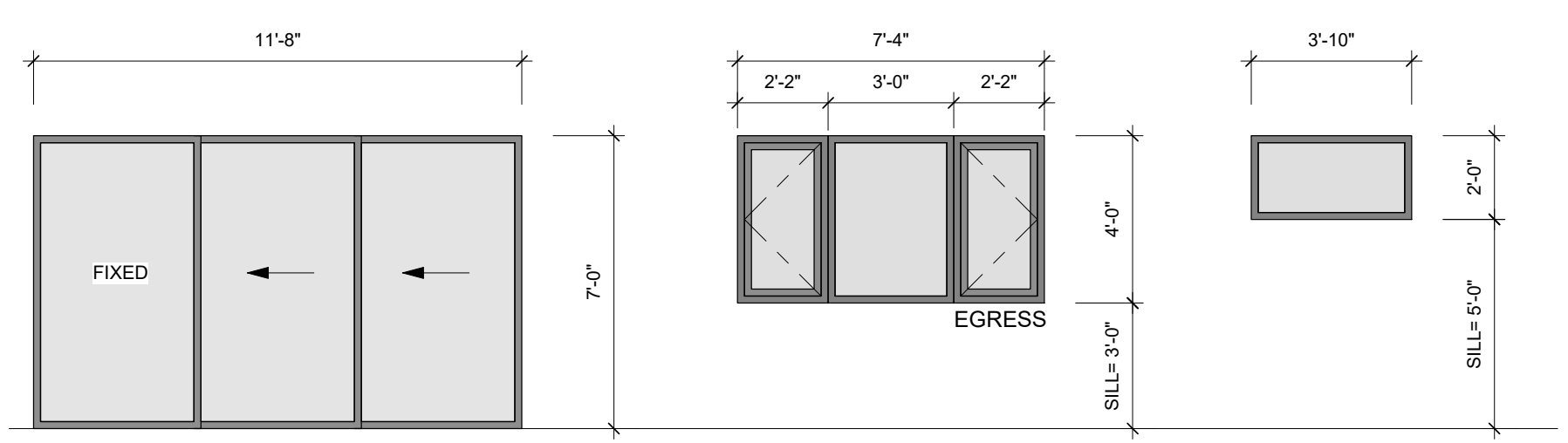
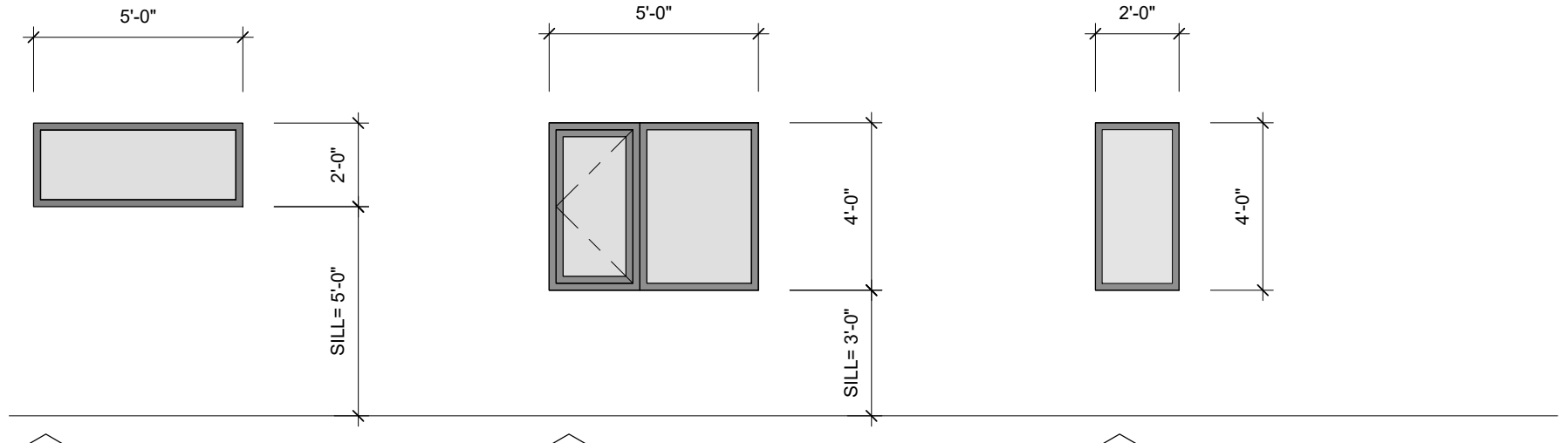


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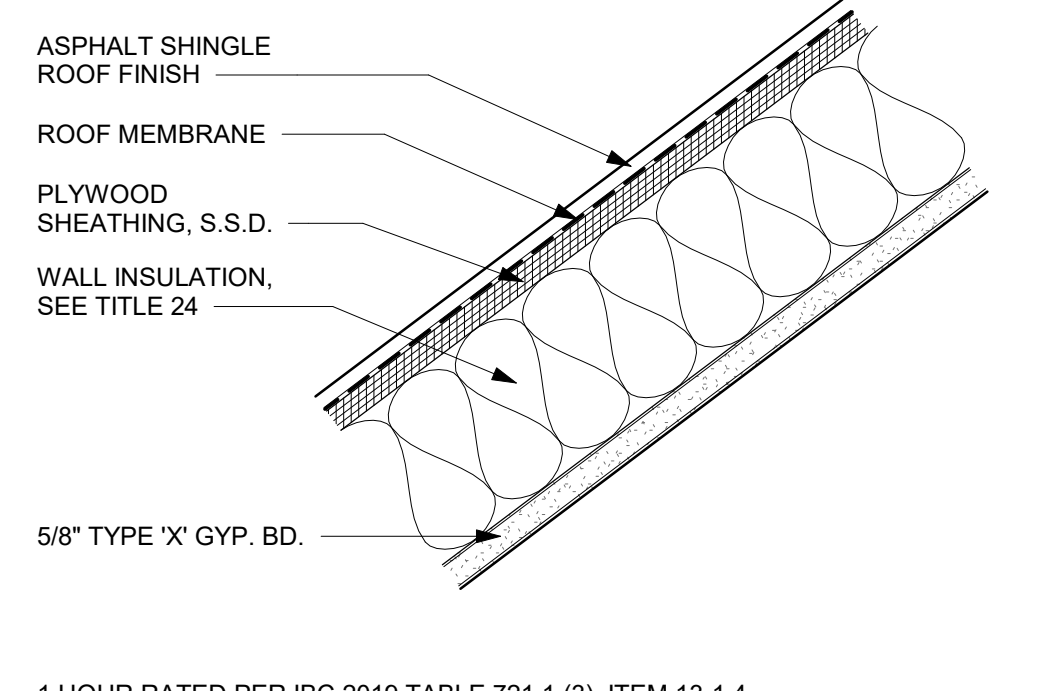
**(D1)** 3 PANELS SLIDING DOOR (TEMPERED GLASS) QTY. = 1  
**(W1)** BEDROOM EGRESS WINDOW QTY. = 1  
**(W2)** BATHROOM WINDOW QTY. = 2



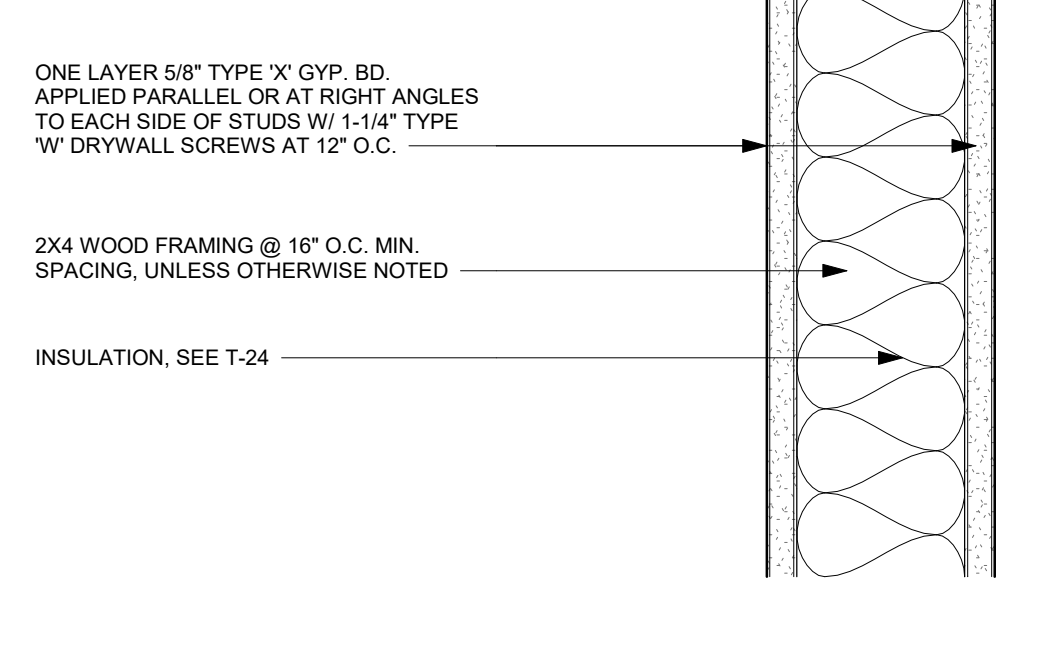
**(W3)** BEDROOM CLERESTORY WINDOW QTY. = 1  
**(W4)** BEDROOM EGRESS WINDOW QTY. = 1  
**(W5)** SKYLIGHT WINDOW QTY. = 3

**WINDOW GENERAL NOTES**  
 1. ALL WINDOWS SHALL BE DOUBLE-GLAZED UNLESS OTHERWISE NOTED, REFER TO TITLE 24 RESIDENTIAL COMPLIANCE FORMS CF-1R FOR U-VALUES AND SHGC.  
 2. SEE SPEC FOR GLAZING TYPE.  
 3. TEMPERED GLASS SHALL BE USED IN ALL PANELS AT BOTTOM/TOP OF STAIR, WITHIN 18" OF FINISH FLOOR AND WITHIN A 24" ARC FROM THE VERTICAL EDGE OF ANY DOOR OPENINGS. PROVIDE TEMPERED GLASS AT ALL LOCATIONS NOTED AND AS REQUIRED BY ALL ORDINANCES AND REGULATIONS ADOPTED BY GOVERNING AGENCIES: CITY, COUNTY, STATE AND FEDERAL AS THEY APPLY. AS PER CBC SECTION 2406. 'TG' DENOTES TEMPERED GLASS PANELS.  
 4. PROVIDE SCREENS AT ALL OPERABLE WINDOWS, UNLESS OTHERWISE NOTED.  
 5. WINDOW DIMENSIONS SHOWN ARE NOMINAL (APPROXIMATE) FRAME SIZES. FIELD VERIFY ROUGH OPENING SIZES AND COORDINATE WITH WINDOW MANUFACTURER'S CLEARANCE REQUIREMENTS AND ADJACENT FINISHES.  
 6. EGRESS WINDOW: ALL EGRESS OPENINGS TO COMPLY WITH CBC SECTION 1030.2 & CBC SECTION R310.2.1. VERIFY THAT ALL EGRESS OPENINGS HAVE CLEAR NET OPENING AREA OF 5.7 SF MIN. WITH 24" MIN. CLEAR OPENING HEIGHT AND 20" MIN. CLEAR OPENING WIDTH AND A FINISHED SILL HEIGHT NOT TO BE MORE THAN 44" ABOVE FINISH FLOOR.  
 7. COORDINATE ALL STRUCTURAL FRAMING REQUIREMENTS WITH WINDOW MANUFACTURER AND OWNER.

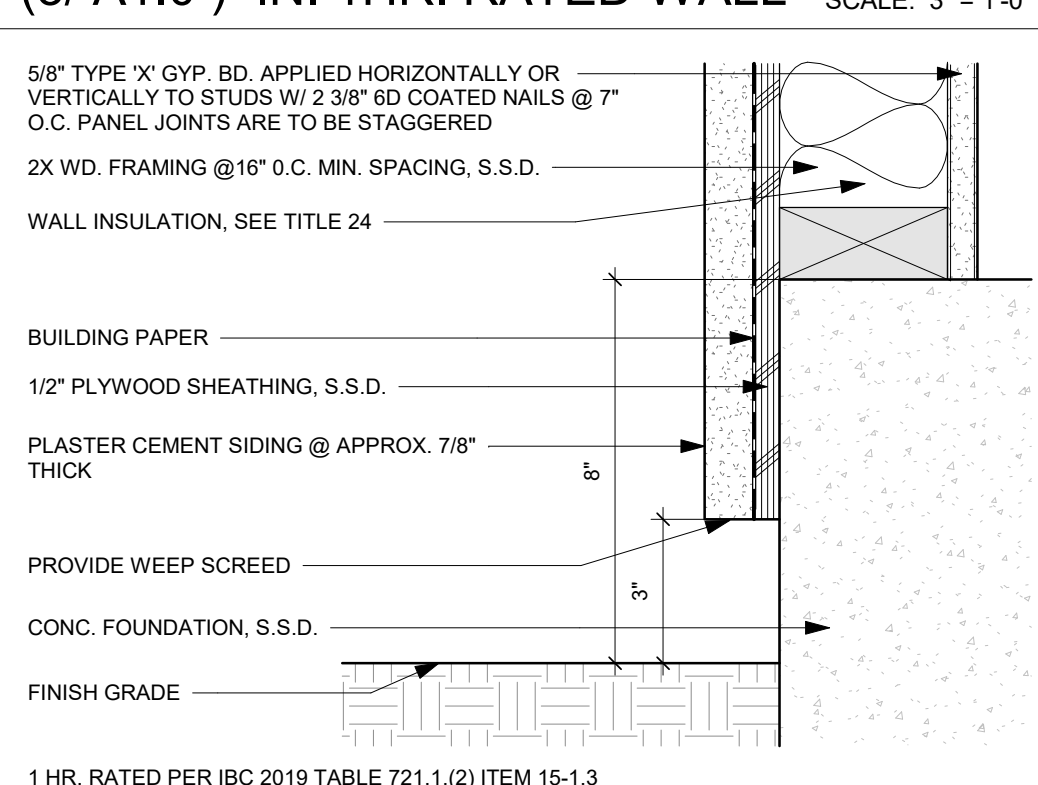
**EXTERIOR WINDOW & DOOR SCHEDULE** SCALE: 1/4" = 1'-0"



**(4/ A1.0) 1HR. ROOF DETAIL** SCALE: 3" = 1'-0"



**(3/ A1.0) IN. 1HR. RATED WALL** SCALE: 3" = 1'-0"



**(2/ A1.0) 1HR. EX. WALL @ CONC.** SCALE: 3" = 1'-0"

**PROJECT DESCRIPTION:** DEMOLITION OF (E) GARAGE AND (N) CONSTRUCTION OF 750 SF DETACHED ADU AT THE SAME LOCATION

**ZONING DISTRICT:** R-1  
**ADDRESS NUMBER:** 936-B MASONIC AVE, ALBANY CITY

**BUILDING HEIGHT TO RIDGE:** EXISTING 14'-0" PROPOSED 16'-0" CHANGE +2'-0"

**APPLICABLE CODES:** 2019 CALIFORNIA RESIDENTIAL ELECTRICAL, MECHANICAL, AND PLUMBING CODES  
 2019 CALIFORNIA ENERGY CODE  
 2019 CALIFORNIA GREEN BUILDING CODE

**LOT COVERAGE:** EXISTING 0 PROPOSED 1 CHANGE +1  
**LOT SIZE:** 4000 SF NO CHANGE  
**LOT COVERAGE:** 1,574 SF 1,761 SF +187 SF  
**% COVERAGE:** 38.5% 44% +4.5%

**FLOOR AREAS:** EXISTING 963 GSF PROPOSED 750 GSF CHANGE +187 GSF

**PROGRAM:** EXISTING PROPOSED CHANGE  
 KITCHEN: 0 1 +1  
 BEDROOMS: 0 2 +2  
 BATHROOMS: 0 2 +2  
 LIVINGROOM: 0 1 +1

**PROJECT INFORMATION**

**OWNER:** JENNIFER TON  
 936 MASONIC AVE  
 ALBANY, CA 94706  
 JENNIFERTON65@GMAIL.COM  
 (510)701-0300

**STRUCTURAL ENGINEER:** FAR ASSOCIATES  
 12885 ALCOSTA BLVD  
 SAN RAMON, CA 94583  
 FERNANDEZ@FAENGINEERS.COM  
 (415) 756-0612

**T-24 ENERGY ENGINEER:** JOHN TAO  
 BASALTIC, INC  
 BASALTIC@GMAIL.COM  
 (510)967-1299

**GENERAL CONTRACTOR:** MORAES CONSTRUCTION  
 953 W MACARTHUR BLVD  
 OAKLAND, CA 94608  
 MORAESCONSTRUCTION@GMAIL.COM  
 (510)708-2300

**DESIGNER/DRAFTER:** HAONAN JIA  
 5905 BAYVIEW AVE  
 RICHMOND, CA 94804  
 HJIADESIGN@GMAIL.COM  
 (415) 528-9534

**PROJECT TEAM**

**ARCHITECTURAL**  
 A1.0 COVER PAGE  
 A1.1 EXISTING CONDITIONS

**LAND SURVEY**  
 A2.0 FLOOR PLANS & ELEVATIONS, SECTIONS  
 A2.1 ATTIC & ROOF PLANS  
 A3.0 WINDOW & DOOR INSTALLATION

**STRUCTURAL**  
 S1 GENERAL NOTES FOUNDATION PLAN CEILING FRAMING PLAN & ROOF FRAMING PLAN  
 S2 FRAMING & SHEAR TRANSFER DETAILS  
 S3 MISCELLANEOUS DETAILS  
 S4 FASTENING SCHEDULE

**TITLE 24**  
 T24-1 ENERGY COMPLIANCE  
 T24-2 ENERGY COMPLIANCE  
 T24-3 TITLE 24 SUPPLEMENT

**SHEET INDEX**

- DUAL SERVICE WATER RISER & HOSE BIB W/ ANTI-SIPHON DEVICE. WATER SERVICE RISER TO HAVE MANUAL SHUT-OFF AND PRESSURE REDUCING VALVES.
- HOSE BIB WITH ANTI-SIPHON DEVICE. FIELD VERIFY LOCATION W/ OWNER
- HYBRID ELECTRIC WATER HEATER
- WALL-MOUNTED EXHAUST CAP TO BE PAINTED TO MATCH ADJACENT WALL COLOR
- GALV. GUTTER W/ PAINTED FINISH. VERIFY PROFILE W/ OWNER
- GALV. DOWNSPOUT WITH PAINTED FINISH. VERIFY PROFILE W/ OWNER
- SOFFIT. SEE SECTIONS & FIELD VERIFY HEIGHT W/ OWNER
- 3" TALL ADDRESS NUMBERS
- DOORBELL. VERIFY W/ OWNER
- WALL-MOUNTED HEAT-PUMP UNIT
- PLASTER CEMENT SIDING W/ PAINTED FINISH. VERIFY COLOR W/ OWNER

**KEYED NOTES**

DOOR TAG	QUANTITY	DOOR TYPE	WIDTH	HEIGHT	FINISH	STYLE
D.1	3	SWING DOOR	2'-6"	7'	WOOD	SOLID CORE W/ SOFT CLOSE
D.2	1	POCKET DOOR	2'-6"	7'	WOOD	SOLID CORE W/ SOFT CLOSE

LIGHT TAG	QUANTITY	DOOR TYPE	NOTES
1	18	CAN LIGHT	
2	1	LIGHT/FAN COMBO	
3	2	Vanity LIGHT	
4	0	WALL-MOUNTED UPLIGHT	
5	1	FLOOD LIGHT	
6	1	MOTION/SECURITY	

**MECHANICAL GENERAL NOTES**  
 M1. ENVIRONMENTAL AIR EXHAUST SHALL HAVE A 3" MIN. CLEARANCE FROM PROPERTY LINES & BUILDING OPENINGS INCLUDING THOSE FROM BATHROOM, KITCHEN RANGE, WATER HEATER AND LAUNDRY.  
 M2. ALL VENTILATION SHALL COMPLY W/ THE 2019 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL & NONRESIDENTIAL BUILDINGS. TITLE 24, PART 6.  
 M3. LOCAL EXHAUST FROM KITCHEN SHALL BE ACCOMPLISHED BY VENTING A MIN. 400 CFM RATED HOOD TO OUTSIDE W/ 6" DUCT.  
 M4. HVAC CONTRACTOR SHALL COVER ALL DUCT OPENINGS IMMEDIATELY UPON INSTALLATION AND TO BE OPENED UPON COMPLETION OF CONSTRUCTION.

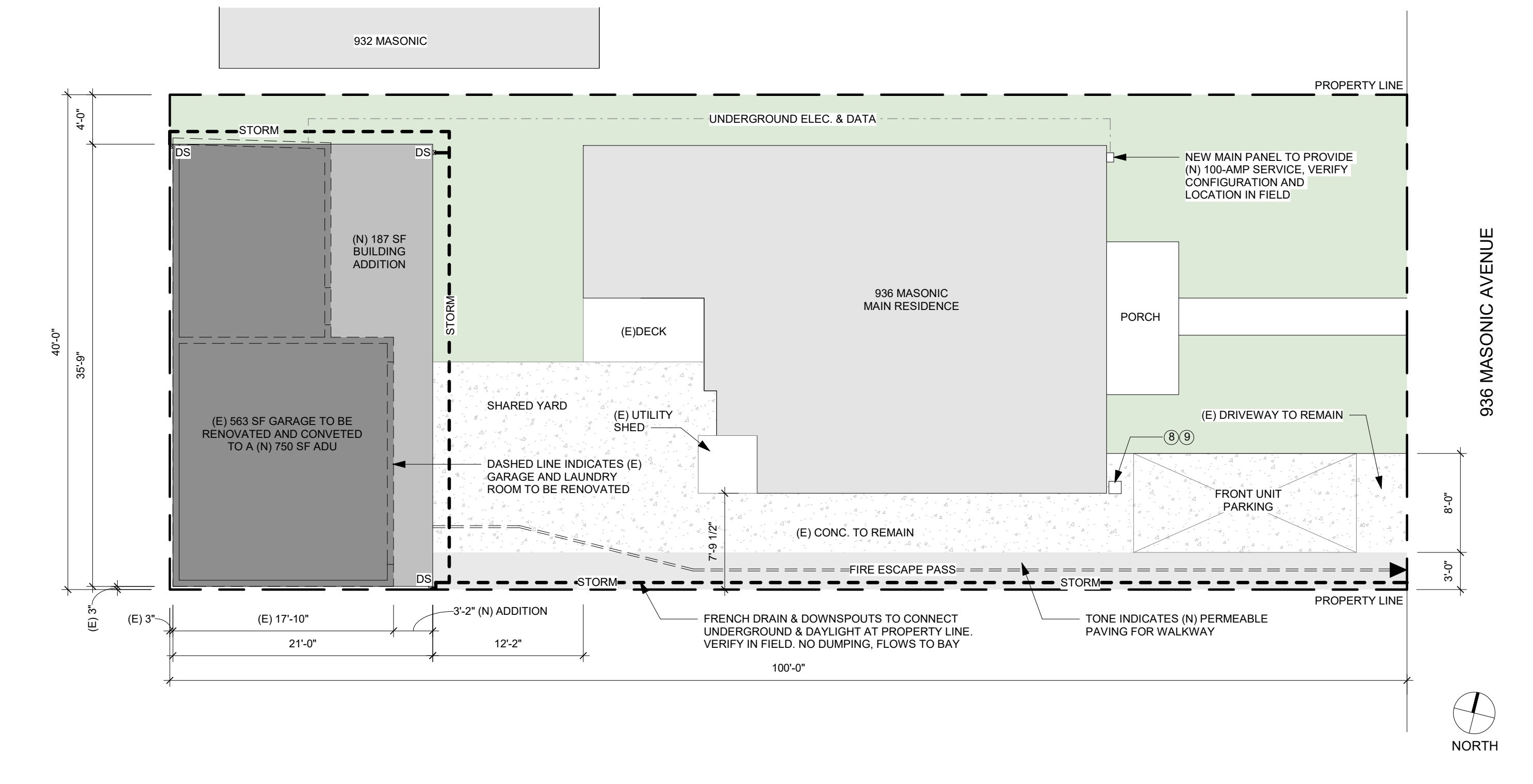
**ELECTRICAL GENERAL NOTES**  
 E1. ALL LIGHT SWITCH, OUTLET & COVERPLATE SHALL BE LUTRON CLARO OR AS VERIFIED BY OWNER.  
 E2. FIELD VERIFY ALL SWITCH LOCATION AND GROUPINGS W/ OWNER. INSTALL SWITCHES TO HAVE 12" OF COVERPLATE AT 44" A.F.F. INSTALL OUTLETS TO HAVE TOP OF COVERPLATE AT 18" A.F.F. U.O.N. DRAWINGS SHOW APPROXIMATE LOCATIONS BUT DO NOT CONSIDER POTENTIAL FRAMING OR OTHER CONFLICTS.  
 E3. ELECTRICIAN TO PROVIDE BOTH CODE REQUIRED OUTLET QUANTITY LOCATIONS AND THOSE REQUIRED BY APPLIANCES AND OTHER MEP SYSTEMS; NEITHER OF WHICH ARE NECESSARILY INDICATED IN THE MEP PLANS. ELECTRICIAN SHALL PROVIDE ADDITIONAL OUTLETS AS SHOWN IN PLANS AND AS FIELD VERIFIED BY OWNER.  
 E4. ELECTRICIAN TO PROVIDE DATA, PHONE/CABLE, AND AUDIO/VIDEO WIRING AS SHOWN IN PLANS OR AS VERIFIED BY OWNER.  
 E5. FIELD VERIFY ALL LIGHT LOCATIONS W/ OWNER. DRAWINGS SHOW DESIGN INTENT BUT DO NOT CONSIDER POTENTIAL FRAMING OR OTHER CONFLICTS.  
 E6. OUTLETS SHALL BE WITHIN 6" OF ANY OPENING AND NOT EXCEED 12" APART. ANY ISOLATED WALL 2' OR WIDER SHALL HAVE OUTLETS. AT KITCHEN COUNTER, GFCI OUTLETS SHALL BE WITHIN 2' OF EDGE OF ALL COUNTERS, SINKS, STOVES, ETC. AND ARE NOT TO EXCEED 4' APART. GFCI OUTLETS ARE REQUIRED AT ALL KITCHEN ISLANDS AND PENINSULAS AND WITHIN 6' RADIUS OF SINK.  
 E7. LUMINAIRES RECESSED INTO INSULATED CEILING SHALL BE LISTED FOR ZERO CLEARANCE INSULATION CONTACT AND BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING.  
 E8. ALL LIGHTING SHALL COMPLY W/ THE 2019 TITLE 24 REQUIREMENTS INCLUDING:  
 a) ALL INSTALLED LUMINAIRES SHALL BE HIGH-EFFICIENCY IN ACCORDANCE WITH TABLE 150.0.A  
 b) IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACANCY SENSOR.  
 c) UNDER CABINET LIGHTING SHALL BE SWITCHED SEPARATELY FROM OTHER LIGHTING SYSTEMS.  
 E9. ALL NEW 120-VOLT, SINGLE PHASE, 15 AND 20 AMP BRANCH CIRCUITS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DEN, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY ROOMS OR SIMILAR ROOMS OR AREA SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTIONS OF THE BRANCH CIRCUITS. CEC 110.120.  
 E10. KITCHEN NOTE: ALL 15 & 20 AMP, 125 VOLT RECEPTACLES, INCLUDING THE GARBAGE DISPOSER RECEPTACLE, WITHIN 6' OF THE KITCHEN SINK SHALL BE GFCI PROTECTED PER CEC 210.8  
 E11. ALL EXTERIOR LIGHTING SHALL BE SHIELDED TO PREVENT GLARE ONTO NEIGHBORING PROPERTIES  
 E12. ALL 15 OR 20 AMP, 125 OR 250 VOLT RECEPTACLES INSTALLED OUTDOORS IN WET LOCATIONS MUST BE A LISTED, "EXTRA DUTY", THAT IS WEATHER PROOF WHETHER OR NOT THE PLUG IS INSERTED PER CEC 406.9(B)  
 E13. ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE TO ON AND ONE OF THE FOLLOWING: CONTROLLED BY PHOTOCELL AND MOTION SENSOR, PHOTO CONTROL AND AUTOMATIC SWITCH CONTROL, ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM.

**PLUMBING GENERAL NOTES**  
 P1. FLOW RATES OF ALL NEW PLUMBING FIXTURES SHALL MEET THE FOLLOWING 2019 CGBG 4.303.1 REQUIREMENTS:  
 a) WATER CLOSETS: <1.28 GALLONS/FLUSH  
 b) SINGLE SHOWERHEADS: <1.8 GPM @ 80 PSI  
 c) MULTIPLE SHOWERHEADS: COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GPM @ 80 PSI OR ONLY ONE SHOWER OUTLET IS TO BE IN OPERATION AT A TIME.  
 d) RESIDENTIAL LABORATORY FAUCETS: <1.2 GPM @ 80 PSI  
 e) KITCHEN FAUCETS: <1.8 GPM @ 80 PSI; TEMPORARY INCREASE TO 2.2 GPM ALLOWED BUT SHALL DEFAULT TO 1.8 GPM  
 P2. IF THE WATER HEATER INPUT RATING EXCEEDS 6.8 BTU/H, THEY SHALL HAVE ISOLATION VALVES ON BOTH THE COLD WATER SUPPLY AND HOT WATER PIPE LEAVING THE WATER HEATER, AND HOSE BIBS OR OTHER FITTINGS ON EACH VALVE FOR FLUSHING THE WATER WHEN THE VALVES ARE CLOSED PER CEC 110.3(C)7.  
 P3. ALL HOT WATER SUPPLY PIPING 3/4" AND GREATER SHALL BE INSULATED PER CEC SECTION 150.0(J)2.III. ALL HOT WATER SUPPLY PIPING FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES SHALL BE INSULATED PER CEC SECTION 150.0

**GENERAL NOTES**  
 G1. CONSTRUCTION LIABILITY: THE GENERAL CONTRACTOR AND SUBCONTRACTORS AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE GENERAL CONTRACTOR AND SUBCONTRACTORS WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL BE MADE TO APPLY TO CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS FURTHER AGREE TO DEFEND, INDEMNIFY, AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.  
 G2. CONTRACTOR ACKNOWLEDGES THAT THE OWNER IS THE AUTHOR OF THESE CONSTRUCTION DOCUMENTS AND IS THE OWNER OF THE COPYRIGHT TO THEM. CONTRACTOR IS ENTITLED TO USE THESE CONSTRUCTION DOCUMENTS ONLY FOR THE PROJECT FOR WHICH THEY WERE DESIGNED AND NOT FOR ANY OTHER PURPOSE OR PROJECT.  
 G3. ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED BY THE DRAWINGS OR AS VERIFIED BY THE OWNER, AND/OR AS REQUIRED BY THE ADOPTED EDITION OF THE UNIFORM BUILDING CODE AND ALL LOCAL CODES AND AUTHORITIES.  
 G4. ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF FINISH OR UNLESS OTHERWISE NOTED. CONFIRM DIMENSIONAL QUESTIONS WITH OWNER. DO NOT SCALE OFF OF THE PLANS.  
 G5. EGRESS WINDOWS TO HAVE MIN. CLR. OPENING OF 20" WIDE, 24" TALL AND 5.7 SQUARE FEET W/ A SILL HEIGHT NO HIGHER THAN 44" ABOVE FINISHED FLOOR. THE NET CLR. OPENING DIMENSIONS SHALL BE THE RESULT OF NORMAL OPERATION OF THE OPENING AND REQUIRE NO SPECIAL KNOWLEDGE OR TOOLS.  
 G6. FOR ALL FLOORS AND WINDOWS, CONTRACTOR SHALL VERIFY ROUGH OPENINGS, SIZES, FUNCTION & MANUFACTURER W/ OWNER PRIOR TO ORDERING. ADDITIONALLY CONTRACTOR SHALL VERIFY INSTALLATION INSTRUCTIONS & DETAILS W/ OWNER AND/OR MANUF. PRIOR TO INSTALLATION.  
 G7. HANDRAILS TO BE 1 1/2" SQ. WOOD W/ METAL BRACKET @ 1-1/2" MIN. FROM WALL & 36" ABOVE STAIR NOSING. SEE PLANS & DETAILS.  
 G8. PER CALGREEN 2019, ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST INTRUSION OF ROBBERS.  
 G9. PER CALGREEN 2019, FINISH MATERIALS, ADHESIVES, SEALANTS, CAULKS, PAINTS, AND COATINGS SHALL COMPLY WITH SECTION 4.504 POLLUTANT CONTROL.  
 4.504.1 ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS.  
 4.504.2.2 PAINTS, STAINS AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS.  
 4.504.2.3 AEROSOL PAINTS AND OTHER COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS.  
 4.504.2.4 DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT COMPLIANT VOC LIMIT FINISH MATERIALS HAVE BEEN USED. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AT THE REQUEST OF THE ENFORCING AGENCY. DOCUMENTATION MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:  
 1. MANUFACTURER'S PRODUCT SPECIFICATION.  
 2. FIELD VERIFICATION OF ON-SITE PRODUCT CONTAINERS  
 4.504.4 RESILIENT FLOORING SYSTEMS.  
 4.504.5 PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF), AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS.  
 G10. PER CALGREEN 2019 CONCRETE SLAB FOUNDATIONS SHALL COMPLY WITH SECTION 4.505.2 WITH RESPECT TO VAPOR RETARDERS AND CAPILLARY BREAKS.  
 G11: BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED PER CALGREEN 2019 SECTION 4505.3.  
 G12: THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IMPLEMENTED AS PART OF CONSTRUCTION TO REDUCE EROSION, SEDIMENTATION, AND WATER QUALITY IMPACTS DURING CONSTRUCTION:  
 a) PROVIDE FILTERS AT NEARBY CATCH BASINS TO PREVENT DEBRIS AND DIRT FROM FLOWING INTO THE CITY'S STORM DRAIN SYSTEM AND CREEKS.  
 b) SEDIMENT BERMS SHALL BE USED AT THE PERIMETER OF THE SITE DURING GRADING TO PREVENT RUN OFF FROM THE SITE. IF SEDIMENT BERMS ARE INSUFFICIENT FOR SEDIMENT CONTROL, MORE SUBSTANTIAL SEDIMENT CONTROL MEASURES SUCH AS CHECK DAMS AND INTERCEPTOR DITCHES SHALL BE IMPLEMENTED.  
 c) NO GRADING SHALL OCCUR DURING WET WEATHER. IF WET WEATHER IS ANTICIPATED, ANY OPEN GRADED AREAS OR BARE SOIL SHALL BE COVERED WITH PLASTIC, MESH OR PLANTS TO PREVENT RUNOFF OF SOIL FROM THE SITE.

**GENERAL NOTES**

- 110 VAC DUPLEX OUTLET. FIELD VERIFY LOCATIONS, HEIGHT AND QUANTITIES W/ OWNER
- 110 VAC DUPLEX GFCI OUTLET. FIELD VERIFY LOCATIONS, HEIGHT W/ OWNER
- 110 VAC DUPLEX OUTLET AT OUTDOOR "WET" LOCATION TO BE A LISTED "EXTRA DUTY" RECEPTACLE. FIELD VERIFY LOCATIONS, HEIGHT W/ OWNER
- DATA OUTLET W/ PHONE AND COAXIAL CABLE. VERIFY W/ OWNER. AT TV LOCATIONS, PROVIDE FOR WALL MTD. INSTALL
- COMBO SMOKE / CO DETECTOR, INTERCONNECTED, HARDWIRED & W/ BATTERY BACK-UP
- GAS BIB FOR LAUNDRY, RANGE, FURNACE, WATER HEATER & FIREPLACE
- HOSE BIB WITH ANTI-SIPHON DEVICE. FIELD VERIFY LOCATION W/ OWNER
- DOORBELL. VERIFY REQTS W/ OWNER
- THERMOSTAT. FIELD VERIFY LOCATION W/ OWNER
- CEILING/ WALL REGISTER FOR HVAC
- EXTERIOR EXHAUST VENT. VERIFY STYLE AND FINISH AND FIELD VERIFY LOCATION W/ OWNER
- DASH LINE INDICATES DUCT LOCATION. FIELD VERIFY LOCATION W/ OWNER
- ELECTRICAL PANEL OR AV HOMERUN PANEL



**(1/ A1.0) SITE PLAN** SCALE: 1/8" = 1'-0"

**DOOR & LIGHTING SCHEDULE**

**SYMBOL/WALL LEGEND & GENERAL NOTES**

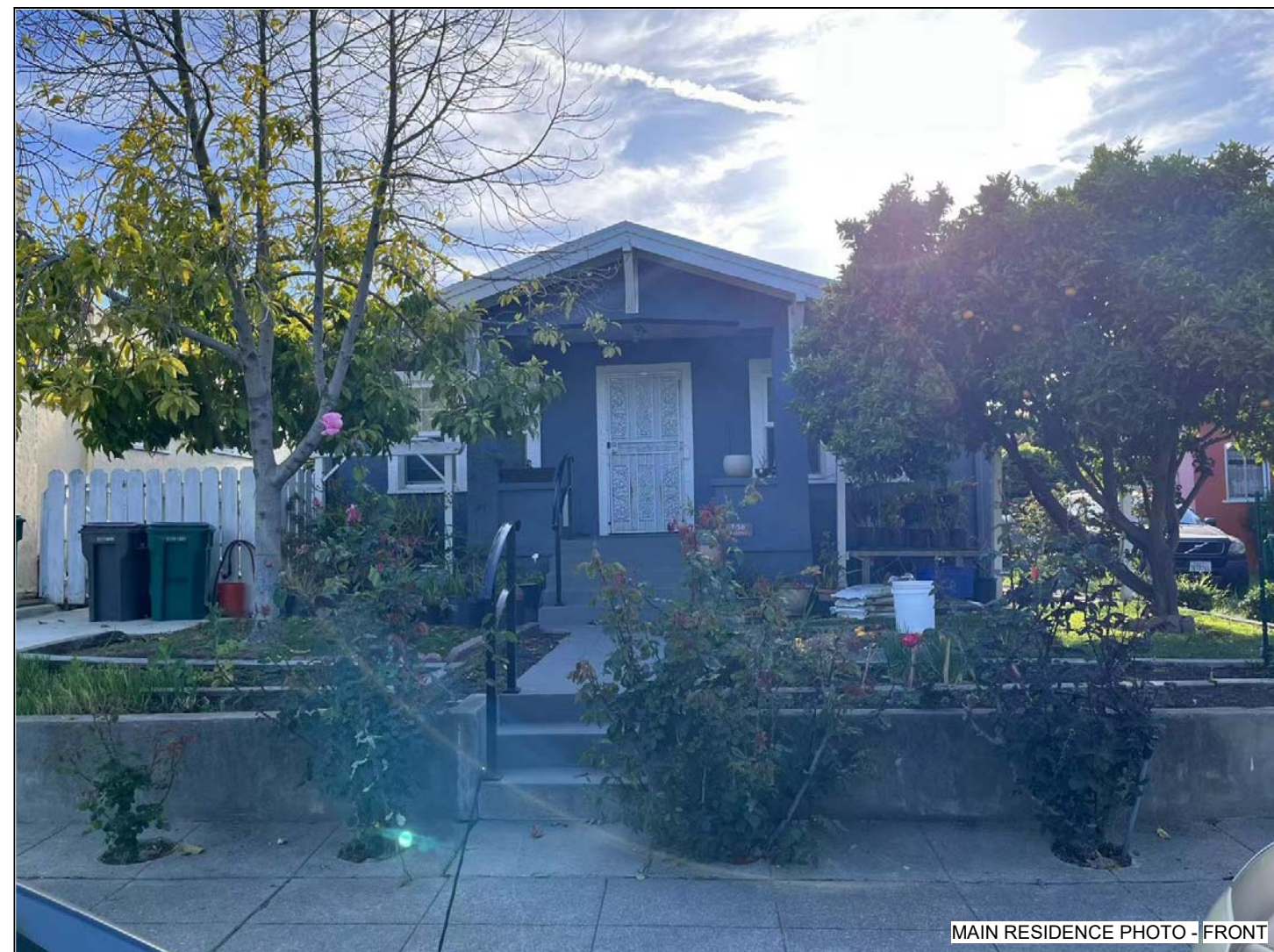
HAONAN JIA, DESIGNER/DRAFTER  
 5905 BAYVIEW AVE  
 RICHMOND CITY, CA 94804  
 (415)528-9534

PROJECT  
**936 MASONIC AVE ADU BUILDING**  
**PERMIT SET**  
 ALBANY, CA 94706  
 APN: 65-2652-17

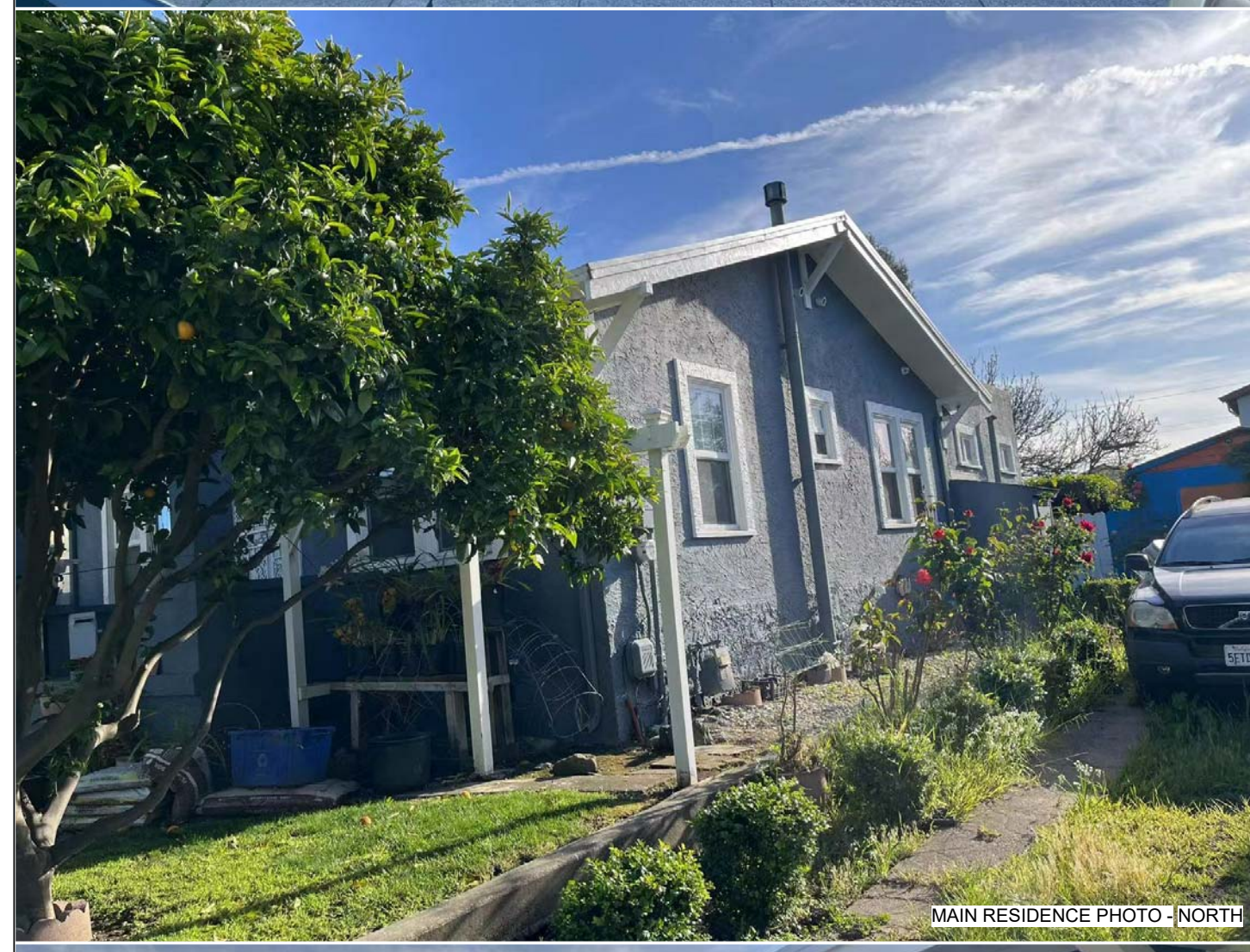
ISSUED FOR: DATE:  
 BUILDING PERMIT 03/28/22

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 SHEET NUMBER  
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MAIN RESIDENCE PHOTO - FRONT



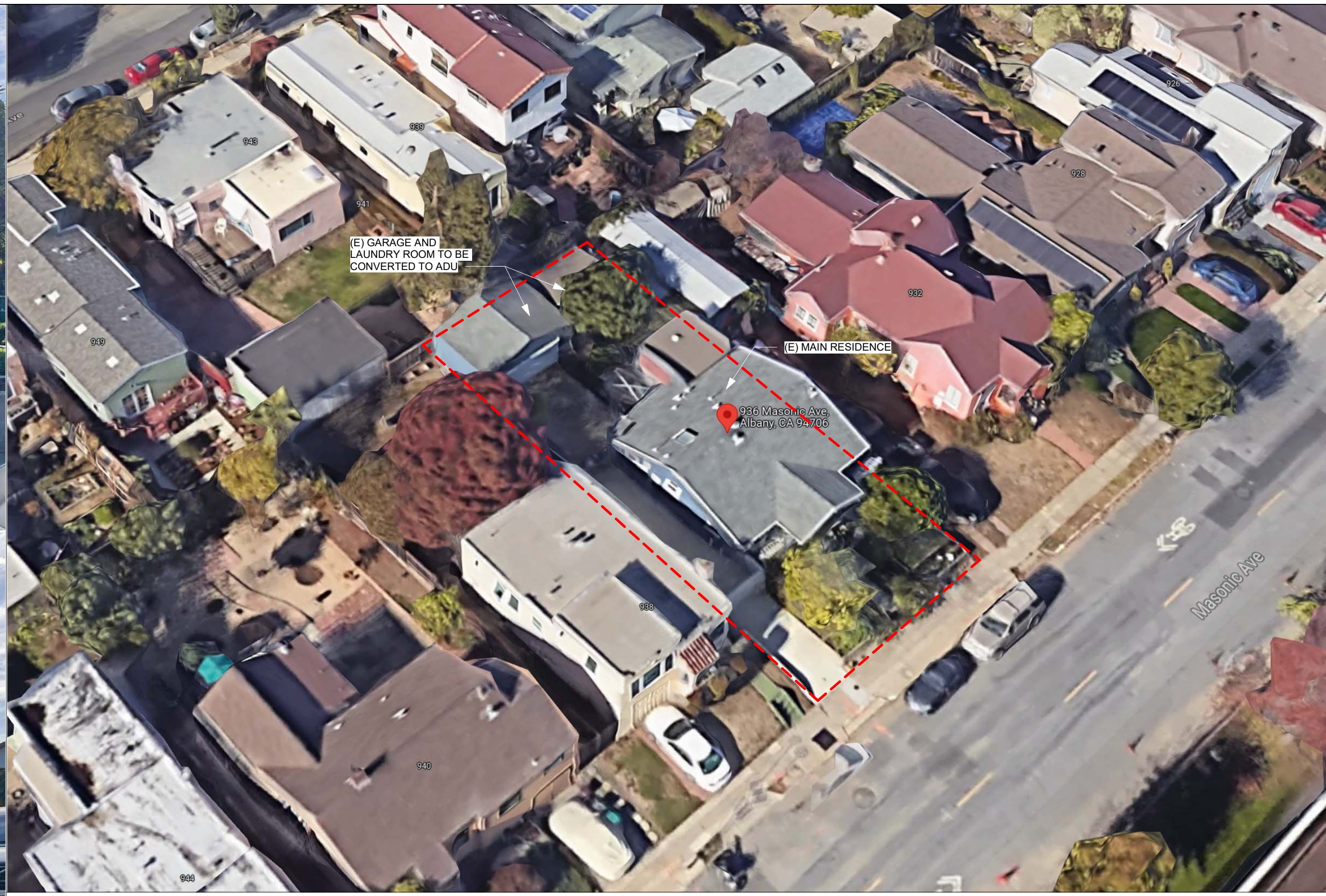
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MAIN RESIDENCE PHOTO - SOUTH



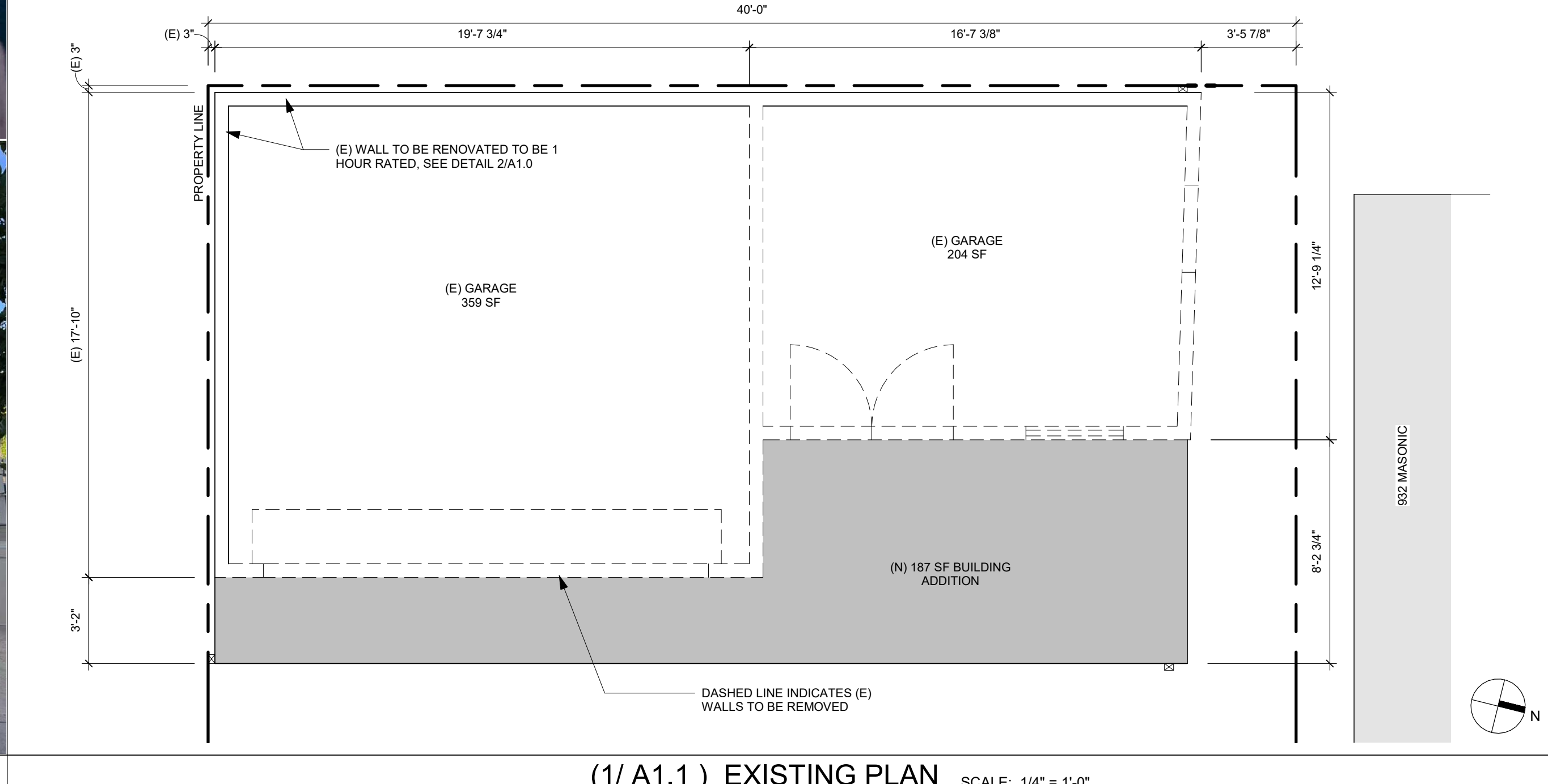
MAIN RESIDENCE PHOTO - REAR



VICINITY MAP



LOCATION AND EXISTING PHOTOS OF NEW DEVELOPMENT



(1/ A1.1) EXISTING PLAN SCALE: 1/4" = 1'-0"

**MECHANICAL GENERAL NOTES**  
M1. ENVIRONMENTAL AIR EXHAUST SHALL HAVE A 3' MIN. CLEARANCE FROM PROPERTY LINES & BUILDING OPENINGS INCLUDING THOSE FROM BATHROOM, KITCHEN RANGE, WATER HEATER AND LAUNDRY.  
M2. ALL VENTILATION SHALL COMPLY W/ THE 2019 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL & NONRESIDENTIAL BUILDINGS, TITLE 24, PART 6.  
M3. LOCAL EXHAUST TO KITCHEN SHALL BE ACCOMPLISHED BY VENTING A MIN. 400 CFM RATED HOOD TO OUTSIDE W/ 6" DUCT.  
M4. HVAC CONTRACTOR SHALL COVER ALL DUCT OPENINGS IMMEDIATELY UPON INSTALLATION AND TO BE OPENED UPON COMPLETION OF CONSTRUCTION.

**ELECTRICAL GENERAL NOTES**  
E1. ALL LIGHT SWITCH, OUTLET & COVERPLATE SHALL BE LUTRON CLARO OR AS VERIFIED BY OWNER.  
E2. FIELD VERIFY ALL SWITCH LOCATION AND GROUPINGS W/ OWNER. INSTALL SWITCHES TO HAVE TO OF COVERPLATE AT 44" A.F.F. INSTALL OUTLETS TO HAVE TOP OF COVERPLATE AT 18" A.F.F. U.O.N. DRAWINGS SHOW APPROXIMATE LOCATIONS BUT DO NOT CONSIDER POTENTIAL FRAMING OR OTHER CONFLICTS.  
E3. ELECTRICIAN TO PROVIDE BOTH CODE REQUIRED OUTLET QUANTITY LOCATIONS AND THOSE REQUIRED BY APPLIANCES AND OTHER MEP SYSTEMS; NEITHER OF WHICH ARE NECESSARILY INDICATED IN THE MEP PLANS. ELECTRICIAN SHALL PROVIDE ADDITIONAL OUTLETS AS SHOWN IN PLANS AND AS FIELD VERIFIED BY OWNER.  
E4. ELECTRICIAN TO PROVIDE BOTH PHONE CABLE, AND AUDIO/VIDEO WIRING AS SHOWN IN PLANS OR AS VERIFIED BY OWNER.  
E5. FIELD VERIFY ALL LIGHT LOCATIONS W/ OWNER. DRAWINGS SHOW DESIGN INTENT BUT DO NOT CONSIDER POTENTIAL FRAMING OR OTHER CONFLICTS.  
E6. OUTLETS SHALL BE WITHIN 6" OF ANY OPENING AND NOT EXCEED 12" APART. ANY ISOLATED WALL 2' OR WIDER SHALL HAVE OUTLETS. AT KITCHEN COUNTER, GFCI OUTLETS SHALL BE WITHIN 2' OF EDGE OF ALL COUNTERS, SINKS, STOVES, ETC. AND ARE NOT TO EXCEED 4' APART. GFCI OUTLETS ARE REQUIRED AT ALL KITCHEN ISLANDS AND PENINSULAS AND WITHIN 6' RADIUS OF SINK.  
E7. LUMINAIRES RECESSED INTO INSULATED CEILINGS SHALL BE LISTED FOR ZERO CLEARANCE INSULATION CONTACT AND BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING.  
E8. ALL LIGHTING SHALL COMPLY W/ THE 2019 TITLE 24 REQUIREMENTS INCLUDING:  
a) ALL INSTALLED LUMINAIRES SHALL BE HIGH EFFICIENCY IN ACCORDANCE WITH TABLE 150.0.A  
b) IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACANCY SENSOR.  
c) UNDER CABINET LIGHTING SHALL BE SWITCHED SEPARATELY FROM OTHER LIGHTING SYSTEMS.

E9. ALL NEW 120-VOLT, SINGLE PHASE, 15 AND 20 AMP BRANCH CIRCUITS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DEN, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY ROOMS OR SIMILAR ROOMS OR AREA SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTIONS OF THE BRANCH CIRCUITS. (CEC 110.129.1)  
E10. KITCHEN NOTE: ALL 15 & 20 AMP, 125 VOLT RECEPTACLES, INCLUDING THE GARBAGE DISPOSER RECEPTACLE, WITHIN 6' OF THE KITCHEN SINK SHALL BE GFCI PROTECTED PER CEC 210.8  
E11. ALL EXTERIOR LIGHTING SHALL BE SHIELDED TO PREVENT GLARE ONTO NEIGHBORING PROPERTIES  
E12. ALL 15 OR 20 AMP, 125 OR 250 VOLT RECEPTACLES INSTALLED OUTDOORS IN WET LOCATIONS MUST BE LISTED, "EXTRA DUTY", THAT IS WEATHER PROOF WHETHER OR NOT THE PLUG IS INSERTED PER CEC 408.9(B)  
E13. ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE TO ON AND ONE OF THE FOLLOWING: CONTROLLED BY PHOTOCELL AND MOTION SENSOR, PHOTO CONTROL AND AUTOMATIC SWITCH CONTROL, ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM.

**PLUMBING GENERAL NOTES**  
P1. FLOW RATES OF ALL NEW PLUMBING FIXTURES SHALL MEET THE FOLLOWING 2019 CDBG 4.303.1 REQUIREMENTS:  
a) WATER CLOSETS: <1.28 GALLONS/FLUSH  
b) SINGLE SHOWERHEADS: <1.8 GPM @ 80 PSI  
c) MULTIPLE SHOWERHEADS: COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GPM @ 80 PSI OR ONLY ONE SHOWER OUTLET IS TO BE IN OPERATION AT A TIME.  
d) RESIDENTIAL LABORATORY FAUCETS: <1.2 GPM @ 80 PSI  
e) KITCHEN FAUCETS: <1.8 GPM @ 80 PSI; TEMPORARY INCREASE TO 2.2 GPM ALLOWED BUT SHALL DEFAULT TO 1.8 GPM  
P2. IF THE WATER HEATER INPUT RATING EXCEEDS 8 BTU/H, THEY SHALL HAVE ISOLATION VALVES ON BOTH THE COLD WATER SUPPLY AND HOT WATER PIPE LEAVING THE WATER HEATER, AND HOSE BIBS OR OTHER FITTINGS ON EACH VALVE FOR FLUSHING THE WATER WHEN THE VALVES ARE CLOSED PER CBEES 110.3(C).  
P3. ALL HOT WATER SUPPLY PIPING 3/4" AND GREATER SHALL BE INSULATED PER CEC SECTION 150.0(J)(2)III. ALL HOT WATER SUPPLY PIPING FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES SHALL BE INSULATED PER CEC SECTION 150.0

**GENERAL NOTES**  
G1. CONSTRUCTION LIABILITY. THE GENERAL CONTRACTOR AND SUBCONTRACTORS AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE GENERAL CONTRACTOR AND SUBCONTRACTORS WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL BE MADE TO APPLY TO CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS FURTHER AGREE TO DEFEND, INDEMNIFY, AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.  
G2. CONTRACTOR ACKNOWLEDGES THAT THE OWNER IS THE AUTHOR OF THESE CONSTRUCTION DOCUMENTS AND IS THE OWNER OF THE COPYRIGHT TO THEM. CONTRACTOR IS ENTITLED TO USE THESE CONSTRUCTION DOCUMENTS ONLY FOR THE PROJECT FOR WHICH THEY WERE DESIGNED AND NOT FOR ANY OTHER PURPOSE OR PROJECT.  
G3. ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED BY THE DRAWINGS OR AS VERIFIED BY THE OWNER, AND/OR AS REQUIRED BY THE ADOPTED EDITION OF THE UNIFORM BUILDING CODE AND ALL LOCAL CODES AND AUTHORITIES.  
G4. ALL FLOOR PLAN DIMENSIONS ARE TO FACE OF FINISH OR UNLESS OTHERWISE NOTED. CONFIRM DIMENSIONAL QUESTIONS WITH OWNER, DO NOT SCALE OFF OF THE PLANS.  
G5. EGRESS WINDOWS TO HAVE MIN. CLR. OPENING OF 20" WIDE, 24" TALL AND 5.7 SQUARE FEET W/ A SILL HEIGHT NO HIGHER THAN 44" ABOVE FINISHED FLOOR; THE NET CLR. OPENING DIMENSIONS SHALL BE THE RESULT OF NORMAL OPERATION OF THE OPENING AND REQUIRE NO SPECIAL KNOWLEDGE OR TOOLS.  
G6. FOR ALL DOORS AND WINDOWS, CONTRACTOR SHALL VERIFY ROUGH OPENINGS, SIZES, FUNCTION & MANUFACTURER W/ OWNER PRIOR TO ORDERING. ADDITIONALLY CONTRACTOR SHALL VERIFY INSTALLATION INSTRUCTIONS & DETAILS W/ OWNER AND/OR MANUF. PRIOR TO INSTALLATION.  
G7. HANDRAILS TO BE 1 1/2" SQ. WOOD W/ METAL BRACKET @ 1-1/2" MIN. FROM WALL & 36" ABOVE STAIR NOSING. SEE PLANS & DETAILS.  
G8. PER CALGREEN 2019, ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST INTRUSION OF ROBBERS.  
G9. PER CALGREEN 2019, FINISH MATERIALS, ADHESIVES, SEALANTS, CAULKS, PAINTS, AND COATINGS SHALL COMPLY WITH SECTION 4.504 POLLUTANT CONTROL.  
4.504.2.1 ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS.  
4.504.2.2 PAINTS, STAINS AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS.  
4.504.2.3 AEROSOL PAINTS AND OTHER COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS.  
4.504.2.4 DOCUMENTATION SHALL BE PROVIDED TO VERIFY THAT COMPLIANT VOC LIMIT FINISH MATERIALS HAVE BEEN USED. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AT THE REQUEST OF THE ENFORCING AGENCY. DOCUMENTATION MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:  
1. MANUFACTURER'S PRODUCT SPECIFICATION.  
2. FIELD VERIFICATION OF ON-SITE PRODUCT CONTAINERS

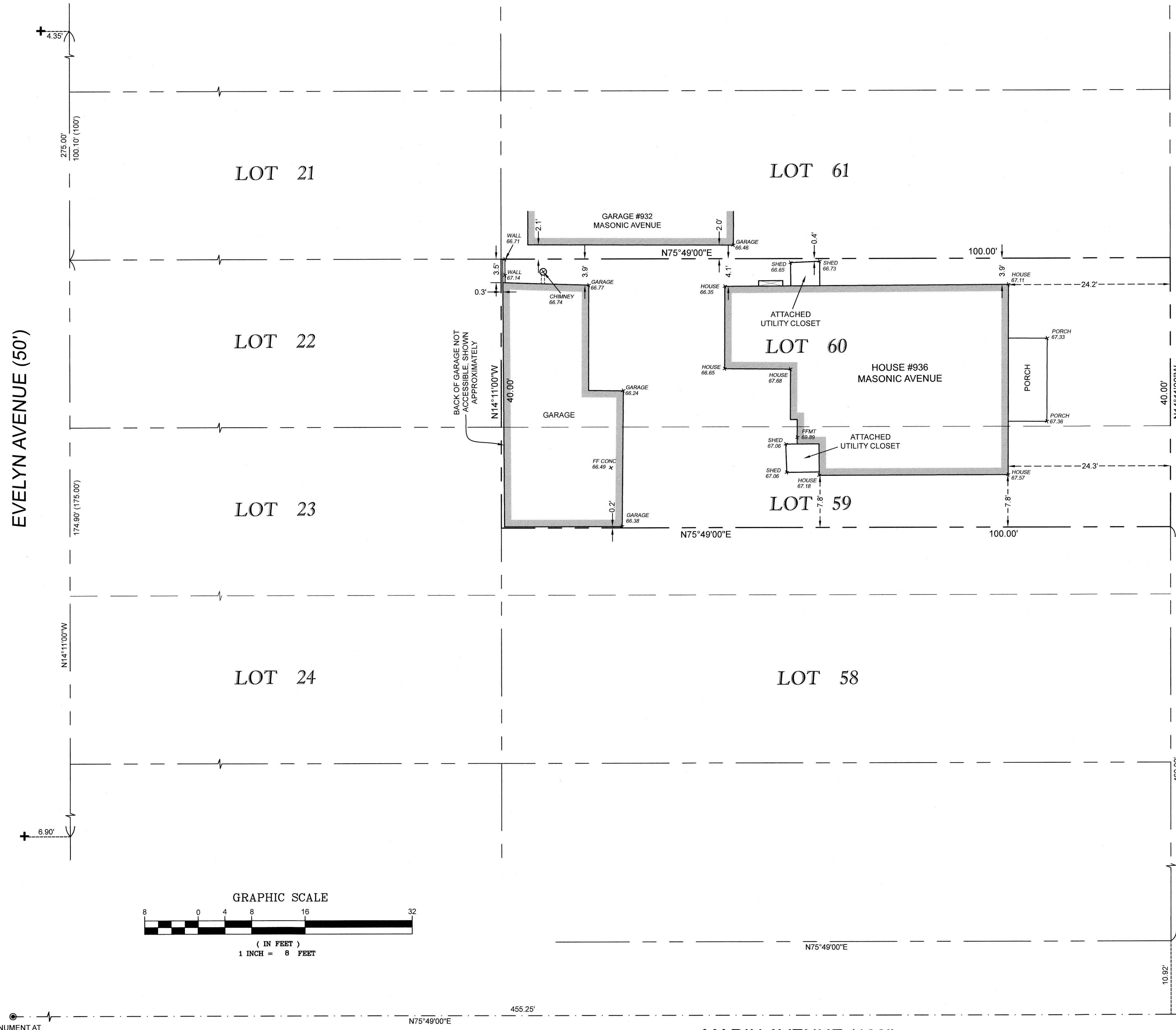
G10. PER CALGREEN 2019 CONCRETE SLAB FOUNDATIONS SHALL COMPLY WITH SECTION 4.505.2 WITH RESPECT TO VAPOR RETARDERS AND CAPILLARY BREAKS.  
G11. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED PER CALGREEN 2019 SECTION 4505.3.  
G12. THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IMPLEMENTED AS PART OF CONSTRUCTION TO REDUCE EROSION, SEDIMENTATION, AND WATER QUALITY IMPACTS DURING CONSTRUCTION:  
a) PROVIDE FILTERS AT NEARBY CATCH BASINS TO PREVENT DEBRIS AND DIRT FROM FLOWING INTO THE CITY'S STORM DRAIN SYSTEM AND CREEK.  
b) SEDIMENT BERMS SHALL BE USED AT THE PERIMETER OF THE SITE DURING GRADING TO PREVENT RUN OFF FROM THE SITE.  
c) IF SEDIMENT BERMS ARE INSUFFICIENT FOR SEDIMENT CONTROL, MORE SUBSTANTIAL SEDIMENT CONTROL MEASURES SUCH AS CHECK DAMS AND INTERCEPTOR DITCHES SHALL BE IMPLEMENTED.  
d) NO GRADING SHALL OCCUR DURING WET WEATHER. IF WET WEATHER IS ANTICIPATED, ANY OPEN GRADED AREAS OR BARE SOIL SHALL BE COVERED WITH PLASTIC, MESH OR PLANTS TO PREVENT RUNOFF OF SOIL FROM THE SITE.

**GENERAL NOTES**

	NEW STUD WALL TO BE 2X4 (INTERIOR) OR 2X6 (EXTERIOR), S.S.D.		110 VAC DUPLEX OUTLET, FIELD VERIFY LOCATIONS, HEIGHT AND QUANTITIES W/ OWNER
	EXTERIOR WINDOWS & DOORS, SEE EXTERIOR WINDOW/DOOR SCHEDULE		110 VAC DUPLEX GFCI OUTLET, FIELD VERIFY LOCATIONS, HEIGHT W/ OWNER
	INTERIOR DOOR, SEE INTERIOR DOOR SCHEDULE		110 VAC DUPLEX OUTLET AT OUTDOOR "WET" LOCATION TO BE A LISTED "EXTRA DUTY" RECEPTACLE, FIELD VERIFY LOCATIONS, HEIGHT W/ OWNER
	DASHED LINE INDICATES ITEM ABOVE OR BEYOND		DATA OUTLET W/ PHONE AND COAXIAL CABLE, VERIFY W/ OWNER. AT TV LOCATIONS, PROVIDE FOR WALL MTD. INSTALL
	DASHED LINE & TONE INDICATES SOFFIT (LOWEDED CEILING) ABOVE, VERIFY HEIGHT W/ OWNER		COMBO SMOKE / CO DETECTOR, INTERCONNECTED, HARDWIRED & W/ BATTERY BACK-UP
	WALL MOUNTED LIGHT, SEE LIGHT FIXTURE SCHEDULE FIELD VERIFY LOCATION W/ OWNER		GAS BIB FOR LAUNDRY, RANGE, FURNACE, WATER HEATER & FIREPLACE
	CEILING MOUNTED LIGHT, SEE LIGHT FIXTURE SCHEDULE & FIELD VERIFY LOCATION W/ OWNER		HOSE BIB WITH ANTI-SIPHON DEVICE, FIELD VERIFY LOCATION W/ OWNER
	RECESSED LIGHT FIXTURE, FIELD VERIFY ALL LOCATION W/ OWNER		DOORBELL, VERIFY REQTS W/ OWNER
	DOWNSPOUT		THERMOSTAT, FIELD VERIFY LOCATION W/ OWNER
	FIRE ALARM BELL		CEILING/ WALL REGISTER FOR HVAC
	WALL SWITCH FOR BATH EXHAUST, USE HUMIDITY SENSOR SWITCH IN BATHROOMS WITH SHOWERS OR BATHTUBS		EXTERIOR EXHAUST VENT, VERIFY STYLE AND FINISH AND FIELD VERIFY LOCATION W/ OWNER
	WALL SWITCH, FIELD VERIFY LOCATIONS AND GROUPING W/ OWNER		DASH LINE INDICATES DUCT LOCATION, FIELD VERIFY LOCATION W/ OWNER
			ELECTRICAL PANEL OR AV HOMERUN PANEL

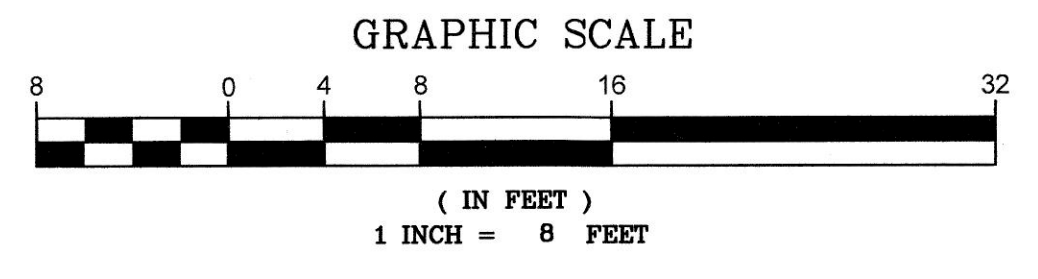
SYMBOL/WALL LEGEND & GENERAL NOTES





- LEGEND:**
- CONC CONCRETE
  - FF FINISHED FLOOR
  - MT METAL THRESHOLD
  - ⊙ FOUND CITY OF ALBANY MONUMENT
  - + FOUND CROSS

**NOTES:**  
 ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.  
 NO TITLE REPORT WAS PROVIDED, EASEMENTS MAY EXIST.  
 ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988.



**BUILDING LOCATION SURVEY**

LOT 60 AND THE NORTHERN 15 FEET OF LOT 59  
 BLOCK 6, MAP NO. 4 REGENTS PARK (21 M 51)  
 LOCATED AT 936 MASONIC AVENUE  
 ALBANY, ALAMEDA COUNTY, CALIFORNIA

AUGUST 20, 2021 SCALE: 1" = 8'

**MONUMENTAL LAND SURVEYING**  
 171 MAYHEW WAY, SUITE 207, PLEASANT HILL, CA 94523  
 (925) 300-3695 MONUMENTAL-LS.COM PROJECT#21081

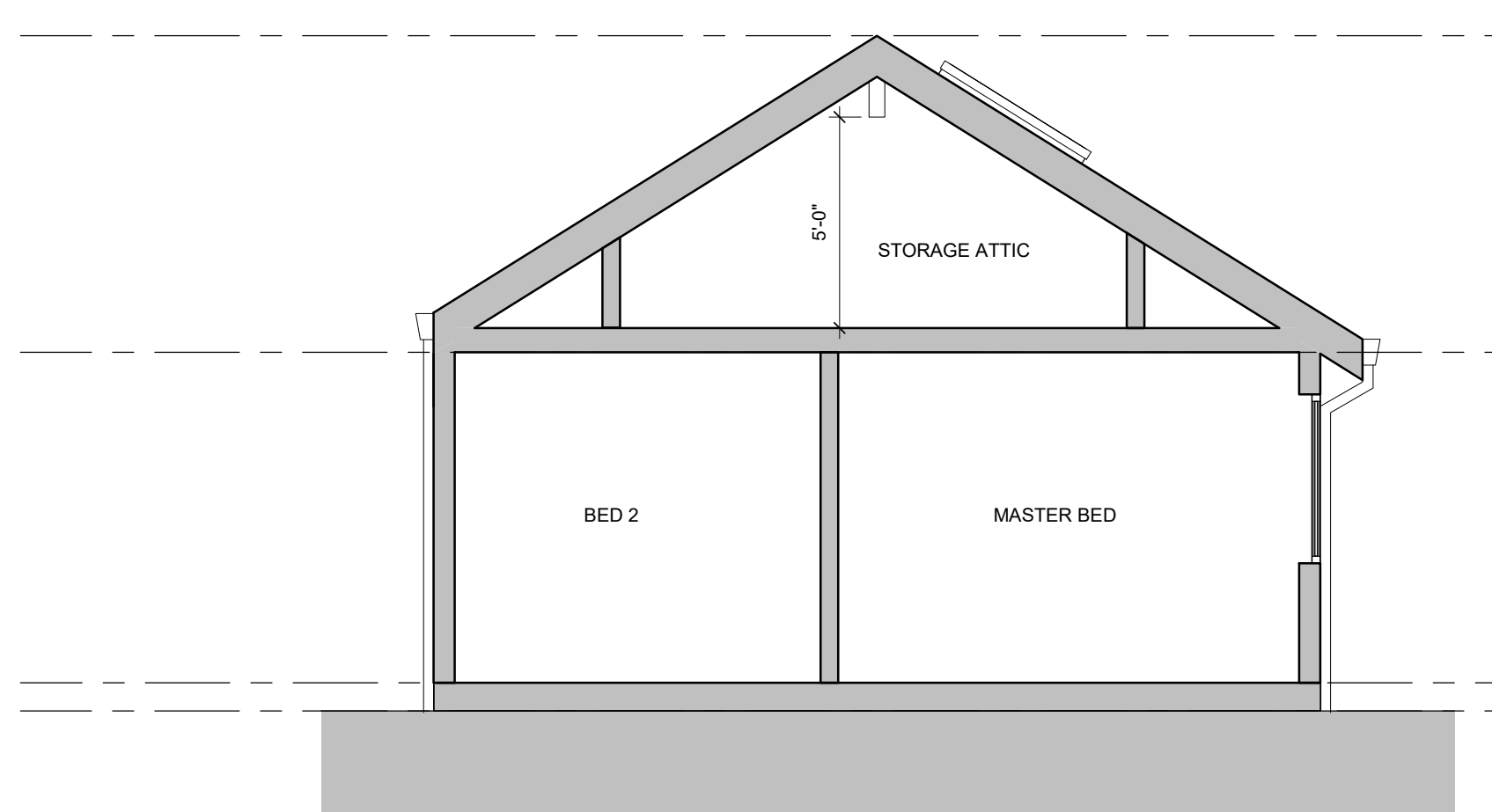
MONUMENT AT  
TALBOT  
AVENUE

MONUMENT AT  
KEY ROUTE  
BOULEVARD

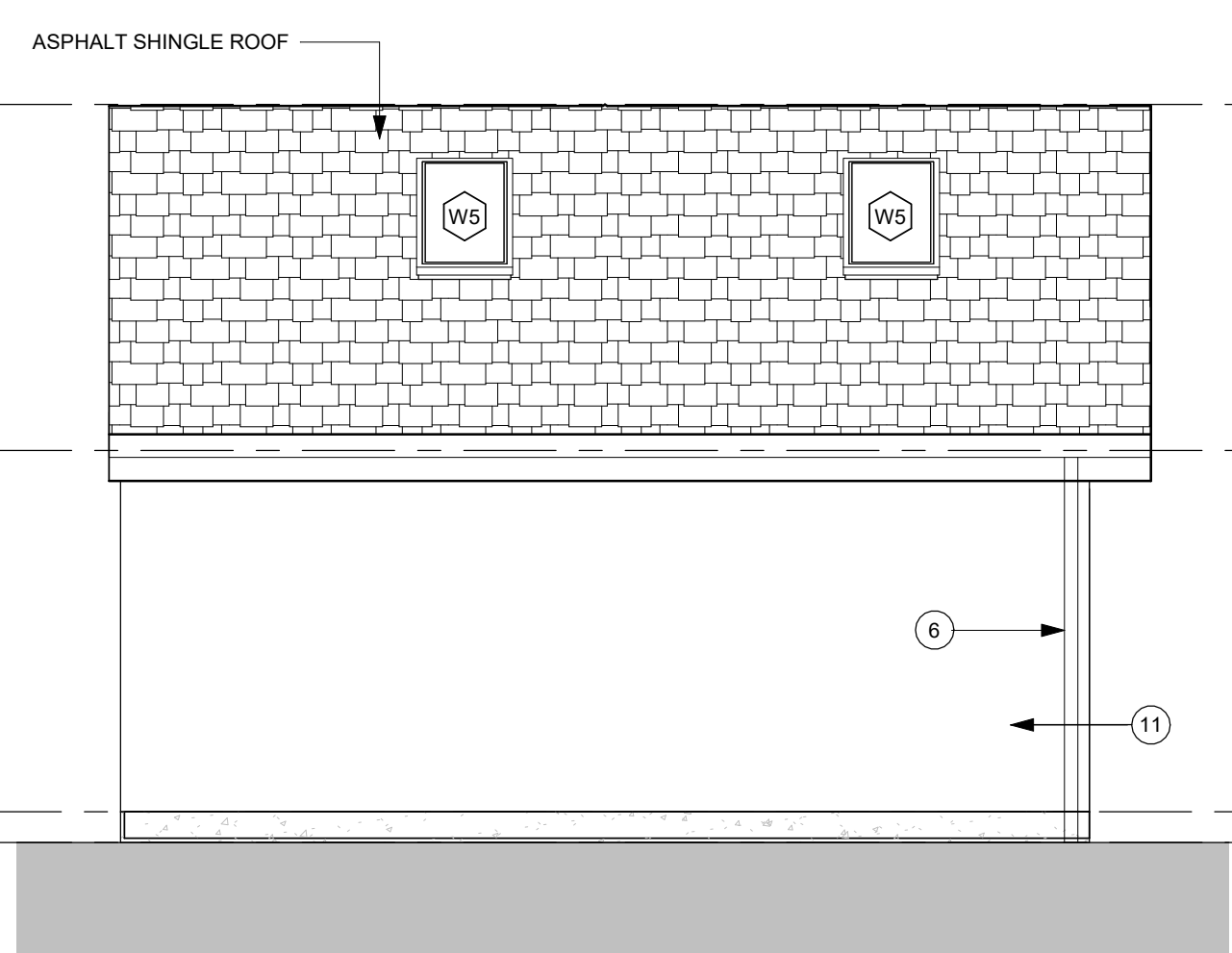
MARIN AVENUE (100')

MASONIC AVENUE (50')

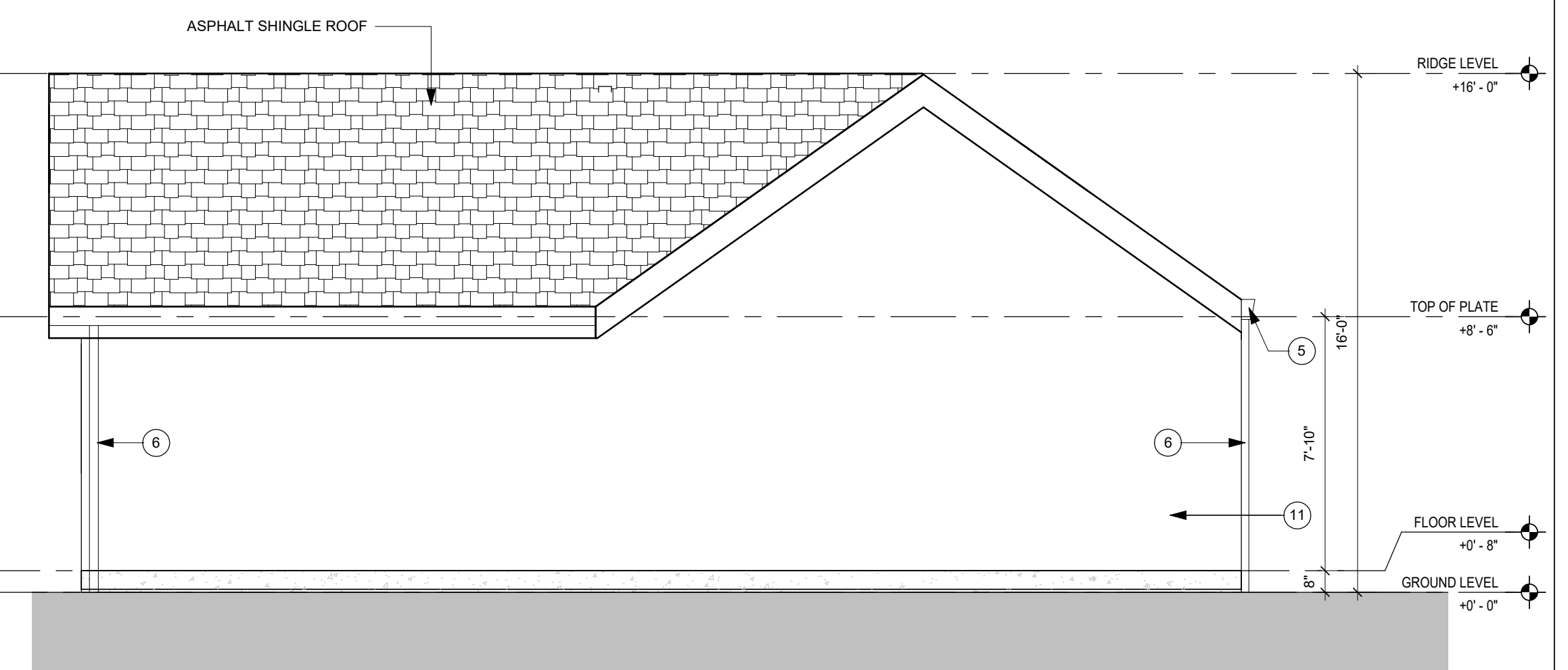
EVELYN AVENUE (50')



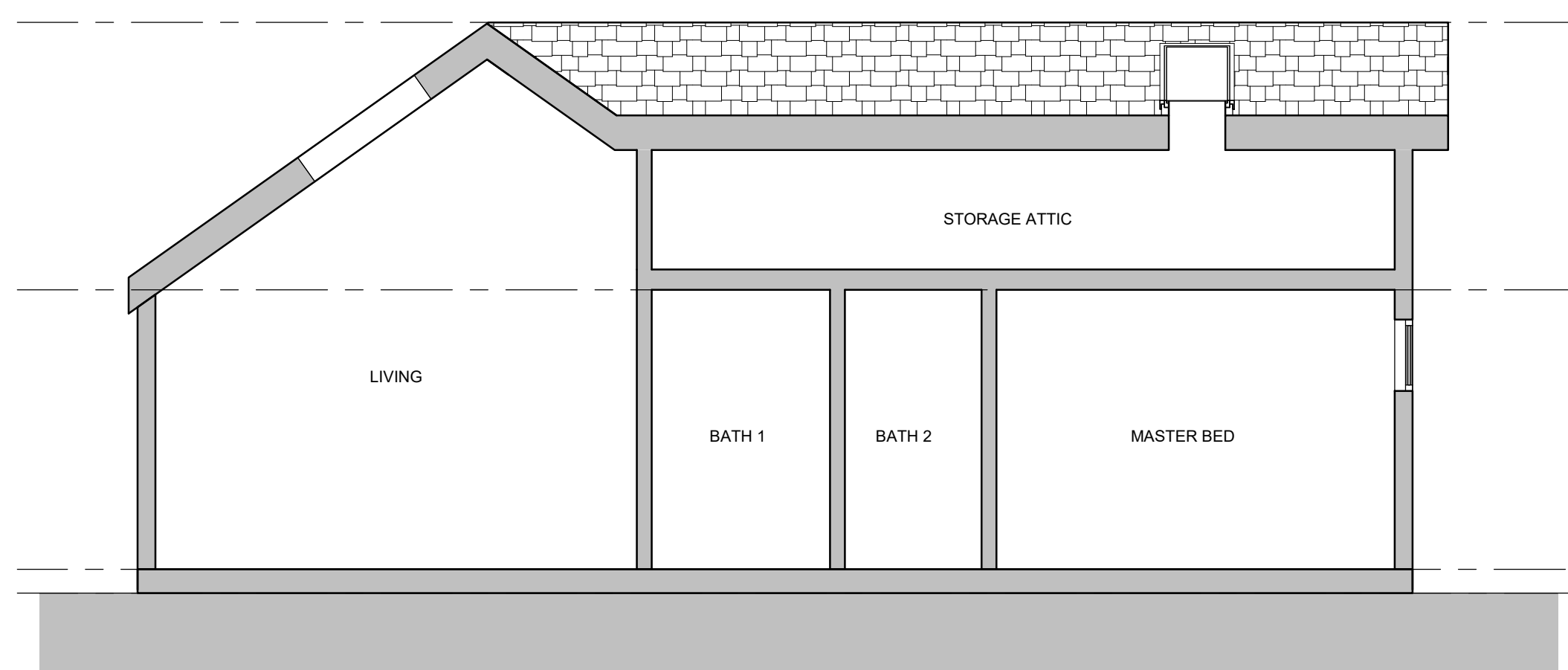
(8/ A2.0 ) SECTION 2 SCALE: 1/4" = 1'-0"



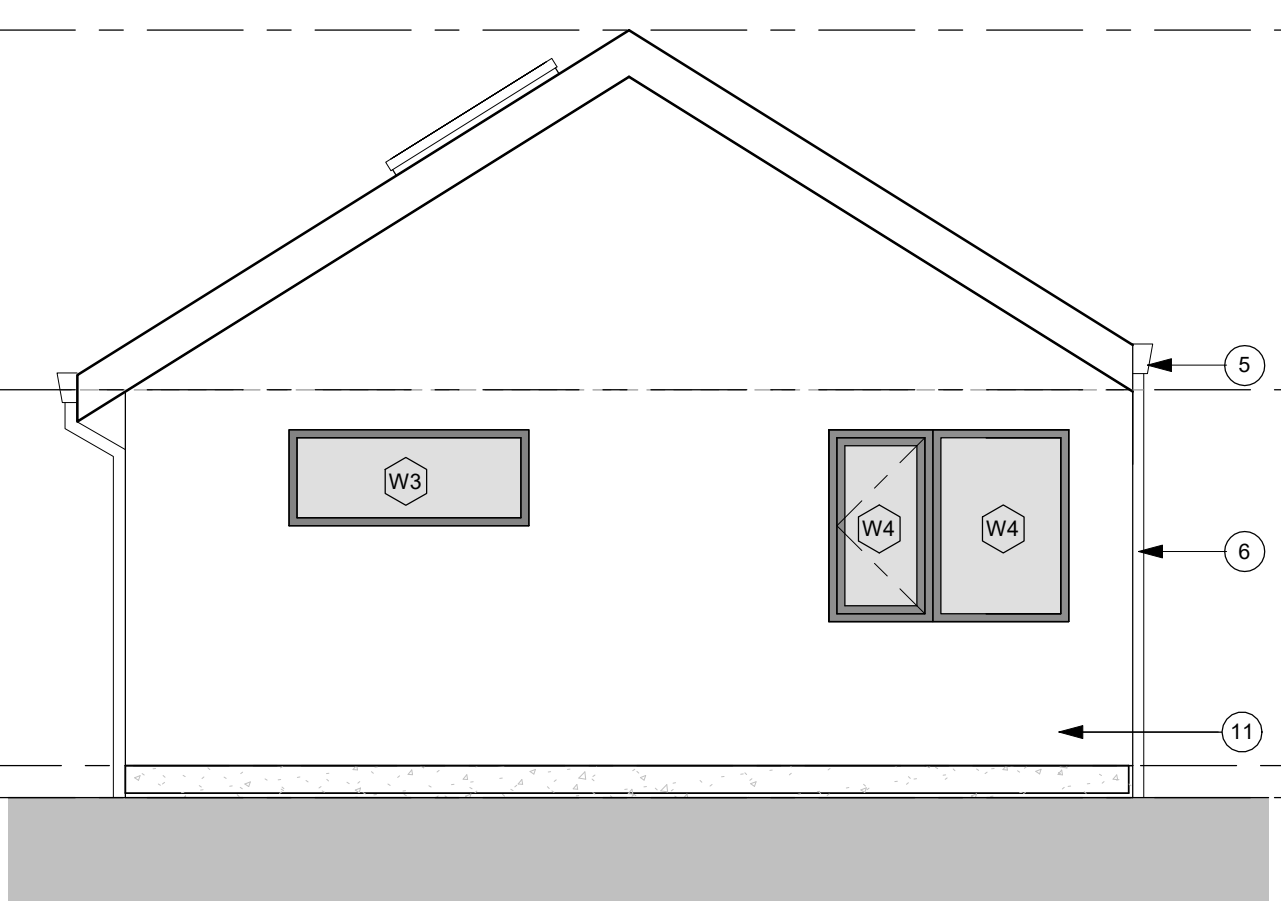
(5/ A2.0 ) SOUTH ELEVATION SCALE: 1/4" = 1'-0"



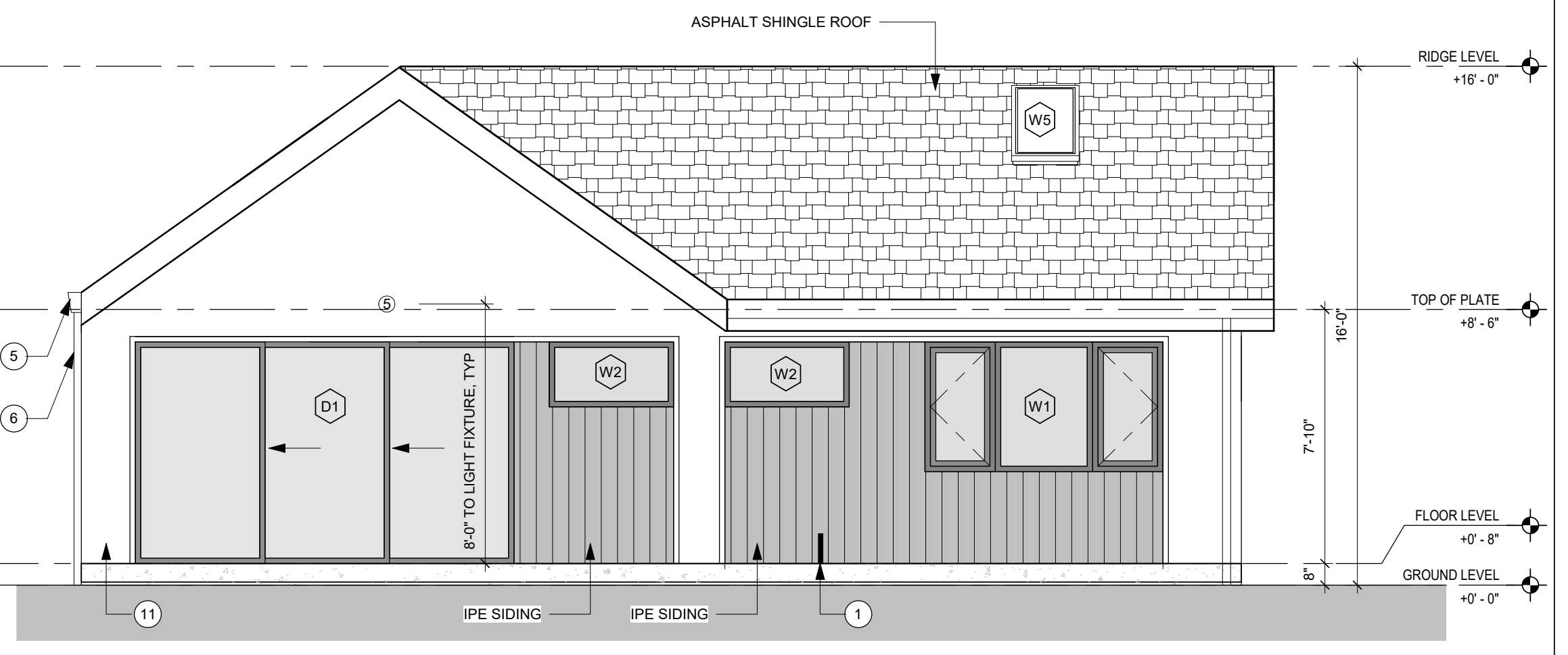
(3/ A2.0 ) WEST ELEVATION SCALE: 1/4" = 1'-0"



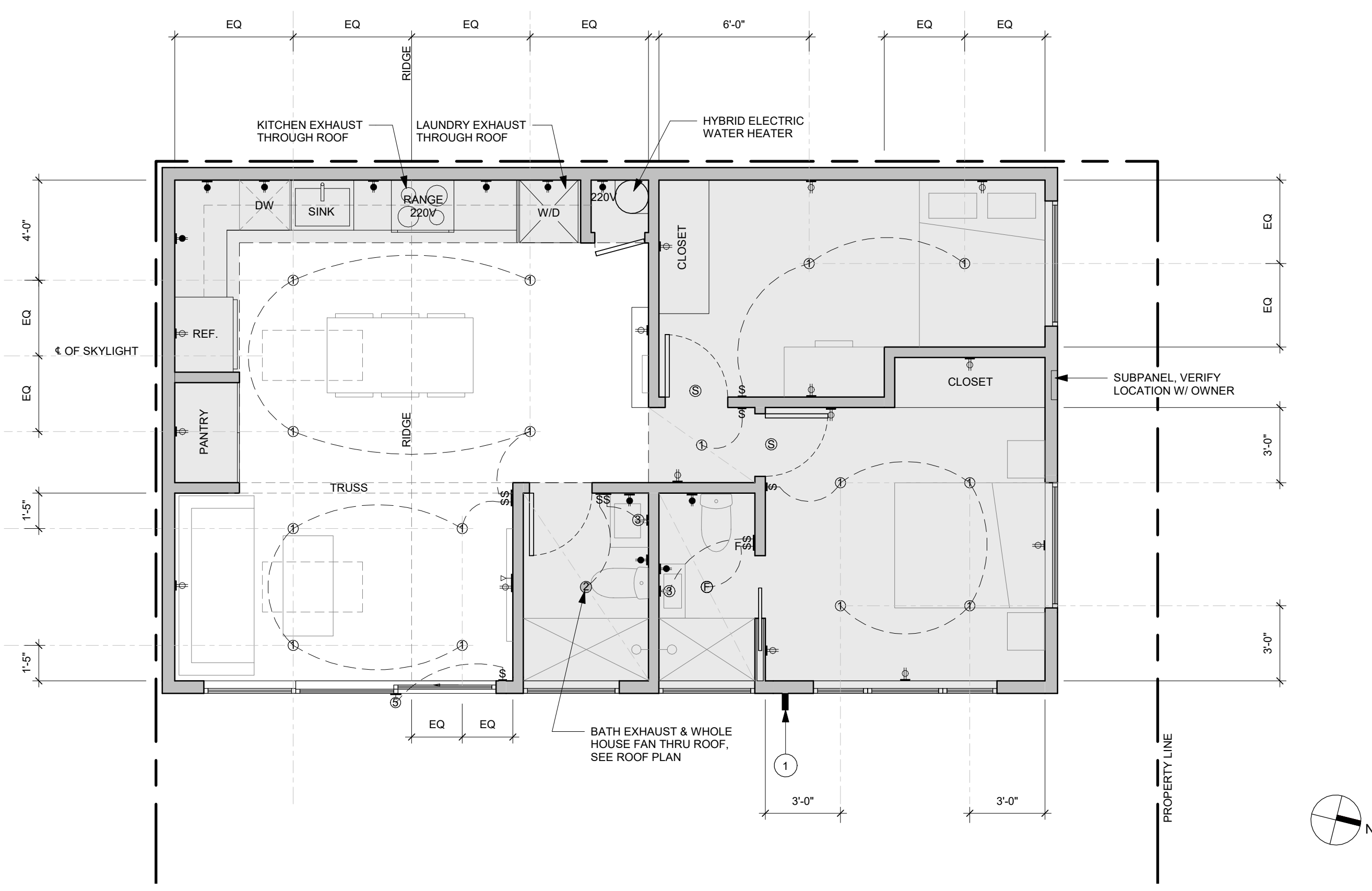
(7/ A2.0 ) SECTION 1 SCALE: 1/4" = 1'-0"



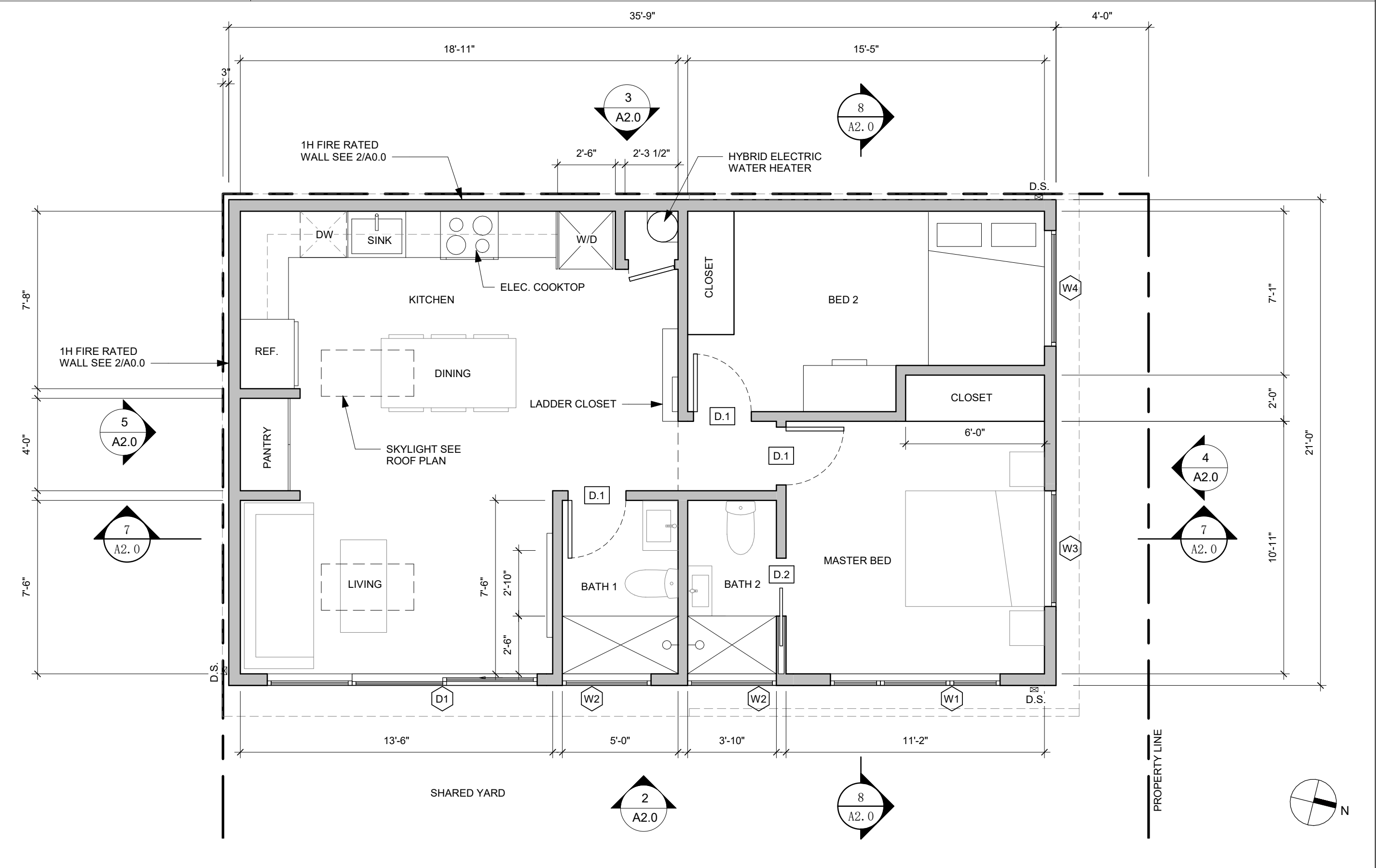
(4/ A2.0 ) NORTH ELEVATION SCALE: 1/4" = 1'-0"



(2/ A2.0 ) EAST ELEVATION SCALE: 1/4" = 1'-0"



(6/ A2.0 ) MEP PLAN SCALE: 1/4" = 1'-0"

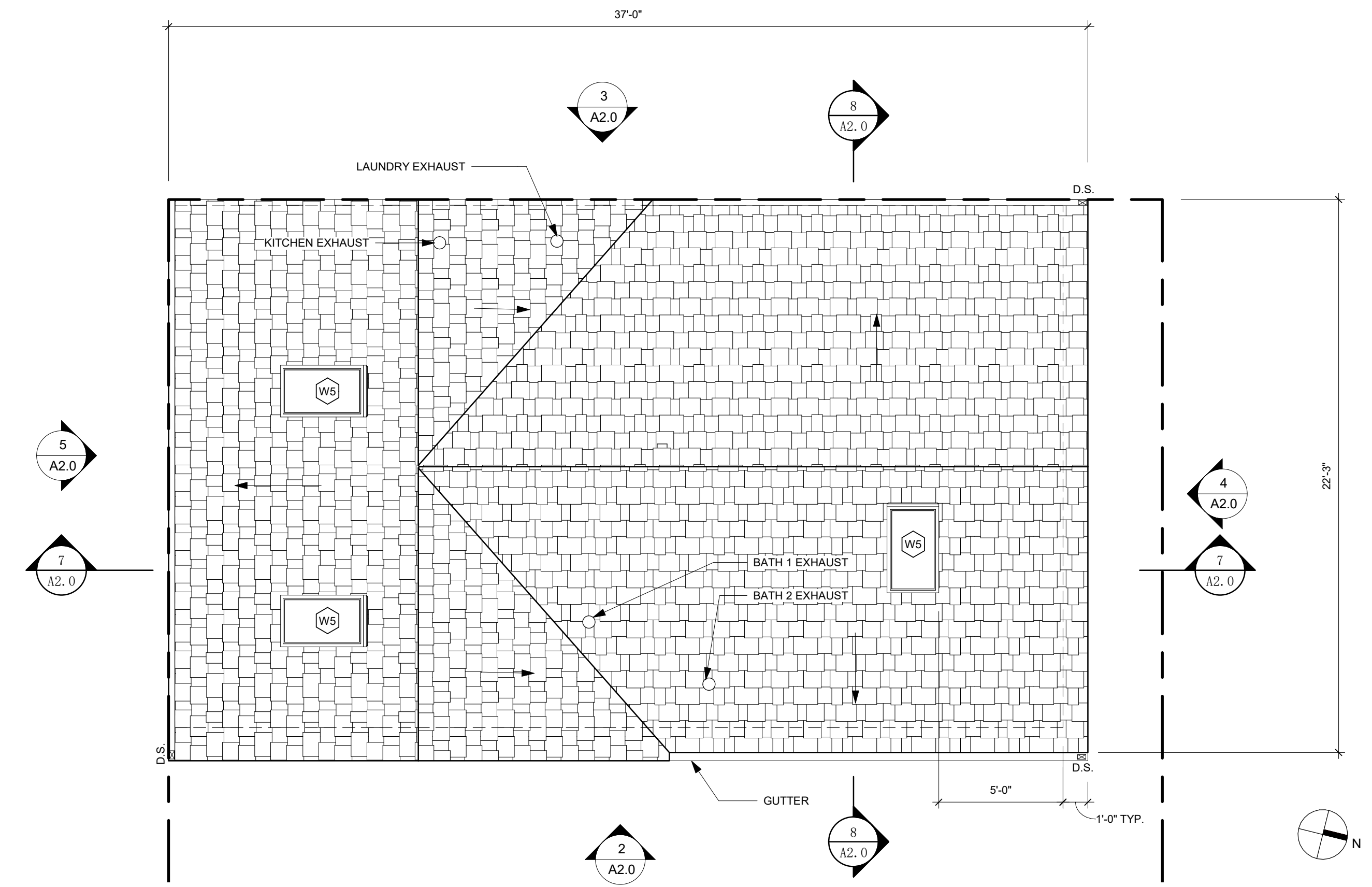


(1/ A2.0 ) GROUND FLOOR PLAN SCALE: 1/4" = 1'-0"

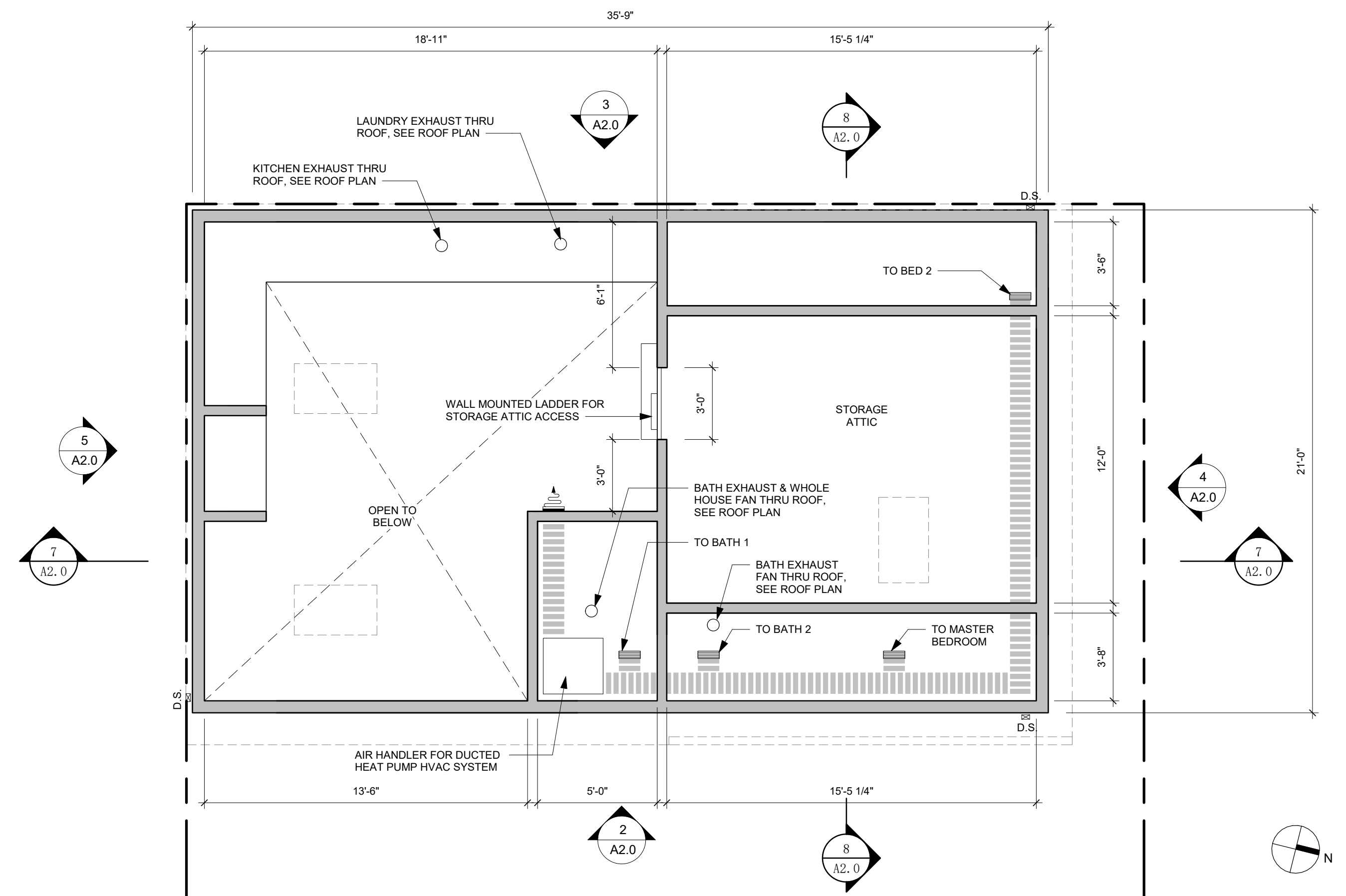
ISSUED FOR: DATE:  
BUILDING PERMIT 10/13/21

DRAWING TITLE  
**FLOOR PLANS & ELEVATIONS, SECTIONS**

SHEET NUMBER  
**A2.0**



(2/ A2.1 ) ROOF PLAN SCALE: 1/4" = 1'-0"



(1/ A2.1 ) ATTIC PLAN SCALE: 1/4" = 1'-0"







**GENERAL NOTES**

1. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE APPROVED PROJECT DRAWINGS, SPECIFICATIONS, 2019 CALIFORNIA BUILDING CODE AND ALL OTHER APPLICABLE CODES OR REGULATIONS.
2. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF ALL OTHER DISCIPLINES, AND IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL CONTACT THE ENGINEER OR ARCHITECT FOR CLARIFICATION PRIOR TO PROCEEDING. WORK DONE WITHOUT VERIFICATION OR CLARIFICATION SHALL BE ENTIRELY THE CONTRACTOR'S RESPONSIBILITY.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SELECTION OF CONSTRUCTION METHODS AND PROCEDURES, FOR THE SAFETY AND PRESERVATION OF THE BUILDING AND ITS CONTENTS DURING CONSTRUCTION, AND FOR PROVIDING A SAFE PLACE TO WORK.
4. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT ARE OF A SIMILAR CHARACTER TO THOSE WHICH ARE SHOWN OR NOTED, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED TO THOSE SHOWN AND/OR NOTED, SUBJECT TO APPROVAL BY THE ENGINEER.
5. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST AVAILABLE KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ENGINEER AND OR ARCHITECT OF ANY DISCREPANCIES.
6. DO NOT SCALE DRAWINGS.

**FOUNDATION**

1. ALL FOUNDATIONS SHALL BEAR ON APPROVED, FIRM AND UNDISTURBED NATIVE SOILS OR ENGINEERED FILLS AT DEPTHS SHOWN ON THE DRAWINGS. CONTACT ENGINEER PRIOR TO PROCEEDING IF SOIL ENCOUNTERED IS INADEQUATE OR QUESTIONABLE.
2. SILL BOLTS (A-307) SHALL EXTEND 7" MINIMUM INTO CONCRETE.
3. HOLD-DOWN ANCHORS SHALL EXTEND INTO CONCRETE THE DEPTH SPECIFIED BY THE MANUFACTURER, U.N.O.

**CONCRETE**

1. CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS AT 28 DAYS:
  - FOUNDATIONS: 3000 PSI N.W.C.\*
  - SLABS: 3000 PSI N.W.C.\*
- \* NOTE: SPECIAL INSPECTION NOT REQUIRED SINCE F'C = 2500 PSI IS USED IN THE DESIGN.
2. ALL CEMENT SHALL CONFORM TO ASTM C-150, TYPE I.
3. AGGREGATE SHALL CONFORM TO ASTM C-33.
4. ALL REBAR, ANCHOR BOLTS, INSERTS, ETC. SHALL BE SECURELY TIED AND FIXED BEFORE POUR.
5. PIPE MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES, BUT MAY NOT BE EMBEDDED THEREIN.

**REINFORCING STEEL**

1. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, (INCLUDING SUPPLEMENT S-1), GRADE 60 FOR No.5 BARS AND LARGER AND GRADE 40 FOR No.4 BARS AND SMALLER.
2. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
  - SURFACE POURED AGAINST GROUND 3"
  - FORMED SURFACES BELOW GRADE 2"
  - SURFACES EXPOSED TO WEATHER 2"
3. ALL REINFORCEMENT SHALL BE BENT COLD. NO.5 OR LARGER REINFORCING BARS SHALL NOT BE RE-BENT WITHOUT APPROVAL BY THE PROJECT ENGINEER.
4. REINFORCING BARS SHOWN OR NOTED AS CONTINUOUS SHALL RUN IN LENGTHS AS LONG AS PRACTICAL. THE FOLLOWING SPICE LENGTHS SHALL APPLY U.N.O.
 

BAR SIZE:	#3	#4	#5	#6	#7
• TOP BARS:	28"	38"	48"	56"	81"
• OTHER:	22"	30"	36"	44"	64"

**LUMBER**

1. ALL LUMBER FOR FRAMING MEMBERS SHALL BE DOUGLAS FIR (DF) OF THE FOLLOWING GRADE, U.N.O. (OR EQUIVALENT GRADE OF ANOTHER SPECIES):
  - JOISTS AND RAFTERS NO. 1 (DF1) OR BETTER
  - BEAMS AND HEADERS NO. 1 (DF1)
  - POSTS AND MULLIONS NO. 1 (DF1)
  - STUDS AND PLATES CONSTRUCTION
  - BLOCKING, FURRING AND MISC. NO. 2 (DF2)
2. ALL LUMBER TO BE GRADE STAMPED S-DRY (SURFACE DRY; MOISTURE CONTENT NOT GREATER THAN 19%).
3. STRUCTURAL COMPOSITE LUMBER SHALL BE AS FOLLOWS:
  - PSL: 2.0E PARALLAM PARALLEL STRAND LUMBER (E= 2.0 E6 psi, Fb= 2900 psi, Fv= 290 psi)
4. ALL FRAMING EXPOSED TO WEATHERING SHALL BE PRESSURE TREATED OR WOOD OF NATURAL RESISTANCE TO DECAY, SUCH AS REDWOOD COMMERCIAL LUMBER.
5. ALL TIMBER PLACED AGAINST BRICK OR CONCRETE SHALL BE PRESSURE TREATED.
6. ALL WOOD FRAMING SHALL BE SET PLUMB AND LEVEL (U.N.O.) TO OBTAIN FULL SOLID BEARING, CUT TO FIT FOR SLOPED ELEMENTS OR WHERE FRAMED AGAINST. SHIMS SHALL BE AVOIDED, U.N.O.
7. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC., UNLESS SPECIFICALLY NOTED OR DETAILED.
8. ALL POSTS SHALL HAVE CONNECTORS TOP AND BOTTOM, SUCH AS SIMPSON "CBCO", "CCO", OR "BC HALF BASE", U.N.O.
9. ALL CONNECTORS TO BE SIMPSON STRONG-TIE OR EQUIVALENT.
10. ALL FASTENERS USED ON PRESSURE TREATED WOOD TO BE STAINLESS STEEL OR GALVANIZED.

**PLYWOOD**

1. PLYWOOD PANELS SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE, TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS-1.
2. FOR PLYWOOD GRADES AND NAILING ON SHEAR WALLS. SEE SHEAR WALL SCHEDULE.
3. PLYWOOD SHEETS AT ROOFS SHALL BE LAID PERPENDICULAR TO RAFTERS, IN STAGGERED PATTERN, AND GLUED TO JOISTS, U.N.O.
4. PLYWOOD SHEETS ON WALLS SHALL BE LAID WITH LONG DIMENSION VERTICAL. BLOCK ALL EDGES.

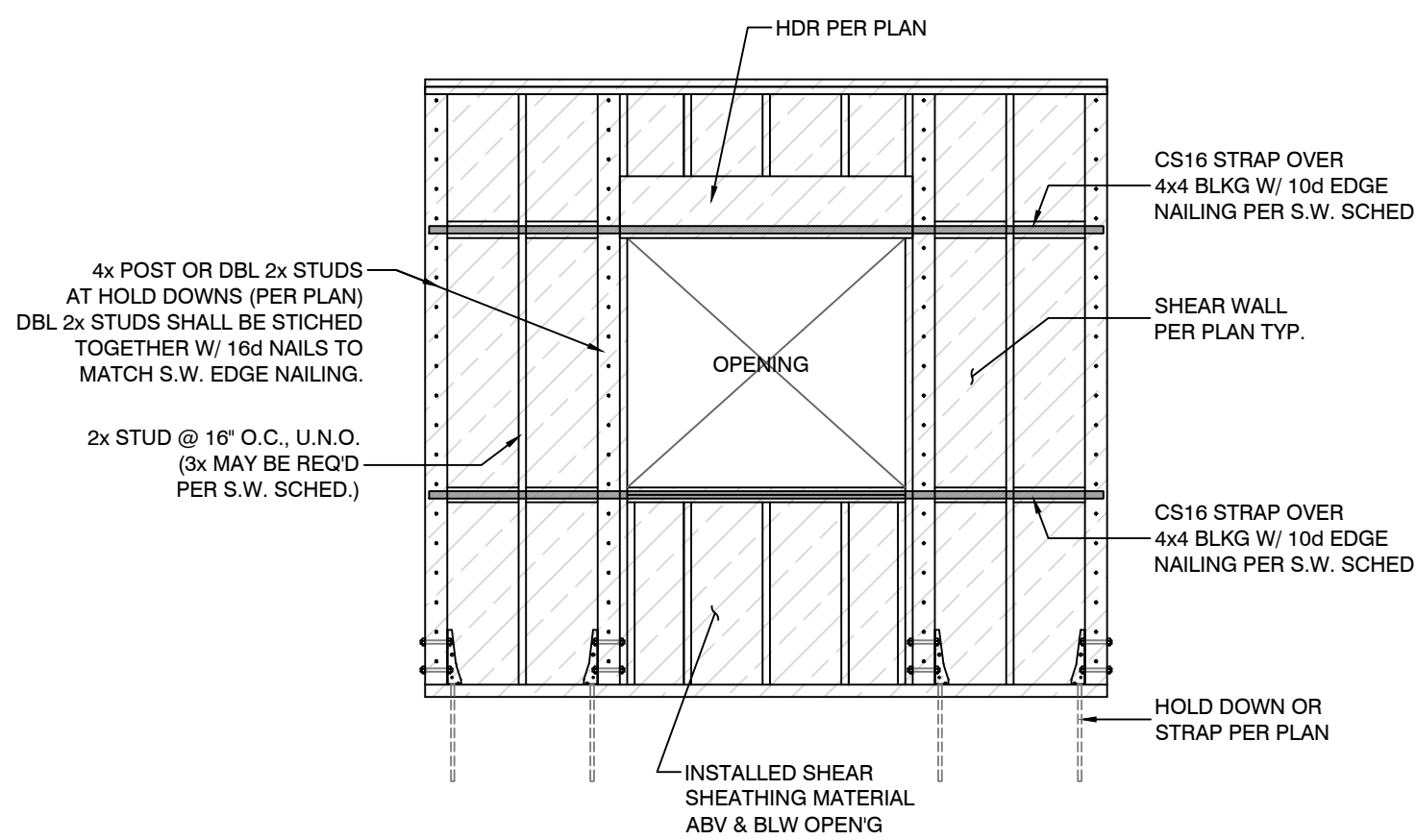
**SPECIAL INSPECTION**

- THE FOLLOWING WORK REQUIRES SPECIAL INSPECTION:
1. REINFORCING STEEL PLACEMENT
  2. ANCHOR BOLT INSTALLATION
  3. HOLD-DOWN INSTALLATION
  4. SHEAR WALL AND SHEAR CLIP INSTALLATION

**SHEAR WALL SCHEDULE** (3,4,5,6,7)

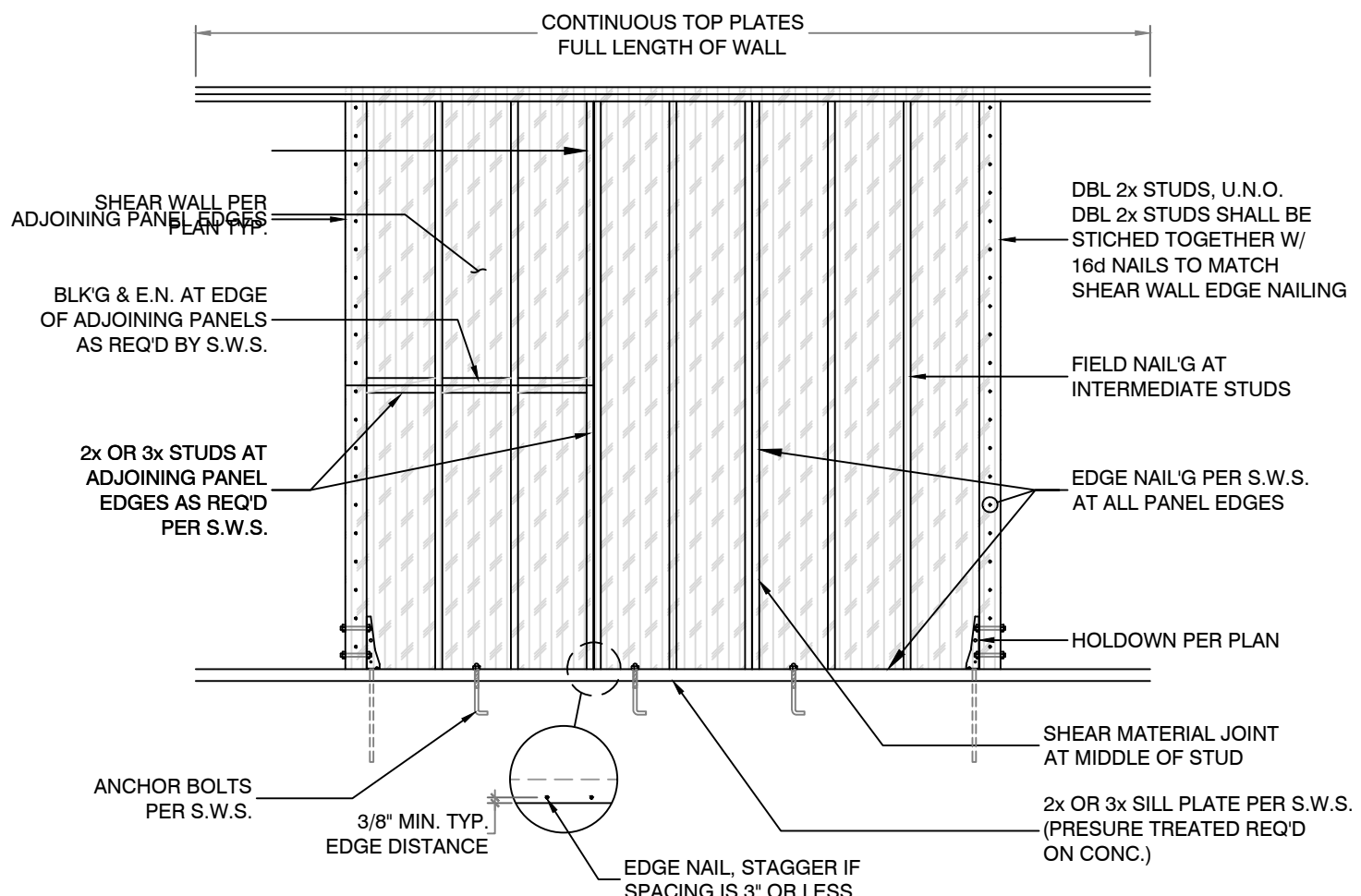
S.W. MARK	SHEAR WALL MATERIAL	EDGE NLG.	FIELD NLG.	SOLE PLATE NLG.	A35 CLIPS AT TOP PL.	ANCHOR BOLTS TO FDN.	DOUBLE STUDS NLG.
SW1	15/32" PLYWOOD CDX <sup>(1)</sup> AT ONE SIDE (1)	10d @ 5" O.C.	10d @ 12" O.C.	16d @ 5" O.C.	A35 @ 16" O.C.	5/8" A.B. @ 48" O.C.	16d @ 5" O.C.

- (1) PLYWOOD SHALL BE APA RATED SHEATHING OR BETTER, EXPOSURE 1. BLOCKING IS REQUIRED AT ALL EDGES.
- (2) FRAMING AT ADJOINING PANEL EDGES SHALL BE 3x OR WIDER AND NAILS SHALL BE STAGGERED WHEN 10d NAILS ARE SPACED 4" OR LESS ON CENTER.
- (3) ANCHOR BOLTS SHALL BE 05/8" (A-307) EMBEDDED 7" MIN. INTO CONCRETE WITH 3"x3"x1/4" PLATE WASHERS AT EACH BOLT. PROVIDE MINIMUM TWO BOLTS PER SHEAR WALL.
- (4) ALL NAILS SHALL BE COMMON NAILS OR GALVANIZED (HOT DIPPED).
- (5) 16d NAILS SHALL HAVE 2" MIN. PENETRATION INTO MAIN MEMBERS.
- (6) EDGE NAILING TO BE NOT LESS THAN 3/8" FROM PANEL EDGE. NAIL HEADS SHALL NOT PENETRATE PLYWOOD. REMOVE ALL SHINERS AND RE-DRIVE.
- (7) REPLACE ALL FRAMING MEMBERS SPLIT BY FASTENERS.



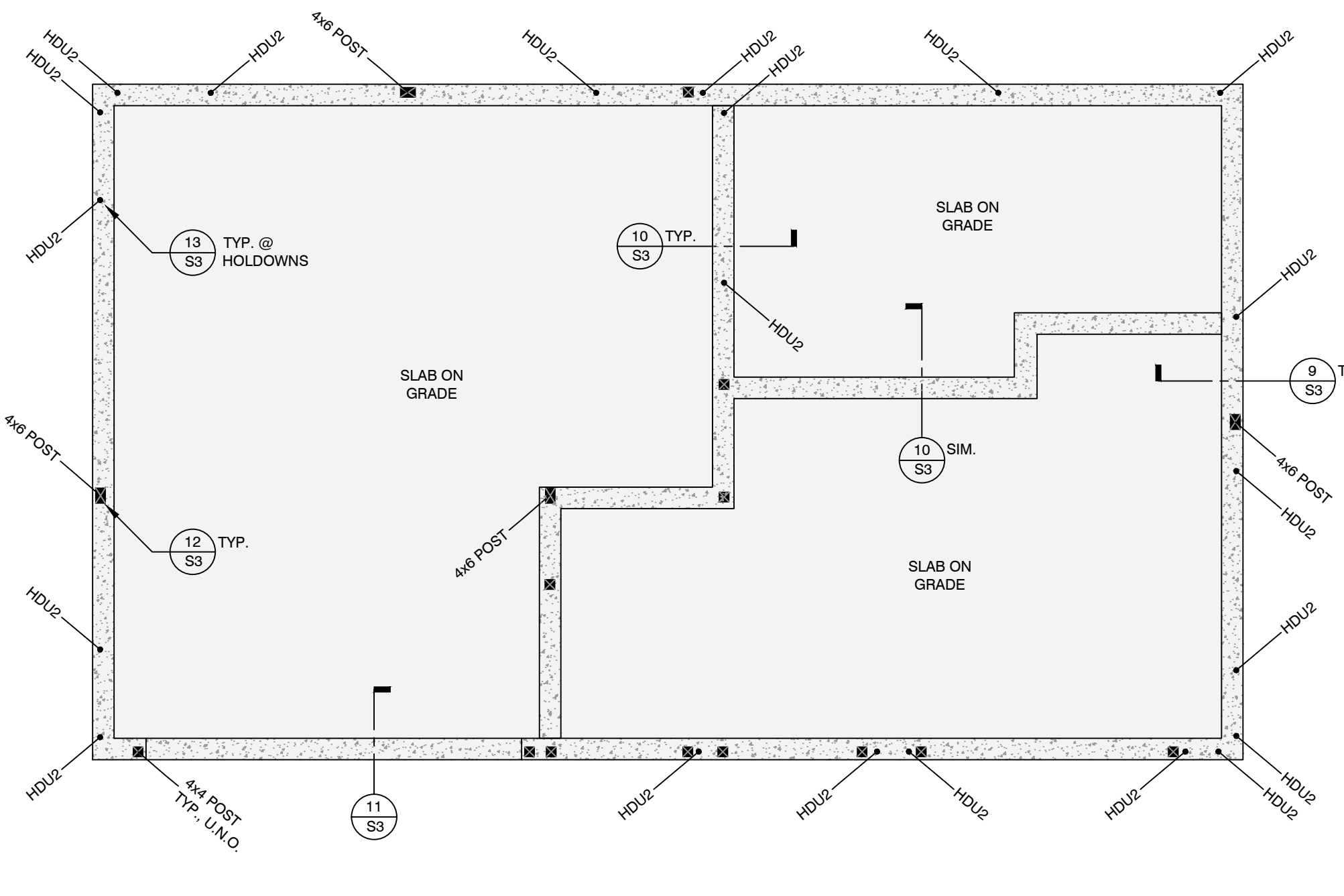
**STRAPPING AROUND SHEAR WALL OPENINGS**

2



**TYPICAL SHEAR WALL DETAIL**

1

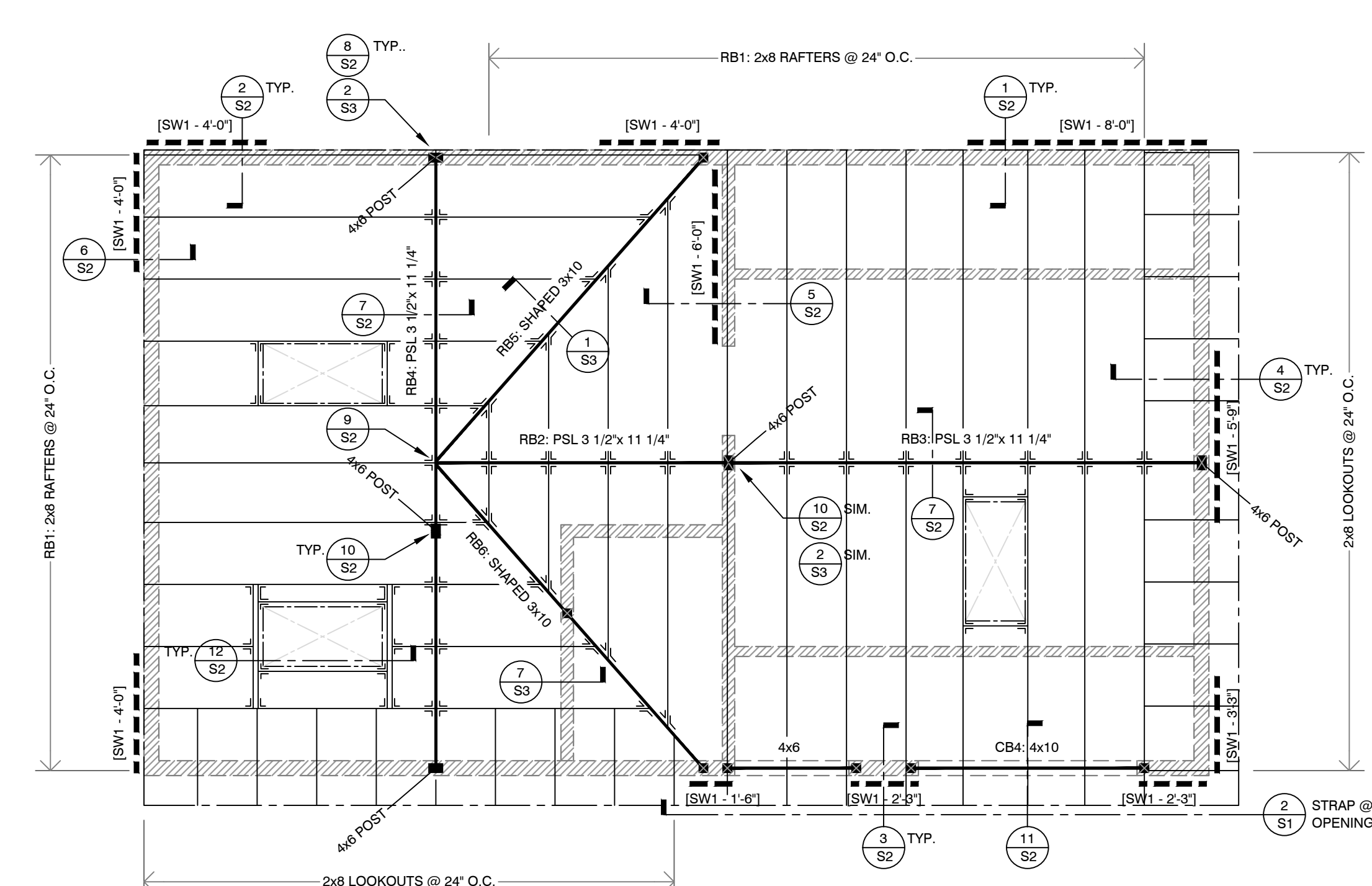


**LEGEND**

- (N) 4x4 POST, U.N.O.
- (N) HOLD-DOWN W/ DBL 2x STUDS, U.N.O.
- (N) FOUNDATION

HOLD-DOWNS SHOWN ON FOUNDATION PLAN ARE ALSO SHOWN ON CEILING FRAMING PLAN

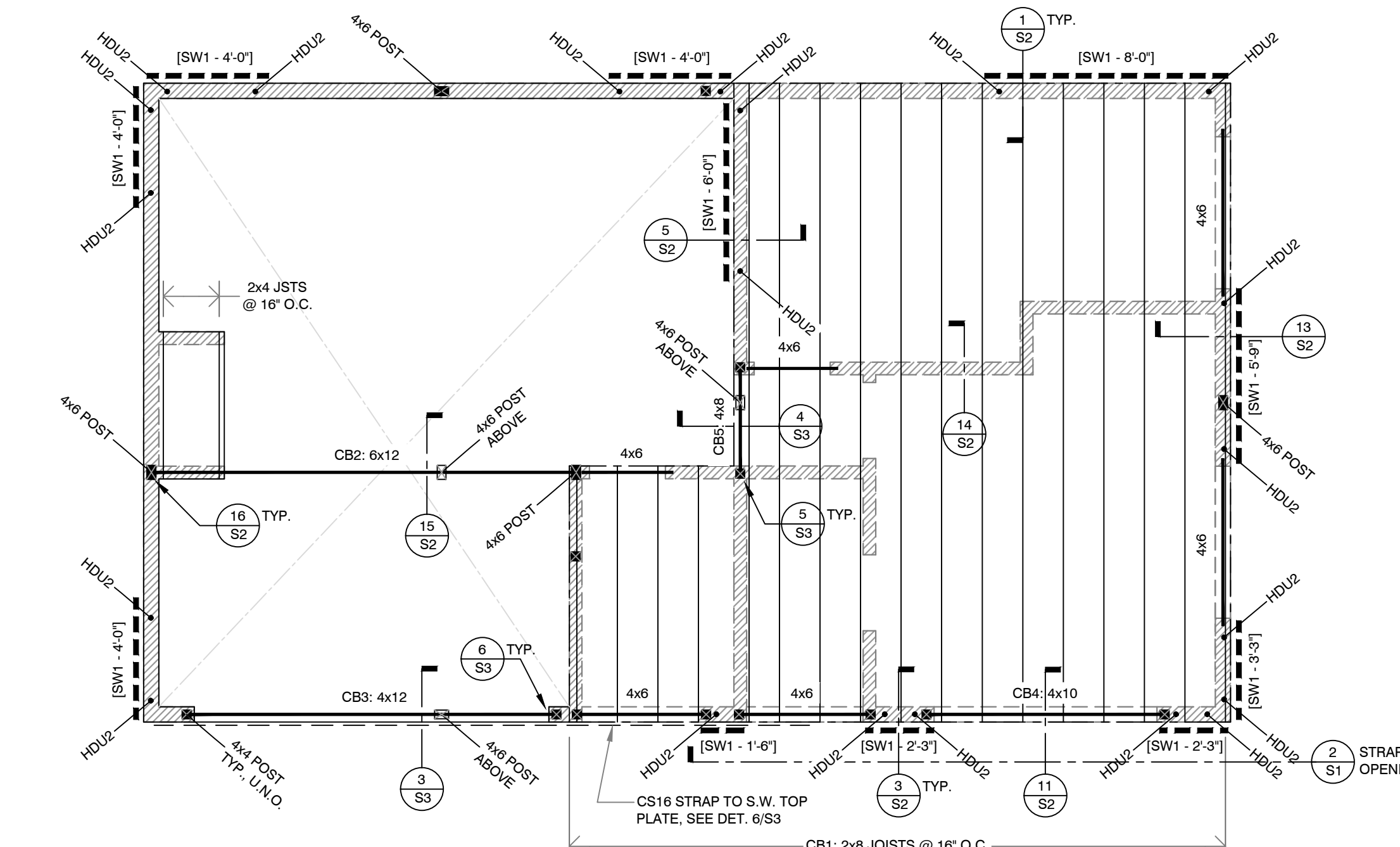
**FOUNDATION PLAN**



**LEGEND**

- (N) 4x4 POST BELOW, U.N.O.
- (N) WALL BELOW
- (N) 15/32" APA RATED PLYWOOD (SHEAR WALL TYPE - LENGTH) FOR SHEAR WALL SCHED. SEE DET. 1/S1

**ROOF FRAMING PLAN**



**LEGEND**

- (N) 4x4 POST BELOW, U.N.O.
- (N) WALL BELOW
- (N) 15/32" APA RATED PLYWOOD (SHEAR WALL TYPE - LENGTH) FOR SHEAR WALL SCHED. SEE DET. 1/S1

U.N.O. SHEAR WALLS AND HOLD-DOWNS SHOWN ARE FOR WALLS BELOW CEILING FRAMING

**CEILING FRAMING PLAN**

**FAR**  
associates  
engineers

3615 17th STREET  
SAN FRANCISCO, CA 94114  
P - (415) 756-0612  
INFO@FAENGINEERS.COM  
WWW.FAENGINEERS.COM

ALL DESIGN DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN ARE UNPUBLISHED WORK OF FAR ASSOCIATES AND MAY NOT BE COPIED, REVISED, REPRODUCED OR DISCLOSED, WITHOUT THE WRITTEN CONSENT OF FAR ASSOCIATES. DRAWINGS AND SPECIFICATIONS SHALL REMAIN THE PROPERTY OF FAR ASSOCIATES AND ITS USE IS RESTRICTED TO THE PROJECT AND SITE FOR WHICH THEY WERE PREPARED.

ADU BUILDING  
936 MASONIC AVENUE  
ALBANY, CA



REVISIONS AND RELEASES

NO.	DATE	DESCRIPTION

JOB NO: PJ22021  
DATE: 03.07.22  
SCALE: 1/4"=1', 1"=1'  
TITLE

GENERAL NOTES  
FOUNDATION PLAN  
CEILING FRAMING PLAN AND  
ROOF FRAMING PLAN

DRAWING  
**S1**

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ENGINEER STAMP



REVISIONS AND RELEASES

JOB NO: PJ22021

DATE: 03.07.22

SCALE: 1"=1'

TITLE

FRAMING  
AND  
SHEAR TRANSFER  
DETAILS

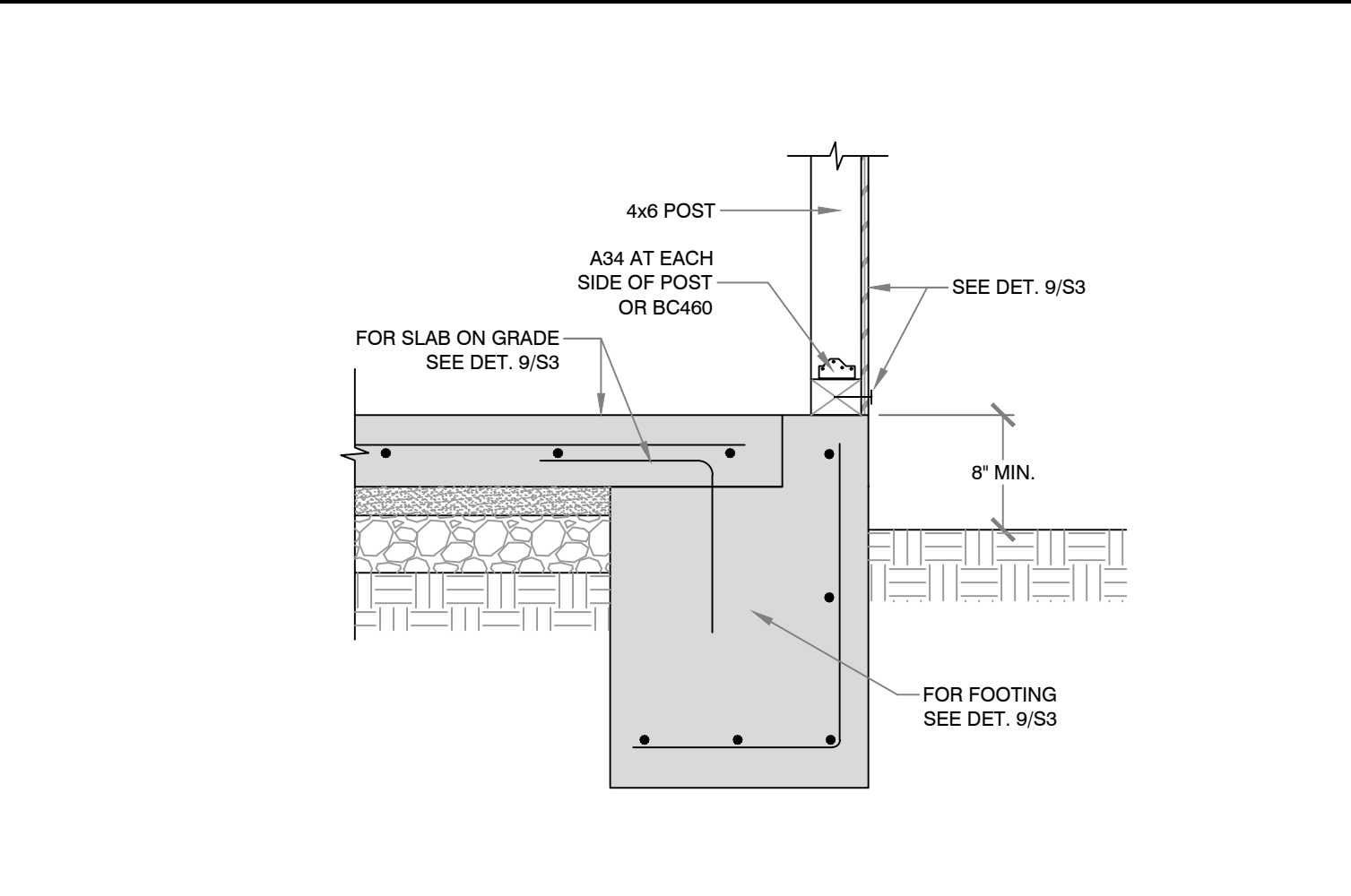
DRAWING

S2

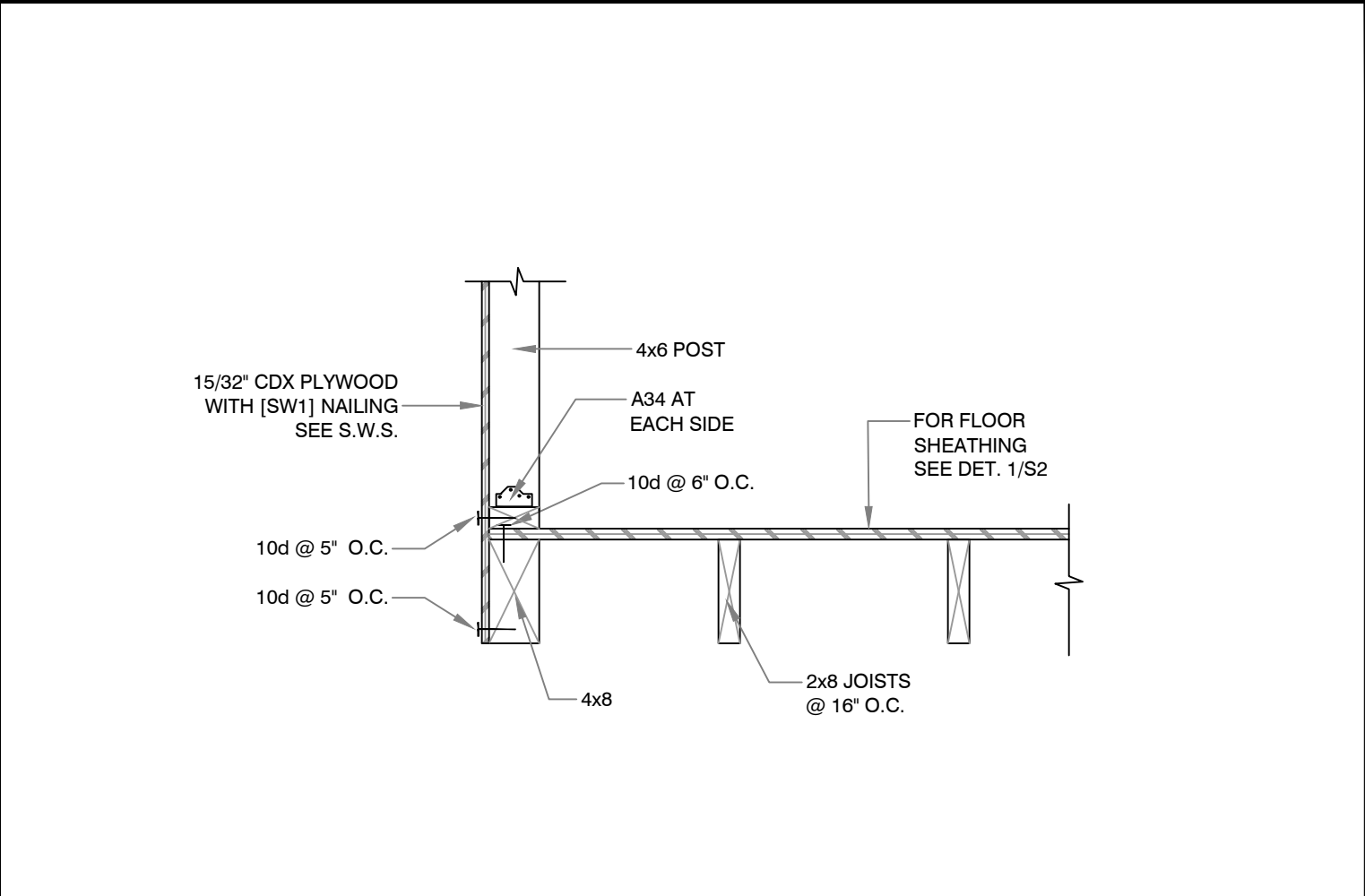
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	14		10		6		2
	13		9		5		1



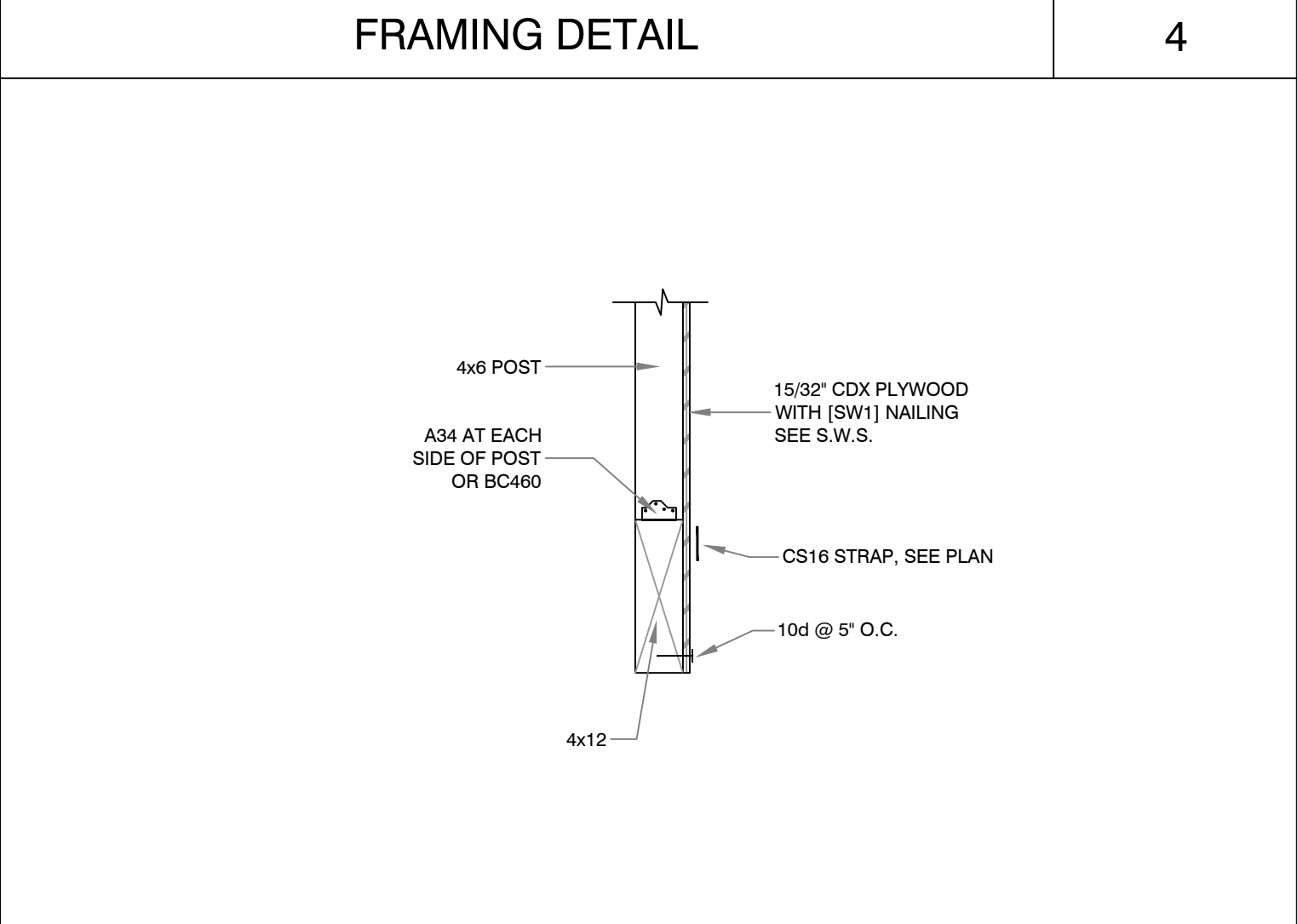
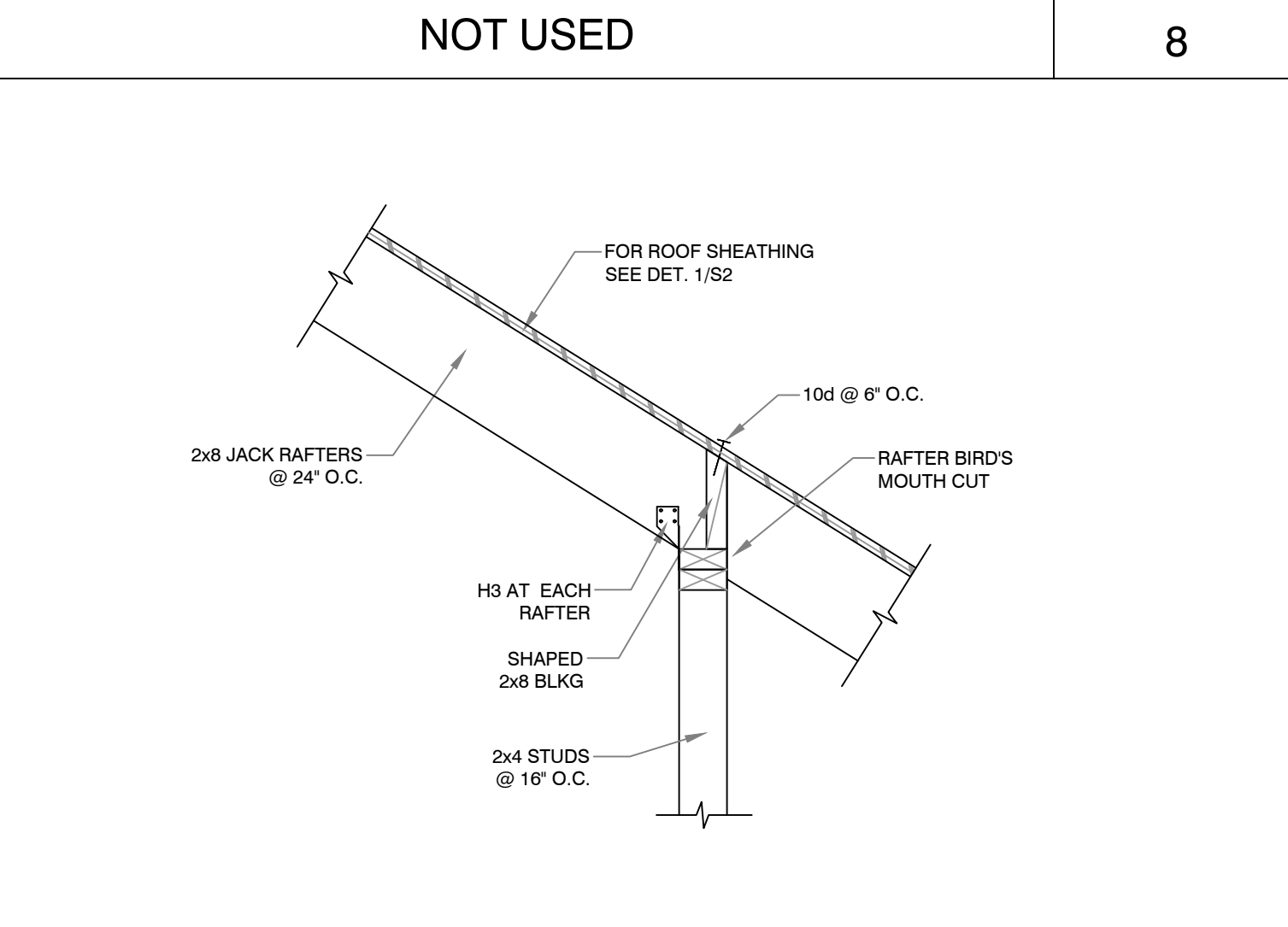
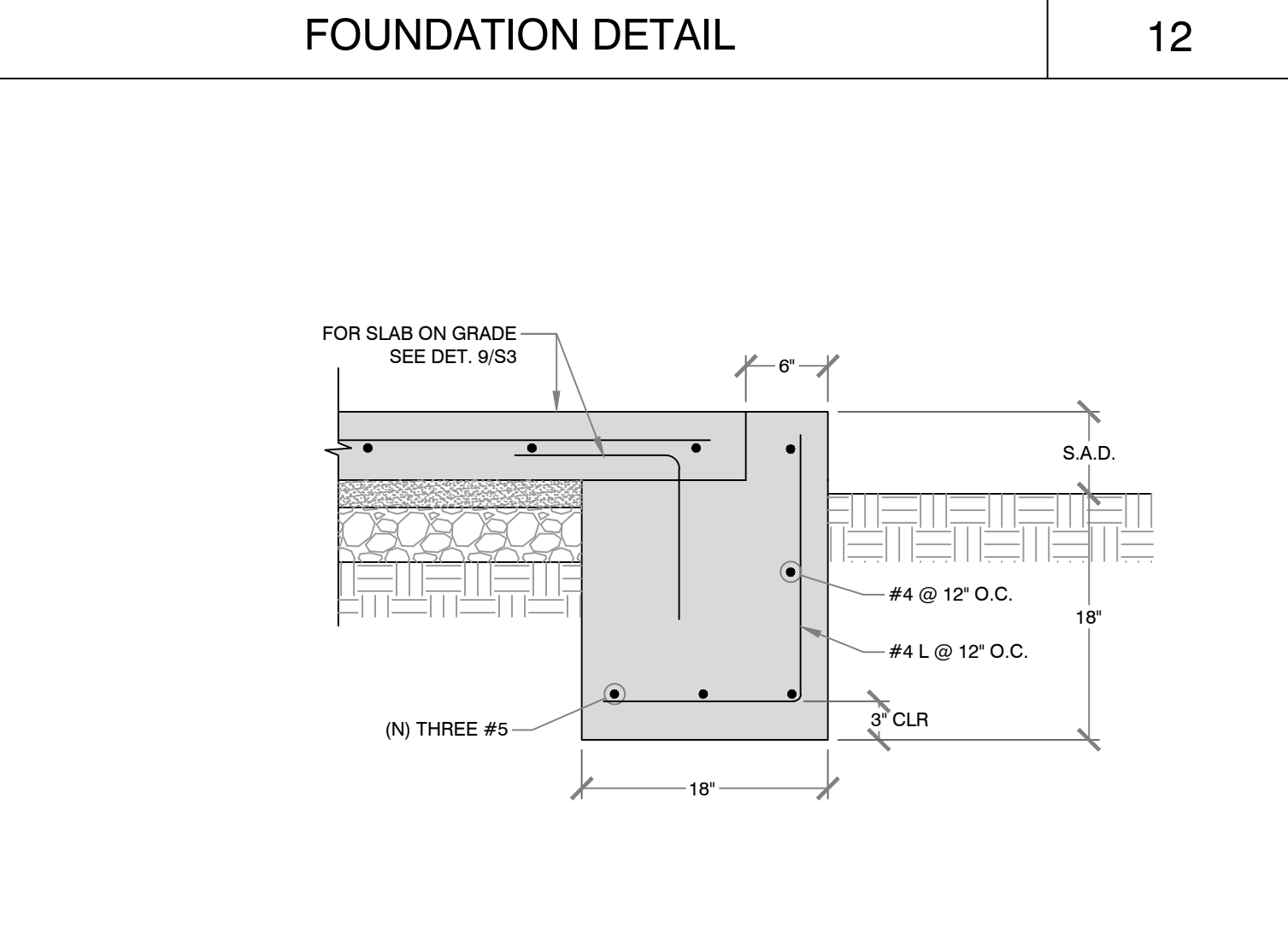
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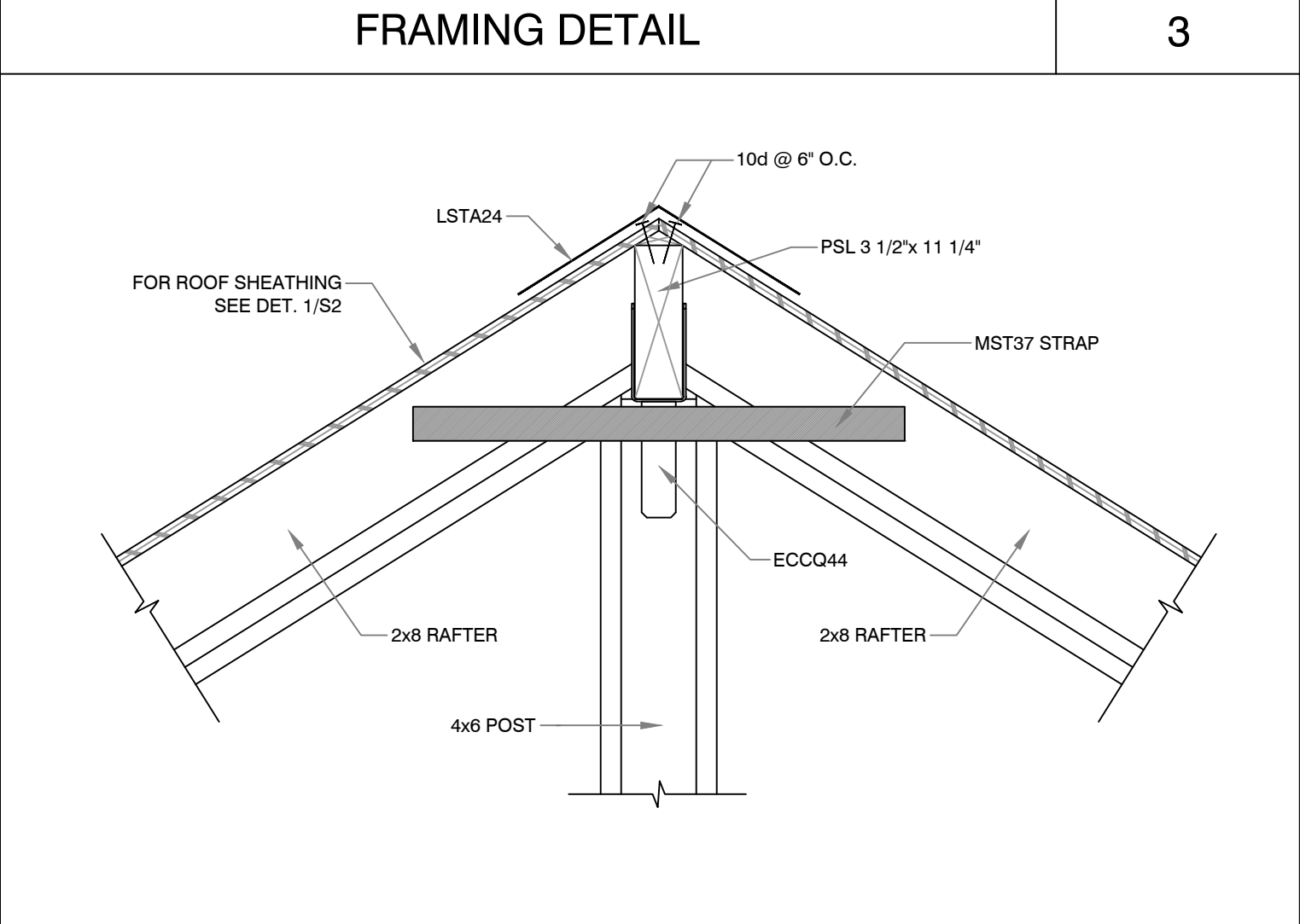
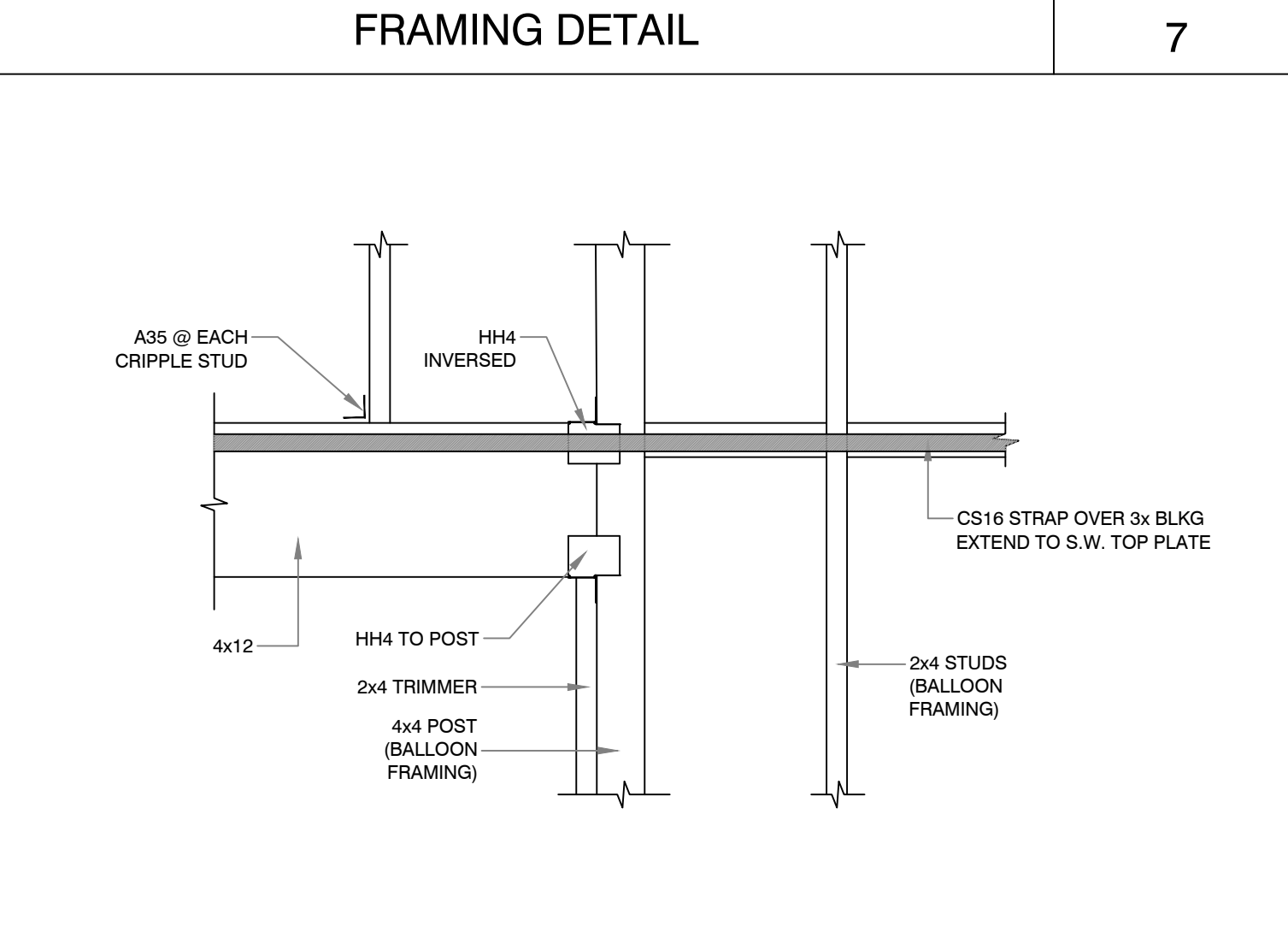
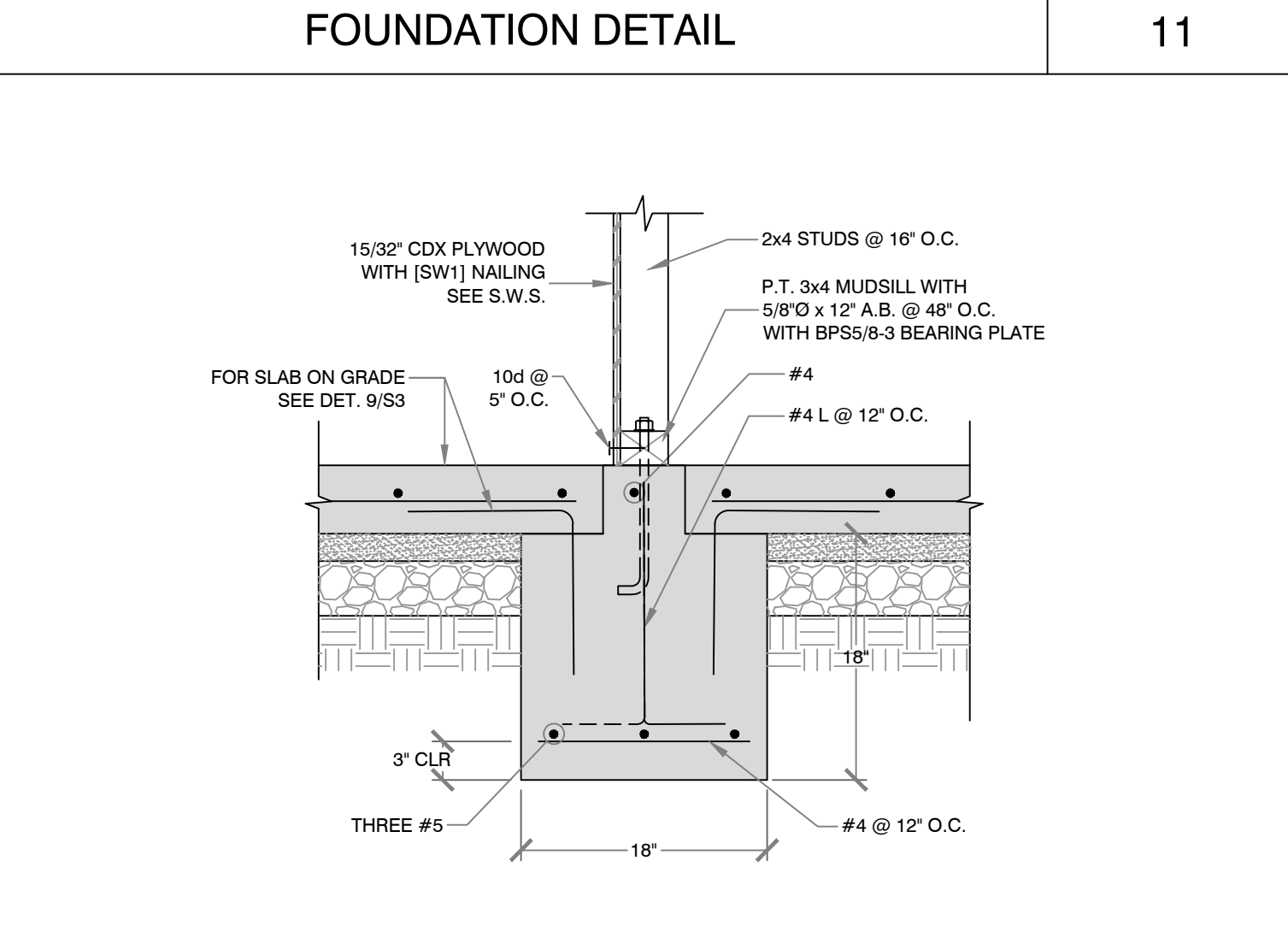
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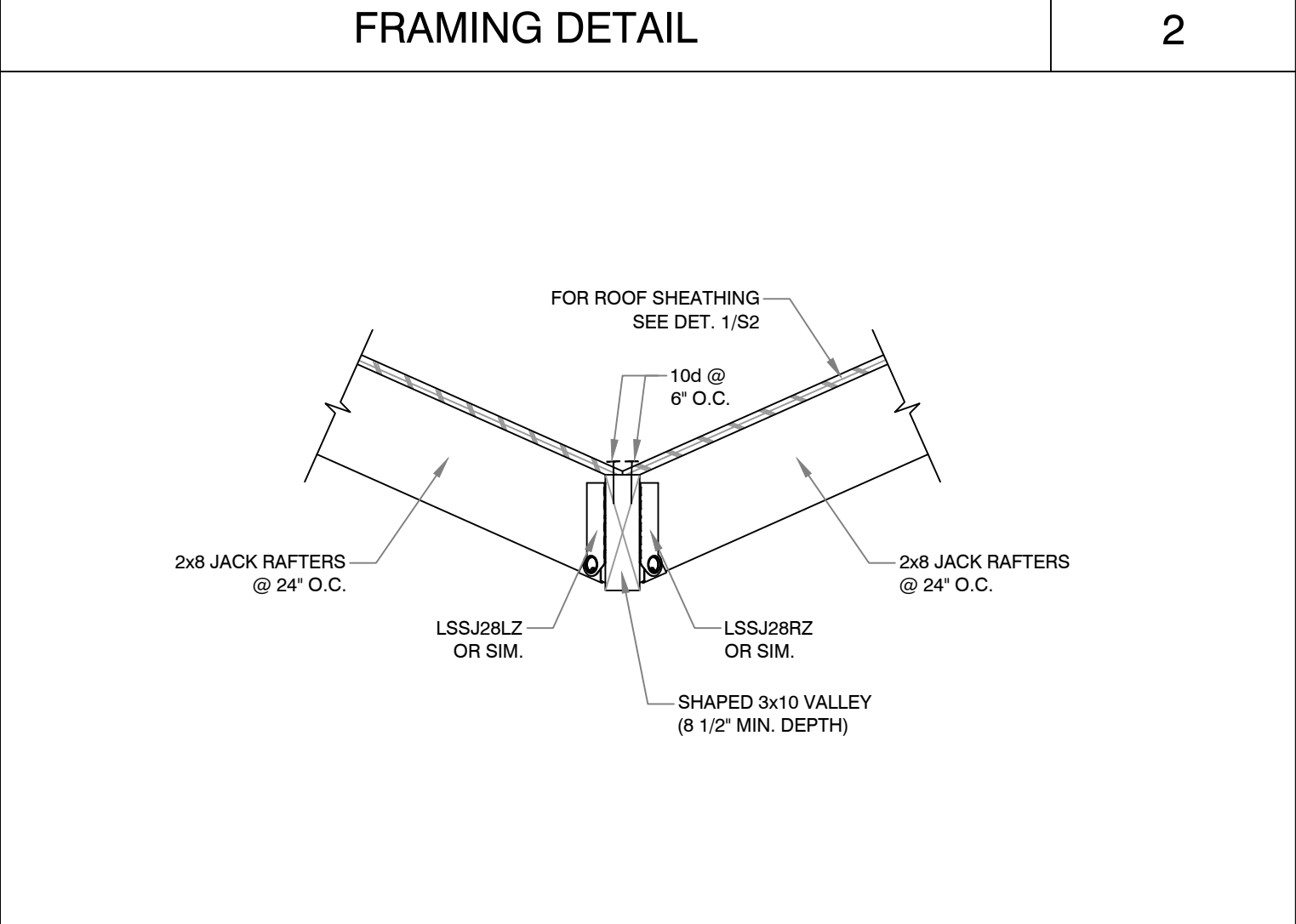
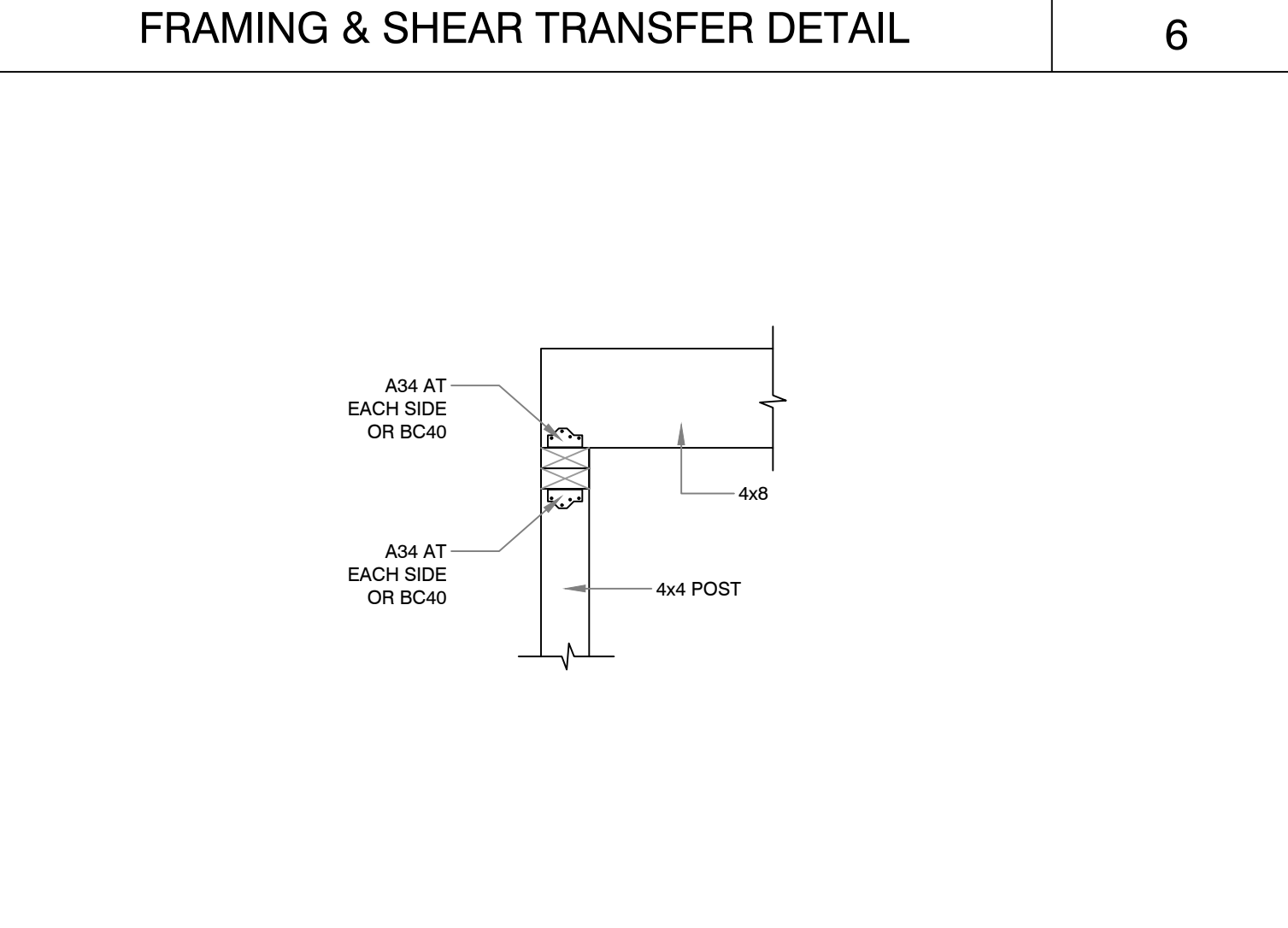
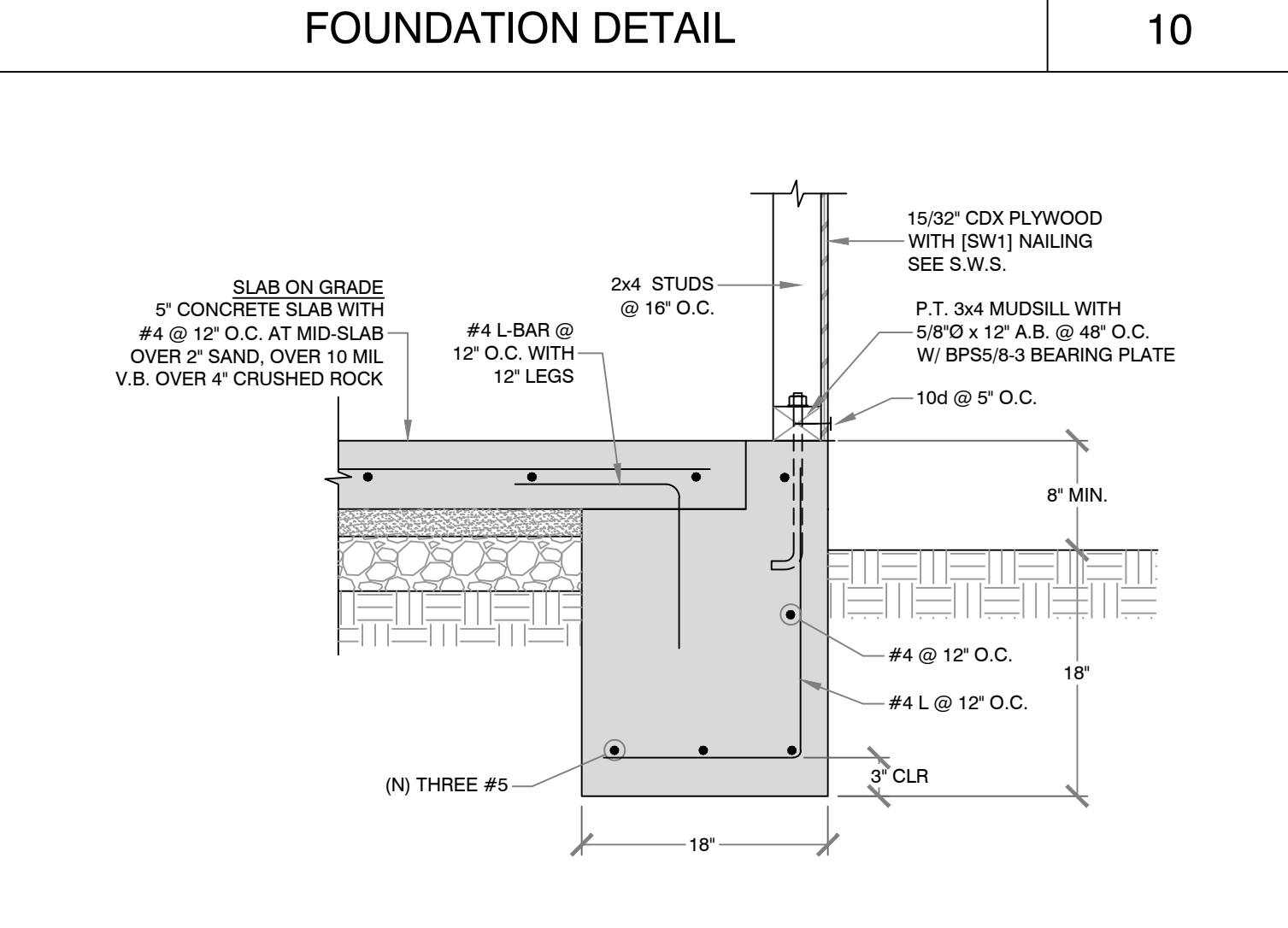
NOT USED	14	FOUNDATION DETAIL	10	FRAMING & SHEAR TRANSFER DETAIL	6	FRAMING DETAIL	2
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NOT USED	13	TYPICAL HOLDOWN DETAIL	13	FOUNDATION DETAIL	9	FRAMING DETAIL	5
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NOT USED	9	FOUNDATION DETAIL	9	FRAMING DETAIL	5	FRAMING DETAIL	1
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FASTENING SCHEDULE AS PER 2019 CBC, TABLE 2304.10.1

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sub>a,b,c</sub>	LOCATION
<b>Roof</b>			
1	Blocking between ceiling joists or rafters to top plate	4-8d box (21/2" x 0.113") or 3-8d common (21/2" x 0.131"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Toe nail
2	Ceiling joists to top plate	4-8d box (21/2" x 0.113"); or 3-8d common (21/2" x 0.131"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions (see Section R802.5.2 and Table R802.5.2)	4-10d box (3" x 0.128"); or 3-16d common (31/2" x 0.162"); or 4-3" x 0.131" nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) (see Section R802.5.2 and Table R802.5.2)	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or 11/4" x 20 ga. ridge strap to rafter	4-10d box (3" x 0.128"); or 3-10d common (3" x 0.148"); or 4-3" x 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails (31/2" x 0.135"); or 3-10d common nails (3" x 0.148"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	4-16d (31/2" x 0.135"); or 3-10d common (3" x 0.148"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails 3-16d box 31/2" x 0.135"; or 2-16d common (31/2" x 0.162"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Toe nail End nail
<b>Wall</b>			
8	Stud to stud (not at braced wall panels)	16d common (31/2" x 0.162"); 10d box (3" x 0.128"); or 3" x 0.131" nails	24" o.c. face nail 16" o.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box (31/2" x 0.135"); or 3" x 0.131" nails 16d common (31/2" x 0.162")	12" o.c. face nail 16" o.c. face nail
10	Built-up header (2" to 2" header with 1/2" spacer)	16d common (31/2" x 0.162") 16d box (31/2" x 0.135")	16" o.c. each edge face nail 12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (21/2" x 0.113"); or 4-8d common (21/2" x 0.131"); or 4-10d box (3" x 0.128")	Toe nail
12	Top plate to top plate	16d common (31/2" x 0.162") 10d box (3" x 0.128"); or 3" x 0.131" nails	16" o.c. face nail 12" o.c. face nail
13	Double top plate splice	8-16d common (31/2" x 0.162"); or 12-16d box (31/2" x 0.135"); or 12-10d box (3" x 0.128"); or 12-3" x 0.131" nails	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (31/2" x 0.162") 16d box (31/2" x 0.135"); or 3" x 0.131" nails	16" o.c. face nail 12" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box (31/2" x 0.135"); or 2-16d common (31/2" x 0.162"); or 4-3" x 0.131" nails	3 each 16" o.c. face nail 2 each 16" o.c. face nail 4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box (21/2" x 0.113"); or 3-16d box (31/2" x 0.135"); or 4-8d common (21/2" x 0.131"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails 3-16d box (31/2" x 0.135"); or 2-16d common (31/2" x 0.162"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Toe nail End nail
17	Top plates, laps at corners and intersections	3-10d box (3" x 0.128"); or 2-16d common (31/2" x 0.162"); or 3-3" x 0.131" nails	Face nail
18	1" brace to each stud and plate	3-8d box (21/2" x 0.113"); or 2-8d common (21/2" x 0.131"); or 2-10d box (3" x 0.128"); or 2 staples 1 3/4"	Face nail
19	1" x 6" sheathing to each bearing	3-8d box (21/2" x 0.113"); or 2-8d common (21/2" x 0.131"); or 2-10d box (3" x 0.128"); or 2 staples, 1" crown, 16 ga., 13/4" long	Face nail
20	1" x 8" and wider sheathing to each bearing	3-8d box (21/2" x 0.113"); or 3-8d common (21/2" x 0.131"); or 3-10d box (3" x 0.128"); or 3 staples, 1" crown, 16 ga., 13/4" long Wider than 1" x 8" 4-8d box (21/2" x 0.113"); or 3-8d common (21/2" x 0.131"); or 3-10d box (3" x 0.128"); or 4 staples, 1" crown, 16 ga., 13/4" long	Face nail

FASTENING SCHEDULE AS PER 2019 CBC, TABLE 2304.10.1 cont.

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sub>a,b,c</sub>	LOCATION
<b>Floor</b>			
21	Joist to sill, top plate or girder	4-8d box (21/2" x 0.113"); or 3-8d common (21/2" x 0.131"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box (21/2" x 0.113"); 8d common (21/2" x 0.131"); or 10d box (3" x 0.128"); or 3" x 0.131" nails	4" o.c. toe nail 6" o.c. toe nail
23	1" x 6" subfloor or less to each joist	3-8d box (21/2" x 0.113"); or 2-8d common (21/2" x 0.131"); or 3-10d box (3" x 0.128"); or 2 staples, 1" crown, 16 ga., 13/4" long	Face nail
<b>Floor</b>			
24	2" subfloor to joist or girder	3-16d box (31/2" x 0.135"); or 2-16d common (31/2" x 0.162")	Blind and face nail
25	2" planks (plank & beam—floor & roof)	3-16d box (31/2" x 0.135"); or 2-16d common (31/2" x 0.162")	At each bearing, face nail
26	Band or rim joist to joist	3-16d common (31/2" x 0.162") 4-10 box (3" x 0.128"); or 4-3" x 0.131" nails; or 4-3" x 14 ga. staples, 7/16" crown	End nail
27	Built-up girders and beams, 2-inch lumber layers	20d common (4" x 0.192"); or 10d box (3" x 0.128"); or 3" x 0.131" nails And: 2-20d common (4" x 0.192"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	Nail each layer as follows: 32" o.c. at top and bottom and staggered. 24" o.c. face nail at top and bottom staggered on opposite sides Face nail at ends and at each splice
28	Ledger strip supporting joists or rafters	4-16d box (31/2" x 0.135"); or 3-16d common (31/2" x 0.162"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	At each joist or rafter, face nail
29	Bridging or blocking to joist	2-10d box (3" x 0.128"); or 2-8d common (21/2" x 0.131"); or 2-3" x 0.131" nails	Each end, toe nail
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sub>a,b,c</sub>	SPACING OF FASTENERS Edges (inches) <sub>b</sub> Intermediate supports <sub>c,e</sub> (inches)
<b>Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing</b> <b>[see Table R602.3(3) for wood structural panel exterior wall sheathing to wall framing]</b>			
30	3/8" — 1/2"	6d common (2" x 0.113") nail (subfloor, wall); 8d common (21/2" x 0.131") nail (roof); or RRSR-01 (23/8" x 0.113") nail (roof)	6 12f
31	19/32" — 1"	8d common nail (21/2" x 0.131"); or RRSR-01, (23/8" x 0.113") nail (roof)	6 12f
32	11/8" — 11/4"	10d common (3" x 0.148") nail; or 8d (21/2" x 0.131") deformed nail	6 12
<b>Other wall sheathing</b>			
33	1/2" structural cellulose fiberboard sheathing	11/2" galvanized roofing nail, 7/16" head diameter, or 11/4" long 16 ga. staple with 7/16" or 1" crown	3 6
34	25/32" structural cellulose fiberboard sheathing	13/4" galvanized roofing nail, 7/16" head diameter, or 11/2" long 16 ga. staple with 7/16" or 1" crown	3 6
35	1/2" gypsum sheathingd	11/2" galvanized roofing nail; staple galvanized, 11/2" long; 11/4" screws, Type W or S	7 7
36	5/8" gypsum sheathingd	13/4" galvanized roofing nail; staple galvanized, 15/8" long; 15/8" screws, Type W or S	7 7
<b>Wood structural panels, combination subfloor underlayment to framing</b>			
37	3/4" and less	6d deformed (2" x 0.120") nail; or 8d common (21/2" x 0.131") nail	6 12
38	7/8" — 1"	8d common (21/2" x 0.131") nail; or 8d deformed (21/2" x 0.120") nail	6 12
39	11/8" — 11/4"	10d common (3" x 0.148") nail; or 8d deformed (21/2" x 0.120") nail	6 12

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

- Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
- Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.
- Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.
- Spacing of fasteners not included in this table shall be based on Table R602.3(2).
- For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the ultimate design wind speed is less than 130 mph and shall be spaced 4 inches on center where the ultimate design wind speed is 130 mph or greater but less than 140 mph.
- Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.
- Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
- Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
- RRSR-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

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ADU BUILDING  
936 MASONIC AVENUE  
ALBANY, CA

ENGINEER STAMP



REVISIONS AND RELEASES

JOB NO: PJ22021

DATE: 03.07.22

SCALE: 1/4"=1', 1"=1'

TITLE

FASTENING  
SCHEDULE

DRAWING

S4



CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 1 of 9)

GENERAL INFORMATION table with columns 01-22 and rows for Project Name, Run Title, Project Location, City, Zip code, Climate Zone, Building Type, Project Scope, Addition Cond. Floor Area (ft²), Existing Cond. Floor Area (ft²), Total Cond. Floor Area (ft²), ADU Bedroom Count, and Is Natural Gas Available?

Additional Alone Project Analysis Parameters table with columns 01-06 and rows for Existing Area (excl. new addition) (ft²), Addition Area (excl. existing) (ft²), Total Area (ft²), Existing Bedrooms, Addition Bedrooms, and Total Bedrooms.

COMPLIANCE RESULTS table with columns 01-03 and rows for Building Complies with Computer Performance, This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider, and This building incorporates one or more Special Features shown below.

Registration Number: 222-P01006766A-000-000-0000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
Registration Date/Time: 2022-04-07 16:21:16  
Report Version: 2019.2.000  
Schema Version: rev 20200901  
HERS Provider: CaCERTS, Inc.  
Report Generated: 2022-04-07 16:18:01

TITLE 24 ENERGY COMPLIANCE PAGE 1

CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 2 of 9)

ENERGY USE SUMMARY table with columns Energy Use (kTDU/ft²-yr), Standard Design, Proposed Design, Compliance Margin, and Percent Improvement. Rows include Space Heating, Space Cooling, IAQ Ventilation, Water Heating, Self Utilization/Flexibility Credit, and Compliance Energy Total.

REQUIRED SPECIAL FEATURES  
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.  
• Non-standard duct location (any location other than attic)  
• Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

HERS FEATURE SUMMARY  
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CE2Rs and CE3Rs are required to be completed in the HERS Registry  
Building-level Verifications:  
• Indoor air quality ventilation  
• Kitchen range hood  
Cooling System Verifications:  
• Minimum Airflow  
• Fan Efficacy Watts/CFM  
Heating System Verifications:  
• Verified heat pump rated heating capacity  
HVAC Distribution System Verifications:  
• Duct leakage testing  
• Ducts located entirely in conditioned space confirmed by duct leakage testing  
Domestic Hot Water System Verifications:  
• -- None --

Registration Number: 222-P01006766A-000-000-0000000-0000  
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TITLE 24 ENERGY COMPLIANCE PAGE 2

CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
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Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 3 of 9)

ZONE INFORMATION table with columns 01-07 and rows for Zone Name, Zone Type, HVAC System Name, Zone Floor Area (ft²), Avg. Ceiling Height, Water Heating System 1, and Water Heating System 2.

OPAQUE SURFACES table with columns 01-10 and rows for Name, Zone, Construction, Azimuth, Orientation, Gross Area (ft²), Window and Door Area (ft²), Tilt (deg), Wall Exceptions, and Status.

OPAQUE SURFACES - CATHEDRAL CEILINGS table with columns 01-11 and rows for Name, Zone, Construction, Azimuth, Orientation, Area (ft²), Skylight Area (ft²), Roof Rise (x in 12), Roof Reflectance, Roof Emission, and Cool Roof.

FENESTRATION / GLAZING table with columns 01-14 and rows for Name, Type, Surface, Orientation, Azimuth, Width (ft), Height (ft), Mult., Area (ft²), U-factor, U-factor Source, SHGC, SHGC Source, and Exterior Shading.

Registration Number: 222-P01006766A-000-000-0000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
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Schema Version: rev 20200901  
HERS Provider: CaCERTS, Inc.  
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TITLE 24 ENERGY COMPLIANCE PAGE 3

CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 4 of 9)

FENESTRATION / GLAZING table with columns 01-14 and rows for Name, Type, Surface, Orientation, Azimuth, Width (ft), Height (ft), Mult., Area (ft²), U-factor, U-factor Source, SHGC, SHGC Source, and Exterior Shading.

SLAB FLOORS table with columns 01-08 and rows for Name, Zone, Area (ft²), Perimeter (ft), Edge Insul. R-value and Depth, Edge Insul. R-value and Depth, Carpeted Fraction, and Heated.

OPAQUE SURFACE CONSTRUCTIONS table with columns 01-08 and rows for Construction Name, Surface Type, Construction Type, Framing, Total Cavity R-value, Interior / Exterior Continuous R-value, U-factor, and Assembly Layers.

Registration Number: 222-P01006766A-000-000-0000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
Registration Date/Time: 2022-04-07 16:21:16  
Report Version: 2019.2.000  
Schema Version: rev 20200901  
HERS Provider: CaCERTS, Inc.  
Report Generated: 2022-04-07 16:18:01

TITLE 24 ENERGY COMPLIANCE PAGE 4

CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 5 of 9)

BUILDING ENVELOPE - HERS VERIFICATION table with columns 01-04 and rows for Quality Insulation Installation (QII), High R-value Spray Foam Insulation, Building Envelope Air Leakage, and CFMS0.

WATER HEATING SYSTEMS table with columns 01-07 and rows for Name, System Type, Distribution Type, Water Heater Name (R), Solar Heating System, Compact Distribution, and HERS Verification.

WATER HEATERS table with columns 01-14 and rows for Name, Heating Element Type, Tank Type, # of Units, Tank Vol. (gal), Energy Factor or Efficiency, Input Rating or Pilot, Tank Insulation R-value (Int/Ext), Standby Loss or Recovery Eff, 1st Hr. Rating or Flow Rate, NEEA Heat Pump Brand or Model, Tank Location or Ambient Condition, Status, and Verified Existing Condition.

WATER HEATING - HERS VERIFICATION table with columns 01-08 and rows for Name, Pipe Insulation, Parallel Piping, Compact Distribution, Compact Distribution Type, Recirculation Control, Central DHW Distribution, and Shower Drain Water Heat Recovery.

Registration Number: 222-P01006766A-000-000-0000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
Registration Date/Time: 2022-04-07 16:21:16  
Report Version: 2019.2.000  
Schema Version: rev 20200901  
HERS Provider: CaCERTS, Inc.  
Report Generated: 2022-04-07 16:18:01

TITLE 24 ENERGY COMPLIANCE PAGE 5

CERTIFICATE OF COMPLIANCE  
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Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 6 of 9)

SPACE CONDITIONING SYSTEMS table with columns 01-11 and rows for Name, System Type, Heating Unit Name, Cooling Unit Name, Fan Name, Distribution Name, Required Thermostat Type, Status, Verified Existing Condition, Heating Equipment Count, and Cooling Equipment Count.

HVAC - HEAT PUMPS table with columns 01-11 and rows for Name, System Type, Number of Units, Heating HSPF/COP, Cap 47, Cap 17, Cooling EER/CEER, Zonally Controlled, Compressor Type, and HERS Verification.

HVAC HEAT PUMPS - HERS VERIFICATION table with columns 01-09 and rows for Name, Verified Airflow, Airflow Target, Verified EER, Verified SEER, Verified Refrigerant Charge, Verified HSPF, Verified Heating Cap 47, and Verified Heating Cap 17.

Registration Number: 222-P01006766A-000-000-0000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
Registration Date/Time: 2022-04-07 16:21:16  
Report Version: 2019.2.000  
Schema Version: rev 20200901  
HERS Provider: CaCERTS, Inc.  
Report Generated: 2022-04-07 16:18:01

TITLE 24 ENERGY COMPLIANCE PAGE 6

PROJECT  
936 MASONIC AVE ADU BUILDING  
PERMIT SET  
ALBANY, CA 94706  
APN: 65-2652-17

ISSUED FOR: DATE:  
BUILDING PERMIT 10/13/21

DRAWING TITLE  
ENERGY COMPLIANCE

SHEET NUMBER  
T24-1



CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 7 of 9)

Table with 16 columns (01-16) for HVAC - DISTRIBUTION SYSTEMS. Columns include Name, Type, Design Type, Supply, Return, Duct Location, Surface Area, Bypass Duct, Duct Leakage, HERS Verification, Status, Verified Existing Condition, Existing Distribution system, and New Ducts 40 ft.

Table with 9 columns (01-09) for HVAC DISTRIBUTION - HERS VERIFICATION. Columns include Name, Duct Leakage Verification, Duct Leakage Target (%), Verified Duct Location, Verified Duct Design, Buried Ducts, Deeply Buried Ducts, Low-leakage Air Handler, and Low Leakage Ducts Entirely in Conditioned Space.

Table with 4 columns (01-04) for HVAC - FAN SYSTEMS. Columns include Name, Type, Fan Power (Watts/CFM), and Name.

Table with 3 columns (01-03) for HVAC FAN SYSTEMS - HERS VERIFICATION. Columns include Name, Verified Fan Watt Draw, and Required Fan Efficacy (Watts/CFM).

Registration Number: 222-P010067666A-000-000-000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
Registration Date/Time: 2022-04-07 16:21:16  
Report Version: 2019.2.000  
Schema Version: rev 20200901  
HERS Provider: CalCERTS Inc.  
Report Generated: 2022-04-07 16:18:01

CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
CF1R-PRF-01E  
(Page 8 of 9)

Table with 7 columns (01-07) for IAQ (INDOOR AIR QUALITY) FANS. Columns include Dwelling Unit, IAQ CFM, IAQ Watts/CFM, IAQ Fan Type, IAQ Recovery Effectiveness - SRE, IAQ Recovery Effectiveness - ASRE, and HERS Verification.



Registration Number: 222-P010067666A-000-000-000000-0000  
CA Building Energy Efficiency Standards - 2019 Residential Compliance  
Registration Date/Time: 2022-04-07 16:21:16  
Report Version: 2019.2.000  
Schema Version: rev 20200901  
HERS Provider: CalCERTS Inc.  
Report Generated: 2022-04-07 16:18:01

CERTIFICATE OF COMPLIANCE  
Project Name: Masonic ADU  
Calculation Description: Title 24 Analysis  
Calculation Date/Time: 2022-04-07T16:17:48-07:00  
Input File Name: Building1.rbd19x  
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Documentation Author's Declaration Statement and Responsible Person's Declaration Statement. Includes fields for Documentation Author Name (Ying (John) Tao), Company (Basaltic, Inc.), Address (2615 MacArthur Blvd., Oakland, CA 94602), and Responsible Designer Name (Haonan Jia).



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Registration Number: 222-P010067666A-000-000-000000-0000  
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Report Version: 2019.2.000  
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2019 Low-Rise Residential Mandatory Measures Summary

NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. \*Exceptions may apply. (01/2020)

Table of 2019 Low-Rise Residential Mandatory Measures Summary, page 1. Includes sections for Building Envelope Measures, Fireplaces, Space Conditioning, and Solar Ready Buildings.



2019 Low-Rise Residential Mandatory Measures Summary

Table of 2019 Low-Rise Residential Mandatory Measures Summary, page 2. Includes sections for Solar Ready Buildings, Solar Ready Buildings (continued), and Solar Ready Buildings (continued).



2019 Low-Rise Residential Mandatory Measures Summary

Table of 2019 Low-Rise Residential Mandatory Measures Summary, page 2. Includes sections for Clearances, Liquid Line Drier, Storage Tank Insulation, Water Piping, Insulation Protection, Gas or Propane Water Heating Systems, Recirculating Loops, Solar Water-Heating Systems, Ducts and Fans Measures, and Space Conditioning System Airflow Rate and Fan Efficacy.



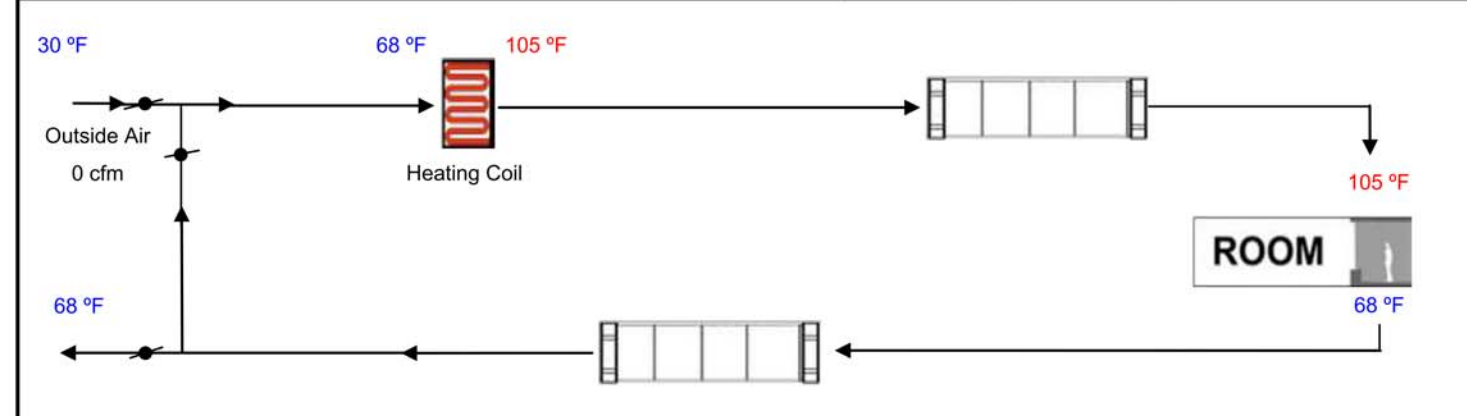
2019 Low-Rise Residential Mandatory Measures Summary

Table of 2019 Low-Rise Residential Mandatory Measures Summary, page 3. Includes sections for Requirements for Ventilation and Indoor Air Quality, Lighting Measures, and Interior Switches and Controls.

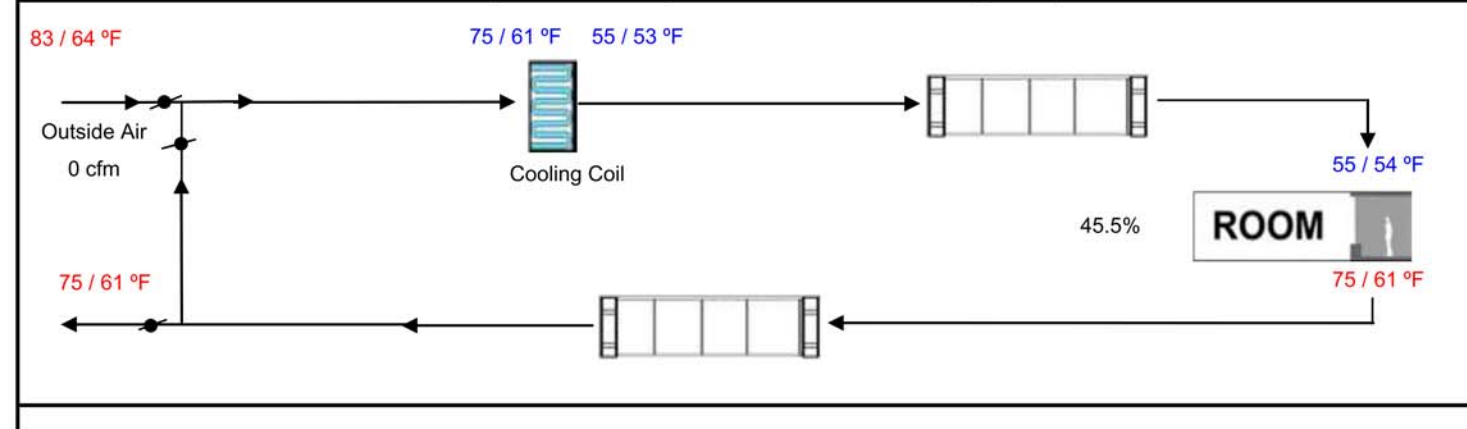
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY table. Includes project name (Masonic ADU), date (4/7/2022), and detailed load calculations for Heating System, Cooling System, and Air System.

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



PROJECT  
936 MASONIC AVE ADU BUILDING  
PERMIT SET  
ALBANY, CA 94706  
APN: 65-2652-17

ISSUED FOR: DATE:

BUILDING PERMIT 10/13/21

DRAWING TITLE

TITLE 24  
SUPPLEMENT

SHEET NUMBER

T24-3