

## GENERAL NOTES

1. THESE GENERAL NOTES IN NO WAY RELIEVE THE GENERAL CONTRACTOR FROM THE RESPONSIBILITIES DOCUMENTED IN GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS OR INFORMATION CONTAINED WITHIN THE CONSTRUCTIONS DRAWINGS AND SPECIFICATIONS. 2. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK OF ALL TRADES TO ASSURE COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.

### CODES:

3. ALL WORK SHALL CONFORM TO APPLICABLE BUILDING CODES AND ORDINANCES. ANY CONFLICT WHERE THE METHODS OR STANDARDS OF INSTALLATION OF THE MATERIAL SPECIFIED DO NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE CODE OR ORDINANCES, CODE OR ORDINANCES SHALL GOVERN. IF AND WHEN THIS OCCURS, NOTIFY THE ARCHITECT IMMEDIATELY. SUBSECTIONS OF THE CODE ARE LISTED HERE FOR GENERAL REFERENCE BUT IN NO WAY RELEASES THE GENERAL CONTRACTOR FROM CONFORMING TO ALL APPLICABLE CODES AND ORDINANCES.

### APPLICABLE CODES:

2021 INTERNATIONAL RESIDENTIAL CODE AS AMENDED BY WASHINGTON STATE BUILDING CODE  
 2021 INTERNATIONAL MECHANICAL CODE  
 2021 INTERNATIONAL ENERGY CODE: PRESCRIPTIVE COMPLIANCE, OPTION 3, CLIMATE ZONE 1  
 2021 WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE  
 2021 INTERNATIONAL FIRE CODE  
 2021 UNIFORM PLUMBING CODE  
 CITY OF SHORELINE DEVELOPMENT CODE

### CONSULTANT DRAWINGS:

4. CONSULTANTS' DRAWINGS, INCLUDING BUT NOT LIMITED TO STRUCTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND INTERIOR DESIGN ARE SUPPLEMENTARY TO THESE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY AND ALL DISCREPANCIES IDENTIFIED BETWEEN THE CONSULTANTS' DRAWINGS WITH A WRITTEN REQUEST FOR CLARIFICATION. WORK INSTALLED IN CONFLICT WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

### CONSTRUCTION:

5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF A SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ARCHITECT/CONSULTANT.

6. ALL INFORMATION RELATED TO ANY EXISTING CONDITIONS IS REPRESENTED TO THE BEST KNOWLEDGE OF THE ARCHITECT. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES THAT WOULD AFFECT THE CONSTRUCTION OF THE PROJECT PRIOR TO THE START OF WORK.

7. THE GENERAL CONTRACTOR SHALL INVESTIGATE EXISTING CONDITIONS PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES W/ THE INFO SHOWING IN THE DRAWINGS OR CONDITIONS WHICH AFFECT EXECUTION OF WORK.

8. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT PROVIDED IN THE DRAWINGS AND SPECIFICATIONS, AND BY OTHERS,

9. CONTRACTOR SHALL PROVIDE ALL BLOCKING, BUCK-OUTS, BACKING AND JACKS AS REQUIRED.

10. SUBCONTRACTORS SHALL BE RESPONSIBLE FOR INSPECTING THE WORKMANSHIP OF SUBCONTRACTORS PRECEDING. DISCREPANCIES IN WORK SHALL BE REPORTED TO THE GENERAL CONTRACTOR IMMEDIATELY. FAILURE TO DO SO IN A TIMELY MANNER SHALL BE CONSTRUED AS ACCEPTANCE OF THAT PRECEDING WORK.

11. SUBCONTRACTORS SHALL BE RESPONSIBLE FOR DAMAGE TO ADJACENT WORK CAUSED BY THE SUBCONTRACTOR, HIS AGENTS, OR EMPLOYEES. SUBCONTRACTOR SHALL REPAIR SAID DAMAGE AT THE SUBCONTRACTOR'S OWN EXPENSE.

12. AUTOMATIC SPRINKLERS CONFORMING TO NFPA 13D ARE TO BE INSTALLED IN ALL DWELLING UNITS PURSUANT TO 2021 INTERNATIONAL RESIDENTIAL CODE SECTION R313.1.

### DRAWING STANDARDS / DIMENSIONS:

13. DO NOT SCALE DRAWINGS, USE WRITTEN DIMENSIONS. WHERE DISCREPANCIES ARE FOUND CLARIFY IMMEDIATELY WITH ARCHITECT BEFORE PROCEEDING WITH WORK.

14. DIMENSIONS ARE TO THE FACE OF FRAMING, FACE OF CONCRETE, GRID LINES, OR CENTERLINE OF COLUMNS, DOORS AND WINDOWS UNLESS NOTED OTHERWISE.

# XIAO ZHOU HOUSE ADDITION

4433 86th Ave SE Mercer Island, WA 98040



## BUILDING PERMIT SET

### PROJECT CODE CONFORMANCE

<b>BUILDING CODE:</b>	<u>IRC</u>
<b>BUILDING DATA:</b>	
CONSTRUCTION TYPE	TYPE V-B
<b>LAND USE DATA:</b>	
LOT AREA	11250 S.F.
ZONE	R-9.6
<b>BUILDING HEIGHT:</b>	
ALLOWED	30' ABOVE ABE
PROPOSED	COMPLIES
<b>SETBACKS:</b>	
FRONT YARD	20'-0" MIN
REAR YARD	25'-0" MIN
SIDE YARD	15'-0" MIN

FOR BUILDING CODE CONFORMANCE SEE SHEET G003.

### PROPERTY DATA

**ADDRESS:**  
4433 86TH AVE SE 98040

**PARCEL NO:**  
759810-0733

**JURISDICTION:**  
MERCER ISLAND

### PROJECT LEGAL DESCRIPTION

SCHMIDS VITUS E SEATTLE ACRE TRS E 150 FT OF S 60 FT OF 3 & E 150 FT OF N 15 FT OF 4  
 PLAT BLOCK: 16  
 PLAT LOT: 3-4



### PROJECT AREA STATEMENT

**PROPOSED BUILDING ADDITION:**  
 NEW ADDITION IS ON EXISTING IMPERVIOUS DRIVEWAY  
 BASEMENT FLOOR TOTAL: 770 SF  
 MAIN FLOOR TOTAL: 770 SF  
**TOTAL CONDITIONED 1540 SF**

**PROPOSED ROOF DECK 770 SF**

**EXISTING BUILDING AREAS:**  
 BASEMENT FLOOR TOTAL: 900 SF  
 MAIN FLOOR TOTAL: 1200 SF  
**TOTAL CONDITIONED 2100 SF**

**GARAGE 300 SF**  
**TOTAL NON-CONDITIONED 300 SF**

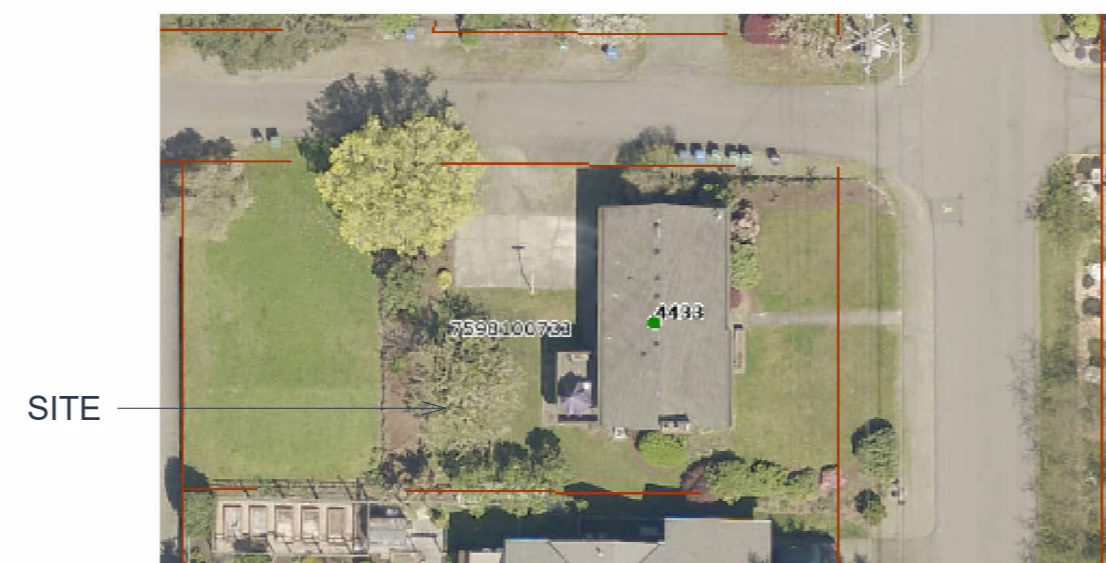
OUTDOOR DECK TOTAL: 150 SF

IMPERVIOUS SURFACES:  
 NO CHANGE TO THE EXISTING

### PROJECT SCOPE OF WORK

NEW ADDITION AND INTERIOR REMODEL OF MERCER ISLAND RESIDENCE. SEE STRUCTURAL MEMO AND NOTES FOR CONFIRMATION. EXTERIOR WINDOWS BEING ADDED, SEE STRUCTURAL NOTES.

### VICINITY PLAN



### PROJECT DIRECTORY

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 4433 86TH AVE SE 98040 CLIENT

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 LAKE STEVENS, WA  
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**BUILDER**  
 BUILDER ADDRESS BUILDER

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## DRAWING INDEX

Sheet No.	Sheet Name	Revision Date
G001	COVER SHEET	•
G002	ABBREVIATIONS, SYMBOLS AND LEGENDS	•
G003	INTERNATIONAL RESIDENTIAL CODE	•
Z000	EXHIBIT MAP	
Z001	SITE PLAN & ZONING	
A000	EXISTING / DEMO PLAN	•
A001	EXISTING / DEMO PLAN	•
A002	EXISTING ROOF PLAN	•
A100	FLOOR PLAN	•
A101	FLOOR PLAN	•
A102	ROOF PLAN	•
A200	BUILDING ELEVATION	
A201	BUILDING ELEVATION	
A300	BUILDING SECTIONS	
A500	WALL, FLOOR, ROOF & FOUNDATION DETAILS	
A501	EXTERIOR ENVELOPE DETAILS	
A502	DETAILS	
A503	WINDOW & DOOR INST. DETAILS	
A600	DOOR TYPES & SCHEDULE	
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### STRUCTURAL DRAWING INDEX

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S1.0	GENERAL STRUCTURAL NOTES/SHEET INDEX	
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S2.0	FOUNDATION PLAN	
S2.1	SECOND FLOOR FRAMING PLAN	
S2.2	ROOF DECK FRAMING PLAN	
S3.0	FOUNDATION DETAILS	
S4.0	FRAMING SCHEDULES	
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S4.2	FLOOR FRAMING DETAILS	
S4.3	ROOF DECK FRAMING DETAILS	

### FIRE SPRINKLER REQUIREMENT NOTE

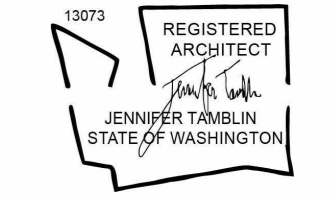
FIRE SPRINKLER SYSTEM REQUIRED: A NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND CITY OF MERCER ISLAND (COMI) STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

THIS REQUIREMENT IS TRIGGERED PER AV107.2 AS THE CUMULATIVE CONSTRUCTION VALUE EXCEEDS 50% OF THE RESIDENCE VALUE WITHIN A SIXTY-MONTH PERIOD.

SYSTEM SHALL BE DESIGNED AND INSTALLED WITH A MINIMUM 1-INCH WATER METER AND 1-INCH DOMESTIC WATER SUPPLY LINE.

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Registered Architect in WA State

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XIAO ZHOU HOUSE ADDITION

BUILDER NAME

BUILDER CONTACT

BUILDER ADDRESS

CLIENT NAME

Xiao Zhou

PROJECT ADDRESS

4433 86th Ave SE Mercer Island, WA 98040

### REVISION LOG

REV #	DATE	DESCRIPTION
1	Date 1	Revision 1

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

DRAWN BY:

SHEET NAME:

COVER SHEET

SHEET NO. G001

Scale 1/8" = 1'-0"



# PROJECT GENERAL AND CODE NOTES

## GENERAL:

ALL CONSTRUCTION SHALL CONFORM TO THE 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) AS AMENDED BY THE STATE OF WASHINGTON AND BE IN ACCORDANCE WITH ALL WASHINGTON STATE LAWS, REGULATIONS AND VARIOUS CODES IMPOSED BY LOCAL AUTHORITIES.

DO NOT SCALE DRAWINGS OR DETAILS - USE DIMENSIONS SHOWN.

- DIMENSIONS SHOWN ON THE PLANS ARE TO FACE OF FRAMING OR CONCRETE, OR TO THE CENTERLINE OF COLUMNS UNLESS NOTED OTHERWISE.
- CHECK DETAILS FOR LOCATION OF ALL ITEMS NOT DIMENSIONED ON THE PLANS.
- DOORS AND CASED OPENINGS WITHOUT DIMENSIONS ARE TO BE 4 1/2" FROM FACE OF ADJACENT WALL OR CENTERED BETWEEN WALLS, UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT. VERIFY FIELD CONDITIONS PRIOR TO COMMENCEMENT OF EACH PORTION OF THE WORK.

THE CONTRACTOR SHALL COORDINATE THE LOCATION OF MECHANICAL WORK, ELECTRICAL WORK, AND OTHER SUBCONTRACTOR WORK TO INSURE COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS, AND ALL CODES. CONTACT THE ARCHITECT FOR RESOLUTION OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL COORDINATE FRAMING LAYOUT WITH MECHANICAL, PLUMBING AND ELECTRICAL SUBCONTRACTORS.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND STRUCTURAL MEMBER SIZES PRIOR TO CONSTRUCTION. INFORM THE ARCHITECT OF ANY DISCREPANCIES IN THE DRAWINGS OR INCONSISTENCIES WITH THE CODES PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL COORDINATE ALL CHANGES WITH THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO FABRICATION OR CONSTRUCTION.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

ALL STRUCTURAL SYSTEM SUCH AS WOOD TRUSSES WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

## SOILS:

SEE THE SOILS REPORT PROVIDED BY THE GEOTECHNICAL CONSULTANT FOR ALL SOILS RELATED STRUCTURAL CRITERIA PERTAINING TO FOUNDATION DESIGN. FOOTING EXCAVATION SHALL BE FREE OF LOOSE SOILS, DEBRIS, AND FREE WATER AT ALL TIMES. THIS OFFICE TAKES NO RESPONSIBILITY IN VERIFYING THE ACCURACY OF ENGINEERING DATA SUPPLIED BY OTHERS.

## CLEARING & GRADING (T.E.S.C. MEASURES):

ALL CLEARING AND GRADING MUST BE IN ACCORDANCE WITH LOCAL JURISDICTION CLEARING AND GRADING EROSION CONTROL STANDARDS, DEVELOPMENT STANDARDS, LAND USE CODE, UNIFORM BUILDING CODE, PERMIT CONDITIONS, AND ALL OTHER APPLICABLE CODES, ORDINANCES AND STANDARDS. THE DESIGN ELEMENTS WITH THESE PLANS HAVE BEEN REVIEWED TO THESE REQUIREMENTS. ANY VARIANCE FROM THE ADOPTED EROSION CONTROL STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE LOCAL JURISDICTION PRIOR TO CONSTRUCTION.

A COPY OF THE APPROVED PLANS MUST BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER REQUIRED OR RELATED PERMITS PRIOR TO BEGINNING CONSTRUCTION.

ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE WORK.

FINAL SITE DRAINAGE MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM SLOPE OF 6 INCHES WITHIN THE FIRST 10 FEET,

**IRC R317.1.2.** ALL WOOD IN CONTACT WITH CONCRETE, CMU OR WITHIN 8" OF SOILS SHALL BE PRESSURE TREATED WOOD IN COMPLIANCE WITH IRC R317.

**IRC R317.3.** ALL METAL FRAMING CONNECTORS AND FASTENERS USED WITH PRESSURE TREATED LUMBER SHALL BE CERTIFIED FOR USE WITH THE TREATED MATERIAL.

## FIREPLACES:

**IRC CHAPTER 10.** MASONRY FIREPLACES, BARBECUES, SMOKE CHAMBERS AND FIREPLACE CHIMNEYS SHALL BE CONSTRUCTED OF MASONRY OR REINFORCED CONCRETE IN ACCORDANCE WITH **IRC CHAPTER 10.**

**UL 127. IRC R1004.** FACTORY-BUILT FIREPLACES AND CHIMNEYS SHALL BE LISTED AND LABELED AND INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING, AND TESTED IN ACCORDANCE WITH **UL 127. IRC R1004.**

**IRC G2425 thru G2430.** FACTORY-BUILT FIREPLACES SHALL BE VENTED IN ACCORDANCE WITH **IRC G2425 thru G2430.**

FACTORY-BUILT FIREPLACES OR WOOD STOVES SHALL BEAR THE STAMP OF THE TESTING LAB AND BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. MANUFACTURER'S INSTRUCTIONS SHALL BE ON SITE AT TIME OF INSPECTION.

## CEILING HEIGHTS:

**IRC R305.** HABITABLE SPACE SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0". NOT MORE THAN 50% OF REQUIRED FLOOR AREA OF A SPACE IS PERMITTED TO HAVE A SLOPED CEILING LESS THAN 7'-0" IN HEIGHT WITH NO PORTION LOWER THAN 5'-0", BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF 6'-8" OVER SHOWERHEAD AND A TUB OR SHOWER ENCLOUSER.

## ROOFING:

**IRC R905.** APPLY ROOF COVERING IN ACCORDANCE WITH **IRC R905.**

BALCONIES, LANDINGS, EXTERIOR STAIRWAYS, OCCUPIED ROOFS AND SIMILAR SURFACES EXPOSED TO THE WEATHER AND SEALED UNDERNEATH SHALL BE WATERPROOFED AND SLOPED A MINIMUM OF 1/4" PER 12" (2% SLOPE) FOR DRAINAGE.

## ATTIC:

**IRC R806.** PROVIDE ATTIC VENTILATION USING CONTINUOUS RIDGE VENT AND VENTED BIRDBLOCKING. AT CLOSED SOFFITS PROVIDE CONTINUOUS 2 1/4" VENT SLOT. THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300, PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVES OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVES OR CORNICE VENTS.

**IRC R302.12.** DRAFT STOPS, WHERE REQUIRED, SHALL BE INSTALLED PER **IRC R302.12.**

**IRC R807.1.** PROVIDE READILY ACCESSIBLE ATTIC ACCESS, MINIMUM 22" X 30" WITH MINIMUM 30" UNOBSTRUCTED HEADROOM IN ATTIC. SEE INSULATION REQUIREMENTS FOR ROOFS AND CEILINGS IN THE **ENERGY** SECTION BELOW.

## GLAZING:

**IRC R308.** ALL GLASS AND GLAZING IS TO BE IN COMPLIANCE WITH **IRC R308** AND THE WASHINGTON STATE SAFETY GLASS LAW.

**IRC R308.4.** GLAZING IN HAZARDOUS LOCATIONS SUCH AS GLASS ON DOORS, GLAZING WITHIN 24" ON EITHER SIDE OF A DOOR OPENING, OPENINGS WITHIN 60" VERTICAL AND 60" HORIZONTAL OF THE BOTTOM LANDING OF A STAIRWAY, STORM DOORS, RAILINGS, SHOWER DOORS, SLIDING GLASS DOORS AND TUB ENCLOSURES SHALL BE SAFETY GLAZING MATERIAL.

ALL EXTERIOR GLAZING SHALL COMPLY WITH THE LATEST EDITION OF THE WASHINGTON STATE ENERGY CODE.

**IRC R308.6.** SKYLIGHT SHALL BE HERMETICALLY SEALED, INSULATED, HEAT STRENGTHENED, OR FULLY TEMPERED GLASS. SKYLIGHTS SHALL MEET THE REQUIREMENTS OF **IRC R308.6.**

GLASS BLOCK SHALL BE 3" MINIMUM. THE MORTARED SURFACES SHALL BE TREATED FOR MORTAR BONDING. **IRC R610.**

## EGRESS:

**IRC R310.** EVERY SLEEPING ROOM SHALL HAVE AN EMERGENCY ESCAPE OPENING WITH A MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. THE MINIMUM NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 24" MINIMUM NET CLEAR OPENING WIDTH DIMENSION OF 20" AND A CLEAR OPENING HEIGHT NOT MORE THAN 44" ABOVE THE FLOOR. ALL EMERGENCY ESCAPE OPENINGS SHALL FULLY COMPLY WITH **IRC R310.**

**IRC R311.** PROVIDE MEANS OF EGRESS IN ACCORDANCE WITH **IRC R311.**

**IRC R311.3.1.** EVERY EXTERIOR EXIT DOOR SHALL HAVE A LANDING ON EACH SIDE. MAXIMUM STEP AT THRESHOLD SHALL BE 1 1/2".

## FIRE PROTECTION:

**IRC R314.** PROVIDE SMOKE DETECTOR IN EACH SLEEPING ROOM AND AT A CENTRAL LOCATION IN CORRIDORS OR AREAS ACCESSING SLEEPING AREAS AS WELL AS ONE ON EACH STORY. SMOKE DETECTORS ARE TO RECEIVE PRIMARY POWER FROM BUILDING WIRING WITH A BATTERY BACKUP. SMOKE DETECTORS SHOULD SOUND AN ALARM AUDIBLE IN ALL SLEEPING ROOMS.

**IRC R314. IRC R314.4.** SMOKE DETECTOR POWER SOURCES TO BE INSTALLED IN ACCORDANCE WITH **IRC R314.** ALL ALARM DEVICES SHALL BE INTERCONNECTED PER **IRC R314.4.**

**IRC R315.** PROVIDE CARBON MONOXIDE DETECTOR OUTSIDE EACH SLEEPING ROOM IN THE IMMEDIATE VICINITY AND WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN A BEDROOM OR ITS ATTACHED BATHROOM. CARBON MONOXIDE DETECTORS ARE TO RECEIVE PRIMARY POWER FROM BUILDING WIRING WITH A COMMERCIAL SOURCE AND WITH A BATTERY BACKUP. BATTERY OPERATED DETECTORS ARE PERMITTED IF COMMERCIAL POWER IS NOT AVAILABLE. CARBON MONOXIDE DETECTORS SHOULD SOUND AN ALARM AUDIBLE IN ALL SLEEPING ROOMS.

**IRC R315. IRC R315.5.** CARBON MONOXIDE DETECTOR POWER SOURCES TO BE INSTALLED IN ACCORDANCE WITH **IRC R315.** ALL ALARM DEVICES SHALL BE INTERCONNECTED PER **IRC R315.5.**

**IRC R302.11.** INSTALL FIREBLOCKING PER **IRC R302.11.**

**IRC R302.12.** INSTALL DRAFTSTOPPING PER **IRC R302.12.**

## BATHROOMS:

ALL TUB AND SHOWER STALLS SHALL HAVE FIREBLOCKING BETWEEN STUDS.

HINGED SHOWER DOORS SHALL OPEN OUTWARD.

**IRC R308.4.** ALL GLAZING USED FOR DOORS OR ENCLOSURES IN BATHROOMS SHALL BE SAFETY GLAZING. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING A SHOWER OR BATHTUB WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 60 INCHES ABOVE THE STANDING SURFACE AND DRAIN INLET SHALL BE SAFETY GLAZING.

**IRC R307.2.** SHOWER STALL WAINSCOT SHALL BE A MINIMUM OF 72 INCHES ABOVE THE FLOOR. RUN CEMENT BACKER BOARD TO CEILING, TYPICAL.

**IRC R307.1.** WATERCLOSETS SHALL HAVE MIN. 30" CLEAR WIDTH AND MIN. 21" FRONT CLEARANCE.

## GAS APPLIANCES:

HEATING SYSTEM SHALL BE CAPABLE OF MAINTAINING 70° FEET ABOVE FLOOR IN HABITABLE ROOMS WHEN OUTSIDE TEMP. IS AS SHOWN IN **SECTION 302 WSEC.**

**IRC G2407.6.** FUEL BURNING EQUIPMENT LOCATED WITHIN THE BUILDING ENVELOPE SHALL OBTAIN COMBUSTION AIR FROM OUTDOORS PER **IRC G2407.6. DO NOT USE CRAWL SPACE AIR!**

**IRC G2407.** EVERY APPLIANCE DESIGNED TO BE VENTED SHALL BE CONNECTED TO A VENTING SYSTEM PER **IRC G2407.**

PROVIDE READILY ACCESSIBLE AUTOMATIC OR MANUAL SHUT-OFF SWITCH THERMOSTAT. PROVIDE AT LEAST ONE THERMOSTAT FOR REGULATING SPACE TEMPERATURES FOR EACH HEATING/COOLING UNIT.

**IRC G2404 & IRC M1307.2.** GAS APPLIANCES SHALL BE INSTALLED AND SECURELY FASTENED IN PLACE IN ACCORDANCE WITH **IRC G2404 & IRC M1307.2.**

**IRC G2408.5.** PROVIDE CLEARANCE FROM COMBUSTIBLE MATERIALS PER **IRC G2408.5.**

SEE **FIREPLACES** SECTION ABOVE FOR ADDITIONAL INFORMATION REGARDING GAS FIREPLACES.

## EXTERIOR FINISHES:

**IRC R703. IRC SECTION 703.8. IRC SECTION 703.2.** EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN (IRC) SECTION 703.4. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN SUCH A MANNER AS TO PREVENT THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTIVE BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED BY (IRC) SECTION 703.2.

- UNDERLAYMENT:** APPLY TWO (2) LAYERS OF 60 MIN. BUILDING PAPER OVER SHEATHING PRIOR TO INSTALLATION OF WINDOWS, WRAP INTO OPENINGS. AFTER INSTALLATION OF WINDOWS, APPLY SELF-ADHESIVE 'BLUESKIN' PER MANUFACTURER'S INSTRUCTIONS.

- ADHERED STONE VENEER; USE PRESSURE-TREATED SHEATHING BEHIND ADHERED STONE VENEER, TYP.** APPLY ADHERED STONE VENEER OVER UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATION. **DO NOT BACKFILL OR POUR CONCRETE AGAINST STONE VENEER.**

**IRC R703.5.**

- WOOD SIDING:** INSTALL OVER UNDERLAYMENT IN ACCORDANCE WITH **IRC R703.3.**

**IRC R703.6.**

- WOOD SHINGLES:** INSTALL OVER UNDERLAYMENT IN ACCORDANCE WITH **IRC R703.5.**

**IRC R703.10.**

- FIBER CEMENT SIDING:** INSTALL OVER UNDERLAYMENT IN ACCORDANCE WITH **IRC R703.10.**

**IRC R703.4.**

- FLASHING:** INSTALL FLASHINGS IN ACCORDANCE WITH **IRC R703.4.** VERTICAL LEG OF FLASHING SHALL BE 4" MIN. 'KICK-OUT' FLASHING TO GUTTERS SHALL EXTEND 3" MIN. BEYOND WALL.

## DECKS & EXTERIOR STAIRWAYS:

**IRC R317.** WOODEN STRUCTURAL SUPPORTS AND MEMBERS THAT ARE EXPOSED TO WEATHER WITHOUT PROTECTION FROM A ROOF, EAVE, OVERHANG OR OTHER COVERING THAT WOULD PREVENT MOISTURE OR WATER ACCUMULATION ON THE MEMBER SURFACE SHALL BE PRESSURE TREATED OR CEDAR LUMBER.

**IRC 317.3.** ALL METAL FRAMING CONNECTORS AND FASTENERS USED WITH PRESSURE TREATED LUMBER SHALL BE CERTIFIED FOR USE WITH THE TREATED MATERIAL.

## VENTILATION (VIAQ) & LIGHTING:

COMPLY WITH **2021 WASHINGTON ENERGY CODE (WSEC)** USING **PRESCRIPTIVE METHOD** FOR GROUP R OCCUPANCIES UNLESS OTHERWISE DETECTED.

INSTALL WHOLE HOUSE VENTILATION SYSTEM IN ACCORDANCE WITH **THE CURRENT WSEC WORKSHEET PREPARED FOR THIS PROJECT.**

IN HABITABLE ROOMS NOT PROVIDED WITH AN OPENABLE EXTERIOR OPENING OF AT LEAST 4% OF THE FLOOR AREA, A MECHANICAL VENTILATION SYSTEM MUST BE PROVIDED THAT PROVIDES A MINIMUM OF .35 AIR CHANGES PER HOUR. **IRC R303.1.**

**IRC R303.1.** NATURAL LIGHTING IN ALL HABITABLE SPACES SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA OF EACH SPACE.

**IRC M1505.4.4.** LAUNDRY, BATH AND UTILITY ROOM FANS TO BE **50 CFM MIN.** AND KITCHEN, RANGE/OVEN FANS TO BE **100 CFM** MINIMUM. ALL VENTILATION DUCTS SHALL VENT TO THE OUTSIDE OF THE BUILDING AND TERMINATE A MINIMUM OF 3 FEET FROM ANY OPENINGS IN THE BUILDING. INSTALL BACK DRAFT DAMPERS IN SYSTEMS DESIGNED TO OPERATE INTERMITTENTLY. ALL DUCTWORK SHALL HAVE A SMOOTH NONCOMBUSTIBLE, NONABSORBENT SURFACE. EXHAUST DUCTS IN UNCONDITIONED SPACES & SUPPLY DUCTS IN CONDITIONED SPACES SHALL BE INSULATED TO R-4 MIN.

**WSEC TABLE R402.4.1.1.** PROVIDE TIGHT FITTING GLASS OR METAL DOORS ON SOLID FUEL BURNING APPLIANCES.

## ENERGY:

METHOD OF COMPLIANCE - PRESCRIPTIVE METHOD FOR GROUP R OCCUPANCY, CLIMATE ZONE - **MARINE 4.** TABLE R402.1.1.

ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE **INTERNATIONAL RESIDENTIAL CODE (IRC)** AND THE **WASHINGTON STATE ENERGY CODE, LATEST EDITION.** VERIFY ALL CONDITIONS BEFORE PROCEEDING WITH WORK.

ALL INSULATION MATERIALS, INCLUDING FACING AND VAPOR BARRIERS, SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY RATING NOT TO EXCEED 450.

**(R-21)**

- WALLS:** INSULATED PER TABLE R402.1.1. **(R-21)** IN NEW 2X6 EXTERIOR WALLS, R-13 IN 2X4 FURRED WALLS.

**(R-49) (R-38)**

- ROOF & CEILING:** INSULATED PER TABLE R402.1.1. PROVIDE INSULATION IN ROOF AND CEILING: ABOVE CEILING **(R-49)** WHERE POSSIBLE AND IN 2X12 RAFTERS **(R-38)** IF VAULTED CEILING CONDITION EXISTS. MAINTAIN A MINIMUM OF 2" CLEAR BETWEEN TOP OF INSULATION AND BOTTOM OF SHEATHING FOR VENTING. VENTING MUST OCCUR IN EACH JOIST SPACE. WHERE CONTINUOUS VENTING WITHIN A JOIST SPACE IS INTERRUPTED BY A HEADER (I.E., SKYLIGHT OR AT HIP END), PROVIDE (2) 1 1/2" VENTING HOLES AT THE TOP OF THE RAFTER AT THE HEADER TO ALLOW FOR CONTINUAL THROUGH-VENTING INTO THE NEXT JOIST SPACE. PROVIDE INSULATION BAFFLES EAVE VENTS AT CEILINGS/ATTICS TO MAINTAIN 2" MIN. OF VENTILATION ABOVE INSULATION. EXTEND BAFFLES 6" VERTICALLY ABOVE BATT INSULATION AND 12" VERTICALLY ABOVE LOOSE-FILL INSULATION. WEATHERSTRIP AND INSULATE ATTIC ACCESS DOORS AND PANELS TO THE R-VALUE OF THE SURROUNDING SURFACES.

**R402.1.1. (R-30)**

- FLOORS:** INSULATE PER TABLE R402.1.1. PROVIDE INSULATION IN ROOF AND CEILING: ABOVE CEILING **(R-49)** WHERE POSSIBLE AND IN 2X12 RAFTERS **(R-38)** IF VAULTED CEILING CONDITION EXISTS. MAINTAIN A MINIMUM OF 2" CLEAR BETWEEN TOP OF INSULATION AND BOTTOM OF SHEATHING FOR VENTING. VENTING MUST OCCUR IN EACH JOIST SPACE. WHERE CONTINUOUS VENTING WITHIN A JOIST SPACE IS INTERRUPTED BY A HEADER (I.E., SKYLIGHT OR AT HIP END), PROVIDE (2) 1 1/2" VENTING HOLES AT THE TOP OF THE RAFTER AT THE HEADER TO ALLOW FOR CONTINUAL THROUGH-VENTING INTO THE NEXT JOIST SPACE. PROVIDE INSULATION BAFFLES EAVE VENTS AT CEILINGS/ATTICS TO MAINTAIN 2" MIN. OF VENTILATION ABOVE INSULATION. EXTEND BAFFLES 6" VERTICALLY ABOVE BATT INSULATION AND 12" VERTICALLY ABOVE LOOSE-FILL INSULATION. WEATHERSTRIP AND INSULATE ATTIC ACCESS DOORS AND PANELS TO THE R-VALUE OF THE SURROUNDING SURFACES.

**R402.1.1. (R-10). WSEC 402.2.9 (OR 402.2.9.1 FOR HEATED FLOORS).**

- SLAB ON GRADE:** INSULATE PER TABLE R402.1.1. PROVIDE EXTRUDED RIGID CLOSED CELL INSULATION **(R-10).** INSULATION MAY BE INSTALLED ON EITHER THE OUTSIDE FACE OR THE INSIDE FACE OF THE FOUNDATION WALL IN ACCORDANCE WITH **WSEC 402.2.9 (OR 402.2.9.1 FOR HEATED FLOORS).**

**IRC R702.7 & R703.**

- VAPOR BARRIERS:** VAPOR RETARDERS SHALL BE INSTALLED ON THE WARM SIDE (IN WINTER) OF INSULATION. FLOORS SEPARATING CONDITIONED SPACE FROM UNCONDITIONED SPACE SHALL HAVE MIN. 4 MIL POLYETHYLENE OR KRAFT FACED MATERIAL. ROOF/CEILING ASSEMBLIES WHERE THE VENTILATION SPACE ABOVE THE INSULATION IS LESS THAN AN AVERAGE OF 12 INCHES SHALL BE PROVIDED WITH A VAPOR RETARDER. WALLS SEPARATING CONDITIONED SPACE FROM UNCONDITIONED SPACE SHALL HAVE A VAPOR RETARDER INSTALLED. FACED BATT INSULATION SHALL BE FACE STAPLED. A GROUND COVER OF MIN. 6 MIL BLACK POLYETHYLENE SHALL BE LAID OVER THE GROUND WITHIN CRAWL SPACES W/ JOINTS LAPPED MIN. 12".

**IRC R702.7 & R703.**

- CAULKING & SEALANTS:** EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES; OPENINGS BETWEEN WALLS AND FOUNDATION; OPENINGS BETWEEN ROOF AND WALL PANELS, OPENINGS AT PENETRATIONS OF UTILITY SERVICES THROUGH WALLS, FLOORS & ROOFS; AND ALL OTHER OPENINGS IN THE EXTERIOR BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED OR WEATHERSTRIPPED.

**WSEC R303.**

- WINDOWS AND DOORS:** ALL VERTICAL FENESTRATIONS SHALL HAVE A MAXIMUM U-FACTOR OF .30. OVERHEAD GLAZING SHALL HAVE A MAXIMUM U-FACTOR OF .50. GLAZING AND DOOR U-FACTORS SHALL BE DETERMINED AND DISPLAYED IN ACCORDANCE WITH **WSEC R303.**

**IRC N1103.2 & M1601.3.**

- DUCTWORK:** INSULATE HEATING DUCTS IN UNCONDITIONED SPACES TO R-8 MINIMUM. DUCTWORK SEAMS & JOINTS SHALL BE TAPED, SEALED, AND FASTENED WITH A MINIMUM NUMBER OF FASTENERS.

**IRC P2603.**

- PIPING:** INSULATE NON-CIRCULATING HOT AND COLD WATER PIPES IN UNCONDITIONED SPACES TO R-3 MINIMUM.

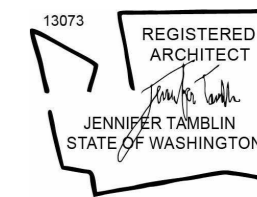
**WAC 51-56 SECTION 402.**

- WATER FLOW:** FLOW RATES FOR PLUMBING FIXTURES SHALL COMPLY WITH **WAC 51-56 SECTION 402.**: TOILETS @ 1.6 GALLONS PER FLUSH MAXIMUM; SHOWERS, TUBS AND LAVATORIES @ 2.5 GPM, MAXIMUM.

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**XIAO ZHOU HOUSE ADDITION**

BUILDER NAME

BUILDER CONTACT

BUILDER ADDRESS

CLIENT NAME

Xiao Zhou

PROJECT ADDRESS

4433 86th Ave SE Mercer Island, WA 98040

## REVISION LOG

REV #	DATE	DESCRIPTION

STATUS:	<b>PERMIT</b>
DPS PERMIT NUMBER:	
BNA Project number:	XXXXXX
DRAWN BY:	
SHEET NAME:	<b>INTERNATIONAL RESIDENTIAL CODE</b>
SHEET NO.:	<b>G003</b>
Scale:	3/32" = 1'-0"

## ENERGY NOTES

- ALL SLEEPING ROOMS AND EACH FLOOR SHALL BE PROVIDED WITH HEAT AND WALL-MOUNTED THERMOSTATIC CONTROLS. HEATED SPACE SHALL MAINTAIN A TEMPERATURE OF 70 DEGRESS FAHRENHEIT AT 3' ABOVE THE FLOOR IN ALL HABITABLE ROOMS.
- ALL CRACKS SHALL BE CAULKED TO PREVENT AIR INFILTRATION FROM EXTERIOR CLIMATE AND INTER-UNIT AIR EXCHANGE.
- EACH OCCUPIABLE SPACE SHALL HAVE A MINIMUM OF ONE INLET THAT HAS A MINIMUM OF 4 SQ. INCHES OF NET FREE AREA PER SMC 403.8.6.1 .
- A MINIMUM OF 90% OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS PER SEC R404.1.

## WINDOW & DOOR HEADER INSULATION

PER TABLE R402.1.1. PROVIDE MINIMUM OF R-10 INSULATION AT ALL WINDOW AND DOOR HEADERS

## VENTILATION REQUIREMENTS

### MINIMUM FAN CFM - M1505.4.4

KITCHEN	100 CFM INTERMITTENT
BATHROOM	50 CFM INTERMITTENT
TOILET	50 CFM INTERMITTENT

- NEW CONSTRUCTION TO CONFROM TO THE REQUIREMENTS OF 2021 SRC & 2021 SEC.
- EXHAUST DUCTS TO TERMINATE OUTSIDE THE BUILDING WITH BACKDRAFT DAMPERS. VENT DUCTS SHOWN THROUGH CEILING OR SOFFIT.
- ALL FANS TO BE SWITCHED INTERMITTENTLY.
- ENVIRONMENTAL AIR EXHAUST VENTS ON BUILDING EXTERIOR TO COMPLY WITH SMC 501.3.1 #3 CLEARANCE. SEE EXTERIOR ELEVATIONS WITH IDENTIFIED CLEARANCES.

## WHOLE HOUSE FAN

- M1505.4.3 REQUIRES 60 CFM CONTINUOUS AIRFLOW RATE FOR A 3 BEDROOM HOME OF 2,501-3,000SF. THIS FAN SHALL BE CONNECTED TO A TIMER SET TO RUN THE FAN AT A FACTOR OF 50% OF EACH DAY IN 4-HOUR INCREMENTS THEREFORE REQUIRING A FAN OF 120 CFM.
- WHOLE-HOUSE FANS NOT TO EXCEED MAXIMUM SONE RATING OF 1.0.

## PRESCRIPTIVE COMPLIANCE

Docusign Envelope ID: 9560A7BC-61FD-49A2-AEB6-962A10928FFA

2021 Washington State Energy Code – Residential  
Prescriptive Energy Code Compliance for All Climate Zones in Washington  
Single Family – New & Additions (effective March 15, 2024)

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Prescriptive Energy Code Compliance for All Climate Zones in Washington  
Single Family – New & Additions (effective March 15, 2024)



Permit#	Address or Lot & Block	
4433 86th Ave SE		
City	Mercer Island, WA	Zip 98040

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

**Instructions:** This single-family project uses the requirements of the Prescriptive Path below to incorporate the minimum values listed. Based on the conditioned floor area of the structure, the number of required additional credits must be selected by the permit applicant.

Provide all information from the following tables in building permit drawings: Table R402.1.2 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and R406.3 Energy Credits.

Authorized Representative Signature		Date	5/5/2025
-------------------------------------	--	------	----------

	All Climate Zones Table 402.1.3	and Table R402.1.2
Fenestration U-Factor <sup>b,1</sup>	R-Value <sup>a</sup>	U-Factor <sup>a</sup>
Skylight U-Factor <sup>b</sup>	n/a	0.30
Ceiling <sup>a</sup>	60	0.024
Above-Grade Wall U-Factor <sup>a,1</sup>	20+5 or 13+10	0.056
Floor U-Factor	30	0.029
Below Grade Wall U-Factor <sup>a,b</sup>	10/15/21 Int + 5TB	0.035
Slab <sup>a,f</sup> On Grade F-Factor	10, 4 ft	0.54
R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.		
The fenestration U-factor column excludes skylights.		
<sup>10</sup> /15/21 +5TB <sup>b</sup> means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the basement wall. <sup>10</sup> /15/21 +5TB <sup>b</sup> shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. <sup>5TB</sup> means R-5 thermal break between floor slab and basement wall.		
R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.		
For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.		
R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.		
For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.		
Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78 percent of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.		
The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "R13+10" means R-13 cavity insulation plus R-10 continuous insulation.		
A maximum U-factor of 0.32 shall apply to vertical fenestration products installed in buildings located above 4000 feet in elevation above sea level, or in windborne debris regions where protection of openings is required under Section R301.2.1.2 of the International Residential Code.		

Table R406.2 ENERGY EQUALIZATION CREDITS			
System Type	Description of Primary Heating Source	Credits - select ONE system type	
1	For combustion heating equipment meeting minimum federal efficiency standards for the equipment listed in Table C403.3.2(5) or C403.3.2(6)	0	<input type="checkbox"/>
2	For an initial heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) and supplemental heating provided by electric resistance or a combustion furnace meeting minimum standards listed in Table C403.3.2(5)b found in the 2021 WSEC- COMMERCIAL ENERGY CODE	1.5	<input checked="" type="checkbox"/>
3	For heating system based on electric resistance only (either forced air or Zonal)	0.5	<input type="checkbox"/>
4 <sup>c</sup>	For heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) or C403.3.2(9) or Air to water heat pump units that are configured to provide both heating and cooling and are rated in accordance with AHRI 550/590	3.0	<input type="checkbox"/>
5	For heating system based on electric resistance with: <ol style="list-style-type: none"> <li>Inverter-driven ductless mini-split heat pump system installed in the largest zone in the dwelling, or</li> <li>With 2kW or less total installed heating capacity per dwelling.</li> </ol>	2.0	<input type="checkbox"/>

a. See Section R401.1 and residential building in Section R202 for Group R-2 scope.  
b. The gas back-up furnace will operate as fan-only when the heat pump is operating. The heat pump shall operate at all temperatures above 38°F (3.3°C) (or lower). Below that "changeover" temperature, the heat pump would not operate to provide space heating. The gas furnace provides heating below 38°F (3.3°C) (or lower).  
c. Additional points for the HVAC system are included in Table R406.3.

Summary of Table R406.3			
Options	Energy Credit Option Descriptions	Credits – limited to one energy option from each category <sup>a</sup>	Comments:
1.1	Efficient Building Envelope	0.5	<input type="checkbox"/>
1.2	Efficient Building Envelope	1.0	<input type="checkbox"/>
1.3	Efficient Building Envelope	1.5	<input checked="" type="checkbox"/>
1.4	Efficient Building Envelope	2.5	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	1.0	<input type="checkbox"/>
2.2	Air Leakage Control and Efficient Ventilation	1.5	<input type="checkbox"/>
2.3	Air Leakage Control and Efficient Ventilation	2.0	<input checked="" type="checkbox"/>
3.1 <sup>a</sup>	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.2 <sup>a</sup>	High Efficiency HVAC	0.5	<input checked="" type="checkbox"/>
3.3 <sup>a,d</sup>	High Efficiency HVAC	0.5	<input type="checkbox"/>
3.4 <sup>a,d</sup>	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.5 <sup>d</sup>	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.6 <sup>d</sup>	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.7 <sup>a,d</sup>	High Efficiency HVAC	2.0	<input type="checkbox"/>
3.8 <sup>a,d</sup>	High Efficiency HVAC	1.0	<input type="checkbox"/>
3.9	High Efficiency HVAC	1.5	<input type="checkbox"/>
3.10 <sup>f</sup>	High Efficiency HVAC	2.5	<input type="checkbox"/>
3.11 <sup>f</sup>	High Efficiency HVAC	0.5	<input type="checkbox"/>
4.1	High Efficiency HVAC Distribution System	0.5	<input type="checkbox"/>
5.1	Efficient Water Heating	0.5	<input type="checkbox"/>
5.2	Efficient Water Heating	0.5	<input type="checkbox"/>
5.3	Efficient Water Heating	0.5	<input type="checkbox"/>
5.4	Efficient Water Heating	1.0	<input type="checkbox"/>
5.5	Efficient Water Heating	1.5	<input checked="" type="checkbox"/>
5.6	Efficient Water Heating	2.0	<input type="checkbox"/>
5.7	Efficient Water Heating	2.5	<input type="checkbox"/>
5.8	Efficient Water Heating	2.5	<input type="checkbox"/>
6.1	Renewable Electric Energy (4.5 credits max)	0.5-4.5	<input checked="" type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>
<b>Total Credits</b>		<b>5.0</b>	<input checked="" type="checkbox"/>

a. An alternative heating source sized at a maximum of 0.5 Watts/ft<sup>2</sup> (equivalent) of heated floor area or 500 Watts, whichever is bigger, may be installed in the dwelling unit.  
b. See Section R401.1 and residential building in Section R202 for Group R-2 scope.  
c. Option 3.11 can only be taken with Options 3.1 and 3.3. To qualify to claim Option 3.11 with 3.3, the system shall be a 1-2 speed heat pump system. Variable capacity heat pumps are ineligible from claiming this option.  
d. This option may only be claimed if serving System Type 4 from Table R406.2.  
e. Primary living areas include living, dining, kitchen, family rooms, and similar areas.  
f. Option 3.10 may only be taken with Efficient Water Heating Options 5.1 or 5.2. Equipment sizing for space heating shall be calculated as provided in Section R403.7 with increased capacity to provide a minimum of 75 percent of peak hot water demand or shall be sized in accordance with approved manufacturer's specifications or guidance. Supplementary heat for water heating system shall be in accordance with Section R403.5.7.

## DRIFT INTERIOR ARCHITECTURE

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# XIAO ZHOU HOUSE ADDITION

BUILDER NAME: Xiao Zhou  
BUILDER CONTACT: Xiao Zhou  
BUILDER ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040

### REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

DRAWN BY:

SHEET NAME:

## ENERGY CODE COMPLIANCE

SHEET NO. G005

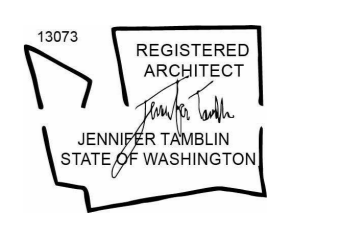
Scale



ADDRESS: DI  
 PARCEL: 753610-0733  
 LOT AREA: 11250 SF  
 LEGAL: SCHMIDS VITUS E SEATTLE ACRE TRS E 150 FT OF S 60 FT OF 3 & E 150 FT OF N 15 FT OF 4  
 PLAT BLOCK: 16  
 PLAT LOT: 3-4  
 ZONING: R-9.6  
 PRESENT USE: SINGLE FAMILY

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**PROPOSED BUILDING ADDITION:**  
 NEW ADDITION IS ON EXISTING IMPERVIOUS DRIVEWAY

**MAIN FLOOR** TOTAL: 770 SF  
**TOTAL CONDITIONED** 770 SF

**BASEMENT FLOOR** TOTAL: 770 SF  
**PROPOSED ROOF DECK** 770 SF  
**TOTAL UN-CONDITIONED** 1540 SF

**EXISTING BUILDING AREAS:**  
**BASEMENT FLOOR** TOTAL: 900 SF  
**MAIN FLOOR** TOTAL: 1200 SF  
**TOTAL CONDITIONED** 2100 SF

**GARAGE** 300 SF  
**TOTAL UN-CONDITIONED** 300 SF

**OUTDOOR DECK** TOTAL: 150 SF

**LOT SCOPE CALCULATIONS:**

HIGHEST ELEVATION POINT OF LOT: 360.8'  
 LOWEST ELEVATION POINT OF LOT: 344.8'  
 ELEVATION DIFFERENCE: 16'  
 HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS: 152'  
**LOT SLOPE: 10.5%**

**MAXIMUM LOT COVERAGE: 40%**  
**REQUIRED LANDSCAPE AREA: 60%**

**HARDSCAPE CALCULATION**

LOT AREA: 11,250 SF  
 BUILDING COVERAGE: 2,452 SF  
 REMAINING DRIVEWAY / ACCESS: 380 SF  
 WALKWAY: 103 SF  
 TOTAL HARDSCAPE: 2935 SF  
 HARDSCAPE PERCENTAGE: 26.1%

**BASEMENT GFA EXCLUSION CALCULATION**

TOTAL BASEMENT AREA: 1,670 SF  
 GARAGE: 300 SF  
 EXCLUDED BASEMENT AREA (BELOW GRADE): 1,370 SF  
 BASEMENT AREA COUNTED TOWARD GFA: 0 SF

NOTE: THE GARAGE (300 SF) IS AT FINISHED GRADE AND DOES NOT MEET THE BELOW-GRADE CONDITION REQUIRED FOR BASEMENT EXCLUSION. THE REMAINING 1,370 SF OF BASEMENT SITS AT OR BELOW A 7-FT BELOW-GRADE CONDITION AT ITS PERIMETER WALLS AND QUALIFIES FOR EXCLUSION.

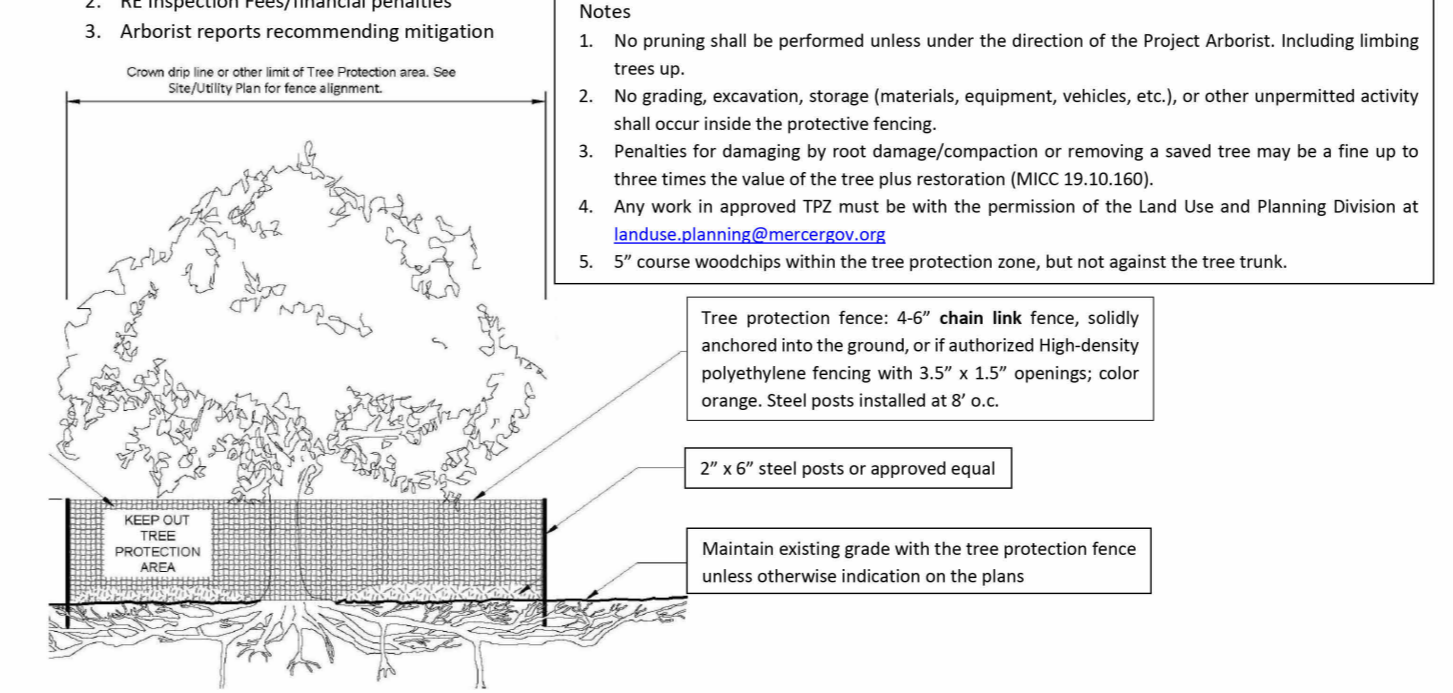
**GROSS FLOOR AREA (GFA) SUMMARY**

EXISTING MAIN FLOOR: 1,200 SF  
 EXISTING GARAGE: 300 SF  
 PROPOSED MAIN FLOOR: 770 SF  
 BASEMENT AREA COUNTED TOWARD GFA: 0 SF  
**TOTAL GFA USED FOR COMPLIANCE: 2270 SF**

**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



Any Work in the protected area must be with the permission of the Land Use and Planning Division at [landuse.planning@mercergov.org](mailto:landuse.planning@mercergov.org)

HEIGHT FROM FINISHED GRADE TO TOP OF EXTERIOR WALL ADJOINING SIDE YARD: 20 FEET.

AS THE HEIGHT EXCEEDS 15 FEET BUT DOES NOT EXCEED 25 FEET, THE MINIMUM REQUIRED SIDE YARD DEPTH IS 7'-6".

PROVIDED SIDE YARD SETBACK: 7'-6".

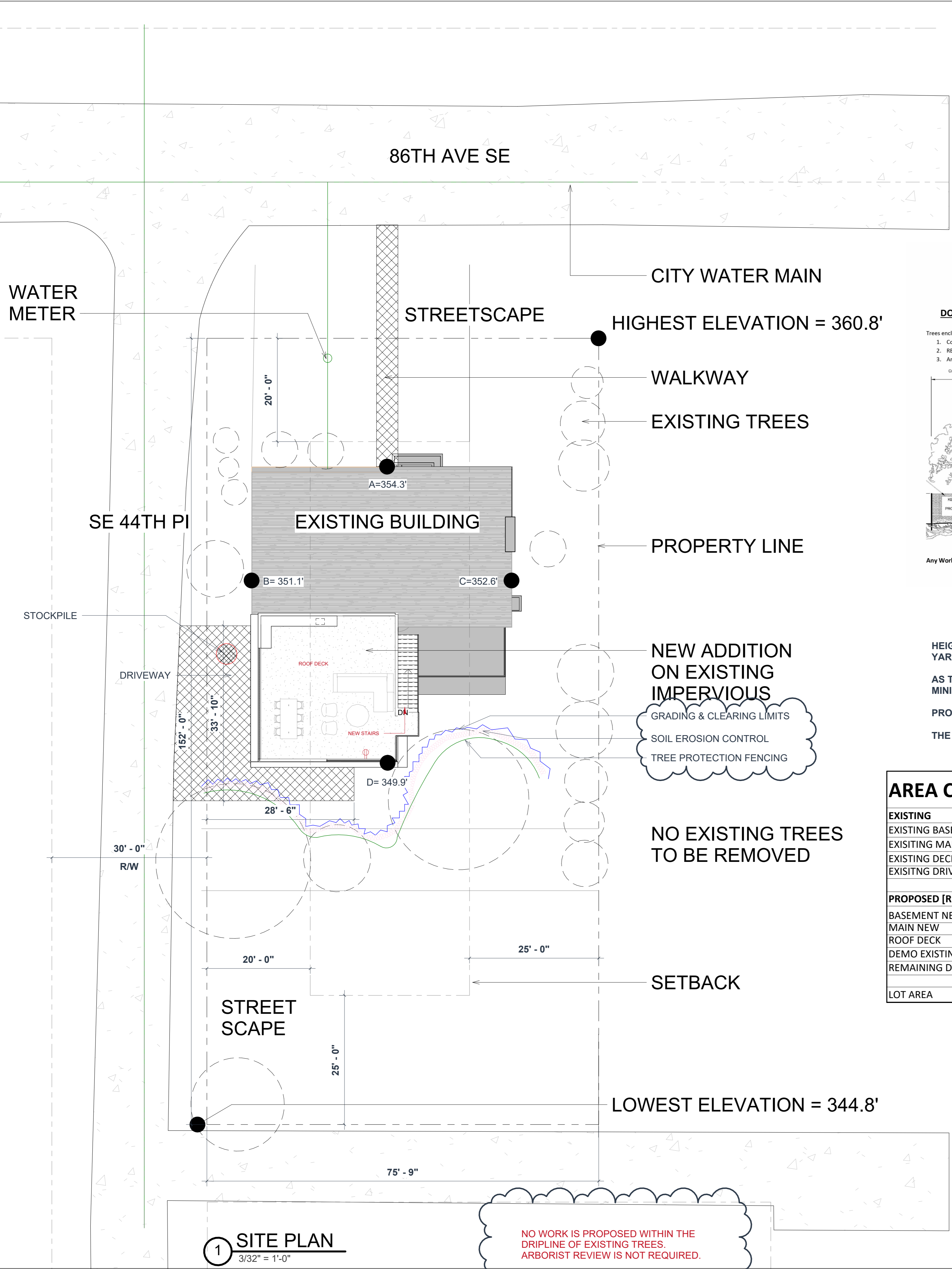
THE PROPOSED STRUCTURE COMPLIES WITH MICC 19.02.020(C)(1)(C)(III).

**AREA CALCULATIONS**

EXISTING	
EXISTING BASEMENT	1200 SF
EXISTING MAIN	1200 SF
EXISTING DECK	150 SF
EXISTING DRIVEWAY	1150 SF
PROPOSED [REPLACED IMPERVIOUS]	
BASEMENT NEW	770 SF
MAIN NEW	770 SF
ROOF DECK	770 SF
DEMO EXISTING DRIVEWAY	-770 SF
REMAINING DRIVEWAY	380 SF
LOT AREA	11250 SF

**LOT COVERAGE CALCULATIONS**

EXISTING	
EXISTING BUILDING FOOTPRINT	1200 SF
EXISTING COVERED DECK	150 SF
EXISTING DRIVEWAY	1150 SF
PROPOSED [REPLACED IMPERVIOUS]	
NEW BUILDING FOOTPRINT [ON TOP OF EX.DRIVEWAY]	770 SF
DEMO OF EXISTING DRIVEWAY	-770 SF
TOTAL LOT COVER	2320 SF
LOT AREA	11250 SF
LOT COVERAGE	19% < 40% [ COMPLIES ]...



**1 SITE PLAN**  
 3/32" = 1'-0"

NO WORK IS PROPOSED WITHIN THE DRIPLINE OF EXISTING TREES. ARBORIST REVIEW IS NOT REQUIRED.

**XIAO ZHOU HOUSE ADDITION**

BUILDER NAME: Xiao Zhou  
 BUILDER CONTACT: Xiao Zhou  
 BUILDER ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040

**REVISION LOG**

REV #	DATE	DESCRIPTION
1	Date 1	Revision 1

STATUS: PERMIT  
 DPS PERMIT NUMBER:  
 BNA Project number: XXXXXX  
 DRAWN BY: Author

**SITE PLAN & ZONING**

SHEET NO. **Z001**

Scale 3/32" = 1'-0"

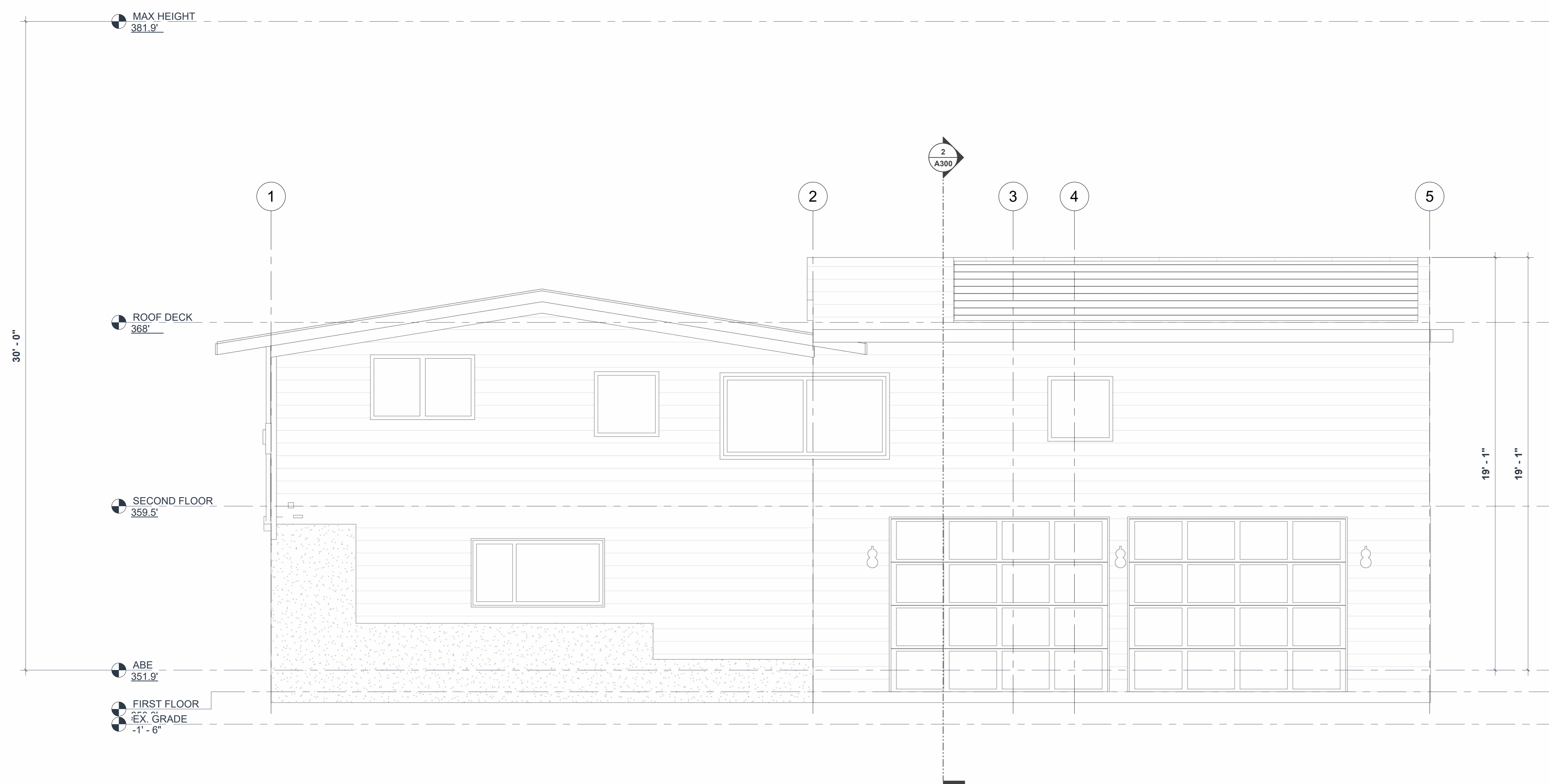


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BUILDING HEIGHT CALCULATION	
	AREA (SF)
AVERAGE BASE GRADE	$(354.3 + 351.1 + 352.6 + 349.9) / 4$
AVERAGE BASE GRADE	351.9'
MAX. ALLOWED BUILDING HEIGHT	$351.9' + 30' = 381.9'$
PROPOSED BUILDING HEIGHT	372' 1"
BUILDING HEIGHT	OK



1 AVERAGE BUILDING ELEVATION  
3/8" = 1'-0"

**XIAO ZHOU HOUSE ADDITION**

CLIENT NAME: Xiao Zhou  
PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040

BUILDER NAME: [Blank]  
BUILDER CONTACT: [Blank]  
BUILDER ADDRESS: [Blank]

REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER: [Blank]

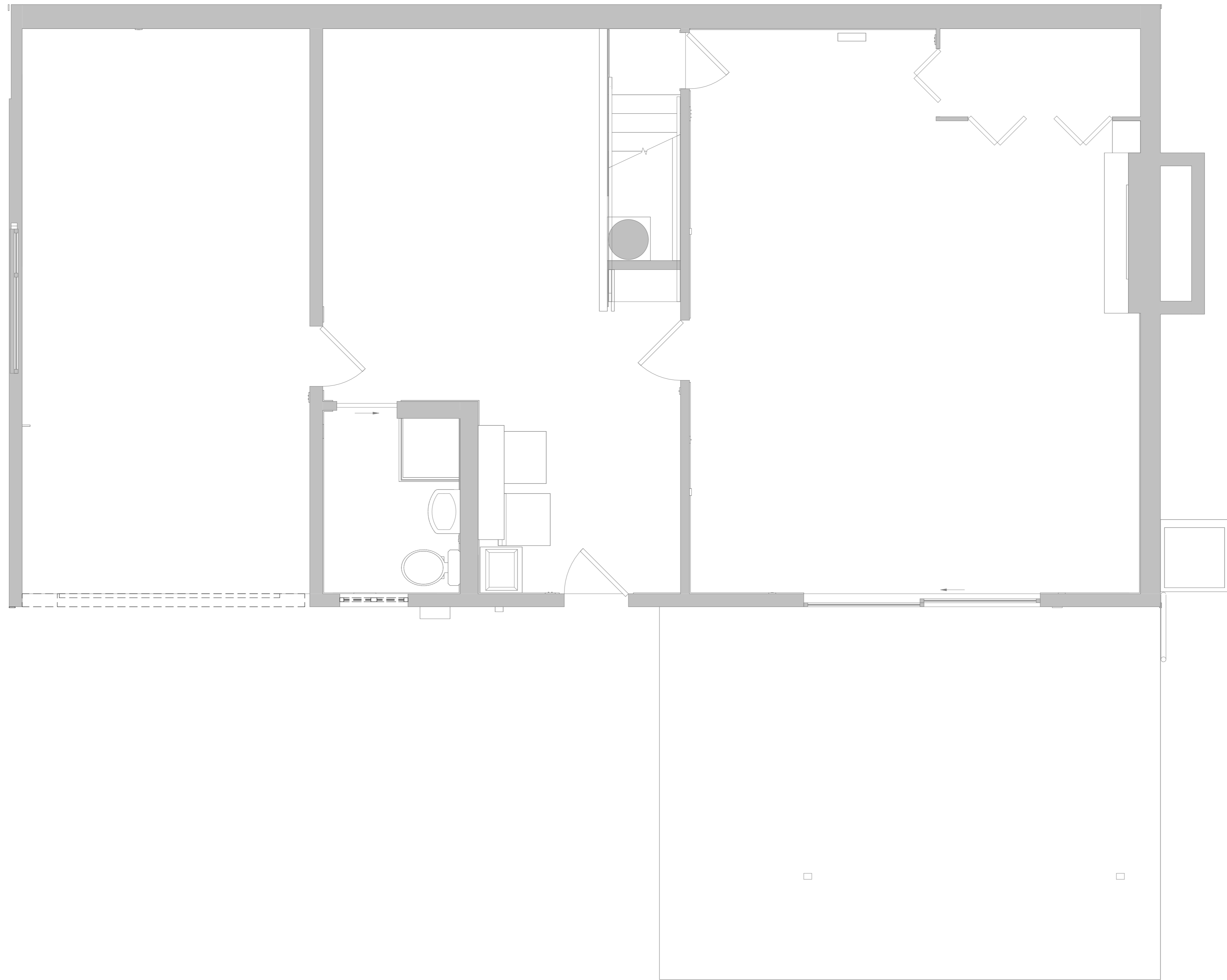
BNA Project number: XXXXXX

DRAWN BY: [Blank]

SHEET NAME: ZONING CODE COMPLIANCE

SHEET NO. G004

Scale 3/8" = 1'-0"



**1 DEMO BASEMENT**  
3/8" = 1'-0"

**DEMOLITION GENERAL NOTES**

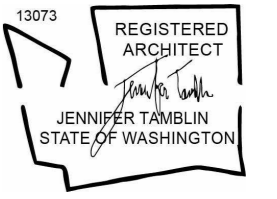
- A. EXISTING EXTERIOR AND FOUNDATION WALLS AND CONCRETE FOOTINGS TO REMAIN. EXISTING BASEMENT SLAB, TO REMAIN.
- B. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND CONSTRUCTION OPERATIONS.
- C. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY EXISTING UTILITIES NOT INDICATED ON DEMO/CONSTRUCTION PLANS THAT MAY INTERFERE WITH THE COMPLETION OF PROPOSED WORK.

--- TO BE REMOVED  
 ■ EXISTING TO REMAIN

**DEMOLITION KEYNOTES**

103 91st Ave SE, Lake Stevens, WA 98258 4254780327

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**XIAO ZHOU HOUSE ADDITION**

CLIENT NAME: Xiao Zhou  
 PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040  
 BUILDER NAME:  
 BUILDER CONTACT:  
 BUILDER ADDRESS:

**REVISION LOG**

REV #	DATE	DESCRIPTION

STATUS: **PERMIT**

DPS PERMIT NUMBER:

BNA Project number: **XXXXXX**

DRAWN BY: **Author**

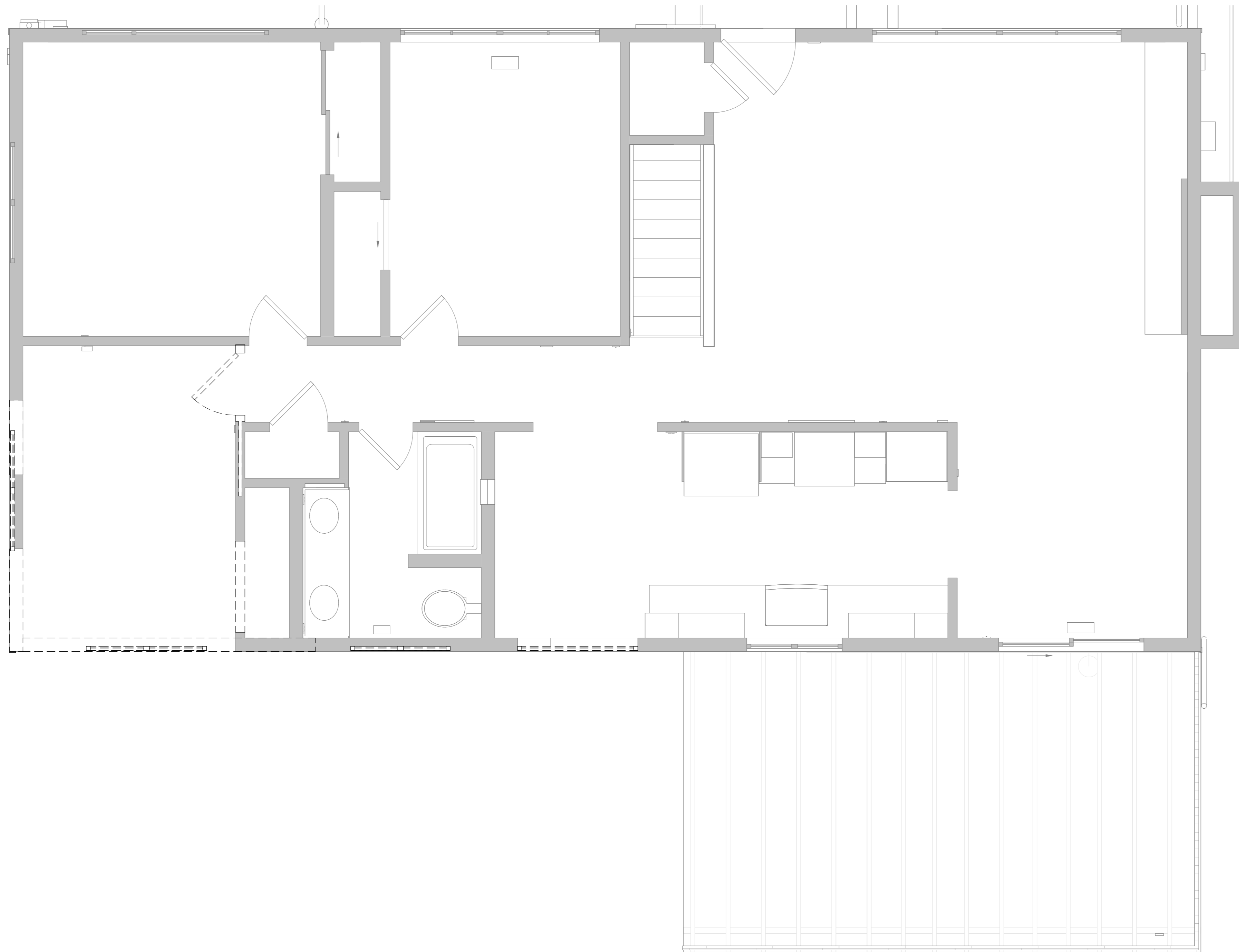
SHEET NAME:

**EXISTING / DEMO PLAN**

SHEET NO.:

**A000**

Scale: **As indicated**



1 DEMO MAIN LEVEL  
3/8" = 1'-0"

### DEMOLITION GENERAL NOTES

- A. EXISTING EXTERIOR AND FOUNDATION WALLS AND CONCRETE FOOTINGS TO REMAIN. EXISTING BASEMENT SLAB, TO REMAIN.
- B. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND CONSTRUCTION OPERATIONS.
- C. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY EXISTING UTILITIES NOT INDICATED ON DEMO/CONSTRUCTION PLANS THAT MAY INTERFERE WITH THE COMPLETION OF PROPOSED WORK.

--- TO BE REMOVED  
 ■ EXISTING TO REMAIN

### DEMOLITION KEYNOTES



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# XIAO ZHOU HOUSE ADDITION

CLIENT NAME: Xiao Zhou  
 PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040  
 BUILDER NAME:  
 BUILDER CONTACT:  
 BUILDER ADDRESS:

#### REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

DRAWN BY: Author

SHEET NAME:

EXISTING / DEMO PLAN

SHEET NO. A001

Scale: As indicated



1 EXISTING ROOF  
3/8" = 1'-0"

### DEMOLITION GENERAL NOTES

- A. EXISTING EXTERIOR AND FOUNDATION WALLS AND CONCRETE FOOTINGS TO REMAIN. EXISTING BASEMENT SLAB, TO REMAIN.
- B. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND CONSTRUCTION OPERATIONS.
- C. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY EXISTING UTILITIES NOT INDICATED ON DEMO/CONSTRUCTION PLANS THAT MAY INTERFERE WITH THE COMPLETION OF PROPOSED WORK.

--- TO BE REMOVED  
 ■ EXISTING TO REMAIN

### DEMOLITION KEYNOTES

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# XIAO ZHOU HOUSE ADDITION

CLIENT NAME: Xiao Zhou  
 PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040  
 BUILDER NAME:  
 BUILDER CONTACT:  
 BUILDER ADDRESS:

#### REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

DRAWN BY: Author

SHEET NAME:

EXISTING ROOF PLAN

SHEET NO. A002

Scale: As indicated

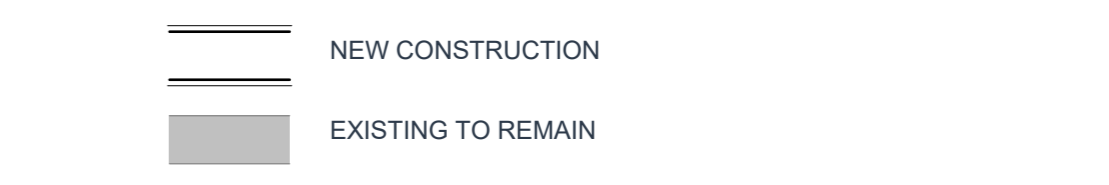
### FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE FROM FACE OF STUD OF NEW WALLS AND FINISHED SURFACE OF EXISTING WALLS UNLESS OTHERWISE NOTED.
- TYPICAL INTERIOR PARTITION IS 2x4 STUD @ 16" O.C. WITH ONE LAYER OF 1/2" GYP BOARD ON EACH SIDE, EXCEPT WHERE NOTED ON PLANS. USE 2x6 STUDS AT PLUMBING WALLS.
- 50 CFM EXHAUST FAN AT ALL NEW BATHROOMS
- CONTRACTOR WILL APPLY FOR PLUMBING, MECHANICAL, ELECTRICAL PERMITS SEPARATELY.
- WHOLE HOUSE FAN SHALL BE LOCATED/ASSOCIATED WITH THE MAIN FLOOR LAUNDRY FAN (CONTRACTOR TO VERIFY). THIS FAN TO BE EQUIPPED WITH CONTROLS CAPABLE OF MANUAL AND AUTOMATIC OPERATION, SUCH AS A CLOCK TIMER AND SHALL BE DESIGNED TO RUN CONTINUOUSLY PER SRC M1507.3.3
  - 3.1 IN NEW MASTER BATH AND W.C ON MAIN FLOOR, INSTALL PANASONIC WHISPERQUIET FAN SIZED PER SPACE (75 CFM, 1.0 SONES OR BETTER) FANS SHALL TERMINATE HORIZONTALLY TO THE EXTERIOR OF THE HOUSE.
  - 3.2 NEW KITCHEN HOOD TO BE SELECTED- MIN 100 CFM, 1.5 SONES OR BETTER, FANS SHALL TERMINATE HORIZONTALLY OR VERTICALLY TO THE EXTERIOR OF THE HOUSE.
- DOOR JAMBS SHALL BE 3 1/2" TYPICAL UNLESS OTHERWISE NOTES
- CONTRACTOR TO VERIFY TO INSPECTOR PRIOR TO FINAL DEMO INSPECTION, LOCATION, AND CONFIRMATION OF NON-STRUCTURAL DEMOED WALLS.
- ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WITH BATTERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL BE INTERCONNECTED AND COMPLY WITH HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72. CONTRACTOR TO PULL FIRE ALARM PERMIT FOR APPROPRIATE FIRE ALARM SYSTEM INSTALLER.
- KITCHEN EXHAUST FAN TO BE A MINIMUM OF 100 CFM
- BATHROOM EXHAUST FAN TO BE A MINIMUM OF 50 CFM

**INSULATION NOTES:**

1. ABOVE GRADE WALL: R20+5 OR R13+10  
R-20 CAVITY INSULATION PLUS R-5 CONTINUOUS INSULATION  
R-13 CAVITY INSULATION PLUS R-10 CONTINUOUS INSULATION

2. BELOW GRADE WALL: 10/15/21 INT + 5TB  
R-10 CONTINUOUS INSULATION ON THE EXTERIOR OF THE WALL, OR R-15 CONTINUOUS INSULATION ON THE INTERIOR OF THE WALL, OR R-21 CAVITY INSULATION PLUS A THERMAL BREAK BETWEEN THE SLAB AND THE BASEMENT WALL AT THE INTERIOR OF THE BASEMENT WALL. "10/15/21 +5TB" SHALL BE PERMITTED TO BE MET WITH R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL PLUS R-5 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE WALL. "5TB" MEANS R-5 THERMAL BREAK BETWEEN FLOOR SLAB AND BASEMENT WALL.



### FLOOR PLAN KEYNOTES

CD	CARBON MONOXIDE DETECTOR
EF	EXHAUST FAN
EW	EGRESS WINDOW
HD	HEAT DETECTOR
SD	SMOKE DETECTOR
WHF	WHOLE HOUSE FAN

**ROOF DRAINAGE CALCULATION**

PER 2021 UPC TABLE 1103.2

ROOF DECK AREA = 770 SF  
DESIGN RAINFALL RATE = 3.0 INCHES PER HOUR

CONVERT RAINFALL TO GALLONS PER MINUTE:

FORMULA:  
GPM = (ROOF AREA × RAINFALL RATE) / 96.23

GPM = (770 × 3.0) / 96.23  
GPM = 2310 / 96.23  
GPM = 24.0 GPM

REQUIRED FLOW CAPACITY = 24 GPM

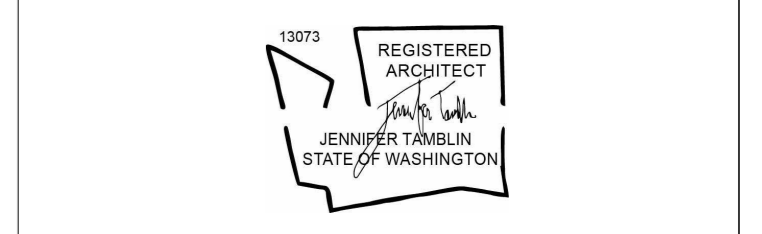
PER UPC TABLE 1103.2:

A 3-INCH VERTICAL ROOF DRAIN EXCEEDS REQUIRED CAPACITY FOR 24 GPM.

PROVIDED:

PRIMARY ROOF DRAIN: 3-INCH DIAMETER  
SECONDARY OVERFLOW: 3-INCH SCUPPER / OVERFLOW DRAIN

ROOF SLOPE: 1/4 INCH PER FOOT MINIMUM TOWARD PRIMARY DRAIN PER UPC 1101.12.



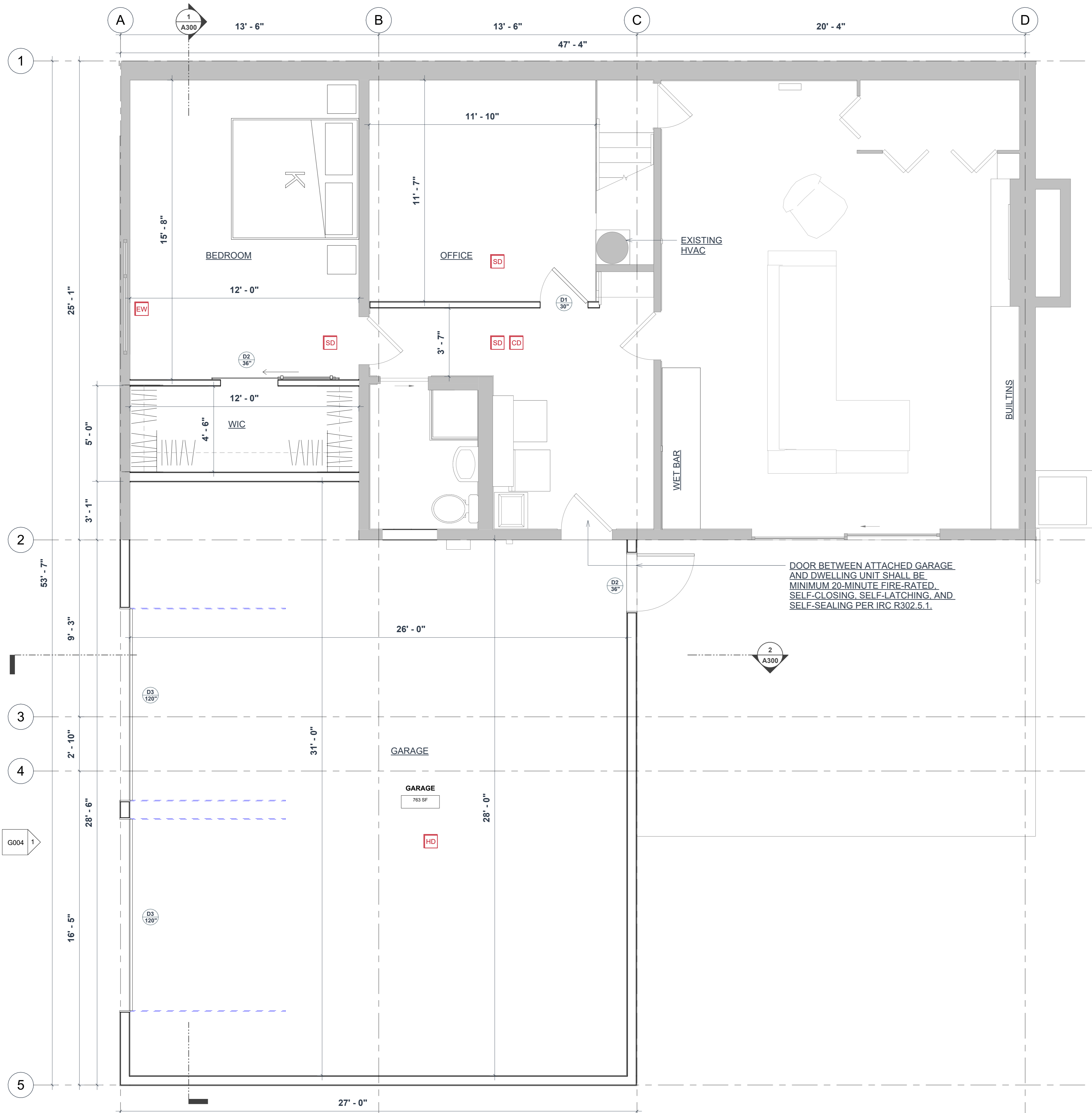
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# XIAO ZHOU HOUSE ADDITION

CLIENT NAME	Xiao Zhou
PROJECT ADDRESS	4433 86th Ave SE Mercer Island, WA 98040
BUILDER NAME	
BUILDER CONTACT	
BUILDER ADDRESS	
STATUS:	PERMIT
DPS PERMIT NUMBER:	
BNA Project number:	XXXXXX
DRAWN BY:	Author
SHEET NAME:	FLOOR PLAN
SHEET NO.:	A100
Scale:	As indicated



### 1 BASEMENT NEW

3/8" = 1'-0"

## FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE FROM FACE OF STUD OF NEW WALLS AND FINISHED SURFACE OF EXISTING WALLS UNLESS OTHERWISE NOTED.
- TYPICAL INTERIOR PARTITION IS 2x4 STUD @ 16" O.C. WITH ONE LAYER OF 1/2" GYP BOARD ON EACH SIDE, EXCEPT WHERE NOTED ON PLANS. USE 2x6 STUDS AT PLUMBING WALLS.
- 50 CFM EXHAUST FAN AT ALL NEW BATHROOMS
- CONTRACTOR WILL APPLY FOR PLUMBING, MECHANICAL, ELECTRICAL PERMITS SEPARATELY.
- WHOLE HOUSE FAN SHALL BE LOCATED/ASSOCIATED WITH THE MAIN FLOOR LAUNDRY FAN (CONTRACTOR TO VERIFY). THIS FAN TO BE EQUIPPED WITH CONTROLS CAPABLE OF MANUAL AND AUTOMATIC OPERATION, SUCH AS A CLOCK TIMER AND SHALL BE DESIGNED TO RUN CONTINUOUSLY PER SRC M1507.3.3  
 3.1 IN NEW MASTER BATH AND W.C ON MAIN FLOOR, INSTALL PANASONIC WHISPERQUIET FAN SIZED PER SPACE (75 CFM, 1.0 SONES OR BETTER) FANS SHALL TERMINATE HORIZONTALLY TO THE EXTERIOR OF THE HOUSE.  
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- DOOR JAMBS SHALL BE 3 1/2" TYPICAL UNLESS OTHERWISE NOTES
- CONTRACTOR TO VERIFY TO INSPECTOR PRIOR TO FINAL DEMO INSPECTION, LOCATION, AND CONFIRMATION OF NON-STRUCTURAL DEMOED WALLS.
- ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WITH BATTERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL BE INTERCONNECTED AND COMPLY WITH HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72. CONTRACTOR TO PULL FIRE ALARM PERMIT FOR APPROPRIATE FIRE ALARM SYSTEM INSTALLER.
- KITCHEN EXHAUST FAN TO BE A MINIMUM OF 100 CFM
- BATHROOM EXHAUST FAN TO BE A MINIMUM OF 50 CFM

### INSULATION NOTES:

- ABOVE GRADE WALL: R20+5 OR R13+10  
 R-20 CAVITY INSULATION PLUS R-5 CONTINUOUS INSULATION  
 R-13 CAVITY INSULATION PLUS R-10 CONTINUOUS INSULATION
- BELOW GRADE WALL: 10/15/21 INT + 5TB  
 R-10 CONTINUOUS INSULATION ON THE EXTERIOR OF THE WALL, OR R-15 CONTINUOUS INSULATION ON THE INTERIOR OF THE WALL, OR R-21 CAVITY INSULATION PLUS A THERMAL BREAK BETWEEN THE SLAB AND THE BASEMENT WALL AT THE INTERIOR OF THE BASEMENT WALL. "10/15/21 +5TB" SHALL BE PERMITTED TO BE MET WITH R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL PLUS R-5 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE WALL.  
 "5TB" MEANS R-5 THERMAL BREAK BETWEEN FLOOR SLAB AND BASEMENT WALL.

- NEW CONSTRUCTION
- EXISTING TO REMAIN

## FLOOR PLAN KEYNOTES

- CD CARBON MONOXIDE DETECTOR
- EF EXHAUST FAN
- EW EGRESS WINDOW
- HD HEAT DETECTOR
- SD SMOKE DETECTOR
- WHF WHOLE HOUSE FAN

### ROOF DRAINAGE CALCULATION

PER 2021 UPC TABLE 1103.2

ROOF DECK AREA = 770 SF  
 DESIGN RAINFALL RATE = 3.0 INCHES PER HOUR

CONVERT RAINFALL TO GALLONS PER MINUTE:

FORMULA:  
 $GPM = (ROOF AREA \times RAINFALL RATE) / 96.23$

$GPM = (770 \times 3.0) / 96.23$   
 $GPM = 2310 / 96.23$   
 $GPM = 24.0 GPM$

REQUIRED FLOW CAPACITY = 24 GPM

PER UPC TABLE 1103.2:

A 3-INCH VERTICAL ROOF DRAIN EXCEEDS REQUIRED CAPACITY FOR 24 GPM.

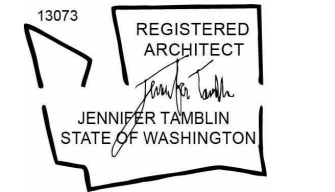
PROVIDED:

PRIMARY ROOF DRAIN: 3-INCH DIAMETER  
 SECONDARY OVERFLOW: 3-INCH SCUPPER / OVERFLOW DRAIN

ROOF SLOPE: 1/4 INCH PER FOOT MINIMUM TOWARD PRIMARY DRAIN PER UPC 1101.12.

Scale As indicated

ORIGINAL DRAWING SIZE IS 36" X 24" DO NOT SCALE DRAWINGS FOR MEASUREMENTS



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# XIAO ZHOU HOUSE ADDITION

BUILDER NAME: Xiao Zhou  
 BUILDER CONTACT: 4433 86th Ave SE Mercer Island, WA 98040  
 BUILDER ADDRESS:

### REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

DRAWN BY: Author

SHEET NAME:

FLOOR PLAN

SHEET NO. A101

Scale As indicated



**1 MAIN LEVEL NEW**  
 3/8" = 1'-0"

## FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE FROM FACE OF STUD OF NEW WALLS AND FINISHED SURFACE OF EXISTING WALLS UNLESS OTHERWISE NOTED.
- TYPICAL INTERIOR PARTITION IS 2x4 STUD @ 16" O.C. WITH ONE LAYER OF 1/2" GYP BOARD ON EACH SIDE, EXCEPT WHERE NOTED ON PLANS. USE 2x6 STUDS AT PLUMBING WALLS.
- 50 CFM EXHAUST FAN AT ALL NEW BATHROOMS
- CONTRACTOR WILL APPLY FOR PLUMBING, MECHANICAL, ELECTRICAL PERMITS SEPARATELY.
- WHOLE HOUSE FAN SHALL BE LOCATED/ASSOCIATED WITH THE MAIN FLOOR LAUNDRY FAN (CONTRACTOR TO VERIFY). THIS FAN TO BE EQUIPPED WITH CONTROLS CAPABLE OF MANUAL AND AUTOMATIC OPERATION, SUCH AS A CLOCK TIMER AND SHALL BE DESIGNED TO RUN CONTINUOUSLY PER SRC M1507.3.3
  - 3.1 IN NEW MASTER BATH AND W.C ON MAIN FLOOR, INSTALL PANASONIC WHISPERQUIET FAN SIZED PER SPACE (75 CFM, 1.0 SONES OR BETTER) FANS SHALL TERMINATE HORIZONTALLY TO THE EXTERIOR OF THE HOUSE.
  - 3.2 NEW KITCHEN HOOD TO BE SELECTED- MIN 100 CFM, 1.5 SONES OR BETTER, FANS SHALL TERMINATE HORIZONTALLY OR VERTICALLY TO THE EXTERIOR OF THE HOUSE.
- DOOR JAMBS SHALL BE 3 1/2" TYPICAL UNLESS OTHERWISE NOTES
- CONTRACTOR TO VERIFY TO INSPECTOR PRIOR TO FINAL DEMO INSPECTION, LOCATION, AND CONFIRMATION OF NON-STRUCTURAL DEMOED WALLS.
- ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WITH BATTERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL BE INTERCONNECTED AND COMPLY WITH HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72. CONTRACTOR TO PULL FIRE ALARM PERMIT FOR APPROPRIATE FIRE ALARM SYSTEM INSTALLER.
- KITCHEN EXHAUST FAN TO BE A MINIMUM OF 100 CFM
- BATHROOM EXHAUST FAN TO BE A MINIMUM OF 50 CFM

### INSULATION NOTES:

- ABOVE GRADE WALL: R20+5 OR R13+10  
R-20 CAVITY INSULATION PLUS R-5 CONTINUOUS INSULATION  
R-13 CAVITY INSULATION PLUS R-10 CONTINUOUS INSULATION
- BELOW GRADE WALL: 10/15/21 INT + 5TB  
R-10 CONTINUOUS INSULATION ON THE EXTERIOR OF THE WALL, OR R-15 CONTINUOUS INSULATION ON THE INTERIOR OF THE WALL, OR R-21 CAVITY INSULATION PLUS A THERMAL BREAK BETWEEN THE SLAB AND THE BASEMENT WALL AT THE INTERIOR OF THE BASEMENT WALL. "10/15/21 +5TB" SHALL BE PERMITTED TO BE MET WITH R-13 CAVITY INSULATION ON THE INTERIOR OF THE BASEMENT WALL PLUS R-5 CONTINUOUS INSULATION ON THE INTERIOR OR EXTERIOR OF THE WALL. "5TB" MEANS R-5 THERMAL BREAK BETWEEN FLOOR SLAB AND BASEMENT WALL.

- NEW CONSTRUCTION
- EXISTING TO REMAIN

## FLOOR PLAN KEYNOTES

CD	CARBON MONOXIDE DETECTOR
EF	EXHAUST FAN
EW	EGRESS WINDOW
HD	HEAT DETECTOR
SD	SMOKE DETECTOR
WHF	WHOLE HOUSE FAN

### ROOF DRAINAGE CALCULATION

PER 2021 UPC TABLE 1103.2

ROOF DECK AREA = 770 SF  
DESIGN RAINFALL RATE = 3.0 INCHES PER HOUR

CONVERT RAINFALL TO GALLONS PER MINUTE:

FORMULA:  
GPM = (ROOF AREA × RAINFALL RATE) / 96.23

GPM = (770 × 3.0) / 96.23  
GPM = 2310 / 96.23  
GPM = 24.0 GPM

REQUIRED FLOW CAPACITY = 24 GPM

PER UPC TABLE 1103.2:

A 3-INCH VERTICAL ROOF DRAIN EXCEEDS REQUIRED CAPACITY FOR 24 GPM.

PROVIDED:

PRIMARY ROOF DRAIN: 3-INCH DIAMETER  
SECONDARY OVERFLOW: 3-INCH SCUPPER / OVERFLOW DRAIN

ROOF SLOPE: 1/4 INCH PER FOOT MINIMUM TOWARD PRIMARY DRAIN PER UPC 1101.12.



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# XIAO ZHOU HOUSE ADDITION

CLIENT NAME: Xiao Zhou  
PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040

### REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

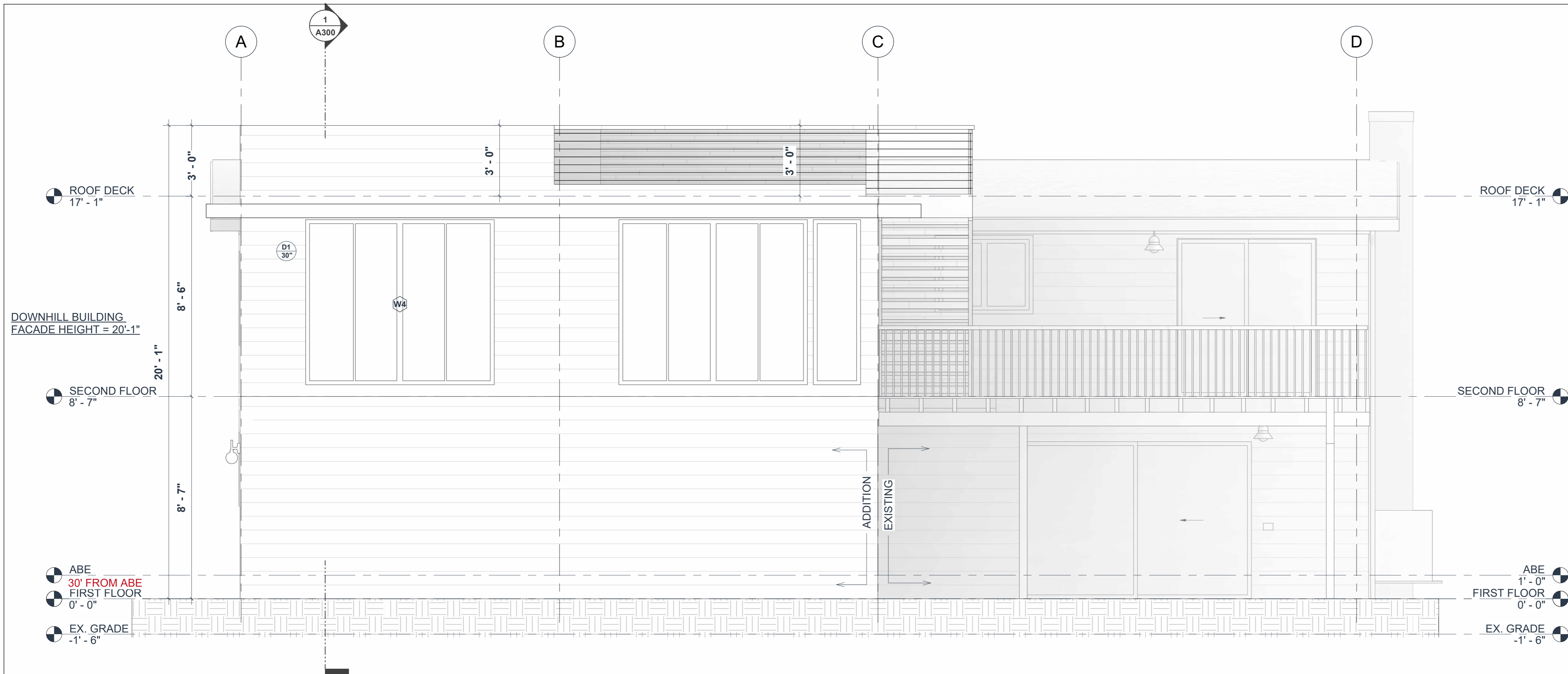
DRAWN BY: Author

SHEET NAME: ROOF PLAN

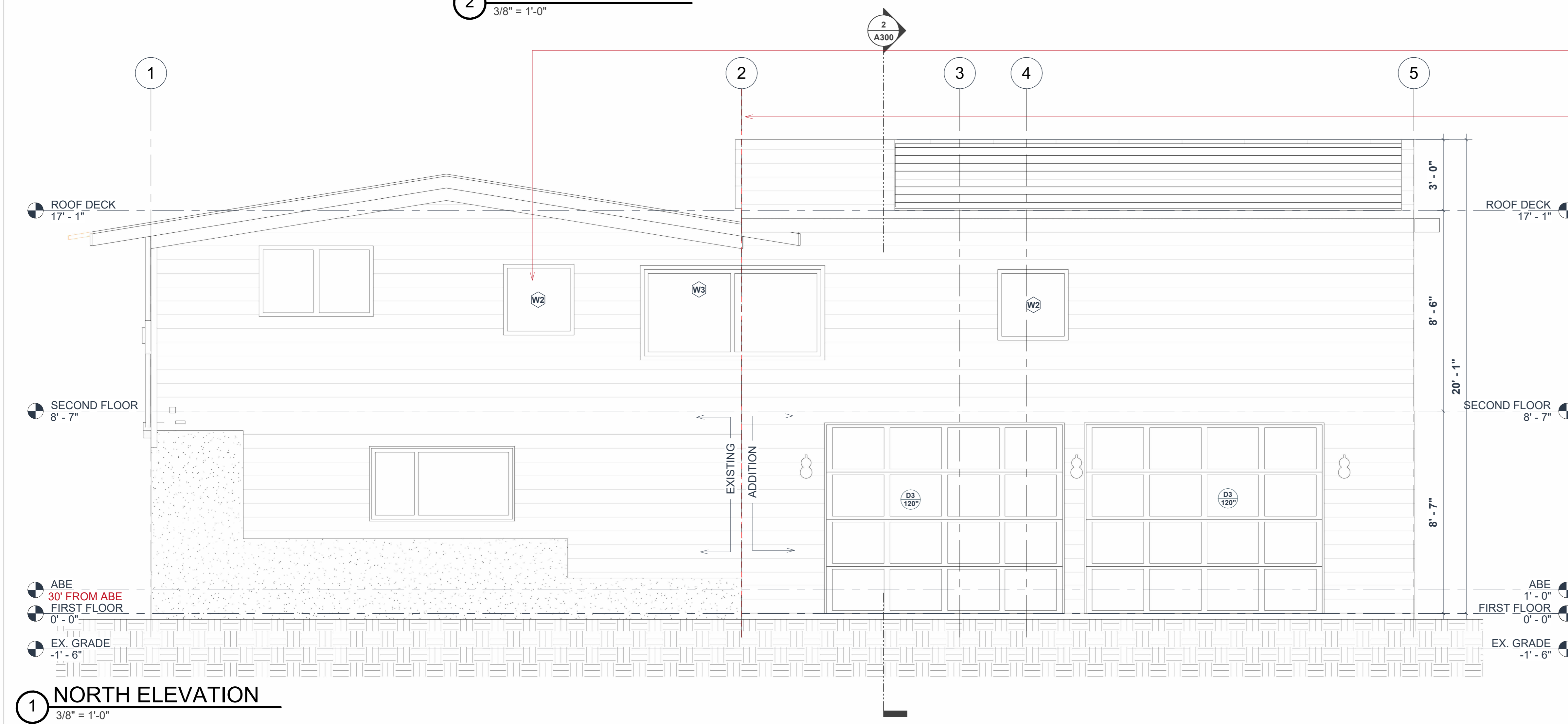
SHEET NO. A102

Scale: As indicated

**1 ROOF DECK**  
3/8" = 1'-0"



**2 WEST ELEVATION**  
3/8" = 1'-0"



**1 NORTH ELEVATION**  
3/8" = 1'-0"

**ELEVATION GENERAL NOTES**

NEW WINDOW IN EXISTING WALL — EXISTING WALL TO REMAIN, NOT DEMOLISHED OR STRUCTURALLY ALTERED.

NEW ADDITION BEGINS

PER MICC 19.01.050(D)(1)(B)(I), INSTALLATION OF A NEW WINDOW OPENING IN AN EXISTING NONCONFORMING EXTERIOR WALL DOES NOT CONSTITUTE A STRUCTURAL ALTERATION OF THE WALL LENGTH AND IS NOT INCLUDED IN THE 40% THRESHOLD CALCULATION. THE EXISTING NONCONFORMING WALL IS NOT BEING DEMOLISHED OR EXTENDED.

**ELEVATION KEYNOTES**

NEW WINDOW IN EXISTING WALL — EXISTING WALL TO REMAIN, NOT DEMOLISHED OR STRUCTURALLY ALTERED.

NEW ADDITION BEGINS

PER MICC 19.01.050(D)(1)(B)(I), INSTALLATION OF A NEW WINDOW OPENING IN AN EXISTING NONCONFORMING EXTERIOR WALL DOES NOT CONSTITUTE A STRUCTURAL ALTERATION OF THE WALL LENGTH AND IS NOT INCLUDED IN THE 40% THRESHOLD CALCULATION. THE EXISTING NONCONFORMING WALL IS NOT BEING DEMOLISHED OR EXTENDED.

**DRIFT INTERIOR ARCHITECTURE**

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www.drift-ia.com

REGISTERED ARCHITECT  
JENNIFER TABLIN  
STATE OF WASHINGTON

Registered Architect in WA State

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**XIAO ZHOU HOUSE ADDITION**

CLIENT NAME: Xiao Zhou  
PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040

BUILDER NAME: \_\_\_\_\_  
BUILDER CONTACT: \_\_\_\_\_  
BUILDER ADDRESS: \_\_\_\_\_

REV #	DATE	DESCRIPTION

STATUS: **PERMIT**

DPS PERMIT NUMBER: \_\_\_\_\_

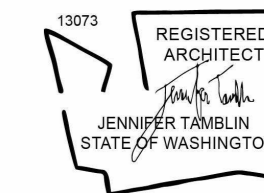
BNA Project number: **XXXXXX**

DRAWN BY: **Author**

SHEET NAME: **BUILDING ELEVATION**

SHEET NO.: **A200**

Scale: 3/8" = 1'-0"



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**XIAO ZHOU HOUSE ADDITION**

BUILDER NAME  
BUILDER CONTACT  
BUILDER ADDRESS

CLIENT NAME  
**Xiao Zhou**  
PROJECT ADDRESS  
**4433 86th Ave SE Mercer Island, WA 98040**

REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: **PERMIT**

DPS PERMIT NUMBER:

BNA Project number: **XXXXXX**

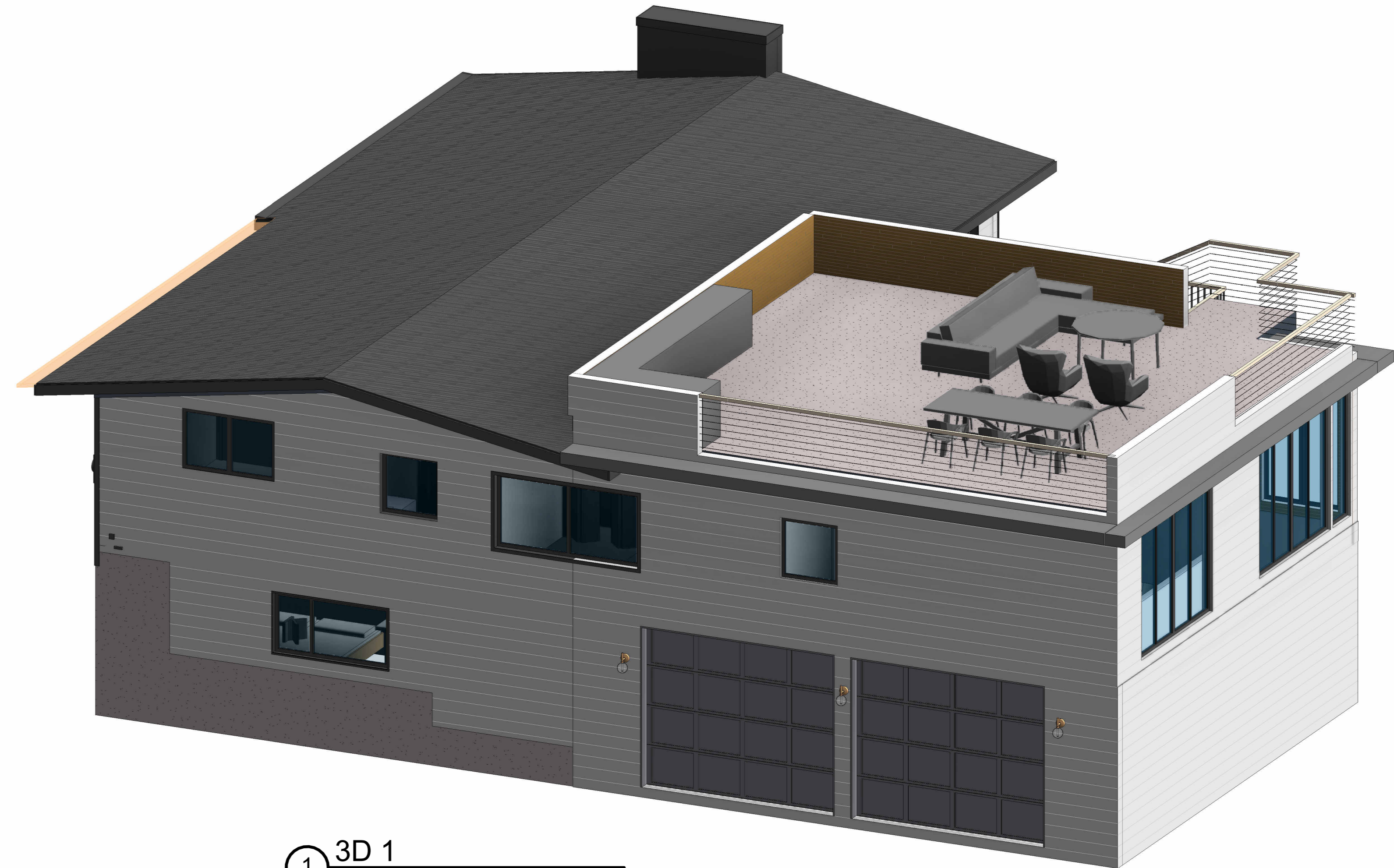
DRAWN BY: **Author**

SHEET NAME:

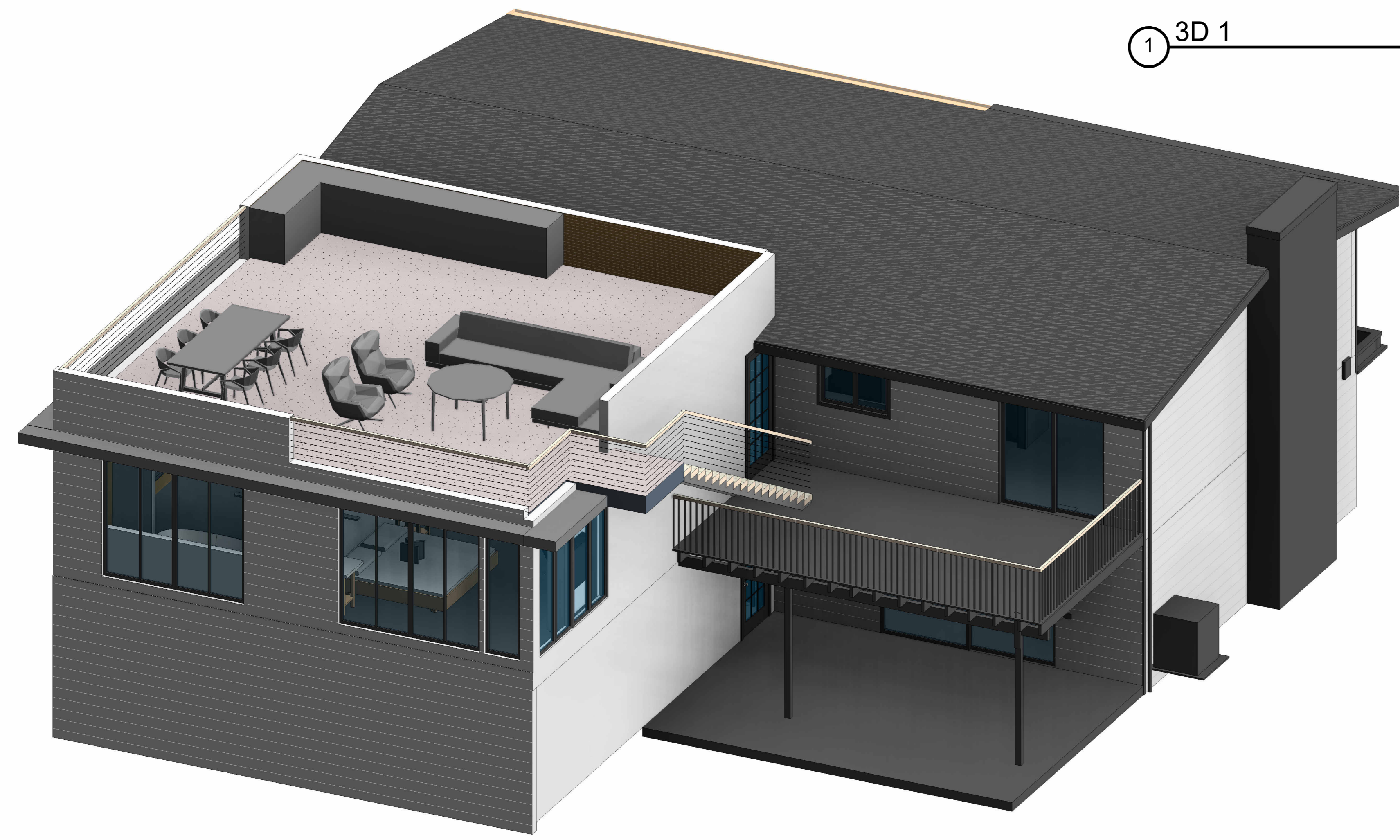
**BUILDING ELEVATION**

SHEET NO. **A201**

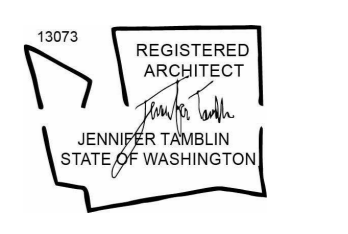
Scale



① 3D 1



② 3D 2



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# XIAO ZHOU HOUSE ADDITION

CLIENT NAME: Xiao Zhou  
PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040  
BUILDER NAME: \_\_\_\_\_  
BUILDER CONTACT: \_\_\_\_\_  
BUILDER ADDRESS: \_\_\_\_\_

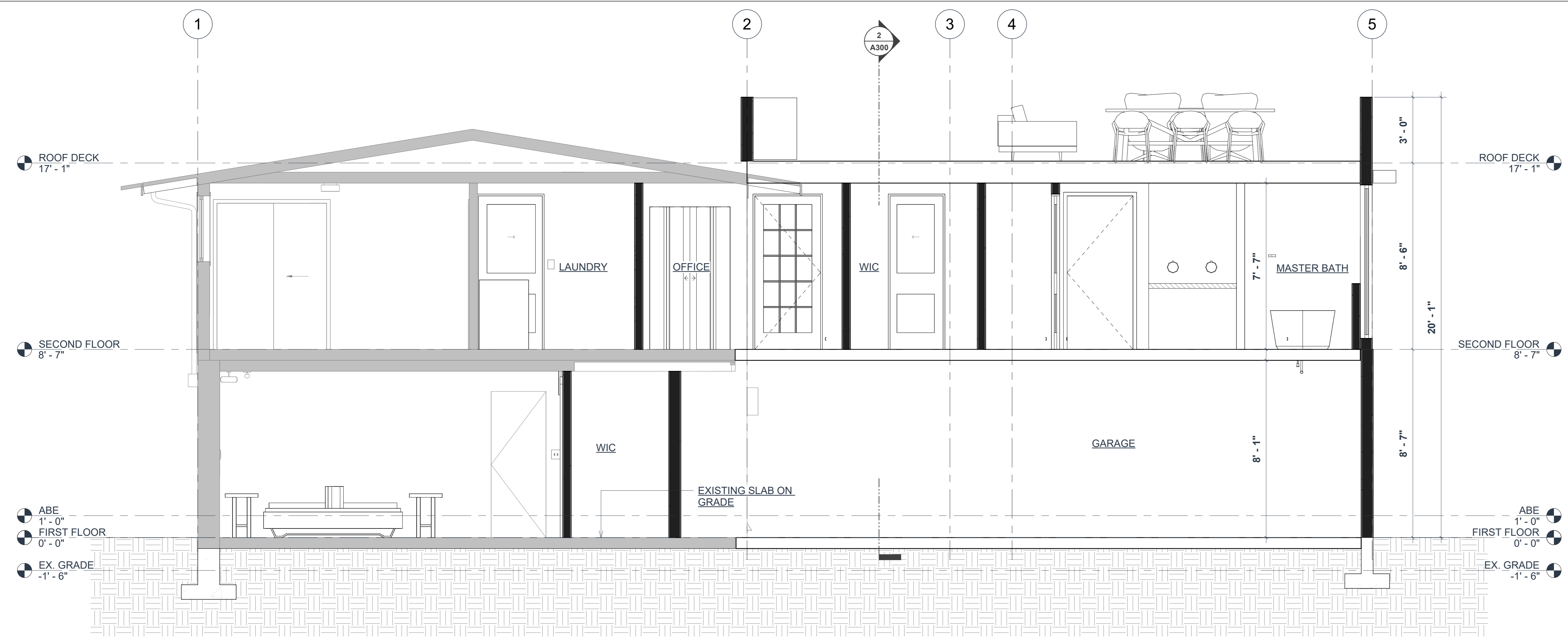
REV #	DATE	DESCRIPTION

STATUS: PERMIT  
DPS PERMIT NUMBER: \_\_\_\_\_  
BNA Project number: XXXXXX  
DRAWN BY: Author

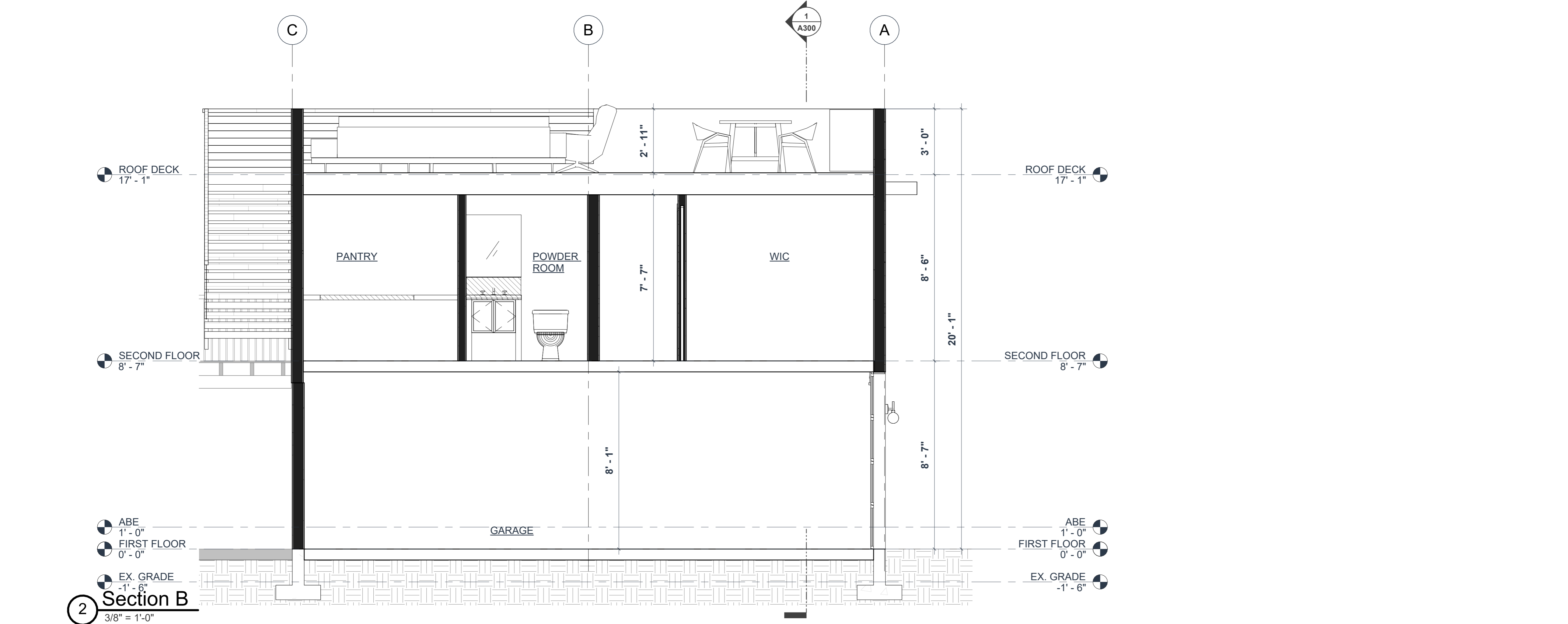
SHEET NAME: BUILDING SECTIONS

SHEET NO. A300

Scale: 3/8" = 1'-0"



1 Section A  
3/8" = 1'-0"



2 Section B  
3/8" = 1'-0"

ROOF

**SPRAY FOAM INFORMATION:**

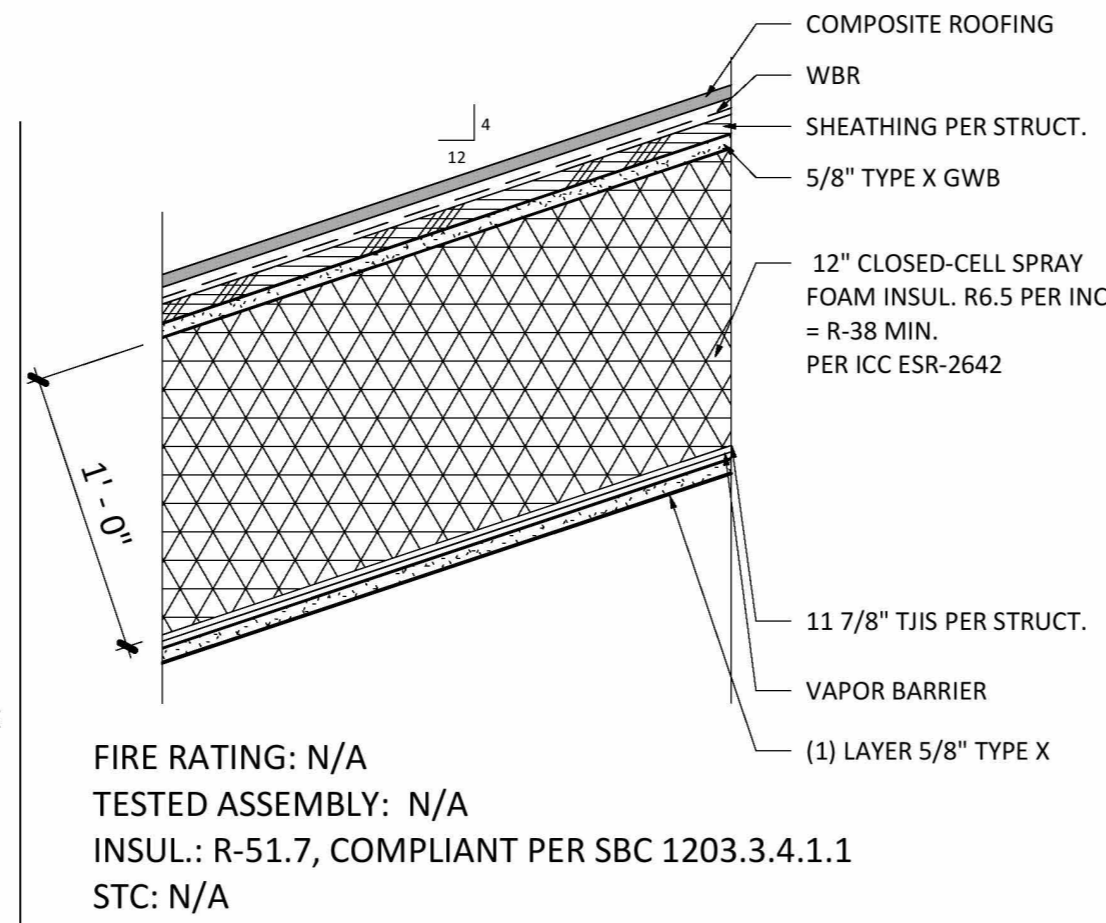
PRODUCT NAME: SPRAYTITE, 158, 178, 81205 AND 81206

MANUFACTURER: BASF CORPORATION

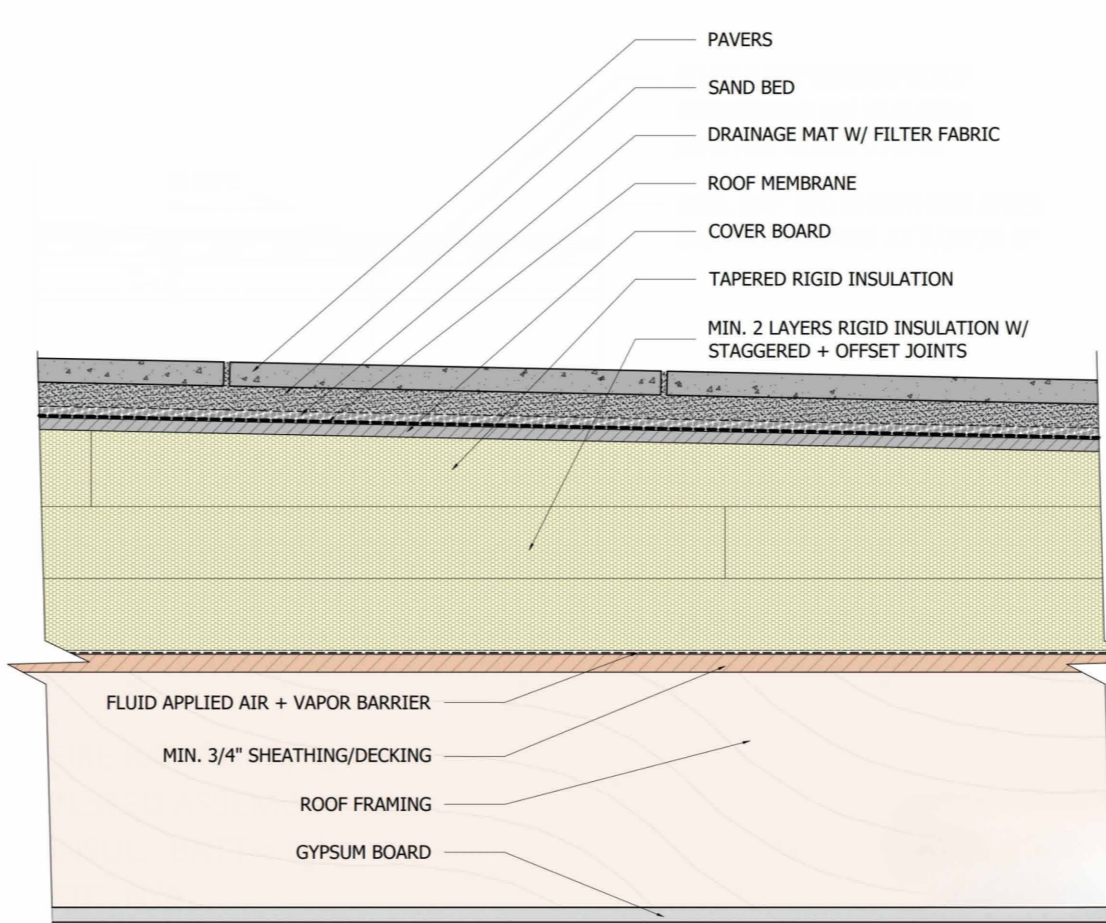
ICC-ES REPORT ISSUE: ESR-2642

**ADDITIONAL NOTES:**

1. CONFIRM THAT THE APPLICATION OF SPRAY FOAM IS CONSISTANT WITH THE "CONDITIONS OF USE" AND COMPLIES WITH IRC R806.5.5.1.2. WHERE AIR-PERMEABLE INSULATION IS PROVIDED INSIDE THE BUILDING THERMAL ENVELOPE, IT SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 5.1. IN ADDITION TO THE AIR-PERMEABLE INSULATION INSTALLED DIRECTLY BELOW THE STRUCTURAL SHEATHING, RIGID BOARD OR SHEET INSULATION SHALL BE INSTALLED DIRECTLY ABOVE THE STRUCTURAL ROOF SHEATHING IN ACCORDANCE WITH THE R-VALUES IN TABLE R806.5 FOR CONDENSATION CONTROL.
2. A COPY OF THE ICC-ES REPORT FOR THE INSULATION PRODUCT MUST BE PROVIDED ON SITE FOR THE FIELD INSPECTOR.
3. THE APPLIED SPRAY FOAM MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BY A CERTIFIED INSTALLER.

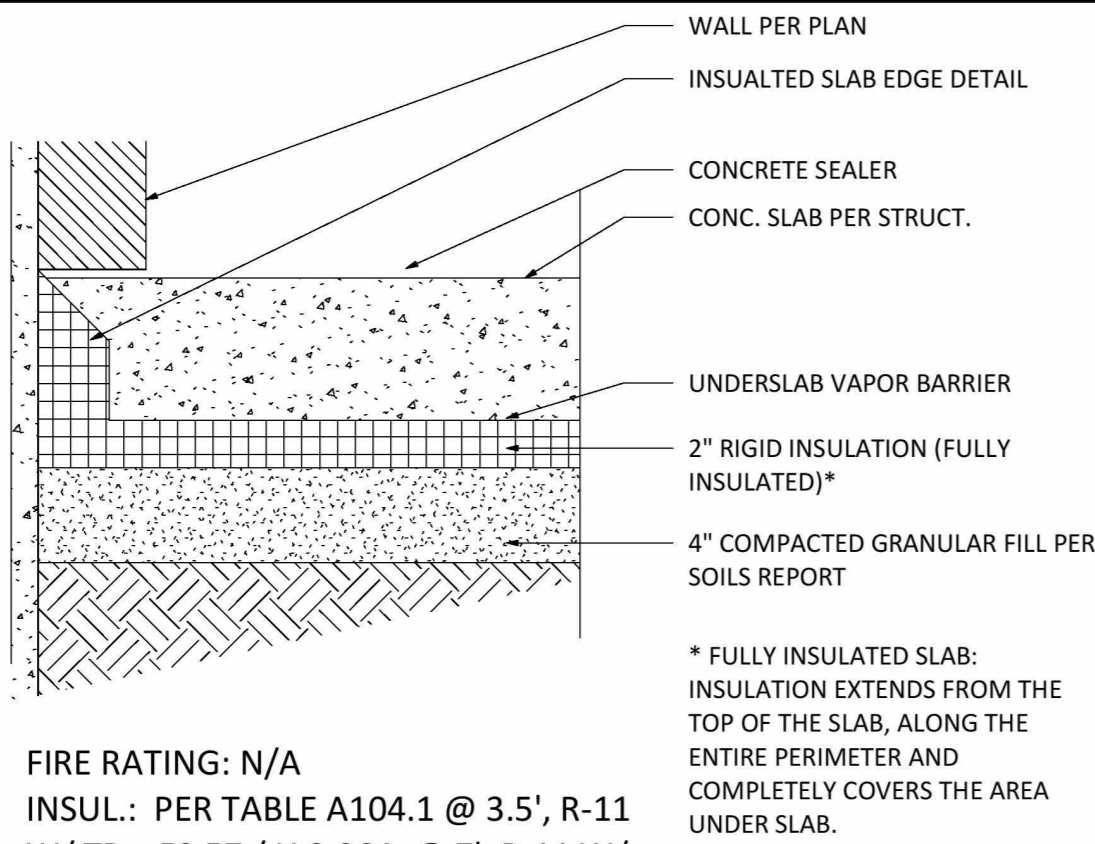


**R1 ROOF/CLG @ SLOPED ROOF**  
1 1/2" = 1'-0"



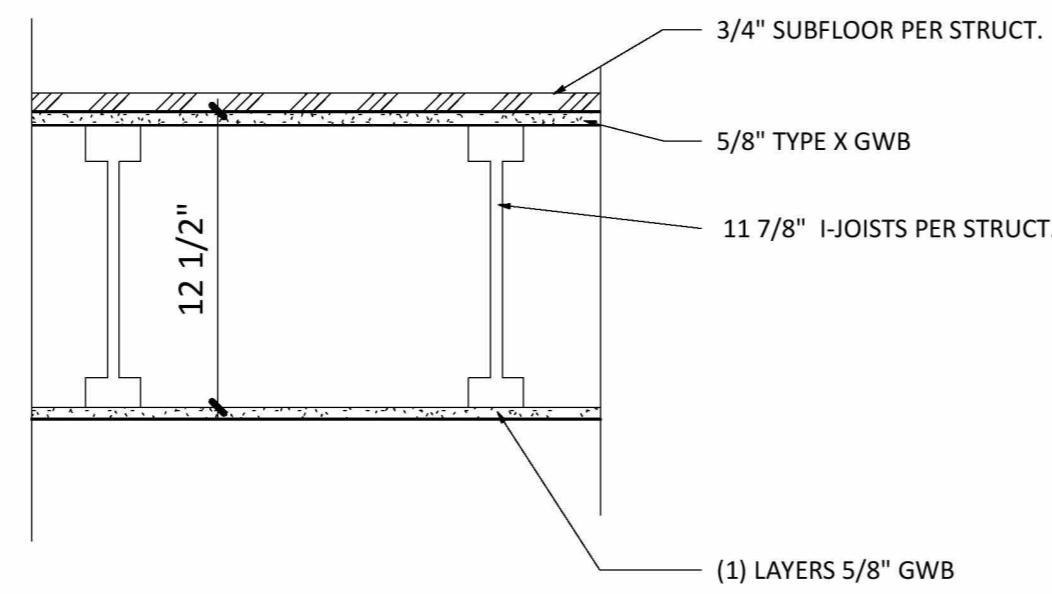
**R2 ROOF/CEILING @ DECK**  
1 1/2" = 1'-0"

FLOOR



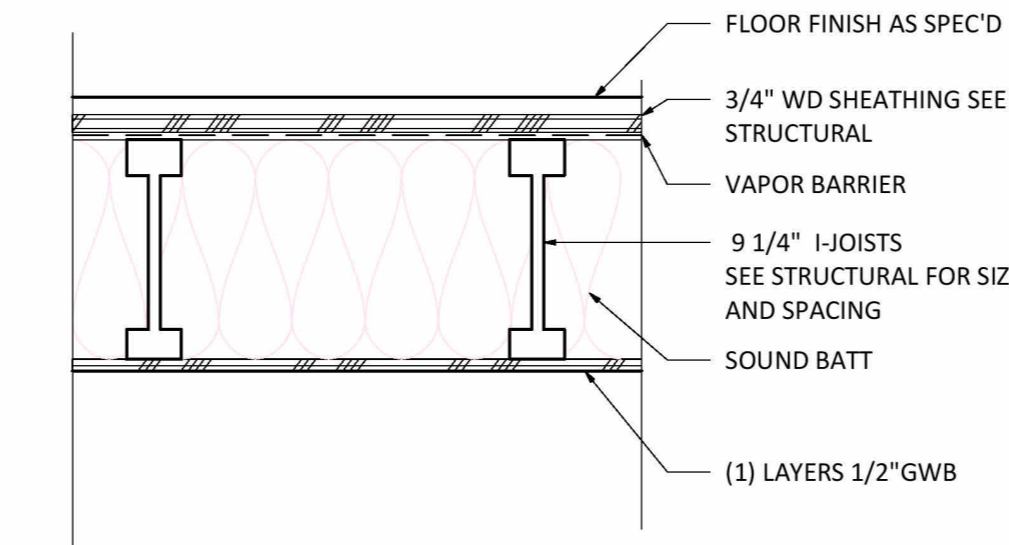
FIRE RATING: N/A  
INSUL.: PER TABLE A104.1 @ 3.5', R-11  
W/ TB = F0.57 / U 0.064; @ 7', R-11 W/  
TB = F0.42 / U 0.056  
STC: N/A

**F1 FLOOR @ SLAB ON GRADE<sup>1</sup>**  
1 1/2" = 1'-0"



FIRE RATING: N/A  
TESTED ASSEMBLY: N/A  
INSUL.: N/A  
STC: N/A

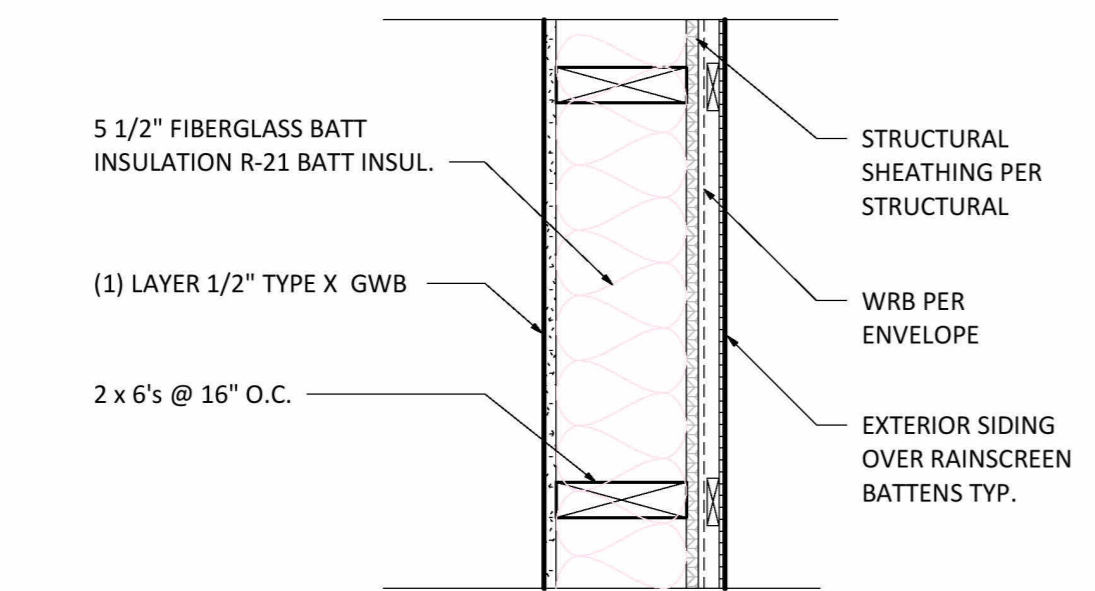
**F2 TYP FLOOR/CEILING @ UNITS**  
1 1/2" = 1'-0"



FIRE TEST: 1 HR  
TEST ASSEMBLY: 1 HR, SBC TABLE 721.1(3) #21-1.1  
INSUL.: R-30 MIN.  
STC: N/A

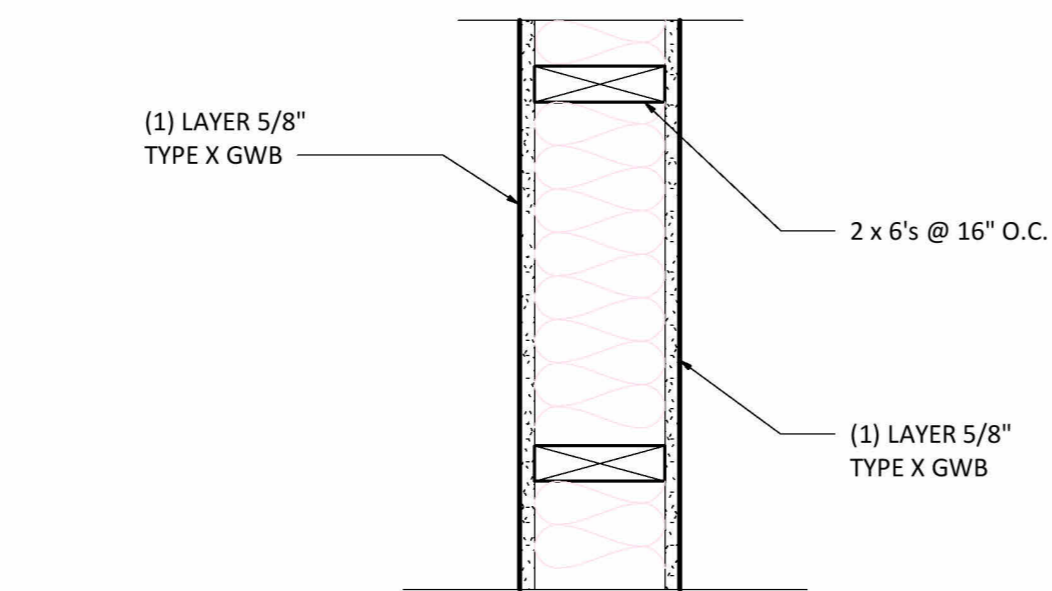
**F3 TYP FLOOR/CEILING**  
1 1/2" = 1'-0"

WALL



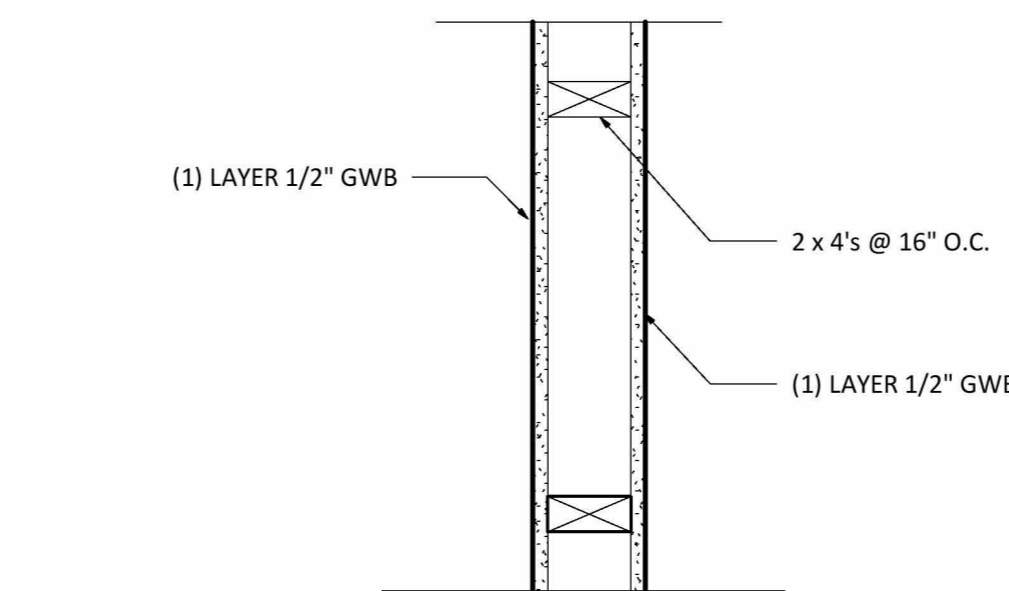
FIRE RATING: N/A  
TESTED ASSEMBLY: CALC. PER SEC. 721.6  
INSUL.: R-21, BATT INSUL.  
STC: N/A

**W1 TYP. EXT. WALL @ 2X6**  
1 1/2" = 1'-0"



FIRE RATING: 1 HR  
TEST: NA  
INSUL.: BATT  
STC: NA

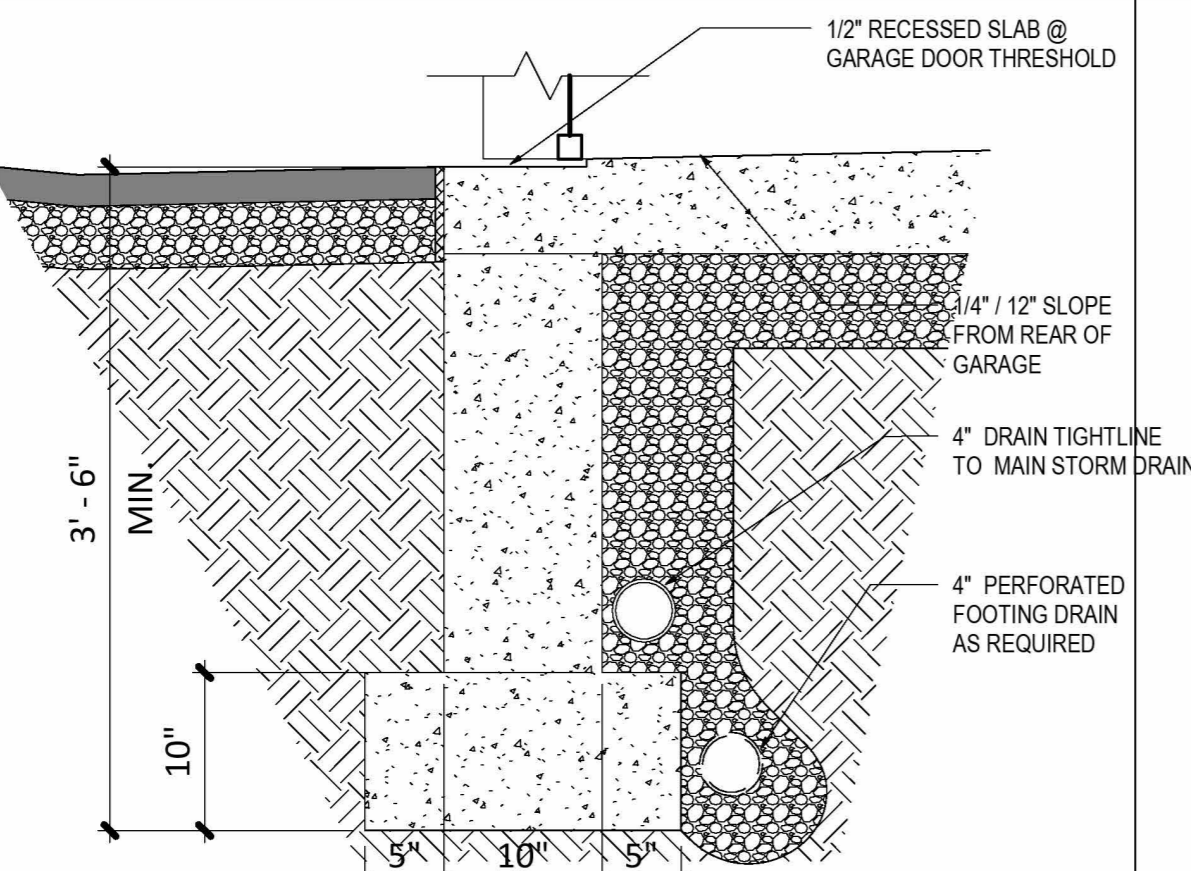
**W2 TYP INTERIOR WALL @ 2X6**  
1 1/2" = 1'-0"



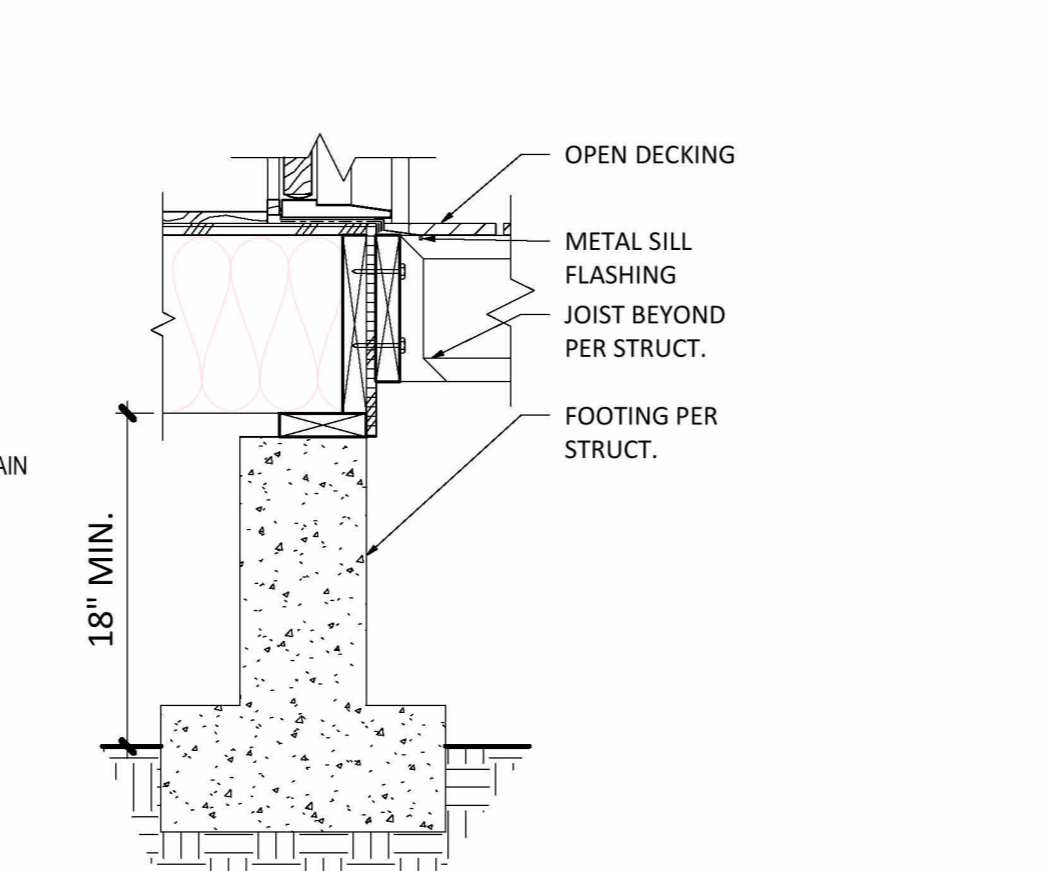
FIRE RATING: NA  
TEST: NA  
INSUL.: NA  
STC: NA

**W3 TYP INTERIOR WALL @ 2X4**  
1 1/2" = 1'-0"

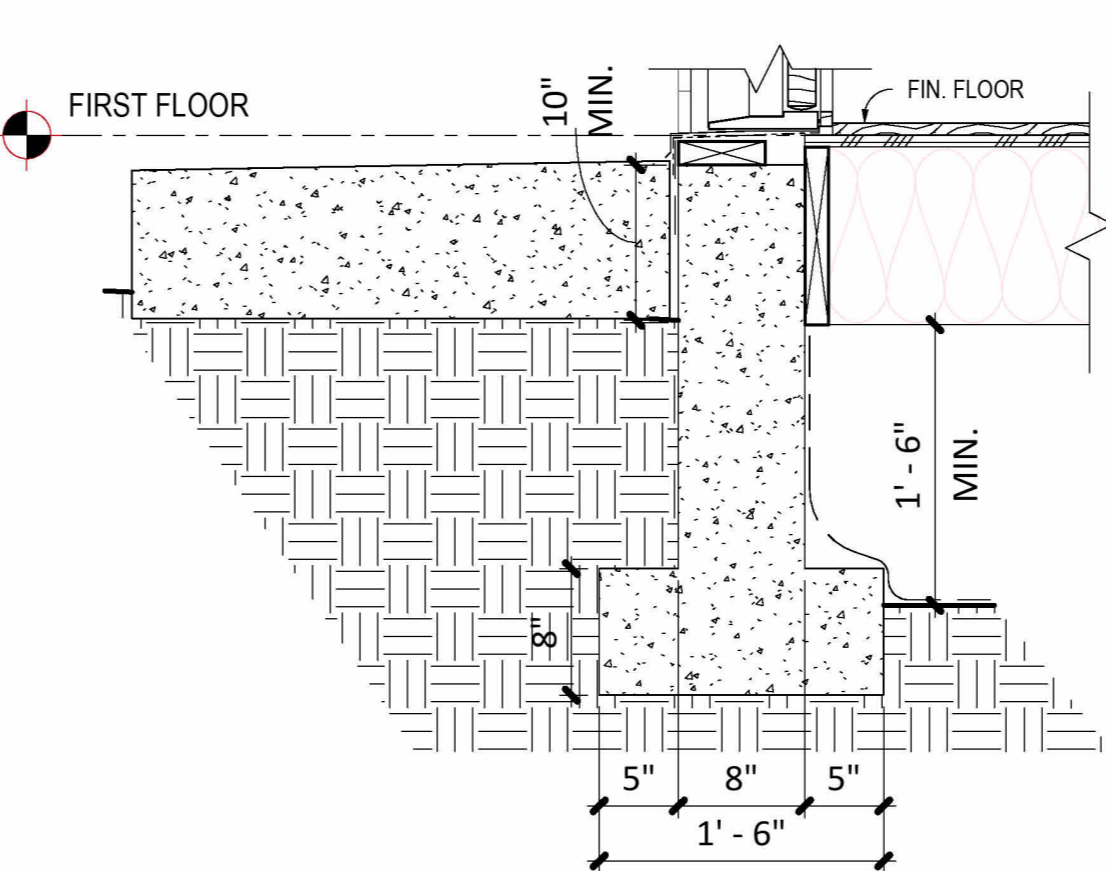
FOUNDATION



**1 FOUNDATN @ GARAGE ENTRY**



**2 FOUNDATION @ DECK**



**3 FOUNDATION @ ENTRY**



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**XIAO ZHOU HOUSE ADDITION**

CLIENT NAME: Xiao Zhou  
PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040

BUILDER NAME: Xiao Zhou

BUILDER CONTACT:

BUILDER ADDRESS:

REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: PERMIT

DPS PERMIT NUMBER:

BNA Project number: XXXXXX

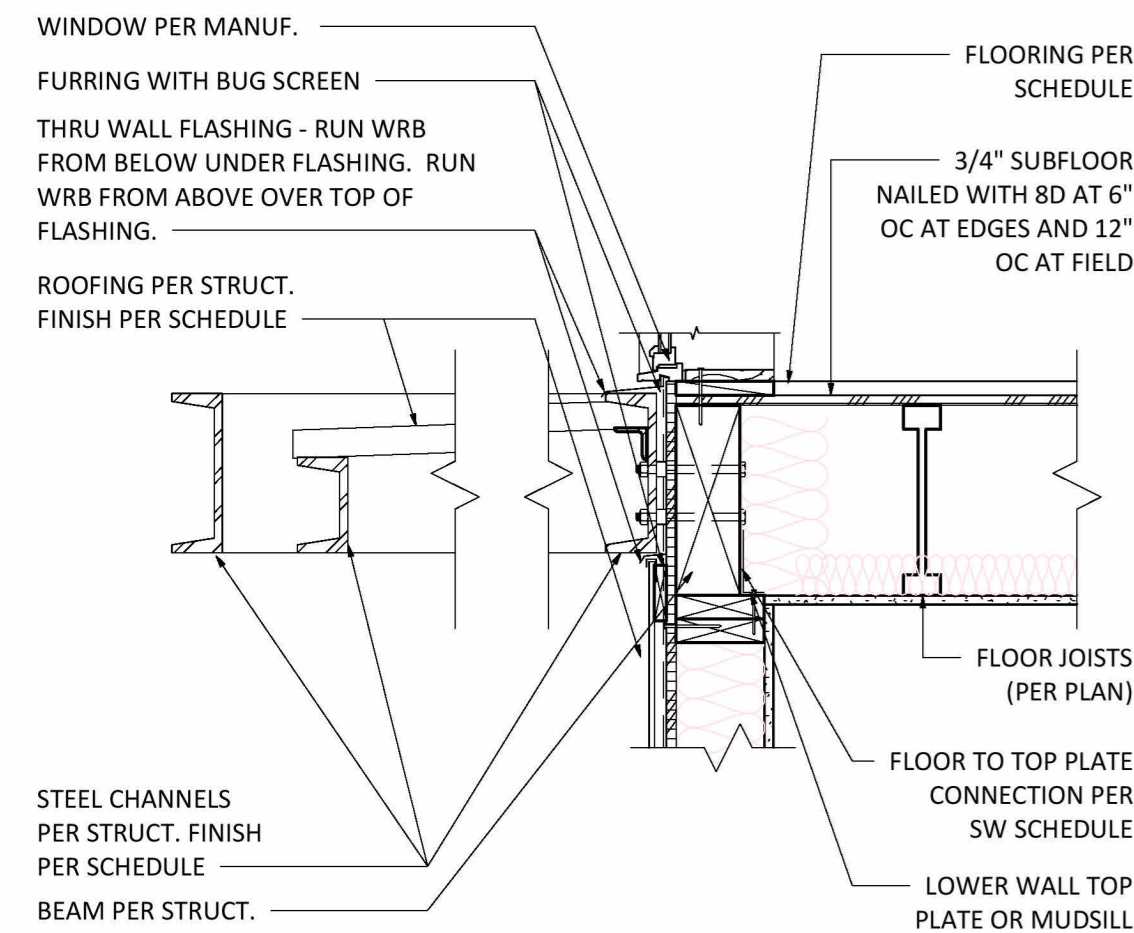
DRAWN BY: Author

SHEET NAME:

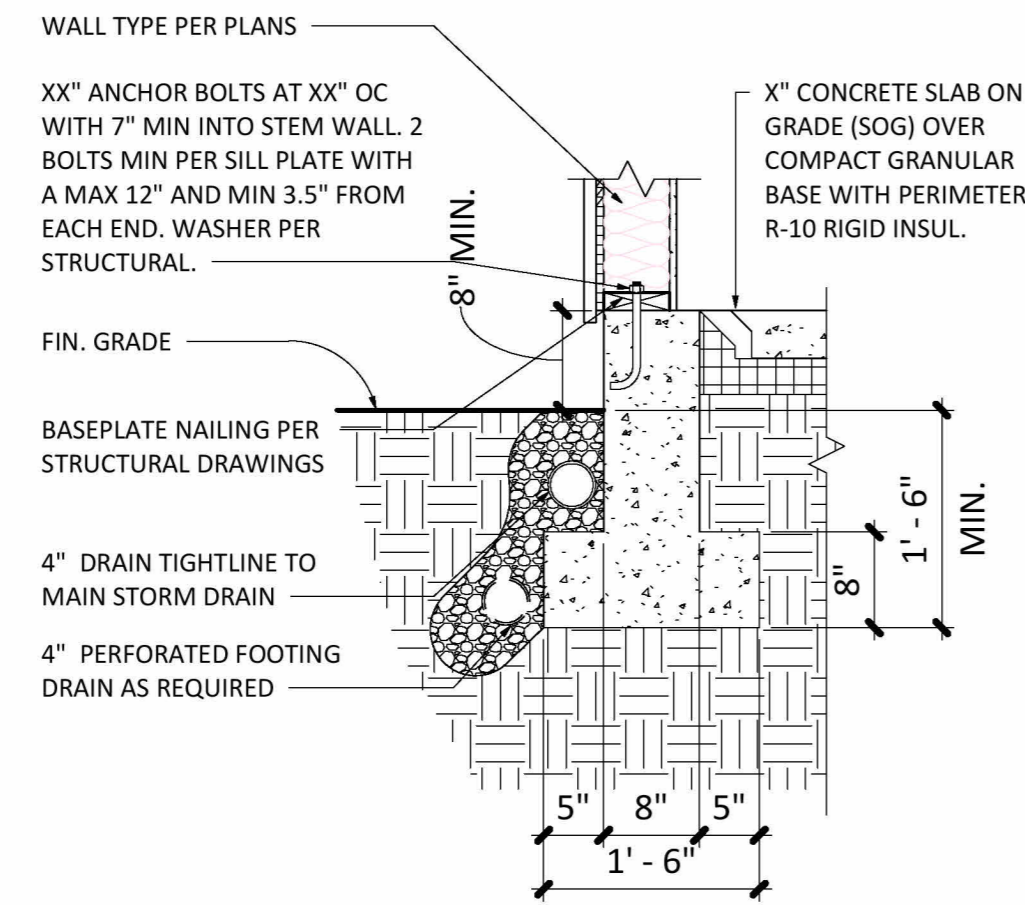
WALL, FLOOR, ROOF & FOUNDATION DETAILS

SHEET NO. A500

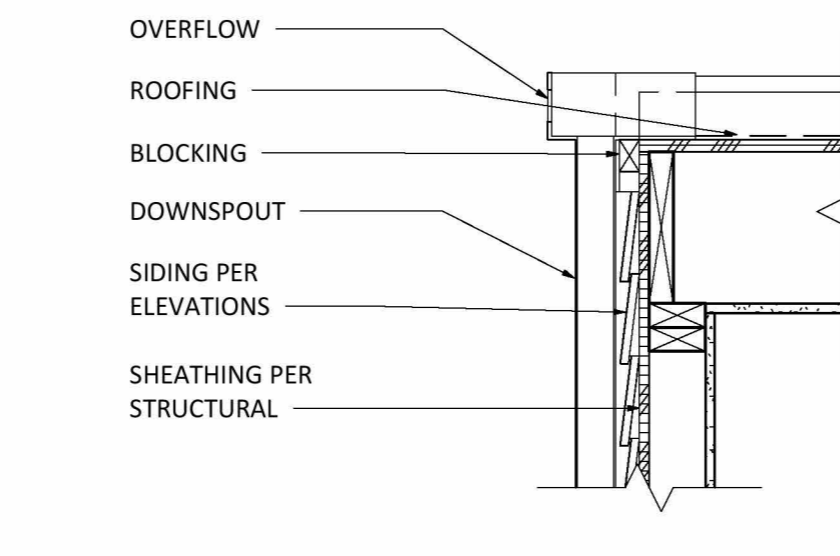
Scale



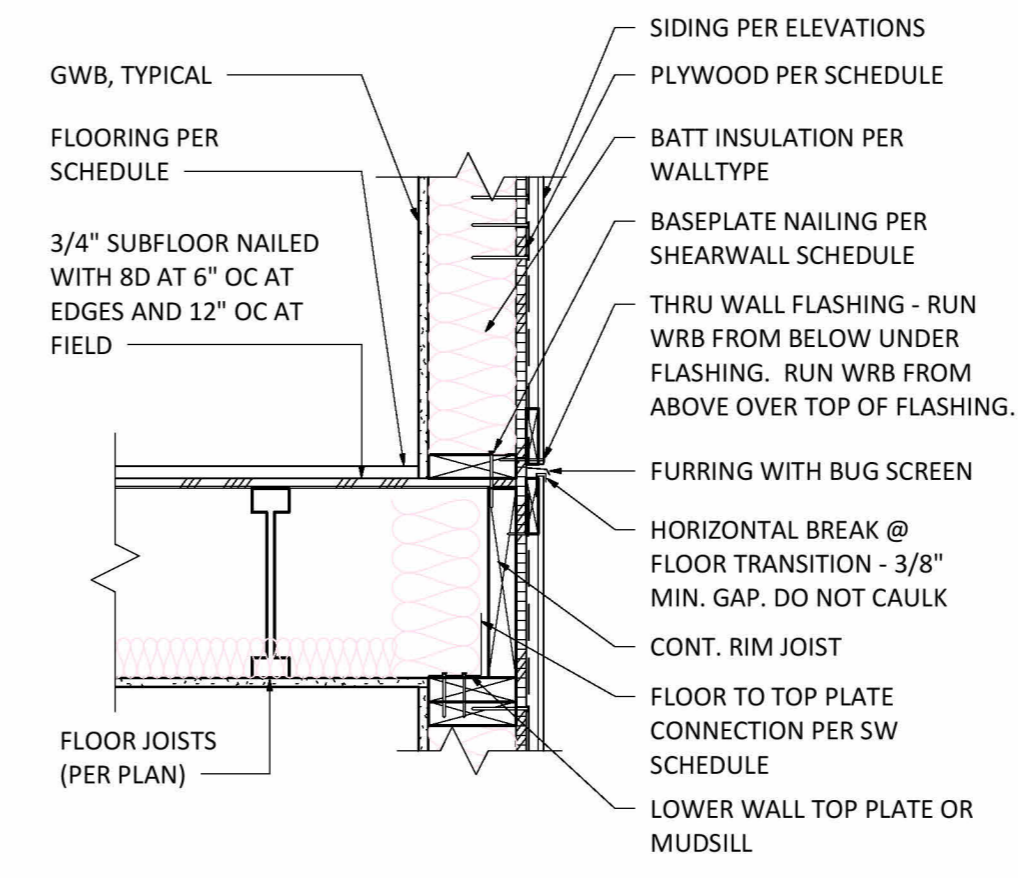
**1 ENTRY AWNING**  
1" = 1'-0"



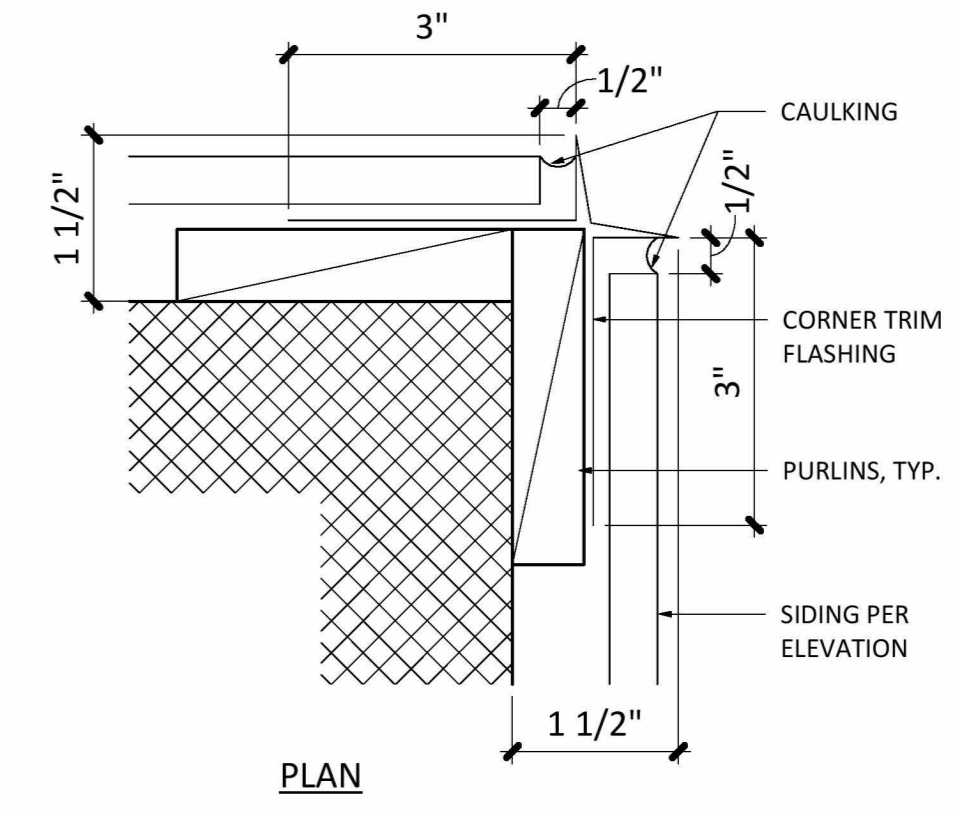
**2 FOUNDTN @ SLAB ON GD**  
3/4" = 1'-0"



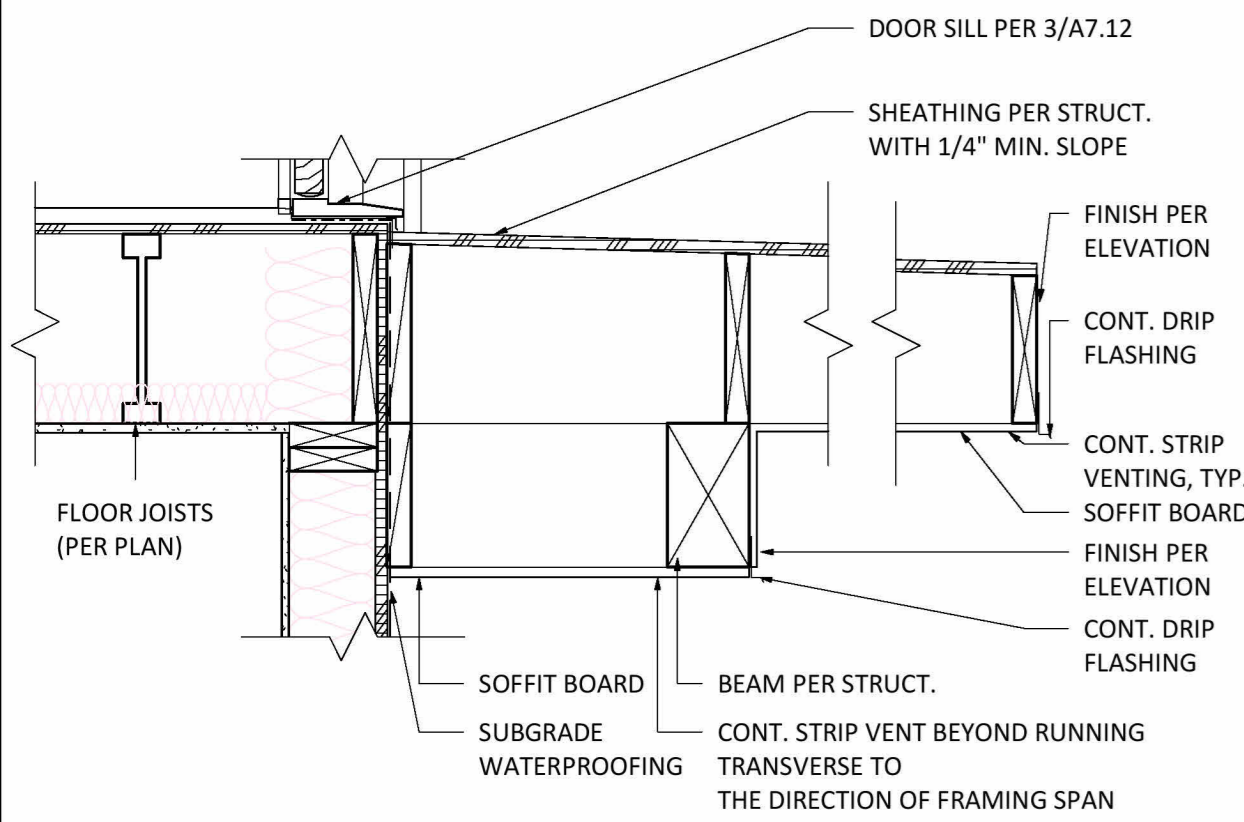
**3 TYP. SCUPPER**  
1" = 1'-0"



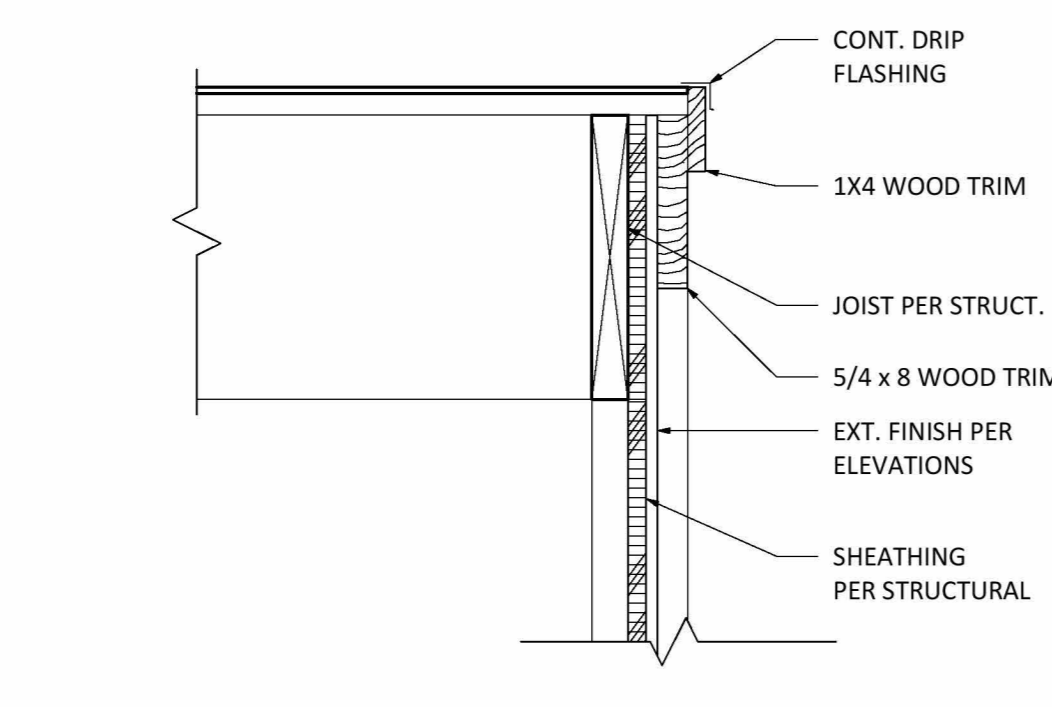
**4 TYP. FLOOR LEVEL**  
1" = 1'-0"



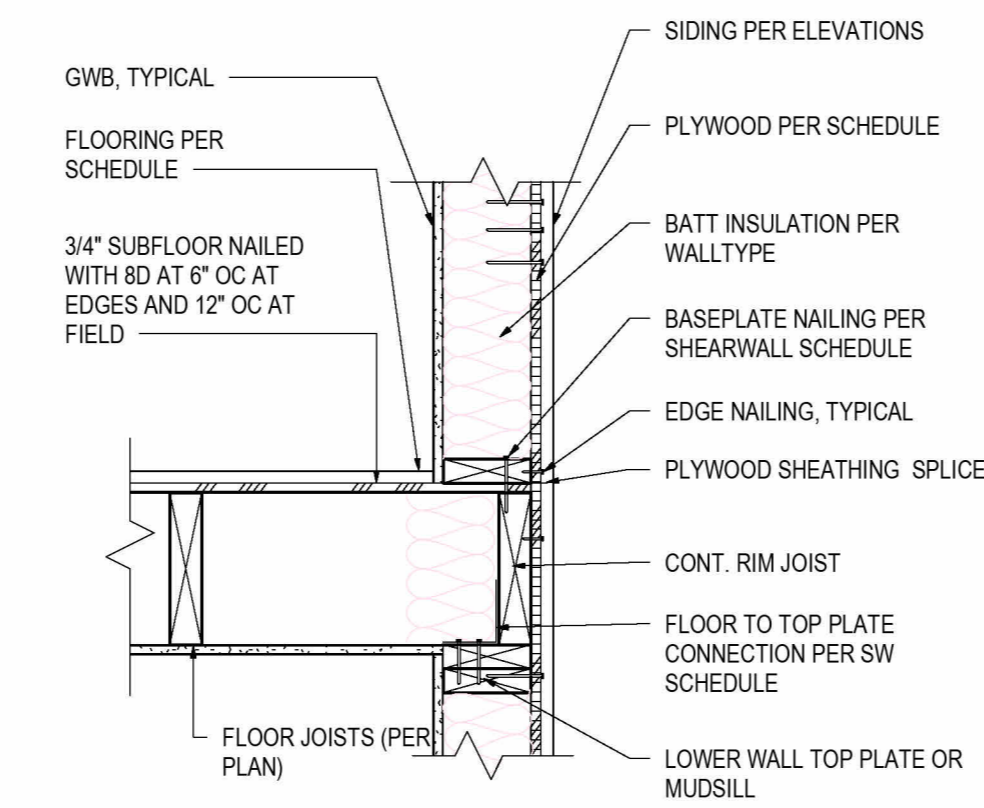
**5 FLASHING @ EXT CORNER**  
6" = 1'-0"



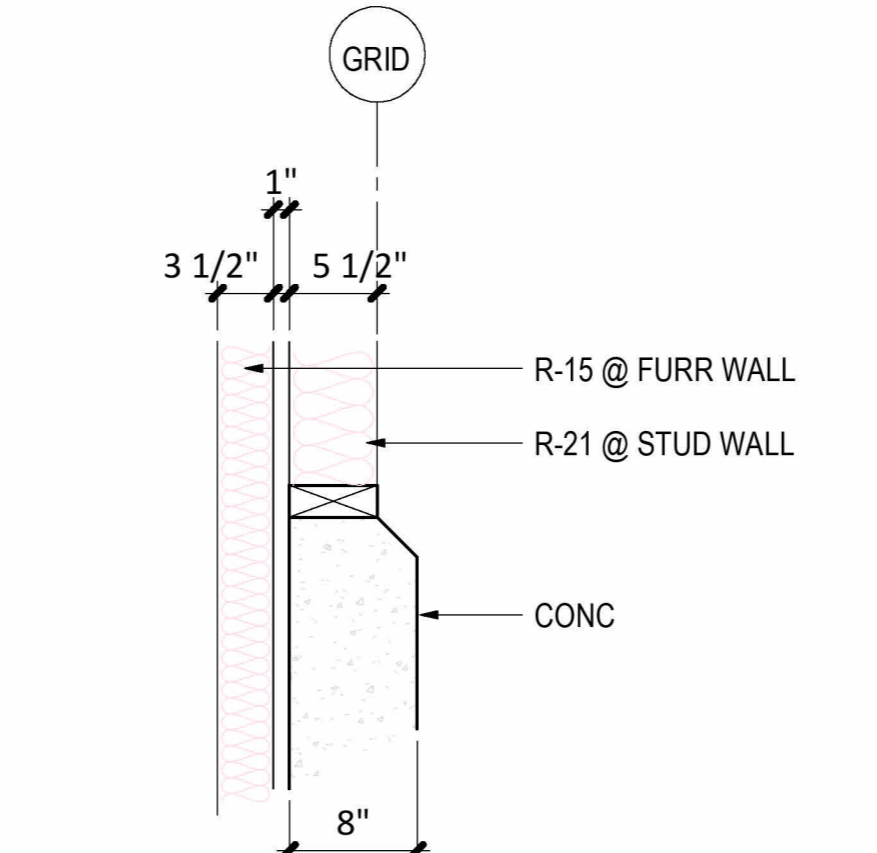
**6 SECTION @ DECK**  
1" = 1'-0"



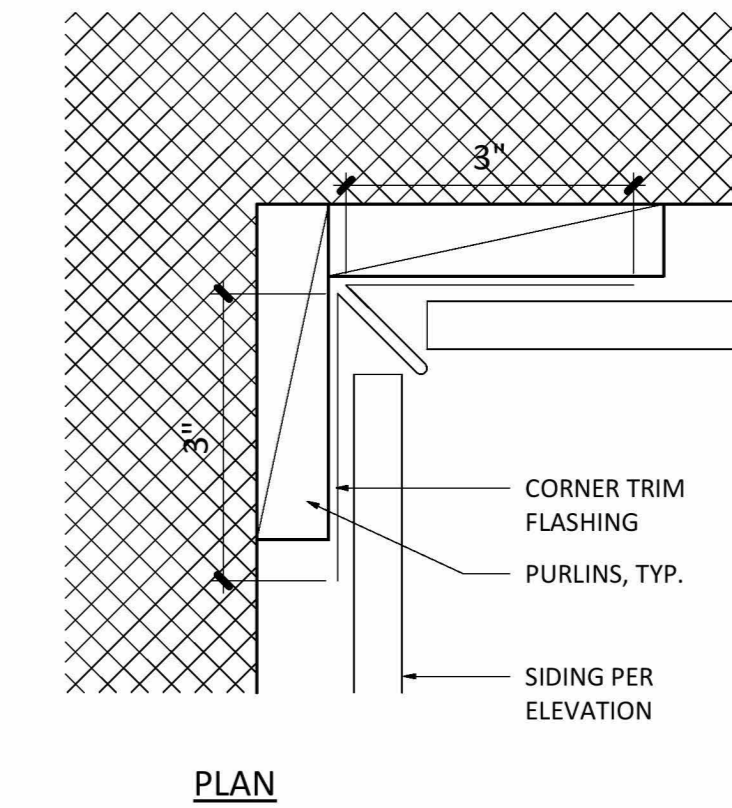
**7 TYP. FLAT RAKE**  
1 1/2" = 1'-0"



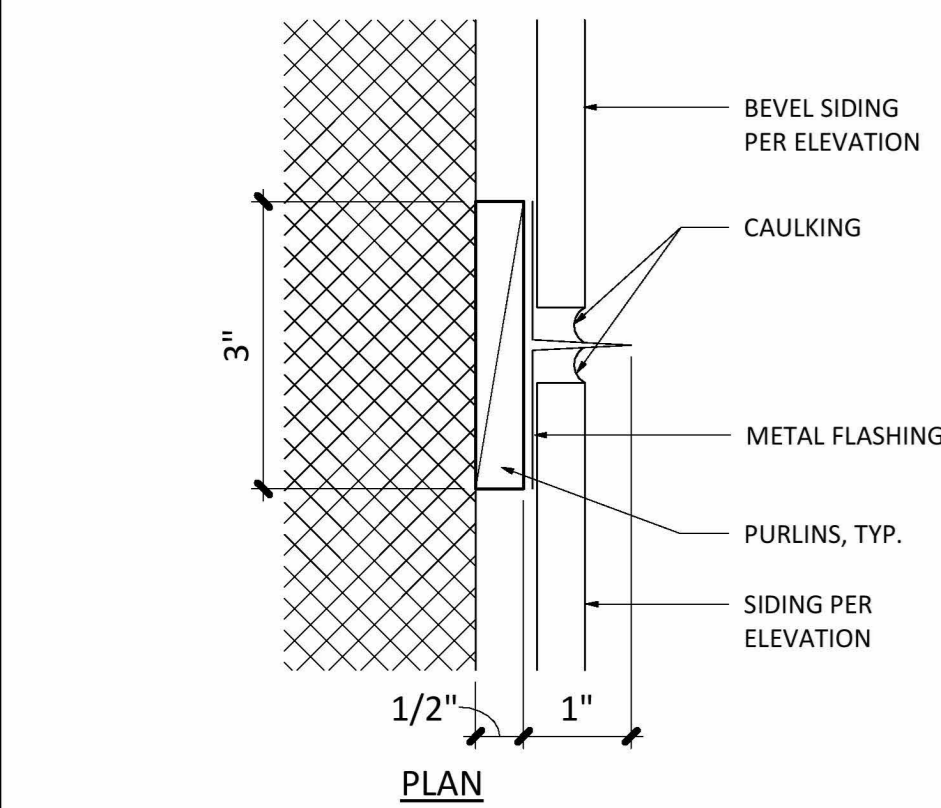
**8 TYP. PERP. JOIST TO WALL**  
1" = 1'-0"



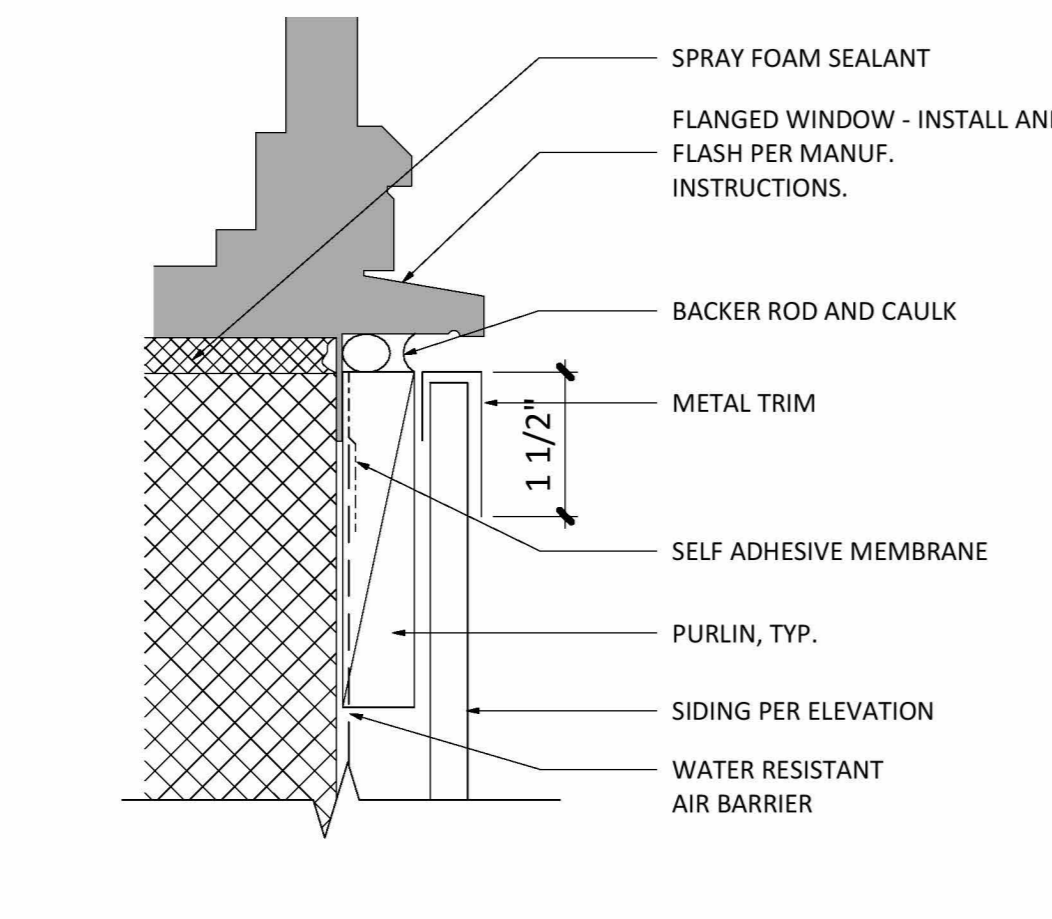
**9 FOUNDATION WALL DTL.**  
1" = 1'-0"



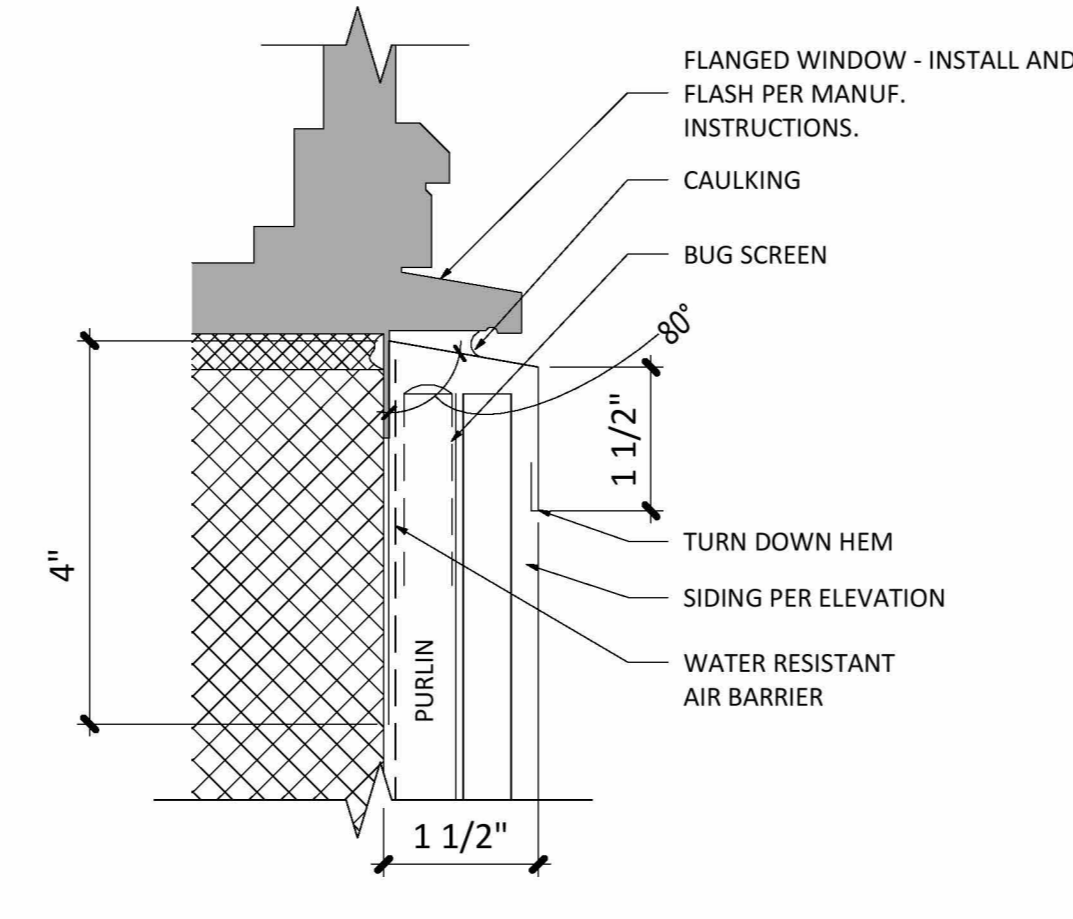
**10 FLASHING @ INT CORNER**  
6" = 1'-0"



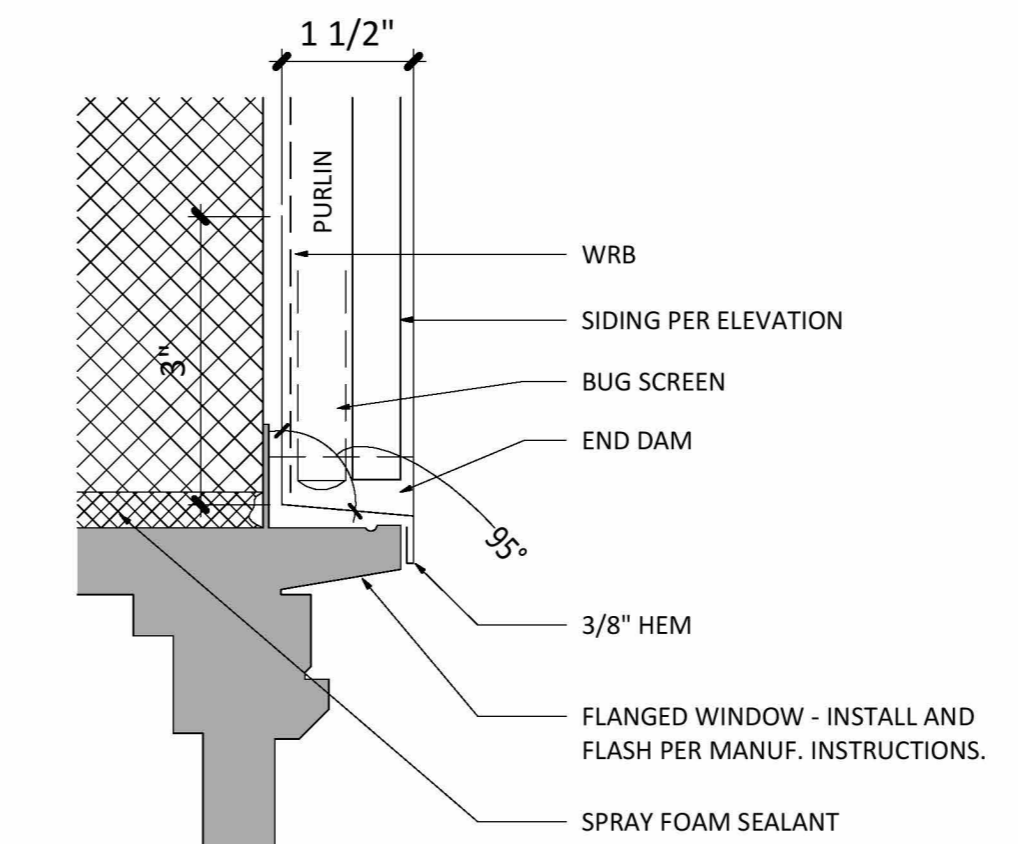
**11 FLASHING @ SDG TRANSITION**  
6" = 1'-0"



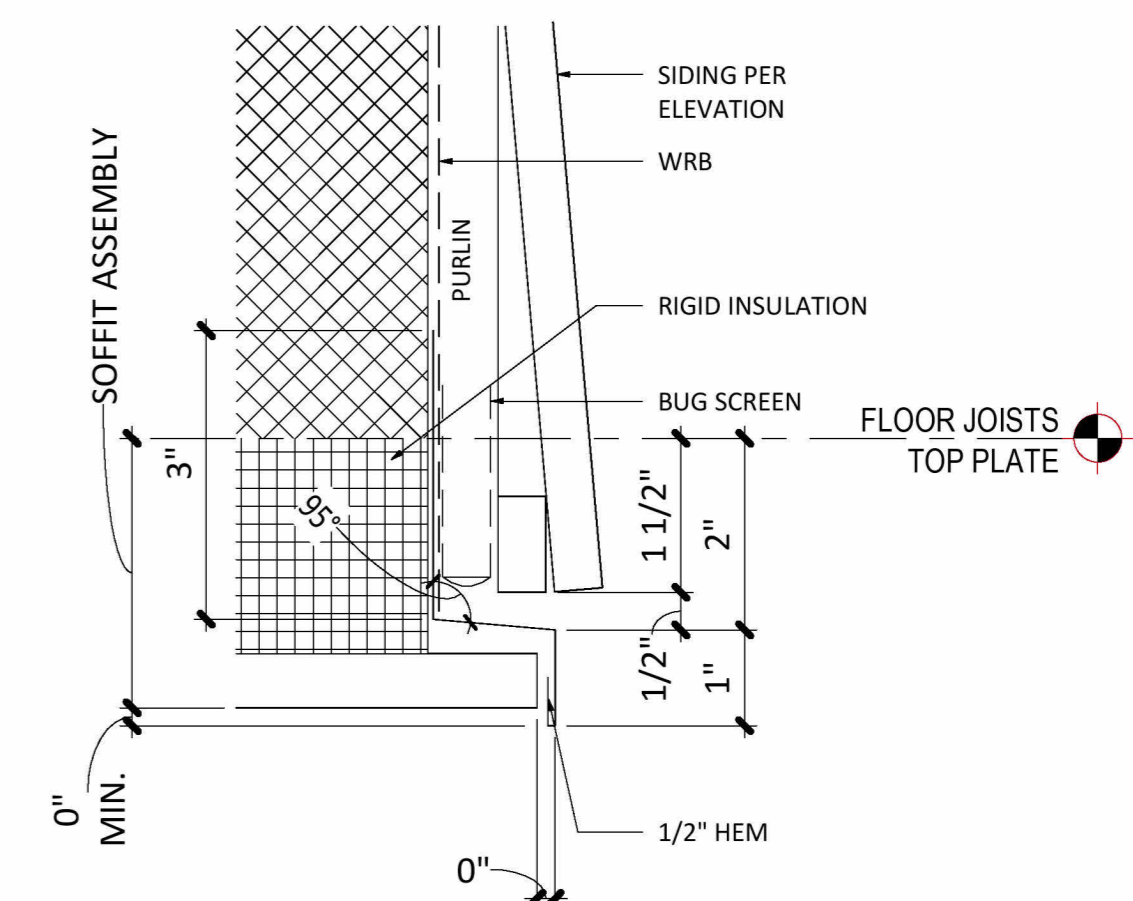
**12 FLASHING @ WINDOW JAMB**  
6" = 1'-0"



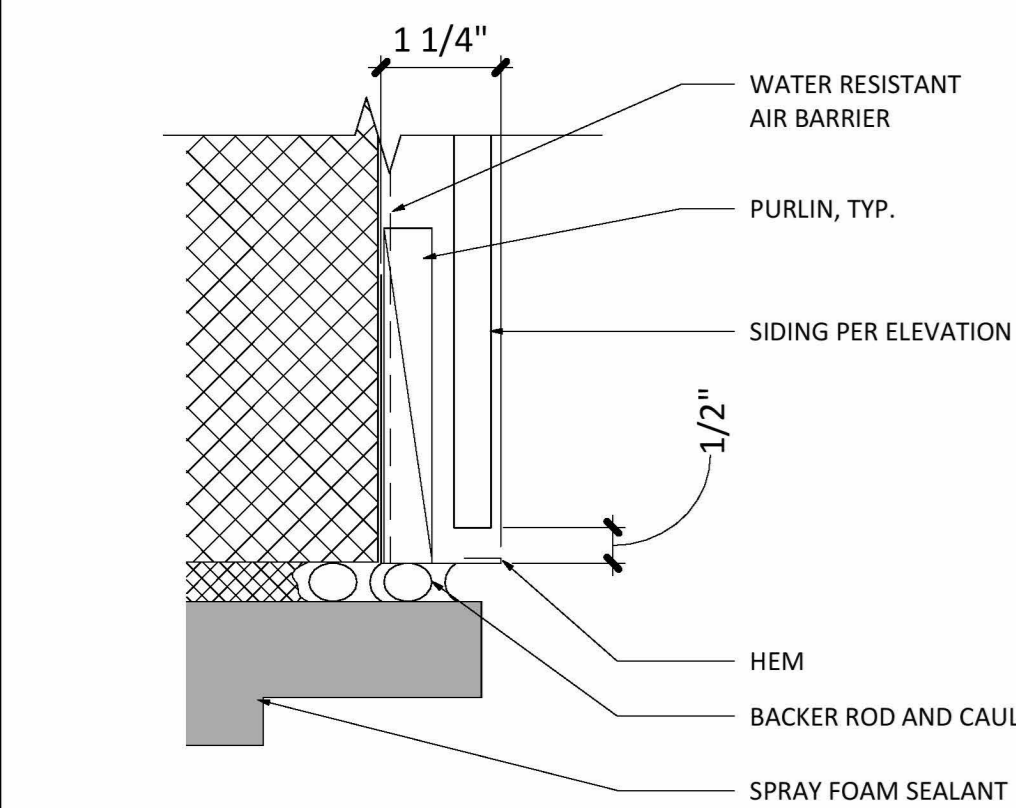
**13 FLASHING @ WINDOW SILL**  
6" = 1'-0"



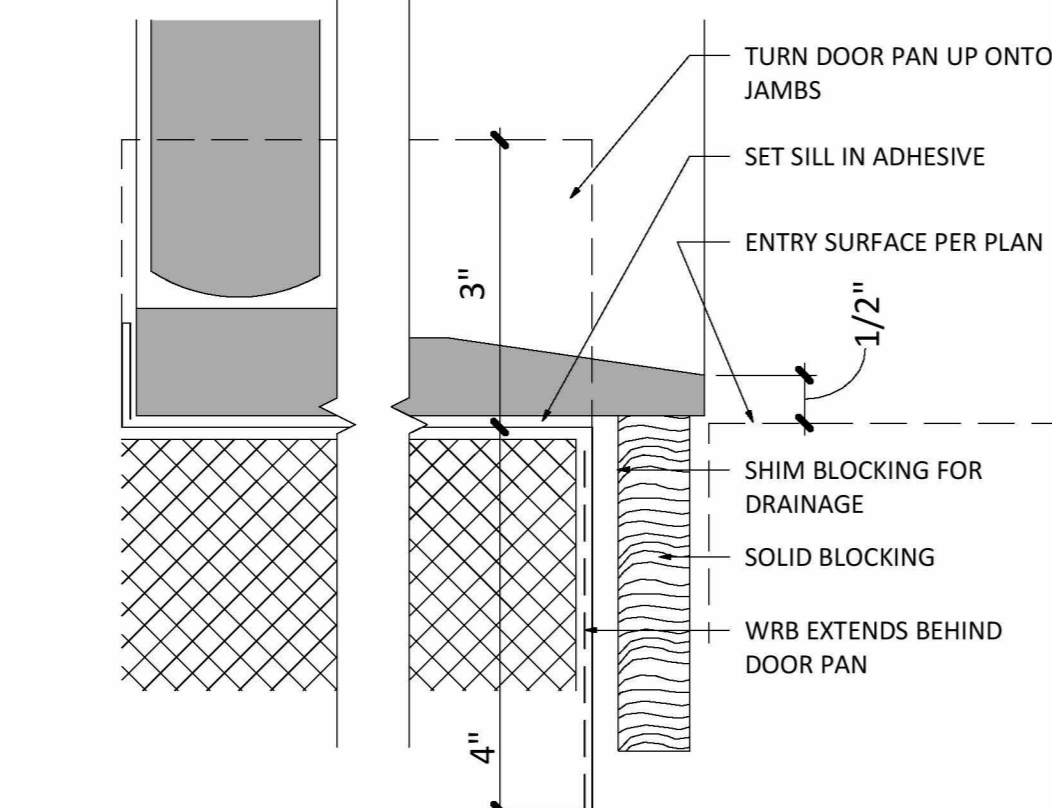
**14 FLASHING @ WINDOW HEAD**  
6" = 1'-0"



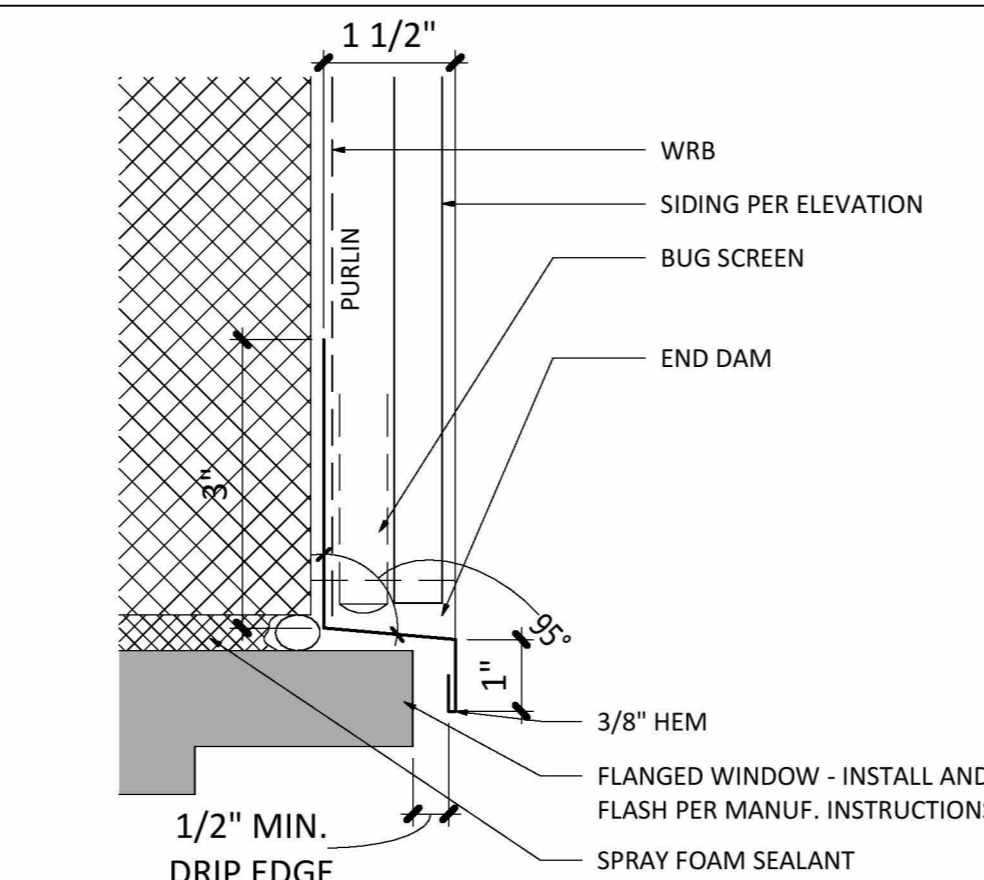
**15 FLASHING @ SOFFIT**  
6" = 1'-0"



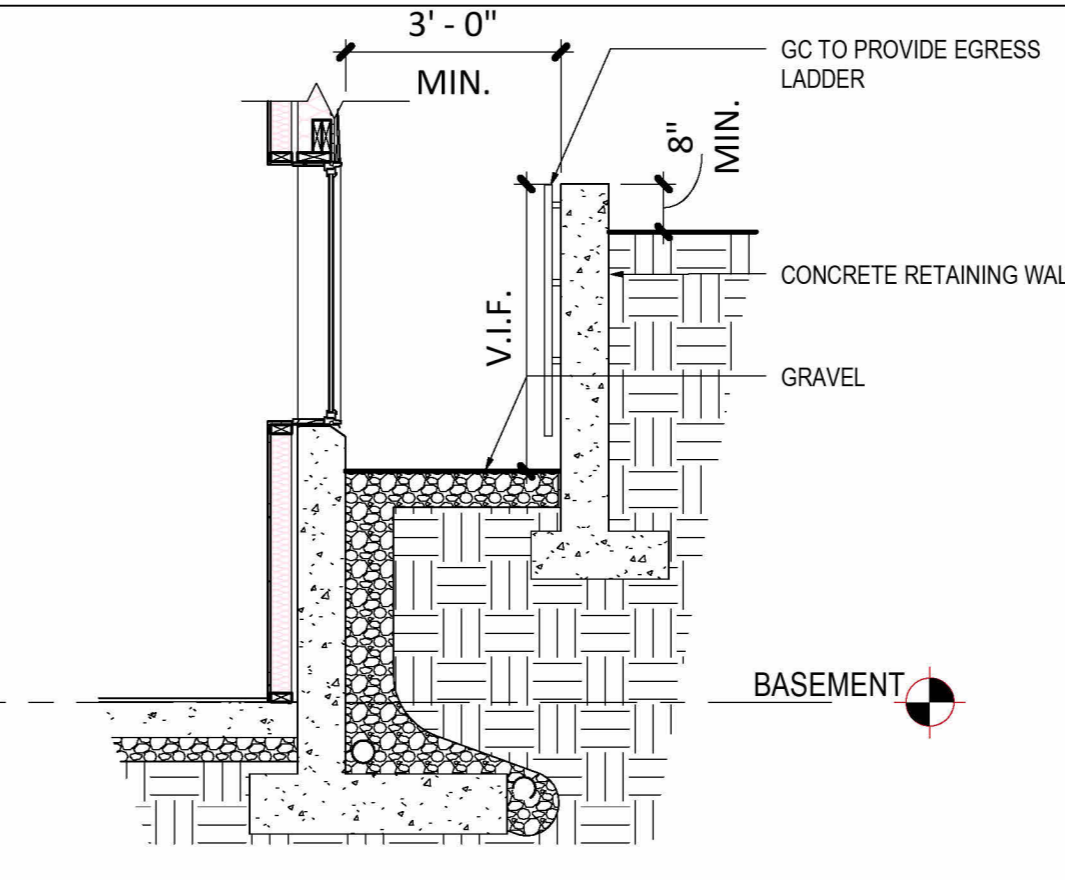
**16 FLASHING @ DOOR JAMB**  
6" = 1'-0"



**17 FLASHING @ DOOR SILL**  
6" = 1'-0"



**18 FLASHING @ DOOR HEAD**  
6" = 1'-0"



**19 TYPICAL WINDOW WELL - SECTION**  
3/8" = 1'-0"

**EMERGENCY ESCAPE AND RESCUE:**  
ONE WINDOW (OR DOOR) IN THE BASEMENT, A HABITABLE ATTIC, AND IN EACH BEDROOM, MUST MEET THESE REQUIREMENTS (SRC R310):  
THE MINIMUM NET CLEAR OPEN AREA IS 5.7 SQUARE FEET (HOWEVER, OPENINGS AT GRADE FLOOR MAY BE A MINIMUM OF 5 SQUARE FEET)  
THE MINIMUM CLEAR OPEN WIDTH IS 20"  
THE MINIMUM CLEAR OPEN HEIGHT IS 24"  
THE MAXIMUM ALLOWED SILL HEIGHT IS 44"  
THE INSIDE OF THE WINDOW WELLS MUST BE A MINIMUM OF 9 SQUARE FEET IN AREA, WITH A MINIMUM 3' WIDTH, AND MUST ALLOW THE WINDOW TO OPEN ALL THE WAY. A LADDER IS REQUIRED IF THE BOTTOM OF THE WINDOW WELL IS MORE THAN 44" BELOW THE ADJACENT GROUND.

**DRIFT INTERIOR ARCHITECTURE**  
103 91st Ave SE, Lake Stevens, WA 98258 4254780327  
www.drift-ia.com  
REGISTERED ARCHITECT  
JENNIFER TABLIER  
STATE OF WASHINGTON  
Registered Architect in WA State  
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**XIAO ZHOU HOUSE ADDITION**  
CLIENT NAME: Xiao Zhou  
PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040  
BUILDER NAME  
BUILDER CONTACT  
BUILDER ADDRESS

REV #	DATE	DESCRIPTION

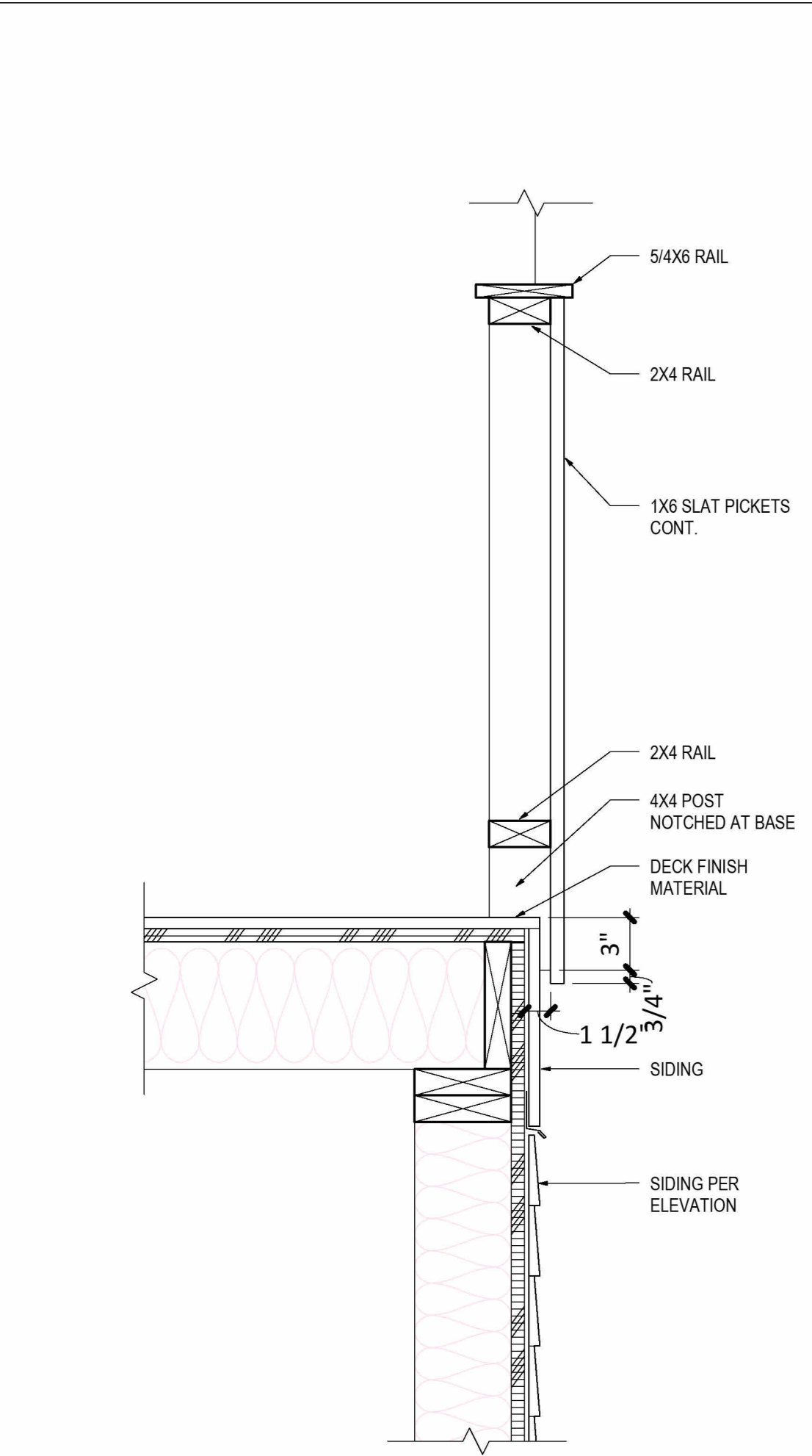
STATUS: PERMIT  
DPS PERMIT NUMBER:  
BNA Project number: XXXXXX  
DRAWN BY: Author  
SHEET NAME: EXTERIOR ENVELOPE DETAILS  
SHEET NO: A501  
Scale



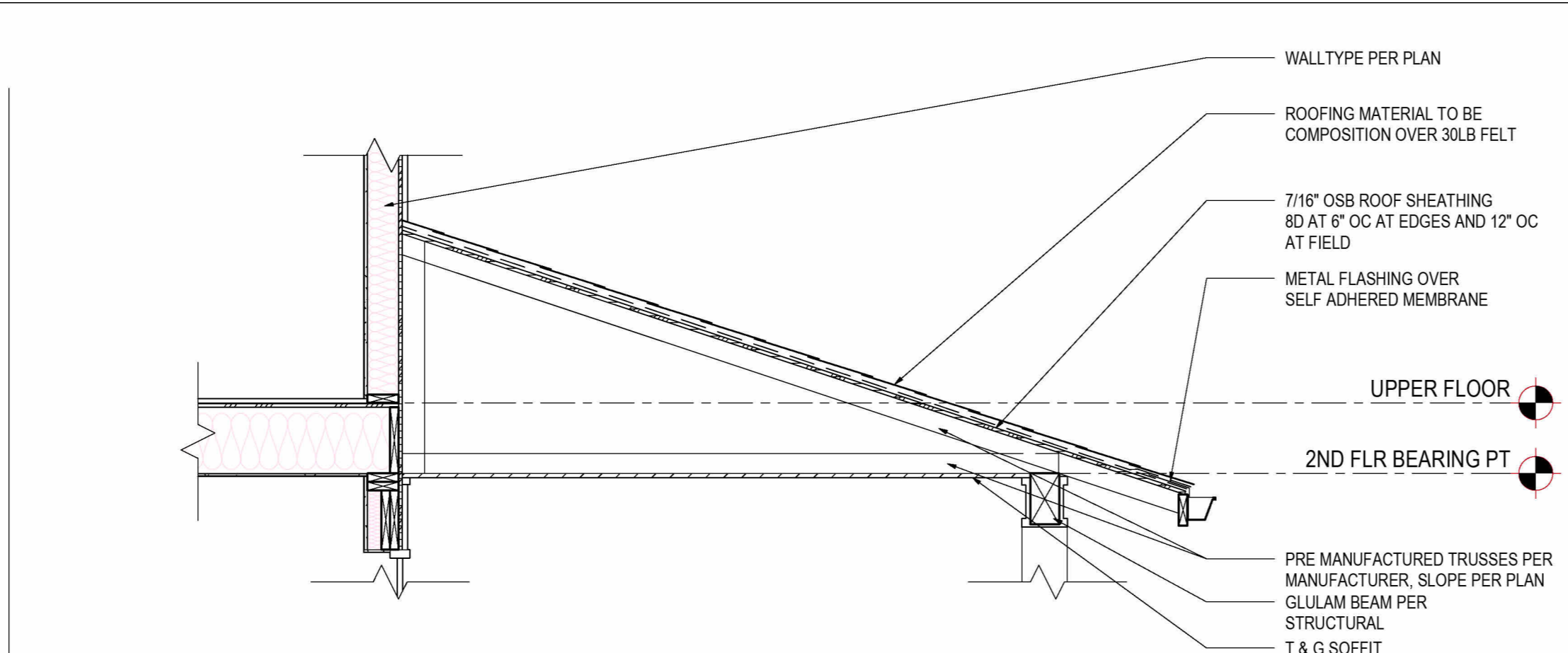
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# XIAO ZHOU HOUSE ADDITION

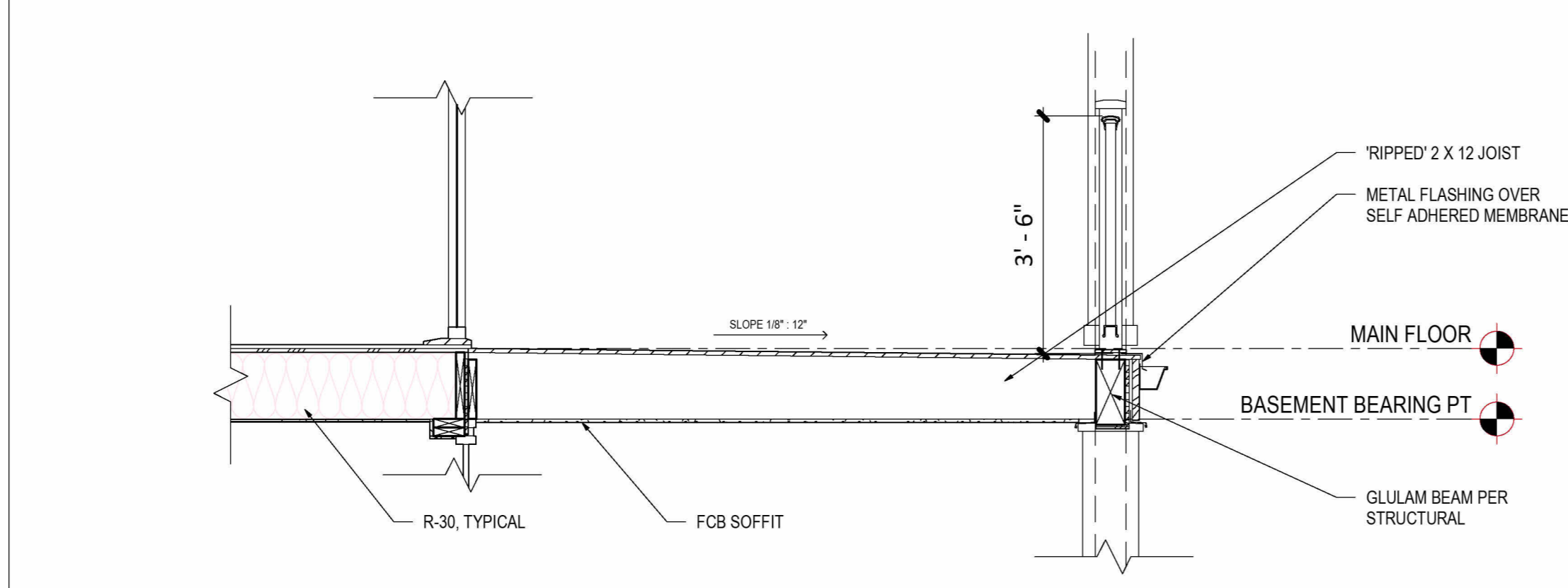
CLIENT NAME: Xiao Zhou  
 PROJECT ADDRESS: 4433 86th Ave SE Mercer Island, WA 98040  
 BUILDER NAME: [Blank]  
 BUILDER CONTACT: [Blank]  
 BUILDER ADDRESS: [Blank]



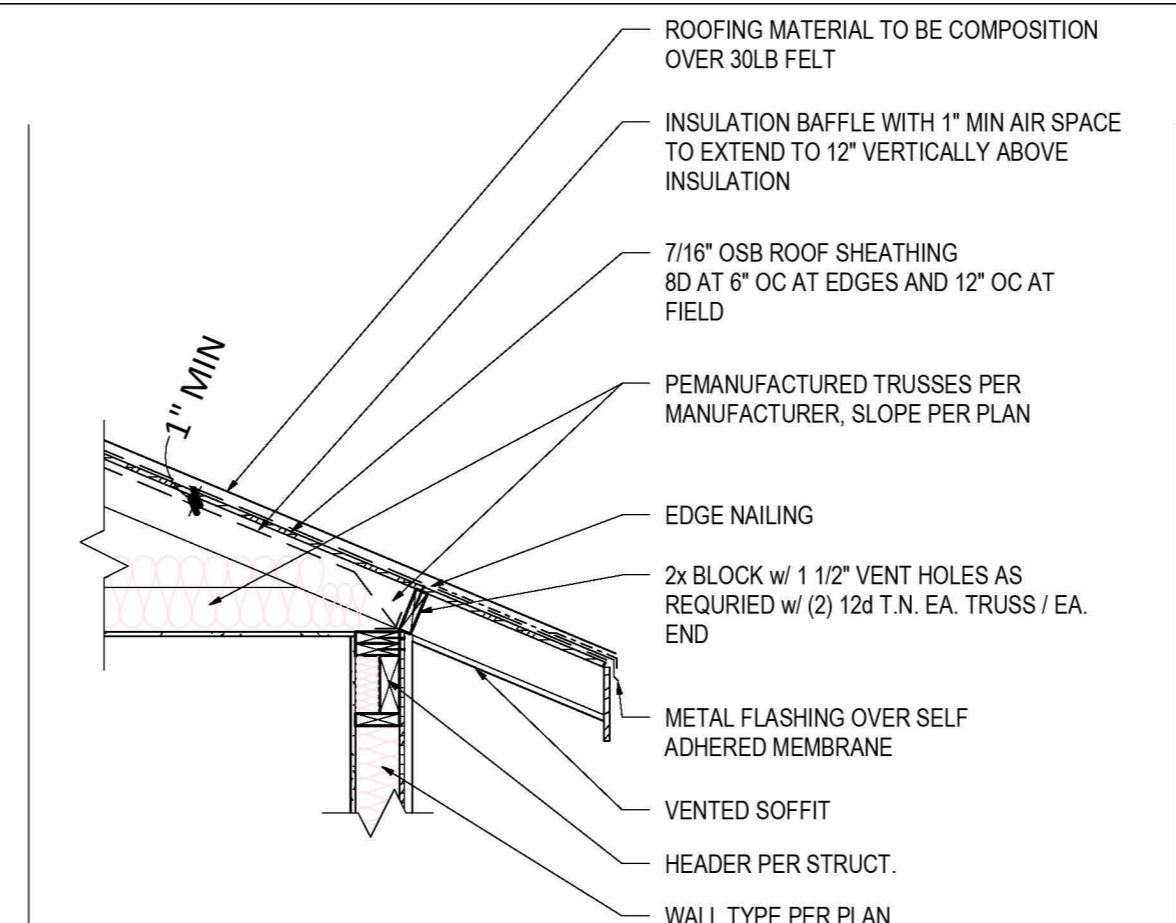
**1 TYP. EXT. STAIR RAILING**  
1 1/2" = 1'-0"



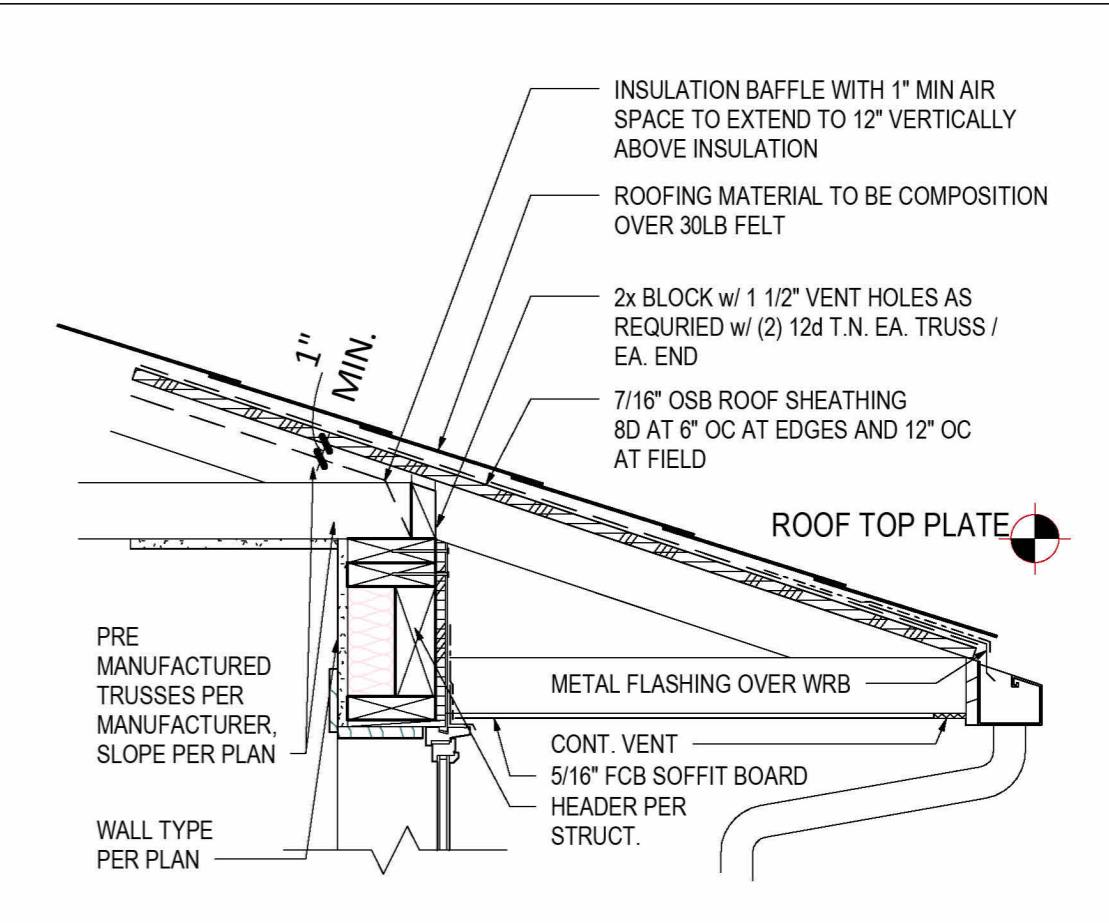
**2 TYP. TRUSS ROOF @ DECK**  
1/2" = 1'-0"



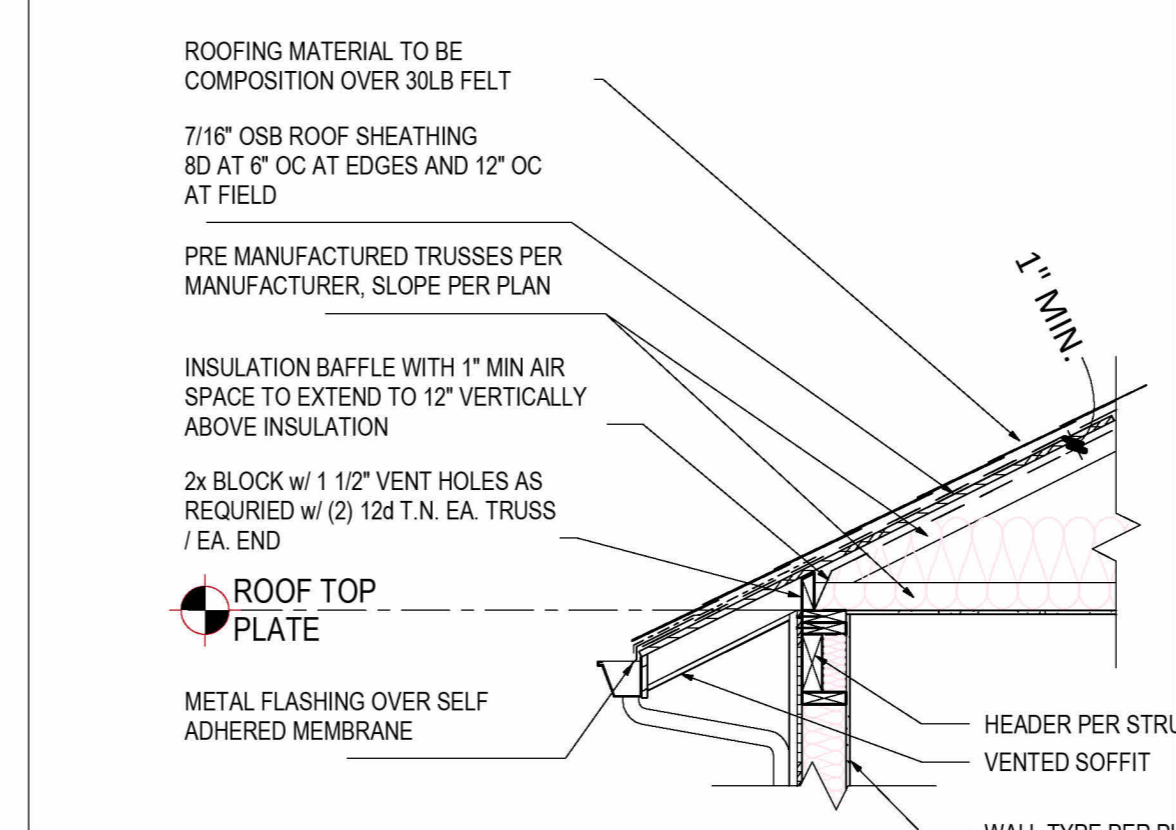
**3 TYP. WATER PROOF DECK**  
1/2" = 1'-0"



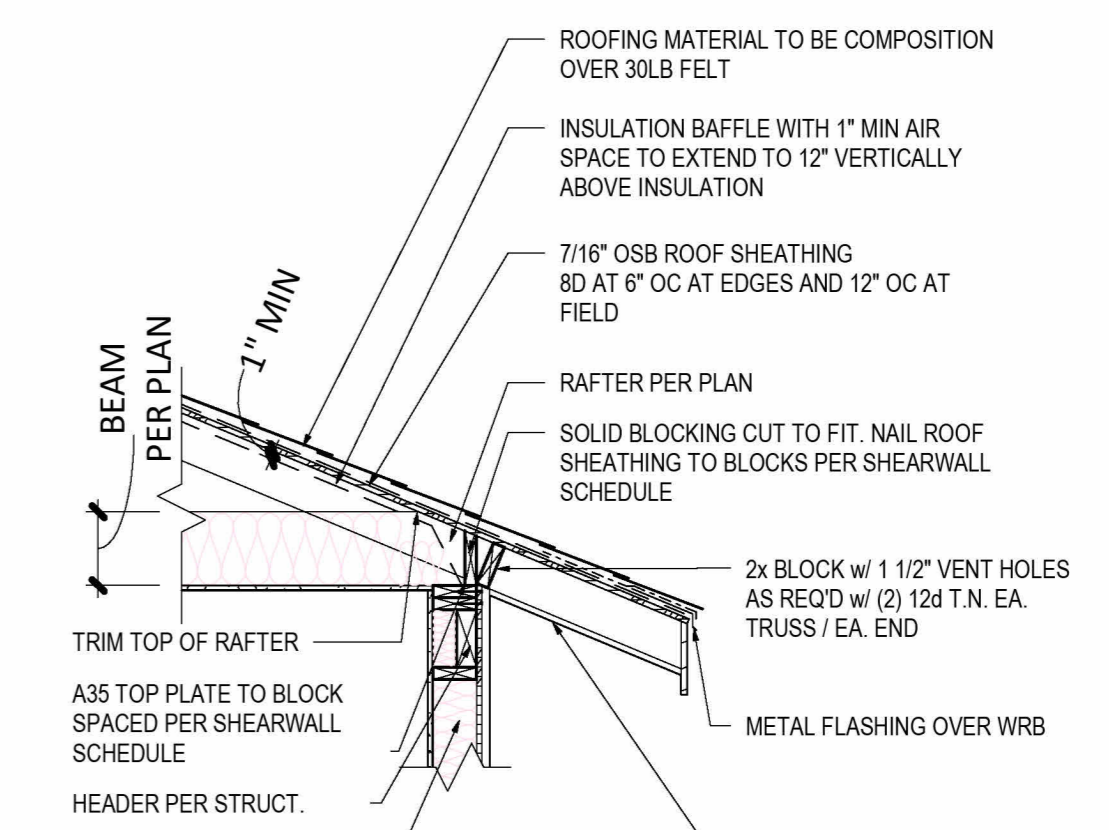
**9 TYP. EAVE @ TRUSSES**  
1/2" = 1'-0"



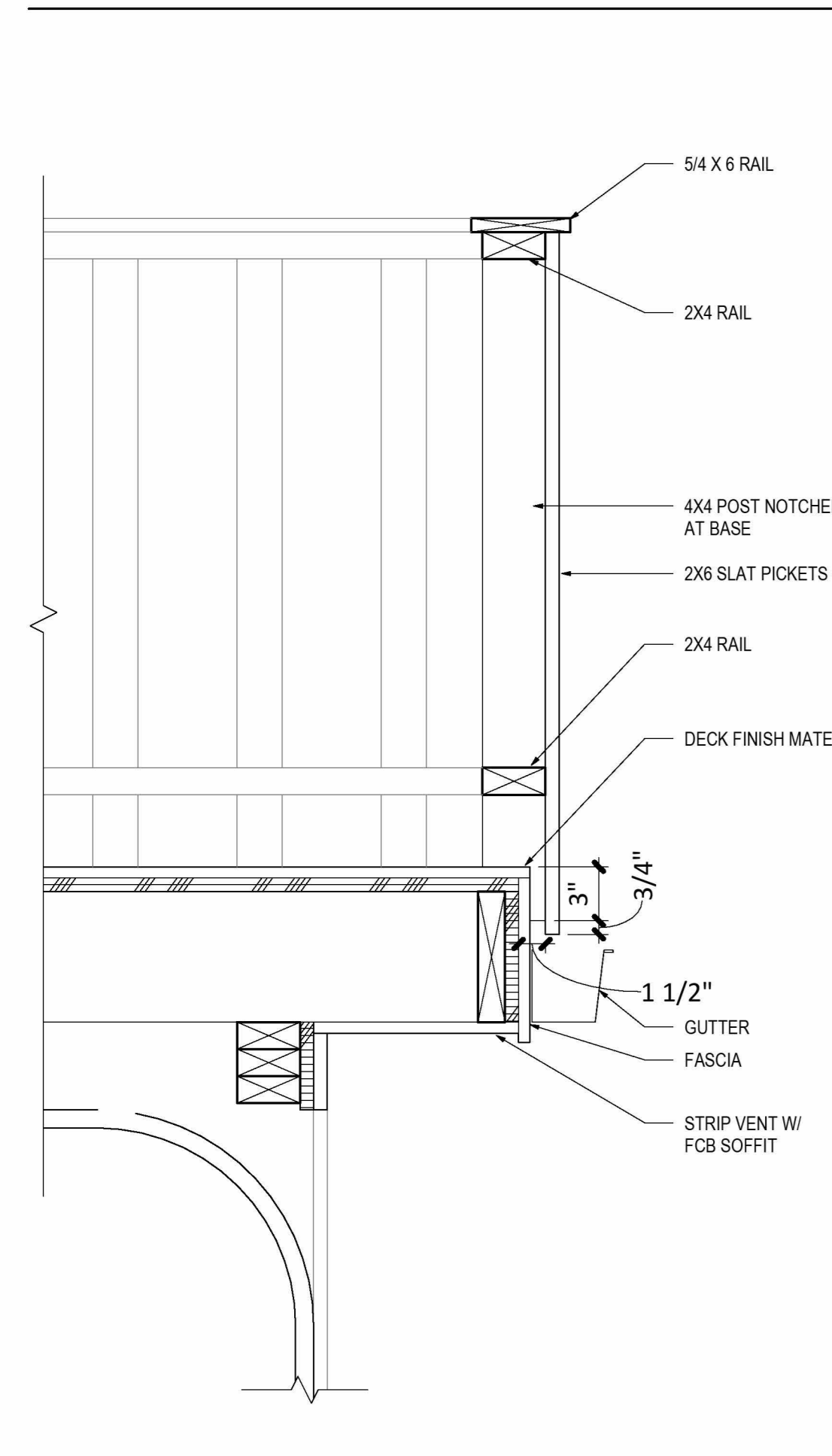
**10 TYP. TRUSS RF @ EAVE**  
1" = 1'-0"



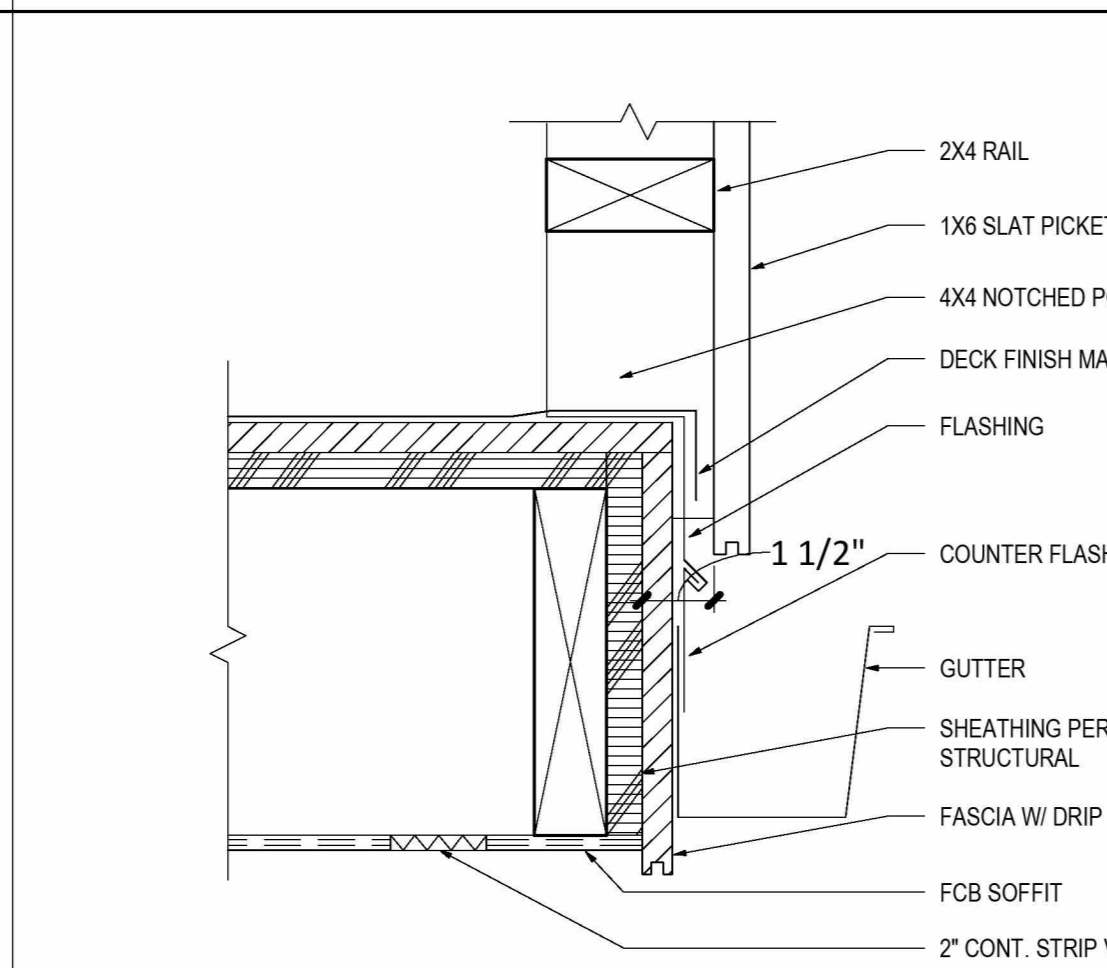
**11 TYP. TRUSS ROOF @ EAVE 2**  
1/2" = 1'-0"



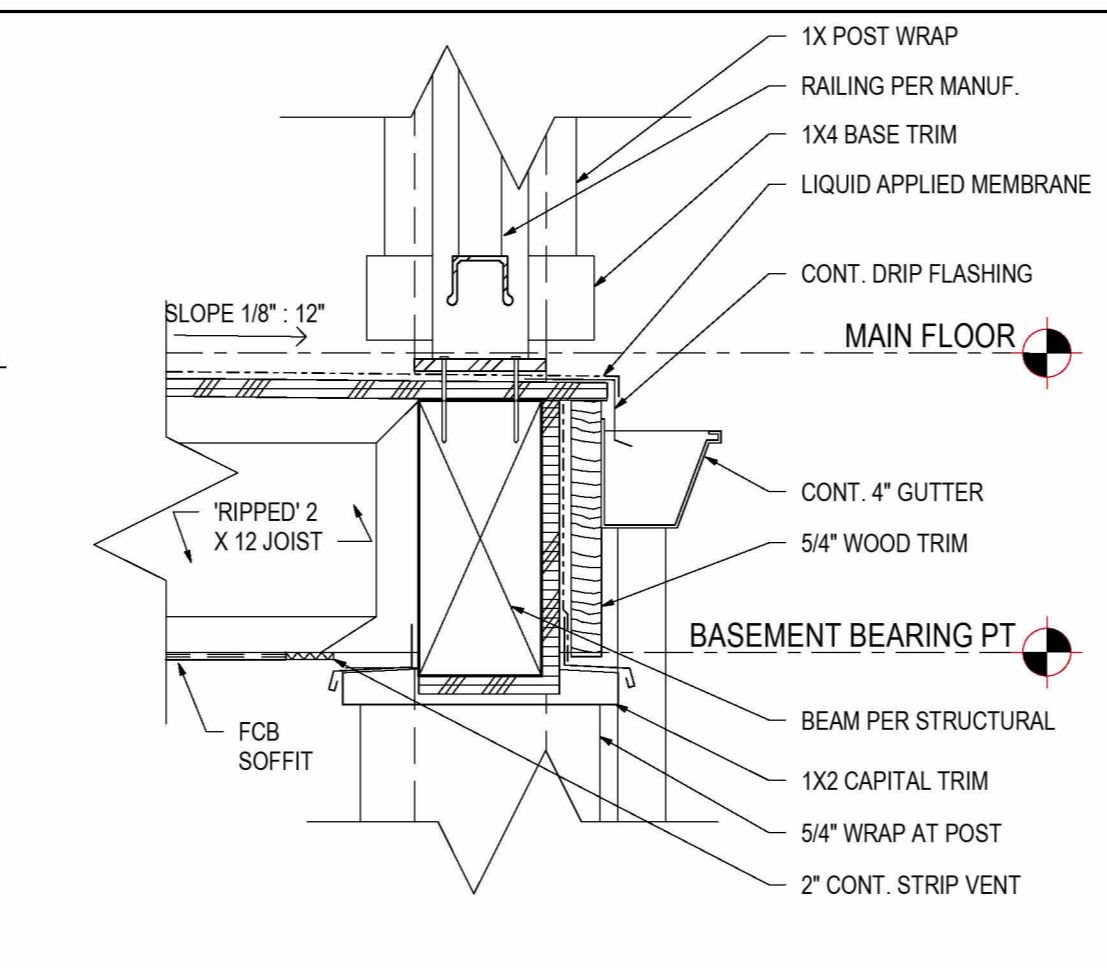
**12 TYP. EAVE @ RAFTERS**  
1/2" = 1'-0"



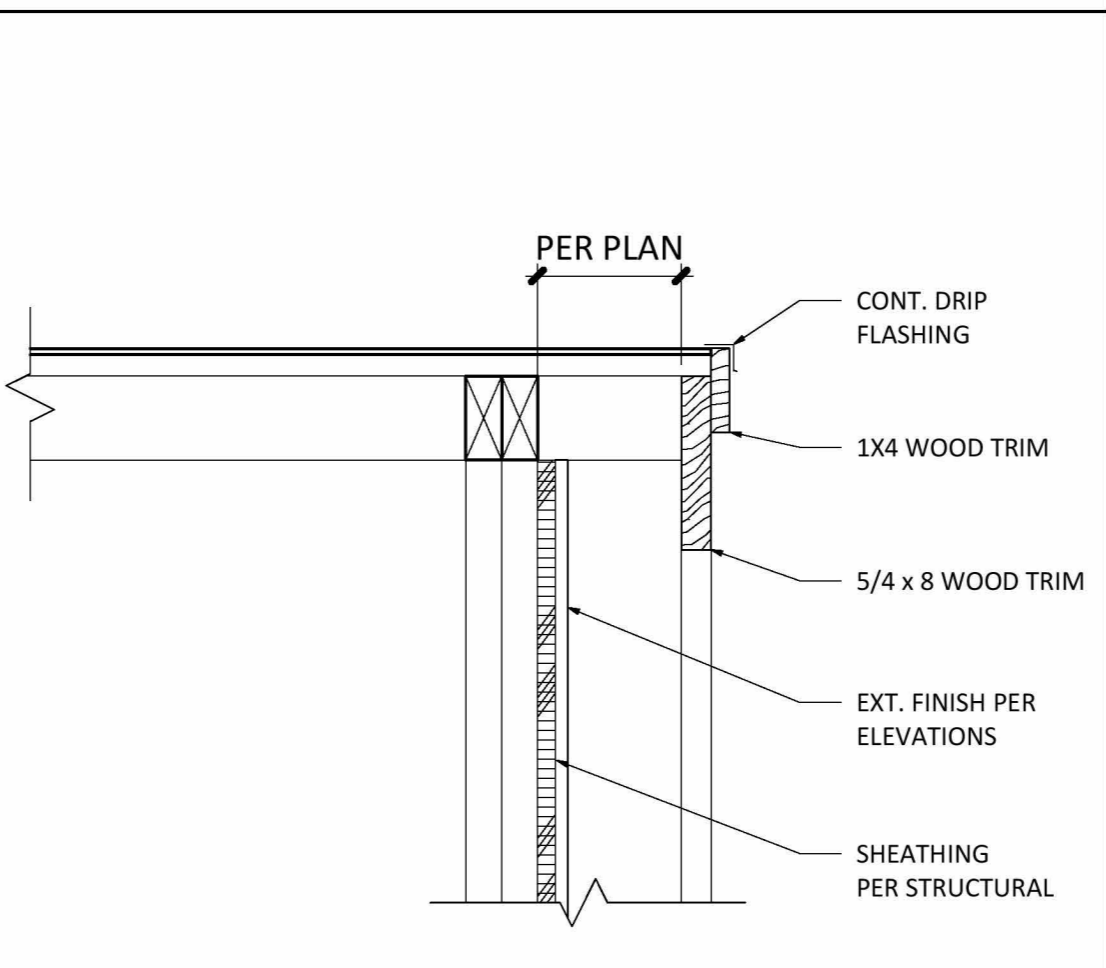
**4 TYP. EXT. STAIR RAILING 2**  
1 1/2" = 1'-0"



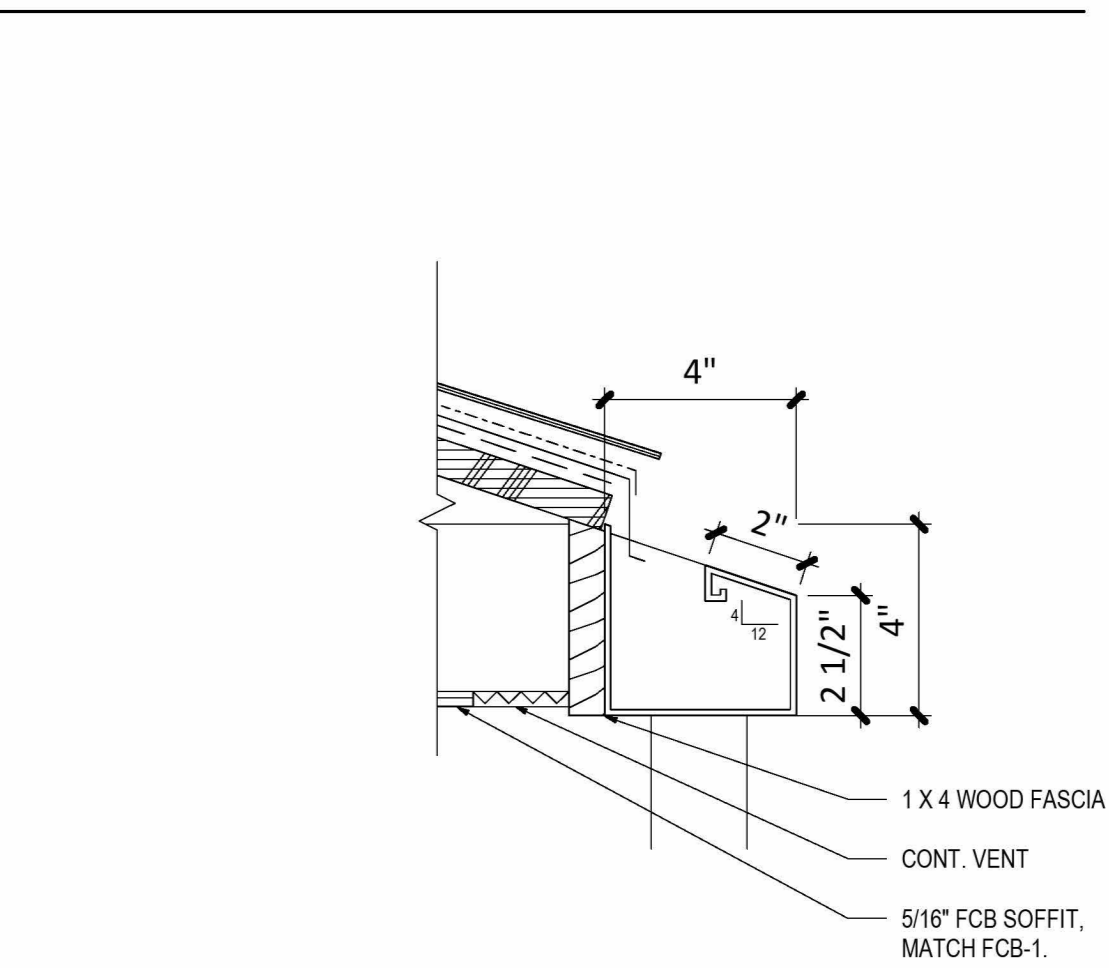
**5 TYP. PICKET BASE**  
3" = 1'-0"



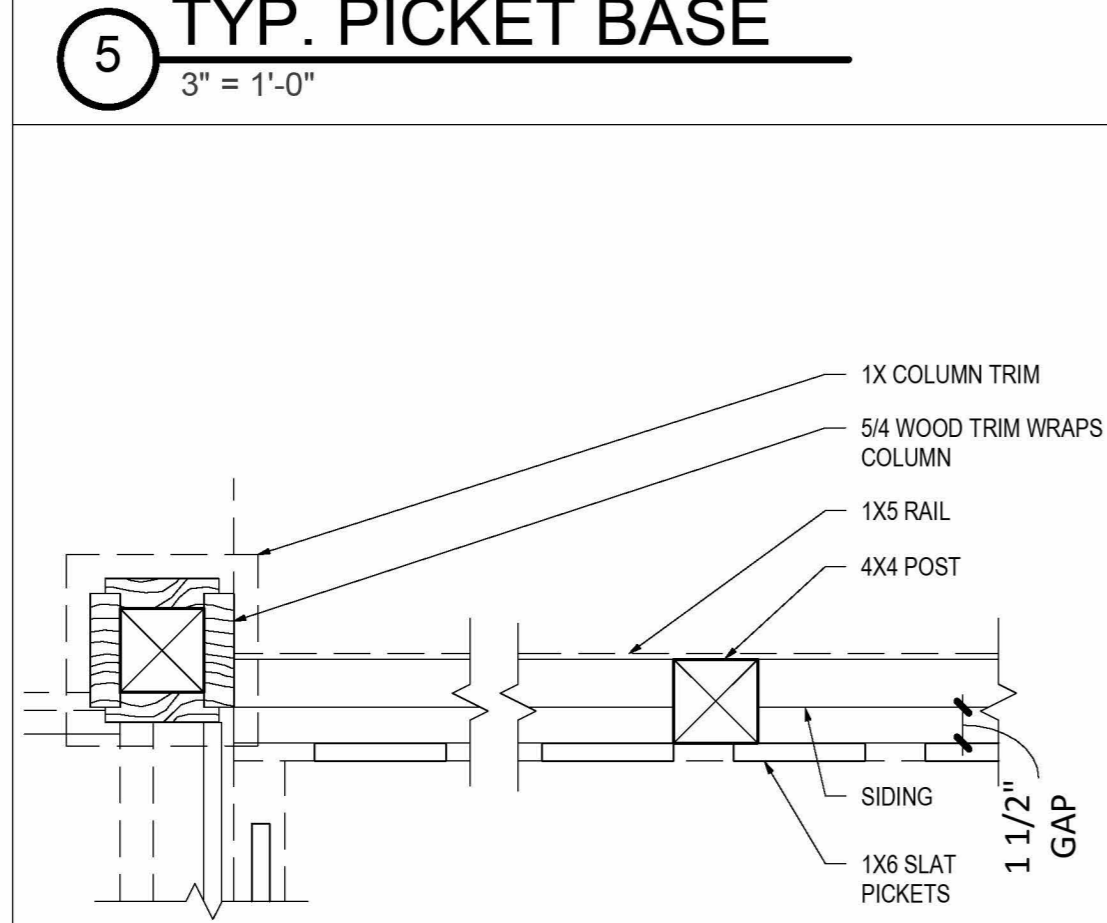
**6 TYP. DECK RIM**  
1 1/2" = 1'-0"



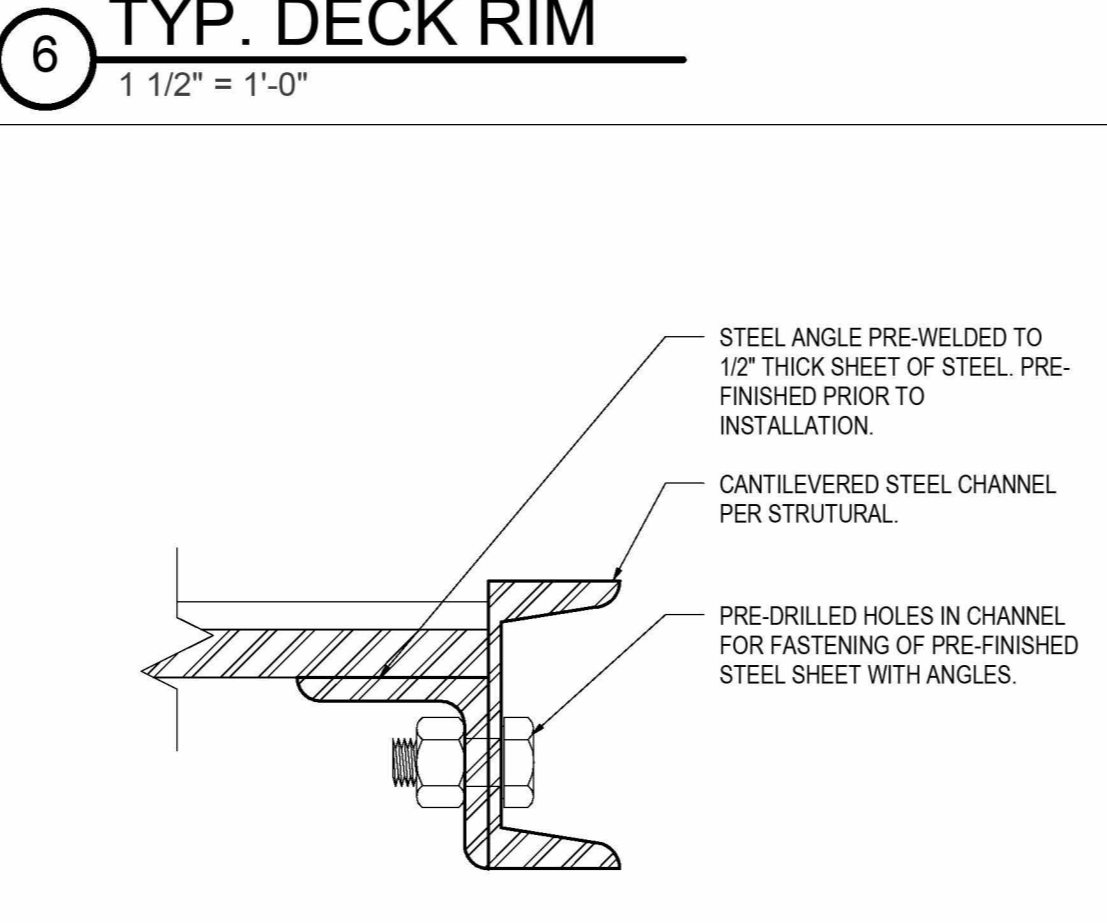
**13 TYP. RAKE**  
1 1/2" = 1'-0"



**14 TYP. GUTTER**  
3" = 1'-0"



**7 TYP. RAILING PLAN**  
1 1/2" = 1'-0"



**8 CANT. STL AWNG @ EAVE**  
6" = 1'-0"

REV #	DATE	DESCRIPTION

STATUS: **PERMIT**

DPS PERMIT NUMBER: [Blank]

BNA Project number: XXXXXX

DRAWN BY: Author

SHEET NAME: **DETAILS**

SHEET NO: **A502**

Scale: [Blank]



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DOOR SCHEDULE - EXTERIOR											
NUMBER	DOOR				FRAME		FIRE RATING	HARDWARE		GLAZING AREA	NOTES
	WIDTH	HEIGHT	MATERIAL	FINISH	MATERIAL	FINISH		GROUP	CLOSER		
D3	10' - 0"	8' - 0"									EXTERIOR
Grand total: 2											

DOOR SCHEDULE - INTERIOR											
NUMBER	DOOR				FRAME		FIRE RATING	HARDWARE		NOTES	
	WIDTH	HEIGHT	MATERIAL	FINISH	MATERIAL	FINISH		GROUP	CLOSER		
D1	2' - 6"	7' - 0"								INTERIOR	
D2	3' - 0"	7' - 0"								INTERIOR	
Grand total: 7											

**DOOR AND WINDOW GENERAL NOTES**

- DOORS AND WINDOWS ARE TYPICALLY CENTERED IN WALL UNLESS DIMENSIONED OTHERWISE.
- DOOR HINGE JAMB TO BE 4 1/2" FROM ADJACENT WALL UNLESS OTHERWISE NOTED.
- DOOR AND WINDOW SIZES ARE NOMINAL, CONFIRM R.O. WITH MANUFACTURER.
- ALL DOOR AND WINDOW HEADERS TO ALIGN AT HEADER LEVEL.
- PROVIDE SAFETY GLAZING AT ALL LOCATIONS REQUIRED BY CODE (IRC R308.4)
- ALL EXTERIOR FENESTRATION TO MEET REQUIREMENTS OF CURRENT WASHINGTON STATE ENERGY CODE (W.S.E.C.) AS INDICATED IN ENERGY WORKSHEET.

**DOOR SCHEDULE NOTES**

1. PROVIDE LOCKS
  2. PROVIDE KICK PLATE
  3. PROVIDE HOLD OPEN
  4. PROVIDE PULL AND PUSH PLATE
  5. INSULATED DOOR
- GLAZING TYPE SCHEDULE:**
- GL-1: TINTED
  - GL-2: TEMPERED/ INSULATED
  - GL-3: TEMPERED/FIRE RATED
  - GL-4: TEMPERED

**XIAO ZHOU HOUSE ADDITION**

CLIENT NAME <b>Xiao Zhou</b>	BUILDER NAME
PROJECT ADDRESS <b>4433 86th Ave SE Mercer Island, WA 98040</b>	BUILDER CONTACT
	BUILDER ADDRESS

REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: **PERMIT**

DPS PERMIT NUMBER:

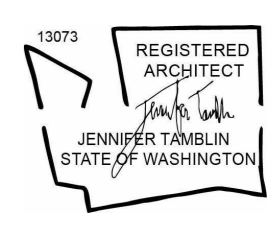
BNA Project number: **XXXXXX**

DRAWN BY: **Author**

SHEET NAME: **DOOR TYPES & SCHEDULE**

SHEET NO.: **A600**

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



Registered Architect in WA State

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EXTERIOR GLAZING SCHEDULE									
TYPE MARK	COUNT	HEIGHT	WIDTH	U VALUE	WINDOW AREA	UA	OPERATION	FRAME MATERIAL	REMARKS
W1	5	7' - 0"	2' - 0"	0.30	70 SF	21 SF			
W2	2	3' - 0"	3' - 0"	0.30	18 SF	5 SF			
W3	1	3' - 8"	7' - 6"	0.30	28 SF	8 SF			
W4	2	7' - 0"	8' - 0"	0.30	112 SF	34 SF			
<b>TOTAL</b>	<b>10</b>				<b>228 SF</b>	<b>68 SF</b>			

**GENERAL NOTES:**

- A.) CONTRACTOR TO VERIFY ALL GLAZING SIZING, AND DOOR DIMENSIONS IN FIELD PRIOR TO ROUGH FRAMING & ORDERING OF GLAZING/WINDOW/DOOR MATERIALS. REVIEW SIZES AND ANY DISCREPANCIES W/ OWNER.
- B.) ALL GLAZING TO BE "LOW E", INSULATED GLASS UNLESS NOTED OTHERWISE.
- C.) ALL OPERABLE WINDOWS TO HAVE SCREENS.
- D.) GLAZING INDOORS AND/OR WITHIN 24" OF A DOOR TO BE TEMPERED OR PROVIDE SAFETY GLASS. SEE EXTERIOR DOOR AND WINDOW TYPES FOR SAFETY GLASS LOCATION. SEE SCHEDULES FOR LOCATIONS OF EGRESS WINDOWS/DOORS.
- E.) ALL FACTORY FINISH DOORS & FRAMES TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.
- F.) ALL INTERIOR & EXTERIOR DOORS ARE 1 3/4" THICK, UNLESS NOTED OTHERWISE
- G.) EMERGENCY & ESCAPE OPENINGS (FROM IRC R310), WHERE EMERGENCY & ESCAPE OPENINGS ARE PROVIDED, THEY SHALL:
  - HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR.
  - HAVE A MIN. NET CLEAR OPENING OF 5.7 SQUARE FEET.
  - HAVE A MIN. NET CLEAR OPENING HEIGHT OF 24 INCHES.
  - HAVE A MIN. NET CLEAR OPENING WIDTH OF 20 INCHES.
  - BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS, OR SPECIAL KNOWLEDGE.
- H.) WHOLE HOUSE VENTILATION TO INCLUDE OUTDOOR AIR INLETS (FROM IRC M1508.4.5): OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY INDIVIDUAL OUTDOOR AIR INLETS. PROVIDE NOT LESS THAN 4 SQUARE INCHES (0.003 m2) OF NET FREE AREA OF OPENING FOR EACH HABITABLE SPACE. ANY INLET OR COMBINATION OF INLETS WHICH PROVIDE 10 CFM AT 10 PASCALS AS DETERMINED BY THE HOME VENTILATING INSTITUTE AIR FLOW TEST STANDARD (HVI 901 NOVEMBER 1996) ARE DEEMED EQUIVALENT TO 4 SQUARE INCHES NET FREE AREA.
- I.) ALL PRODUCTS SHALL BE NFRC CERTIFIED AND NFRC (CPD) NUMBERS PER R303.1.3 SHALL BE PROVIDED - FROM ENERGY CORRECTION COMMENT.

**GLAZING SCHEDULE NOTES:**

1. SEE EXTERIOR DOOR & WINDOW ELEVATIONS FOR OPERATION, LAYOUT, & DIMENSION.
2. EMERGENCY EGRESS OPENING.
3. SUITABLE TO INCLUDE OUTDOOR AIR INLET PER ITEM (H) IN DOOR & WINDOW NOTES.

XIAO ZHOU HOUSE ADDITION

BUILDER NAME

BUILDER CONTACT

BUILDER ADDRESS

---

CLIENT NAME

Xiao Zhou

PROJECT ADDRESS

4433 86th Ave SE Mercer Island, WA 98040

REVISION LOG

REV #	DATE	DESCRIPTION

STATUS: **PERMIT**

DPS PERMIT NUMBER:

BNA Project number: **XXXXXX**

DRAWN BY: **Author**

SHEET NAME

WINDOW TYPES & SCHEDULE

SHEET NO.

A601

Scale 3" = 1'-0"