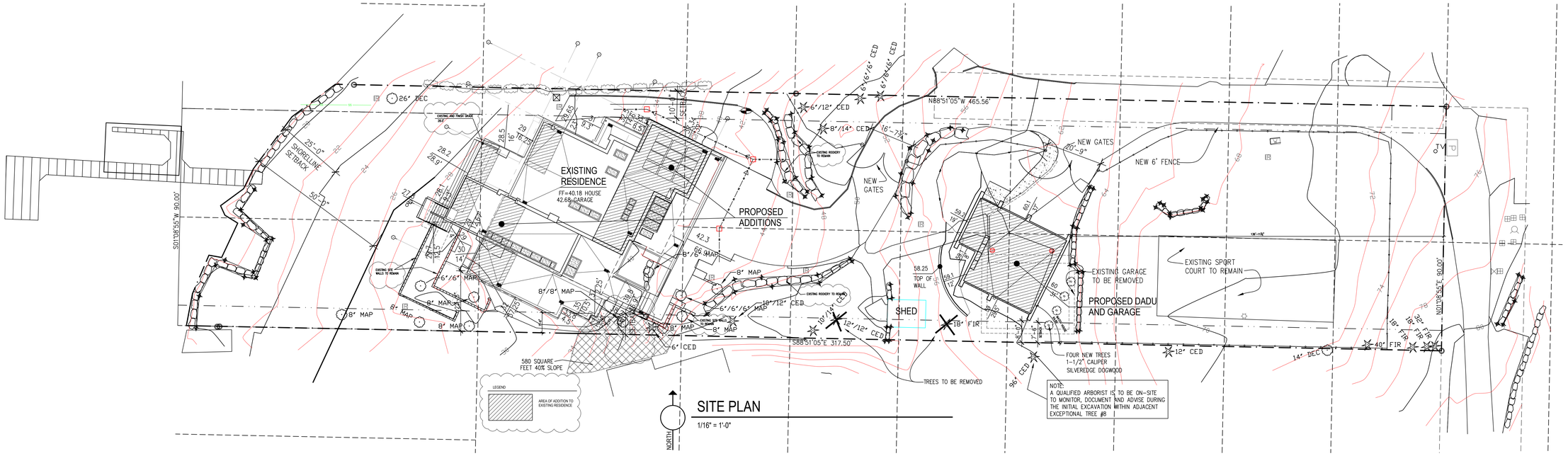

SITE PLAN

1/16" = 1'-0"

GENERAL NOTES

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ALL CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) AND BE IN ACCORDANCE WITH THE WASHINGTON STATE LAWS AND REGULATIONS AND VARIOUS CODES IMPOSED BY LOCAL AUTHORITIES. INCLUDING WASHINGTON AMMENDMENTS TO IRC, AND MERCER ISLAND CITY CODE.

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.

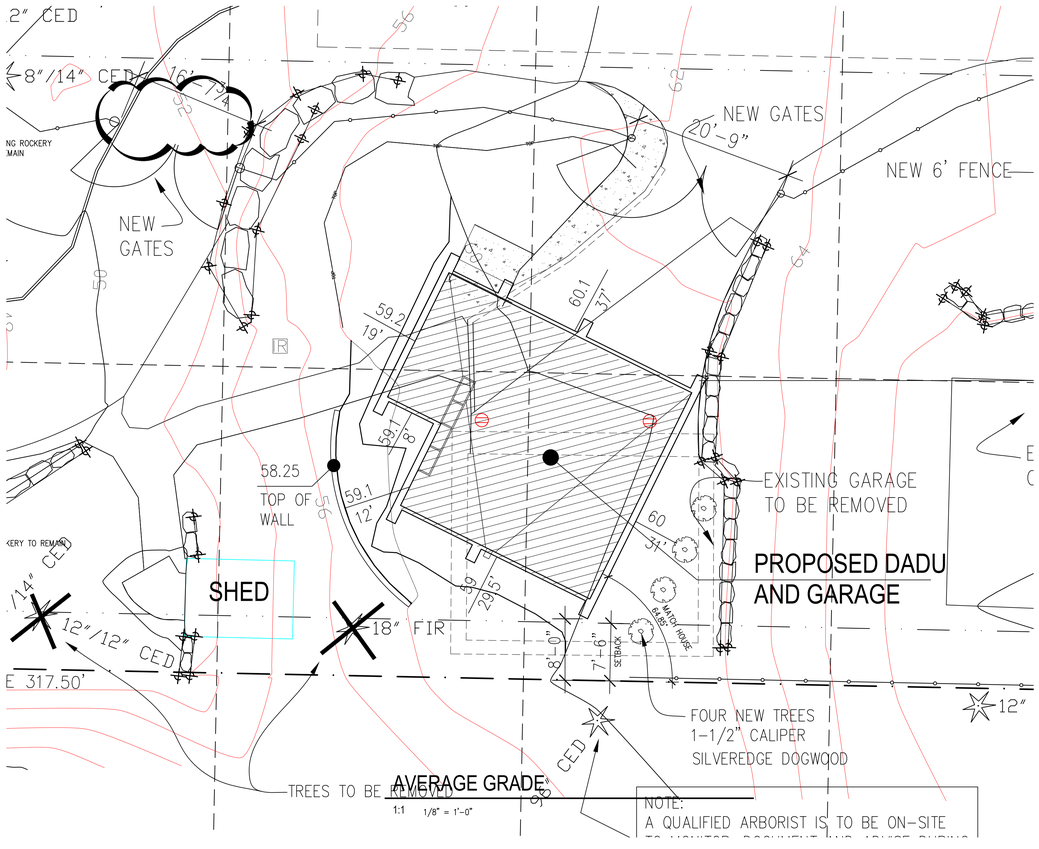
CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHTECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON THE DRAWING ONLY WILL NOT SATISFY THIS REQUIREMENT.

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

ALL STUCTURAL 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.

THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ARCHITECT IF UNUSUAL, UNFORESEEABLE, OR UNEXPECTED SUBSURFACE CONDITIONS ARE ENCOUNTERED.

BECAUSE THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, THE CONTRACTOR SHALL, BEFORE STARTING EACH PORTION OF THE WORK, CAREFULLY STUDY AND COMPARE THE VARIOUS CONTRACT DOCUMENT RELATIVE TO THAT PORTION OF THE WORK, AS WELL AS THE INFORMATION PROVIDED BY THE OWNER, SHALL TAKE FIELD MEASUREMENTS OF ANY EXISTING CONDITIONS RELATED TO THAT PORTION OF THE WORK AND SHALL OBSERVE ANY CONDITIONS AT THE SITE AFFECTING IT. THESE OBLIGATIONS ARE FOR THE PURPOSE OF FACILITATING COORDINATION AND CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL REPORT TO THE ARCHITECT ANY ERRORS, INCONSISTENCIES, OR OMMISSIONS DISCOVERED BY OR MADE KNOWN TO THE CONTRACTOR AS A REQUEST FOR INFORMATION IN SUCH FORM AS THE ARCHITECT MAY REQUIRE. THE CONTRACTOR'S REVIEW IS MADE IN THE CONTRACTOR'S CAPACITY AS A CONTRACTOR AND NOT AS A LICENSED DESIGN PROFESSIONAL.



length	elevation	axb
29.5	59	1740.5
31	60	1860
37	60.1	2223.7
19	59.2	1124.8
8	59.1	472.8
12	59.1	709.2
136.5		8131

59.57 average grade

PROJECT NOTES

PROPOSED ADDITION TO EXISTING RESIDENCE AND NEW ADU/GARAGE

OWNERS

STEVE KAO & HUI HONG
21722 CHINOOK ROAD
WOODWAY, WA 98020

ZONING

R-15

PROPERTY TAX ACCT#

PROPERTY TAX ACCOUNT NUMBER: 294890-0015

LEGAL DESCRIPTION

GROVELAND PARK ADD VAC 3-4 & S 10 FT OF 2 & SH LDS ADJ & VAC ST ADJ IN BLK 22 & VAC N 40 FT OF 16 THRU 22 & VAC S 50 FT OF 9 THRU 15 & VAC ST ADJ IN BLK 2

LOT COVERAGE

TOTAL LOT AREA: 42,797 S.F. NET LOT AREA 39,844 S.F.
LOT COVERAGE:

HOUSE W/ ADDITIONS	5,266 S.F.
DADU	1,108 S.F.
SHED	143 S.F.
STRUCTURAL TOTAL	6,517 S.F.
SPORT COURT	1,950 S.F.
DRIVING SURFACES	6,766 S.F.
TOTAL	15,233 S.F.

HARDSCAPE MAX. ALLOWED 9% OF 42,797 S.F. = 3,852 S.F.

STEPPING STONES & ROCKERIES	976 S.F.

40% ALLOWABLE LOT COVERAGE OR 17,119 S.F

GROSS FLOOR AREA

BASEMENT	640 S.F.
MAIN FLOOR	3,916 S.F.
UPPER FLOOR	1,908 S.F.
DADU	1,952 S.F.
TOTAL	8,416 S.F.
ALLOWABLE GROSS FLOOR AREA	12,000 S.F.

LOT SLOPE CALCULATION

HIGH POINT 80'-LOW POINT 18'=62' DIFFERENCE
62'/438.3' HORIZONTAL DISTANCE*100=12.8% LOT SLOPE

FIRE SPRINKLERS

PROVIDE A NFPA 13D FIRE SPRINKLER SYSTEM THROUGHOUT THE MAIN HOUSE. THIS SYSTEM WILL REQUIRE A SEPARATE FIRE PERMIT.

PROVIDE THE DADU WITH A NFPA 13D MONITORED FIRE ALARM SYSTEM.

SHEET INDEX

CHESMORE|BUCK architecture
27 100TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
PHONE: 425-679-0904
FAX: 425-679-0907

REGISTERED ARCHITECT
DAVID N. BUCK
STATE OF WASHINGTON
5389

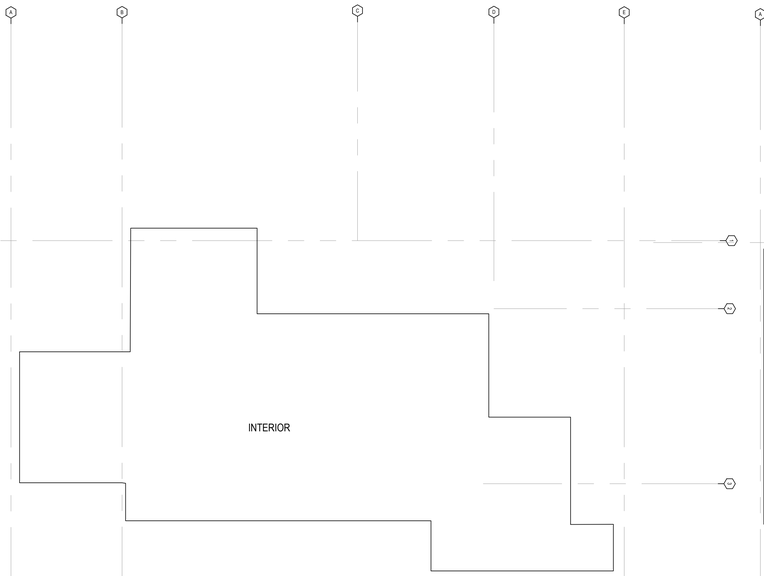
No.	Date	Revision
1	10/16/23	RESPONSE
	9/28/23	PRICING SET

HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

SITE PLAN

Sheet No. D1.0
Project No. 2222
Date: 9/8/23



EXISTING AND PROPOSED LOWER FLOOR AREA

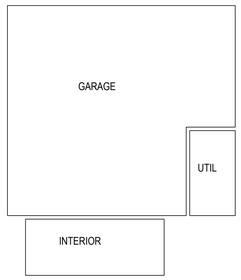
1/8" = 1'-0"

PROPOSED MAIN FLOOR

1/8" = 1'-0"

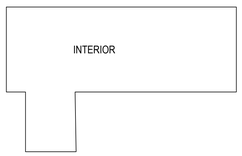
PROPOSED UPPER FLOOR

1/8" = 1'-0"



DADU MAIN FLOOR

1/8" = 1'-0"

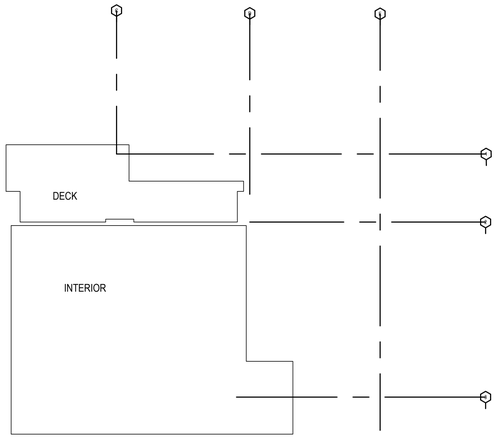


DADU UPPER FLOOR

1/8" = 1'-0"

EXISTING MAIN FLOOR

1/8" = 1'-0"



EXISTING UPPER FLOOR

1/8" = 1'-0"

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REGISTERED ARCHITECT
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DAVID N. BUCK
STATE OF WASHINGTON

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HONG AND KAO RESIDENCE

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

FLOOR AREA ILLUSTRATION

Sheet No. 1.1
Project No. 2222
Date: 9/8/23

FOUNDATION NOTES:

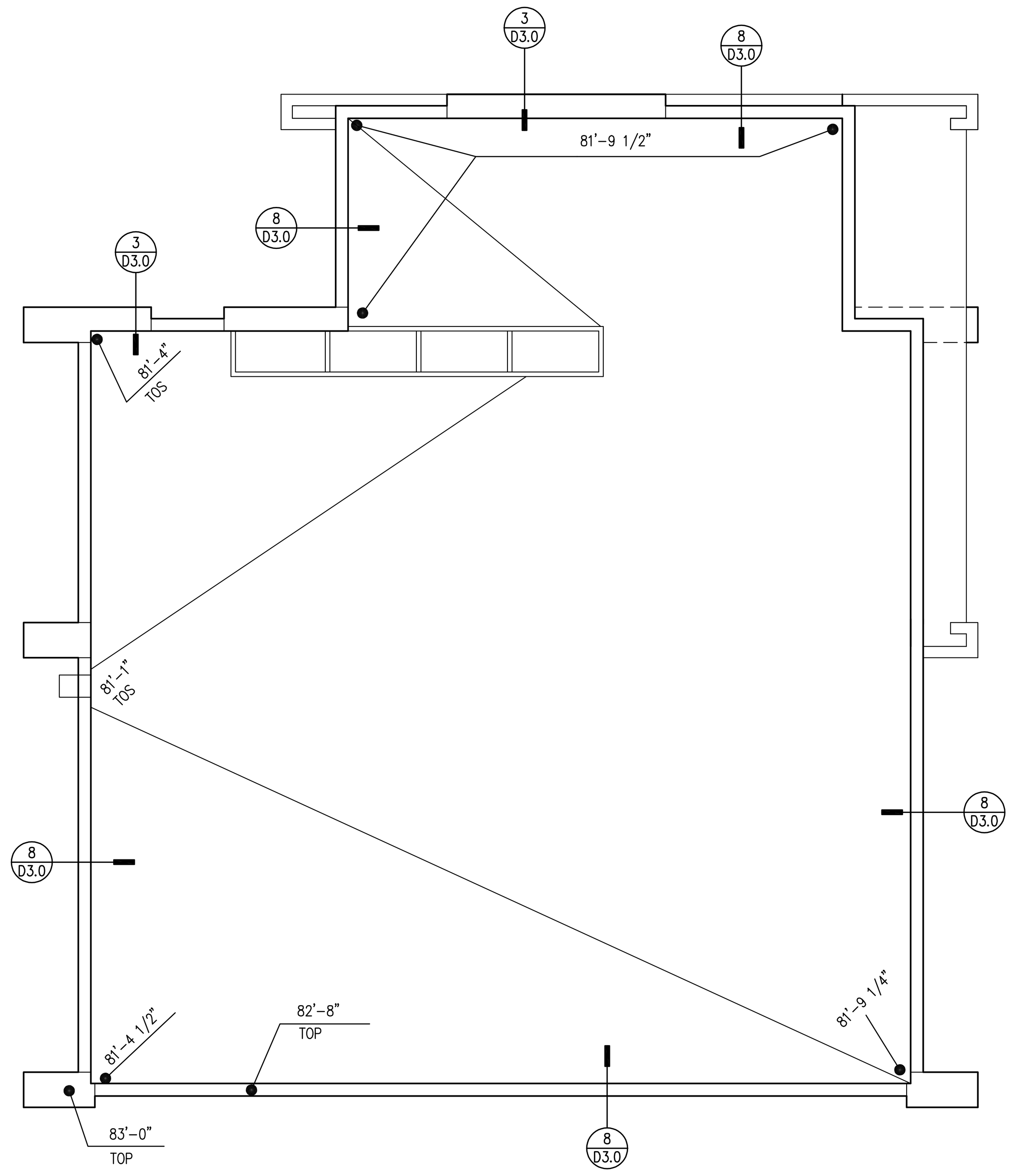
1. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEET S3.0 FOR TYPICAL CONCRETE AND FOUNDATION DETAILS. SEE SHEET S4.0 FOR TYPICAL WOOD DETAILS.
2. ALL WOOD BEARING ON UNPROTECTED CONCRETE, EXPOSED TO WEATHER, OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED, U.O.N.
3. FOR SILL PLATE ANCHOR BOLT LAYOUT TO CONCRETE FOUNDATION WALLS AND SLABS, SEE DETAIL 1/S4.0.
4. HDUx INDICATES HOLDOWN TO CONCRETE FOUNDATION WALLS OR FOOTINGS. SEE 12/S4.0 FOR HOLDOWN DETAIL. USE MIN. (2) 2x POST U.O.N.

ROOF FRAMING NOTES:

1. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.5 FOR TYPICAL WOOD DETAILS.
2. TYPICAL ROOF FRAMING CONSISTS OF 15/32" APA RATED PLYWOOD SHEATHING (INDEX 32./16), LAID FACE GRAIN PERPENDICULAR OVER 11 7/8" TJI @ 24" O.C. UNLESS OTHERWISE NOTED. HANG JOISTS WITH IUS HANGERS TYPICAL AT FLUSH BEAMS UNLESS OTHERWISE NOTED (UON).
3. NAIL ROOF SHEATHING TO FRAMING WITH 8d NAILS (0.131" Φ X 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS. (UNBLOCKED). SEE DETAIL 6/S4.0
4. SW-x INDICATES SHEAR WALL AT LEVEL BELOW. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS.

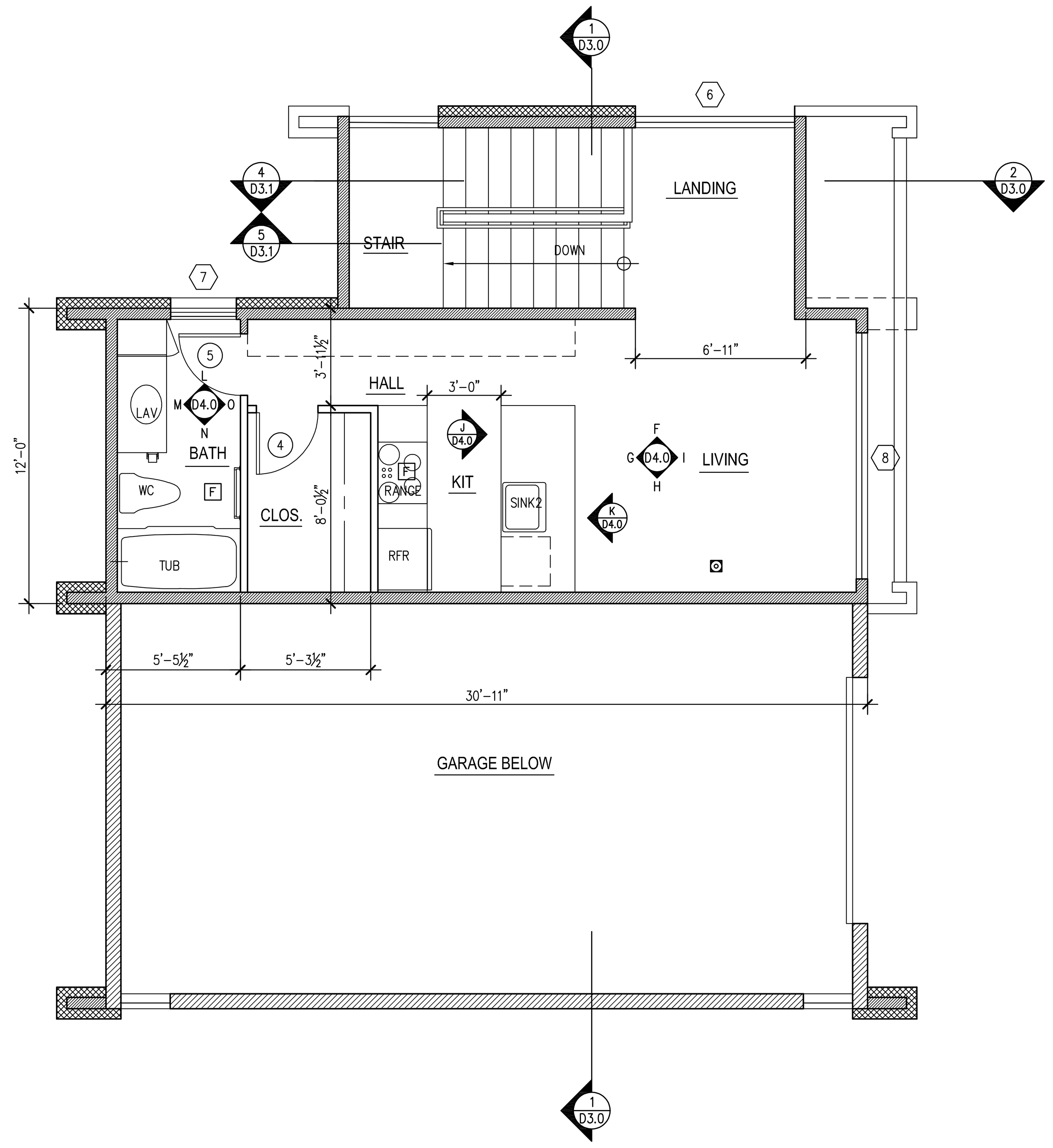
FLOOR FRAMING NOTES:

1. SEE SHEETS S1.0 AND S1.1 FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS. SEE SHEETS S4.0, S4.1 AND S4.2 FOR TYPICAL WOOD DETAILS.
2. TYPICAL FLOOR FRAMING CONSISTS OF 23/32" APA RATED T&G SHEATHING (INDEX 48/24), LAID FACE GRAIN PERPENDICULAR OVER 9 1/2" TJI 210 JOISTS AT 16" O.C. HANG TJI JOISTS WITH IUS TOP FLANGE HANGERS TYPICAL AT FLUSH BEAMS, U.O.N.
3. NAIL FLOOR SHEATHING TO FRAMING WITH 8d NAILS (0.131"Φ X 2.5" LONG) AT 6" O.C. AT ALL PANELS EDGES AND 8d NAILS AT 12" O.C. AT INTERMEDIATE FRAMING MEMBERS. (UNBLOCKED). SEE DETAIL 6/S4.0.
4. SW-x INDICATES SHEAR WALL AT LEVEL BELOW. SEE SHEAR WALL SCHEDULE 8/S4.0 FOR SHEATHING, BLOCKING, NAILING, AND ANCHOR BOLT REQUIREMENTS.
5. CS16 INDICATES HOLDOWN STRAP TO FRAMING BELOW WALL. SEE 10/S4.0 FOR STRAP HOLDOWN DETAIL AT FLOOR-TO-FLOOR AND BEAM SUPPORTING SHEAR WALL END. USE MIN. (2) 2x POST U.O.N.



ROOF PLAN

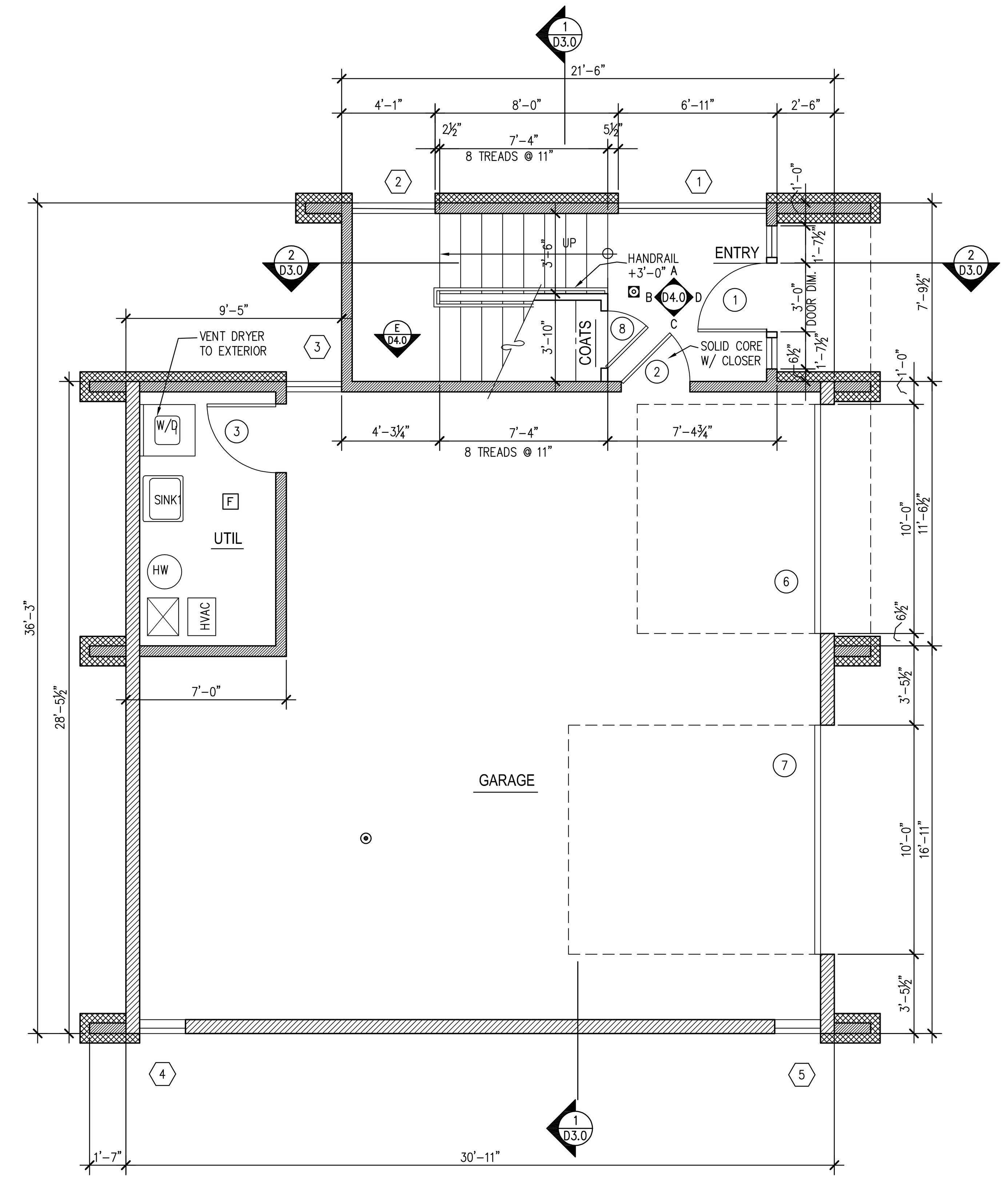
1/4" = 1'-0"



UPPER FLOOR

383 SQUARE FEET CONDITIONED FLOOR AREA

1/4" = 1'-0"



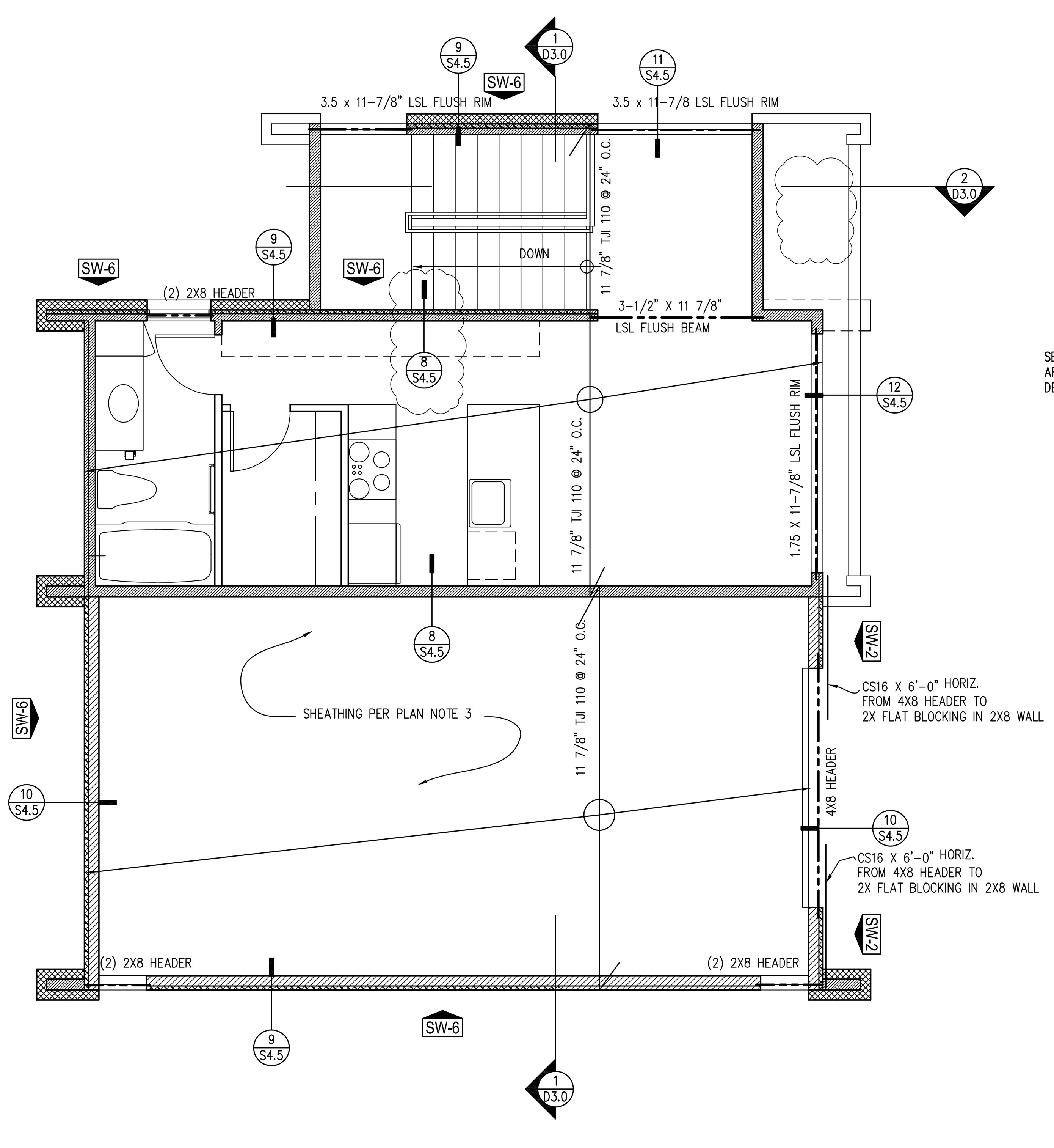
MAIN FLOOR

199 SQUARE FEET CONDITIONED FLOOR AREA
740 SQUARE FEET NON-CONDITIONED GARAGE AREA

1/4" = 1'-0"

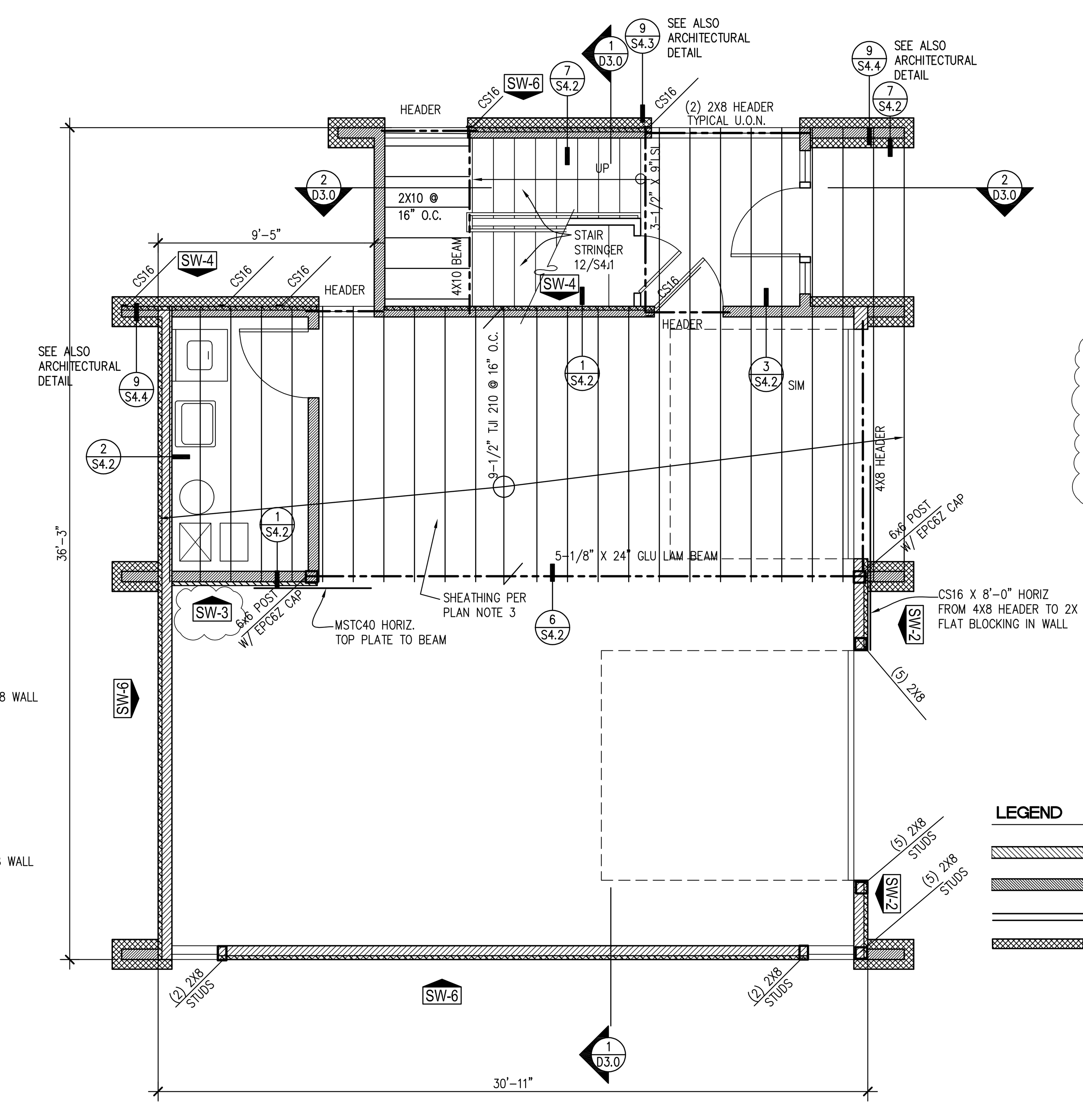
NOTE:
SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS.

- COMBO-SMOKE/CARBON MONOXIDE DETECTOR (S/CM)
- HEAT DETECTOR
- F EXHAUST FAN (VENT TO EXTERIOR) 50 CFM, 100 CFM AT HOOD



ROOF FRAMING PLAN

1/4" = 1'-0"



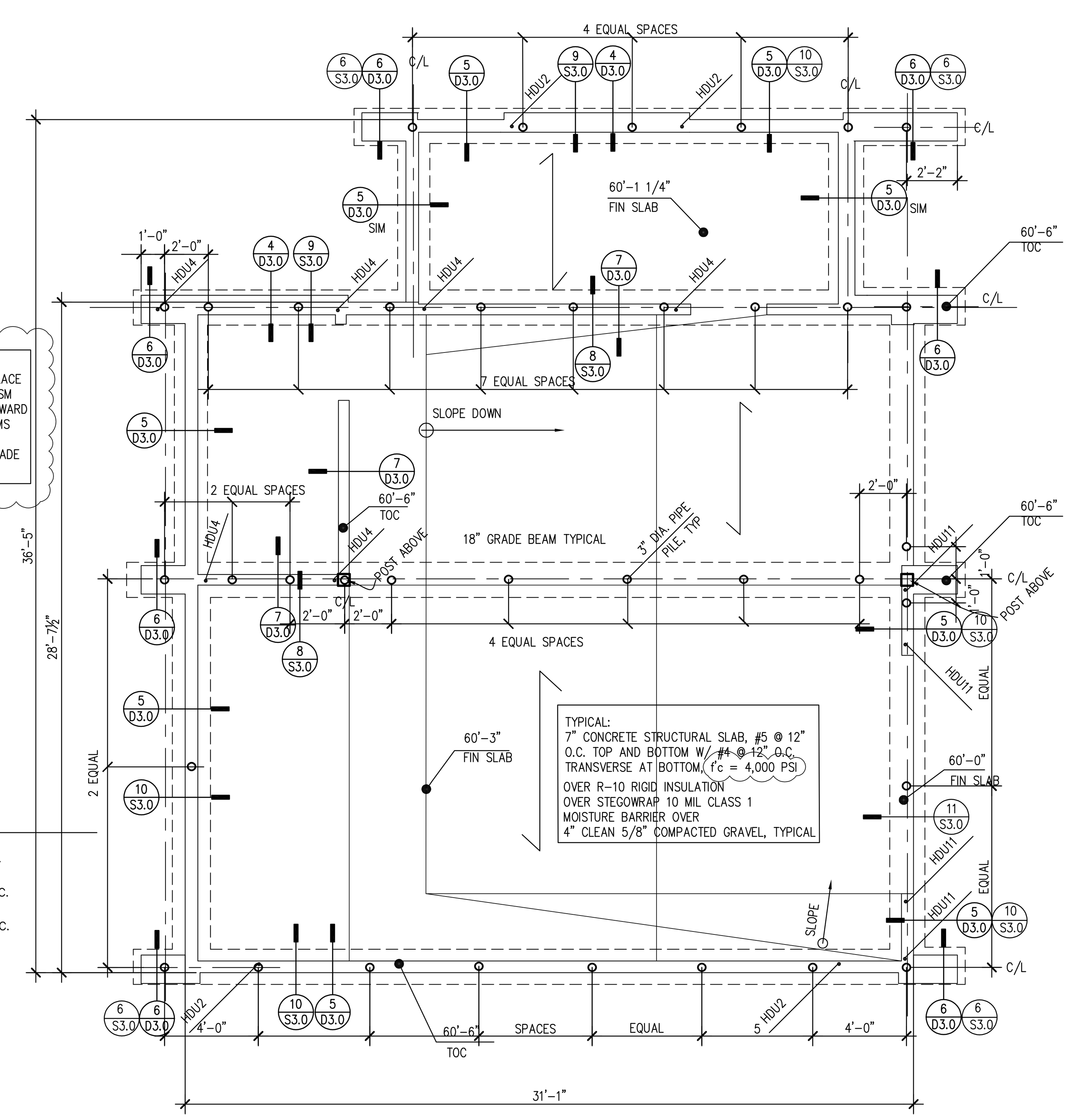
UPPER FLOOR FRAMING PLAN

1/4" = 1'-0"

LEGEND

- NEW 2X8 STUD @ 16" O.C.
- NEW 2X6 STUDS @ 16" O.C.
- NEW 2X4 STUDS @ 16" O.C.
- NEW BRICK VENEER

FOUNDATION NOTE:
PER THE GEOTECHNICAL ENGINEER, PLACE COMPACTED CRUSHED ROCK IN A PRISM EXTENDING AT LEAST FOUR FEET OUTWARD FROM THE SIDES OF THE GRADE BEAMS AND TO A DEPTH OF AT LEAST ONE FOOT BELOW THE BOTTOM OF THE GRADE BEAMS



FOUNDATION PLAN

1/4" = 1'-0"

TOC – TOP OF CONCRETE
FIN SLAB – FINISH SLAB ELEVATION
○ – PIPE PILE SEE 10/S3.0

CHESMORE|BUCK architecture
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BELLEVUE, WA 98004
FAX: 425-679-0804
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REGISTERED ARCHITECT 5389 DAVID N. BUCK STATE OF WASHINGTON

No.	Date	Revision
1	10/16/23	RESPONSE
	9/28/23	PRICING SET

QUANTUM CONSULTING ENGINEERS
1511 THIRD AVENUE SUITE 323 SEATTLE, WA 98101 TEL 206.957.3900 www.quantumce.com

SCOTT H. TINKER STATE OF WASHINGTON 36098 STRUCTURAL PROFESSIONAL ENGINEER

HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

DADU PLANS

Sheet No. D2.0
Project No. 2222
Date: 9/8/23

SECTION R406 ADDITIONAL ENERGY EFFICIENCY REQUIREMENTS

R406.3 SMALL DWELLING UNIT ..... 3.0 CREDITS REQUIRED

FUEL NORMALIZATION CREDITS
SYSTEM TYPE 2 LISTED HEAT PUMP..... 1.0 CREDITS

2. AIR LEAKAGE CONTROL
2.2 REDUCE AIR LEAKAGE TO 2.0 AIR CHANGES..... 1.0 CREDITS
MAXIMUM PER HOUR AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS OR IRC M1505.4 OR IMC 403.4 SHALL BE MET WITH HEAT RECOVERY VENTILATION SYSTEM WITH MIN. SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.65

3. HIGH EFFICIENCY HVAC EQUIPMENT
3.2 AIR SOURCE DUCTED HEAT PUMP MIN. HSPF 9.5..... 1.0 CREDITS

TOTAL PROVIDED..... 3.0 CREDITS

TESTING

TEST AIR LEAKAGE CHANGES WITH A BLOWER DOOR AT A PRESSURE OF 0.2" W.G. (50 PASCALS)

WHOLE HOUSE VENTILATION

INTEGRATE WHOLE HOUSE VENTILATION WITH AIR HANDLER FANS THAT ARE VARIABLE SPEED WITH LOW SPEED OPERATION NOT GREATER THAN 25% OF RATED SUPPLY AIRFLOW. OUTDOOR AIR INTAKE OPENINGS MUST MEET THE PROVISIONS OF R303.5 AND R303.6 AND MUST INCLUDE MOTORIZED DAMPERS ACTIVATED BY THE WHOLE HOUSE VENTILATION CONTROLLER. TEST AND VERIFY THAT OUTDOOR AIR INTAKE AT MINIMUM VENTILATION FAN SPEED AND MAXIMUM HEATING OR COOLING FAN SPEED. FAN MUST BE SOUND RATED TO ONE SONE.

ENERGY:

ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE UNIFORM BUILDING CODE AND THE WASHINGTON STATE ENERGY CODE, LATEST EDITION. VERIFY ALL CONDITIONS BEFORE PROCEEDING WITH WORK.

APPLICATION AND INSTALLATIONS OF INSULATION AND VAPOR BARRIERS SHALL COMPLY WITH STATE OF WASHINGTON THERMAL INSULATION STANDARDS (H.B. 98).

WALLS: INSULATED WITH R-21 BATT, INSULATE HEADERS TO R-10.

ROOF AND CEILING: INSULATED WITH R-10 CLOSED CELL FOAMED IN-PLACE INSULATION, UNFACED FIBERGLAS BATTS IN 2X RAFTERS TO R-38 IN VAULTED CEILING CONDITIONS.

FLOORS: PROVIDE R-30 BATT INSULATION OVER UNHEATED SPACE (UNLESS NOTED OTHERWISE).

SLAB ON GRADE: PROVIDE EXTRUDED RIGID CLOSED CELL INSULATION R-10. INSULATION TO PROVIDE THERMAL BREAK BETWEEN SLAB AND FOOTING AND RUN FROM THE TOP OF THE SLAB TO THE BOTTOM OF THE FOOTING. INSULATION MAY BE INTERRUPTED FOR 6" EVERY 2'-0" TO ALLOW FOR DOWELING TO TIE SLAB AND FOOTING TOGETHER.

VAPOR BARRIERS: AN APPROVED VAPOR BARRIER SHALL BE INSTALLED AT EXTERIOR WALLS.

THIS VAPOR BARRIER MAY BE A COMPONENT OF THE INSULATION MATERIAL. APPLICATION AND INSTALLATIONS OF INSULATION AND VAPOR BARRIERS SHALL COMPLY WITH STATE OF WASHINGTON THERMAL INSULATION STANDARDS (H.B. 96).

CERTIFICATE: PRIOR TO SUBSTANTIAL COMPLETION POST ON A WALL NEAR THE HEATING EQUIPMENT OR ON AN ELECTICAL PANEL THE FOLLOWING: PREDOMINATE R- VALUES, U- VALUES OF FENESTRATION, RESULTS FROM DUCT SYSTEM AND BUILDING AIR LEAKAGE TESTING, THE RESULTS FROM THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FLOW RATE TEST, AND THE TYPES AND EFFICIENCIES OF HEATING/COOLING/WHOLE-HOUSE MECHANICAL VENTILATION/WATER HEATING EQUIPMENT.

LEAK TESTING: DUCTS MUST BE LEAK TESTED IN ACCORDANCE WITH WSU RS-33 USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED. TOTAL LEAKAGE MUST BE VERIFIED BY EITHER THE ROUGH-IN TEST OR POSTCONSTRUCTION TEST PER WSEC R403.3.3. TOTAL LEAKAGE MUST BE LESS THAN OR EQUAL TO 4CFM PER 100 SF OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1" W.G. (25 PA) ACROSS THE ENTIRE SYSTEM.

ROOM FINISH SCHEDULE

ROOM NAME	MATERIAL FLOOR	BASE MTL.	BASE DET.#/SHT.#	CASING DR.	CASING WIN.	WALLS N	WALLS E	WALLS S	WALLS W	CEILING MTL.	CEILING HEIGHT	FINISH FLOOR	BASE	CASING DR.	CASING WIN.	WALLS N	WALLS E	WALLS S	WALLS W	CEILING	REMARKS
ENTRY	F2	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	8'-0"	–	–	–	–	–	–	–	–	–	–
GARAGE	F1	B2	–	–	–	W5	W5	W5	W5	C-1	9'-1" 18'-0"	S1	X1	–	–	–	–	–	–	–	–
UTILITY	F1	B2	–	–	–	W5	W5	W5	W5	C-1	9'-1"	S1	X1	–	–	–	–	–	–	–	–
STAIR	F3	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	18'-0"	S2	–	–	–	–	–	–	–	–	–
LANDING	F3	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	8'-0"	S2	–	–	–	–	–	–	–	–	–
LIVING	F3	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	8'-0"	S2	–	–	–	–	–	–	–	–	–
KITCHEN	F3	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	8'-0"	S2	–	–	–	–	–	–	–	–	–
CLOSET	F2	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	8'-0"	S2	–	–	–	–	–	–	–	–	–
BATH	F3	B1	18/3.2	–	–	W1	W1	W1	W1	C-1	8'-0"	S2	–	–	–	–	–	–	–	–	–
COATS	F2	B1	–	–	–	W5	W5	W5	W5	C-1	VARIES	–	–	–	–	–	–	–	–	–	–

LEGEND

FLOORS

F1 – MTL: CONCRETE SLAB-ON-GRADE
FINISH: LIGHT BROOM

F2 – TILE
MTL: TERRAZZO TILE
MFR: ANN SACKS
MODEL: TERRAZZO RENATA
COLOR: CASHMERE
SIZE: 24" X 24", OR 12" X 24"
COO: IT

F3 – LVP
MTL: LUXURY VINYL PLANKS
MFR: PROVENZA WATERPROOF/MAX CORE
COLLECTION: UPTOWN CHIC
COLOR: TO BE SELECTED
SIZE:

BASE

B1 – WOOD BASE
MTL: POPLAR
SIZE: 1 X 4

B2 – RUBBER BASE
MTL: RUBBER COVE BASE
MFR: ROPPE
COLOR: TBD

WALLS

W1 – DRYWALL
MTL: 5/8" TYPE 'X' GYPSUM WALL BOARD
FINISH: LEVEL 5 SMOOTH

W2 – MIRROR

W3 – TILE
MTL: STATEMENTS
PATTERN: MIKASA
COLOR: BIANCO
SIZE: 12" X 24"

W4 – TILE
MTL: ACCENT TILE
MFR: CROSSVILLE – UNITED TILE
PATTERN: YIN+YANG
COLOR: BONSAI YY01/1.51.SMOS
SIZE: 1/2" X 1-1/2" STACKED

W5 – DRYWALL
MTL: 5/8" TYPE 'X' GYPSUM DRYWALL
FINISH: LEVEL FOUR SMOOTH

SOLID SURFACE

SS1 – QUARTZ SOLID SURFACE
MFR: CAMBRIA MATTE
MTL: LAKEDALE LUXURY SERIES
FINISH: MATTE
THICKNESS: 2CM, 3CM

SS2 – QUARTZ SOLID SURFACE
MFR: STRATUS QUARTZ
COLOR: LEVINA
FINISH: POLISHED
THICKNESS: 3/4" SLAB

CEILINGS

C1 – DRYWALL
MTL: 5/8" TYPE 'X' GYPSUM WALL BOARD
FINISH: LEVEL 5 SMOOTH

FINISHES

X1 – FACTORY FINISH

P1 – PAINT
MTL: ACRYLIC LATEX PAINT
MFR:
COLOR:
SHEEN:

P2 – PAINT
MTL: ACRYLIC LATEX PAINT
MFR:
COLOR:
SHEEN:

S1 – SEALER
MTL: WATERBORNE DENSE STONE SEALER
MFR: STAIN PROOF

S2 – SEALER
MTL: PREMIUM IMPREGNATING SEALER
MFR: STAIN-PROOF

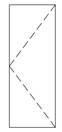
DOOR SCHEDULE

ALL INTERIOR DOORS TO BE SOLID CORE

#	DOOR DIMENSION (NOTE: VERIFY DOOR HEIGHT) WIDTH	HEIGHT		TYPE	U-VALUE	DETAILS HEAD DET#/SHT#	JAMB DET#/SHT#	JAMB DET#/SHT#	SILL DET#/SHT#	LOCKSET	LATCHSET	DEADBOLT	PRIVACY	FLUSH BOLTS	KNOB PULL	CLOS. LATCH	PCKT. ROLLER	BUTTS	CLOSER	WEATHERST.	REMARKS
1	3'-0"	8'-0"	–	A	.30	1/3.2	2/3.2	3/3.2	4/3.2	●	○	●	○	○	○	○	○	●	●	●	WITH SIDELIGHTS
2	3'-0"	6'-8"	–	A	.30	5/3.2	5/3.2	5/3.2	4/3.2	●	○	●	○	○	○	○	○	●	○	●	SOLID CORE WITH CLOSER
3	3'-0"	6'-8"	–	A	–	5/3.2	5/3.2	5/3.2	–	○	●	○	○	○	○	○	○	●	○	○	–
4	2'-6"	6'-8"	–	A	–	5/3.2	5/3.2	5/3.2	–	○	●	○	○	○	○	○	○	●	○	○	–
5	2'-6"	6'-8"	–	A	–	5/3.2	5/3.2	5/3.2	–	○	○	○	●	○	○	○	○	●	○	○	–
6	10'-0"	8'-0"	–	–	–	7/3.2	6/3.2	6/3.2	–	○	○	○	○	○	○	○	○	○	○	○	GARAGE DOOR OPENER LIFTMASTER 8500W
7	10'-0"	12'-0"	–	–	–	9/3.2	8/3.2	8/3.2	–	○	○	○	○	○	○	○	○	○	○	○	GARAGE DOOR OPENER LIFTMASTER 8500W
5	2'-6"	6'-8"	–	A	–	5/3.2	5/3.2	5/3.2	–	○	●	○	○	○	○	○	○	●	○	○	–

DOOR TYPES

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



(A)

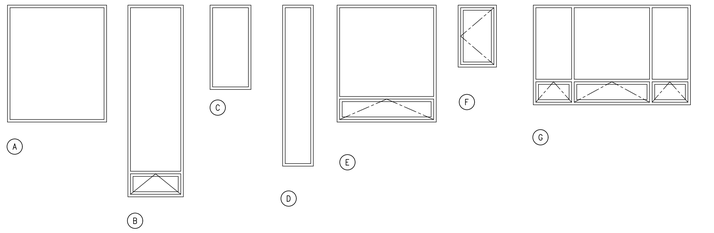
WINDOW SCHEDULE

WINDOWS BY: MARVIN
ALUMINUM CLAD FRAMES; INSULATED HIGH PERFORMANCE GLAZING

#	ROUGH OPENING WIDTH	HEIGHT	ROUGH HEAD (FROM SUBFLOOR)	TYPE	U-VALUE	DETAILS HEAD DET#/SHT#	JAMB DET#/SHT#	JAMB DET#/SHT#	SILL DET#/SHT#	REMARKS
1	6'-5"	7'-6"	8'-0"	A	.30	10/3.2	12/3.2	12/3.2	11/3.2	–
2	3'-7"	12'-5"	18'-0"	B	.30	10/3.2	12/3.2	12/3.2-14/3.2	11/3.2	–
3	2'-5"	5'-6"	6'-10"	C	.30	15/3.2	12/3.2	13/3.2	11/3.2	–
4	2'-0"	10'-6"	12'-0"	D	.30	15/3.2	12/3.2	14/3.2	11/3.2	–
5	2'-0"	10'-6"	12'-0"	D	.30	15/3.2	11/3.2	12/3.2	11/3.2	–
6	6'-5"	7'-7"	8'-0"	E	.30	10/3.2	12/3.2	14/3.2	11/3.2	–
7	2'-8"	4'-0"	6'-10"	F	.30	16/3.2	12/3.2	12/3.2	17/3.2	–
8	10'-0"	6'-6"	8'-0"	G	.30	10/3.2	14/3.2	14/3.2	11/3.2	–
	–	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–

WINDOW TYPES

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



APPLIANCE SCHEDULE

O.P.C.I. = OWNER TO PROVIDE/CONTRACTOR TO INSTALL

MARK	PRODUCT	MANUFACTURER	MODEL NO.	FINISH/COLOR	LOCATION	REMARKS
DW	–	–	–	–	–	–
RANGE	–	–	–	–	–	–
REFER	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MANUFACTURER	MODEL NO.	FINISH/COLOR	FITTING	REMARKS
LAV		KOHLER	LADENA K-2214		HANSGROHE 71710821	
TUB	TUB	JACUZZI	LN5603ZBRXXXXXW, MF35826 DRAIN	–	HANSGROHE 04233820 TRIM 28632820 BAR, 27458823 ELBOW, 72411821 SPOUT 01850181 VALVE, 28036821 HEAD 28417ENO HOSE	
SINK1	–	EL MUSTEE	14CP COMBO	–	INCLUDES FAUCET AND STOPPER	–
SINK2	–	KOHLER	K-3335	STAINLESS	BRIZO 61063LF-BLGL K-8799 DRAIN & STRAINER	
WC	TOILET	SIGNATURE HARDWARE	447355		K-10349-0 SEAT	
–	–	–	–	–	– –	–

SPECIALTIES SCHEDULE

MARK	PRODUCT	MANUFACTURER	MODEL NO.	FINISH/COLOR	LOCATION	REMARKS
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
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–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–

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No.	Date	Revision
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	9/28/23	PRICING SET

HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

DADU SCHEDULES

Sheet No. D2.1
Project No. 2222
Date: 9/8/23

ELECTRICAL SYMBOLS

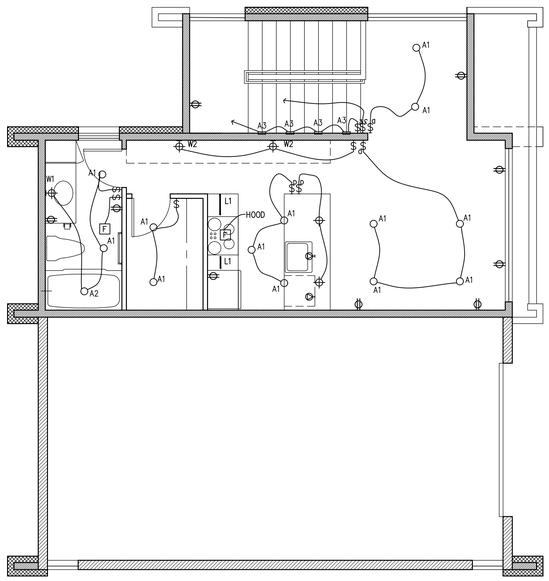
- RECESSED LIGHT/ROUND TRIM
- RECESSED LIGHT/SQUARE TRIM
- WALL MOUNTED LIGHT
- SURFACE/PENDANT LIGHT
- WALLWASH LIGHT
- FLOOD LIGHT
- STRIP LIGHT
- STEP LIGHT
- CERAMIC SOCKET
- SMOKE DETECTOR (SD)
- CARBON MONOXIDE DETECTOR (CM)
- COMBO-SMOKE/CARBON MONOXIDE DETECTOR (S/CM)
- HEAT DETECTOR
- F EXHAUST FAN (VENT TO EXTERIOR)
- CENTRAL VACUUM WALL PORT
- MOTION SENSOR
- DOORBELL
- THERMOSTAT
- GARAGE DOOR CONTROL PANEL
- CIRCUIT BREAKER PANEL
- METER
- SWITCH
- 3-WAY SWITCH
- DIMMING SWITCH
- SWITCH W/ TIMER
- SWITCH W/ OCCUPANCY SENSOR
- 6-BUTTON KEYPAD, LUTRON
- SMART DIMMER SWITCH, LUTRON
- DUPLEX RECEPTACLE
- DUPLEX RECEPT./HALF-SWITCHED
- DUPLEX RECEPT. W/ DUAL USB-C
- FOURPLEX RECEPTACLE
- FLOOR RECEPTICAL
- CEILING/SOFFIT RECEPTACLE
- 1xxV SPECIAL PURPOSE
- 2xxV SPECIAL PURPOSE
- TELEPHONE
- TELEVISION
- TELEVISION/MULTI-FUNCTION CABLE
- CAT 6 COMPUTER NETWORK/DATA
- FIBER OPTIC OUTLET
- SPEAKER OUTLET
- SOUND SPEAKER
- WINDOW SHADE

ELECTRICAL LEGEND

MARK	DESCRIPTION	MANUF.	MODEL NO.	FINISH / TRIM	LAMP
A1	DOWNLIGHT	NORA	NLCBS-4WS1-85-30-MPW	NHSIC-485LE3LT	–
A2	SHOWER LIGHT	NORA	NL-427W-	NSERIC-407AT/20	20W/LED
A3	STEP LIGHT	NORA	NSW-851/32BN		3W/LED
F	FAN	PANASONIC	FV-0511VFC1	–	N/A
LS1	SURFACE	NORA	NLSTR-4L1334W		24W
L1	UNDERCABINET	NWLED	LINF12-NT-F-MB-30K		
W1	WALL LIGHT	TBS			
W2	WALL LIGHT	BEGA	33817-K3	BLACK	–

NOTE:
ALL SWITCHES AND OUTLETS TO BE LEVITON WHITE
ALL SWITCHES TO BE LEVITON ROCKER ARM TYPE AND DIMMERS TO HAVE SLIDE BAR CONTROL

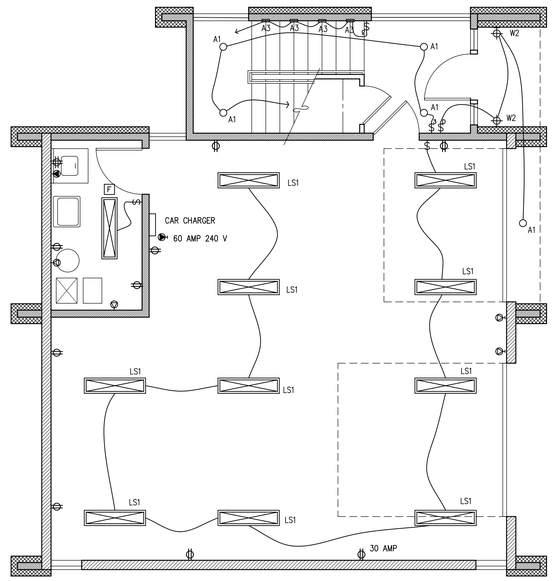
LAM4B408R259730DE0103MB



NORTH

UPPER FLOOR ELECTRICAL PLAN

1/4" = 1'-0"



NORTH

MAIN FLOOR ELECTRICAL PLAN

1/4" = 1'-0"

GENERAL NOTES

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ALL CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) AND BE IN ACCORDANCE WITH THE WASHINGTON STATE LAWS AND REGULATIONS AND VARIOUS CODES IMPOSED BY LOCAL AUTHORITIES. INCLUDING WASHINGTON AMMENDMENTS TO IRC, AND MERCER ISLAND CITY CODE.

SOILS:

REFER TO TABLE R401.4.1 FOR MAXIMUM LOAD-BEARING VALUES OF FOUNDATION MATERIALS UNLESS ENGINEERING INFORMATION IS PROVIDED. ALL FOOTINGS AND SLABS SHALL BEAR ON UNYIELDING SOIL.

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 WATER AT ALL TIMES. THIS OFFICE TAKES NO RESPONSIBILITY IN VERIFYING THE ACCURACY OF ENGINEERING DATA SUPPLIED BY OTHERS.

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 ARCHTECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON THE DRAWING ONLY WILL NOT SATISFY THIS REQUIREMENT.

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

ALL STUCTURAL 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.

THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ARCHITECT IF UNUSUAL, UNFORESEEABLE, OR UNEXPECTED SUBSURFACE CONDITIONS ARE ENCOUNTERED.

BECAUSE THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, THE CONTRACTOR SHALL, BEFORE STARTING EACH PORTION OF THE WORK, CAREFULLY STUDY AND COMPARE THE VARIOUS CONTRACT DOCUMENT RELATIVE TO THAT PORTION OF THE WORK, AS WELL AS THE INFORMATION PROVIDED BY THE OWNER, SHALL TAKE FIELD MEASUREMENTS OF ANY EXISTING CONDITIONS RELATED TO THAT PORTION OF THE WORK AND SHALL OBSERVE ANY CONDITIONS AT THE SITE AFFECTING IT. THESE OBLIGATIONS ARE FOR THE PURPOSE OF FACILITATING COORDINATION AND CONSTRUCTION BY THE CONTRACTOR. THE CONTRACTOR SHALL REPORT TO THE ARCHITECT ANY ERRORS, INCONSISTENCIES, OR OMMISSIONS DISCOVERED BY OR MADE KNOWN TO THE CONTRACTOR AS A REQUEST FOR INFORMATION IN SUCH FORM AS THE ARCHITECT MAY REQUIRE. THE CONTRACTOR'S REVIEW IS MADE IN THE CONTRACTOR'S CAPACITY AS A CONTRACTOR AND NOT AS A LICENSED DESIGN PROFESSIONAL.

GLAZING:

TO BE IN COMPLIANCE WITH IRC SEC. R308, AND WASHINGTON STATE SAFETY GLASS LAW, EXCEPTIONS ARE AS OUTLINED IN IRC SEC R308.4.

GLAZING IN HAZARDOUS LOCATIONS SUBJECT TO HUMAN IMPACT SHALL BE SAFETY OR TEMPERED GLASS.

HAZARDOUS LOCATIONS ARE:

- GLAZING IN SWINGING DOORS EXCEPT JALOUSIES
- GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SWINGING DOORS OTHER THAN WARDROBE DOORS.
- GLAZING IN STORM DOORS
- GLAZING IN ALL UNFRAMED SWINGING DOORS
- GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A STANDING SURFACE AND DRAIN INLET.
- GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE ABOVE, THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
  1. EXPOSED AREA ON AN INDIVIDUAL PANE GREATER THAN 9 SQURE FEET
  2. EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR
  3. EXPOSED TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR
  4. ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE PLANE OF THE THE GLAZING

GLAZING IN RAILINGS REGARDLESS OF HEIGHT.

GLAZING IN WARDROBE DOORS SHALL MEET THE IMPACT TEST REQUIREMENTS FOR SAFETY GLAZING AS SET FORTH IN UBC STANDARD NO. 24-2, PART II.

GLAZING IN WALLS AND FENCES USED AS THE BARRIER FOR INDOOR AND OURDOOR SWIMMING POOLS AND SPAS WHEN ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:

- THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE
- THE GLAZING IS WITHIN 5 FEET OF A SWIMMING POOL OR SPA WATER'S EDGE

GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36" HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.

GLAZING ADJACENT TO STAIRWAYS, WITHIN 60" HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60" ABOVE THE NOSE OF THE TREAD.

EGRESS IN EVERY SLEEPING ROOM SHALL HAVE 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 SEC. R310.1

IN ROOMS NOT PROVIDED WITH AN OPERABLE WINDOW OF 4% OF THE FLOOR AREA OR GREATER, A MECHANICAL VENTILATION SYSTEM, CAPABLE OF PROVIDING .35 AIR CHANGES PER HOUR, SHALL BE PROVIDED IRC SEC. R303 AND M1507.

VENT DRYER, BATH FANS, AND RANGES/OVENS TO THE OUTSIDE.

STAIRS:

MINIMUM HEADROOM 6'-8"; MINIMUM WIDTH 3'-0" CLEAR: MINIMUM TREAD 10"; MAXIMUM RISER 7 3/4"; HANDRAIL MINIMUM 34" AND MAXIMUM 38" ABOVE STAIR NOSING. HANDRAIL TO BE 1 1/2" CROSS SECTION AND 1 1/2" AWAY FROM WALL. INSTALL FIRE BLOCKING AT MID STRINGER SPAN AND AT WALL ALONG STRINGER. COVER WALLS AND SOFFITS OF USABLE SPACE UNDER STAIR WITH 5/8" TYPE "X" GYPSUM WALLBOARD. SEE SECTION R311.7

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STATE OF WASHINGTON

No.	Date	Revision
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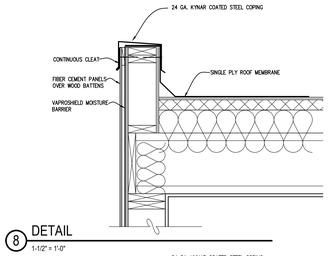
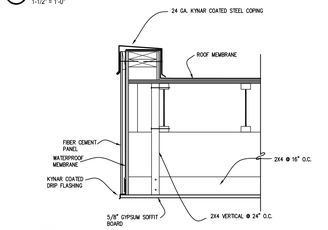
MERCER ISLAND, WA 98040

ELECTRICAL PLANS

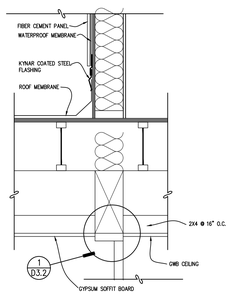
Sheet No. D2.2
Project No. 2222
Date: 9/8/23



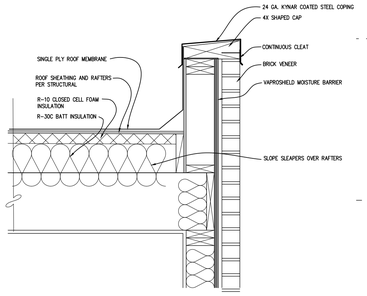
8 DETAIL
1-1/2" = 1'-0"



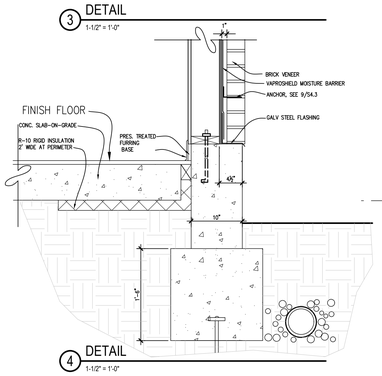
9 DETAIL
1-1/2" = 1'-0"



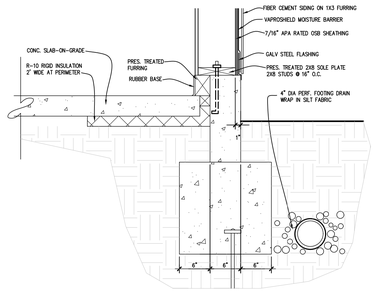
10 DETAIL
1-1/2" = 1'-0"



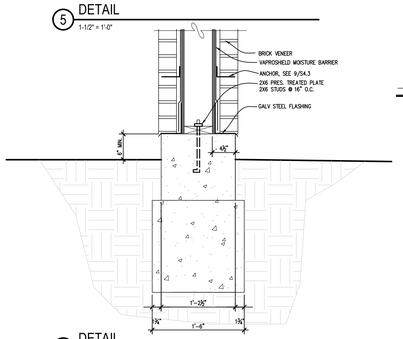
3 DETAIL
1-1/2" = 1'-0"



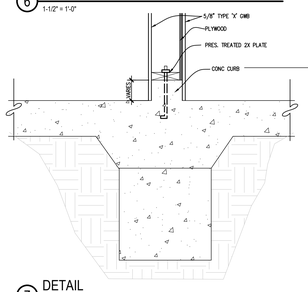
4 DETAIL
1-1/2" = 1'-0"



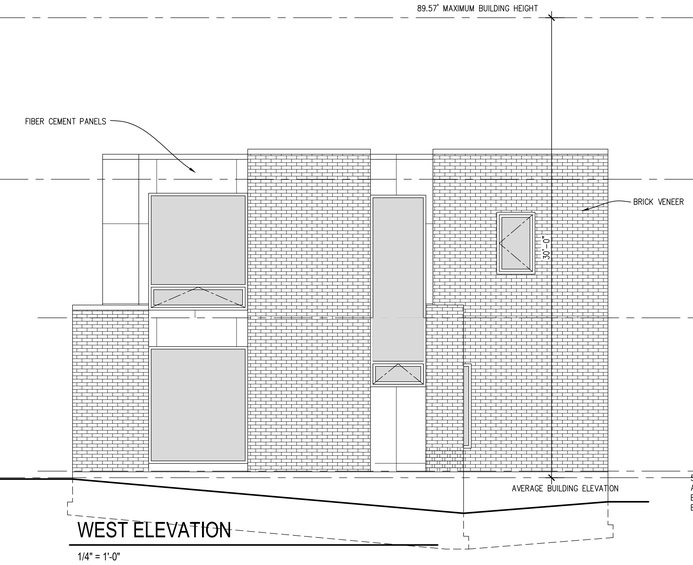
5 DETAIL
1-1/2" = 1'-0"



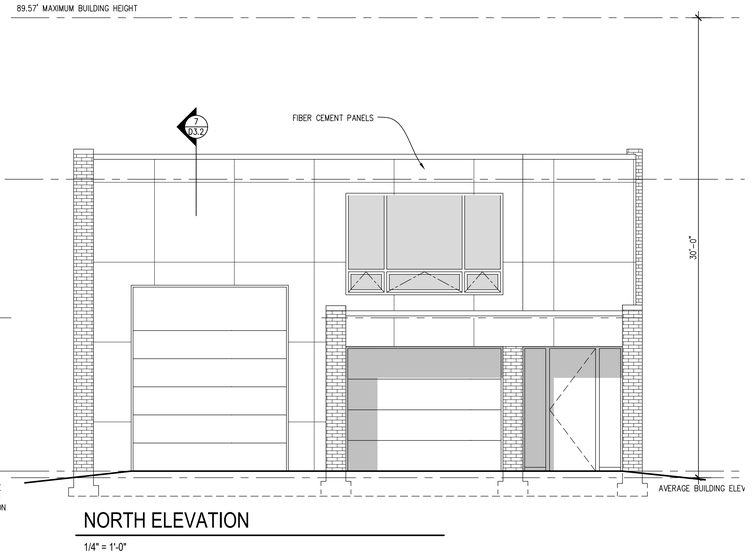
6 DETAIL
1-1/2" = 1'-0"



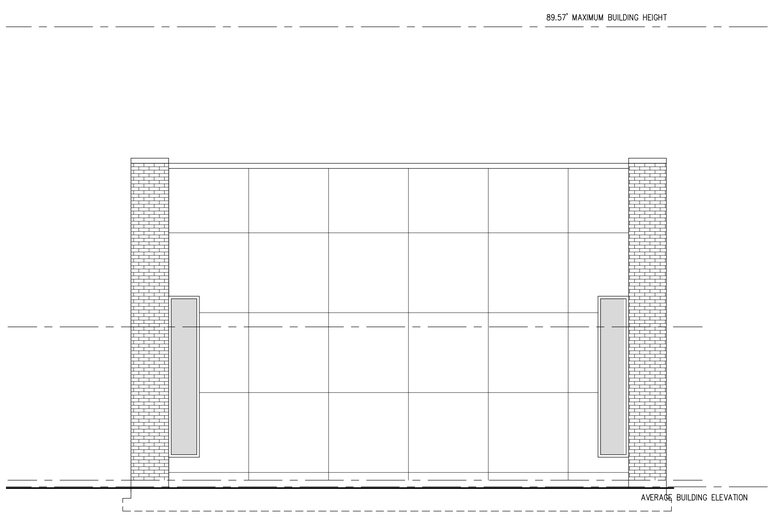
7 DETAIL
1-1/2" = 1'-0"



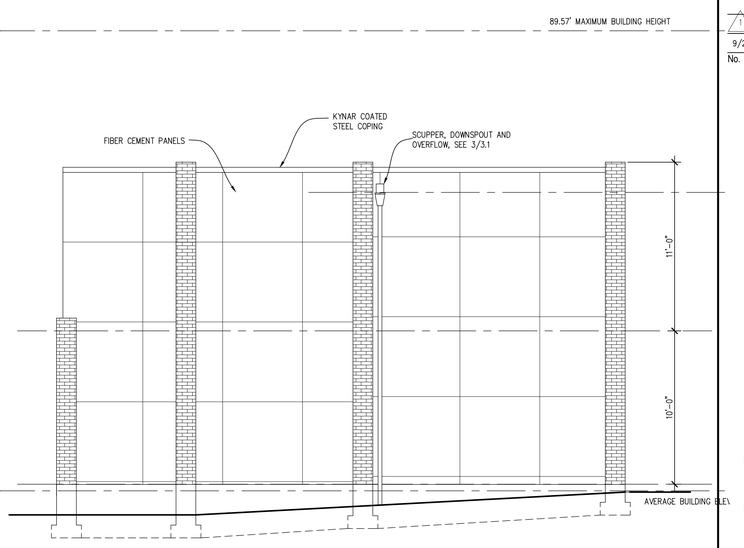
WEST ELEVATION
1/4" = 1'-0"



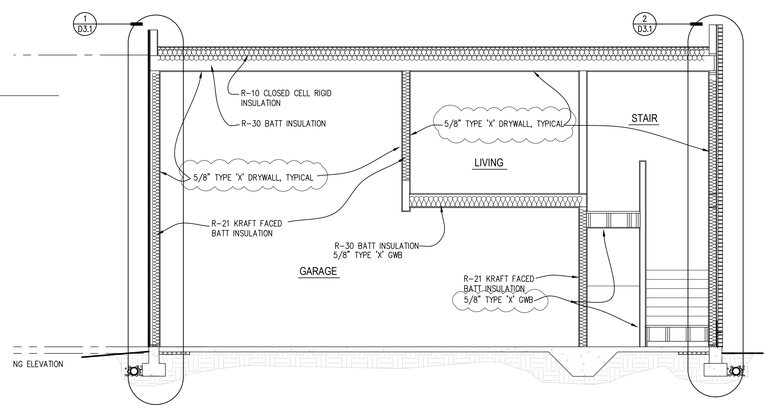
NORTH ELEVATION
1/4" = 1'-0"



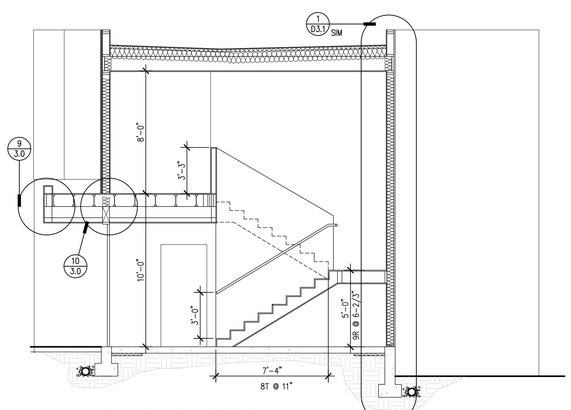
EAST ELEVATION
1/4" = 1'-0"



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



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



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

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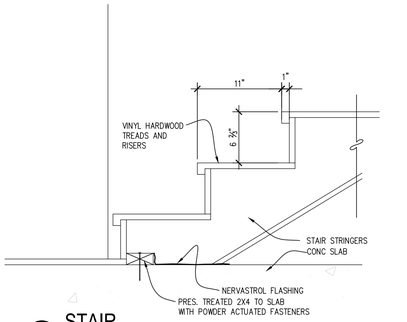
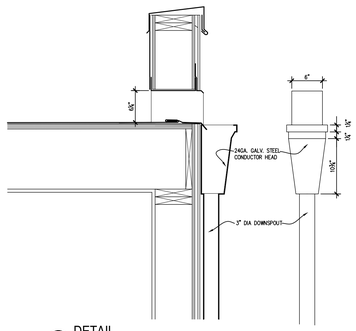
ELEVATIONS

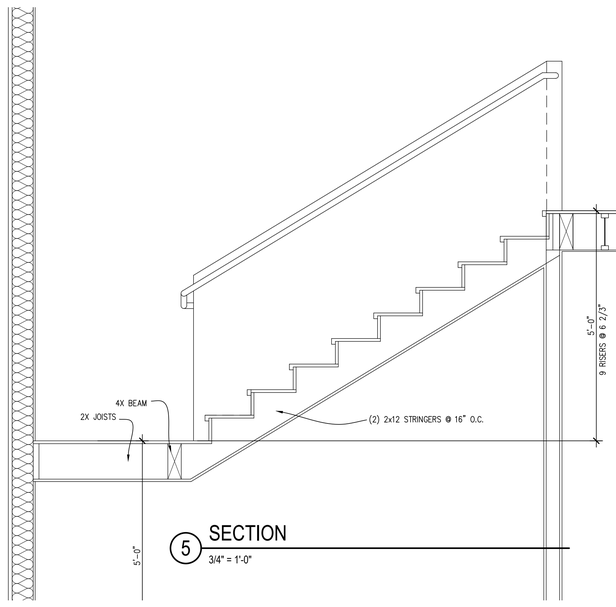
Sheet No. D3.0
Project No. 2222
Date: 9/8/23



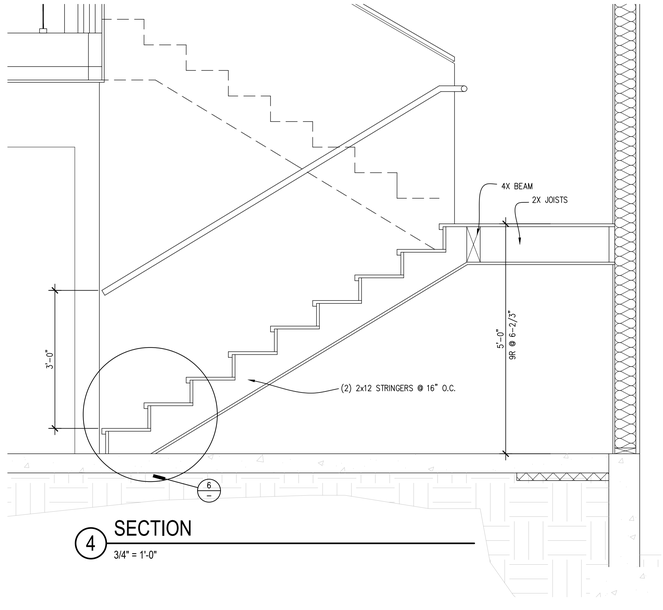
6 STAIR
1-1/2" = 1'-0"



3 DETAIL
1-1/2" = 1'-0"



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



4 SECTION
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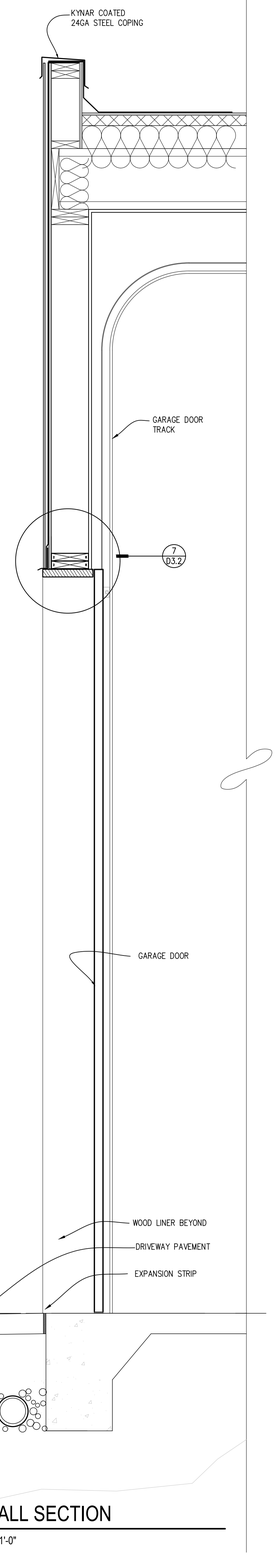

7 WALL SECTION
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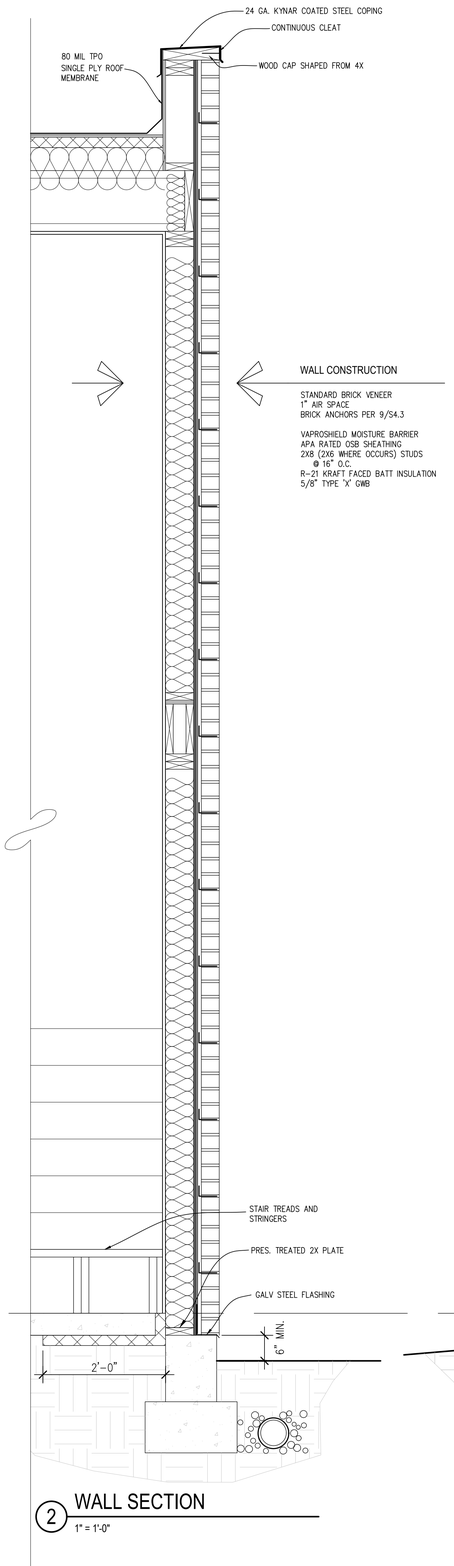

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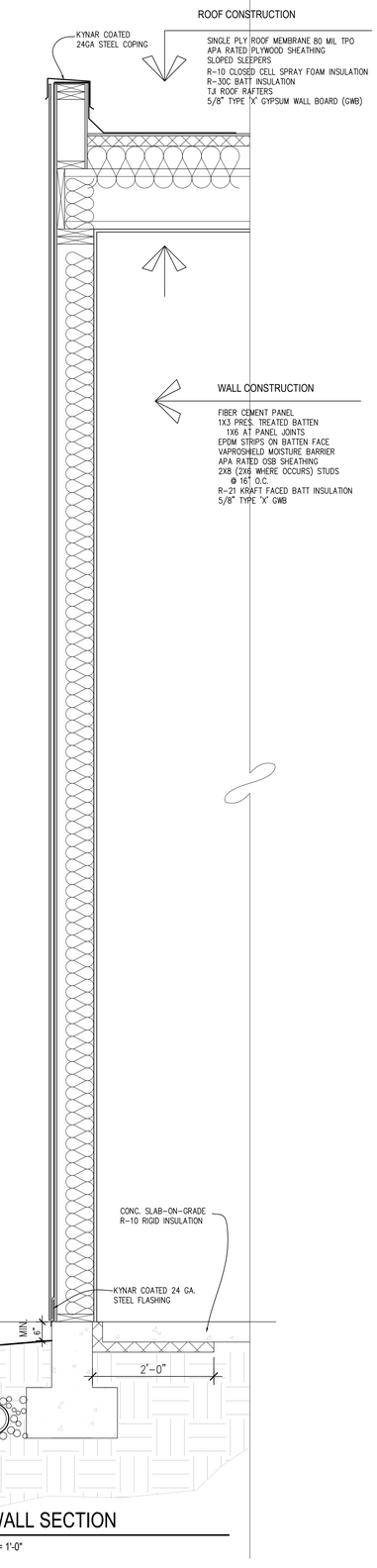

1 WALL SECTION
1" = 1'-0"

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REGISTERED ARCHITECT
5389
DAVID N. BUCK
STATE OF WASHINGTON

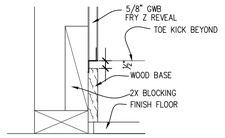
No.	Date	Revision
1	10/16/23	RESPONSE
	9/28/23	PRICING SET

HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

DETAILS

Sheet No. D3.1
Project No. 2222
Date: 9/8/23



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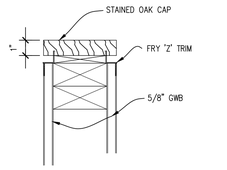

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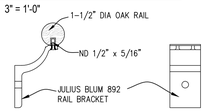

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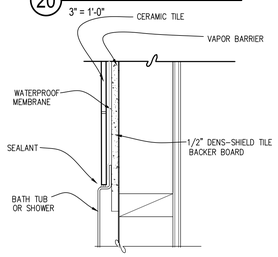

INSTALL PER TCNA B412-15 OR CURRENT VERSION

21 SECTION
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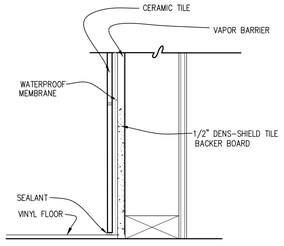

INSTALL PER TCNA B412-15 OR CURRENT VERSION

22 SECTION
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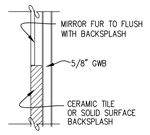

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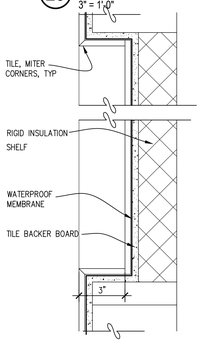

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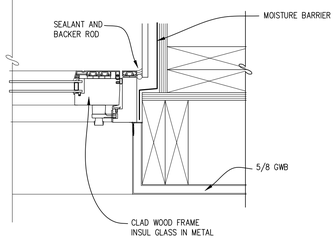

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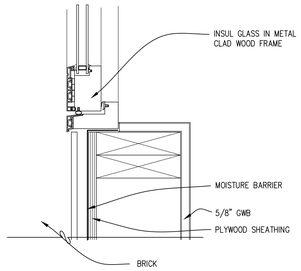

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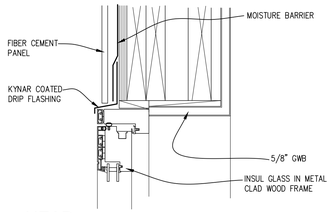

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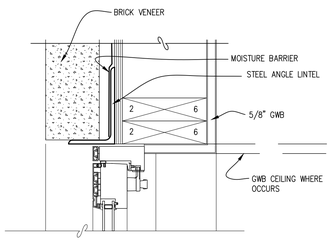

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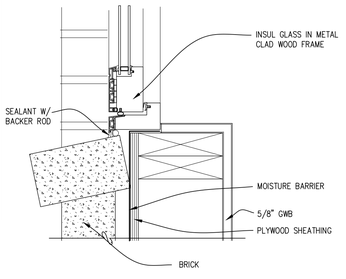

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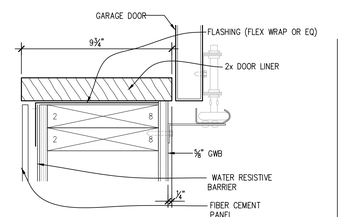

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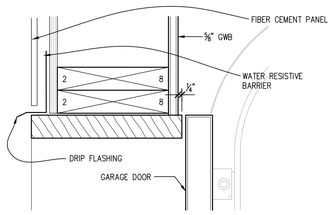

9 HEAD
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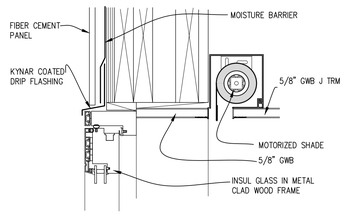

NOTE: NO SHADE AT WINDOW 10

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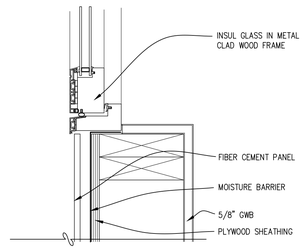

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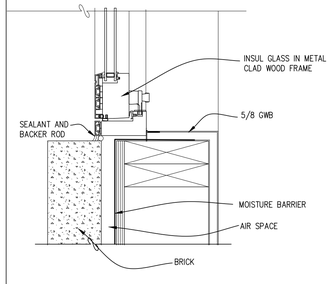

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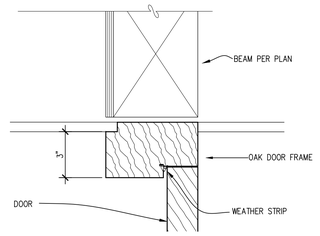

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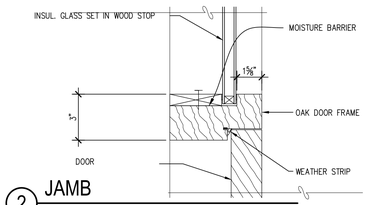

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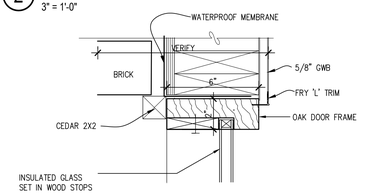

3 JAMB
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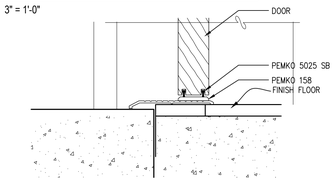

4 THRESHOLD
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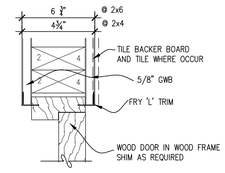
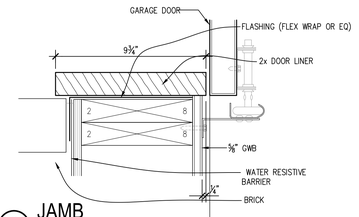


5 HEAD/JAMB SIM.
3" = 1'-0"



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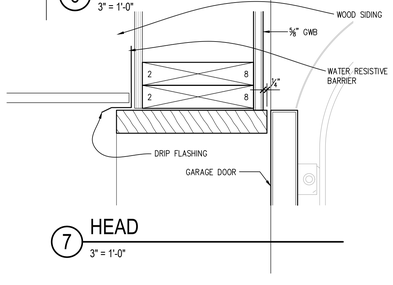

7 HEAD
3" = 1'-0"

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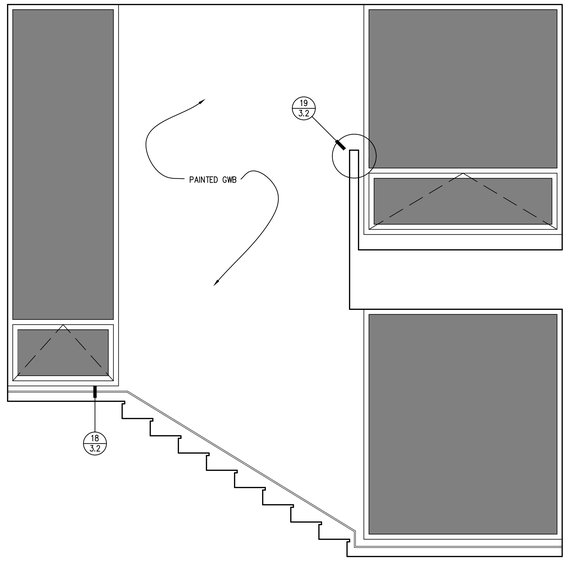
No.	Date	Revision
1	10/16/23	RESPONSE
	9/28/23	PRICING SET

HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

DETAILS

Sheet No. D3.2
Project No. 2222
Date: 9/8/23



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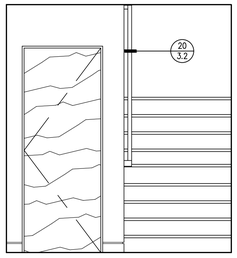

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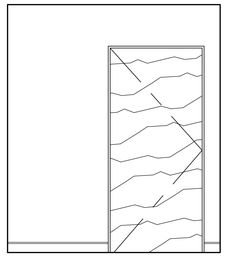

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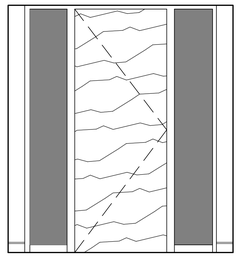

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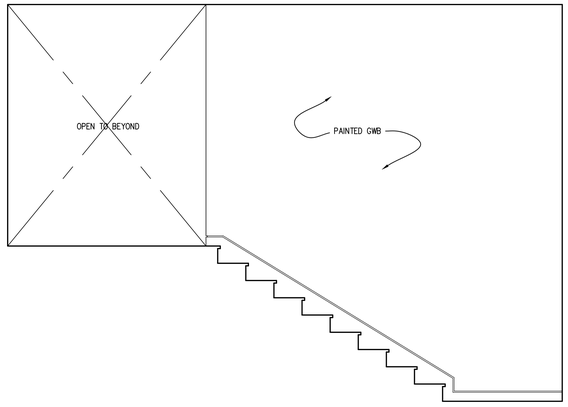
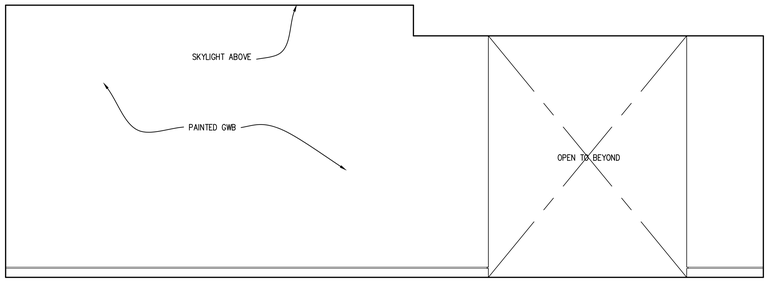


E

ENTRY

1/2" = 1'-0"



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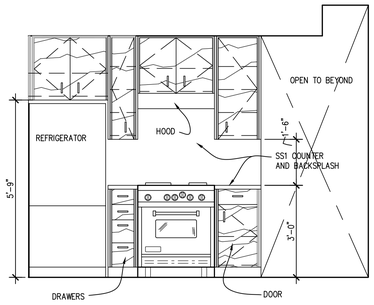

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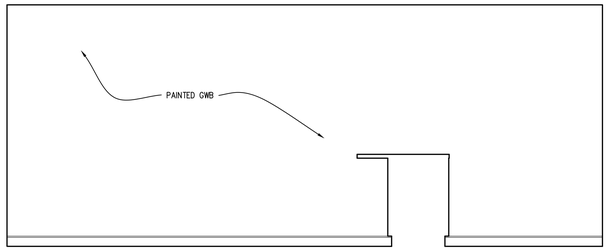

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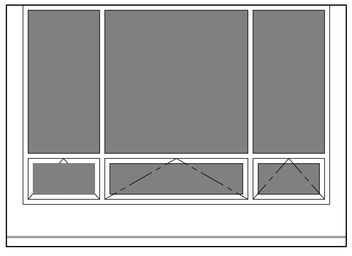

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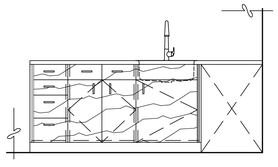

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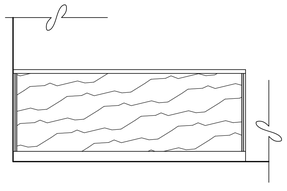

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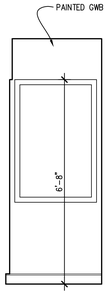

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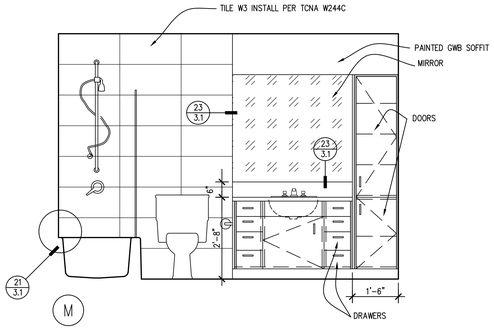

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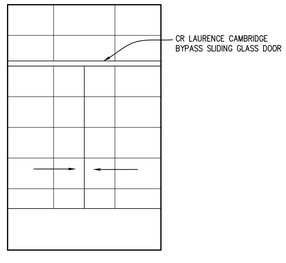

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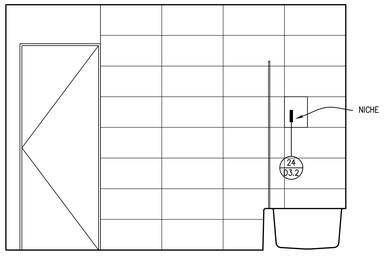

O

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REGISTERED ARCHITECT
DAVID N. BUCK
STATE OF WASHINGTON
5389

No.	Date	Revision
1	10/16/23	RESPONSE
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HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

INTERIOR

Sheet No. D4.0
Project No. 2222
Date: 9/8/23

SECTION 07531 - TPO MEMBRANE ROOFING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Shop Drawings of tapered insulation.

B. Exterior Fire-Test Exposure: ASTM E 108, Class **[A] [B]** [**C**].

C. Warranties: Manufacturer's standard form, without monetary limitation, signed by roofing manufacturer agreeing to repair leaks due to defects in materials or workmanship for period of **[10] [15]** years.

PART 2 - PRODUCTS

2.1 ROOFING MATERIALS

A. TPO Sheet: **80 mils** thick; color to be selected

1. Products:

a. Carlisle Sure-Weld TPO or equivalent

B. Auxiliary Materials: Recommended by roofing system manufacturer for intended use and as follows:

1. Sure-Weld reinforced flashing, low VOC adhesive, Pressure sensitive cover strip, TPO joint covers, Cut edge sealant and others as recommended by manufacturer.

2.2 BALLAST

A. Aggregate Ballast: Smooth, washed, black riverbed gravel or other acceptable smooth-faced stone, **3/4 to 1-1/2 inches**.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install TPO sheet according to roofing system manufacturer's written instructions and as follows:

B. 1. Sweep loose debris from the substrate.

C. 2. Position Sure-Weld Membrane over acceptable substrate and fold membrane back so half the underside is exposed.

D. 3. Apply the applicable Carlisle Bonding Adhesive to the exposed underside of the membrane and the corresponding substrate area with a plastic core medium nap paint roller at the published application rate on the applicable Product Data Sheet.

E. 4. Allow adhesive to dry until tacky and roll coated membrane into coated substrate and avoid wrinkling.

F. 5. Brush down the bonded section of membrane immediately with a soft bristle push broom.

G. 6. Fold back the un-bonded half of the sheet and repeat the bonding procedure.

H. 7. Install adjoining membrane sheets in the same manner, overlapping edges a minimum of 2" to provide for a minimum 1- 1/2" hot air weld. It is recommended that all splices be shingled to avoid bucking of water.

I. 8. Hot air weld the membrane sheets a minimum of 1-1/2" with an Automatic Hot Air Welding Machine.

J. 9. Membrane that has been exposed to the elements for approximately 7 days must be prepared with Weathered Membrane Cleaner. Wipe the surface where Weathered Membrane Cleaner has been applied with a clean, dry HP Splice Wipe or other white rag to remove cleaner residue prior to hot air welding.

END OF SECTION 07531

SECTION 08211 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Samples for doors, shop drawings.

B. Quality Standard: NWWDA I.S.1-A.

1.2 FLUSH WOOD DOORS

A. Doors for Transparent Finish: **Premium** grade.

1. Faces: **white oak, rift cut, horizontal grain**.

2. Veneer Matching: **Book and balance** match.

3. Pair matching **and set matching**.

4. Continuous matching for doors with transoms.

B. Doors for Opaque Finish: **Custom** grade.

1. Faces: **Medium-density overlay**.

C. Interior Veneer-Faced Solid-Core Doors: **Five**-ply, **structural composite lumber** cores.

D. Interior Solid-Core Doors with Hardboard Faces: Three-ply, particleboard cores.

1.3 FABRICATION AND FINISHING

A. Factory fit doors to suit frame-opening sizes indicated and to comply with referenced quality standard.

1. Comply with NFPA 80 for fire-resistance-rated doors.

B. Factory machine doors for hardware that is not surface applied.

C. Cut and trim openings to comply with referenced standards.

1. Trim light openings with moldings indicated.

2. Factory install louvers in prepared openings.

D. Factory doors indicated for transparent finish with **stain and** manufacturer's standard finish comparable to **AWI System TR-4, conversion varnish**.

PART 2 - EXECUTION

1.1 INSTALLATION

A. Comply with WDMA's "How to Store, Handle, Finish, Install, and Maintain Wood Doors."

1. Install fire-rated doors to comply with NFPA 80.

Align **and fit** doors in frames with uniform clearances and bevels. **Machine doors for hardware.**

Repair, refinish, or replace factory-finished doors damaged during installation, as directed by Architect.

END OF SECTION 08211

SECTION 08710 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

Allowances: Provice Hardware Allowance in Division 8 Section 8700

A. Submittals: Hardware Schedule.

B. Deliver keys to Owner.

C. For fire-rated openings provide hardware tested and listed by UL or FMG (NFPA 80). On exit devices provide UL or FMG label indicating "Fire Exit Hardware."

PART 2 - PRODUCTS

2.1 HARDWARE

A. Manufacturers:

1. Baldwin

B. Hinges:

Two hinges for 1-3/8-inch- thick wood doors.

2. Three hinges for 1-3/4-inch- thick doors 90 inches or less in height; four hinges for doors more than 90 inches in height.

C. Locksets and Latchsets:

1. BHMA A156.13, Series 1000, Grade **3** for mortise locks and latches.

2. Lever handles on locksets and latchsets, Baldwin LO22 lever.

3. Pocket door pulls - see schedule

Provide wall stops or floor stops for doors without closers.

D. Provide hardware finishes as follows:

1. Hinges: **Matching finish of lockset/latchset**.

2. Locksets, Latchsets, and Exit Devices: Brushed Nickel US15

3. Other Hardware: Matching finish of lockset/latchset.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Mount hardware in locations recommended by the Door and Hardware Institute, unless otherwise indicated.

END OF SECTION 08710

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: **Product Data for solid-surfacing materials**, **Shop Drawings and Samples showing the full range of colors, textures, and patterns available for each type of finish**.

B. Quality Standard: **Architectural Woodwork Institute's "Architectural Woodwork Quality Standards**

C. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is completed, and HVAC system is operating.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Hardboard: AHA A135.4.

B. Medium-Density Fiberboard: ANSI A208.2, Grade MD.

C. Particleboard: not allowed

D. Softwood Plywood: DOC PS 1.

E. Hardwood Plywood and Face Veneers: HPVA HP-1.

F. Solid-Surfacing Material:

1. Products:

a. See finish schedule

2.2 CABINET HARDWARE AND ACCESSORY MATERIALS

A. Hardware Standards: Comply with BHMA A156 series standards.

B. Exposed Hardware Finishes: Comply with BHMA A156.18 for BHMA code number indicated.

1. Finish: **Satin Chrome: BHMA 626 or BHMA 652** or **Satin Stainless Steel: BHMA 630**.

C. Furring, Blocking, Shims, and Hanging Strips: **Softwood or hardwood** lumber, kiln dried to 15 percent moisture content.

2.3 INTERIOR WOODWORK

A. Complete fabrication before shipping to Project site to maximum extent possible. Disassemble only as needed for shipping and installing. Where necessary for fitting at Project site, provide for scribing and trimming.

B. Backout or groove backs of flat trim members, kerf backs of other wide, flat members, except for members with ends exposed in finished Work.

C. Interior Standing and Running Trim for Transparent Finish: **Premium** grade, made from **white oak, rift sawn**.

D. Interior Standing and Running Trim for Opaque Finish: **Premium** grade, made from **any closed-grain hardwood**.

E. Wood Cabinets (Casework) for Transparent Finish: **Premium** grade.

1. AWI Type of Cabinet Construction: **Reveal overlay, see details**.

2. Wood Species for Exposed Surfaces: **White oak, rift sawn or cut**.

3. Grain Matching: Run and match grain **horizontal** for drawer fronts, doors, and fixed panels.

4. Matching of Veneer Leaves: **Slip and balance** match.

5. Semiexposed Surfaces Other Than Drawer Bodies: **Same species and cut as exposed surfaces**.

6. Drawer Sides and Backs: **Solid hardwood, stained to match exposed surfaces**.

7. Drawer Bottoms: **Hardwood plywood**.

2.4 SHOP FINISHING OF INTERIOR ARCHITECTURAL WOODWORK

A. Finishes: Same grades as items to be finished.

B. Finish architectural woodwork at the fabrication shop; defer only final touch up until after installation.

1. Apply one coat of sealer or primer to concealed surfaces of woodwork.

2. Apply a vinyl wash coat to woodwork made from closed-grain wood before staining and finishing.

3. After staining, if any, apply paste wood filler to open-grain woods and wipe off excess. Tint filler to match stained wood.

C. Transparent Finish: AWI Finish System **TR-4, conversion varnish**.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Condition woodwork to prevailing conditions before installing.

B. Install woodwork to comply with **AWI Section 10** for grade specified.

C. Install woodwork level, plumb, true, and straight. Shim as required with concealed shims. Install to a tolerance of 1/8 inch in 96 inches for level and plumb.

D. Scribe and cut woodwork to fit adjoining work, seal cut surfaces, and repair damaged finish at cuts.

E. Install trim with minimum number of joints possible, using full-length pieces to greatest extent possible. Stagger joints in adjacent and related members.

F. Anchor countertops securely to base units. Seal space between backsplash and wall.

G. Anchor paneling to supports with concealed panel-hanger clips and by blind nailing on back-up strips, splined-connection strips, and similar associated trim and framing.

H. Stairwork and Rails: Cut carriages to accurately fit treads and risers and securely anchor to supporting substrates. Glue treads to risers, and glue and nail treads and risers to carriages. Glue and wedge treads and risers to housed stringers. Glue and dowel or pin balusters to treads and railings, and railings to newel posts.

3.2 CABINET HARDWARE AND ACCESSORY SCHEDULE

A. Butt Hinges: 2-3/4-inch, 5-knuckle steel hinges made from 0.095-inch- thick metal; BHMA A156.9, B01361 for flush doors and BHMA A156.9, B01521 for overlay doors.

B. Concealed (European-Type) Hinges: Clip top Blumotion BHMA A156.9, B01602.

C. Pulls: TOPKNOB EUROPA TAB PULL BRUSHED SATIN NICKEL.

D. Catches: **Magnetic catches, BHMA A156.9, B03141**.

E. Adjustable Shelf Standards: BHMA A156.9, B04071; with shelf rests, BHMA A156.9, B04081.

F. Drawer Slides: Blum Movento under-mounted, zinc-plated steel drawer slides with steel ball bearings, complying with BHMA A156.9, Grade 1 and rated for the following loads:

1. Box Drawer Slides: **75 lbf** .

2. File Drawer Slides: **150 lbf** .

3. Pencil Drawer Slides: 45 lbf .

G. Door Locks: BHMA A156.11, E07121.

H. Drawer Locks: BHMA A156.11, E07041.

I. Grommets for Cable Passage through Countertops: 1-inch- OD brown, molded-plastic grommets with brown plastic cap.

END OF SECTION 06402

SECTION 07210 - BUILDING INSULATION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data.

B. Surface-Burning Characteristics: ASTM E 84, and as follows:

1. Flame-Spread Index: 25 or less where exposed; otherwise, as indicated in Part 2 "Insulation Products" Article.

2. Smoked-Developed Index: 450 or less.

PART 2 - PRODUCTS

2.1 INSULATION PRODUCTS

Foamed-in-Place Insulation: closed cell spray applied polyurethane foam insulation.

1. Product: Icynene ProSeal LE, R-7.1 per inch

C. Fiberglas Insulation Kraft Faced Batt Insulation: ASTM C 665, Type II, Class C preformed formaldehyde free glass fiber batt type, Kraft paper faced one side.

B. Acoustic Batt Insulation: ASTM C 665, **Type I, unfaced** with fibers manufactured from **rock wool**, with flame-spread index of 25 or less.

2.2 ACCESSORIES

Vapor Retarder: **Polyethylene, Reinforced polyethylene 6 mil** thick.

C. Eave Ventilation Troughs: Preformed, rigid fiberboard or plastic sheets designed to fit between roof framing members and to provide cross-ventilation between attic spaces and vented eaves.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install insulation in areas and in thicknesses indicated or required to produce R-values indicated. Cut and fit tightly around obstructions and fill voids with insulation.

B. Extend vapor retarder to extremities of areas to be protected from vapor transmission. Secure in place with adhesives or other anchorage. Locate seams at framing members, overlap, and seal with tape.

END OF SECTION 07210

SECTION 04810 - UNIT MASONRY ASSEMBLIES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Samples for **face brick and colored mortar**.

B. Comply with ACI 530.1/ASCE 6/TMS 602.

C. Mockups: Construct a sample wall panel approximately 48 inches long-by 48 inches high to demonstrate aesthetic effects and set quality standards for materials and execution.

PART 2 - PRODUCTS

2.1 MASONRY UNITS

A. Face Brick: Grade **SW**, Type **FBX**.

1. Products:

a. Mutual Materials (Jackson Valencia 425-452-2430)

2. Size: **Standard match existing**.

3. Solid brick with exposed surfaces finished for ends of sills and caps.

4. Special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.

2.2 MORTAR AND GROUT

A. Mortar: **Ready-mixed mortar, ASTM C 1142, may be used at Contractor's option.**

1. Do not use calcium chloride in mortar.

2. For masonry below grade or in contact with earth, use Type **M**.

For exterior, above-grade, load-bearing and non-load-bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions, and for other applications where another type is not indicated, use Type **N**.

2.3 REINFORCEMENT, TIES, AND ANCHORS

A. Veneer Anchors: Two-piece adjustable masonry veneer anchors that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall, for attachment over sheathing to studs, and acceptable to authorities having jurisdiction.

1. Products:

a. see detail 9 on sheet s4.4

2.4 EMBEDDED FLASHING MATERIALS

A. Sheet Metal Flashing: **Stainless steel, 0.0156 inch thick** or **Copper, 10-oz./sq. ft. weight or 0.0135 inch thick for fully concealed flashing, 16-oz./sq. ft. weight or 0.0216 inch thick elsewhere**.

2.5 MISCELLANEOUS MASONRY ACCESSORIES

A. Compressible Filler: Premolded strips complying with ASTM D 1056, Grade 2A1.

B. Preformed Control-Joint Gaskets: Designed to fit standard sash block and to maintain lateral stability in masonry wall; made from styrene-butadiene rubber or PVC.

C. Weep Holes: [**Round polyethylene tubing, 3/8-inch OD**] [**Cotton or polyester rope, 1/4 to 3/8 inch in diameter, 24 inches long**].

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Cut masonry units with saw. Install with cut surfaces and, where possible, cut edges concealed.

B. Mix units for exposed unit masonry from several pallets or cubes as they are placed to produce uniform blend of colors and textures.

Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.

C. Stopping and Resuming Work: Rack back units; do not tooth.

D. Build non-load-bearing interior partitions full height and install compressible filler in joint between top of partition and underside of structure above.

E. Tool exposed joints slightly concave when thumbprint hard, unless otherwise indicated.

F. Keep cavities clean of mortar droppings and other materials during construction. Strike joints facing cavities flush.

3.2 LINTELS

A. Install steel lintels where indicated.

3.3 FLASHING AND WEEP HOLES

A. Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to the downward flow of water in the wall, and where indicated.

B. Place through-wall flashing on sloping bed of mortar and cover with mortar. Seal penetrations in flashing before covering with mortar.

1. Extend flashing 4 inches into masonry at each end and turn up 2 inches to form a pan.

C. Trim wicking material used in weep holes flush with outside face of wall after mortar has set.

3.4 CLEANING

A. Clean masonry as work progresses. Remove mortar fins and smears before tooling joints.

B. Final Cleaning: After mortar is thoroughly cured, remove large mortar particles, scrub, and rinse unit masonry.

Wet wall surfaces with water before applying acidic cleaner, then remove cleaner promptly by rinsing thoroughly with clear water.

END OF SECTION 04810

SECTION 01701 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 CLOSEOUT SUBMITTALS

A. Record Drawings: Maintain a set of the Contract Drawings as Record Drawings. Mark to show installation that varies from the Work originally shown.

Operation and Maintenance Data: Organize data into three-ring binders with identification on front and spine of each binder and pocket folders for folded sheet information. . Include the following:

1. Manufacturer's operation and maintenance brochures.

2. Emergency instructions.

3. Spare parts list.

4. Wiring diagrams.

5. Copies of warranties.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, plumb, smooth, clean, and free of deleterious substances; substrates within installation tolerances; and application conditions within environmental limits. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Verify layout information shown on Drawings, in relation to property survey and existing benchmarks, before laying out the Work.

C. Prepare substrates and adjoining surfaces according to manufacturer's written instructions, including, but not limited to, filler and primer application.

D. Take field measurements as required to fit the Work properly. Where fabricated products are to be fitted to other construction, verify dimensions by field measurement before fabricating and, when possible, allow for fitting and trimming during installation.

3.2 CUTTING AND PATCHING

A. Do not cut structural members**[or operational elements]** without prior written approval of Architect.

B. For patching, provide materials whose installed performance will equal or surpass that of existing materials. For exposed surfaces, provide or finish materials to visually match existing adjacent surfaces to the fullest extent possible.

3.3 INSTALLATION

A. Comply with manufacturer's written instructions for installation. Anchor each product securely in place, accurately located and aligned. Clean exposed surfaces and protect from damage. If applicable, prepare surfaces for field finishing.

B. Clean Project site and work areas daily, including common areas.

3.4 FINAL CLEANING

A. Clean each surface or item as follows before requesting inspection for certification of Substantial Completion:

1. Remove labels that are not permanent.

2. Clean transparent materials, including mirrors. Remove excess glazing compounds. Replace chipped or broken glass.

3. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Leave concrete floors broom clean.

4. Vacuum carpeted surfaces and wax resilient flooring.

5. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication. Clean plumbing fixtures. Clean light fixtures and lamps.

6. Clean the site. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.

3.5 CLOSEOUT PROCEDURES

A. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:

1. Advise Owner of pending insurance changeover requirements.

2. Submit specific warranties, maintenance agreements, and similar documents.

3. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.

4. Submit Record Drawings**[and Specifications]**, operation and maintenance manuals,**[property surveys,]** and similar final record information.

5. Deliver tools, spare parts, extra materials, and similar items.

6. Changeover locks and transmit keys to Owner.

7. Complete startup testing of systems and instruction of operation and maintenance personnel.

8. Remove temporary facilities and controls.

9. Advise Owner of changeover information related to Owner's occupancy, operation, and maintenance.

10. Complete final cleaning requirements, including touchup painting.

11. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. On receipt of a request for inspection, Architect will proceed with inspection or advise Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or advise Contractor of items that must be completed or corrected before the certificate will be issued.

C. Request inspection for certification of Final Completion, once the following are complete:

1. Submit a copy of Substantial Completion inspection list stating that each item has been completed or otherwise resolved for acceptance.

2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

D. Architect will reinspect the Work on receipt of notice that the Work has been completed.

1. On completion of reinspection, Architect will prepare a final Certificate for Payment. If the Work is incomplete, Architect will advise Contractor of the Work that is incomplete or obligations that have not yet been fulfilled.

3.6 DEMONSTRATION AND TRAINING

A. Provide experienced instructors for each piece of equipment that requires operation and maintenance to provide instruction to Owner's personnel. Include a detailed review of the following:

1. Include instruction for system design and operational philosophy, review of documentation, operations, adjustments, troubleshooting, maintenance, and repair.

END OF SECTION 01700

SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Unless otherwise indicated, demolished materials become Contractor's property. Remove from Project site.

B. Items indicated to be removed and salvaged remain Owner's property. Remove, clean, and deliver to Owner's designated storage area.

C. Comply with EPA regulations and disposal regulations of authorities having jurisdiction.

D. Conduct demolition without disrupting Owner's use of the building.

E. It is not expected that hazardous materials will be encountered in the Work. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 DEMOLITION

A. Maintain and protect existing utilities to remain in service before proceeding with demolition.

B. Locate, identify, shut off, disconnect, and cap off utility services to be demolished.

C. Conduct demolition operations and remove debris to prevent injury to people and damage to adjacent buildings and site improvements.

D. Provide and maintain shoring, bracing, or structural support to preserve building stability and prevent movement, settlement, or collapse.

E. Protect building structure and interior from weather and water leakage and damage.

F. Protect walls, ceilings, floors, and exposed finishes that are to remain.

G. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.

H. Promptly patch and repair holes and damaged surfaces of building caused by demolition. Restore exposed finishes of patched areas and extend finish restoration into remaining adjoining construction.

I. Promptly remove demolished materials from Owner's property and legally dispose of them.

END OF SECTION 01732

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REGISTERED ARCHITECT
DAVID N. BUCK
STATE OF WASHINGTON
5389

No.	Date	Revision
1	10/16/23	RESPONSE
	9/28/23	PRICING SET

HONG AND KAO RESIDENCE DADU

5425 W. MERCER WAY
MERCER ISLAND, WA 98040

SPECIFICATION

Sheet No. D5.0
Project No. 2222
Date: 9/8/23

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
ROOF RAIN ON SNOW LOAD	5 PSF
ROOF DEAD LOAD ALLOWANCE FOR PV PANELS	5 PSF
FLOOR LIVE LOAD	40 PSF
FLOOR LIVE LOAD (EXTERIOR DECKS AND BALCONIES)	60 PSF
FLOOR LIVE LOAD (PARKING GARAGE)	50 PSF
GUARDRAILS/BALCONY RAILS	200 LBS

WIND : ANALYSIS PROCEDURE: ASCE 7-16 CHAPTER 27 "PART 1 - BUILDINGS OF ALL HEIGHTS"
RISK CATEGORY II
97 MPH
EXPOSURE "C"
TOPOGRAPHIC FACTOR Kzt = 1.0
MAIN HOUSE WIND BASE SHEAR, NORTH/SOUTH Vn = 32.6 K
MAIN HOUSE WIND BASE SHEAR, EAST/WEST Vn = 38.9 K
DADU WIND BASE SHEAR, NORTH/SOUTH Vn = 11.6 K
DADU WIND BASE SHEAR, EAST/WEST Vn = 10.9 K

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 = 1.45; S_1 = 0.51
DESIGN ACCELERATION Sds = 0.97; Sd$_1$ = 0.61
SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5
SEISMIC RESPONSE COEFFICIENT: Cs = 0.149
MAIN HOUSE SEISMIC BASE SHEAR Vs = 88.2 K
DADU SEISMIC BASE SHEAR Vs = 10.3 K

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 STRUCTURAL STEEL AND GLUED LAMINATED MEMBERS 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.

14. DEFERRED SUBMITTALS OF DESIGN BUILD COMPONENTS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE AND SHALL INCLUDE DESIGN CALCULATIONS WITH THE ENGINEER'S STAMP.

THE FOLLOWING COMPONENTS SHALL BE DEFERRED SUBMITTALS FOR THIS PROJECT:
STAIRS, RAILINGS.

15. SPECIAL INSPECTION: CONCRETE, STRUCTURAL STEEL FABRICATION AND ERECTION (INCLUDING FIELD WELDING AND HIGH-STRENGTH FIELD BOLTING), EXPANSION BOLTS AND THREADED EXPANSION INSERTS, SCREW ANCHORS, EPOXY GROUTED INSTALLATIONS, AND DRIVEN PILE INSTALLATION SHALL BE SUPERVISED IN ACCORDANCE WITH IBC SECTIONS 1704 & 1705 AND THE PROJECT SPECIFICATIONS BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET PROJECT SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

GEOTECHNICAL

16. 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	2,000 PSF
LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	55 PCF/35 PCF
SEISMIC SURCHARGE PRESSURE (RESTRAINED/UNRESTRAINED)	8H PSF/5H PSF
PASSIVE SOIL PRESSURE	350 PCF
SOIL COEFFICIENT OF FRICTION	0.35
PILE CAPACITY (3 INCH)	12 KIPS

GEOTECHNICAL REPORT REFERENCE: #G-5881 BY GEO GROUP NORTHWEST, INC. DATED MAY 20, 2023.

17. PIPE PILES SHALL BE GALVANIZED SCHEDULE-40 (STD) ASTM A53 (TYPE E OR S, GRADE A OR B) 3 INCH NOMINAL PIPE DRIVEN TO REFUSAL PER THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER. THE ALLOWABLE AXIAL COMPRESSION CAPACITY SHALL BE 12 KIPS. SECTIONS OF PIPE SHALL BE CONNECTED TOGETHER WITH COMPRESSION FITTED SLEEVE COUPLERS.

18. PIPE PILING INSPECTION SHALL BE CONTINUOUSLY PERFORMED BY THE GEOTECHNICAL ENGINEER DURING PLACEMENT TO CONFIRM THAT THE PILES ARE INSTALLED IN ACCORDANCE WITH THE PLANS AND GEOTECHNICAL REPORT. AT LEAST 3% OF THE 3 INCH PILES SHALL BE LOAD TESTED IN ACCORDANCE WITH ASTM D1143. MAXIMUM PILE MIS-LOCATION SHALL BE 2" LATERALLY. ACTUAL PILE LENGTH SHALL BE DETERMINED IN THE FIELD BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRIVING PILES.

RENOVATION

19. DEMOLITION: VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

20. ALL EXTERIOR WALLS SHALL BE INSPECTED AND REPAIRED AS FOLLOWS:
SCRAPE ALL LOOSE AND WEAKENED MORTAR OUT TO FULL DEPTH OF THE DETERIORATION; REMOVE AND REPLACE ANY LOOSE MASONRY UNITS; CHECK FOR LOOSE FACING BRICK VENEERS; TUCK POINT ALL JOINTS SOLID. ALL MASONRY RESTORATION AND REPAIR SHALL BE PERFORMED IN SUCH A MANNER THAT THE EXISTING STRUCTURE IS NOT WEAKENED OR LEFT UNSUPPORTED DURING THE PROCESS OF THE WORK. ALL EXTERIOR APPENDAGES SUCH AS FIRE ESCAPES, CORNICES AND EYEBROWS SHALL BE INSPECTED FOR STRUCTURAL INTEGRITY AND THE CONDITION OF THE CONNECTIONS TO THE STRUCTURE. NOTIFY THE STRUCTURAL ENGINEER AS TO THE FINDINGS OF THIS INSPECTION.

21. CHECK FOR DRYROT AT ALL EXTERIOR WALLS, EXISTING TOILET ROOM FLOORS AND WALLS, AREAS SHOWING WATER STAINS, AND ALL WOOD MEMBERS IN BASEMENT AND CRAWL SPACES. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

CONCRETE

22. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI 117. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 2,500 PSI AT THE HOUSE, AND 4,000 PSI AT THE DADU. ALL CONCRETE EXPOSED TO THE WEATHER AND ALL GARAGE SLABS-ON-GRADE SHALL ATTAIN A 28-DAY STRENGTH f'c OF 3,000 PSI IN ACCORDANCE WITH IBC SECTION 1904.1. AND ACI 318 TABLE 19.3.2.1 THIS INCREASE IN REQUIRED STRENGTH IS FOR DURABILITY ONLY (SPECIAL INSPECTION IS NOT REQUIRED). MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS (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 UNLESS OTHERWISE NOTED. EXCEPT FOR FOOTINGS AND SLAB ON GRADE, AGGREGATE SIZE SHALL NOT EXCEED 3/4".

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.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.3.1. ALL CONCRETE TO RECEIVE A STEEL TROWELED FINISH SHALL NOT BE AIR-ENTRAINED.

23. REINFORCING STEEL SHALL CONSIST OF #4 BARS, GRADE 40, fy = 40,000 PSI AND #5 BARS, GRADE 60, fy = 60,000 PSI, CONFORMING TO ASTM A615 AND SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT 48 BAR DIAMETERS, 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS, LAP 2'-0" MINIMUM. PROVIDE (2) #4 MIN. U.N.O. TRIM BARS AROUND ALL OPENINGS IN CONCRETE WALLS OR SLABS EXTENDING 2'-0" PAST CORNERS, TYPICAL.

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

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.

24. 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	2"
SLABS AND WALLS (INTERIOR FACE)	1"

CONCRETE WALL REINFORCING - PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

WALL THICKNESS	VERTICAL BARS	HORIZONTAL BARS
6" WALLS	#4 @ 18" (1 CURTAIN)	#4 @ 12" (1 CURTAIN)
8" WALLS	#4 @ 16" (1 CURTAIN)	#4 @ 10" (1 CURTAIN)
10" WALLS	#4 @ 18" (2 CURTAIN)	#4 @ 16" (2 CURTAIN)

25. NON-SHRINK GROUT SHALL BE NON-METALLIC CONFORMING TO ASTM C1107 AND BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (5000 PSI MINIMUM).

ANCHORAGE

26. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2 WEDGE ANCHOR", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-3037 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 EXPANSION BOLT INSTALLATION.

27. 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.

28. DRIVE PINS, SHOT PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE FASTENERS AS MANUFACTURED BY HILTI CORPORATION. WHEN CALLED FOR IN THE DRAWINGS, PROVIDE THE APPROPRIATE FASTENER AS NOTED IN THE TABLE BELOW FOR EACH GIVEN APPLICATION. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORTS NO. ESR-2269 FOR THE X-U FASTENERS AND ESR-2379 FOR THE X-CP FASTENERS. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE EDGE AND 4" CENTER TO CENTER SPACING. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES.

ALLOWABLE APPLICATION	ALLOWABLE FASTENER TYPE	SHEAR CAPACITY (LBS)	TENSION CAPACITY (LBS)
2X TREATED LUMBER TO CONCRETE (2000 PSI MIN.)	X-CP 72 P8 S23 w/ 1.33" EMBED	250	175
2X LUMBER TO STRUCTURAL STEEL (3/16" MIN., 36 OR 50 KSI)	X-U 52 MX PLUS R-23 WASHERS	250	175

29. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SHALL BE INSTALLED USING "SET-3G" ADHESIVE ANCHOR AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-4057, 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 OF INSTALLATION IS REQUIRED.

MASONRY

30. MASONRY VENEER SHALL HAVE W1.7 (9 GAUGE) WIRE JOINT REINFORCEMENT SPACED AT 16" O.C. VERTICALLY AND SHALL BE ANCHORED TO BACKING WALLS PER IBC SECTION 1404.6 WITH SHEET METAL ANCHORS, WIRE ANCHORS OR ADJUSTABLE ANCHORS. MECHANICALLY CONNECT THE ANCHORS TO THE JOINT REINFORCEMENT WITH CLIPS OR HOOKS THAT WILL ENGAGE OR ENCLOSE THE WIRE. THE WIRE SHALL BE CONTINUOUS WITH BUTT SPLICES BETWEEN ANCHORS PERMITTED.

SHEET METAL ANCHORS (NON-CORRUGATED) SHALL BE AT LEAST 7/8" WIDE, 0.03" THICK, COMPLY WITH TMS 402/602 REQUIREMENTS AND BE SPACED AT 16" O.C. VERTICALLY AND A MAX. OF 24" O.C. HORIZONTALLY.

THE MAXIMUM HEIGHT OF CONTINUOUS BRICK VENEER FROM A CONCRETE FOUNDATION SHALL BE 30 FEET. PROVIDE VERTICAL EXPANSION JOINTS IN CONTINUOUS VENEER @ 25' O.C. MAX. TYPICAL U.O.N. LINTEL ANGLES OVER OPENINGS 6'-0" WIDE OR LESS SHALL BE L4" X 4" X 1/4" HOT DIP GALVANIZED, U.N.O. AND SHALL BEAR ON A MINIMUM OF 4" OF MASONRY EACH END.

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APPROVAL:

NO.	DESCRIPTION	DATE	BY
1	REV 1	10/13/23	
	PERMIT SET	6/7/23	

ISSUES: ◯ REVISIONS: △

P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

SHEET TITLE:

GENERAL STRUCTURAL NOTES

SHEET NO.

S1.0

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

STEEL

31. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE A.I.S.C. SPECIFICATIONS AND CODES:

    A. AISC - STEEL CONSTRUCTION MANUAL, 15TH EDITION
    B. AISC 303-16 - CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
    C. 2014 RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS.

32. STRUCTURAL STEEL, WIDE FLANGE (W AND WT) SHAPES SHALL CONFORM TO ASTM A992, Fy = 50 KSI; ALL OTHER ROLLED SHAPES SHALL CONFORM TO ASTM A36, Fy = 36 KSI. STEEL PLATE SHALL CONFORM TO ASTM A36, Fy = 36 KSI. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B, Fy = 35 KSI. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE C, Fy = 50 KSI. CONNECTION BOLTS SHALL CONFORM TO ASTM A307. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36, Fy = 36 KSI.

33. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

34. ALL A325 CONNECTION BOLTS SHALL BE INSTALLED TO THE SNUG-TIGHT CONDITION PER RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. ALL NUTS SHALL CONFORM TO ASTM A563. ALL WASHERS SHALL CONFORM TO ASTM F436 OR ASTM F454 TYPE 325. ALL BOLT HOLES SHALL BE STANDARD SIZE UNLESS OTHERWISE NOTED.

35. ALL A307 CONNECTION BOLTS SHALL BE PROVIDED WITH LOCK WASHERS UNDER NUTS OR SELF-LOCKING NUTS. ALL BOLT HOLES SHALL BE STANDARD SIZE UNLESS OTHERWISE NOTED.

36. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.C. AND A.W.S. STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY A.W.S.) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS. ALL WELDING SHALL BE PERFORMED BY WELDERS WITH AWS / W.A.B.O. CERTIFICATION WITH THE MATERIAL AND METHOD REQUIRED.

    SHOP DRAWINGS SHALL SHOW ALL WELDING WITH AWS A2.4 SYMBOLS. WELDS SHOWN ON DRAWINGS ARE MINIMUM SIZES. INCREASE WELD SIZE TO AWS MINIMUM SIZES BASED ON PLATE THICKNESS. MINIMUM WELDING SHALL BE 3/16-INCH. THE WELDS SHOWN ARE FOR THE FINAL CONNECTIONS. FIELD WELD ARROWS ARE SHOWN WHERE A FIELD WELD IS REQUIRED BY THE STRUCTURAL DESIGN; THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF A WELD SHOULD BE SHOP OR FIELD WELDED IN ORDER TO FACILITATE THE STRUCTURAL STEEL DELIVERY AND ERECTION.

37. WELDING OF LATERAL FORCE RESISTING MEMBERS SHALL BE PERFORMED IN ACCORDANCE WITH A WELDING PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 AND APPROVED BY THE STRUCTURAL ENGINEER BEFORE WORK BEGINS. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER METAL MANUFACTURER. WELDING ELECTRODES SHALL BE E70T6-K2 OR E70T6 WITH A MINIMUM SPECIFIED CHARPY V-NOTCH (CVN) OF 20 ft-lbs AT -20 DEGREES FAHRENHEIT AND 40 ft-lbs AT 70 DEGREES FAHRENHEIT. REMOVE BOTTOM FLANGE WELD TAB AT MOMENT FRAME CONNECTIONS AND REINFORCE WITH 5/16'" FILLET WELD IN CONFORMANCE WITH FEMA-353 RECOMMENDATIONS. WELD ACCESS HOLE DETAILING AT MOMENT FRAME CONNECTIONS SHALL CONFORM WITH FEMA-350 AND FEMA-353 RECOMMENDATIONS.

WOOD

38. 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, 3X, 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

39. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM D3737 AND ANSI A190.1 STANDARDS. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. CERTIFICATES OF CONFORMANCE MUST BE MADE AVAILABLE TO BUILDING INSPECTORS. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800 KSI. ALL CANTILEVERED OR CONTINUOUS BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2,400 PSI, Fv = 240 PSI, E = 1,800 KSI. CAMBER ALL SIMPLE SPAN GLULAM BEAMS TO 5,000' RADIUS UNLESS SHOWN OTHERWISE ON THE PLANS. ALL GLUE LAMINATED COLUMNS SHALL BE DOUGLAS FIR COMBINATION 2, Fc = 1,900 PSI, Fby = 1,800 PSI, Fbx = 1,700 PSI, E = 1,700 KSI (4 LAMS MINIMUM DEPTH). CONTRACTOR SHALL VERIFY AVAILABILITY OF THE GL MEMBER SIZES SHOWN ON THE DRAWINGS AND ADJUST THE CONNECTOR SIZES IF NEEDED FOR LARGER MEMBER SIZES.

40. 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.

41. 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

    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.

42. WOOD I-JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE 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 WOOD JOIST PROVIDED. GLUE FLOOR JOISTS TO SHEATHING AS REQUIRED BY THE JOIST MANUFACTURER.

43. 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. WHERE NOT NOTED OTHERWISE, NAIL PANEL EDGES WITH 8d NAILS @ 6" O.C. EDGES, 12" O.C. IN THE FIELD.

44. 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 CONFORMING TO AMERICAN WOOD PRESERVERS ASSOCIATION U1 AND M4 AND SHALL BE BRANDED WITH A QUALITY CONTROL AGENCY MARK BY THE AWPA 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.

45. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2021. 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.

46. 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 LUMBER SHALL BE HOT DIPPED GALVANIZED.

47. 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 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" GNB AND 5/8" GNB 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.

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APPROVAL:

NO.	DESCRIPTION	DATE	BY
1	REV 1	10/13/23	
	PERMIT SET	6/7/23	

ISSUES: ○ REVISIONS: △

P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

SHEET TITLE:

GENERAL STRUCTURAL NOTES

SHEET NO.

S1.1

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

ABBREVIATIONS

@	At
d	Penny (Nails)
ϕ	Diameter
°	Degrees
...#	Pounds
#...	Number
(A)	Above
A.B.	Anchor Bolt
ADD'L	Additional
ALT.	Alternate
APPROX.	Approximate
ARCH.	Architect
A.S.D.	Allowable Stress Design
(B)	Below
B/	Bottom of
BF	Braced Frame
BLKG.	Blocking
BLDG.	Building
BM.	Beam
BOT.	Bottom
BRG.	Bearing
BTWN.	Between
CL or ℄	Centerline
C	Camber
CIP	Cast In Place
C.J.	Construction Joint or Control Joint
CJP	Complete Joint Penetration
CLG.	Ceiling
CLR.	Clear
CMU	Concrete Masonry Unit
COL.	Column
CONC.	Concrete
CONN.	Connections
CONST.	Construction
CONT.	Continuous
CSK.	Countersink
DBA	Deformed Bar Anchor
DBL.	Double
DEG.	Degree
DF	Doug Fir-Larch
DIA.	Diameter
DIAG.	Diagonal
DIAPH.	Diaphragm
DIM.	Dimension
DN.	Down
DO	Ditto
DTL.	Detail
DTP	Double Top Plate
DWG.	Drawing
(E)	Existing
E.	East
EA.	Each
E.F.	Each Face
EL.	Elevation
ELEV.	Elevator
EMBED.	Embedment Length
ENGR.	Engineer
EQ.	Equal
E.W.	Each Way
EXP.	Expansion
EXT.	Exterior
FDN.	Foundation
FIN.	Finish
FLR.	Floor
FRP	Fiber Reinforced Polymer
F.S.	Far Side
FT.	Foot or Feet
FTG.	Footing
GA.	Gauge
GALV.	Galvanized
GL	Glue Laminated
GWB	Gypsum Wall Board
HDG	Hot Dipped Galvanized
HDR.	Header
HF	Hem Fir
HGR.	Hanger
HORIZ.	Horizontal
HSS	Hollow Structural Section
HT.	Height
I.D.	Inside Diameter
I.F.	Inside Face
IN.	Inch
INFO.	Information
INT.	Interior
JT.	Joint
K	Kips
KSF	Kips per Square Foot
KSI	Kips per Square Inch

L	Angle
LB.	Pound
LL	Live Load
LLH	Long Leg Horizontal
LLV	Long Leg Vertical
LONGIT.	Longitudinal
LT. WT.	Lightweight
MAX.	Maximum
MECH.	Mechanical
MEZZ.	Mezzanine
MF	Moment Frame
MFR.	Manufacturer
MIN.	Minimum
MISC.	Miscellaneous
MK.	Mark
(N)	New
N.	North
N.S.	Near Side
NOM.	Nominal
NTS	Not to Scale
O.C.	On Center
O.D.	Outside Diameter
O.F.	Outside Face
O.H.	Overhang
OPNG.	Opening
OPP.	Opposite
PAF	Ponder Actuated Fastener
PC	Precast
PERM.	Permanent
PERP.	Perpendicular
PJP	Partial Joint Penetration
PL or ℄	Plate
PLF	Pounds per linear Foot
PLYWD	Plywood
PREFAB.	Prefabricated
PSF	Pounds per Square Foot
PSI	Pounds per Square Inch
P.T. or PT	Post-Tensioning
P/T	Pressure-Treated
RAD.	Radius
REF.	Reference
REINF.	Reinforce or Reinforcement
REQD.	Required
REV.	Revise
R.O.	Rough Opening
S.	South
SCH. or SCHED.	Schedule
SECT.	Section
SHT.	Sheet
SIM.	Similar
SOG	Slab On Grade
SPEC.	Specification
SQ.	Square
SQ. FT.	Square Feet
SQ. IN.	Square Inch(es)
SPF	Spruce-Pine-Fir
S.S.	Stainless Steel
STD.	Standard
STIFF.	Stiffener
STL.	Steel
STR.	Structural
SUB.	Substitute
SYM.	Symmetrical
T/	Top of
T&B	Top and Bottom
T&G	Tongue & Groove
TEMP.	Temporary
THRU	Through
T.O.C.	Top of Concrete
T.O.S.	Top of Steel
T.O.W.	Top of Wall
TRANS.	Transverse
TS	Tube Steel
TYP.	Typical
U.O.N.	Unless Otherwise Noted
VERT.	Vertical
V/F	Verify in Field
W.	West
W/ or w/	With
W.H.S.	Welded Headed Stud
W/O	Without
W.P.	Work Point
W.T.S.	Welded Threaded Stud
WWF	Welded Wire Fabric
X SECT.	Cross Section
X-STR	Extra Strong
XX-STR	Double Extra Strong

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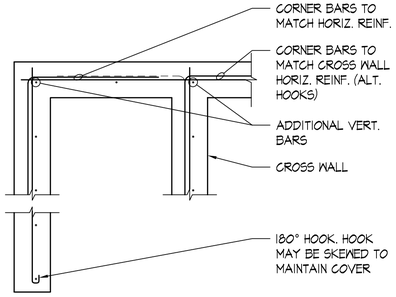
SHEET TITLE:

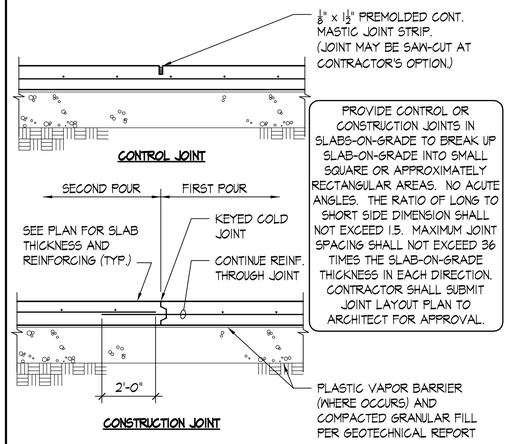
GENERAL STRUCTURAL NOTES

SHEET NO.

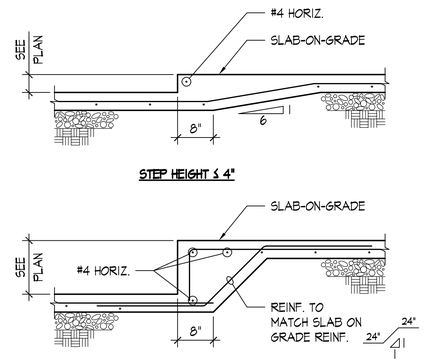
S1.2



TYPICAL CORNER BAR AND WALL END BAR ARRANGEMENT AT CONCRETE WALLS OR FOOTINGS — SCALE: NONE — 1

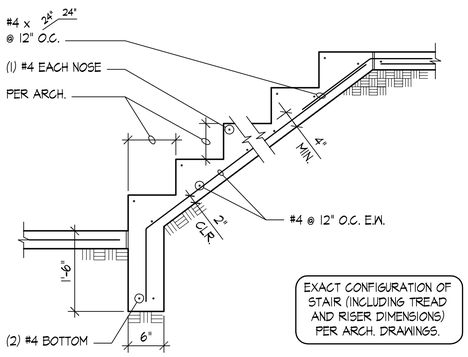


TYPICAL SLAB-ON-GRADE JOINTS — SCALE: NONE — 2

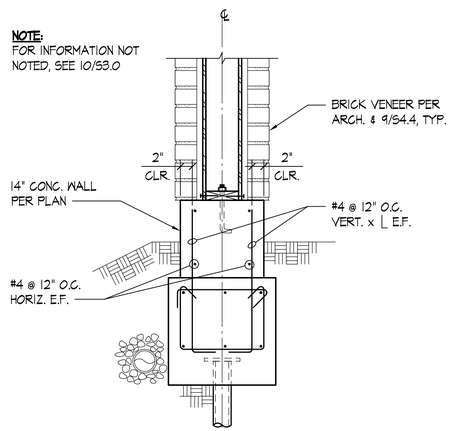


TYPICAL SLAB-ON-GRADE STEP DETAIL — SCALE: NONE — 3

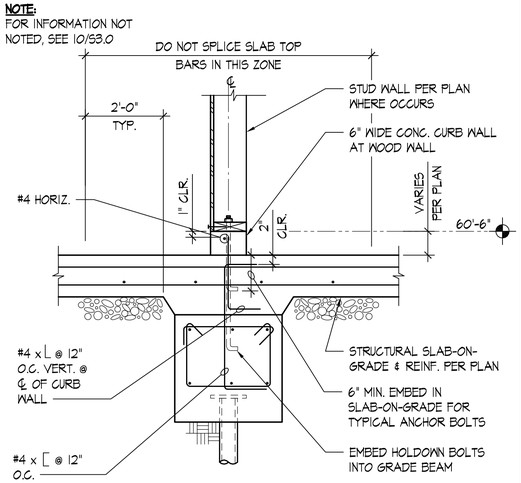
DETAIL — SCALE: NONE — 8



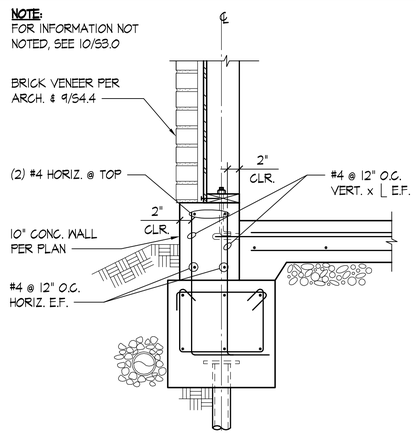
TYPICAL STAIR ON GRADE — SCALE: NONE — 5



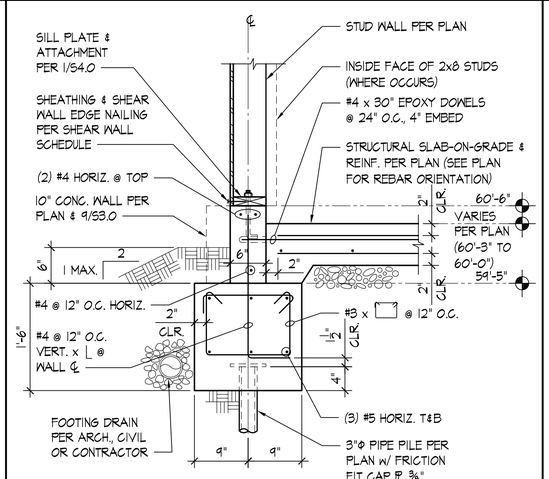
PIPE PILE FOUNDATION - EXTERIOR w/ VENEER BOTH SIDES — SCALE: NONE — 6



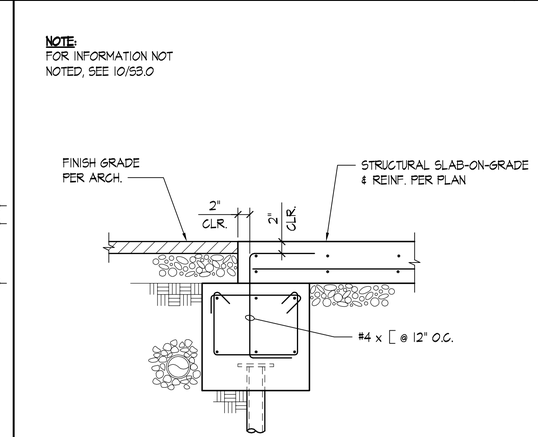
TYPICAL PIPE PILE FOUNDATION - INTERIOR — SCALE: NONE — 8



PIPE PILE FOUNDATION - EXTERIOR w/ VENEER — SCALE: NONE — 9



TYPICAL PIPE PILE FOUNDATION - EXTERIOR — SCALE: NONE — 10



TYPICAL THICKENED SLAB AT DOOR — SCALE: NONE — 11

MARK	SIZE	DEPTH	REINFORCING	REMARKS
F2.0	2'-0" x 2'-0"	10"	(2) #4 EA. WAY	.
F2.5	2'-6" x 2'-6"	10"	(3) #4 EA. WAY	.
F3.0	3'-0" x 3'-0"	12"	(4) #4 EA. WAY	.
F4.0	4'-0" x 4'-0"	12"	(6) #4 EA. WAY	.
F3.0x4.0	3'-0" x 4'-0"	12"	(6) #4 TRANSV. (4) #4 LONGIT.	.

SPREAD FOOTING SCHEDULE — SCALE: NONE — 12

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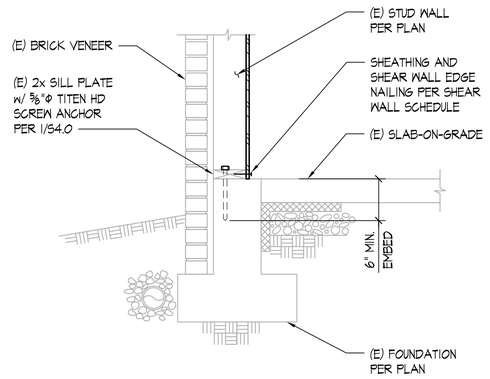
FOUNDATION DETAILS

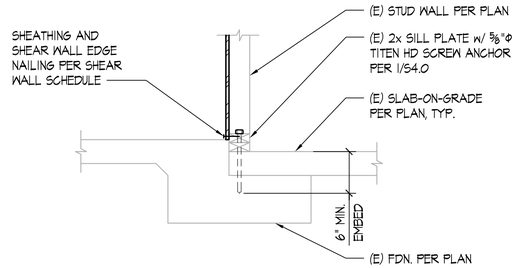
SHEET NO.

S3.0

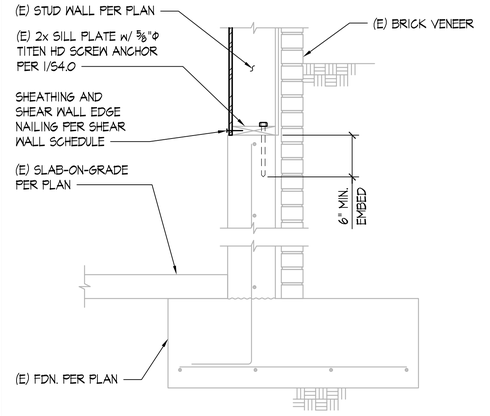
File: 127-s300.dwg Plotted: Fri, 10/13/2023 10:44 am



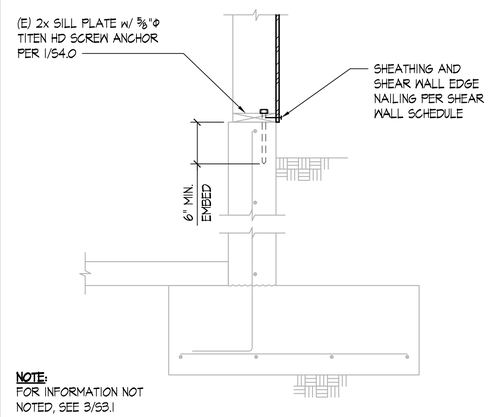
TYPICAL PERIMETER WALL FOUNDATION AT SLAB-ON-GRADE — SCALE: 1"=1'-0" — 1



INTERIOR WALL AT EXISTING FOUNDATION STEP — SCALE: 1"=1'-0" — 2

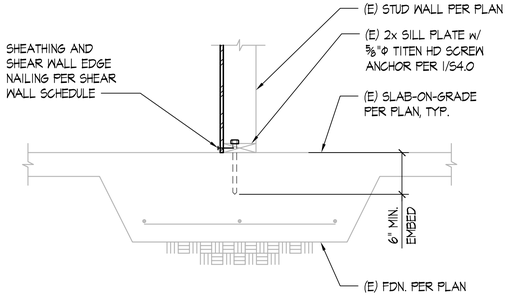


EXTERIOR WALL AT EXISTING RETAINING WALL — SCALE: 1"=1'-0" — 3

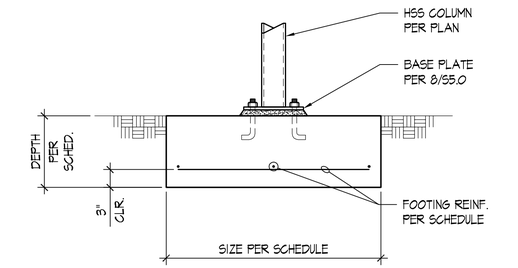


NOTE:
FOR INFORMATION NOT NOTED, SEE 3/S3.1

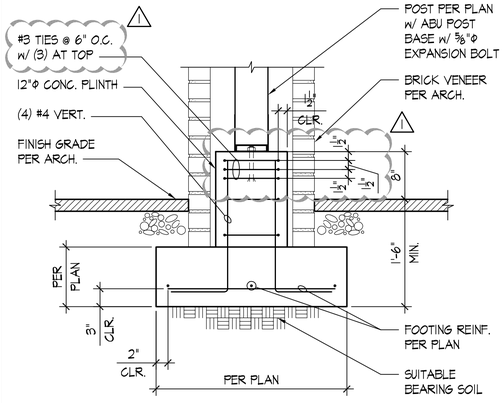
INTERIOR WALL AT EXISTING RETAINING WALL — SCALE: 1"=1'-0" — 4



INTERIOR WALL AT EXISTING THICKENED SLAB — SCALE: 1"=1'-0" — 5

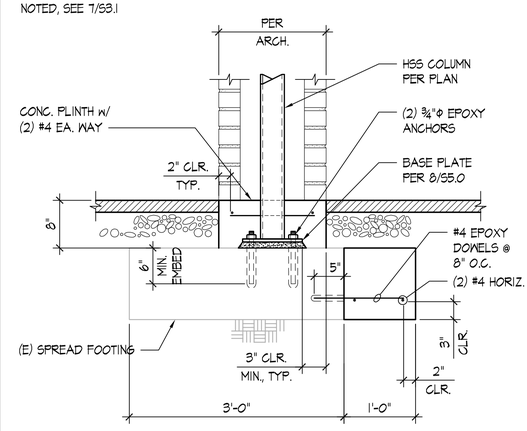


CRAWL SPACE FOOTING AT HSS COLUMN — SCALE: 1"=1'-0" — 6

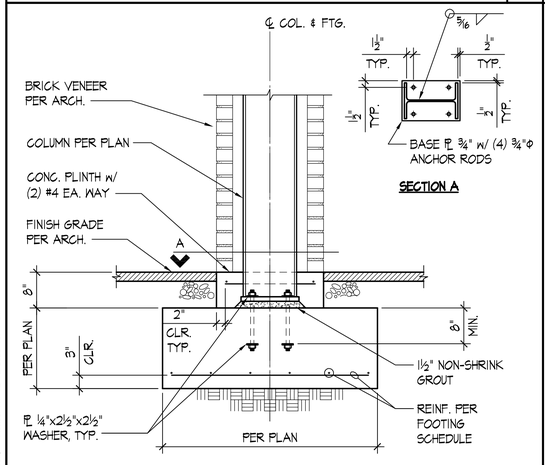


TYPICAL EXTERIOR POST FOOTING — SCALE: 1"=1'-0" — 7

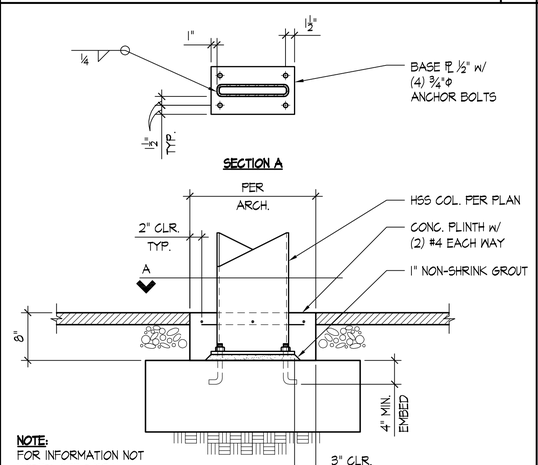
NOTE:
FOR INFORMATION NOT NOTED, SEE 1/S3.1



EXISTING SPREAD FOOTING AT HSS COLUMN — SCALE: 1"=1'-0" — 8



TYPICAL SPREAD FOOTING SUPPORTING MF COLUMN — SCALE: NONE — 9



NOTE:
FOR INFORMATION NOT NOTED, SEE 7/S3.1

EXTERIOR SPREAD FOOTING AT HSS COLUMN — SCALE: 1"=1'-0" — 10

DETAIL — SCALE: 1"=1'-0" — 11

DETAIL — SCALE: 1"=1'-0" — 12

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SHEET TITLE:

FOUNDATION DETAILS

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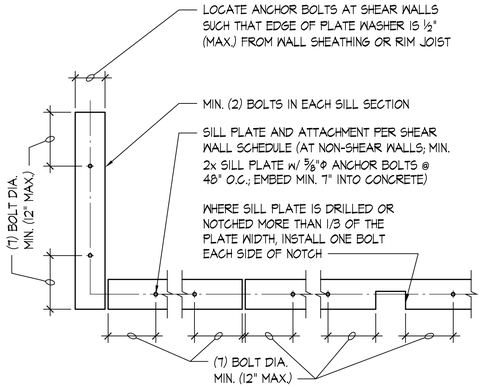
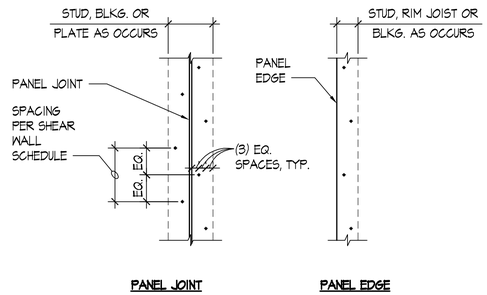


TYPICAL SILL PLATE BOLTING - PLAN VIEW SCALE: NONE



PANEL JOINT **PANEL EDGE**

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

TYPICAL STAGGERED NAILING SCALE: NONE **2**

SHEAR WALL SCHEDULE								
SHEAR WALL TYPE	SHEAR WALL SHEATHING (1)	PANEL EDGE FRAMING (2)(7)	PANEL EDGE NAILING (3)	BOTTOM PLATE ATTACHMENT			TOP PLATE ATTACHMENT	
				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
SW-6	15/32" APA ONE-SIDE SHTG.	2x	0.148"Φx2¼" @ 6" O.C.	0.148"Φx3¼" @ 6" O.C. (9)	⅝"Φ @ 48" O.C.	⅝"Φ @ 48" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.
SW-4	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.148"Φx2¼" @ 4" O.C. (8)	0.148"Φx3¼" @ 4" O.C. (9)	⅝"Φ @ 32" O.C.	⅝"Φ @ 24" O.C.	A35 @ 12" O.C.	LTP4 @ 12" O.C.
SW-3	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.148"Φx2¼" @ 3" O.C. (8)	0.148"Φx3¼" @ 3" O.C. (9)	⅝"Φ @ 32" O.C.	⅝"Φ @ 24" O.C.	A35 @ 8" O.C.	LTP4 @ 8" O.C.
SW-2	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.148"Φx2¼" @ 2" O.C. (8)	(2) ROWS 0.148"Φx3¼" @ 4" O.C. (10)	⅝"Φ @ 24" O.C.	⅝"Φ @ 16" O.C.	A35 @ 6" O.C.	LTP4 @ 8" O.C.

NOTES:

(1) INSTALL PANEL SHEATHING EITHER HORIZONTALLY OR VERTICALLY FOR THE ENTIRE LENGTH OF THE WALL PER PLAN. WALL STUD SPACING SHALL BE 16" O.C. MAXIMUM.

(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/ 0.148"Φ x 2-1/4" @ 12" O.C.

(4) EMBED CAST-IN-PLACE 5/8"Φ 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.

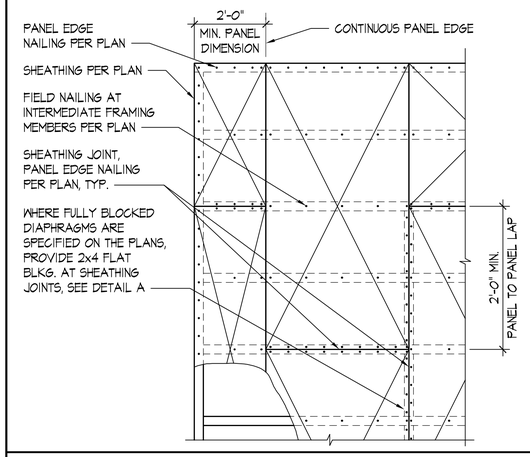
(6) PROVIDE 0.131"Φ x 1-1/2" LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"Φ x 2-1/2" LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/S4.1 FOR TOP PLATE SPLICE.

(7) ALTERNATIVE TO 3x STUDS IS (2) 2x STUDS NAILED TOGETHER WITH 0.148"Φ x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).

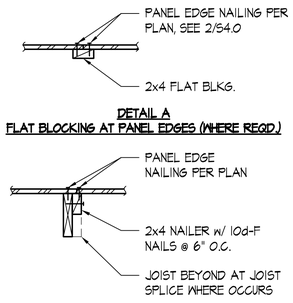
(8) STAGGER THE PANEL EDGE NAILS PER 2/S4.0.

(9) RIM JOIST/BLOCKING MINIMUM WIDTH OF 1¾". STAGGER NAILS PER 2/S4.0 WHERE SPACING IS LESS THAN 6" O.C.

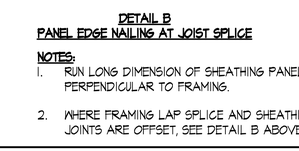
(10) RIM JOIST/BLOCKING MINIMUM WIDTH OF 1¾" AT EXTERIOR WALLS, 3½" AT INTERIOR WALLS. STAGGER NAILS SIMILAR TO 2/S4.0.



TYPICAL ROOF AND FLOOR DIAPHRAGM SHEATHING SCALE: NONE **6**

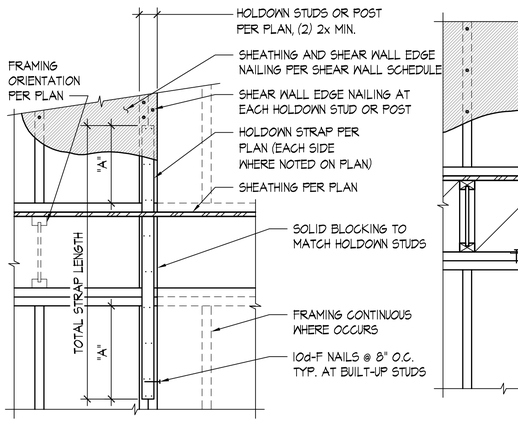


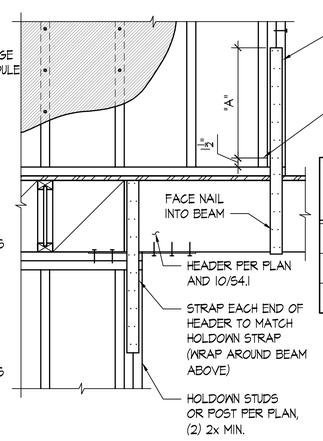
DETAIL A
FLAT BLOCKING AT PANEL EDGES (WHERE REQD.)



DETAIL B
PANEL EDGE NAILING AT JOIST SPLICE

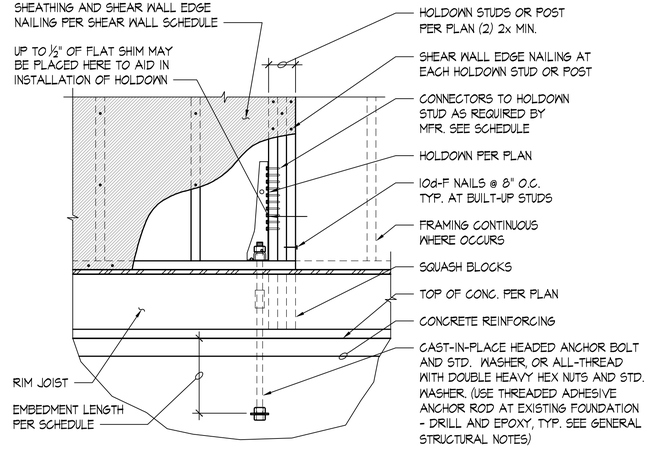
NOTES:
1. RUN LONG DIMENSION OF SHEATHING PANELS PERPENDICULAR TO FRAMING.
2. WHERE FRAMING LAP SPLICE AND SHEATHING JOINTS ARE OFFSET, SEE DETAIL B ABOVE.





HOLDOWN STRAP	MIN. NUMBER OF NAILS EACH END	MIN. STRAP END LENGTH "A"
CS16	(15) 8d	1'-4"
MSTC66	(38) 16d SINKERS	2'-6"
CMST12	(49) 16d SINKERS	3'-8"

TYPICAL FLOOR TO FLOOR HOLDOWN STRAP & FLOOR TO HEADER HOLDOWN STRAP SCALE: NONE **10**



HOLDOWN	ANCHOR BOLT Φ	ANCHOR BOLT IN CONCRETE EMBED LENGTH	CONNECTORS TO HOLDOWN STUDS
HDU2	⅝"Φ	13"	(6) ¼"x2½" SDS
HDU4	⅝"Φ	13"	(10) ¼"x2½" SDS
HDU5	⅝"Φ	13"	(14) ¼"x2½" SDS
HDU8	⅞"Φ	18"	(20) ¼"x2½" SDS
HDU11	1"Φ	20"	(30) ¼"x2½" SDS

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

SHEAR WALL SCHEDULE - 10d NAILS SCALE: NONE **8**

TYPICAL HOLDOWN TO CONCRETE AT RIM JOIST SCALE: NONE **12**

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PROJECT:

HONG AND KAO RESIDENCE

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APPROVAL:

NO.	DESCRIPTION	DATE	BY
1	REV 1	10/13/23	
	PERMIT SET	6/7/23	

ISSUES: REVISIONS:

P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

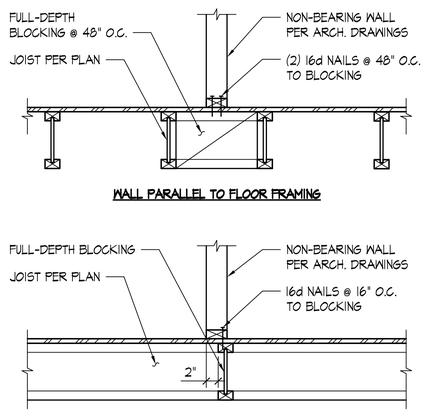
SHEET TITLE:

TYPICAL WOOD DETAILS

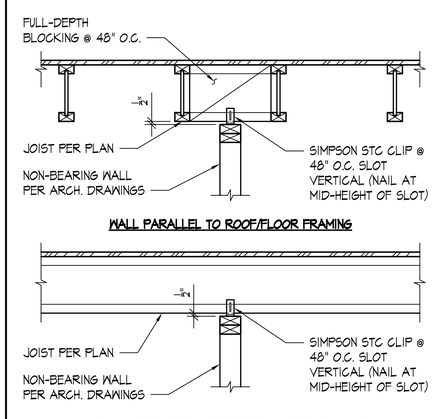
SHEET NO.

S4.0

File: 127-s400.dwg Plotted: Fri, 10/13/2023 10:44 am



TYPICAL NON-BEARING WALL SUPPORT (BOTTOM) - I-JOIST — SCALE: NONE | 1



TYPICAL NON-STRUCTURAL WALL SUPPORT (TOP) - I-JOIST — SCALE: NONE | 2

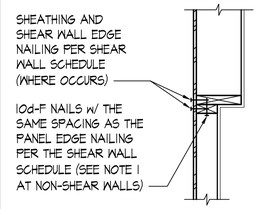
CEILING JOIST SCHEDULE	
SIZE	MAX. SPAN
2x4 @ 24" O.C. 2x4 @ 16" O.C.	8'-0" 9'-2"
2x6 @ 24" O.C. 2x6 @ 16" O.C.	12'-6" 14'-4"
2x8 @ 24" O.C. 2x8 @ 16" O.C.	16'-6" 19'-0"
2x10 @ 24" O.C. 2x10 @ 16" O.C.	21'-2" 24'-3"

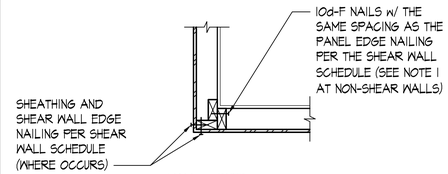
NOTES:
CEILING JOIST TABLE BASED ON HF #2, Fb=850 PSI (REPETITIVE MEMBER USE), Fv = 150 PSI
$E=1.3X10^6$ PSI, DEFL. < L/240

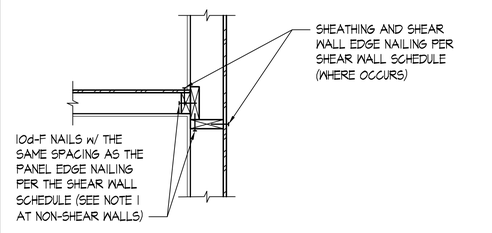
ATTIC LIVE LOAD = 10.0 PSF
CEILING DEAD LOAD = 5.0 PSF

CEILING JOIST SCHEDULE — SCALE: NONE | 3

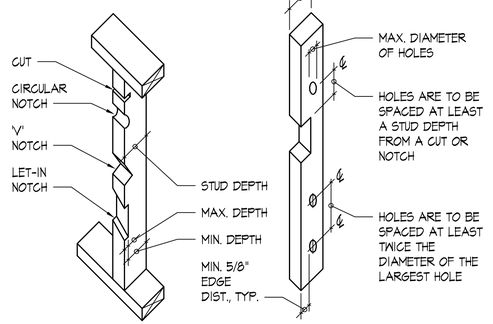
NOTES:
1. AT NON-SHEAR WALLS, NAIL STUDS TOGETHER W/ 10d-F NAILS @ 8" O.C.
2. ADDITIONAL STUDS REQUIRED AS NAILERS, ETC. ARE NOT SHOWN.







TYPICAL WALL INTERSECTIONS - RESIDENTIAL — SCALE: NONE | 8



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	1"/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

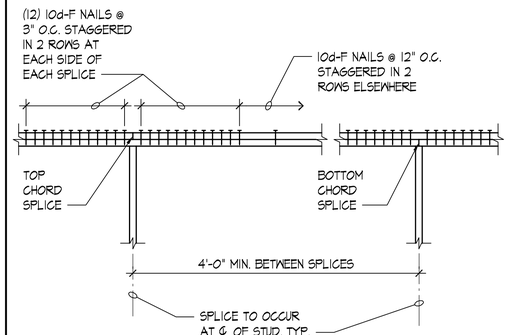
BEARING WALL:

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

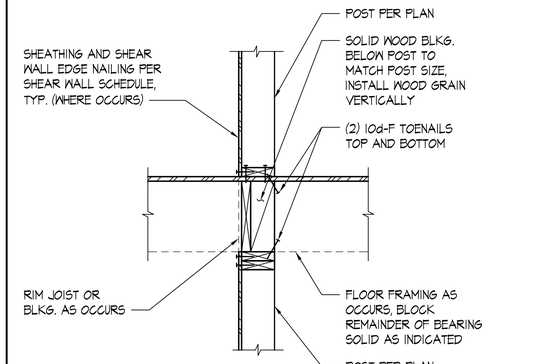
NON-BEARING WALL:

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

TYPICAL ALLOWABLE HOLES AND NOTCHES IN STUDS — SCALE: NONE | 9

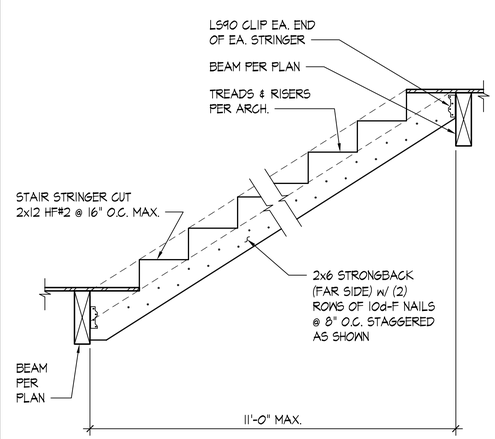


TYPICAL TOP PLATE SPLICE — SCALE: NONE | 6

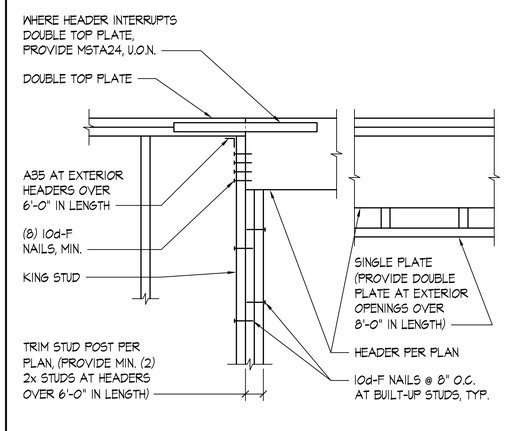


NOTE:
FRAMING CONDITIONS VARY, FOR INFORMATION NOT NOTED SEE PLAN & APPROPRIATE DETAILS

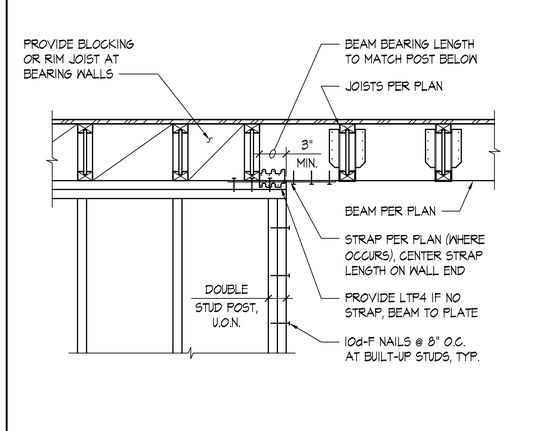
TYPICAL POST AT FLOOR — SCALE: NONE | 7



TYPICAL STAIR STRINGER — SCALE: NONE | 12



TYPICAL HEADER — SCALE: NONE | 10



TYPICAL FLUSH BEAM — SCALE: NONE | 11

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SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

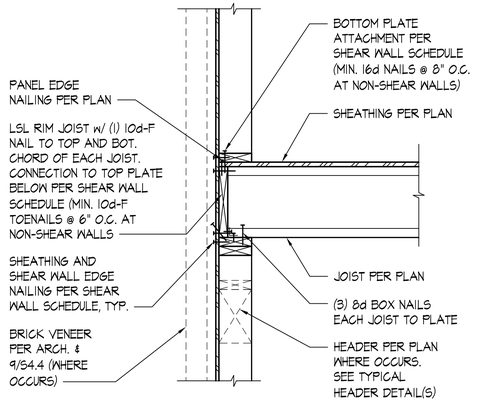
SHEET TITLE:

TYPICAL WOOD DETAILS

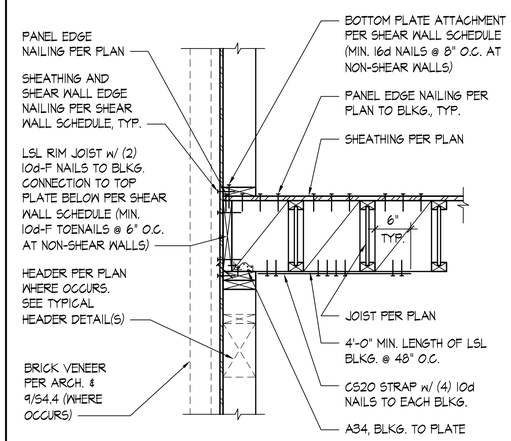
SHEET NO.

S4.1

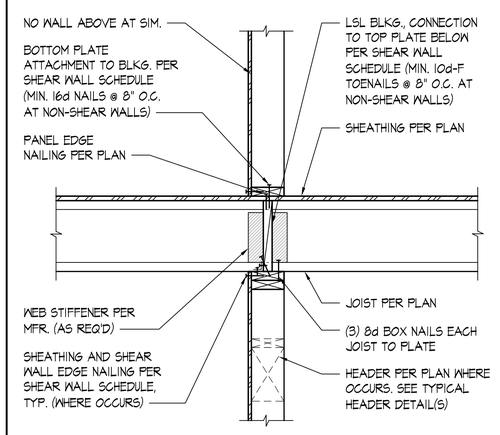
File: 127-s401.dwg Plotted: Fri, 10/13/2023 10:44 am



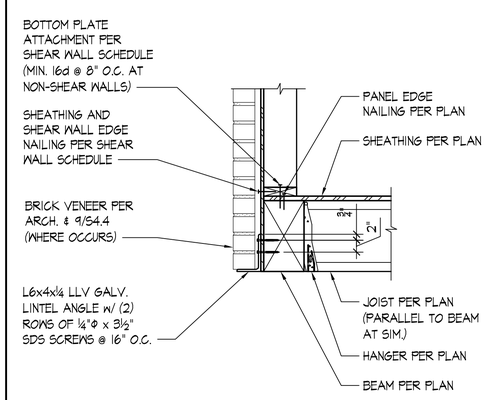
TYPICAL EXTERIOR WALL - I-JOIST PERPENDICULAR — SCALE: NONE — 1



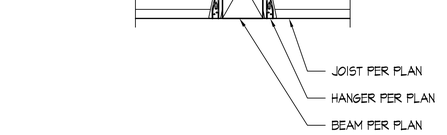
TYPICAL EXTERIOR WALL - I-JOIST PARALLEL — SCALE: NONE — 2



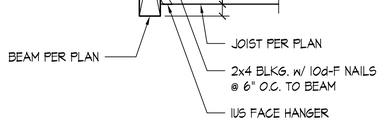
TYPICAL INTERIOR WALL - I-JOIST PERPENDICULAR — SCALE: NONE — 3



TYPICAL STRUCTURAL WALL TO PARALLEL PERIMETER BEAM BELOW - I-JOIST PERPENDICULAR — SCALE: NONE — 4



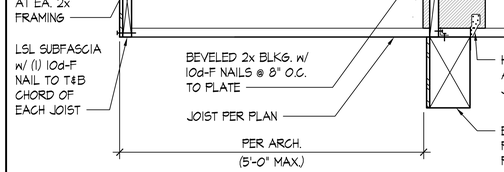
TYPICAL I-JOIST TO FLUSH BEAM CONNECTION — SCALE: NONE — 5



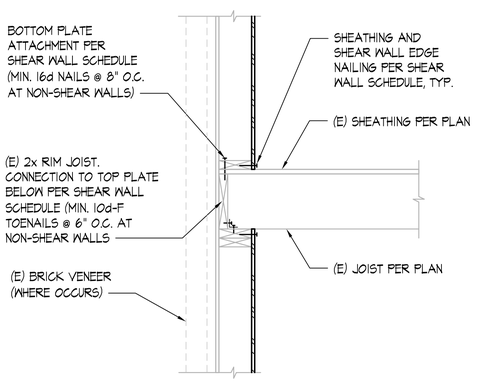
FLOOR JOIST TO UP-SET BEAM CONNECTION — SCALE: NONE — 6

EXTERIOR WALL AT FLOOR OPENING - I-JOIST — SCALE: NONE — 7

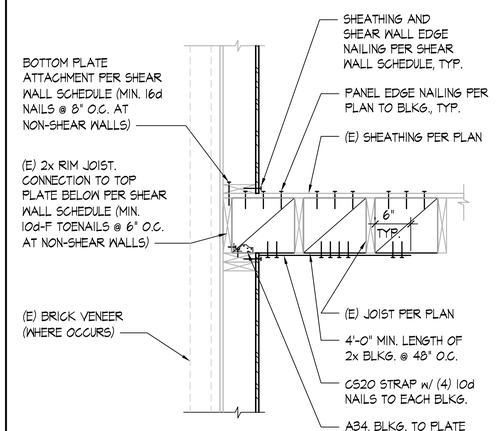
NOTE:
FOR INFORMATION NOT NOTED, SEE 3/S4.2 & 11/S4.4



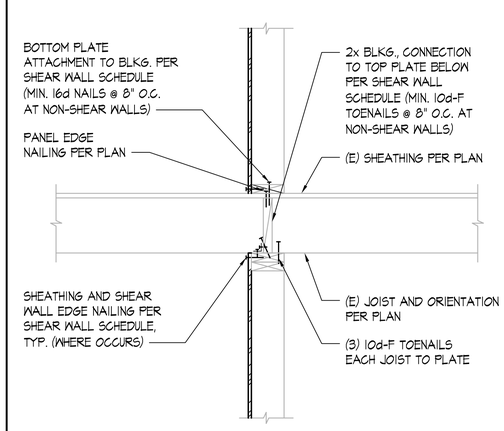
TYPICAL CANTILEVER JOIST AT DROP BEAM — SCALE: NONE — 8



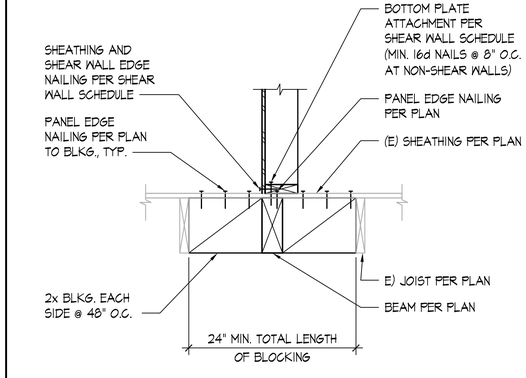
TYPICAL EXTERIOR WALL - (E) 2x JOIST PERPENDICULAR — SCALE: NONE — 9



TYPICAL EXTERIOR WALL - (E) 2x JOIST PARALLEL — SCALE: NONE — 10



TYPICAL INTERIOR WALL - (E) 2x JOIST PERPENDICULAR — SCALE: NONE — 11



TYPICAL STRUCTURAL WALL TO PARALLEL BEAM BELOW - 2x JOIST PARALLEL — SCALE: NONE — 12

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APPROVAL:

NO.	DESCRIPTION	DATE	BY
1	REV 1	10/13/23	
	PERMIT SET	6/7/23	

ISSUES: ◯ REVISIONS: △

P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

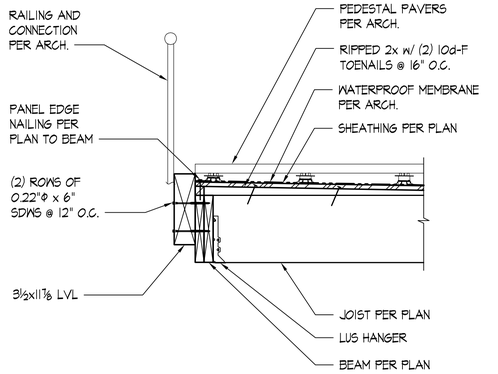
SHEET TITLE:

FLOOR DETAILS

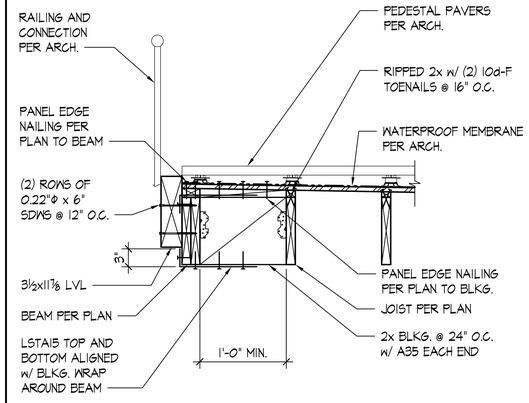
SHEET NO.

S4.2

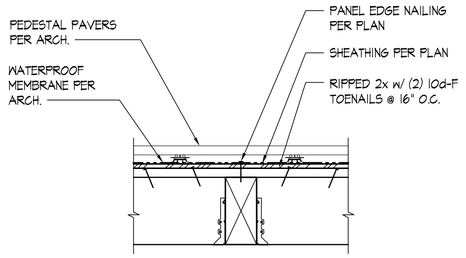
File: 127-s402.dwg Plotted: 10/13/2023 10:44 am



TYPICAL DECK EDGE - JOIST PERPENDICULAR SCALE: 1"=1'-0" | 1

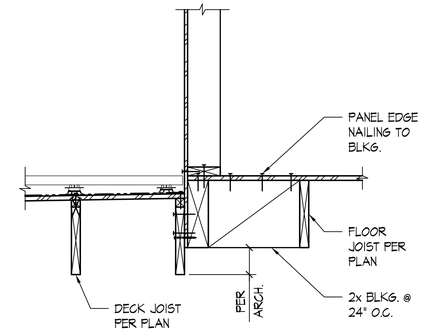


TYPICAL DECK EDGE - JOIST PARALLEL SCALE: 1"=1'-0" | 2



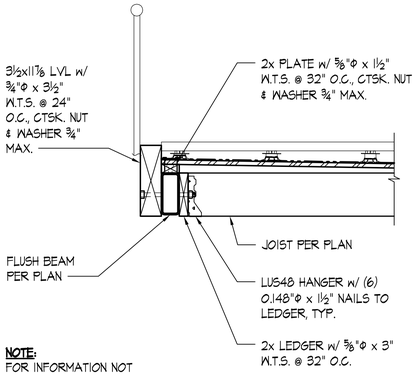
NOTE:
FOR INFORMATION NOT NOTED, SEE 5/S4.2

TYPICAL FLUSH BEAM AT DECK SCALE: 1"=1'-0" | 3



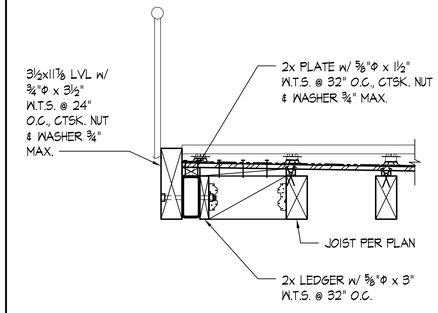
NOTE:
FOR INFORMATION NOT NOTED, SEE 8/S4.3

DETAIL SCALE: 1"=1'-0" | 4



NOTE:
FOR INFORMATION NOT NOTED, SEE 1/S4.3

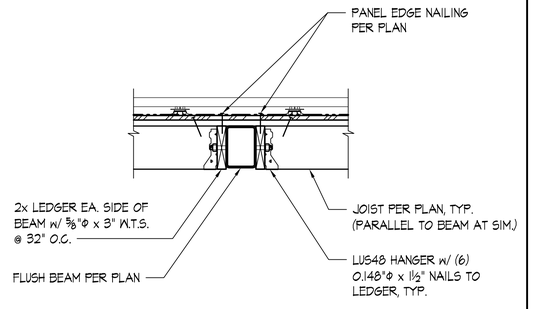
DECK EDGE AT STEEL BEAM - JOIST PERPENDICULAR SCALE: 1"=1'-0" | 5



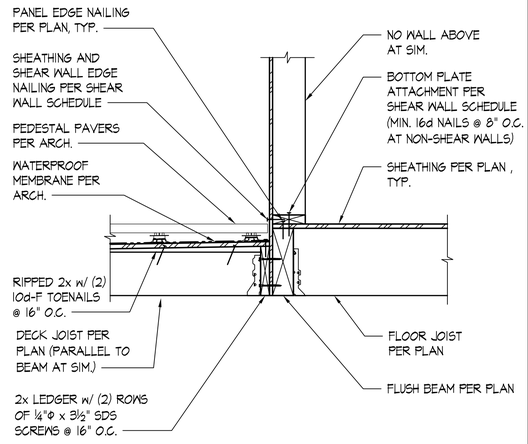
NOTE:
FOR INFORMATION NOT NOTED, SEE 2/S4.3

DECK EDGE AT STEEL BEAM - JOIST PARALLEL SCALE: 1"=1'-0" | 6

NOTE:
FOR INFORMATION NOT NOTED, SEE 3/S4.3

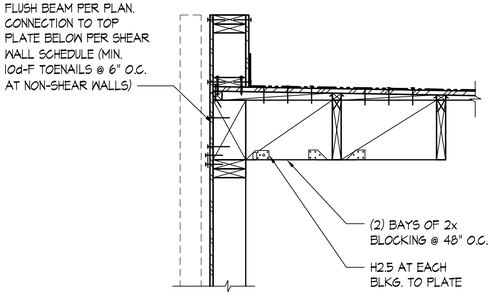


FLUSH STEEL BEAM AT DECK SCALE: 1"=1'-0" | 7



TYPICAL FLUSH BEAM AT DECK - DECK JOIST PARALLEL SCALE: 1"=1'-0" | 8

NOTE:
FOR INFORMATION NOT NOTED, SEE 2/S4.5



DETAIL SCALE: 1"=1'-0" | 9

DETAIL SCALE: 1"=1'-0" | 10

DETAIL SCALE: 1"=1'-0" | 11

DETAIL SCALE: 1"=1'-0" | 12

File: 123-s403.dwg Plotted: Fri, 10/13/2023 10:44 am

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PROJECT:

HONG AND KAO RESIDENCE

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APPROVAL:

NO.	DESCRIPTION	DATE	BY
1	REV 1	10/13/23	
	PERMIT SET	6/7/23	

ISSUES: ◯ REVISIONS: △

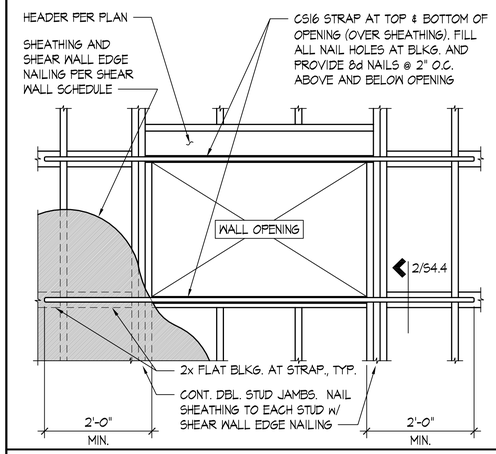
P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

SHEET TITLE:

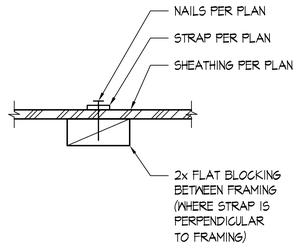
DECK DETAILS

SHEET NO.

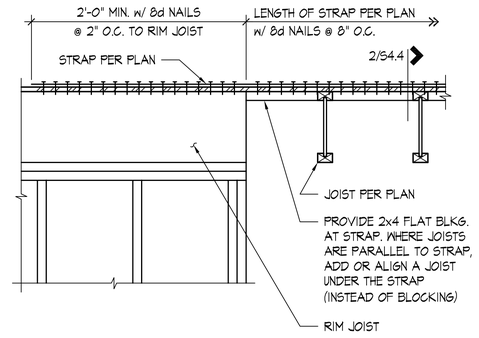
S4.3



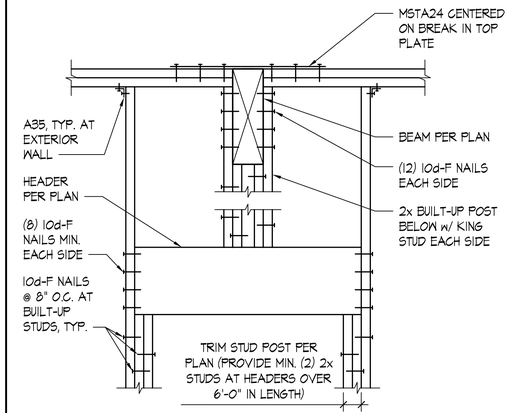
STRAPPING AROUND SHEAR WALL OPENING — SCALE: NONE — 1



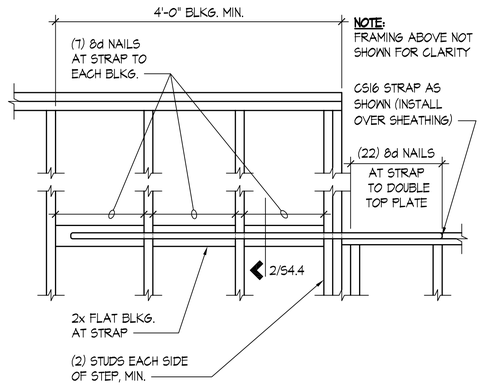
STRAP TO BLOCKING DETAIL — SCALE: NONE — 2



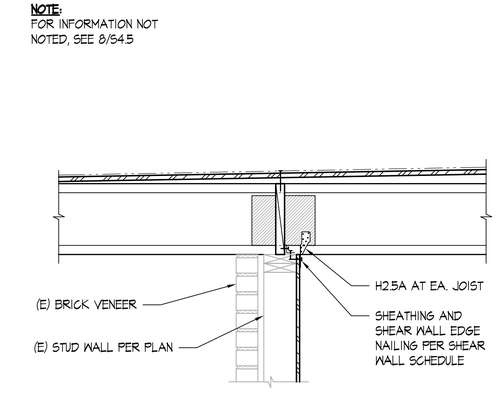
TYPICAL DRAG STRUT DETAIL — SCALE: NONE — 3



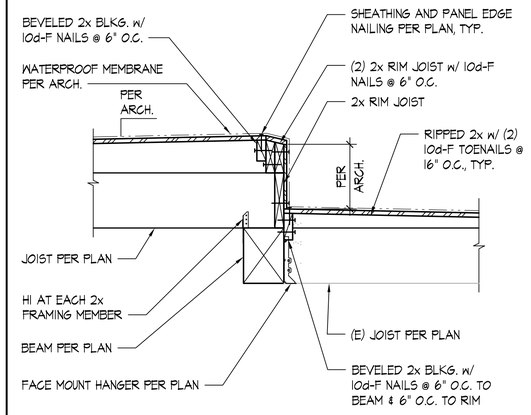
TYPICAL DROP BEAM TO WALL SUPPORT (OVER HEADER) — SCALE: NONE — 4



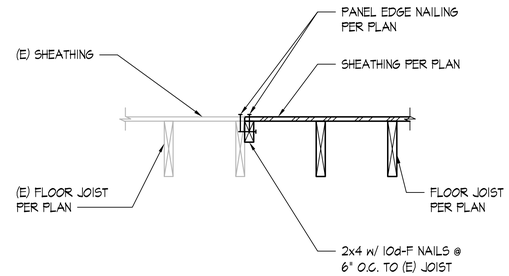
TYPICAL PLATE HEIGHT STEP — SCALE: NONE — 5



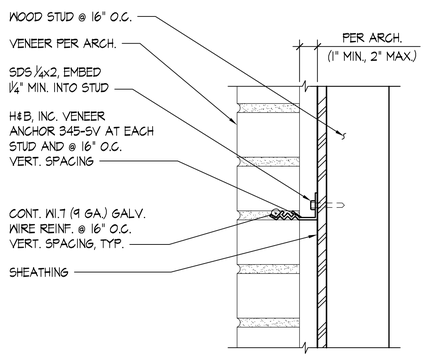
DETAIL — SCALE: NONE — 6



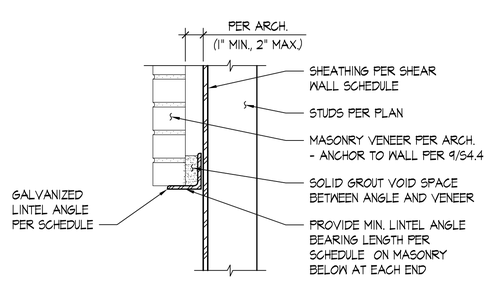
TYPICAL ROOF STEP — SCALE: NONE — 7



TYPICAL FLOOR JOIST AT EXISTING FRAMING — SCALE: NONE — 8

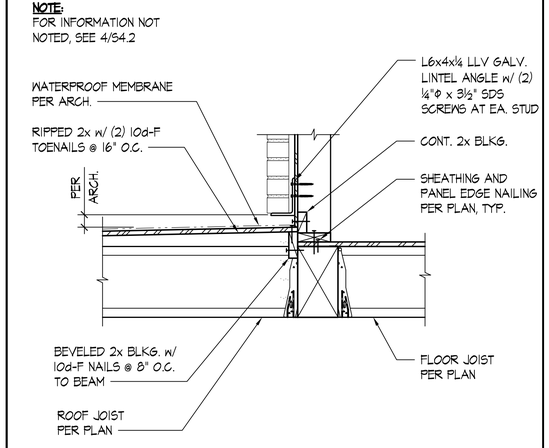


MASONRY VENEER ANCHORAGE DETAIL - WOOD STUD WALL — SCALE: NONE — 9

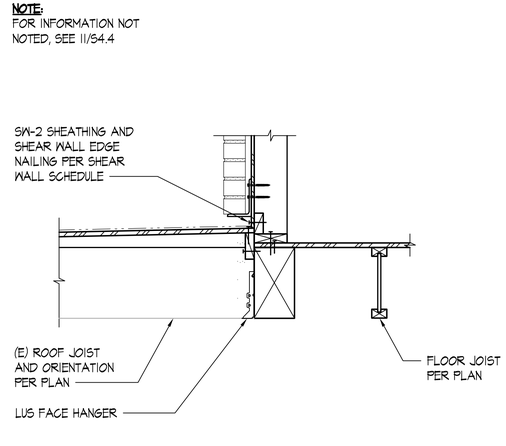


BRICK LINTEL ANGLE SCHEDULE		
MAX. OPENING WIDTH	ANGLE SIZE (LLV)	MIN. END BEARING
6'-0"	L4x4x¼	4"
12'-0"	L6x4x5/16	4"
15'-0"	L7x4x7/16	6"

BRICK LINTEL ANGLE SCHEDULE — SCALE: 1 1/2"=1'-0" — 10



EXTERIOR WALL TO FLUSH BEAM AT FLAT ROOF - FLOOR JOIST PERPENDICULAR — SCALE: NONE — 11



EXTERIOR WALL TO FLUSH BEAM AT FLAT ROOF - FLOOR JOIST PARALLEL — SCALE: NONE — 12

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1	REV 1	10/13/23	
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P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

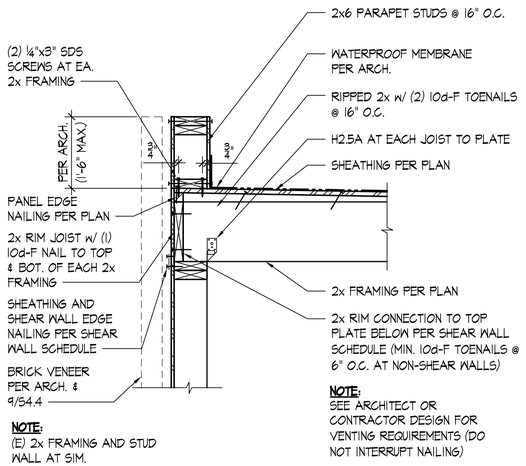
SHEET TITLE:

TYPICAL WOOD DETAILS

SHEET NO.

S4.4

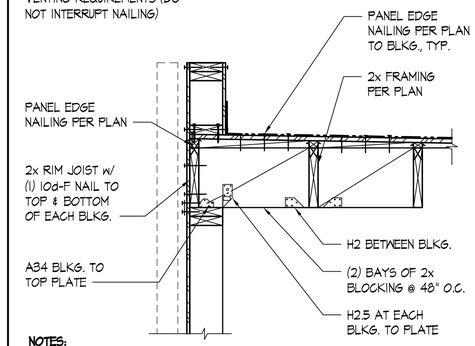
File: 127-s404.dwg Plotted: Fri, 10/13/2023 10:44 am



NOTE:
(E) 2x FRAMING AND STUD WALL AT SIM.

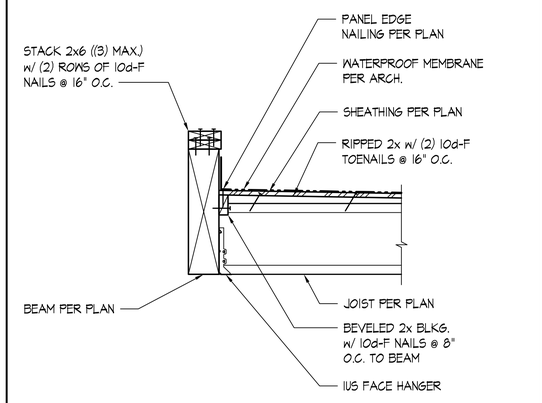
NOTE:
SEE ARCHITECT OR CONTRACTOR DESIGN FOR VENTING REQUIREMENTS (DO NOT INTERRUPT NAILING)

TYPICAL EXTERIOR WALL AT ROOF - 2x FRAMING PERPENDICULAR — SCALE: NONE — 1

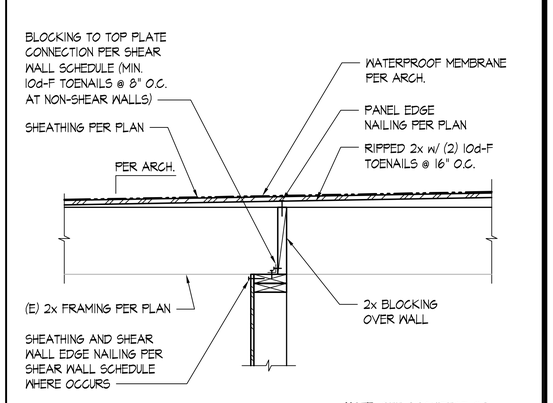


NOTES:
1. FOR INFORMATION NOT NOTED SEE 1/S4.5.
2. (E) 2x FRAMING AND STUD WALL AT SIM.

TYPICAL EXTERIOR WALL AT ROOF - 2x FRAMING PARALLEL — SCALE: NONE — 2

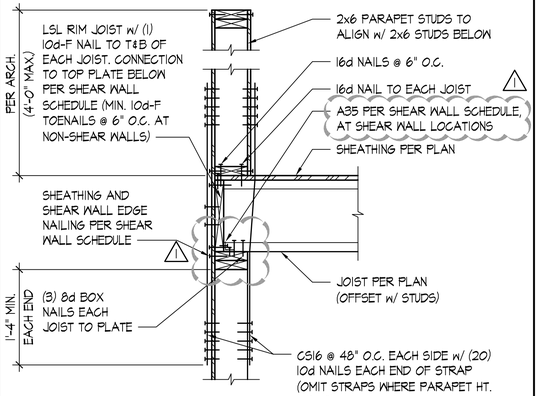


FLUSH BEAM AT FLAT ROOF - JOIST PERPENDICULAR — SCALE: NONE — 3

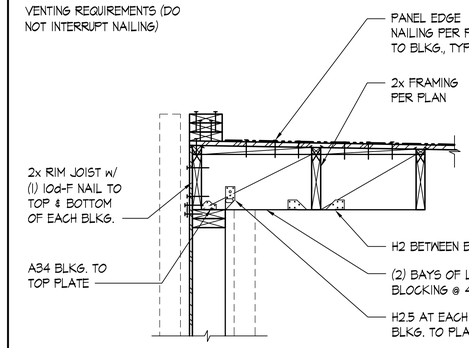


NOTE: SEE ARCHITECT OR CONTRACTOR DESIGN FOR VENTING REQUIREMENTS (DO NOT INTERRUPT NAILING)

TYPICAL INTERIOR STRUCTURAL WALL AT ROOF - 2x FRAMING PERPENDICULAR — SCALE: NONE — 4

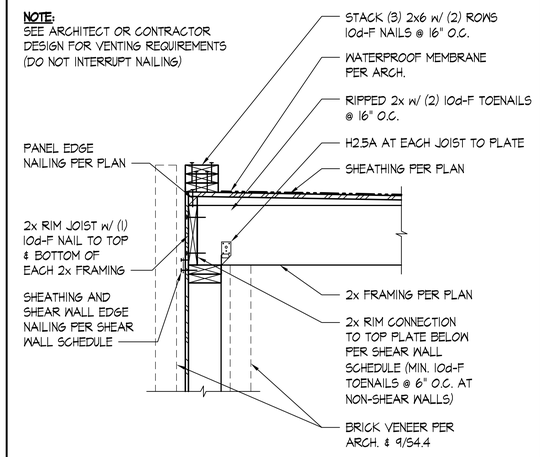


TYPICAL 2x JOIST TO FLUSH BEAM CONNECTION — SCALE: NONE — 5

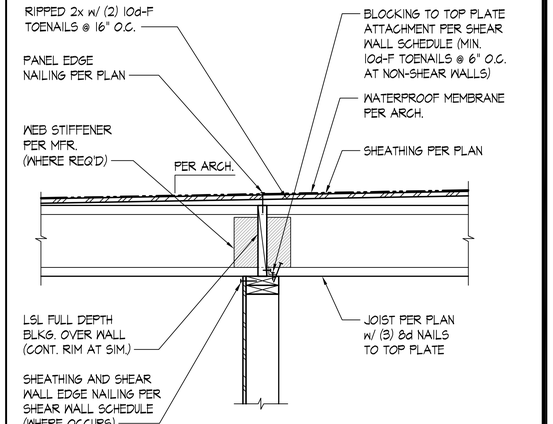


NOTE:
FOR INFORMATION NOT NOTED, SEE 7/S4.5

TYPICAL EXTERIOR WALL AT ROOF - 2x FRAMING PARALLEL — SCALE: NONE — 6

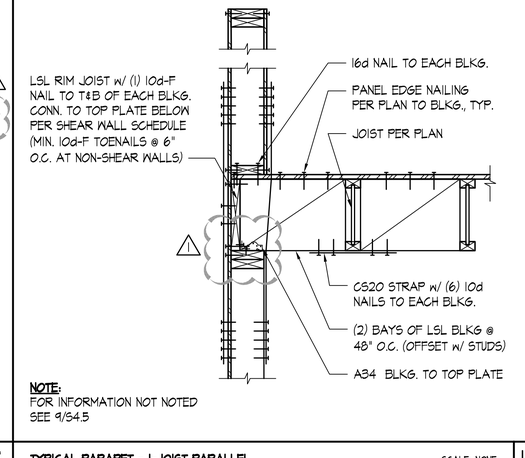


TYPICAL EXTERIOR WALL AT ROOF - 2x FRAMING PERPENDICULAR — SCALE: NONE — 7



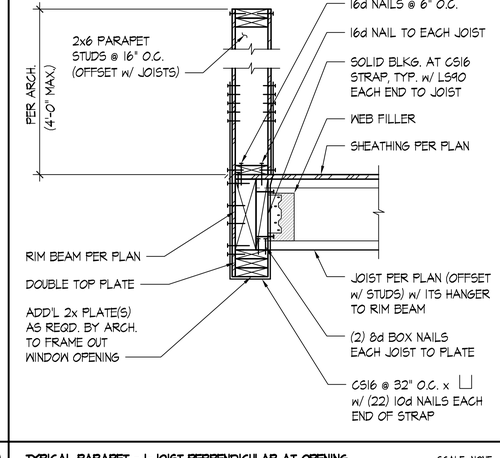
TYPICAL INTERIOR STRUCTURAL WALL AT ROOF - I-JOIST PERPENDICULAR — SCALE: NONE — 8

TYPICAL PARAPET - I-JOIST PERPENDICULAR — SCALE: NONE — 9

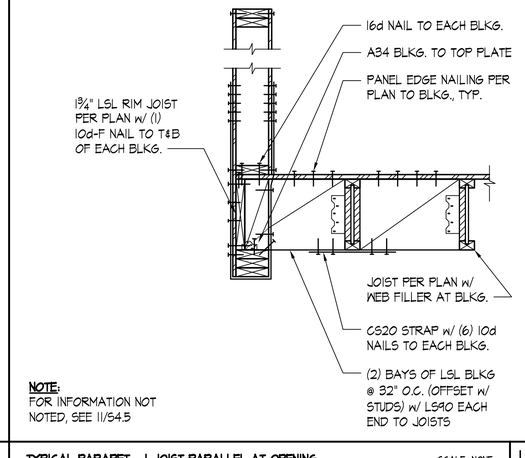


NOTE:
FOR INFORMATION NOT NOTED SEE 9/S4.5

TYPICAL PARAPET - I-JOIST PARALLEL — SCALE: NONE — 10



TYPICAL PARAPET - I-JOIST PERPENDICULAR AT OPENING — SCALE: NONE — 11



NOTE:
FOR INFORMATION NOT NOTED, SEE 11/S4.5

TYPICAL PARAPET - I-JOIST PARALLEL AT OPENING — SCALE: NONE — 12

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APPROVAL:

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1	REV 1	10/13/23	
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ISSUES: ○ REVISIONS: △

P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

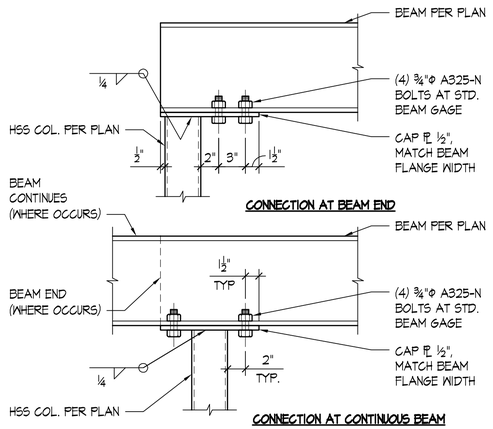
SHEET TITLE:

PARAPET & FLAT ROOF DETAILS

SHEET NO.

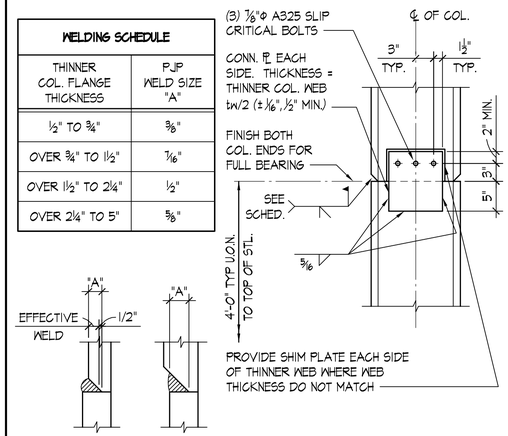
S4.5

File: 127-sht05.dwg Plotted: Fri, 10/13/2023 10:45 am



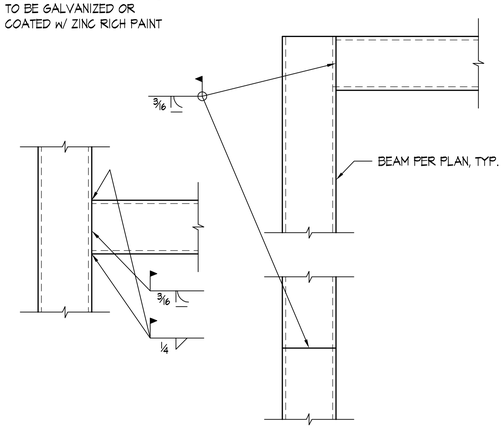
TYPICAL BEAM BEARING ON HSS COLUMN — SCALE: NONE — 1

WELDING SCHEDULE	
THINNER COL. FLANGE THICKNESS	PJP WELD SIZE "A"
½" TO ¾"	⅜"
OVER ¾" TO 1½"	7/16"
OVER 1½" TO 2¼"	½"
OVER 2¼" TO 5"	⅝"

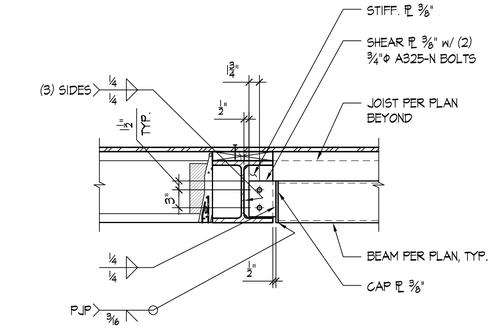


TYPICAL WIDE FLANGE GRAVITY COLUMN SPLICE — SCALE: NONE — 2

NOTE:
ALL EXPOSED STEEL BEAMS TO BE GALVANIZED OR COATED W/ ZINC RICH PAINT

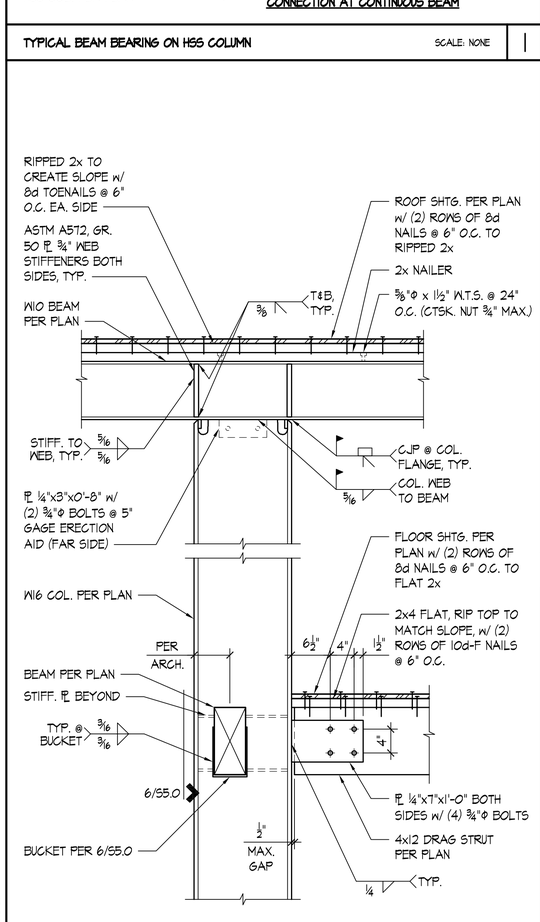


TYPICAL HSS BEAM WELDED CONNECTION — SCALE: NONE — 3



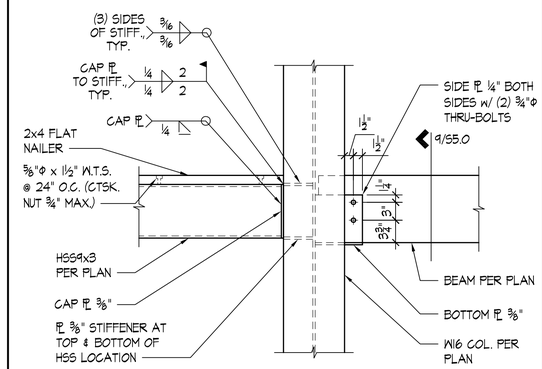
NOTE:
FOR INFORMATION NOT NOTED, SEE 1/S6.0

HSS BOLTED BEAM CONNECTION — SCALE: 1"=1'-0" — 4

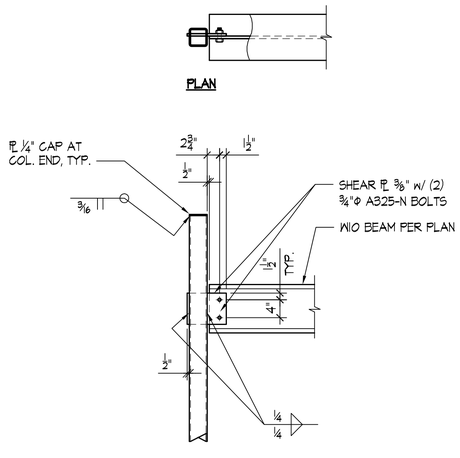


WIDE FLANGE BEAM TO COLUMN MOMENT CONNECTION — SCALE: 1"=1'-0" — 9

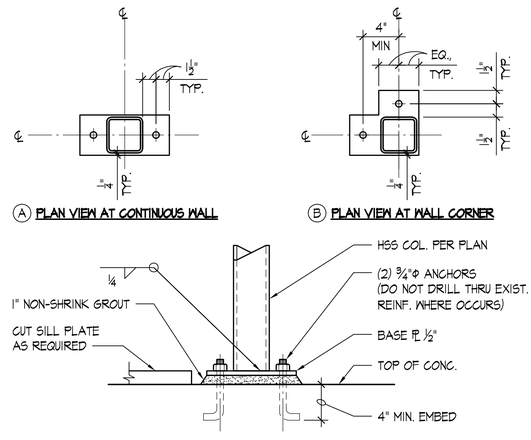
NOTE:
TYPICAL WOOD FRAMING NOT SHOWN.



BEAM TO COLUMN WEB MOMENT CONNECTION — SCALE: 1"=1'-0" — 6



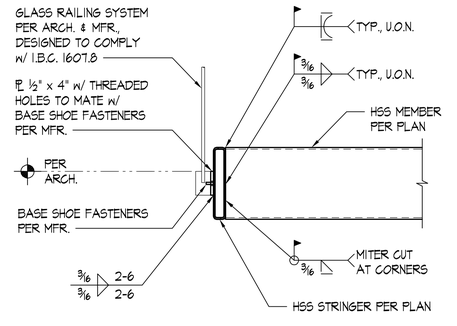
TYPICAL BEAM TO HSS COLUMN — SCALE: NONE — 10



Ⓐ PLAN VIEW AT CONTINUOUS WALL
Ⓑ PLAN VIEW AT WALL CORNER
Ⓒ PLAN VIEW AT WALL END

TYPICAL HSS COLUMN BASE PLATES — SCALE: NONE — 8

DETAIL — SCALE: 1"=1'-0" — 11



TYPICAL HSS STRINGER — SCALE: 1"=1'-0" — 12

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APPROVAL:

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1	REV 1	10/13/23	
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ISSUES: ○	REVISIONS: △
P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

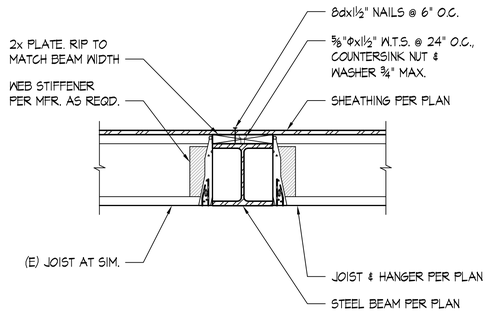
SHEET TITLE:

STEEL DETAILS

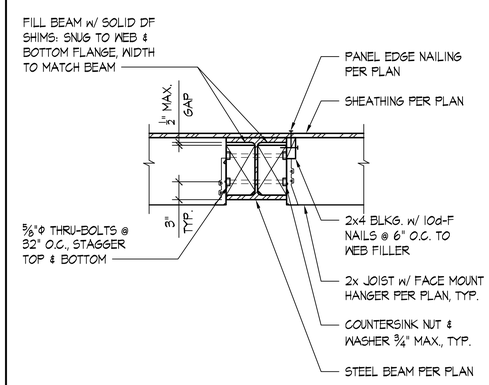
SHEET NO.

S5.0

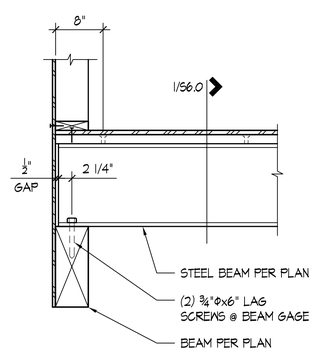
File: 127-s500.dwg Plotted: Fri, 10/13/2023 10:45 am



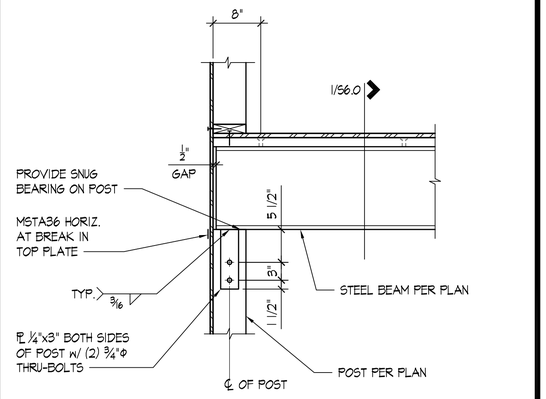
TYPICAL WOOD JOIST TO STEEL BEAM w/ 2x PLATE SCALE: 1"=1'-0" 1



TYPICAL WOOD JOIST TO STEEL BEAM - FACE MOUNT HANGER SCALE: 1"=1'-0" 2

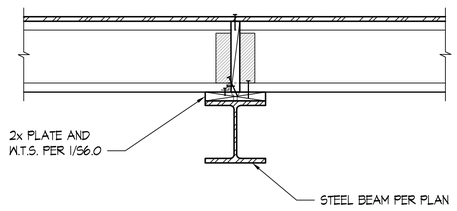


TYPICAL WOOD BEAM SUPPORTING STEEL BEAM SCALE: 1"=1'-0" 3



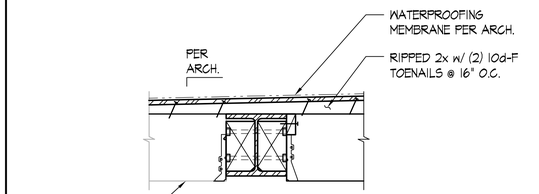
TYPICAL WOOD POST SUPPORTING STEEL BEAM SCALE: 1"=1'-0" 4

NOTE:
FOR INFORMATION NOT NOTED, SEE 3/S4.2 AND 1/S6.0

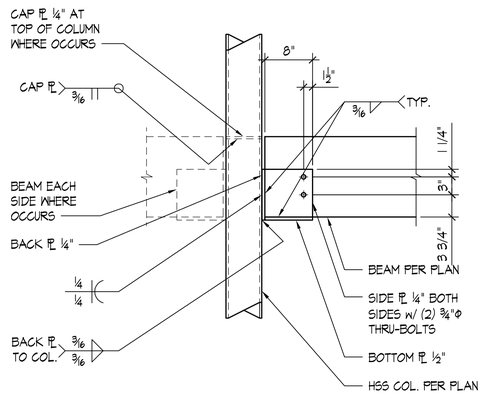


WOOD JOIST TO DROPPED STEEL BEAM SCALE: 1"=1'-0" 5

NOTE:
FOR INFORMATION NOT NOTED, SEE 2/S6.0

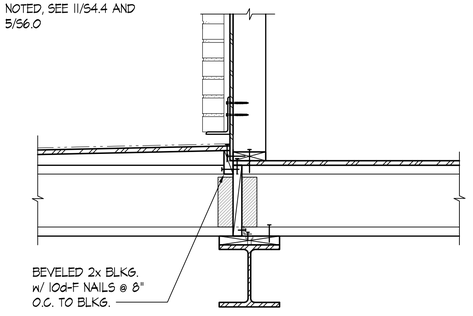


WOOD JOIST TO STEEL BEAM AT FLAT ROOF SCALE: 1"=1'-0" 6



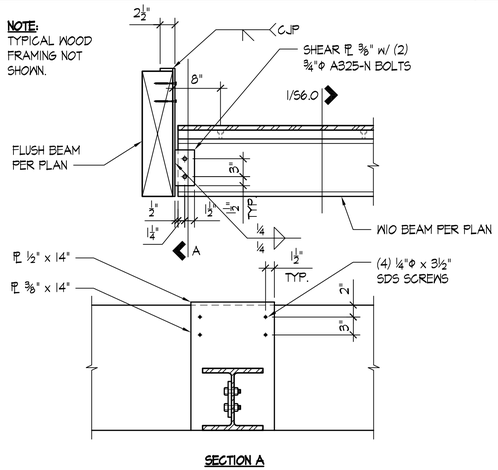
TYPICAL WOOD BEAM BUCKET AT HSS COLUMN SCALE: 1"=1'-0" 7

NOTE:
FOR INFORMATION NOT NOTED, SEE 11/S4.4 AND 5/S6.0



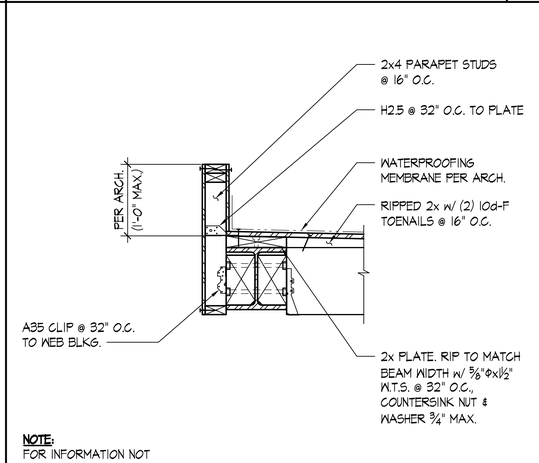
EXTERIOR WALL TO STEEL BEAM AT FLAT ROOF - FLOOR JOIST PERPENDICULAR SCALE: 1"=1'-0" 8

NOTE:
TYPICAL WOOD FRAMING NOT SHOWN.



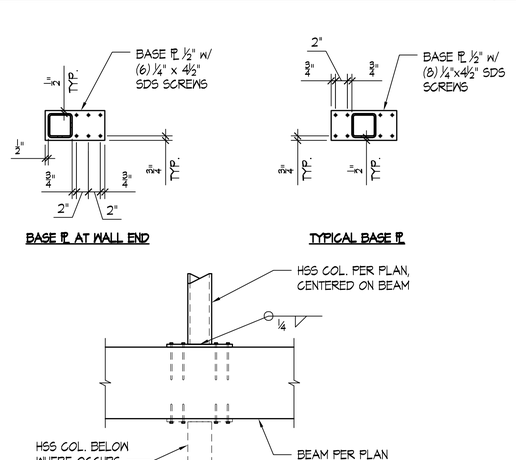
SECTION A

TYPICAL FLUSH BEAM SUPPORTING STEEL BEAM SCALE: 1"=1'-0" 9

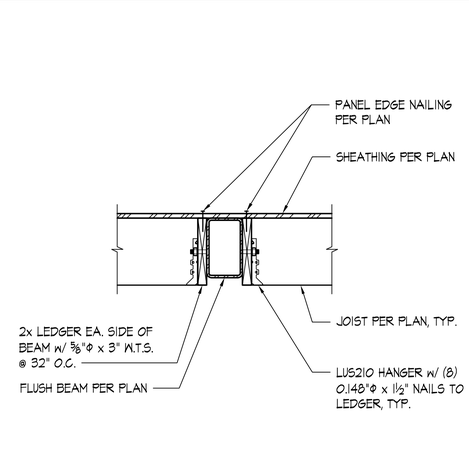


NOTE:
FOR INFORMATION NOT NOTED, SEE 2/S6.0

PARAPET AT STEEL BEAM SCALE: 1"=1'-0" 10



HSS COLUMN AT GL BEAM SCALE: NONE 11



FLUSH STEEL BEAM AT FLOOR SCALE: NONE 12

QUANTUM
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SEAL:

PROJECT:

HONG AND KAO RESIDENCE

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APPROVAL:

NO.	DESCRIPTION	DATE	BY
1	REV 1	10/13/23	
	PERMIT SET	6/7/23	

ISSUES: ◯ REVISIONS: △

P.M.	SHT
P.E.	MKS
DRAWN BY:	TA
SCALE:	AS SHOWN
DATE:	6/7/23
JOB NO.	23127.01

SHEET TITLE:

WOOD AND STEEL DETAILS

SHEET NO.

S6.0

File: 127-4600.dwg Plotted: Fri, 10/13/2023 10:43 am