

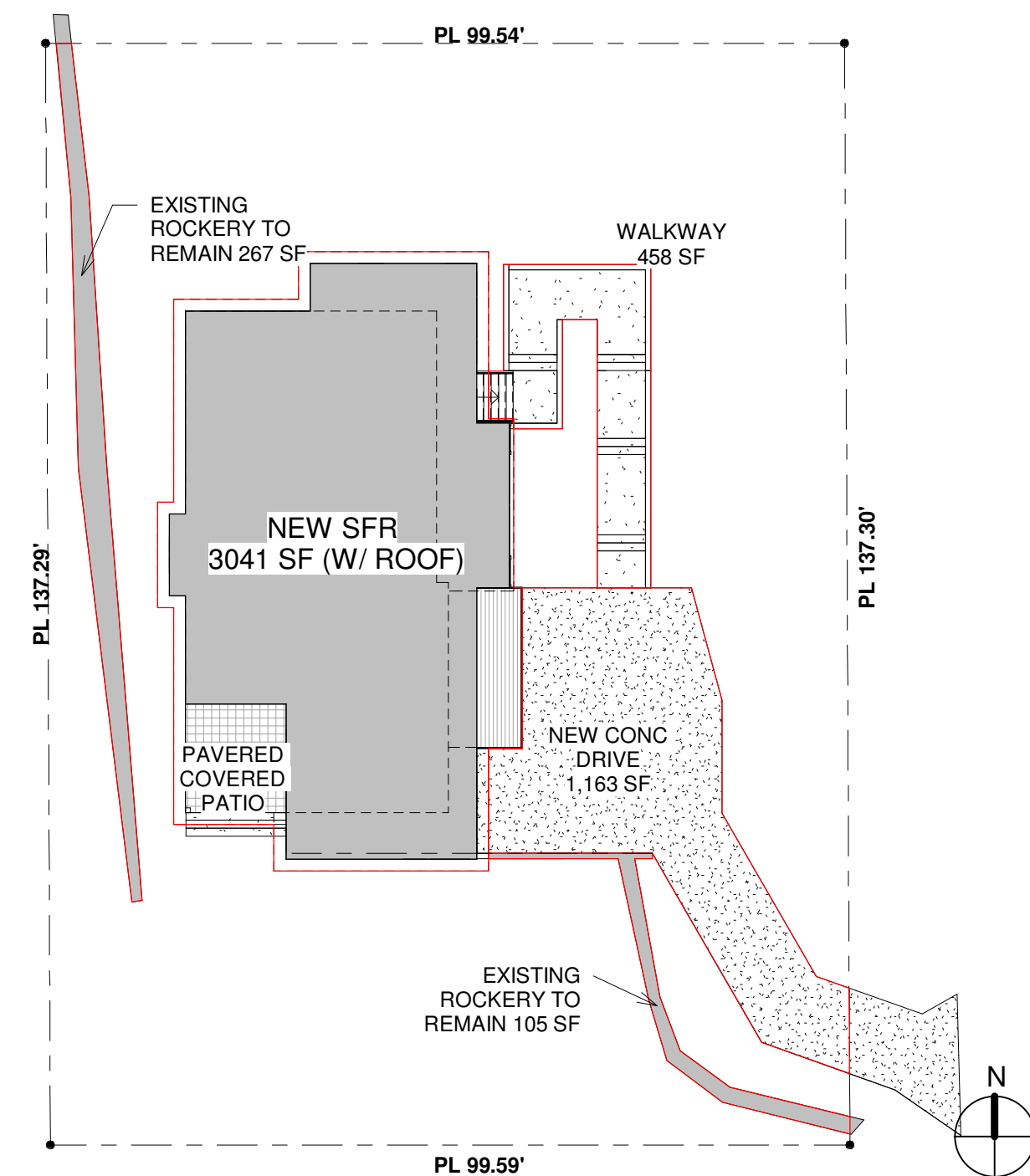
PROJECT INFORMATION

LEGAL DESCRIPTION	MC GILVRAS ISLAND ADD LESS W 200 FT PLAT 5 LOT 12
PARCEL NUMBER	531510-0431
ZONING	R-9.6
SCOPE OF WORK	DEMOLITION OF EXISTING RESIDENCE AND CONSTRUCTION OF NEW SINGLE FAMILY RESIDENCE
BUILDING CODE	IRC 2021
DRAWING LIST	A0 SITE PLAN AND GENERAL NOTES A1.1 BASEMENT PLAN A1.2 MAIN FLOOR PLAN A1.3 UPPER FLOOR PLAN A2 ELEVATIONS A3 ELEVATIONS A4 BUILDING SECTIONS A5 DETAILS STRUCTURAL SHEETS CIVIL SHEETS

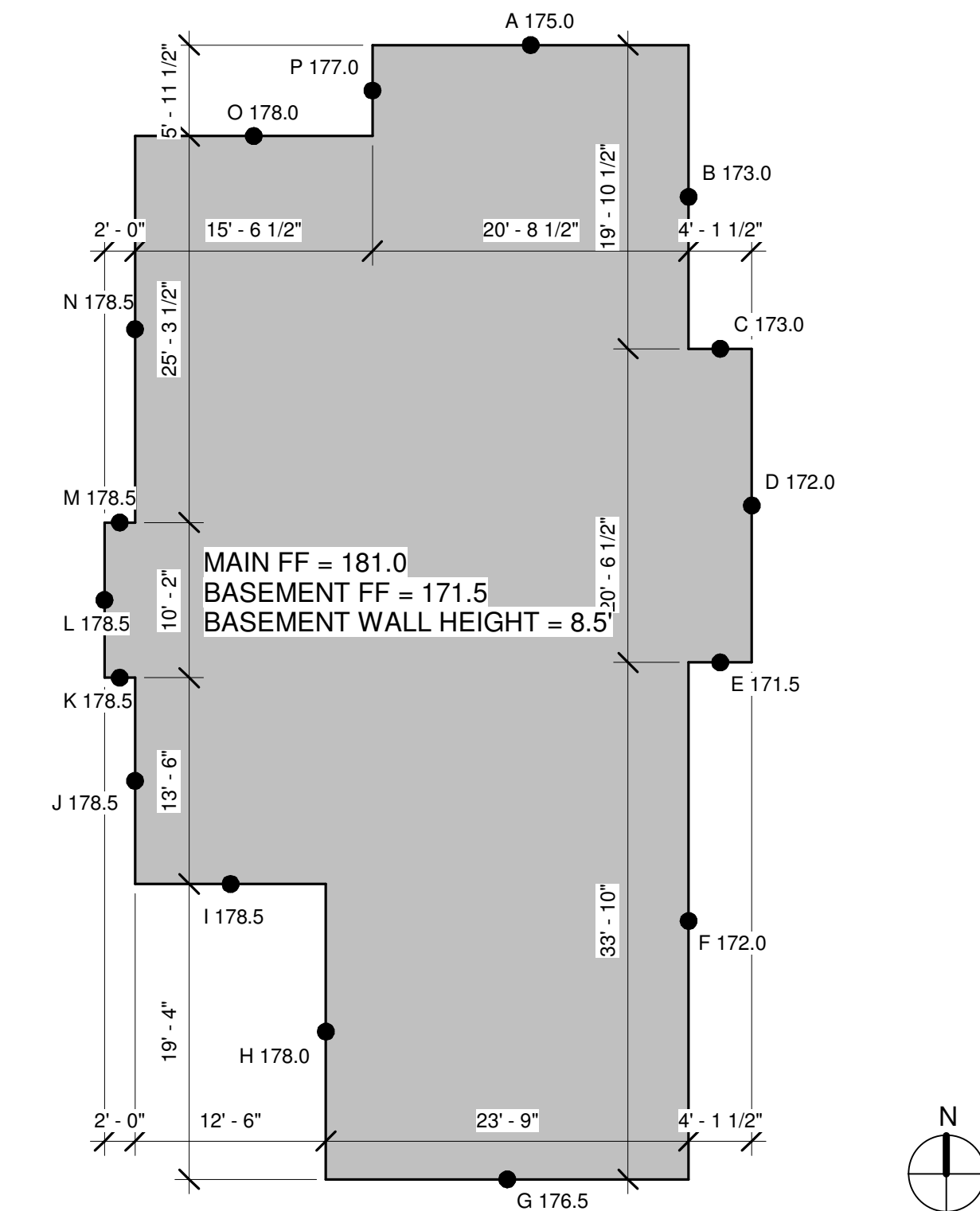
SITE DATA AND CALCULATIONS

SETBACK REQUIREMENTS	FRONT YARD	20'																																																																																																																																				
	REAR YARD	25'																																																																																																																																				
	SIDE YARD (17% OF PL)	7.76' MIN., 23.29' TOTAL																																																																																																																																				
IMP SURFACE	LOT AREA	13,654 SF																																																																																																																																				
	LOT SLOPE = 25' / 150'	16.67%																																																																																																																																				
	MAX LOT COVERAGE	35%																																																																																																																																				
	MAX HARDSCAPE	9%																																																																																																																																				
	HOUSE AND DRIVEWAY	4,204 SF																																																																																																																																				
	RET WALLS, ROCKERY AND WALKS	830 SF																																																																																																																																				
	LOT COVERAGE HARDSCAPE	30.79% 6.08%																																																																																																																																				
FLOOR AREA (FAR AND FIRE CALCS)	BASEMENT	2,111 SF																																																																																																																																				
	FIRST FLOOR	2,360 SF																																																																																																																																				
	SECOND FLOOR	2,016 SF																																																																																																																																				
BUILDING HEIGHT CALCULATIONS	DEDUCT STAIRS ON UPPER FLOOR	-103 SF																																																																																																																																				
	BASEMENT AREA TO BE EXCLUDED SEE TABLE BELOW	-1035 SF																																																																																																																																				
	TOTAL FLOOR AREA (FAR)	5,349 SF																																																																																																																																				
	MAXIMUM ALLOWED (40% FAR)	5,462 SF																																																																																																																																				
	TOTAL FLOOR AREA (FIRE)	6,487 SF																																																																																																																																				
	FIRE SPRINKLER REQUIRED																																																																																																																																					
	*ACTUAL CONDITIONED FLOOR AREA 5,685 SF																																																																																																																																					
	AVERAGE BLDG ELEVATION =	175.67 OR 4.17' ABOVE BASEMENT FF																																																																																																																																				
	MAX BUILDING HEIGHT ALLOWED =	30'																																																																																																																																				
	MAX BUILDING ELEVATION =	205.67																																																																																																																																				
	SEE BUILDING SECTIONS ON A4 FOR BUILDING HEIGHT LIMIT																																																																																																																																					
	<table border="1"> <thead> <tr> <th>SEGMENT</th> <th>LENGTH (INCHES)</th> <th>MIDPOINT ELEV</th> <th>DISTANCE FROM BASEMT FF (FT)</th> <th>COVERAGE</th> <th>LENGTH X COVERAGE</th> <th>LENGTH X MIDPOINT ELEV</th> </tr> </thead> <tbody> <tr><td>A</td><td>248.5</td><td>175</td><td>3.5</td><td>41.18%</td><td>102.3235294</td><td>43487.5</td></tr> <tr><td>B</td><td>238.5</td><td>173</td><td>1.5</td><td>17.65%</td><td>42.08823529</td><td>41260.5</td></tr> <tr><td>C</td><td>49.5</td><td>173</td><td>1.5</td><td>17.65%</td><td>8.735294118</td><td>8563.5</td></tr> <tr><td>D</td><td>246.5</td><td>172</td><td>0.5</td><td>5.88%</td><td>14.5</td><td>42398</td></tr> <tr><td>E</td><td>49.5</td><td>171.5</td><td>0</td><td>0.00%</td><td>0</td><td>8489.25</td></tr> <tr><td>F</td><td>406</td><td>172</td><td>0.5</td><td>5.88%</td><td>23.88235294</td><td>69832</td></tr> <tr><td>G</td><td>285</td><td>176.5</td><td>5</td><td>58.82%</td><td>167.6470588</td><td>50302.5</td></tr> <tr><td>H</td><td>232</td><td>178</td><td>6.5</td><td>76.47%</td><td>177.4117647</td><td>41296</td></tr> <tr><td>I</td><td>150</td><td>178.5</td><td>7</td><td>82.35%</td><td>123.5294118</td><td>26775</td></tr> <tr><td>J</td><td>162</td><td>178.5</td><td>7</td><td>82.35%</td><td>133.4117647</td><td>28917</td></tr> <tr><td>K</td><td>24</td><td>178.5</td><td>7</td><td>82.35%</td><td>19.76470588</td><td>4284</td></tr> <tr><td>L</td><td>122</td><td>178.5</td><td>7</td><td>82.35%</td><td>100.4705882</td><td>21777</td></tr> <tr><td>M</td><td>24</td><td>178.5</td><td>7</td><td>82.35%</td><td>19.76470588</td><td>4284</td></tr> <tr><td>N</td><td>303.5</td><td>178.5</td><td>7</td><td>82.35%</td><td>249.9411765</td><td>54174.75</td></tr> <tr><td>O</td><td>186.5</td><td>178</td><td>6.5</td><td>76.47%</td><td>142.6176471</td><td>33197</td></tr> <tr><td>P</td><td>71.5</td><td>177</td><td>5.5</td><td>64.71%</td><td>46.26470588</td><td>12655.5</td></tr> <tr><td></td><td>2799</td><td>2817</td><td></td><td></td><td>1372.352941</td><td>491693.5</td></tr> <tr><td></td><td></td><td></td><td></td><td>49.03%</td><td></td><td>175.6675598</td></tr> </tbody> </table>		SEGMENT	LENGTH (INCHES)	MIDPOINT ELEV	DISTANCE FROM BASEMT FF (FT)	COVERAGE	LENGTH X COVERAGE	LENGTH X MIDPOINT ELEV	A	248.5	175	3.5	41.18%	102.3235294	43487.5	B	238.5	173	1.5	17.65%	42.08823529	41260.5	C	49.5	173	1.5	17.65%	8.735294118	8563.5	D	246.5	172	0.5	5.88%	14.5	42398	E	49.5	171.5	0	0.00%	0	8489.25	F	406	172	0.5	5.88%	23.88235294	69832	G	285	176.5	5	58.82%	167.6470588	50302.5	H	232	178	6.5	76.47%	177.4117647	41296	I	150	178.5	7	82.35%	123.5294118	26775	J	162	178.5	7	82.35%	133.4117647	28917	K	24	178.5	7	82.35%	19.76470588	4284	L	122	178.5	7	82.35%	100.4705882	21777	M	24	178.5	7	82.35%	19.76470588	4284	N	303.5	178.5	7	82.35%	249.9411765	54174.75	O	186.5	178	6.5	76.47%	142.6176471	33197	P	71.5	177	5.5	64.71%	46.26470588	12655.5		2799	2817			1372.352941	491693.5					49.03%	
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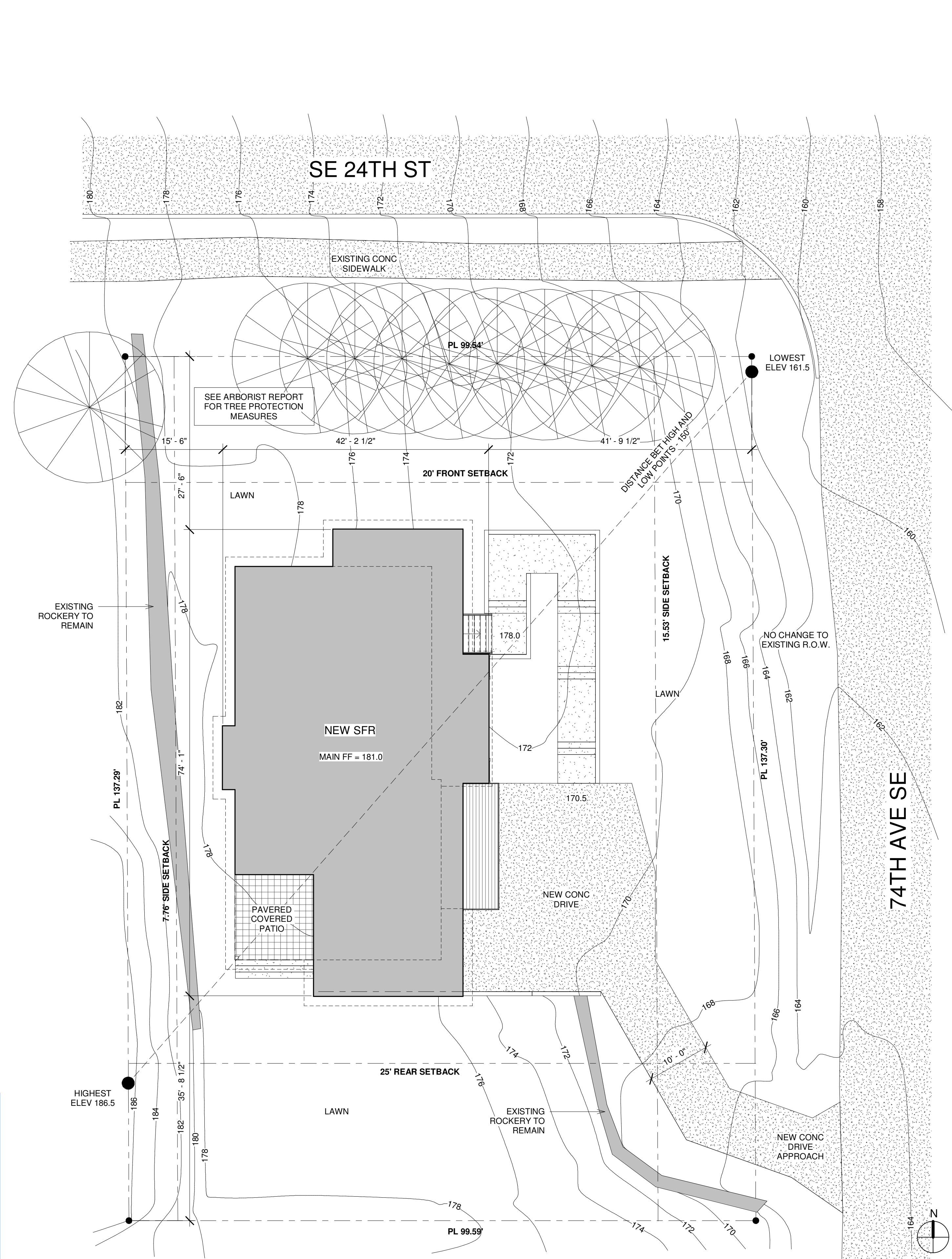
LOT COVERAGE AND HARDSCAPE



FAR AND AVERAGE GRADE DIAGRAM



SITE PLAN 1' = 10'-0"



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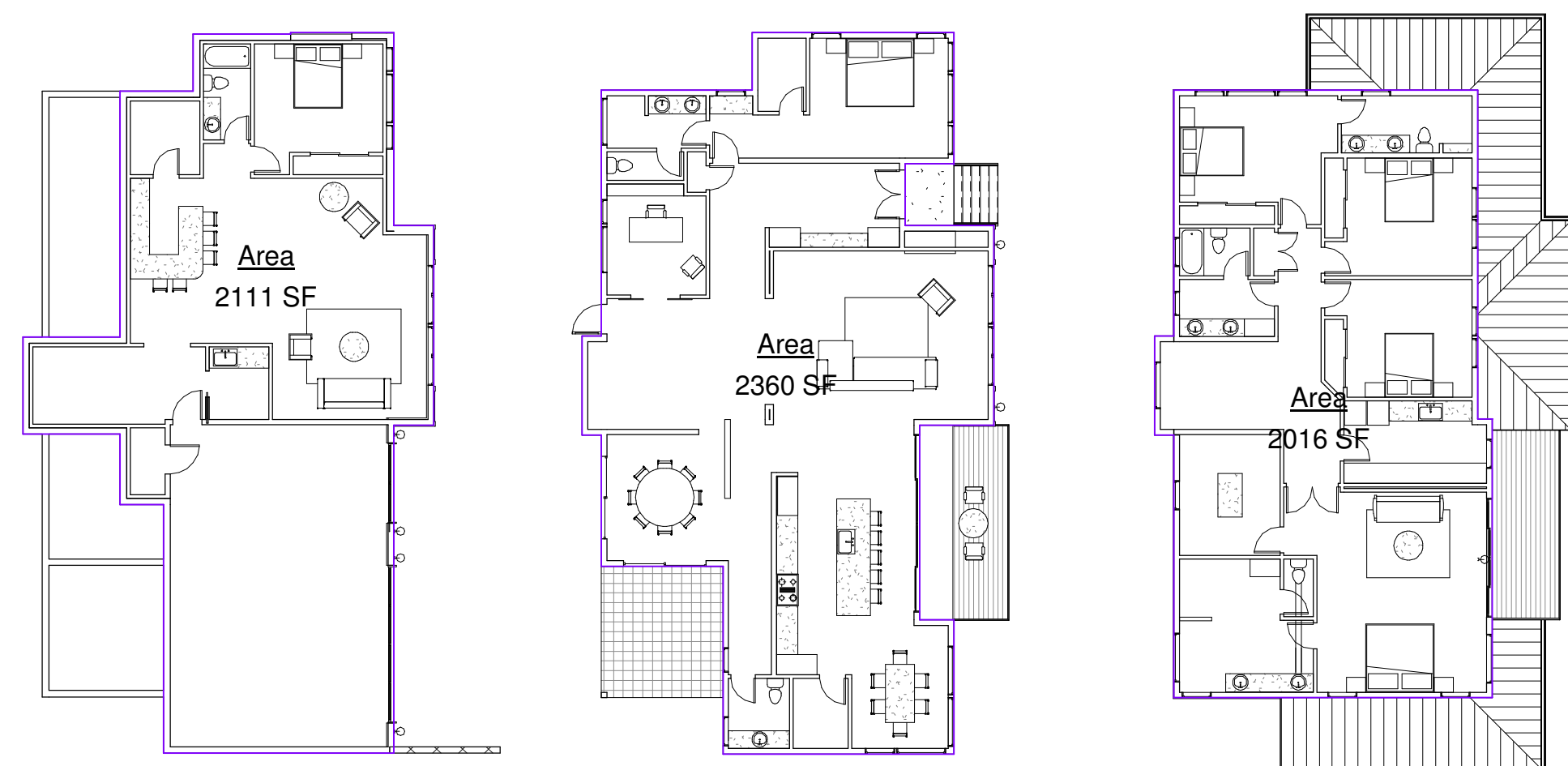
ARCHITECT
MILTON LAM ARCHITECTS
PO BOX 523, KIRKLAND, WA 98083

Contact:
MILTON LAM 206-303-7877
MILTON@MLARC.COM

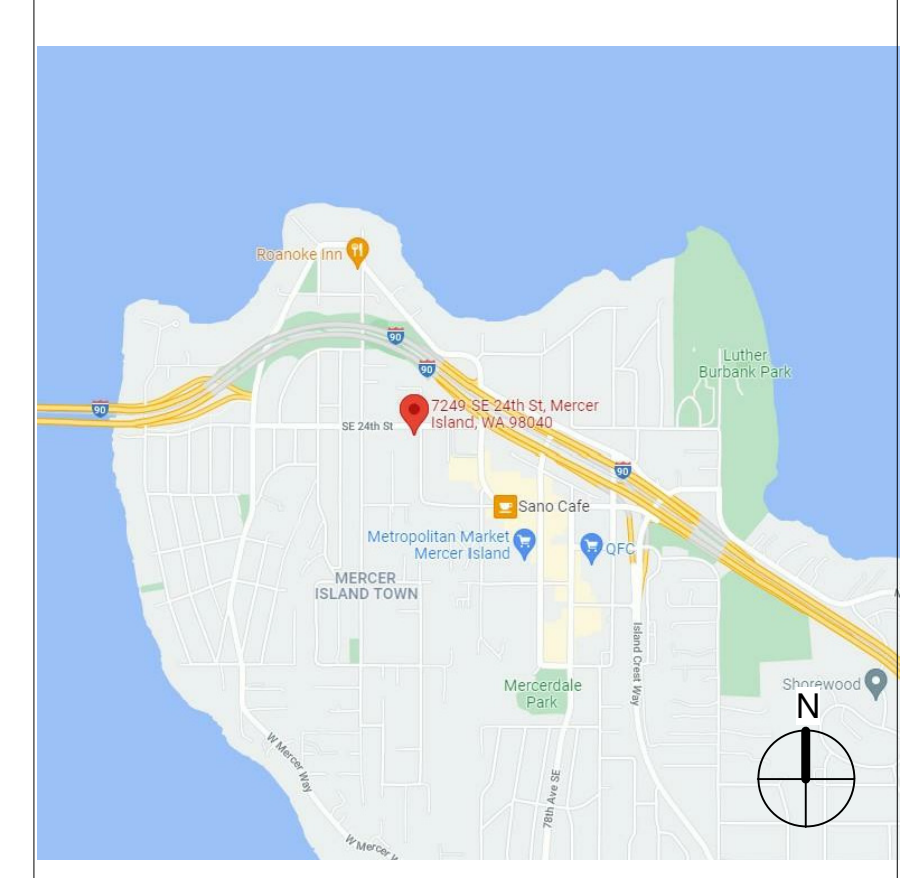
Client Name IMANI

Project Address 2405 74TH AVE SE
MERCER ISLAND, WA 98040

FLOOR AREA CALCULATIONS 1/16" = 1'-0"



VICINITY MAP



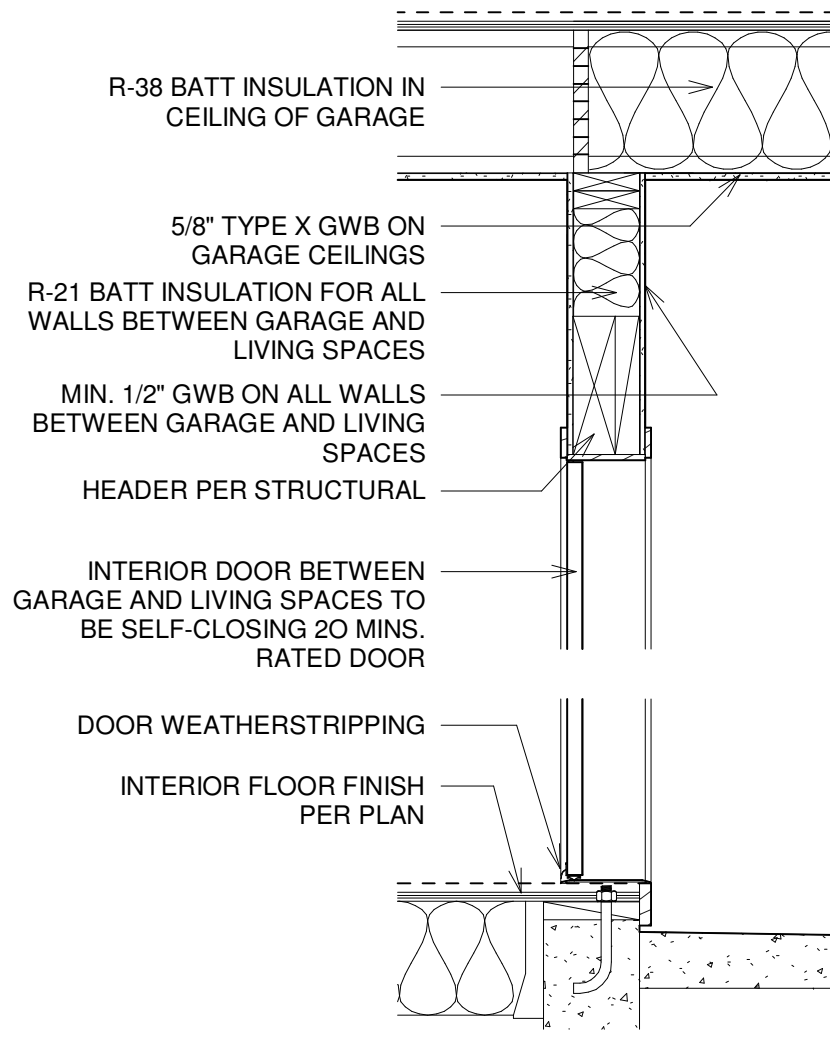
No.	Description	Date

IMANI
MERCER ISLAND

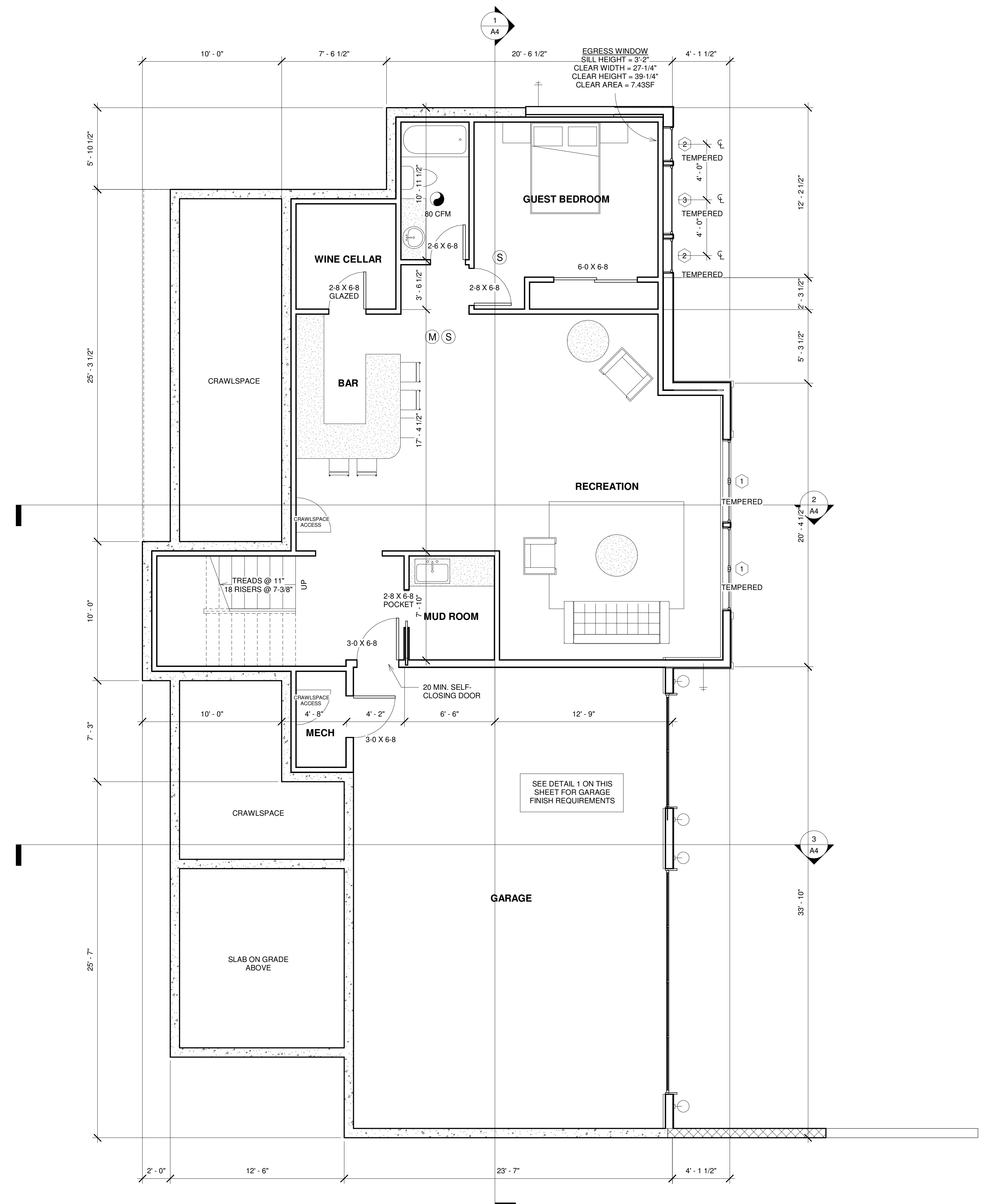
SITE PLAN AND GENERAL NOTES

Project number	2124
Date	12/27/21
Drawn by	MLA
Checked by	ML
A0	
Scale	As indicated

DETAIL 1



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



FLOOR PLANS LEGEND

- (M)** CARBON MONOXIDE ALARM
- (S)** SMOKE DETECTOR, HARDWIRED W/ BATTERY BACK-UP
- (E)** EXHAUST FAN
- (G)** GAS OUTLET
- (H)** HOSE BIB

REINFORCE SHEAR WALL PER STRUCTURAL
ALL DIMENSIONS TO FACE OF FOUNDATION OR STUDS, U.N.O.

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MILTON LAM 206-303-7877
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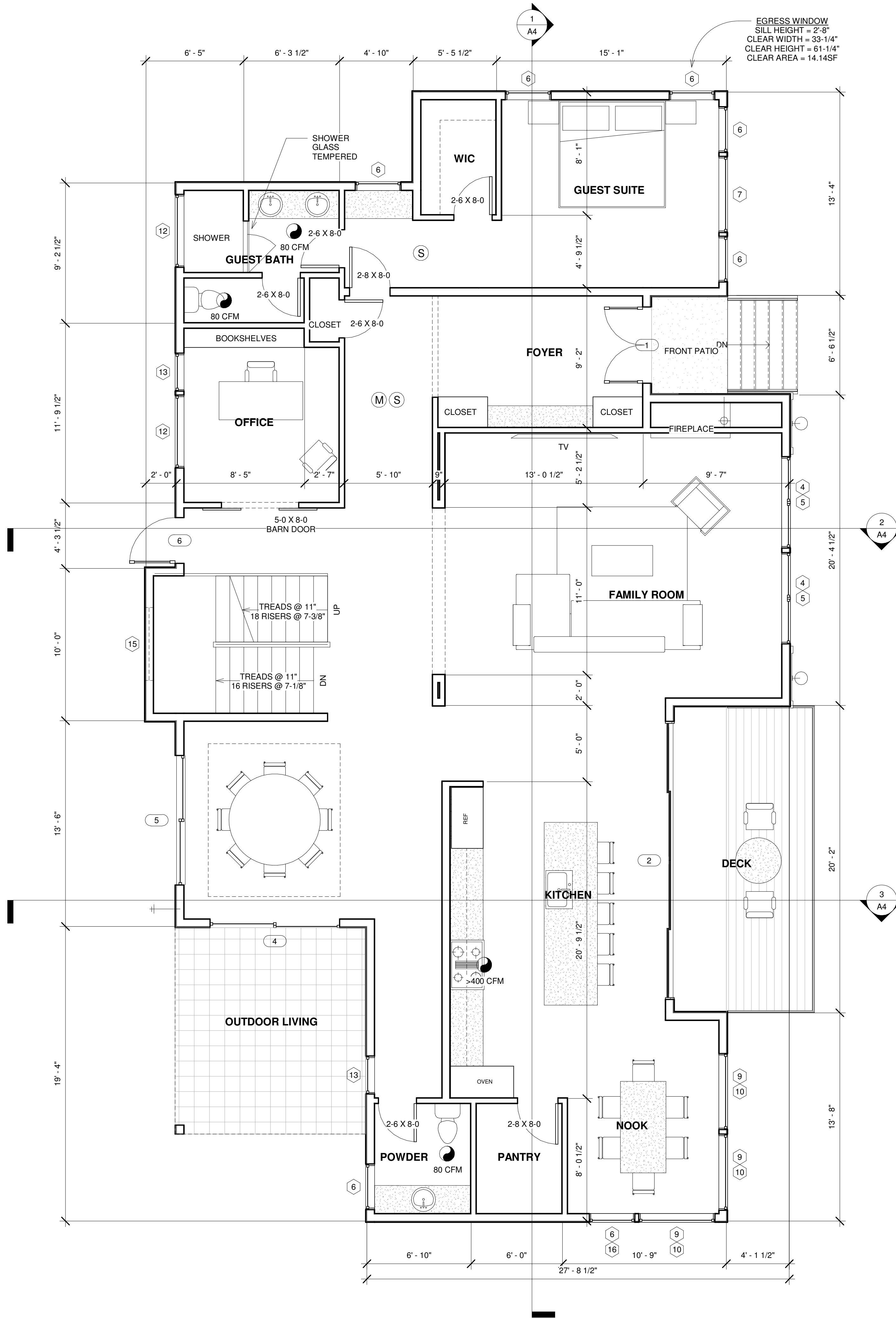
Project Address 2405 74TH AVE SE
MERCER ISLAND, WA 98040

No.	Description	Date

IMANI
MERCER ISLAND
BASEMENT PLAN

Project number	2124
Date	12/27/21
Drawn by	MLA
Checked by	ML
A1.1	
Scale	As indicated

MAIN FLOOR PLAN - 1/4" = 1'-0"



MILTON LAM ARCHITECTS

ARCHITECT
MILTON LAM ARCHITECTS
PO BOX 523, KIRKLAND, WA 98083

Contact:
MILTON LAM 206-303-7877
MILTON@MLARC.COM

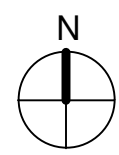
Client Name: IMANI
Project Address: 2405 74TH AVE SE
MERCER ISLAND, WA 98040

No.	Description	Date

IMANI
MERCER ISLAND
MAIN FLOOR PLAN

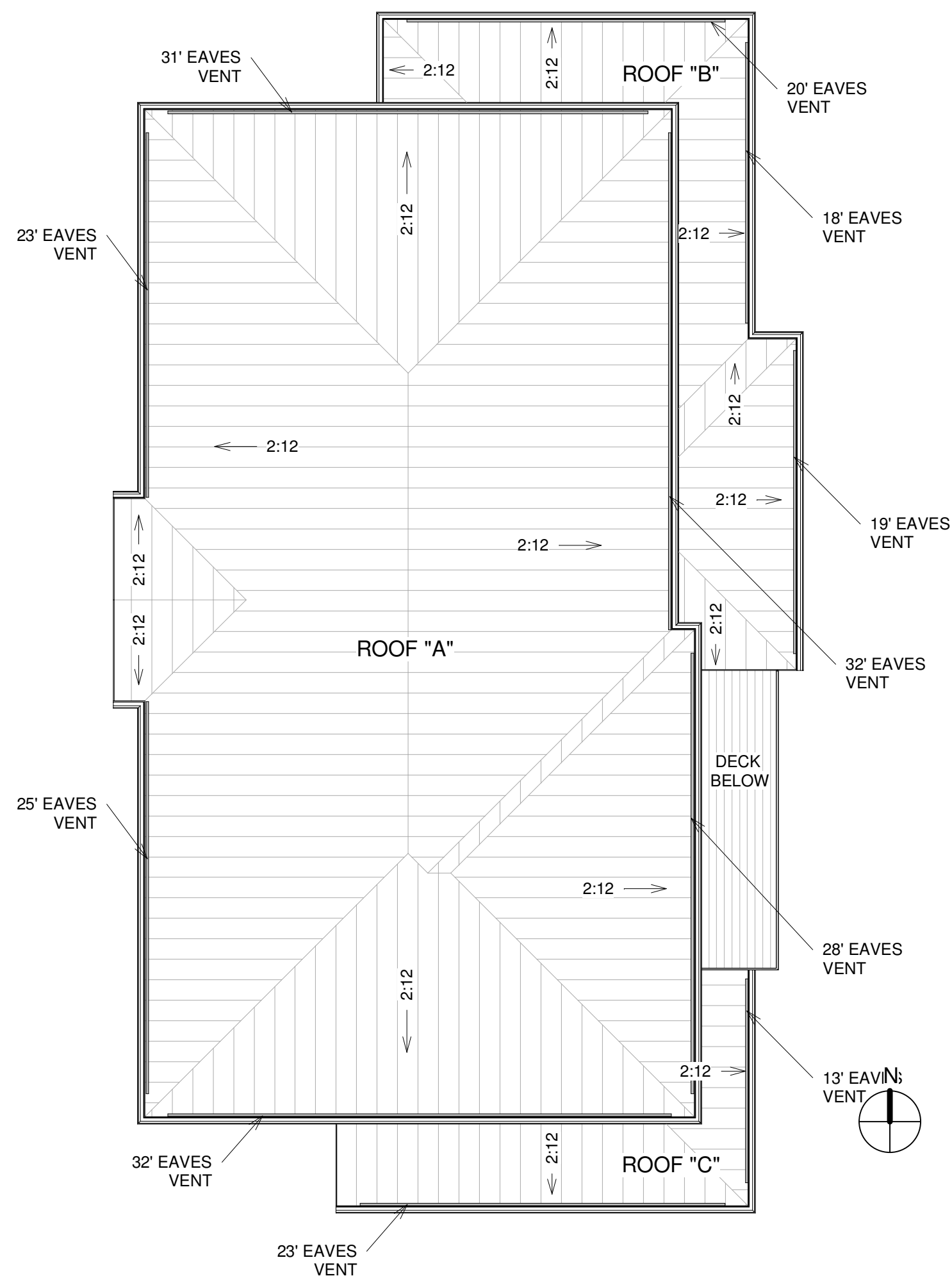
Project number	2124
Date	12/27/21
Drawn by	MLA
Checked by	ML
Scale	1/4" = 1'-0"

A1.2



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ROOF PLAN - 1/8" = 1'-0"



ROOF VENTILATION

PROVIDE MINIMUM 1" AIR SPACE BETWEEN INSULATION AND ROOF SHEATHING.

2" SCREENED EAVES OR RIDGE VENTS
0.167 SF/LF - 25% REDUCTION = 0.125 SF/LF

ROOF VENTS = 0.27SF NET VENTING AREA PER MFGT.

ROOF "A" - 2,016 SF /150 = 13.44 SF REQUIRED
171 LF OF EAVES VENTS = 21.38 SF PROVIDED

ROOF "B" - 380 SF / 150 = 2.53 REQUIRED
57 LF OF EAVES VENTS = 7.13 SF PROVIDED

ROOF "C" - 165 SF / 150 = 1.10 REQUIRED
36 LF OF EAVES VENTS = 4.50 SF PROVIDED

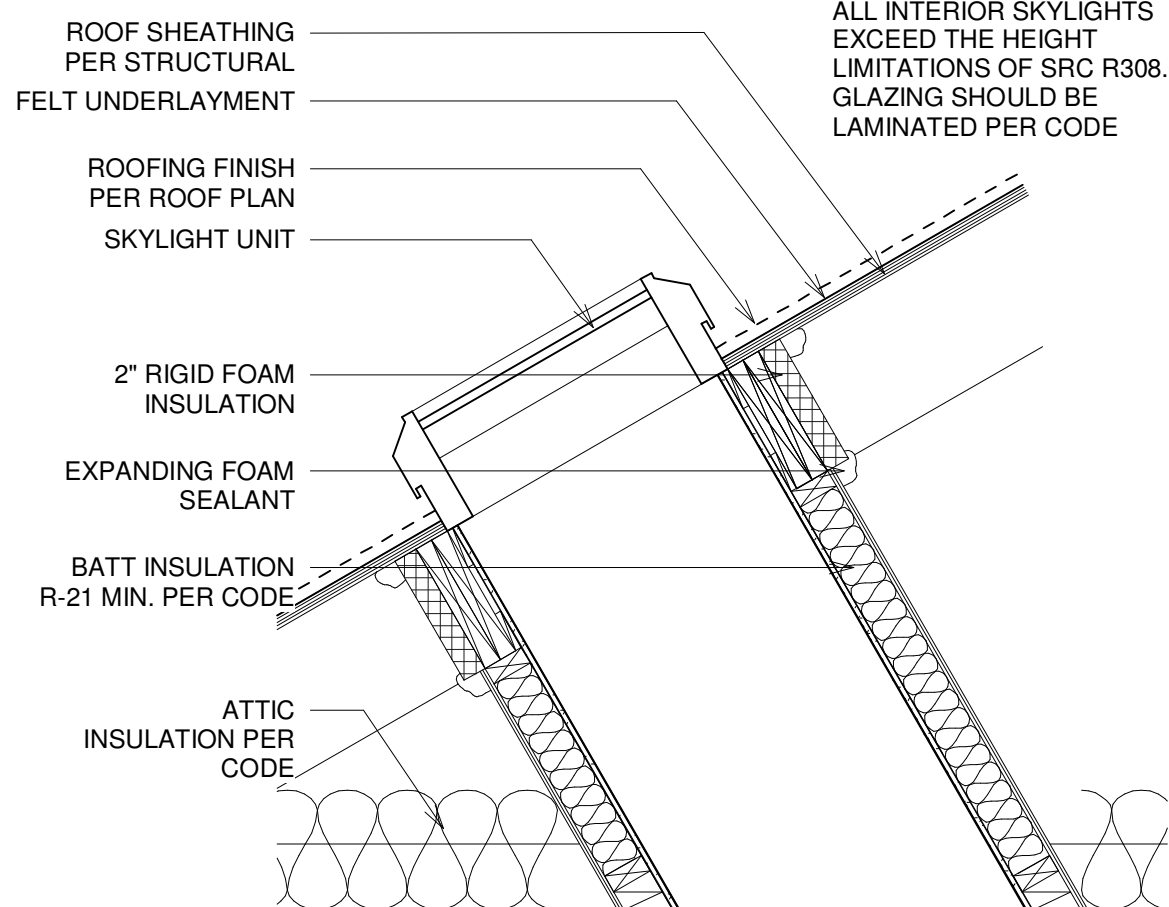
EAVES WITHIN 5 FEET OF A PROPERTY LINE ARE REQUIRED TO BE RATED FROM THE UNDERSIDE FOR 1 HOUR.

SOLAR-READY REQUIREMENTS

THE MAIN ELECTRICAL SERVICE OR FEEDER PANEL OFR EACH DWELLING UNIT SHALL HAVE A RESERVED SPACE TO ALLOW INSTALLATION OF A DUAL POLE CIRCUIT BREAKER FOR FUTURE SOLAR ELECTRIC INSTALLATION AND SHALL BE LABELED "FOR FUTURE SOLAR ELECTRIC".

A PERMANENT CERTIFICATE, INDICATING THE BOUNDARIES AND STRUCTURAL PROVISIONS OF THE SOLAR-READY ZONE, SHALL BE POSTED NEAR THE ELECTRICAL DISTRIBUTION PANEL, WATER HEATER, OR OTHER CONSPICUOUS LOCATION.






SKYLIGHT DETAIL



SKYLIGHT REQUIREMENTS

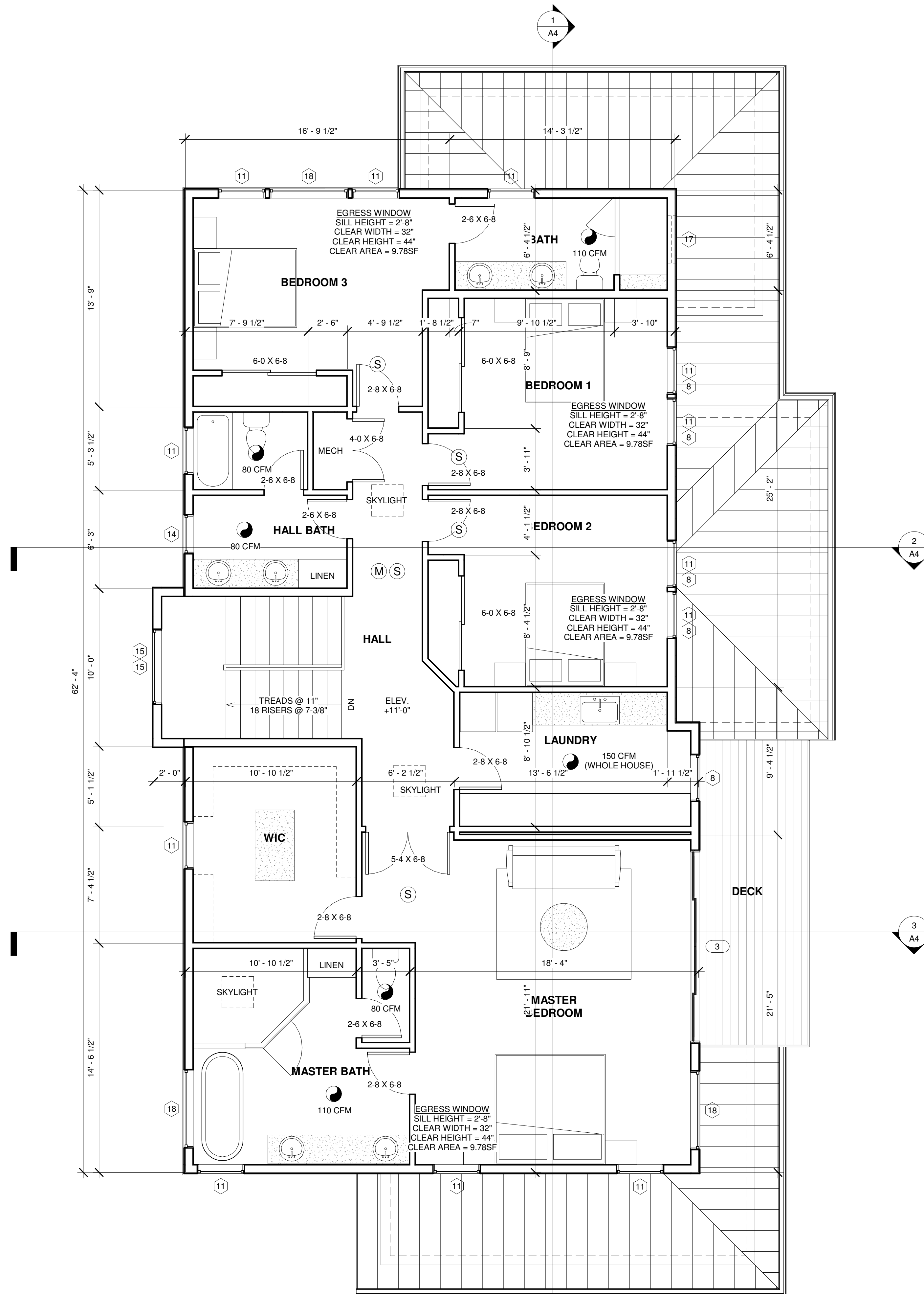
ALL INTERIOR SKYLIGHTS EXCEED THE HEIGHT LIMITATIONS OF SRC R308.6.5. GLAZING SHOULD BE LAMINATED PER CODE

FLOOR PLANS LEGEND

-  CARBON MONOXIDE ALARM
-  SMOKE DETECTOR, HARDWIRED W/ BATTERY BACK-UP
-  EXHAUST FAN
-  GAS OUTLET
-  HOSE BIB

REINFORCE SHEAR WALL PER STRUCTURAL
ALL DIMENSIONS TO FACE OF FOUNDATION OR STUDS, U.N.O.

UPPER FLOOR PLAN - 1/4" = 1'-0"



MILTON LAM ARCHITECTS

ARCHITECT
MILTON LAM ARCHITECTS
PO BOX 523, KIRKLAND, WA 98083

Contact:
MILTON LAM 206-303-7877
MILTON@MLARC.COM

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No.	Description	Date

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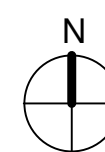
MERCER ISLAND

UPPER FLOOR PLAN

Project number	2124
Date	12/27/21
Drawn by	MLA
Checked by	ML

A1.3

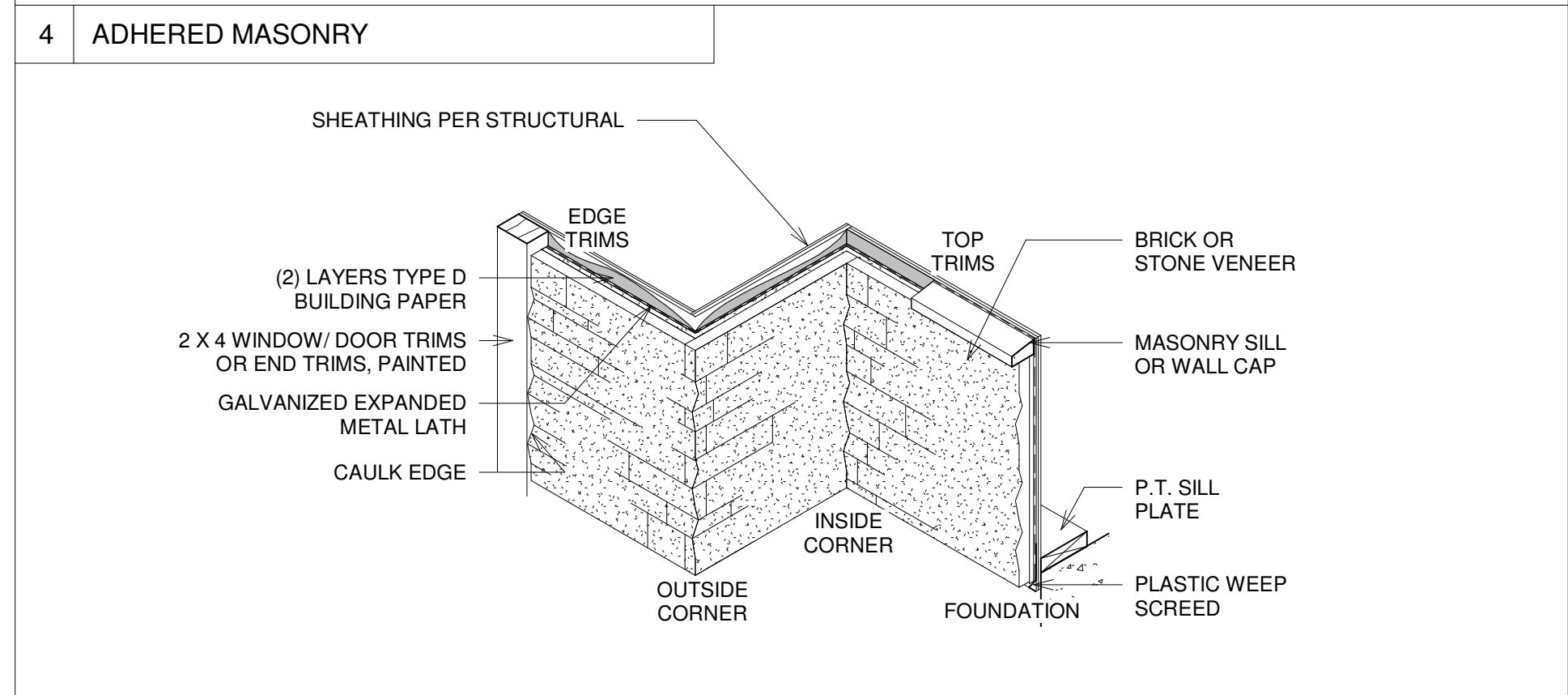
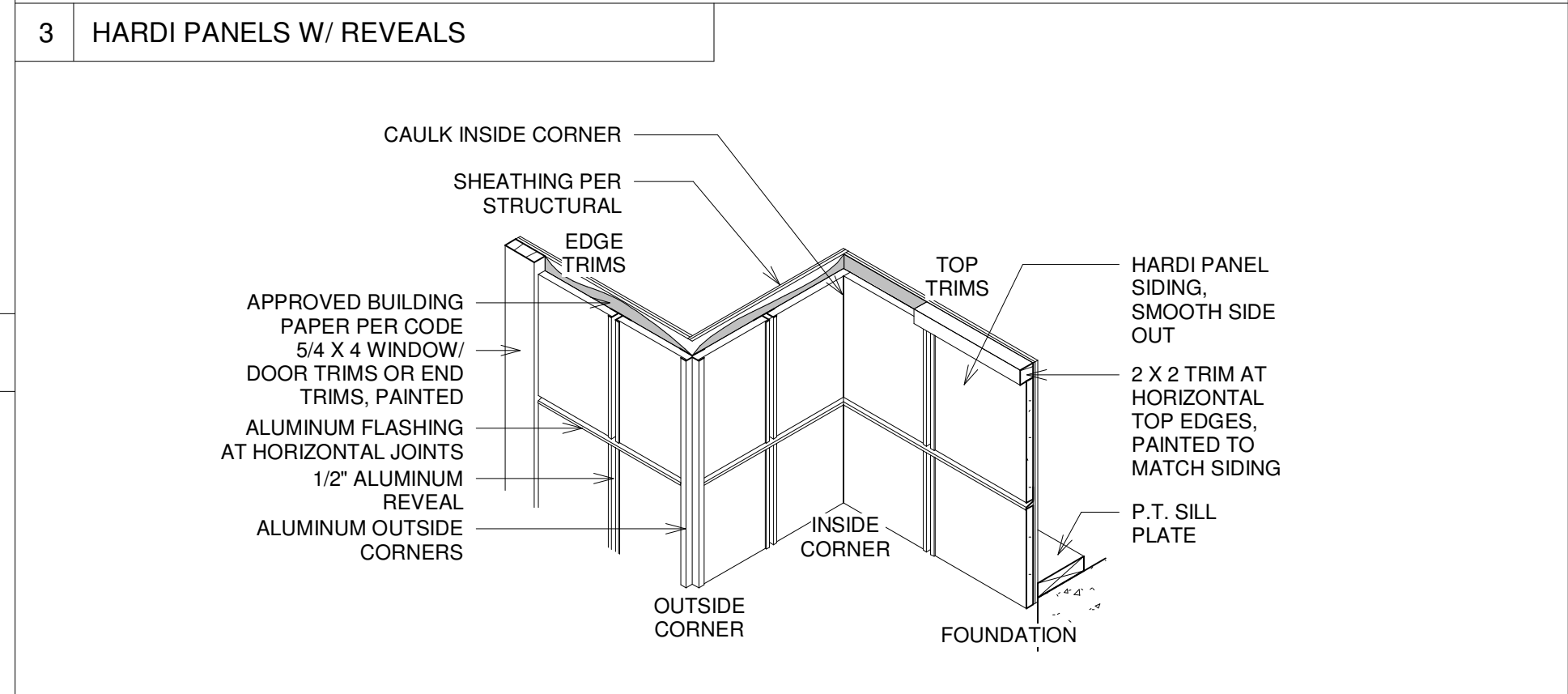
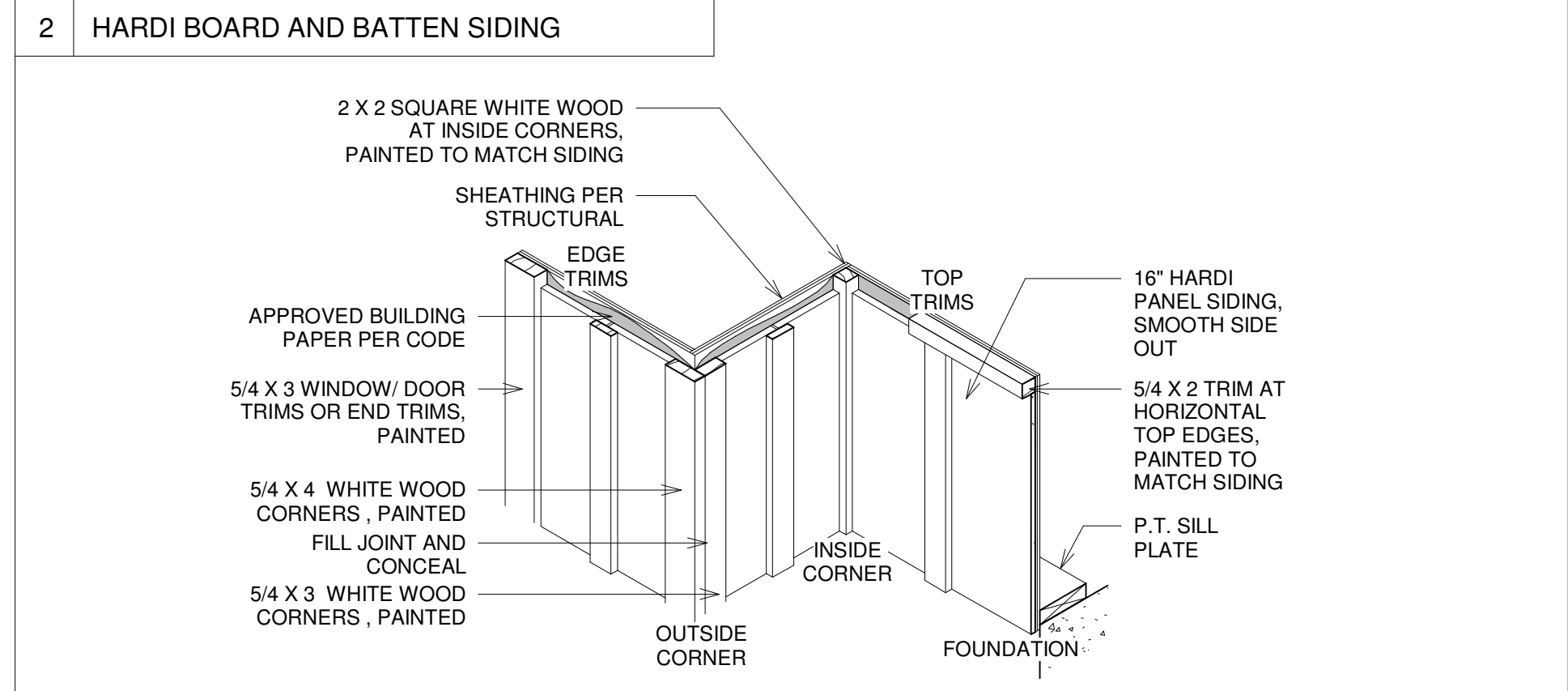
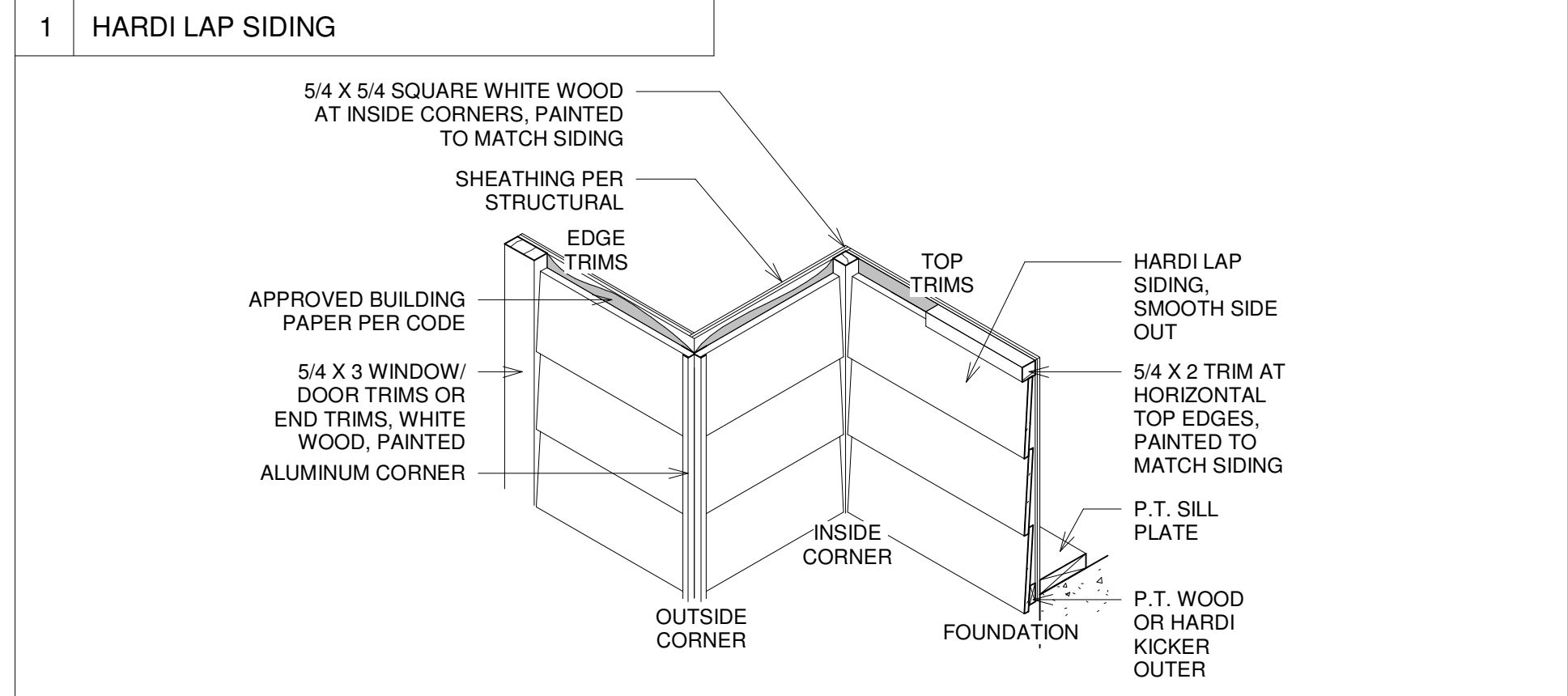
Scale As indicated



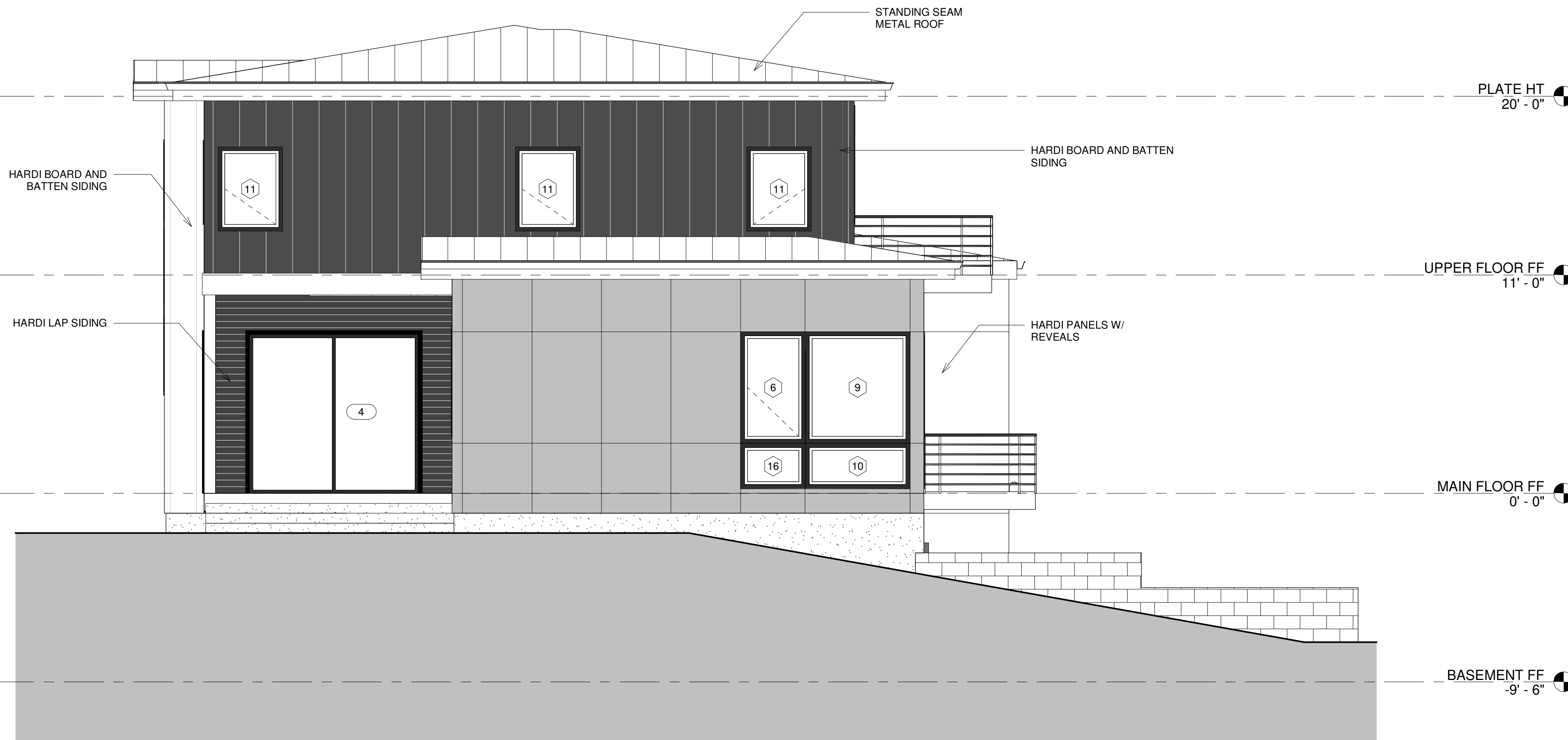
NORTH ELEVATION 1/4" = 1'-0"



EXTERIOR FINISH DETAILS



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



MILTON LAM ARCHITECTS

ARCHITECT
MILTON LAM ARCHITECTS
PO BOX 523, KIRKLAND, WA 98083
Contact:
MILTON LAM 206-303-7877
MILTON@MLARC.COM
Client Name IMANI
Project Address 2405 74TH AVE SE
MERCER ISLAND, WA 98040

No.	Description	Date

IMANI
MERCER ISLAND
ELEVATIONS
Project number 2124
Date 12/27/21
Drawn by MLA
Checked by ML
A2
Scale As indicated

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



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



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ARCHITECT
MILTON LAM ARCHITECTS
PO BOX 523, KIRKLAND, WA 98083
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MERCER ISLAND, WA 98040

No.	Description	Date

IMANI
MERCER ISLAND
ELEVATIONS

Project number	2124
Date	12/27/21
Drawn by	MLA
Checked by	ML

A3

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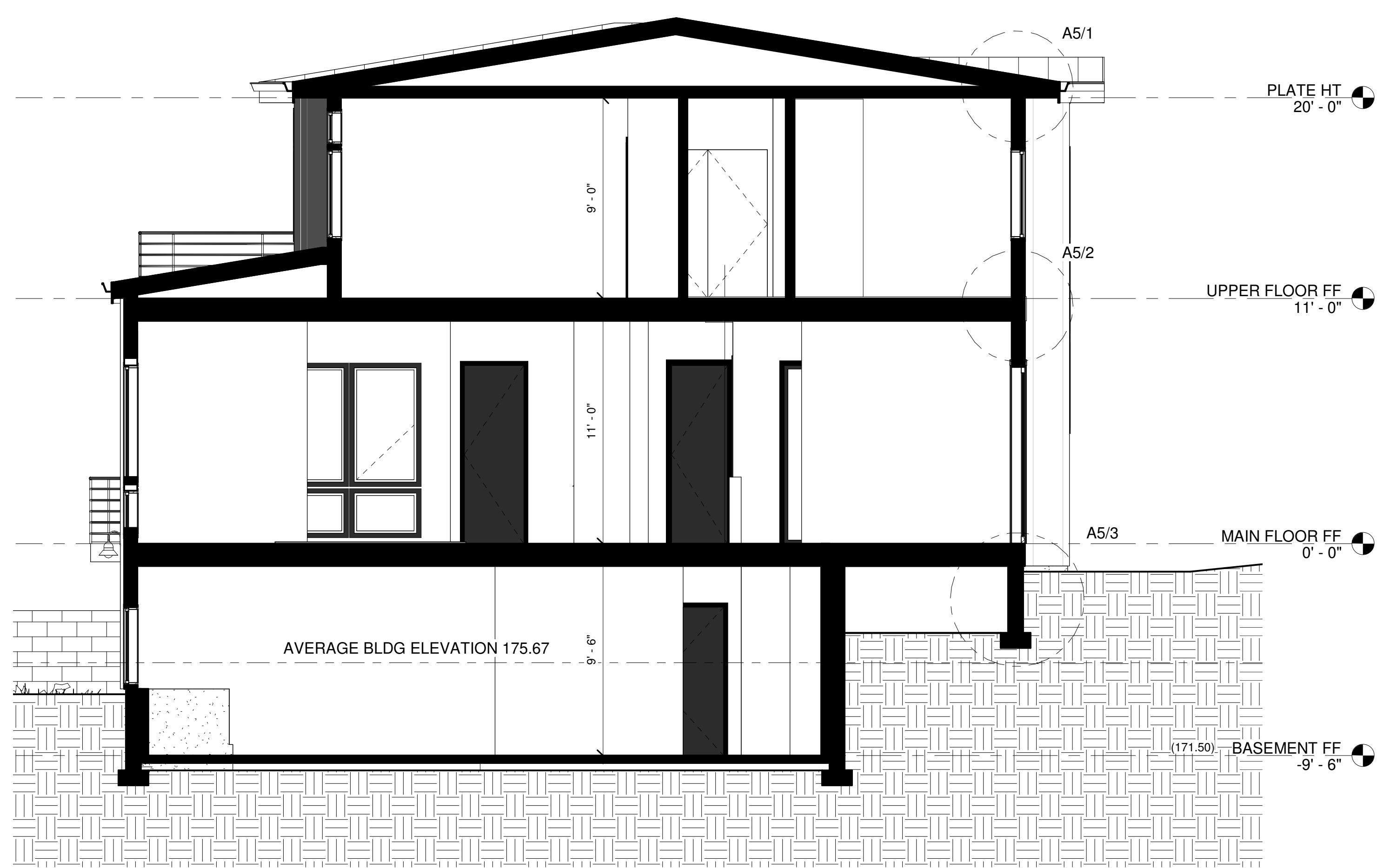
SECTION 1 - 1/4" = 1'-0"

BUILDING HEIGHT LIMIT 205.67



SECTION 2 - 1/4" = 1'-0"

BUILDING HEIGHT LIMIT 205.67



SECTION 3 - 1/4" = 1'-0"

BUILDING HEIGHT LIMIT 205.67



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No.	Description	Date

IMANI
MERCER ISLAND

BUILDING SECTIONS

Project number 2124
Date 12/27/21
Drawn by MLA
Checked by ML

A4

Scale 1/4" = 1'-0"

MISC ARCHITECTURAL NOTES

MISCELLANEOUS ARCHITECTURAL REQUIREMENTS

- 1. ALL EXPOSED EXTERIOR METAL SHALL BE GALVANIZED.
2. CAULK ALL OPENINGS COMPLETELY.
3. PROVIDE SOLID WOOD BLOCKING AS SUPPORT FOR ALL WALL MOUNTED FIXTURES.
4. ALL WOOD IN CONTACT WITH CONCRETE OR EARTH SHALL BE PRESSURE TREATED. ALL PRESSURE TREATED LUMBER (PT.) SHALL NOT CONTAIN, OR BE TREATED WITH CHROMIUM COPPER ARSENATE.
5. PROVIDE ATTIC ACCESS, MINIMUM 22" X 30", WITH 30" MINIMUM HEADROOM AT UNOBSTRUCTED, READILY ACCESSIBLE OPENING PER IRC R807. INSULATE AND WEATHER-STRIP.
6. PROVIDE CRAWL SPACE ACCESS, MINIMUM 18"X 24" UNOBSTRUCTED OPENING PER IRC R408.4. ALLOW 18" MINIMUM SPACE UNDER WOOD JOISTS. INSULATE AND WEATHER-STRIP.
7. SLOPE ALL DECKS, WALKS, DRIVEWAYS AND PATIOS AWAY FROM THE BUILDING AT A MINIMUM OF 1/4" PER FOOT.
8. FIREPLACES INSERTS SHALL COMPLY WITH PROVISIONS OF THE IRC. UNITS TO BEAR UL APPROVAL AND BE INSTALL PER MANUFACTURER'S REQUIREMENTS.
9. EXTERIOR DOORS AND WINDOW ASSEMBLIES
a. ALL BUILDING ENTRANCE DOORS INCLUDING GARAGE DOORS SHALL BE EQUIPPED WITH LOCKS CONSISTING OF A DEAD LOCKING LATCH BOLT WITH AT LEAST 1/2" OF THROW WHICH PENETRATES THE STRIKE JAMB A MINIMUM OF 1/4". BUILDING ENTRANCE DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
b. BUILDING ENTRANCE DOORS SHALL BE EQUIPPED WITH AN OBSERVATION PORT OR WINDOW SIDELIGHT. OBSERVATION PORTS SHALL BE INSTALLED AT MINIMUM 54" TO MAXIMUM 66" ABOVE THE FLOOR.
c. ALL OPERABLE WINDOWS AND SLIDING GLASS DOORS INSTALLED WITHIN 10'-0" OF FINISH GRADE SHALL BE EQUIPPED WITH A LOCKING DEVICE. THIS LOCK SHALL BE INSTALLED SO IT'S MOUNTING HARDWARE IS INACCESSIBLE FROM THE EXTERIOR.
10. FIREBLOCKING 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. FIREBLOCKING SHALL BE PROVIDED IN WOOD FRAME CONSTRUCTION PER IRC R302.11.
11. APPROVED CORRISION-RESISTIVE FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT THE ENTRY OF WATER INTO THE WALL CAVITY, REPEATED WETTING OF THE SHEATHING, OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH AND SHALL BE INSTALLED TO PREVENT WATER FROM RE-ENTERING THE EXTERIOR WALL ENVELOPE. APPROVED CORROSION FLASHING SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS;
a. AT THE TOP OF ALL EXTERIOR WINDOW AND DOOR OPENINGS IN SUCH A MANNER AS TO BE LEAKPROOF.
b. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.
c. UNDER AND AT THE ENDS OF ALL MASONRY, WOOD OR METAL COPINGS AND SILLS.
d. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.
e. WHERE EXTERIOR PORCHES, DECKS, HALF-WALLS, RAILINGS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD FRAME CONSTRUCTION.
f. AT WALL AND ROOF INTERSECTIONS
g. AT BUILT IN GUTTERS.
12. PROVIDE ELECTRICAL GROUND WIRES EMBEDDED IN FOUNDATION PER ELECTRICAL CODE.
13. 110 V HARD WIRED SMOKE DETECTORS WITH BATTERY BACKUP SHALL BE INSTALLED IN EACH SLEEPING ROOM AND IN ONE CENTRAL LOCATION ON EACH STORY OR LEVEL, PREFERABLY CLOSE TO THE STAIR LANDING. EACH SMOKE DETECTOR SHALL BE INTERCONNECTED SO AS TO SOUND ALARMS IN EACH ROOM OR AREA IF ONE DETECTOR IS TRIGGERED, PER IRC R313
14. EVERY SLEEPING ROOM AND HABITABLE ROOMS IN BASEMENTS SHALL HAVE AT LEAST ONE OPERABLE WINDOW WITH A NET CLEAR OPENING OF 5.7 SF. THE OPENING HEIGHT SHALL BE 24" MINIMUM AND WIDTH 20" MINIMUM, WITH A FINISHED SILL HEIGHT NO MORE THE 44" ABOVE THE FLOOR, PER IRC R310.1. IF WINDOW WELLS ARE NECESSARY THEY SHALL MEET THE REQUIREMENTS OF IRC R310.2

ENERGY NOTES

ENERGY CREDITS

3. Large Dwelling Unit: 7 credits
Dwelling is >5000sf

Table with 2 columns: OPTION, DESCRIPTION. Contains energy credit details for heating, HVAC, ductless split system, water heating, and appliances.

INSULATION & FENESTRATION REQUIREMENTS BY COMPONENT

WSEC TABLE R402.1.1
FENESTRATION U = 0.28 (PRESCRIPTIVE OPTION 1.3)
SKYLIGHT U = 0.50
CEILING = R-49
FLOOR = R-38 (PRESCRIPTIVE OPTION 1.3)
WALL = R-21

GLAZING

AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION

BUILDING AIR LEAKAGE TESTING, DEMONSTRATING AIR LEAKAGE OF 1.5 AIR CHANGES PER HOUR MAXIMUM, IS REQUIRED PRIOR TO FINAL INSPECTION. THE TEST RESULTS SHALL BE POSTED ON THE RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE.

HIGH EFFICIENCY HVAC EQUIPMENT

1. MITSUBISHI MINI SPLIT SYSTEM.

EFFICIENT WATER HEATER

WATER HEATING SYSTEM TO BE TANKLESS HEATER WITH A MINIMUM EF OF 0.91. TEMPERATURE AND PRESSURE RELIEF VALVES SHALL BE DRAINED TO THE OUTSIDE OF THE BUILDING. SERVICE WATER HEATING SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC TEMPERATURE CONTROLS AND SHALL BE SET TO 120 DEGREES FAHRENHEIT.

OTHER ENERGY REQUIREMENTS

MINIMUM 90% OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS.

A RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE COMPLYING WITH SEC 105.4 IS REQUIRED TO BE COMPLETED BY THE DESIGN PROFESSIONAL OR BUILDER AND PERMANENTLY POSTED WITHIN 3' OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.

VENTILATION NOTES

INTERIOR VENTILATION REQUIREMENTS

SOURCE SPECIFIC VENTILATION:
BATHROOM - 50CFM MIN. @ 0.25 IN. W.G.
KITCHEN - 100CFM MIN. @ 0.25 IN. W.G.
(TO BE CONTROLLED BY MANUAL SWITCHES)

WHOLE HOUSE VENTILATION:
4501-6000SF, 6-7 BEDROOMS, USE 120CFM CONTINUOUS VENTILATION
WHOLE HOUSE VENTILATION TO BE ACHIEVED WITH LAUNDRY ROOM FAN AND PANASONIC PASSIVE INLET VENTS AT 100CFM EACH AT LOCATIONS INDICATED ON FLOOR PLANS.

ALL EXHAUST DUCTS MUST BE INSULATED TO A MINIMUM OF R-8 IN UNCONDITIONED SPACES. BE EQUIPPED WITH A BACK DRAFT DAMPER, TERMINATE OUTSIDE THE BUILDING. ALL EXHAUST DUCTS ARE TO BE FLEX DUCTS AT 6" DIAMETER WITH A MAXIMUM RUN OF 45'-0".
WARM AIR DUCTS IN UNCONDITIONED AREAS MUST BE LEAK TESTED IN ACCORDANCE WITH THE 2015 WASHINGTON STATE ENERGY CODE.

DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR AND HOMEOWNER PRIOR TO AN APPROVED FINAL INSPECTION.

A SIGNED AFFIDAVIT DOCUMENTING THE DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO AN APPROVED FINAL INSPECTION.

ATTIC VENTILATION REQUIREMENTS

SEE ROOF PLAN ON A1.3 FOR CALCS AND LOCATIONS

CRAWLSPACE VENTILATION REQUIREMENTS

REQUIRED VENTING:

NORTHWEST CRAWLSPACE
181 SF / 150 = 1.21SF
2 VENTS REQUIRED

SOUTHWEST CRAWLSPACE
119 SF / 150 = 0.79SF
1 VENT REQUIRED

SEE SFP1 FOR LOCATIONS

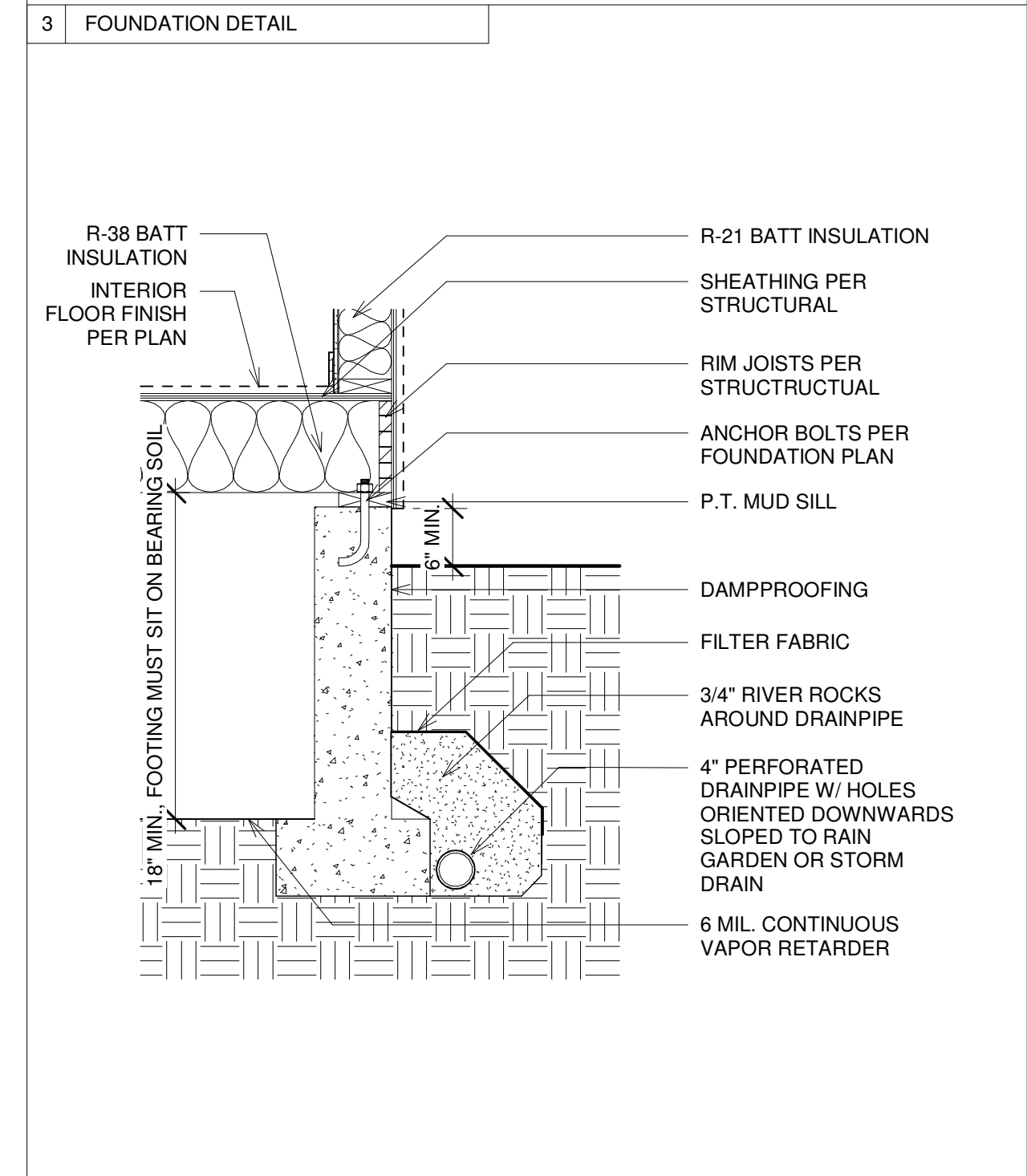
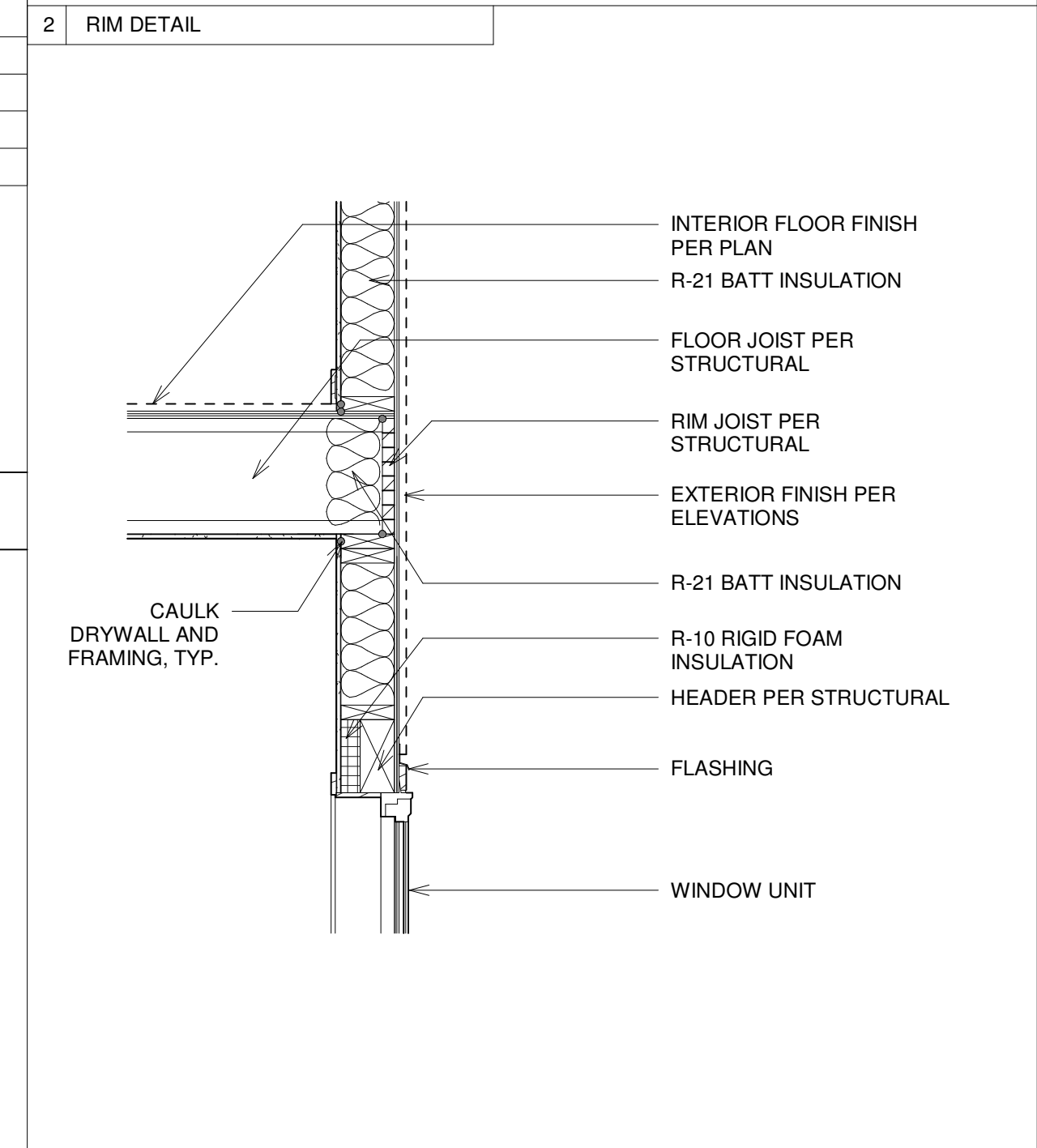
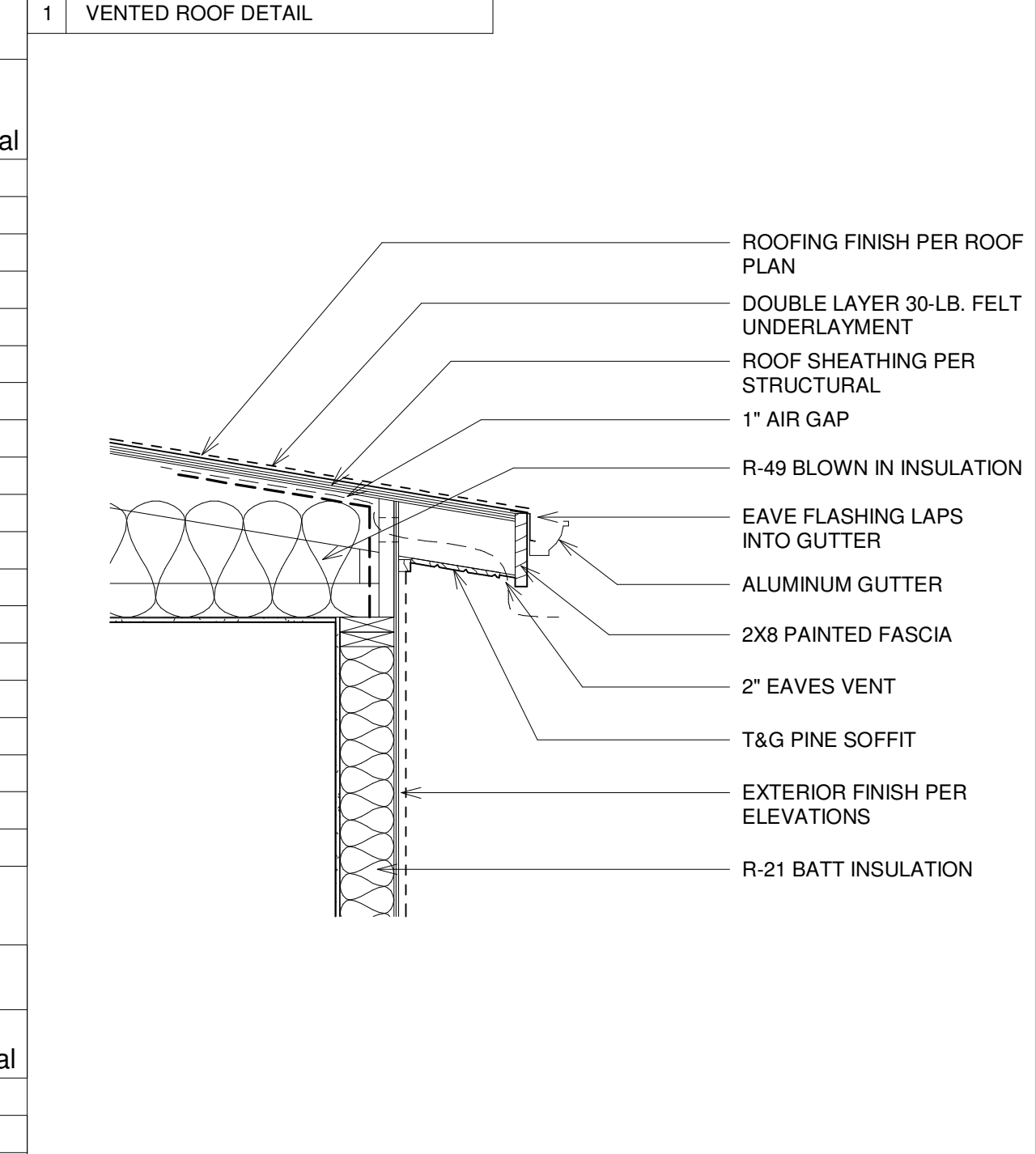
GLAZING SCHEDULE

Table with columns: Unit #, Rough Opening (Width, Height, Qty), Operation, Total Area, UValue, Total Area X UValue, Material. Lists window specifications for units 1-18.

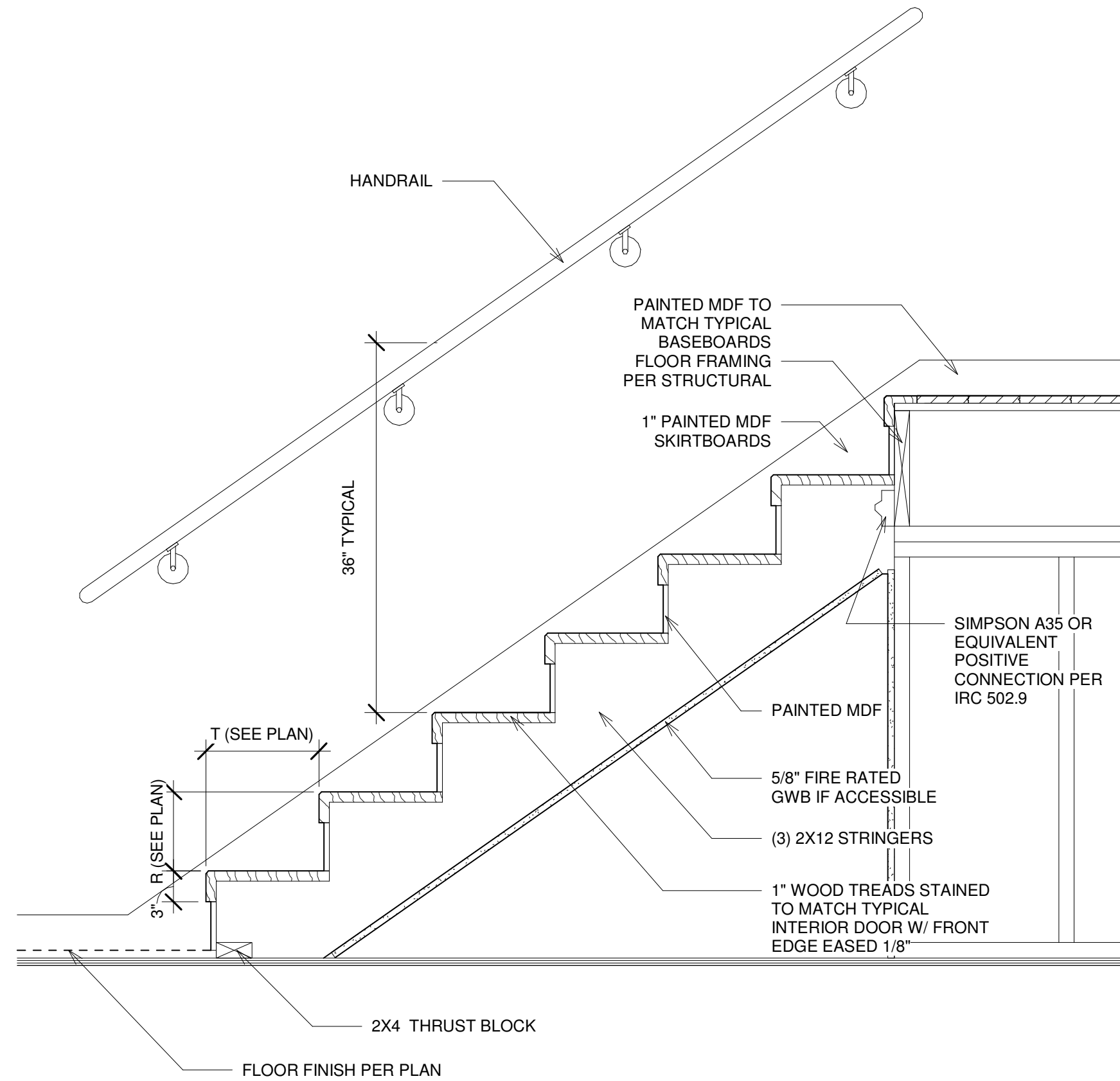
EXTERIOR DOORS

Table with columns: Door #, Width, Height, Qty, Total Area, UValue, Total Area X UFactor, Frame Material. Lists door specifications for units 1-6.

CONSTRUCTION DETAILS



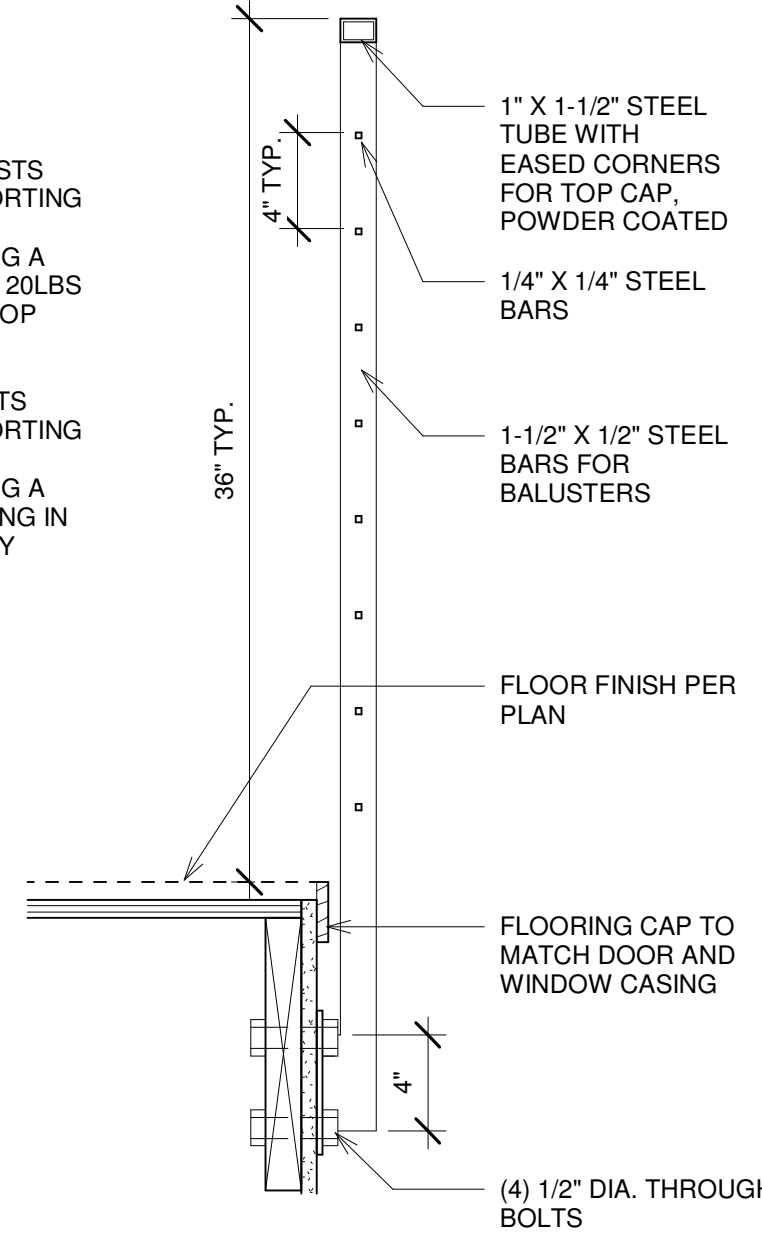
TYPICAL STAIRS AND GUARDRAIL DETAILS



GUARDRAIL REQUIREMENTS -

1. GUARDTAILS TO POSTS AND POSTS TO SUPPORTING STRUCTURE MUST BE CAPABLE OF RESISTING A HORIZONTAL LOAD OF 20LBS / FT APPLIED TO THE TOP RAIL

2. HANDRAILS TO POSTS AND POSTS TO SUPPORTING STRUCTURE MUST BE CAPABLE OF RESISTING A LOAD OF 200 LBS ACTING IN ANY DIRECTION AT ANY POINT ON THE RAIL



MILTON LAM ARCHITECTS

ARCHITECT
MILTON LAM ARCHITECTS
PO BOX 523, KIRKLAND, WA 98083

Contact:
MILTON LAM 206-303-7877
MILTON@MLARC.COM

Client Name IMANI

Project Address 2405 74TH AVE SE
MERCER ISLAND, WA 98040

Table with 3 columns: No., Description, Date. Contains a list of construction details.

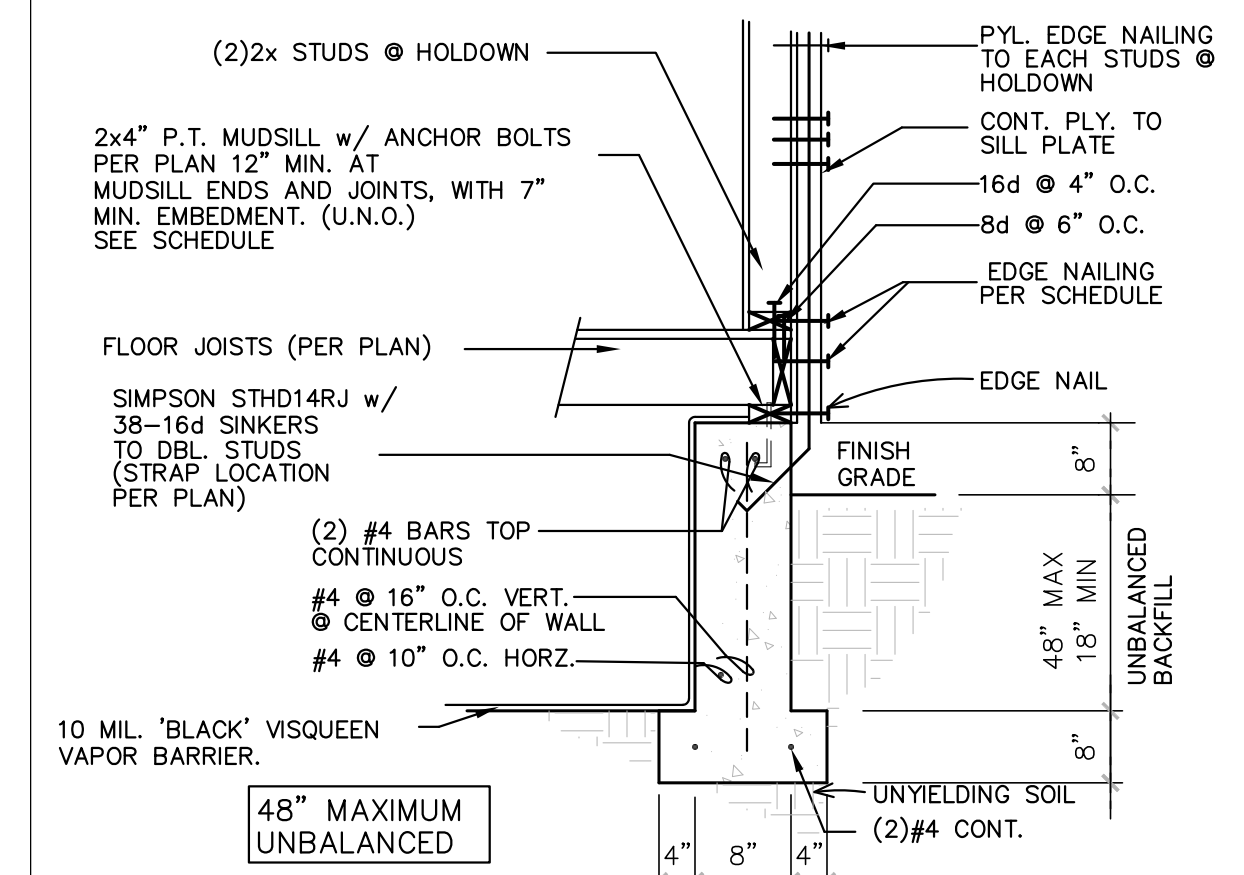
IMANI
MERCER ISLAND

DETAILS

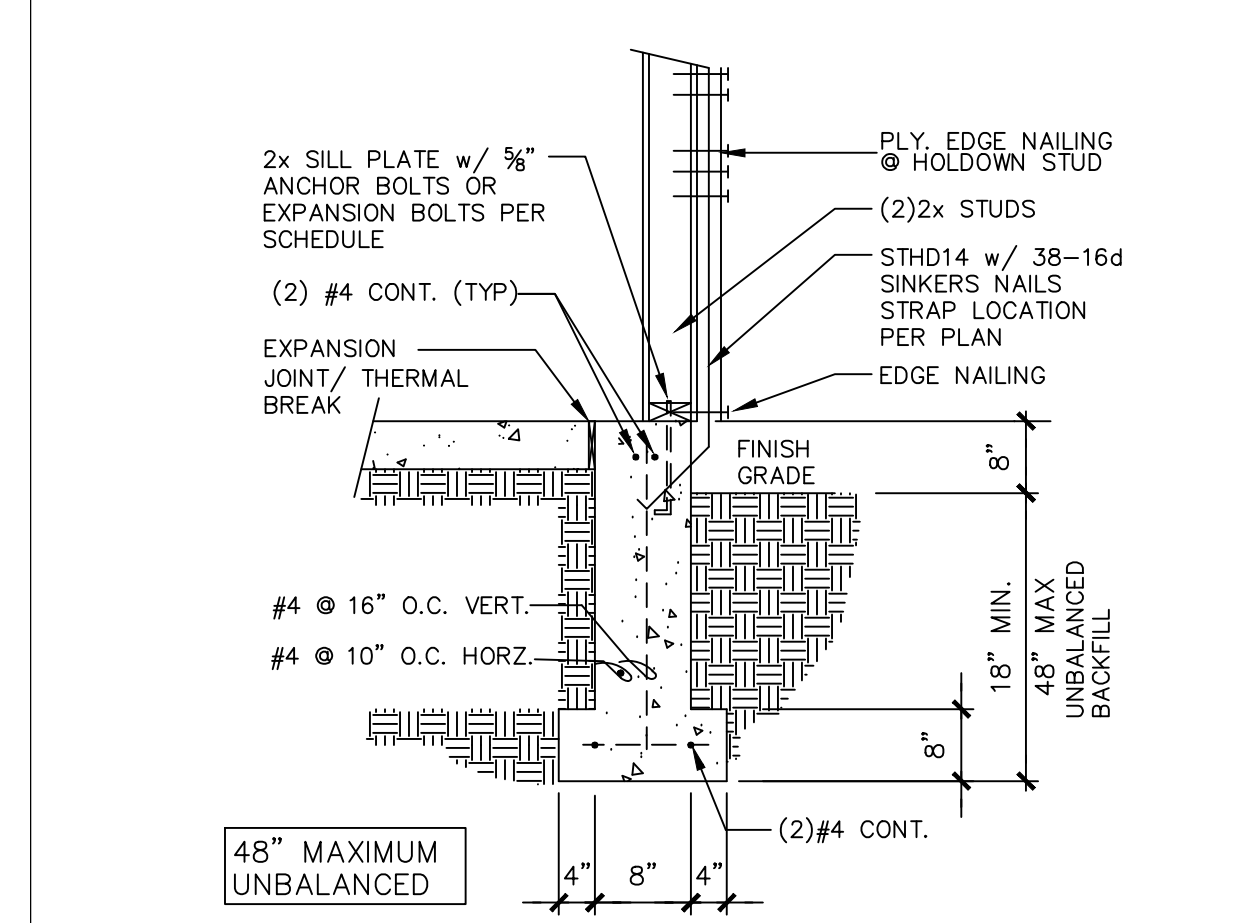
Table with 2 columns: Field, Value. Contains project information like number, date, and drafter.

A5

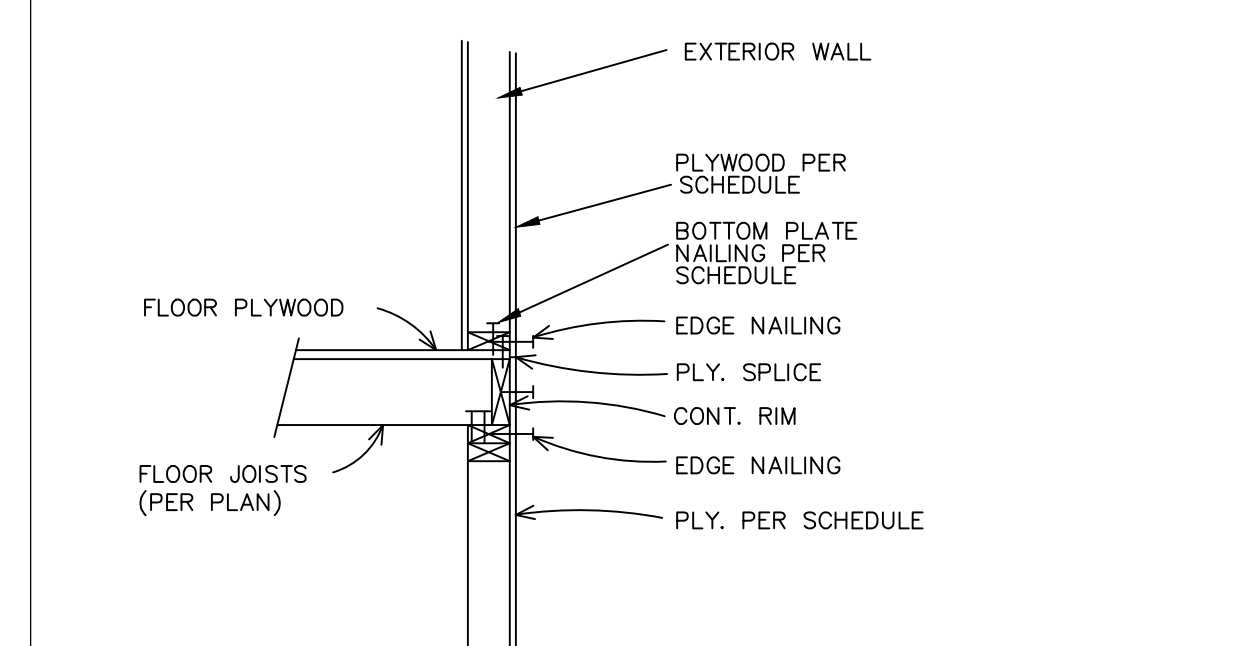
Scale As indicated



A EXTERIOR SHEARWALL @ CRAWL SPACE
3/4"=1'-0"



E EXT. SHEARWALL @ SLAB
3/4"=1'-0"

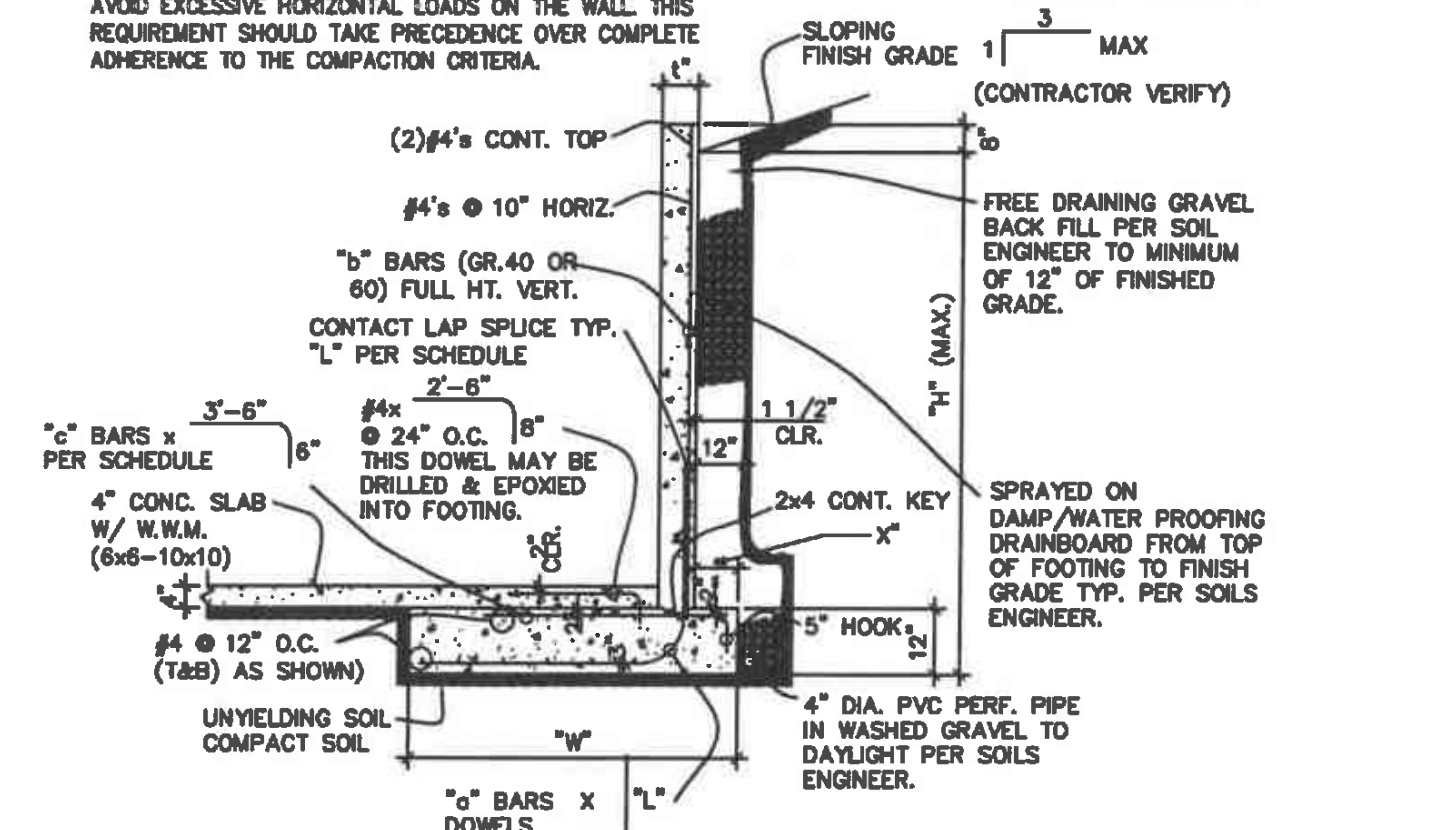


I JOIST PERP. TO EXT. WALL
3/4"=1'-0"

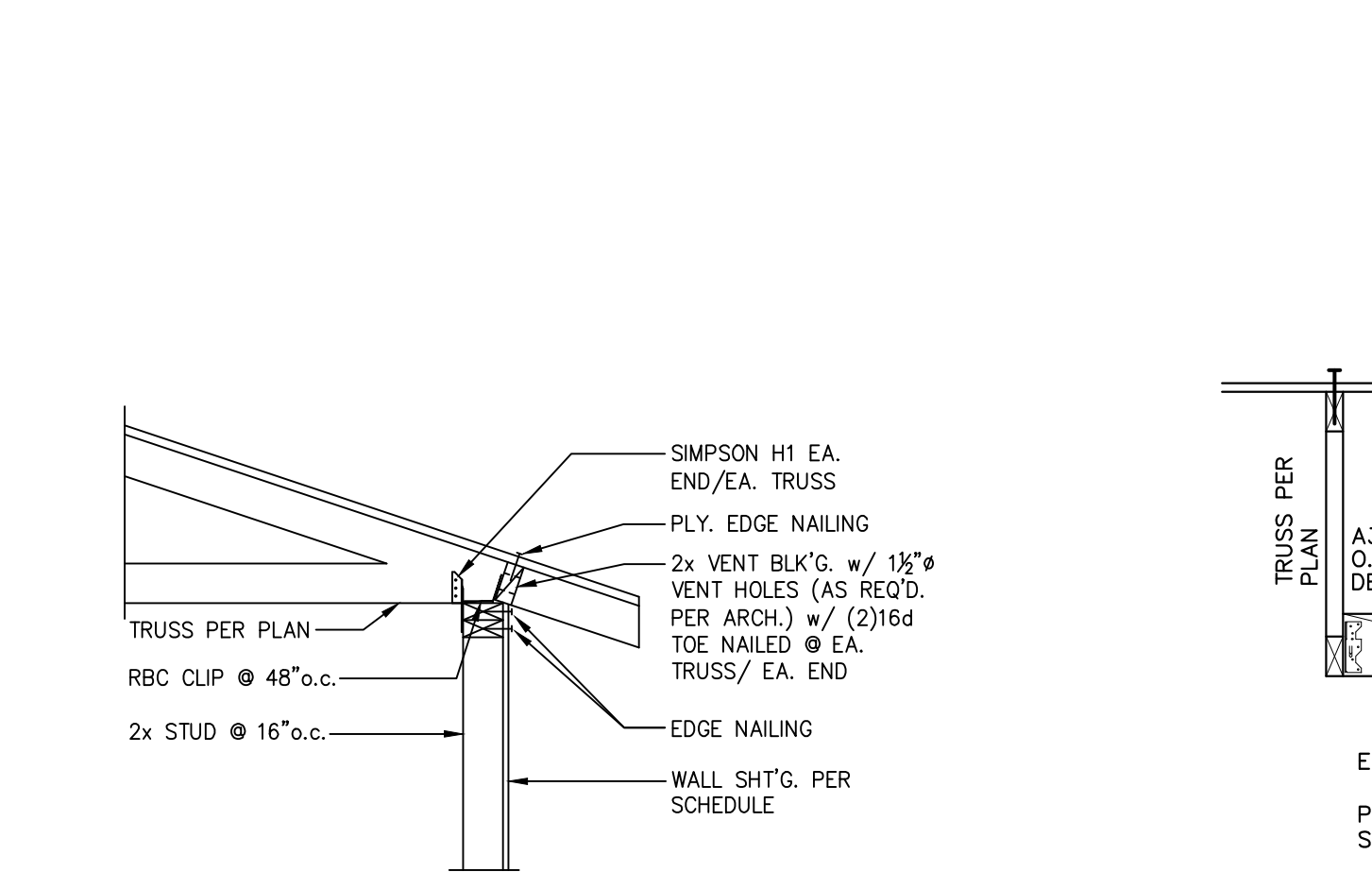
RETAINING WALL NOTES:
 1. 2,000 PSF SOIL BEARING, 0.4 CO. OF FRICTION
 2. 35 PSF COV. FLUID PRESSURE, 250 PCF FRACTION PRESSURE.
 3. 2,500 PSI CONCRETE.
 4. GRADE 40 OR 60 REINF.
 5. CONTRACTOR SHALL VERIFY ALL EXISTING & FINISH GRADES PRIOR TO CONSTRUCTION.
 6. REINFORCING SHALL BE INSPECTED POURING CONCRETE.
 7. BUILDING INSPECTOR/SOILS ENGINEER TO INSPECT & APPROVE SOILS BELOW FOOTING PRIOR TO CONSTRUCTION OF FOOTINGS.
 8. THIS DESIGN SHALL NOT BE CONSTRUCTED ON SILT OR CLAY BEARING SOILS, OR WITH SILT OR CLAY BACKFILL BEHIND WALLS.
 9. CONTRACTOR SHALL COMPLY WITH ALL O.S.H.A. & W.L.S.H.A. HEALTH & SAFETY STANDARDS.
 10. BACKFILL SHOULD BE PLACED WITH EXTREME CARE TO AVOID EXCESSIVE HORIZONTAL LOADS ON THE WALL. THIS REQUIREMENT SHOULD TAKE PRECEDENCE OVER COMPLETE ADHERENCE TO THE COMPACTION CRITERIA.

RETAINING WALL SCHEDULE

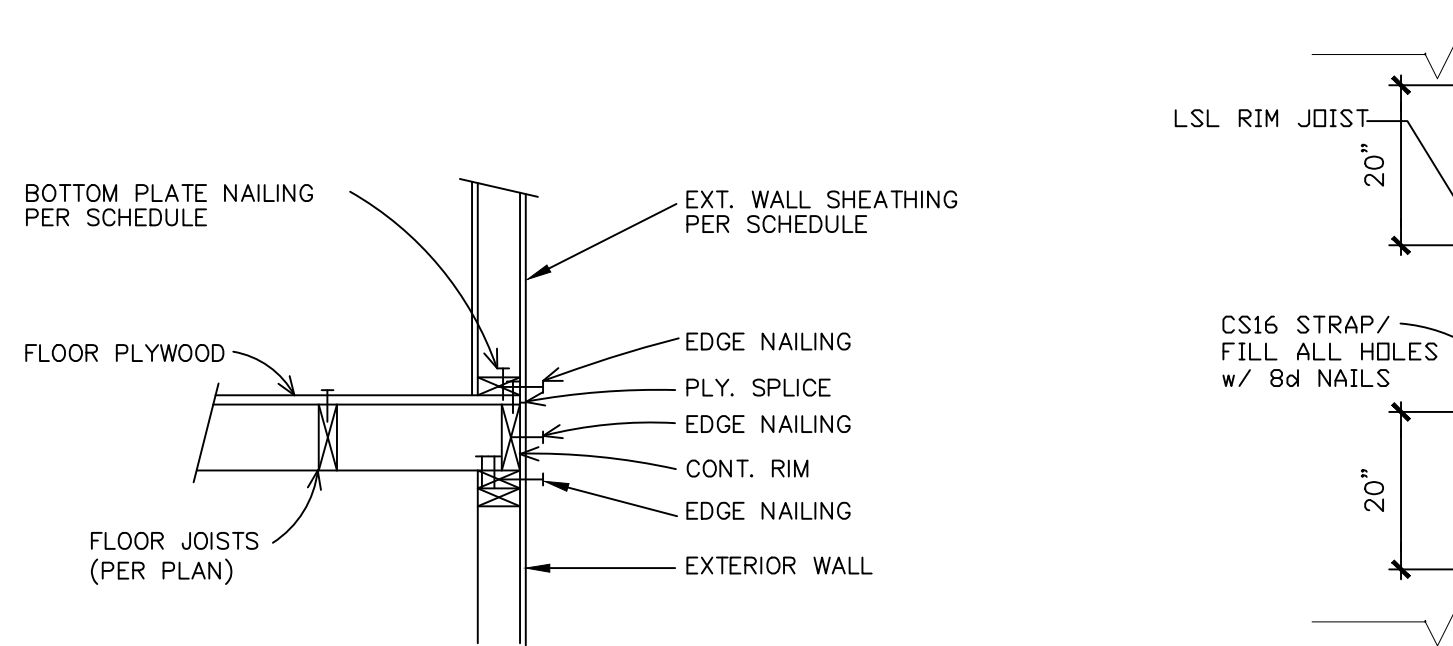
Ht	W	1st	2nd	3rd	4th	5th	6th
11'	5'-6"	#5@6"	#5@12"	#5@12"	5'-0"	8"	10"
9'	4'-0"	#5@8"	#5@12"	#5@12"	4'-0"	8"	10"
7'	3'-0"	#4@9"	#4@12"	#4@12"	4'-0"	8"	10"
5'	2'-4"	#4@12"	#4@12"	#4@12"	3'-6"	8"	8"



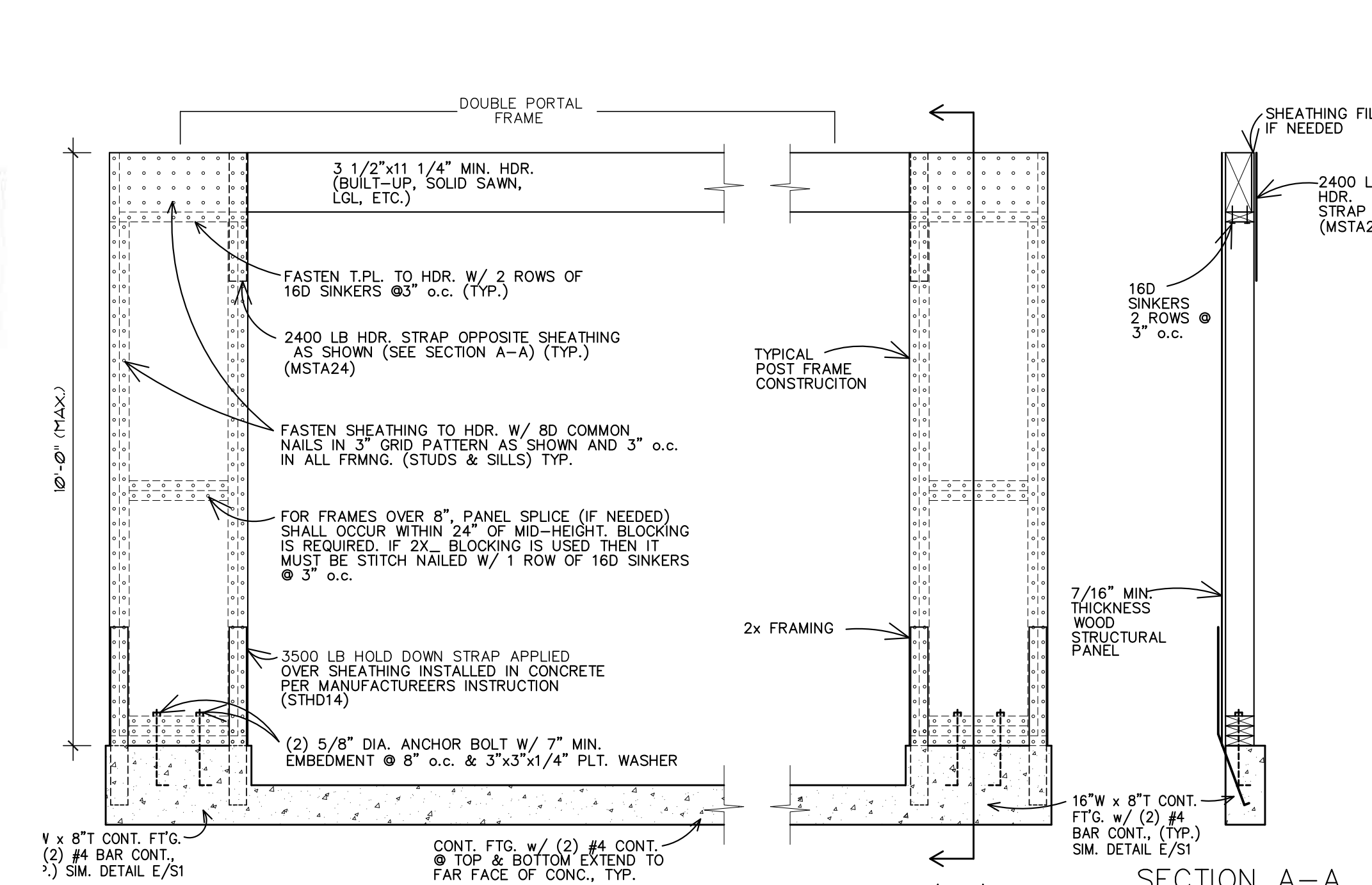
C1 L SHAPED RETAINING WALL



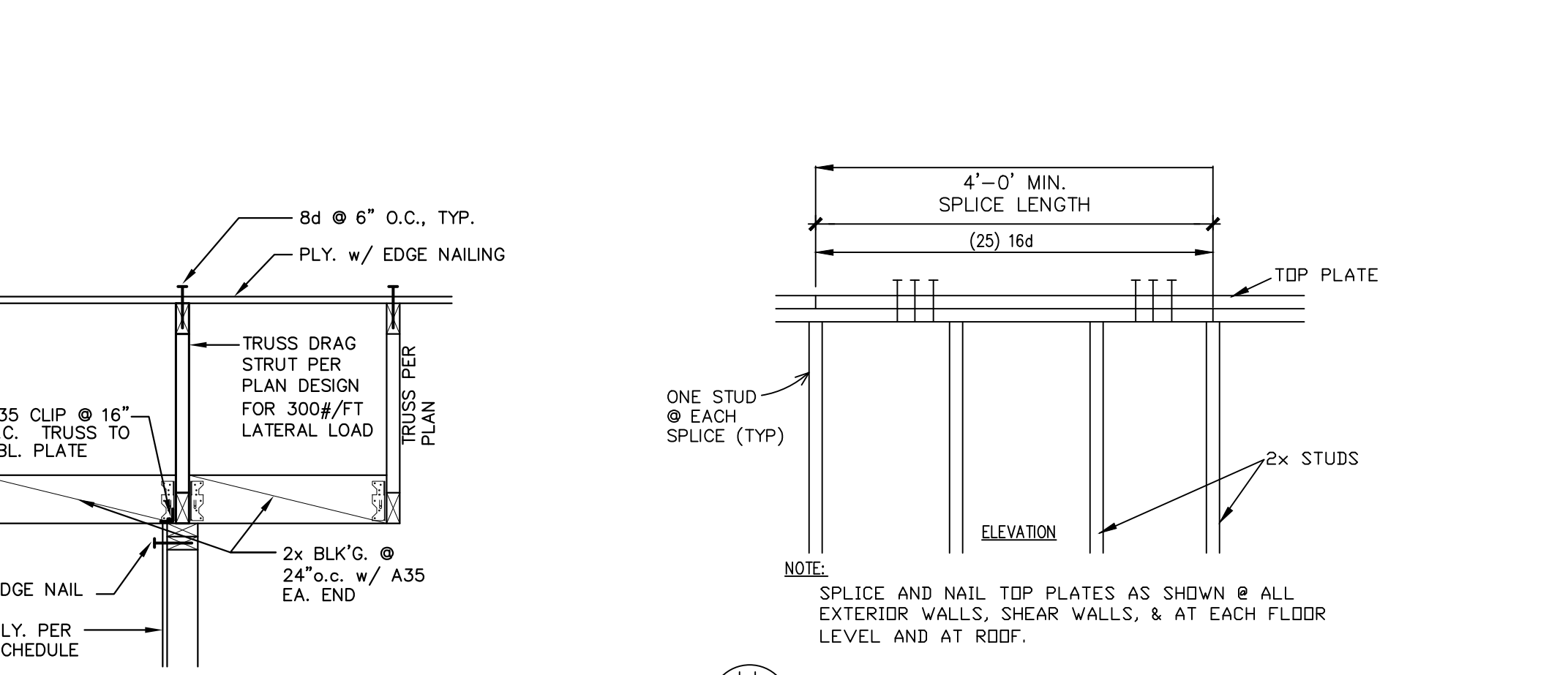
F EAVE @ ROOF (TRUSS)
3/4"=1'-0"



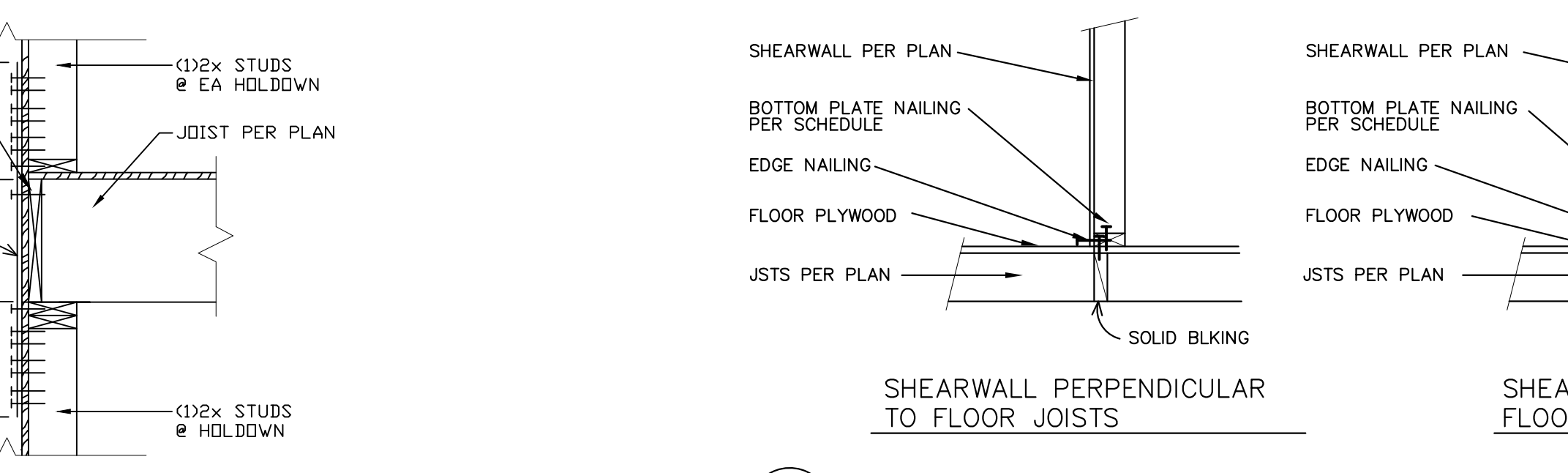
J JOIST PARALLEL TO EXT. WALL
3/4"=1'-0"



D MIN. LATERAL PANEL
3/4"=1'-0"



G DRAG STRUT TRUSS
3/4"=1'-0"



K STRAP HOLD-DOWN AT FLOOR
3/4"=1'-0" SEE PLANS FOR # OF HOLD-DOWNS

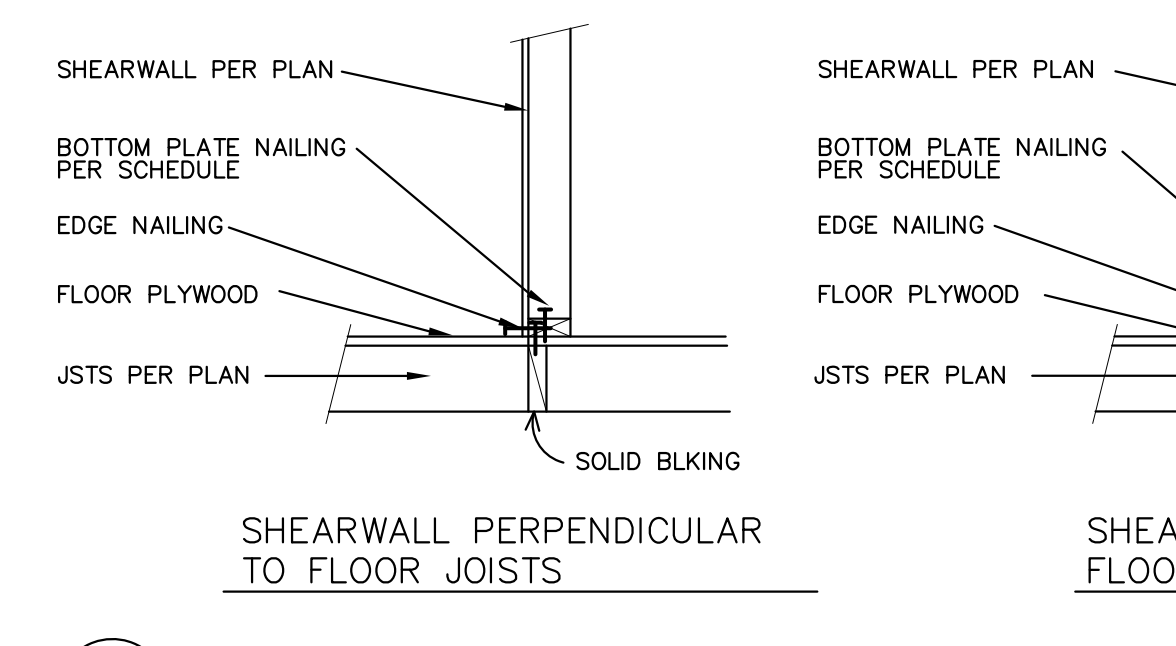
SHEARWALL SCHEDULE:

- SW-4** INDICATES SHEARWALL w/ SHEATHING ONE SIDE
 1. SHEATHING: 1/2" PLYWOOD or 7/16" O.S.B., ONE SIDE, BLOCKED, NAIL w/ 8d @ 4"o.c. ALL EDGES & 12"o.c. FIELD.
 2. BOLT SILL PLATE TO CONCRETE w/ 5/8" x 10" ANCHOR BOLTS @ 32"o.c.
 3. NAIL BOTTOM PLATE TO FRAMING BELOW w/ 16d @ 3"o.c.
 4. FASTEN DOUBLE TOP PLATE TO JOIST or BLOCKING ABOVE PER DETAILS AS PROVIDED.
- SW-3** INDICATES SHEARWALL w/ SHEATHING ONE SIDE
 1. SHEATHING: 1/2" PLYWOOD or 7/16" O.S.B., ONE SIDE, BLOCKED, NAIL w/ 8d @ 3"o.c. ALL EDGES & 12"o.c. FIELD.
 2. a. BOLT (3)2x SILL PLATE TO CONCRETE w/ 5/8" x 12" ANCHOR BOLTS @ 16"o.c. PER DETAIL D/S1
 b. or BOLT 2x SILL PLATE TO CONCRETE w/ 5/8" x 10" ANCHOR BOLTS @ 24"o.c.
 3. NAIL BOTTOM PLATE TO FRAMING BELOW w/ 16d @ 4"o.c.
 4. FASTEN DOUBLE TOP PLATE TO JOIST or BLOCKING ABOVE PER DETAILS AS PROVIDED.
 5. USE (2)2x STUDS @ 16"o.c. or PER DETAIL D/S1 IF APPLICABLE &
- SW-2** INDICATES SHEARWALL w/ SHEATHING ONE SIDE
 1. SHEATHING: 1/2" PLYWOOD or 7/16" O.S.B., ONE SIDE, BLOCKED, NAIL w/ 8d @ 2"o.c. ALL EDGES & 12"o.c. FIELD.
 2. BOLT 3x SILL PLATE TO CONCRETE w/ 5/8" x 12" ANCHOR BOLTS @ 12"o.c.
 3. FASTEN DOUBLE BOTTOM PLATE TO FRAMING BELOW w/ 2-LAYERS 16d @ 3"o.c.
 4. FASTEN DOUBLE TOP PLATE TO JOIST or BLOCKING ABOVE w/ SIMPSON LTP4 @ 10"o.c. PER DETAILS AS PROVIDED.
- (2)SW-3** INDICATES SHEARWALL w/ SHEATHING TWO SIDES
 1. SHEATHING: 1/2" PLYWOOD or 7/16" O.S.B., TWO SIDES, BLOCKED, NAIL w/ 8d @ 3"o.c. ALL EDGES & 12"o.c. FIELD.
 2. BOLT 3x SILL PLATE TO CONCRETE w/ 5/8" x 12" ANCHOR BOLTS @ 16"o.c.
 3. FASTEN DOUBLE BOTTOM PLATE TO DOUBLE JOIST or BLOCKING BELOW w/ 2-ROWS & 2-LAYERS 16d @ 4"o.c. or 2-ROWS A35 CLIPS @ 16"o.c.
 4. FASTEN DOUBLE TOP PLATE TO DOUBLE JOIST or BLOCKING ABOVE w/ 2-ROWS & 2-LAYERS 16d TOE NAILS @ 4"o.c. & 2-ROWS A35 CLIPS @ 16"o.c. or PER DETAILS AS PROVIDED.
 5. USE 3x or DBL. STUDS @ ALL FRAMING MEMBERS RECEIVING END NAILING FROM ADJUTING PANELS.

TYPICAL ROOF SHEATHING:
 7/16" O.S.B., INDEX 40/20, UNBLOCKED, w/ FACE GRAIN PERPENDICULAR TO FRAMING BELOW.
 NAIL AS FOLLOWS:
 DIAPHRAGM BOUNDARY, OVER EXTERIOR WALLS, SHEAR WALLS, & DRAG STRUTS: 8d @ 6"o.c.
 ALL SUPPORTED EDGES: 8d @ 6"o.c.
 FIELD: 8d @ 12"o.c.

TYPICAL FLOOR SHEATHING:
 3/4" 1&G O.S.B., INDEX 40/20, UNBLOCKED, LAID UP w/ FACE GRAIN PERPENDICULAR TO FRAMING BELOW; STAGGER END JOINTS, GLUE & NAIL AS FOLLOWS:
 DIAPHRAGM BOUNDARY, OVER EXTERIOR WALLS, SHEAR WALLS, & DRAG STRUTS: 8d @ 6"o.c.
 ALL SUPPORTED EDGES: 8d @ 6"o.c.
 FIELD: 8d @ 10"o.c.

- NOTES:**
- USE 3"x3"x1/4" PLATE WASHERS ON ALL ANCHOR BOLTS.
 - THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE(S) w/SHEATHING PER NDS 2015 EDITION (SDPWS) 4.3.6.4.3.
 - EXPANSION BOLTS MAY BE USED IN LIEU OF ANCHOR BOLTS w/ SAME SPACING & 4 1/2" MIN. EMBEDMENT.
 - ALL POWDER DRIVEN NAILS SHALL BE 2 3/4" LONG(min.) x 0.156 SHANK Ø, w/ MINIMUM 1 1/4" PENETRATION.
 - USE 20d NAILS @ 3x FRAMING MEMBERS.
 - a. 8d NAILS SHALL BE .131 x 2 1/2" LONG
 - b. 10d NAILS SHALL BE .148 x 3" LONG
 - c. 16d NAILS SHALL BE .162 x 3 1/2" LONG
 - d. 20d NAILS SHALL BE .192 x 4" LONG



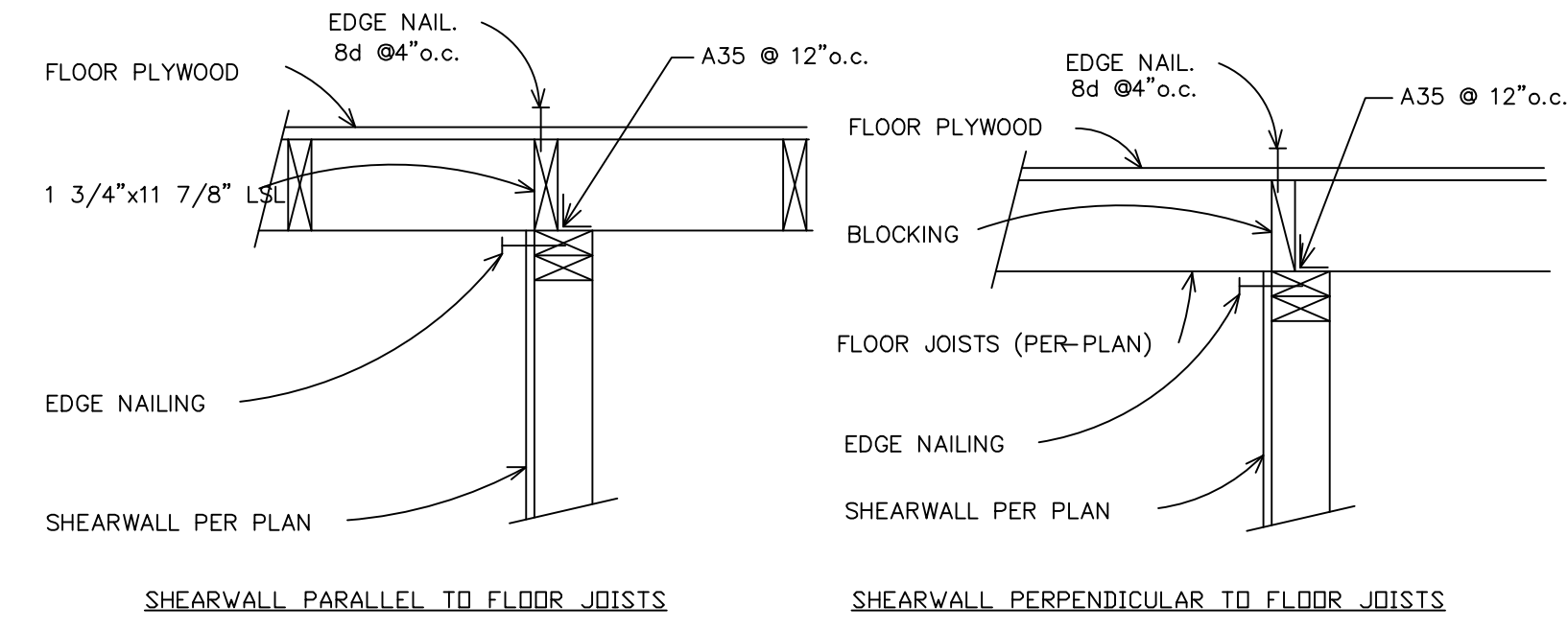
L INTERIOR SHEARWALL TO FLOOR BELOW
3/4"=1'-0"

RB ENGINEERS, INC.
 1312 2nd Street, Kirkland, WA 98033
 Tel: (425) 351-2085, Fax: (425) 822-2679
 Email: RBE1992@GMAIL.COM
 R-B-Engineers.com

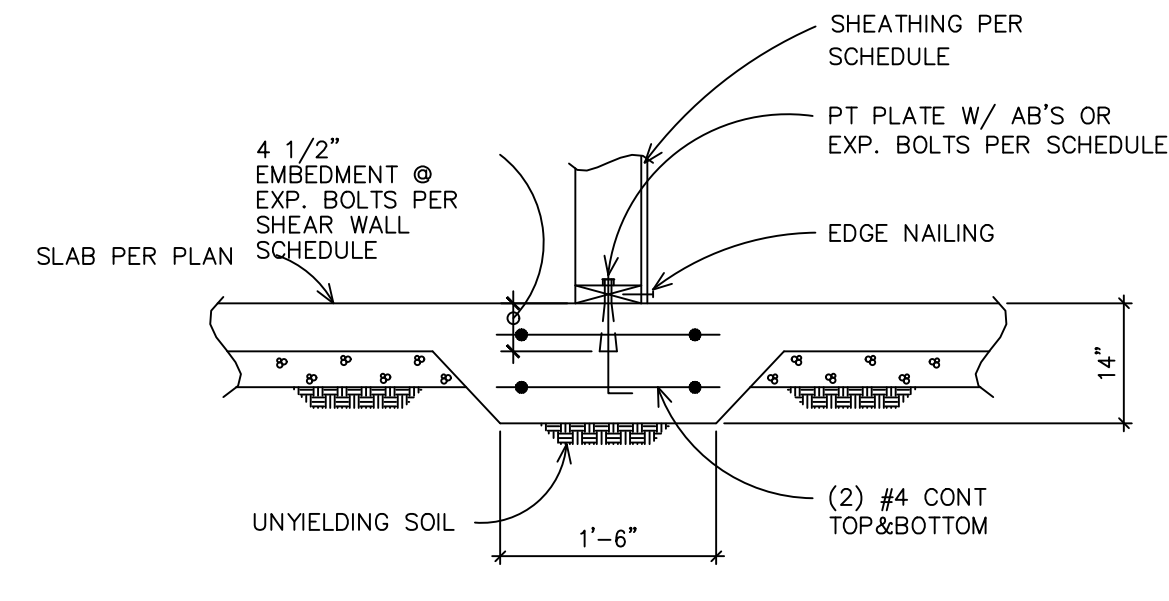
Shearwall Schedule & Structural Details
IMANI
 2405 74TH AVE SE, MERCER ISLAND WA

Project	
Project No.	
Drawn By	
Date	2.20.2021

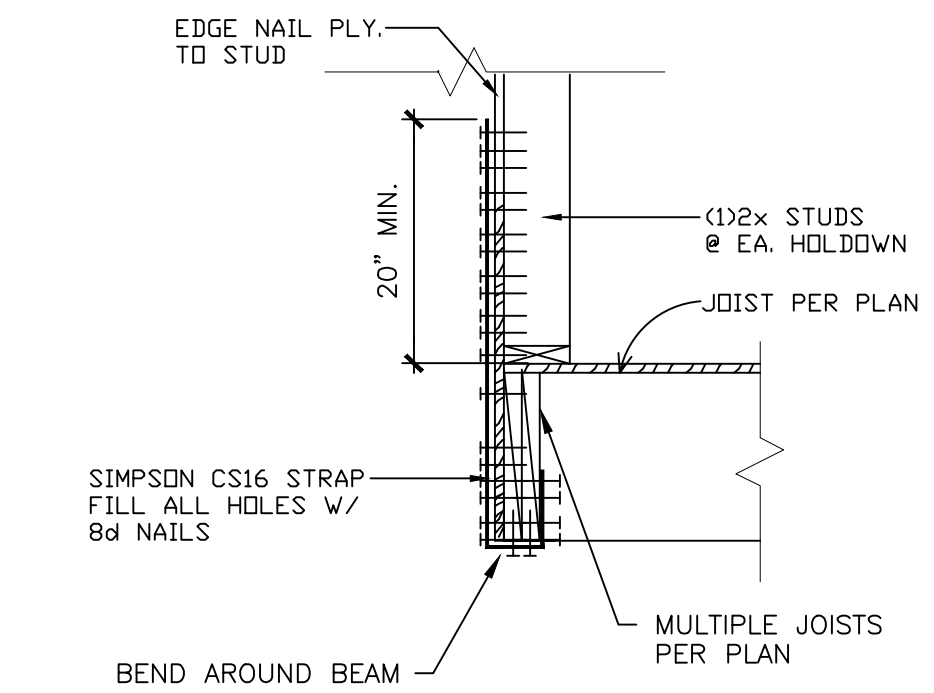
Sheet
S1
 12"x18" PLOT = 1/2 SCALE



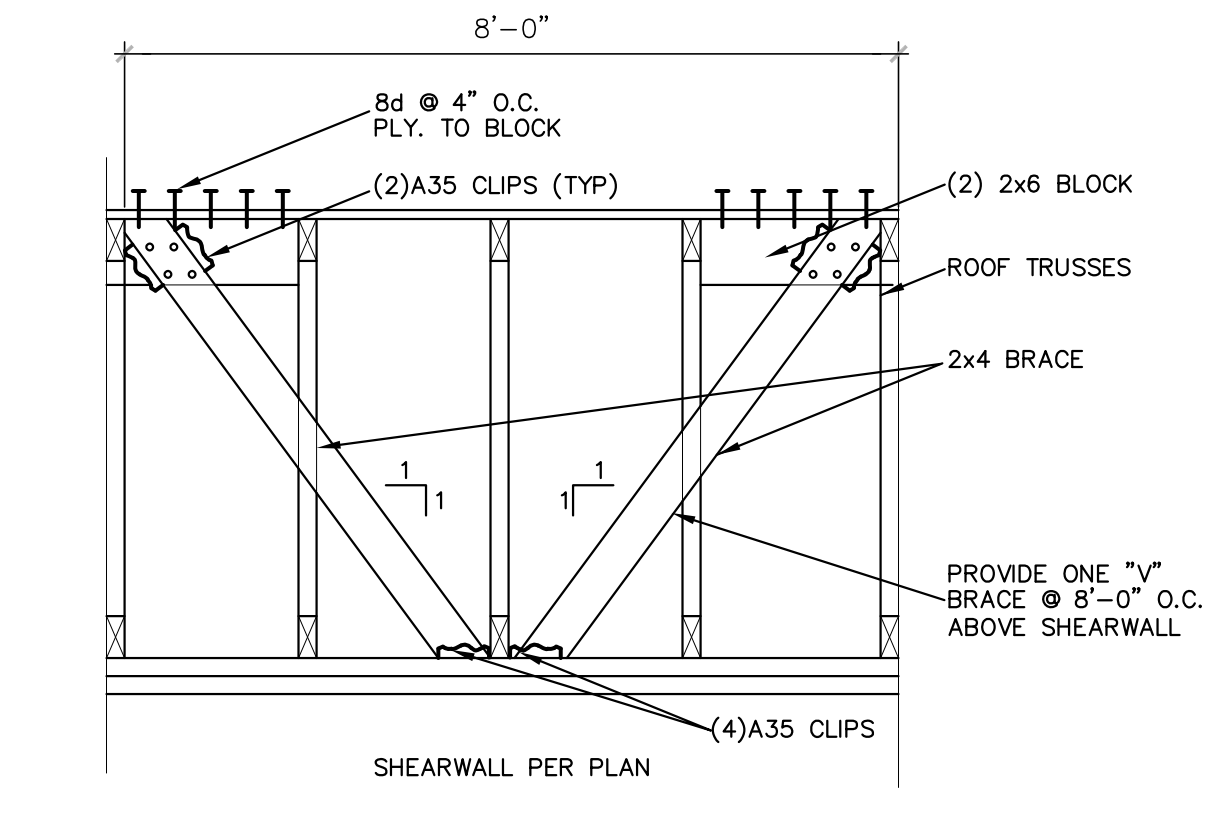
M INT. SHEARWALL TO FLOOR ABV.
N.T.S.



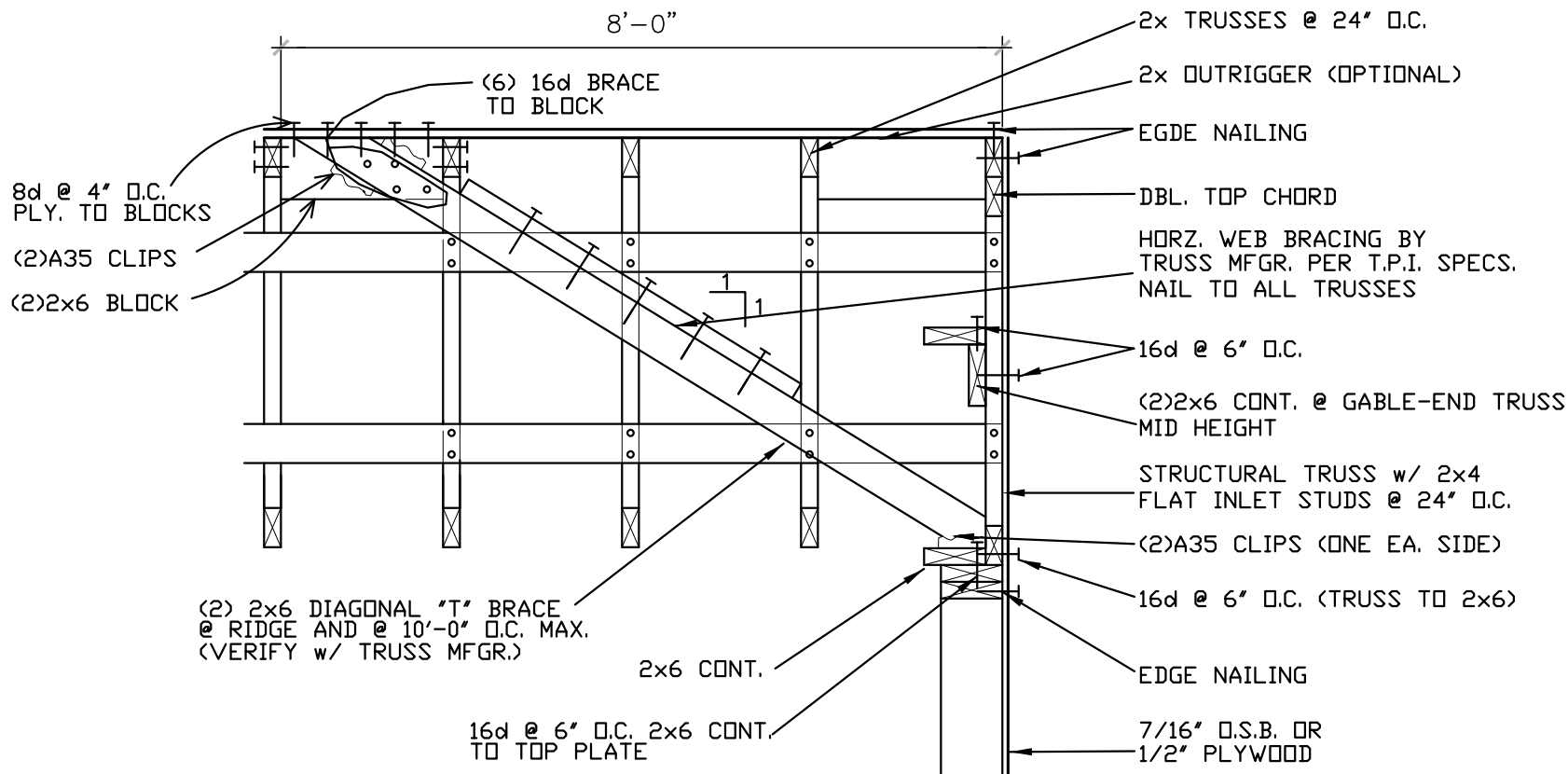
N THICKENED SLAB



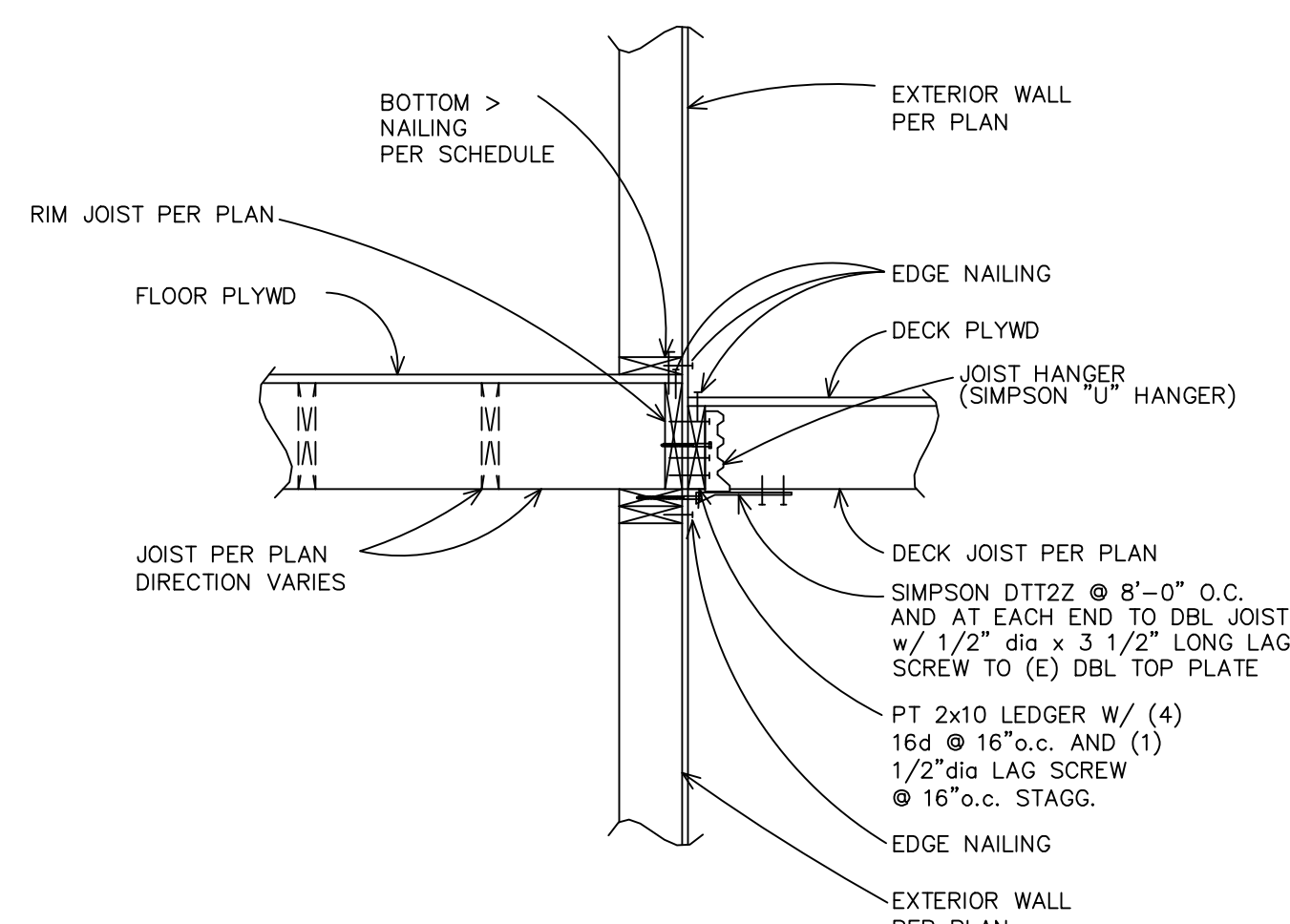
P STRAP HOLDOWN AT HDR
3/4"=1'-0" SEE PLANS FOR # OF HOLD-DOWNS



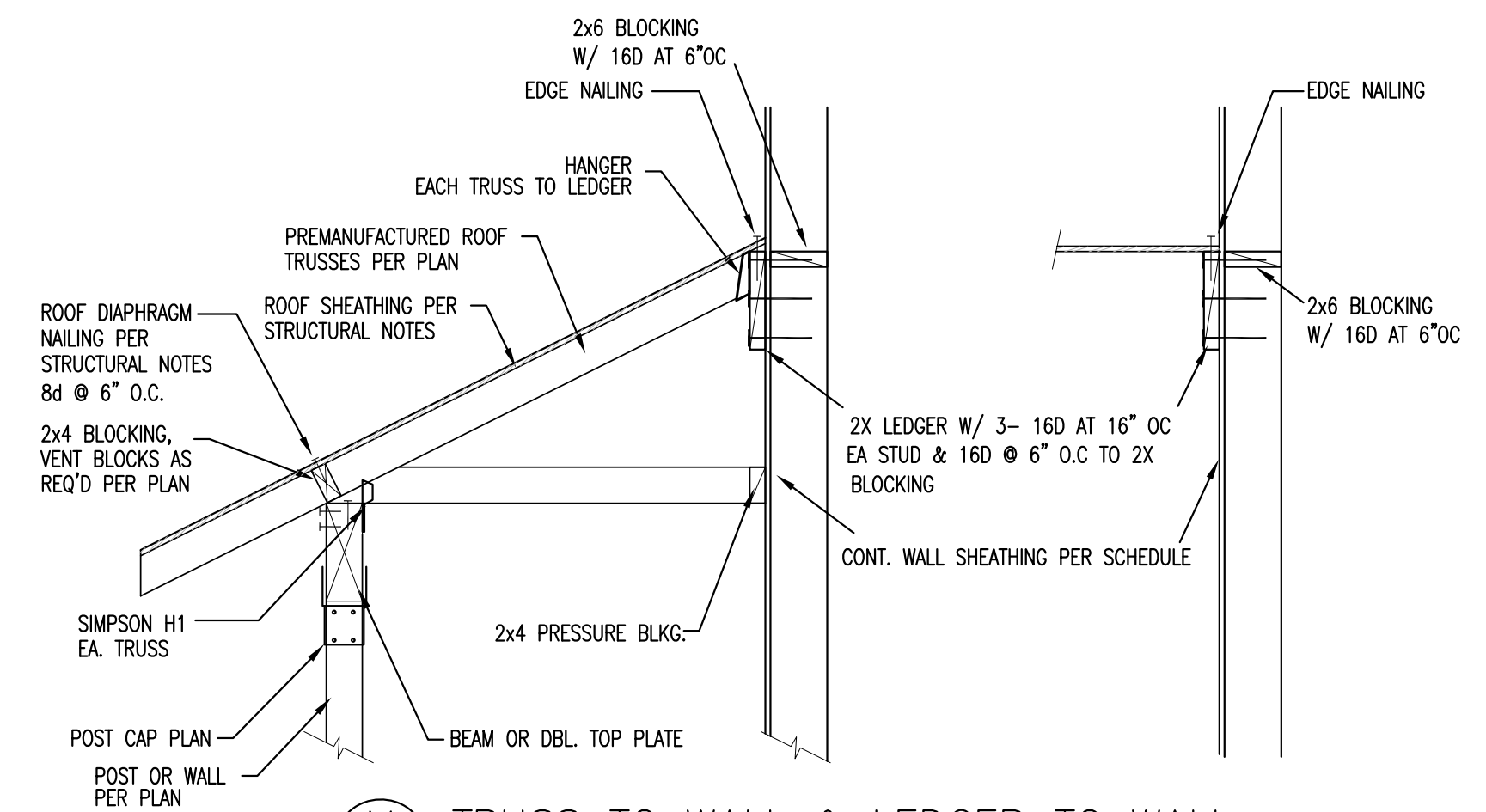
S SHEARWALL PERPENDICULAR
3/4"=1'-0" TO ROOF TRUSSES



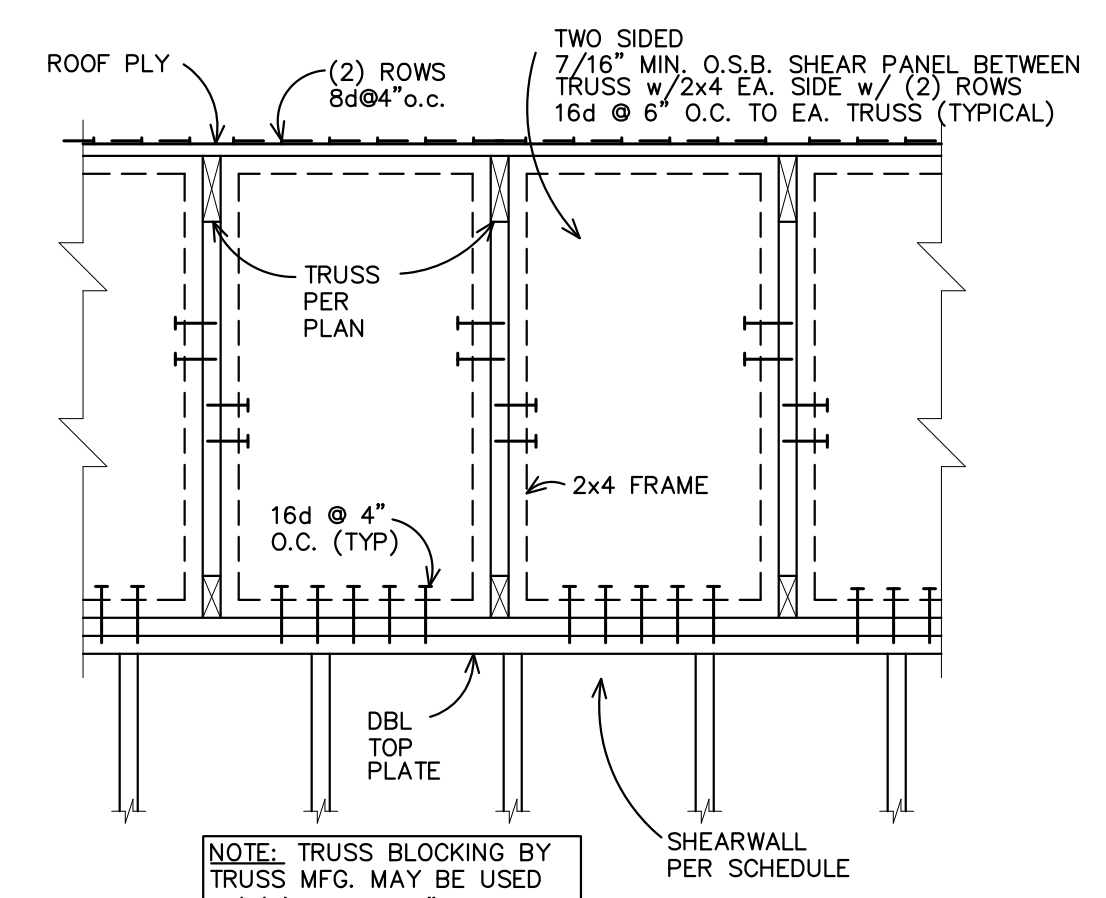
T TYP. GABLE TRUSS DETAIL
3/4"=1'-0"



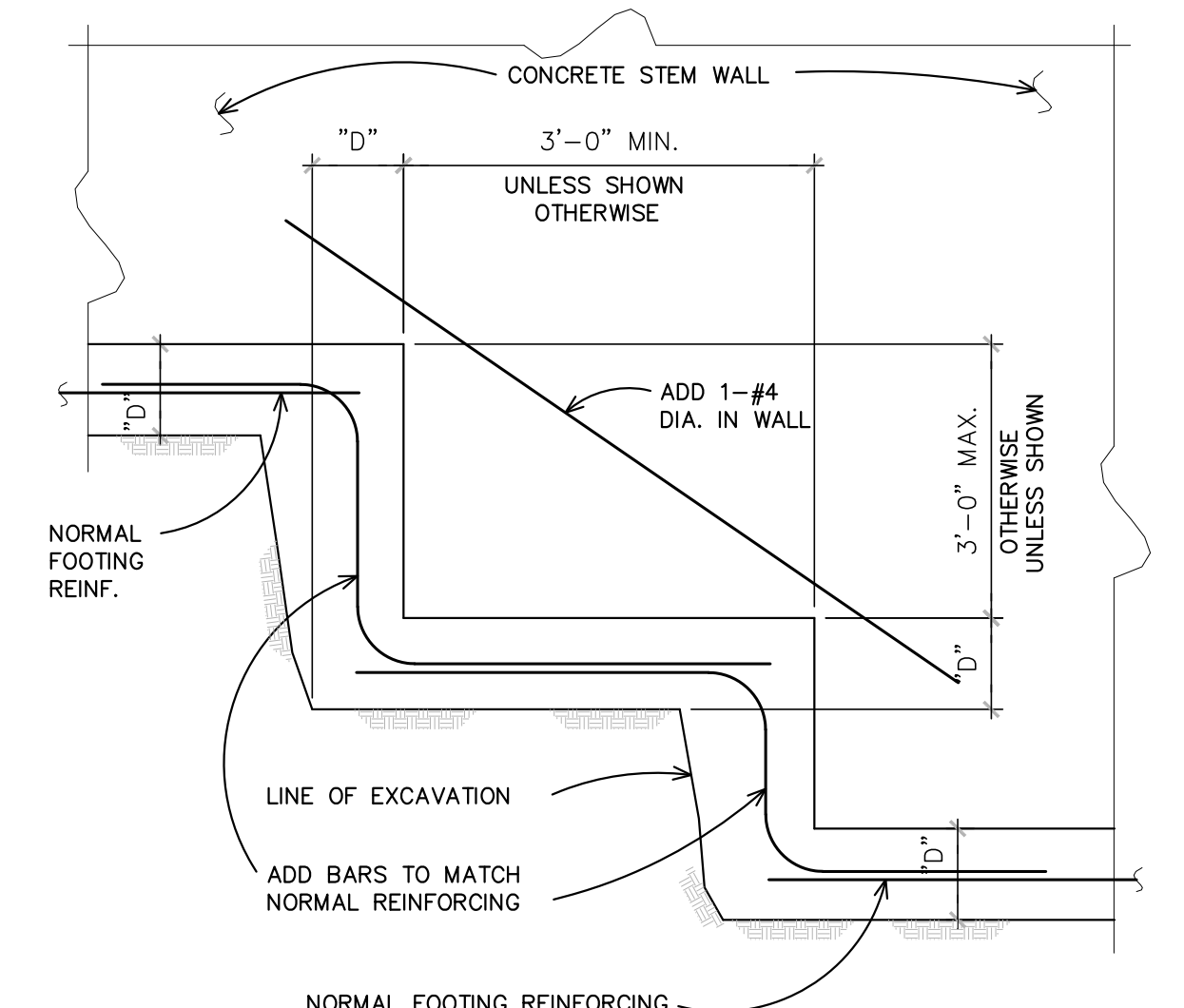
U DECK LEDGER



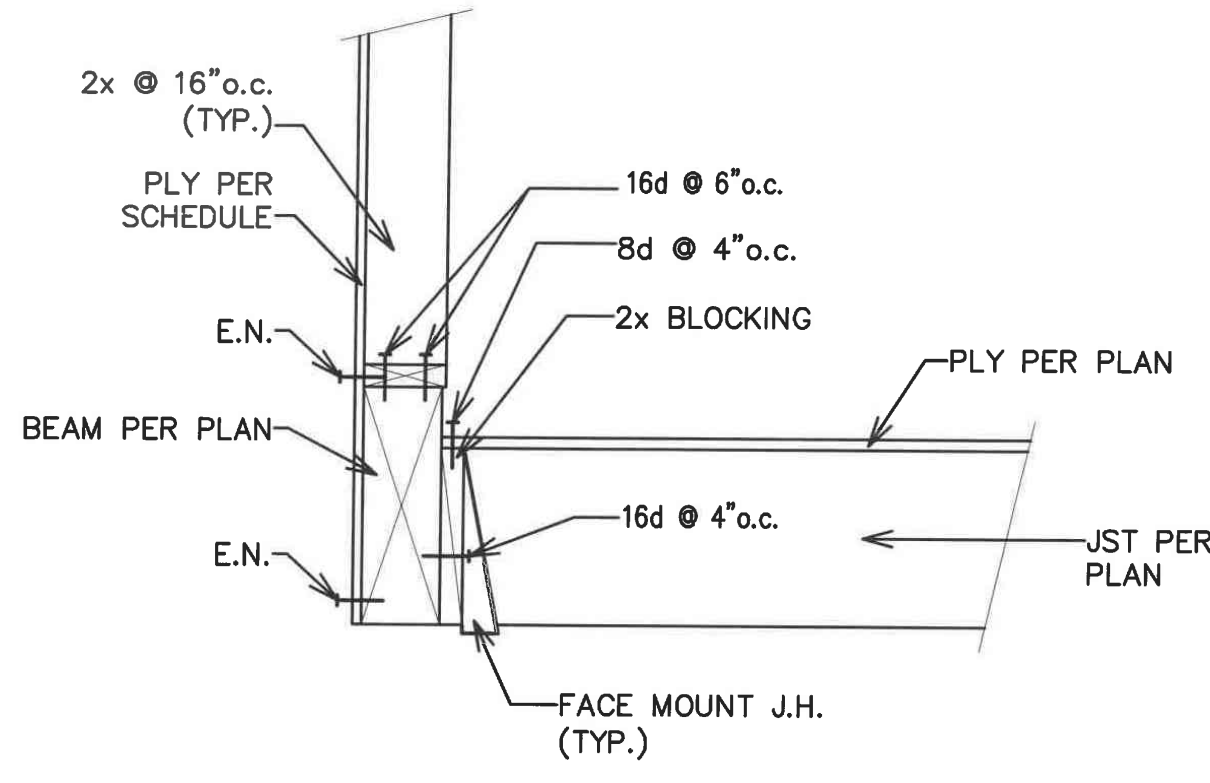
V TRUSS TO WALL & LEDGER TO WALL
3/4"=1'-0"



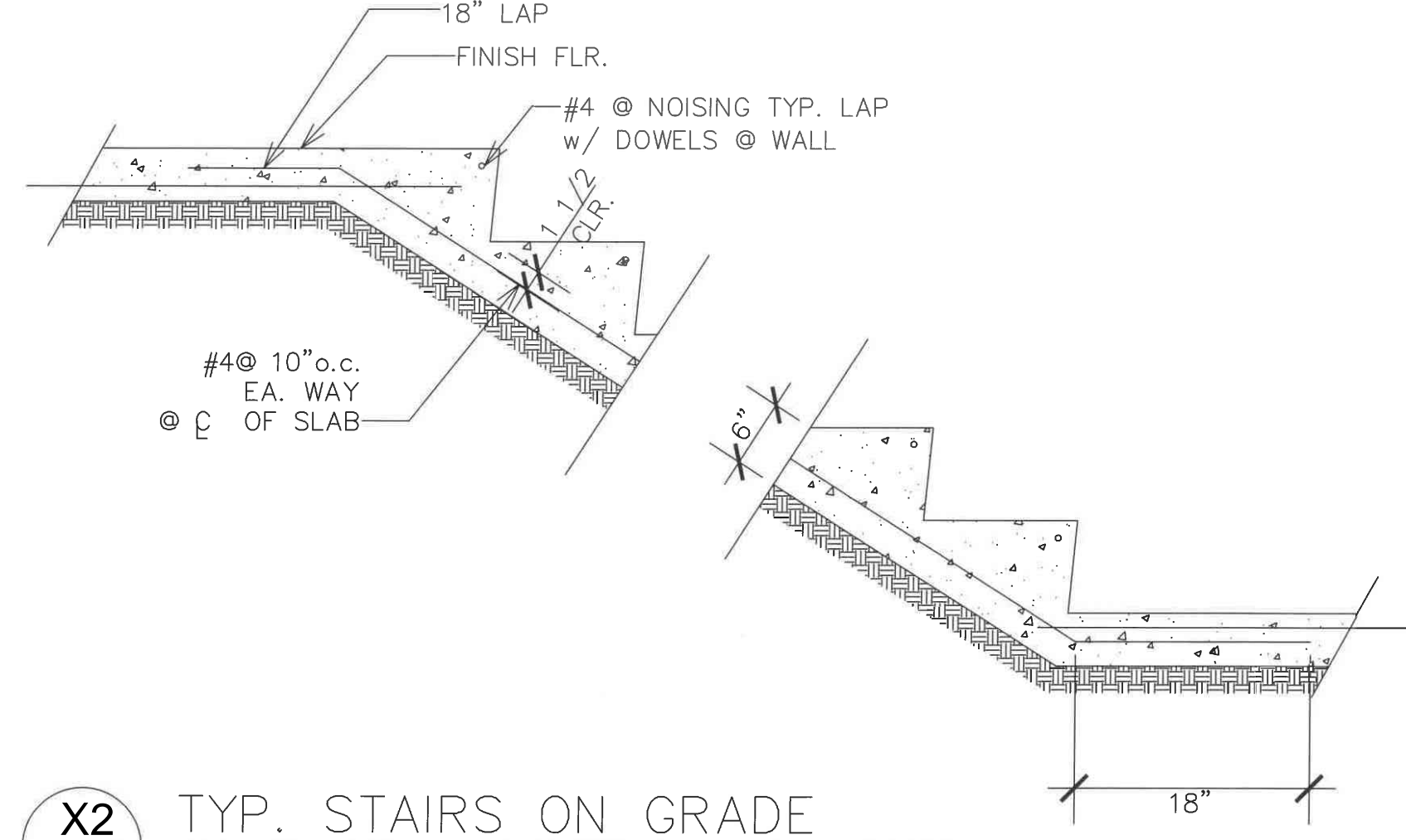
W SHEAR PANEL DETAIL



X STEPPED FOOTING
(AS REQUIRED BY GRADE)



X1 UPSET BEAM @ FLR.
1"=1'-0"



X2 TYP. STAIRS ON GRADE
3/4"=1'-0"

RB ENGINEERS, INC.
1312 2nd Street, Kirkland, WA 98033
Tel: (425) 351-2085, Fax: (425) 822-2679
Email: RBE1992@GMAIL.COM

Structural Details
IMANI
2405 74TH AVE SE, MERCER ISLAND WA

Project
Project No.
Drawn By
Date
2.20.2021

Sheet
S2
12"x18" PLOT = 1/2" SCALE

GENERAL STRUCTURAL NOTES

(The following applies unless specifically indicated otherwise on the plans.)

- ALL MATERIALS & WORKMANSHIP, DESIGN, & CONSTRUCTION SHALL CONFIRM TO THE REQUIREMENTS OF THE DRAWING SPECIFICATIONS, INTERNATIONAL BUILDING CODE, 2018 EDITION.
- DESIGN CRITERIA

ROOF LIVE LOAD (SNOW)	25 psf
PHOTOVOLTAIC PANEL SYSTEM	5 psf
SPRINKLERS	1.5 psf (IF APPLICABLE)
FLOOR LIVE LOAD (RESIDENTIAL)	40 psf
FLOOR LIVE LOAD (DECK)	60 psf (1.5x AREA SERVED)
HANDRAILS & GUARDS	RAIL LINE LOAD: 50 psf RAIL CONCENTRATE LOAD: 200#
STAIR & CORRIDOR LIVE LOAD	100 psf
MECHANICAL UNITS	WEIGHTS AS FURNISHED BY MFG.
WIND	100mph (BASIC WIND SPEED) EXPOSURE 'B' (RISK CATEGORY II) Kzt = 1.20
EARTHQUAKE	S _s =1.60 S ₁ =.57 (CLASS 'D') LIGHT FRAMED SHEAR WALL R=6.5
ALLOWABLE SOIL PRESSURE	2,500 psf. (NATURAL SOILS OR COMPACTED)

SEE PLANS & COMPUTATIONS FOR ADDITIONAL LOADING CRITERIA PER I.B.C. SECTION 1603 & SECTION 1607

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION w/ ARCHITECTURAL DRAWINGS FOR BIDDING CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS & CONDITIONS FOR COMPATIBILITY & SHALL NOTIFY THE ARCHITECT & STRUCTURAL ENGINEER, OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION TO ALLOW ARCHITECT & ENGINEER TO COMPLETE PROPER REVISIONS TO THE WORK.
- DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED & IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 psf.
- CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, & CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING (e) CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY & MUST BE FIELD VERIFIED.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING & SHORING FOR THE STRUCTURE & STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS & THE METHODS, TECHNIQUES, SEQUENCES & PROCEDURES REQUIRED TO PERFORM HIS WORK.
- CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT & THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- DRAWINGS INDICATE GENERAL & TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW & APPROVAL BY THE ARCHITECT & STRUCTURAL ENGINEER.
- ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE & ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
- SHOP DRAWINGS FOR STRUCTURAL STEEL, GLUED LAMINATED MEMBERS, OPEN WEB WOOD TRUSSES, & PLYWOOD WEB JOISTS SHALL BE SUBMITTED TO THE ARCHITECT & STRUCTURAL ENGINEER FOR REVIEW TWO WEEKS PRIOR TO FABRICATION OF THESE ITEMS.
- SHOP DRAWINGS REVIEW: DIMENSIONS & QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, & THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW & STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. SUBMISSIONS SHALL INCLUDE A REPRODUCIBLE & ONE COPY; REPRODUCIBLE WILL BE MARKED & RETURNED.
- SHOP DRAWINGS SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, THAT HE DEMONSTRATES HIS UNDERSTANDING BY INDICATING WHICH MATERIAL HE INTENDS TO FURNISH & INSTALL & BY DETAILING THE FABRICATION & INSTALLATION METHODS HE INTENDS TO USE. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS & THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS & SPECIFICATIONS SHALL CONTROL & SHALL BE FOLLOWED.

GEOTECHNICAL

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

CONCRETE

- CONCRETE SHALL ATTAIN A 28 DAY STRENGTH OF f'c= 2,500 psi & MIX SHALL CONTAIN NOT LESS THAN 5 1/2 SACKS OF CEMENT PER CUBIC YARD & NO MORE THAN 6 GALLONS OF WATER PER SACK OF CEMENT.
 ALL CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO I.B.C. THE AMOUNT SHALL BE 4% + 1% BY VOLUME. f'c = 3,000 psi.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, (INCLUDING SUPPLEMENT S1) GRADE 60, fy = 60,000 psi. EXCEPTION: COLUMN TIES, BEAM STIRRUPS, BARS TO BE FIELD BENT, BARS TO BE WELDED & ANY OTHER BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy = 40,000 psi REINFORCING COMPLYING WITH ASTM A706 (S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED. NO REINFORCING SHALL BE WET-SET UNLESS SPECIFICALLY SO DETAILED.
- WELDED WIRE MESH SHALL CONFORM TO ASTM A-185.
- REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS & BENDS) IN ACCORDANCE WITH ACI 318-19. LAP ALL CONTINUOUS REINFORCEMENT 58 BAR DIAMETERS (2'-6" min.). PROVIDE CORNER BARS AT ALL WALL INTERSECTIONS. LAP CORNER BARS 30 BAR DIAMETERS (2'-6" min.). LAP ADJACENT MATS OF WELDED WIRE FABRIC TWO SQUARES (min. OF 12") AT SIDES & ENDS.
 NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
 FOOTINGS & OTHER UNFORMED SURFACES, EARTH FACE 3"
 FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER
 #6 BARS OR LARGER 2"
 #5 BARS OR SMALLER 1 1/2"
 COLUMN TIES OR SPIRAL & BEAM STIRRUPS 1 1/2"
 SLABS & WALLS (INTERIOR FACE) 3/4"
 CAST-IN-PLACE CONCRETE:
 SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS & DIMENSIONS OF DOOR & WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE & LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, & OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE & PRECAST.
- NON-SHRINKING GROUT (3,000psi MINIMUM STRENGTH) SHALL BE FURNISHED BY AN APPROVED MANUFACTURER & SHALL BE MIXED & PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURE'S PUBLISHED RECOMMENDATIONS.

STEEL

- STRUCTURAL STEEL DESIGN, FABRICATION, & ERECTION SHALL BE BASED ON ON THE A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION, & ERECTION OF STRUCTURAL STEEL BUILDINGS", LATEST EDITION, PLUS ALL REFERENCES CODES.
- STRUCTURAL WIDE FLANGE SHAPES TO CONFORM TO ASTM A992, Fy = 50 ks
 OTHER STRUCTURAL STEEL INCLUDING PLATES SHALL CONFORM TO ASTM A36, Fy = 36 ksi
 STEEL PIPE SHALL CONFORM TO ASTM A-53, TYPE E, OR S, GRADE B, Fy = 35 ksi
 STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, Fy = 46 ksm
 BOLTS SHALL CONFORM TO ASTM A307(CONNECTION BOLTS A325-N)
 EXPANSION SHALL BE "PARABOLT" or APPROVED EQUAL INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURES'S PUBLISHED RECOMMENDATION.
 EXPANSION BOLTS SHALL ALSO BE SIMPSON STRONG BOLT INSTALLED PER ICC-ESR REQUIREMENTS OR EQUAL.
- ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. & A.W.S. STANDARDS & SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70XX ELECTRODES.
 ONLY PRE-QUALIFIED WELDS (AS DEFINED BY A.W.S.) SHALL BE USED.
 WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70XX ELETRODES & PER ASTM A706.
 WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS.

STEEL FABRICATION

GENERAL:
 ALL WELDING IS REQUIRED TO BE DONE BY A WABO CERTIFIED WELDER & HAVE SPECIAL INSPECTIONS BY WABO CERTIFIED INSPECTION AGENCY, OR BE DONE IN A WABO CERTIFIED FABRICATION SHOP.
 HAVE EITHER THE SPECIAL INSPECTION REPORT OR WABO FABRICATION SHOP CERTIFICATION AVAILABLE ON SITE FOR THE BUILDING INSPECTOR.

- WELDING:
 - WELDING SHALL CONFIRM TO AWS D1.1 & VISUALLY CONFIRM TO AWS SECTION 6 & TABLE 6.1. FABRICATION/ERECTION INSPECTIONS BY THE CONTRACTOR PER AWS D1.1 SECTION 6, SHALL BE BY ASSOCIATE/CERTIFIED INSPECTORS (AW/CWI) PER AWS QC1 OR AWS B5.1. SPECIAL INSPECTIONS (VERIFICATION INSPECTIONS SHALL BE BY A CERTIFIED WELDING INSPECTOR (WI) OR SENIOR WELDING INSPECTOR (SW) PER AWS B5.1
 - WELDERS SHALL BE QUALIFIED FOR THE SPECIFIC PRE-QUALIFIED JOINTS REQUIRED BY THE DESIGN & CERTIFIED IN ACCORDANCE WITH WABO REQUIREMENTS.
 - WELDING SHALL BE DONE IN ACCORDANCE WITH APPROPRIATE WELD PROCEDURE SPECIFICATIONS (WPS's). WELDERS SHALL BE FAMILIAR WITH THE APPLICABLE WPS's.
 - WELDING SHALL BE DONE WITH AWS PRE-QUALIFIED WELDING PROCESSES UNLESS OTHERWISE APPROVED.
 - WELDER QUALIFICATIONS & WPS'S SHALL BE MAINTAINED AT THE SITE OF THE WORK & SHALL BE READILY AVAILABLE FOR INSPECTION UPON REQUEST, BOTH IN THE SHOP & IN THE FIELD.
 - USE E70 OR E717, 70ksi STRENGTH ELECTRODES APPROPRIATE FOR THE PROCESS SELECTED.
- FABRICATION:
 - CONFORM TO AISC 303, SECTION 8 & AISC 360 SECTION M2 & M5.
 - STRUCTURAL WELDING & QUALIFICATIONS SHALL CONFORM TO THE AWS D1.1
- VERIFICATION INSPECTION:
 - STRUCTURAL WELDING INSPECTIONS & QUALIFICATIONS SHALL CONFIRM TO THE AWS D1.1. SEE WELDING NOTES & SPECIAL INSPECTIONS FOR STRUCTURAL STEEL.
 - SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS & ADEQUACY RELATIVE TO THE CODE & THE WORK. FURTHER SHOP SPECIAL INSPECTIONS MAY BE WAIVED IF THE FABRICATOR IS "AISC CERTIFIED" OR OTHERWISE "APPROVED" BY THE AUTHORITY HAVING JURISDICTION PER IBC SECTION 1704.2.2 SEE SPECIAL INSPECTIONS FOR STRUCTURAL STEEL.
- ERECTION:
 - CONFORM TO AISC 303, SECTION 7 "ERECTION", SECTION 8 "QUALITY ASSURANCE." & AISC 360, SECTION M4.
 - THE ERECTOR SHALL MAINTAIN DETAILED FABRICATION & ERECTION QUALITY CONTROL PROCEDURES THAT ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH AISC 360 SECTION M, AISC 303, & THE CONTRACT DOCUMENTS
 - STEEL WORK SHALL BE CARRIED UP TRUE & PLUMB WITHIN THE LIMITS DEFINED IN AISC 303, SECTION 7.13.
 - STRUCTURAL WELDING TO CONFORM TO THE AWS D1.1 & APPLICABLE WELDING NOTES ABOVE.
 - SPECIAL INSPECTOR SHALL INSPECT THE STEEL FRAMING TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONTRACT DOCUMENTS INCLUDING MEMBER SIZE, LOCATION, BRACING & THE APPLICATION OF PROPER JOINT DETAILS AT EACH CONNECTION.
- BRACING & SAFETY PROTECTION:
 THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING & SAFETY PROTECTION REQUIRED BY AISC 360 SECTION M4.2 & AISC 303 SECTION 7010 & 7.11.
- PROTECTIVE COATING REQUIREMENTS:
 - SHOP PAINTING: CONFORM TO AISC 360 SECTION M3 & AISC 303 SECTION 6.5 UNLESS A MULTI-COAT SYSTEM IS REQUIRED PER THE PROJECT SPECIFICATIONS.
 - INTERIOR STEEL:
 - UNLESS NOTED OTHERWISE, DO NOT PAINT STEEL SURFACES TO BE,
 - WELDED; IF AREA REQUIRES PAINTING, DO NOT PAINT UNTIL AFTER WELD INSPECTION & NON-DESTRUCTIVE TESTING REQUIREMENTS, IF ANY, ARE SATISFIED.
 - INTERIOR STEEL, EXPOSED TO VIEW, SHALL BE PAINTED WITH ONE COAT OF SHOP PRIMER UNLESS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS. FIELD TOUCH-UPS TO MATCH THE FINISH COAT OR AS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS.

WOOD

- FRAMING LUMBER SHALL BE KILN DRIED OR MC-15 (MC-192), & GRADED & MARKED IN CONFORMANCE WITH W.C.L.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 16 (172), LATEST EDITION. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS (2x MEMBERS)	HEM-FIR #2
BEAMS & STRINGERS	DOUGLAS FIR #1
POSTS & TIMBERS	DOUGLAS FIR #1
STUDS, PLATES & MISC. LIGHT FRAMING	DOUGLAS FIR or HEM-FIR STAND. GRADE
TOP & BOTTOM PLATES @ BEARING & SHEAR WALLS	DOUGLAS FIR #1 or CONST. GRADE
BOLTED STUDS, LEDGERS & PLATES	HEM-FIR #2 or CONST. GRADE 2
2x6 STUDS	HEM-FIR #2 or HEM-FIR CONST. GRADE 2
- GLUE-LAMINATED MEMBERS SHALL BEAR AN AITC IDENTIFICATION MARK & SHALL BE ACCOMPANIED BY AN AITC CERTIFICATION OF CONFORMANCE.
 ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb= 2,400 psi, Fv = 240 psi.
 ALL CONT. & CANTILEVER BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 psi, Fv = 240 psi.
- LAMINATED VENEER LUMBER SHALL BE FABRICATED IN CONFORMANCE WITH ICC-ES ESR-1387. EACH MEMBER SHALL BEAR AN IDENTIFICATION MARK.
 ALL BEAMS SHALL BE WESTERN SPECIES, GRADE 1.8E, Fb = 2,600 psi, Fv = 285 psi.
- LAMINATED STRAND LUMBER (TIMBERSTRAND LSL) SHALL BE FABRICATED IN CONFORMANCE WITH CODE EVALUATION ICC ES ESR-1387. EACH MEMBER SHALL BEAR AN IDENTIFICATION MARK.
 ALL BEAMS SHALL BE WESTERN SPECIES, GRADE 1.55E, Fb = 2,325 psi, Fv = 310 psi.
- PARALLEL STRAND LUMBER SHALL BE FABRICATED IN CONFORMANCE WITH ICC-ES ESR-1387. EACH MEMBER SHALL BEAR AN IDENTIFICATION MARK.
 ALL BEAMS SHALL BE DOUGLAS FIR, GRADE 2.0E, Fb = 2,900 psi, Fv = 290 psi
- [DEFERRED SUBMITTAL:] PREFABRICATED OPEN WEB WOOD TRUSSES (or COMBINATION WOOD & METAL) SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS & CONDITIONS SHOWN ON THE PLANS & SHALL BE FURNISHED & INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. ALL NECESSARY BRACING, BRIDGING, BLOCKING, PRE-NOTCHED PLATES ETC., SHALL BE DETAILED & FURNISHED BY THE MANUFACTURER.
 SUBMIT SHOP DRAWINGS & DESIGN CALCULATIONS (COMPLETE WITH STRESS DIAGRAMS) TO THE ARCHITECT & THE STRUCTURAL ENGINEER FOR REVIEW TWO WEEKS PRIOR TO FABRICATION.
 DESIGN SUBMITTALS SHALL BEAR THE STAMP OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF WASHINGTON.
 PERMANENT & TEMPORARY BRIDGING & BRACING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.
- PLYWOOD SHEATHING SHALL BE GRADE C-D EXTERIOR GLUE or STRUCTURAL II, EXTERIOR GLUE ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE 1 RATING & PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.
 SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX & NAILING REQUIREMENTS.
 STRUCTURAL WOOD SHEATHING PANELS SHALL HAVE APA GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION.
- ALL WOOD PLATES & BLOCKING IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN A.W.P.A. APPROVED PRESERVATIVE.
 PROVIDE 2-LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC., & CONCRETE OR MASONRY.

- TIMBER CONNECTORS CALLED OUT BY LETTERS & NUMBERS SHALL BE BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER & SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 WHERE CONNECTORS STRAPS CONNECT TWO MEMBERS, PLACE HALF OF THE NAILS or BOLTS IN EACH MEMBER.
 ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS & NUTS OF ALL BOLTS & LAG SCREWS BEARING ON WOOD UNLESS NOTED OTHERWISE.
 ALL NAILS SHALL BE COMMON.
 ALL SHIMS SHALL BE SEASONED & DRIED & THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.
 ALL JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "U" SERIES HANGERS.
 ALL DOUBLE JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "U" SERIES HANGERS.
 ALL TRIPLE JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "U" SERIES HANGERS.
 TJI JOIST HANGERS PER MANUFACTURER TJI SHOP DRAWINGS (U.N.O.)
- PROTECTION OF CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD ALL BOLTS, NAILS, JOIST HANGERS & ANY OTHER CONNECTORS SHALL BE HOT DIPPED GALVANIZED FASTENERS RECOMMENDED TO CONFORM WITH ASTM STANDARD A-153 & HOT DIPPED GALVANIZED CONNECTORS SHOULD CONFORM TO ASTM A165, CLASS G-183. STAINLESS STEEL FASTENERS & CONNECTORS SHOULD BE TYPE 304 OF 316 SIMPSON PRODUCT FINISHES CORRESPONDING TO THESE REQUIREMENTS ARE ZMAX 9158 (HOT DIPPED GALVANIZED) & SST3000 (STAINLESS STEEL).
- ALL WOOD FRAMING DETAILS – THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS.

- MINIMUM NAILING REQUIREMENTS: UNLESS OTHERWISE NOTED, MINIMUM NAILING SHALL BE IN ACCORDANCE WITH TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE.
- AT SAWN TIMBER JOIST AREAS: PROVIDE CROSS-BRIDGING @ 8'-0"o.c. max. SPACING & SOLID BLOCKING AT BEARING POINTS. PROVIDE DOUBLE JOISTS UNDER ALL PARTITIONS. PROVIDE DOUBLE JOISTS EACH SIDE OF OPENINGS UNLESS DETAILED OTHERWISE.
- PROVIDE DOUBLE JOIST UNDER ALL PARALLEL PARTITIONS THAT EXTEND MORE THAN HALF THE JOIST LENGTH & DOUBLE JOIST HEADERS & DOUBLE JOISTS EACH SIDE OF ALL OPENINGS IN FLOORS & ROOFS UNLESS DETAILED OTHERWISE. COORDINATE SIZE & LOCATION OF ALL OPENINGS WITH ARCHITECTURAL & MECHANICAL DRAWINGS.
- PROVIDE TWO 2x10 HEADERS OVER & DOUBLE STUDS EACH SIDE OF ALL OPENINGS IN STUD BEARING WALLS NOT DETAILED OTHERWISE.
- PROVIDE SOLID BLOCKING FOR WOOD COLUMNS & MULTIPLE STUD POSTS THROUGH FLOORS TO SUPPORTS BELOW.
- PROVIDE CONTINUOUS SOLID BLOCKING AT MID OF ALL STUDS OVER 10' IN HEIGHT.
- TOENAIL JOISTS TO SUPPORTS WITH 2-16d NAILS. ATTACH ALL BEAMS AT THE ROOF EXCEEDING 8'-0" IN LENGTH TO SUPPORTS WITH ST22 STRAP EACH END.
- ATTACH TIMBER JOISTS TO FLUSH HEADERS AND BEAMS WITH "U" SERIES METAL JOIST HANGERS TO SUIT THE JOIST SIZE.
- WALL FRAMING ALL STUD WALL SHOWN & NOT OTHERWISE NOTED SHALL BE 2x4 STUDS @ 16"o.c. AT INTERIOR WALLS & 2x6 STUDS @ 16" o.c. AT EXTERIOR WALLS.
- NOTATIONS ON DRAWINGS RELATING TO FRAMING CLIPS, JOIST HANGERS, & OTHER CONNECTING DEVICES REFER TO CATALOG NUMBERS OF CONNECTORS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY OR EQUIVALENT DEVICES BY OTHER MANUFACTURES MAY BE SUBSTITUTED. PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL LOAD CAPACITIES.
- INDIVIDUAL MEMBERS OF BUILT-UP POSTS & BEAMS SHALL EACH BE ATTACHED WITH 16d NAILS @ 6"o.c. STAGGERED.
- ALL WOOD STUDS WALLS SHALL HAVE LOWER WOOD PLATE ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS @ 6" o.c. STAGGERED UNLESS SHOWN OTHERWISE.
- ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE.
- PLYWOOD ROOF SHEATHING & FLOOR SHEATHING UNLESS OTHERWISE NOTED ON PLANS SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS & NAILED WITH 8d NAILS @ 6" o.c. TO FRAMED PANEL EDGES & OVER STUD WALLS SHOWN ON PLANS & @ 12"o.c. (10"o.c. AT FLOORS TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED EDGE CLIPS @ 16"o.c. AT UNBLOCKED ROOF SHEATHING EDGES.
 PROVIDE SOLD BLOCKING AT LINES OF SUPPORT AT FLOORS.
 TOENAIL BLOCKING TO SUPPORTS WITH 16d NAILS @ 12"o.c. UNLESS OTHERWISE NOTED IN THE SHEAR WALL SCHEDULE.
- PLYWOOD WALL SHEATHING SHALL HAVE SOLID BLOCKING AT ALL EDGES.
- ALL WOOD STUD WALLS SHALL HAVE LOWER WOOD PLATE ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 6"o.c. STAGGERED or BOLTED TO CONCRETE WITH 5/8" DIA. ANCHOR BOLTS @ 4'-0"o.c. UNLESS SHOWN OTHERWISE.
- PLYWOOD NAILING: (USE UNLESS GREATER NAILING IS DETAILED OR SPECIFIED)
 8d @ 6"o.c. AT SHEET EDGES
 8d @ 12"o.c. AT INTERMEDIATE BEARING POINTS
- PROVIDE ABU POST BASE @ ISOLATED POSTS TO CONCRETE CONNECTION
 - PROVIDE (2)A35 CLIPS @ TOP & BOTTOM OF ALL POST TO OTHER FRAMING MEMBERS
 - PROVIDE AC OR ACE POST CAP @ ISOLATED POSTS TO BEAM CONNECTIONS
 - PROVIDE MIN. (2)A35 CLIPS @ POST TO BEAM CONNECTION (U.N.O.)
 - PROVIDE (2)CS16 x 30" AT ALL CUT DOUBLE TOP PLATES, TYPICAL.
- ANCHORAGE:
 EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-XP" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2508. MINIMUM BASE MATERIAL TEMPERATURE IS 50F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE & DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION & EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT & ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL & OVERHEAD INSTALLATIONS.
 EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "AT-XP" AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH IAMPO REPORT NO. ER-0281. MINIMUM BASE MATERIAL TEMPERATURE IS 14F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE & DIMENSIONS, LOCATIONS, ADHESIVE IDENTIFICATIONS & EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, & ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL & OVERHEAD INSTALLATIONS.

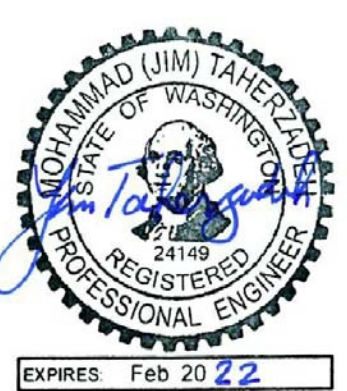
RB ENGINEERS, INC.
 1312 2nd Street, Kirkland, WA 98033
 Tel: (425) 351-2085, Fax: (425) 822-2679
 Email: RBE1992@GMAIL.COM

R-B-Engineers.com

General Structural Notes

IMANI

2405 74TH AVE SE, MERCER ISLAND WA



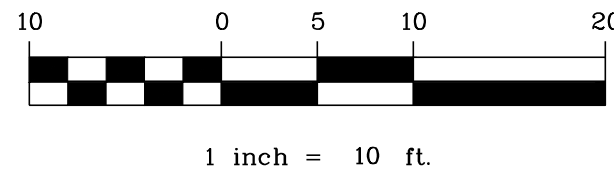
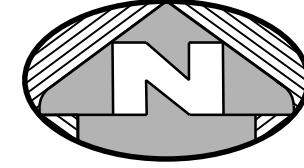
Project : _____

Project No. : _____

Drawn By :

Date : 2.20.2021

Sheet **S3**



LEGEND

- FOUND MONUMENT IN CASE
- FOUND REBAR AS DESCRIBED
- SET MAG NAIL AS DESCRIBED
- SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP
- ⊕ POWER METER
- ⊕ UTILITY POLE
- ⊕ SANITARY SEWER MANHOLE
- ⊕ WATER VALVE
- ⊕ FIRE HYDRANT
- ⊕ WATER METER
- ⊕ SIGN
- SS— APPROXIMATE LOCATION SANITARY SEWER LINE
- SD— APPROXIMATE LOCATION STORM DRAIN LINE
- W— APPROXIMATE LOCATION UNDERGROUND WATER LINE
- OHP— OVERHEAD POWER
- WOOD FENCE
- ⊠ CATCH BASIN
- CATCH BASIN SOLID LID
- ⊕ ROCKERY
- ⊕ ASPHALT SURFACE
- ⊕ CONCRETE SURFACE
- ⊕ GRAVEL SURFACE
- CE CEDAR

LEGAL DESCRIPTION

LOT 12, BLOCK 5, MCGILVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 16 OF PLATS, PAGE 58, RECORDS OF KING COUNTY, WASHINGTON; EXCEPT THE WEST 200 FEET THEREOF.

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

BASIS OF BEARINGS

RECORD OF SURVEY FOR LOUISE FONG BY TERRAME, AS RECORDED UNDER RECORDING NUMBER 20210702900035, RECORDS OF KING COUNTY, WASHINGTON. ACCEPTED A BEARING OF S 88°30'04" E FOR THE CENTERLINE OF SE 24TH STREET BASED ON FOUND MONUMENTS IN CASE.

PROJECT INFORMATION

SURVEYOR: SITE SURVEYING, INC.
21923 NE 11TH ST
SAMMAMISH, WA 98074
PHONE: 425.298.4412

PROPERTY OWNER: JASON IMANI
2405 74TH AVENUE SE
MERCER ISLAND, WA 98040

TAX PARCEL NUMBER: 531510-0431

PROJECT ADDRESS: 2405 74TH AVENUE SE
MERCER ISLAND, WA 98040

ZONING: R-9.6

JURISDICTION: CITY OF MERCER ISLAND

PARCEL ACREAGE: 13,670 S.F. (0.314 ACRES) AS SURVEYED

GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND SPECTRAPRECISION FOCUS 35 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN AUGUST 2021 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

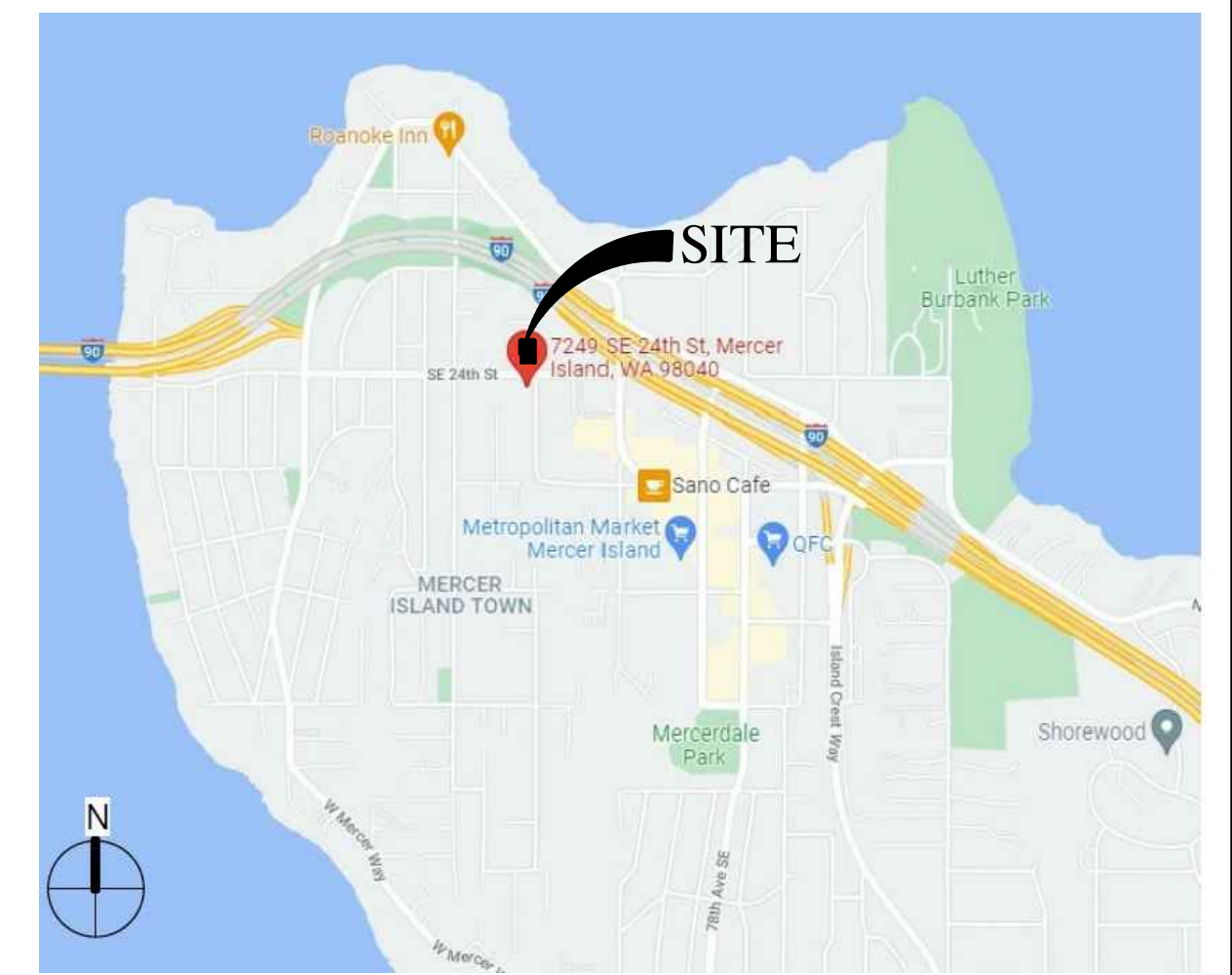
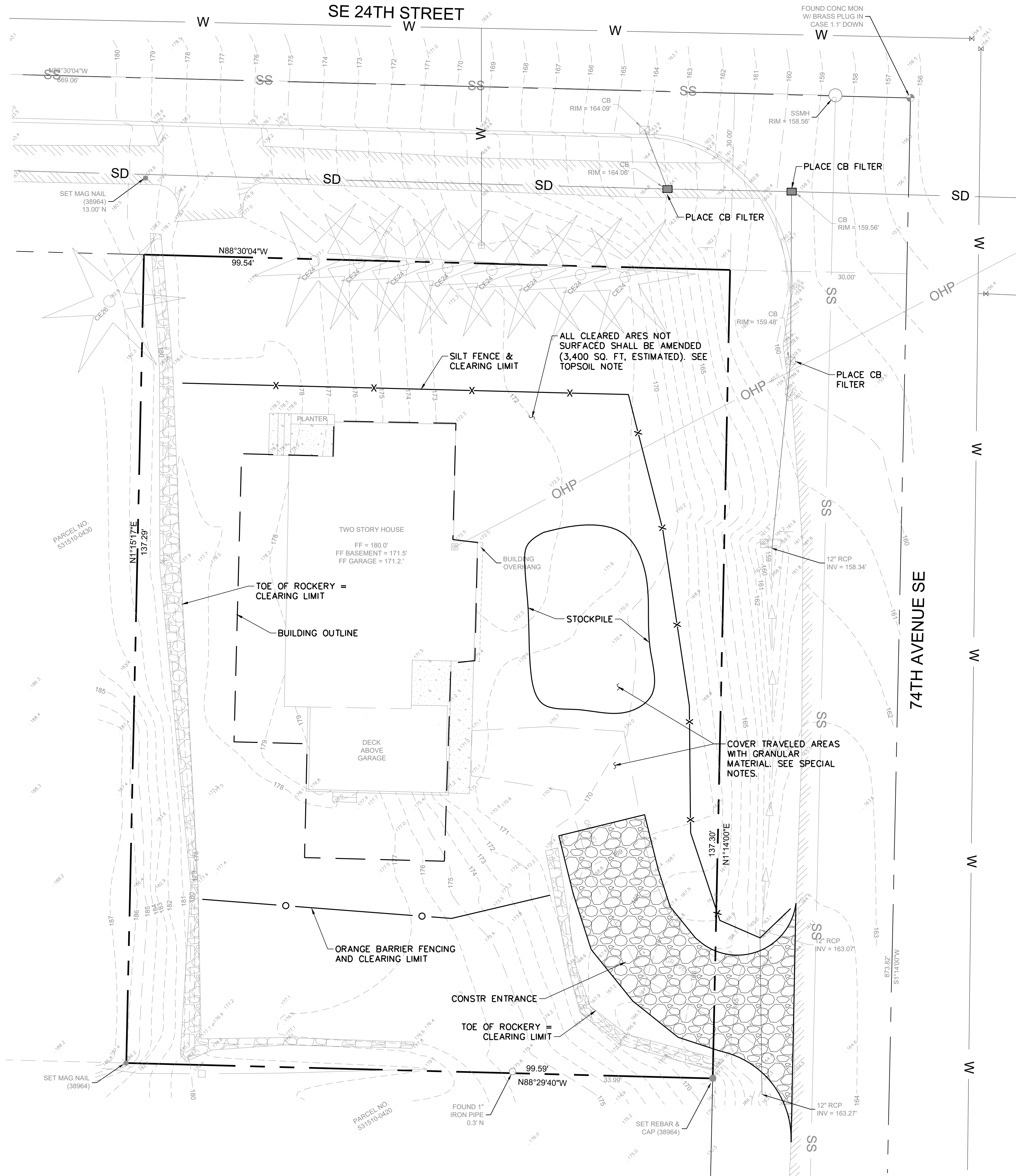
VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A MONUMENT IN CAST AT THE INTERSECTION OF 74TH AVENUE SE AND SE 24TH STREET.

POINT ID NO. 7126;
ELEVATION: 155.203 FEET -- NAVD 88

1.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 0.5' FOR THIS PROJECT.



VICINITY MAP

MAINTAIN SUPPLIES OF PLASTIC COVERING, SILT FENCE, STRAW MULCH AND OTHER MATERIALS ON SITE TO BE USED AS REQUIRED DURING CONSTRUCTION.

CONSTRUCTION SEQUENCE:

- 1.) PRE-CONSTRUCTION MEETING WITH OWNER, CONTRACTOR, DESIGN ENGINEERS, AND CITY ENGINEER
- 2.) FLAG CLEARING LIMITS.
- 3.) INSTALL CONSTRUCTION ENTRANCE AS SHOWN.
- 4.) INSTALL CATCH BASIN FILTERS.
- 5.) ESTABLISH STAGING AREAS FOR STORAGE AND HANDLING POLLUTED MATERIAL AND BMPs.
- 6.) INSTALL SEDIMENT CONTROLS.
- 7.) GRADE & INSTALL SEDIMENTATION MEASURES FOR DISTURBED AREAS.
- 8.) MAINTAIN ALL TESC MEASURES DURING CONSTRUCTION AND REMOVE WITHIN 30 DAYS AFTER SITE IS STABILIZED AND THE CITY'S INSPECTOR OR ENGINEER DETERMINE THEY ARE NO LONGER NEEDED.

SPECIAL NOTES:

1. ENTIRE CLEARED AREA NOT EXPERIENCING VEHICLE OR EQUIPMENT TRAFFIC SHALL BE COVERED WITH 3 INCHES OF STRAW MULCH DURING CONSTRUCTION. AREAS USED FOR STORAGE OR TRAVELED BY VEHICLES AND EQUIPMENT SHALL BE COVERED WITH GRANULAR MATERIAL TO A MINIMUM DEPTH OF THREE INCHES.
2. ALL EQUIPMENT THAT LEAVES THE SITE SHALL TRAVEL OVER QUARRY SPALLS OR GRAVEL. NO MUD OR DIRT SHALL LEAVE THE SITE.
5. NO CONCRETE TRUCK CLEAN-OUT SHALL BE PERFORMED ON SITE UNLESS THE CONTRACTOR PROVIDES AN ECOPAN OR EQUAL SYSTEM AS APPROVED BY THE CITY'S INSPECTOR.
6. NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN 7 DAYS FROM MAY 1 TO SEPTEMBER 30 OR MORE THAN 2 DAYS FROM OCTOBER 1 TO APRIL 30. COVER DISTURBED GROUND THAT IS NOT TO BE WORKED FOR ONE WEEK OR MORE WITH 3 INCHES OF STRAW MULCH.
7. COVER STOCKPILES WITH PLASTIC.
8. DISTURBANCE LIMITS: 7,300 SQUARE FEET.

TOPSOIL NOTE:

STOCKPILE TOPSOIL FROM GRADED AREAS. AREAS TO BE LANDSCAPED OR RESTORED TO NATURAL CONDITIONS SHALL BE COVERED WITH SITE TOPSOIL TO A MINIMUM DEPTH OF 8 INCHES. TOPSOIL SHALL MEET THE COMPOST REQUIREMENTS OF WAC 173-350-100. THE COMPOST SHALL HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. TOPSOIL NOT MEETING THIS REQUIREMENT SHALL BE AMENDED WITH COMPOST TO THE EXTENT NECESSARY TO MEET THE REQUIREMENT.

SHEET INDEX:

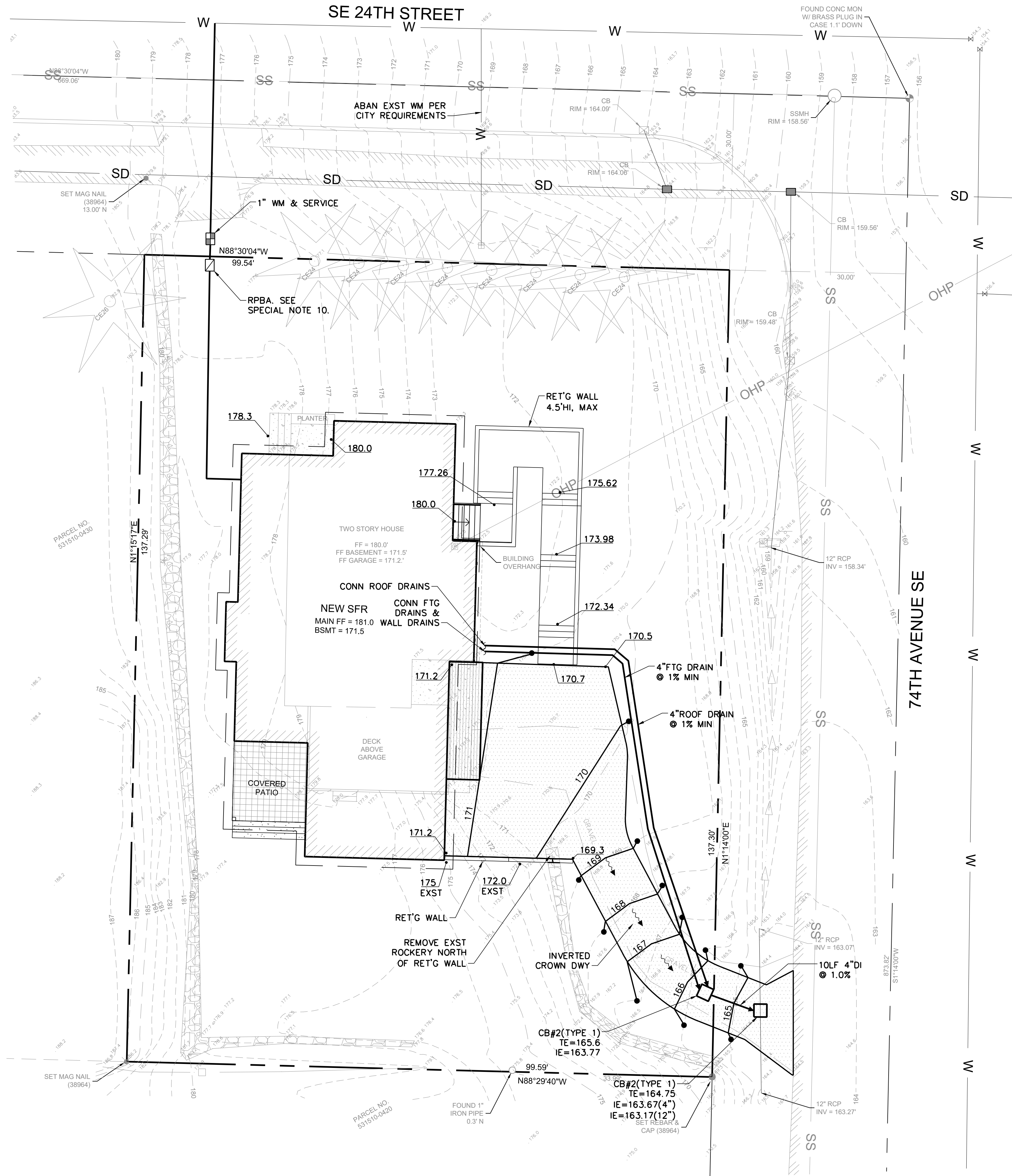
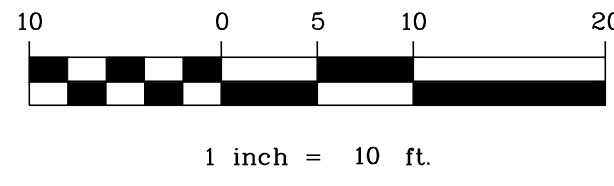
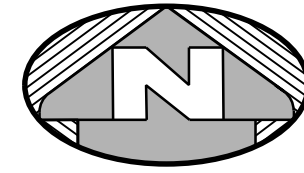
- 1 ***** TESC PLAN
- 2 ***** GRADING & DRAINAGE PLAN
- 3 ***** DETAILS



SDS
SITE DEVELOPMENT SERVICES
3011 RAVEN CREST
BELLINGHAM, WA 98226
(425) 481-9687
DAVESDS49@GMAIL.COM

IMANI RESIDENCE	
2405 74TH AVE SE	
DATE: 12/27/21	DES: DCD
SCALE: 1"=10'	DWN: DCD
TESC PLAN	
OWNER/APPLICANT: JASON IMANI 8215 NE JUANITA DR KIRKLAND, WA 98034	
1 of 3	

NE 1/4, SEC 24, TWP 4N, RGE 4E



SPECIAL NOTES:

1. VERIFY EXISTING TOPOGRAPHY IN AREA OF PROPOSED CONSTRUCTION PRIOR TO ANY WORK. NOTIFY ENGINEER IF CONFLICTS ARE IDENTIFIED.
2. VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES (WHETHER OR NOT SHOWN) IN POTENTIAL CONFLICT W/ PROPOSED CONSTRUCTION PRIOR TO ANY WORK.
3. SITE DOWNSPOUTS DRAIN INTO THE GROUND. NO OUTLETS FOUND. CONNECT ALL DOWNSPOUTS TO ROOF DRAIN CONNECTION AS SHOWN ON THIS PLAN.
4. ALL STORM DRAIN PIPING (SD) SHALL BE SMOOTH WALL MEETING CITY AND BUILDING CODE STANDARDS. ROOF DRAINS SHALL MEET MATERIAL STANDARDS FOR SDR35 FOR PVC PIPE AND N-12 FOR SMOOTH-BORE HDPE PIPE.
5. PROVIDE TV INSPECTION OF EXISTING PRIVATE SIDE SEWER BETWEEN THE RESIDENCE AND THE PUBLIC SEWER MAIN. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED.
6. PROPOSED WATER METER SIZE HAS NOT BEEN APPROVED BY THE CITY FIRE MARSHALL. THE LOCATION AND SIZE OF THE METER AND SERVICE SHALL BE VERIFIED BY THE SPRINKLER DESIGNER AND COORDINATED WITH AND APPROVED BY THE CITY DEVELOPMENT ENGINEER PRIOR TO PRECONSTRUCTION MEETING.
7. FOOTING DRAIN ROUTING NOT SPECIFIED IN THESE PLANS. CONSTRUCTION SHALL MEET ALL RELEVANT CODES AND STRUCTURAL AND ARCHITECTURAL DETAILS AND SPECIFICATIONS. DO NOT DIRECTLY CONNECT FOOTING DRAINS TO STORM DRAIN PIPES. MAKE CONNECTIONS TO DRAINAGE STRUCTURES AS SPECIFIED ON THIS PLAN.
8. USE AIR EXCAVATION OR OTHER APPROVED METHOD TO FIND AREA TO INSTALL UTILITIES OR PERFORM ANY EXCAVATION WITHIN TREE DRIFLINE. QUALIFIED ARBORIST SHALL BE ON SITE DURING THIS AND ANY EXCAVATION/GRADING WITHIN SAVED TREE DRIFLINES. CITY ARBORIST MUST BE NOTIFIED WHEN WORK WILL TAKE PLACE AND WHEN PROJECT ARBORIST IS ON SITE.
9. PRACTICES SUCH AS AIR EXCAVATION OR TUNNEL/BORE SHALL BE UTILIZED AS NECESSARY TO PROTECT RETAINED TREES.
10. LOCATION OF RPBA TO BE COORDINATED WITH AND APPROVED BY THE CITY DEVELOPMENT ENGINEER PRIOR TO PRECONSTRUCTION MEETING.

EARTHWORK QUANTITIES

CUT = 62 C.Y.
FILL = 29 C.Y.

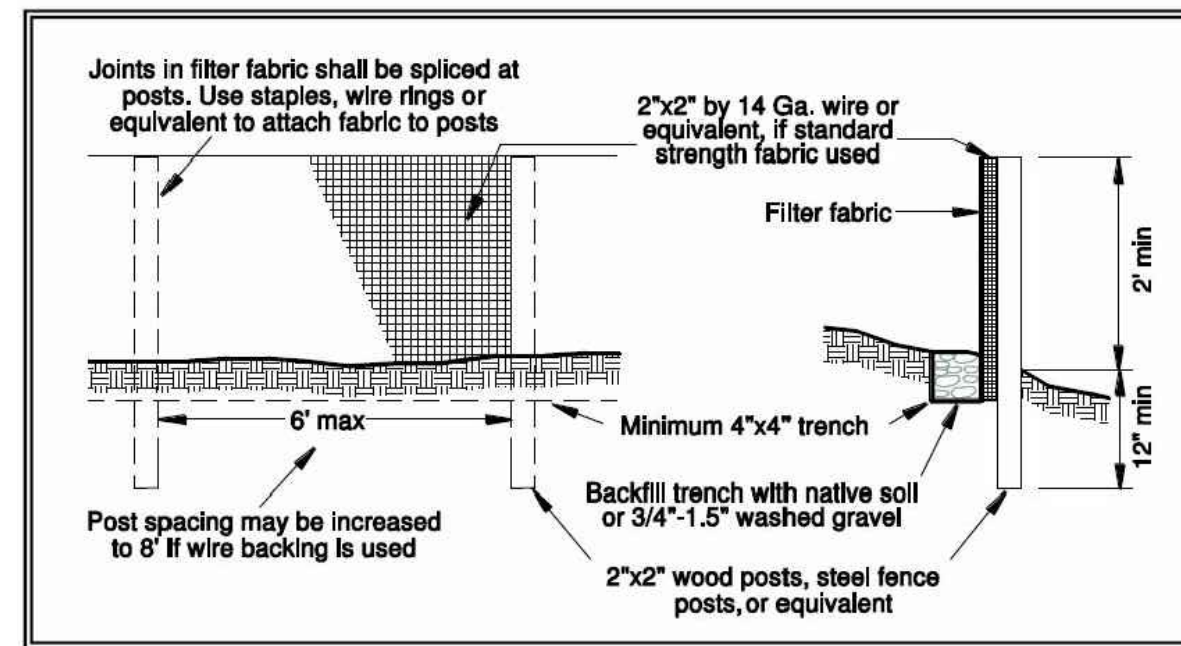
NOTES:

1. QUANTITIES ARE APPROXIMATE. CONTRACTOR TO PERFORM WORK AS REQUIRED TO BRING SITE TO FINISHED GRADES AS SHOWN.
2. HAUL EXCESS MATERIAL TO APPROVED SITE USING AN APPROVED HAUL ROUTE.



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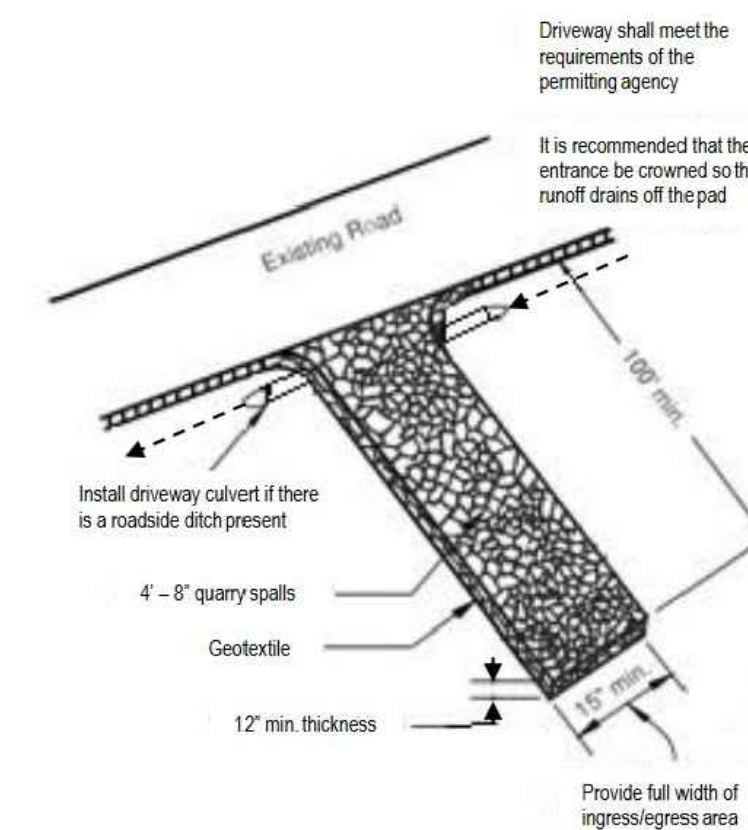
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GRADING & DRAINAGE PLAN	
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- Repair any damage immediately.
- Intercept and convey all evident concentrated flows uphill of the silt fence to a sediment pond.
- Check the uphill side of the fence for signs of the fence clogging and acting as a barrier to flow and then causing channelization of flows parallel to the fence. If this occurs, replace the fence or remove the trapped sediment.
- Remove sediment deposits when the deposit reaches approximately one-third the height of the silt fence, or install a second silt fence.
- Replace filter fabric that has deteriorated due to ultraviolet breakdown.

SILT FENCE DETAIL

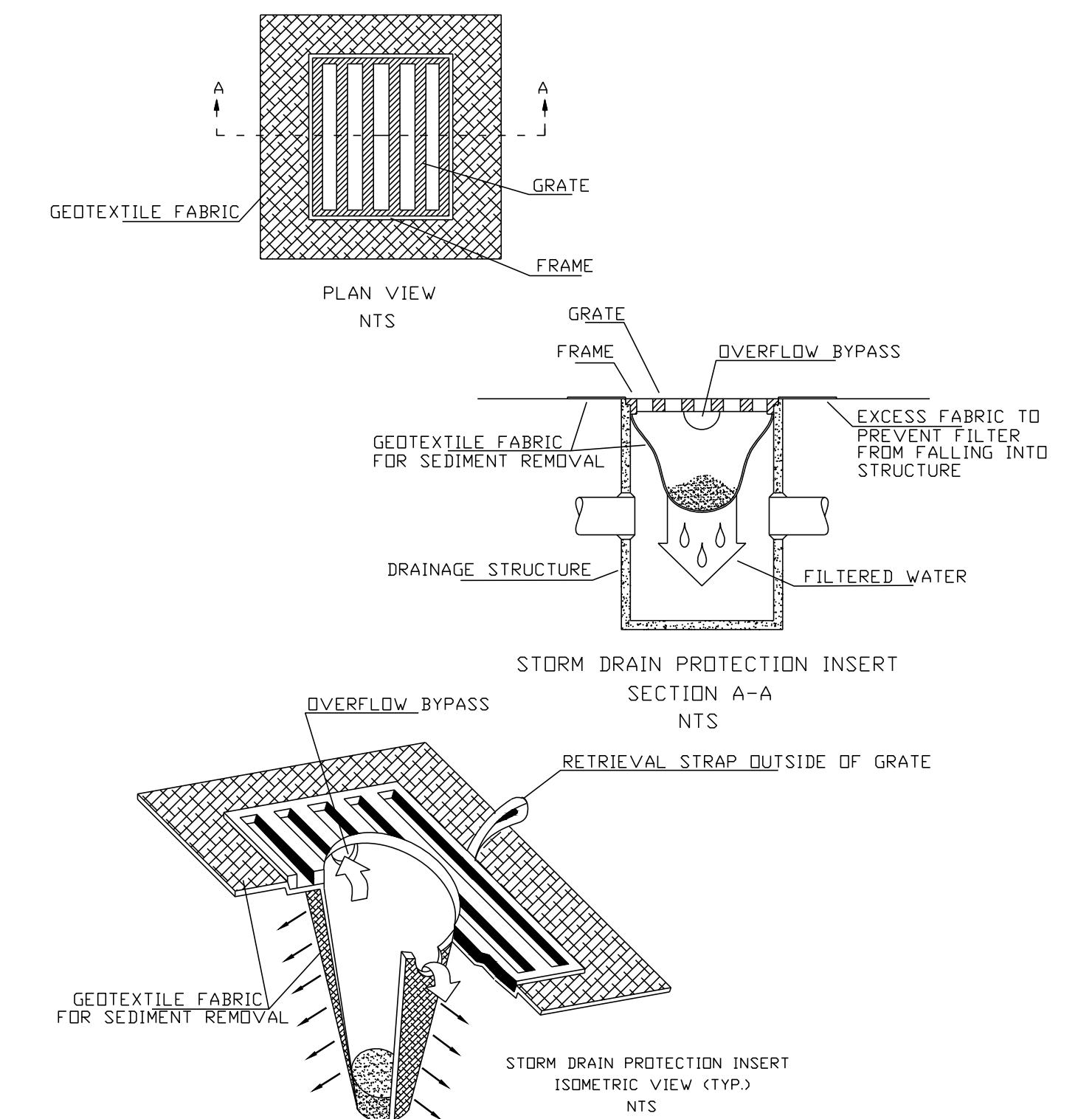
NTS



- Quarry spalls shall be added if the pad is no longer in accordance with the specifications.
- If the entrance is not preventing sediment from being tracked onto pavement, then alternative measures to keep the streets free of sediment shall be used. This may include replacement/cleaning of the existing quarry spalls, street sweeping, an increase in the dimensions of the entrance, or the installation of a wheel wash.
- Any sediment that is tracked onto pavement shall be removed by shoveling or street sweeping. The sediment collected by sweeping shall be removed or stabilized on site. The pavement shall not be cleaned by washing down the street, except when high efficiency sweeping is ineffective and there is a threat to public safety. If it is necessary to wash the streets, the construction of a small sump to contain the wash water shall be considered. The sediment would then be washed into the sump where it can be controlled.
- Perform street sweeping by hand or with a high efficiency sweeper. Do not use a non-high efficiency mechanical sweeper because this creates dust and throws soils into storm systems or conveyance ditches.
- Any quarry spalls that are loosened from the pad, which end up on the roadway shall be removed immediately.
- If vehicles are entering or exiting the site at points other than the construction entrance(s), fencing (see BMP C103) shall be installed to control traffic.
- Upon project completion and site stabilization, all construction accesses intended as permanent access for maintenance shall be permanently stabilized.

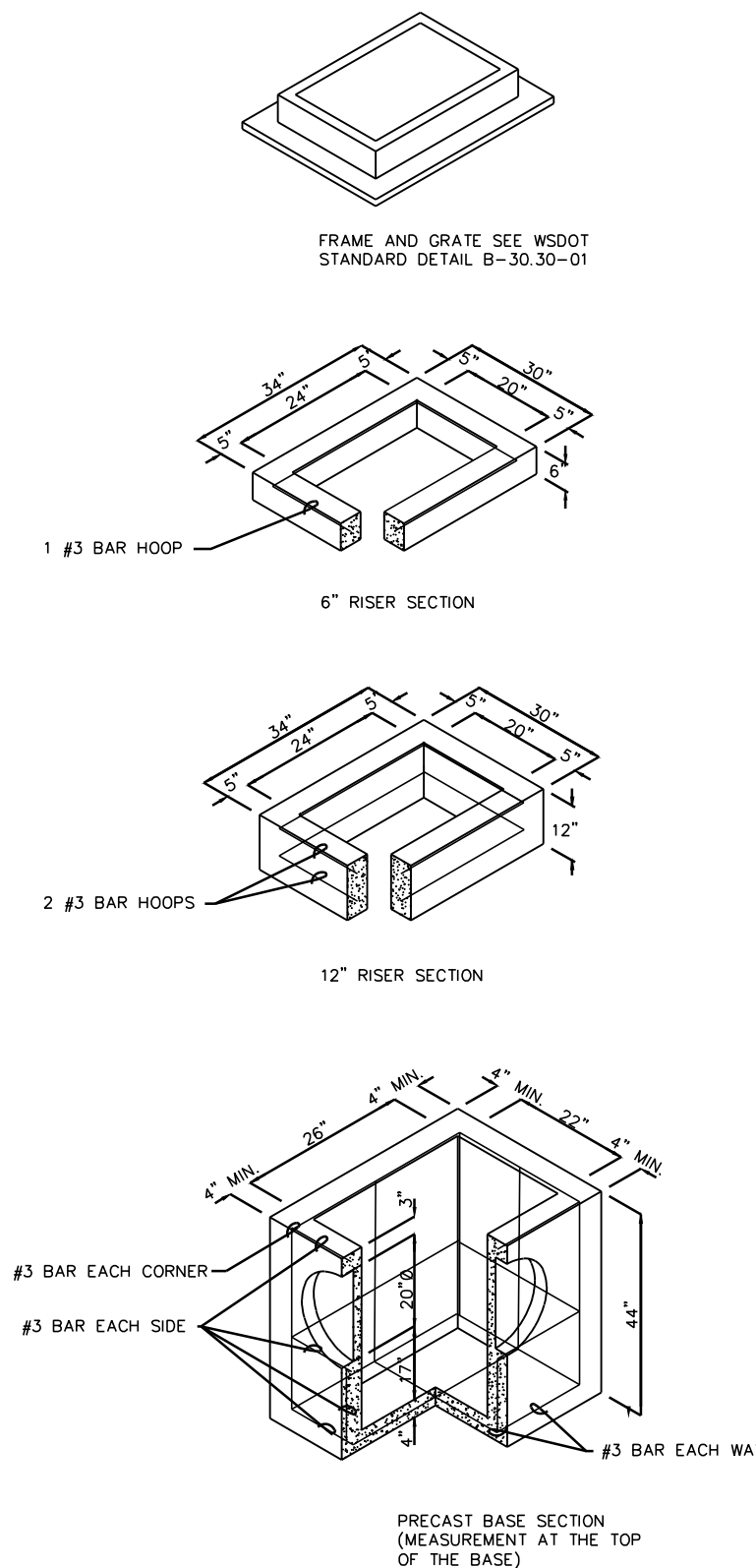
CONSTRUCTION ENTRANCE DETAIL

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CATCH BASIN FILTER

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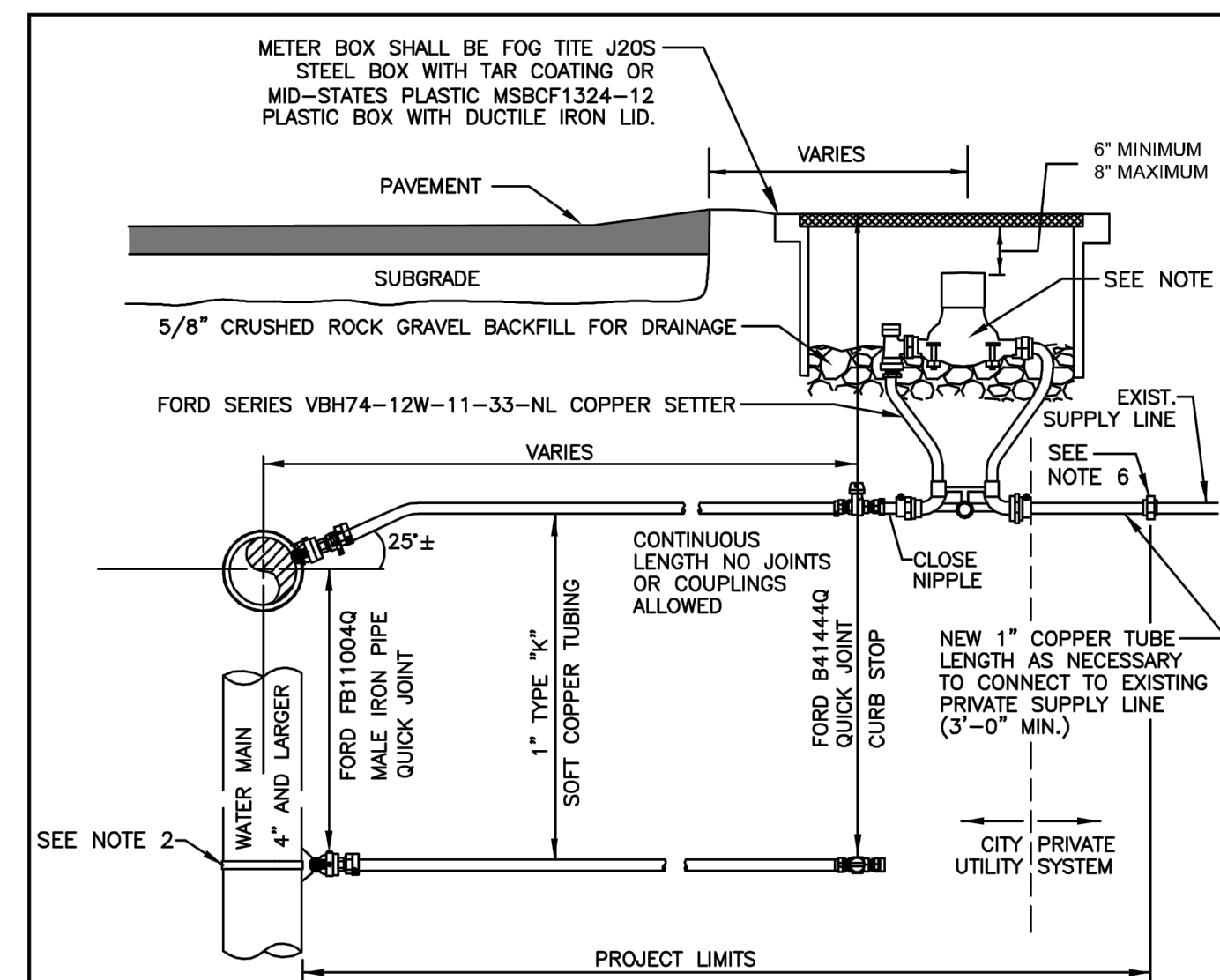


NOTES:

- CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C475 (ASHTO M 199) & C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
- AS AN ACCEPTABLE ALTERNATIVE TO REBAR, WELDED WIRE FABRIC HAVING A MIN. AREA OF 0.12 SQUARE INCHES PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A497 (ASHTO M 221). WIRE FABRIC SHALL NOT BE PLACED IN KNOCKOUTS.
- ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.
- PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUDED IF WALL IS LEFT INTACT.
- KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAM. PLUS CATCH BASIN WALL THICKNESS.
- ROUND KNOCKOUTS MAY BE ON ALL 4 SIDES, WITH MAX. DIAM. OF 20". KNOCKOUTS MAY BE EITHER ROUND OR "D" SHAPE.
- THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 4'-0".
- THE TAPER ON THE SIDES OF THE PRECAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2"/FT.
- CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS. FINISH SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
- FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISEL.
- EDGE OF RISER OR BRICK SHALL NOT BE MORE THAN 2" FROM VERTICAL EDGE OF CATCH BASIN WALL.

TYPE 1 CATCH BASIN

NTS



NOTES

- WATER SERVICES SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT DATED 01/04/2014.
- ON EXISTING WATER MAINS USE NYLON COATED D.I. SADDLE WITH STAINLESS STEEL DOUBLE STRAPS, ROMAC 202NS, OR APPROVED EQUAL.
- MINIMUM DISTANCE BETWEEN CORP. STOPS SHALL BE 18". MINIMUM DISTANCE BETWEEN TAPS, BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24", ALL HORIZONALLY STAGGERED.
- PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.
- UPON CITY ENGINEER'S APPROVAL, METER BOXES ARE ALLOWED TO BE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK.
- WHEN CONNECTING TO EXISTING PRIVATE SUPPLY LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DB SERIES WITH C21 SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING PRIVATE SUPPLY LINE DIAMETER.
- SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO WATER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.
- WATER METER SUPPLIED BY CITY.
- ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.
- NO SERVICE CONNECTIONS BETWEEN BLOW-OFF AND END OF MAIN.

CITY OF MERCER ISLAND
STANDARD DETAILS
WATER
1" WATER METER INSTALLATION

REV DATE	02-05-2021	NO SCALE	W-13
			APPROVED



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