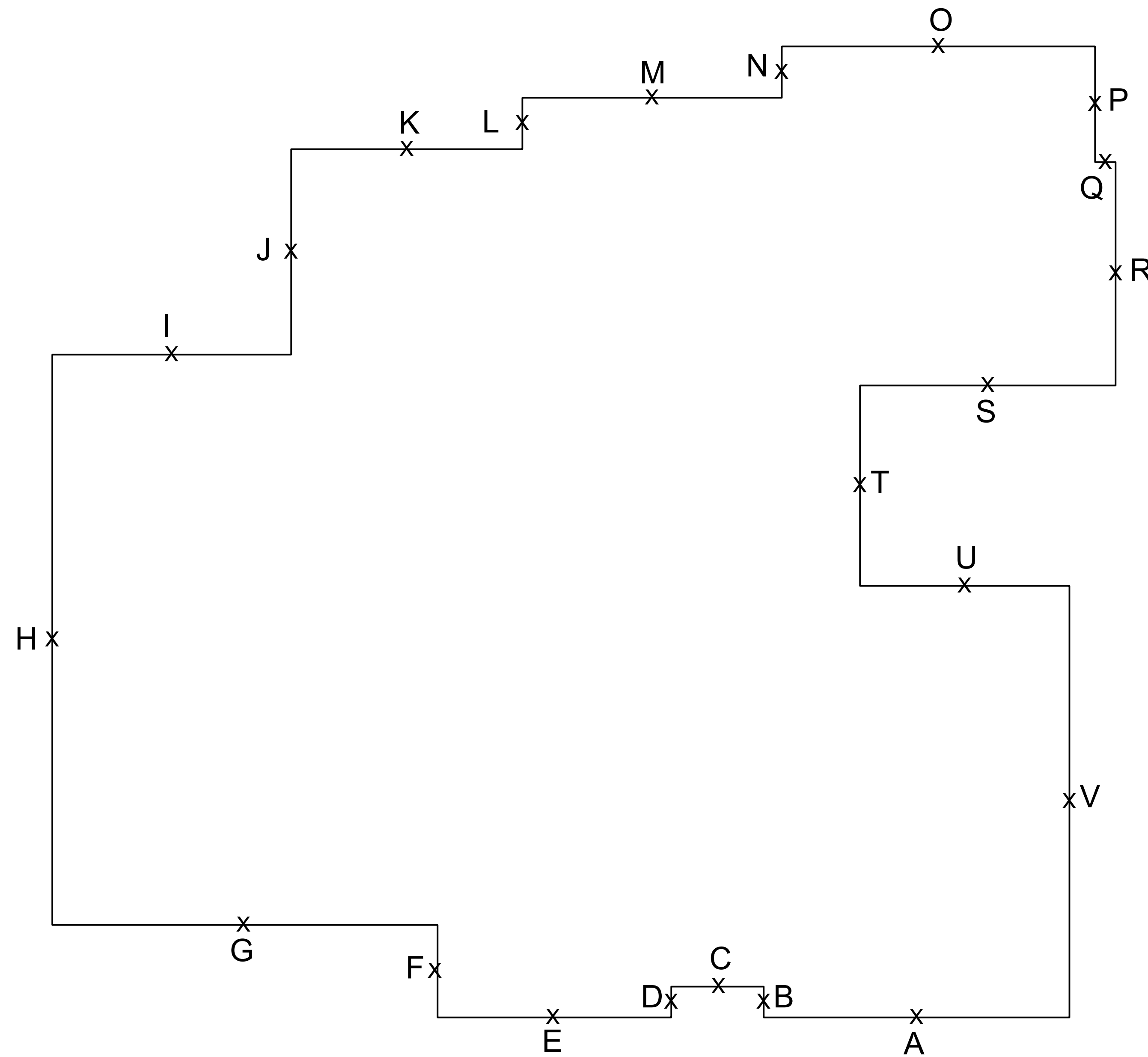


Toda Residence
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HARDSCAPE COVERAGE
 DIAGRAM / CALCS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024-06
SHEET:	

A1.3



AVERAGE BLDG ELEV- PLAN / DIAGRAM

Weaver Construction- Toda Residence

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

CHART ELEV X WALL LENGTH = SUM

SEGMENT	EXIST ELEV.	WALL LENGTH	SUM
A	78.00	19.83'	1546.74
B	79.25	2.00'	158.50
C	79.25	6.00'	475.50
D	79.25	2.00'	158.50
E	77.62	15.16'	1176.71
F	77.62	6.00'	465.72
G	78.00	25.00'	1950.00
H	77.35	37.00'	2861.95
I	77.28	15.50'	1197.84
J	77.28	13.33'	1030.14
K	77.25	15.00'	1158.75
L	77.25	3.33'	257.24
M	77.25	16.83'	1300.11
N	77.25	3.33'	257.24
O	77.00	20.33'	1570.49
P	77.00	7.50'	577.50
Q	77.00	1.33'	102.33
R	77.09	14.50'	1117.80
S	77.17	16.58'	1279.47
T	77.17	13.00'	1003.21
U	77.17	13.58'	1047.96
V	77.80	28.00'	2178.40
TOTALS		295.13'	22,872.10

FORMULA(AVERAGE BUILDING ELEV)

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

$$\frac{22,872.10}{295.13} = 77.50 \text{ (ABE)}$$

ALLOWABLE BUILDING HEIGHT MAX

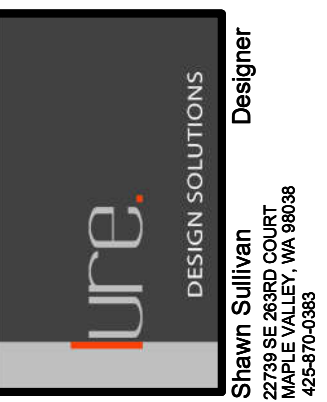
ALLOWABLE BUILDIN HT + 30' ABOVE (ABE)

$$77.50(\text{ABE}) + 30 = \text{ELEV } 107.50'$$

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Toda Residence
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 MERCER ISLAND, WA 98040

AVERAGE BUILDING ELEV
 DIAGRAM / CALCS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A1.4

PROPOSED REPLACEMENT TREES



- A** RED MAPLE
- B** RED LACE LEAF JAPANESE MAPLE
- C** VINE MAPLE
- D** DOUGLAS FIR

TREE REPLANTING PER MICC19.10

- TREES CAN BE REPLANTED BENEATH THE CANOPY OF EXISTING TREES.
- NEW TREES TO BE PLANTED NO LESS THAN 10 FEET FROM OTHER TREES, FENCES, STRUCTURES OR UTILITIES
- 50% OF NEW REPLACEMENT TREES TO BE NATIVE SPECIES
- CONIFEROUS REPLACEMENT TREES MUST BE MIN. 6 FEET TALL
- DECIDUOUS REPLACEMENT TREES MUST BE MIN. 1.5" DIA
- REMOVING TREES LESS THAN 10" REQUIRES (1) REPLACEMENTS
- REMOVING TREES 10" UP TO 24" REQUIRES (2) REPLACEMENTS

TREE WATERING

AN IRRIGATION DRIP LINE / RING SYSTEM WILL BE PROVIDED FOR WATERING NEWLY PLANTED REPLACEMENT TREES.

ARBORIST REPORT

SEE ATTACHED ARBORIST REPORT FOR ADDITIONAL TREE PROTECTION AND ADDITIONAL INFORMATION

PROPOSED TREE TO BE PLANTED

-(3) TREES ARE PROPOSED TO BE REPLANTED WITHIN THE PROPERTY UNDER THE EXISTING TREES CANOPY 10' FROM EXISTING TREES, STRUCTURES AND FENCES. THIS STILL ALLOWS FOR A COMFORTABLE REAR YARDS SPACE FOR LAWN AND LANDSCAPE.

PROPOSED TREE TO BE REMOVED / REQ'D REPLACEMENT

NO.	SPECIES	SIZE	REASON FOR REMOVAL	REPLANTING
107	EMPRESS TREE	12"	NEW CONSTRUCTION ACTIVITY	2
108	LAMBARDY POPLAR	18"	POOR CONDITION	2
110	LAMBARDY POPLAR	10"	POOR CONDITION	2
111	LAMBARDY POPLAR	18"	POOR CONDITION	2
112	NORWAY SPRUCE	13"	NEW CONSTRUCTION ACTIVITY	2
113	DEODAR CEDAR	21"	NEW CONSTRUCTION ACTIVITY	2
114	COTTON WOOD	20"	POOR CONDITION	2
TOTAL REQUIRED TREE REPLACEMENT				14

TREE PROTECTION INFO

TREE PROTECTION AREA (TPZ) KEEP OUT!

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

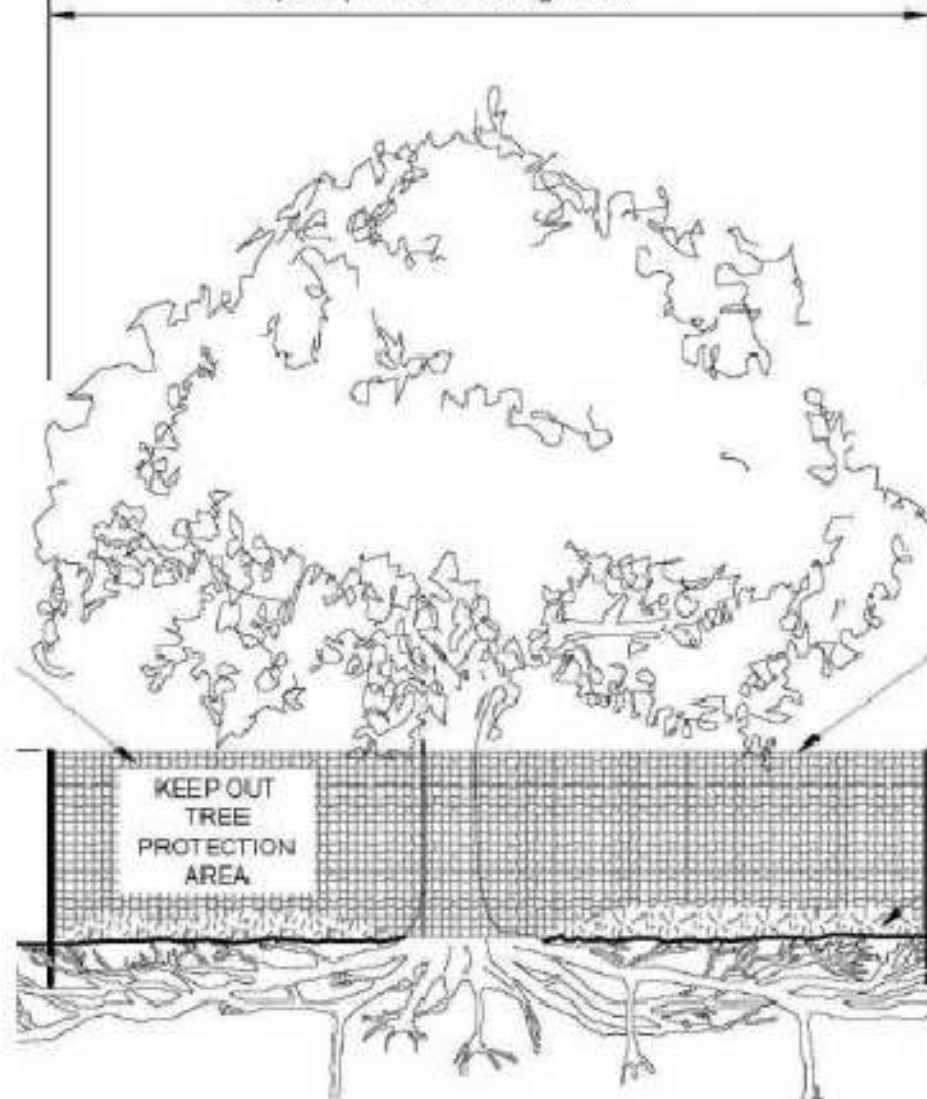
Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

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

Notes

1. No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
2. No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
3. Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
4. Any work in approved TPZ must be with the permission of the Land Use and Planning Division at landuse.planning@mercergov.org
5. 5" course woodchips within the tree protection zone, but not against the tree trunk.

Crown drip line or other limit of Tree Protection area. See Site/Utility Plan for fence alignment.

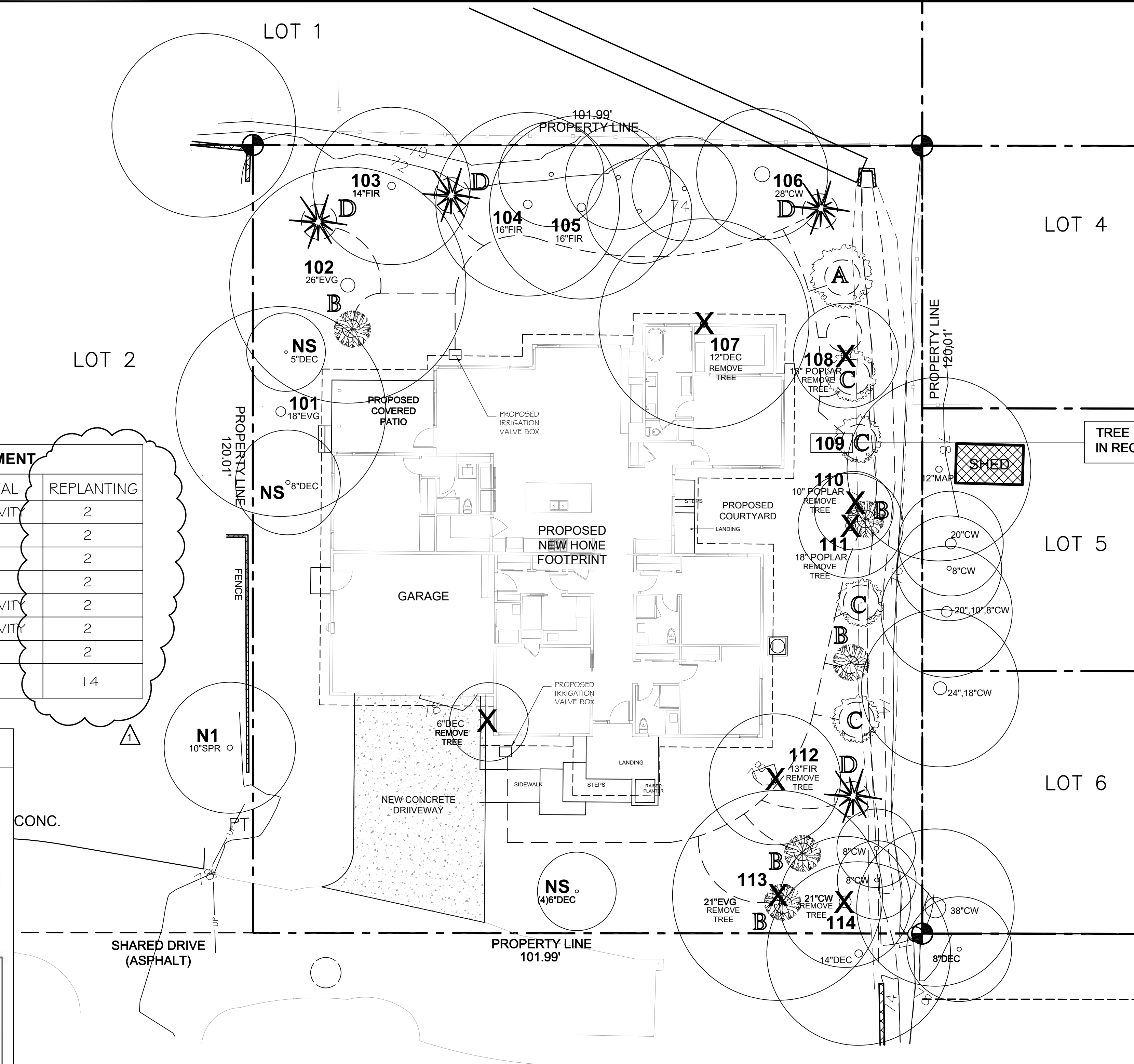


Tree protection fence: 4-6" chain link fence, solidly anchored into the ground, or if authorized High-density polyethylene fencing with 3.5" x 1.5" openings; color orange. Steel posts installed at 8' o.c.

2" x 6" steel posts or approved equal

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

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



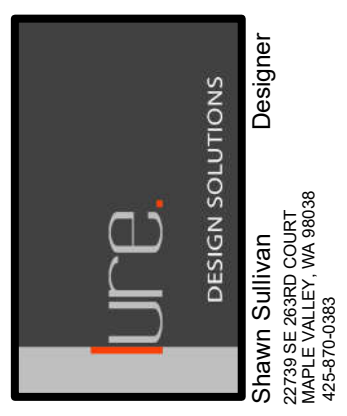
PROPOSED TREE TO BE PLANTED

PLANT ID	QUANTITY	REPLANTING TREE LIST	SPECIES	SIZE	TYPE	SUNLIGHT EXPOSURE
A	1	RED MAPLE	NON- NATIVE	1.5" DIA.	DECIDUOUS	LIGHT TO OPEN SHADE
B	5	JAPANESE MAPLE- (ORANGEOLA) LACE LEAF	NON- NATIVE	1.5" DIA.	DECIDUOUS	LIGHT TO OPEN SHADE
C	4	VINE MAPLE (<i>Acer Circinatum</i>)	NATIVE	1.5" DIA.	DECIDUOUS	LIGHT TO DAPPLE SHADE
D	4	DOUGLAS-FIR(<i>Pseudotsuga menziesli</i>)	NATIVE	6' FT HT MIN.	CONIFEROUS	LIGHT TO OPEN SHADE
TOTAL	14					

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PERMIT SET



Toda Residence
 REMODEL / FNDTN UPGRADES
 2262 78TH AVE SE 98040
 MERCER ISLAND, WA 98040

PROPOSED TREE REMOVAL AND REPLANTING PLAN

DATE: 06-03-24
 DESIGNED: SLS
 DRAWN: SLS
 JOB NO: 2024- 06
 SHEET:

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 3/8 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 TPO OR PVC MEMBRANE ROOFING AT ALL ROOF AREAS PER CONTRACTOR'S SPECIFICATION. PROVIDE TAPERED INSULATION AT MIN. 2" HFT TO DRAIN WATER TO ROOF DRAIN LOCATIONS. ROOFING CONTRACTOR IS RESPONSIBLE FOR ALL WATERPROOFING METHODS.
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 5D OUTSIDE OF BEDROOM DOOR SIGNIFIED BY Ⓢ_{CO}
18. [LANDINGS] IRC R311.4.3
1" Door Width 3/8" 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:
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 M1505.4.3(1)
DWELLING UNIT 2501 SF-3000 SF W/ 6-7 BEDROOMS = 70 CFM MIN. CONTINUOUS OR INTERMITTENT
INTERMITTENT PROVIDE FAN SIZE PER TABLE M1505.4.3(3)
(50% MIN. RUN - TIME EA. 4 HR SEGMENT)
70 CFM X 2 = 140 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 A1-1.5 FOR CODE STUDY INFORMATION
31. PER R302.11, FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE.
32. PER R314.2.3 PROVIDED HEAT DETECTOR OR HEAT ALARM CENTRALLY LOCATION IN GARAGE PER MANUFACTURER'S INSTRUCTIONS SIGNIFIED BY Ⓢ_{HEAT}
33. ALL INTERIOR DOORS TO BE SOLID CORE DOORS WITH THE EXCEPTION OF CLOSETS WITHIN ROOMS.
34. INSTALL TYPE "X" 5/8" GWB ON ALL INTERIOR WALLS AND CEILINGS

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

FIRE SPRINKLER / ALARM

-NFPA 13D (FULL COVERAGE) FIRE SPRINKLER SYSTEM IN COMPLIANCE NFPA 13D AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED - NFPA 72 (CHAPTER 25) MONITORED HOUSEHOLD FIRE ALARM SYSTEM IN COMPLIANCE WITH NFPA 72 AND COMI STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE
-THE SYSTEM MAY TAKE THE PLACE OF LINE-VOLTAGE INTERCONNECTED SMOKE AND CO DETECTORS REQ IN IRC R314.3 AND IRC R315.3.
-RAIN CITY FIRE PROTECTION WILL BE DESIGNING THE SYSTEM AND APPLYING FOR A SEPARATE PERMIT
-TYPE "X" 5/8" GWB INSTALLED ON ALL INTERIOR WALLS AND CEILINGS, INCLUDING GARAGE
-WHERE BOOSTER PUMP IS REQ TO MAINTAIN ADEQUATE WATER FLOW FOR A REQ'D FIRE SPRINKLER SYSTEM, A PERMANENTLY INSTALLED BACKUP POWER SYSTEM MUST BE INSTALLED AND INCLUDE AN AUTOMATIC TRANSFER SWITCH
-ALL INTERIOR DOORS TO BE SOLID CORE DOORS (WITH EXCEPTION OF CLOSETS)

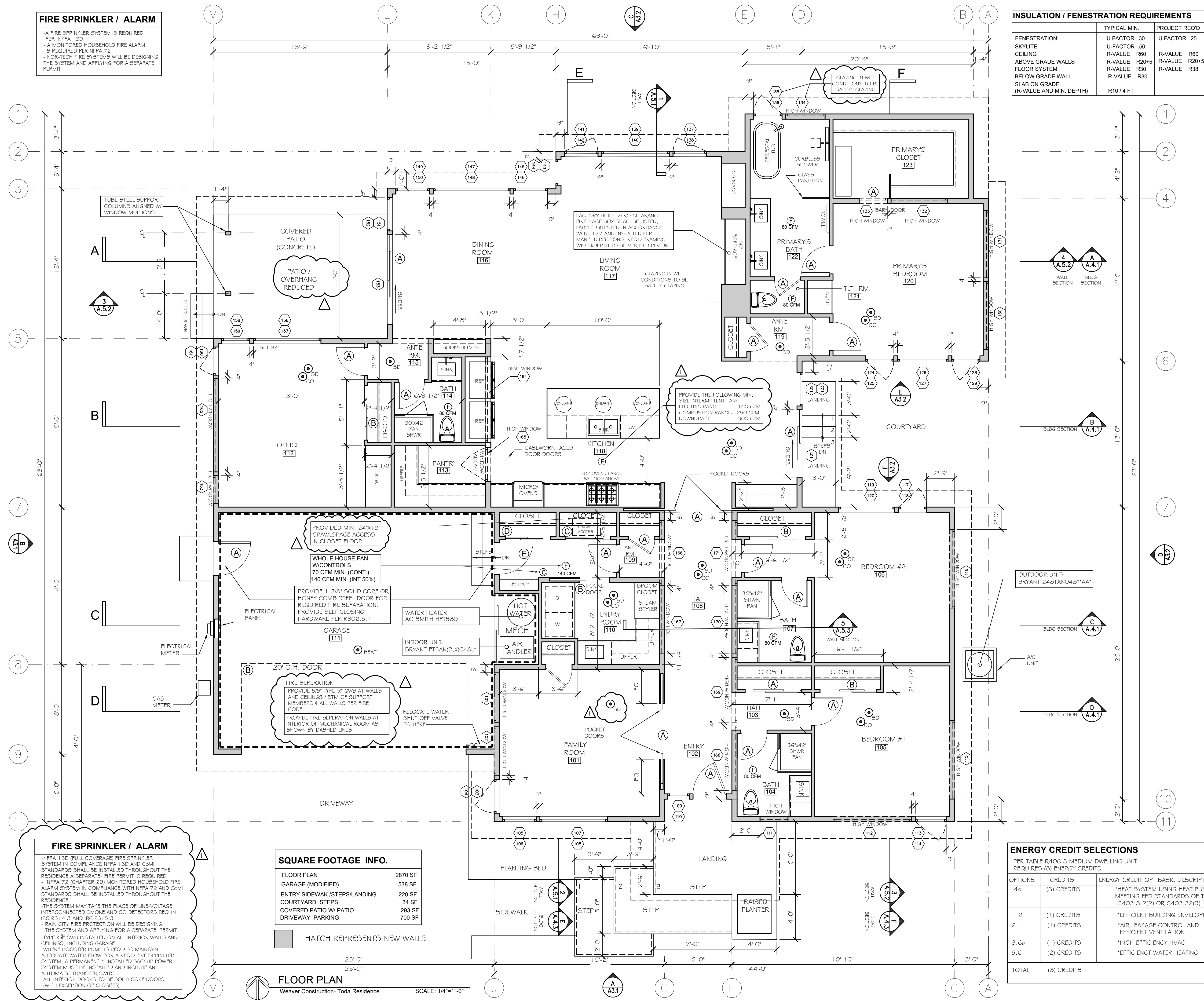
SQUARE FOOTAGE INFO.

FLOOR PLAN	2870 SF
GARAGE (MODIFIED)	538 SF
ENTRY SIDEWALK /STEPS/LANDING	220 SF
COURTYARD STEPS	34 SF
COVERED PATIO W/ PATIO DRIVEWAY PARKING	293 SF
	700 SF

HATCH REPRESENTS NEW WALLS

FLOOR PLAN

Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"



INSULATION / FENESTRATION REQUIREMENTS

FENESTRATION:	TYPICAL MIN.	PROJECT REQ'D
SKYLITE:	U FACTOR .30	U FACTOR .25
ABOVE GRADE WALLS	R-VALUE .50	R-VALUE .60
FLOOR SYSTEM	R-VALUE R60	R-VALUE R20+5
BELOW GRADE WALL	R-VALUE R30	R-VALUE R38
SLAB ON GRADE (R-VALUE AND MIN. DEPTH)	R10 / 4 FT	

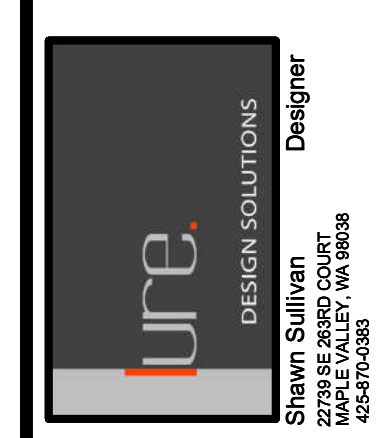
ENERGY CREDIT SELECTIONS

PER TABLE R403.3 MEDIUM DWELLING UNIT
REQUIRES (8) ENERGY CREDITS

OPTIONS	CREDITS	ENERGY CREDIT OPT BASIC DESCRIPTION
4c	(3) CREDITS	*HEAT SYSTEM USING HEAT PUMP MEETING FED STANDARDS OF TABLE C403.3.2(2) OR C403.3.2(9)
1.2	(1) CREDITS	*EFFICIENT BUILDING ENVELOPE
2.1	(1) CREDITS	*AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION
3.6a	(1) CREDITS	*HIGH EFFICIENCY HVAC
5.6	(2) CREDITS	*EFFICIENT WATER HEATING
TOTAL	(8) CREDITS	

- Misc. Info:
1. Concept completed 01-14-2025
 2. 25% DD completed 01-31-2025
 3. 100% DD completed 03-13-2025
 4. 100% DD updated 03-27-2025
 5. 80% CD completed 05-02-2025
 6. 100% Permit Submittal 06-10-2025
 7. Permit REV-1 08-28-2025
 - 8.

PERMIT SET

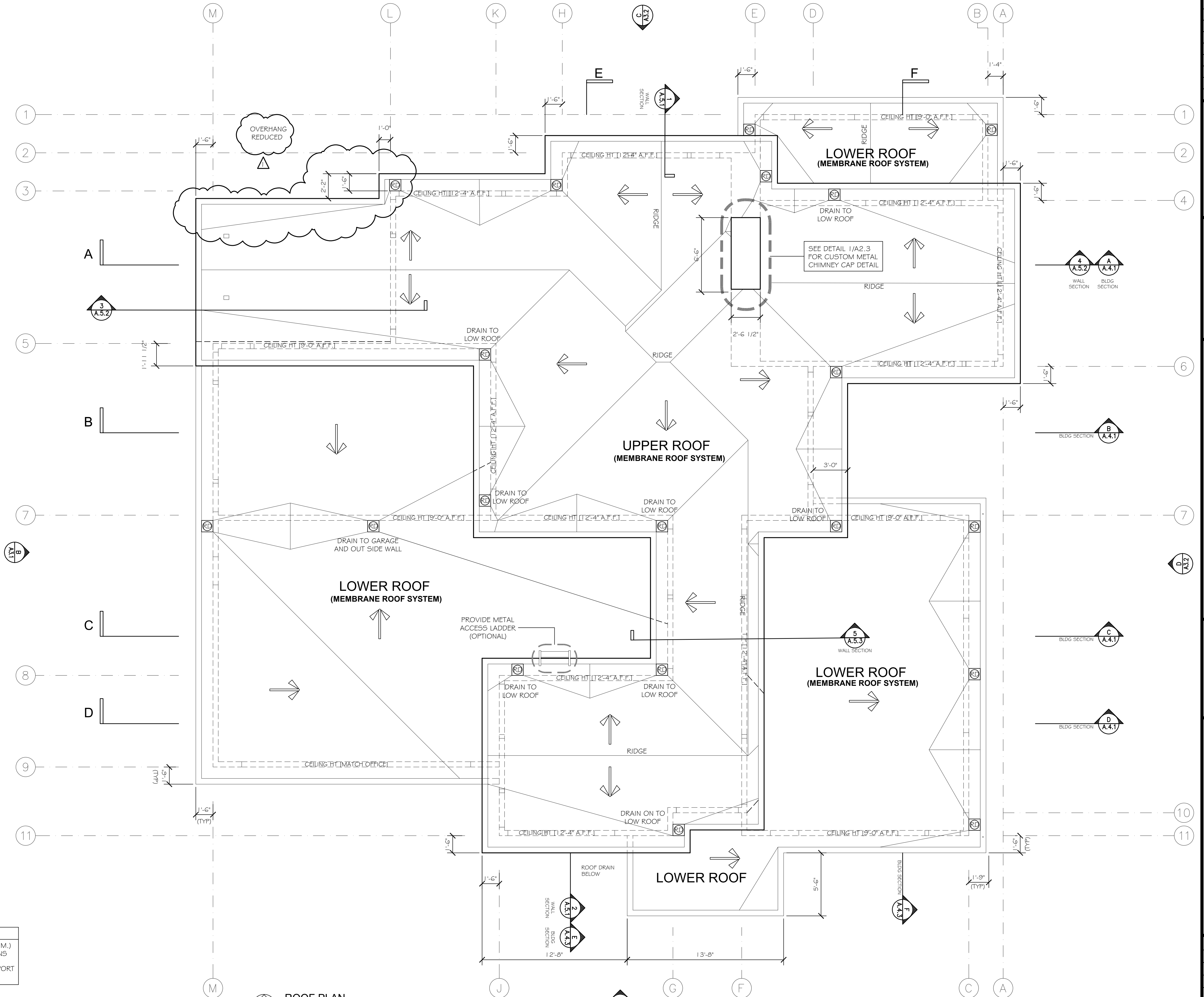
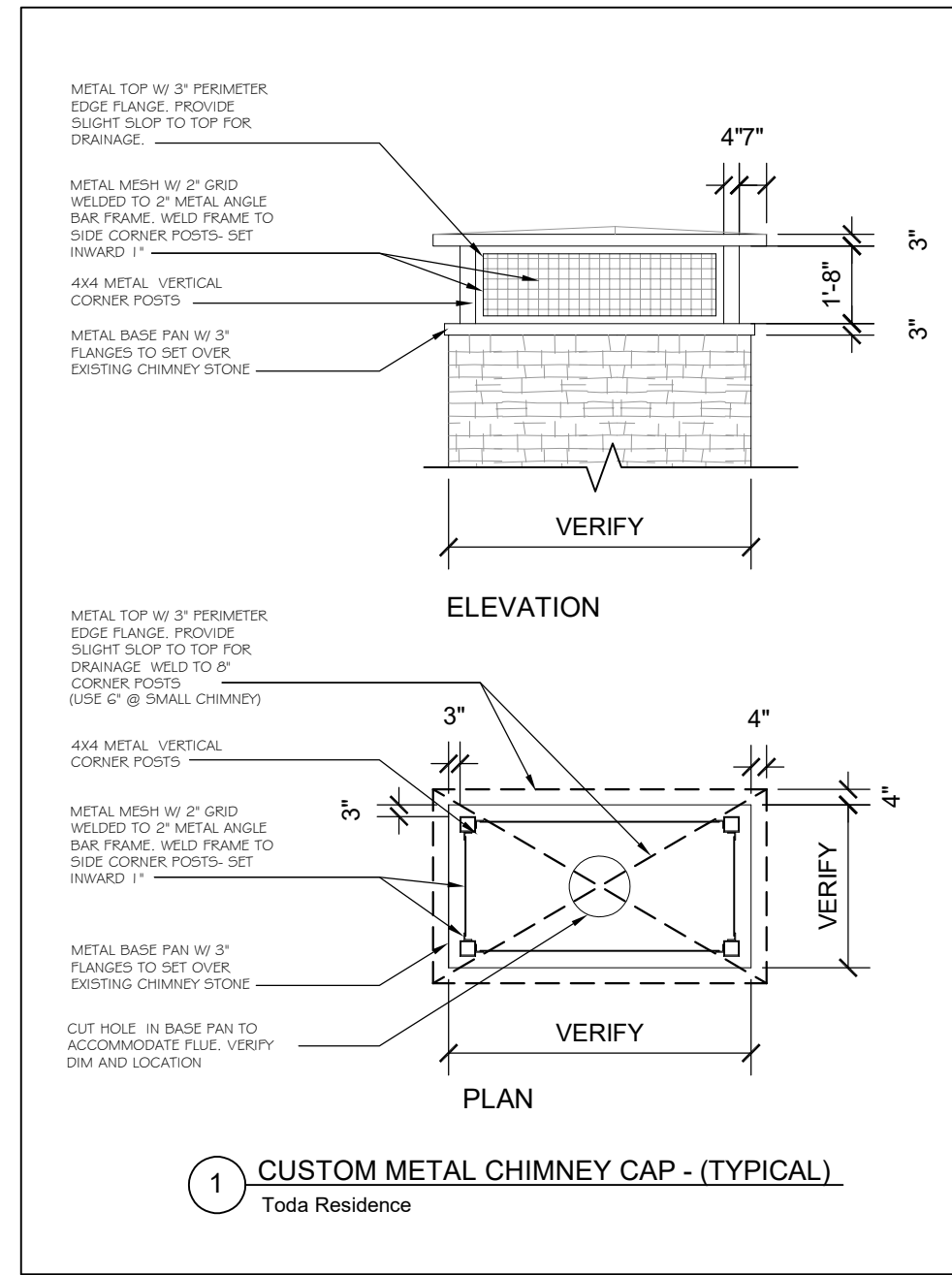


Toda Residence
REMODEL / FNDTN UPGRADES
2262 78TH AVE SE 98040
MERCER ISLAND, WA 98040

PROPOSED FLOOR PLAN

DATE: 06-03-24
DESIGNED: SLS
DRAWN: SLS
JOB NO: 2024-06
SHEET:

A2.2



UNVENTED ROOF INSULATION SYSTEMS
 NOTE: THIS SYSTEM IS SELECTED TO ALLOW FOR AN UNVENTED ROOF SYSTEM. ANY REVISIONS OR SUBSTITUTIONS MUST BE APPROVED BY THE DESIGNER. INSPECTOR TO APPROVE PROPER INSTALLATION.

PROVIDE "CLOSED CELL" SPRAY FOAM ROOF INSULATION SYSTEM MIN. R-38 INSTALLED BY CERTIFIED INSTALLER PER R806.5 REQUIREMENTS. FILL ENTIRE RAFTER /JOIST CAVITY TO ELIMINATE AIR SPACE. NO CROSS VENTILATION REQD. PROVIDE A COPY OF ICC ESR ON JOBSITE FOR FIELD INSPECTOR VERIFICATION.

WATERPROOF MEMBRANE SYSTEM
 INSTALL WATERPROOF MEMBRANE CONTINUOUSLY UP ALL VERTICAL SURFACES A MIN. OF 12" AND AROUND ALL ROOF DRAIN LOCATIONS. COORDINATE W/ ROOFING CONTRACTOR FOR ADDITIONAL FLASHING AND WATERPROOFING METHODS. SEE ROOF PLAN FOR ROOF DRAINS, DOWNSPOUTS, TAPERED INSULATION / CRICKETS LOCATIONS.

TAPERED INSULATION /CRICKETS
 THE TAPERED INSULATION AND CRICKET LAYOUT SHOWN IS BASED ON DIAGRAMS PROVIDED BY INSULATION CONSULTANT'S ENGINEERS. COORDINATE WITH ROOFING CONTRACTOR AND INSULATION ENGINEERS FOR ADDITIONAL INSTALLATION METHODS AND DETAILS.

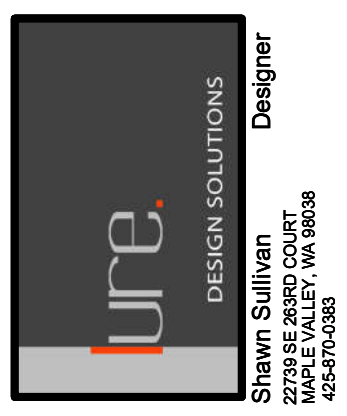
ROOF DRAINS
 REFERENCE (SMITH 1330 8.5 INCH ROOF DRAIN W/ DECK PLATE OR SIM.) COORDINATE WITH ROOF CONTRACTOR FOR ALTERNATE DRAIN OPTIONS AND INSTALLATION METHODS. ROOF DRAIN TO BE LOCATED IN OVERHANG AREA, ADJACENT TO SUPPORT WALL BELOW AND CONNECT DIRECTLY TO DOWNSPOUT.

ROOF PLAN
 Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

Misc. Info:

1. Concept completed	01-14-2025
2. 25% DD completed	01-31-2025
3. 100% DD completed	03-13-2025
4. 100% DD updated	03-27-2025
5. 80% CD completed	05-02-2025
6. 100% Permit Submittal	06-10-2025
7. Permit REV-1	06-26-2025
8.	

PERMIT SET

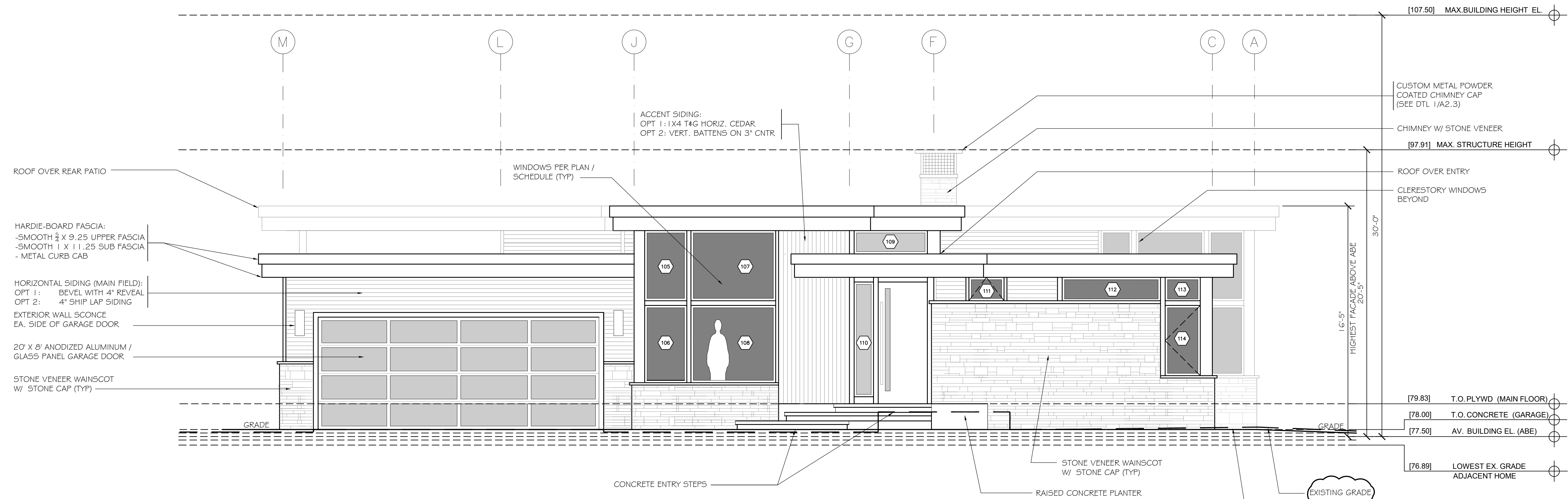


Toda Residence
 REMODEL / FNDTN UPGRADES
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 MERCER ISLAND, WA 98040

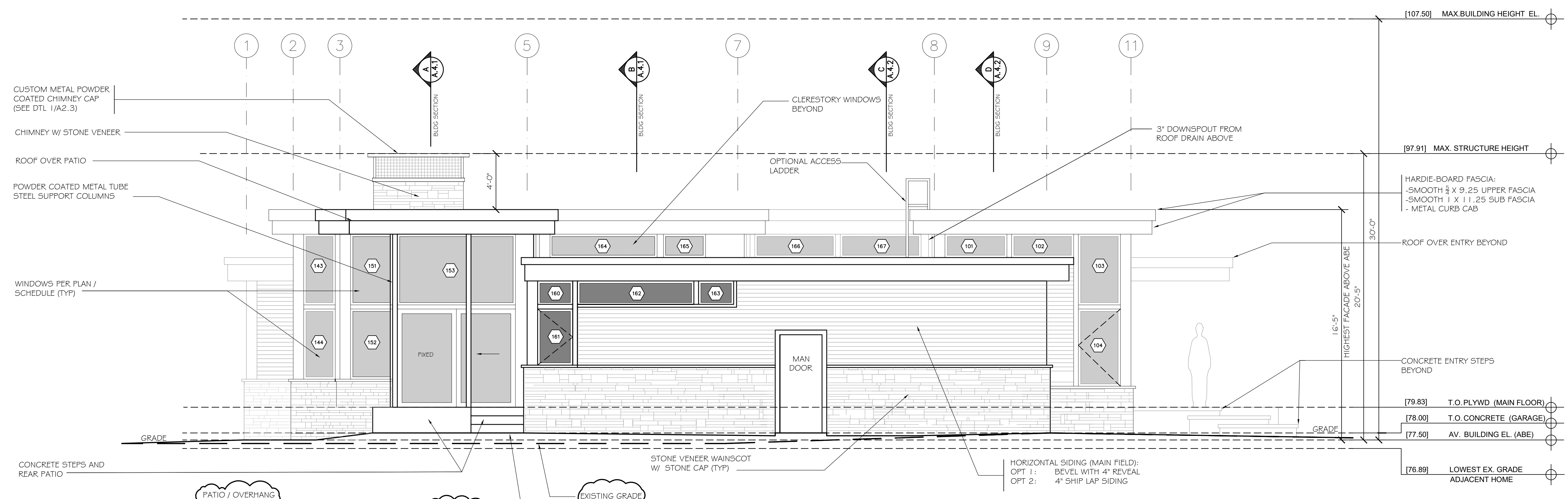
PROPOSED ROOF PLAN

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	A2.3

A2.3



A EXTERIOR ELEVATION- (SOUTH)
Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

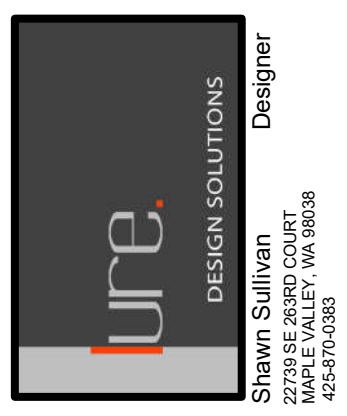


B EXTERIOR ELEVATION- (WEST)
Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	08-28-2025
8.		

PERMIT SET

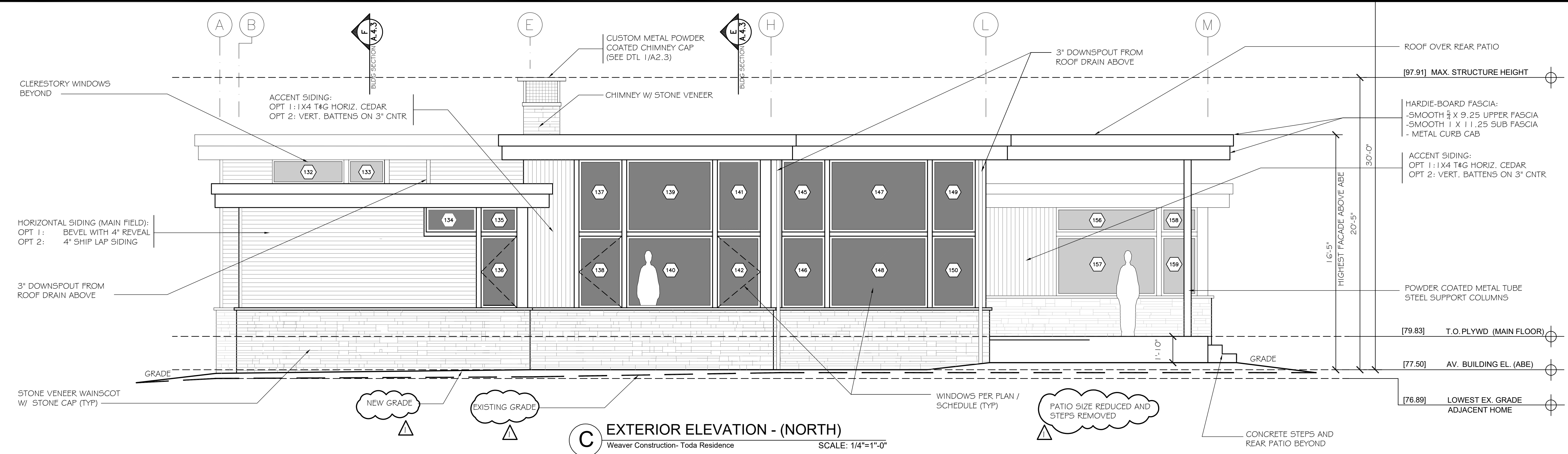


Toda Residence
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MERCER ISLAND, WA 98040

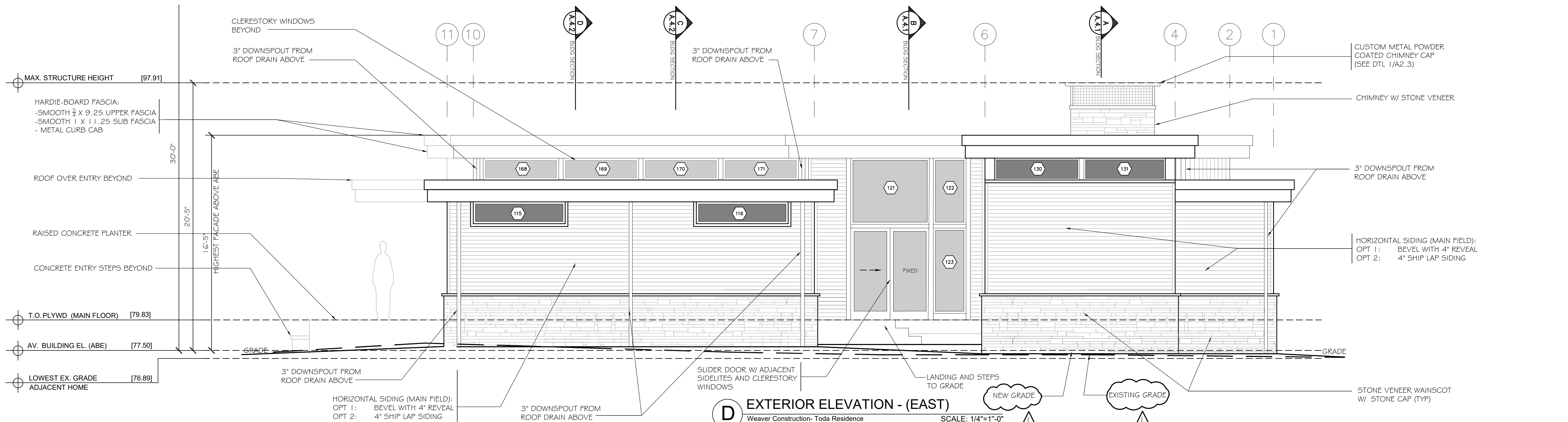
PROPOSED EXTERIOR ELEVATIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

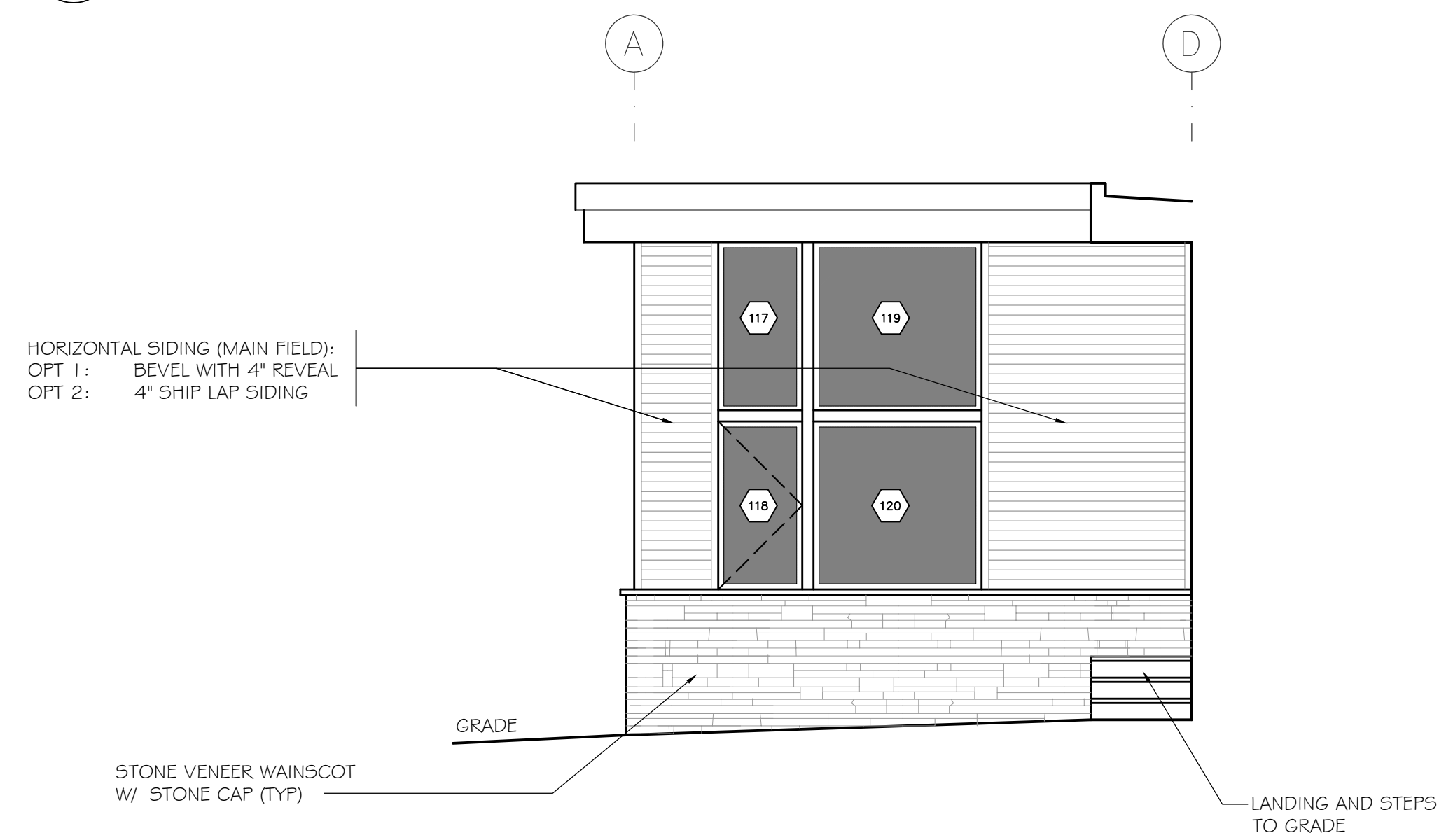
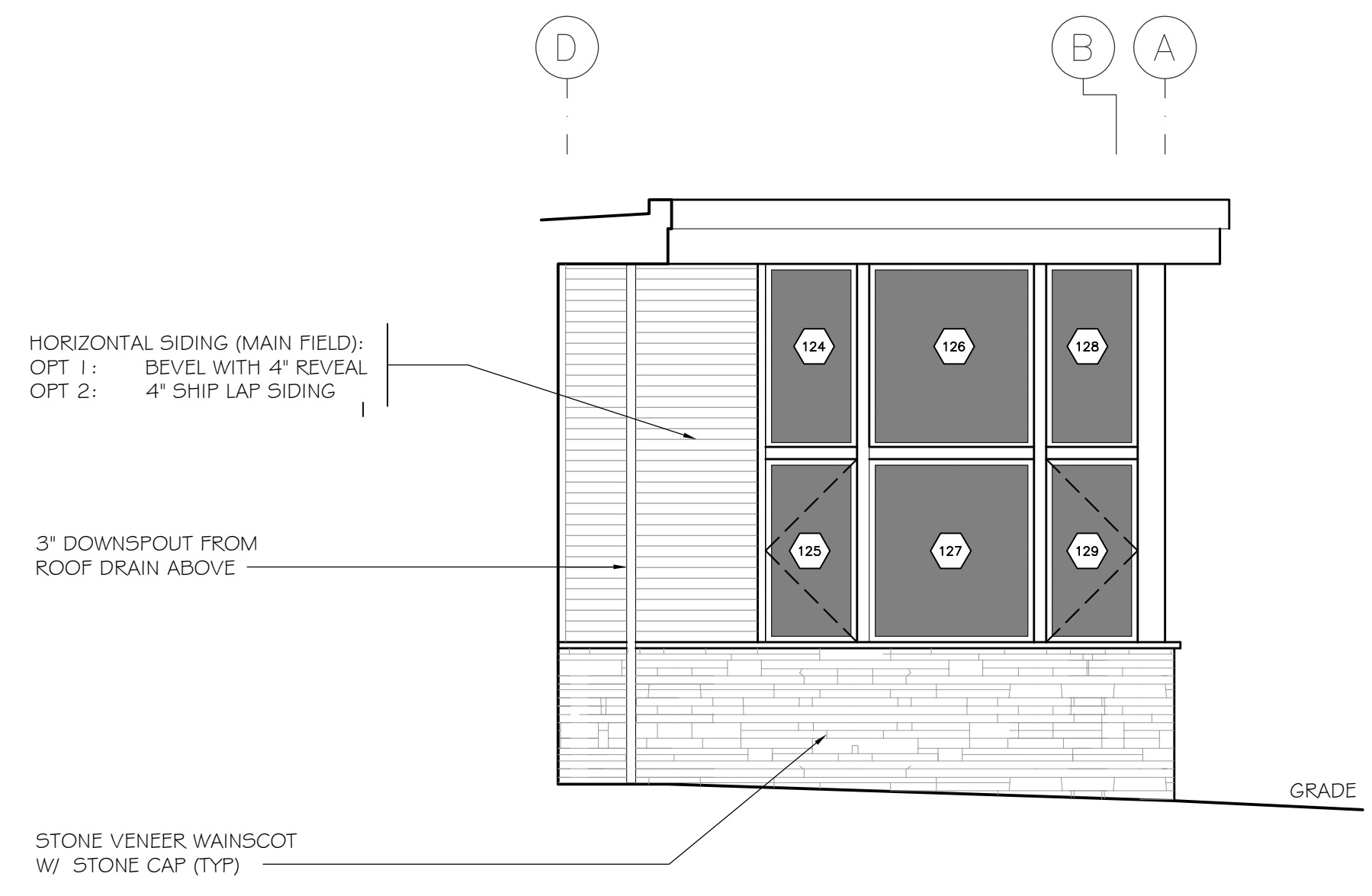
A3.1



C EXTERIOR ELEVATION - (NORTH)
 Weaver Construction- Toda Residence
 SCALE: 1/4"=1'-0"



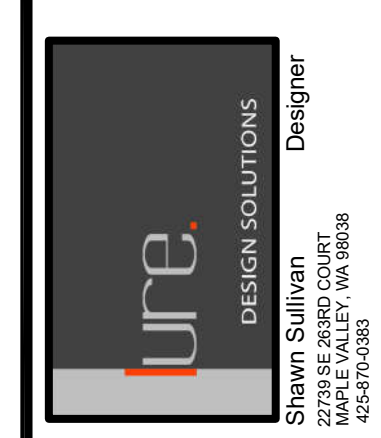
D EXTERIOR ELEVATION - (EAST)
 Weaver Construction- Toda Residence
 SCALE: 1/4"=1'-0"



Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	08-28-2025
8.		

PERMIT SET

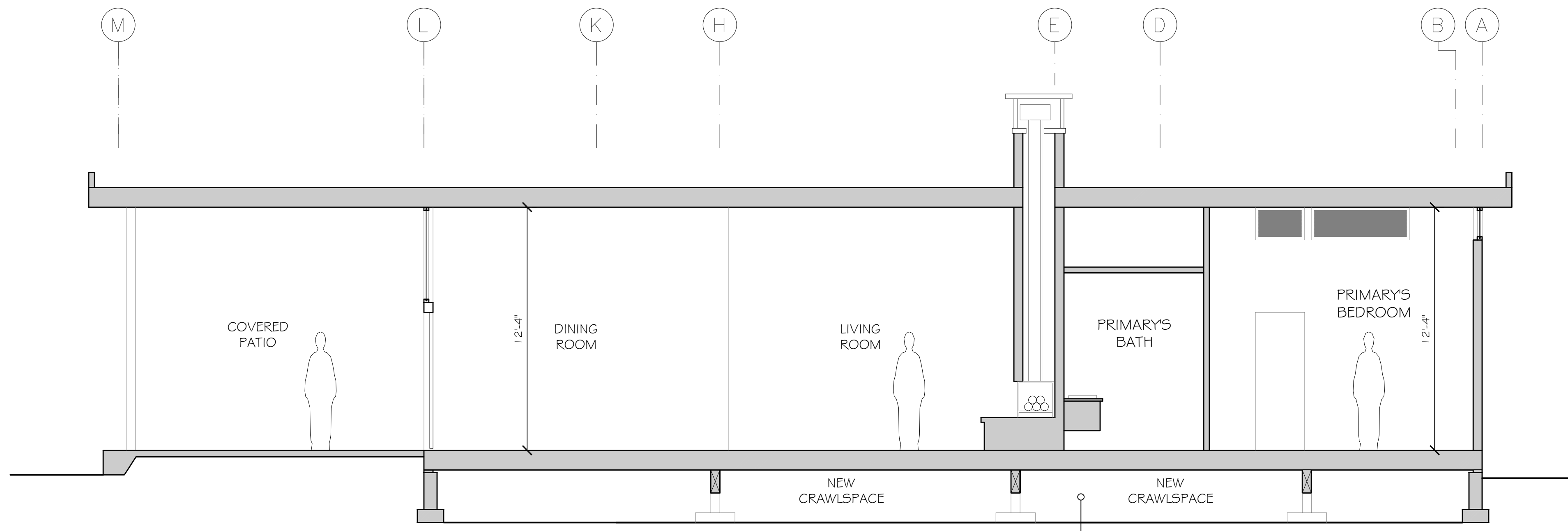


Toda Residence
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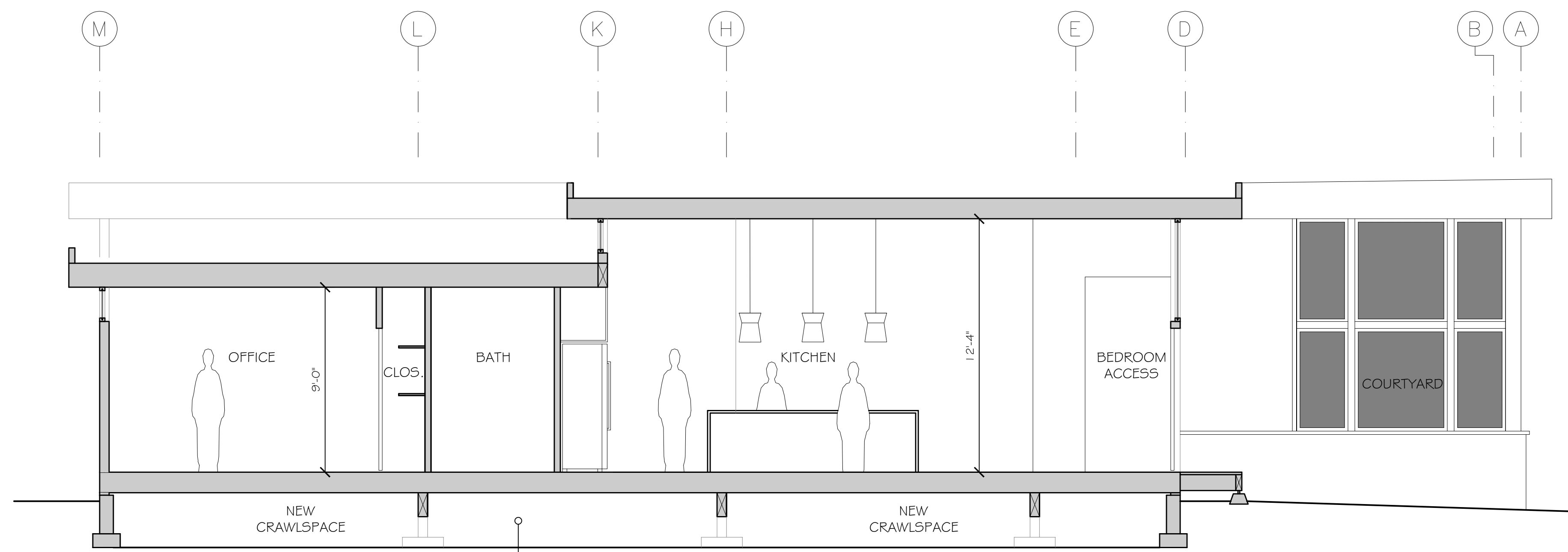
PROPOSED EXTERIOR ELEVATIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A3.2



A BUILDING SECTION
 Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

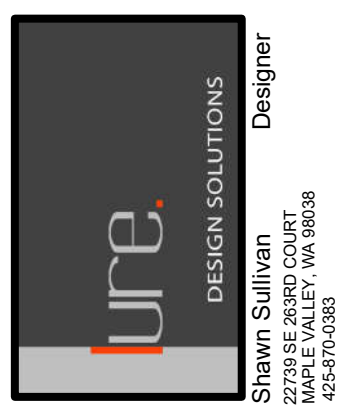


B BUILDING SECTION
 Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
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7.	Permit REV-1	06-26-2025
8.		

PERMIT SET

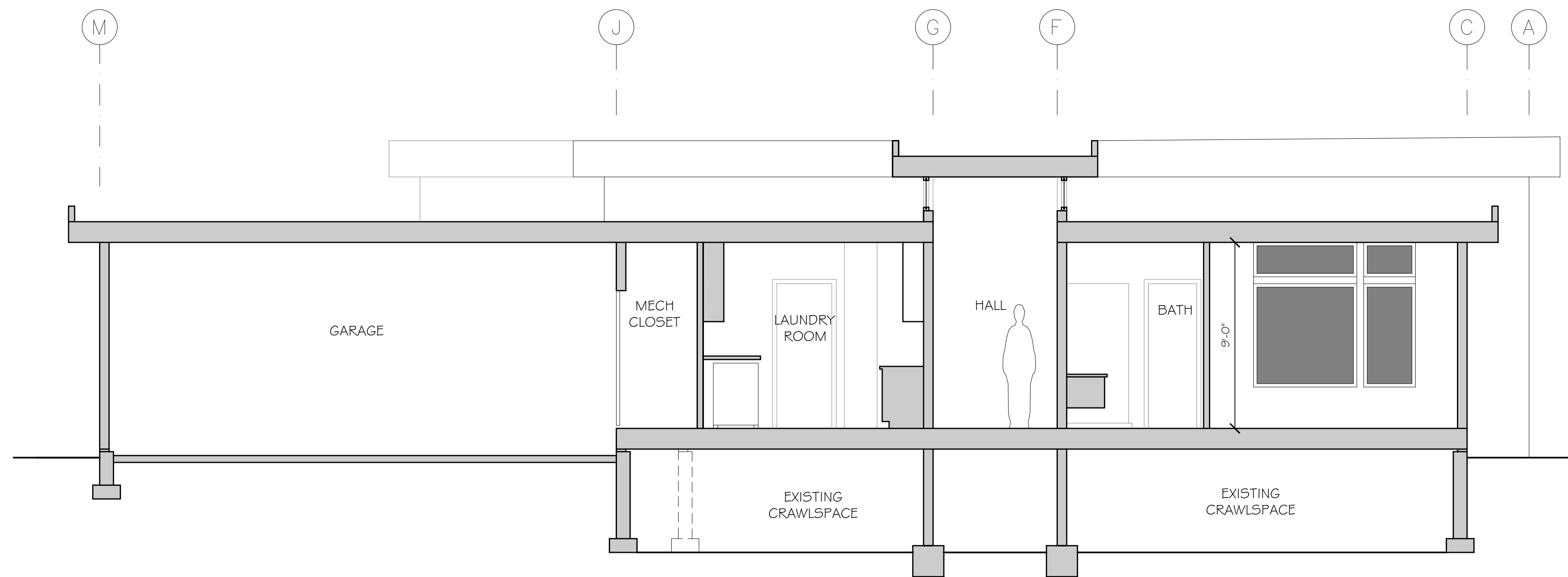


Toda Residence
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 MERCER ISLAND, WA 98040

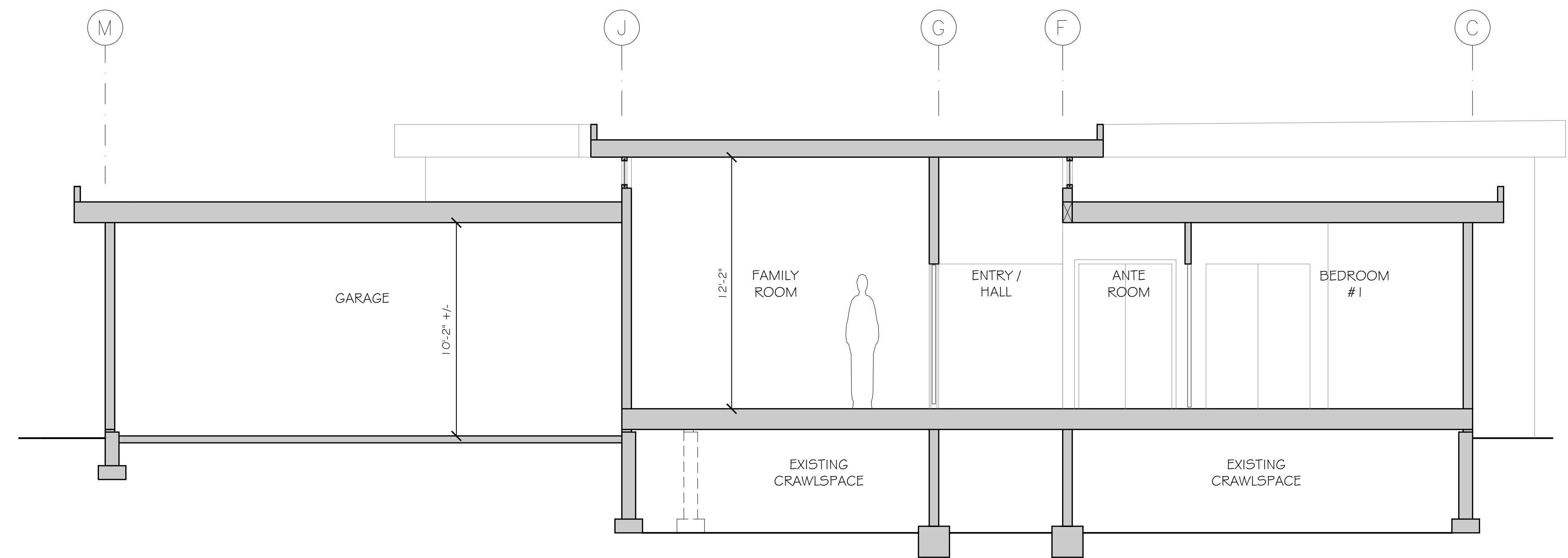
PROPOSED BUILDING SECTIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A4.1



C BUILDING SECTION
 Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

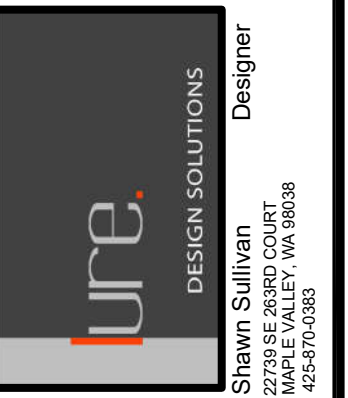


D BUILDING SECTION
 Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	06-26-2025
8.		

PERMIT SET

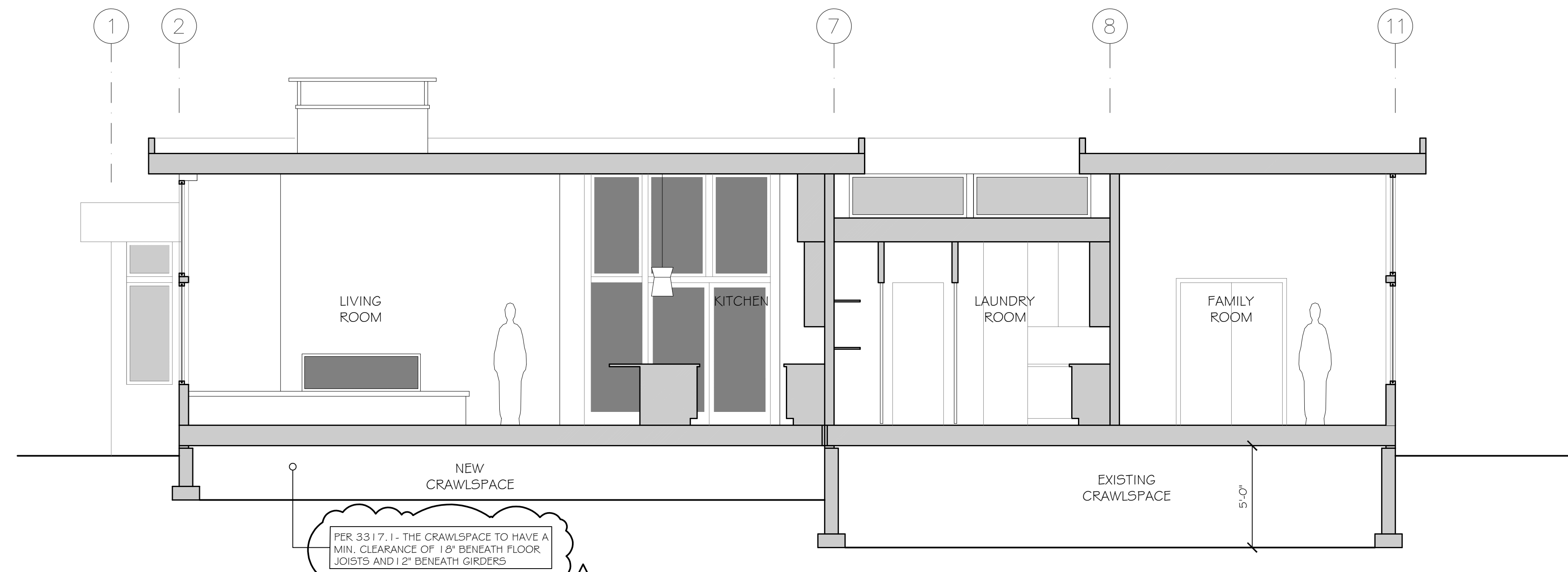


Toda Residence
 REMODEL / FNDTN UPGRADES
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PROPOSED BUILDING SECTIONS

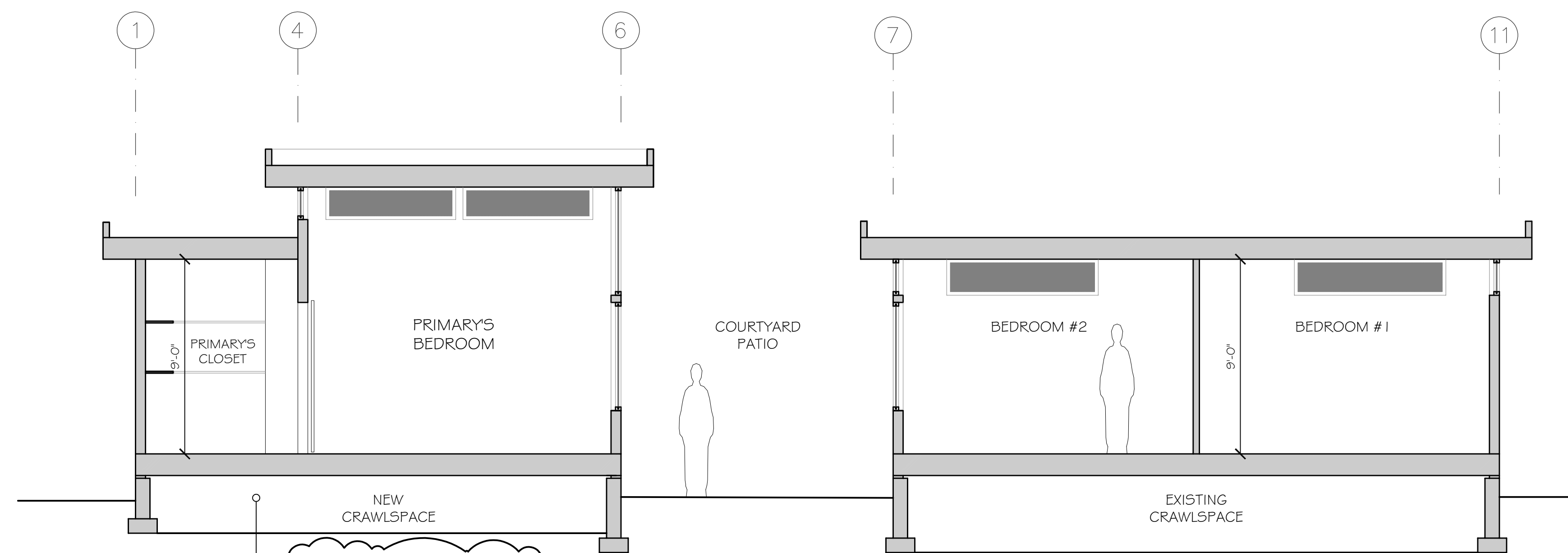
DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A4.2



PER 3317.1 - THE CRAWLSPACE TO HAVE A MIN. CLEARANCE OF 1'8" BENEATH FLOOR JOISTS AND 1'2" BENEATH GIRDERS

E BUILDING SECTION
Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"



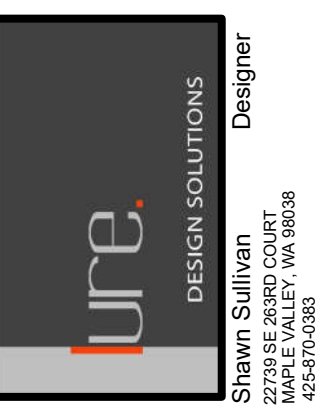
PER 3317.1 - THE CRAWLSPACE TO HAVE A MIN. CLEARANCE OF 1'8" BENEATH FLOOR JOISTS AND 1'2" BENEATH GIRDERS

F BUILDING SECTION
Weaver Construction- Toda Residence SCALE: 1/4"=1'-0"

Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	06-26-2025
8.		

PERMIT SET



Toda Residence
REMODEL / FNDTN UPGRADES
2262 78TH AVE SE 98040
MERCER ISLAND, WA 98040

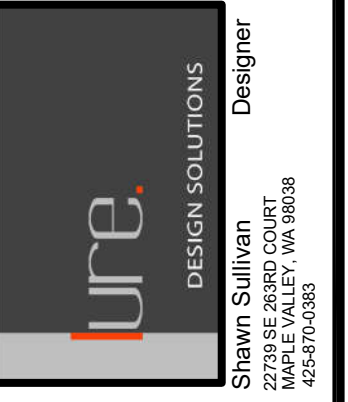
PROPOSED BUILDING SECTIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A4.3

Misc. Info:
1. Concept completed 01-14-2025
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3. 100% DD completed 03-13-2025
4. 100% DD updated 03-27-2025
5. 80% CD completed 05-02-2025
6. 100% Permit Submittal 06-10-2025
7. Permit REV-1 08-28-2025
8.

PERMIT SET

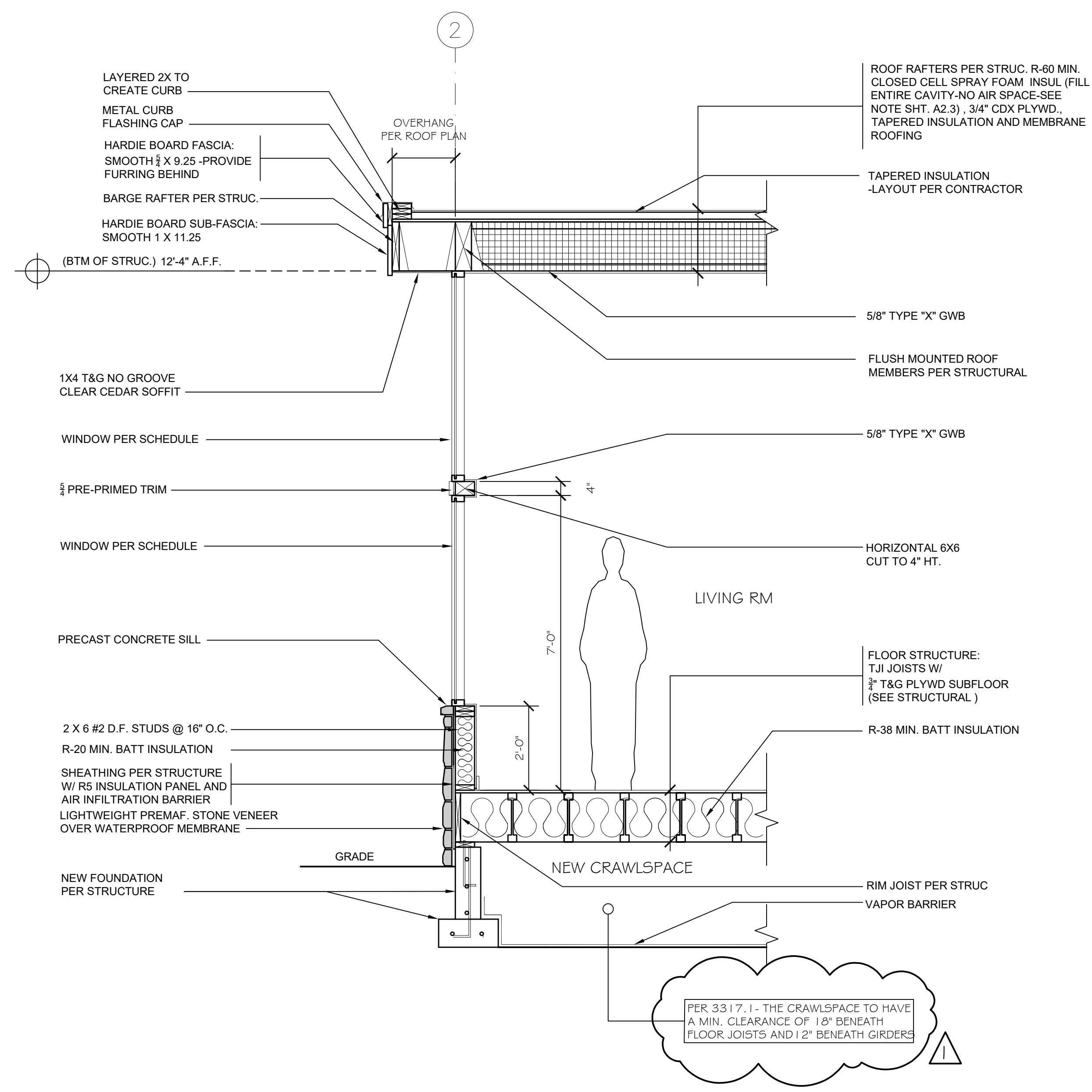


Toda Residence
 REMODEL / FNDTN UPGRADES
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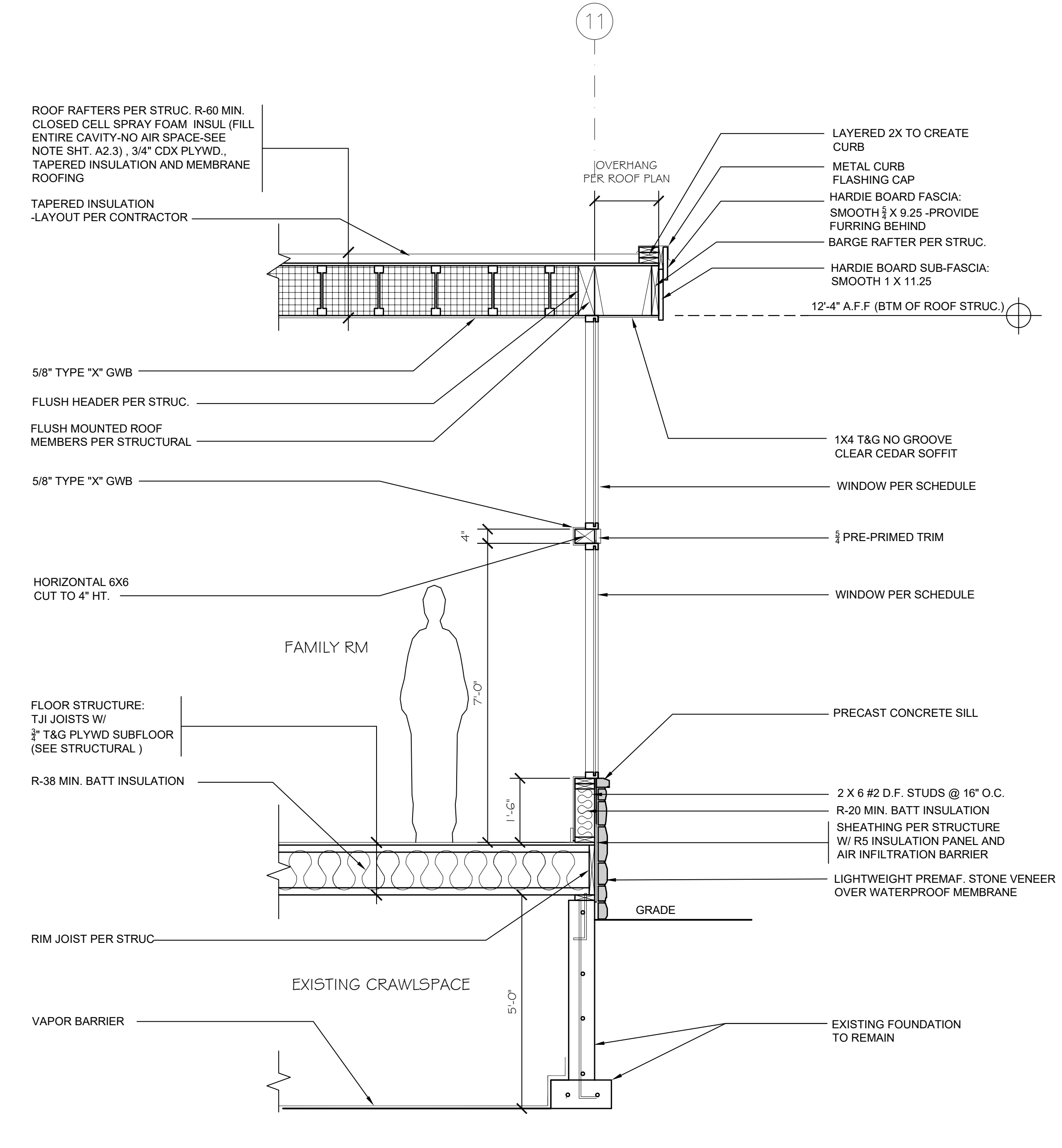
PROPOSED WALL SECTIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

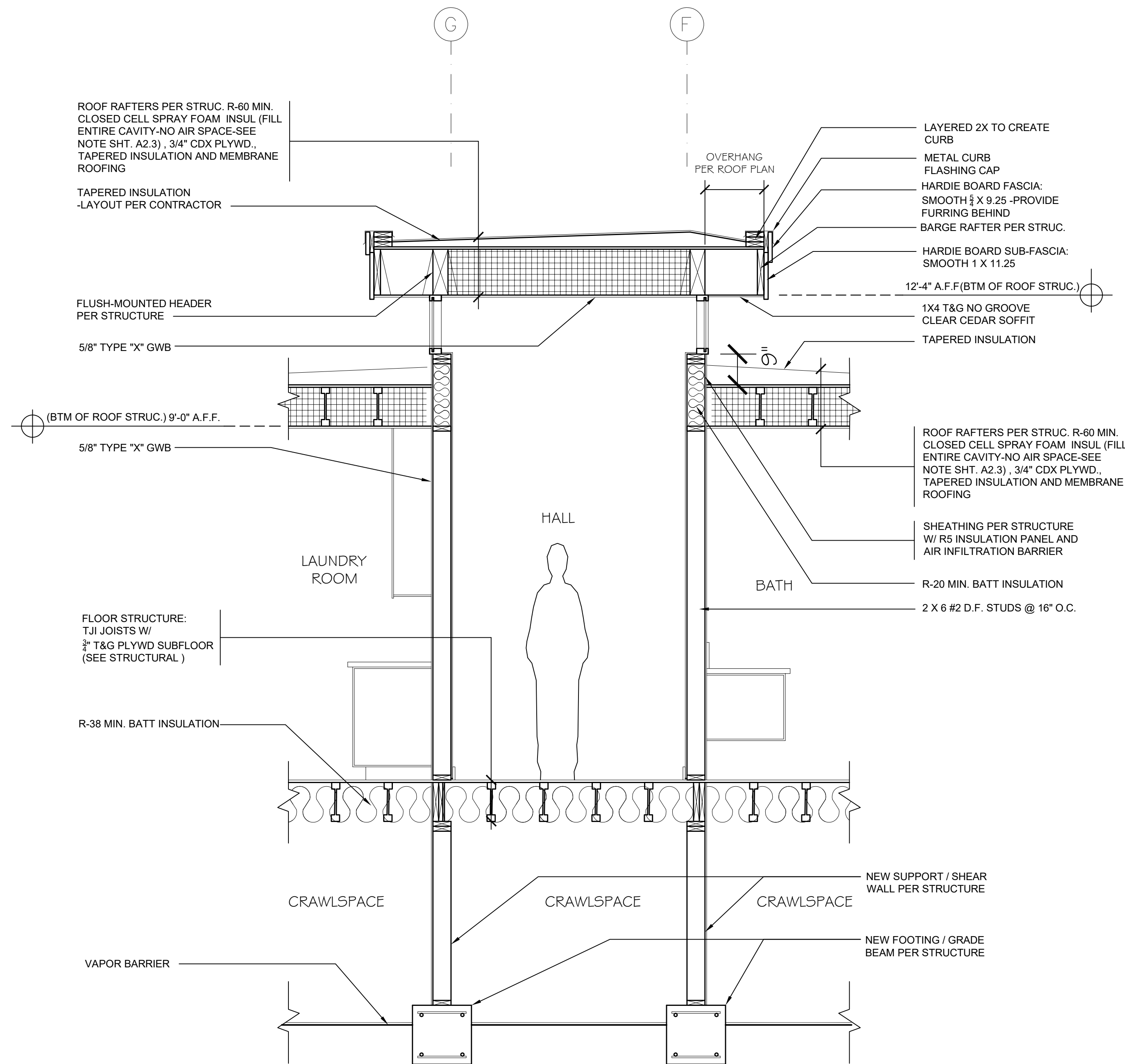
A5.1



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



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

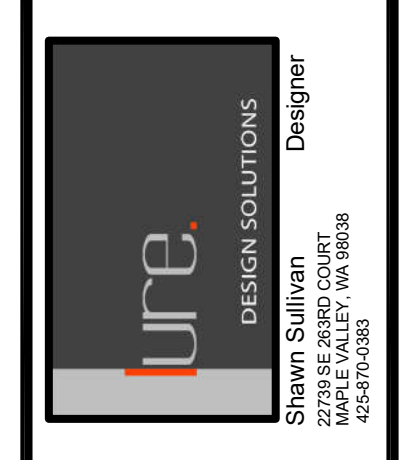


5 WALL SECTION
Cambell Residence
SCALE: 1/2"=1'-0"

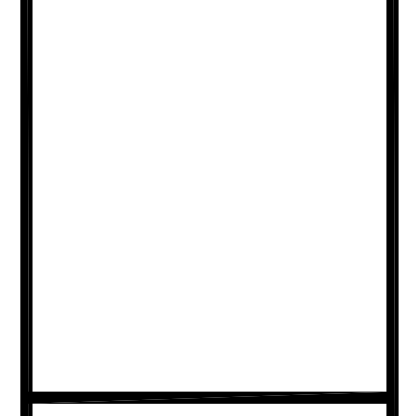
Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	06-26-2025
8.		

PERMIT SET



Toda Residence
REMODEL / FNDTN UPGRADES
2262 78TH AVE SE 98040
MERCER ISLAND, WA 98040



PROPOSED WALL SECTIONS

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A5.3

WINDOW SCHEDULE (APPROX. R.O.SIZES)

MAIN FLOOR												
WNDW NO.	ROOM NAME	R.O. SIZE	W X H	STYLE	TYPE	SYSTEM / GROUP	MATERIAL	OPERATION (standing inside)	NOTES	U-FACTOR	EGRESS	
101	FAMILY ROOM	4' x 4'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
102	FAMILY ROOM	4' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
103	FAMILY ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
104	FAMILY ROOM	3' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE R (SWING L TO R)	SAFETY GLAZING	.25 MIN.		
105	FAMILY ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
106	FAMILY ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
107	FAMILY ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
108	FAMILY ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
109	ENTRY	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
110	ENTRY	1' x 8'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
111	BATH	2' x 1'		AWNING	C		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
112	BEDROOM #1	7' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
113	BEDROOM #1	2' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
114	BEDROOM #1	2' x 5'		CASEMENT	A		ANODIZED ALUMINUM OR FIBERGLASS	HINGE R (SWING L TO R)	SAFETY GLAZING	.25 MIN.	YES	
115	BEDROOM #1	7' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
116	BEDROOM #2	7' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
117	BEDROOM #2	2' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
118	BEDROOM #2	2' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE L (SWING R TO L)	SAFETY GLAZING	.25 MIN.	YES	
119	BEDROOM #2	5' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
120	BEDROOM #2	5' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
121	KITCHEN	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
122	KITCHEN	2' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
123	KITCHEN	2' x 6'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
124	PRIM. BEDROOM	2' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
125	PRIM. BEDROOM	2' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE R (SWING L TO R)	SAFETY GLAZING	.25 MIN.	YES	
126	PRIM. BEDROOM	4' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
127	PRIM. BEDROOM	4' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
128	PRIM. BEDROOM	2' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
129	PRIM. BEDROOM	2' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE L (SWING R TO L)	SAFETY GLAZING	.25 MIN.	YES	
130	PRIM. BEDROOM	6' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
131	PRIM. BEDROOM	6' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
132	PRIM. BEDROOM	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
133	PRIM. BEDROOM	2' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
134	PRIM. BATH	3' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
135	PRIM. BATH	2' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
136	PRIM. BATH	2' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE R (SWING L TO R)	SAFETY GLAZING	.25 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 (xxx)
 * SAFETY GLAZING TO BE PROVIDE PER LOCAL CODE REQUIREMENTS

WINDOW SCHEDULE (APPROX. R.O.SIZES)

MAIN FLOOR CONT.												
WNDW NO.	ROOM NAME	R.O. SIZE	W X H	STYLE	TYPE	SYSTEM / GROUP	MATERIAL	OPERATION (standing inside)	NOTES	U-FACTOR	EGRESS	
137	LIVING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
138	LIVING ROOM	3' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE R (SWING L TO R)	SAFETY GLAZING	.25 MIN.		
139	LIVING ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
140	LIVING ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
141	LIVING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
142	LIVING ROOM	3' x 5'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE L (SWING R TO L)	SAFETY GLAZING	.25 MIN.		
143	LIVING ROOM	2' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
144	LIVING ROOM	2' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
145	DINING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
146	DINING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
147	DINING ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
148	DINING ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
149	DINING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
150	DINING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
151	DINING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
152	DINING ROOM	3' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
153	DINING ROOM	6' x 5'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
154	NOT USED									.25 MIN.		
155	NOT USED									.25 MIN.		
156	OFFICE	7' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
157	OFFICE	7' x 4'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
158	OFFICE	2' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
159	OFFICE	2' x 4'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
160	OFFICE	2' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
161	OFFICE	2' x 4'		CASEMENT	B		ANODIZED ALUMINUM OR FIBERGLASS	HINGE R (SWING L TO R)	SAFETY GLAZING	.25 MIN.	YES	
162	OFFICE	8' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
163	OFFICE	2' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
164	KITCHEN	7' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
165	KITCHEN	3' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
166	HALL	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
167	HALL	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
168	ENTRY	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
169	HALL	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
170	HALL	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		
171	HALL	5' x 1'		PICTURE	A		ANODIZED ALUMINUM OR FIBERGLASS		SAFETY GLAZING	.25 MIN.		

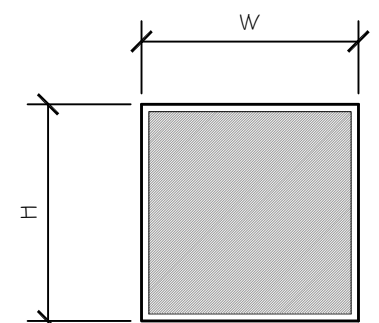
*VERIFY /MEASURE ALL R.O. FOR ACCURATE WINDOWS SIZES PRIOR TO ORDERING / MANUFACTURING
 *WINDOW SIZES ABOVE REFLECT APPROXIMATE R.O. (ROUGH OPENINGS). WINDOWS TO BE SIZED ACCORDINGLY
 * SEE PLANS AND ELEVATIONS FOR WINDOW TAG LOCATION (xxx)
 * SAFETY GLAZING TO BE PROVIDE PER LOCAL CODE REQUIREMENTS

WINDOW TYPES

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

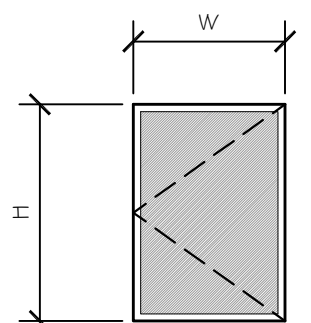
ENERGY CODE INFO

* SEE SCHEDULE FOR GLAZING SIZES
 * PROVIDE GLAZING U-FACTOR OF .24



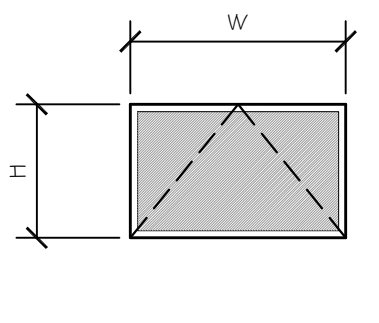
* ANODIZED ALUMINUM OR FIBERGLASS
 * COLOR BLACK
 * PICTURE

TYPE A



* ANODIZED ALUMINUM OR FIBERGLASS
 * COLOR BLACK
 * CASEMENT

TYPE B



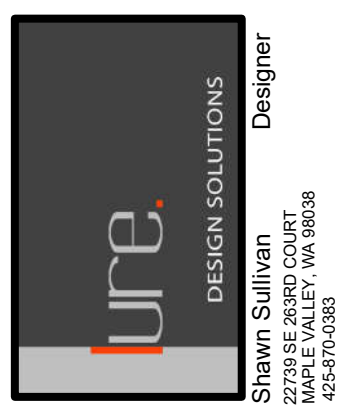
* ANODIZED ALUMINUM OR FIBERGLASS
 * COLOR BLACK
 * AWNING

TYPE C

Misc. Info:

1. Concept completed 01-14-2025
2. 25% DD completed 01-31-2025
3. 100% DD completed 03-13-2025
4. 100% DD updated 03-27-2025
5. 80% CD completed 05-02-2025
6. 100% Permit Submittal 06-10-2025
7. Permit REV-1 06-26-2025
- 8.

PERMIT SET



Toda Residence
 REMODEL / FNDTN UPGRADES
 2262 78TH AVE SE 98040
 MERCER ISLAND, WA 98040

PROPOSED WINDOW SCHEDULE AND WINDOW TYPES

DATE: 06-03-24
 DESIGNED: SLS
 DRAWN: SLS
 JOB NO: 2024- 06
 SHEET:

A6.1

DOOR SCHEDULE

MAIN FLOOR

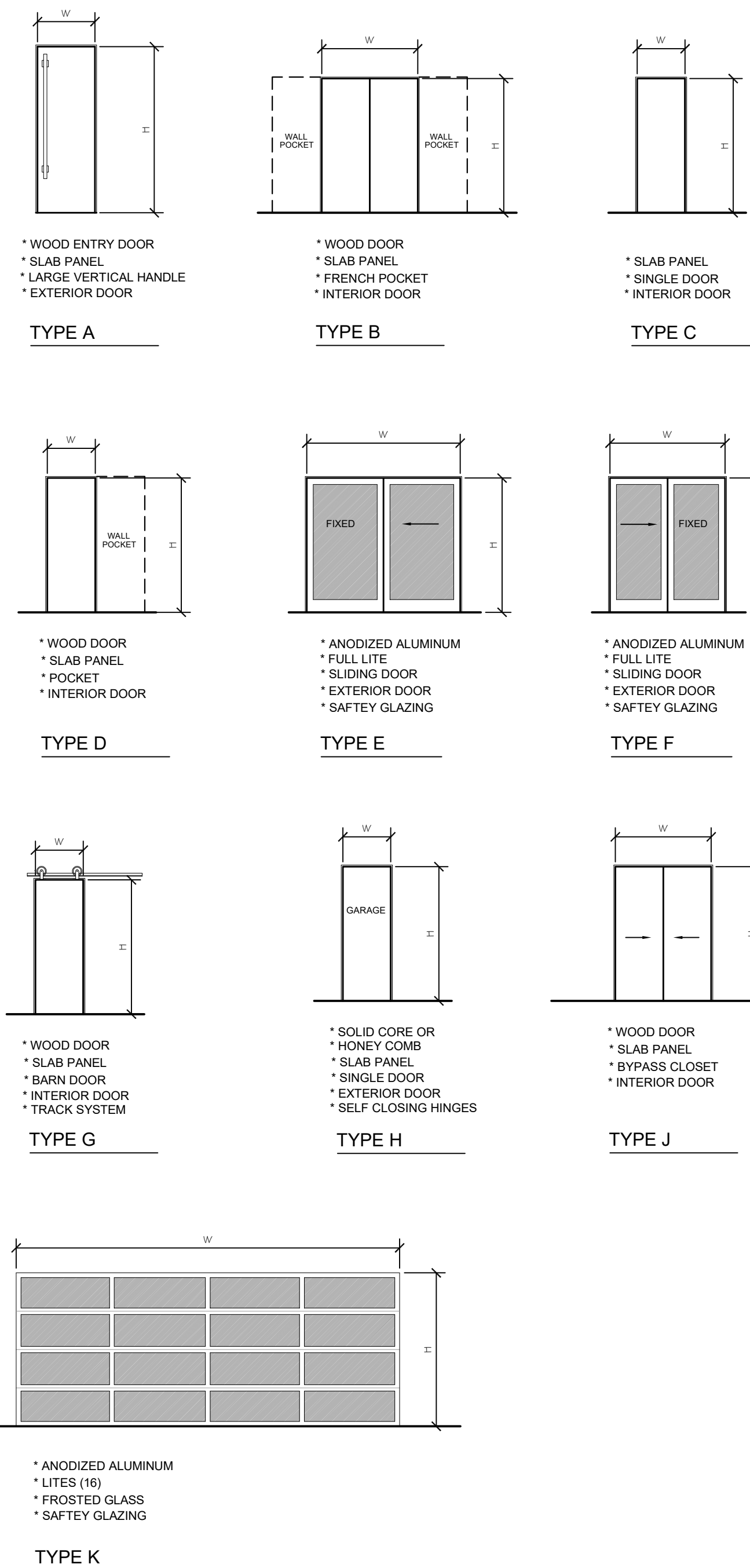
DOOR #	ROOM NAME	R.O. SIZE W X H	STYLE	SWING	TYPE	MATERIAL	NOTES	U-FACTOR
101A	FAMILY ROOM	5' X 8'	FRENCH POCKET	POCKET L / R	B	VG FIR		
102A	ENTRY	3' X 8'	SINGLE ENTRY DOOR	R-SWING	A	VG FIR		
103A	HALL	5' X 7'	BYPASS-CLOSET	N/A	J	VG FIR		
104A	BATH	2' X 7'	SINGLE DOOR	R-SWING	C	VG FIR		
105A	BEDROOM #1	2' X 7'	SINGLE DOOR	L-SWING	C	VG FIR		
105B	BEDROOM #1	5' X 7'	BYPASS-CLOSET	N/A	J	VG FIR		
106A	BEDROOM #2	2' X 7'	SINGLE DOOR	L-SWING	C	VG FIR		
106B	BEDROOM #2	5' X 7'	BYPASS-CLOSET	N/A	J	VG FIR		
107A	BATH	2' X 7'	SINGLE DOOR	L-SWING	C	VG FIR		
108A	HALL	6' X 8'	FRENCH POCKET	N/A	B	VG FIR		
109A	ANTE ROOM	2' X 7'	SINGLE DOOR CLOSET	R-SWING	C	VG FIR		
110A	LAUNDRY RM	2' X 7'	SINGLE DOOR	R-SWING	C	VG FIR		
110B	LAUNDRY RM	2' X 7'	SINGLE POCKET DOOR	POCKET - R	D	VG FIR		
110C	LAUNDRY RM	4' X 7'	BYPASS-CLOSET	N/A	J	VG FIR		
110D	LAUNDRY RM	4' X 7'	BYPASS-CLOSET	N/A	J	VG FIR		
110E	LAUNDRY RM	3' X 7'	SINGLE DOOR	L-SWING	H	SOLID CORE OR HONEY COMB MTL	SELF CLOSING HDWR	
111A	GARAGE	3' X 7'	SINGLE DOOR	L-SWING	H	SOLID CORE OR HONEY COMB MTL	SELF CLOSING HDWR	
111A	GARAGE	20' X 8'	OVERHEAD DOOR	N/A	K	ANODIZED ALUMINUM /GLASS	16 LITES	
112A	OFFICE	2' X 7'	SINGLE DOOR	R-SWING	C	VG FIR		
112B	OFFICE	5' X 7'	BYPASS-CLOSET	N/A	J	VG FIR		
114A	BATH	2' X 7'	SINGLE DOOR	R-SWING	C	VG FIR		
116A	DINING RM	8' X 7'	EXTERIOR SLIDER DOOR	R-HAND OPERABLE	E	ANODIZED ALUM. OR FIBERGLASS	FULL LITE, SAFTEY GLASS	.25 MIN.
118A	KITCHEN	6' X 7'	EXTERIOR SLIDER DOOR	L-HAND OPERABLE	F	ANODIZED ALUM. OR FIBERGLASS	FULL LITE, SAFTEY GLASS	.25 MIN.
119A	ANTE RM	2' X 7'	SINGLE DOOR CLOSET	L-SWING	C	VG FIR		
120A	PRIM. BEDROOM	2' X 8'	SINGLE DOOR	R-SWING	C	VG FIR		
121A	TLT. RM	2' X 7'	SINGLE DOOR	L-SWING	C	VG FIR		
122A	BATH	2' X 7'	SINGLE DOOR	L-SWING	C	VG FIR		
123A	PRIM. CLOSET	3' X 7'	CUSTOM BARN DOOR	SLIDE - R	G	VG FIR		

*VERIFY /MEASURE ALL R.O. FOR ACCURATE DOOR SIZES PRIOR TO ORDERING / MANUFACTURING

* SEE PLANS AND ELEVATIONS FOR WINDOW TAG LOCATION (A)

* SAFTEY GLAZING TO BE PROVIDE PER LOCAL CODE REQUIREMENTS

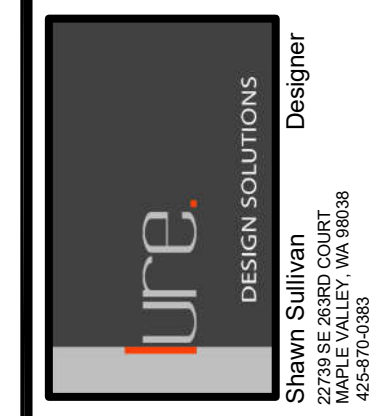
DOOR TYPES



Misc. Info:

1.	Concept completed	01-14-2025
2.	25% DD completed	01-31-2025
3.	100% DD completed	03-13-2025
4.	100% DD updated	03-27-2025
5.	80% CD completed	05-02-2025
6.	100% Permit Submittal	06-10-2025
7.	Permit REV-1	08-28-2025
8.		

PERMIT SET



Toda Residence
 REMODEL / FNDTN UPGRADES
 2262 78TH AVE SE 98040
 MERCER ISLAND, WA 98040

PROPOSED DOOR SCHEDULE AND DOOR TYPES

DATE:	06-03-24
DESIGNED:	SLS
DRAWN:	SLS
JOB NO:	2024- 06
SHEET:	

A6.2

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

LOT B, CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-021, RECORDED UNDER RECORDING NO. 7708010612, RECORDS OF KING COUNTY, WASHINGTON;
 TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS DELINEATED ON THE FACE OF SAID SHORT PLAT.
 SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

HELD A BEARING OF N 11°58'58" E BETWEEN FOUND MONUMENTS AS SHOWN OR R4.

REFERENCES

- R1. RECORD OF SURVEY, VOL. 221, PG. 66, RECORDS OF KING COUNTY, WASHINGTON.
- R2. RECORD OF SURVEY, VOL. 323, PG. 256, RECORDS OF KING COUNTY, WASHINGTON.
- R3. CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-021, REC. NO. 7708010612, RECORDS OF KING COUNTY, WASHINGTON.
- R4. RECORD OF SURVEY, VOL. 385, PG. 206, RECORDS OF KING COUNTY, WASHINGTON.

VERTICAL DATUM

NAVD 88 PER GPS OBSERVATIONS
 SITE TEMP. BENCHMARK
 DESCRIPTION: SET PK NAIL W/ RED WASHER
 LOCATION: NEAR SW COR OF SITE
 ELEVATION: 77.39'

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN JANUARY OF 2024. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 5315101697
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 12,240 S.F. (0.28 ACRES)
6. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM COMMONWEALTH LAND TITLE INSURANCE COMPANY'S "HOMEOWNER'S POLICY", ORDER NO. 767209RPT, DATED MARCH 05, 2020. IN PREPARING THIS MAP, TERRANE, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS TERRANE, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED "HOMEOWNER'S POLICY". TERRANE, INC. HAS RELIED WHOLLY ON COMMONWEALTH LAND TITLE INSURANCE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND TERRANE, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE(S) OF THE SIDING UNLESS OTHERWISE NOTED.
8. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 3-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

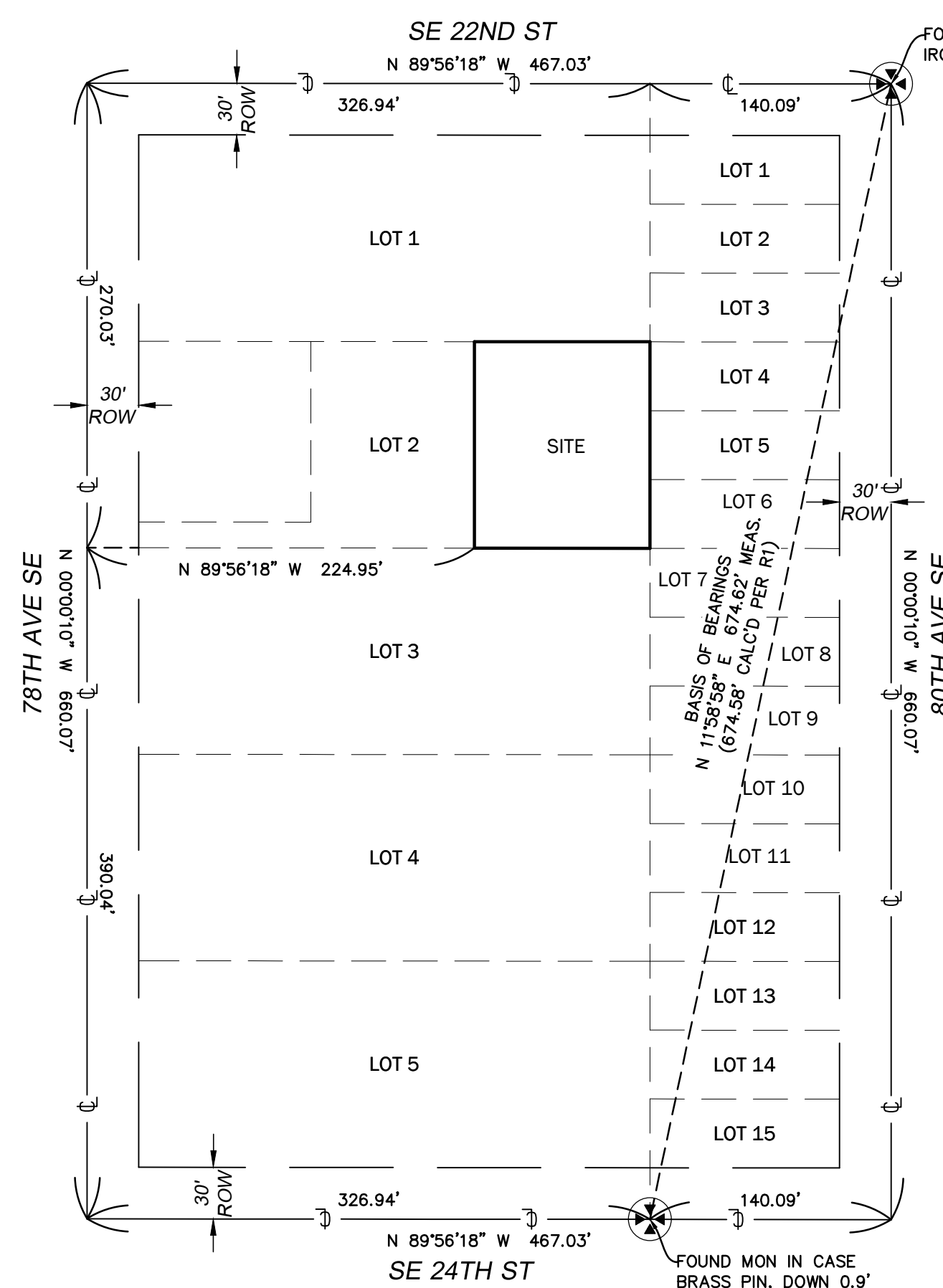
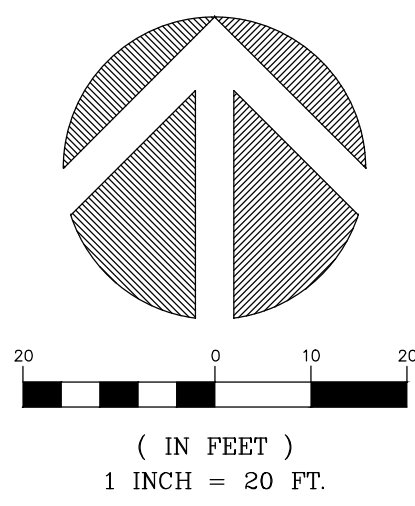
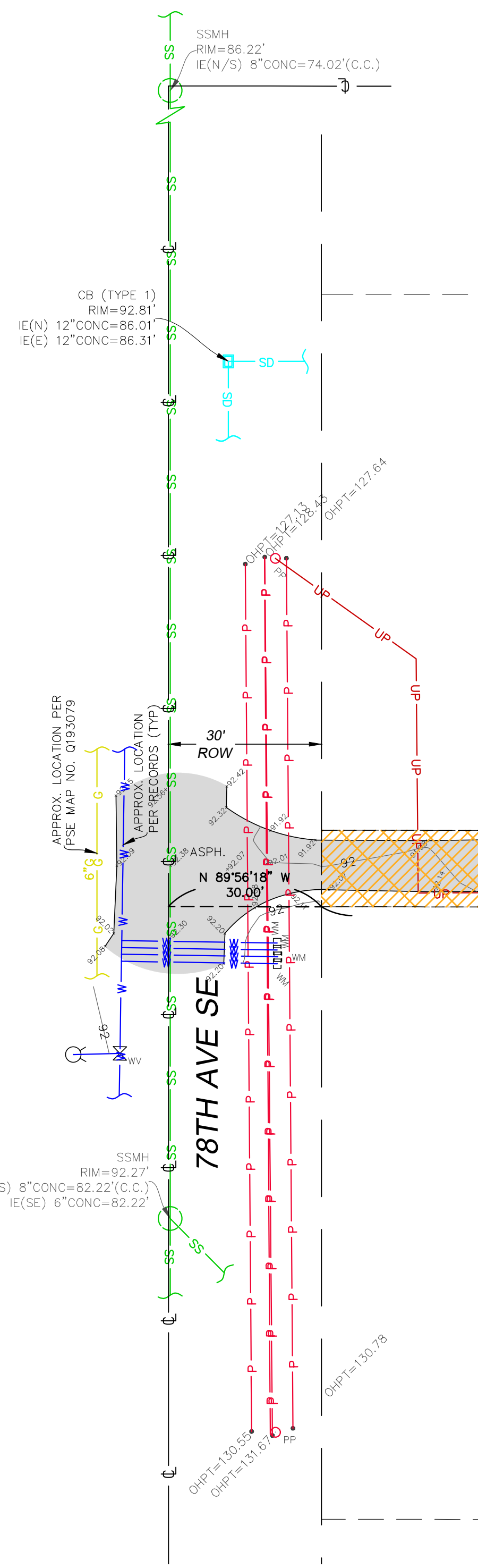
LEGEND

	BENCHMARK		INLET (TYPE 1)
	CENTERLINE ROW		STORM MANHOLE
	FENCE LINE (WOOD)		STORM DRAIN LINE
	MONUMENT (IN CASE, FOUND)		SEWER MANHOLE
	NAIL AS NOTED		SEWER LINE
	PROPERTY LINES (ADJACENT)		FIRE HYDRANT
	PROPERTY LINE (SUBJECT)		WATER METER
	REBAR & CAP (SET)		WATER VALVE
	REBAR AS NOTED (FOUND)		WATER LINE
	RETAINING WALL		BUILDING
	RIGHT-OF-WAY LINES		C.C.
	SUBDIVISION LINES		C.C.D.
	BUILDING		C.B.
	TREE (AS NOTED)		CITY OF SEATTLE
	ASPHALT SURFACE		CONCRETE
	CONCRETE SURFACE		CORNER
	DECK		DECIDUOUS
	ROCKERY		ELEV
	OHV FLAGS		EVG
	GAS METER		FF
	GAS LINE		FINISH FLOOR
	POWER METER		GAS
	POWER POLE		LAND SURVEYOR NUMBER
	POWER (OVERHEAD)		MEAS
	POWER (UNDERGROUND)		MON
	POWER TRANSFORMER		OHP
	TELEPHONE SENTRY		PROP
	AREA DRAIN		(R)
	CULVERT PIPE		RECORD DATA
			SERVICE DRAIN
			SERVICE DRAIN MANHOLE
			SSMH
			SANITARY SEWER MANHOLE
			SQUARE FEET
			INGRESS, EGRESS & UTILITY EASEMENT PER REC. NO. 7708010612
			UTILITY EASEMENT PER REC. NO. 7708010612

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

SCHEDULE B ITEMS

2. ALL COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS OR OTHER SERVITUDES, IF ANY, BUT OMITTING RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, CREED OR NATIONAL ORIGIN, DISCLOSED BY THE SHORT PLAT RECORDED UNDER RECORDING NO. 7708010612. (PLOTTED)
3. SIDE SEWER EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
 WIDTH: 4 FEET
 LOCATED ALONG THE LINE AS CONSTRUCTED.
 RECORDED: JANUARY 16, 1978
 RECORDING NO.: 7801161084 (DOCUMENT NOT PROVIDED)



INDEXING INFORMATION	
SW 1/4	SE 1/4
SECTION: 01	
TOWNSHIP: 24N	
RANGE: 04E, W.M.	
COUNTY: KING	

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TOPOGRAPHIC & BOUNDARY SURVEY

2262 78TH AVE SE

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SEATTLE, WA 98040

TERRANE

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

JOB NUMBER: 232261

DATE: 02/02/24

DRAFTED BY: TDB

CHECKED BY: JGM

SCALE: 1" = 20'

REVISION HISTORY

SHEET NUMBER

1 OF 1



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 Email: john@cse-engineering.com

Toda Residence
 2262 78th Ave SE
 Mercer Island, WA 98040

Revisions:
 06-02-25

Date:
 06-02-25

Sheet:

S-0

Structural Notes:

Applicable Codes and Standards:

2021 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.

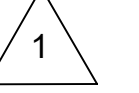
Special Inspections:

Special Inspections are required for:
 Epoxy Grouted Hold Down Bolt Installation
 Structural Steel Erection
 Wood Seismic Resistance System



Design Loads:

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



Wind load: Basic wind speed 98 mph, exposure C, KzT=1.0
 Building Category: Enclosed, Wind Important Factor Iw = 1.0
 Refer to calculation page L1 for design wind forces.

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 1.0, Seismic Use Group 1
 Design and Analysis by Simplified Design Procedure
 Peak Ground Accelerations (PGA) based on USGS Hazards Program, by lat/long.
 PGA 1 sec = .482 PGA .2 sec = 1.385
 Seismic base shear = 0.17 * 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 Grade C, Fy=50 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.

Unless noted with a field weld flag, all welds are to be completed in a WABO certified shop.

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 and into the stud end grain are not permitted. Simpson A34 clips at top and bottom of each stud are permitted where correct toenailing is not provided.

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

Where a post aligns with a header on the floor below, provide full depth blocking through the floor framing and a full sized post above the header in the wall below

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

2x joists	Hem-Fir #2
2x, 3x, and 4x studs	DF/L standard for plywood or WSP shear walls
	Hem-Fir standard for other walls
4x and 6x beams	DF-L #2
Timberstrand LSL lumber	1.5E, Fb = 2250 psi, Fv = 300 psi (minimums)
	1.55E, Fb = 2325 psi, Fv = 310 psi (minimums)
Parallam lumber	2.2 E, Fb = 2900 psi, Fv = 290 psi (minimums)
Glu-lam lumber	24F-V4 for simple span beams, 24F-V8 for cantilever beams

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

Preservative-Treated Wood and Fasteners:

All wood in contact with concrete or masonry shall be preservative-treated, in accordance with 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 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, web stiffener, 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.

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 Typical Holddown Detail (2/S-8).

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. Provide 18" min. embedment.

5/8" diameter A307 threaded steel rod may be used, which shall be embedded 8" into the concrete foundation.

For HDU8: Simpson SB7/8x24 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature. Provide 18" min. embedment.

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.

For HDU11: Simpson SB1x30 may be used, installed per the most recent edition of the Simpson Strong-Tie Literature. Provide 24" min. embedment.

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

The PAB anchor shall be continuous through the foundation stem wall, into the footing. Footings containing an anchor bolt shall be a minimum of 16" wide by 12" deep. The embedment depth shall be as shown in the Hold Down Bolt Embedment Table.
 The PAB threaded rod may be extended using an ASTM A194-2H coupler connecting to a 1" diameter ASTM A449 threaded rod.

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 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.



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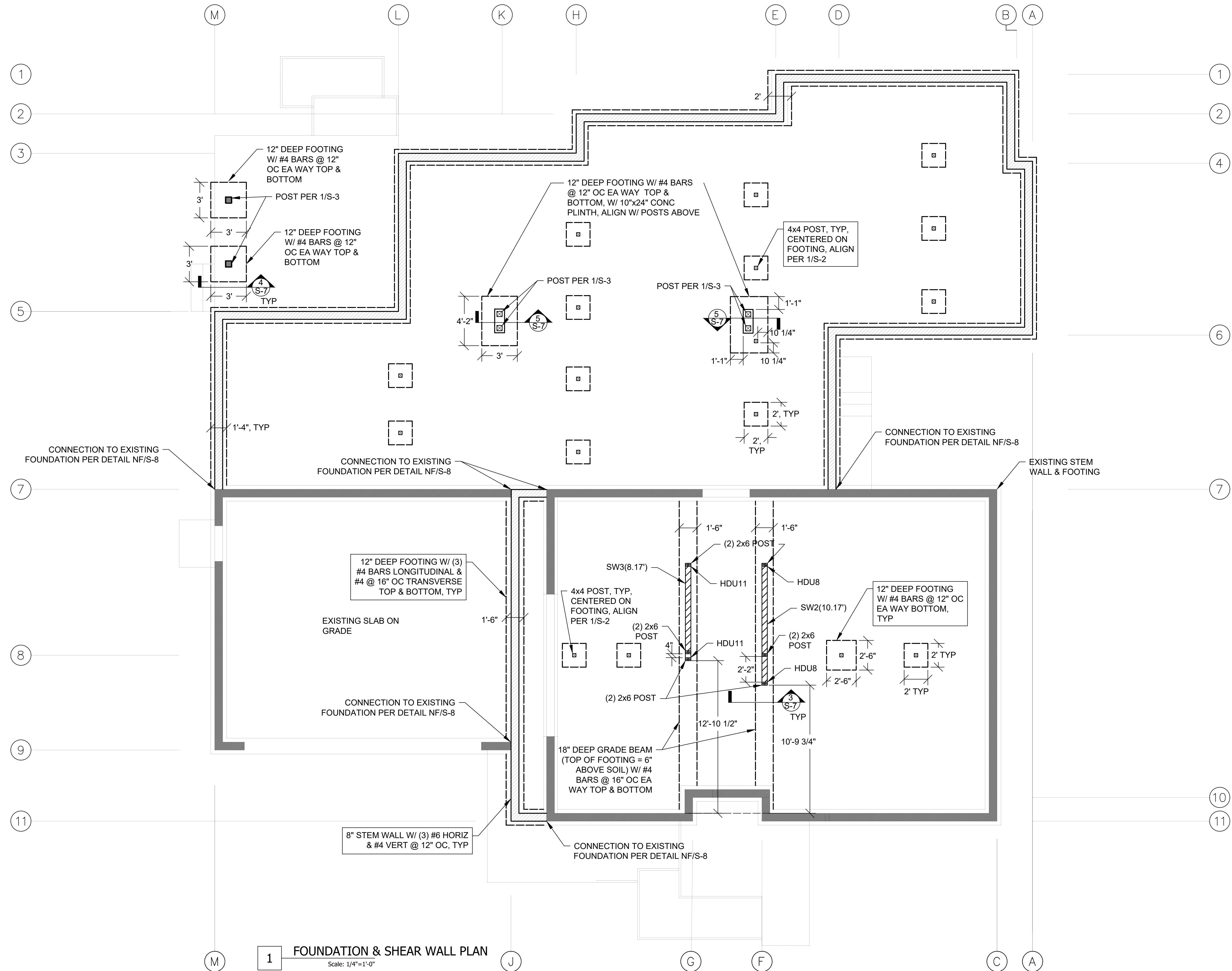
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Date:
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S-1





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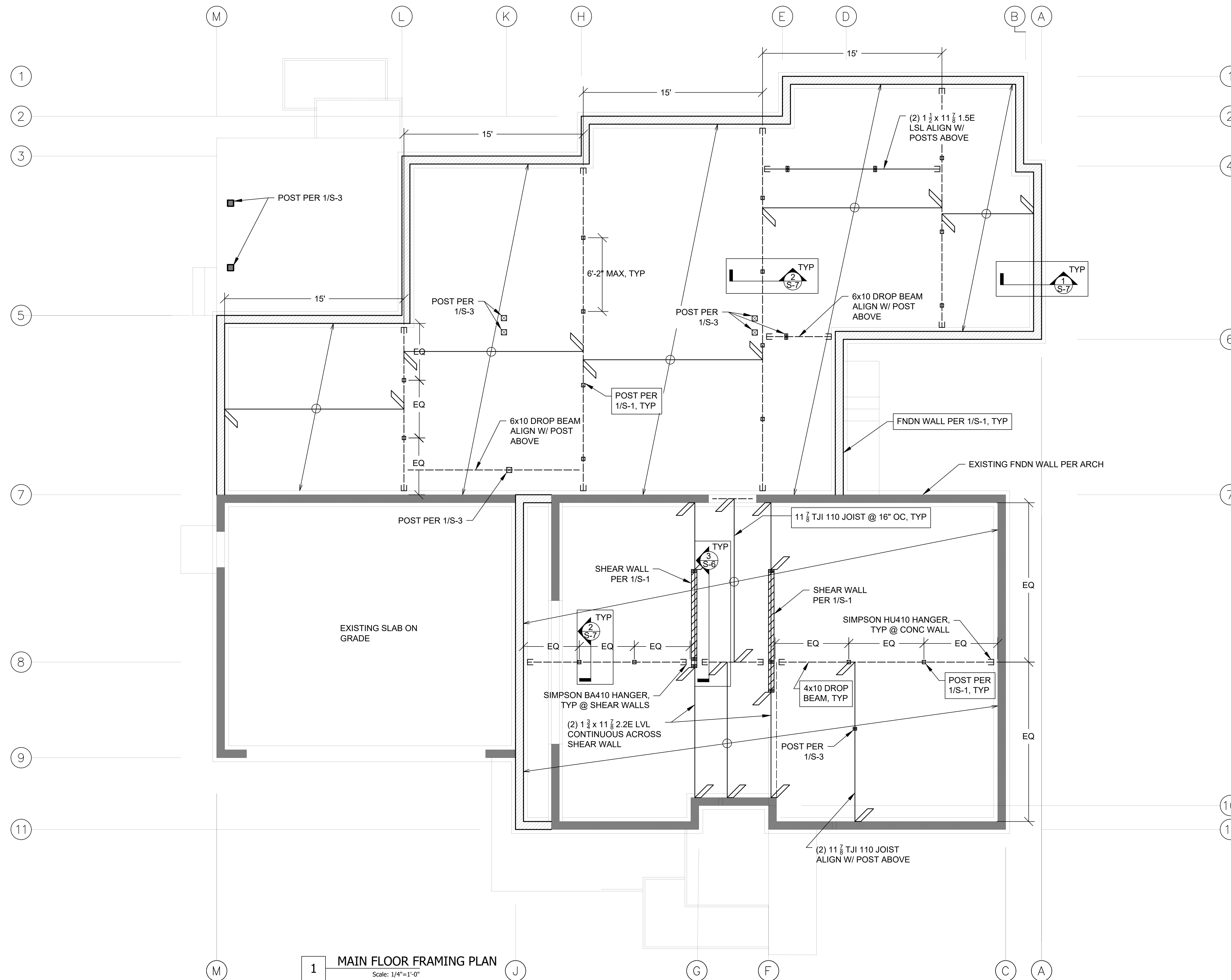
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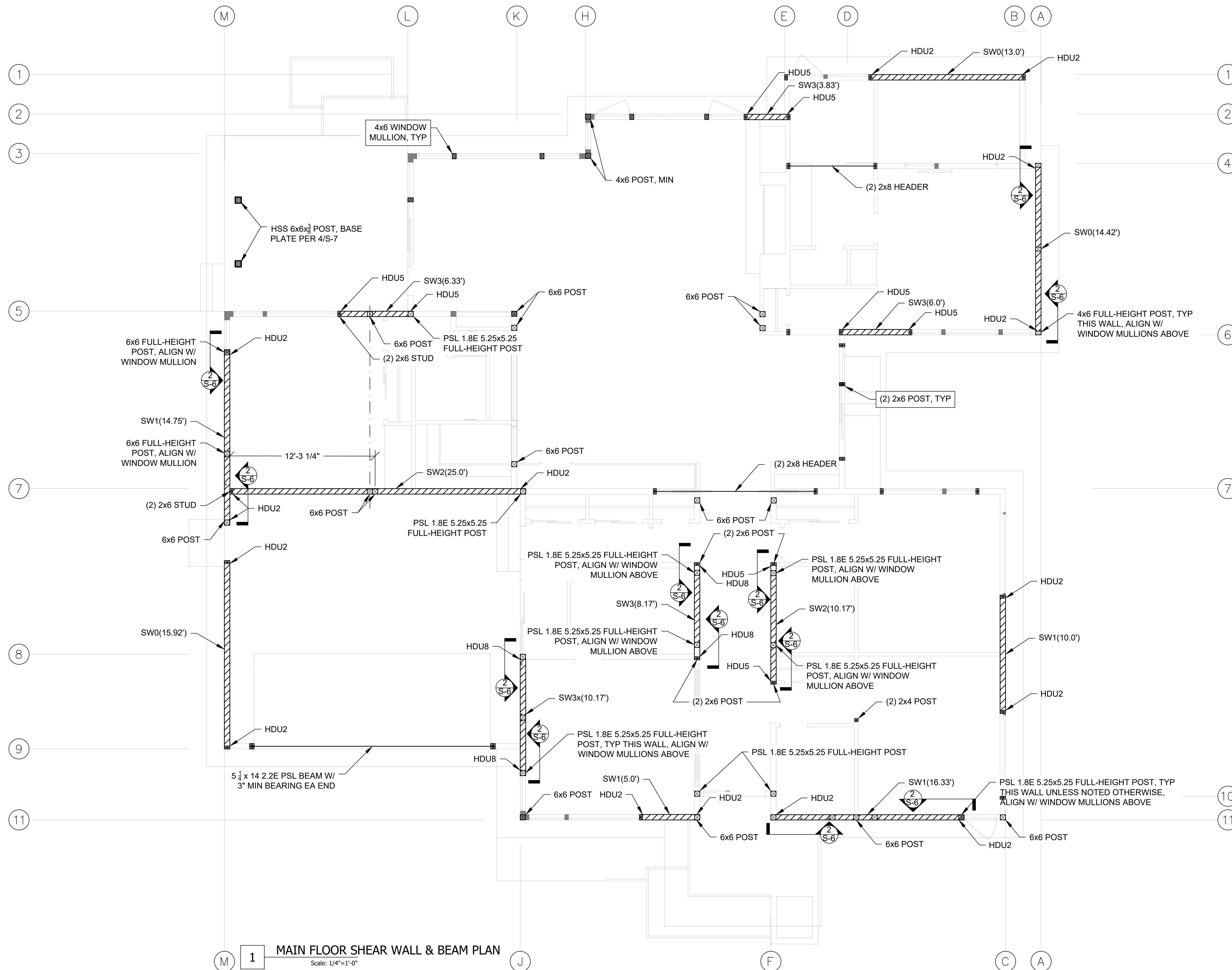
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S-3



1 MAIN FLOOR SHEAR WALL & BEAM PLAN
Scale: 1/4"=1'-0"



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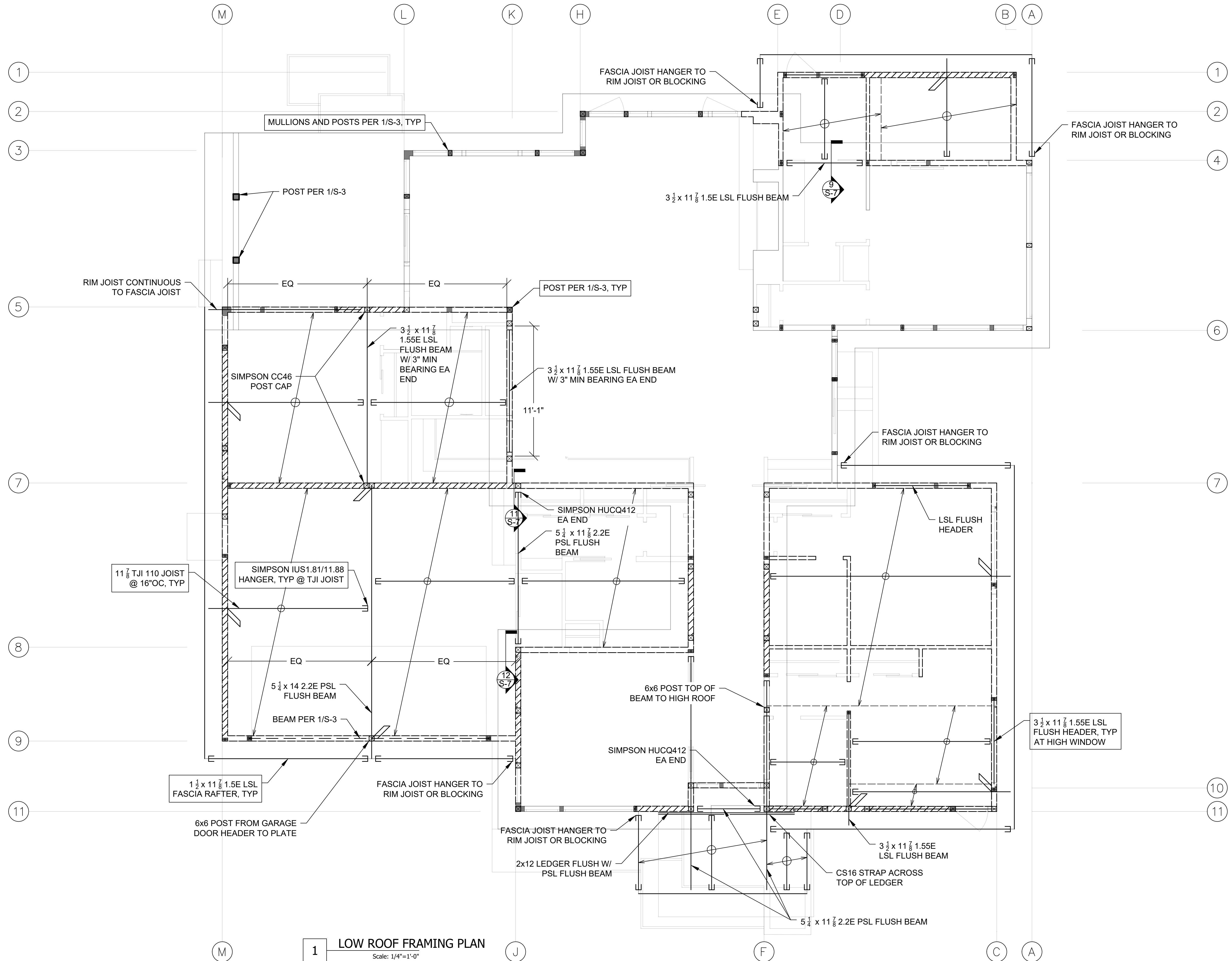
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Date:
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S-4



1 LOW ROOF FRAMING PLAN
 Scale: 1/4"=1'-0"



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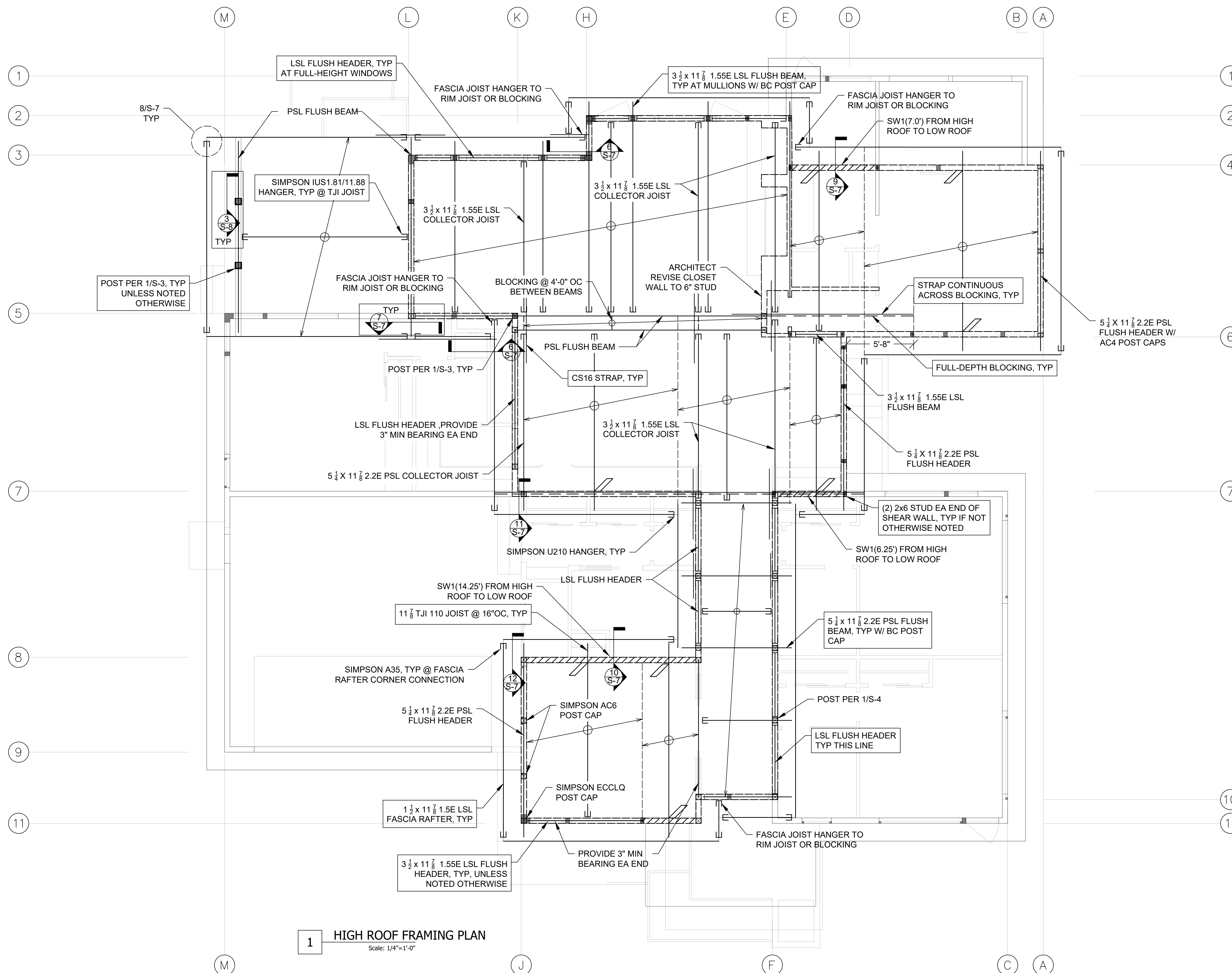
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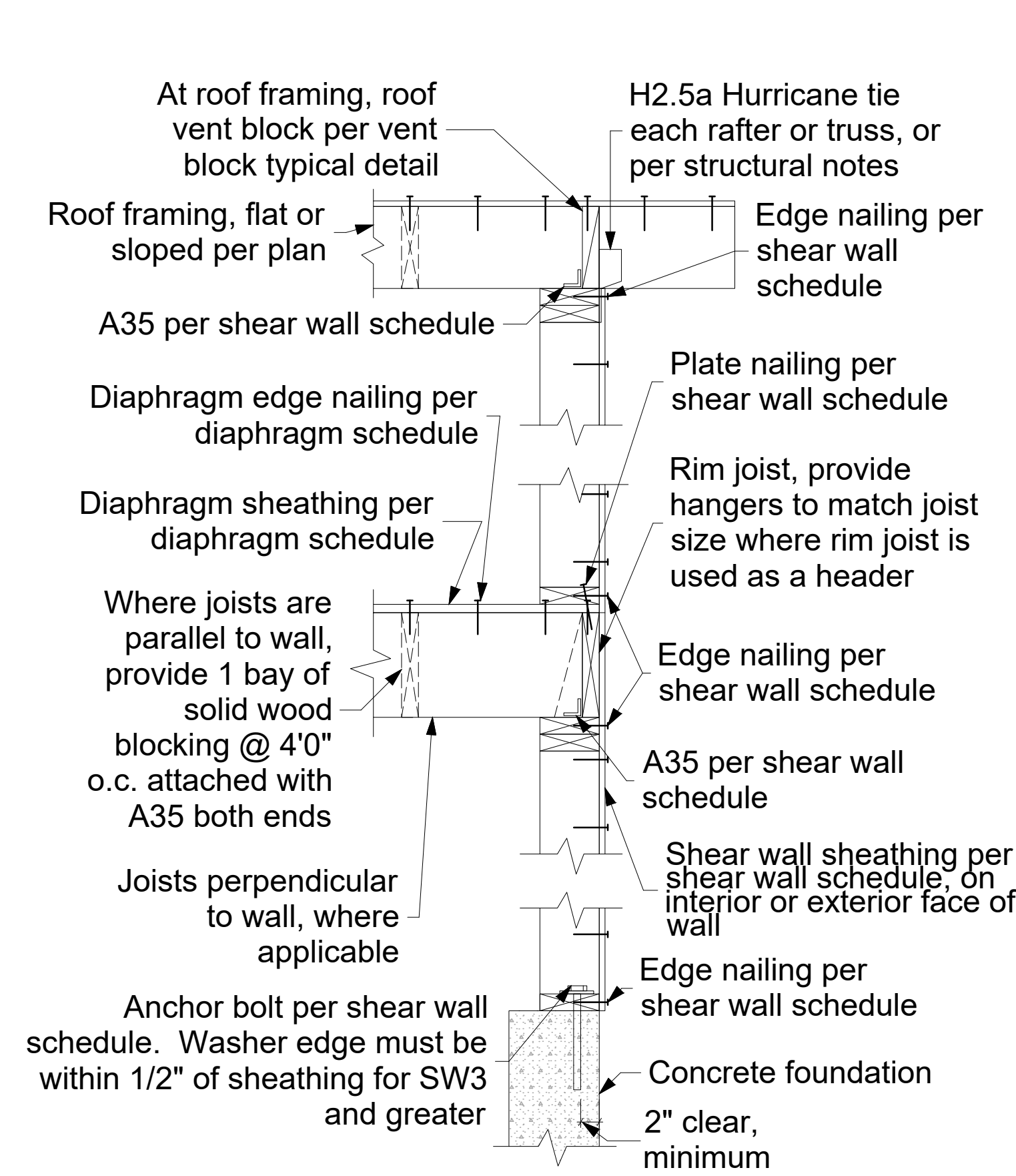
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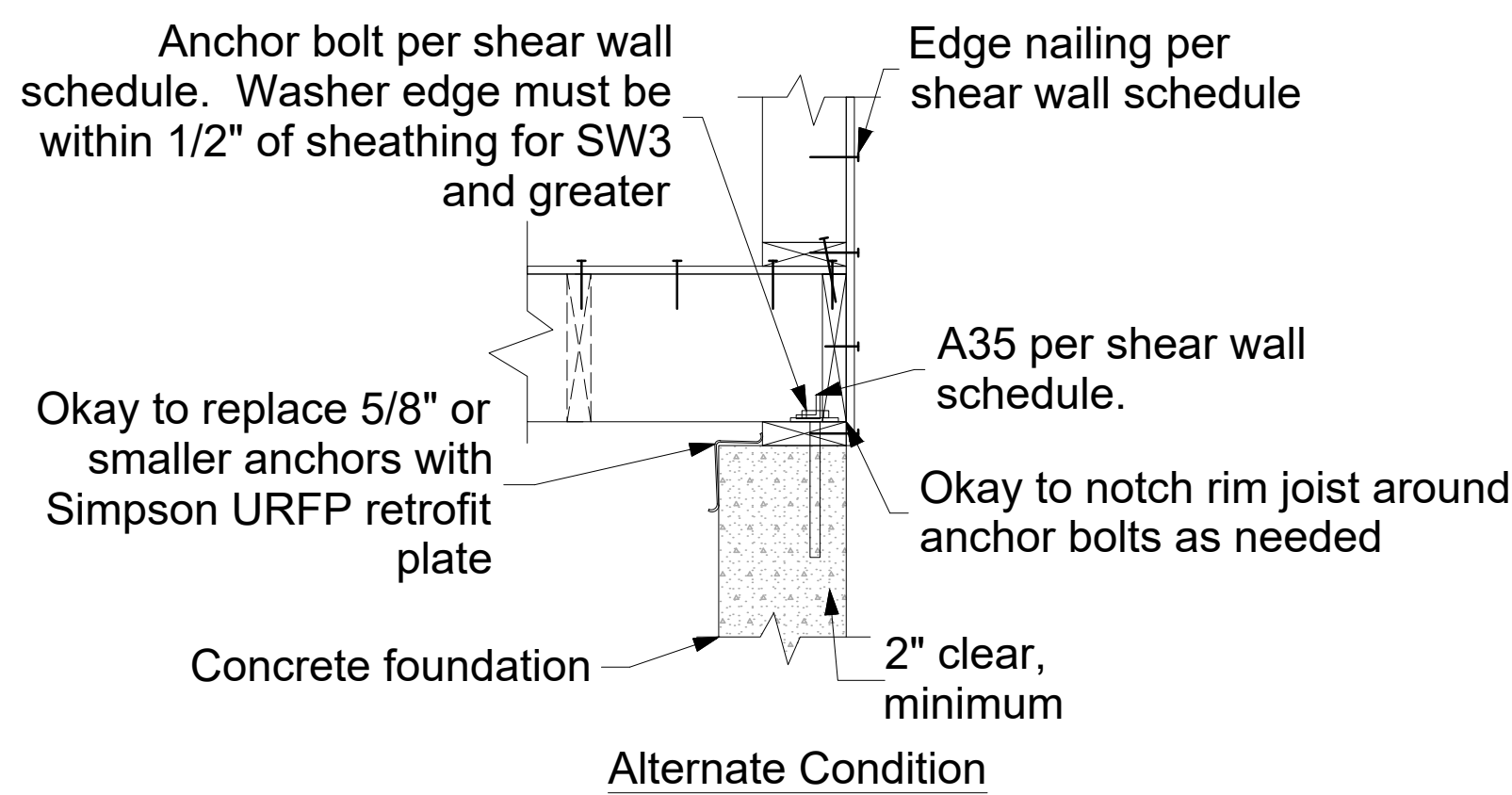


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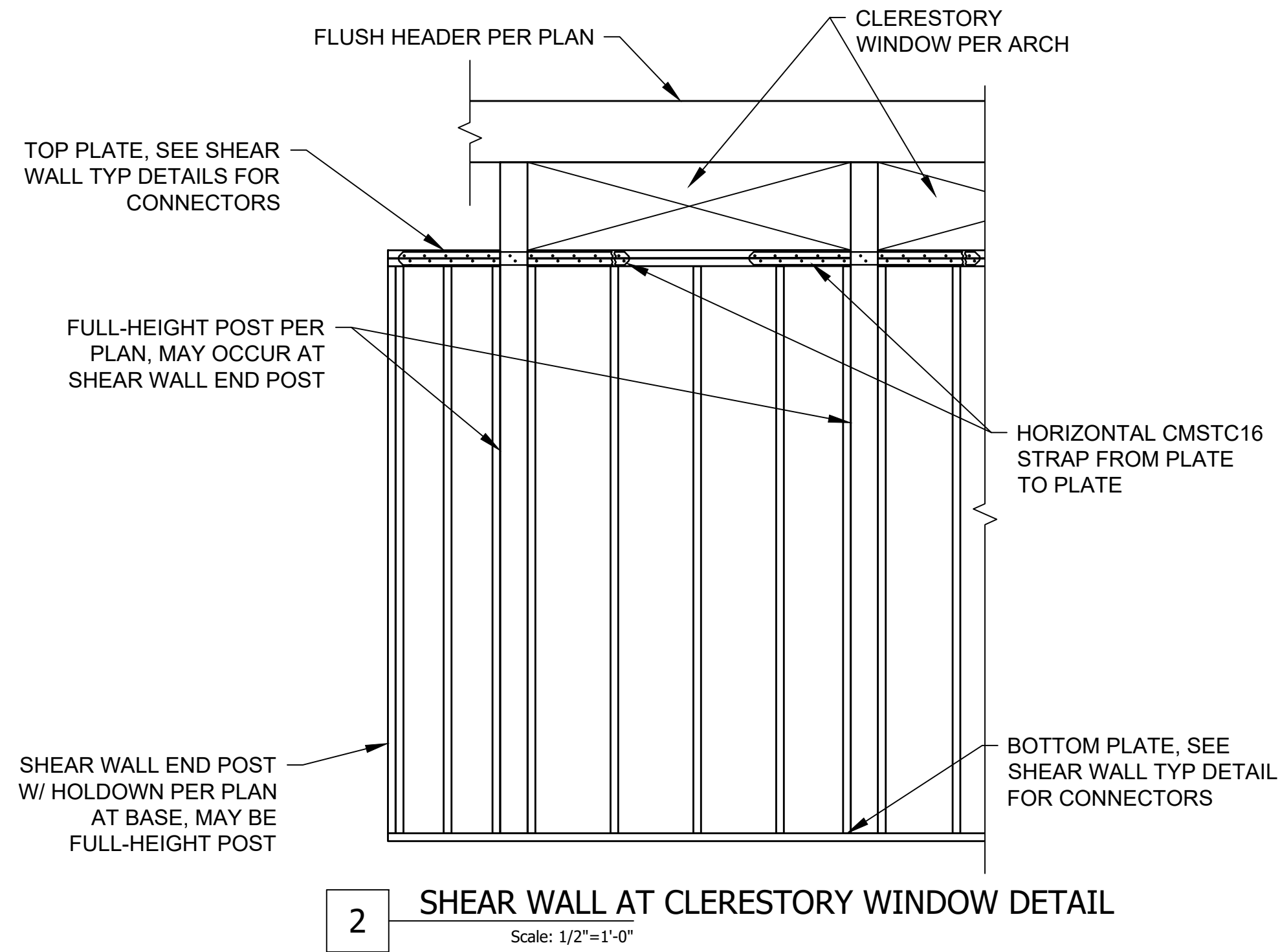
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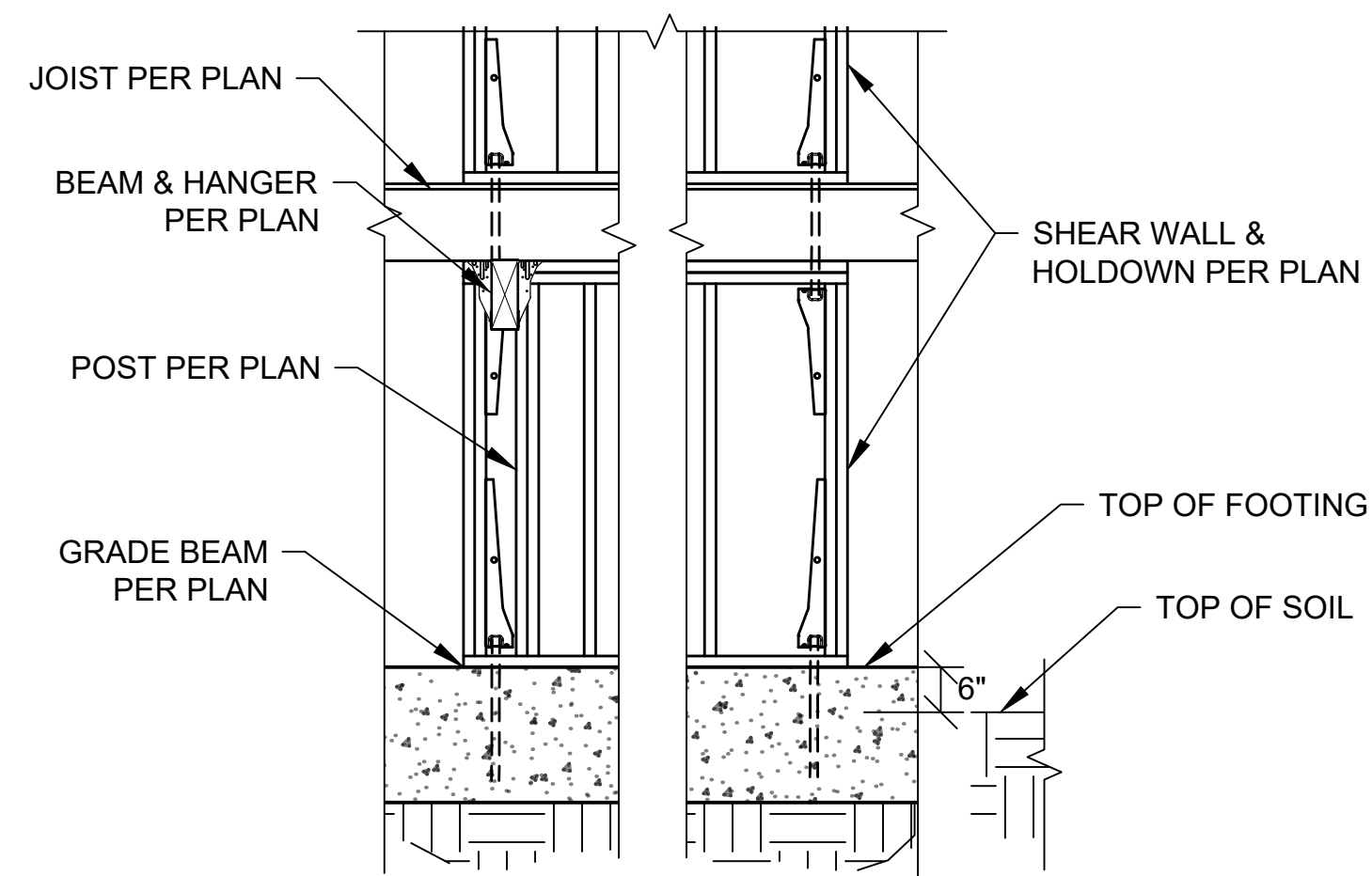
1 EXTERIOR SHEAR WALL TYPICAL DETAIL
 Scale: 1/2"=1'-0"



Alternate Condition



2 SHEAR WALL AT CLERESTORY WINDOW DETAIL
 Scale: 1/2"=1'-0"



3 CRAWLSPACE SHEAR WALL FRAMING AT MAIN FLOOR DROP BEAM
 Scale: 1/2"=1'-0"

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"	1/4"x4.5" SDS @ 5"	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 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.
- "SIS" refers to "Structural I Sheathing", either plywood or other wood materials. Apply any "WSP" notes to "SIS" as well.
- Provide double stud minimum at both ends of all shear walls.
- Provide blocking at all panel edges to match the depth of framing, unless otherwise noted.
- At the roof or top level of any shear wall, "A35 spacing", and all other relevant connector specifications, apply to assemblies at both the top and bottom of the shear wall. At lower levels, apply to the bottom of the wall only.
- Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates (whichever applies) of all shear walls.
- Provide 3x_ plates, and 4x_ rim joists, minimum, where lag screws are specified for plate nailing.
- Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members receiving edge nailing from abutting panels shall not be less than a single 3x_ member.
- Provide 4x_ or double 2x_ framing where A35 angles are used on both sides of one piece of wood.
- Where a shear wall terminates above the foundation level (no shear wall below), provide minimum 4x_ blocking or double joist framing (as applicable) below the shear wall. Plate nailing per this schedule shall be nailed into this blocking at the bottom of the wall only.
- 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.
- "SDS" refers to Simpson SDS screws
- 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.
- 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.

4 SHEAR WALL & DIAPHRAGM SCHEDULE
 Scale: N/A

Revisions:

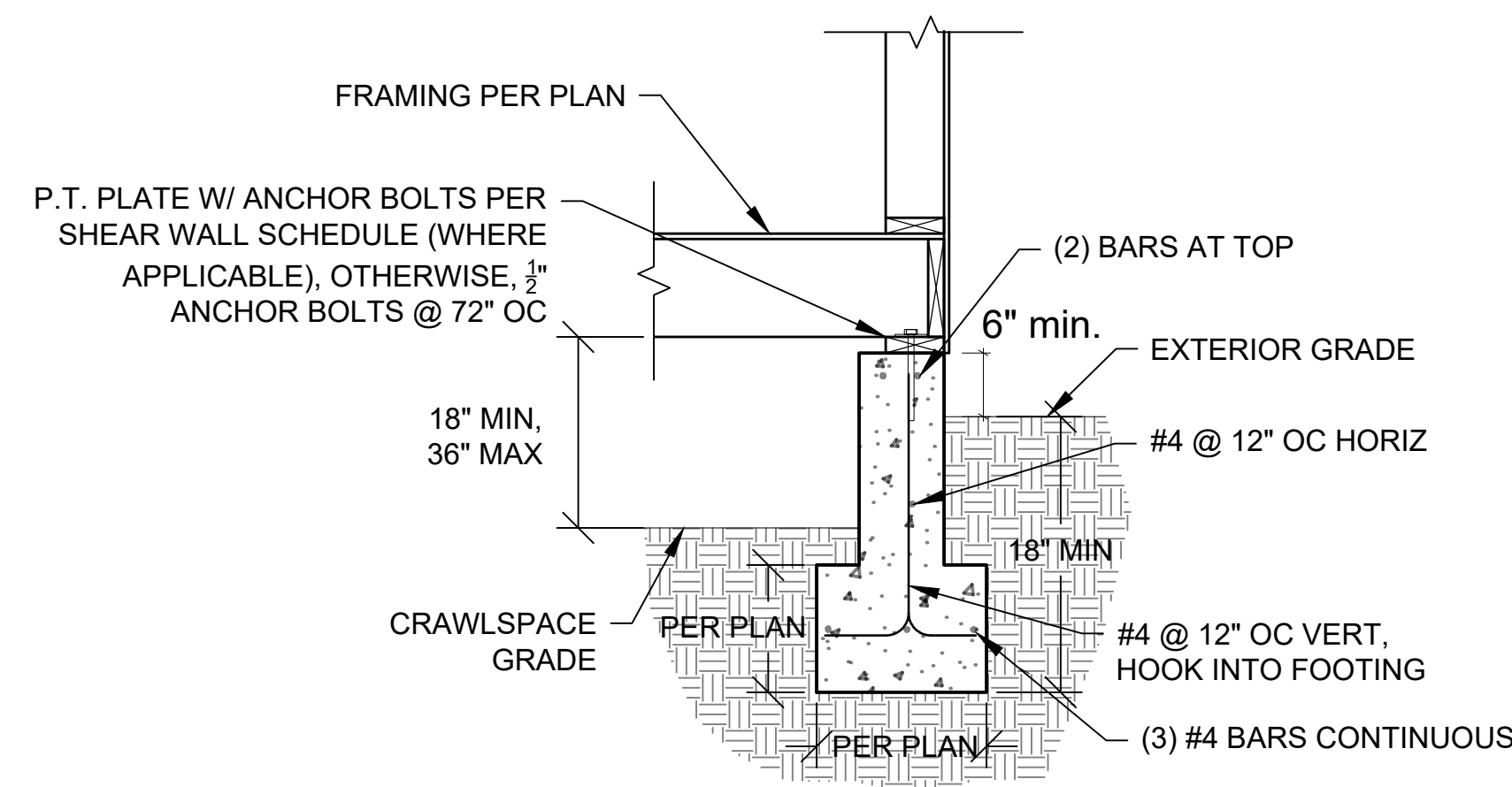
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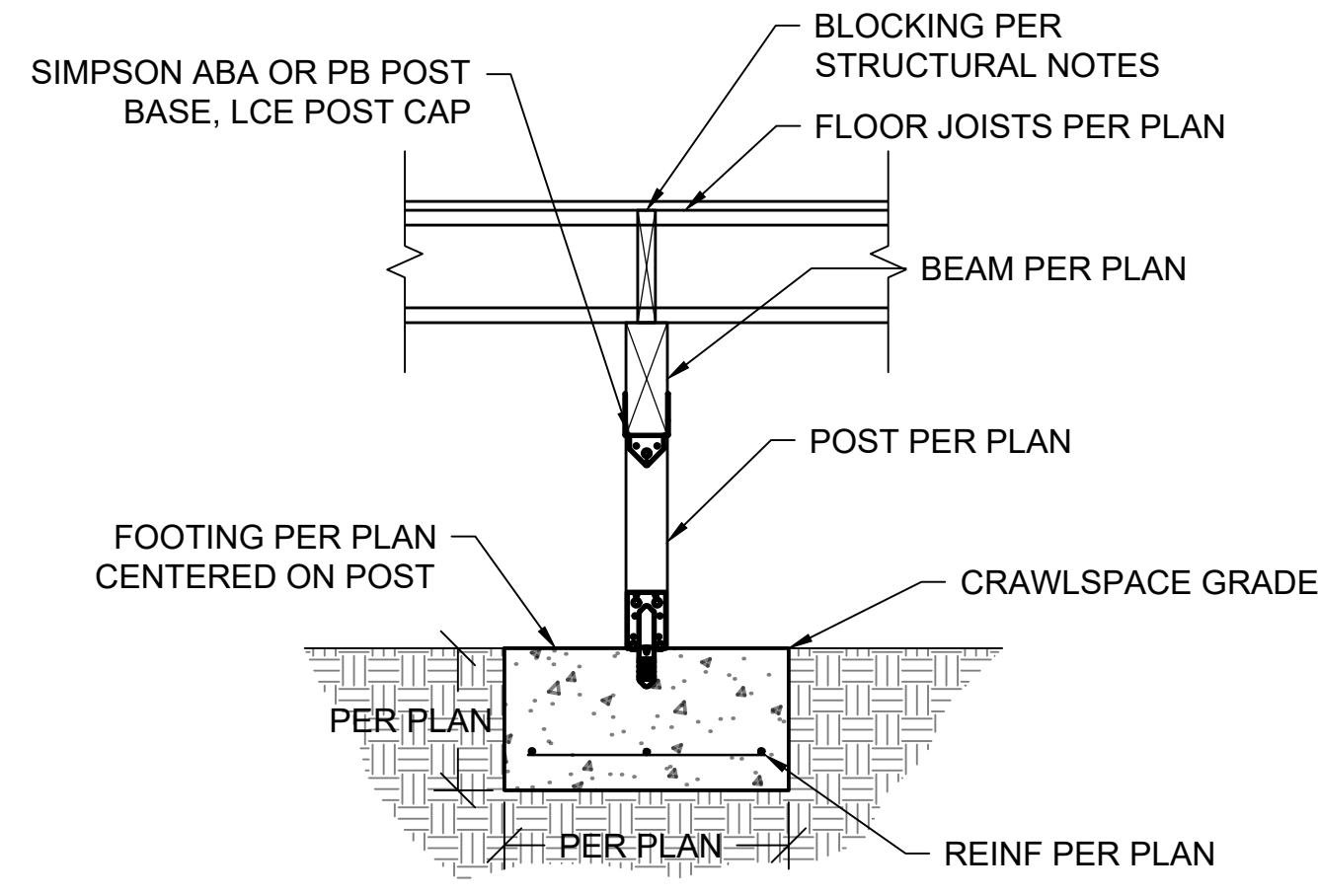
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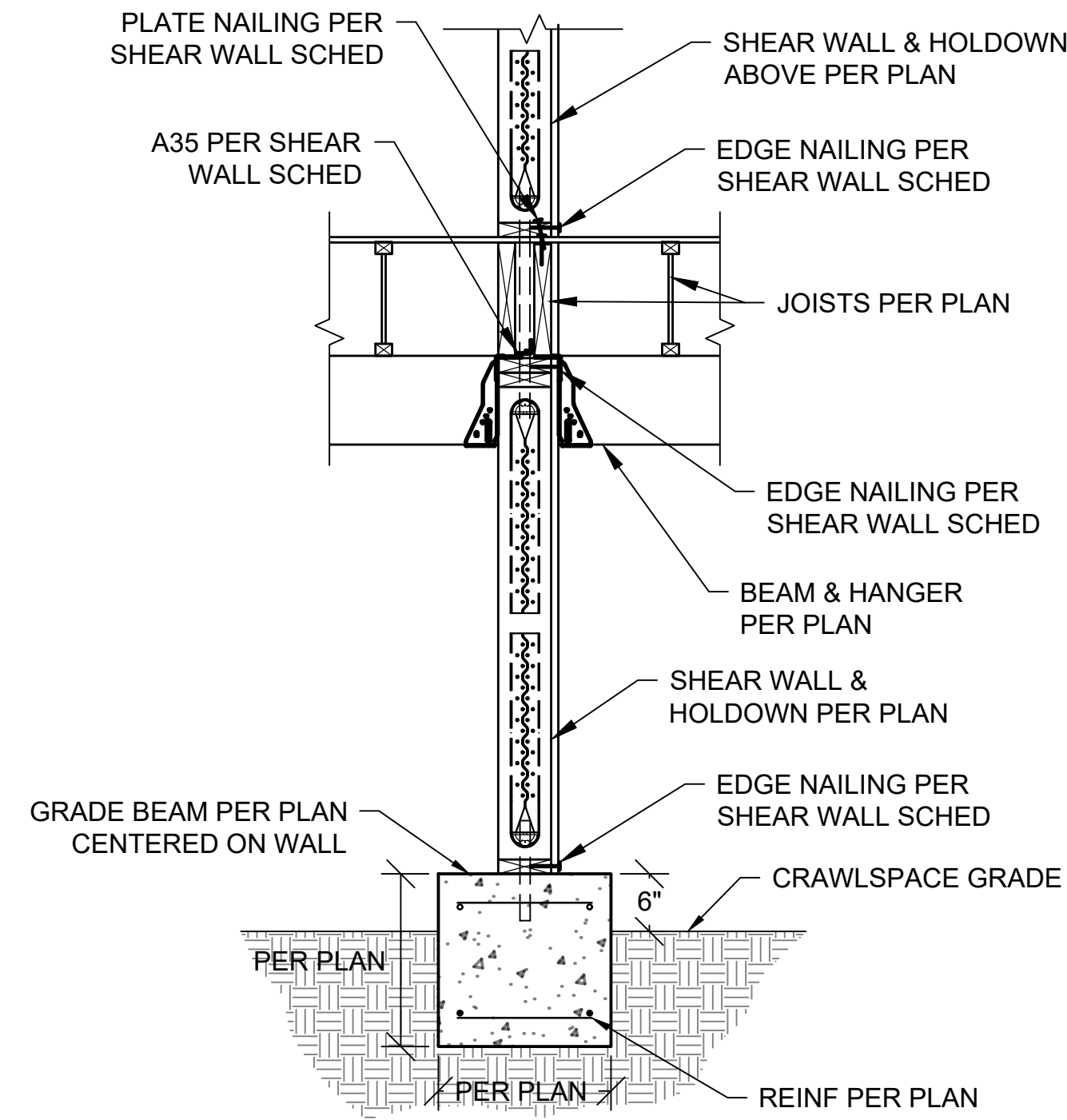
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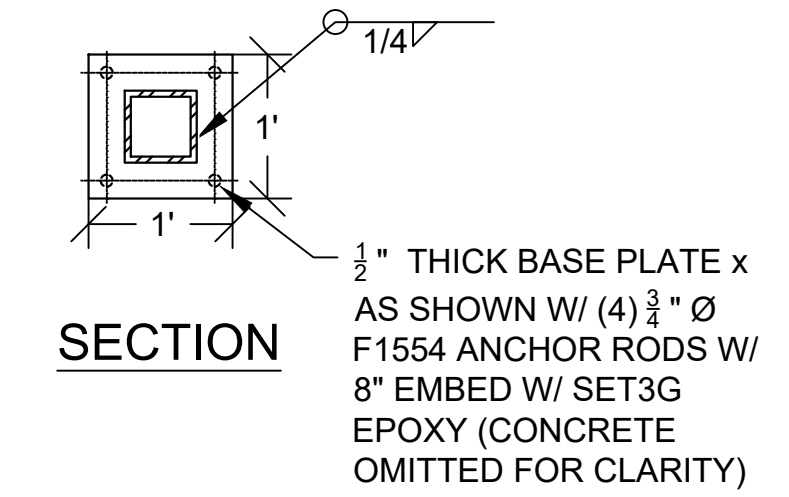
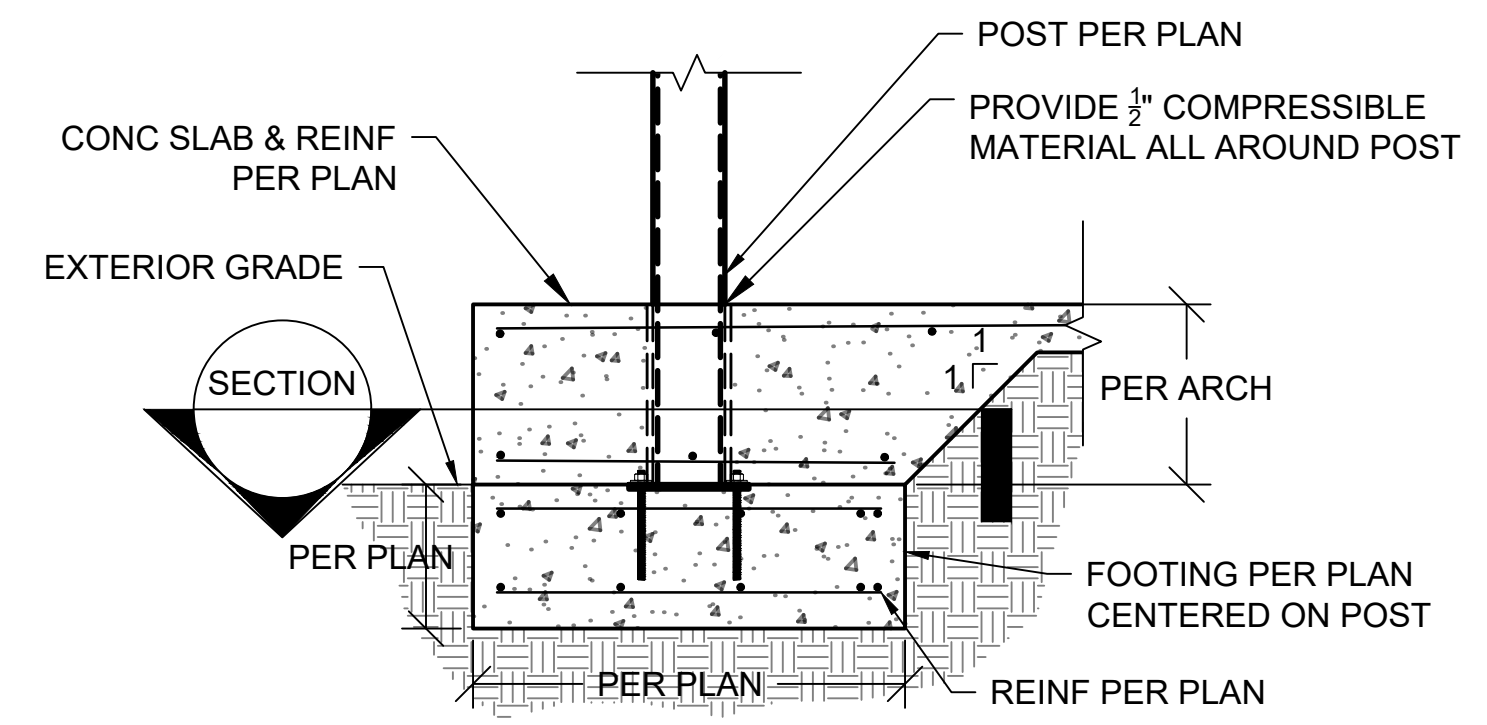
1 EXTERIOR FOOTING W/ CRAWLSPACE
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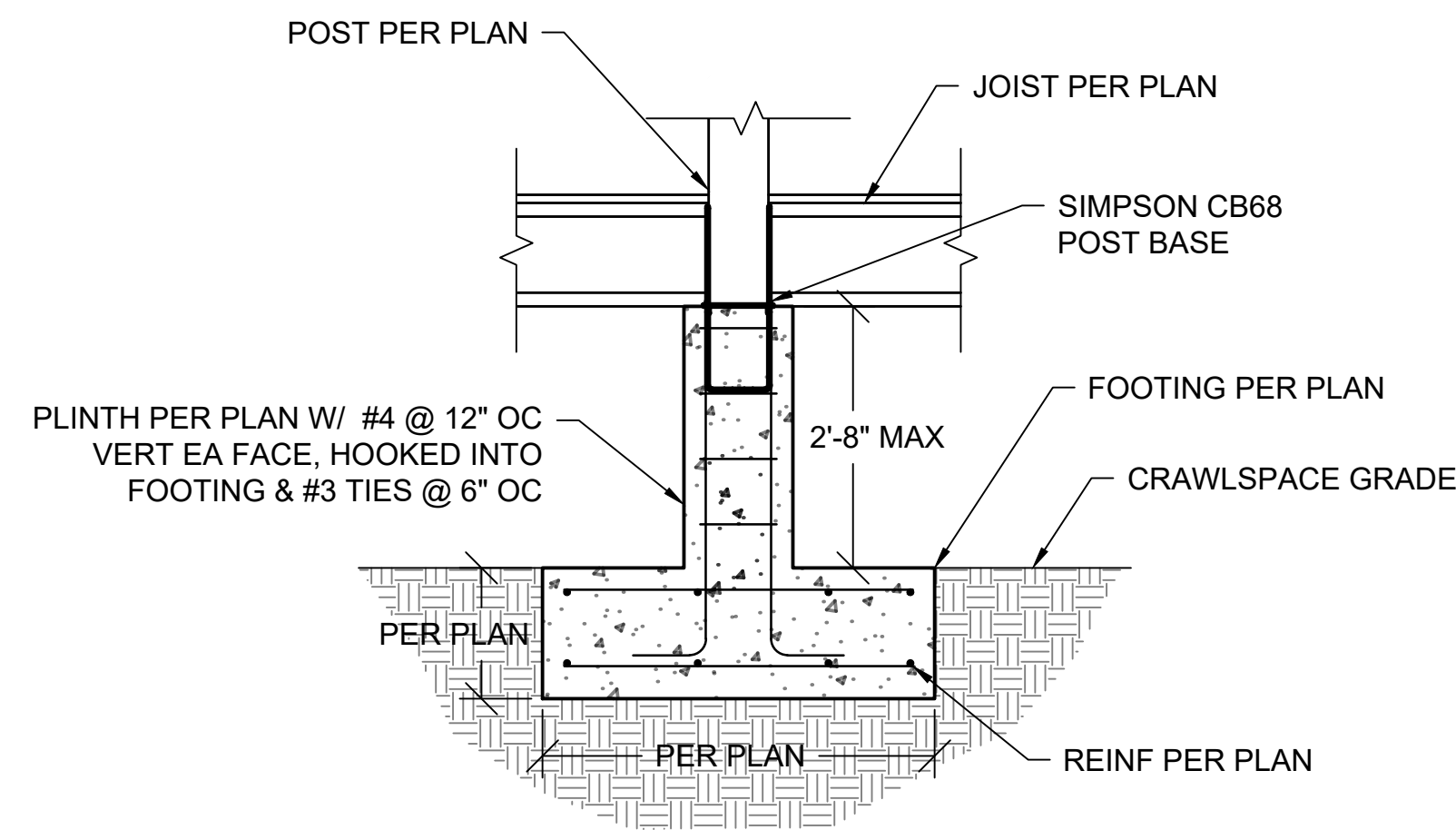
2 CRAWLSPACE PIER FOOTING DETAIL
 Scale: 3/4"=1'-0"



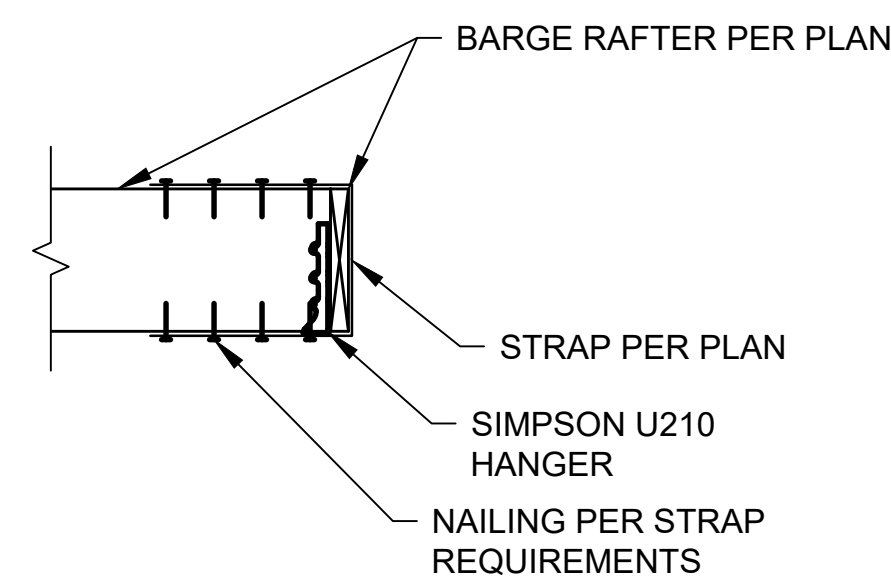
3 CRAWLSPACE SHEAR WALL FRAMING & GRADE BEAM
 Scale: 3/4"=1'-0"



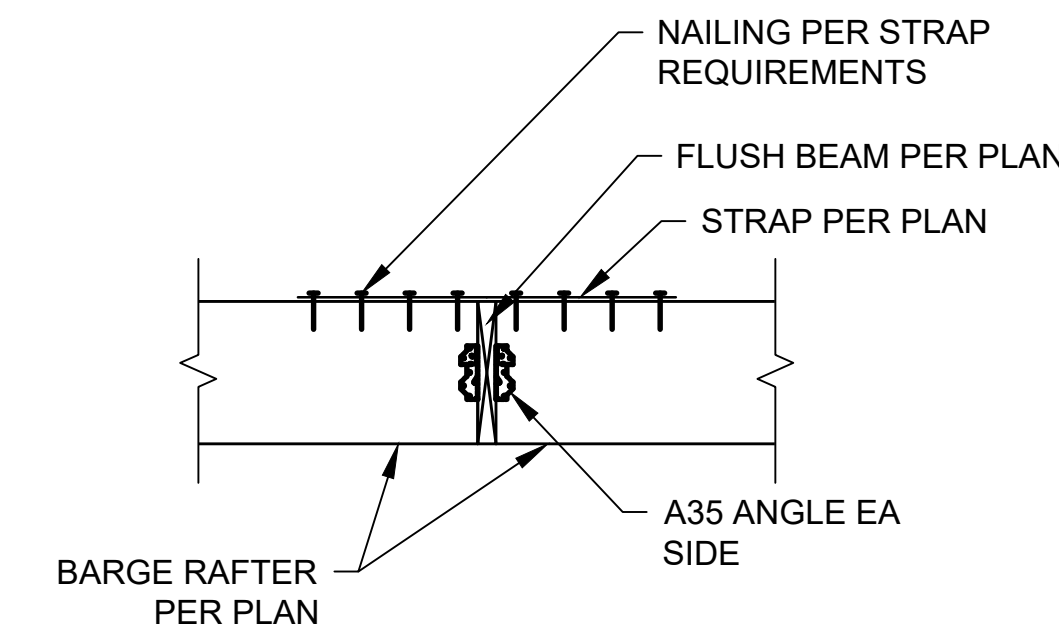
4 STEEL POST FOOTING & BASE PLATE DETAIL
 Scale: 3/4"=1'-0"



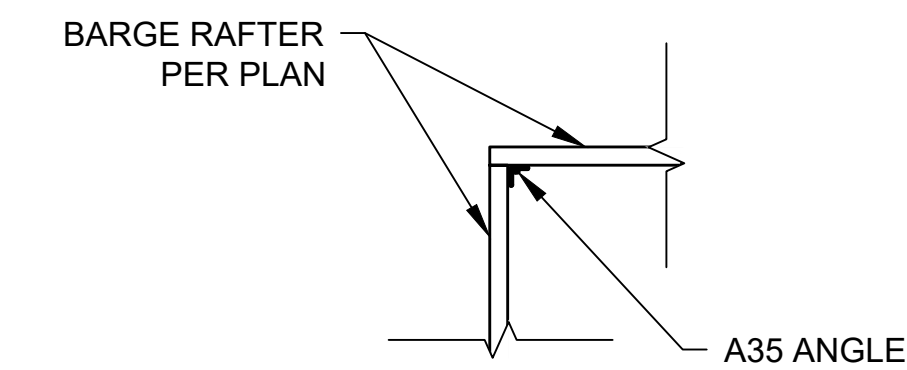
5 FOOTING PLINTH DETAIL
 Scale: 3/4"=1'-0"



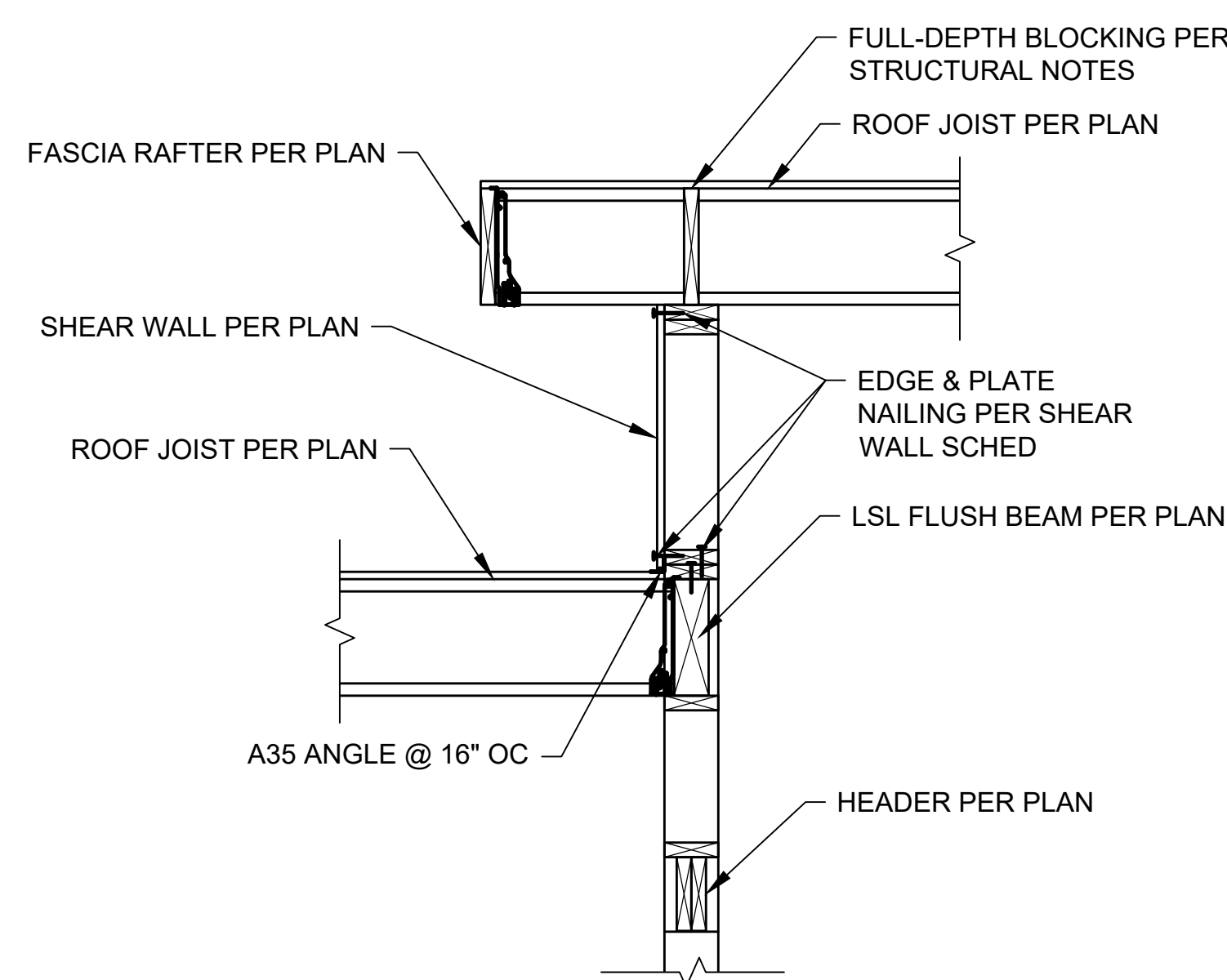
6 BARGE RAFTER STRAPPING AT PERPENDICULAR CONNECTION
 Scale: 3/4"=1'-0"



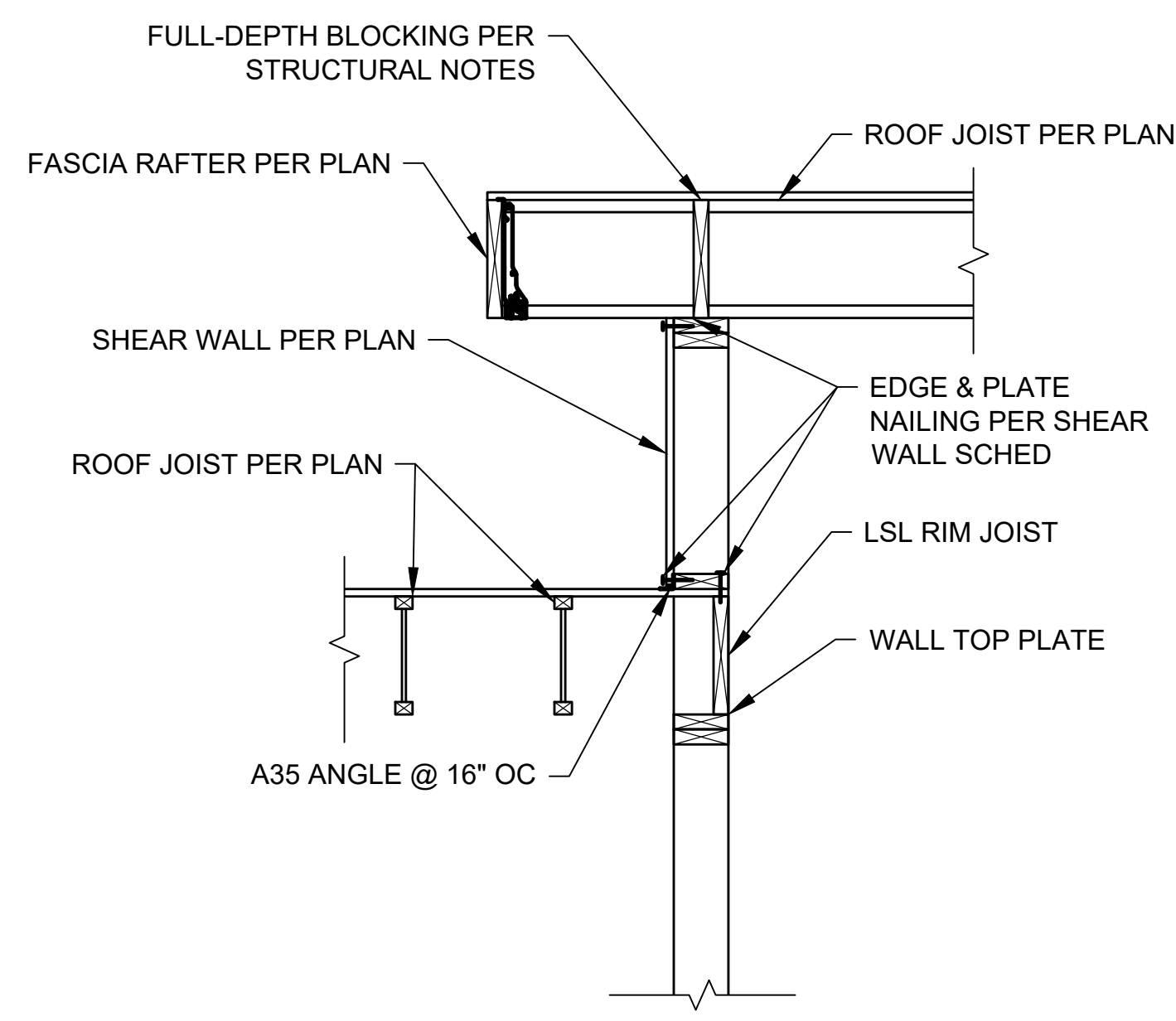
7 BARGE RAFTER STRAPPING AT END-END CONNECTION
 Scale: 3/4"=1'-0"



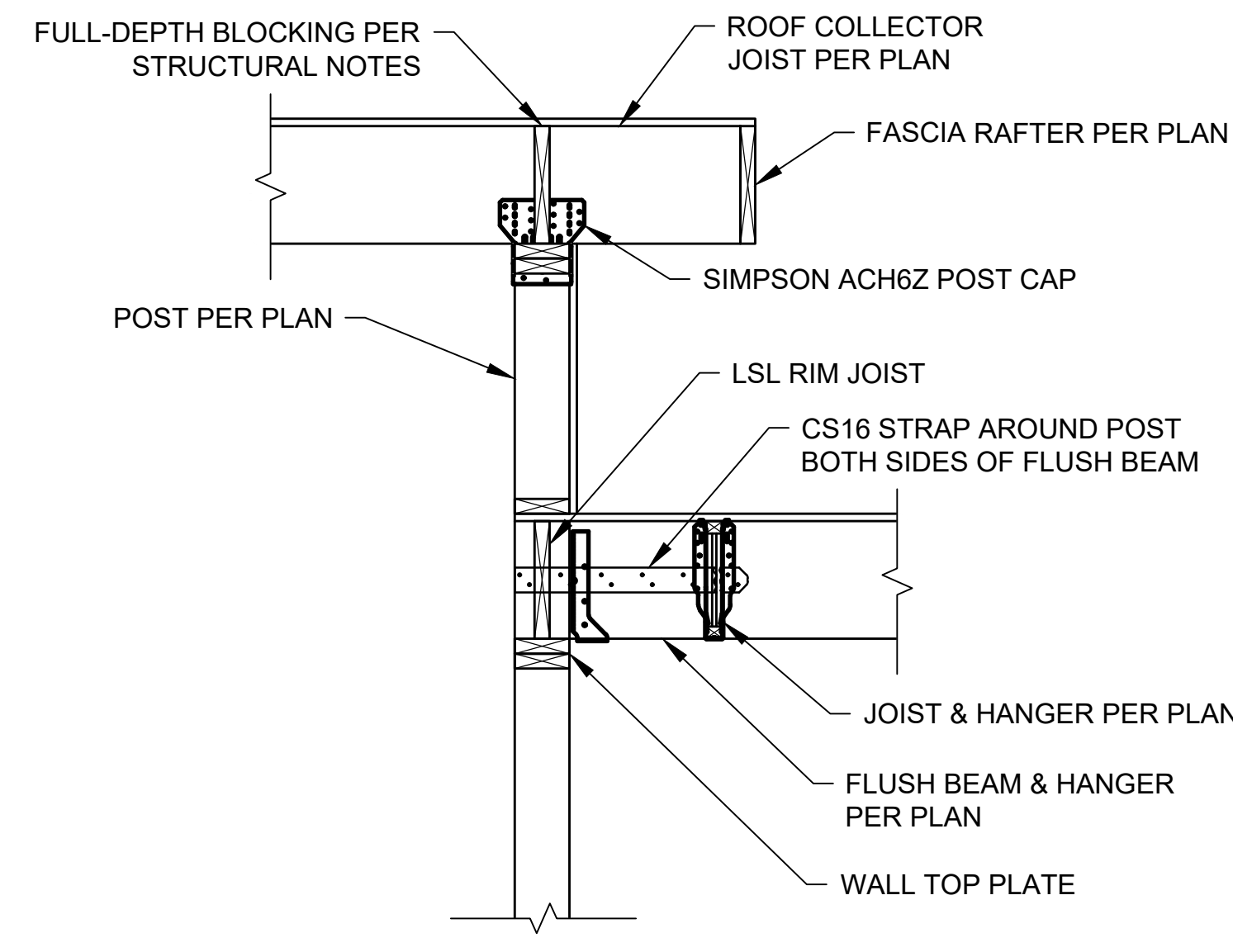
8 BARGE RAFTER OUTSIDE CORNER CONNECTION
 Scale: 3/4"=1'-0"



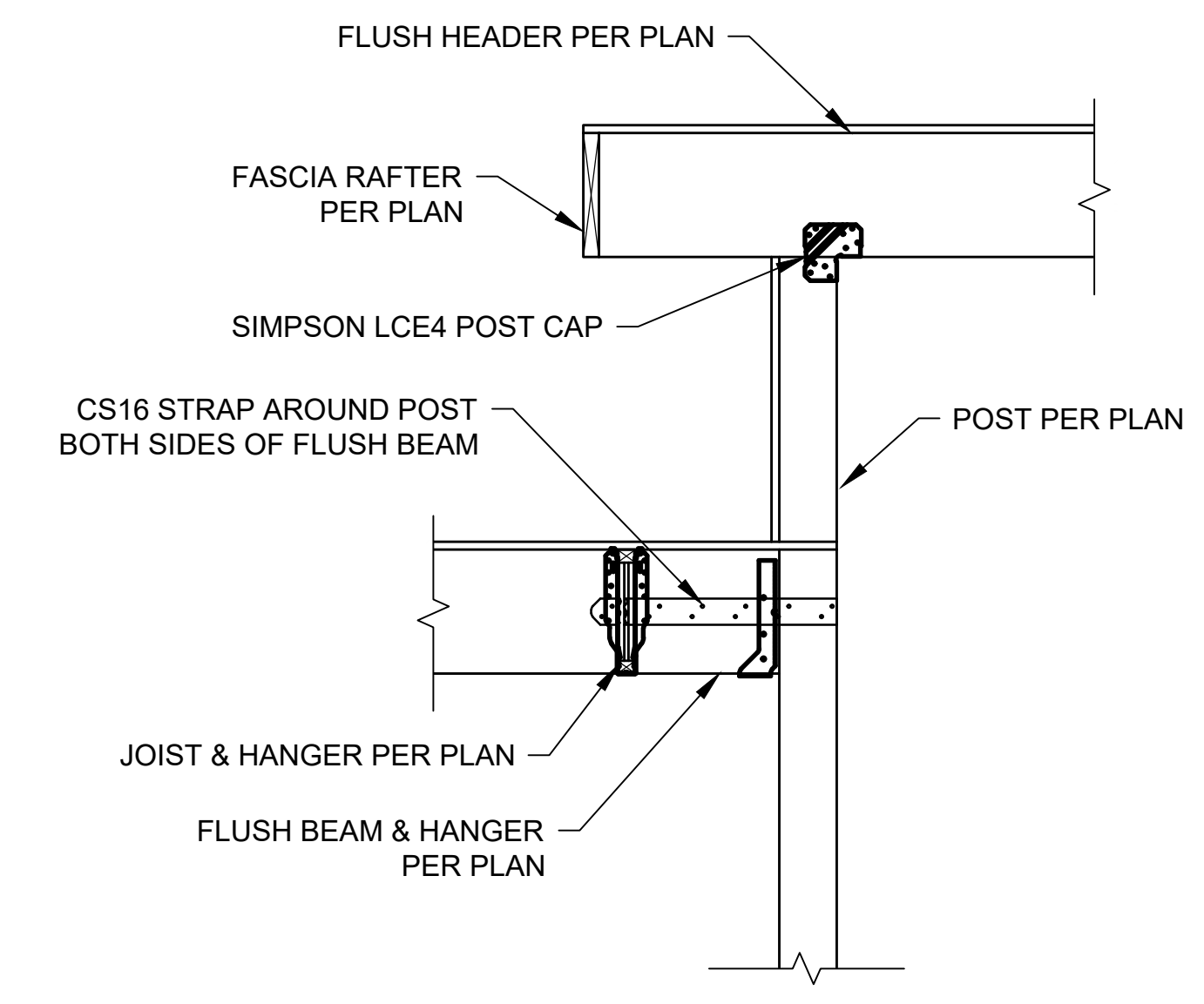
9 DIAPHRAGM SHEAR TRANSFER FROM LOW TO HIGH ROOF
 Scale: 3/4"=1'-0"



10 DIAPHRAGM SHEAR TRANSFER FROM LOW TO HIGH ROOF
 Scale: 3/4"=1'-0"



11 DIAPHRAGM DRAG TRANSFER FROM LOW TO HIGH ROOF
 Scale: 3/4"=1'-0"



12 DIAPHRAGM DRAG TRANSFER FROM LOW TO HIGH ROOF
 Scale: 3/4"=1'-0"

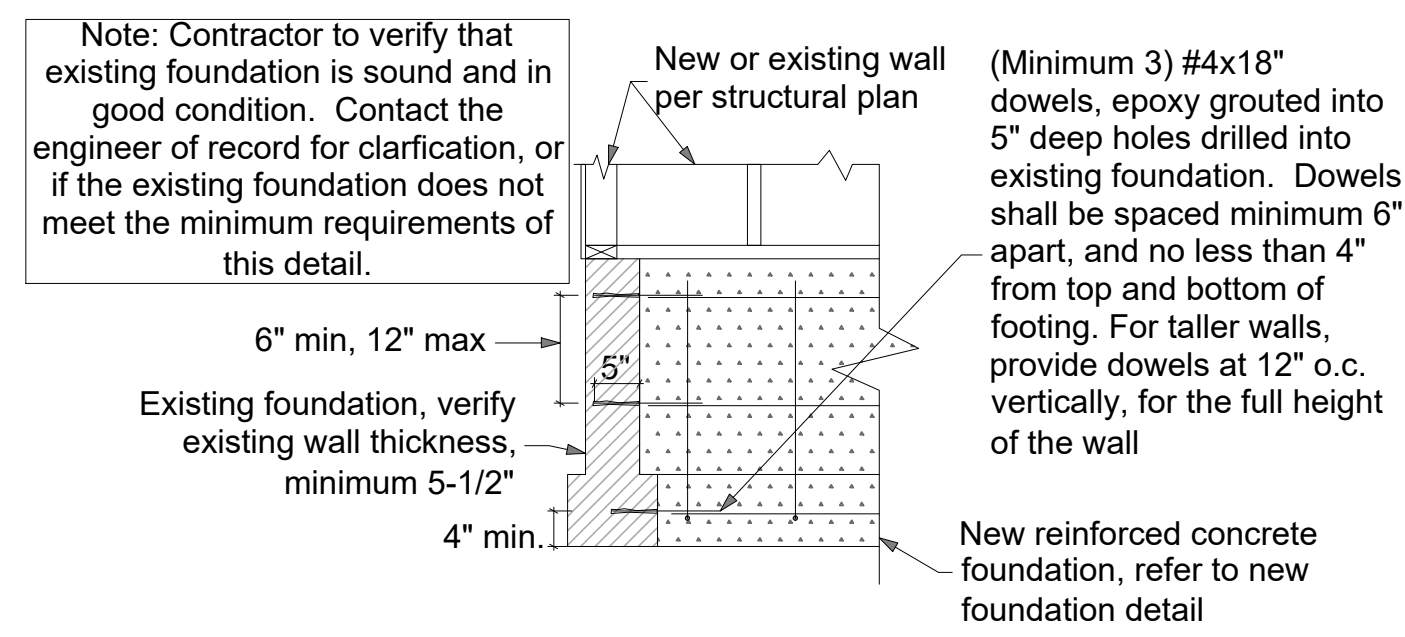
Toda Residence
 2262 78th Ave SE
 Mercer Island, WA 98040

Revisions:

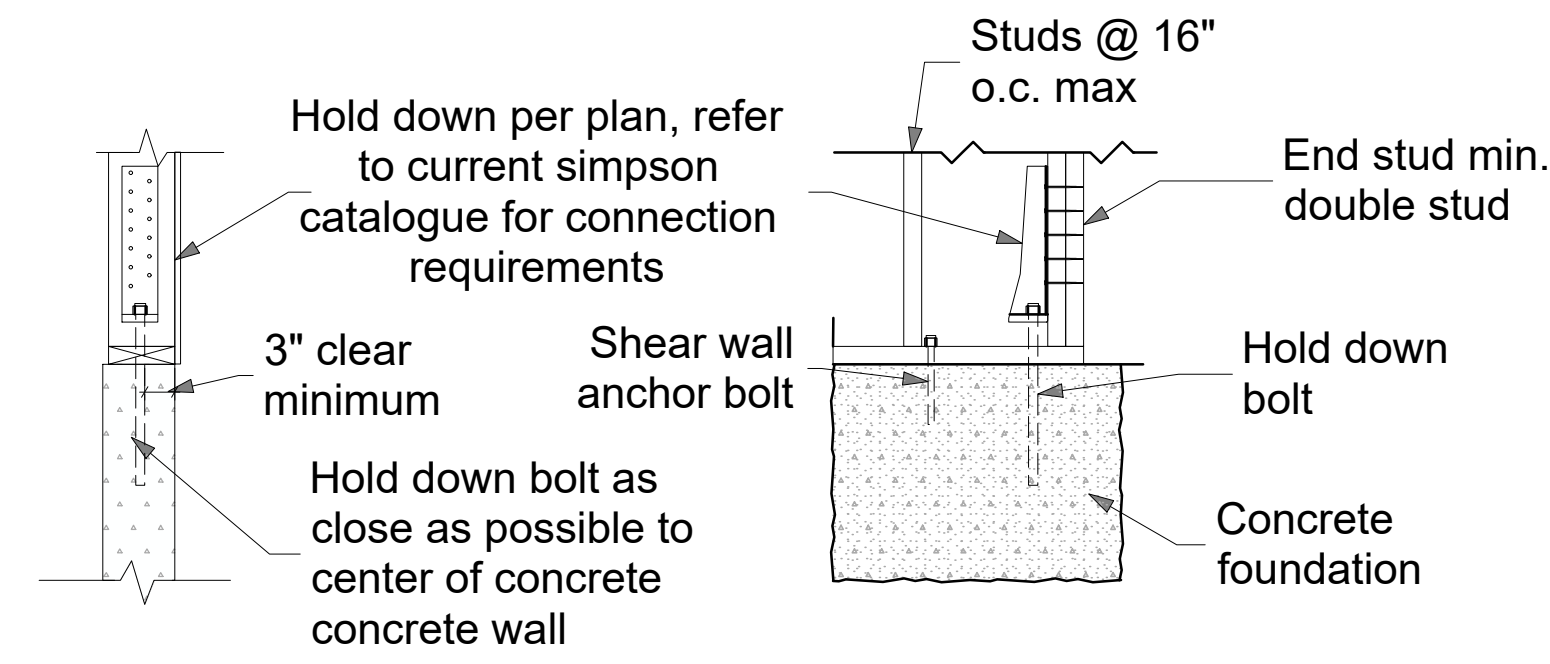
Date:
 06-02-25

Sheet:

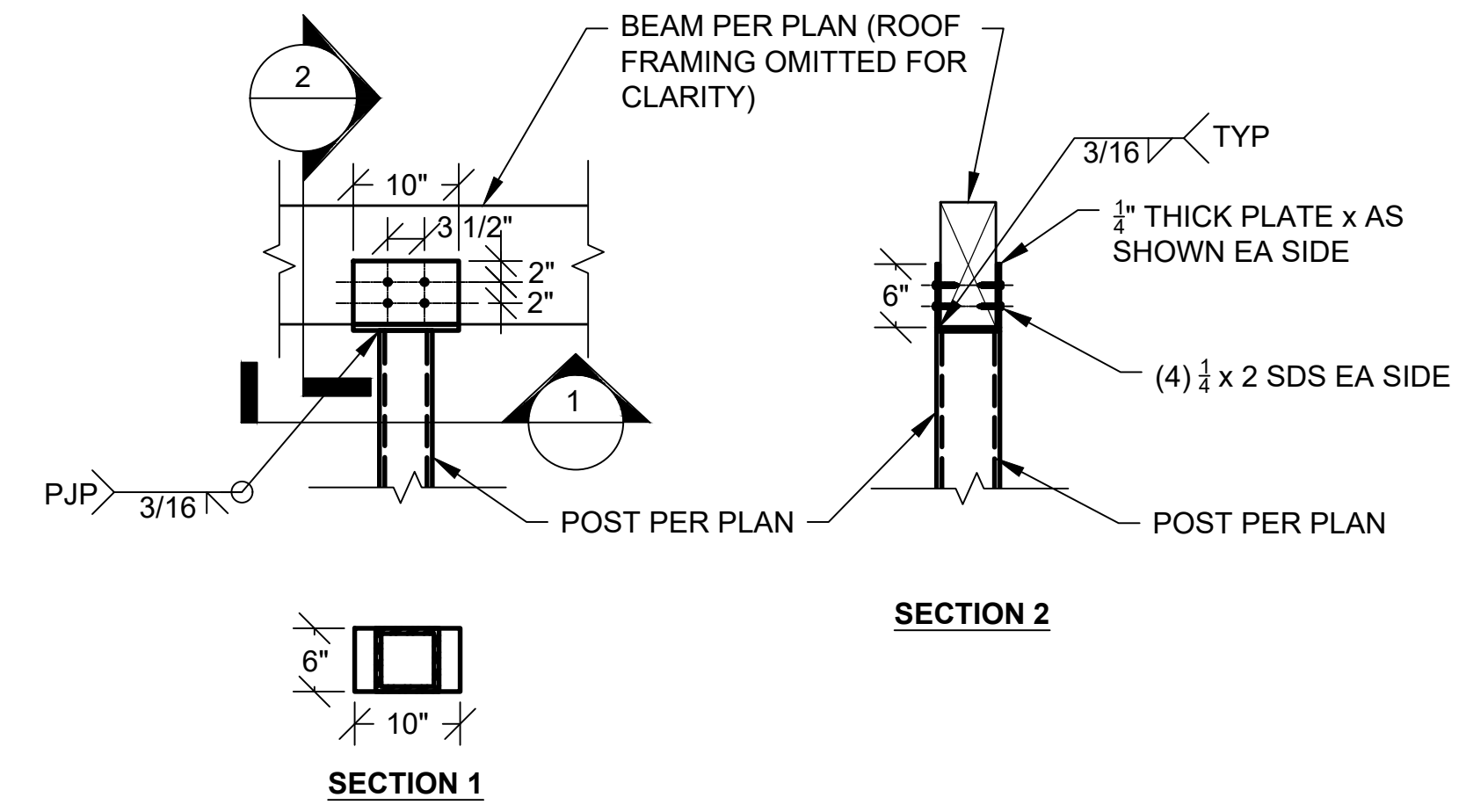
S-7



NF NEW FOUNDATION TO EXISTING DETAIL
Scale: 3/4"=1'-0"



2 TYPICAL HOLDOWN DETAIL
Scale: 3/4"=1'-0"



3 STEEL POST CAP CONNECTION
Scale: 3/4"=1'-0"

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

Toda Residence
2262 78th Ave SE
Mercer Island, WA 98040

Revisions:

Date:
06-02-25

Sheet:

S-8

LEGAL DESCRIPTION

LOT B, CITY OF MERCER ISLAND SHORT PLAT NO. MI-77-1-021, RECORDED UNDER RECORDING NO. 7708010612, RECORDS OF KING COUNTY, WASHINGTON;

TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AS DELINEATED ON THE FACE OF SAID SHORT PLAT.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

SITE DATA

PARCEL NUMBER: 531510-1697
 SITE ADDRESS: 2262 78TH AVE SE, MERCER ISLAND, WA 98040
 SITE AREA: 12,197 SF (RECORDED), 12,240 SF (SURVEYED)
 ZONING: R-8.4 (SINGLE FAMILY)
 REQUIRED SETBACKS:
 FRONT/GARAGE: 20 FT
 BACK: 25 FT
 INTERIOR: 10 FT EA (15 FT TOTAL)

ON-SITE IMPERVIOUS

NEW PLUS REPLACED
 TRIBUTARY TO DETENTION TANK
 NEW SINGLE-FAMILY ROOFTOP 4,195 SF
 EXPOSED DRIVEWAY 633 SF
 TOTAL TO DETENTION TANK 4,828 SF

PROJECT IMPACTS

EXISTING (TO BE REMOVED)
 SINGLE-FAMILY ROOFTOP 1,968 SF
 DRIVEWAY 781 SF
 SIDEWALK/PATIO 347 SF
 TOTAL 3,096 SF

NEW/REPLACED
 SINGLE-FAMILY ROOFTOP 4,195 SF
 EXPOSED DRIVEWAY 633 SF
 EXPOSED WALK/PATIO/STEPS 168 SF
 TOTAL NEW/REPLACED 4,996 SF

FOOTING DRAIN NOTE

THE EXISTING FOOTING DRAIN WILL NOT BE ALTERED AND REMAIN IN PLACE. NO NEW CONNECTION FROM ANY SOURCES TO THE EXISTING FOOTING DRAIN ARE ALLOWED. IF THERE ARE ALTERATIONS OR CONNECTIONS TO THE EXISTING FOOTING DRAIN ARE NEEDED DURING THE CONSTRUCTION, THEN A NEW DESIGN FOR THE FOOTING DRAIN MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.

SOIL QUALITY GUIDELINES

- 2019 SWMMW, BMP 15.13
- SOIL RETENTION. RETAIN, IN A UNDISTURBED STATE THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCK-PILE THE DUFF LAYER AND TOPSOIL, IF ANY, ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SIT WHERE FEASIBLE.
 - SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
 - A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 5-10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A Ph FROM 6.0 TO 8.0 OR MATCHING THE pH OF THE UNDISTURBED SOIL. THE TOPSOIL LAYER SHALL A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS NEEDED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
 - MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL
 - USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
 - THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN ONLY BE MET USING COMPOST MEETING THE COMPOST SPECIFICATION FOR BIORETENTION WITH THE EXCEPTION THAT THE COMPOST MUST HAVE AN ORGANIC MATTER CONTENT OF 40 PERCENT TO 65 PERCENT, AND A CARBON TO NITROGEN RATIO BETWEEN 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTING COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
 - CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIALS AS DEFINED ABOVE, OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220

SOIL AMENDMENT OPTIONS

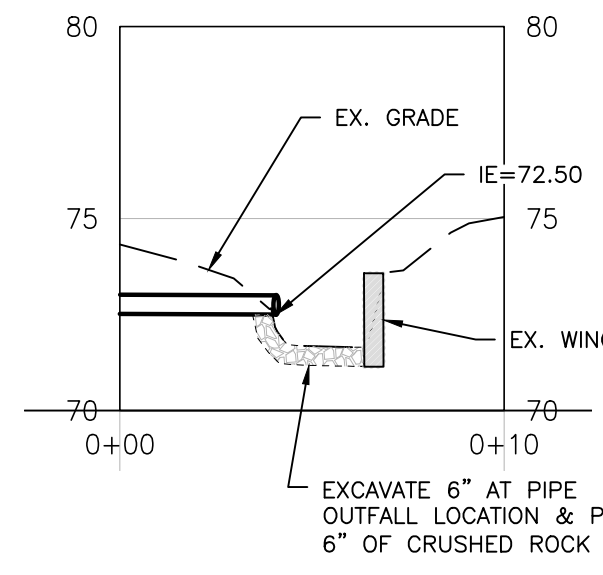
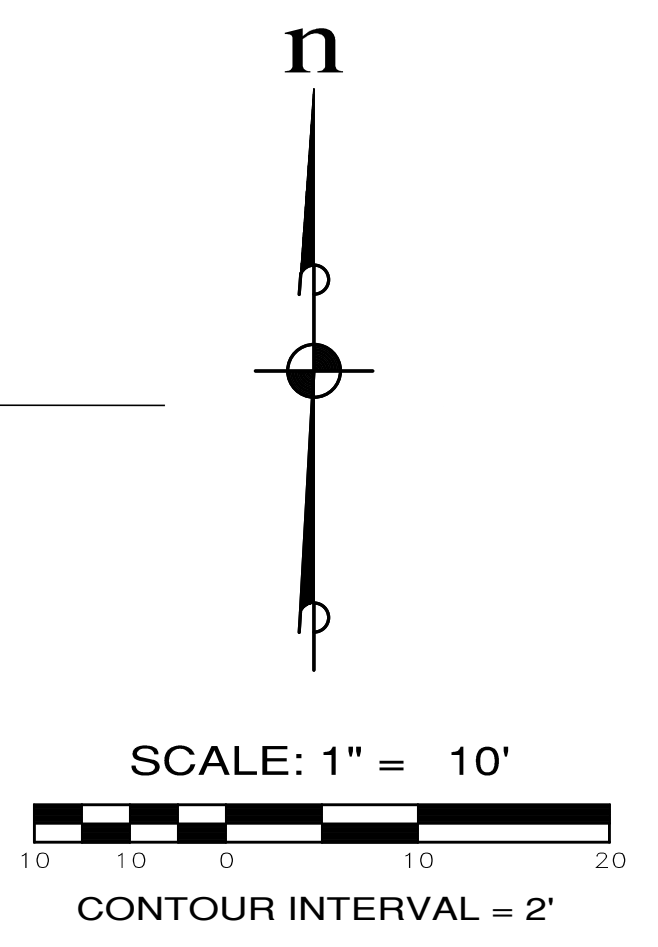
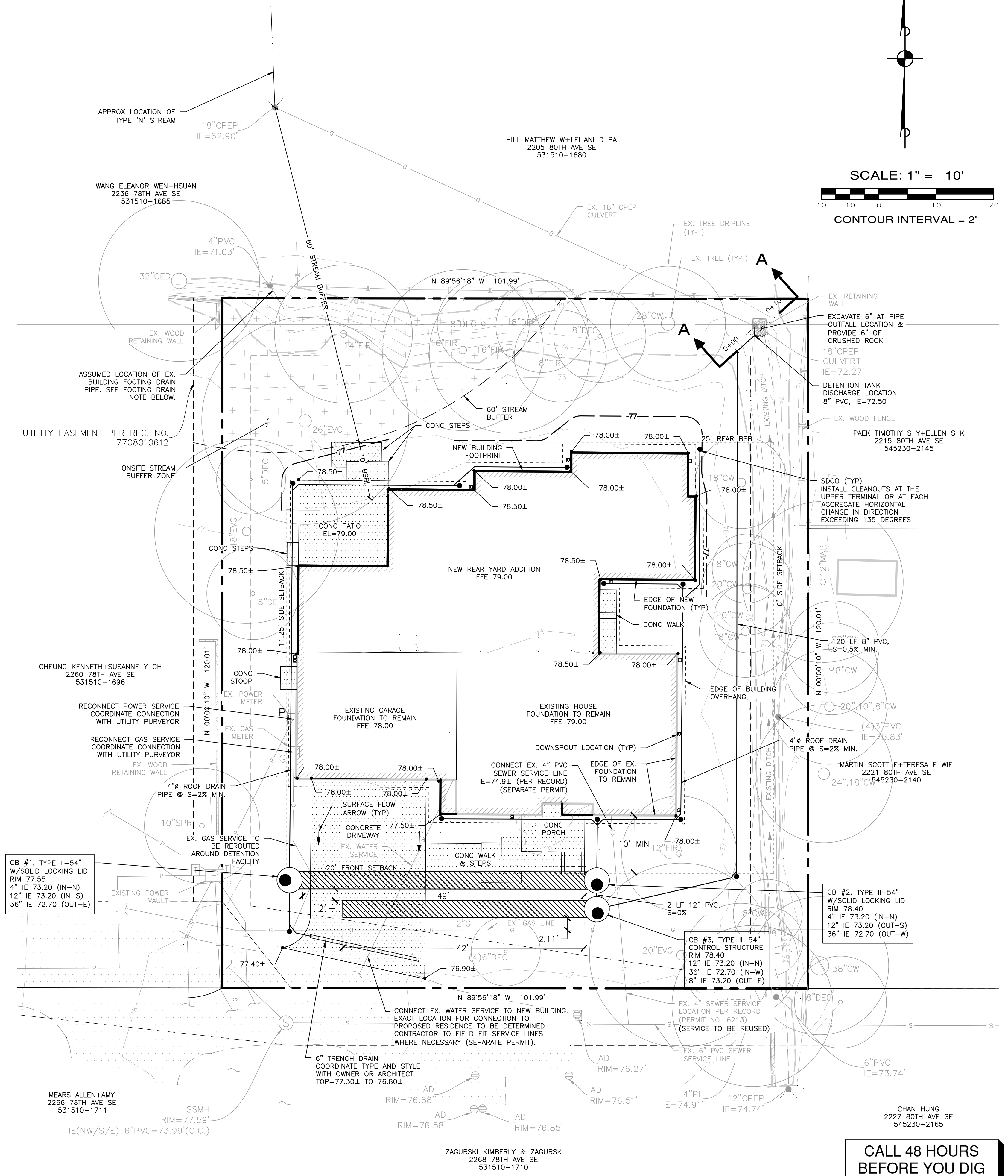
- 2019 SWMMW, BMP 15.13
 IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ON THIS SHEET CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW:
- OPTION 1: LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL, AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
 - OPTION 2: AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PRE-APPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
 - OPTION 3: STOCKPILE EXISTING TOPSOIL DURING GRADING, AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
 - OPTION 4: IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS.
- MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

POST CONSTRUCTION SOIL INSPECTION

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP 15.13. THE PROJECT CIVIL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.

UTILITY NOTE

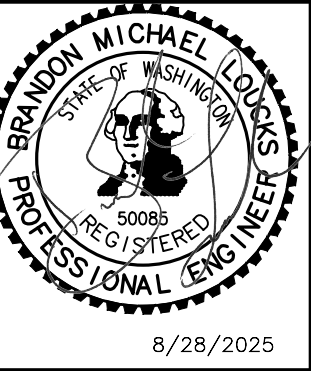
CONNECT EX. SEWER AND WATER SERVICES TO NEW BUILDING.



SECTION A-A - 6" PIPE OUTFALL
 SCALE: 1"=5' HORIZ., 1"=5' VERT.

CALL 48 HOURS BEFORE YOU DIG
 811

REVISIONS		
NO.	DESCRIPTION/DATE	BY

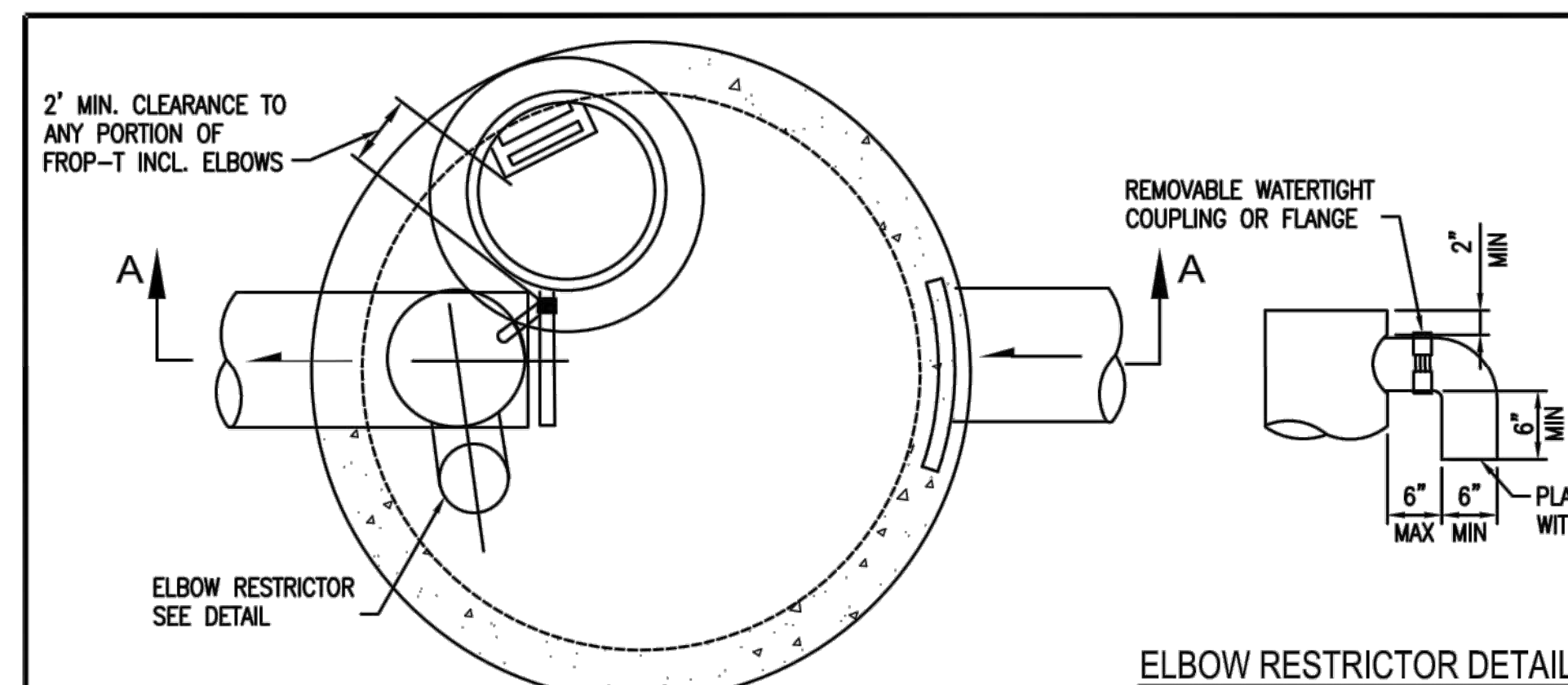


ESM CONSULTING ENGINEERS, LLC
 33400 Riva Ave S, Suite 205
 Federal Way, WA 98003
 (206) 898-6113
 (206) 898-6113
 (206) 898-6113
 www.esmcivil.com
 Civil Engineering, Land Surveying, Project Management, Landscape Architecture, Public Works

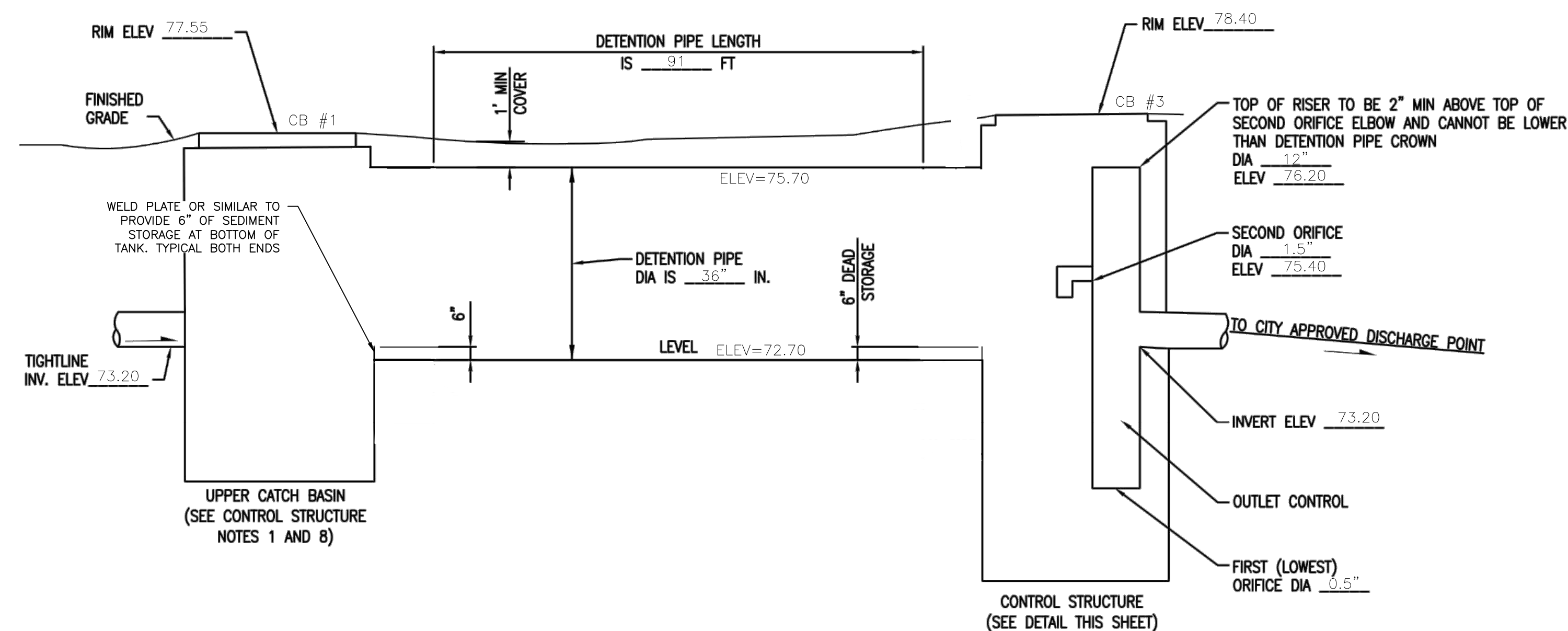
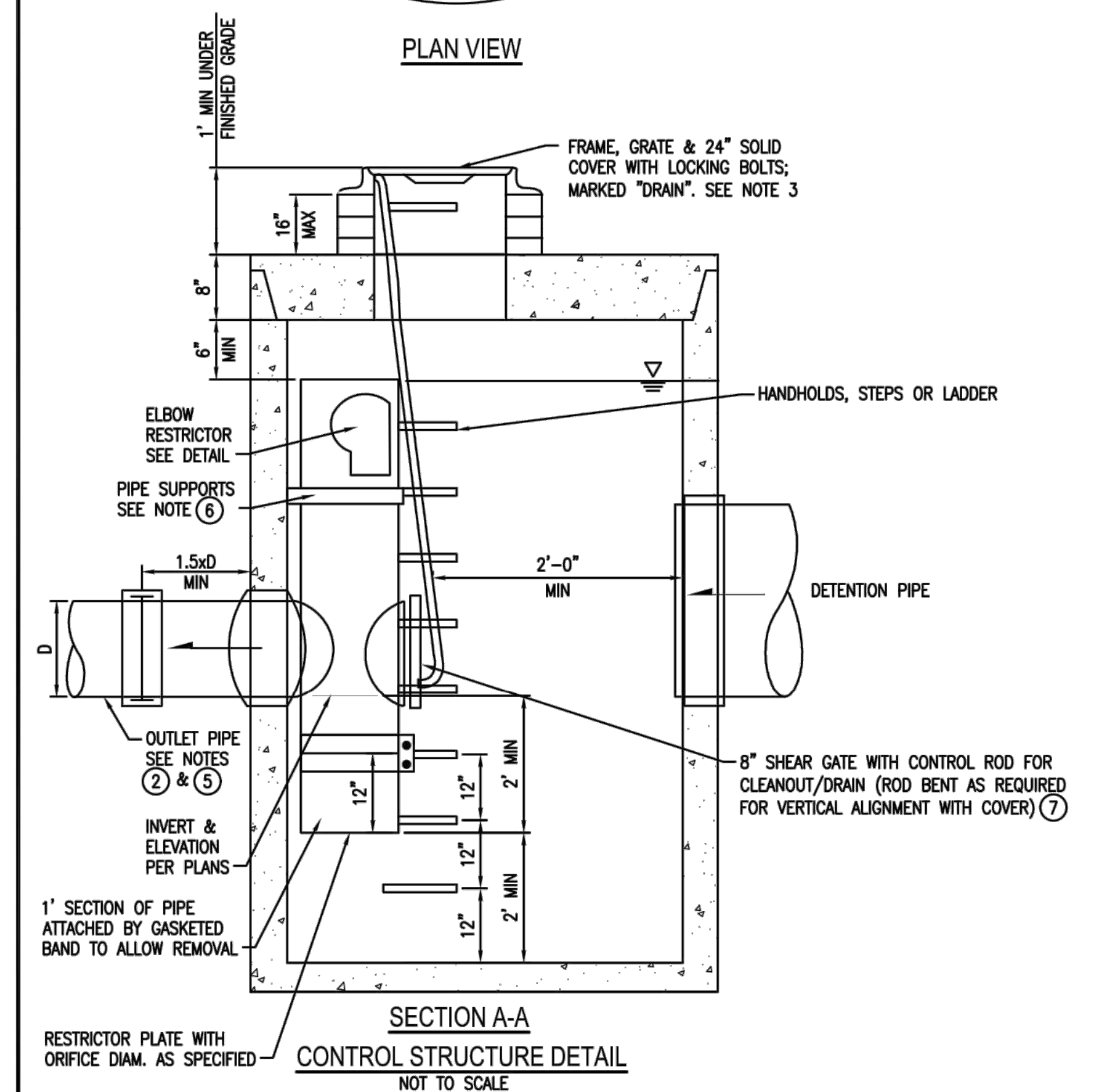
JOHN & JUNG TODA
TODA RESIDENCE
 DRAINAGE & GRADING PLAN
 CITY OF MERCER ISLAND, WASHINGTON
 JOB NO.: 2429-001-024
 DWG. NAME:
 DESIGNED BY: DRD
 DRAWN BY: DRD
 CHECKED BY:
 DATE: 05/15/2025
 DATE OF PRINT:
C2
 2 OF 3 SHEETS

File: \\mms\ENGR\ESM-0085\2429\01\024\plans\Toda Residence CIVIL_2025-05-15.dwg
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 Plotted By: Brandon Loucks

**ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS
AREA OF 9,500 SF OR LESS)**



OWNER: JOHN & JUNG TODA	ADDRESS: 2262 78TH AVE SE	PREPARED BY: ESM CONSULTING ENGINEERS
PERMIT #:	MERCER ISLAND, 98040	PHONE: (253) 838-6113
		DATE: 05/15/2025
NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 4,828 (TRIBUTARY)	DETENTION PIPE DIA (INCH): .36	DETENTION PIPE LENGTH (FT): 91
SOIL TYPE: C	PIPE MATERIAL: CMP	ORIFICE #1 DIA .0.5 INCH, ELEV 71.20
		ORIFICE #2 DIA 1.5 INCH, ELEV 75.40



**ON-SITE DETENTION SYSTEM
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)**

CONTROL STRUCTURE NOTES:

- ① USE A MINIMUM OF A 54 IN. DIAM. TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
- ② OUTLET PIPE: MIN. 6 INCH.
- ③ METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
- ④ FRAME AND LADDER OR STEPS OFFSET SO:
 - A. CLEANOUT GATE IS VISIBLE FROM TOP;
 - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE;
 - C. FRAME IS CLEAR OF CURB.
- ⑤ IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.
- ⑥ PROVIDE AT LEAST ONE 3 X 0.090 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
- ⑦ THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 26M AND ASTM B 275, DESIGNATION ZG32A; OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 30B. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION), IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
- ⑧ THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

ON-SITE DETENTION SYSTEM NOTES:

1. CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
2. RESPONSIBILITY FOR OPERATION AND MAINTANANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
3. PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING, LINED CORRUGATED POLYETHYLENE PIPE (LCPPE), ALUMINIZED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
4. FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

REVISIONS		
NO.	DESCRIPTION/DATE	BY

ESM CONSULTING ENGINEERS LLC
 33400 8th Ave S, Suite 205
 Federal Way, WA 98003
 (253) 838-6113
 www.esmcivil.com

Civil Engineering
 Landscape Architecture
 Land Planning
 Project Management

JOHN & JUNG TODA
TODA RESIDENCE
 NOTES & DETAILS
 CITY OF MERCER ISLAND, WASHINGTON

JOB NO.: 2429-001-024
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C3
 3 OF 3 SHEETS