WANG & YANG ADU

6450 E MERCER WAY

MERCER ISLAND, WA 98040

GENERAL NOTES

GENERAL:

THESE DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND MAY BE REPRODUCED ONLY WITH THE WRITTEN PERMISSION OF THE ARCHITECT. AUTHORIZED REPRODUCTIONS MUST BEAR THE NAME OF THE ARCHITECT. THESE DRAWINGS ARE FULLY PROTECTED BY FEDERAL AND STATE COPYRIGHT LAWS. ANY INFRINGEMENT WILL BE VIGOROUSLY PROSECUTED.

ALL CONSTRUCTION SHALL CONFORM TO THE *2018 INTERNATIONAL RESIDENTIAL CODE (IRC)* AS AMENDED BY THE STATE OF WASHINGTON AND BE IN ACCORDANCE WITH WASHINGTON STATE LAWS, REGULATIONS AND VARIOUS CODES IMPOSED BY LOCAL AUTHORITIES.

DO NOT SCALE DRAWINGS OR DETAILS - USE GIVEN DIMENSIONS. CHECK DETAILS FOR LOCATION OF ALL ITEMS NOT DIMENSIONED ON THE PLANS. DIMENSIONS ON THE PLANS ARE TO FACE OF FRAMING OR CENTERLINE OF COLUMNS UNLESS NOTED OTHERWISE.

DOOR AND CASED OPENINGS WITHOUT DIMENSIONS ARE TO BE 4" FROM FACE OF ADJACENT WALL OR CENTERED BETWEEN WALLS, UNLESS NOTED OTHERWISE.

VERIFY FIELD CONDITIONS PRIOR TO COMMENCEMENT OF EACH PORTION OF THE WORK.

THE CONTRACTOR SHALL COORDINATE ALL PORTIONS OF THE WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT FOR RESOLUTION OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION.

CONTRACTORS RESPONSIBILITY:

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

CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE OWNER / ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL 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 SYSTEMS SUCH AS WOOD TRUSSES WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

CONTRACTOR TO COORDINATE FRAMING LAYOUT WITH ELECTRICAL AND MECHANICAL PLAN.

SOILS:

UNLESS A SOILS REPORT BY A SOILS ENGINEER IS PROVIDED AND ATTACHED THIS OFFICE ASSUMES NO RESPONSIBILITY AS TO THE PHYSICAL CHARACTERISTICS OF THE SOIL. FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING OF 2,000 PSF. ALL FOOTINGS SHALL BE CAST ON UNDISTURBED FIRM NATURAL SOIL OR COMPACTED SOIL OF 2,000 PSF BEARING CAPACITY AT LEAST 1'-6" BELOW LOWEST ADJACENT GRADE, FREE OF ORGANIC MATERIALS. FOOTING EXCAVATION SHALL BE FREE OF LOOSE SOILS, DEBRIS, AND FREE OF WATER AT ALL TIMES. THIS OFFICE TAKES NO RESPONSIBILITY IN VERIFYING THE ACCURACY OF ENGINEERING DATA SUPPLIED BY OTHERS.

CLEARING AND 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, INTERNATIONAL RESIDENTIAL 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 EFFECTED BY THE WORK.

FINAL SITE DRAINAGE MUST DIRECT DRAINAGE AWAY FROM ALL BUILDING STRUCTURES AT A MINIMUM OF 6" WITHIN THE FIRST 10'. *Ref IRC R401.3*

CRAWL SPACE:

UNDER-FLOOR AREAS SHALL BE VENTED BY AN APPROVED MECHANICAL MEANS OR BY OPENINGS IN EXTERIOR FOUNDATION WALLS. SUCH OPENINGS SHALL HAVE A NET AREA OF NOT LESS THAN 1 SQ. FT. FOR EACH 150 SQ. FT. OF UNDER-FLOOR AREA. ONE OPENING SHALL BE WITHIN 3' OF EACH CORNER OF THE BUILDING. *Ref IRC R408.2*

CRAWL SPACE, UNOBSTRUCTED ACCESS, MINIMUM 18" x 24". *Ref IRC R408.4*

PROVIDE 18" MINIMUM CRAWL SPACE UNDER WOOD JOIST AND 12" MINIMUM CRAWL SPACE UNDER WOOD GIRDERS. *Ref IRC R317.1*

A GROUND COVER VAPOR BARRIER OF MIN. 6 MIL. (0.006") POLYETHYLENE (OR EQUIVALENT) SHALL BE INSTALLED IN ALL CRAWL SPACES, JOINTS LAPPED 12", EXTEND UP FOUNDATION WALL AND SECURE TO SILL PLATE WHEREVER PRACTICAL.

ALL WOOD IN CONTACT WITH CONCRETE, CMU OR WITHIN 8" OF SOILS SHALL BE PRESSURE TREATED WOOD. *Ref IRC R317.1*

GARAGES:

OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. DOORS BETWEEN GARAGE AND DWELLING SHALL BE SOLID WOOD DOORS; MINIMUM 1 3/8" THICK WITH SELF CLOSING DEVICE. *Ref R302.5.1*

SEPARATION FROM DWELLING TO GARAGE, SHOP OR SIMILAR AREAS SHALL BE SEPARATED FROM RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2" GYPSUM BOARD OR EQUIVALENT. *Ref IRC R302.6 & TABLE 302.6*

HEATING AND/OR COOLING EQUIPMENT LOCATED IN GARAGE SHALL BE INSTALLED WITH PILOTS AND BURNERS OR HEATING ELEMENTS AND SWITCHES AT LEAST 18" ABOVE THE FLOOR LEVEL. *Ref IRC G2408.2*

FIREPLACES:

FACTORY-BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127. *Ref IRC R1004.1*

MASONRY FIREPLACES, BARBECUES, SMOKE CHAMBERS AND FIREPLACE CHIMNEYS SHALL BE CONSTRUCTED OF MASONRY OR REINFORCED CONCRETE. FOUNDATIONS SHALL BE MIN. 12" THICK AND EXTEND MIN. 6" BEYOND MASONRY. FIREBOX WALLS MIN. 10" THICK EXCEPT MIN. 8" THICK WHERE A FIREBRICK LINING IS USED. COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 2 INCHES OF FIREPLACE. SMOKE CHAMBER OR CHIMNEY WALLS. COMBUSTIBLE MATERIAL SHALL NOT BE PLACED WITHIN 6" OF THE FIREPLACE OPENING. MIN. 4" THICK NON-COMBUSTIBLE HEARTH EXTENDING 16" IN FRONT AND 8" TO THE SIDE OF THE FIREPLACE OPENING. COMBUSTIBLE MATERIAL WITHIN 12" OF THE FIREPLACE OPENING SHALL NOT PROJECT MORE THAN 1/8" FOR EACH 1" DISTANCE FROM SUCH OPENING. *Ref IRC R1001 - R1003*

CEILING HEIGHTS:

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". BATHROOM SHALL HAVE A MIN CEILING HEIGHT OF 6'-8" OVER THE FIXTURE AND ITS FRONT CLEARANCE AREA. *Ref IRC R305*

ROOFING:

APPLY ROOFING 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:

PROVIDE ATTIC VENTILATION AS INDICATED ON ROOF FRAMING PLANS. THE MINIMUM NET FREE VENTILATING AREA SHALL BE 1/150 OF THE AREA OF THE VENTED SPACE. EXCEPTION: THE MINIMUM NET FREE VENTILATION AREA SHALL BE 1/300 OF THE VENTED SPACE PROVIDED NOT LESS THAN 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. UPPER VENTILATORS SHALL BE LOCATED NOT MORE THAN 3 FEET BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. *Ref IRC R806.2*

ATTIC ACCESS SHALL HAVE A ROUGH FRAMED OPENING NOT LESS THAN 22 INCHES BY 30 INCHES LOCATED IN A READILY ACCESSIBLE LOCATION. THE MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE 30 INCHES MEASURED VERTICALLY FROM THE BOTTOM OF THE CEILING FRAMING MEMBERS. *Ref IRC R807.* FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS *Ref IRC M1305.1.3*

GLAZING:

TO BE IN COMPLIANCE WITH IRC R308 AND WASHINGTON STATE SAFETY GLASS LAW.

GLAZING IN HAZARDOUS LOCATIONS SUCH AS GLASS ON DOORS, GLAZING WITHIN 24" ON EITHER SIDE OF A DOOR OPENING, AREAS WITHIN 60" VERTICAL AND 36" HORIZONTAL OF THE BOTTOM LANDING OF A STAIRWAY, STORM DOORS, RAILINGS, SHOWER DOORS, SLIDING GLASS DOORS, AND TUB ENCLOSURES SHALL BE SAFETY GLAZING MATERIAL. *Ref IRC R308.4*

ALL EXTERIOR WALL GLAZING SHALL COMPLY WITH THE 2018 EDITION OF THE WASHINGTON STATE ENERGY CODE.

EGRESS:

EGRESS IN EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY EXIT 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 FINISHED SILL HEIGHT NOT MORE THAN 44" ABOVE THE FLOOR. IRC R310.1.

ONE EXIT DOOR CONFORMING TO IRC R311.2 IS REQUIRED.

FIRE & CARBON MONOXIDE PROTECTION:

SMOKE & CARBON MONOXIDE DETECTOR POWER SOURCES TO BE INSTALLED IN ACCORDANCE WITH NFPA 72, IRC R314 & IRC R315. ALL ALARM DEVICES SHALL BE INTERCONNECTED PER IRC R314.1.

FIREBLOCKING PER *IRC R1003.19, R1001.12, R302.11 & R602.8. DRAFTSTOPPING PER IRC R302.12 & R502.12.*

VENTILATION & LIGHTING:

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 MIN. .35 AIR CHANGES PER HOUR. *IRC R303.1.*

DRYER & BATH FANS TO BE 50 CFM, AND RANGE/OVEN FANS TO BE 100 CFM MIN, VENT TO THE OUTSIDE. *IRC303 AND 2006 WA STATE VENTILATION AND INDOOR AIR QUALITY CODE.*

NATURAL LIGHTING TO BE NOT LESS THAN 8% OF THE FLOOR AREA OR ALL HABITABLE SPACES. *IRC R303.*

STAIRS:

MINIMUM HEADROOM OF 6'-8" MEASURED VERTICALLY FROM A SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OR PLATFORM. IRC R311.7.2 MINIMUM WIDTH 36", *IRC 311.7.1*

MINIMUM TREAD 10", MAXIMUM RISER 7 3/4", HANDRAIL MINIMUM 34" AND MAXIMUM 38" ABOVE STAIR NOSING. HANDRAIL TO BE 1 1/4" TO 2" CROSS SECTION AND 1 1/2" AWAY FROM WALL. *IRC R311.7.5 & 311.7.8.* INSTALL FIRE BLOCKING AT MID STRINGER SPAN AND AT WALL ALONG STRINGER. COVER WALLS AND SOFFITS OF USABLE SPACE UNDER STAIR WITH 1/2" GYPSUM BOARD. *IRC R302.11*

GUARDRAILS: ANY WALKING SURFACE 30" OR MORE ABOVE GRADE OR ADJACENT SURFACE SHALL HAVE MIN. 36" HIGH GUARDRAIL. *IRC R312.*

BATHROOMS:

ALL TUB AND SHOWER STALLS SHALL HAVE FIREBLOCKING BETWEEN STUDS.

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 R308.4*

BATH TUB & SHOWER STALL NON-ABSORBENT WAINSCOTS SHALL BE A MINIMUM OF 72 INCHES ABOVE THE FLOOR. *IRC R307.2.*

WATERCLOSETS SHALL HAVE MIN. 15" TO SIDE WALLS FROM CENTER OF FIXTURE, AND MIN. 21" FRONT CLEARANCE. IRC R307.1

APPLIANCES IN A FIXED POSITION SHALL BE SECURELY FASTENED IN PLACE TO STRUCTURAL MEMBERS WITH STRAP ANCHORS OR SIMILAR ANCHORING METHOD.
IRC G2404.4

PROJECT ADDRESS

6450 E MERCER WAY
MERCER ISLAND, WA 98040

LEGAL DESCRIPTION & TAX PARCEL NUMBER

POR OF GL 1 IN NE 1/4 BEG ON S LN OF N 498 FT OF SD GL 1646.58 FT E OF W LN SD NE 1/4 TH S 01-25-38 W
89.64 FT TH N 88-35-33 W 171.49 FT TH N 38-38-53 W 117.36 FT TO SD N 498 FT TH S 88-35-15 E 251.89 FT TO
BEG

TAX PARCEL NUMBER: 302405-9004

ZONING CLASSIFICATION

R-15

BUILDING CLASSIFICATION

OCCUPANCY (IBC Chapter 3 & 4)	R-3 (SINGLE FAMILY RESIDENCE)
CONSTRUCTION TYPE (IBC 602.5)	V-B
ALLOWABLE FLOOR AREA (IBC Table 506.2)	Unlimited
ALLOWABLE NO. OF STORIES (IRC R101.2)	3 STORIES ABOVE GRADE PLANE (4 Stories above grade plane are allowed per IBC Table 504.4 when structural design is in accordance with 2018 IBC)
ALLOWABLE BLDG HT IN FEET (IBC Table 504.3)	60'
FIRE PROTECTION SYSTEM	FULL COVERAGE NFPA 13D
SPRINKLERS	REQUIRED
ALTERNATIVE FIRE PROTECTIONS	1. UPGRADED FULL COVERAGE NFPA 13D (DEFERRED SUBMITTAL) 2. MONITORED FIRE ALARM SYSTEM (DEFERRED SUBMITTAL) 3. 1-HR RATED GYPSUM IN ALL AREAS 4. SOLID CORE DOORS * SEE **FIRE CODE ALTERNATE REQUEST**
COMPLIANCE WITH	**2018 INTERNATIONAL RESIDENTIAL CODE (IRC)**

BUILDING AREA CALCULATIONS

REFER TO SHEET A1.05 FOR GROSS FLOOR AREA CALCS

BUILDING HEIGHT CALCULATIONS

REFER TO SHEET A1.02 FOR HEIGHT CALCULATIONS

WET SEASON WORK

WET SEASON WORK IS NOT ALLOWED. REFER TO GEOTECHNICAL REPORT.

PROJECT DIRECTORY

GENERAL CONTRACTOR

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Project Information	*Contact Information*
Wang & Yang ADU	Siyao Wang
6450 E Mercer Way, Mercer Island, WA 98040	

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative Siyao Wang — Digitally signed by Siyao Wang Date: 2024.02.18 16:55:44 -08'00' — *Date* 02/18/2024

All Climate Zones (Table R402.1.1)	R-Value [a]	U-Factor [a]
Fenestration U-Factor [b]	n/a	0.28
Skylight U-Factor [b]	n/a	0.50
Glazed Fenestration SHGC [b,c]	n/a	n/a
Ceiling [i]	49	0.026
Wood Frame Wall [e,h]	21 int	0.056
Floor	38	0.029
Below Grade Wall [e,h]	10/15/21 int + TB	0.042
Slab [d,h] R-Value & Depth	10, 2 ft	n/a

a. *R-values are minimums. U-factors and SHGC are maximums.* When insulation is installed in a cavity that 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.
b. The fenestration *U-factor* column excludes skylights.
c. "10/15/21 +5TB" 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 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.
d. R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.
e. 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.
f. 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.
g. For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for *climate zone* 5 of ICC 400.
h. Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

Summary of Table R406.2 and 406.3				
Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option		User Notes
1	Combustion heating minimum NAECA[a]	0.0	☐	
2	Heat pump[a]	1.0	☒	
3	Electric resistance heat only - furnace or zonal	-1.0	☐	
4	DHP with zonal electric resistance per option 3.4	0.5	☐	
5	All other heating systems	-1.0	☐	
Energy Options	**Energy Credit Option Descriptions**	**Credits - select ONE energy option from each category**		
1.1	[illegible]	0.5	☐	
1.2	Efficient Building Envelope	1.0	☐	
1.3	Efficient Building Envelope	0.5	☒	
1.4	Efficient Building Envelope	1.0	☐	
1.5	Efficient Building Envelope	2.0	☐	
1.6	Efficient Building Envelope	3.0	☐	
1.7	Efficient Building Envelope ☐	0.5	☐	
2.1	Air Leakage Control and Efficient Ventilation	0.5	☒	
2.2	Air Leakage Control and Efficient Ventilation	1.0	☐	
2.3	Air Leakage Control and Efficient Ventilation	1.5	☐	
2.4	Air Leakage Control and Efficient Ventilation ☐	2.0	☐	
3.1*	High Efficiency HVAC	1.0	☐	
3.2	High Efficiency HVAC	1.0	☐	
3.3*	High Efficiency HVAC	1.5	☐	
3.4	High Efficiency HVAC	1.5	☐	
3.5.1	High Efficiency HVAC	1.5	☐	
3.5.2	High Efficiency HVAC	1.5	☐	
3.6*	High Efficiency HVAC ☐	2.0	☐	
4.1	High Efficiency HVAC Distribution System	0.5	☒	
4.2	High Efficiency HVAC Distribution System ☐	1.0	☐	

Summary of Table R406.2 (cont.)				
Energy Options	**Energy Credit Option Descriptions (cont.)**	**Credits - select ONE energy option from each category**		**User Notes**
5.1*	Efficient Water Heating	0.5	☐	
5.2	Efficient Water Heating	0.5	☒	
5.3	Efficient Water Heating	1.0	☐	
5.4	Efficient Water Heating	1.5	☐	
5.5	Efficient Water Heating	2.0	☐	
5.6	Efficient Water Heating ☐	2.5	☐	
6.1*	Renewable Electric Energy (3 credits max)	1.0	☐	
7.1	Appliance Package	0.5	☐	
	Total Credits	3.0	Calculate Total	Clear Form

VICINITY MAP

DRAWING INDEX

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A1.00B	SURVEY
A1.02	ARCHITECTURAL DEMO SITE PLAN
A1.02	ARCHITECTURAL PROPOSED SITE PLAN
A1.03	LOT COVERAGE DIAGRAMS
A1.04	HARDSCAPE DIAGRAM
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STRUCTURAL

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S1.1	GENERAL STRUCTURAL NOTES
S2.0	FOUNDATION PLAN
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S2.2	ROOF FRAMING PLAN
S3.0	FOUNDATION DETAILS
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S4.2	FLOOR FRAMING DETAILS
S4.3	ROOF FRAMING DETAILS

CIVIL

C01	DRAINAGE SITE PLAN
C02	TESC PLAN
C02.1	TESC DETAILS

SIYAO STUDIO

WANG & YANG ADU
6450 E MERCER WAY
MERCER ISLAND, WA 98040

Job No. 2303
Project Manager: SW
Issue Date: 6/13/2024

NO.	DATE	REVISION
1	10/17/2023	STRUCTURAL
2	12/01/2023	STRUCTURAL REV 1
3	12/07/2023	PRICING
4	12/16/2023	PRE-APP MEETING #2
5	02/25/2024	BUILDING PERMIT
6	06/13/2024	BUILDING PERMIT REV 1

COVER SHEET

A0.01

TOPOGRAPHIC & BOUNDARY SURVEY

LEGAL DESCRIPTION

THAT PORTION OF THE NORTH HALF OF THE NORTH HALF OF THOSE PORTIONS OF GOVERNMENT LOT 1 AND THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 24 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY WASHINGTON, LYING BETWEEN THE NORTH 498.00 FEET THEREOF AND THE SOUTH 471.00 FEET THEREOF DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH QUARTER OF SAID SECTION 30;
THENCE SOUTH 1°25'38" WEST ALONG THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 30, A DISTANCE OF 498.00 FEET;
THENCE SOUTH 88°32'59" EAST, PARALLEL TO THE NORTH LINE OF SAID NORTHEAST QUARTER, 1,646.58 FEET TO THE TRUE POINT OF BEGINNING;
THENCE SOUTH 01°25'38" WEST 89.64 FEET TO THE NORTH LINE OF GREGORY ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 72 OF PLATS, PAGE 69, IN KING COUNTY, WASHINGTON;
THENCE NORTH 88°35'33" WEST ALONG SAID NORTH LINE 171.49 FEET;
THENCE NORTH 38°38'53" WEST 117.36 FEET TO THE SOUTH LINE OF SAID NORTH 498.00 FEET;
THENCE SOUTH 88°3515" EAST 251.89 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS OVER THAT PORTION OF THE NORTH HALF OF THE NORTH HALF OF THAT PORTION OF PORTION OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER AND OF GOVERNMENT LOT 1 OF SAID SECTION 30, LYING BETWEEN THE NORTH 498.00 FEET THEREOF, AND THE SOUTH 471.00 FEET THEREOF DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH QUARTER CORNER OF SAID SECTION 30;
THENCE SOUTH 01°25'38" WEST, ALONG THE WEST LINE OF SAID NORTHEAST QUARTER, 498.00 FEET;
THENCE SOUTH 88°32'59" EAST, PARALLEL TO THE NORTH LINE OF SAID NORTHEAST QUARTER, 1,133.27 FEET TO THE TRUE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 88°32'59" EAST 274.49 FEET;
THENCE SOUTH 38°38'53" EAST 104.58 FEET TO THE SOUTH LINE OF THE NORTH 578.00 FEET OF SAID GOVERNMENT LOT 1;
THENCE SOUTH 27°49'11" WEST 10.91 FEET;
THENCE NORTH 38°38'53" WEST 104.52 FEET;
THENCE NORTH 88°3533" WEST 260.25 FEET, MORE OF LESS, TO A POINT FROM WHICH THE TRUE POINT OF BEGINNING BEARS NORTH 41°49'00" WEST;
THENCE NORTH 41°49'00" WEST 13.76 FEET, MORE LESS, TO THE TRUE POINT OF BEGINNING;
EXCEPTING THEREFROM THAT PORTION LYING WITHIN THE ABOVE DESCRIBED MAIN TRACT.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

ACCEPTED A BEARING OF N 80°02'58" E BETWEEN SURVEY MONUMENTS FOUND AND SHOWN HEREON.

REFERENCES

R1. RECORD OF SURVEY, VOL. 022, PG. 021. RECORDS OF KING COUNTY, WASHINGTON.
R2. RECORD OF SURVEY, VOL. 017, PG. 168. RECORDS OF KING COUNTY, WASHINGTON.
R3. RECORD OF SURVEY, VOL. 014, PG. 031. RECORDS OF KING COUNTY, WASHINGTON.
R4. RECORD OF SURVEY, VOL. 097, PG. 160. RECORDS OF KING COUNTY, WASHINGTON.
R5. PLAT OF GREGORY ADDITION, VOL. 72 OF PLATS, PG 66, KING COUNTY WASHINGTON

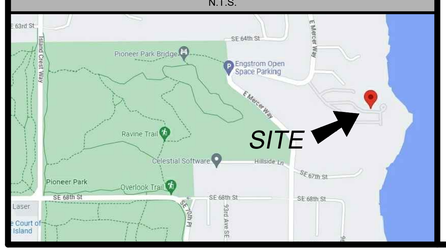
VERTICAL DATUM

NAVD 88 PER GPS OBSERVATIONS

SITE TEMP. BENCHMARK
DESCRIPTION: SET NAIL AT NORTH BASE OF POWER POLE
LOCATION: 6' EAST OF SW PROPERTY CORNER
ELEVATION: 63.88'

VICINITY MAP

N.T.S.



SCHEDULE B ITEMS

1. EASEMENT, EXCEPTIONS AND RESERVATIONS CONTAINED IN DEED
PURPOSE: USE ROAD AND TO LAY AND MAINTAIN WATER PIPELINES
RECORDED: MAY 23, 1927
RECORDING NO.: 2355301
"LOCATION UNSPECIFIED"

2. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
IN FAVOR OF: PUGET SOUND & LIGHT COMPANY, A WASHINGTON CORPORATION
PURPOSE: CONSTRUCT, OPERATE, MAINTAIN, REPAIR, REPLACE AND ENLARGE AN UNDERGROUND ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM UPON AND UNDER THE RIGHT-OF-WAY TOGETHER WITH ALL NECESSARY OR CONVENIENT APPURTENANT THEREFOR, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: UNDERGROUND CONDUITS, CABLES, COMMUNICATION LINES; VAULTS, MANHOLES, SWITCHES AND TRANSFORMERS; AND SEMI-BURIED OR GROUND MOUNTED FACILITIES.
RECORDED: MARCH 29, 1938
RECORDING NO: 2990205
"AS CONSTRUCTED"

3. EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
IN FAVOR OF: PUGET SOUND & LIGHT COMPANY, A WASHINGTON CORPORATION
PURPOSE: CONSTRUCT, OPERATE, MAINTAIN, REPAIR, REPLACE AND ENLARGE AN UNDERGROUND ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM UPON AND UNDER THE RIGHT-OF-WAY TOGETHER WITH ALL NECESSARY OR CONVENIENT APPURTENANT THEREFOR, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: UNDERGROUND CONDUITS, CABLES, COMMUNICATION LINES; VAULTS, MANHOLES, SWITCHES AND TRANSFORMERS; AND SEMI-BURIED OR GROUND MOUNTED FACILITIES.
RECORDED: MARCH 29, 1938
RECORDING NO.: 2990210
"AS CONSTRUCTED"

4. EASEMENT FOR WATER PIPE LINES AND THE TERMS AND CONDITIONS THEREOF:
IN FAVOR OF: WATER DISTRICT NO. 93, KING COUNTY, WASHINGTON
PURPOSE: INSTALLING, CONSTRUCTING, MAINTAINING, OPERATING, REPAIRING AND REPLACING THE WATER PIPE LINE OR LINES AND ALL NECESSARY CONNECTIONS AND APPURTENANCES; TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS
RECORDED: DECEMBER 17, 1959
RECORDING NO: 5113737
"PLOTTED"

SCHEDULE B ITEMS

5. EASEMENT AS DISCLOSED BY STATUTORY WARRANTY DEED
PURPOSE: INGRESS AND EGRESS
RECORDED: APRIL 25, 1962
RECORDING NO: 5417239
"PLOTTED"

6. EASEMENT AS DISCLOSED BY QUIT CLAIM DEED
PURPOSE: INGRESS AND EGRESS
RECORDED: APRIL 28, 1969
RECORDING NO: 6502352
"PLOTTED"

7. NOTICE OF ADDITIONAL TAP OR CONNECTION CHARGES
RECORDING DATE: DECEMBER 6, 1977
RECORDING NO.: 7712060812
"NOT SURVEY RELATED"

8. WAIVER AND COVENANT NOT TO SUE ON CONSTRUCTION
RECORDING DATE: MAY 1, 1986
RECORDING NO.: 8605010369
"BLANKET IN NATURE"

9. COVENANTS, CONDITIONS, RESTRICTIONS, RECITALS, RESERVATIONS, EASEMENTS, EASEMENT PROVISIONS, DEDICATIONS, BUILDING SETBACK LINES, NOTES, STATEMENTS, AND OTHER MATTERS, IF ANY, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH ON SURVEY:
RECORDING NO: 20170526900002
"CURRENT CONDITIONS SHOWN"

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN APRIL OF 2023. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US, BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555).
4. SUBJECT PROPERTY TAX PARCEL NO. 302405-9004
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 19,210 S.F. (0.44 ACRES)
6. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM CHICAGO TITLE INSURANCE COMPANY'S "ALTA COMMITMENT", ORDER NO. 0200514-ETU, DATED FEBRUARY 4, 2021. IN PREPARING THIS MAP, TERRANE, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS TERRANE, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED "ALTA COMMITMENT". TERRANE, INC. HAS RELIED WHOLLY ON CHICAGO TITLE INSURANCE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND TERRANE, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.
7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE OF THE SIDING UNLESS OTHERWISE NOTED.
8. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

LEGEND

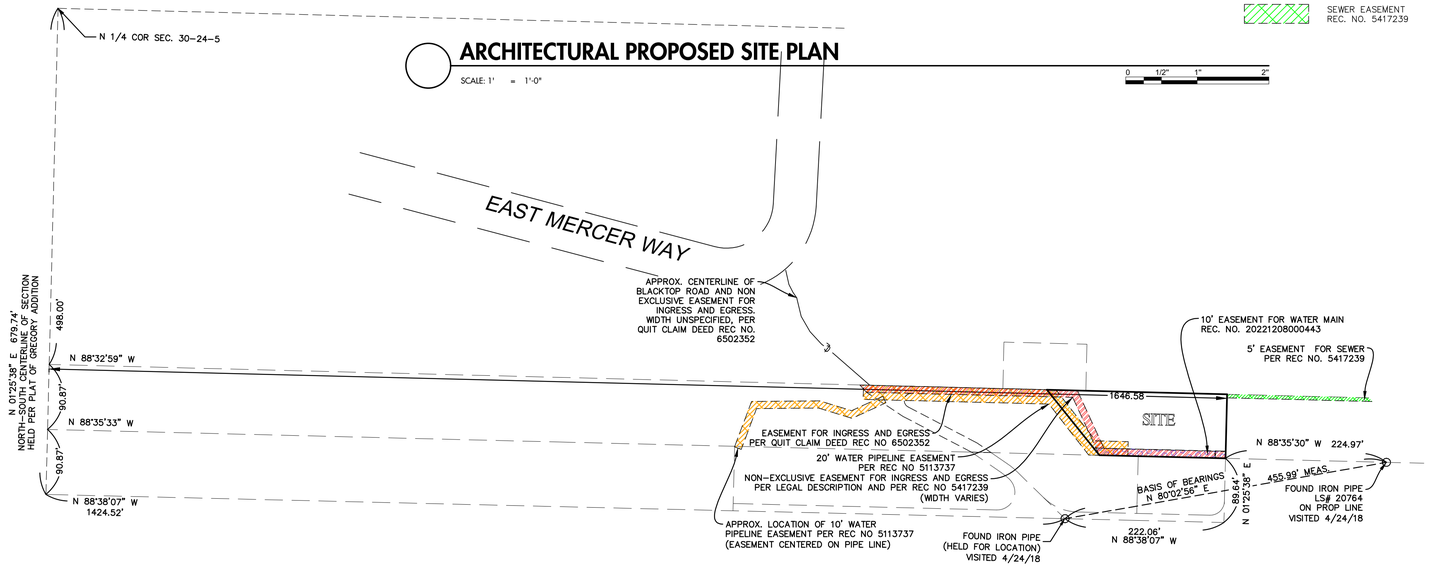
- ASPHALT SURFACE
- BENCHMARK
- BOL — BOLLARD
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- SSCO — CLEANOUT
- CONCRETE SURFACE
- DECK
- FENCE LINE (CHAIN LINK)
- FENCE LINE (WIRE)
- FENCE LINE (WOOD)
- FIRE HYDRANT
- FLAGSTONE SURFACE
- G — GAS LINE
- G — GAS METER
- GRAVEL SURFACE
- PAVER SURFACE
- P — POWER METER
- P — POWER (OVERHEAD)
- UP — POWER (UNDERGROUND)
- PP — POWER POLE
- PROPERTY LINE (SUBJECT)
- PROPERTY LINES (ADJACENT)
- REBAR & CAP (SET)
- REBAR AS NOTED (FOUND)
- RETAINING WALL
- RIGHT-OF-WAY LINES
- ROCKERY
- SIZE TYPE — TREE (AS NOTED)
- W — WATER LINE
- WM — WATER METER
- WV — WATER VALVE
- ACU — AIR CONDITION UNIT
- CONC — CONCRETE
- COR — CORNER
- DEC — DECIDUOUS
- ELEV — ELEVATION
- EVG — EVERGREEN
- FF — FINISH FLOOR
- LS# — LAND SURVEYOR NUMBER
- PROP — PROPERTY
- (R) — RECORD DATA

EASEMENTS

- INGRESS, EGRESS EASEMENT REC. NO. 5417239
- WATER EASEMENT REC. NO. 20221208000443
- WATER PIPELINE EASEMENT REC. NO. 5113737
- INGRESS, EGRESS EASEMENT REC. NO. 6502352
- SEWER EASEMENT REC. NO. 5417239

ARCHITECTURAL PROPOSED SITE PLAN

SCALE: 1" = 1'-0"



CONTROL MAP

N.T.S.

STEEP SLOPE/BUFFER DISCLAIMER:

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

INDEXING INFORMATION

NE 1/4 NE 1/4
SECTION: 30
TOWNSHIP: 24N
RANGE: 05E, W.M.
COUNTY: KING

We are the measure | terrane.net

TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 302405-9004

Wang / Yang Residence
6450 E Mercer Way
MERCER ISLAND, WA 98040

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

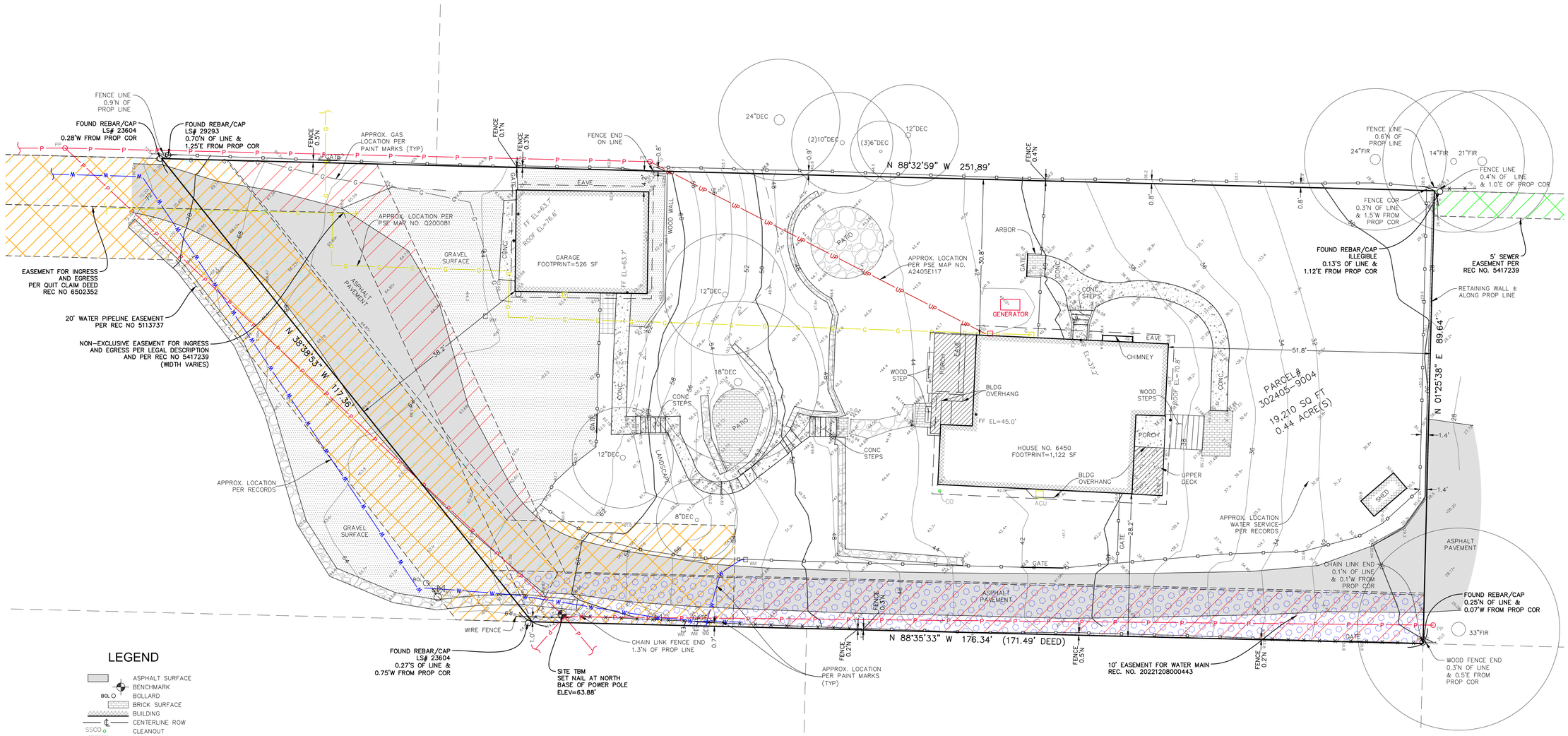
JOB NUMBER:	230545
DATE:	04/26/23
DRAFTED BY:	TLR
CHECKED BY:	JGM/DRT
SCALE:	N.T.S.

REVISION HISTORY

05/10/23	POWER LINES

SHEET NUMBER
1 OF 2

TOPOGRAPHIC & BOUNDARY SURVEY



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10 0 5 10

(IN FEET)
1 INCH = 10 FT.

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TOPOGRAPHIC & BOUNDARY SURVEY
PARCEL NO. 302405-9004

Wang / Yang Residence

6450 E Mercer Way
MERCER ISLAND, WA 98040

LANCE GOODMAN MILLER — REGISTERED PROFESSIONAL LAND SURVEYOR — STATE OF WASHINGTON

05/10/25

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

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05/10/23	POWER LINES
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2 OF 2	

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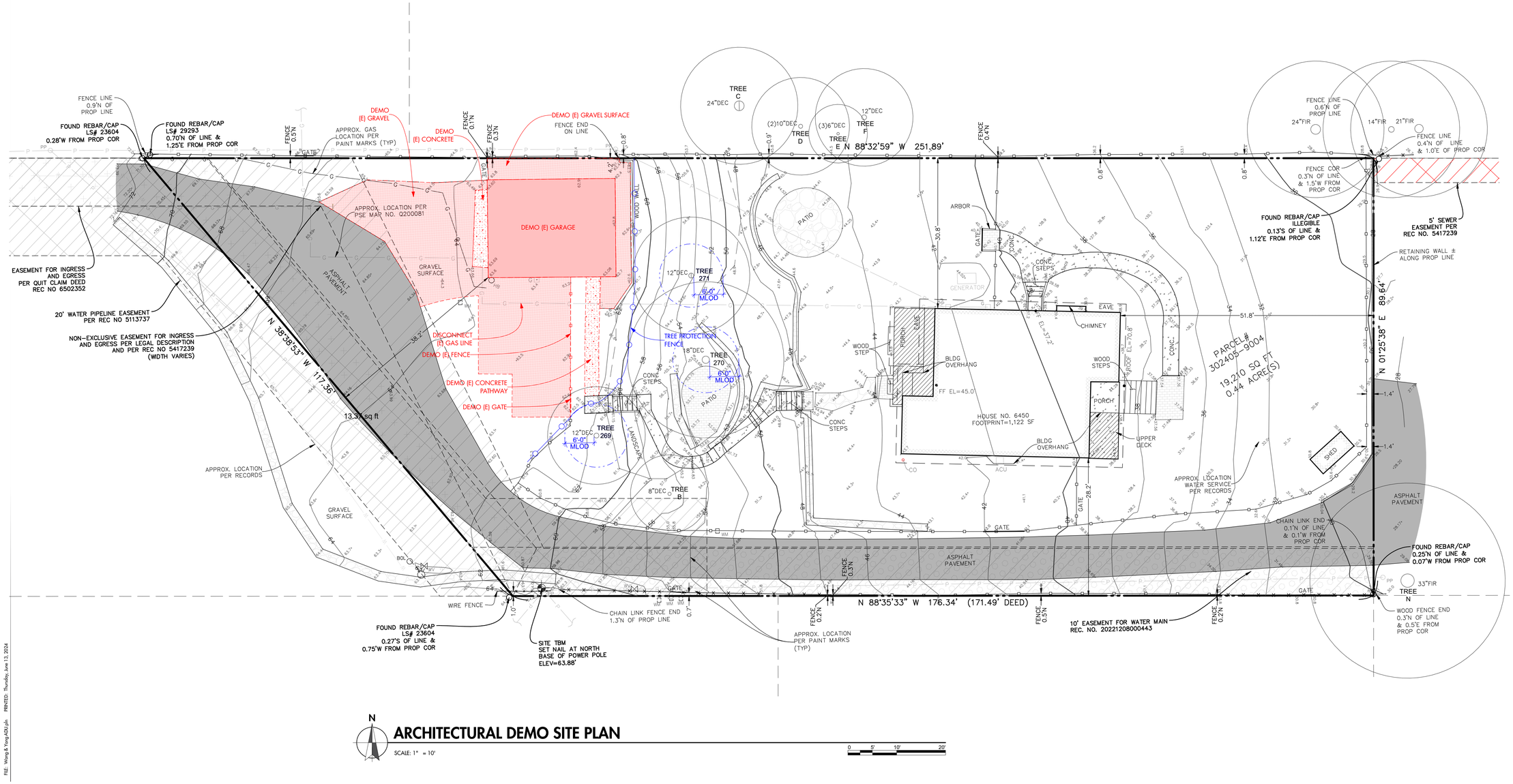


N

ARCHITECTURAL DEMO SITE PLAN

SCALE: 1" = 10'

0 5' 10' 20'

FILE: Wong & Yang ADU.pln PRINTED: Thursday, June 13, 2024

SIYAO STUDIO

WANG & YANG ADU

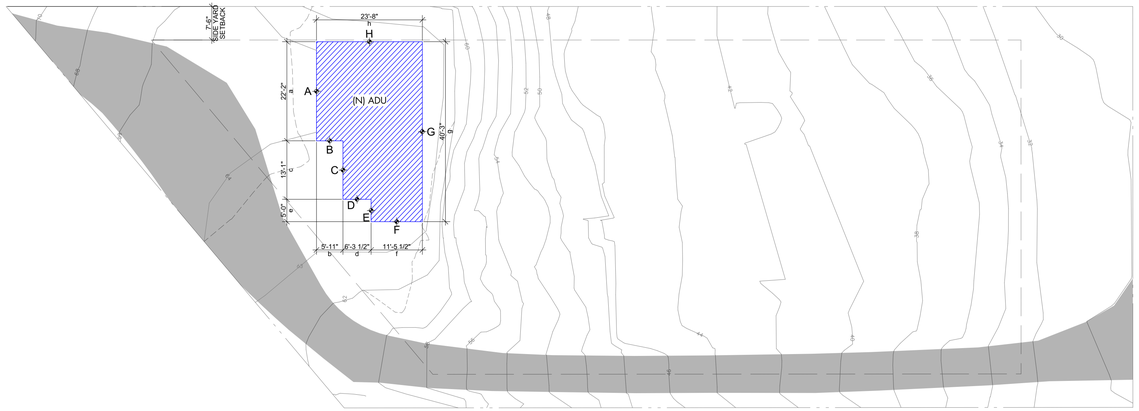
6450 E MERCER WAY
MERCER ISLAND, WA 98040

Job No.	2303
Project Manager:	SW
Issue Date:	**6/13/2024**

NO.	DATE	REVISION
1	10/17/2023	STRUCTURAL
2	12/01/2023	STRUCTURAL REV 1
3	12/07/2023	PRICING
4	12/16/2023	PRE-APP MEETING #2
5	02/25/2024	BUILDING PERMIT
6	06/13/2024	BUILDING PERMIT REV 1

ARCHITECTURAL DEMO SITE PLAN

A1.02



MAX BUILDING HEIGHT CALCULATIONS

		Existing		Finished		
	Top of Gabled Roof	Existing grade	Existing Ground Elevation	Finish Grade	Finished Ground Elevation	Length of Wall Segement
A	88.02'	63.76'	24.26'	64.00'	24.02'	22.17'
B		63.77'	24.25'	63.90'	24.12'	5.92'
C		63.45'	24.57'	63.70'	24.32'	13.08'
D		63.14'	24.88'	63.40'	24.62'	6.29'
E		62.93'	25.09'	63.40'	24.62'	5.00'
F		62.61'	25.41'	63.50'	24.52'	11.46'
G		62.99'	25.03'	63.10'	24.92'	40.25'
H		63.42'	24.60'	63.54'	24.48'	23.67'

PER MICC 19.02.020.C.1.c.iii.(a).(2) and 19.02.020.C.1.c.iii.(b), GABLED ROOF SINGLE-FAMILY DWELLINGS SHALL PROVIDE A MINIMUM SIDE YARD DEPTH OF SEVEN AND ONE-HALF FEET IF THE BUILDING HEIGHT IS MORE THAN 15 FEET BUT LESS THAN 25 FEET MEASURED FROM EXISING OR FINISHED GRADE, WHICHEVER IS LOWER, TO THE TOP OF THE GABLED ROOF END ADJOINING THE SIDE YARD.

AVERAGE BUILDING ELEVATION = (A*a + B*b + C*c + D*d + E*e + F*f + G*g + H*h) / (a + b + c + d + e + f + g + h)
= (63.76*22.17 + 63.77*5.92 + 63.45*13.08 + 63.14*6.29 + 62.93*5 + 62.61*11.46 + 62.99*40.25 + 63.42*23.67) / (22.17 + 5.92 + 13.08 + 6.29 + 5 + 11.46 + 40.25 + 23.67) = 8,085.22 / 127.84 = **63.26'**

ALLOWABLE BUILDING HEIGHT = 63.26' + 25' = **88.26'**

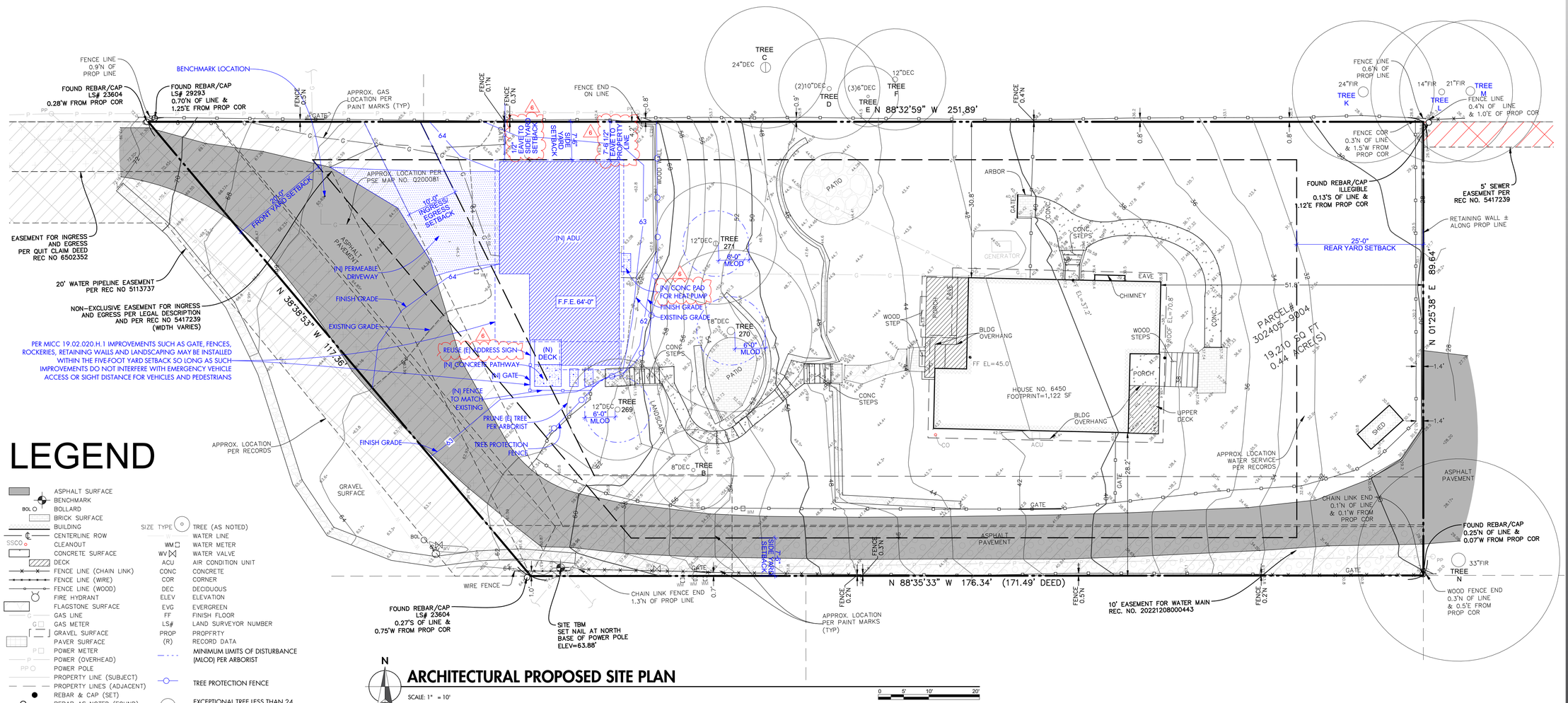
PROPOSED BUILDING HEIGHT = **88.02' < 88.26'** (SEE A3.01)

N

BUILDING HEIGHT DIAGRAMS

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

0 8' 16' 32'



N

ARCHITECTURAL PROPOSED SITE PLAN

SCALE: 1" = 10'

0 5' 10' 20'

LEGEND

- ASPHALT SURFACE
- BENCHMARK
- BOLLARD
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CLEANOUT
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FILE: Wong & Yang ADU.pln PRINTED: Thursday, June 13, 2024

SIYAO STUDIO

WANG & YANG ADU

6450 E MERCER WAY
MERCER ISLAND, WA 98040

Job No. 2303
Project Manager: SW
Issue Date: 6/13/2024

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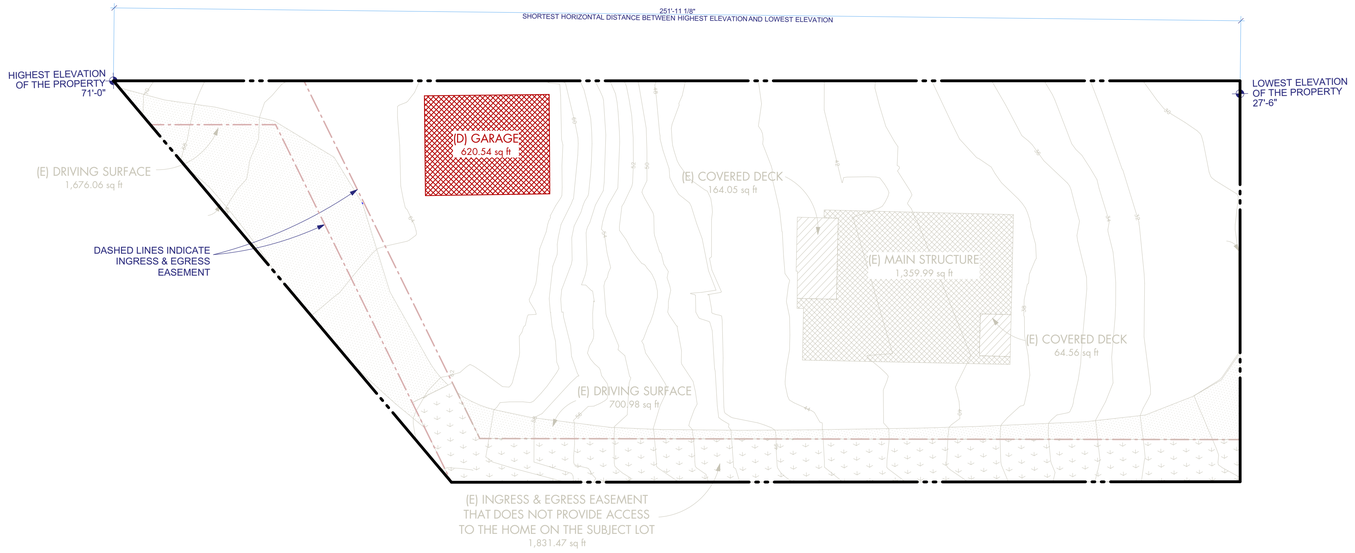
ARCHITECTURAL PROPOSED SITE PLAN

A1.02



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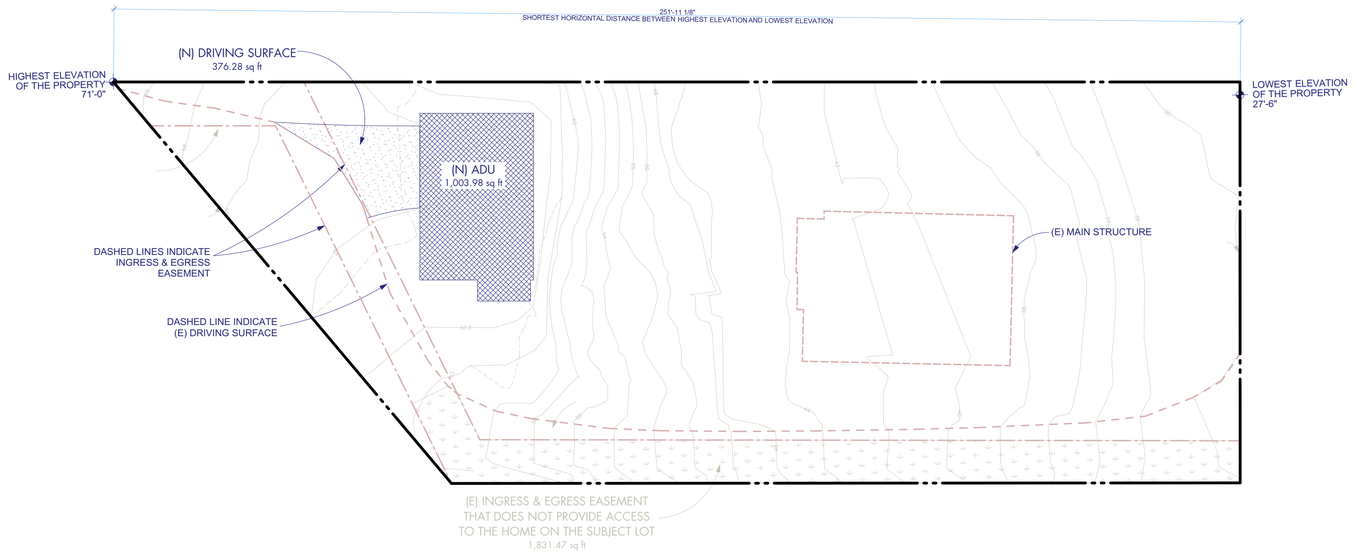
(E) LOT COVERAGE DIAGRAM

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

0 8' 16' 32'



N

(N) LOT COVERAGE DIAGRAM

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

0 8' 16' 32'

LOT COVERAGE CALCULATIONS

LOT SLOPE CALCULATIONS

HIGHEST ELEVATION OF THE PROPERTY ..... 71'-0" (71')
LOWEST ELEVATION OF THE PROPERTY ..... 27'-6" (27.5')
SHORTEST HORIZONTAL DISTANCE BETWEEN HIGHEST ELEVATION AND LOWEST ELEVATION ..... 251'-11 1/8" (251.93')

LOT SLOPE ..... (71'-27.5') / 251.93' * 100% = **17.27%**

NET LOT AREA CALCULATIONS

LOT AREA ..... 19,270 SF
ACCESS EASEMENT AREA THAT DOES NOT PROVIDE ACCESS TO HOME ON THE SUBJECT LOT ..... 1,831.47 SF

NET LOT AREA ..... 19,270 - 1,831.47 = **17,438.53 SF**

LOT COVERAGE CALCULATIONS

LOT COVERAGE EXISTING

(D) GARAGE	621
(E) COVERED DECK	229
(E) DRIVING SURFACE	2,377
(E) MAIN STRUCTURE	1,360
	4,586 ft²

LOT COVERAGE DEMO

(D) GARAGE	621
	621 ft²

LOT COVERAGE NEW

(N) ADU	1,004
(N) DRIVING SURFACE	376
	1,380 ft²

Lot Slope	Maximum Lot Coverage (house, driving surfaces, and accessory buildings)	Required Landscaping Area
Less than 15%	40%	60%
15% to less than 30%	35%	65%
30% to 50%	30%	70%
Greater than 50% slope	20%	80%

MAX. LOT COVERAGE ALLOWED 35%
MAX. LOT COVERAGE AREA ALLOWED ..... 17,438.53 * 35% = 6,103.49 SF

LOT COVERAGE AREA PROVIDED ..... 4,586 - 621 + 1,380 = **5,345 SF < 6,103.49 SF**
LOT COVERAGE PROVIDED ..... 5,345 / 17,438.53 = **30.65% < 35%**

SIYAO STUDIO

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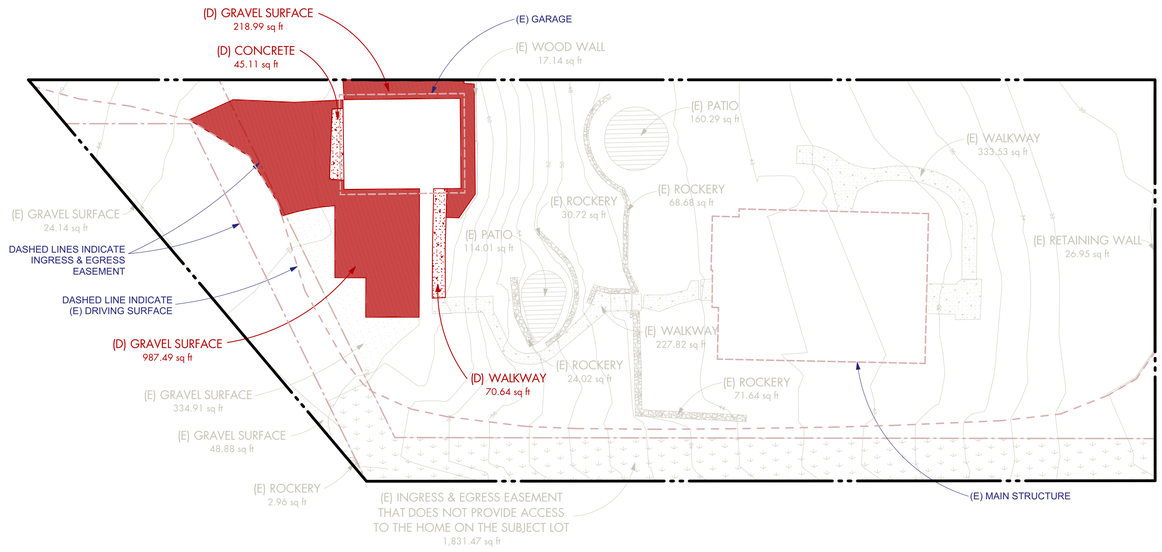
LOT COVERAGE DIAGRAMS

A1.03



N

(E) HARDSCAPE DIAGRAM

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

0 8' 16' 32'

HARDCAPE CALCULATIONS

HARDSCAPE COVERAGE EXISTING

(D) CONCRETE	45
(D) GRAVEL SURFACE	1,206
(D) WALKWAY	71
(E) GRAVEL SURFACE	408
(E) PATIO	274
(E) RETAINING WALL	27
(E) ROCKERY	198
(E) WALKWAY	561
(E) WOOD WALL	17
	2,807 ft² 6

HARDSCAPE COVERAGE DEMO

(D) CONCRETE	45
(D) GRAVEL SURFACE	1,206
(D) WALKWAY	71
	1,322 ft²

HARDSCAPE COVERAGE NEW

(N) CONCRETE PAD	7 6
(N) UNCOVERED DECK	19
(N) WALKWAY	34
	60 ft² 6

NET LOT AREA CALCULATIONS

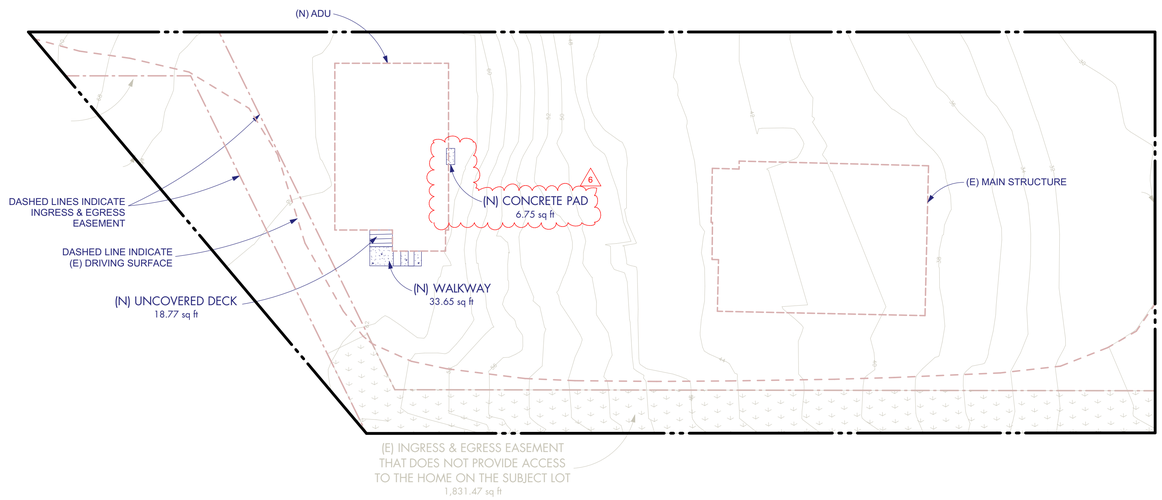
LOT AREA ..... 19,270 SF
ACCESS EASEMENT AREA THAT DOES NOT PROVIDE ACCESS TO HOME ON THE SUBJECT LOT ..... 1,831.47 SF

NET LOT AREA ..... 19,270 - 1,831.47 = **17,438.53 SF**

PER MICC 19.02.020.F.3.b.i, A MAXIMUM OF NINE PERCENT OF THE NET LOT AREA MAY CONCIST OF HARDSCAPE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, WALKWAYS, DECKS, ETC.

MAX. HARDSCAPE ALLOWED 9%
MAX. HARDSCAPE AREA ALLOWED ..... 17,438.53 * 9% = 1,569.47 SF

HARDSCAPE AREA PROVIDED ..... 2,807 - 1,322 + 60 = **1,545 SF < 1,569.47 SF** 6
HARDSCAPE PROVIDED ..... 1,537 / 17438.53 = 8.86% < 9%



N

(N) HARDSCAPE DIAGRAM

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

0 8' 16' 32'

SIYAO STUDIO

WANG & YANG ADU

6450 E MERCER WAY
MERCER ISLAND, WA 98040

Job No. 2303
Project Manager: SW
Issue Date: 6/13/2024

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HARDSCAPE DIAGRAM

A1.04

RE: Wang & Yang ADU.pln PRINTED: Thursday, June 13, 2024

ADU SQUAREGFOOTAGE CALCULATIONS

PER MICC 19.02.030.B.4, THE SQUARE FOOTAGE OF THE ACCESSORY DWELLING UNIT SHALL BE A MINIMUM OF 220 SF AND A MAXIMUM OF 900 SF, EXLUDING ANY GARAGE AREA; PROVIDED, THE SQUARE FOOTAGE OF THE ACCESSORY DWELLING UNIT SHALL NOT EXCEED 80% OF THE TOTAL SQUARE FOOTAGE OF THE PRIMARY DWELLING UNIT, EXCLUDING THE GARAGE AREA.

ADU SQUARE FOOTAGE

MAIN FLOOR ..... 171 SF
UPPER FLOOR ..... 591 SF
STAIRS (2-STORY) ..... 50 SF
200% GFA MODIFIER FOR CEILING HEIGHT MORE THAN 16 FT
FOYER ..... 38 SF
TOTAL SQUARE FOOTAGE ..... 171 + 591 + 50 + 38*2 = **888 SF < 900 SF**

GROSS FLOOR AREA CALCULATIONS

GROSS FLOOR AREA - EXISTING

FINISHED BASEMENT ..... 1,070 SF
MAIN FLOOR ..... 1,130 SF
UPPER FLOOR ..... 1,150 SF
COVERED DECK ..... 65 SF
GARAGE ..... 527 SF
TOTAL GROSS FLOOR AREA EXISTING ..... **3,942 SF**

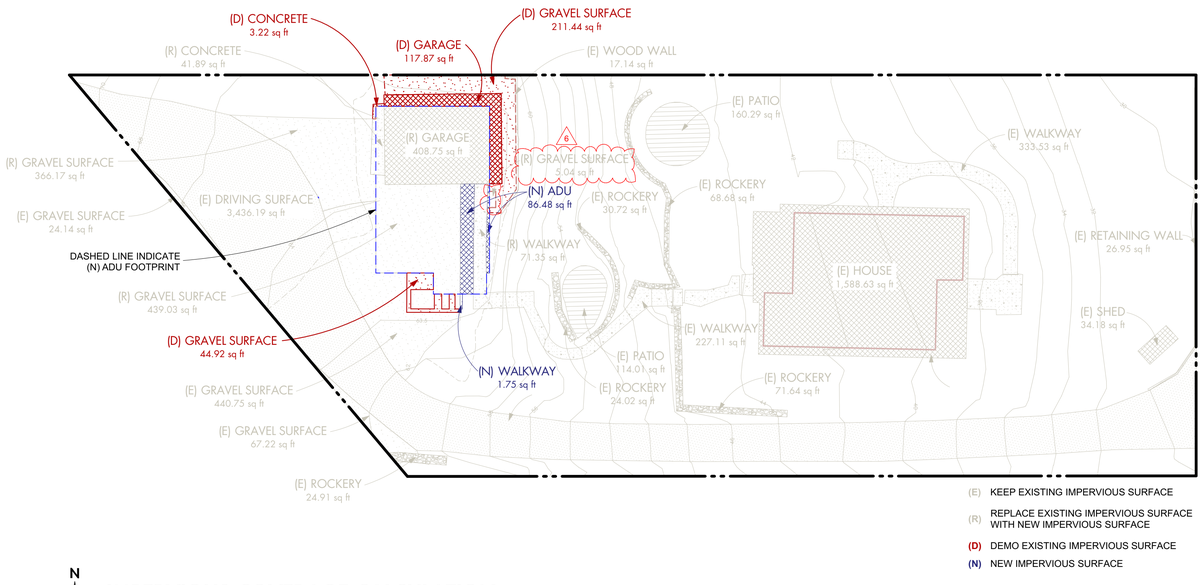
GROSS FLOOR AREA - DEMO

GARAGE ..... 527 SF
TOTAL GROSS FLOOR AREA DEMO ..... **527 SF**

GROSS FLOOR AREA - NEW

MAIN FLOOR ..... 171 SF
UPPER FLOOR ..... 591 SF
STAIRS (2-STORY) ..... 50 SF
GARAGE ..... 513 SF
200% GFA MODIFIER FOR CEILING HEIGHT MORE THAN 16 FT
FOYER ..... 38 SF
TOTAL GROSS FLOOR AREA NEW ..... **1,401 SF**

GROSS FLOOR AREA ALLOWED ..... 19,270 * 40% = **7,708 SF**
GROSS FLOOR AREA PROVIDED ..... 3,942 - 527 + 1,401 = **4,816 SF < 7,708 SF**



(E) KEEP EXISTING IMPERVIOUS SURFACE

(R) REPLACE EXISTING IMPERVIOUS SURFACE WITH NEW IMPERVIOUS SURFACE

(D) DEMO EXISTING IMPERVIOUS SURFACE

(N) NEW IMPERVIOUS SURFACE

N

IMPERVIOUS COVERAGE CALCULATION

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

0 8' 16' 32'

IMPERVIOUS COVERAGE CALCULATIONS

IMPERVIOUS COVERAGE EXISTING

(E) DRIVING SURFACE	3,436
(E) GRAVEL SURFACE	532
(E) HOUSE	1,589
(E) PATIO	274
(E) RETAINING WALL	27
(E) ROCKERY	220
(E) SHED	34
(E) WALKWAY	561
(E) WOOD WALL	17
	6,690 ft²

IMPERVIOUS SURFACE REPLACE

(R) CONCRETE	42
(R) GARAGE	409
(R) GRAVEL SURFACE	810 6
(R) WALKWAY	71
	1,332 ft² 6

IMPERVIOUS COVERAGE DEMO

(D) CONCRETE	3
(D) GARAGE	118
(D) GRAVEL SURFACE	256 6
	377 ft²

IMPERVIOUS COVERAGE NEW

(N) ADU	86
(N) WALKWAY	2
	88 ft²

PREVIOUS IMPERVIOUS COVERAGE ..... 6,690 + 1,332 + 377 = 8,399 SF
PROPOSED IMPERVIOUS COVERAGE ..... 6,690 + 1,332 + 88 = 8,110 SF

IMPERVIOUS COVERAGE INCREASE ..... 8,110 - 8,399 = **-289 SF** < 500 SF 6

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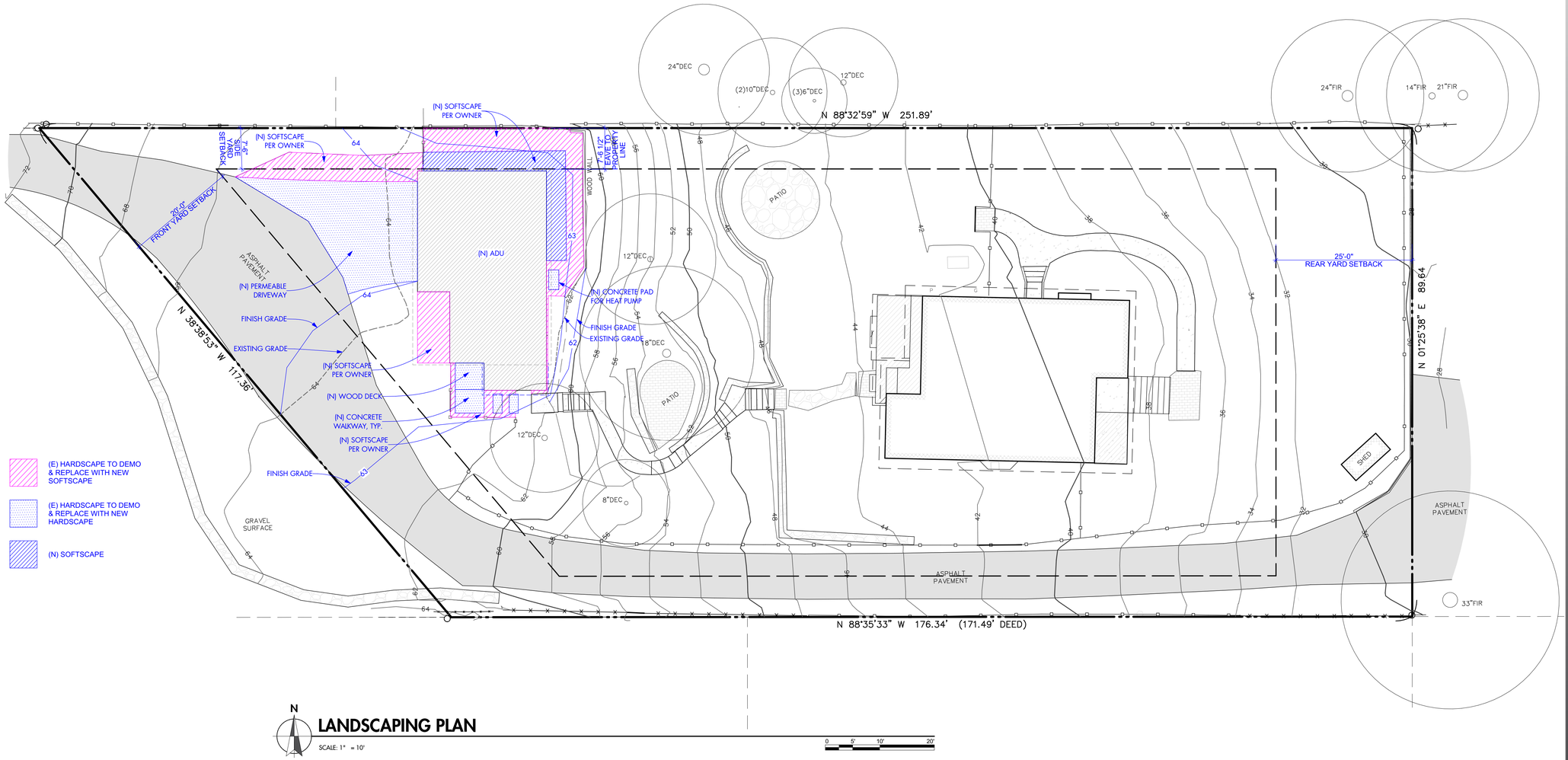
GROSS FLOOR AREA & IMPERVIOUS

A1.05



N

LANDSCAPING PLAN

SCALE: 1" = 10'

0 5' 10' 20'

FILE: Wang & Yang ADU.pln PRINTED: Thursday, June 13, 2024

SIYAO STUDIO

WANG & YANG ADU

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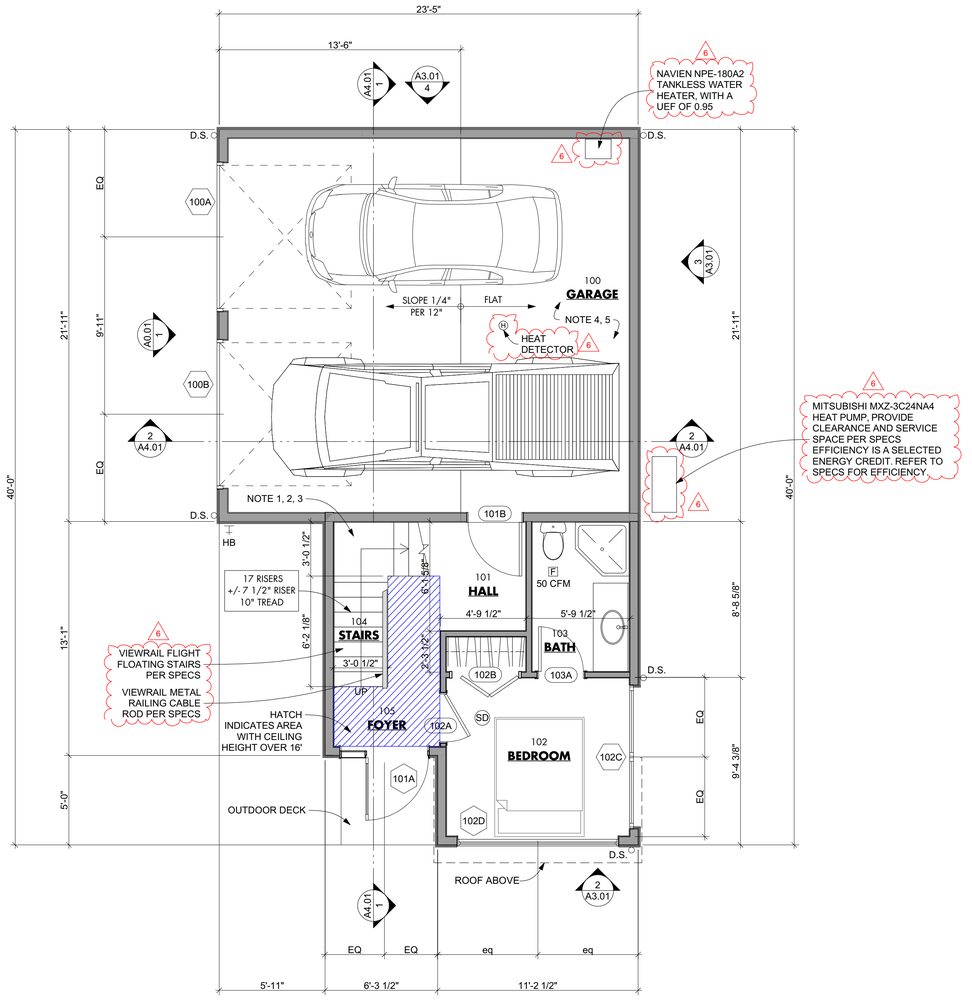
LANDSCAPING PLAN

6

A1.06



PLAN NOTES

1) INTERIOR STAIRWAYS SHALL BE ILLUMINATED PER IRC, SECTION R303.7.

2) ALL HANDRAILS TO BE 34"-38" ABOVE TREAD NOSING, 1 1/2" FROM WALL, NOT LESS THAN 1 1/4" OR MORE THAN 2" IN DIAMETER PER IRC, SECTION R311& R312

3) ALL GUARD RAILS SHALL BE MIN 36" HIGH AND HAVE A MAXIMUM OPENING SUCH THAT A 4" SPHERE CANNOT PASS THROUGH PER IRC, SECTIONS R312.1.2 & R312.1.3

4) THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE WITH A MIN 1/2" GYPSUM BOARD OR EQUIV. APPLIED TO THE GARAGE SIDE. 5/8" TYPE 'X' GYPSUM BOARD IS REQUIRED WHERE THERE ARE HABITABLE ROOMS ABOVE THE GARAGE. SUPPORTING COLUMNS, WALLS AND BEAMS USE 1/2" GYPSUM WALL BOARD PER IRC, SECTION 302.6

5) OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL HAVE A SOLID WOOD, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 3/8" IN THICKNESS OR 20-MIN FIRE-RATED DOORS. ALL DOORS SHALL BE EQUIPPED WITH A SELF CLOSING OR AUTOMATIC CLOSING DEVICE. PER IRC, SECTIONO R302.5.1

LEGEND

- CONCRETE WALL
- EXTERIOR FRAMED WALL, FINISH VARIES
- INTERIOR WALL
- ELEMENT ABOVE
- SD — SMOKE DETECTOR/ CARBON MONOXIDE DETECTOR
- F — FAN

MAIN FLOOR SQUARE FOOTAGES

BATH	49
BEDROOM	107
FOYER	38
HALL	15
STAIRS	50
	258 ft²

N

MAIN FLOOR PLAN

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

0 2' 4' 8'

SIYAO STUDIO

WANG & YANG ADU

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MAIN FLOOR PLAN

A2.01

RVE - Wang & Yang ADU.pln PRINTED: Thursday, June 13, 2024

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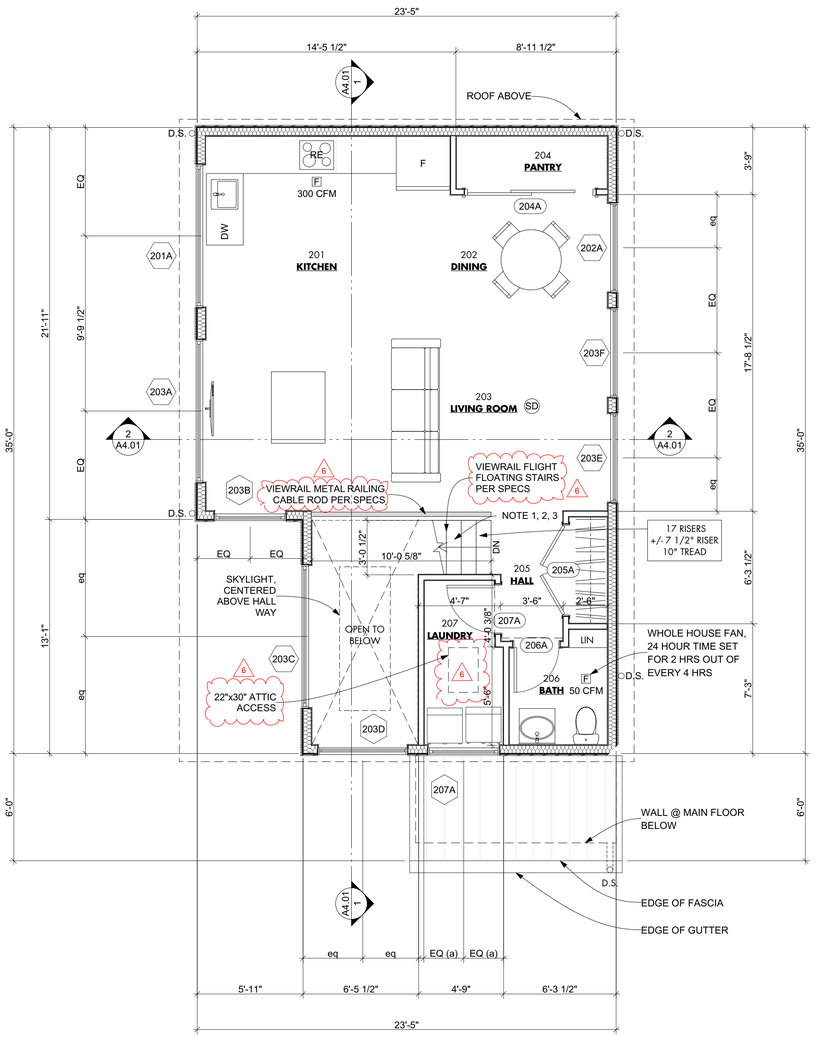

LEGEND

- CONCRETE WALL
- EXTERIOR FRAMED WALL, FINISH VARIES
- INTERIOR WALL
- ELEMENT ABOVE
- SD — SMOKE DETECTOR/ CARBON MONOXIDE DETECTOR
- F — FAN

UPPER FLOOR SQUARE FOOTAGES

BATH	34
DINING	56
HALL	39
KITCHEN	132
LAUNDRY	42
LIVING ROOM	259
PANTRY	29
	591 ft²

N

UPPER FLOOR PLAN

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

0 2' 4' 6'

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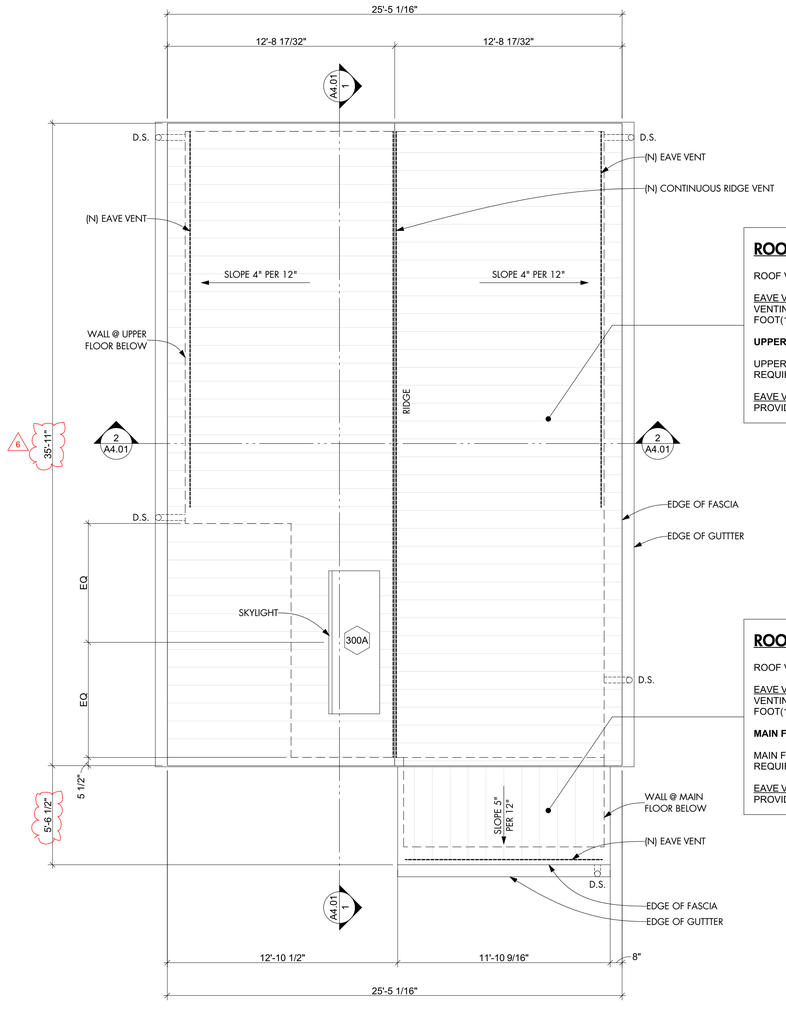
UPPER FLOOR PLAN

A2.02



ROOF VENTING CALCULATIONS

ROOF VENTING PER IRC R806

EAVE VENTING
VENTING PRODUCT: COR-A VENT S-400, 10 SQ IN NFVA/LINEAL FOOT(10/144=0.06944 SG FT/LINEAL FOOT)

UPPER FLOOR ROOF

UPPER FLOOR ROOF AREA: 742 SF
REQUIRED VENTING AREA: 1/300 X 742 SF= 2.47 SF

EAVE VENTING
PROVIDED: 77 X 0.06944 CONTINUOS EAVE VENT= 5.34 SF > 2.47 SF

ROOF VENTING CALCULATIONS

ROOF VENTING PER IRC R806

EAVE VENTING
VENTING PRODUCT: COR-A VENT S-400, 10 SQ IN NFVA/LINEAL FOOT(10/144=0.06944 SG FT/LINEAL FOOT)

MAIN FLOOR BEDROOM ROOF

MAIN FLOOR BEDROOM ROOF AREA: 56 SF
REQUIRED VENTING AREA: 1/150 X 56 SF= 0.37 SF

EAVE VENTING
PROVIDED: 11 X 0.06944 CONTINUOS EAVE VENT= 0.76 SF > 0.37 SF

N

ROOF PLAN

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

0 2' 4' 8'

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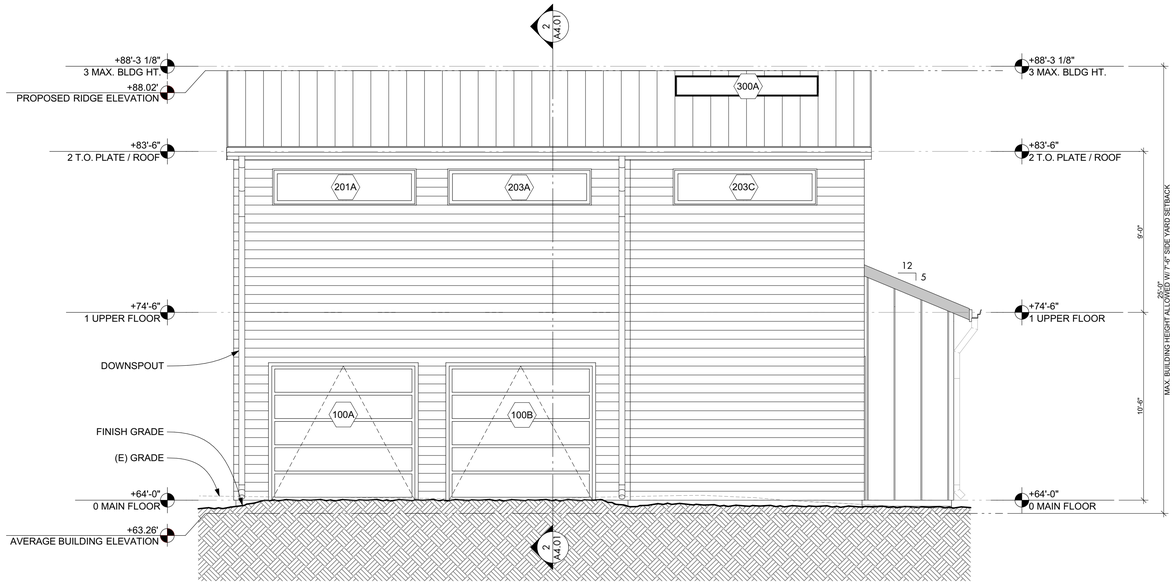
ROOF PLAN

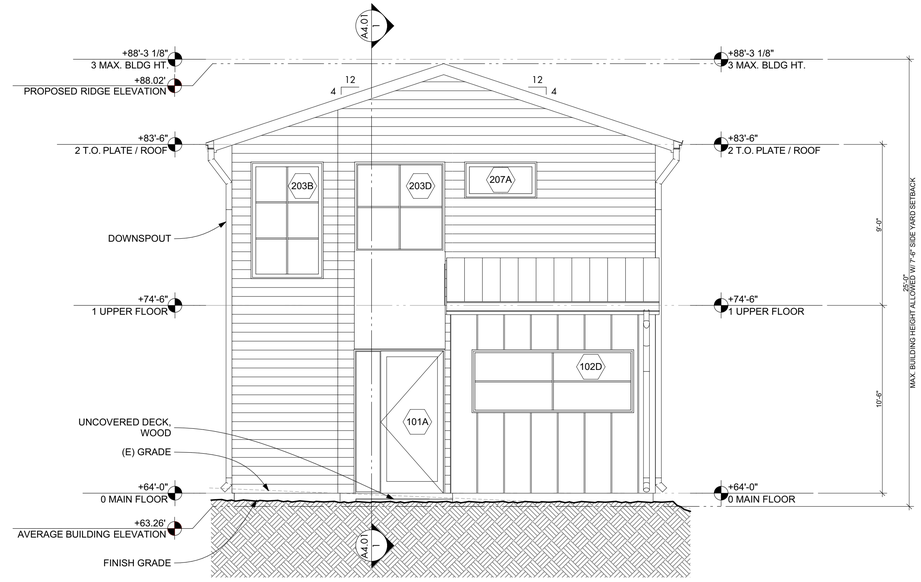
A2.03



1 WEST ELEVATION

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

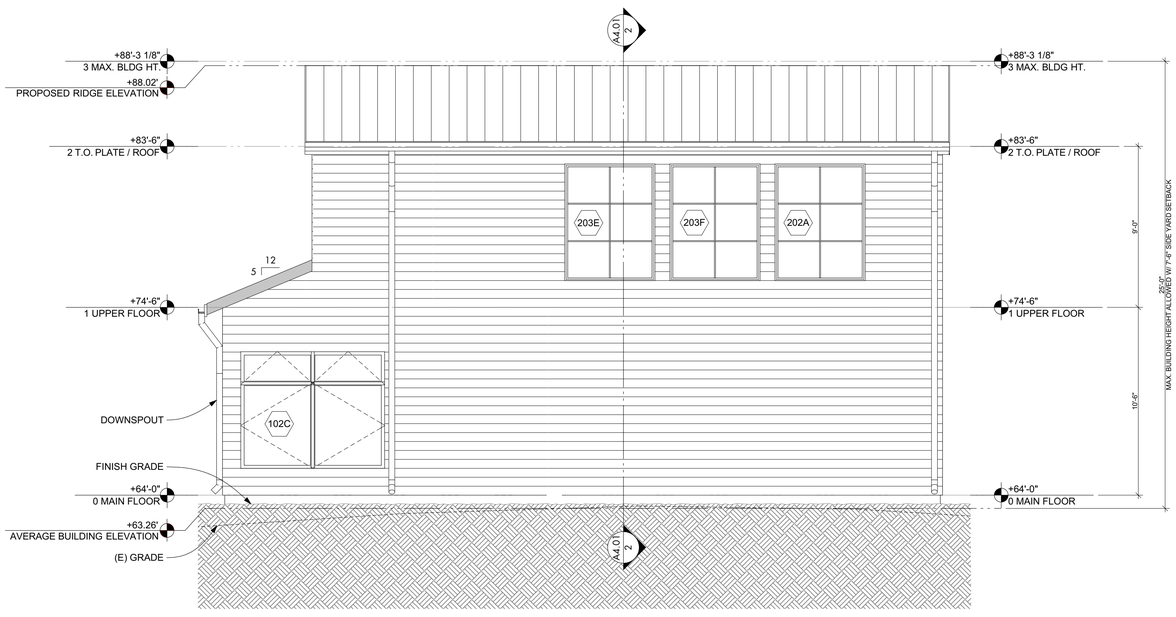
0 2' 4' 8'



2 SOUTH ELEVATION

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

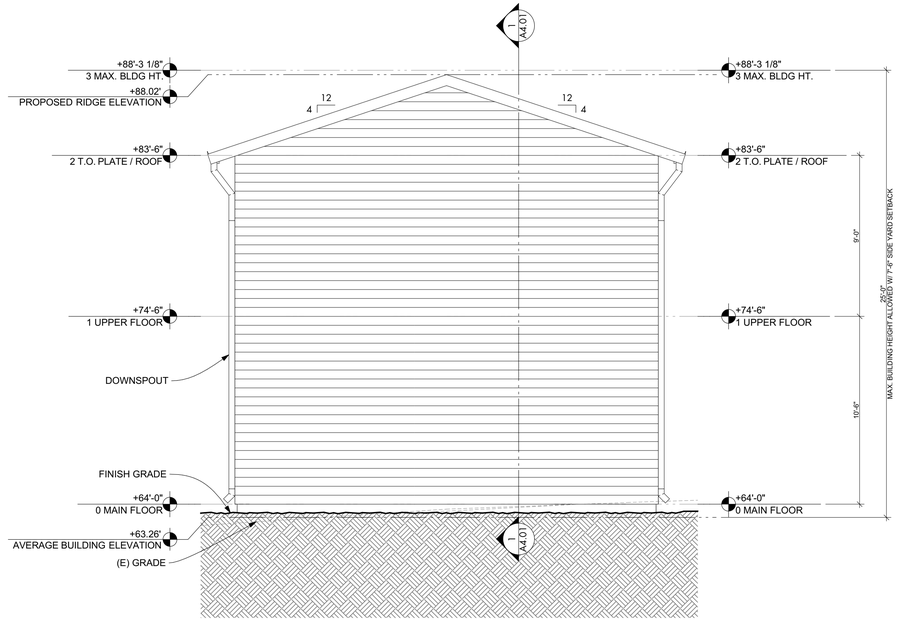
0 2' 4' 8'



3 EAST ELEVATION

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

0 2' 4' 8'



4 NORTH ELEVATION

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

0 2' 4' 8'

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EXTERIOR ELEVATIONS

A3.01

RIE: Wang & Yang ADU.pln PRINTED: Thursday, June 13, 2024

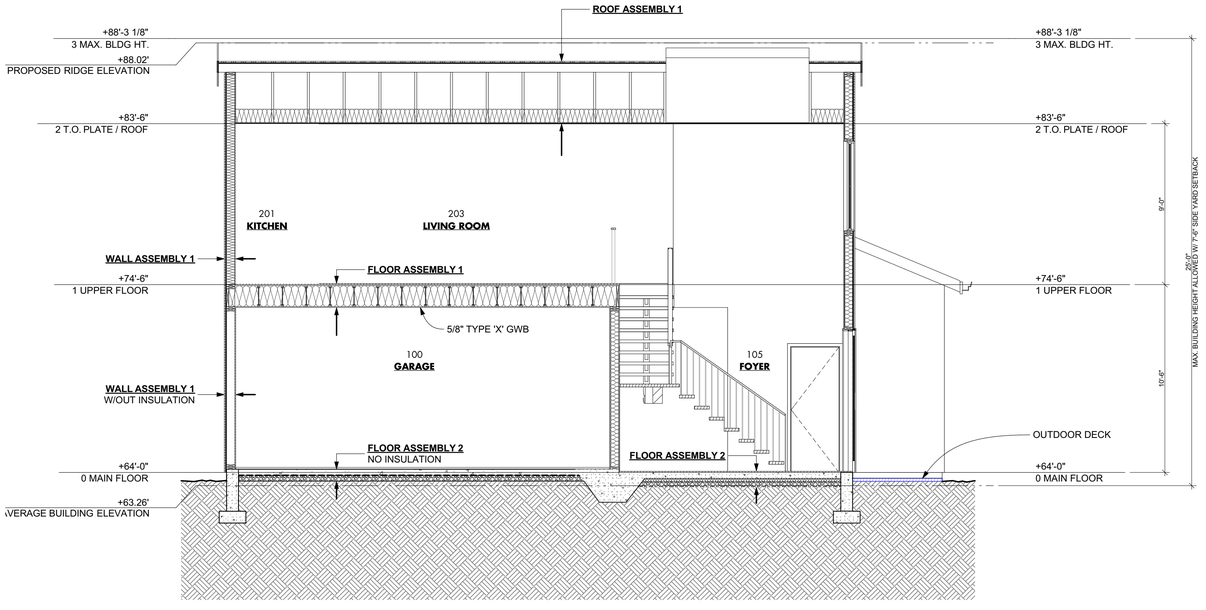
CONSTRUCTION ASSEMBLIES

FLOOR ASSEMBLY 1
* FINISHED FLOORING
* PLYWOOD SUBFLOOR PER STRUCT.
* FLOOR FRAMING PER STRUCT.
* R-38 BATT INSULATION
* 5/8" TYPE 'X' GYPSUM BOARD

FLOOR ASSEMBLY 2
* FINISH FLOORING
* 4" CONCRETE SLAB
* 6 mil VAPOR BARRIER
* R-10 RIGID INSULATION UNDER ENTIRE SLAB
* 4" MIN. GRANULAR FILL

WALL ASSEMBLY 1
* FINISH: SIDING PER ELEVATIONS
* DRAIN MAT
* BUILDING WRAP
* PLYWOOD SHEATHING PER STRUCT.
* STUD WALL PER STRUCT.
* MIN. R-21 BATT INSULATION
* 5/8" TYPE 'X' GYPSUM BOARD FINISH

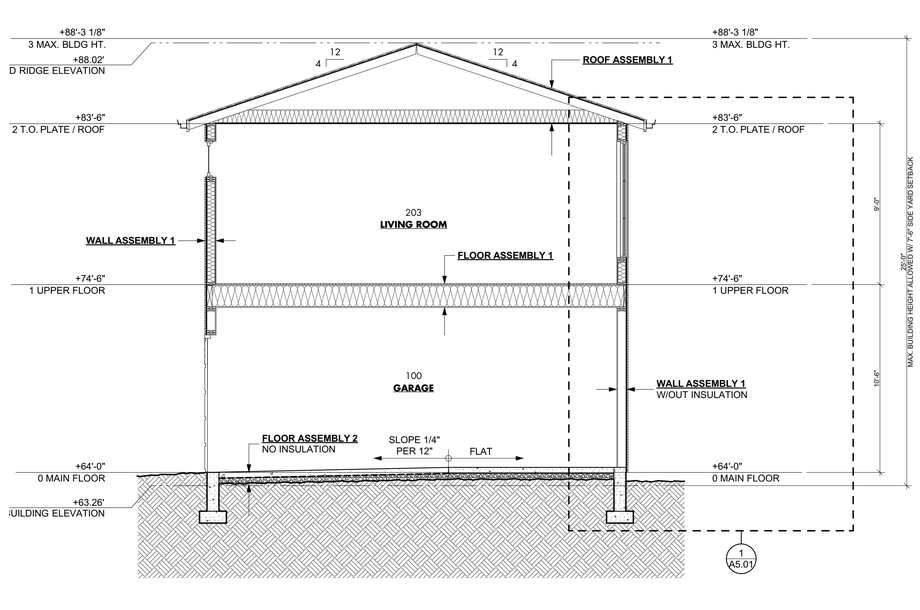
ROOF ASSEMBLY 1
* COMPOSITE SHINGLE METAL ROOF PER ELEVATIONS
* ROOFING FELTS
* PLYWOOD SHEATHING PER STRUCT.
* TRUSS PER STRUCT.
* R-38 INSULATION + MIN. 1" AIR SPACE TO VENT
* 5/8" TYPE 'X' GWB CEILING



1 BUILDING SECTION A

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

0 2' 4' 8'



2 BUILDING SECTION B

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

0 2' 4' 8'

SIYAO
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BUILDING SECTIONS

A4.01

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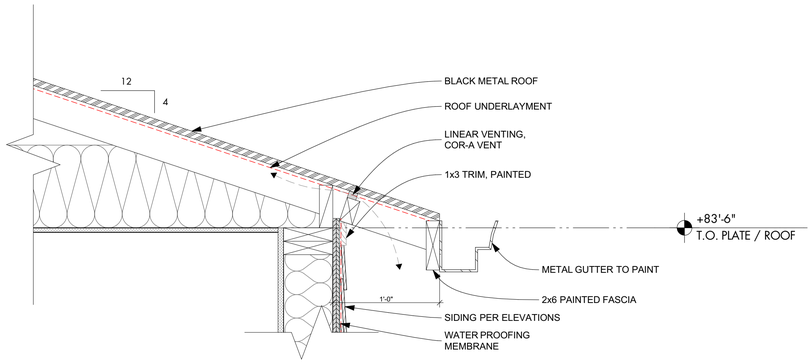
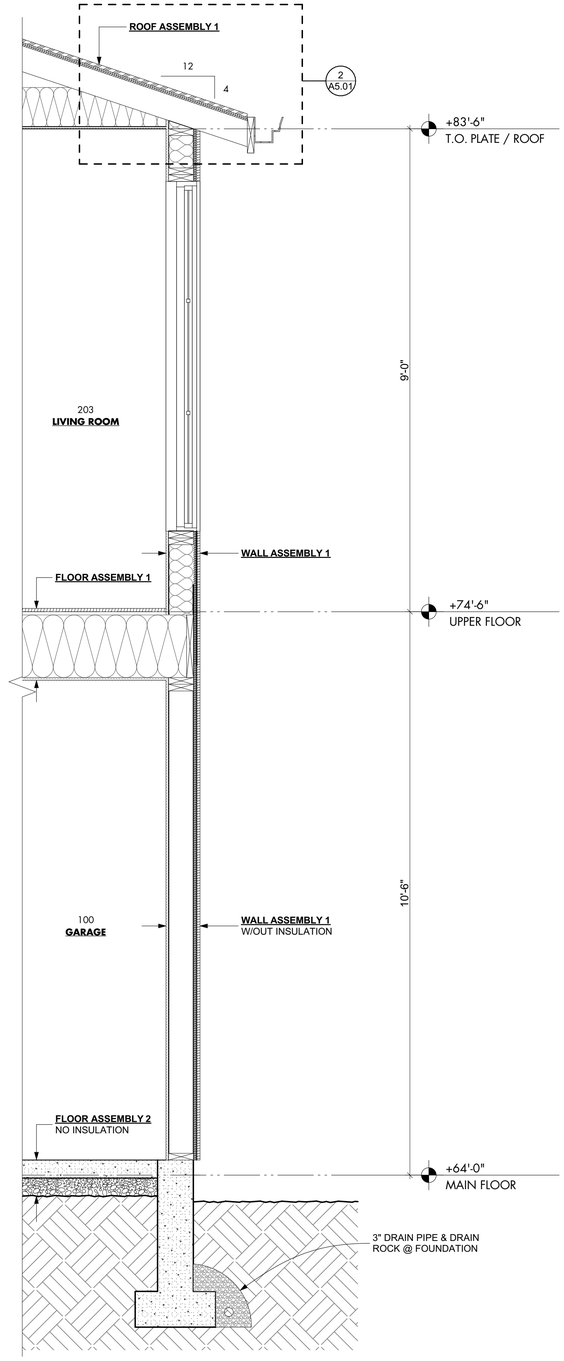


2 EAVE DETAILS

SCALE: 1 1/2"= 1'-0"

0 6" 12" 18"



1 WALL SECTION

SCALE: 3/4" = 1'-0"

0 1' 2' 3'

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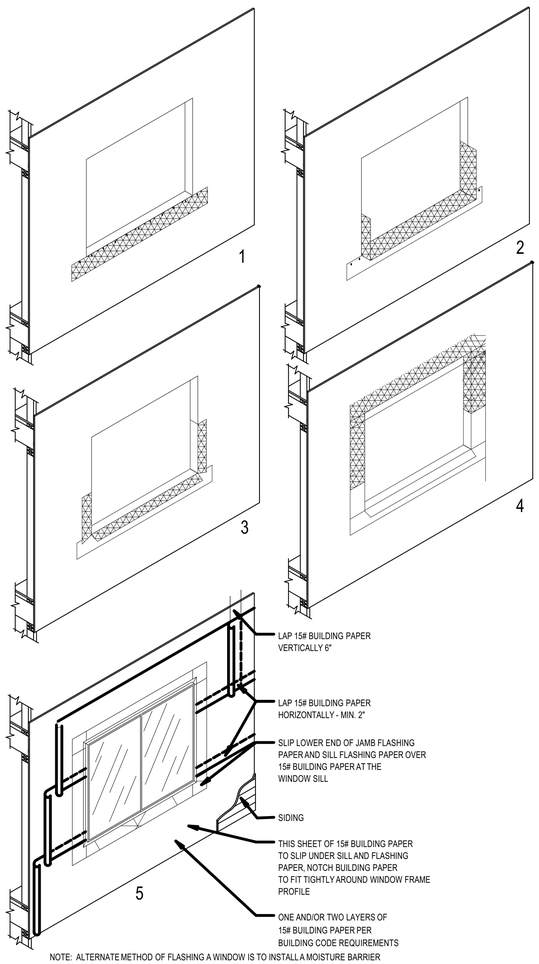
WALL SECTIONS

A5.01



NOTE: ALTERNATE METHOD OF FLASHING A WINDOW IS TO INSTALL A MOISTURE BARRIER PAPER TO THE OUTSIDE SURFACE IN THE SAME OPERATION THAT YOU WOULD BE WRAPPING THE ROUGH INSIDE SURFACE OPENING.

THE NAIL ON WINDOW WOULD BE INSTALLED OVER THE FLASHING SYSTEM

INTERIOR DOOR SCHEDULE

LOCATION	NO.	UNIT DIMENSIONS WIDTH	UNIT DIMENSIONS HEIGHT	MFGR	TYPE	SAFETY GLASS	NOTES
MAIN FLOOR							
	101B	3'-0"	7'-0"	PER CONTRACTOR	D3	NO	
	102A	2'-8"	7'-0"	PER CONTRACTOR	D3	NO	
	102B	4'-0"	7'-0"	PER CONTRACTOR	D4	NO	
	103A	2'-6"	7'-0"	PER CONTRACTOR	D3	NO	
UPPER FLOOR							
	204A	7'-0"	7'-0"	PER CONTRACTOR	D5	NO	
	205A	5'-0"	7'-0"	PER CONTRACTOR	D6	NO	
	206A	2'-6"	7'-0"	PER CONTRACTOR	D3	NO	
	207A	2'-8"	7'-0"	PER CONTRACTOR	D3	NO	

NOTE:
ALL DOORS TO BE SOLID CORE.

WINDOW SCHEDULE

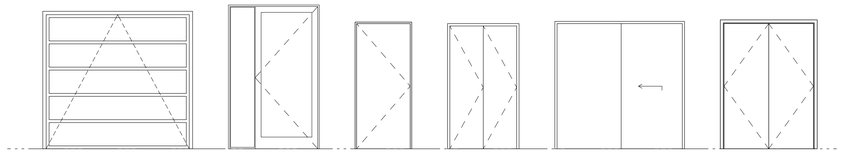
LOCATION	NO.	UNIT DIMENSIONS WIDTH	UNIT DIMENSIONS HEIGHT	UNIT DIMENSIONS HEAD HEIGHT	OPERATION	MFGR	TYPE	EGRESS	SAFETY GLASS	U-VALUE	NOTES:
MAIN FLOOR											
	102C	8'-0"	6'-6"	8'-0"	CSMT	PER CONTRACTOR	W3	YES	NO	0.28	
	102D	9'-0"	3'-6"	8'-0"	FIXED	PER CONTRACTOR	W2		NO	0.28	
UPPER FLOOR											
	201A	8'-0"	2'-0"	8'-0"	FIXED	PER CONTRACTOR	W1		NO	0.28	
	202A	5'-0"	6'-6"	8'-0"	FIXED	PER CONTRACTOR	W4		NO	0.28	
	203A	8'-0"	2'-0"	8'-0"	FIXED	PER CONTRACTOR	W1		NO	0.28	
	203B	4'-0"	6'-6"	8'-0"	FIXED	PER CONTRACTOR	W4		NO	0.28	
	203C	8'-0"	2'-0"	8'-0"	FIXED	PER CONTRACTOR	W1		NO	0.28	
	203D	5'-0"	5'-0"	18'-6"	FIXED	PER CONTRACTOR	W2		NO	0.28	
	203E	5'-0"	6'-6"	8'-0"	FIXED	PER CONTRACTOR	W4		NO	0.28	
	203F	5'-0"	6'-6"	8'-0"	FIXED	PER CONTRACTOR	W4		NO	0.28	
	207A	4'-0"	2'-0"	8'-0"	FIXED	PER CONTRACTOR	W1		NO	0.28	

EXTERIOR DOOR SCHEDULE

LOCATION	NO.	UNIT DIMENSIONS WIDTH	UNIT DIMENSIONS HEIGHT	TYPE	MFGR	SAFETY GLASS	U-VALUE	REMARKS
MAIN FLOOR								
	100A	8'-0"	7'-6"	D1	AMARR	NO		GARAGE DOOR, AMARR LINCOLN
	100B	8'-0"	7'-6"	D1	AMARR	NO		GARAGE DOOR, AMARR LINCOLN
	101A	5'-0"	8'-0"	D2	PER CONTRACTOR	YES		CUSTOM ENTRY DOOR WITH SIDE LITE

SKYLIGHT SCHEDULE

LOCATION	NO.	UNIT DIMENSIONS WIDTH	UNIT DIMENSIONS HEIGHT	MFGR	TYPE	OPERATION	SAFETY GLASS	U-VALUE	NOTES:
T.O. PLATE / ROOF									
	300A	8'-0"	3'-0"	PER CONTRACTOR	SK1	FIXED	NO		



D1
GARAGE DOOR

D2
(1) SINGLE DOOR +
SIDE LITE

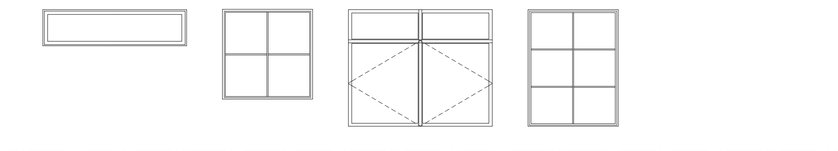
D3
SINGLE DOOR

D4
BI-FOLD DOOR

D5
SLIDING DOOR

D6
DOUBLE DOOR

DOOR TYPES



W1
FIXED WINDOW

W2
FIXED WINDOW

W3
(2) CASEMENT +
(2) FIXED

W4
FIXED

WINDOW TYPES

SK1
FIXED SKYLIGHT

SKYLIGHT TYPES

SIYAO STUDIO

WANG & YANG ADU

6450 E MERCER WAY
MERCER ISLAND, WA 98040

Job No. 2303
Project Manager: SW
Issue Date: 6/13/2024

NO.	DATE	REVISION
1	10/17/2023	STRUCTURAL
2	12/01/2023	STRUCTURAL REV 1
3	12/07/2023	PRICING
4	12/16/2023	PRE-APP MEETING #2
5	02/25/2024	BUILDING PERMIT
6	06/13/2024	BUILDING PERMIT REV 1

DOOR AND WINDOW SCHEDULES

A6.01

FILE: Wang & Yang ADU.pln PRINTED: Thursday, June 13, 2024

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)

2. DESIGN LOADING CRITERIA

ROOF SNOW LOAD	25 PSF
FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF

SNOW : ROOF SNOW LOAD = 25 PSF
GROUND SNOW LOAD = 20 PSF
EXPOSURE Ce = 1.00
IMPORTANCE FACTOR Is = 1.00
THERMAL FACTOR Ct = 1.00

WIND : ANALYSIS PROCEDURE: ASCE 7-16 CHAPTER 27 "PART 1 - BUILDINGS OF ALL HEIGHTS"
RISK CATEGORY II
98 MPH
EXPOSURE "B"
TOPOGRAPHIC FACTOR Kzt = 1.0

CLADDING / WINDOW DESIGN PRESSURE (MAX.)	35 PSF
ROOFING DESIGN PRESSURE NOT AT A CORNER (MAX.)	44 PSF
ROOFING DESIGN PRESSURE AT CORNER (MAX.)	67 PSF

THE DESIGN WIND PRESSURES LISTED ABOVE ARE INWARD OR OUTWARD AND ARE BASED ON AN EFFECTIVE WIND AREA OF 10 SQUARE FEET NEAR A BUILDING CORNER, U.O.N. CORNER AND OTHER ZONES ARE DEFINED BY FIGURE 30.3-1, 30.3-2A TO 2I AND 30.3-5A TO 5B IN ASCE 7-16. REDUCED DESIGN PRESSURES MAY BE CALCULATED USING ASCE 7. NOTE THAT THE DESIGN WIND PRESSURES NOTED ABOVE ARE ULTIMATE VALUES PER THE 2018 IBC AND SHALL BE MULTIPLIED BY 0.6 FOR ALLOWABLE STRESS DESIGN.

EARTHQUAKE : ANALYSIS PROCEDURE: IBC "EQUIVALENT LATERAL FORCE PROCEDURE"
SEISMIC DESIGN CATEGORY (SDC) = D
RISK CATEGORY = II
SEISMIC SITE CLASS = D
IMPORTANCE FACTOR Ie = 1.0
MAPPED MCE Ss = 1.61; S_1 = 0.62
DESIGN ACCELERATION Sds = 1.14; Sd_1 = 0.86
SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5

3. LATERAL LOADS ARE TRANSFERRED BY THE ROOF AND FLOOR DIAPHRAGMS TO THE SHEAR WALLS. FORCES ARE BASED ON THE TRIBUTARY AREA FOR EACH SHEAR WALL AND ARE CARRIED BY THE SHEAR WALLS TO THE FOUNDATION.

4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

5. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.

6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THEIR WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

8. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

9. DRAWINGS INDICATE GENERAL AND 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 AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. WHERE INFORMATION ON THE DRAWINGS IS IN CONFLICT WITH THE SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. DO NOT SCALE THE DRAWINGS.

10. ALL STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF FIELD ERECTED COMPONENTS SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

11. SHOP DRAWINGS FOR CONNECTOR PLATE WOOD ROOF TRUSSES AND PLYWOOD WEB JOISTS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

12. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR REVIEW.

13. SHOP DRAWING 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, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

GEOTECHNICAL

14. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL 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 AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND GEOTECHNICAL ENGINEER. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED UNDER COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE GEOTECHNICAL REPORT.

THE STRUCTURAL DESIGN IS BASED ON THE FOLLOWING VALUES FROM THE REFERENCED GEOTECHNICAL REPORT:

ALLOWABLE SOIL BEARING PRESSURE	2,500 PSF

GEOTECHNICAL REPORT REFERENCE: PROJECT # 2EH03221024 DATED OCT.5TH, 2023 PREPARED BY MERIT ENGINEERING, INC.

CONCRETE

15. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI 117. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS:

TYPE OF CONSTRUCTION	28 DAY STRENGTH (f'c)	MAXIMUM SLUMP	MIN. CEMENT CONTENT PER CUBIC YARD	MAX. AGGREGATE SIZE
A. FOOTINGS, SLABS-ON-GRADE, STEM WALLS	2,500 PSI	5"	5-1/2 SACKS	1 1/4"

MIXES SHALL BE PROPORTIONED SO AS NOT TO EXCEED THE MAXIMUM SLUMPS INDICATED (BEFORE THE ADDITION OF ADMIXTURES). THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.55 FOR FOOTINGS AND 0.45 FOR ALL SLABS AND EXPOSED CONCRETE.

THE MINIMUM AMOUNT OF CEMENT AND THE MAXIMUM SLUMP MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. (THE W/C RATIO LIMITS STILL APPLY). THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITIOUS MATERIAL, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER/CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 301. CHEMICAL ADMIXTURES AND FLY ASH SHALL CONFORM TO ASTM C494 AND C618 RESPECTIVELY. FLY ASH PERCENTAGE OF TOTAL CEMENTITIOUS MATERIAL SHALL NOT EXCEED 20%. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY TO CONTRACT DOCUMENTS. CONTRACTOR MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

16. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy = 60,000 PSI. GRADE 60 REINFORCING STEEL INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING STEEL COMPLYING WITH ASTM A615 (S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED.

LONGITUDINAL REINFORCING STEEL IN DUCTILE FRAME MEMBERS AND IN SHEAR WALL BOUNDARY MEMBERS SHALL COMPLY WITH ASTM A706. ASTM A615 GRADE 60 REINFORCING STEEL IS ALLOWED IN THESE MEMBERS IF (A) THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3,000 PSI) AND (B) THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL TENSILE YIELD STRENGTH IS NOT LESS THAN 1.25.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy = 60,000 PSI.

17. REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 60 BAR DIAMETERS, 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 60 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS. PROVIDE (2) #5 MIN. U.N.O. TRIM BARS AROUND ALL OPENINGS IN CONCRETE WALLS OR SLABS EXTENDING 2'-6" PAST CORNERS, TYPICAL.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO REINFORCING BARS SHALL BE "WET-SET" INTO THE CONCRETE. PROVIDE A 20' LONG REBAR GROUND (UFER GROUND) PER ELECTRICIAN.

18. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST EARTH	3"
FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER (#5 BARS OR SMALLER)	1-1/2"
SLABS AND WALLS (INTERIOR FACE)	GREATER OF (BAR DIAMETER PLUS 1/8") OR 3/4"

19. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

20. POLYSTYRENE (RIGID INSULATION) LIGHTWEIGHT STRUCTURAL FILL PLACED BELOW CONCRETE SLABS SHALL BE RIGID CELLULAR POLYSTYRENE CONFORMING TO ASTM D6817 OR ASTM C578, WITH A MINIMUM COMPRESSIVE RESISTANCE OF 5 PSI @ 1% DEFORMATION AND A MINIMUM COMPRESSIVE RESISTANCE OF 15 PSI @ 10 % DEFORMATION, U.O.N. MAXIMUM DENSITY SHALL BE 2.0 PCF. OFFSET BLOCK JOINTS BETWEEN ADJACENT LAYERS AND ATTACH BLOCKS PER THE MANUFACTURER'S RECOMMENDATIONS.

ANCHORAGE

21. SCREW ANCHORS INTO CONCRETE SHALL BE "TITEN HD", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-2713 INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL SCREW ANCHOR INSTALLATION.

WOOD

22. FRAMING LUMBER: SHALL BE KILN DRIED OR MC-19 (MOISTURE CONTENT LESS THAN 19%), AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD NO. 17 GRADING RULES FOR WEST COAST LUMBER. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS (2X AND 4X MEMBERS)	DOUGLAS FIR OR HEM-FIR NO. 2
BEAMS AND STRINGERS (INCLUDING 6 X AND LARGER MEMBERS)	DOUGLAS FIR NO. 1
POSTS AND TIMBERS	DOUGLAS FIR NO. 1
STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING (AS NOTED ON PLANS / DETAILS)	DOUGLAS FIR OR HEM-FIR NO. 2
2X, 3X AND 4X TONGUE AND GROOVE DECKING	HEM-FIR COMMERCIAL DEX

23. WOOD SETTLEMENT SHRINKAGE: DUE TO CROSS GRAIN WOOD SHRINKAGE, THIS BUILDING IS EXPECTED TO SETTLE APPROXIMATELY 1/8 TO 1/4 INCH PER STORY. ALL UTILITIES SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHER MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE THICKNESS OF THE WALL PLATES AND NOT IN THE LENGTH OF THE WALL STUDS.

24. LAMINATED VENEER LUMBER (LVL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL LAMINATED VENEER LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR VENEER GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

Fb = 2600 PSI, E = 2.0 x 10^6 PSI, Fv = 285 PSI

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

25. LAMINATED STRAND LUMBER (LSL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL LAMINATED STRAND LUMBER SHALL BE MANUFACTURED USING A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

RIM JOISTS AND BLOCKING (1-1/4" MINIMUM THICKNESS AT NON-SHEAR WALLS; SEE SCHEDULE FOR MINIMUM THICKNESS AT SHEAR WALLS):

Fb = 1700 PSI, E = 1.3 x 10^6 PSI, Fv = 400 PSI

BEAMS AND HEADERS:
Fb = 2325 PSI, E = 1.55 x 10^6 PSI, Fv = 310 PSI

STUDS:
2x4 & 2x6 Fb = 1700 PSI, E = 1.3 x 10^6 PSI, Fv = 400 PSI
> 2x6 Fb = 2425 PSI, E = 1.6 x 10^6 PSI, Fv = 400 PSI

COLUMNS:
Fb = 1700 PSI, E = 1.3 x 10^6 PSI, Fv = 400 PSI

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

26. PARALLEL STRAND LUMBER (PSL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL PARALLEL STRAND LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR STRANDS GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

Fb = 2900 PSI, E = 2.2x 10^6 PSI, Fv = 290 PSI
Fb = 2400 PSI, E = 1.8x 10^6 PSI, F'c = 2500 PSI (COMMERCIAL COLUMNS)

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

SHEET INDEX

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11/17/2023

PROJECT INFORMATION: **WANG & YANG ADU**

PROJECT ADDRESS: **6450 E MERCER WAY MERCER ISLAND, WA 98040**

REVISIONS:

NO.	DESCRIPTION	DATE

PROJECT NUMBER: 23-146
ISSUE DATE: 11.17.2023
CURRENT REVISION: PERMIT

SHEET NAME: **GENERAL STRUCTURAL NOTES/SHEET INDEX**

SHEET NUMBER: **S1.0**

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

27. WOOD I-JOISTS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. DESIGN SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS. GLUE FLOOR JOISTS TO SHEATHING AS REQUIRED BY THE JOIST MANUFACTURER.

    DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE WOOD I-JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

28. PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH IBC SECTION 2303.4 AND ANSI/TPI 1-2014 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. TRUSSES SHALL BE HANDLED, INSTALLED, AND BRACED PER "HIB 91" PER THE TRUSS PLATE INSTITUTE. LOADING SHALL BE AS FOLLOWS:

TOP CHORD SNOW LOAD	25 PSF
TOP CHORD DL ALLOWANCE FOR PV PANELS	5 PSF
TOP CHORD DEAD LOAD	5 PSF
BOTTOM CHORD LIVE LOAD	10 PSF (NOT INCLUDED IN TOTAL)
BOTTOM CHORD DEAD LOAD	5 PSF
TOTAL LOAD	40 PSF
NET WIND UPLIFT (TOP CHORD)	10 PSF

    THE LOADS ABOVE SHALL BE INCREASED TO THE FOLLOWING IF THE TRUSSES MEET THE DESCRIPTION OF AN "UNINHABITABLE ATTIC WITH LIMITED STORAGE" AS DEFINED IN FOOTNOTE j OF IBC TABLE 1607.1:

BOTTOM CHORD LIVE LOAD	20 PSF - INCLUDE IN TOTAL
BOTTOM CHORD DEAD LOAD	10 PSF

    SNOW LOAD DUE TO DRIFTING AND UNBALANCED LOADS SHALL BE INCLUDED PER THE IBC. TOP CHORDS SHALL BE DF LUMBER. UTILIZE A MINIMUM CREEP FACTOR OF 2.0 FOR DEAD AND SUSTAINED LIVE LOADS IN DETERMINING THE TRUSS DEFLECTIONS. MAXIMUM TOTAL DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/240 OF THE TOTAL SPAN AND MAXIMUM LIVE LOAD DEFLECTION SHALL BE LESS THAN OR EQUAL TO L/360 OF THE TOTAL SPAN. PROVIDE ADEQUATE PLIES AND/OR METAL BRACKETS TO ADEQUATELY DISTRIBUTE THE BEARING PRESSURE AT THE ENDS OF THE GIRDER TRUSSES TO THE TOP PLATES OF THE BEARING WALLS SUCH THAT THE BEARING PRESSURE DOES NOT EXCEED 405 PSI. PROVIDE ADDITIONAL TRUSSES (AS REQUIRED) TO CARRY ALL CONCENTRATED LOADS AND MECHANICAL UNITS.

    WOOD TRUSSES SHALL UTILIZE I.C.C. OR IAPMO UES APPROVED CONNECTOR PLATES. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

29. WOOD SHEATHING SHALL BE APA RATED, EXTERIOR GLUE; EXPOSURE 1, IN CONFORMANCE WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PS-1 OR PS-2. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS.

    UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH (2) 10d-F NAILS AT EACH END, UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPACED PER PLANS.

30. ALL WOOD EXPOSED TO WEATHER, OR BEARING ON UNPROTECTED CONCRETE BELOW GRADE, OR BEARING ON UNPROTECTED CONCRETE LESS THAN 8" FROM EXPOSED EARTH SHALL BE PRESSURE-TREATED, U.O.N. PRESSURE TREATMENT SHALL BE WITH AN APPROVED PRESERVATIVE AND BRANDED WITH A QUALITY CONTROL AGENCY MARK BY THE AMERICAN WOOD PRESERVERS BUREAU OR EQUAL. ALL METAL HARDWARE IN CONTACT WITH TREATED WOOD SHALL BE PROTECTED WITH A G185 GALVANIZED COATING (ZMAX) OR BETTER. ALL NAILS IN TREATED WOOD SHALL BE HOT-DIP GALVANIZED OR BETTER. PROVIDE 2 LAYERS OF 30# ASPHALT IMPREGNATED BUILDING PAPER BETWEEN NON-PRESSURE-TREATED LEDGERS, BLOCKING, ETC., AND CONCRETE.

31. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE I.C.C. OR IAPMO UES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL BOLTS TIGHTENED TO SNUG TIGHT.

32. WOOD FASTENERS:

    A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

DRAWING ID	NAIL NAME	NAIL DIAMETER	NAIL LENGTH
"6d"	6d Common	0.113"	2"
"8d Box"	8d Box	0.113"	2-1/2"
"8d"	8d Common	0.131"	2-1/2"
"10d-F"	10d Framer	0.131"	3"
"10d"	10d Shear	0.148"	2-1/4"
"16d"	16d Sinker	0.148"	3-1/4"

    IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

    B. NAILS - SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

    C. SCREWS SHALL BE WOOD SCREWS OF THE DIAMETER AND LENGTH NOTED ON THE DRAWINGS. SDS FASTENERS ARE SIMPSON STRONG DRIVE SCREWS.

    D. HOT DIPPED GALVANIZED NAILS, BOLTS AND METAL PLATES - ALL NAILS, BOLTS AND METAL PLATES IN CONTACT WITH PRESSURE TREATED (INCLUDING FIRE-RETARDANT TREATED) LUMBER SHALL BE HOT DIPPED GALVANIZED.

33. WOOD FRAMING NOTES: THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

    A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS SNUGLY AGAINST WOOD FRAMING AFTER WOOD HAS REACHED SPECIFIED MOISTURE CONTENT.

    B. WALL FRAMING: ALL BEARING AND SHEAR WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2 x 4 STUDS @ 16" O.C. AT INTERIOR WALLS AND 2 x 6 @ 16" O.C. AT EXTERIOR WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL BEARING AND SHEAR WALLS AND AT EACH SIDE OF ALL OPENINGS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW.

    ALL BEARING STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 8" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS WITH 3"x3"x1/4" PLATE WASHERS @ 4'-0" O.C., UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH 10d-F NAILS @ 8" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES AND GYPSUM SHEATHING ON EXTERIOR SURFACES ATTACHED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH SCREWS AT 8" O.C. USE 1-1/4 " W #6 SCREWS FOR 1/2" GWB AND 5/8" GWB WHERE OCCURS. USE 1-1/4" W #6 GALVANIZED SCREWS FOR 1/2" GWB AND 5/8" EXTERIOR GYPSUM SHEATHING, WHERE OCCURS. VERIFY THE FIRE ASSEMBLY REQUIREMENTS WHERE APPLICABLE WITH THE ARCHITECT.

    C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH 10d-F NAILS @ 8" O.C. STAGGERED UNLESS OTHERWISE NOTED.

    D. POSITIVE CONNECTIONS: PROVIDE THE FOLLOWING SIMPSON CONNECTORS AT TYPICAL FRAMING UNLESS OTHERWISE NOTED ON PLAN OR DETAIL. PROVIDE CCQ/ECCQ CAPS AND PBS BASES AT POSTS. PROVIDE BC BASE WHERE POST BEARS ON WOOD FRAMING BELOW. PROVIDE LUS SERIES HANGERS FOR 2X FLOOR AND ROOF JOISTS. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED.

34. TONGUE AND GROOVE STRUCTURAL ROOF AND FLOOR DECKING SHALL BE INSTALLED AS A RANDOM LENGTH CONTINUOUS LAY-UP SYSTEM. INSTALL DECKING IN RANDOM LENGTHS OVER 3 OR MORE SPANS WITH EACH LENGTH OF DECKING OVER AT LEAST ONE FRAMING SUPPORT MEMBER. LAY WITH TONGUES FACING UPWARD ON SLOPED DECKING. FOR 2X AND 3X DECKING THE MAXIMUM MOISTURE CONTENT SHALL BE 15%. FOR 4X DECKING THE MAXIMUM MOISTURE CONTENT SHALL BE 19%.

    END JOINTS: DISPERSE END JOINTS AS RANDOMLY AS POSSIBLE TO MAKE EVEN SEPARATION PATTERN.

    A. AT LEAST 24-INCH APART AT ADJACENT PLANKS.

B. MORE THAN 1-FOOT APART AT ALTERNATE PLANKS SEPARATED BY ONE ROW.

C. NO END JOINTS IN 1/3 OF END SPAN COURSE BETWEEN FRAMING MEMBERS.

D. END MATCH EACH JOINT.

    THE MINIMUM LENGTHS SHALL BE BASED ON THE FOLLOWING:

    2X DECKING

- NOT LESS THAN 40% TO BE 14 FEET AND LONGER.
- NOT OVER 10% TO BE LESS THAN 10 FEET.
- NOT OVER 1% TO BE 4 TO 5 FEET.

    DECKING SHALL BE INSTALLED AS FOLLOWS:

    2X DECKING SHALL BE TOENAILED THROUGH THE TONGUE AND FACENAILED WITH ONE 16d COMMON NAIL PER PIECE PER SUPPORT. COURSES SHALL BE ATTACHED TO EACH OTHER WITH 6d COMMON TOENAILS @ 30" O.C. MAXIMUM.

ABBREVIATIONS

@	At	L	Angle
d	Penny (Nails)	LB.	Pound
ϕ	Diameter	LL	Live Load
°	Degrees	LLH	Long Leg Horizontal
...#	Pounds	LLV	Long Leg Vertical
#...	Number	LONGIT.	Longitudinal
		LT. WT.	Lightweight
(A)	Above		
A.B.	Anchor Bolt	MAX.	Maximum
ADD'L.	Additional	MECH.	Mechanical
ALT.	Alternate	MEZZ.	Mezzanine
APPROX.	Approximate	MF	Moment Frame
ARCH.	Architect	MFR.	Manufacturer
		MIN.	Minimum
(B)	Below	MISC.	Miscellaneous
B/	Bottom of	MK.	Mark
BF	Braced Frame		
BLKG.	Blocking	(N)	New
BLDG.	Building	N.	North
BM.	Beam	N.S.	Near Side
BOT.	Bottom	NOM.	Nominal
BRG.	Bearing	NTS	Not to Scale
BTWN.	Between		
		O.C.	On Center
℄	Centerline	O.D.	Outside Diameter
C	Camber	O.F.	Outside Face
CIP	Cast In Place	O.H.	Overhang
C.J.	Construction Joint or Control Joint	OPNG.	Opening
CJP	Complete Joint Penetration	OPP.	Opposite
CLG.	Ceiling		
CLR.	Clear	PAF	Powder Actuated Fastener
CMU	Concrete Masonry Unit	PC	Precast
COL.	Column	PERM.	Permanent
CONC.	Concrete	PERP.	Perpendicular
CONN.	Connections	PJP	Partial Joint Penetration
CONST.	Construction	PL or ℙ	Plate
CONT.	Continuous	PLF	Pounds per linear Foot
CSK.	Countersink	PLYWD	Plywood
		PREFAB.	Prefabricated
DBA	Deformed Bar Anchor	PSF	Pounds per Square Foot
DBL.	Double	PSI	Pounds per Square Inch
DEG.	Degree	P.T. or PT	Post-Tensioning
DF	Doug Fir-Larch	P/T	Pressure-Treated
DIA.	Diameter		
DIAG.	Diagonal	RAD.	Radius
DIAPH.	Diaphragm	REF.	Reference
DIM.	Dimension	REINF.	Reinforce or Reinforcement
DN.	Down	REQD.	Required
DO	Ditto	REV.	Revise
DTL.	Detail	R.O.	Rough Opening
DWG.	Drawing		
		S.	South
(E)	Existing	SCH. or SCHED.	Schedule
E.	East	SECT.	Section
EA.	Each	SHT.	Sheet
E.F.	Each Face	SIM.	Similar
EL.	Elevation	SOG	Slab On Grade
ELEV.	Elevator	SPEC.	Specification
EMBED.	Embedment Length	SQ.	Square
ENGR.	Engineer	SQ. FT.	Square Feet
EQ.	Equal	SQ. IN.	Square Inch(es)
E.W.	Each Way	SPF	Spruce-Pine-Fir
EXP.	Expansion	S.S.	Stainless Steel
EXT.	Exterior	STD.	Standard
		STIFF.	Stiffener
FDN.	Foundation	STL.	Steel
FIN.	Finish	STR.	Structural
FLR.	Floor	SUB.	Substitute
FRP	Fiber Reinforced Polymer	SYM.	Symmetrical
F.S.	Far Side		
FT.	Foot or Feet	T/	Top of
FTG.	Footing	T&B	Top and Bottom
		T&G	Tongue & Groove
GA.	Gauge	TEMP.	Temporary
GALV.	Galvanized	THRU	Through
GL	Glue Laminated	T.O.C.	Top of Concrete
GWB	Gypsum Wall Board	T.O.S.	Top of Steel
		T.O.W.	Top of Wall
HDG	Hot Dipped Galvanized	TRANS.	Transverse
HF	Hem Fir	TS	Tube Steel
HGR.	Hanger	TYP.	Typical
HORIZ.	Horizontal		
HSS	Hollow Structural Section	U.O.N.	Unless Otherwise Noted
HT.	Height		
		VERT.	Vertical
I.D.	Inside Diameter	VIF	Verify in Field
I.F.	Inside Face		
IN.	Inch	W.	West
INFO.	Information	W/ or w/	With
INT.	Interior	W.H.S.	Welded Headed Stud
		W/O	Without
JT.	Joint	WP	Work Point
		W.T.S.	Welded Threaded Stud
K	Kips	WWF	Welded Wire Fabric
KSF	Kips per Square Foot		
KSI	Kips per Square Inch	X SECT.	Cross Section
		X-STR	Extra Strong
		XX-STR	Double Extra Strong

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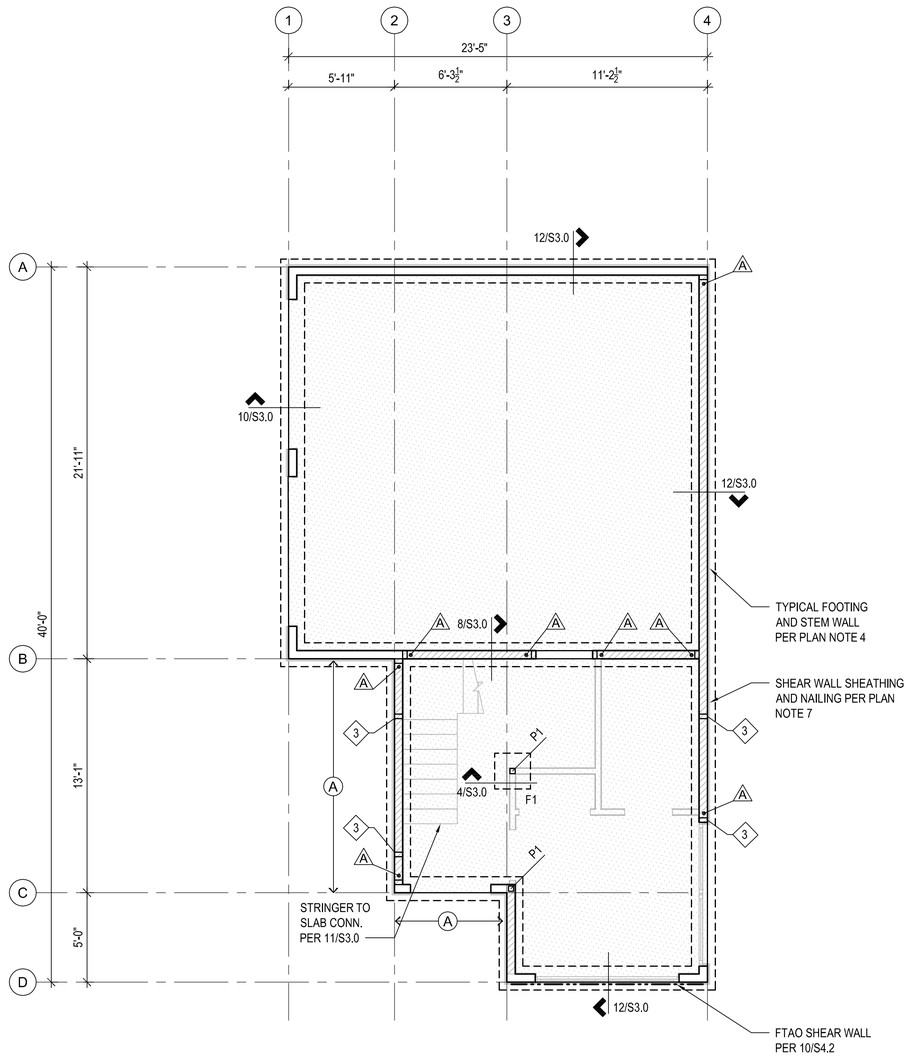

FOUNDATION PLAN

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

STUD WALL TYPE SCHEDULE	
(A)	1¾ x5½ LSL (1.55E) STUDS @ 12" O.C.

FOOTING SCHEDULE	
MARK	**SIZE**
F1	24" SQ. x 12" DEEP FOOTING w/ (3) #4 E.W. BOTTOM, TYP.

POST SCHEDULE	
MARK	**SIZE**
P1	P/T 4x4

SEISMIC FORCE RESISTING SYSTEM LEGEND

SW-X — SHEAR WALL TYPE 'X' PER SCHEDULE 8/S4.0

(A) — HOLDOWN TYPE 'X' PER SCHEDULE 12/S4.0

LEGEND

4" SLAB-ON-GRADE PER PLAN NOTE 5

FOUNDATION & MAIN FLOOR FRAMING PLAN NOTES:

1. TOPS OF ALL EXTERIOR FOOTINGS ON THIS PLAN SHALL BE BURIED BELOW FINISHED GRADE AS SHOWN IN THE DETAILS. FOOTINGS SHALL BEAR ON DENSE NATIVE MATERIAL, OR PREPARED AS SPECIFIED IN THE GEOTECHNICAL REPORT.
2. FINAL SITE GRADES TO BE DETERMINED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE UNDERSLAB PIPING REQUIREMENTS AS SHOWN IN 7/S3.0.
3. POSTS AND STUD PACKS SHALL BE CONTINUOUS TO FOUNDATION. TYPICAL STUD WALLS SHALL BE FRAMED USING HEM-FIR #2 2x STUDS @ 16" O.C., U.O.N. POST LOADS FROM ABOVE TO BE BLOCKED PER 7/S4.1.
4. TYPICAL FOOTING TO BE 18"W x 8" DP. CONC. STRIP FTG. w/ (2) #4 CONT. BOTTOM AND #4 @ 16" O.C. TRANS. TYP. STEM WALL TO BE 8" STEM WALL w/ #4 @ 12" O.C. HORIZ. AND 16" O.C. VERT.
5. SLAB-ON-GRADE SHALL BE 4" THICK w/ WWF 6x6-W2.1xW2.1 MID-DEPTH OR #4 @ 16" O.C. E.W. MID-DEPTH, U.O.N. PROVIDE VAPOR BARRIER BELOW SLAB AS REQUIRED AND PER 2/S3.0. INSTALL CONSTRUCTION AND CONTROL JOINTS PER 2/S3.0.
6. ALL CONNECTIONS AND CONNECTORS IN CONTACT WITH PRESSURE-TREATED LUMBER TO BE HOT DIPPED GALVANIZED OR STAINLESS STEEL, PER GENERAL STRUCTURAL NOTES.
7. ALL EXTERIOR WALLS TO BE SHEATHED AND NAILED PER SW-6, U.O.N.

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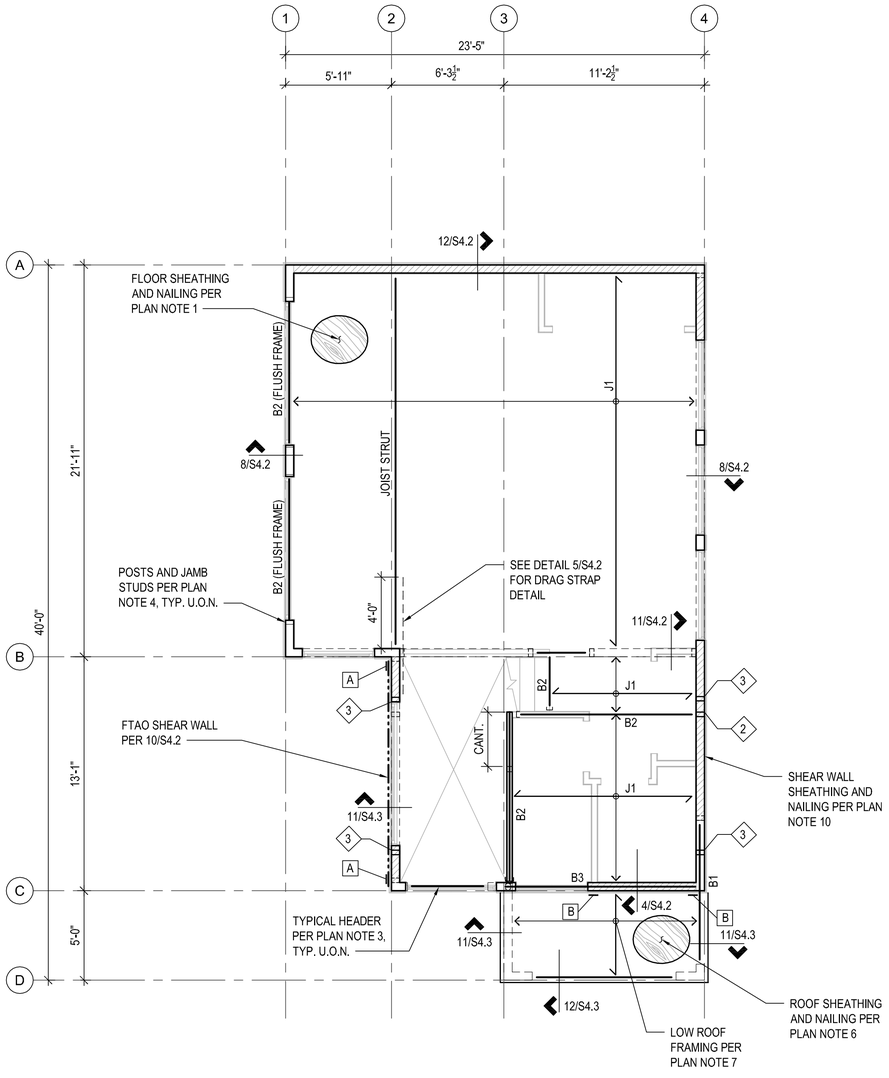

UPPER FLOOR FRAMING PLAN

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

JOIST & BEAM SCHEDULE		
MARK	**SIZE**	**HANGER**
J1	14" TJI 110 @ 16" O.C.	PER MFR.
B1	3½ x 9¼ LVL	N/A
B2	3½ x 14 LVL	HUS412
B3	5¼ x 14 LVL	N/A

SEISMIC FORCE RESISTING SYSTEM LEGEND

SW-X	SHEAR WALL TYPE 'X' PER SCHEDULE 8/S4.0
X	STRAP TYPE HOLDOWN PER SCHEDULE 10/S4.0
	EXTENT OF SHEAR WALL SHEATHING
STRUT	FRAMING MEMBER NAILED AS STRUT PER PLAN NOTE 1

LEGEND

	SPAN DIRECTION OF FRAMING MEMBERS (SEE PLAN NOTE 2)
	STRUCTURAL WALL BELOW
	POST BELOW
X	NUMBER OF BUILT-UP STUDS

FLOOR FRAMING PLAN NOTES:

1. FLOOR SYSTEM SHALL CONSIST OF 23/32" PERFORMANCE CATEGORY, APA RATED SHEATHING, 48/24, EXPOSURE 1, NOMINAL 4'x8' (T&G OR SQUARE EDGE) PERMANENT OUTDOOR SHEATHING GRADE SHALL BE "EXTERIOR". NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING AND EXTERIOR SHEAR WALLS BELOW WITH 10d @ 6" O.C. PROVIDE ⅛" GAP AT ALL PANEL EDGE. FASTENER EDGE DISTANCE TO PANEL EDGE OF ⅜" MINIMUM. NAIL SHEATHING IN PANEL FIELD TO ALL STRUTS, STRUT BLOCKING, AND INTERIOR SHEAR WALLS BELOW WITH 10d @ 3" O.C. STAGGERED. NAIL SHEATHING AT ALL INTERMEDIATE SUPPORTS WITH 10d @ 12" O.C. GLUE SHEATHING AT ALL SUPPORTS WITH ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
2. FLOOR JOISTS TO BE 14" TJI 110 @ 16" O.C. PROVIDE HANGERS PER MFR. AS REQUIRED. ALLOWABLE HOLES IN JOISTS PER JOIST SUPPLIER SPECIFICATIONS.
3. BEAMS OVER INTERIOR AND EXTERIOR OPENINGS SHALL BE 4x8 AND DROPPED BELOW STUD WALL TOP PLATES PER 10/S4.1, U.O.N.
4. POSTS OR JAMB STUDS AT END OF SUPPORTING BEAMS, GIRDER TRUSSES, OR BELOW POSTS SHALL BE (3) STUDS AT A MINIMUM. TYPICAL HEADER STUDS WILL BE (2) CRIPPLE STUDS AND (1) KING STUD.
5. OTHER TYPICAL FRAMING DETAILS SHOWN ON SHEET S4.1.
6. ROOF SYSTEM SHALL CONSIST OF 19/32" PERFORMANCE CATEGORY, APA RATED SHEATHING, 32/16, EXPOSURE 1, NOMINAL 4'x8' (T&G OR SQUARE EDGE). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, STRUTS, BLOCKING, AND SHEAR WALLS BELOW w/ 10d @ 6" O.C. PROVIDE ⅛" GAP AT ALL PANEL EDGE. FASTENER EDGE DISTANCE TO PANEL EDGE OF ⅜" MINIMUM. NAIL SHEATHING AT ALL INTERMEDIATE SUPPORTS WITH 10d @ 12" O.C. U.O.N. INSTALL PANEL EDGE CLIPS PER GENERAL STRUCTURAL NOTES AT ALL UNFRAMED, UNBLOCKED PANEL EDGES
7. ROOF FRAMING SHALL BE CONNECTOR PLATE TRUSSES @ 24" O.C. TRUSS MANUFACTURER SHALL INSTALL ALL TEMPORARY AND PERMANENT TRUSS BOTTOM CHORD BRACING AND BRIDGING, RELATED CONNECTIONS, AND ATTACHMENT DETAILS. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS & ARCHITECTURAL DRAWINGS FOR HEIGHTS AND CONFIGURATIONS. TRUSSES SHALL BE DESIGNED FOR TYPICAL TRUSS LOADING AS SHOWN IN THE GENERAL STRUCTURAL NOTES.
8. DO NOT SCALE DRAWINGS. REFER TO ARCH. DRAWINGS FOR ALL DIMENSIONS.
9. FOR ALL DUCTS, CHASES, AND PIPES, REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
10. ALL EXTERIOR WALLS TO BE SHEATHED AND NAILED PER SW-6, U.O.N.

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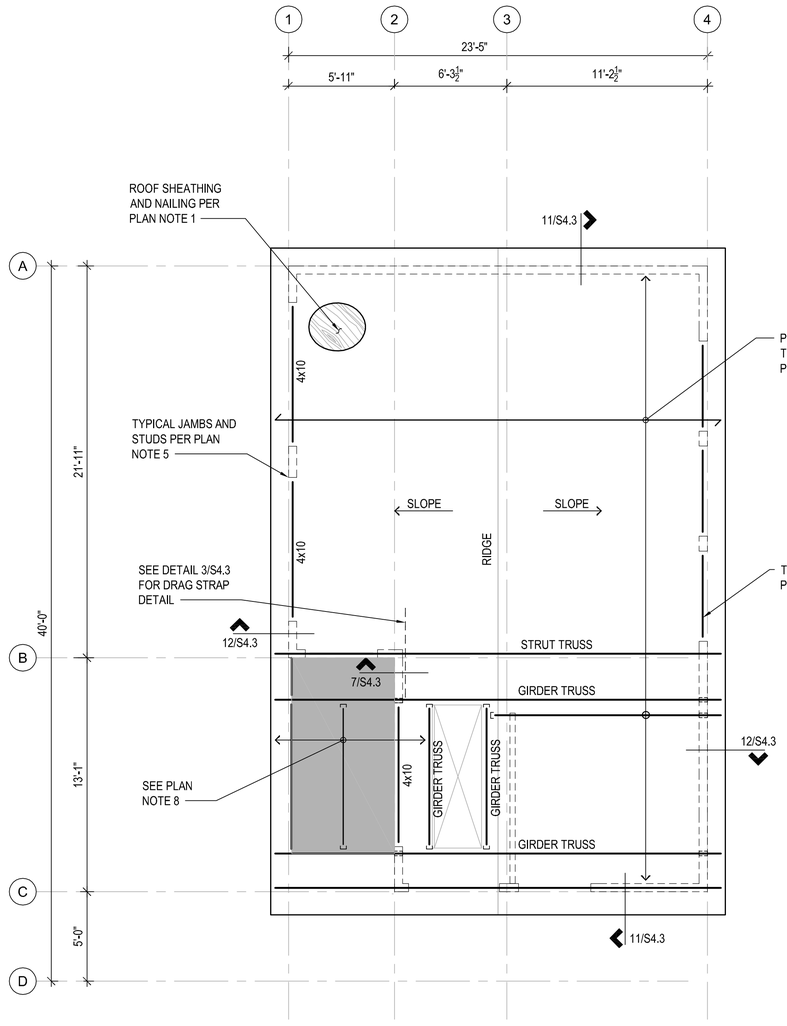

ROOF FRAMING PLAN

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

SEISMIC FORCE RESISTING SYSTEM LEGEND

STRUT	FRAMING MEMBER NAILED AS STRUT PER PLAN NOTE 1

LEGEND

	STRUCTURAL WALL BELOW
	SPAN DIRECTION OF FRAMING MEMBERS (SEE PLAN NOTE 2)
	SEE PLAN NOTE 9

ROOF FRAMING PLAN NOTES:

1. ROOF SYSTEM SHALL CONSIST OF $^{15}/_{32}$" PERFORMANCE CATEGORY, APA RATED SHEATHING, $^{32}/_{16}$, EXPOSURE 1, NOMINAL 4'x8' (T&G OR SQUARE EDGE). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, STRUTS, BLOCKING, AND SHEAR WALLS BELOW w/ 10d @ 6" O.C. PROVIDE $^{1}/_{8}$" GAP AT ALL PANEL EDGE. FASTENER EDGE DISTANCE TO PANEL EDGE OF $^{3}/_{8}$" MINIMUM. NAIL SHEATHING AT ALL INTERMEDIATE SUPPORTS WITH 10d @ 12" O.C. U.O.N. INSTALL PANEL EDGE CLIPS PER GENERAL STRUCTURAL NOTES AT ALL UNFRAMED, UNBLOCKED PANEL EDGES
2. ROOF FRAMING SHALL BE CONNECTOR PLATE TRUSSES @ 24" O.C. TRUSS MANUFACTURER SHALL INSTALL ALL TEMPORARY AND PERMANENT TRUSS BOTTOM CHORD BRACING AND BRIDGING, RELATED CONNECTIONS, AND ATTACHMENT DETAILS. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS & ARCHITECTURAL DRAWINGS FOR HEIGHTS AND CONFIGURATIONS. TRUSSES SHALL BE DESIGNED FOR TYPICAL TRUSS LOADING AS SHOWN IN THE GENERAL STRUCTURAL NOTES.
3. CONNECTOR PLATE TRUSS SHOP DRAWINGS TO BE APPROVED BY HAREZLAK ENGINEERING PRIOR TO MANUFACTURING AND INSTALLATION.
4. ALL EXT. HEADERS TO BE 4x8 HF#2 UNLESS OTHERWISE NOTED, SEE 10/S4.1.
5. POST OR JAMB STUDS AT END OF SUPPORTING BEAMS, GIRDER TRUSSES, OR BELOW POSTS SHALL BE (3) STUDS AT A MINIMUM. TYPICAL HEADER STUDS WILL BE (2) CRIPPLE STUDS AND (1) KING STUD.
6. FLAT BLOCKING IS REQUIRED AT ALL UNFRAMED RIDGES, HIPS, AND VALLEYS, FOR SHEATHING CONNECTION.
7. NON-STRUCTURAL WALL CONNECTION TO TRUSS PER 4/S4.3.
8. 2x6 RAFTERS BETWEEN GIRDER TRUSSES @ 24" O.C. INSTALL RAFTERS TO TRUSS TOP CHORD w/ LUS26 HANGER. AT LOW END OF TRUSS PROFILE, INSTALL 2x6 CEILING JOISTS @ 24" O.C. w/ LUS HANGER TO TRUSS BOTTOM CHORD. TRUSS MFR. TO DESIGN FOR 2x6 TOP AND BOTTOM CHORD FOR GIRDER TRUSSES NOTED.
9. INSTALL 2x T&G DECKING OR $^{15}/_{32}$" PLYWOOD SHEATHING PER PLAN NOTE 1 TO UNDERSIDE OF TRUSS/2x FRAMING AT OVERHANG AS NOTED PER PLAN. COORDINATE WITH ARCH. ON FINAL ASSEMBLY.

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REVISIONS:

NO.	DESCRIPTION	DATE

PROJECT NUMBER: 23-146
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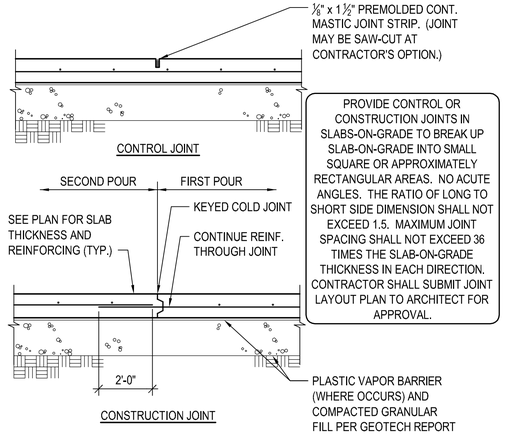
SHEET NAME:
ROOF FRAMING PLAN

SHEET NUMBER:
S2.2



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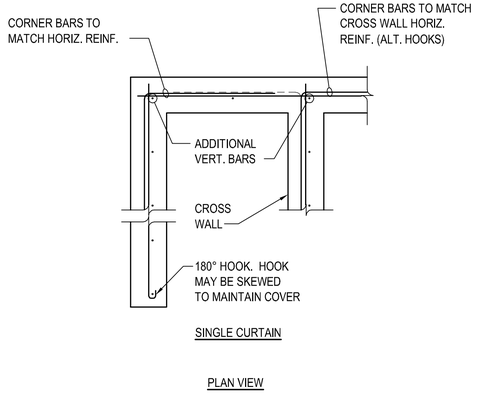

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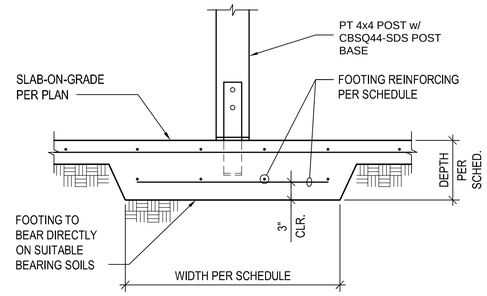

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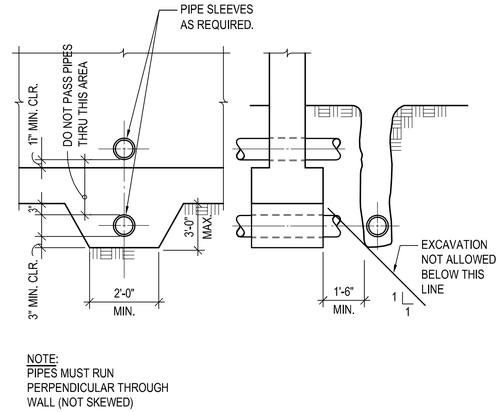

NOTE:
PIPES MUST RUN PERPENDICULAR THROUGH WALL (NOT SKEWED)

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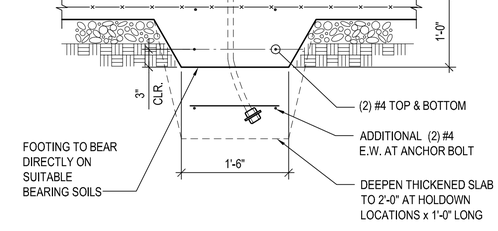

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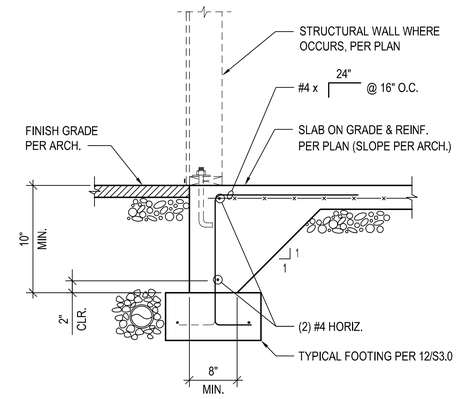

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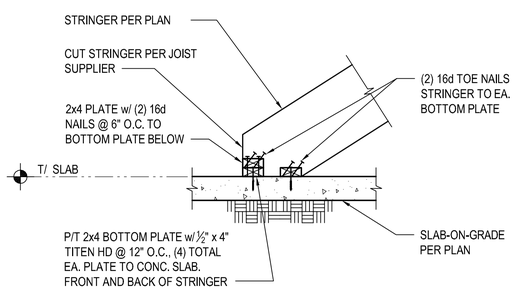

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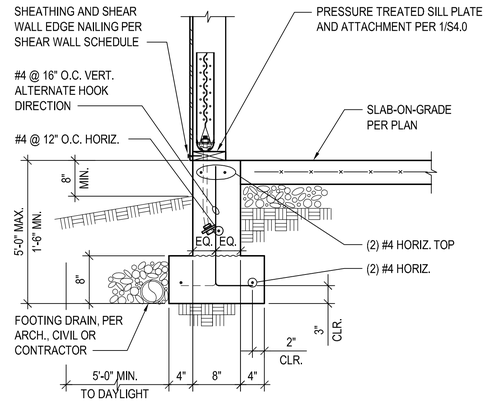

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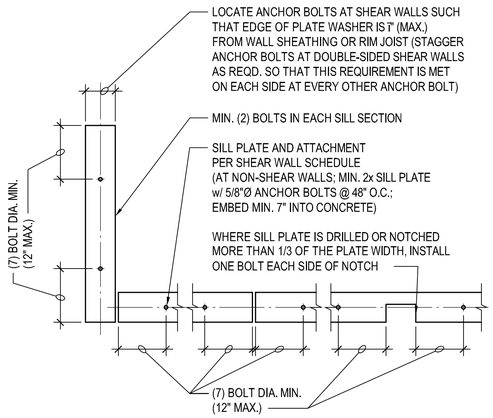
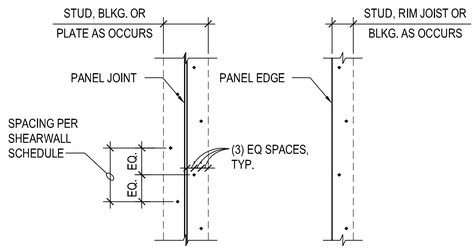
SHEET NAME:
FOUNDATION DETAILS

SHEET NUMBER:
S3.0





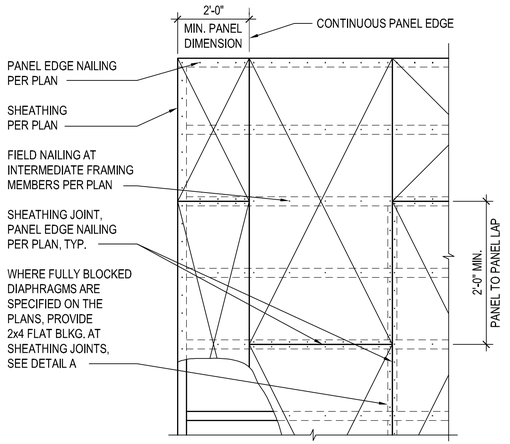
NOTE:
STAGGER EA. LINE OF NAILING (AT ALL PANEL EDGES) AS INDICATED

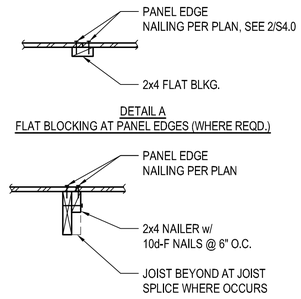
SHEAR WALL SCHEDULE (HEM-FIR, 10d NAILING)										
SHEAR WALL TYPE	SHEAR WALL SHEATHING (1)	PANEL EDGE FRAMING (2)(7)	PANEL EDGE NAILING (3)	BOTTOM PLATE ATTACHMENT			TOP PLATE ATTACHMENT		ALLOWABLE SHEAR WALL CAPACITY (PLF)	
				2x BOTTOM PLATE CONNECTION TO RIM JOIST OR BLOCKING BELOW	ANCHOR BOLTING OF SILL PLATE TO CONCRETE BELOW (4)(5)		RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE (6)			
					3x PLATE	2x PLATE	INTERIOR WALL	EXTERIOR WALL	SEISMIC	WIND
SW-6	15/32" APA ONE-SIDE SHTG.	2x	0.148"Øx2 ¼" @ 6" O.C.	0.148"Øx3 ¼" @ 6" O.C. (9)	⅝"Ø @ 48" O.C.	⅝"Ø @ 48" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.	288	405

NOTES:

1. INSTALL PANEL SHEATHING EITHER HORIZONTALLY OR VERTICALLY FOR THE ENTIRE LENGTH OF THE WALL PER PLAN.
2. ALL INTERMEDIATE WALL STUDS SHALL BE PER PLAN. PROVIDE BACKING FRAMING AT ALL PANEL EDGES INCLUDING HORIZONTAL BLOCKING PER THE SCHEDULE.
3. PROVIDE NAILING TO ALL PANEL EDGES, TOP & BOTTOM PLATES AND HORIZONTAL BLOCKING. PROVIDE THE SAME NAILING PATTERN TO EACH MULTIPLE STUD OF THE BUILT-UP HOLD DOWN POST. NAIL PANEL TO INTERMEDIATE FRAMING MEMBERS w/ 0.131"Ø x 2 ½" @ 12" O.C.
4. EMBED CAST-IN-PLACE 5/8"Ø ANCHOR BOLTS 7" MIN. (OR EMBED ADHESIVE ANCHOR BOLTS 5 1/2" IN (E) CONCRETE; SEE STRUCTURAL NOTES). PROVIDE PLATE WASHER 3" x 3" x 1/4" AT EACH ANCHOR BOLT. SILL PLATES SHALL BE TREATED PER GENERAL NOTES, AND SHALL BE 2x OR 3x PER THE SCHEDULE. SEE DETAIL 1/S4.0 FOR OTHER REQUIREMENTS.
5. PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.
6. PROVIDE 0.131"Ø x 1-1/2" LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"Ø x 2-1/2" LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/S4.1 FOR TOP PLATE SPLICE.
7. ALTERNATIVE TO 3x STUDS AND 3x HORIZ. BLOCKING IS (2) 2x STUDS/BLKG. NAILED TOGETHER WITH 0.148"Ø x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).
8. STAGGER NAILS PER 2/S4.0.
9. RIM JOIST/BLOCKING MINIMUM WIDTH OF 1 ½". STAGGER NAILS PER 2/S4.0 WHERE SPACING IS LESS THAN 6" O.C.

1





DETAIL A
FLAT BLOCKING AT PANEL EDGES (WHERE REQD.)

DETAIL B
PANEL EDGE NAILING AT JOIST SPLICE

NOTES:

1. RUN LONG DIMENSION OF SHEATHING PANELS PERPENDICULAR TO FRAMING.
2. WHERE FRAMING LAP SPLICE AND SHEATHING JOINTS ARE OFFSET, SEE DETAIL B ABOVE.

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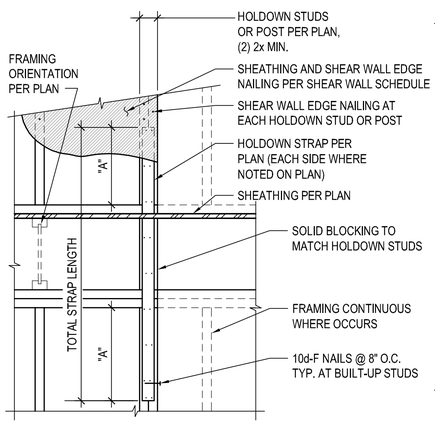

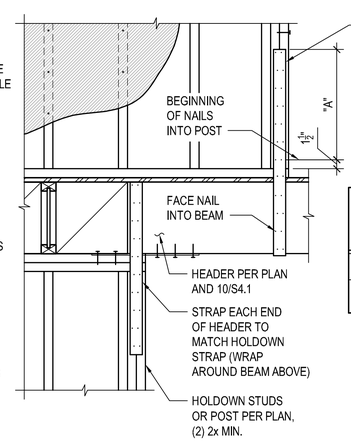

MARK	HOLDOWN STRAP	MIN. NUMBER OF NAILS EACH END	MIN. STRAP END LENGTH "A"
A	CS16	(15) 8d	1'-4"
B	MSTC66B3Z	(38) 10d FACE (4) 10d BEAM	1'-9"

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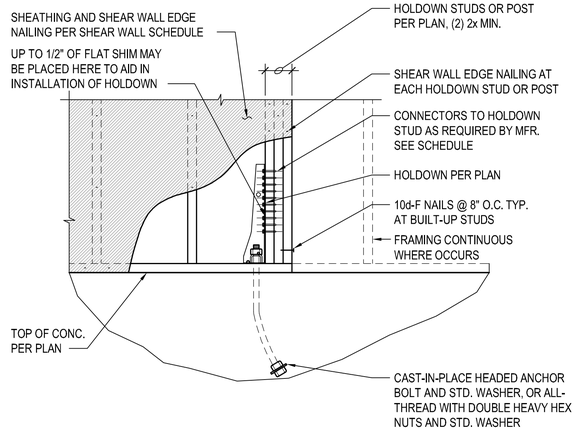

MARK	HOLDOWN	ANCHOR BOLT *	CONNECTORS TO HOLDOWN STUDS	END STUDS / POST
A	HDU5	SB 5/8 x 24"	(14) SDS ¼"x2½" SCREWS	(2) 2x

NOTE:
PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

* CONTRACTOR OPTION TO PROVIDE THREADED ROD IN LIEU OF ANCHOR IN SCHEDULE. DIAMETER TO BE AS INDICATED, CONTACT HAREZLAK ENGINEERING FOR PROJECT SPECIFIC EMBED REQUIREMENTS.

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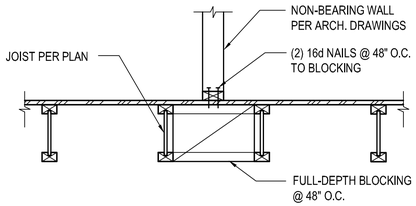
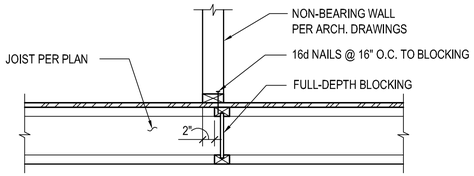
SHEET NAME:
FRAMING SCHEDULES

SHEET NUMBER:
S4.0



WALL PARALLEL TO FLOOR FRAMING



WALL PERPENDICULAR TO FLOOR FRAMING

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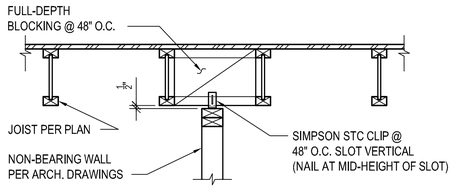
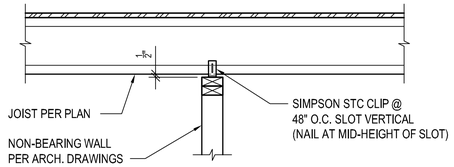


WALL PARALLEL TO ROOF/FLOOR FRAMING



WALL PERPENDICULAR TO ROOF/FLOOR FRAMING

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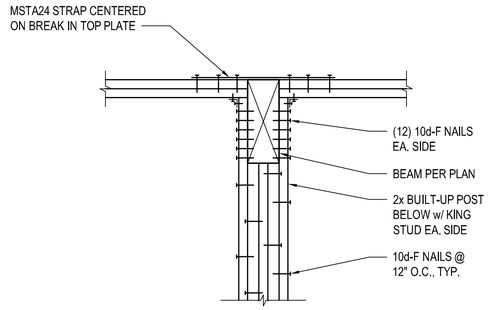

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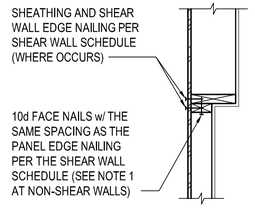
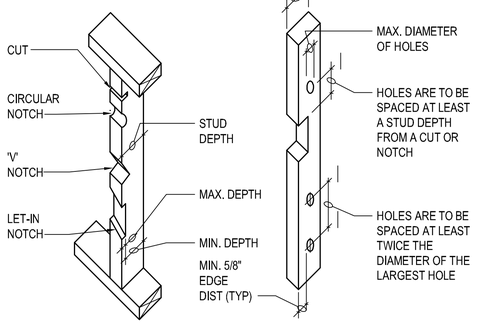
NOTES:

1. AT NON-SHEAR WALLS, NAIL STUDS TOGETHER WITH 10d-F NAILS @ 8" O.C.
2. ADDITIONAL STUDS REQUIRED AS NAILERS, ETC. ARE NOT SHOWN.



VARYING WALL SIZE



A. CUTTING AND NOTCHING WOOD STUDS
(DO NOT NOTCH MORE THAN 3 ADJACENT STUDS w/o REVIEW BY ENGINEER)

BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	7/8"	2-3/8"
2x6	1-3/8"	4-1/8"
2x8	1-7/8"	5-3/8"

NON-BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	1-1/2"	2"
2x6	2-3/8"	3-1/8"
2x8	3"	4-1/4"

B. HOLES IN WOOD STUDS

BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	1-1/2"
2x6	2-3/8"
2x8	3"

NON-BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	2-1/4"
2x6	3-3/8"
2x8	4-1/2"

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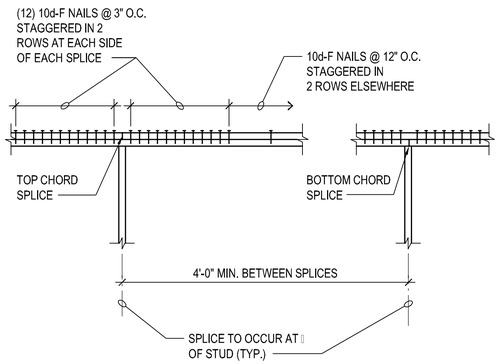

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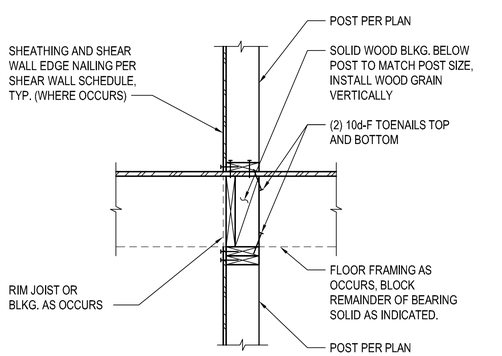
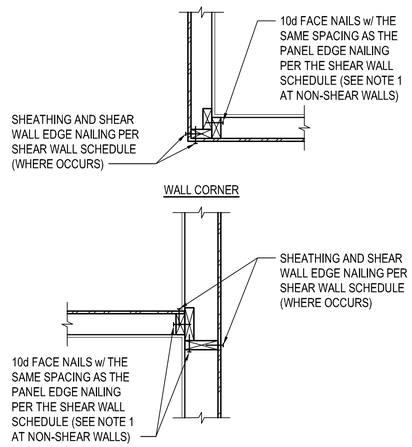


NOTE:
FRAMING CONDITIONS VARY, FOR INFORMATION NOT NOTED SEE PLAN & APPROPRIATE DETAILS

7



WALL CORNER

WALL INTERSECTION

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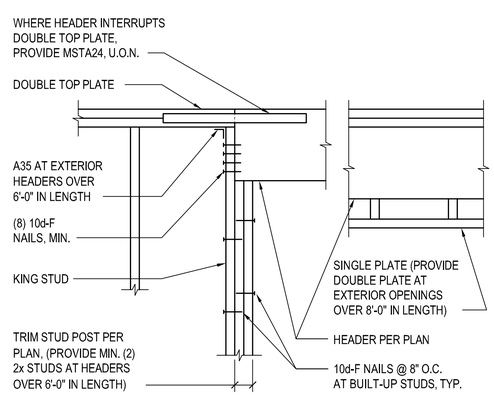

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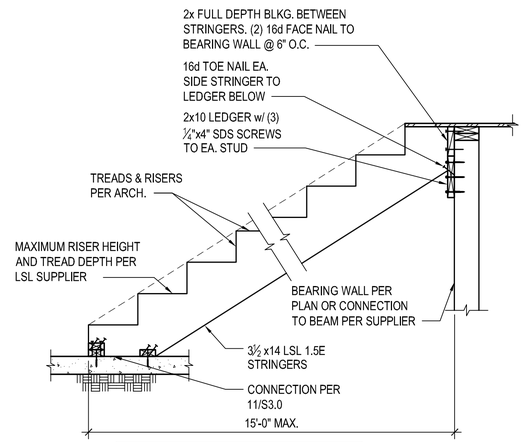

SEE SUPPLIER, TYPICAL LSL STAIR STRINGER DETAILS FOR LOW END CONNECTION TO BEAM

11 12

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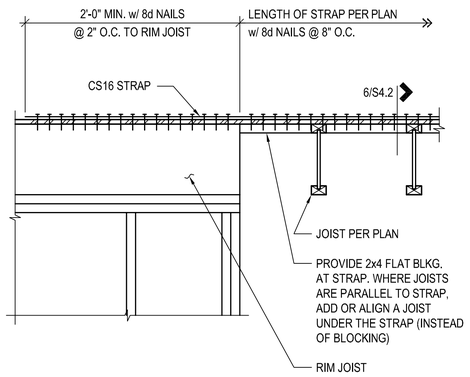
SHEET NAME:
WOOD FRAMING DETAILS

SHEET NUMBER:
S4.1



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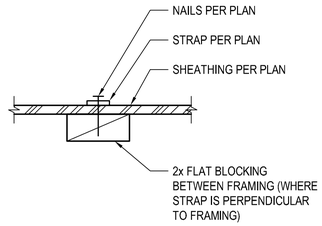

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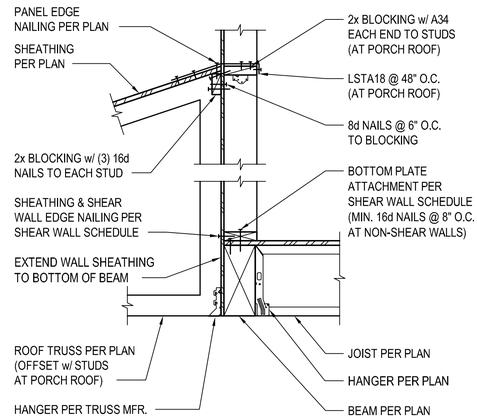

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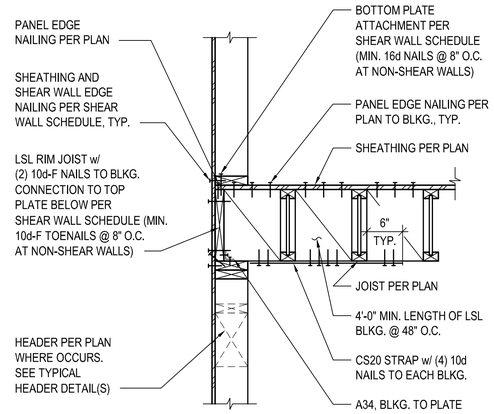

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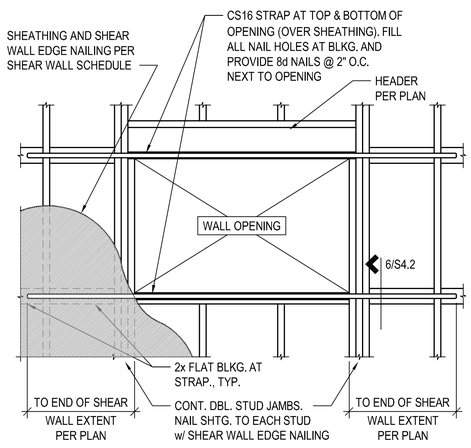

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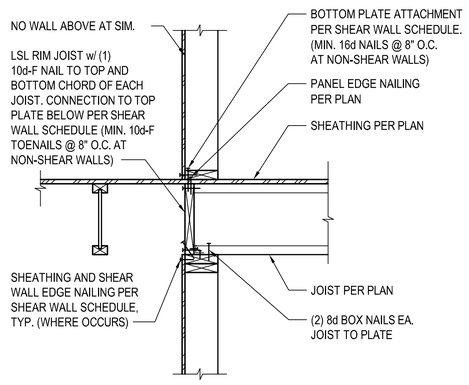

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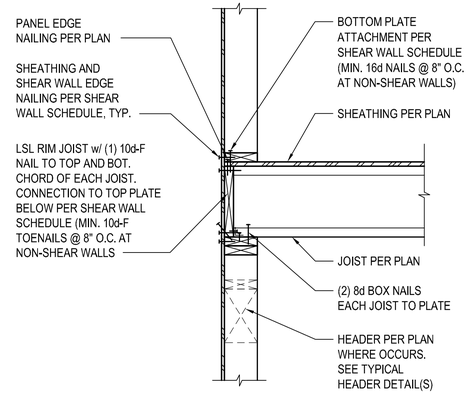


12

HAREZLAK
ENGINEERING
HAREZLAK ENGINEERING
11745 87th Ave. S.
Seattle, WA 98178
PH: 360.224.0627
E: phil@harezlakengineering.com

CONSULTANT STAMP:

PHILIP HAREZLAK
STATE OF WASHINGTON
55577
PROFESSIONAL ENGINEER
11/17/2023

DRAWN BY: TA
CHECKED BY: MJH
APPROVED BY: PAH

PROJECT INFORMATION:
WANG & YANG ADU

PROJECT ADDRESS:
6450 E MERCER WAY
MERCER ISLAND, WA 98040

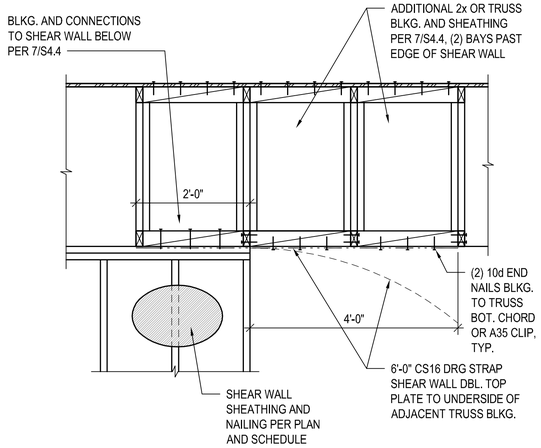
REVISIONS:

NO.	DESCRIPTION	DATE

PROJECT NUMBER: 23-146
ISSUE DATE: 11.17.2023
CURRENT REVISION: PERMIT

SHEET NAME:
FLOOR FRAMING DETAILS

SHEET NUMBER:
S4.2



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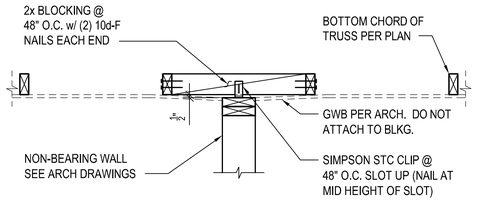
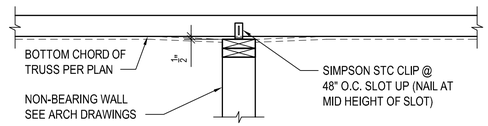


WALL PARALLEL TO TRUSS FRAMING



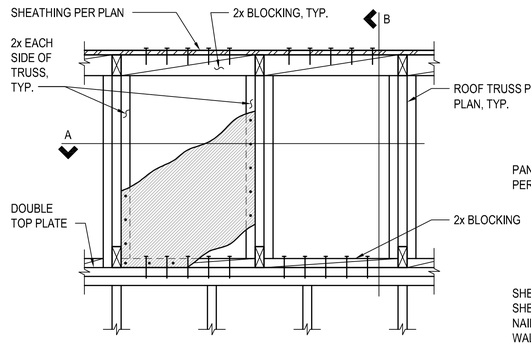
WALL PERP. TO TRUSS FRAMING

2

3

4

NOTE:
AT CONTRACTOR'S OPTION TRUSS MANUFACTURER MAY PROVIDE BLOCKING PANELS INSTEAD OF SITE-BUILT FRAMING SHOWN. MATCH CAPACITY OF SHEAR WALL BELOW.



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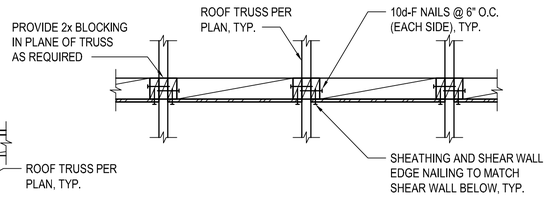
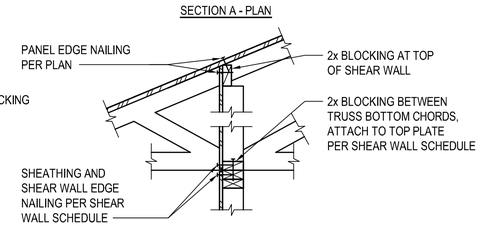


SECTION A - PLAN



SECTION B

5

7

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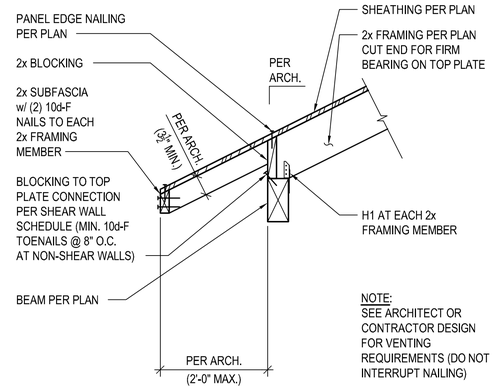
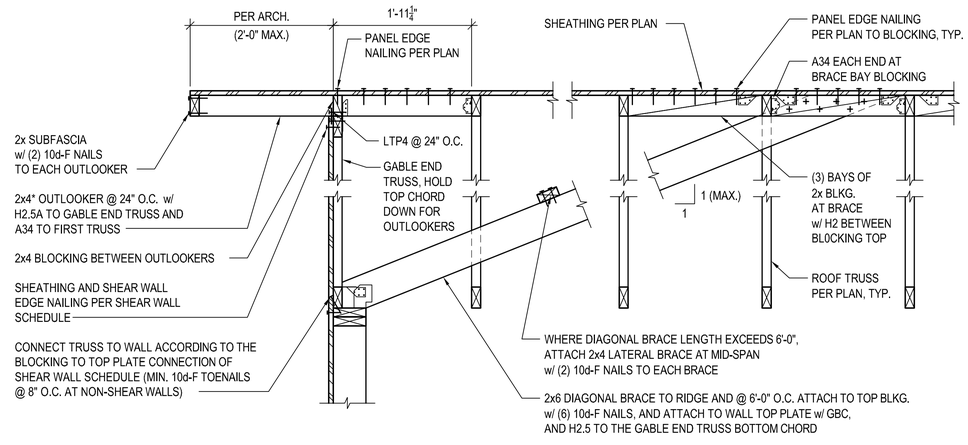


NOTE:
SEE ARCHITECT OR CONTRACTOR DESIGN FOR VENTING REQUIREMENTS (DO NOT INTERRUPT NAILING)



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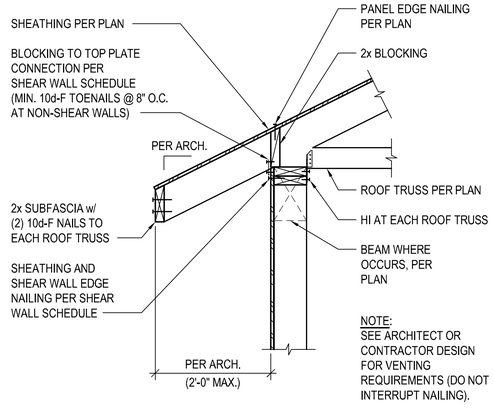

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HAREZLAK ENGINEERING
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11745 87th Ave. S.
Seattle, WA 98178
PH: 360.224.0627
E: phil@harezlakengineering.com

CONSULTANT STAMP:

PHILIP A. HAREZLAK
STATE OF WASHINGTON
55577
REGISTERED PROFESSIONAL ENGINEER

DRAWN BY: TA
CHECKED BY: MJH
APPROVED BY: PAH

11/17/2023

PROJECT INFORMATION:
WANG & YANG ADU

PROJECT ADDRESS:
6450 E MERCER WAY
MERCER ISLAND, WA 98040

REVISIONS:

NO.	DESCRIPTION	DATE

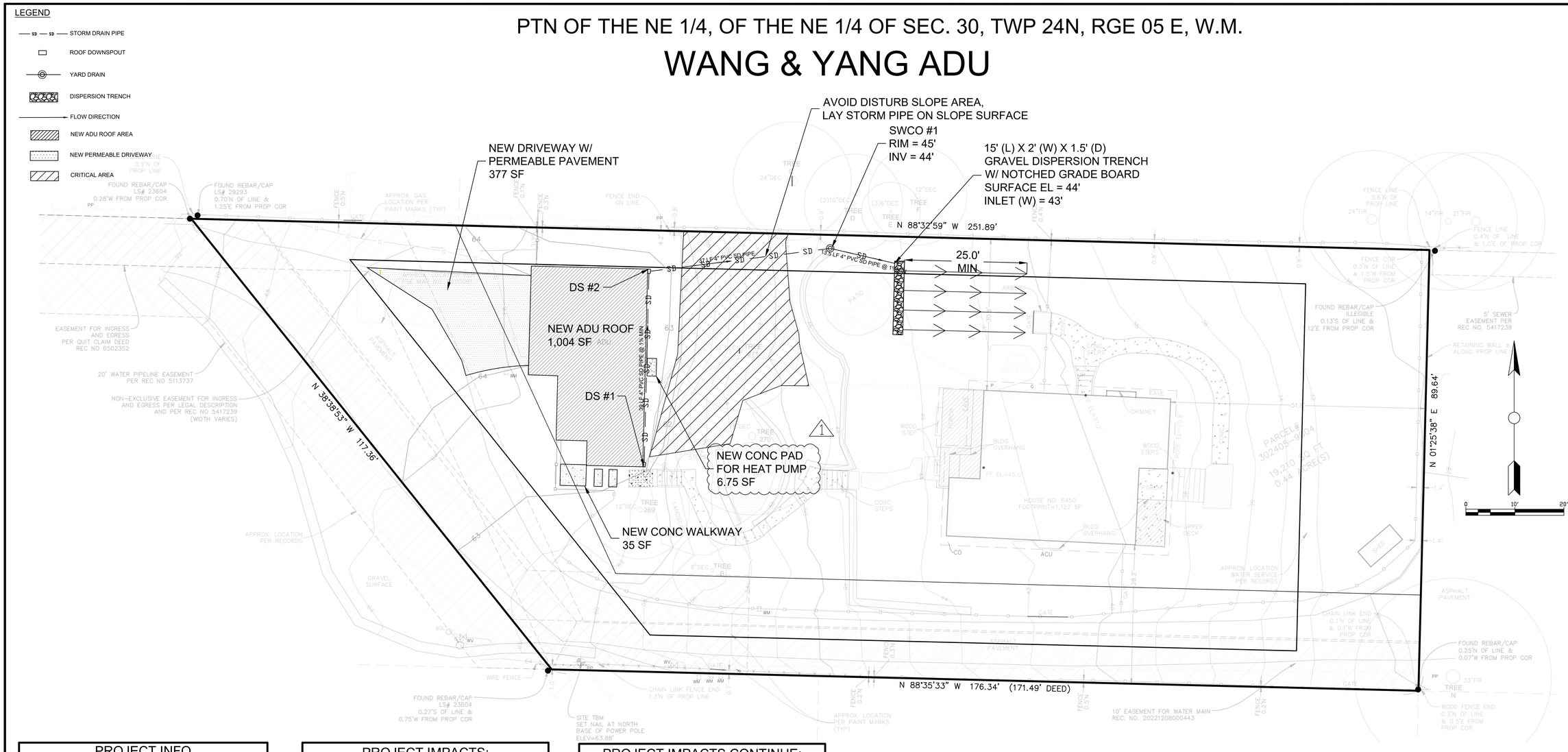
PROJECT NUMBER: 23-146
ISSUE DATE: 11.17.2023
CURRENT REVISION: PERMIT

SHEET NAME:
ROOF FRAMING DETAILS

SHEET NUMBER:
S4.3

PTN OF THE NE 1/4, OF THE NE 1/4 OF SEC. 30, TWP 24N, RGE 05 E, W.M.

WANG & YANG ADU



PROJECT INFO

OWNER:	**ENGINEER:**
BUPING WANG & WANQIU YANG	MERIT ENGINEERING, INC 10129 MAIN ST., #201 BELLEVUE, WA 98004 TEL: 425-454-2133 EMAIL: merit@meritengineering.com
ARCHITECT:	**SURVEYOR:**
SIYAO STUDIO EMAIL: SIYAOW@SIYAO.STUDIO TEL: 734-834-5994	PACIFIC COAST SURVEYS,INC. P.O. BOX 13619 MILL CREEK, WA 98082 TEL:425-512-7099 FAX: 425-357-357

SITE NOTES:

ADDRESS:	6450 E MERCER WAY, MERCER ISLAND, WA 98040
TAX ACCOUNT No.:	302405-9004
ZONING:	R-15
GOVERNMENT AGENCY	CITY OF MERCER ISLAND
AREA:	19,270 SF
LEGAL DESCRIPTION:	SEE SURVEY NOTES

PROJECT IMPACTS:

IMPERVIOUS COVERAGE EXISTING:	
EXISTING DECK	274 SF
EXISTING DRIVING SURFACE	3,436 SF
GRAVEL SURFACE	532 SF
HOUSE	1,589 SF
RETAINING WALL	27 SF
ROCKERY	220 SF
SHED	34 SF
WALKWAY	561 SF
WOOD WALL	17 SF
TOTAL	6,690 SF
IMPERVIOUS SURFACE REPLACE:	
CONCRETE	42 SF
GARAGE	409 SF
GRAVEL SURFACE	810 SF
WALKWAY	71 SF
TOTAL	1,332 SF

PROJECT IMPACTS CONTINUE:

IMPERVIOUS COVERAGE DEMO:	
CONCRETE	3 SF
GARAGE	118 SF
GRAVEL SURFACE	256 SF
TOTAL	377 SF
IMPERVIOUS SURFACE NEW:	
ADU	86 SF
WALKWAY	2 SF
TOTAL	88 SF

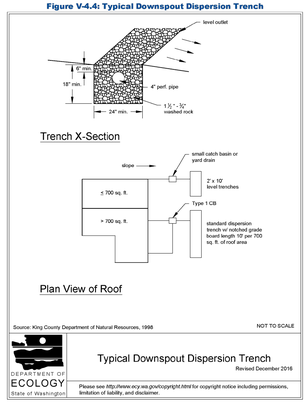
QUANTITES:

EXTENT OF CLEARING:	3,600 SF
CUT/FILL	95 CY CUT

SHEET INDEX

SHEET #	PLAN #	DETAIL/SHEET
1	C 01	DRAINAGE PLAN
2	C 02	TESC PLAN
3	C 02.1	TESC DETAIL

Figure V-4.4: Typical Downspout Dispersion Trench



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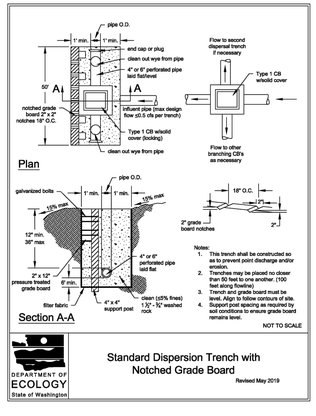
Volume V - Chapter 4 - Page 715

1 C 01 ***DISPERSION TRENCH*** NTS

Figure V-4.5: Standard Dispersion Trench with Notched Grade Board



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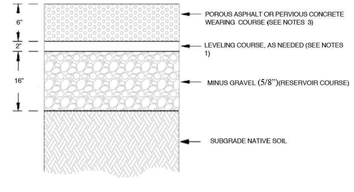
2 C 01 ***NOTCHED GRADE BOARD*** NTS



NOTES:

1. LEVELING COURSE MATERIALS: 1.5" TO U.S. NO.8 UNIFORMLY GRADED, CRUSED (ANGULAR), THROUGHLY WAHSED STONE.
2. LONGITUDINAL SLOPE, 0 TO 5% MAX. FOR POROUS ASPHALT.
3. PERVIOUS CONCRETE MUST BE INSTALLED BY A CERTIFIED PERVIOUS CONCRETE INSTALLER. POROUS ASPHALT MUST BE INSTALLED BY AN EXPERIENCED POROUS ASPHALT INSTALLER.

3 C 01 ***PERMEABLE PAVEMENT*** NTS

MERIT ENGINEERING INC.
10129 Main Street, #201
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Telephone: (425)454-2133
http://www.meritengineering.com

No.	Date	Revision
1	06/03/2024	COMMENT

CALL 811 2 BUSINESS DAYS BEFORE YOU DIG
(UNDERGROUND UTILITY LOCATION AS APPROX)

PROJECT:
WANG & YANG ADU
PARCEL # 302405-9004

SCALE	1" = 10'
DESIGNED	ZD
DRAWN	ZD
CHECKED	AY
APPROVED	AXH

AUSTIN X HUANG STATE OF WASHINGTON 28572 REGISTERED PROFESSIONAL ENGINEER

JUNE 03, 2024

PERMIT SET

THIS DOCUMENT HAS BEEN PREPARED FOR PERMIT APPLICATION AND IS SUBJECT TO REVIEW AND MODIFICATIONS BY GOVERNMENTAL AGENCIES

TITLE
DRAINAGE
SITE PLAN

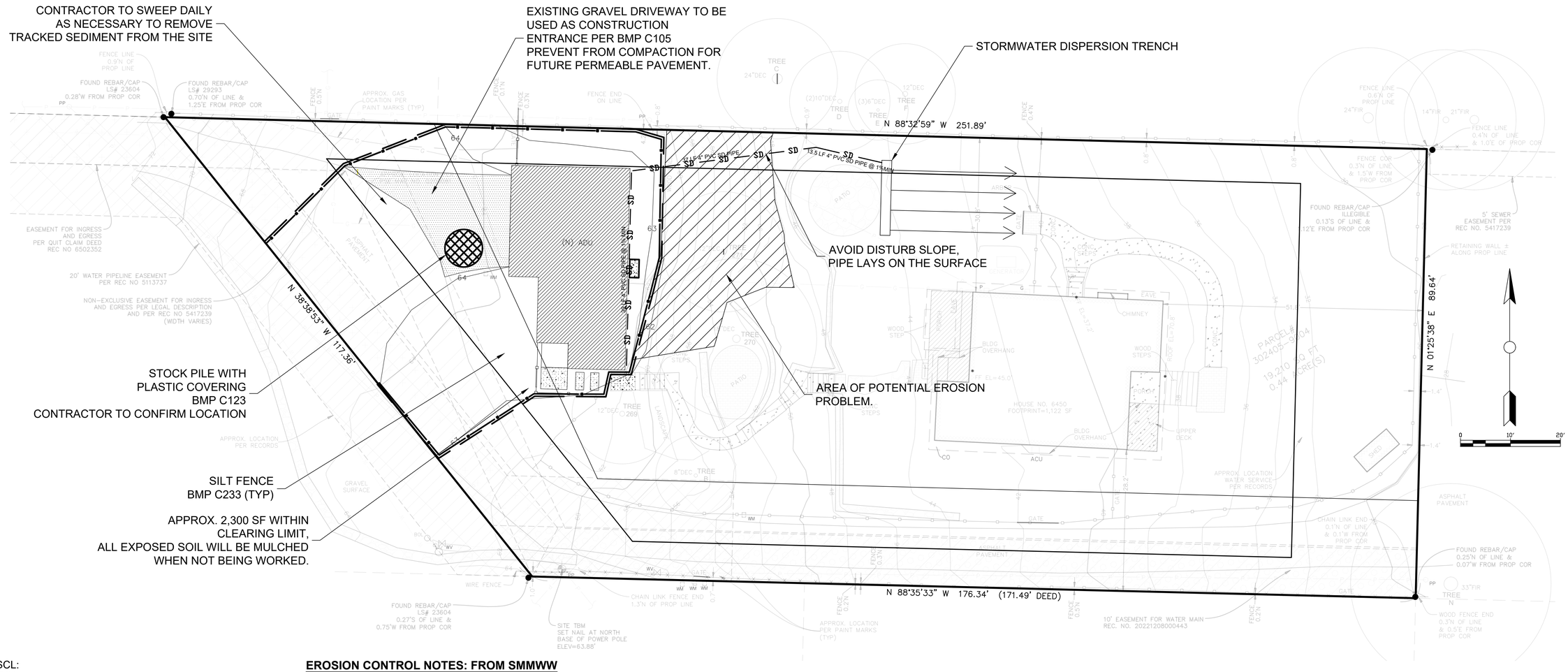
PROJECT No.
2EH03221024

DATE
JUNE 03, 2024

SHEET No.
C 01

APPROVED FOR CONSTRUCTION
By:
Permit No.:
Date:

PTN OF THE NE 1/4, OF THE NE 1/4 OF SEC. 30, TWP 24N, RGE 05 E, W.M.



CESCL:
DI ZHU
ID#: EF8184699
TEL: 253-391-7441

TESC LEGEND

- CONSTRUCTION ENTRANCE
- PLASTIC STOCK PILE
- SILT FENCE
- CLEARING LIMIT
- TREE PROTECTION
- CRITICAL AREA

QUANTITES:	
EXTENT OF CLEARING:	3,600 SF
CUT/FILL	95 CY CUT

EROSION CONTROL NOTES: FROM SMMWW

1. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE SC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
2. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY APE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED.
3. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
4. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
5. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
6. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
7. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
8. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
9. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY EIGHT (48) HOURS FOLLOWING A STORM EVENT.
10. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING.
11. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
12. STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
13. ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE CITY INSPECTOR. THE CITY INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

MERIT ENGINEERING INC.
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http://www.meritengineering.com

No.	Date	Revision

CALL 811 2 BUSINESS DAYS BEFORE YOU DIG
(UNDERGROUND UTILITY LOCATION AS APPROX)

PROJECT:
WANG & YANG ADU
PARCEL # 302405-9004

SCALE	1" = 20'
DESIGNED	ZD
DRAWN	ZD
CHECKED	AY
APPROVED	AXH

AUSTIN X HUANG STATE OF WASHINGTON 28511 REGISTERED PROFESSIONAL ENGINEER

JUNE 03, 2024
PERMIT SET
THIS DOCUMENT HAS BEEN PREPARED FOR PERMIT APPLICATION AND IS SUBJECT TO REVIEW AND MODIFICATIONS BY GOVERNMENTAL AGENCIES

TITLE
TESC PLAN

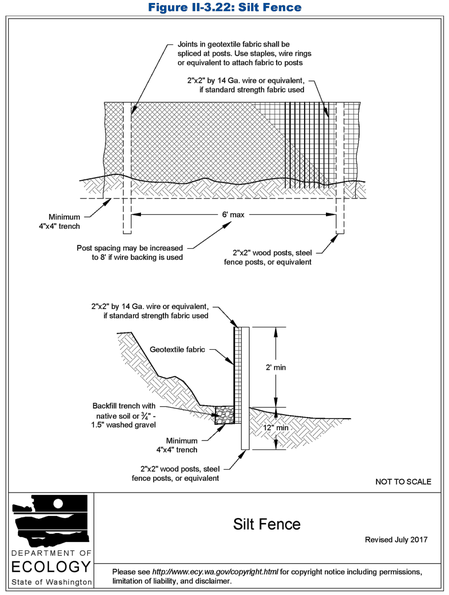
PROJECT No.
2EH03221024

DATE
JUNE 03, 2024

SHEET No.
C 02

APPROVED FOR CONSTRUCTION
By:
Permit No.:
Date:

Figure II-3.22: Silt Fence



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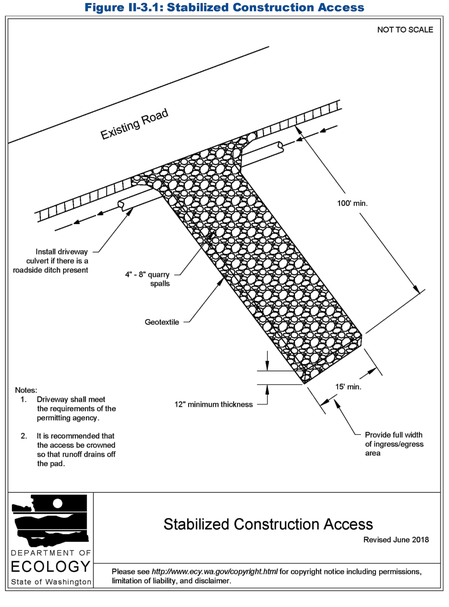
1 C 02.1 ***SILT FENCE DETAIL***

NTS

Figure II-3.1: Stabilized Construction Access



2019 Stormwater Management Manual for Western Washington

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3 C 02.1 ***TEMPORARY CONSTRUCTION ENTRANCE***

NTS

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Bellevue, Washington 98004
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http://www.meritengineering.com

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PROJECT:
WANG & YANG ADU
PARCEL # 302405-9004

SCALE	NTS
DESIGNED	ZD
DRAWN	ZD
CHECKED	AY
APPROVED	AXH

AUSTIN X HUANG STATE OF WASHINGTON 28534 REGISTERED PROFESSIONAL ENGINEER

JUNE 03, 2024

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SHEET No.
C 02.1

APPROVED FOR CONSTRUCTION
By:
Permit No.:
Date: