

PROPERTY DATA CONSTRUCTION DATA PROJECT ADDRESS SCOPE OF WORK: 8035 SE 45TH ST MERCER ISLAND 98040 WEST SIDE OF HOUSE WALLS REMOVED & REBUILT LOT AREA REMAIN EAST OF ENTRY & NEW ROOF FOR HOUSE | BARRIER PER TABLE R-402.4.1.1 25,130 SF AND GARAGE. ASSESSOR'S TAX NUMBER GROSS FLOOR AREA 770010-0091 10,000 S.F. OR 40% OF LOT AREA, WHICHEVER

LEGAL DESCRIPTION

SEWARD ADD POR OF 16 THRU 19 LY W OF LN RNG N

00-16-04 E 100 FT FR PT ON S LN OF 19 49.95 FT E OF

SW COR TH S 89-43-56 W ALG S LN OF 17 0.25 FT M/L

101.28 FT M/L TO N LN OF 16 & POR 32 THRU 34 LY E OF

TO PT 81.10 FT E OF SW COR OF 17 TH N 00-16-04 E

LN BEG ON NLY LN OF LOT 34 5.28 FT W OF NE COR

THOF TH S 27-09-40 W 24.75 FT TH ON CURVE TO LFT

LOT WIDTH>90'=115.43' X 17% = 19.6' COMBINED

30'-0" FEET FROM THE 'AVERAGE BUILDING

ELEVATION'. 30'-0" ON DOWNHILL SIDE FROM

EXISTING OR FINISHED GRADE TO TOP PLATE

OF ROOF. WITH ROOF RIDGE NOT EXCEEDING

BUILDING ELEVATION CALCULATIONS AND

HIGHEST ELEVATION POINT OF LOT = 204.1'

LOWEST ELEVATION POINT OF LOT = 182.9'

SEE 1/A -1.2 FOR LOT COVERAGE DIAGRAM

30' ABOVE THE ABE. SEE 1/A-1.0 FOR AVERAGE

S 64-59-11 E 68.47 FT TO S LN LOT 32

ZONING DESIGNATION

FRONT YARD: 20'-0"

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EAST SIDE YARD = 7'

REAR YARD: 25'

LOT SLOPE

LOT COVERAGE

WEST SIDE YARD = 12.6'

SEE 1/A-1.2 FOR SETBACKS

RESIDENCE HEIGHT LIMIT

HEIGHT LIMIT DETERMINATION.

ELEVATION DIFFERENCE = 21.2'

HIGH AND LOW POINTS = 140.3'

LOT SLOPE: 21.2/140.3 = 15.1%

HORIZONTAL DISTANCE BETWEEN

SIDE YARD DETERMINATION:

MIN SIDE YARD = 19.6' X 33% = 6.5'

SETBACKS

RAD 144 FT DIST 110.75 FT TH S 16-54-20 E 35.79 FT TH

NET LOT AREA = 25,130.0 S.F. X 40% ALLOWABLE GROSS FLOOR AREA = 10,052 S.F.

GFA CALCULATION MEASURED FROM EXTERIOR FACES OF BUILDING) LOWER FLOOR: 706 S.F. MAIN FLOOR: 3,981 S.F. GARAGE/SHOP: 1,283 S.F.

5,970 S.F. < 10,052 S.F (THEREFORE GFA IS OK)

**ENERGY DATA** PRESCRIPTIVE COMPLIANCE INSULATION & FENESTRATION REQUIREMENTS (2018 WASHINGTON STATE ENERGY CODE) CLIMATE ZONE

PROVIDE MANDATORY CERTIFICATE PER R401.3 PROVIDE MIN BUILDING THERMAL ENVELOPE OR BETTER PER SECTION R402 FENESTRATION U-FACTOR SKYLIGHT U-FACTOR CEILING R-VALUE

VAULTED CEILING WOOD FRAMED WALL R-VALUE 21 INT. MASS WALL R-VALUE FLOOR R-VALUE BELOW GRADE WALL R-VALUE SLAB R-VALUE WINDOW AND DOOR HEADER R-VALUE

PROVIDE INSULATION SPECIFIED PER R402.2 ON EXISTING FOUNDATION AND SLAB, WALLS TO PROVIDE CONTINUOUS AIR BARRIER & THERMAL

| ENERGY DATA

THE BUILDING ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE PER R402.4

PROVIDE TESTING OF BUILDING ENVELOPE PER R402.4.1.2

FENESTRATION AIR LEAKAGE TESTING FOR WINDOWS, SKYLIGHTS, AND SLIDING GLASS DOORS

TO COMPLY PER R402.4.3 RECESSED LIGHTING IN THE BUILDING THERMAL

ENVELOPE TO COMPLY PER R402.4.4 FENESTRATION TRADE OFFS PER SECTION R4-2.1.4

OR R405 NOT APPLICABLE PROVIDE MANDATORY CONTROLS OF CONDITIONING SYSTEMS PER SECTION R403

BUILDING FRAMING CAVITIES PER R403.2.3 SHALL NOT BE USED AS DUCTS OR PLENUMS

PROVIDE MECHANICAL PIPING INSULATION PER R403.3 MINIMUM R-6 MECHANICAL DUCTS OUTSIDE OF THE THERMAL ENVELOPE SHALL BE INSULATED A MINIMUM OF R-8 PER SECTION R403.2.1 MECHANICAL DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED AND TESTED PER PER R403.2.2 JOINTS AND SEAMS TO COMPLY WITH ADOPTED IMC OR IRC

CIRCULATING HOT WATER SYSTEMS SHALL BE PROVIDED WITH AN AUTOMATIC OR ACCESSIBLY MANUAL SHUT OFF SWITCH PER R403.4.1

PER R403.4.2 INTERIOR VENTILATION PROVIDE INTERMITTENT WHOLE-HOUSE VENTILATION

PROVIDE MINIMUM R-4 HOT WATER PIPE INSULATION

PER IRC M1507.3 AND 2012 WSEC SECTION R403.5 SYSTEM FAN EFFICANCY PER TABLE R403.5.1

PROVIDE EQUIPMENT HEATING AND COOLING SIZING PER R403.6 ELECTRICAL POWER AND LIGHTING SYSTEMS TO 21 INT. COMPLY WITH SECTION R404

> SIMULATED PERFOMANCE ALTERNATIVE PER SECTION R405 NOT APPLICABLE

2018 WSEC ENERGY CREDIT OPTIONS EACH DWELLING UNIT IN ONE AND TWO FAMILY DWELLINGS AND TOWNHOUSES, AS DEFINED IN SECTION 101.2 OF THE IRC SHALL COMPLY WITH SUFFICIENT OPTIONS FROM TABLE R406.2 SO AS TO ACHIEVE THE FOLLOWING MINIMUM # OF

CATEGORY: MEDIUM DWELLING UNIT: 6 CREDITS.

TABLE R406.2 ENERGY CREDITS SELECTED

ENERGY DATA

SYSTEM TYPE: 1 COMBUSTION HEATING EQUIPMENT MEETING MINIMUM FEDERAL EFFICIENCY STANDARDS FOR THE EQUIPMENT LISTED IN TABLE C403.3.2(4) OR C403.3.2(5) OPTION 1.1

CREDITS: 0.5 PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS: VERTICAL FENESTRATION U = 0.24

OPTION 2.1 CREDITS 0.5 COMPLIANCE BASED ON R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALS

FOR R-2 OCCUPANCIES, OPTIONAL COMPLIANCE BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 0.3 CFM/FT2 MAXIMUM AT 50 PASCALS

ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE INTERNATIONAL RESIDENTIAL CODE OR SECTION 403.8 OF THE INTERNATIONAL MECHANICAL CODE SHALL BE MET WITH A HIGH EFFICIENCY FAN(S) (MAXIMUM 0.35 WATTS/CFM), NOT INTERLOCKED WITH THE FURNACE FAN (IF PRESENT). VENTILATION SYSTEMS USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED. PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION ONLY MODE. OPTION 3.5

CREDITS 1.5 AIR-SOURCE, CENTRALLY DUCTED HEAT PUMP WITH MINIMUM HSPF OF 11.0. OPTION 4.2

CREDITS 1.0 HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF **SECTION R403.3.7.** 

LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION. OPTION 5.5 CREDITS 2.0

WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER III OF NEEA'S ADVANCED WATER HEATING SPECIFICATION OPTION 7.1 CREDITS 0.5 ALL OF THE FOLLOWING APPLIANCES SHALL BE NEW AND INSTALLED IN THE DWELLING UNIT AND SHALL MEET THE

FOLLOWING STANDARDS: DISHWASHER – ENERGY STAR RATED REFRIGERATOR (IF PROVIDED) – ENERGY STAR RATED

TOTAL CREDITS: 6.0

2018 INTERNATIONAL RESIDENTIAL CODE (IRC)

2018 INTERNATIONAL MECHANICAL CODE (IMC)

VENTILATION DATA SYSTEM DESIGN

THIS SYSTEM IS DESIGN/BUILD SYSTEM CRITERIA

PER 2018 IRC TABLE M1507.3.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS: PROVIDE 135 CFM

PER 2018 IRC TABLE M1507.3.3 (2) INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS, RUN TIME % IN EACH 4-HOUR SEGMENT TO BE 75% WITH A FACTOR OF 1.3: 135 CFM X 1.3 = 175.5 CFM

PER 2018 IRC M1507.3.6.1 ALL HABITABLE SPACES SHALL RECEIVE FILTERED VENTILATION AIR.

MINIMUM OF .35 AIR EXCHANGES PER HOUR FOR ALI HABITABLE ROOMS. MAXIMUM OF .50 AIR EXCHANGES PER HOUR FOR ALL HABITABLE ROOMS.

SYSTEM COMPONENTS INTAKE GRILL & DUCTING (FROM EXTERIOR) MOTORIZED DAMPER ELECTRIC AIR TEMPERING UNIT INTAKE BLOWER DISTRIBUTION DUCTING (HABITABLE ROOMS) DISTRIBUTION GRILLS (HABITABLE ROOMS)

EXHAUST DUCTING EXHAUST PORT WITH BACK DRAFT DAMPER

ELECTRIC EXHAUST FAN

SYSTEM FUNCTION INTAKE BLOWER, AIR TEMPERING UNIT, AND EXHAUST FAN TO BE CONNECTED TO TIMER FOR SYNCHRONIZED, INTERMITTENT USE THROUGHOUT EACH DAY. FRESH AIR FROM THE EXTERIOR IS PULLED THROUGH AIR TEMPERING UNIT, THEN DISTRIBUTED THROUGH DUCTING TO ALL HABITABLE ROOMS. A BALANCED QUANTITY OF AIR IS SIMULTANEOUSLY EVACUATED FROM THE INTERIOR VIA THE EXHAUST FAN DUCTED TO THE EXTERIOR.

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> DESCRIPTION DATE 2023-07-12 PERMIT SET 2024-05-01 REVISED PERMIT SET

**REVISIONS** 

A REVISION



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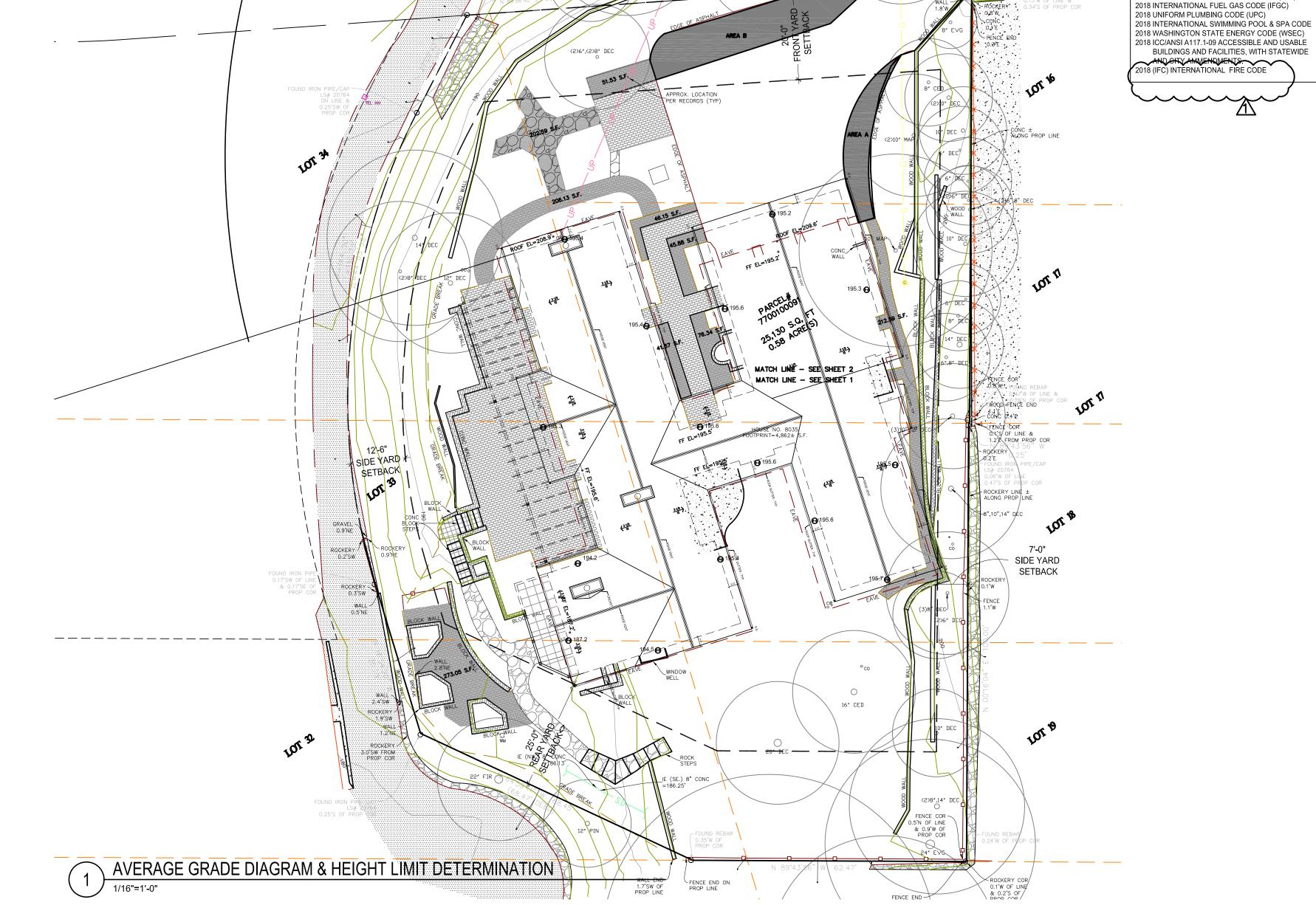
Kirkland, WA 98003

## **ADAMS RESIDENCE**

8035 SE 45TH ST MERCER ISLAND 98040

PROJECT INFO & ZONING DIAGRAMS

VICINTY MAP NOT TO SCALE





PATIO VIEW NOT TO SCALE

#### GENERAL NOTES

ASSUMPTIONS.

- 1. ALL WORK SHALL COMPLY WITH THE 2018 IRC WITH WASHINGTON AND CITY AMMENDMENTS.
- 2. ALL APPLICABLE CODES, ORDINANCES AND MINIMUM STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER ALL DRAWINGS, NOTES AND SPECIFICATIONS.
- 3. DO NOT SCALE DRAWINGS; USE PRINTED DIMENSIONS ONLY. NOTIFY ARCHITECT OF ANY OMISSIONS OR DISCREPANCIES BEFORE PROCEEDING WITH WORK IN QUESTION.
- 4. CONTRACTOR MUST CONTACT ARCHITECT IMMEDIATELY FOR ANY DISCREPANCIES IN CONTRACT DOCUMENTS OR EXISTING CONDITIONS PRIOR TO PROCEEDING WITH WORK.
- 5. CONTRACTOR MUST CONTACT ARCHITECT IMMEDIATELY FOR ANY DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND APPLICABLE CODES PRIOR TO PROCEEDING WITH WORK.
- 6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, GRADES AND EXISTING CONDITIONS BEFORE PROCEEDING
- 7. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF/HERSELF WITH ALL ASPECTS OF THE WORK
- PRIOR TO CONTRACTING WITH THE OWNER TO PERFORM THE WORK. 8. CONTRACTOR SHALL VERIFY CONFORMANCE OF ACTUAL SOIL CONDITIONS WITH SOILS REPORT AND DESIGN
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS FOR THE WORK, EXCEPT
- FOR THE BUILDING PERMIT WHICH IS THE RESPONSIBILITY OF THE ARCHITECT. 10. GUARANTEE ON ALL MATERIALS AND WORKMANSHIP TO BE (1) YEAR FROM DATE OF COMPLETION UNLESS
- NOTED OTHERWISE IN CONTRACT.
- 11. REPETITIVE FEATURES MAY BE DRAWN ONLY ONCE, BUT SHALL BE PROVIDED AS IF DRAWN IN FULL. REPETITIVE NOTES MAY BE CALLED OUT ONLY ONCE AND INDICATED AS TYPICAL.
- 12. DIMENSIONS ARE TO FACE OF STUD OR FACE OF CONCRETE OR CENTERLINE OF INTERIOR COLUMNS UNLESS NOTED OTHERWISE.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS AND NOTIFYING THE ARCHITECT OF ANY DISCREPANCIES IN FRAMING PRIOR TO PROCEEDING
- 14. THIS PROJECT TO BE DESIGN-BUILD IN THE AREAS OF MECHANICAL, ELECTRICAL AND PLUMBING.

#### JOB SITE SAFETY

- 1. THE ARCHITECT HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND/OR CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS.
- 2. PERIODIC SITE VISITS PERFORMED BY THE ARCHITECT SHALL NOT BE CONSTRUED AS SUPERVISION OF ACTUAL CONSTRUCTION SAFETY PRECAUTIONS.
- 3. THE ARCHITECT IS NOT RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES OR EMPLOYEES OF SUPPLIERS OR SUBCONTRACTORS, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL OR OCCUPANCY BY ANY PERSON.

- 1. ALL EXCAVATION AND FILL SHALL BE STORED AND PROTECTED SUCH AS TO PREVENT RUN OFF OF MATERIAL TO ADJACENT PROPERTIES.
- 2. FOOTING DRAIN SHALL BE SEPARATE FROM ROOF AND IMPERVIOUS AREA DRAINS.
- 3. DOWNSPOUT DRAIN SHALL BE 4" DIAMETER TIGHTLINE UNLESS NOTED OTHERWISE
- 4. FOOTING DRAIN SHALL BE 4" DIAMETER PERFORATED PIPE UNLESS NOTED OTHERWISE
- 5. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH REQUIRED SEPTIC AND/OR STORM WATER DETENTION

#### EARTH WORK

- 1. EXTEND EXCAVATION DOWN TO UNDISTURBED SOIL OF THE SPECIFIED STRENGTH WITH A MINIMUM OF 18" BELOW LOWEST ADJACENT FINISH GRADE.
- 2. COMPACTED FILL SHALL BE WELL GRADED AND GRANULAR WITH NOT MORE THAN 5% PASSING A 200 SIEVE. PLACE IN 8" LOOSE LIFTS AND COMPACT TO 95% MODIFIED AASHO DENSITY AT OPTIMUM MOISTURE CONTENT.
- 3. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

#### **ENERGY NOTES**

- 1. ALL WORK SHALL COMPLY WITH THE RESIDENTIAL PROVISIONS OF THE 2018 WASHINGTON STATE ENERGY CODE (WSEC).
- 2. HEATING UNIT(S) SHALL MAINTAIN 70 DEGREES FAHRENHEIT AT 36" ABOVE FLOOR WHEN OUTSIDE TEMPERATURE IS 24 DEGREES FAHRENHEIT, OR CURRENT REQUIREMENTS.
- PROVIDE NIGHT SETBACK THERMOSTAT.
- 4. CAULK ALL JOINTS AROUND EXTERIOR OPENINGS AND ALL JOINTS IN SIDING AND FLASHING WHERE INFILTRATION MAY BE POSSIBLE.
- 5. SEAL ALL TEARS AND JOINTS IN INSULATION WITH APPROVED TAPE.
- 6. SHOWER FLOW CONTROL SHALL BE LIMITED TO 2.5 GALLONS PER MINUTE, OR CURRENT REQUIREMENTS.
- 7. ALL CRAWLSPACES SHALL HAVE A MINIMUM OF 6 MIL BLACK VISQUEEN GROUND COVER EXTENDED OVER THE TOP OF THE FOOTINGS. LAP ALL JOINTS 12" MINIMUM.
- 8. FIREPLACE(S) SHALL HAVE TIGHT FITTING DAMPERS AND SHALL BE PROVIDED WITH A MINIMUM OF 6 SQUARE INCHES OF OUTSIDE COMBUSTIBLE AIR SUPPLY.
- 9. METAL DUCTS OUTSIDE THE CONDITIONED SPACE SHALL BE INSULATED TO R-8 MINIMUM PER THE 2018 WSEC, SECTION R403.2.1. PROVIDE WEATHER BARRIER IF LOCATED ON THE EXTERIOR OF THE BUILDING.
- 10. HOT WATER PIPES SHALL BE WRAPPED WITH INSULATION (R-4 MINIMUM) PER THE 2018 WSEC, SECTION R403.4.2.
- 11. WATER HEATER(S) SHALL MEET 1987 NATIONAL APPLIANCE ENERGY CONSERVATION ACT.
- 12. MINIMUM INSULATION VALUES UNLESS NOTED OTHERWISE:
- CEILING R-49 (1" clear vent space) CATHEDRAL CEILING R-38 (1" clear vent space) ABOVE GRADE WALL R-21 (Interior) w/ thermal break @ slab BELOW GRADE WALL BELOW GRADE WALL R-10 (Exterior) R-30 FLOOR R-10 (First 24")

SLAB ON GRADE

- WINDOW AND DOOR HEADER R-10 13. VAPOR RETARDER SHALL BE INSTALLED ON THE CONDITIONED ROOM SIDE OF THE INSULATION.
- 14. BLOWER DOOR TESTING: AIR LEAKAGE SHALL NOT EXCEED 5 AIR CHANGES/HOUR, AND SHALL BE TESTED PER THE 2018 WSEC, SECTION R402.4.1.2. PROVIDE A WRITTEN REPORT OF THE TEST RESULTS, SIGNED BY THE TESTING PARTY, TO THE BUILDING INSPECTOR, PRIOR TO APPROVED FINAL INSPECTION.
- 15. 75% MIN. OF LUMINAIRES TO BE HIGH EFFICACY LUMINARIES PER THE 2018 WSEC, SECTION R404.1.

#### **VENTILATION NOTES**

- 1. VENTILATION AND EXHAUST SYSTEMS TO COMPLY WITH THE REQUIREMENTS OF CHAPTER 15 OF THE 2018 WASHINGTON RESIDENTIAL CODE (WRC).
- 2. SOURCE SPECIFIC FANS SHALL BE LOCATED IN ALL KITCHENS. BATHROOMS, WATER CLOSETS, AND LAUNDRY FACILITIES IN COMPLIANCE WITH THE 2018 WRC, SECTION M1507.4 VENTILATION CAPACITY SHALL BE AT LEAST 50 C.F.M. FOR BATHROOMS, WATER CLOSETS, AND LAUNDRY ROOMS (Intermittent use) AND 100 C.F.M. FOR KITCHENS (INTERMITTENT USE). RANGE HOODS SHALL BE EXHAUSTED IN ACCORDANCE WITH SECTION
- 3. CLOTHES DRYERS SHALL BE EXHAUSTED IN ACCORDANCE WITH THE 2018 WRC, SECTION M1502. DUCT LENGTH SHALL NOT EXCEED 35 FEET, PLUS THE LENGTH OF THE TRANSITION DUCT, LESS THE EQUIVALENT LENGTH OF FITTINGS PER TABLE M1502.4.4.1.
- 4. INTERMITTENT WHOLE HOUSE VENTILATION SYSTEM SHALL COMPLY WITH THE 2018 WRC, SECTION M1507.3. INTERMITTENT VENTILATION SHALL OCCUR AT LEAST 25% OF EACH 4-HOUR SEGMENT. VENTILATION RATE SHALL BE NOT LESS THAN AS SPECIFIED BY TABLE M1507.3.3(1), MULTIPLIED BY THE RATE FACTOR INDICATED ON TABLE M1507.3.3(2). FAN SHALL HAVE A SONE RATING OF 1.0 OR LESS MEASURED AT 0.1 INCHES WATER GAUGE. OUTDOOR AIR SHALL BE PROVIDED TO ALL HABITABLE ROOMS.
- 5. EXHAUST DUCT WORK SHALL CONFORM TO THE 2018 WRC, CHAPTER 16. EXHAUST DUCTING TERMINATIONS SHALL BE OUTSIDE THE BUILDING, SHALL BE LOCATED IN COMPLIANCE WITH SECTION M1506.2, AND SHALL BE EQUIPPED WITH BACKDRAFT DAMPERS.
- 6. SUPPLY DUCTS WITHIN CONDITIONED SPACE SHALL BE INSULATED TO A MINIMUM OF R-4.
- 7. PROVIDE A MINIMUM NET AREA OF 1 SQUARE FOOT OF VENTILATION AREA FOR EACH 300 SQUARE FEET OF CRAWLSPACE AREA. PLACE OPENINGS AS NEAR AS TO CORNERS AS PRACTICABLE AND SHALL PROVIDE
- 8. ALL CRAWLSPACE VENTS SHALL BE PROVIDED WITH 1/4" NON-CORROSIVE WIRE MESH.
- 9. PROVIDE A MINIMUM NET AREA OF 1 SQUARE FOOT OF VENTILATION AREA FOR EVERY 150 SQUARE FEET OF ATTIC AREA. PROVIDE A CONTINUOUS 1 INCH MINIMUM AIR SPACE ABOVE INSULATION FOR CROSS VENTILATION.
- 10. ALL ATTIC VENTS SHALL BE PROVIDED WITH 1/4" NON-CORROSIVE WIRE MESH OR APPROVED SOFFIT VENTS. MOISTURE PROTECTION
- PROVIDE PRESSURE TREATED PLATES BETWEEN CONCRETE AND FRAMING.
- 2. PROVIDE A MINIMUM OF 12" CLEAR BETWEEN WOOD GIRDERS AND EARTH.
- 3. PROVIDE A MINIMUM OF 18" CLEAR BETWEEN WOOD JOISTS AND EARTH.
- 4. PROVIDE A MINIMUM OF 8" CLEAR BETWEEN WOOD POSTS AND EARTH.

PROVIDE A MINIMUM OF 1" CLEAR BETWEEN WOOD POSTS AND CONCRETE FLOORS.

- 6. CAULK ALL OPENINGS THOROUGHLY.
- 7. FLASH ALL OPENINGS WITH A MINIMUM OF 26 GAUGE GALVANIZED STEEL TO ACCEPTABLE INDUSTRY STANDARDS.
- 8. METAL COPING AT PARAPET TO BE A MINIMUM OF 22 GAUGE GALVANIZED STEEL.

#### FIRE PROTECTION

- 1. 1. THE GARAGE SHALL BE SEPERATED FROM THE RESIDENCE AND IT'S ATTIC BY NOT LESS THAN THE
- FOLLOWING: 1.1. NOT LESS THAN (1) LAYER OF 5/8" TYPE "X" GYPSUM WALLBOARD APPLIED TO ALL GARAGE WALLS. NOT LESS THAN (2) LAYERS OF 5/8" TYPE "X" GYPSUM WALLBOARD AT CEILINGS.
- 1.2. 1-3/8" MINIMUM THICK, SOLID CORE, OR HONEYCOMB CORE STEEL DOOR, OR A 20-MIN. FIRE-RATED
- 1.3. DUCTS PIERCING FIRE SEPARATION TO BE A MINIMUM OF 26 GAUGE, AND HAVE NO OPENINGS INTO THE GROUP "U" OCCUPANCY.
- 2. FIRE SEPARATION TO BE HORIZONTAL AND VERTICAL INCLUDING ALL STRUCTURAL MEMBERS SUPPORTING THE FIRE SEPARATION.
- 3. ALL ENCLOSED USEABLE SPACE UNDER STAIRWAYS SHALL BE (1) LAYER OF 5/8" TYPE 'X' GYPSUM
- WALLBOARD ON ENCLOSED SIDE.

4. SMOKE DETECTORS SHALL BE HARD WIRED TO BUILDING POWER AND SHALL HAVE BATTERY BACKUP.

- 5. SMOKE DETECTORS SHALL BE AUDIBLE IN ALL SLEEPING ROOMS, AND OUTSIDE EACH SLEEPING AREA IN THE
- IMMEDIATE VICINITY OF THE BEDROOMS.
- 6. A MINIMUM OF (1) SMOKE DETECTOR SHALL BE INSTALLED ON EACH FLOOR INCLUDING THE GARAGE.
- 7. FIRESTOPPING AND DRAFTSTOPPING SHALL CONSIST OF 2" NOMINAL LUMBER.
- 8. FIRESTOPPING AND DRAFTSTOPPING IS REQUIRED IN THE FOLLOWING PLACES: 8.1. CONCEALED SPACES AT ALL FLOOR AND CEILING LEVELS AND AT 10 FOOT INTERVALS ALONG THE LENGTH OF THE WALL.
- 8.2. INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES (I.E., SOFFITS) CONCEALED SPACES BETWEEN STAIR STRINGERS AT TOP AND BOTTOM OF THE RUN.
- 9. ROCK WOOL AROUND ALL OPENINGS FOR VENTS, PIPES, DUCTS, ETC.
- 10. EMERGENCY EGRESS WINDOWS SHALL MEET THE FOLLOWING REQUIREMENTS:
- 11. PREFABRICATED FIREPLACES SHALL BEAR U.L. OR I.C.B.O. SEAL OF APPROVAL AND SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS.
- 12. CAFFARANCE VIEW TRATING A GLOW MAISTANK, OR FLAME MAY BE INSTALLED IN THE GARAGE PROVIDED THE CHEATROPELENTER AND SWIZE HEROMRED 8" ABOVE THE FLOOR. CLEAR OPEN AREA 5.7 s.f. (Minimum)
- 13. SEMPHORE TO BE CONSTACTION OF NON COMBUSTIBLE MATERIAL (CONCRETE).
- 14. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE 2012 WASHINGTON RESIDENTIAL CODE.

### SHOP DRAWINGS

- SHOP DRAWINGS ARE REVIEWED FOR DESIGN INTENT ONLY.
- 2. THE CONTRACTOR IS TO REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ARCHITECT OR STRUCTURAL ENGINEER.
- 3. SEE STRUCTURAL NOTES AND PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND CLARIFICATIONS REGARDING SHOP DRAWINGS.

#### SAFETY AND SECURITY

- 1. DEADBOLTS WITH A MINIMUM THROW OF 1/2" AND A VIEWPORT ARE REQUIRED AT ALL EXTERIOR DOORS
- 2. DEADBOLTS OR APPROVED LOCKING DEVICES ARE REQUIRED ON ALL SLIDING DOORS.
- 3. ALL LOCKS SHALL BE OPENABLE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT
- 4. WINDOWS WITHIN 10'-0" OF FINISHED GRADE SHALL BE PROVIDED WITH LATCHING DEVICES.
- 5. STAIRWAYS SHALL MEET THE FOLLOWING REQUIREMENTS: OCCUPANCIES LESS THAN 10

STAIR WIDTH 36" (Minimum) TREAD WIDTH 10" (Minimum), 6" Minimum for Winders RISER HEIGHT 7 3/4" (Maximum) 80" (Minimum) HEADROOM 34" to 38" above nosing HANDRAIL HEIGHT HANDRAIL GRASP 1-1/4"(Min) to 2" (Max)

- 6. HANDRAIL INTERMEDIATE MEMBERS SHALL BE CONFIGURED AS TO PROHIBIT PASSING A 4" DIAMETER SPHERE THROUGH ANY OPENING.
- 7. GUARDRAILS SHALL BE A MINIMUM OF 36" ABOVE FINISH FLOOR.
- 8. GUARDRAIL INTERMEDIATE MEMBERS SHALL BE CONFIGURED AS TO PROHIBIT PASSING A 4" DIAMETER SPHERE THROUGH ANY OPENING.

#### NATURAL LIGHT

1. PER WA AMMENDMENT TO IRC 303.1: ALL HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA OF SUCH ROOMS.

EXCEPTION: THE GLAZED AREAS NEED NOT BE INSTALLED IN ROOMS WHERE ARTIFICIAL LIGHT IS PROVIDED CAPABLE OF PRODUCING AN AVERAGE ILLUMINATION OF 6 FOOTCANDLES (65 LUX) OVER THE AREA OF THE ROOM AT A HEIGHT OF 30" (762 MM) ABOVE THE FLOOR LEVEL.

- 1. ALL GLAZING SHALL BE (2) PANE INSULATED GLASS OR BETTER UNLESS NOTED OTHERWISE.
- SLIDING DOORS SHALL BE SAFETY GLASS, LAMINATED GLASS, OR TEMPERED GLASS.
- 3. SHOWER DOORS AND ENCLOSURES SHALL BE SAFETY GLASS, LAMINATED GLASS, OR TEMPERED GLASS.
- 4. REFER TO WINDOW SCHEDULE FOR ADDITIONAL REQUIREMENTS.

#### BATHROOM NOTES

- 1. WALL COVERINGS IN SHOWERS SHALL BE MOISTURE RESISTANT MATERIAL TO 72" (Minimum) ABOVE DRAIN INLET.
- 2. TOILET SHALL HAVE CLEAR SPACE OF 30" WIDE (Minimum) AND 24" CLEAR (Minimum) IN FRONT OF STOOL.

DRAWING	LEGEND	
SYMBOL	DESCRIPTION	REMARKS
2	WINDOW SYMBOL	See Window Schedule
A	DOOR SYMBOL	See Door Schedule
202	SPACE NUMBER	See Finish Schedule
2	GRID LINE	
A-12	MATCH LINE	
40'-8" T.O. Slab	VERTICAL DATUM POINT	
Stone Wood	SURFACE MATERIAL CHANGE	
DWG/SHEET BLDG, SECT.	DETAIL REFERENCE	
DWG	SECTION CUT REFERENCE	
1 4 SHT 2	INTERIOR ELEVATION REFERENCE	See Interior Elevations

MATERIAL SYMBOL LEGEND				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	EARTH / COMPACT FILL		ROUGH WOOD FRAMING	
	GRAVEL / POROUS FILL		WOOD BLOCKING	
4 A A	CONCRETE		PLYWOOD	
	CMU / BRICK / STONE VENEER		FINISH WOOD	
	GYPSUM WALL BOARD / PLASTER		BATT INSULATION	
	STEEL OR OTHER METALS		RIGID INSULATION	
	NATURAL STONE			

### ABBREVIATION LIST

ADDT

ADJ

AFF

AGG

ALUM

APPR

ARCH

ASPH

BLDG

BLK

BM

ВО

BOF

BOT BOW

BRG

**BSMT** 

BTB

BUR CAB

CAP

CATV

CB

CIP

CJ

CLG

CLKG

CLR

CMU

CNTR

CONC

CONST

CONT

CRV

CRW

CSMT

CT

CY

DCU

ELEC

ELEV

**ENCL** 

ENG

**EQUIP** 

EXIST

EW

EXT

FIN

**FLASH** 

**FLUOR** 

FLR

FND

FOC

FOF

FOS

FT

FTG

GΑ

GAL

GALV

GFI

GLB

GR

**GWB** 

GYP

HDR

HDWD

**HDWR** 

HGR

HORZ

HWT

IDS

INSUL

FRMG

ELECTRIC

ELEVATION

**ENCLOSURE** 

ENGINEER

FOUIPMENT

EACH WAY

EXISTING

EXTERIOR

FLAT BAR

FINISH

FLOOR

FLASHING

FLOOR DRAIN

FINISH FLOOR

FLUORESCENT

FACE OF FINISH

FACE OF STUD

FRAMING

FOOT/FEET

FOOTING

GAUGE

GALLON

GYPSUM

HOSE BIBB HOLLOW CORE

HEAVY DUTY

HARDWOOD

HARDWARE

HORIZONTAL

HOT WATER TANK

INSIDE DIAMETER

INTERIOR DOWNSPOUT

HANGER

HOUR

INCH

INSULATION

INTERIOR

HEIGHT

HEADER

HEIGHT

GALVANIZED

GROUND FAULT INTERRUPTER

GLU-LAMINATED BEAM

GYPSUM WALL BOARD

FACE OF CONCRETE

FOUNDATION

EQUAL

CONTR CPT

CO COL

BTWN

ALT

ANCHOR BOLT	JST	JOIST
ABOVE	JT	JOINT
AIR CONDITIONING	KD	KILN DRIED
ACOUSTICAL TILE	LAM	LAMINATED
AREA DRAIN	LB	POUNDS
ADDITIONAL	LF	LINEAL FOOT
ADJUSTABLE ABOVE FINISH FLOOR	LH	LEFT HAND
AGGREGATE	LL	LIVE LOAD
ALTERNATE	LT	LIGHT
ALUMINUM	LTG	LIGHTING
APPROXIMATE	MATL	MATERIAL
ARCHITECT/ARCHITECTURAL	MAX	MAXIMUM
ASPHALT	MB	MACHINE BOLT
BOARD	MC MECH	MEDICINE CABINET MECHANICAL
BELOW	MEMB	MEMBRANE
BUILDING	MFR	MANUFACTURER
BLOCKING BEAM	MILP	MAKE IT LOOK PRETTY
BY OTHERS	MIN	MINIMUM
BOTTOM OF FOOTING	MIR	MIRROR
BOTTOM	MISC	MISCELLANEOUS
BOTTOM OF WALL	MTL	METAL
BEARING	N	NORTH
BASEMENT	NA	NOT APPLICABLE
BURY THE BODIES	NIC NO	NOT IN CONTRACT NUMBER
BETWEEN BUILT UP ROOFING	NOM	NOMINAL
	NTS	NOT TO SCALE
CABINET CAPACITY	0/	OVER
CABLE TELEVISION	OBSC	OBSCURE
CATCH BASIN	OC	ON CENTER
CAST IN PLACE	OD	OUTSIDE DIAMETER
CONTROL JOINT	OD	OVERFLOW DRAIN
CENTER LINE	OH	OVERHEAD
CEILING	OPNG	OPENING
CAULKING CLEAR	OPP	OPPOSITE
CONCRETE MASONRY UNIT	PBD	PARTICLE BOARD
CENTER	PERF PERP	PERFORATED PERPENDICULAR
CLEAN OUT	PH	PAPER HOLDER
COLUMN	PL	PLATE
CONCRETE	PL	PROPERTY LINE
CONSTRUCTION	PLAM	PLASTIC LAMINATE
CONTINUOUS CONTRACTOR	PLYWD	PLYWOOD
CARPET	POL	POLISHED
CONTINUOUS RIDGE VENT	PR PSF	PAIR POUNDS PER SQUARE FOO
CONCRETE RETAINING WALL	PSI	POUNDS PER SQUARE INCH
CASEMENT	PT	PRESSURE TREATED
CERAMIC TILE	PTD	PAINTED
CUBIC YARD	QT	QUARRY TILE
PENNY	QTY	QUANTITY
DEEP	R	RADIUS
DRYER	R	RISER
DON'T ASK FOR DETAIL DOUBLE	RD	ROOF DRAIN
DON'T CALL US	REF	REFRIGERATOR
DIAMETER	REINF	REINFORCING
DIAGONAL	REQD	REQUIRED
DIMENSION	RH RJ	RIGHT HAND ROOF JACK/VENT
DOWN	RM	ROOM
DOOR	RO	ROUGH OPENING
DOWNSPOUT (EXTERIOR)	RV	RIDGE VENT
DETAIL DISHWASHER	S	SOUTH
DRAWING	SB	SETBACK
DRAWER	SB	SAND BLAST
EAST	SC	SOLID CORE
EACH	SCHED	SCHEDULE
EXPANSION JOINT	SF	SQUARE FOOT
ELEVATION	SHMTL SHTHG	SHEET METAL SHEATHING
ELECTRIC	ULLILLI	

SHTHG SIM SPECS SQ SS STL STD STL STOR STRUC SYM TEMP TEMP THK TOP TOS TOW TYP UBC UNO VCT VER **VERT** VG

SHEATHING SIMILAR **SPECIFICATIONS** SQUARE STAINLESS STAINLESS STEEL STANDARD STEEL STORAGE STRUCTURAL SOFFIT VENT SYMBOL TRFAD TELEPHONE TEMPERED TEMPERATURE TONGUE AND GROOVE THICK TOP OF TOP OF PLATE TOP OF SLAB TOP OF WALL **TELEVISION** TRAIN WRECK **TYPICAL** UNIFORM BUILDING CODE UNLESS NOTED OTHERWISE VINYL COMPOSITION TILE VERIFY VERTICAL VERTICAL GRAIN WATT WIDTH WITHOUT W/O WRB WATER RESISTANT BARRIER WD WOOD WP WATERPROOF WR WATER RESISTANT WS WOOD SCREW WWM WELDED WIRE MESH YD

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DATE DESCRIPTION 2023-07-12 PERMIT SET REVISIONS

DESIGN

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DRAWING SETS

SHEET ISSUE DATE 07.19.2022

Kirkland, WA 98003

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### **ADAMS RESIDENCE**

8035 SE 45TH ST MERCER ISLAND 98040

GENERAL NOTES

#### LEGAL DESCRIPTION TOPOGRAPHIC & BOUNDARY SURVEY (PER STATUTORY WARRANTY DEED RECORDING #20210222003556) THAT PORTION OF LOTS 16 THROUGH 19 AND LOTS 32 THROUGH 34. SEWARD ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 24 OF PLATS, PAGE 26, IN KING COUNTY, WASHINGTON, LEGEND STEEP SLOPE/BUFFER DISCLAIMER: DESCRIBED AS FOLLOWS: THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR AREA DRAIN NAIL AS NOTED BEGINNING AT A POINT ON THE NORTHERLY LINE OF SAID LOT 34 INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR FOUND MON IN CASE -WHICH BEARS SOUTH 85°56'42" WEST 5.28 FEET FROM THE CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR ASPHALT SURFACE MAILBOX (RESIDENTIAL) IRON PIPE, DOWN 1.1' GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE NORTHEAST CORNER THEREOF; VISITED 08/2013 PUBLIC DOCUMENTS; AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR BRICK SURFACE THENCE SOUTH 27°09'40" WEST 24.75 FEET; MONUMENT IN CASE (FOUND) THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR THENCE ON A CURVE TO THE LEFT HAVING A RADIUS OF 144 FEET SE 45TH ST OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED PAVER SURFACE A DISTANCE OF 110.75 FEET; BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR THENCE SOUTH 16°54'20" EAST 35.79 FEET; ---- CENTERLINE ROW P POWER METER THENCE SOUTH 64°59'11" EAST 68.47 FEET TO THE SOUTH LINE OF SAID LOT 32; CLEANOUT —— UP —— POWER (UNDERGROUND) THENCE SOUTH 89°43'57" EAST, ALONG THE SOUTH LINE, 12.50 SCO SEWER CLEANOUT REBAR AS NOTED (FOUND) FEET TO THE SOUTHEAST CORNER OF SAID LOT 32; THENCE CONTINUING ON THE SOUTH LINE OF LOT 19, SOUTH LOT 34 CULVERT PIPE 89°43'56" EAST 49.95 FEET; THENCE NORTH 00°16'04" EAST 100 FEET TO THE SOUTH LINE OF CONCRETE SURFACE —— SS —— SEWER LINE THENCE SOUTH 89°43'56" EAST, ALONG THE SOUTH LINE OF LOT 17, RETAINING WALL SEWER MANHOLE 0.25 FEET, MORE OR LESS, TO A POINT WHICH IS SOUTH 89°43'56" - X X FENCE LINE (CHAIN LINK) EAST 81.10 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 17; THENCE NORTH 00°16'04" EAST 101.28 FEET TO THE NORTH LINE OF ### FENCE LINE (IRON) TEL HH TELEPHONE HAND HOLE SAID LOT 16; THENCE WESTERLY, ALONG THE NORTH LINE OF SAID LOTS 16 AND SIZE TYPE ( o ) TREE (AS NOTED) FENCE LINE (WOOD) 34, SOUTH 85°56'42" WEST 115.43 FEET TO THE POINT OF FLAGSTONE SURFACE WM□ WATER METER ---- G ---- GAS LINE SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON. WVM WATER VALVE G GAS METER BASIS OF BEARINGS GRAVEL SURFACE COL COLUMN IP IRON PIPE (FOUND) N 16°54'20" W BETWEEN FOUND CENTERLINE MONUMENTATION ALONG FOREST AVE SE PER R1 **CONTROL MAP** REFERENCES R1. SEWARD ADDITION PLAT, VOL. 24, PG. 26, RECORDS OF KING COUNTY, WASHINGTON. R2. RECORD OF SURVEY, VOL. 52, PG. 180, RECORDS OF KING COUNTY, WASHINGTON. FOUND MON IN CASE R3. RECORD OF SURVEY, VOL. 114, PG. 62, 2" IRON PIPE, DOWN 1.0' RECORDS OF KING COUNTY, WASHINGTON. VISITED 08/2013 VERTICAL DATUM NAVD88 PER GPS OBSERVATIONS APPROX. LOCATION PER RECORDS (TYP) SURVEYOR'S NOTES APPROX. LOCATION PER PAINT MARKS (TYP) 1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN N 85'56'47" E SE 45TH ST JULY OF 2021. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS. 2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED. PSE MAP NO. 0197079 . THE TYPES AND LOCATIONS OF ANY UTILITIES SHOWN ON THIS DRAWING ARE BASED ON INFORMATION PROVIDED TO US. BY OTHERS OR GENERAL INFORMATION READILY AVAILABLE IN THE PUBLIC DOMAIN INCLUDING, AS APPLICABLE, IDENTIFYING MARKINGS PLACED BY UTILITY LOCATE SERVICES AND OBSERVED RIM=168.09' BY TERRANE IN THE FIELD. AS SUCH, THE UTILITY INFORMATION E./NW.) 8"CONC SHOWN ON THESE DRAWINGS ARE FOR INFORMATIONAL =158.09'(C.C.) PURPOSES ONLY AND SHOULD NOT BE RELIED ON FOR DESIGN OR CONSTRUCTION PURPOSES; TERRANE IS NOT RESPONSIBLE OR FOUND IRON PIPE 0.07'N OF PROP COR LIABLE FOR THE ACCURACY OR COMPLETENESS OF THIS UTILITY INFORMATION. FOR THE ACCURATE LOCATION AND TYPE OF N 85°56'47" E 115.43' UTILITIES NECESSARY FOR DESIGN AND CONSTRUCTION, PLEASE N 85'56'47" E 5.28' CALC N 85'56'42" E 5.28' DEED CONTACT THE SITE OWNER AND THE LOCAL UTILITY LOCATE SERVICE (800-424-5555). 0.13'W OF LINE & ROCKERYO 0.34'S OF PROP COR 4. SUBJECT PROPERTY TAX PARCEL NO. 7700100091. 5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 25,130± S.F. (0.58 ACRES) 6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE (2)6",(2)8" DEC REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON. 7. EXISTING STRUCTURE(S) LOCATION AND DIMENSIONS ARE MEASURED FROM THE FACE OF THE SIDING UNLESS OTHERWISE FOUND IRON PIPE/CAP LS# 20764 ON LINE & APPROX. LOCATION 8. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD PER RECORDS (TYP) 0.25'SW OF MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090. VICINITY MAP N.T.S. Mercer Island Library SITE Youth Theatre Northwest RIM=195.07' JOB NUMBER: 211187 ( IN FEET ) SE 45th St 07/14/21 1 INCH = 10 FT.35 SE 45th St, Mercer DRAFTED BY: Island, WA 98040, USA JGM/CSP CHECKED BY: Congregational Church 1" = 10' on Mercer Island REVISION HISTORY ≤ SE 46th St SE 46th S INDEXING INFORMATION NE 1/4 SE 1/4 SECTION: 13 TOWNSHIP: 24N 0.8'W WALL RANGE: 04E, W.M.

MATCH LINE - SEE SHEET 2

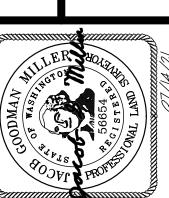
COUNTY: KING

SHEET NUMBER

1 OF 2

RESIDENCE

ADAM RESIL
8035 SE 457



2, Bellevue, WA 98004 support@terrane.net

Main Street, Suite 102 phone 425.458.4488

JOB NUMBER: 211187

DATE: 07/14/21

DRAFTED BY: RSN

CHECKED BY: JGM/CSP

SCALE: 1"= 10'

REVISION HISTORY

RANGE: <u>04E, W.M.</u> COUNTY: <u>KING</u> SHEET NUMBER
2 OF 2

(2)6",(2)8" DEC APPROX. LOCATION PER RECORDS (TYP) 195.3 MATCH LINE - SEE SHEET 2 MATCH LINE - SEE SHEET 1 0.8 W.4 FOUND REBAR WOOD FENCE END FENCE COR 0.1'S OF LINE & 1.2 FROM PROP COR SIDE YARD \* FL=195.5 195.6 ROCKERY LINE ± ALONG PROP LINE ...0.9'NE... ROCKERY? 0.2'SW SIDE YARD FOUND IRON PIH
0.17'SW OF LINE
& 0.17'SE OF
PROP COR SETBACK ROCKERY ....0.3.'SW∷ WALL 0.5 NE 16" CED ∴ROCKERY: 1.9′SW: ROCKERY < (2)8″,14″ DEC FENCE COR — D.5'N OF LINE & 0.9'W OF PROP COR ROCKERY COR/ 0.1'W OF LINE & 0.2'S OF/ WALL END -1.7'SW OF PROP LINE SITE PLAN SCALE: 3/32" = 1'-0"

#### AVERAGE BUILDING ELEVATION CALCULATION

LOT SLOPE CALCULATION:

HIGHEST ELEVATION POINT: 204.1 FEET

ELEVATION DIFFERENCE: 204.1 - 182.9 = 21.2 FEET

LOT SLOPE: (21.2 FEET / 140.3 FEET) \* 100 = 15.1%

HORIZONTAL DISTANCE BETWEEN HIGH AND LOW POINTS:

LOWEST ELEVATION POINT: 182.9 FEET

ABE=((24.2\*195.4)+(76.3\*195.3)+(13.6\*194.2)+(19.7\*187.2)+(37.6\*194.5)+(35.4\*195.4)+(23.2\*195.6)+ (35.3\*195.6)+(21.3\*195.7)+(49\*195.5)+(30.7\*195.3)+(32\*195.2)+(29.5\*195.6)+(18.5\*195.6)+(50\*195.4))/ (24.2+76.3+13.6+19.7+37.6+35.4+23.2+35.3+21.3+49+30.7+32+29.5+18.5+50) ABE=195.0'

MAXIMUM BUILDING HEIGHT = 30' ABOVE A.B.E. MAXIMUM BUILDING ELEVATION = 195.0' + 30' = 225'

CONTRACTOR TO VERIFY OVERHANGS AND SETBACKS

LOT COVERAGE CALCULATION: LOT AREA = 25,130 SF ALLOWABLE LOT COVERAGE = 35%

ALLOWABLE LOT COVERAGE AEA = 8,796 SF EXISTING LOT COVERAGE 6,303 SF (MAIN STRUCTURE) + 2,690 SF (DRIVEWAY) = 8,993

TOTAL LOT COVERAGE TO BE REMOVED = 4,153 SF NEW LOT COVERAGE 3,770 SF (MAIN STRUCTURE) = 3,770 SF

TOTAL PROJECT LOT COVERAGE AREA = (8,993 SF - 4,153 SF) + 3,770 SF = 8,610 SF

TOTAL LOT COVERAGE AREA = 8,610 SF / 25,130 SF = 34.3% EXCESS LOT COVERAGE = 186 SF

HARDSCAPE COVERAGE:

LOT AREA = 25,130 SQUARE FEET ALLOWABLE HARDSCAPE AREA = 9% ALLOWABLE HARDSCAPE AREA = 25,130 SF X 9% = 2,262 SF EXISTING HARDSCAPE AREAS = 3201 SF (WALKWAYS) + 333 SF (ROCKERIES AND RETAINING WALLS) = 3,534 SF

TOTAL EXISTING HARDSCAPE TO BE REMOVED = 1,105 SF TOTAL NEW HARDSCAPE AREA = 0 SF

TOTAL PROJECT HARDSCAPE AREA = 3,534 SF - 1,105 SF + 0 SF = 2,429 SF

TOTAL PROJECT HARDSCAPE AREA = 2,429 SF / 25,130 SF = 9.7%

MATERIAL KEY

SYMBOL DESCRIPTION REMARKS LOT COVERAGE EXISTING DRIVEWAY ASPHALT REMOVED REMOVED EXISTING HARDSCAPE PATHWAYS REMOVED REMOVED

BUILDING PAD AREA = 16,721 S.F.

THERE ARE NO LAND USE APPLICATIONS ASSOCIATED W/ THIS PROJECT.

THE CONTRACTOR SHALL SCOPE ROOF TIGHTLINES AROUND THE HOUSE AND VERIFY THAT THE PIPES ARE CLEAN AND FREE OF DEBRIS SUCH THAT THE SYSTEM IS INTACT. THE CONTRACTOR AND OWNER TAKE FULL RESPONSIBILITY FOR THE CONDITION OF THE DOWNSPOUT TIGHTLINE AND IMPACT TO DOWNSTREAM PROPERTIES. CONTRACTOR TO PROVIDE CLOSED CAPTION TELEVISED VIDEO (CCTV) FOR OWNER AND CITY TO REVIEW THAT SHOWS THE EXISTING DRAINAGE SYSTEM IS WORKING PROPERLY. IF THERE ARE ISSUES WITH THE EXISTING SYSTEM, THE CONTRACTOR SHALL REPAIR THE SYSTEM WITHIN THE OWNER'S PROPERTY LIMITS

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DESIGN DRAWN CHECKED SHEET ISSUE DATE 07.19.2022 DRAWING SETS DATE DESCRIPTION

PERMIT SET

REVISED PERMIT SET

REVISIONS

2023-07-12

2024-05-01

A REVISION 1

1914 5th st.

Kirkland, WA 98003

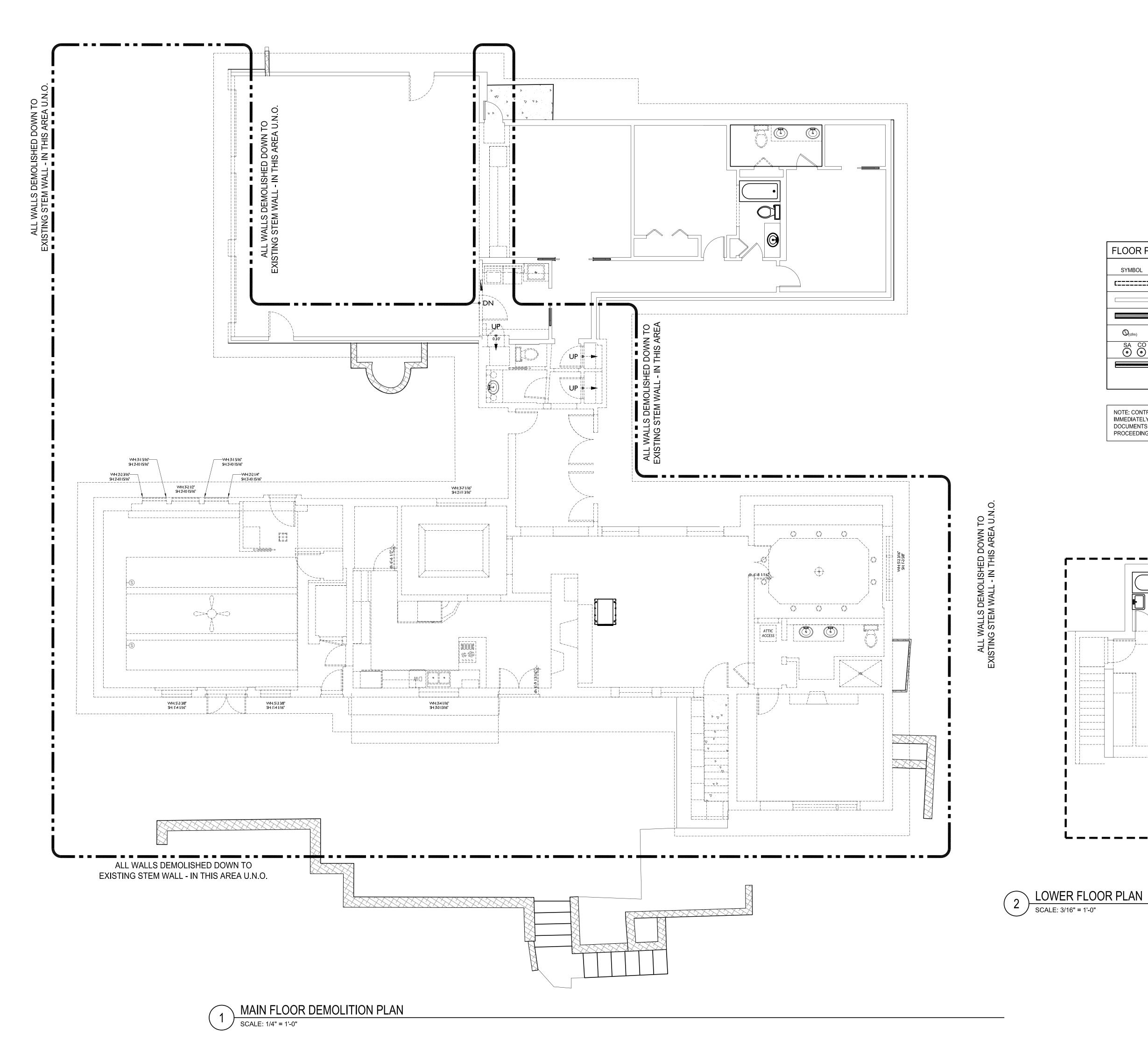
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SITE PLAN

A-1.2



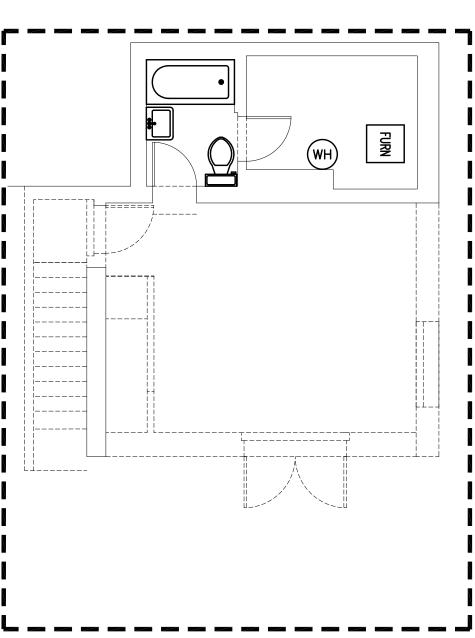
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FLOOR PLAN LEGEND				
SYMBOL	DESCRIPTION	REMARKS		
(======	DEMO WALL	Existing wall to be removed		
	EXISTING WALL	Existing wall to remain		
	NEW WALL (Line of Drywall)	2x studs @ 16" O.C.		
O <sub>(cfm)</sub>	EXHAUST FAN	CFM AS NOTED, VENT TO EXTERIOR, SWITCH SEPARATELY		
SA CO	SMOKE ALARM CO2 DETECTOR	CEILING MOUNTED		
	SOUND WALL	STAGGERED 2X STUDS WITH ROCK WOOL SOUND BATTS & ADDITIONAL LAYER GWB AT RECEIVER SIDE		

NOTE: CONTRACTOR MUST CONTACT ARCHITECT
IMMEDIATELY FOR ANY DISCREPANCIES IN CONTRACT
DOCUMENTS OR EXISTING CONDITIONS PRIOR TO
PROCEEDING WITH WORK.



DATE DESCRIPTION

2023-07-12 PERMIT SET

2024-05-01 REVISED PERMIT SET

REVISIONS

REVISION 1

SHEET ISSUE DATE 07.19.2022

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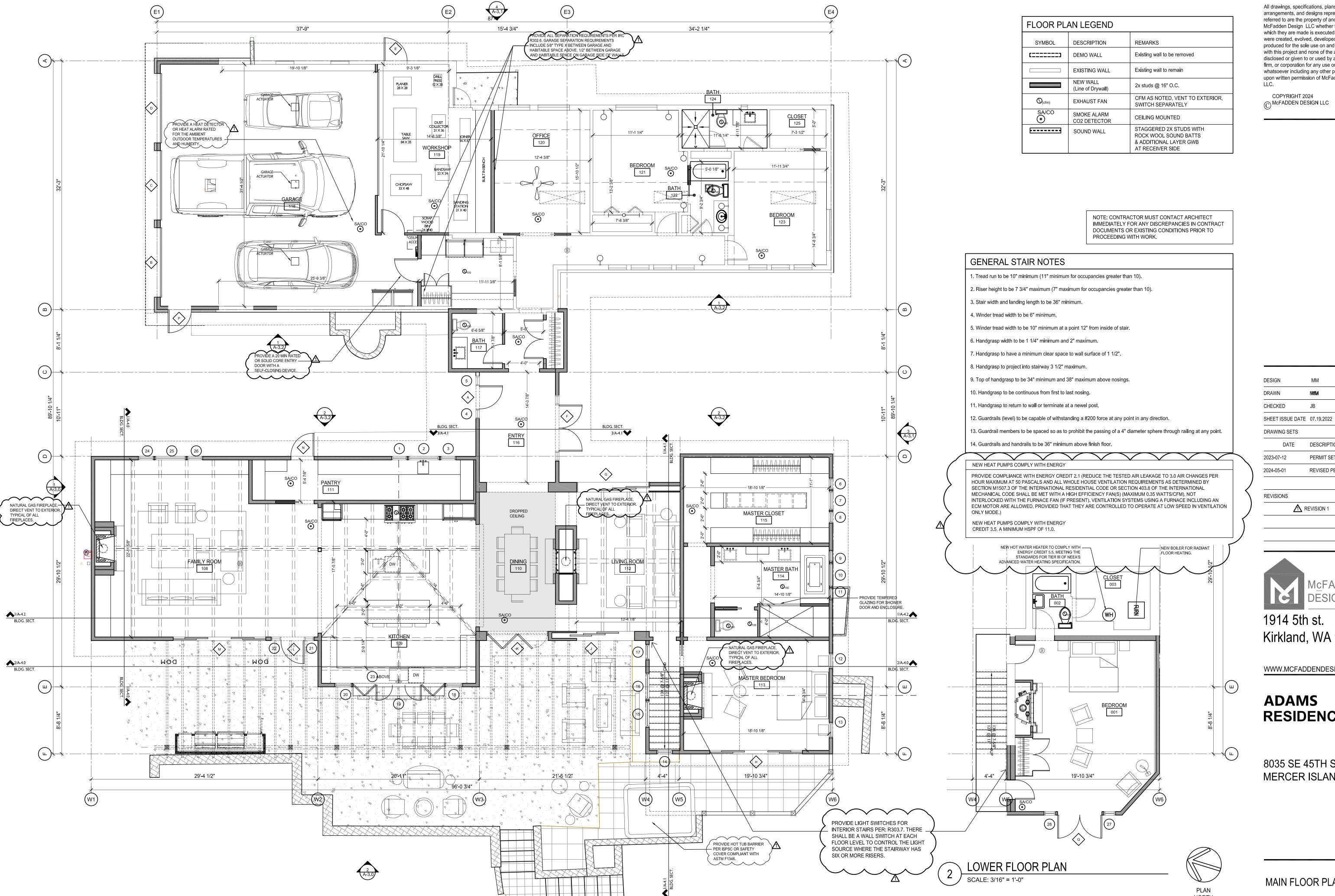
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MAIN FLOOR DEMOLITIONPLAN

A-2.0

PLAN NORTH

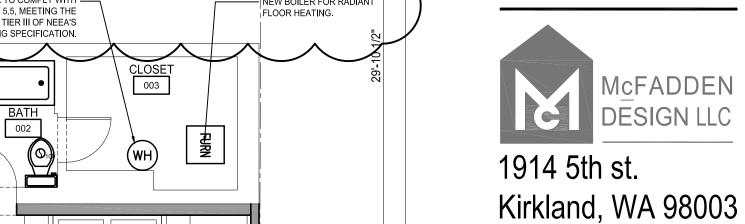


MAIN FLOOR PLAN

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

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DATE DESCRIPTION

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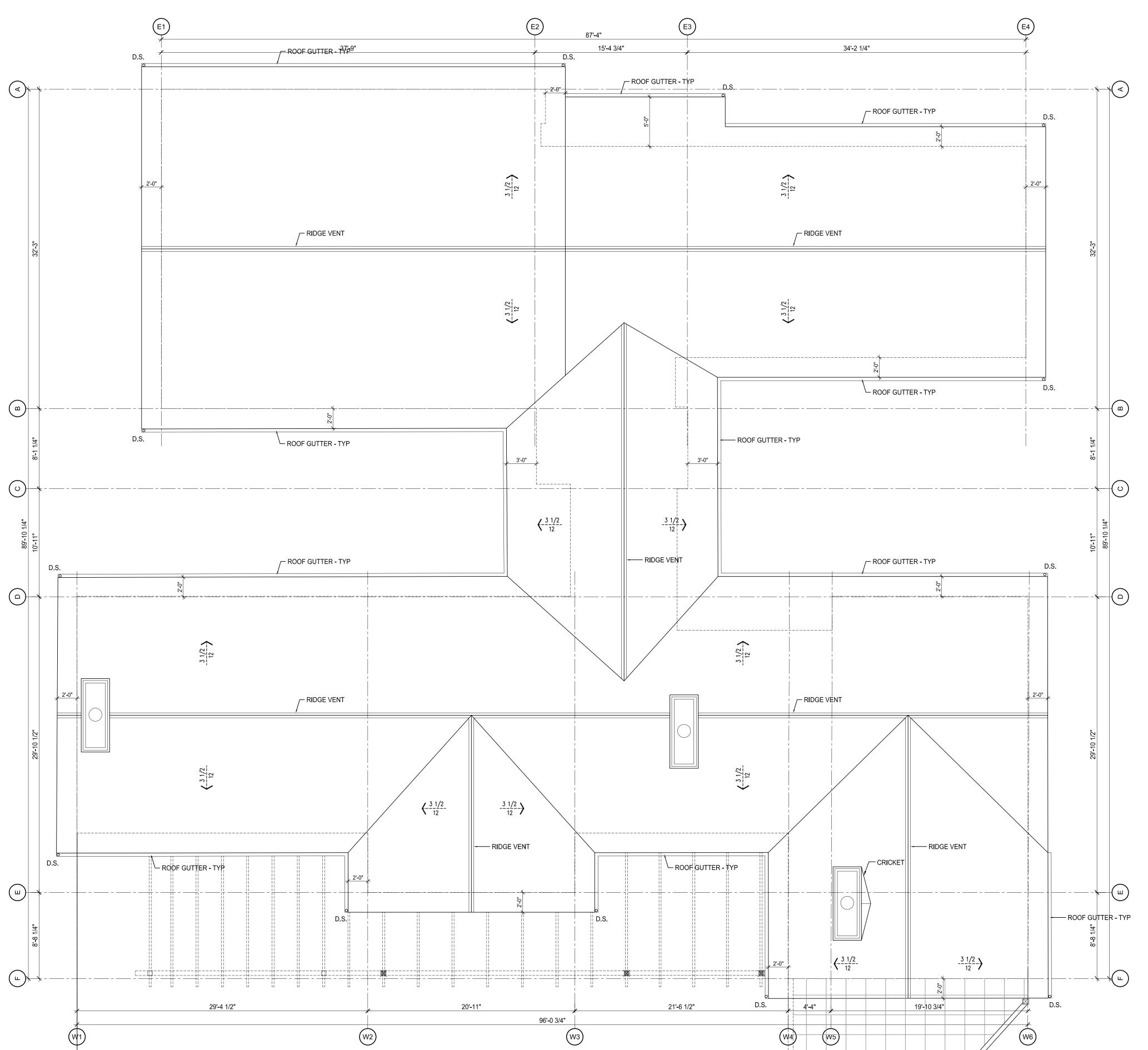
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### **ADAMS RESIDENCE**

8035 SE 45TH ST MERCER ISLAND 98040

MAIN FLOOR PLAN

A-2.1



ROOF PLAN

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

 SYMBOL
 DESCRIPTION
 REMARKS

 DS
 EXTERIOR DOWNSPOUT
 3" DIAMETER, METAL, PAINTED

 RD
 ROOF DRAIN
 AT LOW POINT OF ROOF, 3"~ MINIMUM

 CRV
 CONTINUOUS RIDGE VENT
 0.104 S.F./L.F. NET FREE VENT AREA, MATCH ROOFING COLOR

 SV
 SOFFIT VENT
 0.083 S.F./L.F. NET FREE VENT AREA

#### ROOF PLAN NOTES

1. FLOOD TEST ALL FLAT ROOFS FOR 24 HOURS PRIOR TO INSULATING.

- 2. ROOFING CONTRACTOR TO GUARANTEE MATERIALS AND WORKMANSHIP FOR 10 YEARS.
  3. ALL ROOF PENETRATION LOCATIONS TO BE APPROVED BY ARCHITECT PRIOR TO ROUGH IN.
- NO ROOF PENETRATIONS ON THE (FRONT) SIDE OF ROOF.
  MINIMIZE QUANTITIES OF ROOF PENETRATIONS AS MUCH AS POSSIBLE. COMBINE VENT STACKS.
  4. CONTRACTOR TO FIELD VERIFY VENTING CONTINUITY AND 1" MINIMUM AIRSPACE ABOVE INSULATION.

RIDGE VENT

NOTE:

ALL NEW DOWN SPOUTS TO BE CONNECTED TO EXISTING TIGHTLINE SYSTEM.

ROOF VENTILATION CALCULATIONS - HOUSE

ROOF AREA 6,598 SQUARE FEET

REQUIRED 6,598 / 300 = 21.99 SQUARE FEET VENT AREA

275.17 L.F. PROVIDED 0.104 S.F. PER L.F. VENT AREA 275.17 X 0.104 = 28.6 S.F. PROVIDED

SOFFIT VENT 540.5 L.F. PROVIDED

2" WIDE CONT. VENT WITH 1/4" GALV. VENT SCREEN = 0.083 S.F. VENT AREA PER L.F. 540.5 X 0.083 = 44.9. S.F. PROVIDED

GREATER THAN OR EQUAL TO SOFFIT VENTING

EAVE BLOCKING FULL HEIGHT BLOCKING WITH (6) 2-1/2" VENT HOLES PER 14"

TOTAL VENT AREA 73.5 S.F. TOTAL VENT AREA PROVIDED

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A REVISION 1

2024-05-01

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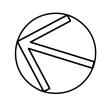


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PLAN NORTH **ROOF PLAN** 

A-2.2



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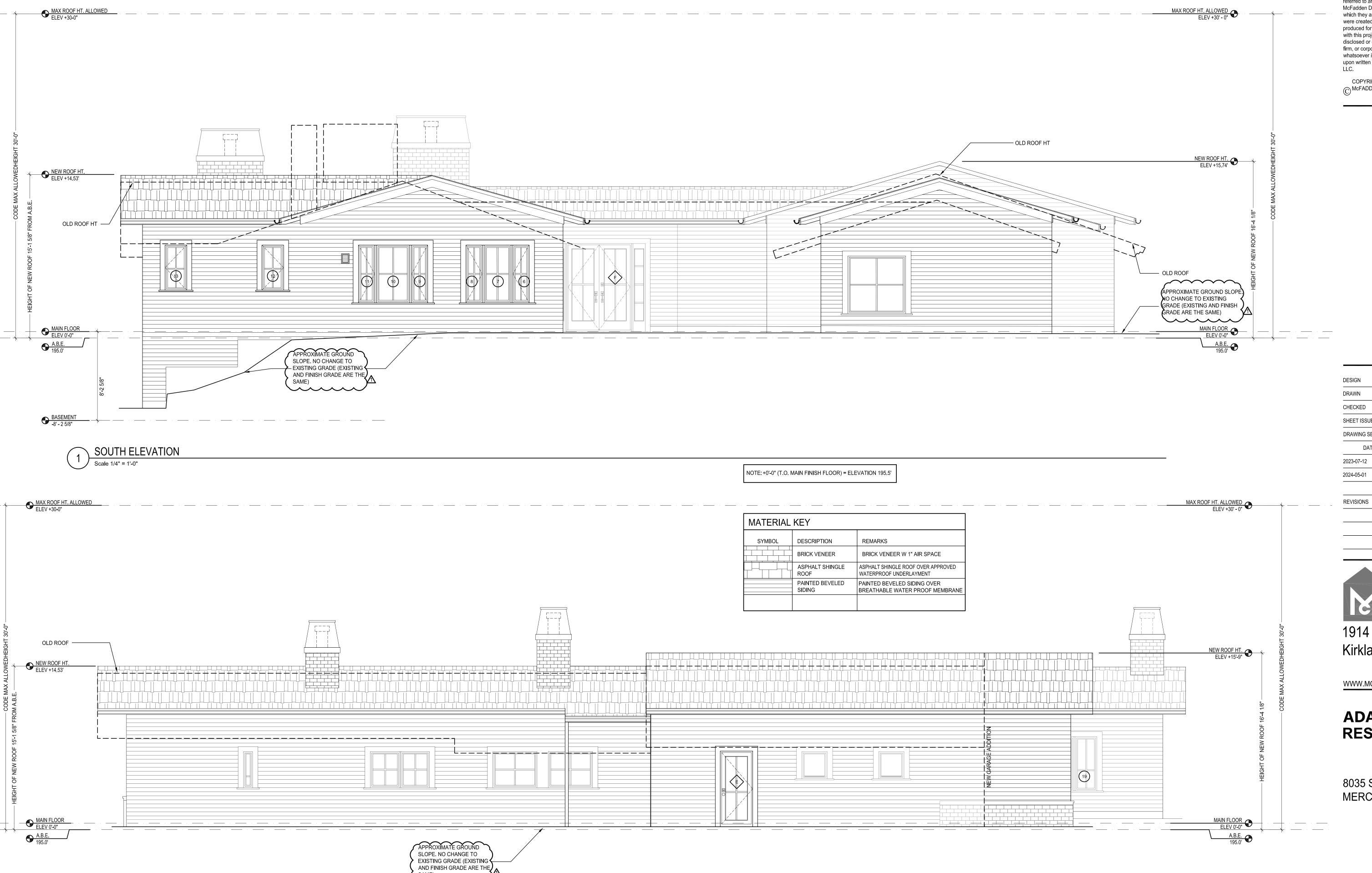
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**EXTERIOR ELEVATIONS** 

A-3.0



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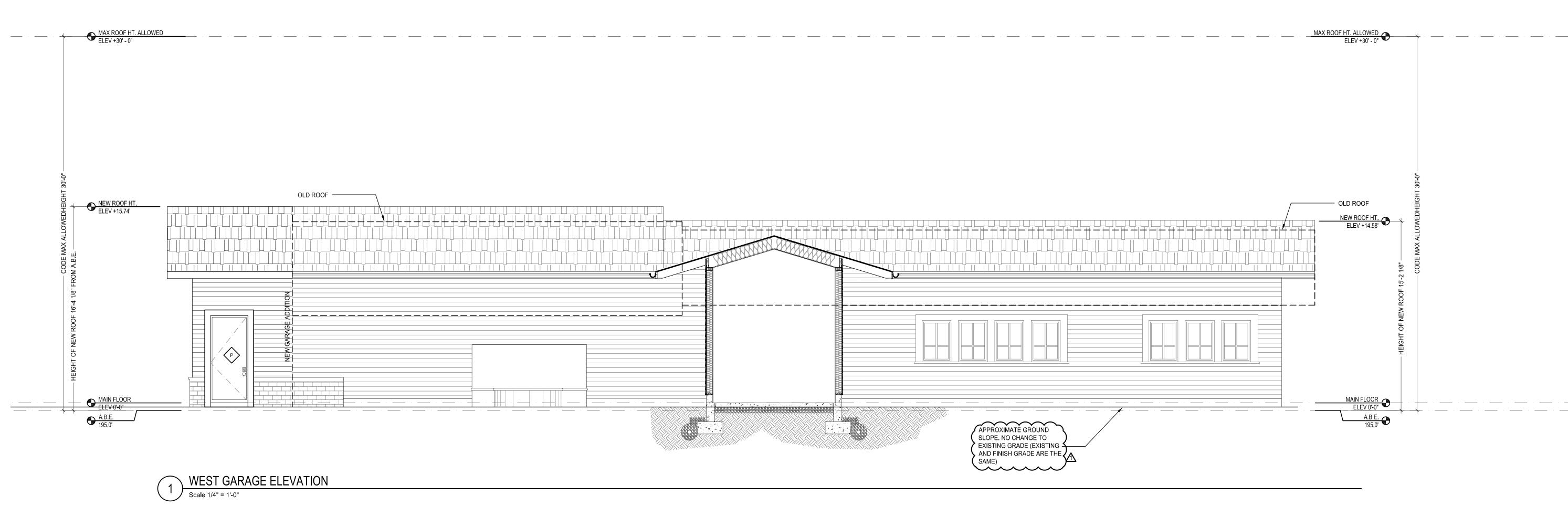
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**EXTERIOR ELEVATIONS** 

A-3.1



MAX ROOF HT. ALLOWED
ELEV +30' - 0" MATERIAL KEY REMARKS DESCRIPTION BRICK VENEER BRICK VENEER W 1" AIR SPACE ASPHALT SHINGLE ROOF OVER APPROVED WATERPROOF UNDERLAYMENT ASPHALT SHINGLE PAINTED BEVELED SIDING OVER BREATHABLE WATER PROOF MEMBRANE — OLD ROOF OLD ROOF ----NEW ROOF HT. ELEV +14.58' NEW ROOF HT. ELEV +14.58' 25 **EXTERIOR WALL** TO REMAIN APPROXIMATE GROUND SLOPE. NO CHANGE TO EXISTING GRADE (EXISTING AND FINISH GRADE ARE THE

Scale 1/4" = 1'-0"

NOTE: +0'-0" (T.O. MAIN FINISH FLOOR) = ELEVATION 195.5'

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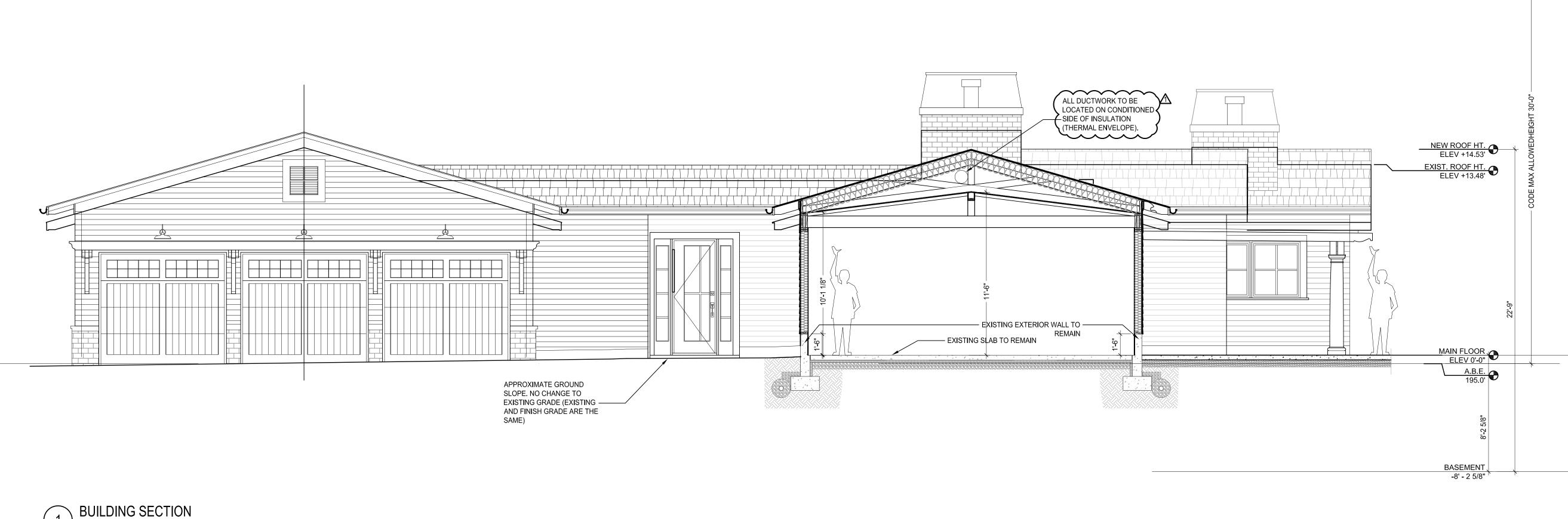
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**EXTERIOR ELEVATIONS** 

A-3.2



ALL DUCTWORK TO BE LOCATED ON CONDITIONED SIDE OF INSULATION (THERMAL ENVELOPE). NEW ROOF HT.
ELEV +14.53' EXIST. ROOF HT. ELEV +13.48' – OLD ROOF HT - OLD ROOF - NEW SLAB & FOUNDATION -WALLS MAIN FLOOR
ELEV 0'-0"

A.B.E.
195.0' APPROXIMATE GROUND

SLOPE. NO CHANGE TO

EXISTING GRADE (EXISTING

AND FINISH GRADE ARE THE 2 A-4.1 NEW FOUNDATION WAL EXISTING EXTERIOR WALL TO — — EXISTING SLAB TO REMAIN BASEMENT -8' - 2 5/8"

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MAX ROOF HT. ALLOWED ELEV +30' - 0"

MAX ROOF HT. ALLOWED ELEV +30' - 0"

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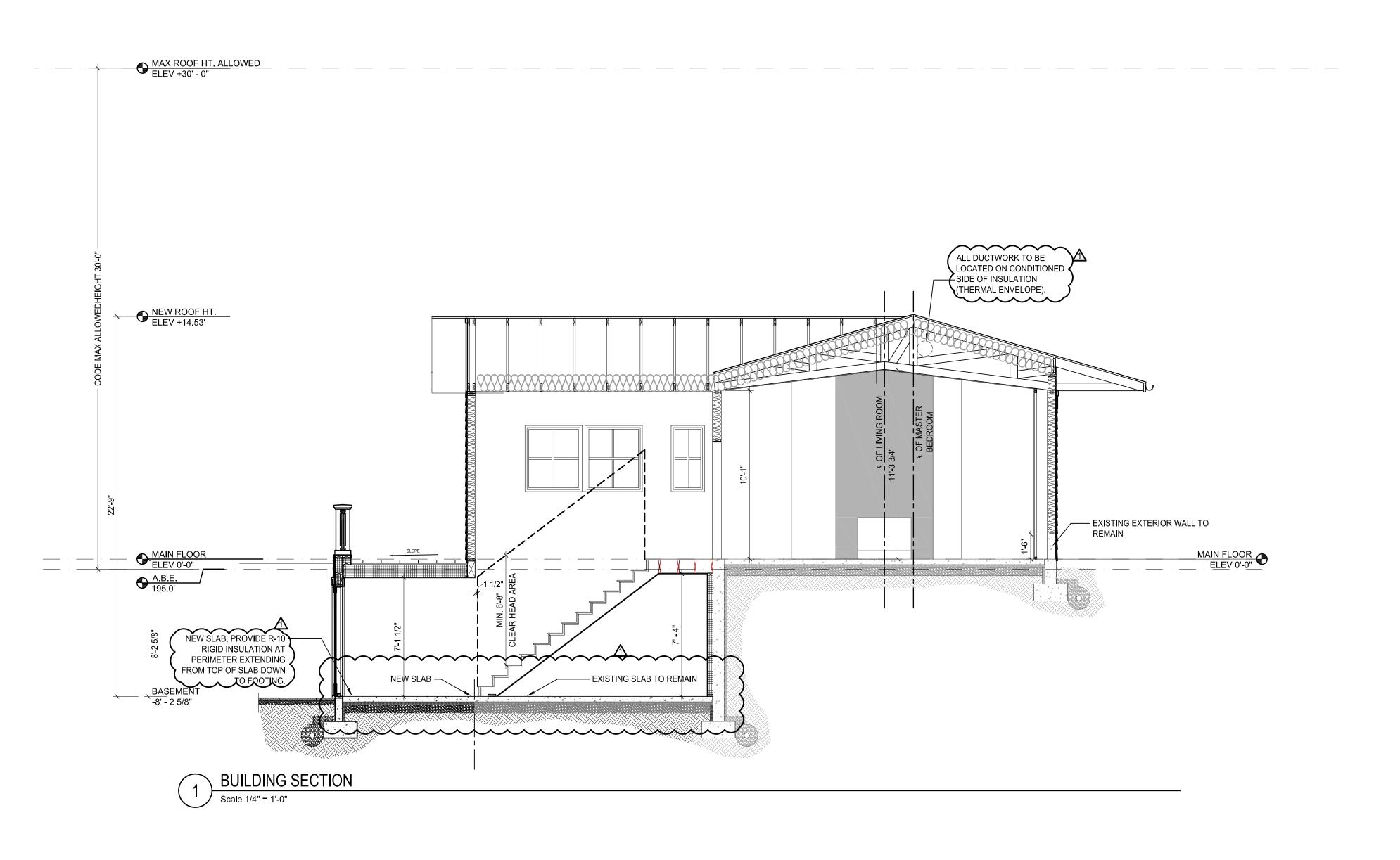
**BUILDING SECTION** 

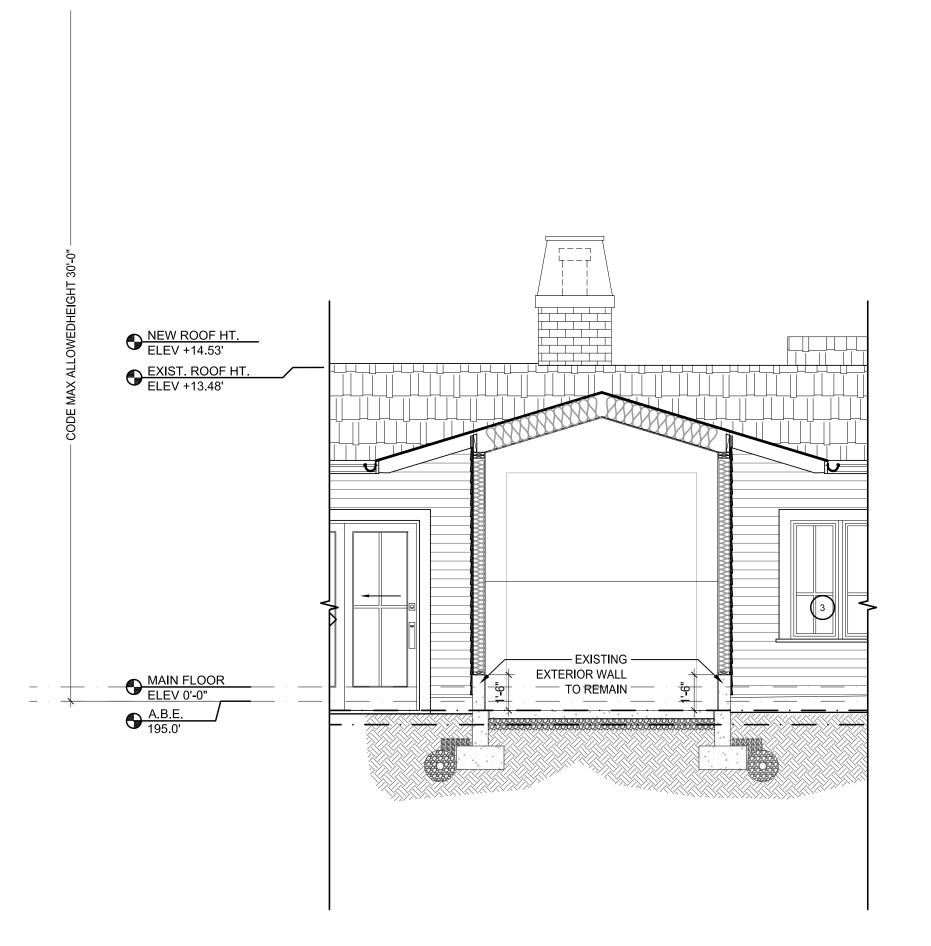
A-4.0

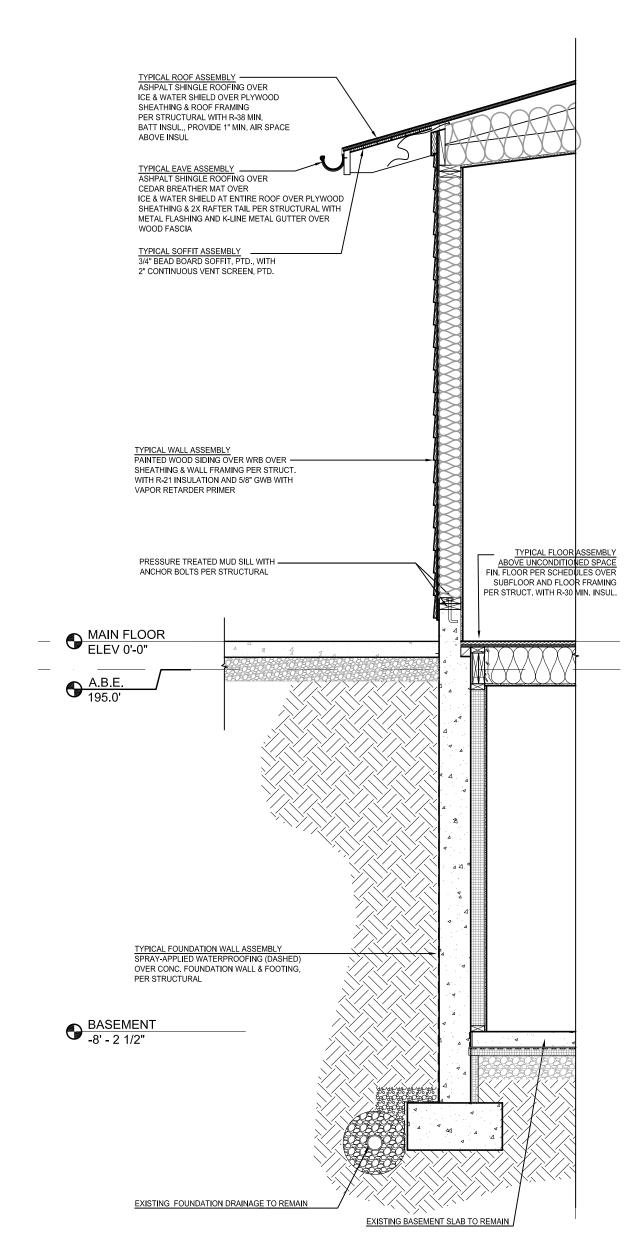
BUILDING SECTION

Scale 1/4" = 1'-0"

Scale 1/4" = 1'-0"







NEW WALL SECTION

Scale 1/2" = 1'-0"

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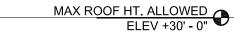
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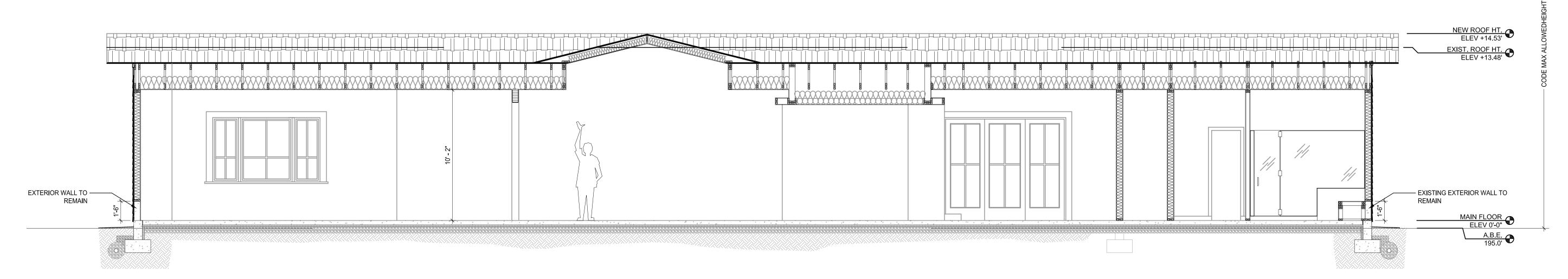
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BUILDING SECTION

A-4.1





1 BUILDING SECTION
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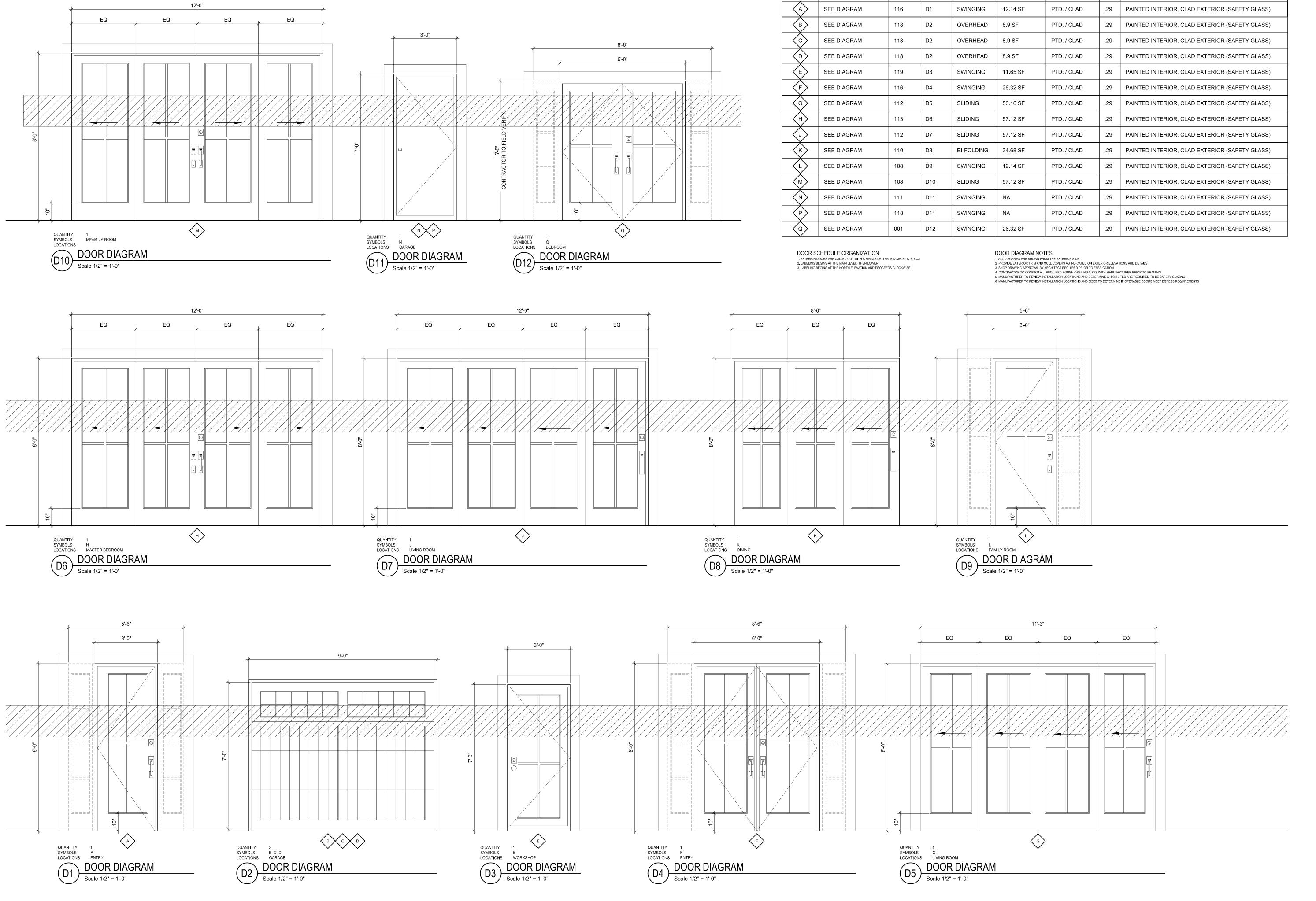
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**BUILDING SECTION** 

A-4.2



EXTERIOR DOOR SCHEDULE

ROOM

DIAGRAM TYPE

GLAZED AREA

FINISH (INT. / EXT.)

REMARKS

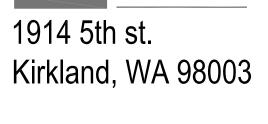
SYMBOL LOCATION

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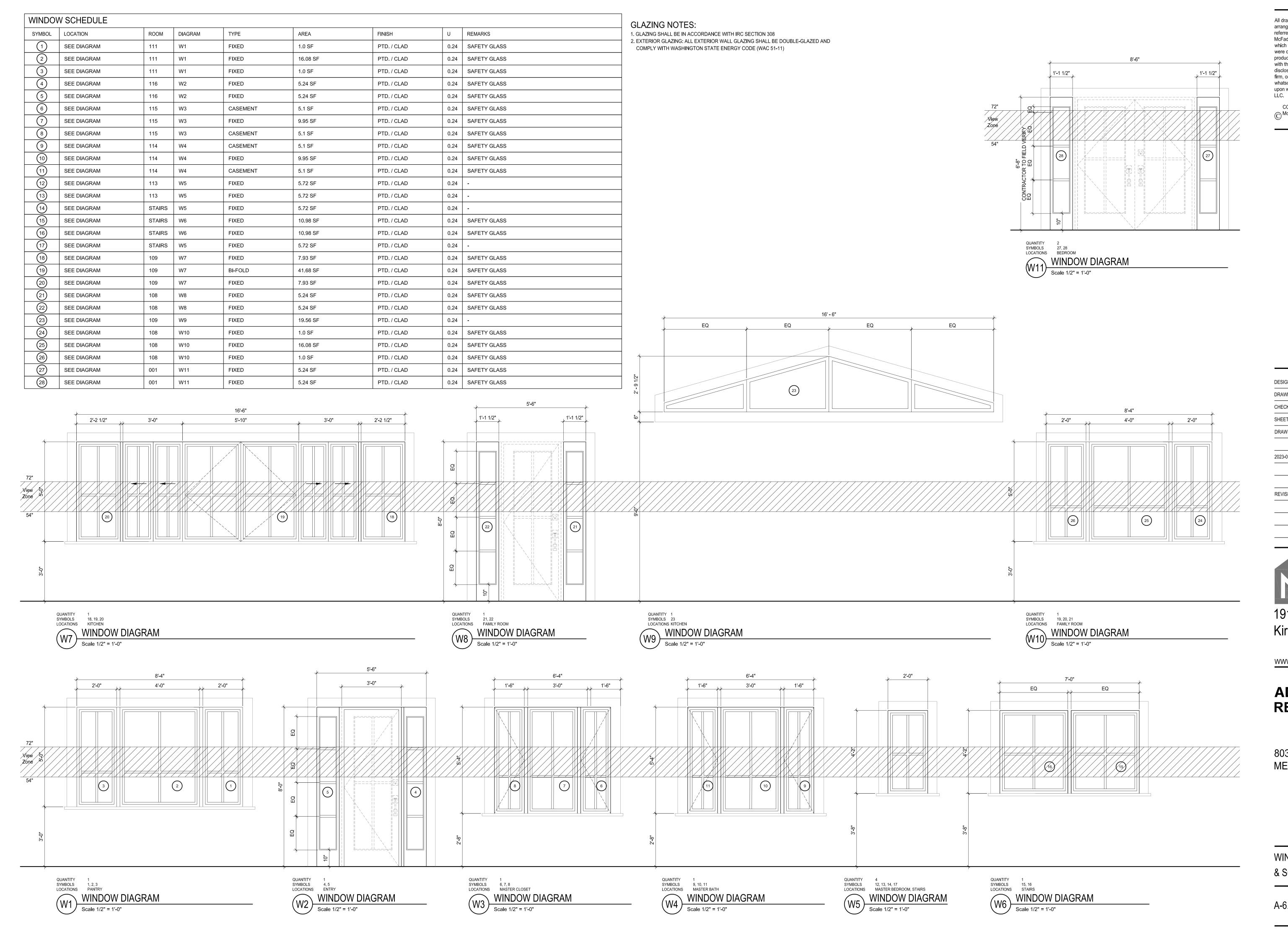
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## ADAMS RESIDENCE

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DOOR DIAGRAMS & SCHEDULE

A-6.0



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WINDOW DIAGRAMS & SCHEDULE

A-6.1

### GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

#### CRITERIA

I. <u>ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION</u> SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

#### 2. <u>DESIGN LOADING CRITERIA</u>

ROOF SNOW LOAD	25 PSF
ROOF DEAD LOAD ALLOWANCE FOR PV PANELS	5 PSF
FLOOR LIVE LOAD	40 PSF
FLOOR LIVE LOAD (EXTERIOR DECKS AND BALCONIES)	60 PSF
GUARDRAILS/BALCONY RAILS	200 LBS

<u>WIND</u>: ANALYSIS PROCEDURE: ASCE 7-16 CHAPTER 27 "PART I - BUILDINGS OF ALL HEIGHTS"

RISK CATEGORY II

97 MPH

EXPOSURE "B"

TOPOGRAPHIC FACTOR Kzt = 1.0

WIND BASE SHEAR, NORTH/SOUTH VW = 12 K WIND BASE SHEAR, EAST/WEST VW = 20 K

CLADDING / WINDOW DESIGN PRESSURE (MAX.)

ROOFING DESIGN PRESSURE NOT AT A CORNER (MAX.)

44 PSF

ROOFING DESIGN PRESSURE AT CORNER (MAX.)

67 PSF

THE DESIGN WIND PRESSURES LISTED ABOVE ARE INWARD OR OUTWARD AND ARE BASED ON AN EFFECTIVE WIND AREA OF 10 SQUARE FEET NEAR A BUILDING CORNER, U.O.N. CORNER AND OTHER ZONES ARE DEFINED BY FIGURE 30.3-1, 30.3-2A TO 21 AND 30.3-5A TO 5B IN ASCE 7-16. REDUCED DESIGN PRESSURES MAY BE CALCULATED USING ASCE 7. NOTE THAT THE DESIGN WIND PRESSURES NOTED ABOVE ARE ULTIMATE VALUES PER THE 2018 IBC AND SHALL BE MULTIPLIED BY 0.6 FOR ALLOWABLE STRESS DESIGN.

EARTHQUAKE : ANALYSIS PROCEDURE: IBC "EQUIVALENT LATERAL FORCE PROCEDURE"

SEISMIC DESIGN CATEGORY (SDC) = D

RISK CATEGORY = 11

SEISMIC SITE CLASS = D

IMPORTANCE FACTOR le = 1.0

MAPPED MCE Ss = 1.43; S<sub>I</sub> = 0.50

DESIGN ACCELERATION Sds = 1.15; Sd<sub>1</sub> = 0.60

SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5

SEISMIC RESPONSE COEFFICIENT: Cs = 0.18

SEISMIC BASE SHEAR Vs = 40 K

- 3. <u>LATERAL LOADS</u> 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. <u>STRUCTURAL DRAWINGS</u> 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. <u>CONTRACTOR</u> 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. <u>CONTRACTOR</u> SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
- 7. <u>CONTRACTOR</u> 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. <u>CONTRACTOR-INITIATED</u> 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. <u>DRAWINGS</u> 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. <u>ALL STRUCTURAL SYSTEMS</u> 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.
- II. <u>SHOP DRAWINGS</u> FOR REINFORCING STEEL AND CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.
- 12. SHOP DRAWING REVIEM: 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. <u>DEFERRED SUBMITTALS OF DESIGN BUILD COMPONENTS</u> 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: RAILINGS, TRUSSES.

15. <u>SPECIAL INSPECTION</u>: CONCRETE CONSTRUCTION, EXPANSION BOLTS AND THREADED EXPANSION INSERTS, SCREW ANCHORS, AND EPOXY GROUTED INSTALLATIONS 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 PRESSURE

LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)

SEISMIC SURCHARGE PRESSURE

PASSIVE SOIL PRESSURE

SOIL COEFFICIENT OF FRICTION

SOIL DENSITY

125 PCF

PILE CAPACITY (3 INCH/4 INCH)

GEOTECHNICAL REPORT REFERENCE: #JN23365 BY GEOTECH CONSULTANTS, INC. DATED DECEMBER 1, 2023.

17. PIPE PILES SHALL BE SCHEDULE-40 (STD) ASTM A53 (TYPE E OR S, GRADE A OR B) 3 INCH NOMINAL PIPE DRIVEN TO REFUSAL PER THE FOLLOWING CRITERIA:

HYDRAULIC HAMMER SIZE

850 LBS.

IO SEC/IN

100 LBS.

2000 LBS.

REFUSAL CRITERIA

6 SEC/IN

2 SEC/IN

THE ALLOWABLE AXIAL COMPRESSION CAPACITY SHALL BE 12 KIPS. SECTIONS OF PIPE SHALL BE CONNECTED TOGETHER WITH COMPRESSION FITTED SLEEVE COUPLERS. PER THE GEOTECHNICAL REPORT, THE ESTIMATED MINIMUM PILE LENGTH IS 15 FEET. THE GEOTECHNICAL SPECIAL INSPECTOR SHALL BE CONTINUOUSLY PRESENT DURING PIN PILE INSTALLATION AND LOAD TESTING.

#### RENOVATION

18. <u>DEMOLITION</u>: 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.

#### CONCRETE

19. <u>CONCRETE</u> SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301.

CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI IIT. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF I'C = 3,000 PSI. ALL CONCRETE EXPOSED TO THE WEATHER AND ALL GARAGE SLABS-ON-GRADE SHALL ATTAIN A 28-DAY STRENGTH I'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.

20. <u>REINFORCING STEEL</u> SHALL CONSIST OF #4 BARS CONFORMING TO ASTM A615, GRADE 40, fy = 40,000 PSI 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.

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

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST EARTH

5"
FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER

2"
SLABS AND WALLS (INTERIOR FACE)

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

#### <u>ANCHORAGE</u>

- 23. 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.
- 24. <u>SCREW ANCHORS</u> 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.
- 25. <u>EPOXY-GROUTED ITEMS</u> (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SHALL BE INSTALLED USING "AT-XP" ADHESIVE AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH IAPMO UES REPORT NO. ER-263, 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.

#### MOOD

26. <u>FRAMING LUMBER:</u> 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. I

POSTS AND TIMBERS

DOUGLAS FIR NO. 1

27. <u>GLUED LAMINATED MEMBERS</u> SHALL BE FABRICATED IN CONFORMANCE WITH ASTM D3737 AND ANSI AI9O.I 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. CONTRACTOR SHALL VERIFY AVAILABILITY OF THE GL MEMBER SIZES SHOWN ON THE DRAWINGS AND ADJUST THE CONNECTOR SIZES IF NEEDED FOR LARGER MEMBER SIZES.

DOUGLAS FIR OR HEM-FIR NO. 2

28. <u>LAMINATED STRAND LUMBER (LSL)</u> 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 (I-1/4" MINIMUM THICKNESS AT NON-SHEAR WALLS; SEE SCHEDULE FOR MINIMUM THICKNESS AT SHEAR WALLS):

Fb = 1700 PSI, E =  $1.3 \times 10^6$  PSI, Fv = 400 PSI

BEAMS AND HEADERS:

Fb = 2325 PSI, E = 1.55  $\times$  10<sup>6</sup> PSI, Fv = 310 PSI

STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING

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.

29. MOOD 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.



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APPROVAL:

$\overline{\mathbb{A}}$	PERMIT	REVISIONS		5/3/24	
	PERMIT	SET		12/12/23	
NO.		DESCRIPTION		DATE	BY
ISSUES:		RE	VISIONS:	$\triangle$	
P.M.			SKK		
P.E.			MKS		
DRAWN BY:		ATK			
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DAT	E:		12/12/23		

### GENERAL STRUCTURAL NOTES

SHEET NO.

JOB NO.

SHEET TITLE:

31.0

### GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

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

TOP CHORD SNOW LOAD

TOP CHORD DL ALLOWANCE FOR PV PANELS

TOP CHORD DEAD LOAD

BOTTOM CHORD LIVE LOAD

BOTTOM CHORD DEAD LOAD

TOTAL LOAD

25 PSF

5 PSF

12 PSF

10 PSF (NOT INCLUDED IN TOTAL)

6 PSF

48 PSF

NET WIND UPLIFT (TOP CHORD) 10 PSF

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

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

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

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

31. TRUSS SUPPLIERS NOTE: THE TRUSS CONFIGURATIONS, INCLUDING DEPTHS AND MEMBER SIZES SHOWN ON THE DRAWINGS, INDICATE THE DESIRED TRUSS CONFIGURATION AND ARE TO BE COMPLIED WITH WHEREVER POSSIBLE. IF A TRUSS MANUFACTURER IS UNABLE TO MEET THE LOAD REQUIREMENTS SPECIFIED WITH THE TRUSS CONFIGURATION INDICATED, THE MANUFACTURER IS TO SUBMIT WRITTEN NOTICE TO THAT EFFECT TO THE ARCHITECT PRIOR TO SUBMITTING A COST PROPOSAL OR BID.

IF A DIFFERENT SYSTEM IS PROPOSED THAT REQUIRES REVISIONS TO PRESENT STRUCTURAL FRAMING OR DETAILS, SUCH SYSTEM SHALL BE CONSIDERED SUBJECT TO THE APPROVAL OF THE OWNER, ARCHITECT, AND STRUCTURAL ENGINEER.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND TRUSS MANUFACTURER TO VERIFY THE WEIGHT AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS. IT SHALL BE NOTED IN THE TRUSS MANUFACTURER'S BID WHETHER OR NOT AN ALLOWANCE HAS BEEN MADE FOR MECHANICAL UNITS.

TRUSS SHOP DRAWINGS WILL NOT BE REVIEWED WITHOUT CALCULATIONS BEARING THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER.

32. <u>MOOD SHEATHING</u> SHALL BE APA RATED, EXTERIOR GLUE; EXPOSURE I, IN CONFORMANCE WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PS-I 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. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW I/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH (2) IOd-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.

- 33. <u>ALL WOOD</u> EXPOSED TO MEATHER, 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 UI 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 GI85 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.
- 34. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-202I. 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 A301. 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.

#### 35. MOOD 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	O.II3"	2-1/2"
"8d"	8d Common	0.131"	2-1/2"
"l0d-F"	10d Framer	0.131"	3"
"l0d"	10d Shear	0.148"	2-1/4"
"l6d"	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. <u>NAILS</u> SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.
- C. <u>SCREWS</u> 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.
- 36. WOOD FRAMING NOTES: THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:
- A. <u>ALL WOOD FRAMING DETAILS</u> 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. <u>WALL FRAMING</u>: ALL BEARING AND SHEAR WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE  $2 \times 4$  STUDS @ 16" O.C. AT INTERIOR WALLS AND  $2 \times 6$  @ 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'-O" O.C., UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH IOd-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 I-I/4 " W #6 SCREWS FOR I/2" GWB AND 5/8" GWB WHERE OCCURS. VERIFY THE FIRE ASSEMBLY REQUIREMENTS WHERE APPLICABLE WITH THE ARCHITECT.
- C. <u>FLOOR AND ROOF FRAMING</u>: 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 IOD-F NAILS @ 8" O.C. STAGGERED UNLESS OTHERWISE NOTED.
- D. <u>POSITIVE CONNECTIONS</u>: 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.

ABBREVIATIONS						
@ d	At Penny (Nails)	L LB.	Angle Pound			
Φ	Diameter	LL.	Live Load			
。 #	Degrees Pounds	LLH LLV	Long Leg Horizonta			
#	Number	LLY LONGIT.	Long Leg Vertica Longitudina			
(A)	<b>A</b> 1	LT. MT.	Lightweight			
(A) A.B.	Above Anchor Bolt	MAX.	Maximum			
ADD'L	Additional	MECH.	Mechanica			
ALT. APPROX	Alternate	MEZZ. MF	Mezzanine Moment Frame			
ARCH.	<ul><li>Approximate</li><li>Architect</li></ul>	MFR.	Manufacturer			
<b>(5</b> )		MIN.	Minimum			
(B) B/	Below Bottom of	MISC. MK.	Miscellaneous Mark			
BF	Braced Frame	1 113.	1 151 1			
BLKG.	Blocking	(N)	New			
BLDG. BM.	Building Beam	N. N.S.	North Near Side			
BOT.	Bottom	NOM.	Nomina			
BRG. BTWN.	Bearing Between	NTS	Not to Scale			
DIMN.	Delneen	O.C.	On Center			
CL or q		O.D.	Outside Diameter			
C CIP	Camber Cast In Place	0.F. 0.H.	Outside Face Overhand			
C.J.	Construction Joint or Control Joint	OPNG.	Opening			
CJP	Complete Joint Penetration	OPP.	Opposite			
CLG. CLR.	Ceiling Clear	PAF	Powder Actuated Fastener			
CMU	Concrete Masonry Unit	PC	Precast			
COL.	Column	PERM.	Permanent			
CONC. CONN.	Concrete Connections	PERP. PJP	Perpendicular Partial Joint Penetratior			
CONST.	Construction	PL or PL	Plate			
CONT.	Continuous	PLF BL YIMD	Pounds per linear Foot			
CSK.	Countersink	PLYMD PREFAB.	Plywood Prefabricated			
DBA	Deformed Bar Anchor	PSF	Pounds per Square Foot			
DBL. DEG.	Double	PSI P.T. or PT	Pounds per Square Inch			
DEG. DF	Degree Doug Fir-Larch	P/T	Post-Tensioning Pressure-Treated			
DIA.	Diameter					
DIAG. DIAPH.	Diagonal Diaphragm	RAD. REF.	Radius Reference			
DIM.	Dimension	REINF.	Reinforce or Reinforcement			
DN.	Down	REQD.	Required			
DO DTL.	Ditto Detail	REV. R.O.	Revise Rough Opening			
DTP	Double Top Plate	14.0.	noogn opening			
DMG.	Drawing	5.	South			
(E)	Existing	SCH. or SCHE SECT.	D. Schedule Sectior			
E.	East	SHT.	Sheet			
EA. E.F.	Each Each Face	SIM. SOG	Similar Slab On Grade			
EL.	Elevation	SPEC.	Specification			
ELEV.	Elevator	5Q.	. Square			
EMBED. ENGR.	Embedment Length Engineer	SQ. FT. SQ. IN.	Square Feet Square Inch(es)			
EQ.	Equal	SPF	Spruce-Pine-Fir			
E.W.	Each May	5.5.	Stainless Stee			
EXP. EXT.	Expansion Exterior	STD. STIFF.	Standard Stiffener			
		STL.	Stee			
FDN. FIN.	Foundation Finish	STR. SUB.	Structura Substitute			
FLR.	Floor	SYM.	Symmetrica			
FRP	Fiber Reinforced Polymer	<b>T</b> /	- ,			
F.S. FT.	Far Side Foot or Feet	T/ T&B	Top of Top and Bottor			
FTG.	Footing	T&G	Tongue \$ Groove			
<b>C</b> A		TEMP.	Temporary			
GA. GALV.	Gauge Galvanized	THRU T.O.C.	Through Top of Concrete			
GL	Glue Laminated	T.O.S.	Top of Stee			
GMB	Gypsum Wall Board	T.O.W. TRANS.	Top of Wal			
HDG	Hot Dipped Galvanized	TS	Transverse Tube Stee			
HDR.	Header	TYP.	Typica			
HF HGR.	Hem Fir Hanger	U.O.N.	Unless Otherwise Noted			
HORIZ.	Horizontal	J. J. 111.	OTHOUS OWNST MISS NOVO			
HSS	Hollow Structural Section	VERT.	Vertica			
HT.	Height	VIF	Verify in Field			
I.D.	Inside Diameter	М.	West			
I.F.	Inside Face	W/orw/	With			
IN. INFO.	Inch Information	W.H.S. W/O	Welded Headed Stud Without			
INT.	Interior	W.P.	Work Point			
lπ	[	M.T.S.	Welded Threaded Stud			
JT.	Joint	MMF	Welded Wire Fabric			
K	Kips	X SECT.	Cross Section			
KSF KSI	Kips per Square Foot Kips per Square Inch	X-STR XX-STR	Extra Strono Double Extra Strono			
	hips per square mon	/V\ JIN	DOUDIO EXII A DII ONG			



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APPROVAL:

$\overline{\triangle}$	PERMIT	REVISIONS		5/3/24	
	PERMIT	SET		12/12/23	
NO.		DESCRIPTION		DATE	BY
ISSUES:		F	REVISIONS:	$\triangle$	
P.M.			SKK		
P.E.			MKS		
DRAWN BY:			ATK		

### GENERAL STRUCTURAL NOTES

SHEET NO.

SCALE:

DATE:

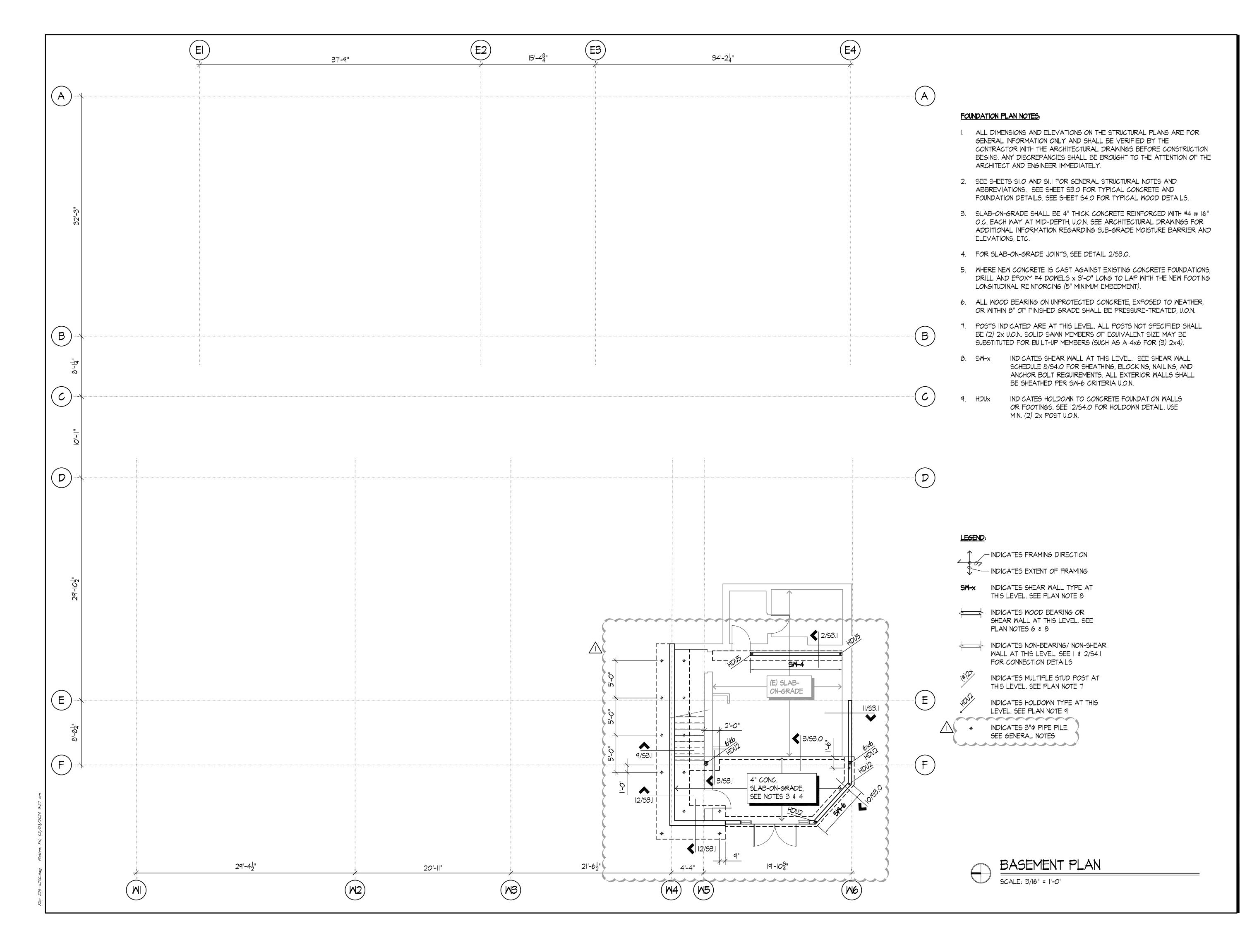
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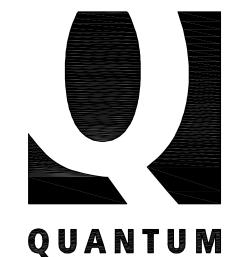
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**31.1** 

AS SHOWN

12/12/23





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CONSULTING ENGINEERS

SEAL:

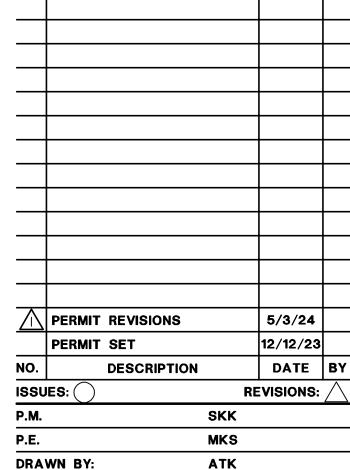


PROJECT:

### ADAMS RESIDENCE

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APPROVAL:



### BASEMENT PLAN

SHEET NO.

SCALE:

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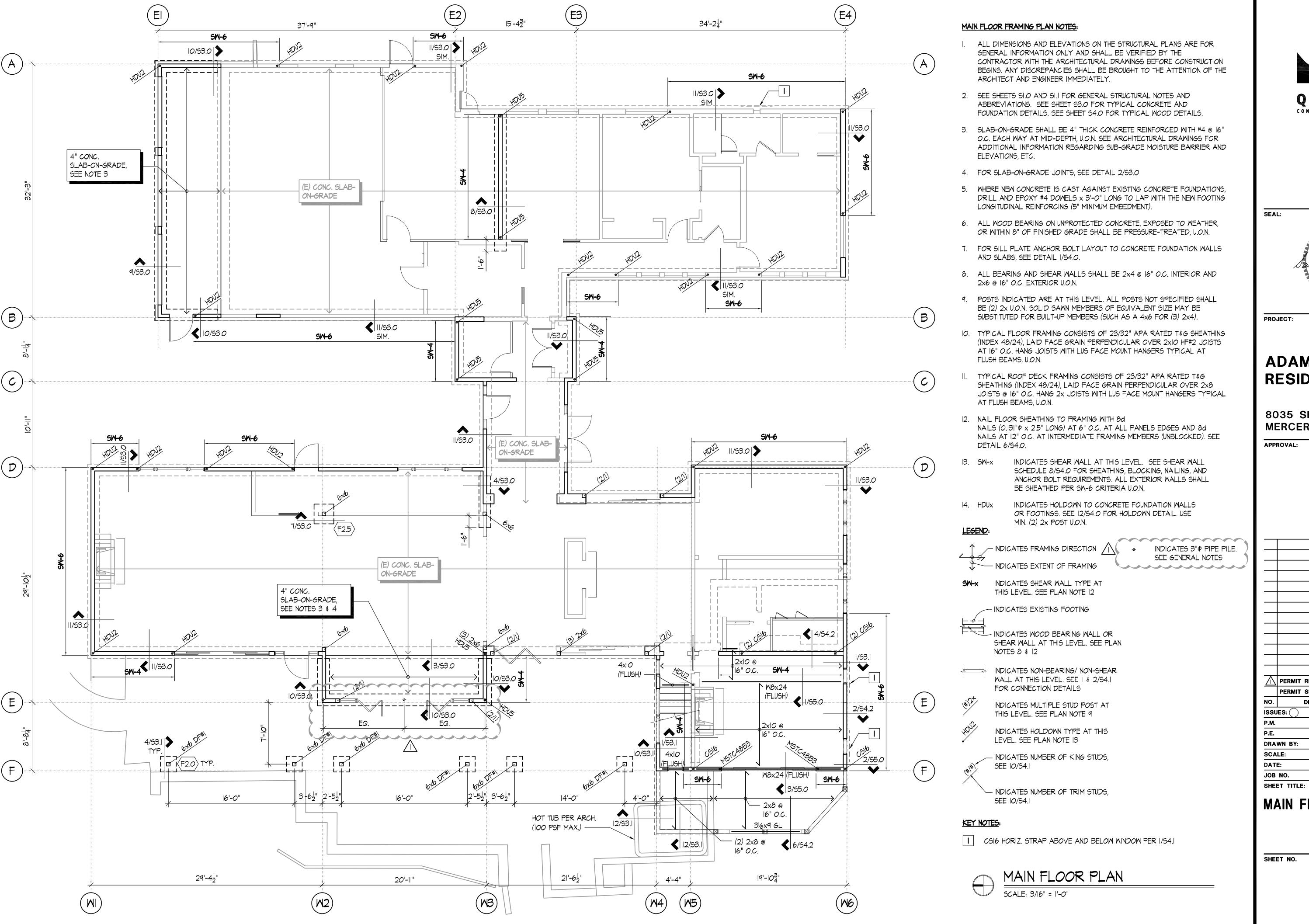
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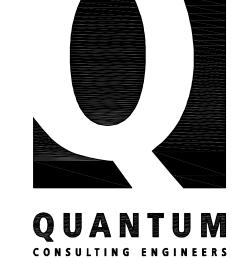
DATE:

**S2.0** 

AS SHOWN

12/12/23





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SEAL:



PROJECT:

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APPROVAL:

$\bigcirc$	PERMIT	REVISIONS		5/3/24	
	PERMIT	SET		12/12/23	
NO.		DESCRIPTION		DATE	BY
ISSUES:		R	EVISIONS:	$\triangle$	
P.M.	P.M.		SKK		
P.E.	P.E.		MKS		
DRAWN BY:		ATK			

### MAIN FLOOR PLAN

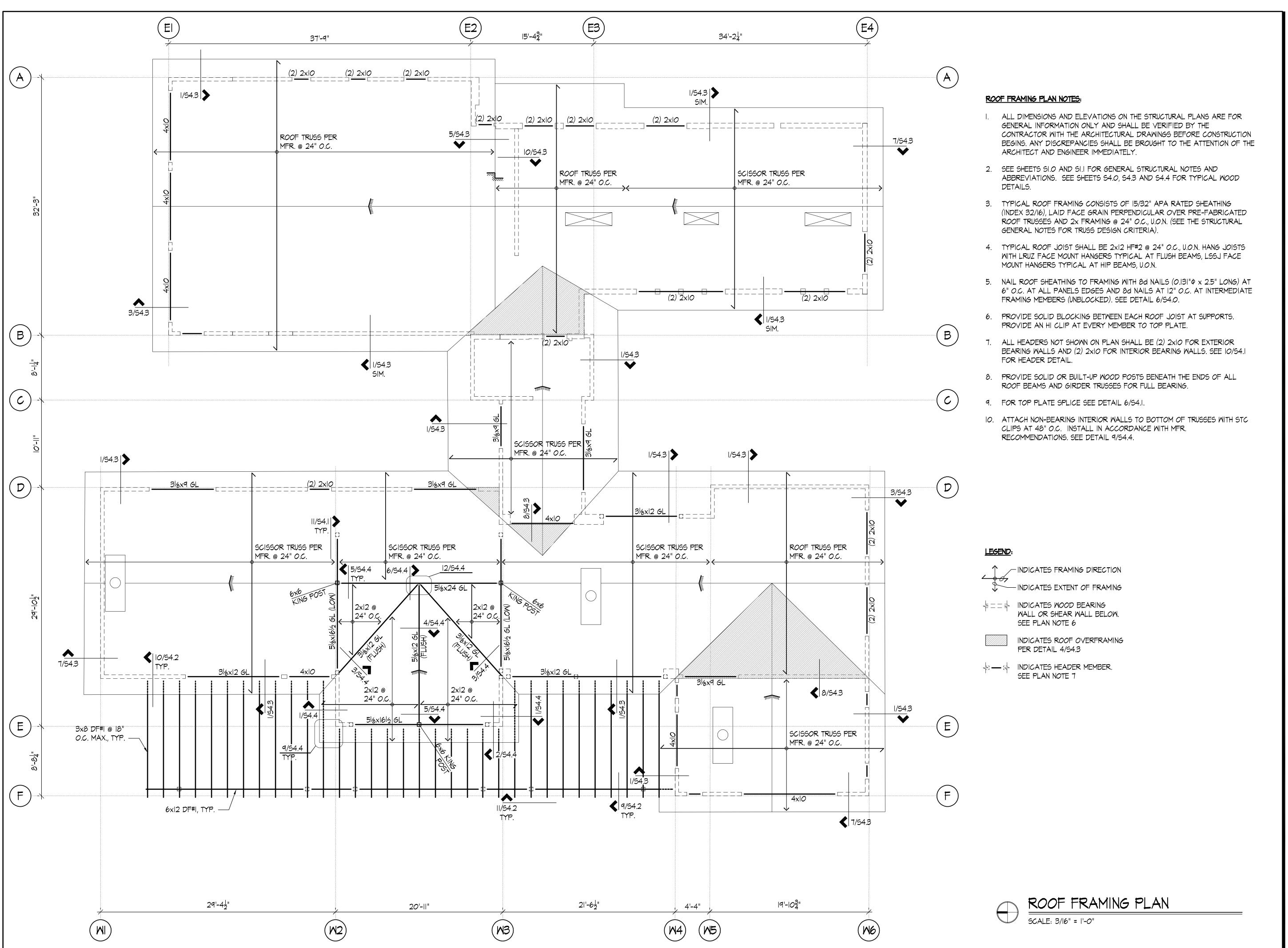
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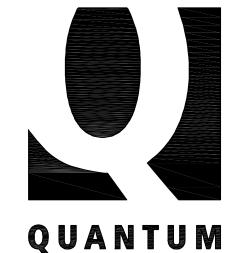
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22229.01

SHEET NO.

**S2.1** 





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CONSULTING ENGINEERS

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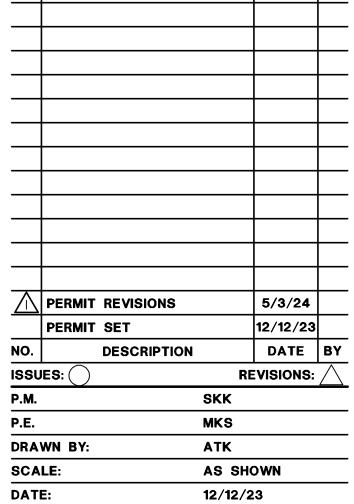


PROJECT:

### ADAMS RESIDENCE

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APPROVAL:



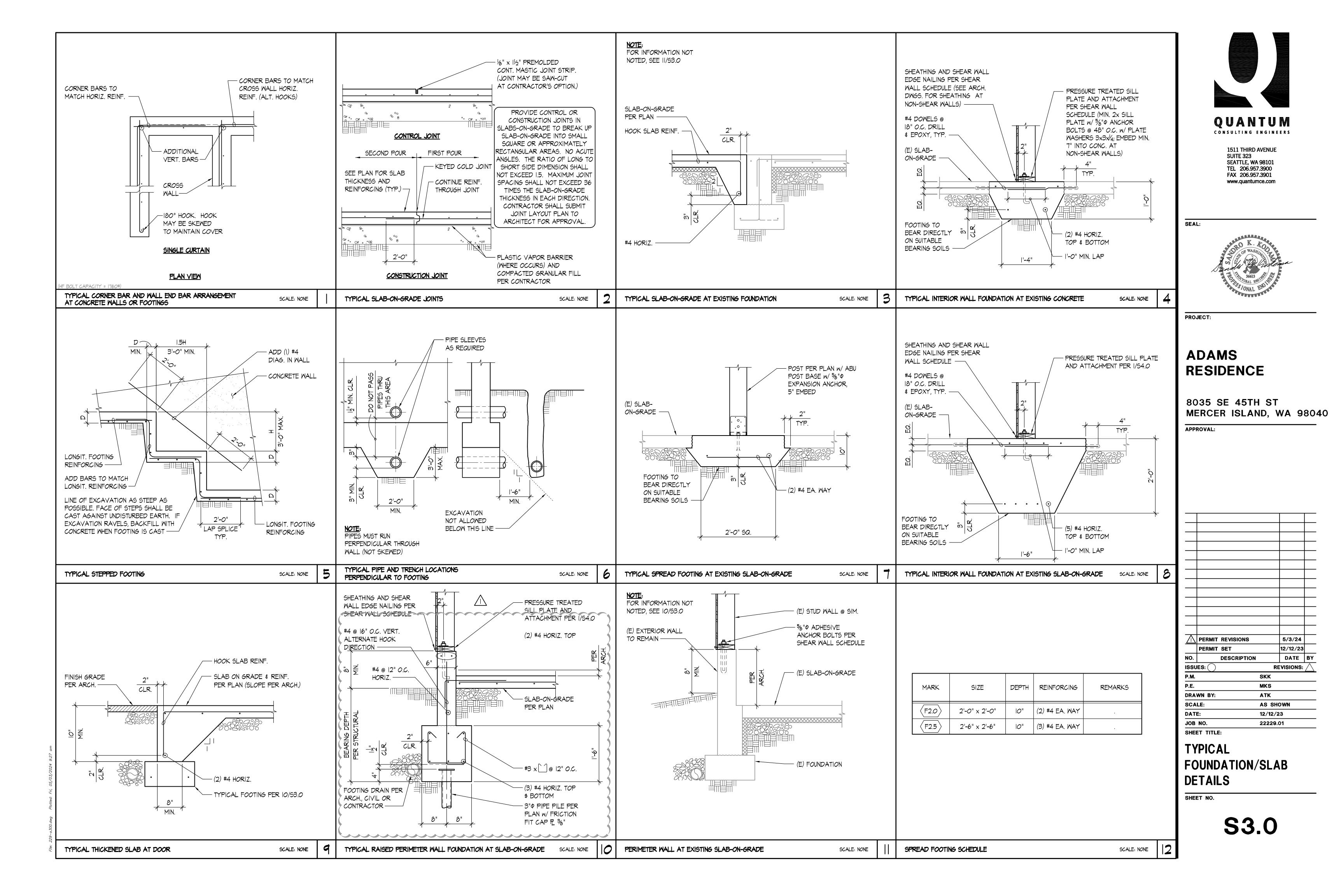
ROOF FRAMING PLAN

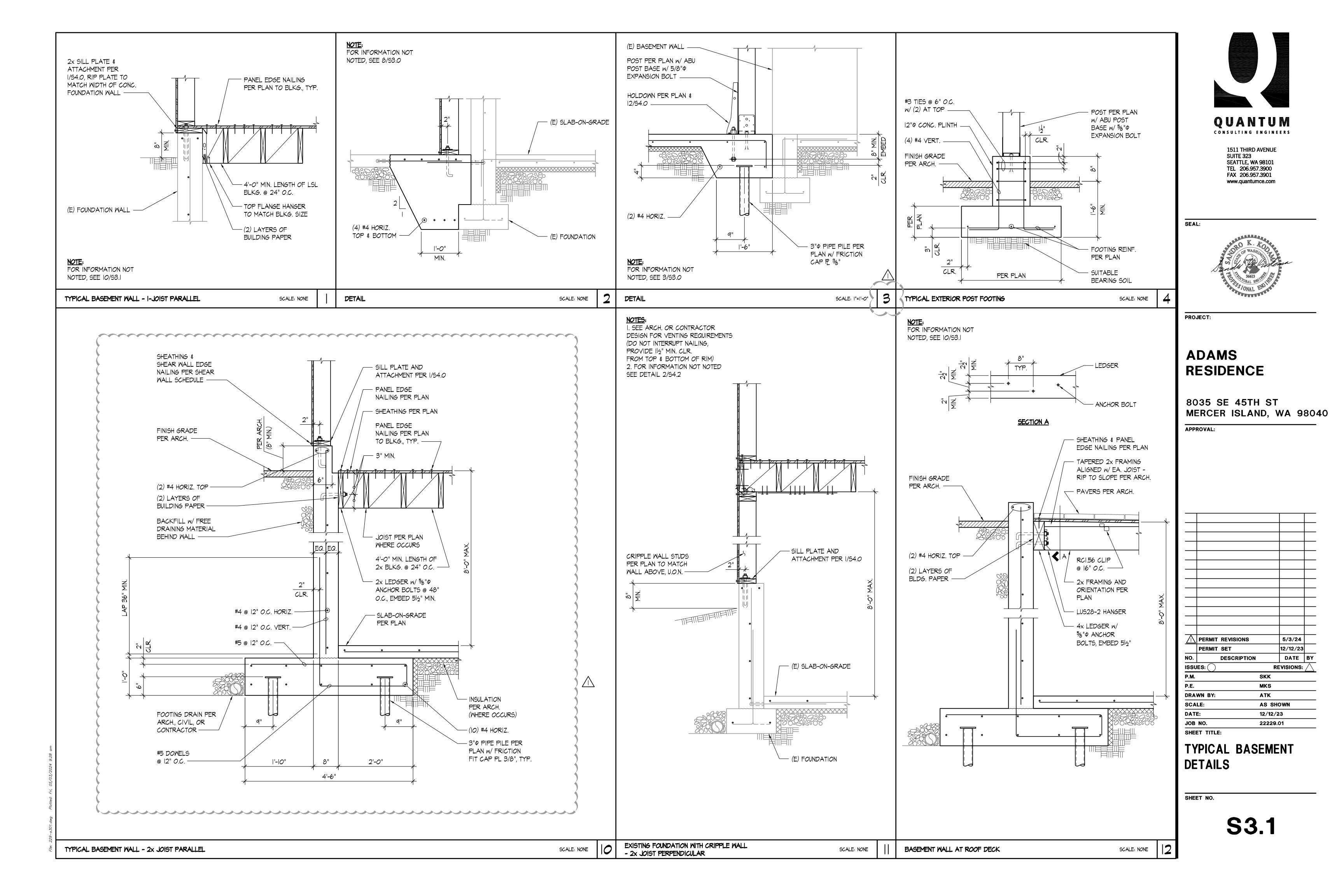
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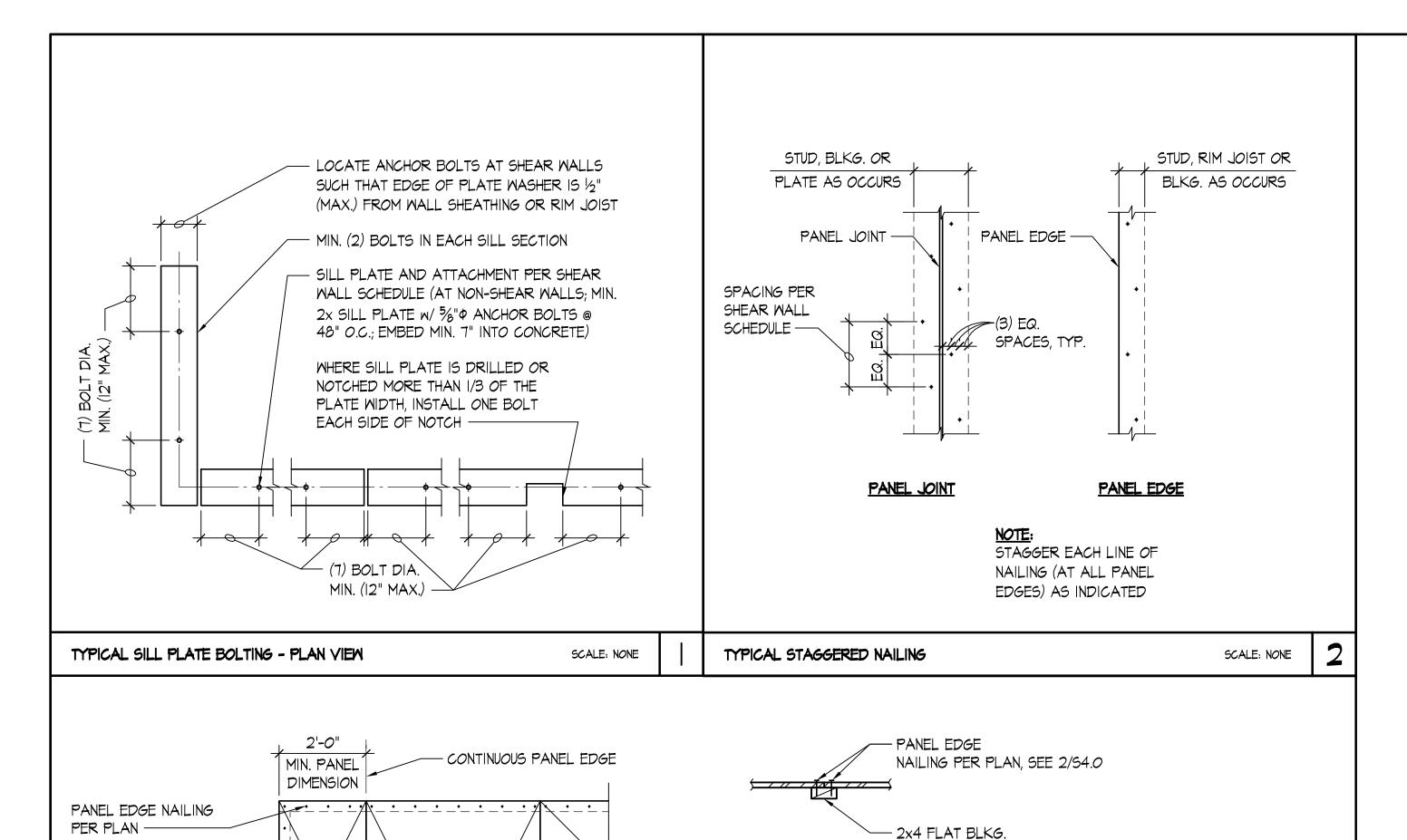
JOB NO.

SHEET TITLE:

**S2.2** 







SHEATHING

PER PLAN -

FIELD NAILING AT

SHEATHING JOINT, PANEL EDGE NAILING

PER PLAN, TYP. —

DIAPHRAGMS ARE

SPECIFIED ON THE PLANS, PROVIDE

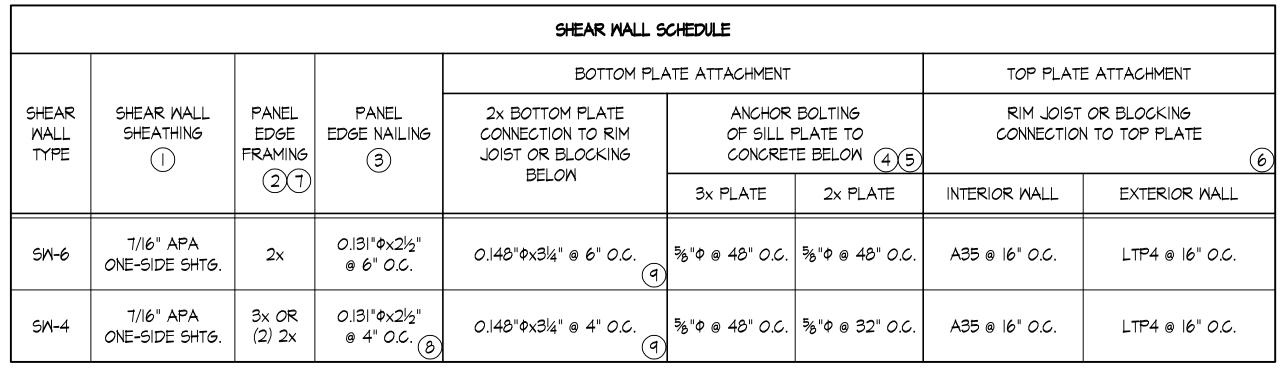
2x4 FLAT BLKG. AT SHEATHING JOINTS, SEE DETAIL A -

INTERMEDIATE FRAMING

WHERE FULLY BLOCKED

TYPICAL FLOOR TO FLOOR HOLDOWN STRAP & FLOOR TO HEADER HOLDOWN STRAP

MEMBERS PER PLAN -



#### NOTES:

- (I) 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/ O.131" 4 x 2-1/2" @ 12" O.C.
- (4) EMBED CAST-IN-PLACE 5/8" 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 I/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"  $\phi \times 1-1/2$ " LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"  $\phi \times 2-1/2$ " LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/54.1 FOR TOP PLATE SPLICE.
- (7) ALTERNATIVE TO 3x STUDS AND 3x HORIZ. BLOCKING IS (2) 2x STUDS/BLKG. NAILED TOGETHER WITH 0.148" 4 x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).

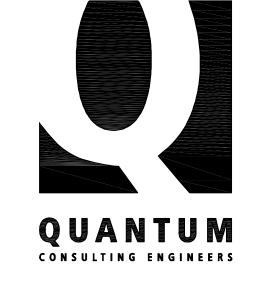
GENERAL STRUCTURAL NOTES)

(8) STAGGER NAILS PER 2/54.0.

TYPICAL HOLDOWN TO CONCRETE

SCALE: NONE

(9) RIM JOIST/BLOCKING MINIMUM WIDTH OF  $1^{3}4$ ". STAGGER NAILS PER 2/54.0 WHERE SPACING IS LESS THAN 6" O.C.



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APPROVAL:

SCALE: NONE

SCALE: NONE

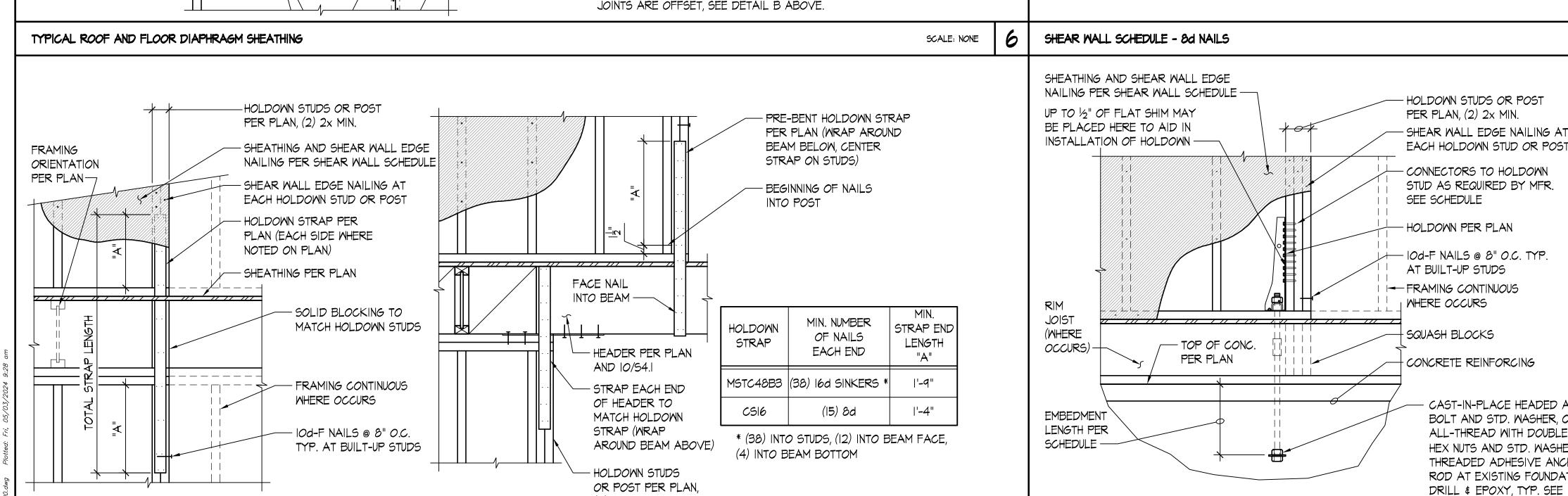
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P.E.	P.E.			MKS		
DRA	WN BY:		ATK			
SCALE:			AS SHOWN			
DATE:			12/12/23			
JOB NO.			22229.01			

**TYPICAL WOOD DETAILS** 

SHEET NO.

SHEET TITLE:

**S4.0** 



**DETAIL A** 

FLAT BLOCKING AT PANEL EDGES (WHERE REQD.)

<u>DETAIL B</u> PANEL EDGE NAILING AT JOIST SPLICE

PERPENDICULAR TO FRAMING.

(2) 2x MIN.

I. RUN LONG DIMENSION OF SHEATHING PANELS

2. WHERE FRAMING LAP SPLICE AND SHEATHING

PANEL EDGE

2x4 NAILER W/

10d-F NAILS @ 6" O.C.

- JOIST BEYOND AT JOIST

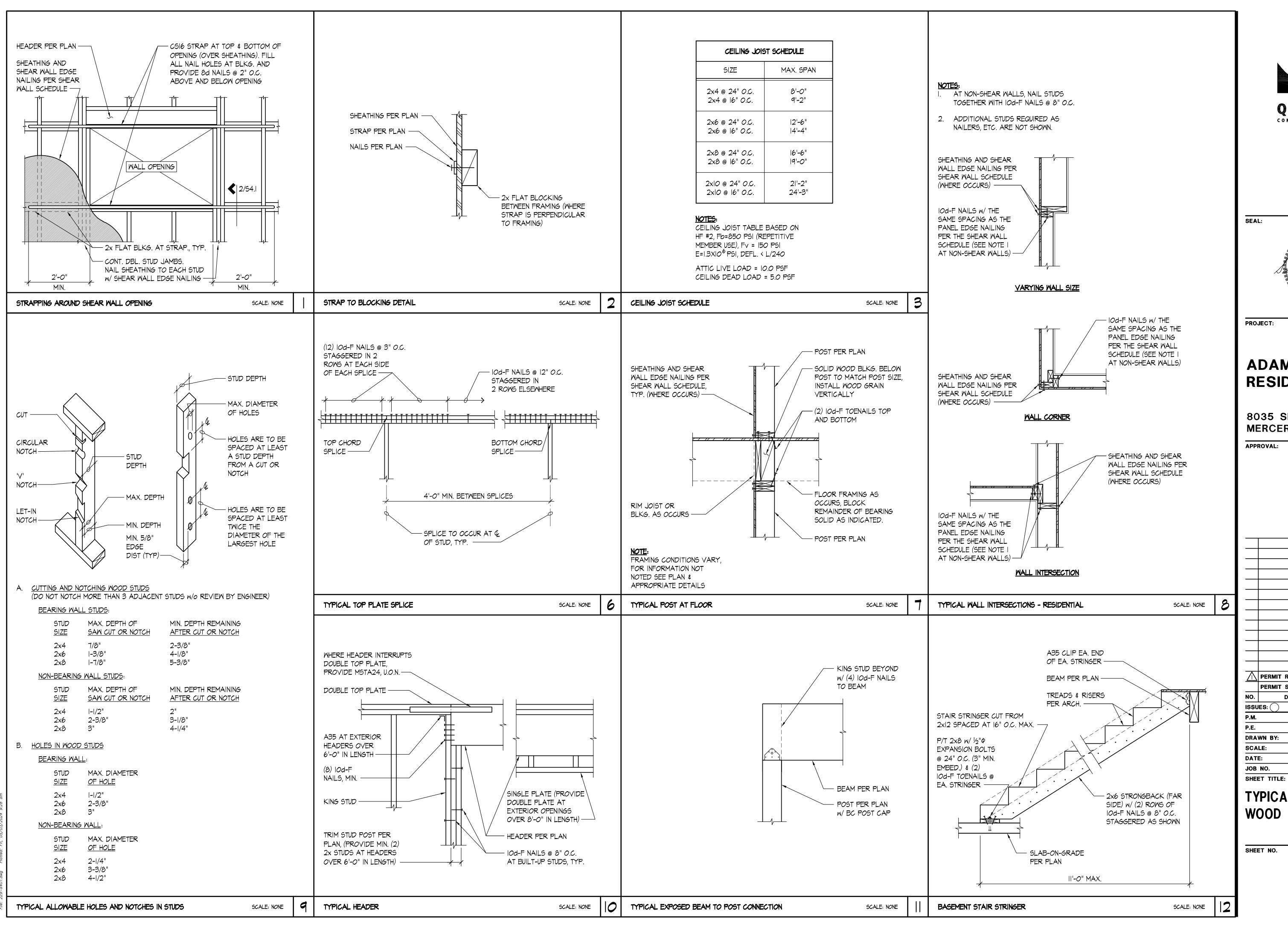
SPLICE WHERE OCCURS

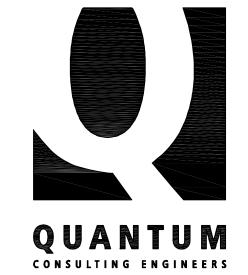
NAILING PER PLAN

-SHEAR WALL EDGE NAILING AT EACH HOLDOWN STUD OR POST CAST-IN-PLACE HEADED ANCHOR BOLT AND STD. WASHER, OR ALL-THREAD WITH DOUBLE HEAVY HEX NUTS AND STD. WASHER (USE THREADED ADHESIVE ANCHOR ROD AT EXISTING FOUNDATION -

CONNECTORS ANCHOR BOLT ANCHOR IN CONCRETE TO HOLDOWN HOLDOWN BOLT **P** EMBED LENGTH STUDS %"Φ HDU2 (6) 4"x21/2" SDS %"Φ HDU5 (14) 1/4"x21/2" SDS

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





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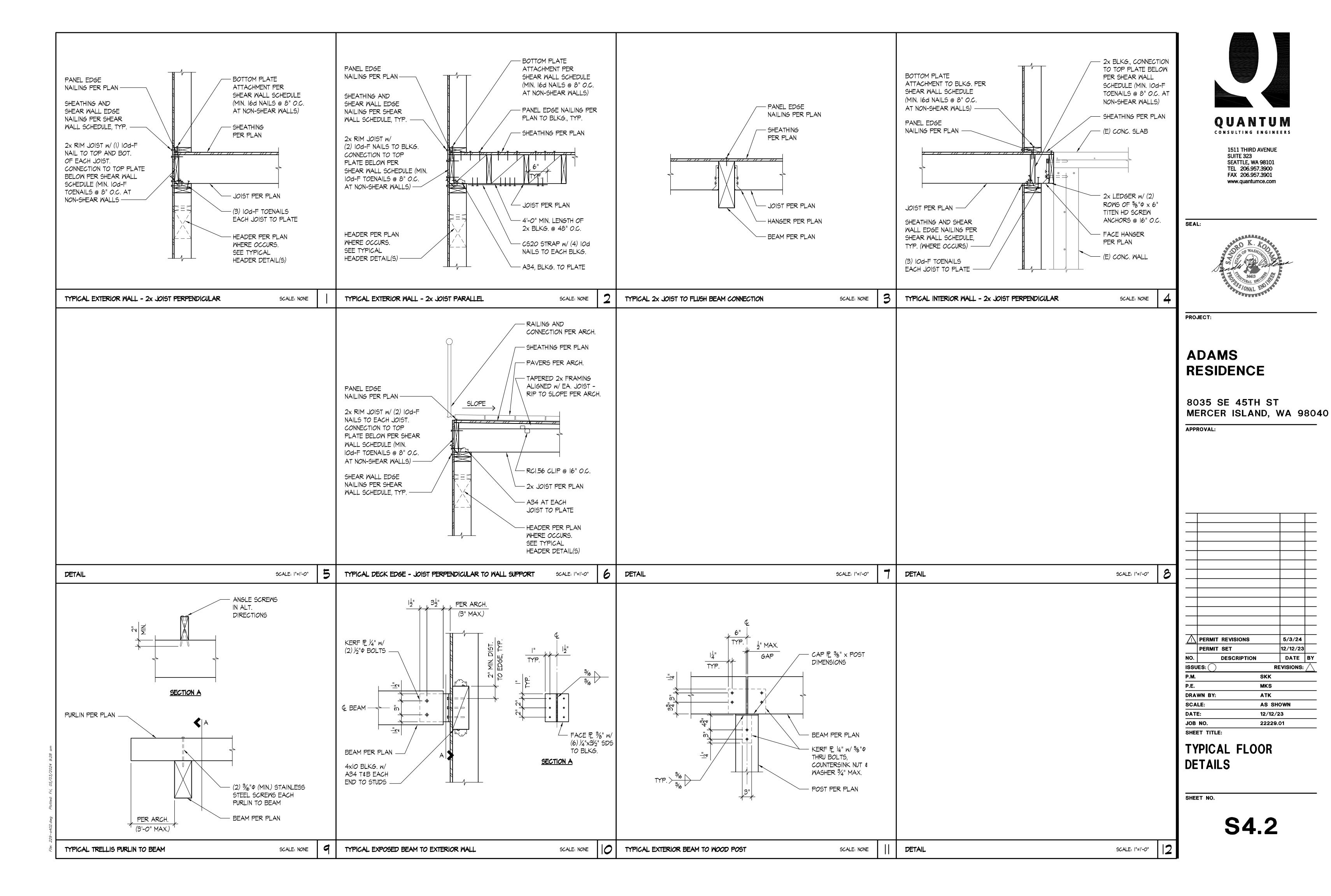
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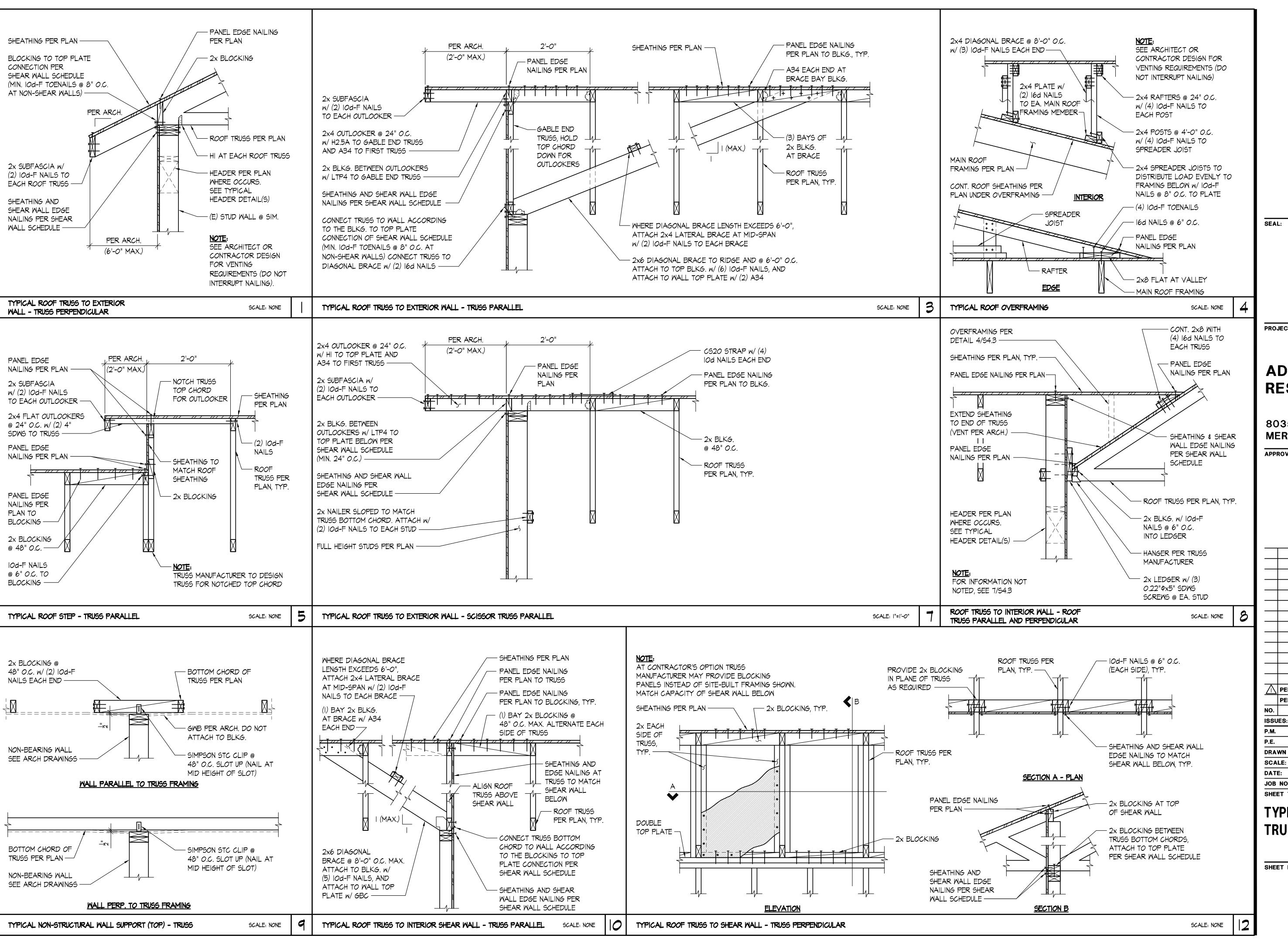
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3	NO.	22229.01			

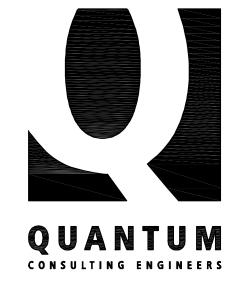
### **TYPICAL** WOOD DETAILS

SHEET NO.

**S4.1** 







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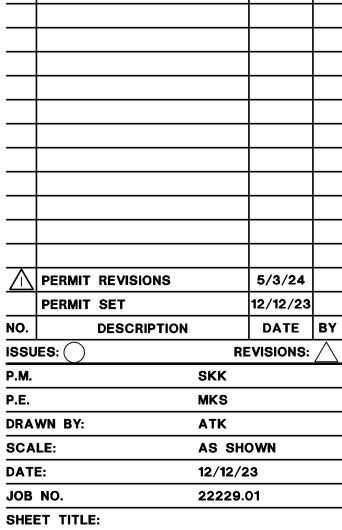


PROJECT:

### **ADAMS** RESIDENCE

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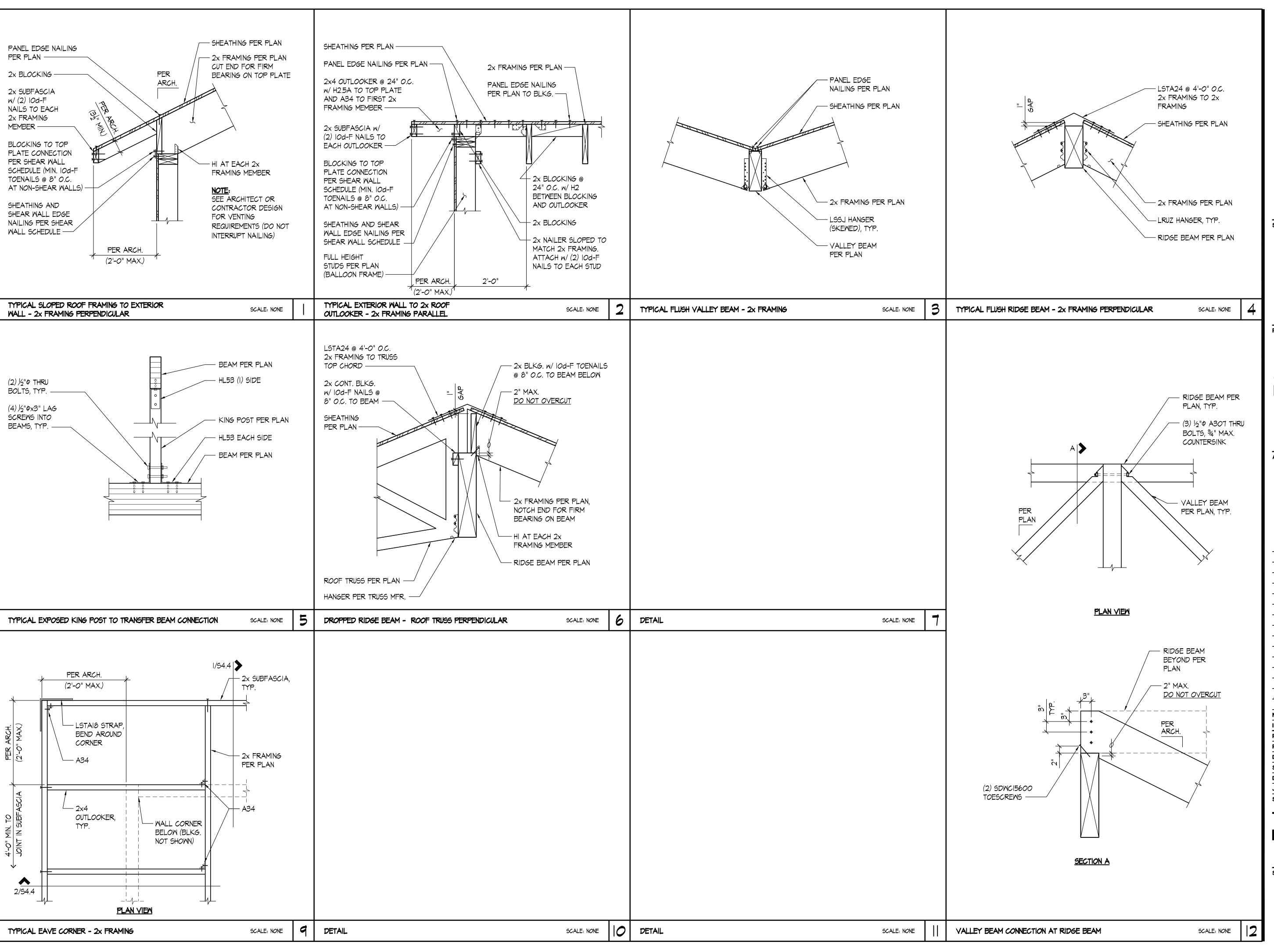
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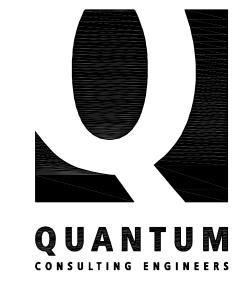


**TYPICAL** TRUSS DETAILS

SHEET NO.

**S4.3** 





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SEAL:

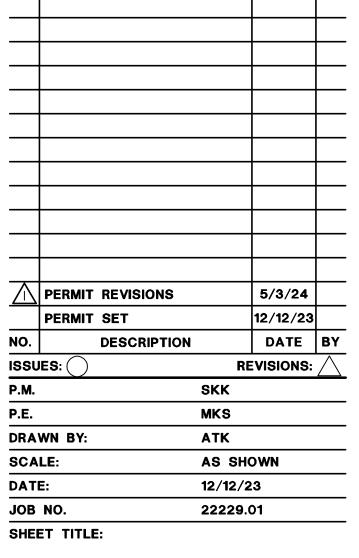


PROJECT:

### ADAMS RESIDENCE

8035 SE 45TH ST MERCER ISLAND, WA 98040

APPROVAL:



# TYPICAL ROOF DETAILS

SHEET NO.

**S4.4** 

