

GENERAL

- 1. Provide each bedroom, basement, and habitable attics with a minimum of one exterior window with a 44" maximum clear opening height, 5.7 sq. ft. minimum clear openable area (minimum 5.0 sq. ft. at grade floor openings), 24" minimum clear openable height and 20" minimum clear width, or an openable exterior exit door. (CRC R310.2.1 and CRC R310.2.2) Window wells, ladders, and steps shall comply with CRC R310.2.3. Bars, grilles, covers, ands screens shall be releasable or removable from the inside without the use of a key, tool, special knowledge, or force greater than 15lbs to operate the emergency escape and rescue openings. (CRC R310.4) **Photovoltaic panels & modules shall not be below an emergency escape and rescue opening within 36". (R324.6.2.2)**
- 2. Each bathroom containing a bathtub, shower or tub/shower combination shall be mechanically ventilated with Energy Star approved equipment (minimum 50cfm) with an integral humidistat installed. (CRC R303.3.1)
- 3. Provide attic cross ventilation: 1/150 of attic area or 1/300 with at least 40% but not more than 50% of vents are a maximum 3 ft. below the ridge or highest space in the attic and the balance is provided in **the lower third of the attic space (not limited to eaves or cornice vents).** As an alternative in Climate Zone 16 (Truckee region), the net area may be reduced to 1/300 when a Class I or II vapor barrier is installed on the warm-in-winter side of the ceiling. Baffles are required at vents for insulation. Provide minimum of 1" inch of air space between insulation and roof sheathing.
- 4. Enclosed rafter spaces shall have a 1-inch clear cross ventilation. (Properly sized raft ers for insulation) (CRC R806.3)
- 5. Under floor cross ventilation: minimum 1.0 sq. ft. for each 150 sq. ft. of under floor area. When a class 1 vapor retarder is installed on the ground surface the minimum area of ventilation may be limited to 1sq.ft for each 1,500 square feet of under-floor space. One ventilation opening shall be within three (3) feet of each corner of the building (CRC R408.1). Unvented crawl spaces shall comply with CRC R408.3. Unvented crawl space added option for dehumidification of 70 pints moisture per day per 1,000 sf to requirement for exemption. (R408.3)
- 6. Exterior balconies and elevated walking surfaces exposed to water, where structural framing is protected by an impervious moisture barrier require construction documents with manufacturer's installation instructions (R106.1.5). Must be inspected and approved before concealing barrier. (R109.1.5.3)
- 7. Enclosed framing in exterior balconies and elevated walking surfaces exposed to rain, snow or drainage from irrigation shall be provided with crossventilation area of at least 1/150. (R317.1.6)
- 8. Provide landings and a porch light at all exterior doors. Landings are to be minimum 3 ft deep x width of door. Landings at required egress doors may step down a maximum of 7.75 inches when the door does not swing over the landing and 1.5 inches when door swings onto the landing. Other than required exterior exit doors may have a threshold of 7.75 inches maximum; a landing is not required if a stair with two or fewer risers is located on the exterior side and the door does not swing over the stairway. (CRC R311.3-R311.3.2)
- 9. Mezzanines shall not be greater than 1/3 of the story unless fire sprinklers are installed then the area can be ½ of the story. (R325.3)
- 10. The following windows shall be fully tempered: (CRC R308.4)
- Sliding/swinging glass doors
- Glazing in walls and enclosures facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and swimming pools where the glazing is less than 60 inches es above the standing surface within the compartment <u>and</u> within 60 inches horizontally of the water's edge (CRC R308.4.5)
- Glazing within a 24" arc of a door that is less than 60 inches above the floor. Safety glazing required on a wall **less than 180 degrees from the plane of the door** in a closed position and within 24" of hinge side of an in-swing door. (R308.4.2)
- Glazing where the exposed area is greater than 9sq.ft, bottom is less than 18 in. and at least 36 in. above the floor, and adjacent to a walking surface
- Within 60in. of the bottom tread of a stairway and less than 36in. above the landing
 Glazing in guards and railings
- Glazing adjacent to stairways, landings, and ramps within 36in. horizontally of the walking surface less than 36in. above the walking surface

FOUNDATIONS & CONCRETE SLABS

- Slope drainage 6" within the first 10ft. from the foundation wall. If physical obstructions or lot lines prohibit the 10ft distance, a 2-5 percent slope shall be provided to an approved alternative method of diverting the water away from the foundation. Impervious surfaces shall also be sloped a minimum of 2 percent for 10ft away from structures to an approved drainage way. (CRC R401.3)
- Footings shall extend at least 12 inches into the undisturbed ground surface. (CRC R403.1.4) Unless erected on solid rock, to protect against frost and freezing, the minimum foundation depth is 18 inches below grade if between 4,000-7,000 foot elevation and 24 inches below grade for 7,000 foot elevation and above. Exception: Interior footings shall be a minimum of 12 inches below grade. (L-V 3.14)
- 3. Stepped footings shall be used when slope of footing bottom is greater than 1 in 10 (V: H). Step footing detail shall be shown on building elevations and foundation plan. (CRC R403.1.5)
- Concrete slabs: 3 ½" minimum (CRC R506.1). Slabs under living areas and garages shall be reinforced with wire 6" x 6", 10 gauge x 10 gauge welded mesh or equivalent steel reinforcement and 4" thickness of 3/8 minimum gravel under the concrete slab. Separate from soil with a 6 mil polyethylene vapor retarder with joints lapped not less than 6 inches in living areas. A capillary break shall be installed when a vapor retarder is required.
- 5. Provide an 18" x 24" under-floor access, unobstructed by pipes or ducts and within 5' of each under-floor plumbing cleanout and not located under a door to the residence, is required. Provide a solid cover or screen. (CRC 408.4 & CPC 707.9)
- 6. Minimum sill bolting: ½" anchor bolts or approved anchors at 6 ft. o.c. maximum for one-story. (CRC R403.1.6) Use anchor bolts at 4 ft. o.c. maximum for three story construction. Embed bolts 7" minimum. The anchor bolts shall be placed in the middle third of the width of the plate. Locate end bolts not less than 7 bolt diameters, nor more than 12" from ends of sill members. In SDC D0 and above: Provide 3"X3"X0.229 plate washers on each bolt at braced or shear wall locations, standard cut washers shall be permitted for anchor bolts not located in braced/shear wall lines. (CRC R403.1.6.1 & R602.11.1)

CLEARANCES AND TREATMENT FOR WOOD FRAMING

- Weather exposed glu-lam, beams and posts shall be pressure treated or shall be wood of natural resistance to decay (CRC R317.1.3 & 5)
- 2. Columns exposed to the weather or in basements when supported on concrete pier or metal pedestals shall be pressure treated or natural resistance to decay <u>unless</u> the pier/pedestals project 1" above concrete or 6" above earth <u>and</u> the earth is covered by an approved impervious moisture barrier. (CRC R317.1.4 exc. 1)
- 3. Columns in enclosed crawl spaces or unexcavated areas located within the periphery of the building shall be pressure treated or natural resistance to decay <u>unless</u> the column is supported by a concrete pier or metal pedestal of a height 8" or more <u>and</u> the earth is covered by an impervious moisture barrier. (CRC R317.1.4 exc. 2)
- 4. Deck posts supported by concrete piers or metal pedestals projecting not less than above a concrete floor or 6" above exposed earth. (CRC R317.1.4 exc. 3)

FLOORS Under-floor areas with storage, fuel-fired equipment or electric-powered equipment

with less than 2x10 solid joists shall be protected on the underside by half-inch sheet-rock or a sprinkler system. (R302.13

Balconies must be designed for a minimum live load of 60lbs per square foot. (CRC T-

WALLS

- Positive connection shall be provided to ensure against uplift and lateral displacement. (CRC R502.9 & CBC 2304.10.7)
- corrosion resistant type. (CRC R317.3)
 Fire-block in concealed spaces of stud walls/partitions, vertically at ceiling/floor levels, & horizontally at 10ft, intervals. Fire-block at soffits, drop ceilings/similar locations &

All fasteners used for attachment of siding & into pressure treated lumber shall be of a

& horizontally at 10ft. intervals. Fire-block at soffits, drop ceilings/similar locations & in concealed spaces at the top/bottom of stair stringers. (CRC R302.11)
 Provide approved building paper under the building siding and approved flashing at exterior openings. (CRC R703.2) Specify a minimum of 2 layers of Grade D paper un-

der stucco and 2 layers of 15lb felt (or equivalent) under stone veneer.

Stucco shall have a minimum clearance to earth of 4 inches and 2 inches to paved surfaces with an approved weep screed. (CRC R703.7.2.1) Masonry stone veneer shall be flashed beneath the first course of masonry and provided with weep holes immediately above the flashing. (CRC R703.8.5 and R703.8.6)

RO

- Roof sheathing can only cantilever 9 inches beyond a gable end wall unless supported by overhang framing. (R802.5.2.1)

 Provide a minimum 22" x 30" access opening to attic (CRC R807); may be required to be 30"x30" to remove the largest piece of mechanical equipment per the California
- Roof drains/gutters required to be installed per the California Plumbing Code with leaf/ debris protection also installed.

- 4. Roof construction and coverings shall comply with CRC Chapters 8, 9 and local ordinance. All roofing shall be tested/listed Class A minimum.
- Asphalt shingles with sloped roofs 2/12 to <4/12 shall have two layers of underlayment applied per CRC R905.2.2.

GARAGE AND CARPORT

- 1. Garage shall be separated from the dwelling unit & attic area by ½ inch gypsum board applied to the garage side. Garage beneath habitable rooms shall be separated by not less than 5/8" type X gypsum board. Structure supporting floor/ceiling assemblies used for required separations shall have ½" gypsum board installed minimum. Door openings from the garage to the dwelling shall be solid wood/steel doors or honeycomb steel doors not less than 1 3/8" thick or a 20-minute rated fire door. Doors shall be self-closing & self-latching. No openings directly into a sleeping room from the garage. When the dwelling and garage has fire sprinklers installed per R309.6 and R313, doors into the dwelling unit from the garage only need to be self-closing and self-latching. (CRC R302.5.1 & T-R302.6)
- 2. Ducts penetrating the garage to dwelling separation shall be a minimum of 26 gauge with no openings into the garage. (CRC R302.5.2)
- Penetrations through the garage to dwelling separation wall (other than ducts as listed above) shall be fire-blocked per CRC section R302.11, item #4.
 Garage and carport floor surfaces shall be non-combustible material and slope to
- drain towards the garage door opening. (CRC R309.1)

 Appliances and receptacles installed in garage generating a glow, spark or flame shall be located 18" above floor unless it is listed as flammable vapor ignition resistant. (CMC 305.1) Provide protective post or other impact barrier from vehicles. (CMC

Appliances in private garages and carports shall be installed with a minimum clearance of 6ft above the floor unless they are protected from vehicular impact. (CBC 406.2.9.3)

STAIRWAYS & RAMPS Stair landings required every 12'7" of vertical rise. (CRC R311.7.3)

- Exterior stair stringers must be naturally resistant to decay or pressure treated. (CRC R317.1)
- 3. Rise shall be maximum 7.75"; Run shall be 10" minimum; headroom 6'-8" minimum; width 36" minimum, 31.5" between a handrail on one side and 27" with handrails on two sides. Variation between riser heights 3/8" maximum. A nosing not less than .75 inches but not more than 1.25 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches. The leading edge of treads shall project not more than 1.25 inches beyond the tread below. Open risers are permitted, provided the opening between the treads does not permit the passage of a 4" sphere. (Openings are not limited when the stair has a rise of 30" or less). (CRC R311.7)
- 4. Stairways with 4 or more risers shall have a handrail on one side 34" to 38" above the tread nosing. Circular handrails shall have an outside diameter of 1.25"-2"; if not circular, it shall have a perimeter dimension of 4"-6.25" with a maximum cross-sectional dimension of 2.25". See R311.7.8.3 item# 2 for type II handrails with a parameter over 6.25". A minimum clearance of 1.5" shall be maintained from the wall or other surface. Handrails shall be returned, terminate in newel posts, or safety terminals. (CRC R311.7.8.2)
- 5. Guards shall be 42" minimum height (unless acting as a handrail/guard for a stairway; the guard height may be 34"-38" in height), with openings less than 4" inches clear (guards on the open sides of stairs may have 4 3/8" openings). (CRC R312)
 6. Provide landings at the top/bottom of the stairway the width of the stairway. The depth of the landing shall be 36" minimum. (see CRC R311.7.6 for exceptions).
- Usable spaces underneath enclosed/unenclosed stairways shall be protected by a minimum of ½" gypsum board. (CRC R302.7)
- 8. Ramps serving the egress door shall have a slope of not more than 1 unit vertical in 12 units horizontal (8.3-percent slope). All other ramps shall have a maximum slope of 1 unit vertical in 8 units horizontal (12.5-percent slope). Exception: Where it is technically infeasible to comply because of site constraints, ramps shall have a slope of not more than 1 unit vertical in 8 units horizontal (12.5-percent slope) (CRC R311.8.1). Provide 3'X3' landings at the top and bottom of ramps, where doors open onto ramps, and where ramps change directions. (CRC R311.8.2)
- Guards are required if deck or floor is over 30" above grade, minimum 42" high, with openings less than 4" (CRC R312). Guardrails shall be designed and detailed for lateral forces according to CRC Table 301.5.
- Provide deck lateral load connections at each end of the deck and at deck intersections per CRC R507.9.2. Specify connectors with a minimum allowable stress design capacity of 1,500lbs and install with 24" of the end of the deck. 750lb rated devices are allowed (DTT1Z as example) if located at 4 points along the deck.
- Posts/columns shall be retrained at the bottom end to prevent lateral displacement; clearly show approved post bases, straps, etc to achieve this per CRC R407.3
 Joists, girders, structural blocking and support posts shall be wood of natural resistance to decay or pressure-treated lumber when exposed to the weather. (CRC R317.1.3)

ELECTRICAL

- No electrical panels in closets of bathrooms. Maintain a clearance of 36" inches in front of panels, 30" wide or width of equipment and 6'-6" high for headroom. (CEC 110.26)
- Provide a minimum 3 lug intersystem bonding busbar at the main electrical service. (CEC 250.94)
 All automatic garage door openers that are installed in a residence shall have a battery backup function that is designed to operate when activated because of an electrical outage. (CBC 406.2.1)
- A concrete-encased electrode (ufer) consisting of 20' of rebar or #4 copper wire placed in the bottom of a footing is required for all new construction. (CEC 250.52(A) (3)) Bond all metal gas and water pipes to ground. All ground clamps shall be accessible and of an approved type. (CEC 250.104)
- . All 15/20 ampere receptacles installed per CEC 210.52 shall be listed tamper-resistant receptacles. (CEC 406.12)
- All branch circuits supplying 15/20 ampere outlets in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, kitchens, laundry room or similar rooms/areas shall be protected by a listed combination type arc-fault circuit interrupter. (CEC 210.12)
- Provide a minimum of one 20A circuit to be used for the laundry receptacle. (CEC 210.11(C)(2)) Provide a minimum of one 20A circuit for bathroom receptacle outlets. (CEC 210.11(C)(3)
- Provide at least 1 outlet in basements, garages, laundry rooms, decks, balconies, porches and within 3' of the outside of each bathroom basin. (CEC 210.52 (D), (F) & (G))
- Furnaces installed in attics and crawl spaces shall have an access platform (catwalk in attics), light switch and receptacle in the space. Provide a service receptacle for the furnace. (CEC 210.63)
- 10. All dwellings must have one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E))
 11. Garage receptacles shall not serve outlets outside the garage. Exception: Garage circuit may serve readily accessible outdoor receptacle outlets. ((CEC 210.11
- (C)(4)) A minimum of 1 receptacle shall be provided for each car space. (210.52(G) (1))

 At least one wall switched lighting outlet or fixture shall be installed in every habita-
- 2. At least one wall switched lighting outlet or fixture shall be installed in every habitable room, bathroom, hallways, stairways, attached garages and detached garages with electrical power, equipment spaces (attics, basements, etc). (CEC 210.70)
- 3. Kitchens, dining rooms, pantries, breakfast nooks, and similar areas must have a minimum of two 20A circuits. Kitchen, pantry, breakfast nooks, dining rooms, **work surfaces** and similar areas counter outlets must be installed in every counter space 12" inches or wider, not greater than 4' o.c., within 24" inches of the end of any counter space and not higher than 20" above counter. (CEC 210.52 (C)) Island counter spaces shall have at least 1 receptacle outlet unless a range top or sink is installed than 2 receptacles may be required. 1 receptacle is required for peninsular counter spaces. Receptacles shall be located behind kitchen sinks if the counter area depth behind the sink is more than 12" for straight counters and 18" for corner installations. (CEC Figure 210.52(C)(1))
- . Receptacles shall be installed at 12' o.c. maximum in walls starting at 6' maximum from the wall end. Walls longer than two feet shall have a receptacle. Hallway walls longer than 10 ft shall have a receptacle in hallways. (CEC 210.52(A))
- Receptacles shall not be installed within or directly over a bathtub or shower stall. (CEC 406.9(C) Light pendants, ceiling fans, lighting tracks, etc shall not be located within 3ft horizontally and 8ft vertically above a shower and/or bathtub threshold. (CEC 410.10(D))
- (CEC 410.10(D))

 16. All lighting/fan fixtures located in wet or damp locations shall be rated for the application (CEC 410.10)
- cation. (CEC 410.10)

 17. GFCI outlets are required: for all kitchen receptacles that are designed to serve countertop surfaces, dishwashers, bathrooms, in under-floor spaces or below grade level, in unfinished basements, crawl space lighting outlets, in exterior outlets, within 6' of a laundry/utility/wet bar sinks, laundry areas, and in all garage outlets including out-
- lets dedicated to a single device or garage door opener. (CEC 210.8)

 8. Carbon-monoxide alarms shall be installed in dwelling units with fuel-burning appliances or with attached garages (CRC R315):

- Outside of each separate sleeping area in the immediate vicinity of bedrooms
- On every level of a dwelling unit including basements
- Alterations, repairs, or additions exceeding 1,000 dollars (May be battery operated)

 19. Smoke alarms shall be installed (CPC (P314)).
- 19. Smoke alarms shall be installed (CRC (R314):
- In each room used for sleeping purposes.
- Outside of each separate sleeping area in the immediate vicinity of bedrooms.
- In each story, including basements.
 20. At the top of stairways between habitable floors where an intervening door or obstruction prevents smoke from reaching the smoke detector.
- 21. Shall not be installed within 20ft horizontally of cooking appliances and no closer than 3ft to mechanical registers, ceiling fans and bathroom doors with a bathtub or shower unless this would prevent placement of a smoke detector (314.3(4)).
- 22. Alterations, repairs, or additions exceeding 1,000 dollars. (May be battery operat-
- 23. All smoke and carbon-monoxide alarms shall be hardwired with a battery backup (smoke alarms shall have a 10-year sealed battery). (CRC R314.4 & R315.1.2)
 24. Smoke detectors within 10 feet to 20 feet of the stove shall be ionization type with alarm silencing switch. CRC R314.3.3.
- 25. All 15/20 ampere receptacles in wet locations shall have in-use (bubble) covers installed. All receptacles in wet locations shall also be listed weather-resistant type. (CEC 406.9(B)(1))

PI LIMRTNO

- 1. Underfloor cleanouts shall not be more than 5' from an underfloor access, access door or trap door. (CPC 707.9)
- 2. ABS piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paints. (CPC 312.13)
- 3. PVC piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paint, .04" thick wrap or otherwise protected from UV degradation.

The adjacent space next to showers without thresholds shall be considered a "wet

- 4. Underground water supply lines shall have a **14 awg** blue tracer wire. (CPC 604 10 1)
- location" when using the CRC, CBC, and the CEC. (CPC 408.5)

 6. Shower compartments, regardless of shape, shall have a minimum finished interior of 1024 square inches (32" by 32") and shall also be capable of encompassing a 30" circle. The required area and dimensions shall be measured at a height equal to the top of the threshold and shall be maintained to a point of not less than 70" above the shower drain outlet. (CPC 408.6) Provide curtain rod or door a minimum of 22" in width. (CPC 408.5) Showers and tubs with showers require a non-absorbent surface up to 6' above the floor. (CRC R307.2) Minimum shower re-
- ceptor slope is 1/8" per foot. (408.5)
 7. Show location and size of the water heater on plans. Provide pressure relief valve with drain to outside for water heater. (CPC 504.6) Provide seismic strapping in the upper & lower third of the water heater a minimum of 4" above controls. (CPC 507.2) The water heater shall be of an instantaneous type or the following shall be
- provided (new construction only) (CEC 150(n)):

 A 120V receptacles provided within 3ft
- A category III or IV vent, or a straight (without bends) Type B vent
- Condensate drain that is no more than 2 inches higher than the base of the water heater
- Gas supply line with a minimum 200,000 Btu/hr dedicated capacity for the water heater
- A dedicated 120/240, 3 wire circuit with 10AWG wire to a receptacle outlet within 3' of the water heater. The unused conductor shall be electrically isolated and have a reserved circuit breaker space. Both ends of the conductor shall be labeled "spare" and be electrically isolated. A reserve single-pole circuit breaker space near this circuit labeled "Future 240V Use." (CEC 150.0(n))
- 8. Domestic hot water lines shall be insulated. Insulation shall be the thickness of the pipe diameter up to 2" in size and minimum 2" thickness for pipes larger than 2" in diameter. (CPC 609.11)
- A 3-inch gravity drain shall be provided at the low point of the space, installed which provides 1/4-inch per foot grade and terminate at an exterior point of the building protected from blockage. The opening shall be screened with a corrosion-resistant wire mesh with mesh openings of 1/4-inch in dimension. Lengths of the gravity drains over 10 feet in length shall be first approved by the Building Official. (L-V 8.8)
- 10. Water heaters located in attics, ceiling assemblies and raised floor assemblies shall show a water-tight corrosion resistant minimum 1 ½" deep pan under the water heater with a minimum ¾ inch drain to the exterior of the building. (CPC 507.5)
- 11. Water closet shall be located in a space not less than 30" in width (15" on each side) and 24" minimum clearance in front. (CPC 402.5)

Indicate on the plans that the maximum hot water temperature discharging from a

- bathtub or whirlpool bathtub filler shall not exceed 120 degrees F. (CPC 408.3) 13. Provide anti-siphon valves on all hose bibs. (CPC 603.5.7)
- 13. Provide anti-sipnon valves on all nose bibs. (CPC 603.5./)
 14. Floor drains shall be provided with a trap primer. (CPC 1007)
- 14. Floor drains shall be provided with a trap primer. (CPC 1007)15. Clearly label on the plans the maximum water flow rates per the (CGBSC 4.303.1):
- Water Closets: 1.28gpf
- Urinals: .125gpf
- Kitchen Faucets: 1.8gpm @ 60psiLavatory Faucets: 1.2gpm @ 60psi
- Showerheads: 1.8gpm

emission limits.

not one of the following:

MECHANICAL

- All newly installed gas fireplaces shall be direct vent and sealed-combustion type. (CMC 912.2)
 Any installed wood stove or pellet stove shall meet the U.S. EPA New Source Performance Standard emission limits and shall have a permanent label certifying
- Top chimney must extend a minimum of 2 ft. above any part of the building within 10 ft. (CMC 802.5.4)
- 4. Fireplaces shall have closable metal or glass doors, have combustion air intake drawn from the outside and have a readily accessible flue dampener control. Continuous burning pilot lights are prohibited. (CEC 150.0(e))
- Provide combustion air for all gas fired appliances per CMC Chapter 7.
 Gas vents passing through an insulated assembly shall have a metal insulation shield a minimum 2" above insulation. (CMC 509.6.2.7)
- Gas water heater and furnace are not allowed in areas opening into bathrooms, closets or bedrooms <u>unless</u> installed in a closet equipped with a listed gasketed door assembly and a listed self-closing device with all combustion air obtained from the outdoors. (CPC 504)
- 8. Roof top equipment on roofs with over 4/12 slope shall have a level 30"x30" working platform. (CMC 304.2)

Exhaust openings terminating to the outdoors shall be covered with a corrosion

- resistant screen ¼"-1/2" in opening size (not required for clothes dryers). (CMC 502.1)

 10. Vent dryer to outside of building (not to under-floor area). Vent length shall be 14 ft. maximum. Shall terminate a minimum of 3' from the property line and any
- opening into the building. (CMC 504.4.2)

 11. Environmental Air Ducts shall not terminate less than 3' to a property line, 10' to a forced air inlet, 3' to openings into the building and shall not discharge on to a public way. (CMC 502.2.1)
- 12. Provide minimum 100 square inches make-up air for clothes dryers installed in closets. (CMC 504.4.1(1))
- .3. Heating system is required to maintain 68 degrees at 3 ft. above floor level and 2ft from exterior walls in all habitable rooms. (CRC R303.10).4. Wood burning appliances shall not be installed in a new or existing project that is
- A pellet-fueled wood burning heater.

 A U.S. EPA Phase II Certified wood burning heater.
- An appliance or fireplace determined to meet the U.S. EPA particulate matter emission standard of less than 7.5 grams per hour for a non-catalytic wood fired appliance or 4.1 grams per hour for a catalytic wood fired appliance and is approved in

TITLE 24 ENERGY All ducts in conditioned spaces must include R-4.2 insulation. (150.1(c)9) Mini-

- mum heating and cooling filter ratings shall be MRV 13 (150.0(m)12)
- 2. Isolation water valves required for instantaneous water heaters 6.8kBTU/hr and above. Valves shall be installed on both cold and hot water lines. Each valve will need a hose bib or other fitting allowing for flushing the water heater when the valves are closed. (CEC 110.3(c)6)
- . ALL luminaires must be high efficacy (150.0(k)1A)
- Luminaries recessed in insulated ceilings must meet five requirements (150.0(k) 1C):
- They must be rated for direct insulation contact (IC).
- They must be certified as airtight (AT) construction.
 They must have a sealed gasket or caulking between the housing and ceiling to
- prevent flow of heated or cooled air out of living areas and into the ceiling cavity.

 They may not contain a screw base sockets
- They may not contain a screw base sockets

 They shall contain a JA8 compliant light source
- 5. In bathrooms, garages, laundry rooms, and utility rooms, at least on luminaire in each of these spaces shall be controlled by a vacancy sensor **or occupant sensor provided the occupant sensor is initially programmed like a vacancy sensor (manual-on operation).** (150.0(k)2I)
- 6. Joint Appendix A (JA8) certified lamps shall be considered high efficacy. JA8 compliant light sources shall be controlled by a vacancy sensor or dimmer. (Exception: <70sf closets and hallway) (150.0(k)2K)
- 7. Under-cabinet lighting shall be switched separately from other lighting systems. (150.0(k)2L)
 8. All exterior lighting shall be high efficacy, be controlled by a manual on/off switch

and have one of the following controls (the manual switch shall not override the

- automatic control device): (150.0(k)3A)

 Photo-control and motion sensor
- Photo-control and automatic time switch control
- Astronomical time clock control turning lights off during the day
 All high efficacy light fixtures shall be certified as "high-efficacy" light fixtures by
- 10. Contractor shall provide the homeowner with a luminaire schedule giving the lamps used in the luminaires installed. (10-103(b))
- 11. The number of blank electrical boxes more than 5 feet above the finished floor shall not be greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor, or fan speed control. (150(k)1B)
- 12. Provide a gasket/ insulation on all interior attic/under-floor accesses. (110.7)
 13. Provide verification on the plans how the building will meet the minimum ventilation and acceptable indoor air quality requirements per ASHRAE Standard 62.2. Window operation is not a permissible method of providing the whole building ventilation airflow required. This is subject to HERS testing. The following label must be attached to the fan switch: "To maintain minimum levels of outside air ventilation required for good health, the fan control should be on at all times when the build-

ing is occupied, unless there is severe outdoor air contamination." (California Ener-

gy Code 150.0(o)) A minimum 100 CFM indoor air quality fan is required in

the kitchen and shall be HERS verified. WILDLAND URBAN INTERFACE (WUI)

- 1. Exterior wall coverings shall be noncombustible, ignition resistant, heavy timber, log wall or fire resistive construction. (CRC R337.7)
- Exterior wall coverings shall extend from the foundation to the roof and terminate at 2 inch nominal solid blocking between rafters and overhangs. (CRC R337.7.3.2)
 Open/enclosed roof eaves and soffits, exterior porch ceilings, floor projections, under-floor areas and undersides of appendages to comply with ignition resistant con-

perforated cap sheet complying with ASTM D 3909. (CRC R337.5.2)

- struction requirements. (CRC R337.5-9)

 4. Spaces created between roof coverings and roof decking shall be fire stopped by approved materials or have one layer of minimum 72lb mineral surfaced non-
- Indicate on the plans where valley flashing is installed, the flashing shall be not less than 26awg and installed over not less than one layer of minimum 72lb mineral surfaced non-perforated cap sheet complying with ASTM D 3909 and at least 36 inches wide running the full length. (CRC R337.5.3)
- inch and maximum 1/8 inch openings, non-combustible and corrosion resistant.
 All other eave vents shall be listed/approved to resist the intrusion of flame and burning embers. (CRC R337.6)

 Indicate on plans exterior glazing shall have a minimum of one-tempered pane,

glass block, have a fire resistive rating of 20 minutes or be tested to meet perfor-

material, minimum 1 3/8 inch solid core, minimum 20 minute fire resistive rating or

Attic gable and eaves above 12ft and under-floor ventilation shall be provided with

fully covered metal wire mesh, vents, or other materials that have a minimum 1/16

- mance requirements of SFM Standard 12-7A-2. (CRC R337.8.2)

 8. Operable skylights shall be protected by a noncombustible mesh screen 1/8" max openings (R337.8.2.2)

 9. Exterior doors including garage doors shall be noncombustible, ignition resistant
- shall be tested to meet the performance requirements of SFM Standard 12-7Å-1. (CRC R337.8.3)

 10. Garage door perimeter gap maximum 1/8". Metal flashing, jamb and header overlap, and weather-stripping meeting section requirements are

permitted. (R337.8.4)

or noncombustible material. (CRC R337.9)

The walking surface material of decks, porches, balconies and stairs within 10ft of grade level shall be ignition resistant material, exterior fire-retardant treated wood

- GREEN BUILDING
 Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion
- and retain soil runoff on the site (CGBSC 4.106.2):

 Retention basins of sufficient size shall be utilized to retain storm water on site
- Where storm water is conveyed to a public drainage system, collection point, gutter, or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
- All new residential construction with attached private garages shall have the following for electric vehicle (EV) charging stations (CGBSC 4.106.4):
- 3. Install a minimum 1-inch conduit capable of supplying a 208/240V branch circuit to a suitable box location for EV charging. The other end shall terminate to the main service and/or subpanel.4. The main panel and/or subpanel shall be of sufficient size to install a 40-ampere
- dedicated branch circuit. The dedicated overcurrent protection space shall be labeled "EV CAPABLE".

 Multiple shower heads serving a single shower shall have a combined flow rate of 1.8 gpm or the shower shall be designed to allow only one shower outlet to be in operation at a time. (CGBSC 4.303.1.3.2)
- 6. Residential projects with an aggregate landscape area equal to or greater than 500 square feet shall comply with either a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Automatic irrigation system controllers installed at time of final inspection shall have weather or soil based controllers and/or weather based controllers with rain sensors. Soil moisture based controllers are not required to have rain sensor input. (CGBSC 4.304)
- Recycle and/or reuse a minimum of 65 percent of nonhazardous construction and demolition waste. (CGBSC 4.408.2)
 (Clearly note on the plans) At time of final inspection, a building operation and
- maintenance manual, compact disc, etc shall be provided containing the following: (CGBSC 4.410)
 Directions that manual shall remain onsite for the life of the building
- Operation and maintenance instructions for equipment, appliances, roof/yard drainage, irrigation systems, etc.
 Information from local utility, water and waste recovery providers
- Public transportation and carpool options
 Material regarding importance of keeping humidity levels between 30-60 percent
 Information regarding routine maintenance procedures
- State solar energy incentive program information
 A copy of any required special inspection verifications that were required (if any)
 The project shall meet minimum pollutant control requirements for adhesives, seal-
- 10. Duct openings related to HVAC systems shall be covered with tape, plastic, sheet metal or other methods to reduce the amount of water, dust and debris which may enter the system. (CGBSC 4.504.1)

ants, caulks, paints, carpet, resilient flooring systems, etc. (CGBSC 4.504)

Construction Waste Management Worksheet (Weight Method) - CW 3 Page of Project Location: ompleted By Project Manager Waste Hauler: Insert weight totals into proper category below Waste Material Type Diverted phalt Shingles ardboard arpet/Carpet Pad psum Board (Drywall) ood (engineered) Vood (solid sawn) Office Waste

Step 1 - Insert weight totals into Columns A, B, and D where appropriate.

Step 2 - Add Column A to Column B and insert total into Column C for total diverted weight.

Step 3 - Add each column down and enter totals in the boxes provided.

If Column C is larger than Column D (on the summary sheet), compliance with 65 percent waste reduction requirement is achieved.

For additional instructions and information, please see reverse.

multiple worksheets are used, transfer column totals from each worksheet to the summary sheet.

Project Name:							Date:	Page o
Project Location:							Completed By:	. ago
Project Manager:							Completed by.	
Waste Hauler:							C!	
waste nauter:	Α		В		С	D	Signature:	
	Insert cul	oic foo	t or cubic yard	totals	nto proper cate		Notes:	
						Non-Recycled		
Waste Material Type	Recycled		Reused		Diverted	(Disposed)		
Asphalt		+		=				
Asphalt Shingles		+		=				
Brick (broken)		+		=				
Cardboard		+		=				
Carpet/Carpet Pad		+		=				
Concrete		+		=				
Gypsum Board (Drywall)		+		=				
Masonry		+		=				
Metals		+		=				
Pallets		+		=				
Plastic		+		=				
Wood (engineered)		+		=				
Wood (solid sawn)		+		=				
Office Waste		+		=				
Other		+		=				
Other		+		=				
Other		+		=				

Total: + = = Step 1 - Insert volume totals into Columns A, B, and D where appropriate.

Step 2 - Add Column A to Column B and insert total into Column C for total diverted volume.

Step 3 - Add each column down and enter totals in the boxes provided.

If Column C is larger than Column D (on the summary sheet), compliance with 65 percent waste reduction requirement is achieved. If multiple worksheets are used, transfer column totals from each worksheet to the summary sheet. For additional instructions and information, please see reverse.

Instructions for Weight or Volume Method:

- Choose which method of construction waste tracking to be used throughout the project. Choose either the Weight Method or
- the Volume Method, but do not use different methods on the same worksheet.

 To minimize confusion, use the same unit of measure and do not mix pounds and tons, or Cu. Yds. and Cu. Ft. on the same
- worksheet. It is easiest to stay with the same unit of measure for the entire project to avoid the need for conversions.
 Enter construction waste materials that are to be recycled under Recycled (Column A).
- Enter construction waste materials that are to be reused under Reused (Column B).

Add amounts in each Column (A, B, C, and D) and enter these sums into Total boxes.

Add amounts from Column A to amounts from Column B and enter the total under Diverted (Column C).

Enter construction waste materials that will not get recycled or reused under Non-Recycled/Disposed (Column D).

If the Diverted amount (Column C) is greater than the Non-Recycled/Disposed amount (Column D), compliance with the
construction waste reduction requirement of at least 65 percent per Section 4.408.1 has been achieved.

When more than one worksheet is used, transfer the data onto the Weight or Volume Summary Worksheet at the completion of the project.

Examples of weights and volumes of some typical construction waste materials*

Material	Range of pounds per cubic yard	Typical pounds per cubic yard	Typical cubic yards per ton
Asphalt roofing material	250-460	360	5.5
Asphalt - paving	1300-2200	1750	1.1
Cardboard	70-135	85	23.5
Concrete	1300-2200	1750	1.1
Gypsum Drywall	315-470	400	5
Metals	220-1940	540	3.7
Wood	200-540	499	5

Standard Conversions: 1 cubic yard equals 27 cubic feet 1 ton equals 2000 pounds

* Source: Sacramento Regional Solid Waste Authority

RUSSELL DAVIDSON ARCHITECTURE + DESIGN

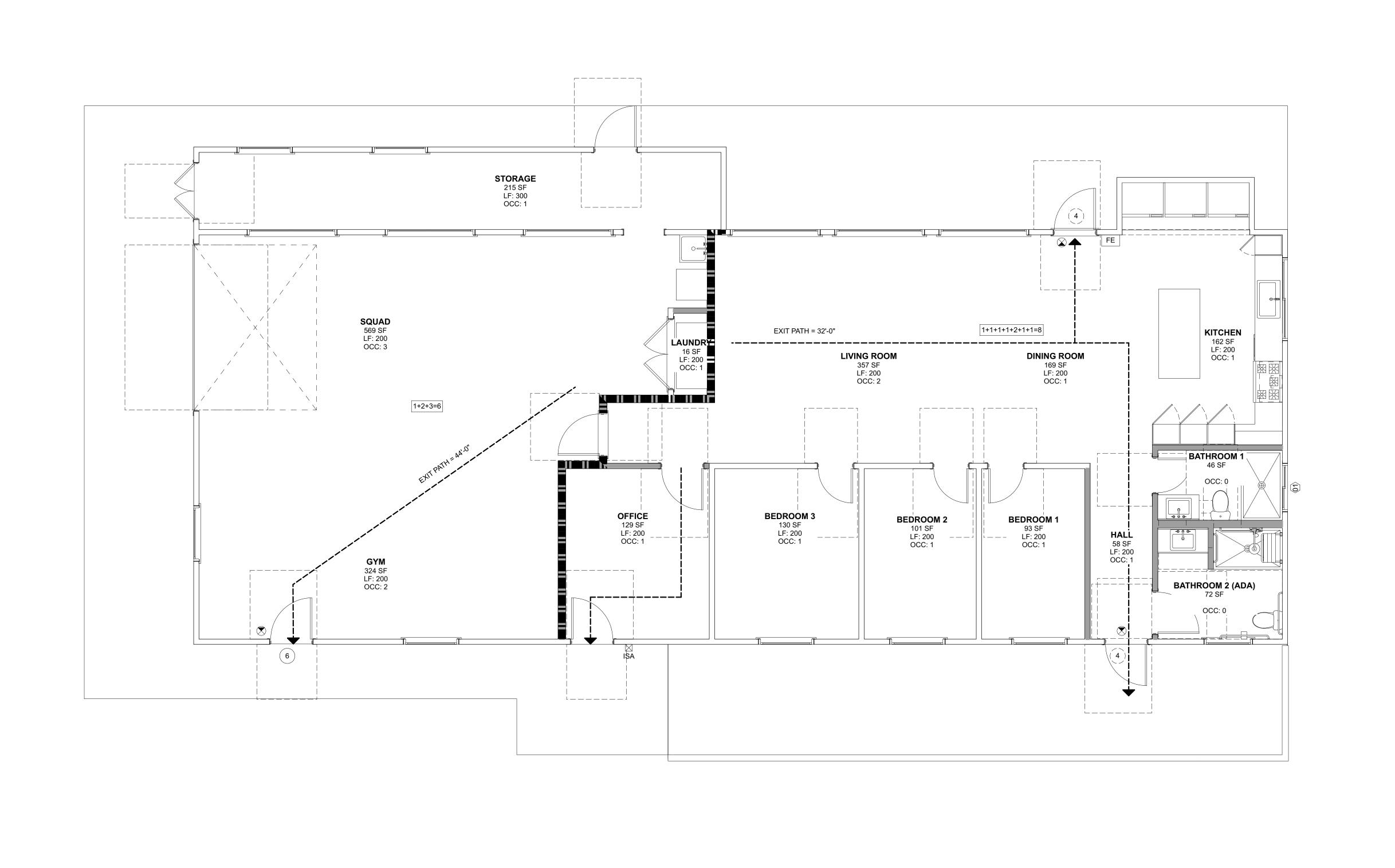
No. C36895
Ren. 11-30-25

TION 86 RENOVATIO
BANNER LAVA CAP ROAD
A CITY, CA 95959
37-280-016

ID NAME DATE OF Programmer of the programmer of

GENERAL NOTES

G10



ARCHITECTURE + DESIGN



RENOVATIO 98 TATION

NAME

SUBMITTED: 11/20/2024 SITE ACCESSIBLE ENTRANCE SIGN AS NOTED DRAWN BY: FIRE EXTINGUISHER SIGNAGE CHECKED BY:

> EXIT & **ACCESSIBILITY**

ASSIGNED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE ANTICIPATED USE PER CBC 1004.7. MOUNT SIGN ON WALL AT 8'-0" AFF TO TOP OF SIGN.

FIRE SPRINKLER RISER ROOM SIGNAGE

MAXIMUM OCCUPANCY SIGNAGE:

OCC "MAXIMUM OCCUPANCY SHALL NOT EXCEED [FILL IN]"

THE OCCUPANT LOAD OF OUTDOORS AREA SHALL BE

UTILITY ROOM SIGNAGE

1. REFER TO SITE PLAN AND DETAILS FOR SITE SIGNAGE NOT ATTACHED TO BUILDING OR LOCATED WITHIN BUILDING.

PLAN

1	NEW 1ST FLOOR	EXITING PLAN
\ I]	SCALE: 1/4" = 1'-0"	

---- &---- ACCESSIBLE PATH OF TRAVEL, REFER TO SITE PLAN

PLAN LEG	END	EGRESS L	SS LEGEND	
	NONRATED WALL	EXITING AN	NALYSIS SY	
ROOM NAME	1 HR. FIRE WALL	#	OCCUPANT LOSF / FLOOR A OCCUPANT LO TRAVEL	
### AREA LOAD FACTOR OCCUPANCY	ROOM IDENTIFICATION	- (#)	ESTIMATED C AREA, TYPICA OCCUPANT LI TRAVEL	
		1+2+3+4=10	COMBINED O DUMP INTO A	
		#	OCCUPANT LO	
		#	OCCUPANT LO	
		AU	ACCESSORY	

YSIS SYMBOLS FIRE EXTINGUISHERS

OCCUPANT LOAD OF SPECIFIC ROOM SF / FLOOR AREA ALLOWANCE PER OCCUPANT = OCCUPANT LOAD ARROW SHOWS DIRECTION OF TRAVEL	FES	FIRE EXTINGUISHER AND BRACKET: SURFACE WITH SIGNAGE FIRE EXTINGUISHER: SEMI RECESSED WITH SIGNAGE
ESTIMATED OCCUPANT LOAD TO EXIT FROM MAIN		

REA, TYPICALLY 1/2 OR 1/3 THE MAIN AREA **HARDWARE** CCUPANT LOAD ARROW SHOWS DIRECTION OF TYPICAL NON LATCHING HARDWARE AT EXIT DOORS. COMBINED OCCUPANT LOAD WHEN MULTIPLE LOADS DUMP INTO A SINGLE AREA PANIC DEVICE (EXIT DEVICE) AT LATCHING DOORS.

OCCUPANT LOAD AT EXTERIOR DOOR USED FOR MINIMUM CLEAR DOOR WIDTH CALCULATION. **EXIT SIGNS (ILLUMINATED)**

#	OCCUPANT LOAD AT STAIR USED FOR MINIMUM STAIR WIDTH CALCULATION.	\bigotimes	ILLUMINATED EXIT SIGN
AU	ACCESSORY USE = 0 OCCUPANT LOAD		
CPT	COMMON PATH OF TRAVEL		

SIGNAGE LEGEND

X TACTILE EXIT SIGN: "EXIT" (CBC 1011.1,1011.4)

(CBC 1011.1,1011.4)

TACTILE EXIT SIGN: "EXIT ROUTE"

EACH GRADE LEVEL EXTERIOR DOOR WHICH LEADS DIRECTLY TO EXTERIOR.

EACH EXIT DOOR OR EXIT PATH WHICH INCLUDES AN

EXIT SIGN THAT LEADS DIRECTLY TO A GRADE LEVEL EXIT BY MEANS OF AN EXIT ENCLOSURE OR AN EXIT

PASSAGEWAY SHALL BE IDENTIFIED BY A TACTILE EXIT

EACH EXIT ACCESS DOOR FROM AN INTERIOR ROOM

OR AREA TO A CORRIDOR OR HALLWAY THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN SHALL BE

IDENTIFIED BY A TACTILE EXIT SIGN.

RESTROOM DOOR MOUNTED IDENTIFICATION SIGN:

RESTROOM WALL MOUNTED IDENTIFICATION SIGN: "MEN" OR "WOMEN" WITH WHEELCHAIR

ACCESSIBLE ENTRANCE SIGN:
ISA "INTERNATIONAL SYMBOL OF ACCESSIBILITY"

PERMANENT AND TACTILE ROOM IDENTIFICATION SIGN

GREEN BUILDING

SECTION 301 GENERAL

CHAPTER 3

California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

NOT APPLICABLE
RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code. 4.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. Efficient Landscape Ordinance (MWELO), whichever is more stringent. 4.106.4.2.5 Electric Vehicle Ready Space Signage. Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/ 4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or **EFFICIENCY** altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such 1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING **DIVISION 4.2 ENERGY EFFICIENCY 4.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste **4.201.1 SCOPE.** For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards. DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION 1. Excavated soil and land-clearing debris. 2. Alternate waste reduction methods developed by working with local agencies if diversion or 4.303 INDOOR WATER USE recycle facilities capable of compliance with this item do not exist or are not located reasonably 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, 3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility. Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving I.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final in conformance with Items 1 through 5. The construction waste management plan shall be updated as completion, certificate of occupancy, or final permit approval by the local building department. See Civil necessary and shall be available during construction for examination by the enforcing agency. Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates. 1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale. 4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per 2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense bulk mixed (single stream) Specification for Tank-type Toilets. 3. Identify diversion facilities where the construction and demolition waste material collected will be Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume 4. Identify construction methods employed to reduce the amount of construction and demolition waste of two reduced flushes and one full flush. 5. Specify that the amount of construction and demolition waste materials diverted shall be calculated 4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. by weight or volume, but not by both. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush. 1.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the 4.303.1.3 Showerheads. enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1. **4.303.1.3.1 Single Showerhead.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA Note: The owner or contractor may make the determination if the construction and demolition waste WaterSense Specification for Showerheads. materials will be diverted by a waste management company. 4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one I.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in allow one shower outlet to be in operation at a time. Note: A hand-held shower shall be considered a showerhead 4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds 4.303.1.4 Faucets. per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1 4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall I.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates not be less than 0.8 gallons per minute at 20 psi. compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4... **4.303.1.4.2** Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi. 1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in **4.303.1.4.3 Metering Faucets.** Metering faucets when installed in residential buildings shall not deliver documenting compliance with this section. 2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle). **4.303.1.4.4 Kitchen Faucets.** The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons 4.410 BUILDING MAINTENANCE AND OPERATION per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per **4.410.1 OPERATION AND MAINTENANCE MANUAL.** At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building: Note: Where complying faucets are unavailable, aerators or other means may be used to achieve 1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure. 4.303.1.4.5 Pre-rinse spray valves. 2. Operation and maintenance instructions for the following: When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance a. Equipment and appliances, including water-saving devices and systems, HVAC systems, Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 photovoltaic systems, electric vehicle chargers, water-heating systems and other major (d)(7) and shall be equipped with an integral automatic shutoff. appliances and equipment. b. Roof and yard drainage, including gutters and downspouts. FOR REFERENCE ONLY: The following table and code section have been reprinted from the California c. Space conditioning systems, including condensers and air filters. Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section d. Landscape irrigation systems. e. Water reuse systems. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations. TABLE H-2 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range. STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY 6. Information about water-conserving landscape and irrigation design and controllers which conserve VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation. PRODUCT CLASS 8. Information on required routine maintenance measures, including, but not limited to, caulking, MAXIMUM FLOW RATE (gpm) [spray force in ounce force (ozf)] painting, grading around the building, etc. 9. Information about state solar energy and incentive programs available. 10. A copy of all special inspections verifications required by the enforcing agency or this code. Product Class 1 (≤ 5.0 ozf) 1.00 11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures. Product Class 2 (> 5.0 ozf and \leq 8.0 ozf) 1.20 12. Information and/or drawings identifying the location of grab bar reinforcements. Product Class 3 (> 8.0 ozf) **4.410.2 RECYCLING BY OCCUPANTS.** Where 5 or more multifamily dwelling units are constructed on a Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)] depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling 4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial ordinance, if more restrictive. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the **Exception:** Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section California Plumbing Code. 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of **4.303.3 Standards for plumbing fixtures and fittings**. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code. DIVISION 4.5 ENVIRONMENTAL QUALITY **SECTION 4.501 GENERAL** THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A 4.501.1 Scope The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors. **SECTION 4.502 DEFINITIONS** 5.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference)

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door

medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood,

structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and

wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for

cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

RUSSELL DAVIDSON ARCHITECTURE + DESIGN



ENOVA ∞ NAME

SUBMITTED: 11/20/2024 AS NOTED DRAWN BY: CHECKED BY: JOB:

CGBSC

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. 301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration. The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application. Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section. Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates. 301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used. **SECTION 302 MIXED OCCUPANCY BUILDINGS 302.1 MIXED OCCUPANCY BUILDINGS.** In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy. 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable. 2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable. DIVISION 4.1 PLANNING AND DESIGN **ABBREVIATION DEFINITIONS:** Department of Housing and Community Development California Building Standards Commission Division of the State Architect, Structural Safety OSHPD Office of Statewide Health Planning and Development Low Rise High Rise AA Additions and Alterations CHAPTER 4 **RESIDENTIAL MANDATORY MEASURES SECTION 4.102 DEFINITIONS** 4.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference) FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water. WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls. 4.106 SITE DEVELOPMENT **4.106.1 GENERAL**. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section. I.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site. Retention basins of sufficient size shall be utilized to retain storm water on the site. 2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency. 3. Compliance with a lawfully enacted storm water management ordinance. Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: https://www.waterboards.ca.gov/water issues/programs/stormwater/construction.html) 1.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following: 2. Water collection and disposal systems French drains Water retention gardens 5. Other water measures which keep surface water away from buildings and aid in groundwater **Exception**: Additions and alterations not altering the drainage path. 1.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions: 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate 1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project. 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities. 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in

accordance with the California Electrical Code.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent

protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination

location shall be permanently and visibly marked as "EV CAPABLE".

I.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to 1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. 1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number 2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed. a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or 2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit. Exception: Areas of parking facilities served by parking lifts.

I.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to 1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserve for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be

reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

a. Construction documents shall show locations of future EV spaces. b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or

EV chargers are installed for use. **2.EV Ready.** Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required pe dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).

Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1. Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable

4.106.4.2.2.1.1 Location.

EVCS shall comply with at least one of the following options:

1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.

2. The charging space shall be located on an accessible route, as defined in the California Building Code,

Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. The charging spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).

2. The minimum width of each EV space shall be 9 feet (2743 mm).

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.2.1.3 Accessible EV spaces.

In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section

1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required

raceways and related components that are planned to be installed underground, enclosed, inaccessible or in

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING VERIFICATION WITH THE FULL CODE.

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING VERIFICATION WITH THE FULL CODE.

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING VERIFICATION WITH THE FULL CODE.

concealed areas and spaces shall be installed at the time of original construction.

installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

TABLE - MAXIMUM FIXTURE WATER USE								
FIXTURE TYPE	FLOW RATE							
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI							
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI							
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI							
KITCHEN FAUCETS	1.8 GPM @ 60 PSI							
METERING FAUCETS	0.2 GAL/CYCLE							
WATER CLOSET	1.28 GAL/FLUSH							
URINALS	0.125 GAL/FLUSH							



California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)



MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O3/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to

Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING **CONSTRUCTION.** At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

- 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below.
- 2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation

4.504.2.4 Verification. 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:

 Manufacturer's product specification. 2. Field verification of on-site product containers.

Less Water and Less Exempt Compounds in Grams	per Liter)
ARCHITECTURAL APPLICATIONS	VOC LIMIT
NDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
DUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
/CT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LII	MIT
(Less Water and Less Exempt Compounds in G	rams per Liter)
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR

ARCHITECTURAL COATINGS2,

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS1	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS ₁							
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION							
PRODUCT	CURRENT LIMIT						
HARDWOOD PLYWOOD VENEER CORE	0.05						
HARDWOOD PLYWOOD COMPOSITE CORE	0.05						
PARTICLE BOARD	0.09						
MEDIUM DENSITY FIBERBOARD	0.11						
THIN MEDIUM DENSITY FIBERBOARD2	0.13						

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued) 4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health. "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for

See California Department of Public Health's website for certification programs and testing labs.

California Specification 01350)

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

hhtps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

- Product certifications and specifications.
- 2. Chain of custody certifications. 3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
- 4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
- 5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the

- 1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute,
- 2. Other equivalent methods approved by the enforcing agency. 3. A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements

acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

- 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified. 3. At least three random moisture readings shall be performed on wall and floor framing with documentation
- nsulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST **4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.

- 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a
- equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

a. Humidity controls shall be capable of adjustment between a relative humidity range less than or

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE VARIABLES BETWEEN BUILDING VERIFICATION WITH THE FULL CODE.

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.

2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.

4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods. 2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.

3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are

NOT APPLICABLE
RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER,

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- 1. State certified apprenticeship programs.
- Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. 4. Programs sponsored by manufacturing organizations. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

- Certification by a national or regional green building program or standard publisher.
- 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
- Successful completion of a third party apprentice training program in the appropriate trade.
- 4. Other programs acceptable to the enforcing agency.

- 1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
- HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not

limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist

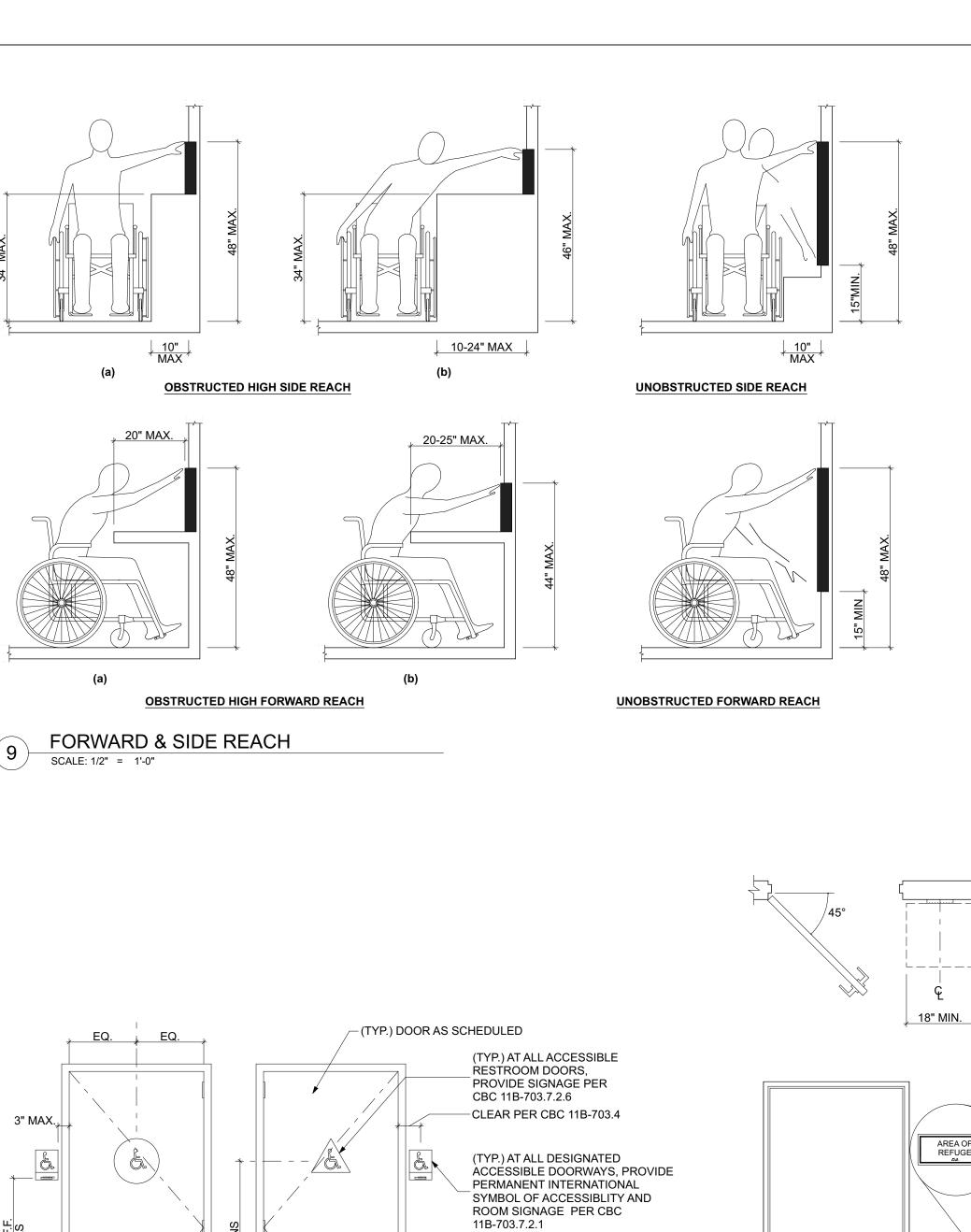
RUSSELL DAVIDSON ARCHITECTURE + DESIGN



0 ∞

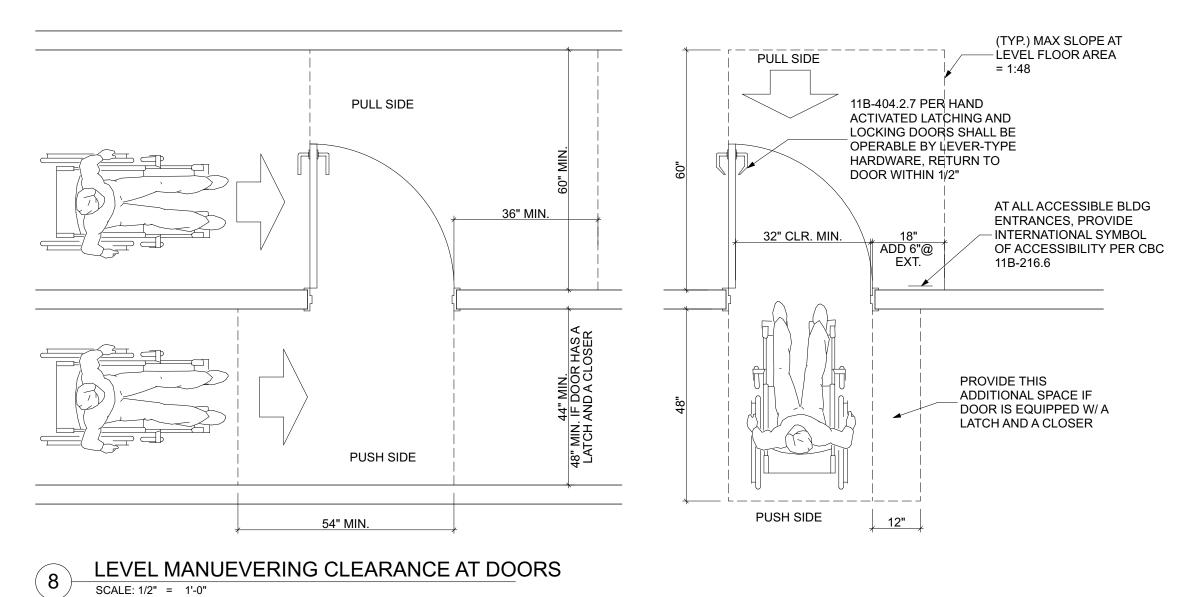
NAME SUBMITTED: 11/20/2024 DRAWN BY: CHECKED BY:

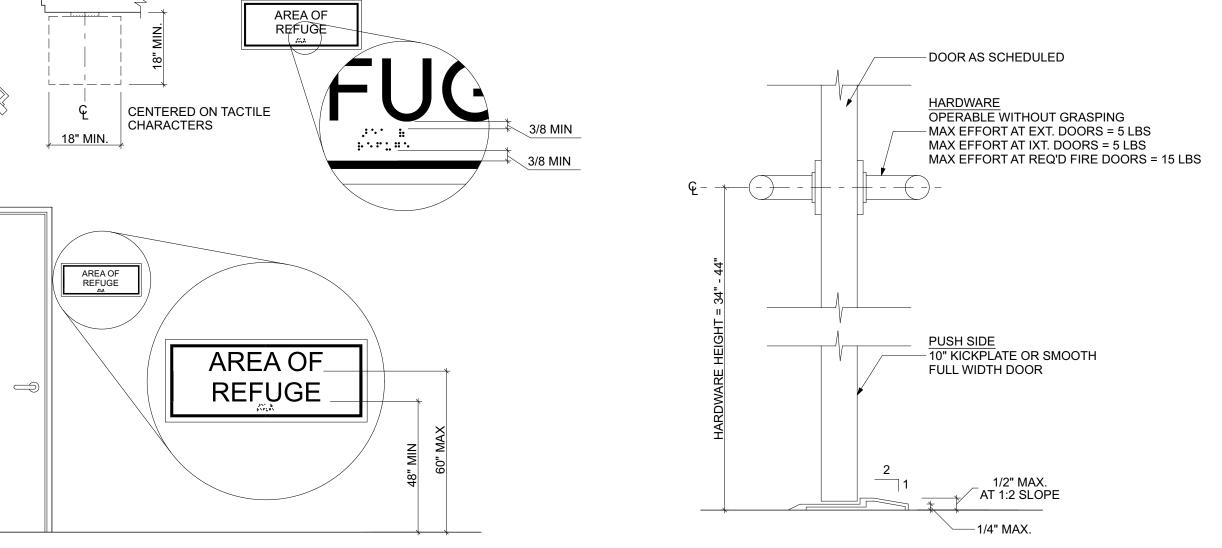
CGBSC

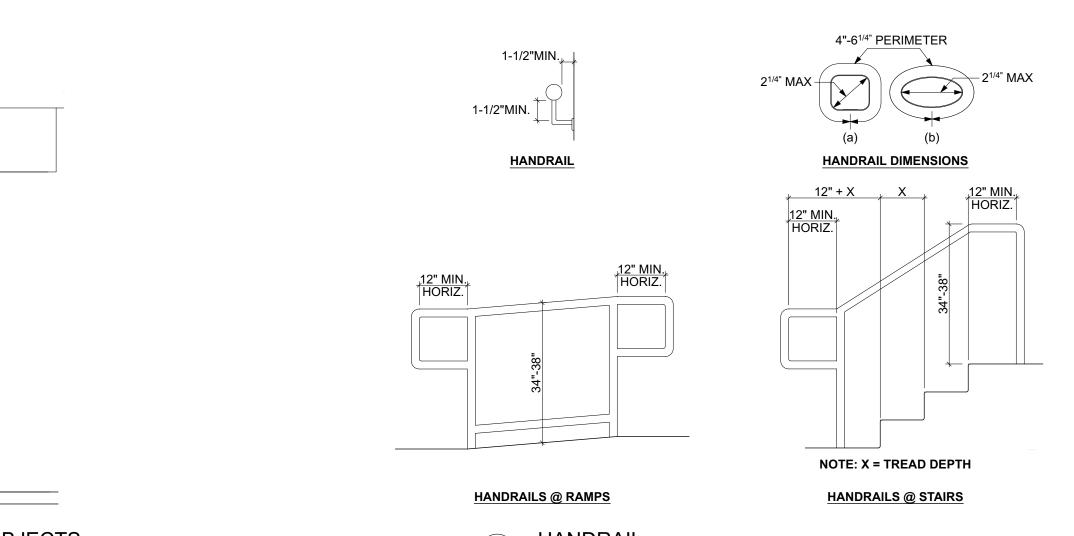


PER CBC 11B-309.4, HAND-ACTIVATED LATCHING AND - LOCKING DOORS SHALL BE OPERABLE BY LEVER-TYPE

HARDWARE

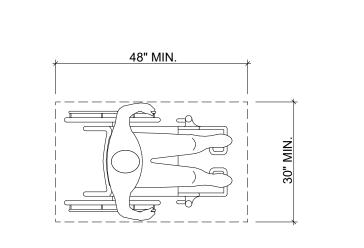






TACTILE SIGNAGE

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



DISABLED ACCESS DOOR THRESHOLD

SCALE: 3" = 1'-0"

2 CLEAR FLOOR SPACE

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

ACCESSIBILITY NOTES:

- 1. A CLEAR OPENING OF 32 INCHES WITH THE DOOR OPEN 90 DEGREES MEASURED BETWEEN THE FACE OF THE DOOR AND THE
- OPPOSITE STOP. 2. WHERE THE DOORS ARE LOCATED WITHIN THE ACCESSIBLE ROUTE. THE DOOR LANDING IS REQUIRED TO HAVE A DEPTH CLEARANCE OF 60 INCHES MINIMUM IN THE DIRECTION OF THE DOOR SWING. THE DEPTH CLEARANCE SHALL BE 48 INCHES IN THE OPPOSITE DIRECTION OF DOOR SWING OR:
 - A. IF APPROACH CAN BE MADE FROM THE LATCH SIDE, THE CLEARANCE DEPTH CAN BE 44 INCHES IF THE DOOR HAS NO
 - B. IF APPROACH CAN BE MADE FROM THE STRIKE SIDE AND THE DOOR, THE CLEARANCE DEPTH CAN BE 44 INCHES IF IT HAS
- NEITHER LATCH NOR CLOSER (CBC 1003.3.3.2) 3. DOORS SHALL BE EQUIPPED WITH SINGLE-EFFORT, NON-GRASP HARDWARE (I.E., LEVER) CENTERED BETWEEN 34" AND 44" ABOVE THE FLOOR AND THE DOOR SHALL HAVE A 10" KICK-PLATE. (CBC 11B-404.2.7, 11B-404.2.10)
- 4. THE FORCE FOR PUSHING OR PULLING OPEN EXTERIORS ACCESSIBLE EGRESS DOORS IS 5 LB. AND 15 LB AT REQUIRED FIRE
- DOORS. (CBC 11B-404.2.9) 5. LANDINGS AT DOORS SHALL BE LEVEL EXCEPT THAT EXTERIOR DOOR LANDINGS MAY HAVE A SLOPE NOT TO EXCEED 1/4" PER FT (2%
- SLOPE). (CBC 11B-404.2.4.4) 6. WHEN THE ACCESSIBLE DOOR HAS A CLOSER, THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MIN. (CBC 11B-404.2.8.1)
- 7. WHERE THERE IS A CARPET DOORMAT, ACCESSIBILITY WILL BE MAINTAINED AND THE DOORMAT SHALL BE SECURELY ATTACHED; EXPOSED EDGES SHALL BE FASTENED TO FLOOR SURFACES AND HAVE A TRIM ALONG ENTIRE LENGTH OF THE EXPOSED EDGE. PILE HEIGHT SHALL BE NO MORE THAN 1/2". CHANGES IN LEVEL OF 1/4" MAX SHALL BE PERMITTED TO BE VERTICAL AND WITHOUT EDGE TREATMENT. (CBC 11B-303 AND CBC 11B-302.2).
- 8. 4" STRIKE SIDE X 60" DEEP CLEARANCE AT EXTERIOR DOORS. THE TOTAL CLEARANCE DIMENSIONS ON THE PULL SIDE OF THE DOOR ARE 60"X60" (36" DOOR WIDTH PLUS 24" SIDE STRIKE). (CBC 11B-404.2.4)
- 9. EXIT DOOR'S SHALL HAVE WITH AN ILLUMINATED EXIT SIGN AND TACTILE SIGNAGE WITH SPECIAL PROVISIONS PER (CBC 1007.9) 10. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS
- AND SURFACE BOLTS OR ANY OTHER TYPE OF DEVICE THAT MAY BE USED TO CLOSE OR RESTRAIN THE DOOR OTHER THAN OPERATION OF THE LOCKING DEVICE SHALL NOT BE USED PER CBC 1008.1.9.4. 11. EXIT DOORS ARE TO BE OPENABLE FROM INSIDE WITHOUT USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT. HOWEVER, KEY-LOCKING HARDWARE MAY BE USED ON THE MAIN EXIT WHEN THE MAIN EXIT DOOR HAS A DURABLE SIGN ON OR ADJACENT TO THE DOOR STATING THIS DOOR MUST REMAIN UNLOCKED DURING BUSINESS HOURS. THE SIGN SHALL BE IN LETTERS NOT LESS THAN ONE INCH HIGH ON A CONTRASTING BACKGROUND. WHEN UNLOCKED, THE DOOR MUST BE FREE TO SWING WITHOUT OPERATION OF ANY LATCHING DEVICE. (CBC 1008.1.9.3)
- 12. FLOORS AND WALL BASE FINISH MATERIALS. IN OTHER THAN DWELLING UNITS, TOILET, BATHING AND SHOWER ROOM FLOOR FINISH MATERIALS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE. THE INTERSECTIONS OF SUCH FLOORS WITH WALLS SHALL HAVE A SMOOTH, HARD, NONABSORBENT VERTICAL BASE THAT EXTENDS UPWARD ONTO THE WALLS AT LEAST 4 INCHES. (CBC 1210.2.1)
- 13. WALLS AND PARTITIONS. WALLS AND PARTITIONS WITHIN 2 FEET OF URINALS AND WATER CLOSETS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE, TO A HEIGHT OF 4 FEET ABOVE THE FLOOR, AND EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS USED IN SUCH WALLS SHALL BE OF A TYPE THAT IS NOT ADVERSELY AFFECTED BY MOISTURE. (CBC 1210.2) **EXCEPTIONS:**
- 1. DWELLING UNITS AND SLEEPING UNITS.
- 2. TOILET ROOMS THAT ARE NOT ACCESSIBLE TO THE PUBLIC AND WHICH HAVE NOT MORE THAN ONE WATER CLOSET. ACCESSORIES SUCH AS GRAB BARS, TOWEL BARS, PAPER DISPENSERS AND SOAP DISHES, PROVIDED ON OR WITHIN WALLS, SHALL BE INSTALLED AND SEALED TO PROTECT STRUCTURAL ELEMENTS FROM MOISTURE. (CBC 2010.2)

RUSSELL DAVIDSON ARCHITECTURE + DESIGN



RENOVATION 86 STATION

NAME SUBMITTED: 11/20/2024 SCALE AS NOTED DRAWN BY: CHECKED BY:

TYPICAL ACCESSIBILITY DETAILS

G4.0

BEVELED CHANGE IN LEVEL

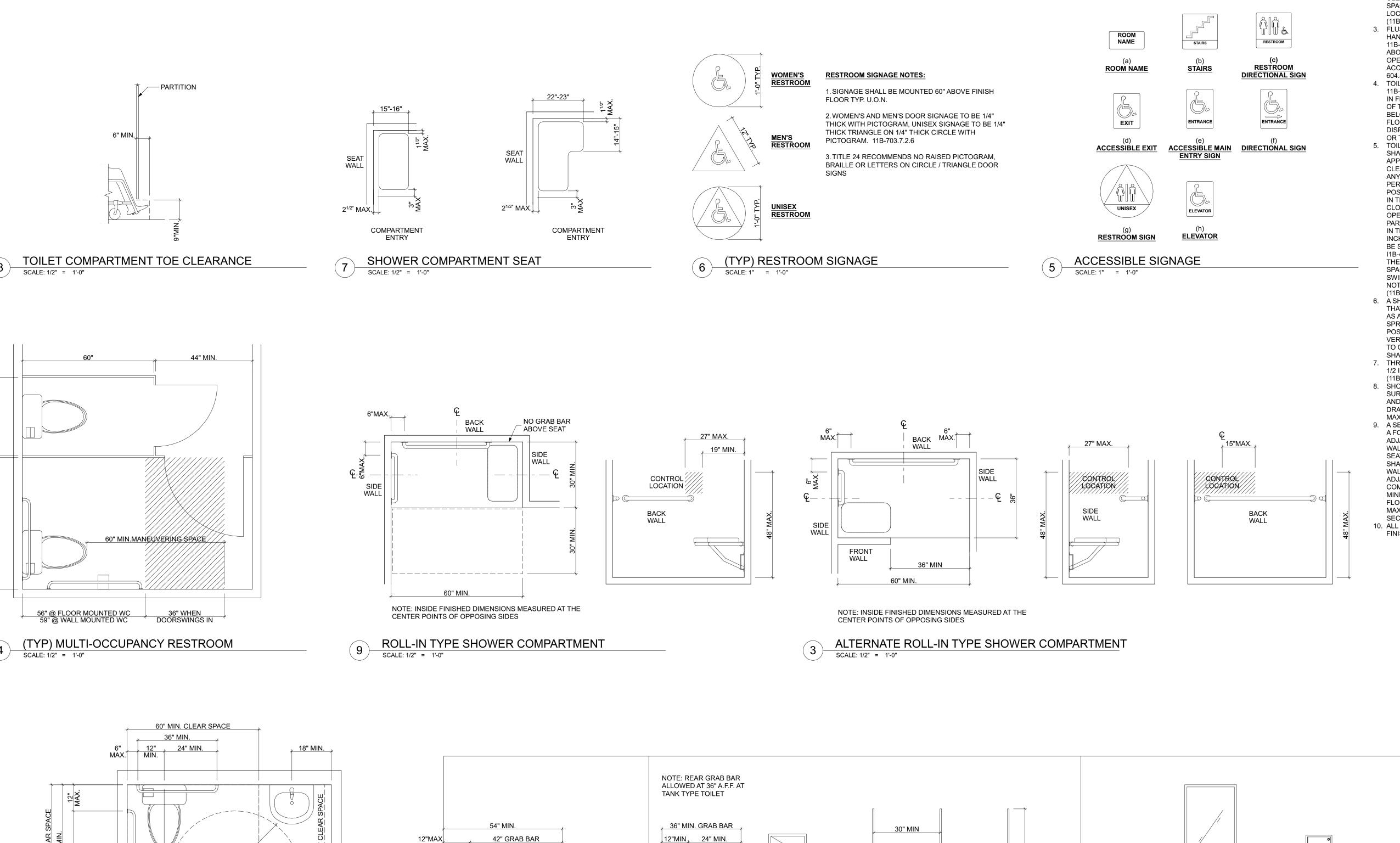
VERTICAL CHANGE IN LEVEL

1 VERTICAL CHANGE IN LEVEL
SCALE: 1/2" = 1'-0"

DISABLED ACCESS DOOR SIGNAGE

LIMITS OF PROTRUDING OBJECTS

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



4" MIN. COVED

FLOOR AND

WALL BASE

FIXTURE MOUNTING HEIGHTS

17-18"

DOOR PERMITTED TO SWING OVER

HATCHED PORTION OF -

MANEUVERING SPACE

(TYP) ACCESSIBLE RESTROOM

ACCESSIBILITY NOTES:

1. ALL DRINKING FOUNTAINS SHALL EITHER BE LOCATED COMPLETELY WITHIN ALCOVES, POSITIONED COMPLETELY BETWEEN WING WALLS, OR OTHERWISE POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS. THE PROTECTED AREA WITHIN WHICH A DRINKING FOUNTAIN IS LOCATED SHALL BE 32 INCHES WIDE MINIMUM AND 18 INCHES DEEP MINIMUM, AND SHALL COMPLY WITH SECTION 11B-305.7. WHEN USED, WING WALLS OR BARRIERS SHALL PROJECT HORIZONTALLY AT LEAST AS FAR AS THE DRINKING FOUNTAIN AND TO WITHIN 6 INCHES VERTICALLY FROM THE FLOOR OR GROUND SURFACE. (11B-602.9)

OR GROUND SURFACE. (11B-602.9)

2. THE REQUIRED CLEARANCE AROUND THE WATER CLOSET SHALL BE PERMITTED TO OVERLAP THE WATER CLOSET, ASSOCIATED GRAB BARS, DISPENSERS, SANITARY NAPKIN DISPOSAL UNITS, COAT HOOKS, SHELVES, ACCESSIBLE ROUTES, CLEAR FLOOR SPACE AND CLEARANCES REQUIRED AT OTHER FIXTURES, AND THE TURNING SPACE. NO OTHER FIXTURES OR OBSTRUCTIONS SHALL BE LOCATED WITHIN THE REQUIRED WATER CLOSET CLEARANCE.

(11B-604.3.2)
3. FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHA11 COMPLY WITH SECTION 11B-309 EXCEPT THEY SHALL BE LOCATED 44 INCHES MAXIMUM ABOVE THE FLOOR. FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET EXCEPT IN AMBULATORY ACCESSIBLE COMPARTMENTS COMPLYING WITH SECTION 11B-604.8.2. (11B-604.6)

4. TOILET PAPER DISPENSERS SHALL COMPLY WITH SECTION 11B-309.4 AND SHALL BE 7 INCHES MINIMUM AND 9 INCHES MAXIMUM IN FRONT OF THE WATER CLOSET MEASURED TO THE CENTERLINE OF THE DISPENSER. THE OUTLET OF THE DISPENSER SHALL BE BELOW THE GRAB BAR, 19 INCHES MINIMUM ABOVE THE FINISH FLOOR AND SHALL NOT BE LOCATED BEHIND GRAB BARS. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY

OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW. (11B-604.7) 5. TOILET COMPARTMENT DOORS, INCLUDING DOOR HARDWARE, SHALL COMPLY WITH SECTION 11B-404 EXCEPT THAT IF THE APPROACH IS FROM THE PUSH SIDE OF THE COMPARTMENT DOOR. CLEARANCE BETWEEN THE DOOR SIDE OF THE COMPARTMENT AND ANY OBSTRUCTION SHALL BE 48 INCHES MINIMUM MEASURED PERPENDICULAR TO THE COMPARTMENT DOOR IN ITS CLOSED POSITION. DOORS SHALL BE LOCATED IN THE FRONT PARTITION OR IN THE SIDE WALL OR PARTITION FARTHEST FROM THE WATER CLOSET. WHERE LOCATED IN THE FRONT PARTITION, THE DOOR OPENING SHALL BE 4 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION FARTHEST FROM THE WATER CLOSET. WHERE LOCATED IN THE SIDE WALL OR PARTITION, THE DOOR OPENING SHALL BE 4 INCHES MAXIMUM FROM THE FRONT PARTITION. THE DOOR SHALL BE SELF-CLOSING. A DOOR PULL COMPLYING WITH SECTION 11B-404.2.7 SHALL BE PLACED ON BOTH SIDES OF THE DOOR NEAR THE LATCH. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE. DOORS MAY SWING INTO THAT PORTION OF MANEUVERING SPACE WHICH DOES NOT OVERLAP THE CLEARANCE REQUIRED AT A WATER CLOSET. (11B-604.8.1.2)

6. A SHOWER SPRAY UNIT WITH A HOSE 59 INCHES LONG MINIMUM THAT CAN BE USED BOTH AS A FIXED-POSITION SHOWER HEAD AND AS A HANDHELD SHOWER SHALL BE PROVIDED. THE SHOWER SPRAY UNIT SHALL HAVE AN ON/OFF CONTROL WITH A NON-POSITIVE SHUT-OFF. IF AN ADJUSTABLE-HEIGHT SHOWER HEAD ON A VERTICAL BAR IS USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS. SHOWER SPRAY UNITS SHALL DELIVER WATER THAT IS 120 F (49°C) MAXIMUM. (11B-605.6)
7. THRESHOLDS IN ROLL-IN TYPE SHOWER COMPARTMENTS SHALL BE 1/2 INCH HIGH MAXIMUM IN ACCORDANCE WITH SECTION 11B-303.

(11B-605.7)
8. SHOWER FLOOR OR GROUND SURFACE. FLOOR OR GROUND SURFACES OFSHOWERS SHALL COMPLY WITH SECTION 11B-302.1 AND SHALL BE SLOPED 1:48 MAXIMUM IN ANY DIRECTION. WHERE DRAINS ARE PROVIDED, GRATE OPENINGS SHALL BE 1/4 INCH

MAXIMUM AND FLUSH WITH THE FLOOR SURFACE. (11B-605.9)

9. A SEAT IN A STANDARD ROLL-IN SHOWER COMPARTMENT SHALL BE A FOLDING TYPE, SHALL BE INSTALLED ON THE SIDE WALL ADJACENT TO THE CONTROLS, AND SHALL EXTEND FROM THE BACK WALL TO A POINT WITHIN 3 INCHES OF THE COMPARTMENT ENTRY. A SEAT IN AN ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENT SHALL BE A FOLDING TYPE, SHALL BE INSTALLED ON THE FRONT WALL OPPOSITE THE BACK WALL, AND SHALL EXTEND FROM THE ADJACENT SIDE WALL TO A POINT WITHIN 3 INCHES OF THE COMPARTMENT ENTRY. THE TOP OF THE SEAT SHALL BE 17 INCHES MINIMUM AND 19 INCHES MAXIMUM ABOVE THE BATHROOM FINISH FLOOR. WHEN FOLDED, THE SEAT SHALL EXTEND 6 INCHES MAXIMUM FROM THE MOUNTING WALL. SEATS SHALL COMPLY WITH SECTION 11B-610.3.1 OR 11B-610.3.2. (11B-610.3)

SECTION 11B-610.3.1 OR 11B-610.3.2. (11B-610.3)

10. ALL DIMENSIONS ARE TO FINISHED INTERIOR OR EXTERIOR WALL FINISH. VERIFY IN FIELD.

48" MIN. FOR DOUBLE

32" MIN. FOR SINGLE

LOW REACH BOTTOM OF

RECEPTACLE

PROVIDE PUSH_ BUTTON OPERATION

PROVIDE INSULATION FOR

EXPOSED PIPES

ALCOVE OR

18"-19"

15" MIN. WINGWALLS

RUSSELL DAVIDSON ARCHITECTURE + DESIGN



TATION 86 RENOVATION

ID NAME DATE

O1 RFI 01 Progress

SUBMITTED: 11/20/2024

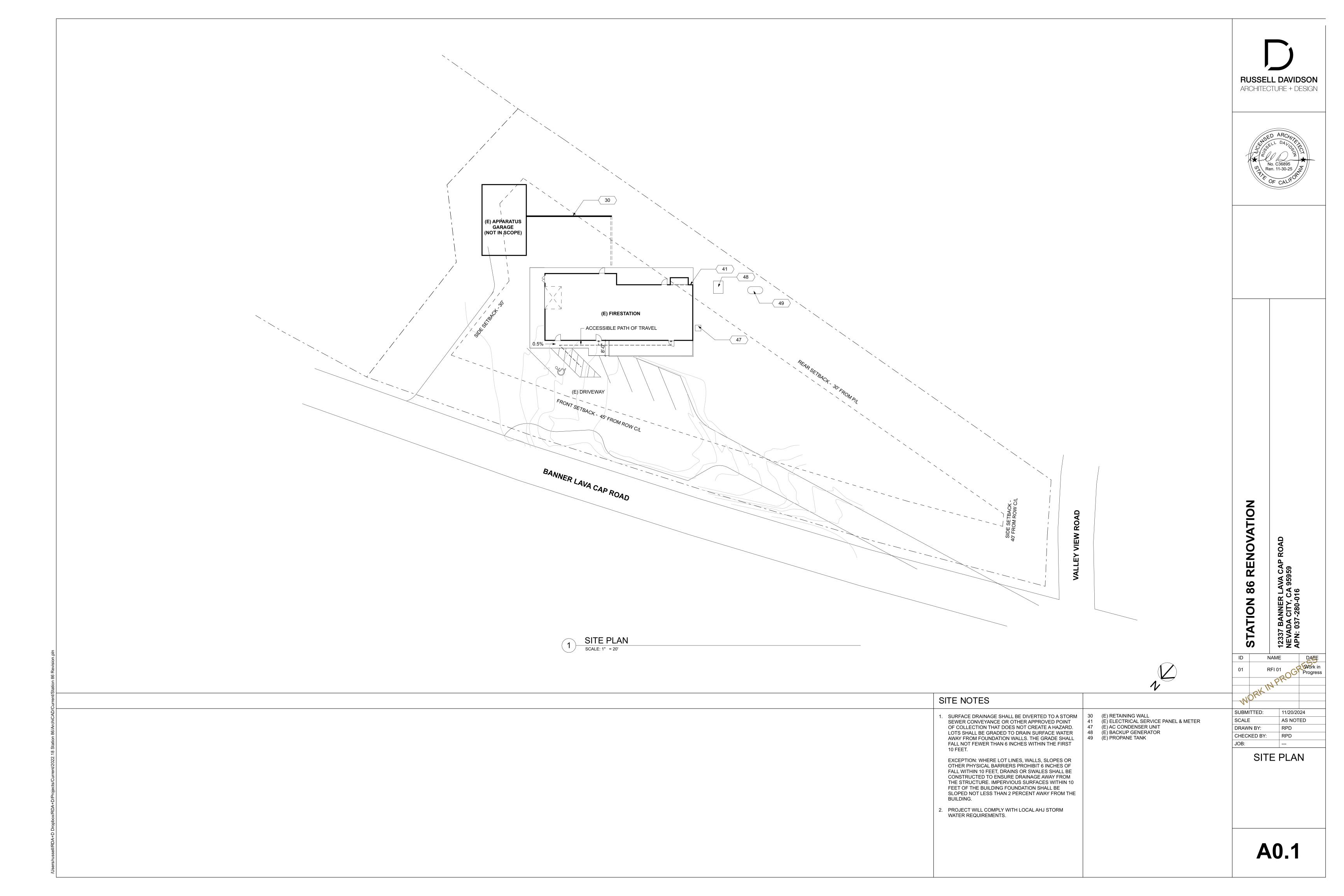
SCALE AS NOTED

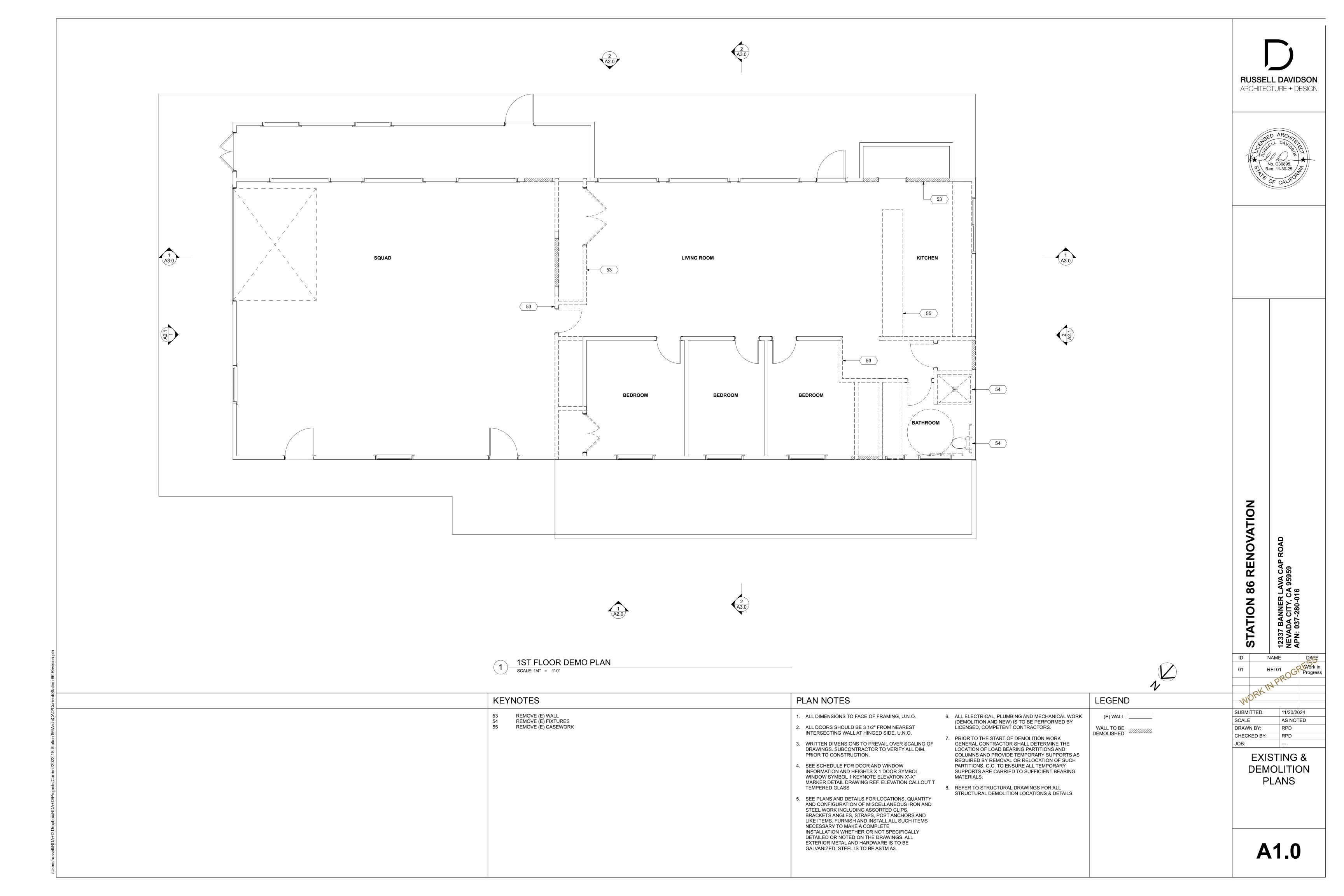
DRAWN BY: RPD

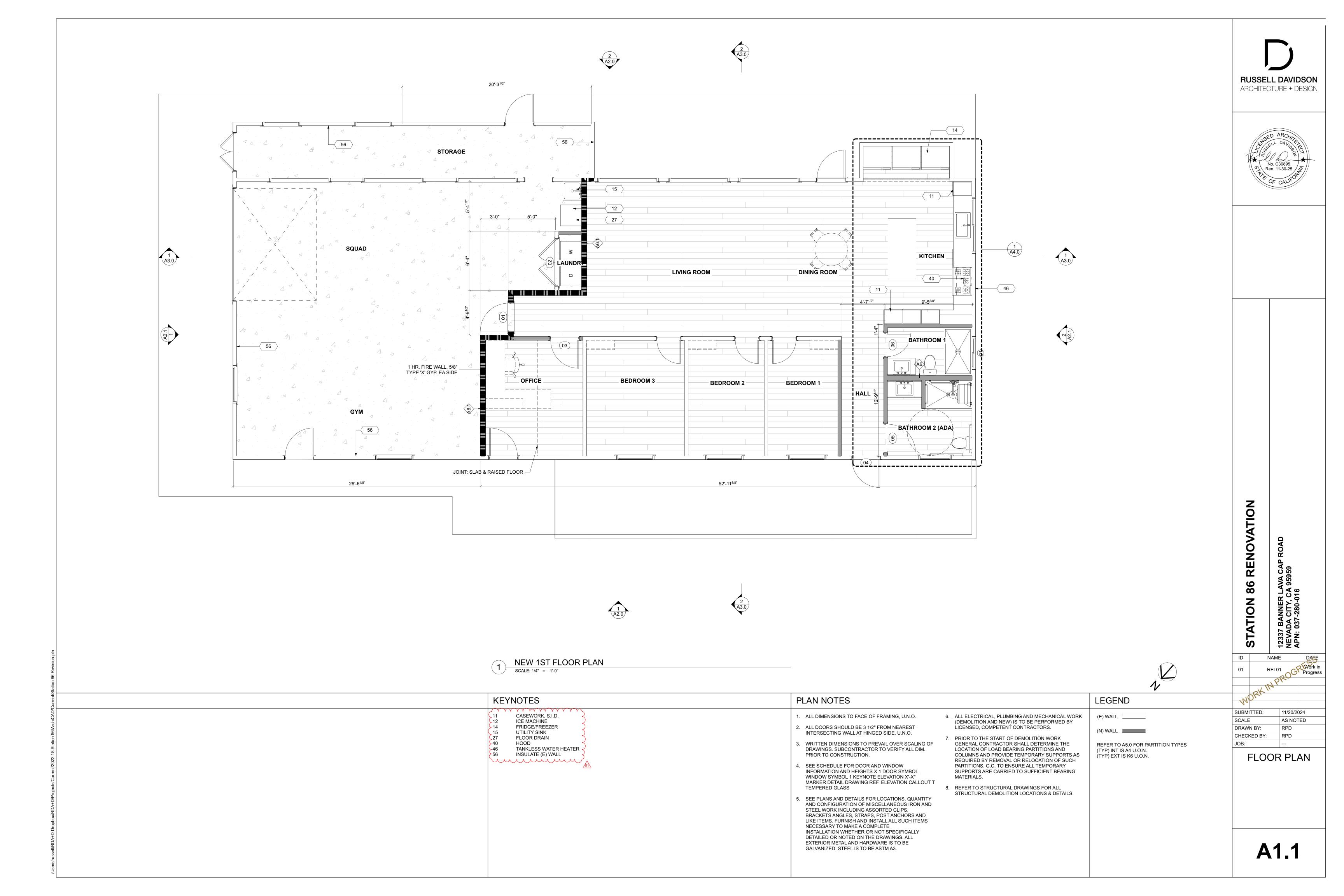
CHECKED BY: RPD

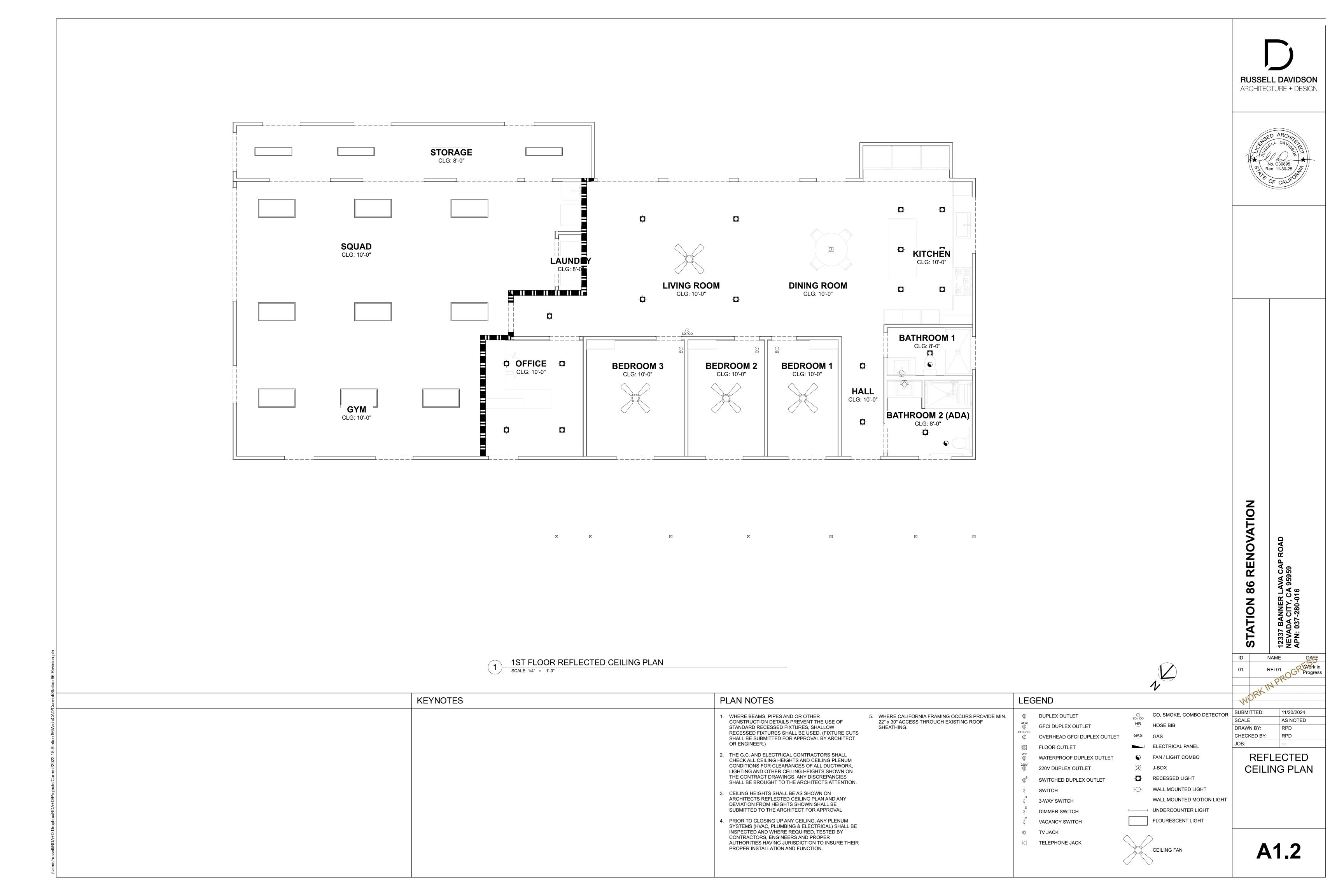
TYPICAL ACCESSIBILITY DETAILS

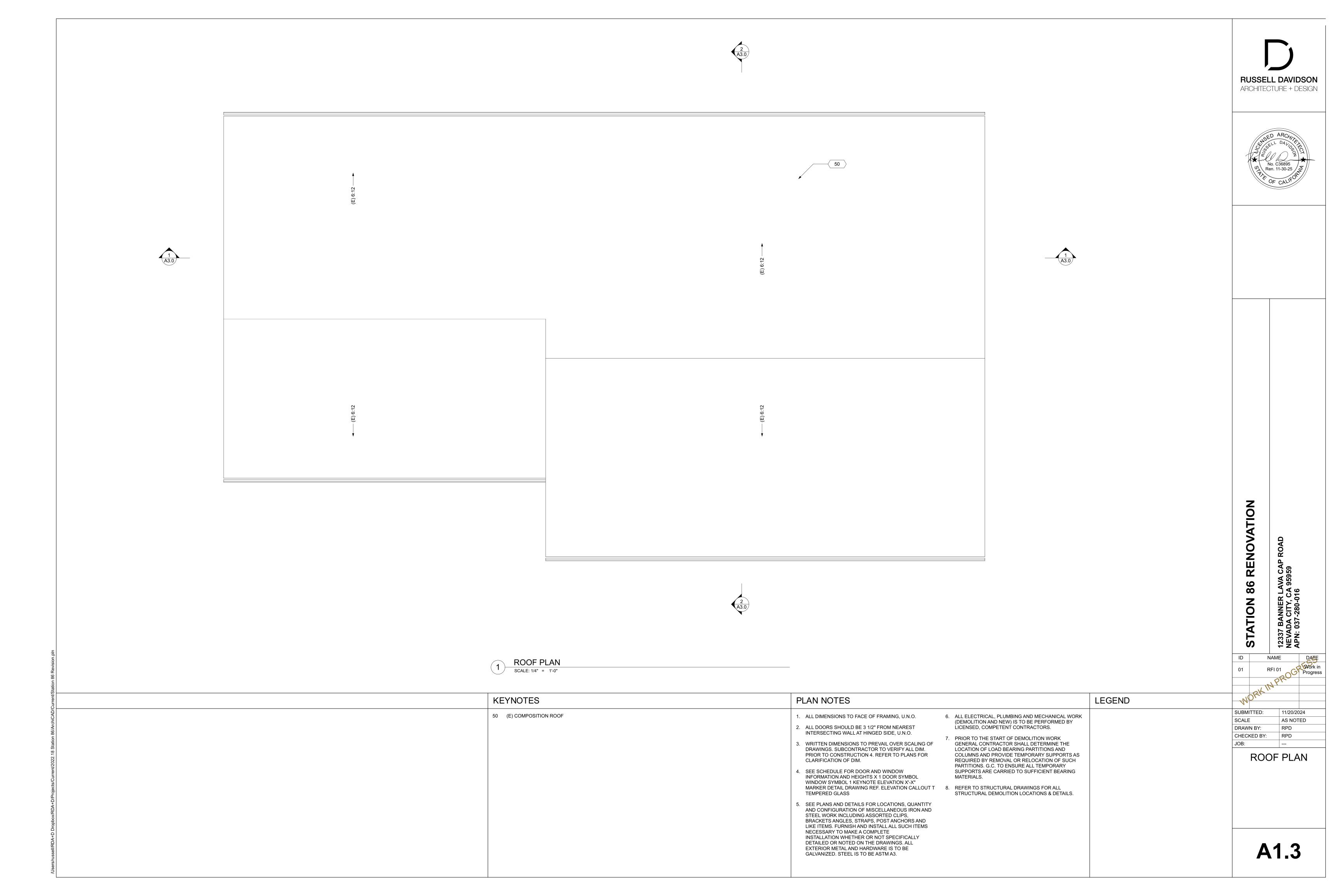
G4.1

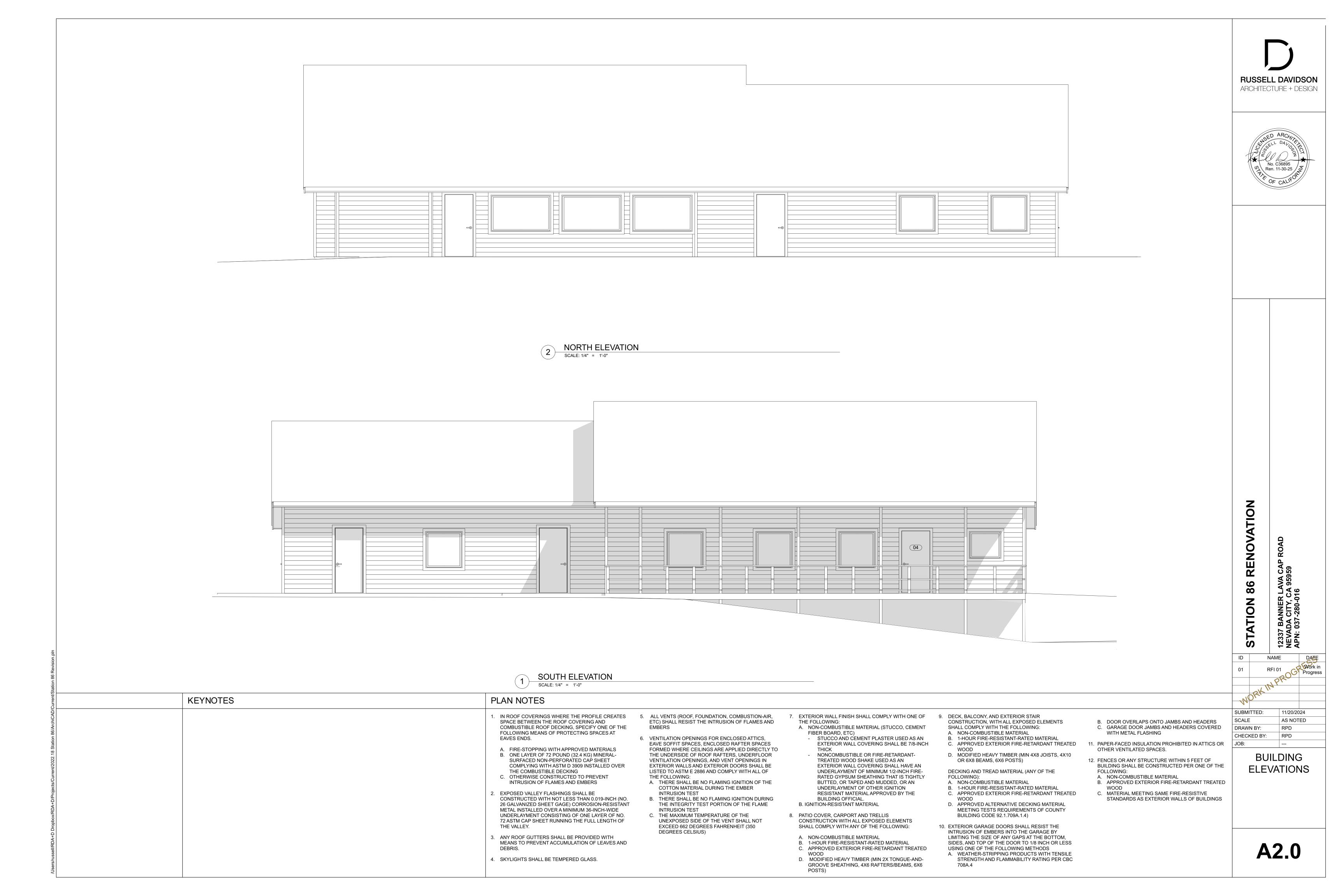


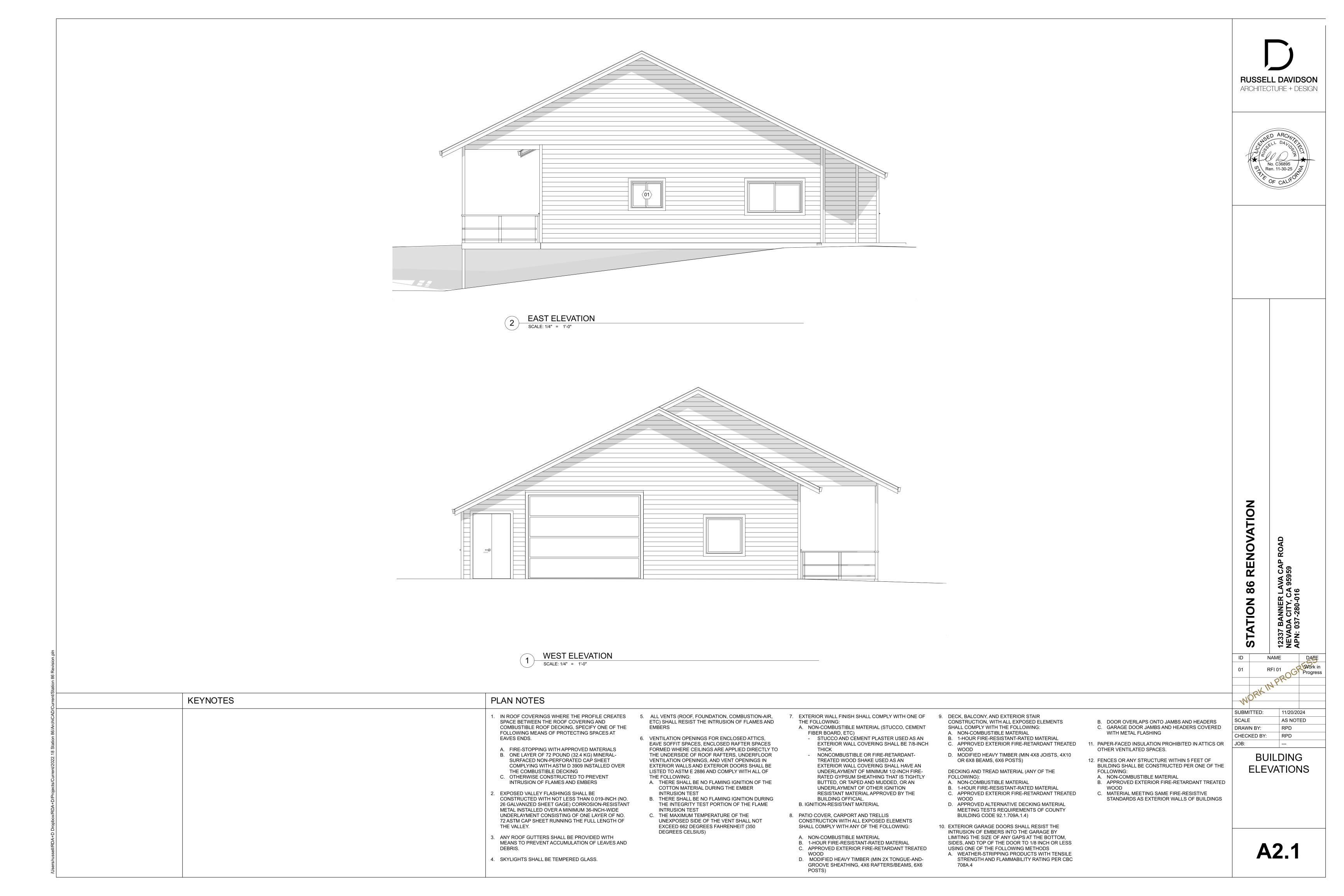


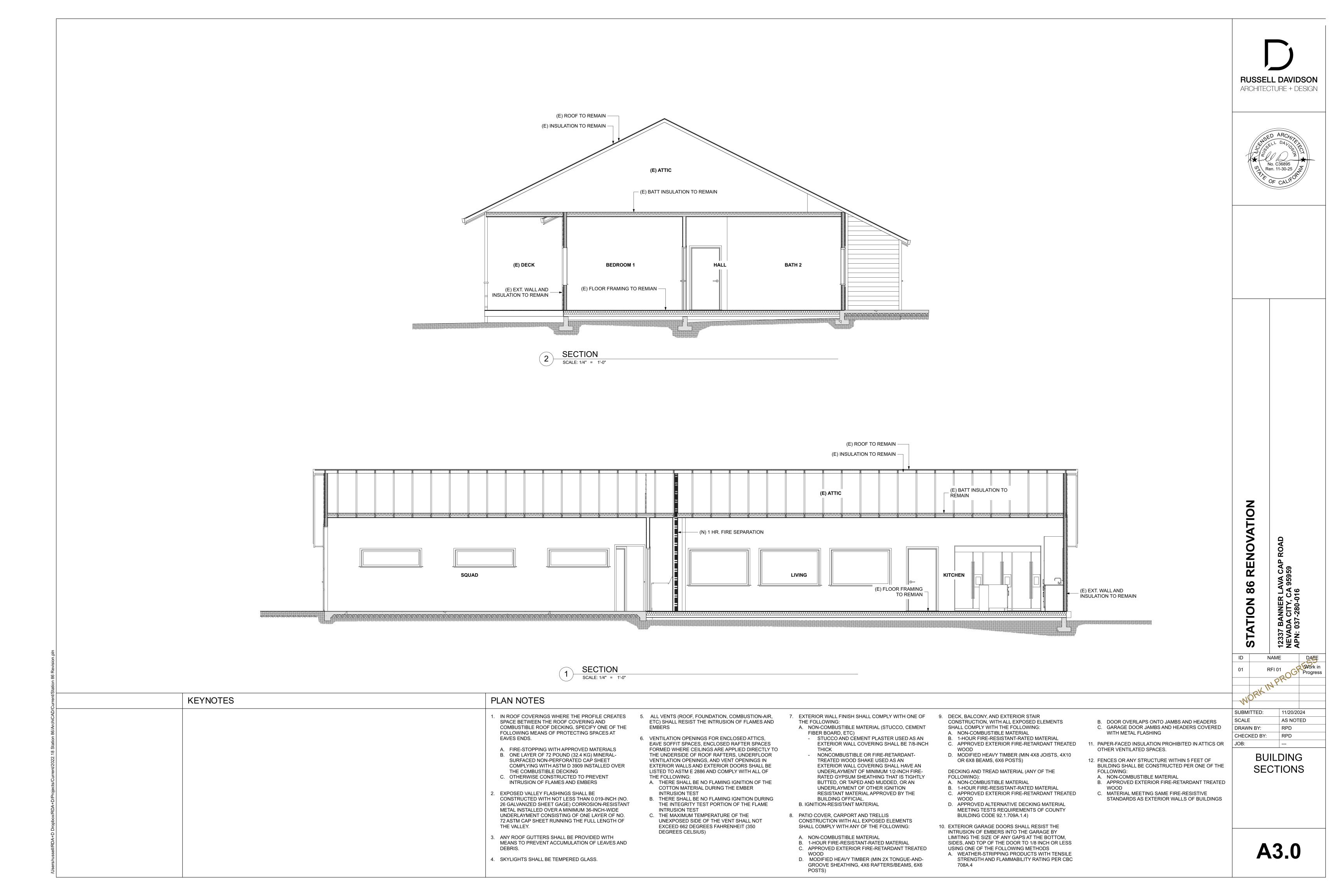


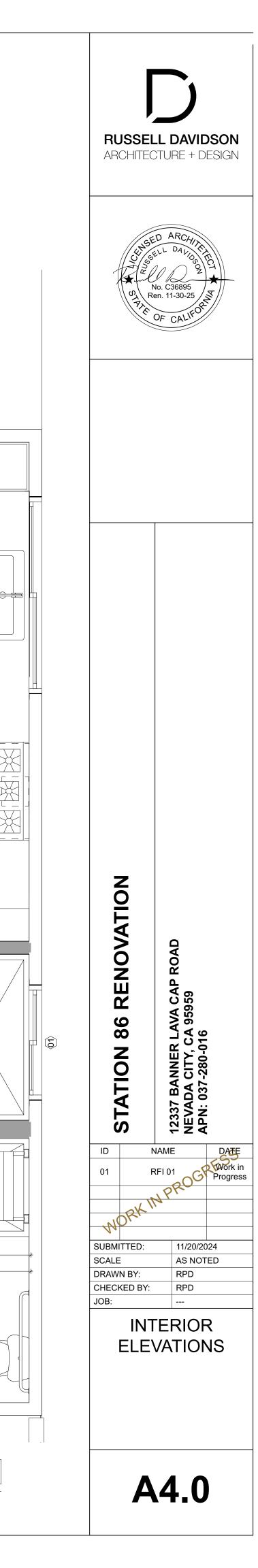












KITCHEN

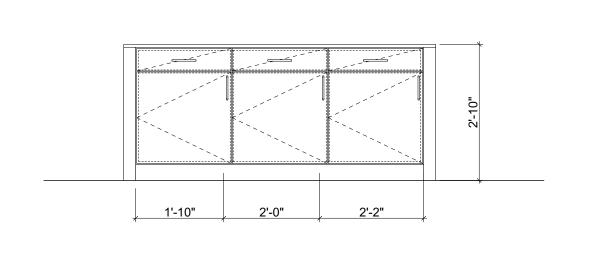
BATHROOM 1

BATHROOM 2 (ADA)

REFER TO G4.1 FOR ALL TYPICAL MOUNTING HEIGHTS

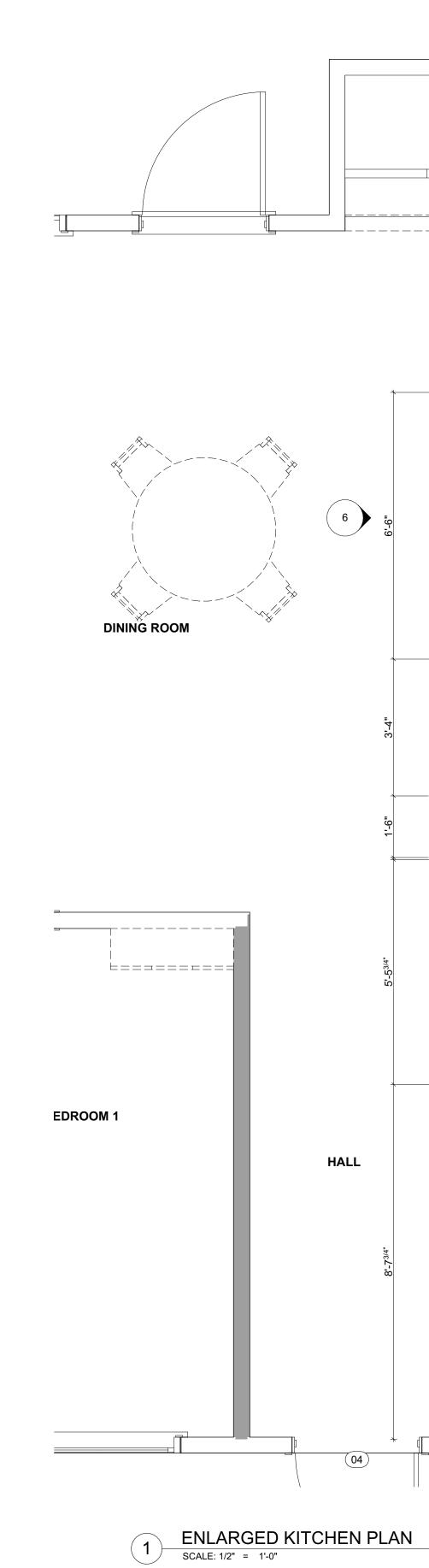
09

5'-0" CLEAR



5 KITCHEN

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

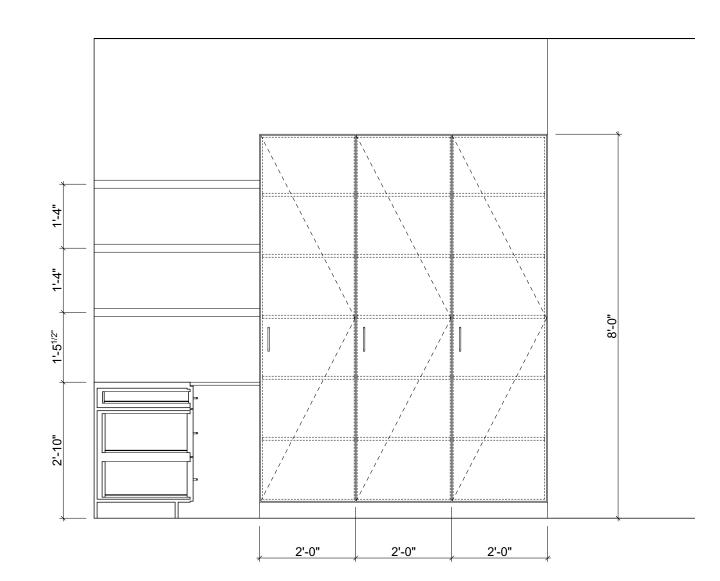


CASEWORK PANEL

3"
6'-0"
3"

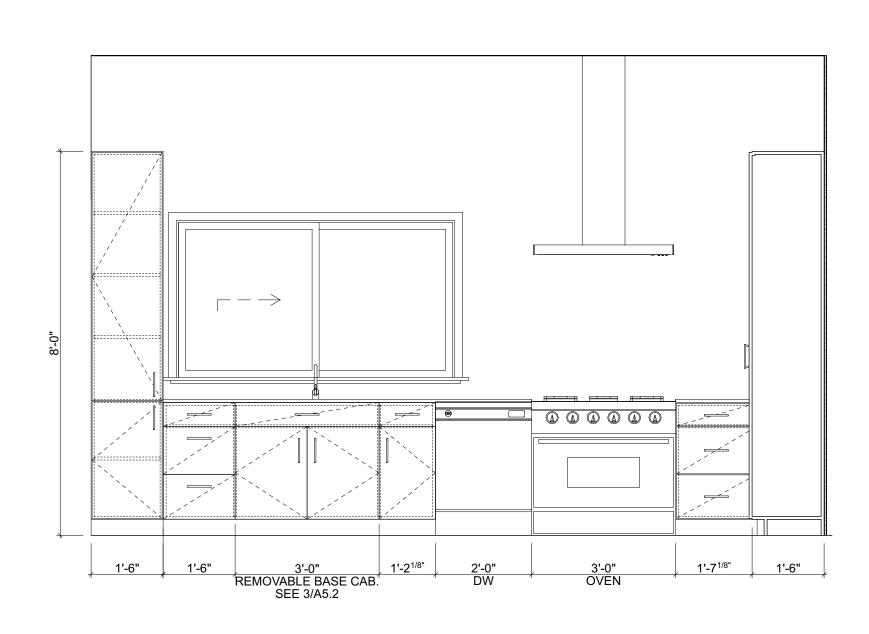
6 KITCHEN

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



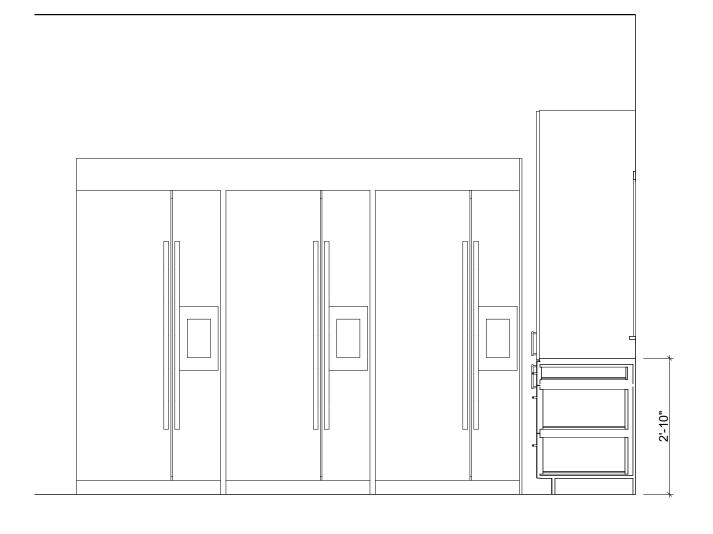
4 KITCHEN

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



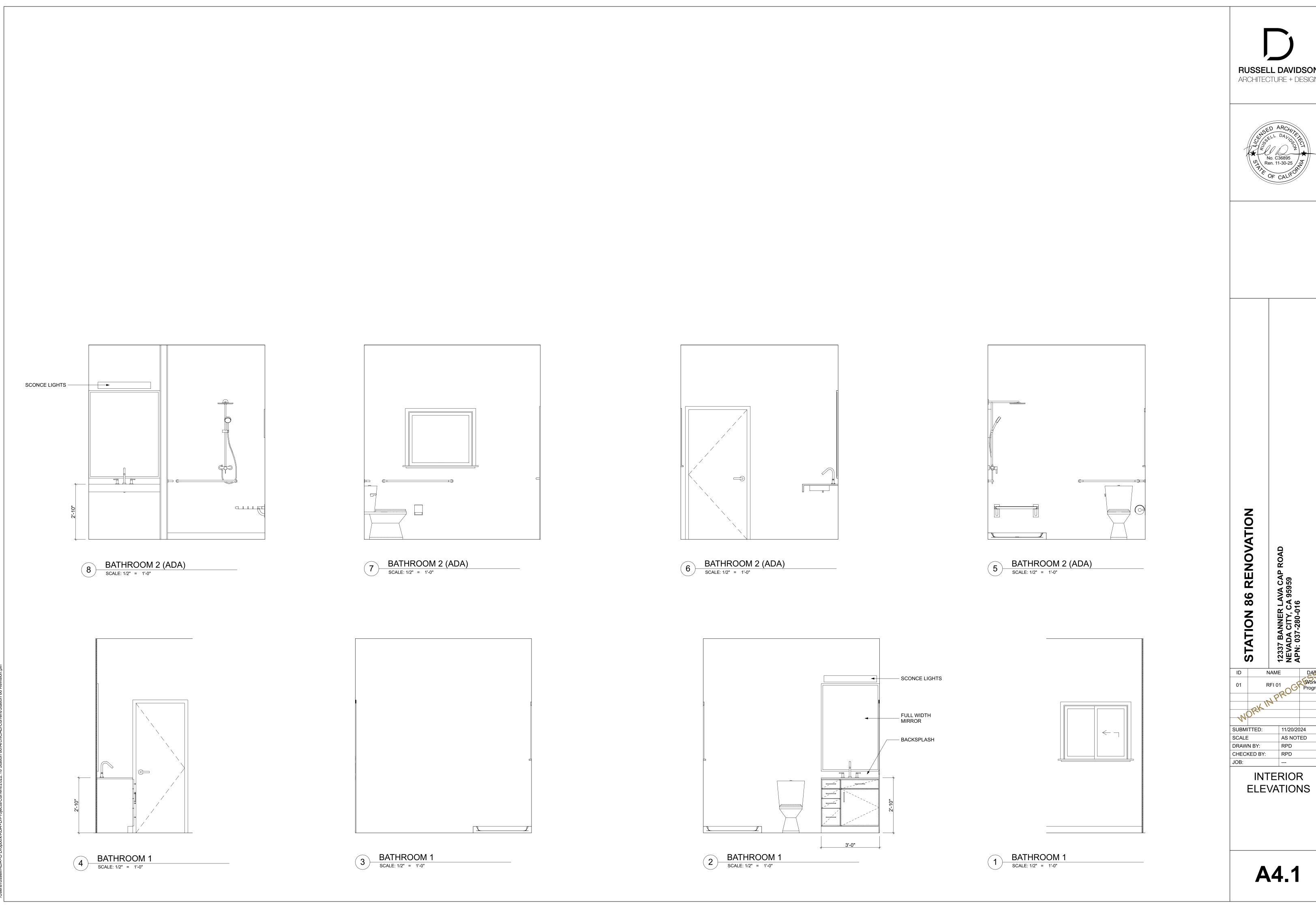
3 KITCHEN

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



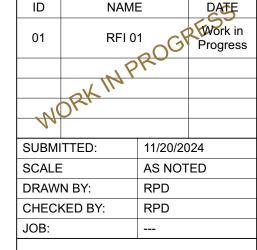
2 KITCHEN

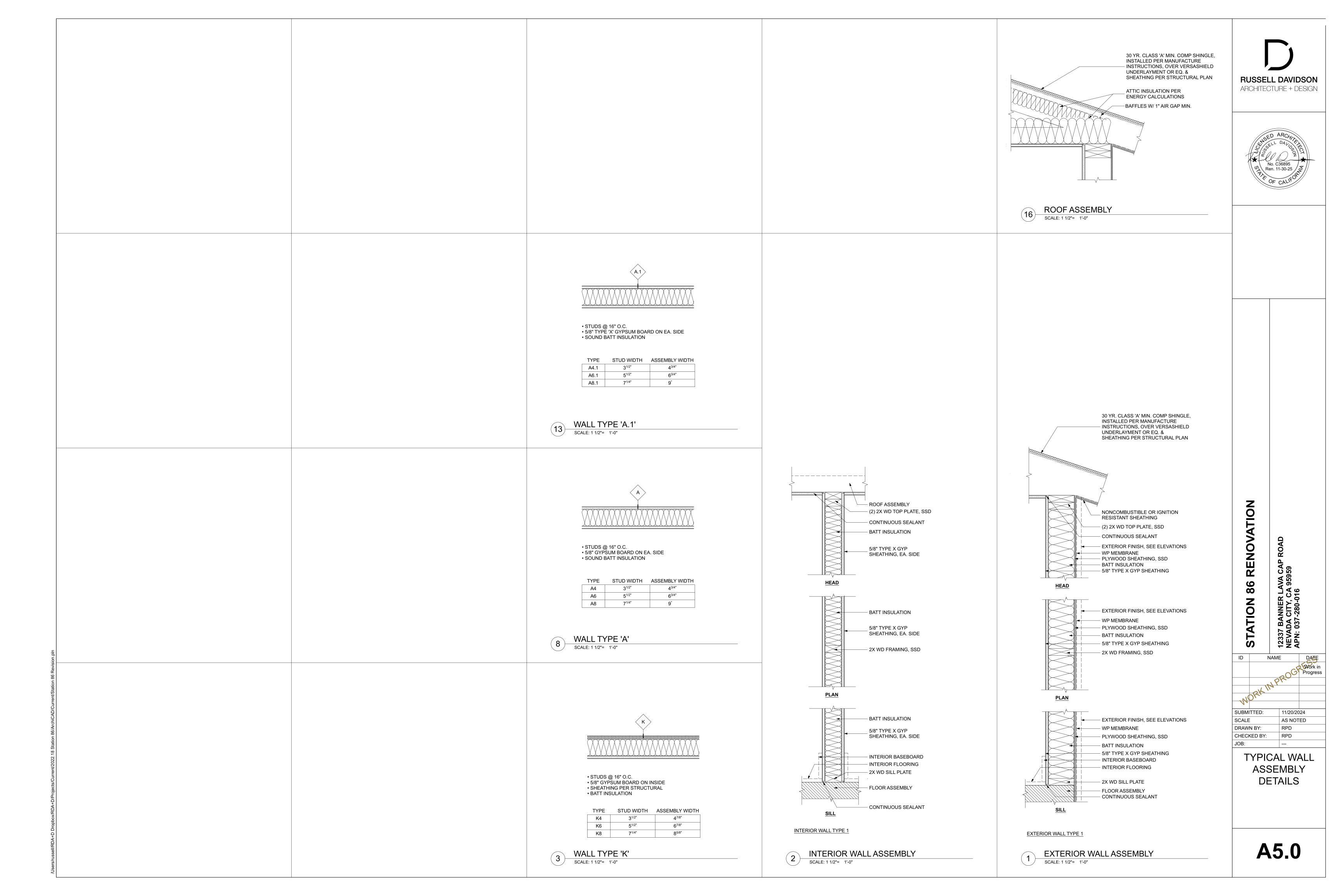
SCALE: 1/2" = 1'-0"

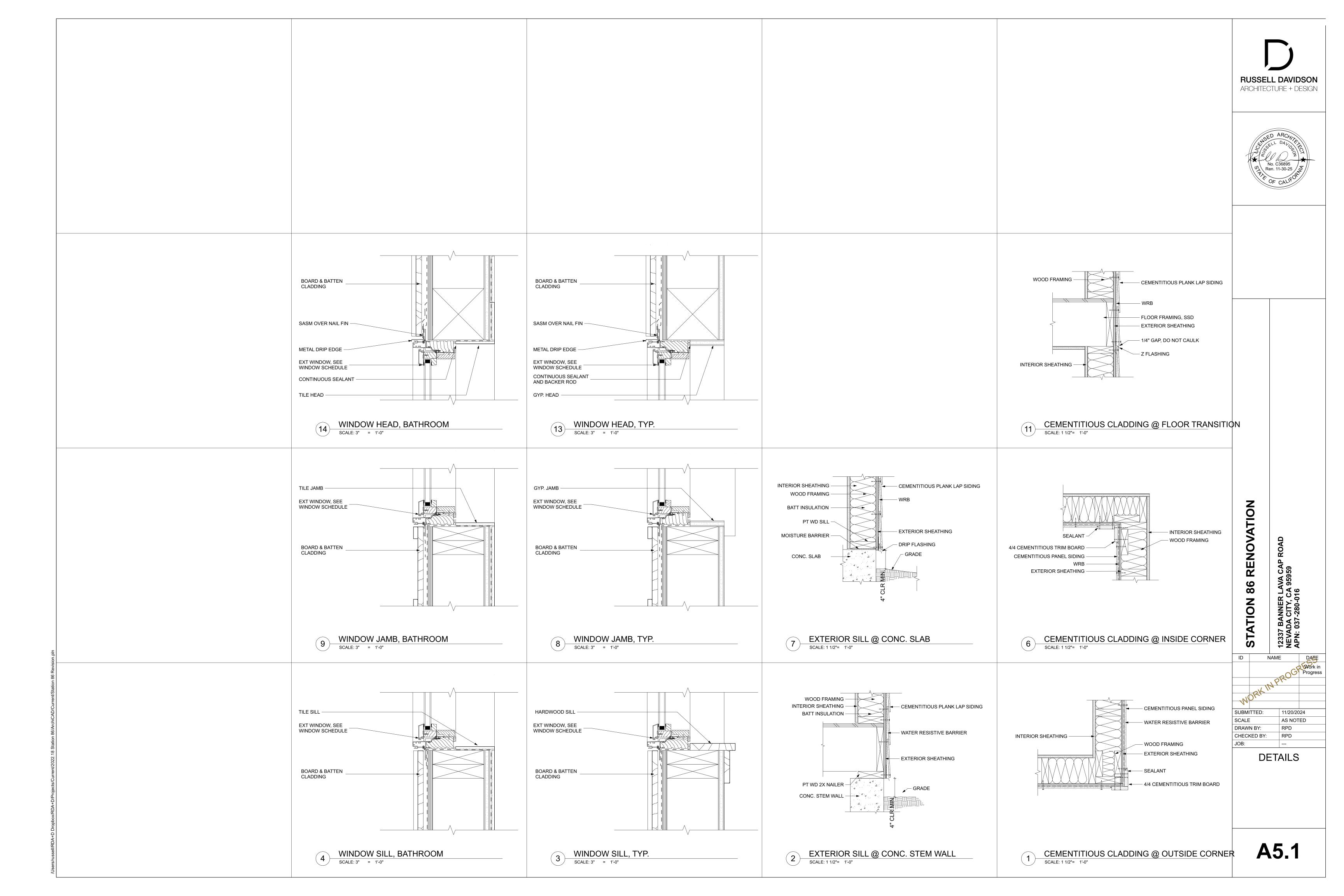


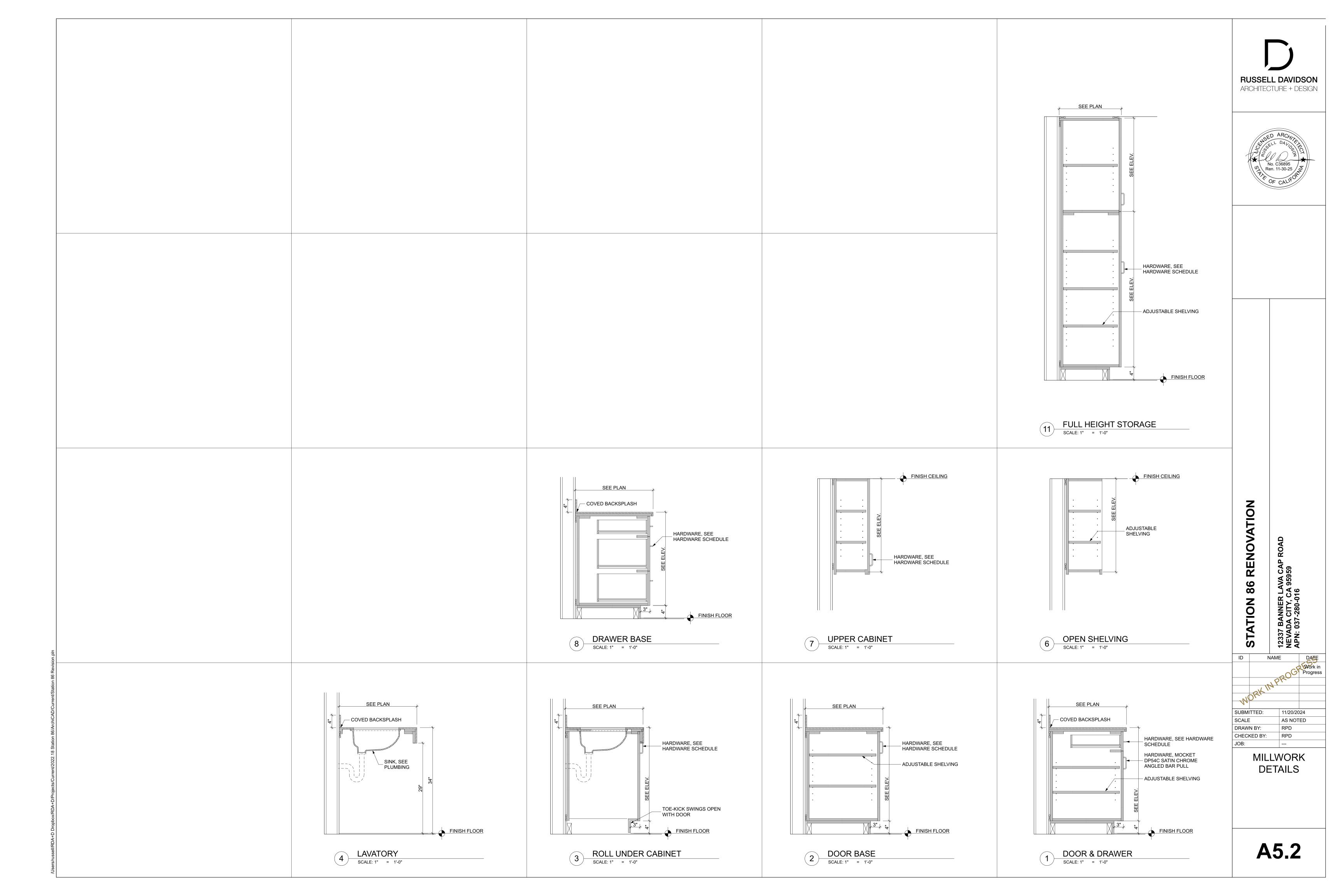
RUSSELL DAVIDSON ARCHITECTURE + DESIGN





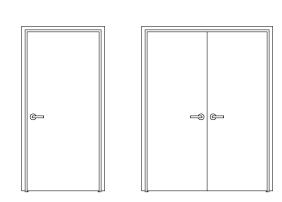






	DOOR SCHEDULE													
DOOR#	LOCATION	TYPE	EXPOSURE	w	н	TH	MFG	MODEL	MATERIAL	FINISH	HARDWARE	CLOSER	FIRE RATING	REMARKS
01	LIVING ROOM	А	INT	3'-0"	6'-8"	1 ^{5/8} "	TRIMLITE	3068FSCPHB	SCWD	PTD	TYPE 2	Y	45 MIN.	
02	SQUAD	В	INT	5'-0"	6'-8"	1 ^{5/8} "	TRIMLITE	3068FSCPHB	SCWD	PTD	TYPE 4	N		
03	OFFICE	А	INT	3'-0"	6'-8"	1 ^{3/8} "	TRIMLITE	3068FSCPHB	SCWD	PTD	TYPE 3	N		
04	HALL	А	EXT	3'-0"	6'-8"	1 ^{3/8} "	STEELCRAFT	L/B SERIES	STEEL	PTD	TYPE 1	N		
05	BATHROOM 2 (ADA)	А	INT	3'-0"	6'-8"	1 ^{3/8} "	TRIMLITE	3068FSCPHB	SCWD	PTD	TYPE 3	N		
06	BATHROOM 1	А	INT	2'-6"	6'-8"	1 ^{3/8} "	TRIMLITE	3068FSCPHB	SCWD	PTD	TYPE 3	N		





			WINE	ow sc	HEDULE		
ID	TYPE	LOCATION	w	Н	MFG	FRAME MATL	REMARKS
01	А	BATHROOM 1	3'-6"	3'-0"	MATCH (E)		

DOOR NOTES	WINDOW NOTES
------------	--------------

- 1. ALL GLASS IN DOORS SHALL BE TEMPERED. TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED AND VISIBLE WHEN THE UNIT IS GLAZED.
- 2. ALL GLAZING WILL BE INSTALLED WITH A CERTIFYING LABEL ATTACHED, SHOWING THE "U" VALUE.
- 3. REFER TO FLOOR PLANS FOR DIRECTION OF DOOR
- 4. DOORS SHALL MEET THE MINIMUM INFILTRATION
- REQUIREMENTS PER SECTION 116 E.E.S.
- 5. VENTILATION SHALL COMPLY WITH C.B.C. 1203.4 AND
- 6. ALL EXTERIOR WINDOW AND EXTERIOR DOOR ASSEMBLIES TO HAVE AN STC RATING OF 36 OR
- GREATER. 7. DOORS MAY OPEN TO THE EXTERIOR ONLY IF THE FLOOR OR LANDING IS NOT MORE THAN 11/2 INCH

LOWER THAN THE DOOR THRESHOLD. SECTION

R311.3.1 CRC 8. GLAZED OPENINGS WITHIN EXTERIOR DOORS SHALL BE INSULATING-GLASS UNITS WITH A MINIMUM OF ONE TEMPERED PANE,

- SEE EXTERIOR ELEVATION FOR DIRECTION OF OPERATION OF WINDOWS (ALL OPERABLE WINDOWS TO HAVE SCREENS).
- ALL WINDOW DIMENSIONS PERTAIN TO ROUGH OPENINGS (R.O.), CONTRACTOR TO FIELD VERIFY
- ACTUAL DIMENSIONS FOR WINDOWS.
- . ALL GLAZING WILL BE INSTALLED WITH A CERTIFYING
- LABEL ATTACHED, SHOWING THE NFRC LABEL.
- ALL GLAZING SHALL BE SPECTRALY SELECTIVE LOW E COATED TO MEET TITLE 24 ENERGY REQUIREMENTS.
- WINDOWS SHALL MEET THE MINIMUM INFILTRATION REQUIREMENTS PER SECTION 116 E.E.S.D
- 6. VENTILATION SHALL COMPLY WITH C.B.C. 1203.4 AND
- . EVERY SLEEPING ROOM SHALL HAVE ONE OPERABLE A MIN. NET CLEAR OPENABLE AREA OF 5.7 SQ. FT, MIN. NET CLEAR OPENABLE HEIGHT OF 24" MIN., NET CLEAR WIDTH OF 20" AND A FIN. SILL HEIGHT OF NOT MORE THAN 44" A.F.F. PER CRC SECTION 3101

8. ALL EXTERIOR WINDOW AND EXTERIOR DOOR ASSEMBLIES TO HAVE AN STC RATING OF 30 OR

AND VISIBLE WHEN THE UNIT IS GLAZED.

- 9. TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED
- DOOR & WINDOW

 SHALL BE PROVIDED WITH NATURAL VENTILATION AND

 DOOR & WINDOW 10. EVERY SPACE INTENDED FOR HUMAN OCCUPANCY NATURAL LIGHT BY MEANS OF VENTILATION / ARTIFICIAL LIGHT. CBC SECTIONS 1203.4 AND 1205.1
- AND R303 A) THE MINIMUM NET GLAZED AREA FOR NATURAL LIGHT SHALL NOT BE LESS THAN 8%OF THE FLOOR AREA OF THE ROOM SERVED. CBC
- **SECTION 1205.2** B) THE MINIMUM OPENABLE AREA TO THE OUTDOORS FOR NATURAL VENTILATION SHALL BE 4% OF THE FLOOR AREA BEING VENTILATED. **SECTION 1203.4**
- WINDOW FOR EMERGENCY ESCAPE OR RESCUE WITH 11. EXTERIOR WINDOWS AND EXTERIOR GLAZED DOOR ASSEMBLIES SHALL BE CONSTRUCTED OF MULTIPANE GLAZING WITH ONE TEMPERED PANE, HAVE A FIRE RESISTANCE RATING OF 20 MINUTES OR MEET THE REQUIREMENTS OF SFM 12-7A-2.

ARCHITECTURE + DESIGN



RENOVA-98 TATION

SUBMITTED: 11/20/2024 AS NOTED DRAWN BY: CHECKED BY:

NAME

MECHANICAL GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS AMENDED AND ADOPTED BY THE AUTHORITY(IES) HAVING JURISDICTION: 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), 2022 CALIFORNIA BUILDING CODE (CBC), 2022 CALIFORNIA FIRE CODE (CFC), 2022 CALIFORNIA MECHANICAL CODE (CMC), 2022 CALIFORNIA PLUMBING CODE (CPC), 2022 CALIFORNIA ELECTRICAL CODE (CEC), 2022 CALIFORNIA ENERGY CODE (CENC), 2022 CALIFORNIA GREEN BUILDING CODE (CGC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND ANY OTHER LOCAL CODES, ORDINANCES, REGULATIONS, OR AUTHORITIES HAVING JURISDICTION. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHER CODES AND REGULATIONS APPLICABLE TO THIS PROJECT. THESE CODES SHALL DETERMINE MINIMUM REQUIREMENTS FOR MATERIALS, METHODS, AND LABOR PRACTICES NOT OTHERWISE DEFINED IN THESE SPECIFICATIONS.
- CONTRACTOR TO EXAMINE THE PROPOSED WORK SITE AND BECOME FAMILIAR WITH ALL JOB CONDITIONS AFFECTING THE WORK SHOWN. CONTRACTOR(S) SHALL FIELD-VERIFY SITE CONDITIONS INCLUDING LOCATIONS AND SIZES OF EXISTING PIPING, VALVES, CLEANOÙTS, WASTE MAINS, GAS METERS, ETC., AND BIDS SHALL BE BASED ON ACTUAL FIFLD CONDITIONS. NO ADDITIONAL ALLOWANCE WILL BE GRANTED DUE TO LACK OF KNOWLEDGE OF SITE CONDITIONS. ACCEPT SOLE AND COMPLETE RESPONSIBILITY FOR CONDITIONS OF THE JOBSITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK.
- DRAWINGS INDICATE DIAGRAMMATICALLY THE ARRANGEMENT OF PRINCIPAL APPARATUS. PIPING. DUCTWORK. AND OTHER MATERIAL. FOLLOW DRAWING AS CLOSELY AS POSSIBLE IN ORDER TO ACHIEVE A NEAT INSTALLATION WHILE STILL WORKING AROUND ANY OBSTRUCTIONS. INSPECT SITE CONDITIONS AFFECTING THE WORK AND PROVIDE FITTINGS AND ACCESSORIES AS REQUIRED TO MEET CONDITIONS WHETHER SHOWN OR NOT.
- 4) IT IS NOT THE INTENTION OF THE PLANS AND SPECIFICATIONS TO COVER ALL INCIDENTALS REQUIRED TO PROVIDE COMPLETE AND FULLY-OPERATIONAL SYSTEMS. THE CONTRACTOR IS TO FURNISH ALL LABOR, MATERIALS, TRANSPORTATION, EQUIPMENT, MISCELLANEOUS SERVICES, ETC., REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION SHALL BE INCLUDED, WHETHER SPECIFICALLY SHOWN OR MENTIONED OR NOT. ENGINEER WILL PROVIDE INTERPRETATIONS
- DEFINITIONS: a. WORK: LABOR AND MATERIALS OF THE CONTRACTOR AND/OR SUBCONTRACTOR.

INSTALLATION.

- b. FURNISH: OBTAIN, COORDINATE, SUBMIT THE NECESSARY DRAWINGS, DELIVER TO THE JOBSITE IN NEW CONDITION AND GUARANTEE.
- c. PROVIDE: FURNISH AND INSTALL d. CONNECT: BRING SERVICE TO THE EQUIPMENT AND MAKE FINAL ATTACHMENTS INCLUDING NECESSARY PIPE
- FITTINGS, DUCTWORK, TRANSITIONS, ETC. e. CONCEALED: HIDDEN FROM SIGHT IN CHASES, FURRED SPACES, SHAFTS, ABOVE CEILING, EMBEDDED IN CONSTRUCTION, IN CRAWL SPACES, OR BURIED.
- E. EXPOSED: NOT INSTALLED UNDERGROUND OR CONCEALED AS DEFINED ABOVE. . PERFORMANCE: CONTRACTOR SHALL PERFORM ALL WORK SPECIFIED, INDICATED, AND REQUIRED UNLESS OTHERWISE NOTED, INCLUDING FINAL CONNECTIONS, IN A WORKMANLIKE MANNER USING WORKERS SKILLED
- AND EXPERIENCED IN THE TRADE. PIPES, FIXTURES, EQUIPMENT, GRILLES, REGISTERS, ETC. TO BE INSTALLED LEVEL, SQUARE, OR CENTERED, ETC. TO GIVE A NEAT APPEARANCE. h. FULL FUNCTION: PROVIDE ALL MINOR ITEMS NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL
- CONTRACTOR SHALL CONFIRM ALL SITE VOLTAGES BEFORE BIDDING AND ORDERING EQUIPMENT. REIMBURSE ELECTRICAL CONTRACTOR, AT NO CHARGE TO CLIENT, FOR ELECTRICAL CONTRACTOR'S COST INCURRED DUE TO SUBSTITUTION OF MECHANICAL EQUIPMENT HAVING ELECTRICAL REQUIREMENTS DIFFERING FROM SITE CONDITIONS.
- CONTRACTOR SHALL PROVIDE THE OWNER WITH COPIES OF OPERATION, MAINTENANCE, AND PREVENTATIVE MAINTENANCE MANUALS FOR EACH MODEL AND TYPE OF PLUMBING AND MECHANICAL EQUIPMENT.
- 8) CONTRACTOR SHALL PROVIDE EVIDENCE OF LICENSING, BONDING, AND INSURANCE, AND PROVIDE OTHER NECESSARY ADMINISTRATIVE FUNCTIONS FOR CONTRACTOR'S WORK.
- 9) CONTRACTOR SHALL PROCURE AND PAY FOR ALL REQUIRED PERMITS AND SERVICE CHARGES.
- 10) COORDINATION: CONFORM TO GENERAL CONSTRUCTION CONTRACT DOCUMENTS EXCEPT AS MODIFIED HEREIN. REFER ALSO TO STRUCTURAL AND ELECTRICAL CONTRACT DOCUMENTS. COORDINATE ALL WORK WITH OTHER
- 11) CUTTING AND PATCHING: CUT AND PATCH AS REQUIRED. CUT OR WELD STRUCTURAL MEMBERS ONLY WITH APPROVAL OF A STRUCTURAL ENGINEER. PATCHING SUBJECT TO ACCEPTANCE BY OWNER.
- 12) SAW CUT TRENCHES IN SLAB SHALL BE FULLY RESTORED AND REINFORCED TO PREVENT SAGGING, ROUGHEN SAW CUT EDGES PRIOR TO RE-POURING CONCRETE.
- 13) COORDINATE ALL WORK WITH OTHER TRADES TO PROVIDE A COMPLETE INSTALLATION. CONNECT ALL EQUIPMENT FURNISHED BY OTHERS AS REQUIRED. INSTALL ALL WORK TO CLEAR ARCHITECTURAL AND STRUCTURAL MEMBERS.
- 14) RESTORE ALL DAMAGE RESULTING FROM YOUR WORK AND LEAVE PREMISES IN CLEAN CONDITION WHEN FINISHED WITH WORK. ADJUST, CLEAN, REPAIR, OR REPLACE PRODUCTS, WHICH HAVE BEEN DAMAGED.
- 15) GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR MINIMUM FROM DATE OF FILING NOTICE OF COMPLETION.
- 16) PROVIDE FLASHING AND COUNTER FLASHING FOR ALL WALL AND ROOF PENETRATIONS.

ARE NECESSARY TO PROPER OPERATION AND WITHIN THE INTENT OF THE CONTRACT.

INSTALL ALL ABOVE GRADE (OVERHEAD) PIPING AS HIGH AS PRACTICAL.

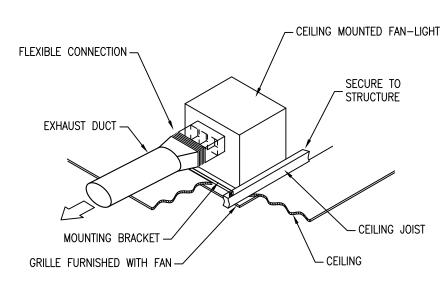
- 17) ADJUSTMENTS: MAKE MINOR ADJUSTMENTS TO WORK WHERE REQUESTED BY OWNER, WHEN SUCH ADJUSTMENTS
- 18) MATERIALS AND EQUIPMENT: PROVIDE NEW, UL-LISTED, COMMERCIAL-GRADE MATERIALS, DEVICES, EQUIPMENT, AND FIXTURES SUITABLE FOR THE ENVIRONMENT WHERE INSTALLED. REUSE EXISTING ONLY WHEN COMPLIANT WITH THE CONTRACT DOCUMENTS, IN GOOD CONDITION, AND APPROVED BY THE ENGINEER.
- 19) INSTALLATION: INSTALL ALL MATERIALS, EQUIPMENT, AND SYSTEMS IN FULL ACCORD WITH MANUFACTURER'S INSTRUCTIONS, CLEARANCES, ETC.
- 20) LAYOUT: INSTALL ALL PIPING AND DUCTWORK TO PRESENT A NEAT AND ORDERLY APPEARANCE. RUN ALL LINES PARALLEL WITH BUILDING CONSTRUCTION AS MUCH AS POSSIBLE. MAINTAIN HEADROOM, EQUIPMENT CLEARANCE, AND GRADIENT WHERE REQUIRED. ALLOW FOR EXPANSION & CONTRACTION.
- 21) ACCESS DOORS: PROVIDE ACCESS DOORS OR PANELS FOR ALL VALVES, CLEANOUTS, DAMPERS, CONTROLS, DEVICES, AND OTHER ITEMS REQUIRING INSPECTION OR MAINTENANCE.
- 22) START-UP: THOROUGHLY TEST/DEMONSTRATE PROPER OPERATION OF ALL SYSTEMS AND EQUIPMENT MODIFIED,

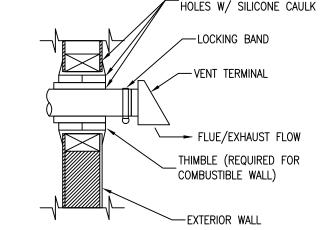
FURNISHED OR INSTALLED UNDER THIS CONTRACT.

- 23) WARRANTY: ALL MATERIALS AND EQUIPMENT INSTALLED UNDER THIS CONTRACT SHALL BE GUARANTEED FREE FROM ALL MECHANICAL, ELECTRICAL, AND WORKMANSHIP DEFECTS FOR A MINIMUM OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE PREMISES CAUSED BY LEAKS AND/OR BREAKS IN PIPES AND FIXTURES INSTALLED UNDER THIS CONTRACT, AS WELL AS ANY DAMAGE FROM LEAKS VIA ROOF PENETRATIONS MADE AND SEALED UNDER CONTRACTOR'S SCOPE.
- 24) PATCHING & PAINTING: RESTORE ANY DAMAGE RESULTING FROM THE WORK AND LEAVE PREMISES CLEAN. ADJUST, CLEAN, REPAIR, AND/OR REPLACE ANY ITEMS DAMAGED BY THE WORK. RESTORE WALL AND ROOF PENETRATIONS TO MATCH SURROUNDING WALL OR ROOF, RESPECTIVELY.
- 25) AIR BALANCE: PROVIDE SERVICES NECESSARY TO VERIFY AIR QUANTITIES AND BALANCE FOR ESTABLISHED QUANTITIES AND UNIFORM TEMPERATURE IN THE SPACES SERVED. ADJUST ALL DAMPERS AND ELEMENTS IN GRILLES AND DIFFUSERS FOR PROPER AIR DISTRIBUTION AND TO MINIMIZE DRAFTS. COMPLY WITH SMACNA MANUAL FOR THE BALANCING AND ADJUSTMENT OF AIR DISTRIBUTION SYSTEMS.
- 26) DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARD.
- 27) MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED 25 AND A SMOKE DEVELOPED INDEX NOT TO EXCEED 50, WHERE TESTED AS A COMPOSITE PRODUCT IN ACCORDANCE WITH ASTM E84 OR UL 723
- 28) ALL SUPPLY BRANCH DUCTS SHALL HAVE MANUAL VOLUME BALANCING DAMPERS WITH ACCESSIBLE LOCKING TYPE QUADRANT
- 29) PROVIDE CONICAL FITTINGS FOR ALL ROUND TO RECTANGULAR DUCTWORK CONNECTIONS
- 30) PROVIDE TURNING VANES FOR RECTANGULAR DUCTWORK AT ALL HARD 90 DEGREE ELBOWS
- 31) DUCTWORK SHALL MEET UL 181, CLASS I AND NFPA 90A AND 90B. DUCT SHALL BE INSTALLED STRAIGHT AND SUPPORT SPACING SHALL BE IN STRICT ACCORDANCE WITH "SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE". FLEXIBLE DUCTWORK TO BE 5' MAX LENGTH, AND SHALL BE EXTENDED TO THE FULLEST POSSIBLE LENGTH, IN ORDER TO MINIMIZE PRESSURE DROP IN THE DUCT. EXCESS DUCT LENGTHS SHALL BE SHORTENED TO PREVENT UNNECESSARY CHANGES IN DIRECTIONS. WHERE ABRUPT CHANGES IN DIRECTION ARE UNAVOIDABLE USE ADJUSTABLE SHORT RADIUS SHEET METAL ELBOWS TO MAKE DIRECTION CHANGES. CONNECTIONS AT METAL DUCTS OR COLLARS SHALL BE MADE BY DRAW BANDS AND PRESSURE-SENSITIVE TAPE WITH THE DRAW BANDS TIGHTENED AS RECOMMENDED BY THE MANUFACTURER WITH AND ADJUSTABLE TENSIONING TOOL, USING PRESSURE-SENSITIVE TAPE ALONE WITHOUT DRAW BANDS IS NOT ACCEPTABLE. ALL PRESSURE-SENSITIVE TAPES AND MASTICS USED SHALL COMPLY WITH UL 181.
- 32) HVAC EQUIPMENT SHALL NOT BE OPERATED DURING CONSTRUCTION WITHOUT A FILTER INSTALLED TO PROTECT THE EVAPORATOR COIL. AFTER ALL CONSTRUCTION IS COMPLETED, ALL CONSTRUCTION FILTERS SHALL BE REMOVED AND NEW FILTERS SHALL BE INSTALLED.
- 33) HVAC EQUIPMENT SHALL BE CERTIFIED BY THE MANUFACTURER FOR COMPLIANCE WITH CALIFORNIA ENERGY COMMISSION STANDARDS.

			AIR 7	ΓERMIN	IAL DEVIC	E SCH	EDULE	
TAG	TYPE	MANU.	MODEL	MOUNTING LOCATION	FRAME	MODULE SIZE	NECK SIZE	REMARKS
SG-1	SUPPLY GRILLE	TITUS	300RS	FLOOR FLUSH MOUNT	BORDER TYPE 1	SEE PLANS	SEE PLANS	SURFACE MOUNT, DOUBLE DEFLECTION, PROVIDE WITH RECESSED SCREWDRIVER OPERATED OPPOSED BLADE DAMPER
RG-1	RETURN GRILLE	TITUS	350RL	FLOOR FLUSH MOUNT	BORDER TYPE 1	SEE PLANS	SEE PLANS	SURFACE MOUNT, STEEL GRILLE, 3/4" BLADE SPACIN (BLADES PARALLEL TO LONG DIMENSION), 35 DEGREE DEFLECTION

							EX	(HAUST	FAN	SCI	HEDI	JLE		
TAG	MANU.	MODEL	MOUNTING	SERVES	CFM	E.S.P.	RPM	ELE	CTRICAL		SONES	WEIGHT	DEMARKS	
IAG	MANO.	MODEL	TYPE	SLIVES	CIW	L.J.F.	IZEINI	V-ø-Hz	WATTS	SONES (LBS.) REMARKS 0.08 <0.3 9.5 FAN TO BE INTERLOCKED WITH LIGHT SWITCH				
EF-1	PANASONIC	FV-0511VF1	CEILING	BATHROOM	50	0.1"	795	115-1-60	4.0	0.08	<0.3	9.5	FAN TO BE INTERLOCKED WITH LIGHT SWITCH	
EF-2	PANASONIC	FV-0511VF1	CEILING	ADA BATHROOM	50	0.1"	795	115-1-60	4.0	0.08	<0.3	9.5	FAN TO BE INTERLOCKED WITH LIGHT SWITCH	





WEATHERPROOF I.D., O.D., &





MECHANICAL CALGREEN NOTES

5.504.1 THE PERMANENT HVAC SYSTEM SHALL ONLY BE USED DURING CONSTRUCTION IF NECESSARY TO CONDITION THE BUILDING OR AREAS OF ADDITION OR ALTERATION WITHIN THE REQUIRED TEMPERATURE RANGE FOR MATERIAL AND EQUIPMENT INSTALLATION. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 8. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR, IF THE BUILDING IS OCCUPIED DURING ALTERATION, AT THE CONCLUSION OF CONSTRUCTION.

5.504.3 AT THE TIME OF ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM.

5.504.5.3 IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDES AT LEAST A MERV OF 13.

5.506.1 FOR MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS, MEET THE MINIMUM REQUIREMENTS OF CENC 120.1, CHAPTER 4 OF CCR, TITLE 8 OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT. 5.506.2 BUILDINGS EQUIPPED WITH DEMAND CONTROL VENTILATION, CO2 SENSORS AND VENTILATION CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH CENC

5.508.1 INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2 5.508.1.1 CHLOROFLUOROCARBONS (CFCS). INSTALL HVAC AND REFRIGERATION EQUIPMENT THAT DOES NOT CONTAIN CFCS. 5.508.1.2 HALONS. INSTALL FIRE SUPPRESSION EQUIPMENT THAT DOES NOT CONTAIN HALONS.

5.410.4.5 PROVIDE THE BUILDING OWNER WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM

ALTERATION SUBJECT TO SECTION 303.1. 5.410.4.3.1 BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, THE SYSTEM SHOULD BE BALANCED IN ACCORDANCE WITH THE PROCEDURES DEFINED BY NATIONAL STANDARDS LISTED IN SECTION 5.410.4.3.1.

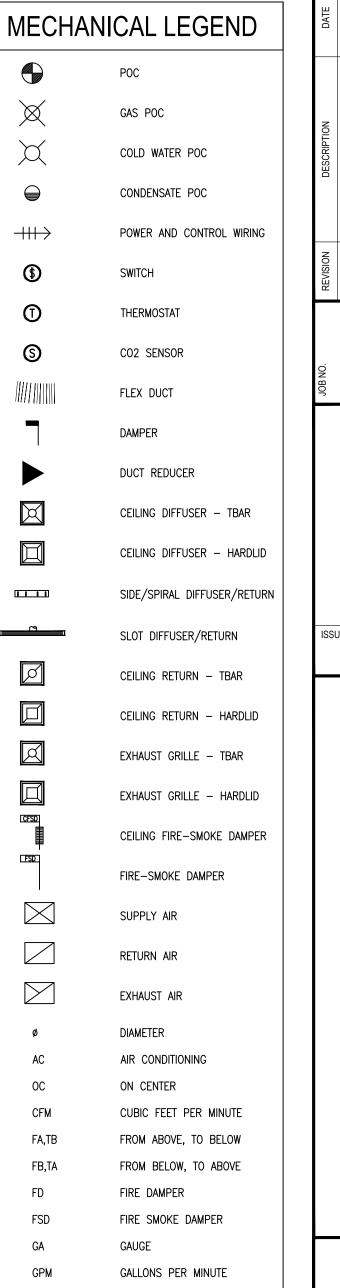
5.410.4 TESTING AND ADJUSTING OF SYSTEMS SHALL BE REQUIRED FOR BUILDINGS LESS THAN 10.000 SQUARE FEET OR NEW SYSTEMS TO SERVE AN ADDITION OR

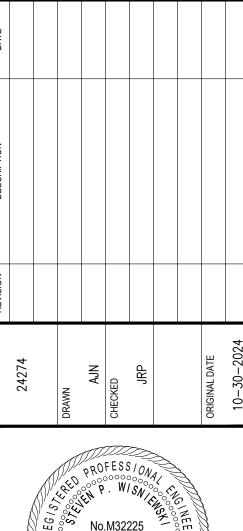
MECHANICAL SHEET INDEX

- MO MECHANICAL SCHEDULES & GENERAL NOTES
- M1 MECHANICAL PLAN FLOOR

MECHANICAL SCOPE OF WORK

- REUSE OF EXISTING SPLIT UNIT AND ALL ASSOCIATED DUCTWORK, DAMPERS. GRILLES. PIPING AND INSTALLATION OF NEW GRILLES AND EXTENSION OF EXISTING DUCTWORK FOR ALTERED SPACES
- INSTALLATION OF NEW CEILING EXHAUST SYSTEM FOR RESTROOMS AND ALL ASSOCIATED DUCTWORK, DAMPERS, AND GRILLES





No.M32225 EXP.12-31-2024 PERMIT 10-30-2024

HORSEPOWER BRAKE HORSEPOWER MAXIMUM / MINIMUM NOT TO SCALE OUTSIDE AIR SHEET METAL SCREW

RETURN AIR

SUPPLY AIR

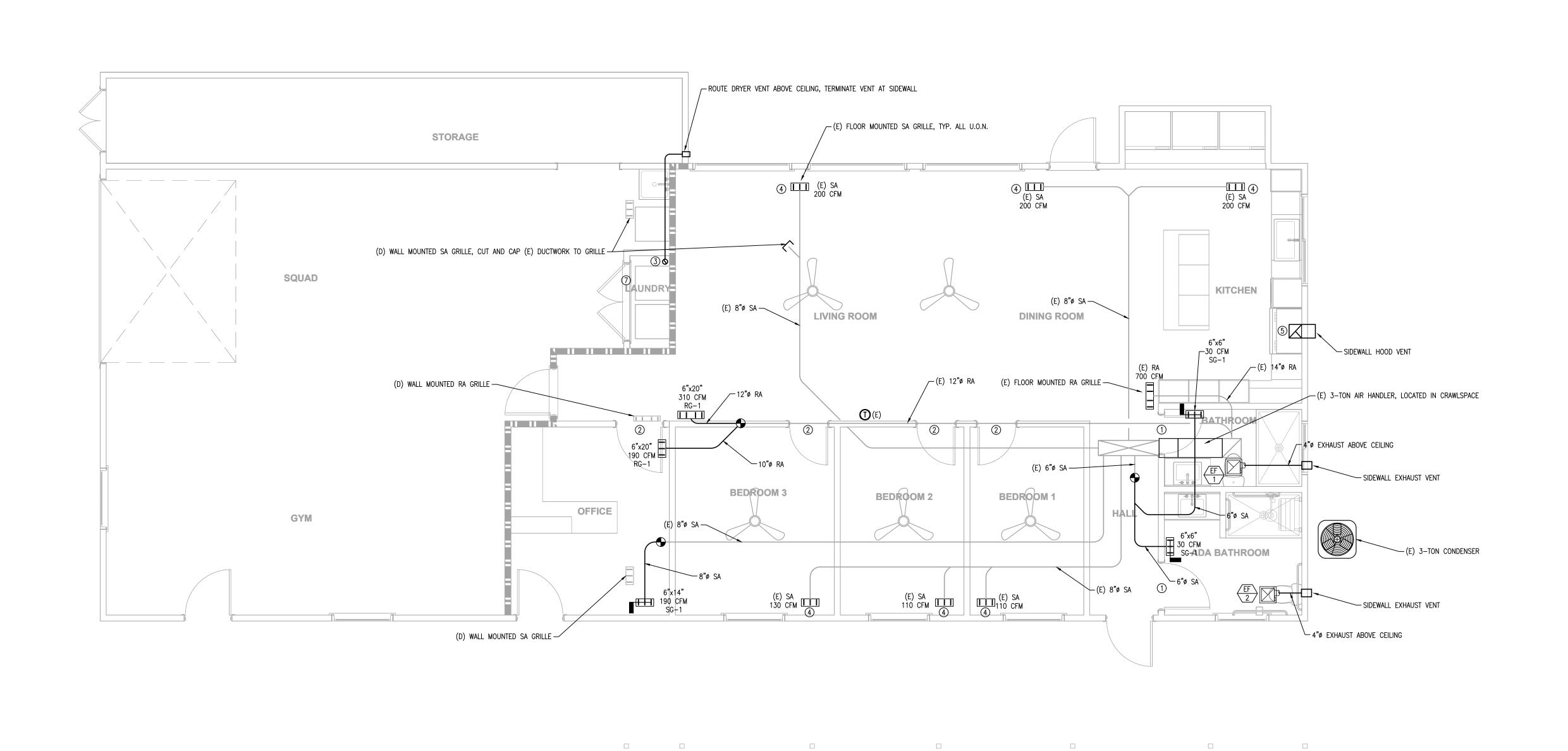
UNLESS OTHERWISE NOTED

0 OAD \triangleleft Ш Δ 9 ∞ S

> **MECHANICAL** SCHEDULES & GEN. NOTES

တ

SHEET NO.



SHEET NOTES:

 (E) EXISTING (N) NEW (R) RELOCATED (D) DEMO

2. ALL EQUIPMENT/CONTROLS AND DUCTWORK/FITTINGS SHOWN ARE (N)

3. ALL DUCTWORK PENETRATIONS TO THE EXTERIOR OF BUILDING SHALL BE CORROSION—RESISTANT AND PROTECTED FROM INTRUSION BY WATER, INSECTS, ETC.

4. REUSE (E) DUCTWORK AS MUCH AS POSSIBLE, FIELD VERIFY SIZES, LOCATIONS, AND ADJUST WORK AS REQUIRED AROUND EXISTING CONDITIONS. IF REUSING (E) DUCTWORK, CONCEALED DÙĆTWORK TO BE INSULATED WITH MINIMUM R-8, AND SHALL BE PERMITTED TO BE FLEX DUCT

5. EQUIPMENT IN ATTICS AND UNDER-FLOOR SPACES SHALL BE PROVIDED WITH AN ACCESS OPENING LARGE ENOUGH TO REMOVE THE LARGEST PIECE OF EQUIPMENT BUT NO LESS THAN 22"X30" PER CMC 304.4

6. ALL DUCTWORK IS IN CRAWLSPACE UNLESS OTHERWISE NOTED



PERMIT 10-30-2024



KEY NOTES:

- ① UNDERCUT DOOR FOR EXHAUST MAKEUP AIR
- ② UNDERCUT DOOR FOR RETURN MAKEUP AIR
- 3 4"Ø DRYER VENT TO SIDWALL, VENT PER MANUFACTURER INSTRUCTIONS PER CMC 504.4.2.1.
- CONTRACTOR TO RE-BALANCE (E)
 SUPPLY AIR GRILLES TO MATCH
 SPECIFIED AIRFLOW
- (5) KITCHEN HOOD TO PROVIDE MINIMUM 250 CFM OF EXHAUST AIR PER TABLE 150.0-G, AND MAX 3.0 SONES PER TITLE 24. HOOD TO BE INSTALLED PER REQUIRED CODE AND MANUFACTURER'S RECOMMENDATIONS
- 6 ENSURE INSTALLATION OF (1) 16"X14" LOUVER IN DOOR TO PROVIDE DRYER MAKEUP AIR PER CMC 504.4.1

RENOVATION 86

12337 BANNER LAVA CAP ROAD NEVADA CITY, CA 95959 STATION

MECHANICAL PLAN

FLOOR

M1

MECHANICAL PLAN - FLOOR

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

PLUMBING GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS AMENDED AND ADOPTED BY THE AUTHORITY(IES) HAVING JURISDICTION: 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), 2022 CALIFORNIA BUILDING CODE (CBC), 2022 CALIFORNIA FIRE CODE (CFC), 2022 CALIFORNIA MECHANICAL CODE (CMC), 2022 CALIFORNIA PLUMBING CODE (CPC), 2022 CALIFORNIA ELECTRICAL CODE (CEC), 2022 CALIFORNIA ENERGY CODE (CENC), 2022 CALIFORNIA GREEN BUILDING CODE (CGC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND ANY OTHER LOCAL CODES, ORDINANCES, REGULATIONS, OR AUTHORITIES HAVING JURISDICTION. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHER CODES AND REGULATIONS APPLICABLE TO THIS PROJECT. THESE CODES SHALL DETERMINE MINIMUM REQUIREMENTS FOR MATERIALS, METHODS, AND LABOR PRACTICES NOT OTHERWISE DEFINED IN THESE SPECIFICATIONS.
- CONTRACTOR TO EXAMINE THE PROPOSED WORK SITE AND BECOME FAMILIAR WITH ALL JOB CONDITIONS AFFECTING THE WORK SHOWN. CONTRACTOR(S) SHALL FIELD-VERIFY SITE CONDITIONS INCLUDING LOCATIONS AND SIZES OF EXISTING PIPING, VALVES, CLEANOUTS, WASTE MAINS, GAS METERS, ETC., AND BIDS SHALL BE BASED ON ACTUAL FIELD CONDITIONS. NO ADDITIONAL ALLOWANCE WILL BE GRANTED DUE TO LACK OF KNOWLEDGE OF SITE CONDITIONS. ACCEPT SOLE AND COMPLETE RESPONSIBILITY FOR CONDITIONS OF THE JOBSITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK.
- DRAWINGS INDICATE DIAGRAMMATICALLY THE ARRANGEMENT OF PRINCIPAL APPARATUS, PIPING, DUCTWORK, AND OTHER MATERIAL. FOLLOW DRAWING AS CLOSELY AS POSSIBLE IN ORDER TO ACHIEVE A NEAT INSTALLATION WHILE STILL WORKING AROUND ANY OBSTRUCTIONS. INSPECT SITE CONDITIONS AFFECTING THE WORK AND PROVIDE FITTINGS AND ACCESSORIES AS REQUIRED TO MEET CONDITIONS WHETHER SHOWN OR NOT.
- 4) IT IS NOT THE INTENTION OF THE PLANS AND SPECIFICATIONS TO COVER ALL INCIDENTALS REQUIRED TO PROVIDE COMPLETE AND FULLY-OPERATIONAL SYSTEMS. THE CONTRACTOR IS TO FURNISH ALL LABOR, MATERIALS, TRANSPORTATION, EQUIPMENT, MISCELLANEOUS SERVICES, ETC., REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION SHALL BE INCLUDED, WHETHER SPECIFICALLY SHOWN OR MENTIONED OR NOT. ENGINEER WILL PROVIDE INTERPRETATIONS UPON REQUEST.
- a. WORK: LABOR AND MATERIALS OF THE CONTRACTOR AND/OR SUBCONTRACTOR. b. FURNISH: OBTAIN, COORDINATE, SUBMIT THE NECESSARY DRAWINGS, DELIVER TO THE JOBSITE IN NEW CONDITION AND GUARANTEE. c. PROVIDE: FURNISH AND INSTALL
- d. CONNECT: BRING SERVICE TO THE EQUIPMENT AND MAKE FINAL ATTACHMENTS INCLUDING NECESSARY PIPE FITTINGS. DUCTWORK, TRANSITIONS, ETC.
- e. CONCEALED: HIDDEN FROM SIGHT IN CHASES, FURRED SPACES, SHAFTS, ABOVE CEILING, EMBEDDED IN CONSTRUCTION, IN CRAWL SPACES, OR BURIED.
- f. EXPOSED: NOT INSTALLED UNDERGROUND OR CONCEALED AS DEFINED ABOVE. g. PERFORMANCE: CONTRACTOR SHALL PERFORM ALL WORK SPECIFIED, INDICATED, AND REQUIRED UNLESS OTHERWISE NOTED, INCLUDING FINAL CONNECTIONS, IN A WORKMANLIKE MANNER USING WORKERS SKILLED AND EXPERIENCED IN THE TRADE. PIPES, FIXTURES, EQUIPMENT, GRILLES, REGISTERS, ETC. TO BE INSTALLED
- LEVEL, SQUARE, OR CENTERED, ETC. TO GIVE A NEAT APPEARANCE. h. FULL FUNCTION: PROVIDE ALL MINOR ITEMS NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL INSTALLATION.
- CONTRACTOR SHALL CONFIRM ALL SITE VOLTAGES BEFORE BIDDING AND ORDERING EQUIPMENT. REIMBURSE ELECTRICAL CONTRACTOR, AT NO CHARGE TO CLIENT, FOR ELECTRICAL CONTRACTOR'S COST INCURRED DUE TO SUBSTITUTION OF MECHANICAL EQUIPMENT HAVING ELECTRICAL REQUIREMENTS DIFFERING FROM SITE CONDITIONS.
- CONTRACTOR SHALL PROVIDE THE OWNER WITH COPIES OF OPERATION, MAINTENANCE, AND PREVENTATIVE MAINTENANCE MANUALS FOR EACH MODEL AND TYPE OF PLUMBING AND MECHANICAL EQUIPMENT.
- 8) CONTRACTOR SHALL PROVIDE EVIDENCE OF LICENSING, BONDING, AND INSURANCE, AND PROVIDE OTHER NECESSARY ADMINISTRATIVE FUNCTIONS FOR CONTRACTOR'S WORK.
- 9) CONTRACTOR SHALL PROCURE AND PAY FOR ALL REQUIRED PERMITS AND SERVICE CHARGES.
- 10) COORDINATION: CONFORM TO GENERAL CONSTRUCTION CONTRACT DOCUMENTS EXCEPT AS MODIFIED HEREIN. REFER ALSO TO STRUCTURAL AND ELECTRICAL CONTRACT DOCUMENTS. COORDINATE ALL WORK WITH OTHER

11) CUTTING AND PATCHING: CUT AND PATCH AS REQUIRED. CUT OR WELD STRUCTURAL MEMBERS ONLY WITH

- APPROVAL OF A STRUCTURAL ENGINEER. PATCHING SUBJECT TO ACCEPTANCE BY OWNER.
- 12) SAW CUT TRENCHES IN SLAB SHALL BE FULLY RESTORED AND REINFORCED TO PREVENT SAGGING. ROUGHEN SAW CUT EDGES PRIOR TO RE-POURING CONCRETE.
- 13) COORDINATE ALL WORK WITH OTHER TRADES TO PROVIDE A COMPLETE INSTALLATION. CONNECT ALL EQUIPMENT FURNISHED BY OTHERS AS REQUIRED. INSTALL ALL WORK TO CLEAR ARCHITECTURAL AND STRUCTURAL MEMBERS. INSTALL ALL ABOVE GRADE (OVERHEAD) PIPING AS HIGH AS PRACTICAL.
- 14) RESTORE ALL DAMAGE RESULTING FROM YOUR WORK AND LEAVE PREMISES IN CLEAN CONDITION WHEN FINISHED WITH WORK. ADJUST, CLEAN, REPAIR, OR REPLACE PRODUCTS, WHICH HAVE BEEN DAMAGED.
- 15) GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR MINIMUM FROM DATE OF FILING NOTICE OF COMPLETION. 16) PROVIDE FLASHING AND COUNTER FLASHING FOR ALL WALL AND ROOF PENETRATIONS.

ARE NECESSARY TO PROPER OPERATION AND WITHIN THE INTENT OF THE CONTRACT.

- 17) ADJUSTMENTS: MAKE MINOR ADJUSTMENTS TO WORK WHERE REQUESTED BY OWNER, WHEN SUCH ADJUSTMENTS
- 18) MATERIALS AND EQUIPMENT: PROVIDE NEW, UL-LISTED, COMMERCIAL-GRADE MATERIALS, DEVICES, EQUIPMENT, AND FIXTURES SUITABLE FOR THE ENVIRONMENT WHERE INSTALLED. REUSE EXISTING ONLY WHEN COMPLIANT WITH THE CONTRACT DOCUMENTS, IN GOOD CONDITION, AND APPROVED BY THE ENGINEER.
- 19) INSTALLATION: INSTALL ALL MATERIALS, EQUIPMENT, AND SYSTEMS IN FULL ACCORD WITH MANUFACTURER'S INSTRUCTIONS.
- 20) LAYOUT: INSTALL ALL PIPING AND DUCTWORK TO PRESENT A NEAT AND ORDERLY APPEARANCE. RUN ALL LINES PARALLEL WITH BUILDING CONSTRUCTION AS MUCH AS POSSIBLE. MAINTAIN HEADROOM, EQUIPMENT CLEARANCE, AND GRADIENT WHERE REQUIRED. ALLOW FOR EXPANSION & CONTRACTION.
- 21) ACCESS DOORS: PROVIDE ACCESS DOORS OR PANELS FOR ALL VALVES, CLEANOUTS, DAMPERS, CONTROLS, DEVICES, AND OTHER ITEMS REQUIRING INSPECTION OR MAINTENANCE.
- 22) START-UP: THOROUGHLY TEST AND DEMONSTRATE PROPER OPERATION OF ALL SYSTEMS AND EQUIPMENT MODIFIED, FURNISHED OR INSTALLED UNDER THIS CONTRACT.
- 23) WARRANTY: ALL MATERIALS AND EQUIPMENT INSTALLED UNDER THIS CONTRACT SHALL BE GUARANTEED FREE FROM ALL MECHANICAL, ELECTRICAL, AND WORKMANSHIP DEFECTS FOR A MINIMUM OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE PREMISES CAUSED BY LEAKS AND/OR BREAKS IN PIPES AND FIXTURES INSTALLED UNDER THIS CONTRACT, AS WELL AS ANY DAMAGE FROM LEAKS VIA ROOF PENETRATIONS MADE AND SEALED UNDER CONTRACTOR'S SCOPE.
- 24) PATCHING & PAINTING: RESTORE ANY DAMAGE RESULTING FROM THE WORK AND LEAVE PREMISES CLEAN. ADJUST, CLEAN, REPAIR, AND/OR REPLACE ANY ITEMS DAMAGED BY THE WORK. RESTORE WALL AND ROOF PENETRATIONS TO MATCH SURROUNDING WALL OR ROOF, RESPECTIVELY.

PLUMBING CALGREEN NOTES

- 5.303.3.1 THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.
- 5.303.3.2 THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH. ALL OTHER URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.
- 5.303.3.3 SINGLE SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI. OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME.
- 5.303.3.4 NON-RESIDENTIAL LAVATORY FAUCETS SHALL HAVE A MAX FLOW RATE OF NOT MORE THAN 0.5 GPM AT 60 KITCHEN FAUCETS AND WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GPM AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTES AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTES AT 60 PSI. METERING FAUCETS SHALL NOT DELIVER MORE THAN 0.20 GALLONS PER CYCLE.
- 5.303.5 FOR THOSE OCCUPANCIES WITHIN THE AUTHORITY OF THE CALIFORNIA BUILDING STANDARDS COMMISSION AS SPECIFIED IN SECTION 103, THE PROVISIONS OF SECTION 5.303.3 AND 5.303.4 SHALL APPLY TO NEW FIXTURES IN ADDITIONS OR AREAS OF ALTERATIONS TO THE BUILDING.
- 5.303.6 PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN CPC TABLE 1701.1 AND CALGREEN
- 5.410.4.5 PROVIDE THE BUILDING OWNER WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM PRIOR TO FINAL INSPECTION.

					Р	LUMB	BING FI	XTUR	E SCI	HEDU	LE				
							WATER SUPPLY	,	DR	AIN		PIPE	SIZES		
TAG	FIXTURE	TYPE	MOUNTING	MANU.	MODEL NO.	MANU.	MODEL NO.	MAX GPM/GPF	TYPE	SIZE	WASTE	VENT	CW	HW	REMARKS
BP-1	BACKFLOW PREVENTER	REDUCED PRESSURE ZONE ASSEMBLY	-	WATTS	LF009	-	-	-	-	-	-	-	SEE PLAN	-	
CO-1	CLEANOUT	WALL	-	ZURN	Z1446	-	_	-	-	-	SEE PLAN	-	-	-	
CW-1	CLOTHES WASHER	-	FLOOR		ATE MODEL WITH OWNER	-	-	-	P-TRAP	2"	2"	1-1/2"	1/2"	1/2"	
DW-1	DISHWASHER	RESIDENTIAL	UNDER COUNTER		ATE MODEL WITH OWNER	-	-	-	INDIRECT	1-1/2"	-	_	-	1/2"	SHALL COMPLY WITH UL 749
LAV-1	LAVATORY	METERED	UNDER COUNTER	AMERICAN STANDARD	0614.000	SLOAN	SF-2350	0.5	P-TRAP	1-1/4"	1-1/2"	1-1/4"	1/2"	1/2"	ADA COMPLIANT, BATTERY POWERED SENSOR ACTIVATED, PROVIDE 4" CENTERSET HOLES
MS-1	MOP SINK	-	FLOOR	FIAT	MSB-2424	CHICAGO	897	-	P-TRAP	3"	2"	1-1/2"	1/2"	1/2"	FAUCET WITH ATMOSPHERIC VACUUM BREAKER
SH-1	SHOWER	-	-		ATE MODEL WITH OWNER		ATE MODEL WITH OWNER	1.8	P-TRAP	2"	2"	1-1/2"	1/2"	1/2"	ADA COMPLIANT
SK-1	SINK	SINGLE COMPARTMENT	DROP-IN		ATE MODEL WITH OWNER	CHICAGO	786-E35- 319ABCP	1.8	P-TRAP	1-1/2"	2"	1-1/2"	1/2"	1/2"	INSTALL 3/4 HP COMPACT GARBAGE DISPOSAL
TMV-1	THERMOSTATIC MIXING VALVE	-	-	WATTS	LFMMV-M1	-	-	-	-	-	-	-	1/2"	1/2"	ASSE STANDARD 1017, 1069, AND 1070 LISTED, 0.5-12 GPM FLOW RATING
WC-1	WATER CLOSET	GRAVITY	FLOOR	AMERICAN STANDARD	3378AB.128	-	-	1.28	INTEGRAL P-TRAP	-	3"	2"	1/2"	-	ADA COMPLIANT, ELONGATED OPEN FRONT SEAT

					WA	TER H	IEATEF	R SCHE	EDULE				
TAG	MANU.	MODEL NO.	LOCATION	UEF (TE)	FUEL SOURCE	INPUT MBH (KW)	RECOVERY GPH (GPM)	VENTING	ELECTRICA	AL AMPS	WEIGHT LBS	MAX T-STAT SETPOINT	REMARKS
WH-1	NAVIEN	NPE-150S	OUTDOORS	0.96	PROPANE	120	(3.2) @67°F RISE	OUTDOOR VENT KIT	120-1-60	2.0	57	120°F	_

FIXTURE TYPE	NO.	SE	WER		DLD TER		OT ITER	TOT WAT
		FU	TOTAL	FU	TOTAL	FU	TOTAL	F
CLOTHES WASHER	1	3	3	4	4	3	3	4
DISHWASHER	1	2	2	0	0	1.5	1.5	1
LAVATORY	2	1	2	1	2	0.75	1.5	2
MOP OR SERVICE SINK	1	3	3	3	3	2.25	2.25	,
SHOWER	2	2	4	2	4	1.5	3	
WATER CLOSET - GRAVITY	2	4	8	2.5	5	0	0	
MISC EQUIP (ICE, SODA, COFFEE)	1	1	1	0.5	0.5	0	0	0
EXISTING DEMAND	1	0	0	3.5	3.5	0	0	3
TOTAL FU			23.0		22.0		11.3	23
EQUIVALENT COLD WATER FLOW R. PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRES ELEVATION LOSS (PSI):):				16 50 8 1.3		OF FLOORS:	
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRES): SURE (PSI): :: ETER TO MOST BLE (PSI):		IXTURE (FT):		50 8		# OF FLOORS: IZE (INCHES):	0.
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRESE ELEVATION LOSS (PSI): METER LOSS (PSI): BACKFLOW PREVENTER LOSS (PSI) EQUIVALENT PIPE LENGTH FROM M FRICTION LOSS PRESSURE AVAILABLE	SURE (PSI): ETER TO MOST BLE (PSI): SS (PSI/100 FT		IXTURE (FT):		50 8 1.3 6.0 10 200 24.70			
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRESELEVATION LOSS (PSI): METER LOSS (PSI): BACKFLOW PREVENTER LOSS (PSI) EQUIVALENT PIPE LENGTH FROM MERICTION LOSS PRESSURE AVAILABEMAXIMUM ALLOWABLE FRICTION LOST	SURE (PSI): ETER TO MOST BLE (PSI): SS (PSI/100 FT):	IXTURE (FT):		50 8 1.3 6.0 10 200 24.70 9.88			
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRESE ELEVATION LOSS (PSI): METER LOSS (PSI): BACKFLOW PREVENTER LOSS (PSI) EQUIVALENT PIPE LENGTH FROM MERICTION LOSS PRESSURE AVAILABLE MAXIMUM ALLOWABLE FRICTION LOMINIMUM REQUIRED 'WATER' PIPE SE	SURE (PSI): ETER TO MOST BLE (PSI): SS (PSI/100 FT):	IXTURE (FT):	CWFIXT	50 8 1.3 6.0 10 200 24.70 9.88	S		0.
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRESELEVATION LOSS (PSI): METER LOSS (PSI): BACKFLOW PREVENTER LOSS (PSI) EQUIVALENT PIPE LENGTH FROM MERICTION LOSS PRESSURE AVAILABED MAXIMUM ALLOWABLE FRICTION LOMINIMUM REQUIRED 'WATER' PIPE SEMINIMUM REQUIRED 'SEWER' PIPE	SURE (PSI): ETER TO MOST BLE (PSI): SS (PSI/100 FT):		CWFIXT FLUSH TANK	50 8 1.3 6.0 10 200 24.70 9.88 1	S	IZE (INCHES):	
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRESELEVATION LOSS (PSI): METER LOSS (PSI): BACKFLOW PREVENTER LOSS (PSI) EQUIVALENT PIPE LENGTH FROM METER TOOLOGY PRESSURE AVAILABLY MAXIMUM ALLOWABLE FRICTION LOMINIMUM REQUIRED 'WATER' PIPE SERIEM STATEMENT OF THE SERIEMENT PIPE SERIEMENT OF THE SE	SURE (PSI): ETER TO MOST BLE (PSI): SS (PSI/100 FT BIZE (INCHES): BIZE (INCHES):	CWMA	X FLOW	FLUSH	50 8 1.3 6.0 10 200 24.70 9.88 1 3 URE UNIT	HWMA	IZE (INCHES):	O.
PRESSURE AVAILABLE AT MAIN (PSI MINIMUM REQUIRED FIXTURE PRESELEVATION LOSS (PSI): METER LOSS (PSI): BACKFLOW PREVENTER LOSS (PSI) EQUIVALENT PIPE LENGTH FROM MERICTION LOSS PRESSURE AVAILABE MAXIMUM ALLOWABLE FRICTION LOMINIMUM REQUIRED 'WATER' PIPE SEMINIMUM REQUIRED 'SEWER' PIPE	SURE (PSI): ETER TO MOST BLE (PSI): SS (PSI/100 FT BIZE (INCHES): BIZE (INCHES): INTERNAL DIAMETER	CW MA	X FLOW FPS	FLUSH TANK	50 8 1.3 6.0 10 200 24.70 9.88 1 3 URE UNIT	HW MA	XFLOW FPS	H FIXT UN

NOTES: COORDINATE ALL TRIM AND ACCESSORY OPTIONS WITH OWNER

EQUIVALENT FIXTURES ACCEPTABLE CONTINGENT ON OWNER APPROVAL

	9	GAS SEI	RVICE CA	LCULA	ATION
		INPUT PER	INPUT T	OTAL	PIPE SIZING
APPLIANCE TYPE	NO.	IN OTTER	1141 01 1	OTAL	NOMINAL DIAMETER MAX CAPACITY
		BTU	BTU	MBH	(INCHES) (MBH)
EXISTING HVAC UNIT	1	80000	80000	80	1/2 67
WATER HEATER (WH-1)	1	120000	120000	120	3/4 140
EXISTING REZNOR HEATER	1	100000	100000	100	1 265
RANGE	1	65000	65000	65	1-1/4 543
CLOTHES DRYER	1	35000	35000	35	
TOTAL				400.0	
GAS SERVICE TYPE:				PROPANE	CALCULATIONS PER CPC TABLE 1215.2(27)
PRESSURE AVAILABLE AT METER:				< 2 PSI	RUNOUTS TO APPLIANCES LESS THAN 3FT TO
EQUIVALENT PIPE LENGTH FROM ME	ETER TO MO	ST REMOTE AF	PPLIANCE (FT):	200	BE THE SAME SIZE AS APPLIANCE CONNECTION S.O.V. AHEAD OF UNION, WITHIN 3FT OF EACH
					APPLIANCE. S.O.V. AND UNION SHALL BE AGA
MINIMUM REQUIRED 'GAS MAIN' PIPE	SIZE (INCH	ES):		1-1/4	APPROVED.

PLUMBING SHEET INDEX

- PO PLUMBING SCHEDULES, CALCULATIONS, & GEN. NOTES
- P1 PLUMBING PLAN WATER & GAS
- PLUMBING PLAN SEWER & VENT
- P3 PLUMBING DETAILS

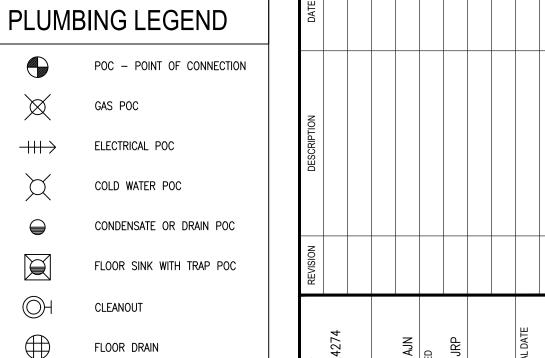
PLUMBING SCOPE OF WORK

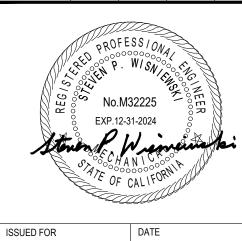
- INSTALLATION OF ALL COLD AND HOT WATER PIPING AND FITTINGS FOR NEW FIXTURES
- INSTALLATION OF ALL SEWER AND VENT PIPING AND FITTINGS FOR NEW FIXTURES
- INSTALLATION OF ALL GAS PIPING AND FITTINGS FOR NEW WATER

	PIF	PE MA	TERIAL SCHEDULE	
APPLICATION	LOCATION	SIZE	MATERIAL	JOINING METHOD
SANITARY WASTE/VENT	BELOW GRADE	ALL	SCHEDULE 40 ABS	SOLVENT
SANITARY WASTE/VENT	ABOVE GRADE	ALL	SCHEDULE 40 ABS	SOLVENT
T&P RELIEF	ALL	ALL	COPPER (TYPE M)	95/5 SOLDER
CAC	BELOW GRADE	ALL	POLYETHYLENE (ASTM D2513)	COMPRESSION FITTINGS
GAS	ABOVE GRADE	ALL	SCHEDULE 40 BLACK STEEL (ASTM A53)	THREADED
DOMESTIC WATER IN OR	BELOW GRADE	ALL	COPPER (TYPE K) W/CORROSION-RESISTANT TAPE	LEAD FREE BRAZED
WITHIN 5' OF BUILDING	ABOVE GRADE	ALL	COPPER (TYPE L OR K)	95/5 SOLDER

NOTES: ALL PIPING MATERIAL AND JOINING METHODS CONTINGENT ON AUTHORITY HAVING JURISDICTION APPROVAL ALL BLACK STEEL PIPING EXPOSED TO MOISTURE SHALL BE PROTECTED BY RUST-PREVENTATIVE PAINT ALL ABS AND PVC PIPING EXPOSED TO SUNLIGHT SHALL BE PROTECTED BY WATER-BASED LATEX PAINT

	PIPE IN	SULATION SC	HEDULE	
TYPE	DIAMETER SIZE (INCHES)	FLUID TEMP RANGE (°F)	INSULATION CONDUCTIVITY (BTU*INCH/HR*FT ² **F)	INSULATION THICKNESS (INCHES)
DOMESTIC HOT WATER	<1	105-140	0.22-0.28	1
DOMESTIC HOT WATER	1 OR LARGER	105-140	0.22-0.28	1-1/2





PERMIT

---- NG ---- NATURAL GAS

—-—SSV—-— SANITARY SEWER VENT

— — SS— — SANITARY SEWER

FLOOR SINK

TRAP PRIMER

HOSE BIBB

WATER HAMMER ARRESTOR

BACKFLOW PREVENTER

INSTA-HOT WATER HEATER

SHUT-OFF VALVE

PUMP

— CW — COLD WATER

—— HW —— HOT WATER

DIAMETER

ABOVE FINISHED FLOOR BELOW FLOOR

BRAKE HORSEPOWER

DRAINAGE FIXTURE UNIT FA.TB FROM ABOVE, TO BELOW

FIXTURE UNIT

FILTERED WATER GAUGE

GALLONS PER MINUTE GPM GREASE WASTE

HORSEPOWER MAX/MIN MAXIMUM / MINIMUM NOT TO SCALE

SHUT-OFF VALVE TOTAL DEVELOPED LENGTH

THERMOSTATIC MIXING VALVE TYPICAL

VENT TO ROOF UNLESS OTHERWISE NOTED

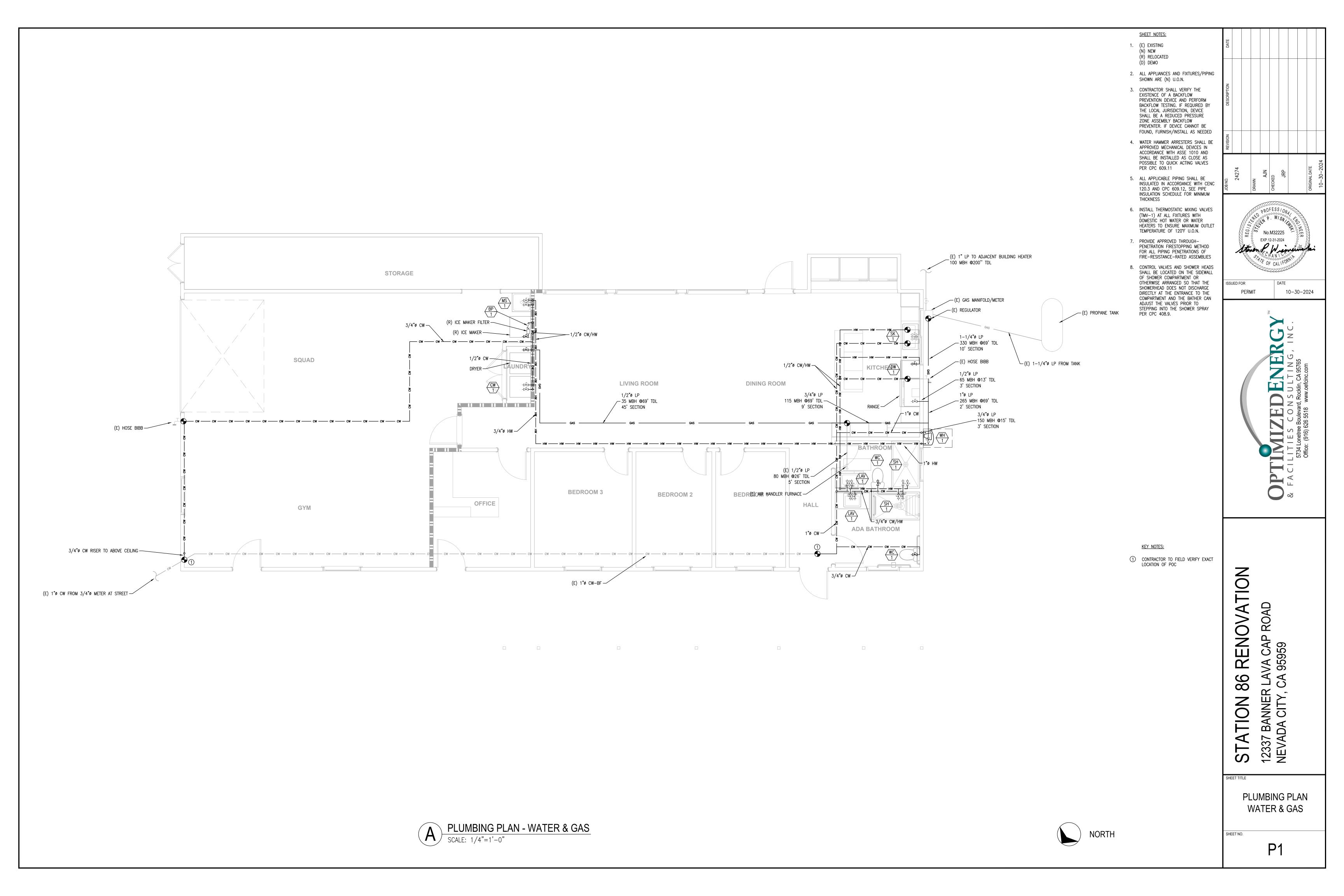
WATER HEATER

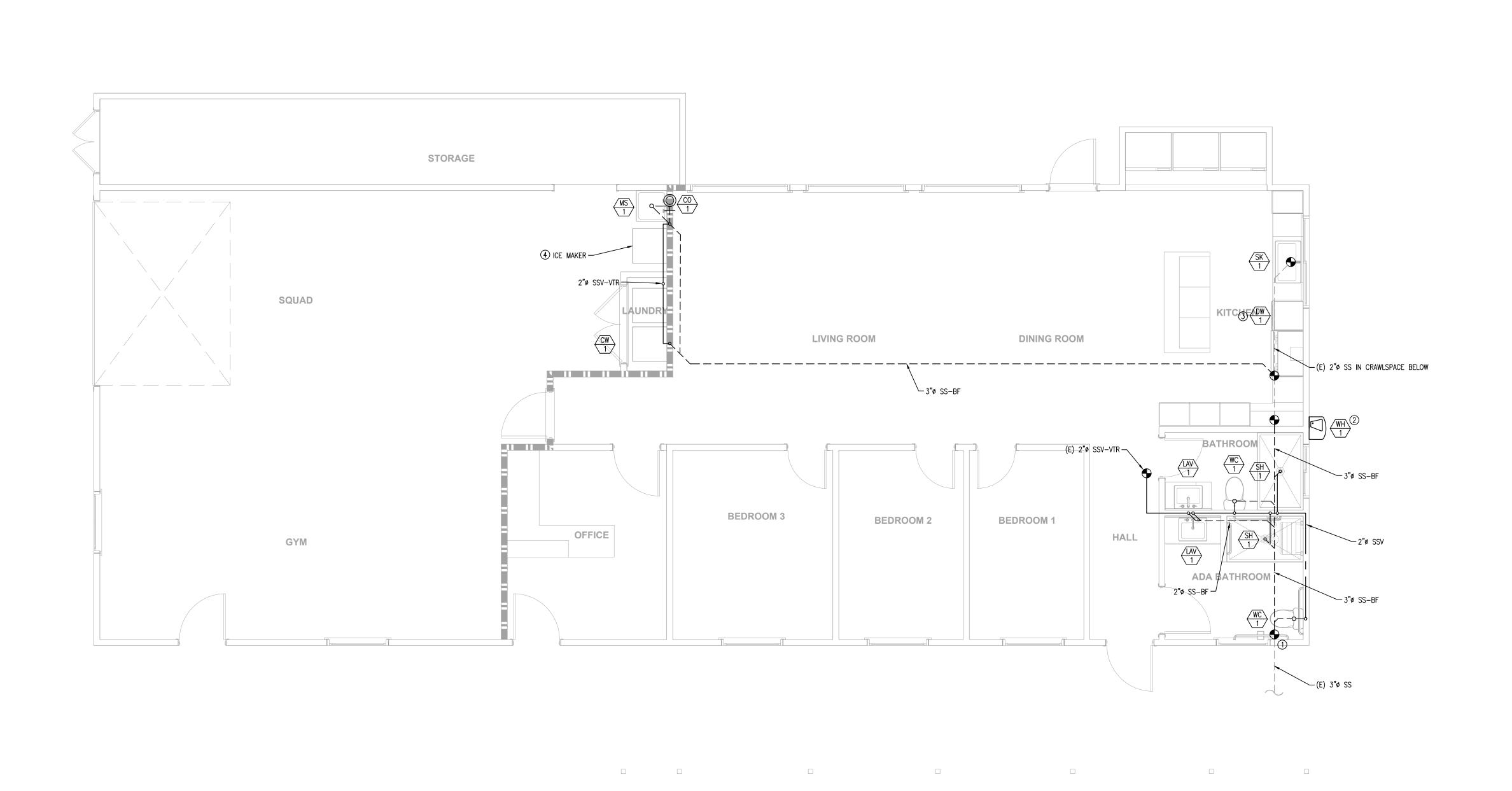
10-30-2024 LT] O

O OAD Q 0 Ш \circ **公** ∞ A S

PLUMBING SCHEDULES, CALCULATIONS, & GEN. NOTES

တ





SHEET NOTES:

1. (E) EXISTING (N) NEW (R) RELOCATED (D) DEMO

- 2. ALL APPLIANCES AND FIXTURES/PIPING SHOWN ARE (N) U.O.N.
- 3. ENSURE CLEANOUT TO GRADE EXISTS
- ENSURE 1/4" PER FOOT SLOPE FOR SANITARY SEWER PIPING
- PROVIDE WALL CLEANOUTS (CO-1) AT ALL LAVATORIES, HAND SINKS, & CLOTHES WASHERS
- 6. PROVIDE APPROVED THROUGH—
 PENETRATION FIRESTOPPING METHOD
 FOR ALL PIPING PENETRATIONS OF FIRE-RESISTANCE-RATED ASSEMBLIES





- CONNECT TO EXISTING SANITARY
 SEWER, FIELD VERIFY EXACT LOCATION,
 DEPTH, SIZE, AND FLOW DIRECTION
 PRIOR TO THE START OF WORK. VERIFY
 WASTE PIPING IS ACTIVE PRIOR TO
 CONNECTING
- 3 DISHWASHER TO DRAIN TO GARBAGE DISPOSAL IN SINK

(4) ICE MAKER DRAIN TO APPROVED EXTERIOR LOCATION

KEY NOTES:

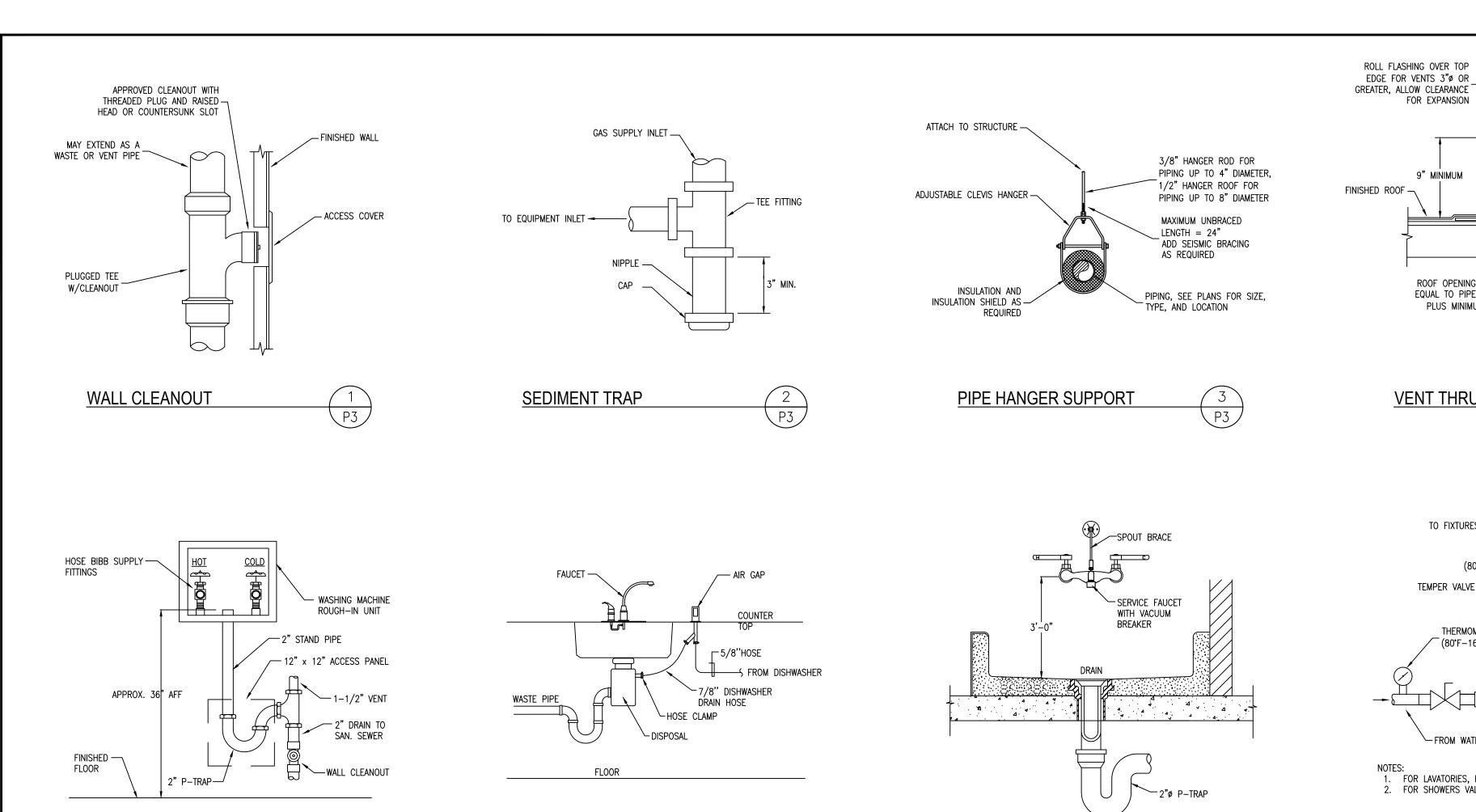
RELIEF VALVE AND CPVC CONDENSATE
PIPING TO APPROVED LOCATION

STATION 86 RENOVATION R LAVA CAP ROAD , CA 95959 12337 BANNER L NEVADA CITY, C

PLUMBING PLAN SEWER & VENT

PLUMBING PLAN - SEWER & VENT

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



DISHWASHING MACHINE DRAIN

MOP SINK

WASHING MACHINE HOOK-UP

MOUNT WATER -HEATER TO WALL

INTO CENTERLINE OF 2X STUD/BLKG.

HOSE BIBB (TYP) -

DI-ELECTRIC UNIONS AT

ALL DISSIMILAR METAL —

CONNECTIONS (TYP)

HOT WATER SUPPLY LINE

LENGTH OF 3"

OUTDOOR INSTALLATION

00000

1. INSULATE ALL HOT WATER PIPING PER CENC

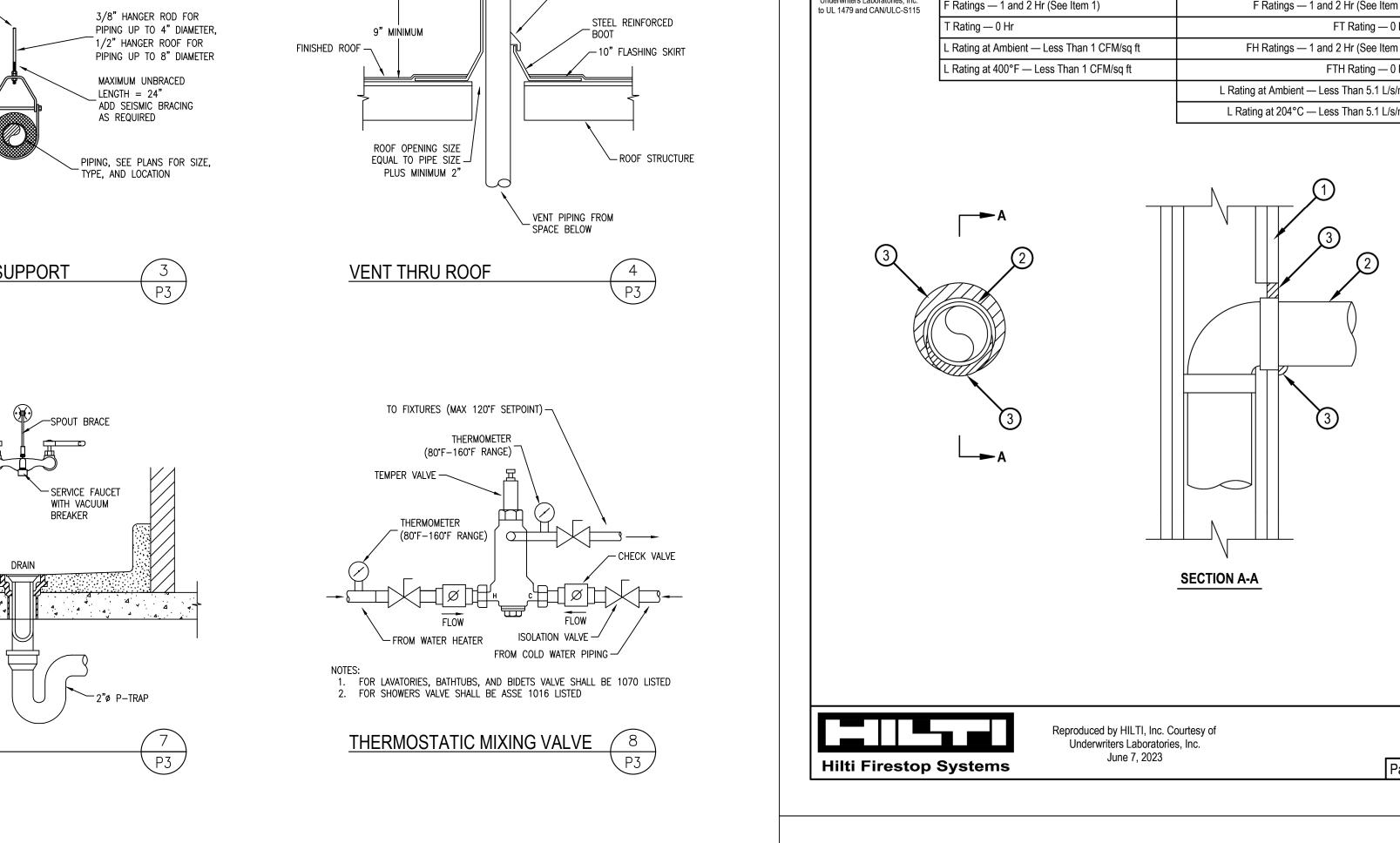
TANKLESS WATER HEATER - OUTDOORS

2. INSTALL SEDIMENT TRAP ON GAS SUPPLY PIPE, MINIMUM

_ TANKLESS WATER

/ ISOLATION BALL VALVE (TYP)

COLD WATER SUPPLY LINE

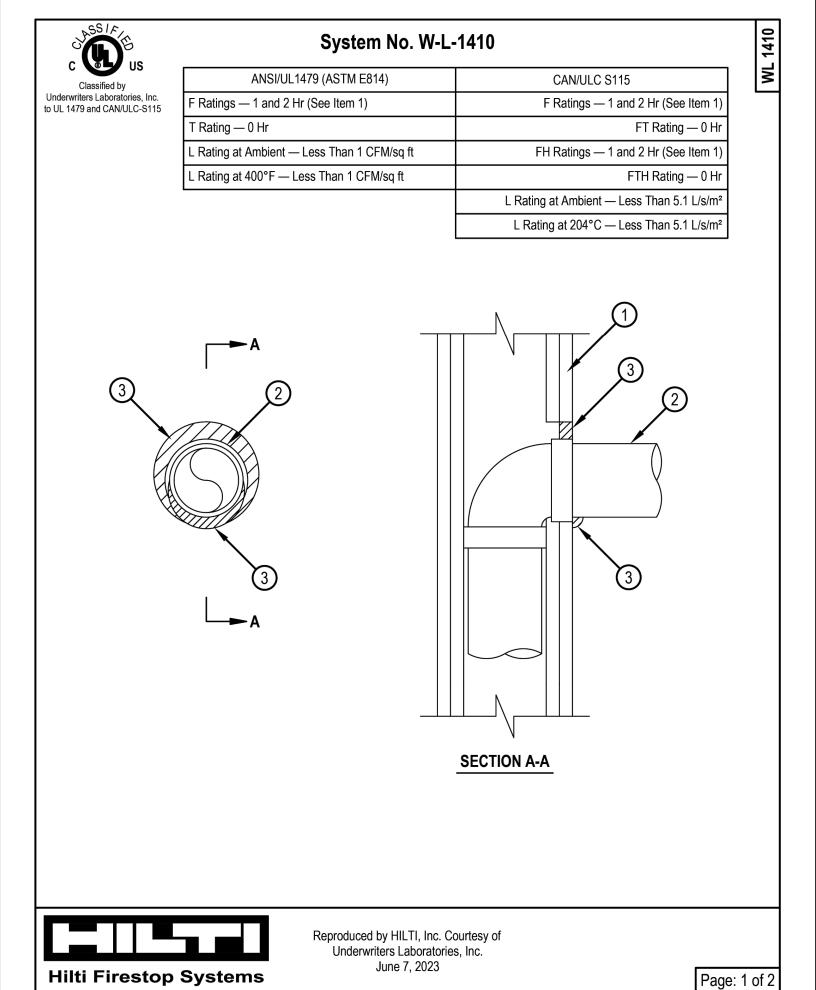


COUNTER FLASHING AND

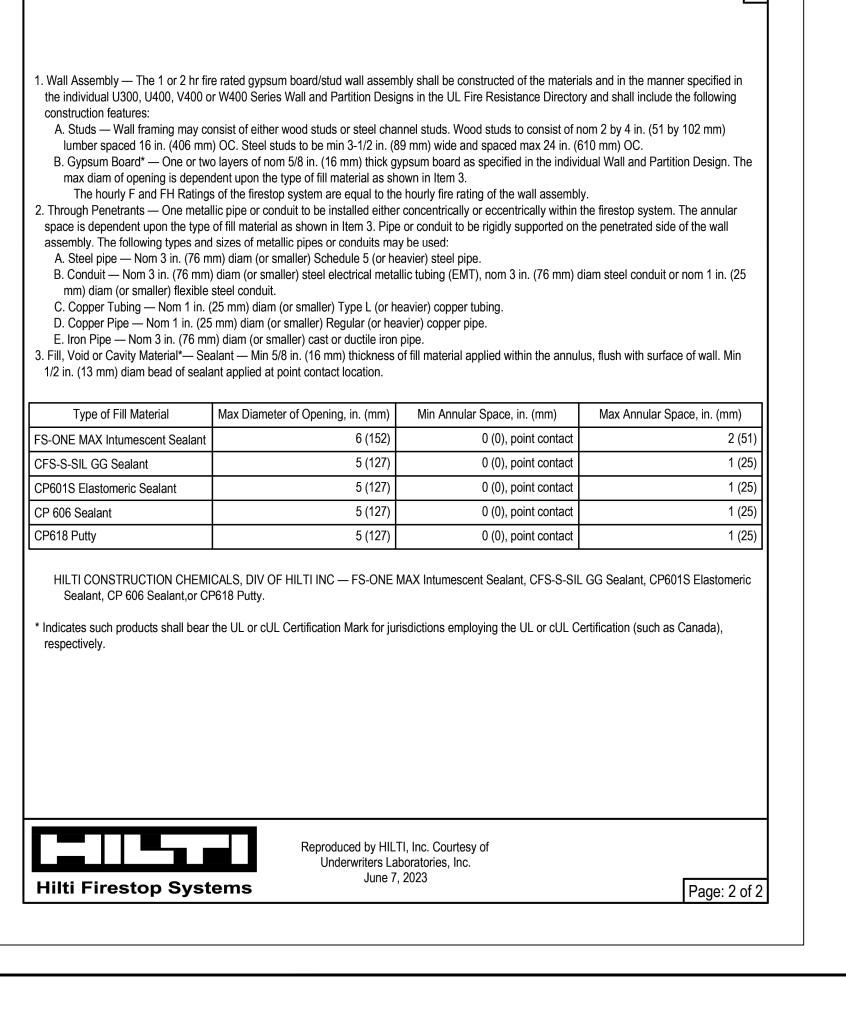
2-1/2"ø OR SMALLER

__ SEALANT_FOR_VENT

FOR EXPANSION



System No. W-L-1410





RENOVATION R LAVA CAP ROAD, CA 95959 86 12337 BANNER I NEVADA CITY, C STATION

> PLUMBING **DETAILS**

SHEET NO.

ELECTRICAL GENERAL NOTES

- 1) ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS AMENDED AND ADOPTED BY THE AUTHORITY(IES) HAVING JURISDICTION: 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), 2022 CALIFORNIA BUILDING CODE (CBC), 2022 CALIFORNIA FIRE CODE (CFC), 2022 CALIFORNIA MECHANICAL CODE (CMC), 2022 CALIFORNIA PLUMBING CODE (CPC), 2022 CALIFORNIA ELECTRICAL CODE (CEC), 2022 CALIFORNIA ENERGY CODE (CENC), 2022 CALIFORNIA GREEN BUILDING CODE (CGC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND ANY OTHER LOCAL CODES, ORDINANCES, REGULATIONS, OR AUTHORITIES HAVING JURISDICTION. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHER CODES AND REGULATIONS APPLICABLE TO THIS PROJECT. THESE CODES SHALL DETERMINE MINIMUM REQUIREMENTS FOR MATERIALS, METHODS, AND LABOR PRACTICES NOT OTHERWISE DEFINED IN THESE SPECIFICATIONS.
- 2) CEC AND MAXIMUM VOLTAGE DROP OF 5% WILL DEFINE CONDUCTOR SIZING.
- 3) ALL CONDUCTORS SHALL BE IN CONDUITS, U.O.N. CONDUITS SHALL BE USED IN THE FOLLOWING
- POLYVINYL CHLORIDE (PVC) CONDUITS ALLOWED FOR UNDERGROUND OTHERWISE PROVIDE RMC OR IMC, INSTALL PER CEC TABLE 300.5 BURIAL DEPTH REQUIREMENTS - ELECTRICAL METALLIC TUBING (EMT) WITH COMPRESSION FITTINGS MAY BE USED IN OR ON WALLS OR
- CEILINGS WHERE NOT SUBJECT TO MECHANICAL DAMAGE, DAMP CONDITIONS OR CORROSIVE - LIQUID TIGHT FLEXIBLE METAL CONDUIT WHERE REQUIRED;
- FLEXIBLE METALLIC CONDUIT, WHERE REQUIRED BY CEC, IN DRY LOCATIONS. NOTE: ALL CONDUITS IN HAZARDOUS LOCATIONS (PER CEC) SHALL MEET THE REQUIREMENTS OF CEC CHAPTER 5.
- CONNECTION TO LIGHT FIXTURES ABOVE LAY-IN CEILING MAY USE 3/8" FLEXIBLE METAL CONDUIT PER CEC 348.20(A)(2) - ALL EXPOSED CONDUIT SUBJECT TO WEAR OR COLLISION SHALL BE RIGID GALVANIZED STEEL (RGS)
- OR INTERMEDIATE METALLIC TUBING (IMT). APPLY BITUMASTIC COATING TO ALL METALLIC CONDUITS IN SLABS OR UNDERGROUND. - PROVIDE FIRE RETARDANT U.L. APPROVED SEALANT ON ALL RACEWAY PENETRATIONS OF FIRE RATED CEILINGS, PARTITIONS, WALLS AND STRUCTURAL SLABS.
- 4) FOR TELEPHONE SYSTEM: PROVIDE GROUNDING FOR ALL TELEPHONE BACKBOARDS, TERMINAL CABINETS AND EQUIPMENT PER REQUIREMENTS OF CEC 800 AND TELEPHONE COMPANY.
- ALL EQUIPMENT SHALL BE PROVIDED WITH AN APPROVED DISCONNECTING MEANS PER CEC. ALL DISCONNECT SWITCHES SHALL BE SIZED PER CEC TO ACCOMMODATE EQUIPMENT SERVED, INCLUDING REQUIRED FUSES, U.O.N. SWITCHES SHALL BE HORSE POWER RATED, OF HEAVY DUTY TYPE. PROVIDE MEANS FOR PAD LOCKING IN THE OPEN POSITION.
- 6) ALL CIRCUIT BREAKERS SHALL BE INVERSE TIME (THERMAL MAGNETIC) "PERMANENT TRIP" TYPE. TWO AND THREE POLE CIRCUIT BREAKERS SHALL BE COMMON TRIP.
- ALL CONNECTIONS TO GROUND RODS AND GRID, ETC., SHALL BE MADE WITH U.L. APPROVED WELDED CONNECTIONS, UNLESS NOTED OTHERWISE.
- LIGHTING SYSTEMS SHALL COMPLY WITH CENC. ALL LIGHTING FIXTURES, LAMPS, BALLASTS, DIMMER SWITCHES, AND CONTROLS SHALL BE CERTIFIED WITH THE CALIFORNIA ENERGY COMMISSION AS MEETING ALL CENC REQUIREMENTS AND BE LISTED IN THE APPLICABLE ENERGY COMMISSION DIRECTORY. ALL SUCH DEVICES AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. LIGHT FIXTURES IN SUSPENDED CEILINGS SHALL BE SUPPORTED IN STRICT ACCORDANCE WITH CBC SEISMIC REQUIREMENTS.
- LIGHT POLLUTION REDUCTION: OUTDOOR LIGHTING SYSTEMS SHALL BE INSTALLED TO COMPLY WITH CENC. CGC, OR LOCAL JURISDICTION ORDINANCE, WHICHEVER IS MORE STRINGENT.
- 10) ALL ELECTRICAL EQUIPMENT, DEVICES, WIRE, ETC., SHALL BE LISTED, FOR THE INTENDED USE, WITH UNDERWRITER'S LABORATORIES, INC., (UL), WHERE STANDARDS HAVE BEEN ESTABLISHED BY UL. ALL EQUIPMENT SHALL BE RAIN TIGHT WHERE EXPOSED TO THE WEATHER. ALL FLEX CONDUITS CONNECTED TO SUCH EQUIPMENT SHALL BE METALLIC LIQUID TIGHT. ALL EQUIPMENT IN HAZARDOUS LOCATIONS, PER CEC, CHAPTER 5, SHALL BE IN ACCORDANCE WITH THE CEC. ALL EQUIPMENT IN CORROSIVE ENVIRONMENTS SHALL BE IN ENCLOSURES (SUCH AS NEMA 4X) RATED FOR THE ENVIRONMENT.
- 11) RECEPTACLES AND SWITCHES INTENDED TO BE ACCESSIBLE TO THE PUBLIC SHALL BE INSTALLED IN ACCORDANCE WITH CBC 11B-308. INSTALLATION HEIGHT ABOVE FINISHED FLOOR OR GROUND SHALL BE AS FOLLOWS: TOP OF UNOBSTRUCTED OUTLET BOXES SHALL BE NO MORE THAN 48 INCHES, BOTTOM OF UNOBSTRUCTED OUTLET BOXES SHALL BE NO LESS THAN 15 INCHES, ETC.
- 12) UTILITY SERVICE AND REQUIREMENTS SHALL BE COORDINATED WITH POWER SERVICE WITH POWER COMPANY; PROVIDE FOR ALL STANDARD POWER COMPANY REQUIREMENTS. FAULT CURRENT RATINGS SHALL
- 13) THE LAYOUTS OF THE CONTRACT DRAWINGS ARE DIAGRAMMATIC. IT IS NOT INTENDED TO SHOW EVERY OFFSET AND FITTING. NOR EVERY STRUCTURAL DIFFICULTY THAT WILL BE ENCOUNTERED DURING THE NSTALLATION OF THE WORK. ALIGNMENT OF EQUIPMENT AND ROUTING OF RACEWAYS MAY BE VARIED SLIGHTLY TO ACCOMMODATE ARCHITECTURAL CONDITIONS OR TO AVOID THE WORK OF OTHER TRADES. IF ANY CONFLICTS OCCUR NECESSITATING DEPARTURES FROM CONTRACT DRAWINGS, DETAILS OF DEPARTURES AND REASONS THEREFORE SHALL BE SUBMITTED AS SOON AS PRACTICABLE FOR WRITTEN APPROVAL OF THE ENGINEER.
- 14) THE WORD "CONTRACTOR", AS USED IN THE ELECTRICAL CONTRACT DOCUMENTS, SHALL MEAN THE PRIME (I.E. GENERAL) CONTRACTOR AND THEIR SUBCONTRACTORS FOR THE APPROPRIATE TRADE. WHERE THE OWNER ACTS AS THEIR OWN CONTRACTOR, THE WORD CONTRACTOR APPLIES TO THE OWNER.
- 15) CONTRACTOR SHALL PROVIDE EVIDENCE OF LICENSING, BONDING, AND INSURANCE, AND PROVIDE OTHER NECESSARY ADMINISTRATIVE FUNCTIONS FOR CONTRACTOR'S WORK.
- 16) CONTRACTOR SHALL PROCURE AND PAY FOR ALL REQUIRED PERMITS AND SERVICE CHARGES.
- 17) COORDINATION: CONFORM TO GENERAL CONSTRUCTION CONTRACT DOCUMENTS EXCEPT AS MODIFIED HEREIN. REFER ALSO TO STRUCTURAL AND MECHANICAL CONTRACT DOCUMENTS. COORDINATE ALL WORK WITH OTHER TRADES.
- 18) CUTTING AND PATCHING: ANY CUTTING, ATTACHING, OR WELDING TO BUILDING STRUCTURE SHOULD BE COORDINATED AND APPROVED BY A CALIFORNIA LICENSED STRUCTURAL ENGINEER. PATCHING SUBJECT TO ACCEPTANCE BY OWNER.
- 19) SAW CUT TRENCHES IN SLAB SHALL BE FULLY RESTORED AND REINFORCED TO PREVENT SAGGING. ROUGHEN SAW CUT EDGES PRIOR TO RE-POURING CONCRETE.
- 20) COORDINATE ALL WORK WITH OTHER TRADES TO PROVIDE A COMPLETE INSTALLATION. CONNECT ALL EQUIPMENT FURNISHED BY OTHERS AS REQUIRED. INSTALL ALL WORK TO CLEAR ARCHITECTURAL AND STRUCTURAL MEMBERS. INSTALL ALL ABOVE GRADE (OVERHEAD) PIPING AS HIGH AS PRACTICAL.
- 21) RESTORE ALL DAMAGE RESULTING FROM THE WORK AND LEAVE PREMISES IN CLEAN CONDITION WHEN FINISHED WITH WORK. ADJUST, CLEAN, REPAIR, OR REPLACE PRODUCTS, WHICH HAVE BEEN DAMAGED.
- 22) PROVIDE FLASHING AND COUNTER FLASHING FOR ALL WALL AND ROOF PENETRATIONS.
- 23) WARRANTY: ALL MATERIALS AND EQUIPMENT INSTALLED UNDER THIS CONTRACT SHALL BE GUARANTEED FREE FROM ALL MECHANICAL, ELECTRICAL, AND WORKMANSHIP DEFECTS FOR A MINIMUM OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE PREMISES CAUSED BY WORK UNDER THIS CONTRACT, AS WELL AS ANY DAMAGE FROM LEAKS VIA ROOF PENETRATIONS MADE AND SEALED UNDER CONTRACTOR'S SCOPE.

ELECTRICAL CALGREEN NOTES

5.106.5.3 ELECTRIC VEHICLE (EV) CHARGING. CONSTRUCTION SHALL COMPLY WITH CGC SECTION 5.106.5.3.1 OR SECTION 5.106.5.3.2 TO FACILITATE FUTURE INSTALLATION OF ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).

5.106.5.3.1 SINGLE CHARGING SPACE REQUIREMENTS. WHEN ONLY A SINGLE CHARGING SPACE IS REQUIRED PER CGC TABLE 5.106.5.3.3, A RACEWAY IS REQUIRED TO BE INSTALLED AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED IN ACCORDANCE WITH CEC

5.106.5.3.2 MULTIPLE CHARGING SPACES REQUIREMENTS. WHEN MULTIPLE CHARGING SPACES ARE REQUIRED PER CGC TABLE 5.106.5.3.3, RACEWAY(S) IS/ARE REQUIRED TO BE INSTALLED AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED IN ACCORDANCE WITH CEC

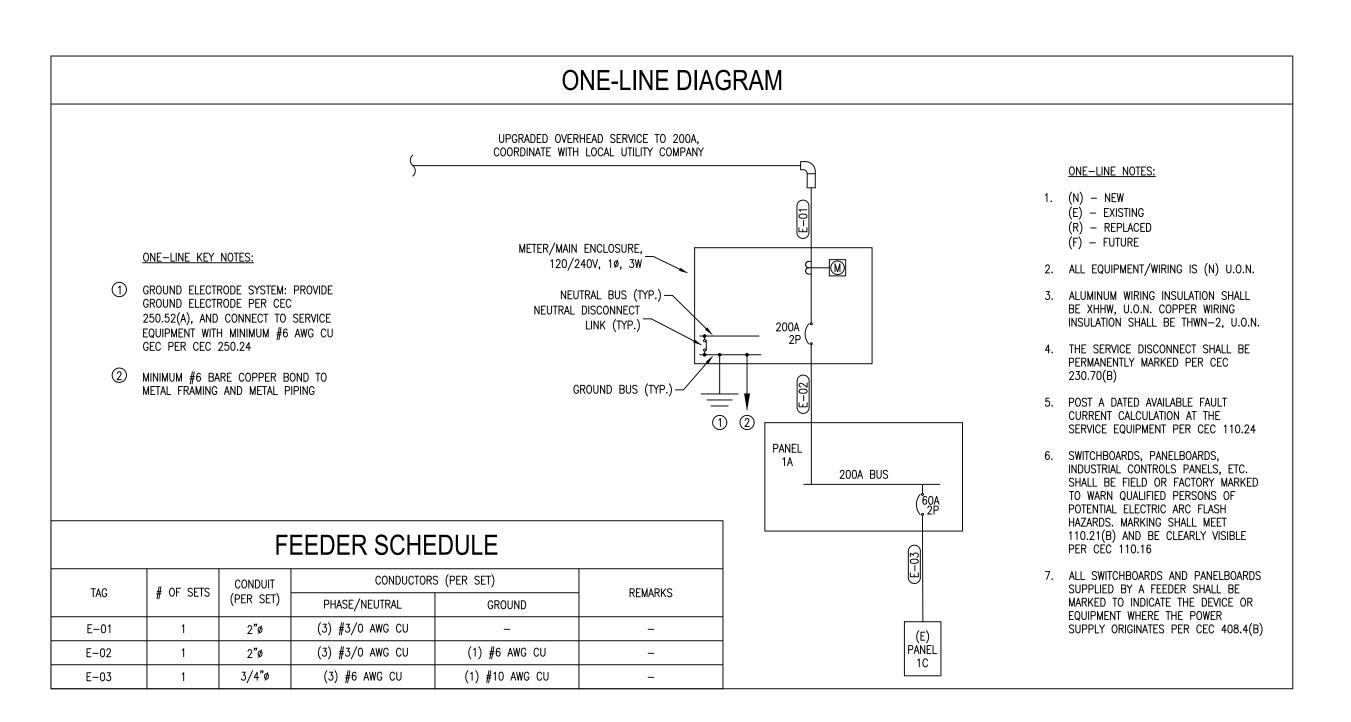
5.106.5.3.3 EV CHARGING SPACE CALCULATION. CGC TABLE 5.106.5.3.3 SHALL BE USED TO DETERMINE IF SINGLE OR MULTIPLE CHARGING SPACE REQUIREMENTS APPLY FOR THE FUTURE INSTALLATION OF EVSE.

5.106.5.3.4 IDENTIFICATION. THE SERVICE PANEL OR SUBPANEL(S) CIRCUIT DIRECTORY SHALL IDENTIFY THE RESERVED OVERCURRENT PROTECTIVE DEVICE SPACE(S) FOR FUTURE EV CHARGING AS "EV CAPABLE". THE RACEWAY TERMINATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE"

5.106.5.3.5 FUTURE CHARGING SPACES: FUTURE CHARGING SPACES QUALIFY AS DESIGNATED PARKING AS DESCRIBED IN CGC SECTION 5.106.5.2 DESIGNATED PARKING FOR CLEAN AIR VEHICLES.

LIGHTING FIXTURE SCHEDULE QTY. VOLT. | WATTAGE | SOURCE | REMARKS SERIES MODEL MOUNTING LUMENS CCT HC615D010-HM60525830-61MDH DOWNLIGHT COOPER HALO RECESSED 120 14.5 LED 1500 3000K FAN/LIGHT COMBO BIG ASS FANS HAIKU MK-HK4-2406---S2 CEILING SURFACE 120 57.7 LED 1770 3000K VANITY COOPER SHAPER 605-25-*-L3/830-UNV WALL @6'-6" AFF 120 20.0 LED 2000 3000K COOPER METALUX CEILING SURFACE 120 41.0 LED 5412 4000K 4' STRIP 4SNLED-LD5-54SL-SLC-UNV-L840-HCD-1 COMMERCIAL U UNDER-CABINET LIGHT 1005837732 (24" UNDER CABINET) SURFACE 120 19.6 LED 1270 ELECTRIC COORDINATE ALL ARCHITECTURAL TRIM AND ACCESSORY OPTIONS WITH OWNER

EQUIVALENT FIXTURES ACCEPTABLE CONTINGENT ON OWNER APPROVAL



ELECTRICAL SHEET INDEX

- ELECTRICAL SCHEDULES, ONE-LINE, & GENERAL NOTES
- ELECTRICAL PANEL SCHEDULES
- ELECTRICAL PLAN POWER
- ELECTRICAL PLAN LIGHTING
- ELECTRICAL DETAILS

ELECTRICAL SCOPE OF WORK

- UPGRADE OF SERVICE TO NEW 200A, 240/120V 10 SERVICE AND INSTALLATION OF NEW PANEL 1A
- INSTALLATION OF NEW POWER SYSTEMS
- REPLACEMENT OF LIGHTING SYSTEMS AND INSTALLATION OF ASSOCIATED POWER AND CONTROLS

LECTR	ICAL LEGEND	DATE	
	2X4 LIGHT FIXTURE (SURFACE, RECESSED)		
	2X2 LIGHT FIXTURE (SURFACE, RECESSED)	NOI	
	FIXTURE W/ BATTERY BACKUP (TYP. ALL SHADED FIXTURES)	DESCRIPTION	
\Diamond	RECESSED DOWNLIGHT		
	ROUND SURFACE MOUNT LIGHT		
\odot	PENDANT LIGHT	VISION	

PENDANI LIGHT TRACK LIGHT

SIGNLIGHT

WALL MOUNT LIGHT

POLE MOUNT LIGHT - 2 HEAD

POLE MOUNT LIGHT - 1 HEAD

EXIT/EMERGENCY COMBO LIGHT

EMERGENCY FIXTURE

EXIT LIGHT

WALL MOUNTED SWITCH

WALL MOUNTED 3-WAY SWITCH

PHOTOCELL

CEILING EXHAUST FAN

PRIMARY AND SECONDARY DAYLIT

"X" CEILING MOUNTED SENSOR

RECEPTACLE - DUPLEX

RECEPTACLE - QUADRUPLEX RECEPTACLE - DEDICATED

RECEPTACLE - 2-POLE

RECEPTACLE - SPECIALTY, SEE PLANS FOR TYPE

RECEPTACLE WITH USB PORT

FLOOR MOUNTED RECEPTACLE

CEILING MOUNTED RECEPTACLE

PHONE-DATA PORT

SMOKE DETECTOR

CARBON MONOXIDE DECTECTOR

JUNCTION BOX

(CAPACITY/FUSE) HOME RUN - PANEL-CIRCUIT(S) "X"-1,3,5

WIRE/CONDUIT — OVERHEAD

DISCONNECT - POLES

_ - WIRE/CONDUIT - UNDERGROUND

POWER PANEL TRANSFORMER

ABOVE FINISHED FLOOR HEIGHT (INCHES) AFF

OCCUPANCY SENSOR VACANCY SENSOR

GROUND FAULT CURRENT INTERRUPTER

WEATHERPROOF

HORSEPOWER

BRAKE HORSEPOWER NOT TO SCALE

GROUND

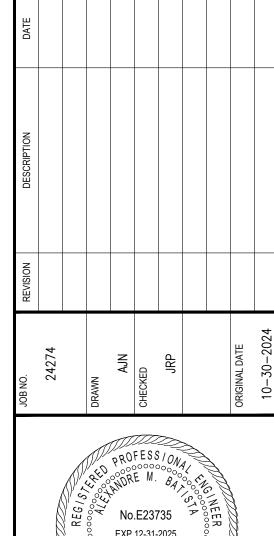
GROUNDING ELECTRODE CONDUCTOR

MSB MAIN SWITCHBOARD SYSTEM BONDING JUMPER

SUPPLY SIDE BONDING JUMPER BCPM BRANCH CIRCUIT POWER METER

TYPICAL

UNLESS OTHERWISE NOTED







\triangleleft O 0 Ш \circ A $\bar{\delta}$ တ 9 ∞ \triangleleft S

0

ELECTRICAL SCHEDULES, ONE-LINE, & GEN. NOTES

Panel Nan	ne:	MAIN						Bus Rating:		200A				
/oltage &		120/240V -	- 1Ø - 3W					AIC Rating:		22kAIC				
Mounting	:	Surface						Main Type:		Circuit Breaker				
nclosure	Rating:	NEMA 3R						MCB Rating	:	200A				
Code	VA		Descri	otion		BRK	Ckt	PHASE	Ckt	BRK	Description	VA	Code	
0	15918	Panel 1A				200/2	1	Α	2					
0	16371					-	3	В	4					
Largest N	Motor VA	•	3841									•	•	
Largest N	Motor Phas	es:	A,B											
			Α	В	С	Total VA	Mult.	VA Load						
R = Rece	-		0	0	0	0	1.00	0						
K = Kitch			0	0	0	0	1.00	0						
M = Mot			0	0	0	0	1.00	0						
L = Lighti			0	0	0	0	1.25	0						
H = Heat			0	0	0	0	1.25	0						
PV = Sola			0	0	0	0	1.25	0						
O = Othe	c. Vehicle		0	0	0	0	1.25	0						
Load Tot			15917.88	16370.88 16370.88	0	32288.75 32288.75	1.00	32289 32288.75						
	rgest Moto	r	13317.00	10370.88	0	3841	0.25	960.25						
	VA Loads		0.0	0.0	0.0									
Total VA	Loads		16398.0	16851.0	0.0]								
Load Bal	ance		98.6%	101.4%	0.0%]								
				VA Load	This Panel			33249.0						
				VIILOUG										

VOL	TAGE	DROP SUM	MARY			
	Volta	ge Drop Summary				
Total Feeder Voltage Drop		Worst Case Bra	nch Circuit	Worst Case Voltage Drop		
MAIN>1A	0.13%	1A-2,4	2.14%	2.27%		

						PA	NEL '	1A' SC	HEDU	LE						
Panel Na	me:	1A						Bus Rating:		200A						
Voltage 8		120/240V	- 1Ø - 3W													
Mounting	g:	Surface						Main Type:		Lugs Onl	у					
Enclosure		NEMA 3R						Upstream F		200A						
Code	VA		Descri	•		BRK	Ckt	PHASE	Ckt	BRK	Description	VA	Code			
M		2059 (E) HVAC Condenser Unit		30/2	1	Α	2	60/2	(E) Panel 1C	6639	0					
М	2059					-	3	В	4	-		5919	0			
M	460		Air Handler			20/1	5	Α	6	20/1	(E) Exterior Lighting	200	L			
R	180	180 (E) Receptacle - Attic			20/1	7	В	8	20/2	(E) Lighting Parking Lot	150	L				
M	1219	(E) Plymovent System			20/2	9	Α	10	-		150	L				
M	1219					-	11	В	12	20/1	Lighting - Garage	462	L			
R	360	Receptacles - Bathrooms			20/1	13	Α	14	20/1	Lighting - Bedrooms	231	L				
R	1080	Receptacles - Bedrooms 1 & 2				20/1	15	В	16	20/1	Lighting - General	328	L			
R	900	Receptacl	es - Bedroo	m 3 & Offic	ce	20/1	17	Α	18	20/1	Ice Maker	575	R			
R	1440	Receptacl	es - Living 8	& Dining		20/1	19	В	20	20/1	Receptacles - Squad & Gym	540	R			
М	400	Kitchen H	ood			20/1	21	Α	22	20/1	Washing Machine	1200	R			
R	800	Receptacl	Receptacles - Refrigerators			20/1	23	В	24	20/1	Dryer	1000	R			
R	720 Receptacles - Kitchen			20/1	25	Α	26	20/1	HVAC Conv. Receptacle	180	R					
K	1200	Dishwash				20/1	27	В	28		Space					
K	600	Disposal				20/1	29	Α	30		Space					
		Space					31	В	32		Space					
		Space					33	A	34		Space					
		Space					35	В	36		Space					
		Space					37	A	38		Space					
							39	В	40							
		Space									Space					
Largost	Motor VA	Space	3841				41	Α	42		Space					
	Motor Phas	ses:	A,B													
	Load Cod	0	VA	Load per Pl	nase		Calculatio	on		Notes:						
	LUAU COO	C	Α	В	С	Total VA	Mult.	VA Load		- Panel Al	C rating based on wire size and length					
R = Rece	-		3935	5040	0	8975	1.00	8975								
K = Kitch			600	1200	0	1800	0.80	1440								
M = Mot L = Light			4137.5 581.1	3277.5 939.5	0	7415 1520.6	1.00 1.25	7415 1901								
H = Hea			0	939.5	0	0	1.25	0								
PV = Sol			0	0	0	0	1.25	0								
	c. Vehicle		0	0	0	0	1.25	0								
O = Oth			6639	5919	0	12558	1.00	12558								
Load To			15892.6	16376	0	32268.6	1.00	32288.75								
	argest Moto				0.0	3841	0.25	960.25								
Subteed	d VA Loads		0.0	0.0	0.0				l							

33249.0 140.4

Subfeed VA Loads Total VA Loads Load Balance

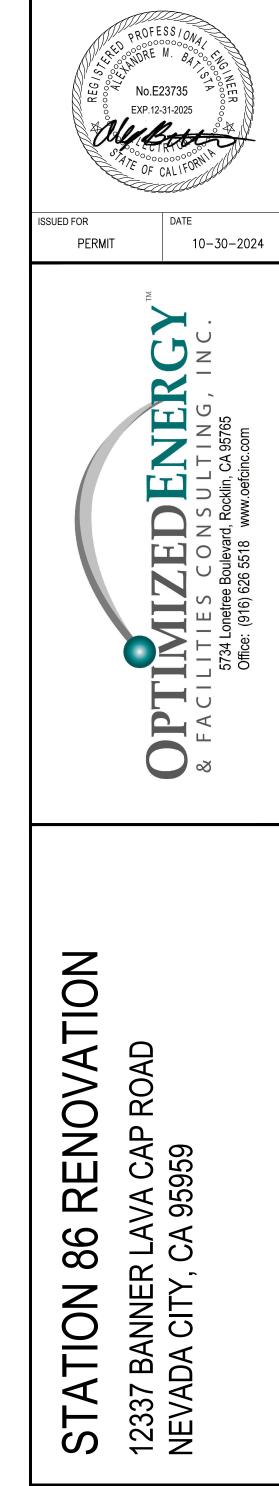
 0.0
 0.0
 0.0

 16398.0
 16851.0
 0.0

 98.6%
 101.4%
 0.0%

 VA Load This Panel

Amperage This Panel Per Largest Phase VA

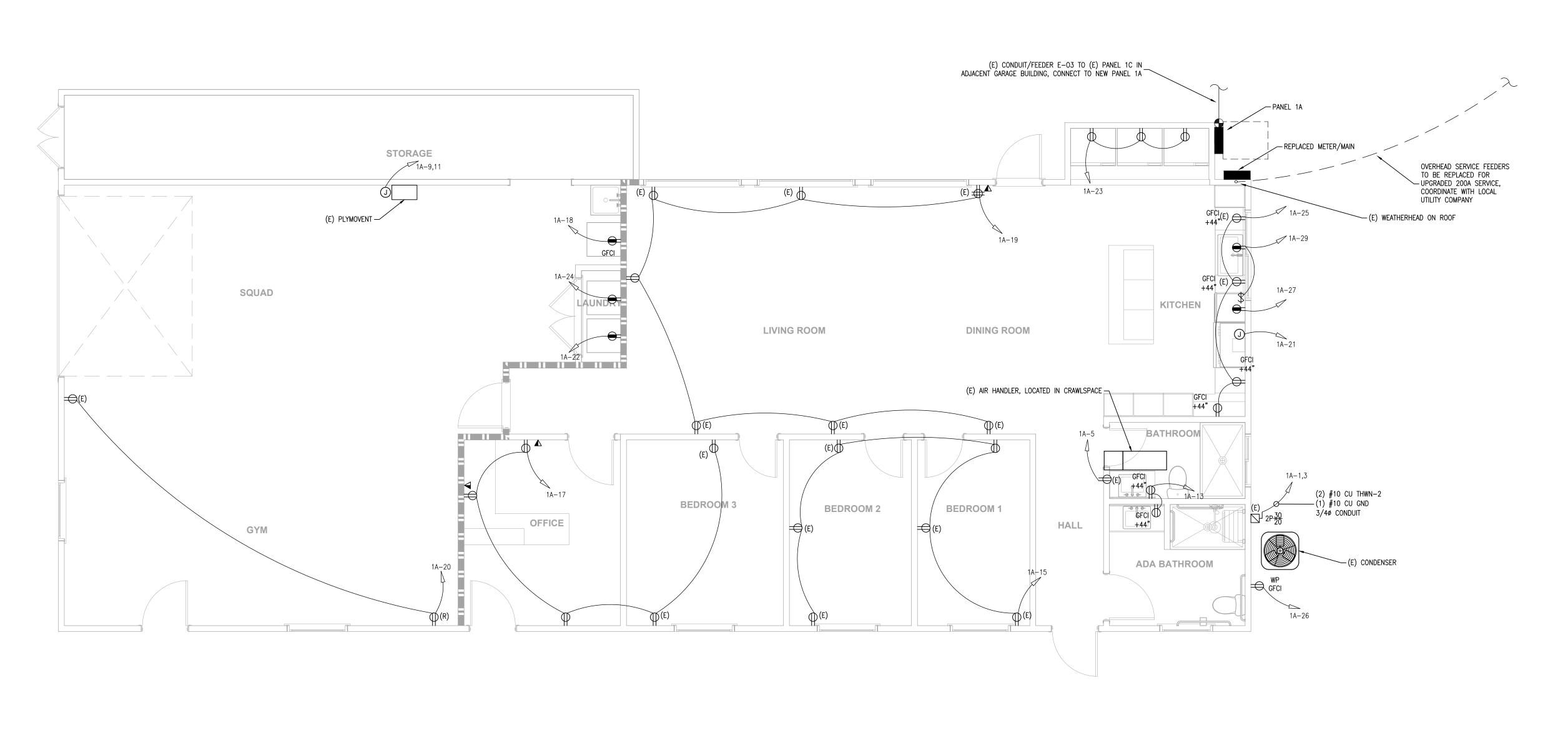


ELECTRICAL

PANEL

SCHEDULES

E1

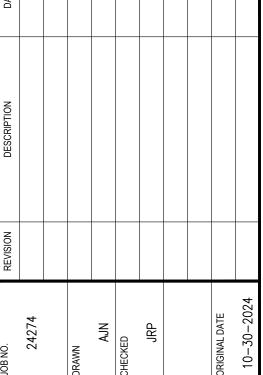


SHEET NOTES:

1. (E) EXISTING

- (N) NEW
 (R) RELOCATED
 (D) DEMO
- 2. ALL RECEPTACLES/EQUIPMENT SHOWN
- ARE (N) U.O.N.

 3. ALL WIRING TO BE #12 AWG U.O.N.
- 4. ALL INTERIOR WIRING TO BE
 2-CONDUCTOR, NON-METALLIC
 SHEATHED. ALL EXTERIOR WIRING TO
 BE INSULATED WITH THWN-2. ALL
 EXTERIOR CONDUIT SHALL BE FLEX
 CONDUIT ABOVE GROUND, OR PVC IF
 BELOW GROUND
- 5. BOTTOM OF BOXES FOR RECEPTACLES AND DATA PORTS SHALL BE AT 16" ABOVE FINISHED FLOOR, U.O.N.
- 6. GFCI RECEPTACLES SHALL BE WIRED IN
- 7. TOP OF BOXES FOR SWITCHES SHALL BE AT 44" ABOVE FINISHED FLOOR,
- 8. ALL FIRE—RATED WALL, CEILING, AND ROOF PENETRATIONS FOR JUNCTION BOXES, RECEPTACLES, AND LIGHTING FIXTURES TO BE CAULKED AND SEALED TO PRESERVE THE FIRE RATING. PROVIDE STEEL ELECTRICAL BOXES IN FIRE—RESISTIVE CLG'S AND WALLS. SEPARATE ELECTRICAL BOXES BACK TO BACK IN FIRE—RESISTIVE WALLS BY A MIN. OF 24". BOX AREA SHALL NOT EXCEED 16 SQ. IN.
- 9. PROVIDE 3/4" CONDUIT FROM EACH DATA RECEPTACLE UP TO CEILING SPACE. STUB WITH LABELED PULL STRING FOR FUTURE WIRING BY OTHERS. VERIFY ROUTING WITH OWNER
- CONTRACTOR TO TEST ALL (E) GFCI RECEPTACLES TO ENSURE GFCI PROTECTION, REPLACE AS NEEDED
- 11. SMOKE DETECTORS AND CARBON
 MONOXIDE DETECTORS ARE TO BE
 INTERCONNECTED AND HAVE A BATTERY
 BACKUP. SMOKE DETECTORS AND
 CARBON MONOXIDE DETECTORS SHALL
 SOUND AN ALARM AND BE AUDIBLE IN
 ALL SLEEPING AREAS
- 12. ALL CEILING FAN BOXES TO BE LISTED AS "FAN RATED"
- 13. ALL 120-VOLT, SINGLE PHASE, 15- & 20-AMP BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT KITCHENS, DINING ROOMS, FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, REC ROOMS, CLOSETS, LAUNDRY AREAS, HALLWAYS AND SIMILAR ROOMS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT PER CEC 210.12
- 14. ALL NEW 125-VOLT, 15 AND 20 AMP RECEPTACLES IN THE DWELLING ARE LISTED TAMPER-RESISTANT. CEC 406.12
- 15. ALL RECEPTACLES LOCATED IN
 BATHROOMS, GARAGES, OUTDOORS,
 CRAWLSPACES, UNFINISHED AREAS OF
 BASEMENTS, KITCHENS, BOATHOUSES,
 LAUNDRY AREAS, OR WITHIN 6FT OF
 SINKS, TUBS, OR SHOWERS TO HAVE
 GFI PROTECTION PER CEC 210.8(A)
- 16. PROVIDE AT LEAST TWO 20-AMPERE BRANCH CIRCUITS TO SERVE COUNTER TOP RECEPTACLES FOR SMALL KITCHEN APPLIANCES PER CEC 210.52(B)
- 17. PROVIDE ONE DEDICATED 20-AMPERE BRANCH CIRCUIT FOR THE BATHROOM RECEPTACLE OUTLETS PER CEC 210.11(C)(3).





OR DATE
PERMIT 10-30-2024



STATION 86 RENOVATION

12337 BANNER LAVA CAP ROAD NEVADA CITY, CA 95959

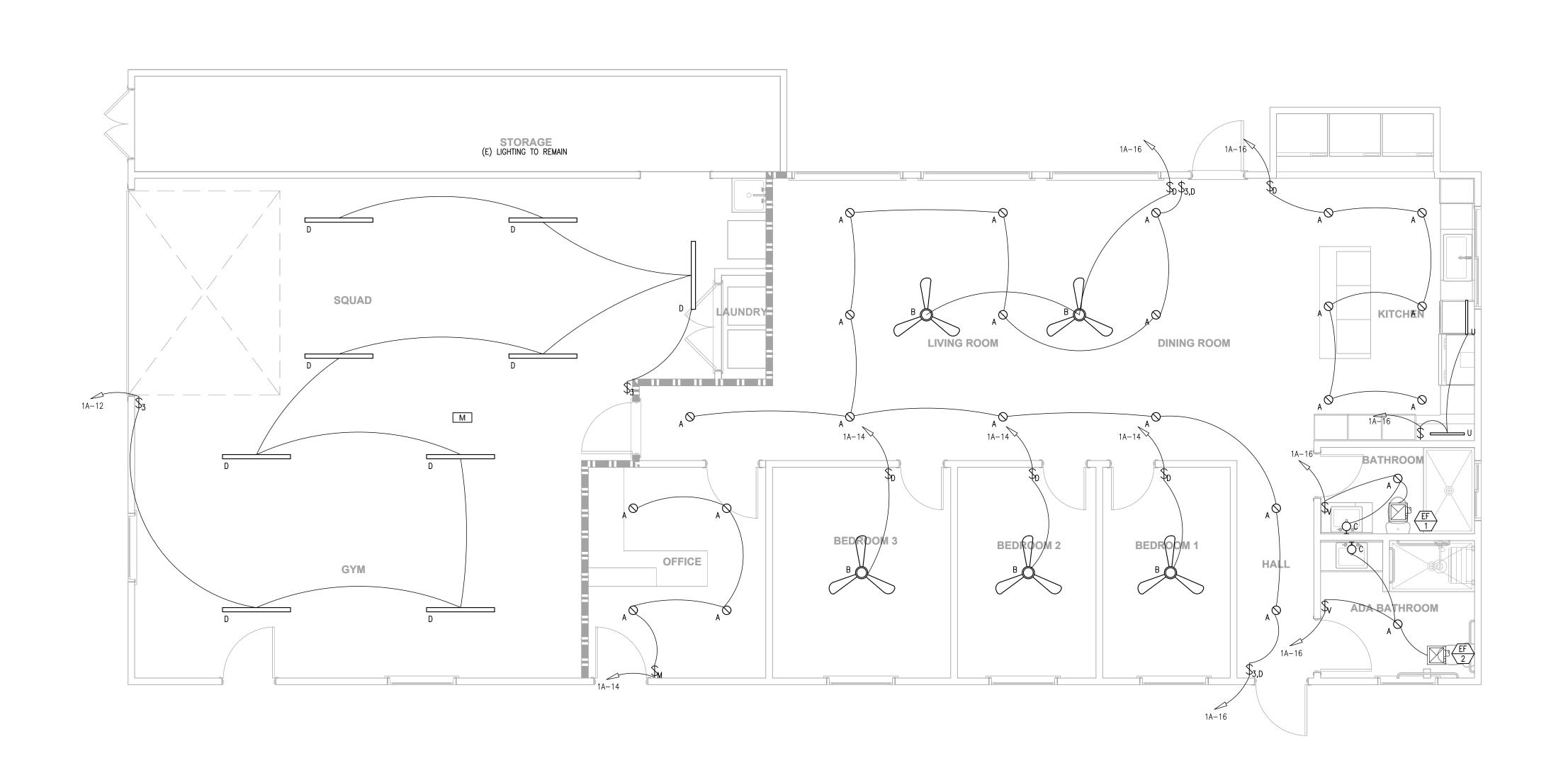
SHEET TITLE

ELECTRICAL PLAN POWER

E2

A ELECTRICAL PLAN - POWER

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



SHEET NOTES: (E) EXISTING (N) NEW

(R) RELOCATED (D) DEMO

2. ALL LIGHT FIXTURES/CONTROLS SHOWN ARE (N) U.O.N.

3. ALL WIRING TO BE #12 AWG U.O.N.

4. ALL INTERIOR WIRING TO BE 2-CONDUCTOR, NON-METALLIC SHEATHED. ALL EXTERIOR WIRING TO BE INSULATED WITH THWN-2. ALL EXTERIOR CONDUIT SHALL BE FLEX CONDUIT ABOVE GROUND, OR PVC IF BELOW GROUND

5. TOP OF BOXES FOR SWITCHES SHALL BE AT 44" ABOVE FINISHED FLOOR,

6. ALL FIRE-RATED WALL, CEILING, AND ROOF PENETRATIONS FOR JUNCTION BOXES, RECEPTACLES, AND LIGHTING FIXTURES TO BE CAULKED AND SEALED TO PRESERVE THE FIRE RATING. PROVIDE STEEL ELECTRICAL BOXES IN FIRE-RESISTIVE CLG'S AND WALLS. SEPARATE ELECTRICAL BOXES BACK TO BACK IN FIRE-RESISTIVE WALLS BY A MIN. OF 24". BOX AREA SHALL NOT EXCEED 16 SQ. IN.

7. NON-METALLIC SHEATHED CABLE SHALL BE SECURED BY STAPLES, CABLE TIES, STRAPS, HANGERS OR SIMILAR AT INTERVALS NOT EXCEEDING 4-1/2' WITHIN 12" OF EACH CABINET, BOX OR FITTING. FLAT CABLES SHALL NOT BE STAPLED ON EDGE

8. ALL NEW RECESSED LIGHT FIXTURES TO BE INSTALLED WITHIN ONE-HALF INCH OF COMBUSTIBLE MATERIAL TO BE LABELED AS TYPE IC (INSULATION CONTACT) AND SEALED TO PREVENT LEAKAGE OF AIRBORNE MOISTURE AS PER NEC 410.66

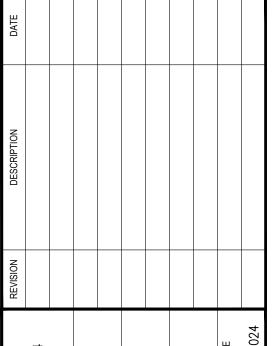
9. LIGHT FIXTURES INSTALLED IN TUB OR SHOWER ENCLOSURES OR WITHIN 3' HORIZONTALLY AND 8' VERTICALLY OF ENCLOSURE RIM TO BE LABELED "SUITABLE FOR WET LOCATIONS"

10. PROVIDE SEPARATE HUMIDISTAT CONTROL FOR ALL BATHROOM EXHAUST FANS PER CGBC 4.506.1

11. PROVIDE VACANCY SENSORS IN GARAGE, BATHROOMS, LAUNDRY/UTILITY ROOMS, AND WALK-IN CLOSETS

12. ALL LED LIGHTING FIXTURES TO BE CONTROLLED BY DIMMER OR BY VACANCY SENSORS, EXCEPT FIXTURES IN STORAGE ROOMS OR CLOSETS

13. ALL INSTALLED LUMINAIRES SHALL BE HIGH EFFICACY PER CENC 150 (K)(1)(A).





ISSUED FOR 10-30-2024



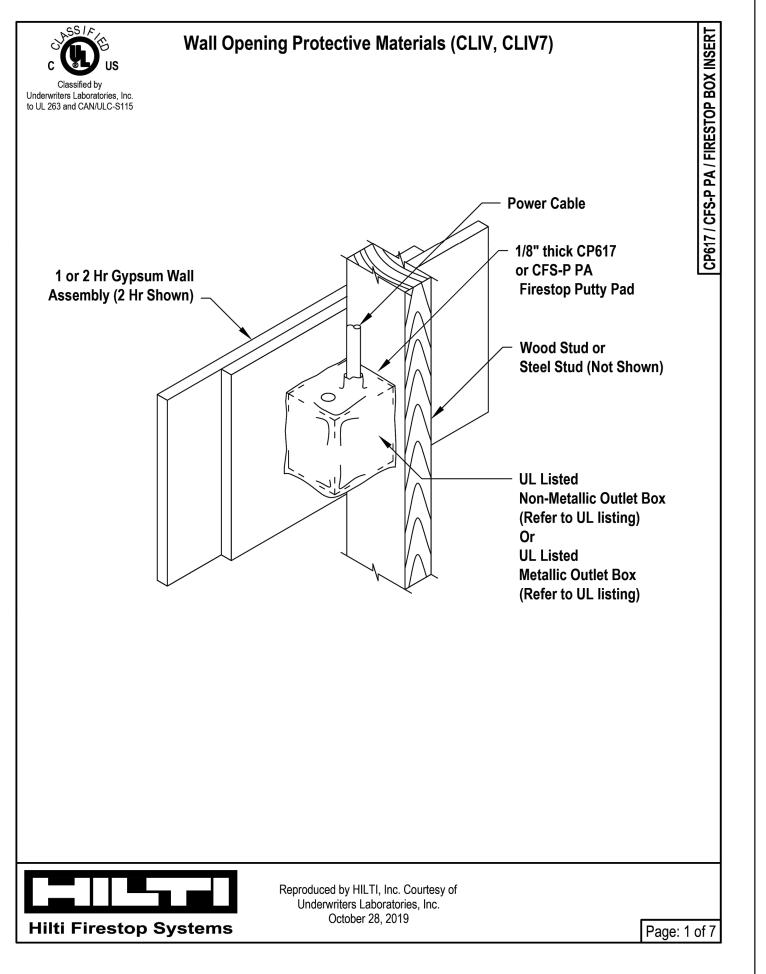


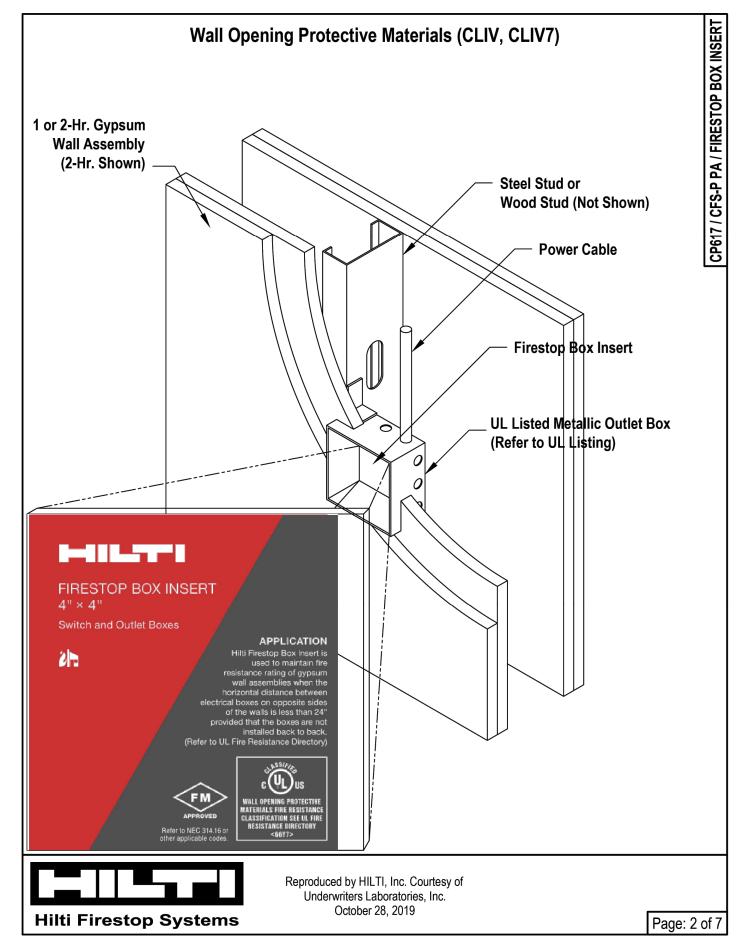
STATION 86 RENOVATION 12337 BANNER LAVA CAP ROAD NEVADA CITY, CA 95959

ELECTRICAL PLAN LIGHTING

E3







Wall Opening Protective Materials (CLIV, CLIV7)

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with flush device UL Listed Metallic Outlet Boxes installed with steel mud rings or UL Listed Nonmetallic Outlet Boxes in framed wall assemblies as specified below. When protective material is used on outlet boxes on both sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in, provided that the boxes are not installed back-to-back (unless otherwise indicated). Installation shall comply with the National Electrical Code (NFPA 70). Min 1/8 in. thick (CP 617) or min 0.2 in. (CFS-P PA) thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and conduit fittings/connectors and to completely seal against the stud and gypsum board in the wall cavity unless otherwise noted below. When CFS-P PA is used, the putty pads may be installed with the release liner intact on the outside of the pad with the exception of any overlaps, in which case the liner is to be removed from the bottom layer at the overlap location. The box composition, max device dimensions, hourly rating, type of stud and type of faceplate

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4 by 4 by max 2-1/8 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 and 2 hr. fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4-11/16 by 4-11/16 by max 2-1/8 in., or max 4-3/8 by 4-7/8 by max 2-1/8 in., flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 hr fire rated V446 gypsum board/steel stud or U341 gypsum board/wood stud Wall and Partition Design No. in the Fire Resistance Directory. When U341 wall design is used, wall shall be sheathed with 5/8 in. gypsum board, and glass or mineral fiber batt insulation shall be installed in stud cavities in accordance with U341

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4-11/16 by 4-11/16 by max 2-1/8 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 and 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of the materials and in the manner specified in the individual U300. U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 0.8 pcf density fiberglass batt insulation is to be installed within the wall cavity required for 1 hr fire rated gypsum board wall assemblies and optional in 2 hr fire rated gypsum wallboard assemblies.

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Putty pads shall lap min 1/2 in. onto the stud and gypsum board within the stud cavity. Outlet boxes installed with steel or plastic cover plates.

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4 by 4 by 2-7/8 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made from polyvinyl chloride, and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in the 1 hr fire rated V446 gypsum board/steel stud or U341 gypsum board/wood stud Wall and Partition Design in the Fire Resistance Directory. When U341 wall design is used, wall shall be sheathed with 5/8 in. gypsum board, and glass or mineral fiber batt insulation shall be installed in stud cavities in accordance with U341 design. Outlet box secured to steel stud by means of fastening tab supplied with the outlet box. Putty pads shall lap min 1/2 in. onto the stud

and gypsum board within the stud cavity. Outlet boxes installed with steel or plastic cover plates. Boxes may be installed back to back. CP 617(-L, -XL) Firestop Putty Pads, for use with max 2-1/4 by 3-3/4 by 2-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Pass and Seymore, Inc., and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 and 2 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Putty pads shall lap min 1/2 in. onto the stud and gypsum board within the stud cavity. Outlet boxes installed with steel or plastic cover plates.

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Allied Molded Products, Inc., made from fiber reinforced thermoplastic and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classification for Fire Resistance" category in the Fire Resistance Directory. Putty pads and boxes for use in 1 hr fire rated gypsum wallboard assemblies, framed with min 3-1/2 in. deep wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs supplied with the outlet box. Outlet boxes installed with plastic cover plates. Putty pads shall lap min 1/2 in. onto the stud and gypsum board within the stud cavity.



design. Boxes may be installed back-to-back.

Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc.

Page: 3 of 7

Wall Opening Protective Materials (CLIV, CLIV7)

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4 by 4 in. by 1-1/2 in. deep flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 hr. fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. The boxes are installed back to back with 5 in. by 4 in. UL Classified fire block, CP 657 or CFS-BL Firestop Block installed in the cavity between the two

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 14 by 4 by max 2-1/2 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 1 and 2 hr. fire rated gypsum board wall assemblies framed with min 5-1/2 in. deep wood or steel studs for 2 hr fire rated walls and min 3-1/2 in. deep wood or steel studs for 1 hr fire rated walls. Walls constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Stud cavity insulation is required and shall consist of min 5-1/2 in. (2 hr rated walls) or min 3-1/2 in. (1 hr rated walls) thick fiberglass (min 0.8 pcf) or mineral fiber (min 4 pcf). Putty pads shall lap min 1/2 in. onto the stud and gypsum board within the stud cavity. When boxes are interconnected by means of electrical metallic tube (EMT) or conduit, a ball of putty pad material shall be used to completely plug the open end of each EMT or conduit within the box.

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads, for use with max 4-11/16 by 4-11/16 by max 2-1/8 in. flush device UL Listed Metallic Outlet Boxes installed with steel or plastic cover plates for use in 1 and 2 hr fire rated gypsum board wall assemblies framed with min 5-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Putty pads shall lap min 1/2 in. onto the stud and gypsum board within the stud cavity. When boxes are interconnected by means of electrical metallic tube (EMT) or conduit, a ball of putty pad material shall be used to completely plug the open end of each EMT or conduit within the outlet boxes. Metallic outlet boxes may be provided with steel attachment brackets which offset box min 1/4 in. from stud. When steel attachment brackets are used, putty pad to be affixed to the back and all four sides of the box.

CP 617(-L, -XL) or CFS-P PA Moldable Putty Pads, for use with max 4-11/16 by 4-11/16 in. by max 2-1/8 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 and V400 Series Wall and Partition Designs in the Fire Resistance Directory. An additional 3/4 in. ball of putty pad material shall be used to plug the end of each electrical metallic tube or conduit at its connection to the box.

CP 617(-L, -XL) or CFS-P PA Moldable Putty Pads, for use with max 4 by 4 by 2-1/8 in. flush device UL Listed Metallic Outlet Boxes installed with steel or plastic cover plates in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 and V400 Series Wall and Partition Designs in the Fire Resistance Directory. An additional 3/4 in. ball of putty pad material shall be used to plug the end of each electrical metallic tube or conduit at its

CP 617(-L, -XL) or CFS-P PA Moldable Putty Pads, for use with max 14-1/4 by 4-1/2 by 2-1/2 in. flush device UL Listed Metallic Outlet Boxes installed with steel cover plates in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 and V400 Series Wall and Partition Designs in the Fire Resistance Directory. An additional 3/4 in. ball of putty pad material shall be used to plug the end of each electrical metallic tube or conduit at its connection to the box.

HILTI Firestop Box Insert, for use with flush device UL Listed Metallic Outlet Boxes installed with steel mud rings or UL Listed Nonmetallic Outlet Boxes in framed wall assemblies as specified below. When protective material is used on outlet boxes on both sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back (unless otherwise indicated). Installation shall comply with the National Electrical Code (NFPA 70). The box composition, max device dimensions, hourly rating, type of stud and type of faceplate are specified below.

HILTI Firestop Box Insert, for use with max 4-11/16 by 4-11/16 by 2-1/8 in. deep UL Listed Metallic Outlet Boxes without internal clamps in 1 or 2 hr fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet boxes in 1 hr fire rated walls may be installed with plastic or steel cover plates. Outlet boxes in 2 hr fire rated walls shall be installed with steel cover plates. One 4-3/8 by 4-3/8 in. insert adhered to the interior back wall of the outlet box in accordance with the instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 4-3/8 x 4-3/8 in coverage.



Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. October 28, 2019

Page: 4 of 7

Wall Opening Protective Materials (CLIV, CLIV7)

HILTI Firestop Box Insert, for use with max 4 by 4 by 1-1/2 in. deep and 2-1/8 in. deep UL Listed Metallic Outlet Boxes without internal clamps in 1 or 2 hr fire rated gypsum wallboard wall assemblies framed with min 3 1/2 in. deep steel or wood studs and constructed of materials and in the manner specified in the individual U400, V400 or U300 Series Wall and Partition Designs in the Fire Resistance Directory, as summarized in the Table below. One 3-11/16 by 3-3/4 in. insert adhered to the interior back wall of the outlet box in accordance with the instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 3-11/16 x 3-3/4 in coverage.

Box Size	Type of Box and Cover Plate	Hourly Rating	Wall Type
4 x 4 x 2-1/8 in deep Metallic w/ steel cover plate		2-hour	U300, U400 or V400 - wood or steel studs
4 x 4 x 2-1/8 in deep	Metallic w/ plastic cover plates	1-hour	U300, U400 or V400 - wood or steel studs
4 x 4 x 1-1/2 in deep	Metallic w/ plastic cover plates	1-hour	U300 - wood studs

HILTI Firestop Box Insert, for use with max 2-1/8 x 4 x 2-1/8 in. deep UL Listed Metallic Outlet Boxes without internal clamps in 2 hr fire rated gypsum wallboard wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet boxes may be installed with steel cover plates. One 1-7/8 x 2-13/16 insert adhered to the interior back wall of the outlet box in accordance with the instructions supplied with the product.

HILTI Firestop Box Insert, for use with max 4-1/2 x 8-1/2 in. by 1-5/8 in. deep or max 3-3/4 x 5-1/2 in. by 2-1/2 in. deep UL Listed Metallic Outlet Boxes without internal clamps in 1 hr or 2 hr fire rated gypsum wallboard wall assemblies framed with min 3 1/2 in. deep steel or wood studs and constructed of materials and in the manner specified in the individual U400, V400 or U300 Series Wall and Partition Designs in the Fire Resistance Directory, as summarized in the Table below. Outlet boxes installed with steel cover plates. Box inserts evenly spaced and adhered to the interior back wall of the outlet box in accordance with the instructions supplied with the product.

Box Size	Inserts Used	Fire Rating	Wall Type			
4-1/2 x 8-1/2 x 1-5/8 in deep	Two 3-11/16 x 3-3/4 in. inserts **	2 hour	U300, U400 or V400 - wood or steel studs			
3-3/4 x 5-1/2 x 2-1/2 in deep	One 3-11/16 x 3-3/4 in. insert and one 1-7/8 x 2-13/16 in. insert	l 1 n∩ur i	U300, U400, or V400 - wood or steel studs			

** - Min 3/4 in. deep plaster rings installed over outlet box. After installation of gypsum board, nom 1/4 in. thickness of Hilti FS-ONE Sealant or FS-ONE MAX Intumescent Sealant, bearing the UL Classification Marking for Fill, Void or Cavity Materials, applied between the base layer of wallboard and the plaster ring.

HILTI Firestop Box Insert, for use with 4-3/8 by 4-7/8 by 2-1/4 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. One 4-3/8 in. wide by 4-3/8 in. high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 4-3/8 in. by 4-3/8 in. coverage and adhered to the interior back wall of the outlet box. Outlet boxes installed with plastic or steel cover plates.

HILTI Firestop Box Insert, for use with 4-3/8 by 4-7/8 by 2-1/4 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. One 4-3/8 in. wide by 4-3/8 in. high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 4-3/8 in. by 4-3/8 in. coverage and adhered to the interior back wall of the outlet box. Outlet boxes installed with steel cover plates.



Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. October 28, 2019

Page: 5 of 7

Wall Opening Protective Materials (CLIV, CLIV7)

CP 617(-L, -XL) or CFS-P PA Firestop Putty Pads and HILTI Firestop Box Inserts, for use with maximum 4 by 4 by 1-1/2 in. (102 by 102 by 38 mm) deep flush device UL Listed Metallic Outlet Boxes installed with steel mud rings and with steel or plastic faceplates in 1 or 2 hr fire rated gypsum board wall assemblies constructed with min 3-1/2 in. (89 mm) wide wood or steel studs. When both protective materials are used with outlet boxes on both sides of the wall as directed, the boxes may be installed back-to-back provided that the backs of the boxes are minimum 1/2 in. (13 mm) apart and provided that the boxes are not interconnected. Adjoining pieces of moldable putty pads to be overlapped approx 1/2 in. (13 mm) at the seam. An insert pad shall be installed to completely cover the back inside surface of each outlet

Firestop Box Inserts, for use with max 2-1/8 by 4 by 2-1/8 in, deep, flush device UL Listed Metallic Outlet Boxes without internal clamps in 2 h fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 47 mm wide by 71 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Installation to comply with the National Electrical code, (NFPA 70). Outlet boxes installed with steel cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

Firestop Box Inserts, for use with max 4 by 4 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 94 mm wide by 95 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with steel cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

Firestop Box Inserts, for use with max 4 by 4 by 1-1/2 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood studs and with max 4 by 4 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 94 mm wide by 95 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with plastic cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on

Firestop Box Inserts, for use with 4-11/16 by 4-11/16 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 111 mm wide by 111 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 111 mm by 111 mm coverage and adhered to the interior back wall of the outlet box. Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with plastic or steel cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.



Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. October 28, 2019

Page: 6 of 7

Wall Opening Protective Materials (CLIV, CLIV7)

Firestop Box Inserts, for use with 4-11/16 by 4-11/16 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 111 mm wide by 111 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 111 mm by 111 mm coverage and adhered to the interior back wall of the outlet box. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with steel cover plates. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in, provided that the boxes are not installed back-to-back.

Firestop Box Inserts, for use with max 3-3/4 by 5-1/2 by 2-1/2 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel or wood studs and constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 94 mm wide by 95 mm high and one 47 mm wide by 71 mm high inserts adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with steel cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the

Firestop Box Inserts, for use with 4-3/8 by 4-7/8 by 2-1/4 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 111 mm wide by 111 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Smaller sized inserts may be cut and combined to achieve the 111 mm by 111 mm coverage and adhered to the interior back wall of the outlet box. Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with plastic or steel cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within

24 in. provided that the boxes are not installed back-to-back. Firestop Box Inserts, for use with 4-3/8 by 4-7/8 by 2-1/4 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps in 2 hr specified in the individual U400 Series Wall and Partition Designs in the Fire Resistance Directory. One 111 mm wide by 111 mm high insert adhered to the interior back wall of the outlet box in accordance with the installation instructions supplied with the product. Smaller sized Installation to comply with the National Electrical Code, (NFPA 70). Outlet boxes installed with steel cover plates. A max 3/8 in. diam opening at one edge may be provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided

Firestop Box Inserts, for use with max 4-11/16 by 4-11/16 by 2-1/8 in. flush device UL Listed Metallic Outlet Boxes installed with steel mud rings and plastic or steel cover plates in 1 h or 2 h fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 3-1/2 in. thick fiberglass (min 0.5 pcf) or mineral wool (min 4.0 pcf) batt insulation is to be installed within the wall cavity. One 4-3/8 by 4-3/8 in. insert adhered to the interior back wall of the outlet box in accordance with the instructions supplied provided to permit access to the electrical box ground screw. When protective material is used within outlet boxes on both sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.



Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. October 28, 2019

Page: 7 of 7

NOL RENOV 86 ATION

ROAD

PERMIT

10-30-2024

ELECTRICAL DETAILS

wall may be less than 24 in. provided that the boxes are not installed back-to-back.

outlet boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than

fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner inserts may be cut and combined to achieve the 111 mm by 111 mm coverage and adhered to the interior back wall of the outlet box.

that the boxes are not installed back-to-back. with the product. Installation to comply with the National Electrical Code (NFPA 70). A max 3/8 in. diam opening at one edge may be

Indoor Lighting		CALIFORNIA ENERGY COMMISSION	Indoor Lighting		CALIFORNIA ENERGY COMMISSION	Indoor Lighting		CALIFORNIA ENERGY COMMISSIO
CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	CERTIFICATE OF COMPLIANCE		NRCC-LTI-
This document is used to demonstrate compliance with requirements in 110.9,			Project Name: Station 86	Report Page:	(Page 2 of 7)	Project Name: Station 86	Report Page:	(Page 3 of
nonresidential and hotel/motel occupancies. It is also used to document compli path for multifamily occupancies. Multifamily includes dormitory and senior livi		for indoor lighting scopes using the prescriptive		Date Prepared:	10/24/2024		Date Prepared:	10/24/202
Project Name: Station 86	Report Page:	(Page 1 of 7)						
Project Address: 12337 Banner	Lava Cap Road Date Prepared:	10/24/2024	<u> </u>			F. INDOOR LIGHTING FIXTURE SCHEDULE		
			C. COMPLIANCE RESULTS	innal Conditional refer to Table D. for midance			han dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and	
A. GENERAL INFORMATION			If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Except	Adjusted Lighting Dower no	er 140.6(a) / 170.2(e)	documented in Table T. If using Table T to document lighting in multifar not included here.	nily common use areas providing shared provisions for living, eating, cookin	g or sanitation, those luminaires are
D1 Project Location (city) Nevada City D2 Climate Zone 11	04 Total Conditioned Floor Area (ft²) 05 Total Unconditioned Floor Area (ft		Allowed Lighting Power per 140.6(b) / 170.	2(e) (Watts) (Watts)		Designed Wattage: Unconditioned Spaces		
03 Occupancy Types Within Project (select all that apply):	06 # of Stories (Habitable Above Grad		Lighting in 01 02 03 04 conditioned and	05 06 07	08 09	01 02 03 04		09 10
	, , ,	,	unconditioned Area Spaces must not be Complete Area Category Tailored	Adjustments > Total PAF Lighting		Name or Item Complete Luminaire Modular Aperture	& Watts per How is Wattage Total Number 140.6(a)3 / D	esign Watts Field Inspector
			combined for Building Category Additional 140.6(c)3	/ = Total Designed Control Credit		Tag Description (Track) Fixture Color Cha	nge ¹ luminaire determined of Luminaires 170.2(e)2C	Pass Fail
B. PROJECT SCOPE			$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B Allowed (Watts) 140.6(a)2 / (Watts) 170.2(e)1B	*Includes 140.6 / 170.2(e)	D D No NA	41 Mfr. Spec 8 No	328 🗆 🗆
This table includes any lighting systems that are within the scope of the permit 141.0(b)2 / 180.2(b)4 for alterations.	application and are demonstrating compliance using the	prescriptive path outlined in 140.6 / 170.2(e) or	(+)	(-)	Adjustments	¹ FOOTNOTE: Design Watts for small aperture and color changing lumin	Total Designed Watts: UNCONDITIONED SPACES aires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80%	of their rated wattage. Table F
Scope of Work	Conditioned Spaces	Unconditioned Spaces	(See Table I)	K) (See Table F) (See Table P)	-	automatically makes this adjustment, the permit applicant should enter	full rated wattage in column 05.	
01	02 03	04 05	Unconditioned 366 0	= 366 ≥ 328 0	= 328 COMPLIES	² Authority Having Jurisdiction may ask for Luminaire cut sheets to confi Iuminaire, not the lamp.	rm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used mus	t be the maximum rated for the
My Project Consists of (check all that apply):	Calculation Method Area (ft²)	Calculation Method Area (ft ²)		Controls Compliance	(See Table H for Details) COMPLIES	turimore, not the turip.		
☐ New Lighting System ☐ New Lighting System - Parking Garage		+		Rated Power Reduction Compliance	(See Table Q for Details)	G. MODULAR LIGHTING SYSTEMS		
☐ Altered Lighting System	Area Category Method 0	Area Category Method 915				This section does not apply to this project.		
Total Area of Work (ft²)	0	915	D. EXCEPTIONAL CONDITIONS					
			This table is auto-filled with uneditable comments because of selections ma	ge or data entered in tables throughout the form.		H. INDOOR LIGHTING CONTROLS (Not including PAFs)		
			C ADDITIONAL PERANDIC			This table includes lighting controls for conditioned and unconditioned	spaces.	
			E. ADDITIONAL REMARKS This table includes remarks made by the permit applicant to the Authority E	aving turisdiction		Building Level Controls		
			This table includes remarks made by the permit applicant to the Authority F	aving Jurisarction.		01	02	03
						Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Field Inspector Pass Fail
						NA < 4,000W subject to multilevel	See Area/Space Level Controls	
				Schema Version: rev 20220101	Report Generated: 2024-10-24 14:48:28		Schema Version: rev 20220101	Report Generated: 2024-10-24 14:48:28
Indoor Lighting	Report Page: Date Prepared:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 5 of 7) 10/24/2024	STATE OF CALIFORNIA Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)	Report Page: Date Prepared:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	Report Page: Banner Lava Cap Road Date Prepared:	CALIFORNIA ENERGY COMMISSIO NRCC-LTI (Page 7 of 10/24/202
ndoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 C. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE		NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86	Report Page:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name:	Report Page: Banner Lava Cap Road Date Prepared: curate and complete.	CALIFORNIA ENERGY COMMISSIC NRCC-LTI (Page 7 of 10/24/202
ndoor Lighting ERTIFICATE OF COMPLIANCE roject Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE this section does not apply to this project.		NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project.	Report Page:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista	Report Page: Banner Lava Cap Road Date Prepared: curate and complete. Documentation Author Signature:	CALIFORNIA ENERGY COMMISSIC NRCC-LTI (Page 7 of 10/24/202
Andoor Lighting ERTIFICATE OF COMPLIANCE roject Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE this section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY		NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING	Report Page:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name:	Report Page: Banner Lava Cap Road Date Prepared: curate and complete. Documentation Author Signature: Signature Date: 2024-10-24	CALIFORNIA ENERGY COMMISSIC NRCC-LTI (Page 7 of 10/24/202
ndoor Lighting ERTIFICATE OF COMPLIANCE Project Name: Station 86 C. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY		NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project.	Report Page:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 1233: DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company:	Report Page: Banner Lava Cap Road Date Prepared: curate and complete. Documentation Author Signature: Signature Date:	CALIFORNIA ENERGY COMMISSIC NRCC-LTI (Page 7 of 10/24/20:
ndoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 C. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project.	Date Prepared:	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project.	Report Page:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone:	CALIFORNIA ENERGY COMMISSIO NRCC-LTI (Page 7 of 10/24/202
CERTIFICATE OF COMPLIANCE Project Name: Station 86 K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L	Date Prepared:	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION	Report Page: Date Prepared:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765	Report Page: Banner Lava Cap Road Date Prepared: curate and complete. Documentation Author Signature: Signature Date: 2024-10-24	CALIFORNIA ENERGY COMMISSIO NRCC-LTI (Page 7 of 10/24/202
Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L	Date Prepared:	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project.	Report Page: Date Prepared: If any selections have been changed by permit applica	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete.	CALIFORNIA ENERGY COMMISSIO NRCC-LTI (Page 7 of 10/24/202
Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project.	Date Prepared:	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document	Report Page: Date Prepared: If any selections have been changed by permit applica	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corres	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete.	CALIFORNIA ENERGY COMMISSIC NRCC-ITI (Page 7 of 10/24/202
K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECI	Date Prepared:	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct 2. I am eligible under Division 3 of the Business and Professions Code to accept	Report Page: Banner Lava Cap Road Date Prepared: curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518	CALIFORNIA ENERGY COMMISSIO NRCC-LTI (Page 7 of 10/24/202
CERTIFICATE OF COMPLIANCE Project Name: Station 86 K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project.	Date Prepared:	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building inspections.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12333 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and the state of California in the Information provided on this Certifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations.	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification in the Certification of Compliance are consistent with the information provided on other applicable compliance are consistent with the information provided on other applicable compliance are consistent with the information provided on other applicable compliance.	CALIFORNIA ENERGY COMMISSIC NRCC-LTI (Page 7 of 10/24/202 10/24/202 nce (responsible designer) te of Compliance conform to the requirement
AC. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECITIVE SECTION AS A RECEIVED TO SECTION AS A RECEIVE	Date Prepared: IGHTING IAL EFFECTS	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building inspections.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept and Facility of The Compliance is true and correct and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance is true and correct plans and specifications submitted to the enforcement agency for approval values and performance specifications submitted to the enforcement agency for approval values. I will ensure that a completed signed copy of this Certificate of Compliance is true and correct plans and specifications submitted to the enforcement agency for approval values.	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification and building permit application.	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable
ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L	Date Prepared: IGHTING IAL EFFECTS	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept and Facility of The Compliance is true and correct and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance is true and correct plans and specifications submitted to the enforcement agency for approval values and performance specifications submitted to the enforcement agency for approval values. I will ensure that a completed signed copy of this Certificate of Compliance is true and correct plans and specifications submitted to the enforcement agency for approval values.	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification if Compliance are consistent with the information provided on other application. All be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the building provides to the building provides to the building provides to the building provides to the building beautiful to the building provides to the building beautiful to the building provides to the building to the building provides to the building to the building to the building provides to the building to the build	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L. This section does not apply to this project.	Date Prepared: IGHTING IAL EFFECTS	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept and the state of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certiplans and specifications submitted to the enforcement agency for approval visions. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections.	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certificate of Complia and manufactured devices for the building design or system design identified on this Certification if this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building permit in t	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
ERTIFICATE OF COMPLIANCE roject Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY his section does not apply to this project. A ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L his section does not apply to this project. A ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECI his section does not apply to this project. A ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECI his section does not apply to this project. A ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE ME his section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and experiments of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of System of the California Code of Regulations. 5. I will ensure that a completed signed copy of this Certificate of Responsible Designer Name:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certification and manufactured devices for the building design or system design identified on this Certification if Compliance are consistent with the information provided on other application. All be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the building provides to the building provides to the building provides to the building provides to the building beautiful to the building provides to the building beautiful to the building provides to the building to the building provides to the building to the building to the building provides to the building to the build	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECI- his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECI- his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE ME his section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Light of the California Code of Regulations. 5. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. Lunderstand that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address:	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certificate of Complia and manufactured devices for the building design or system design identified on this Certification in the Compliance are consistent with the information provided on other applicable complete this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building and the building permit specification. Responsible Designer Signature: Date Signed: 2024-10-24 License:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET is section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET is section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET is section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET is section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECITIVE	IGHTING IAL EFFECTS ERCHANDISE	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand and manufactured devices for the building design or system design identified on this Certification in this Designation of Compliance are consistent with the information provided on other applicable complition this building permit application. hall be made available with the building permit(s) issued for the building, and made available Compliance is required to be included with the documentation the builder provides to the buil Responsible Designer Signature: Date Signed: 2024-10-24 License: E23735 Phone:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
ACTAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET IN SECTION DOES NOT APPLY TO THIS PROJECT. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET IN SECTION DOES NOT APPLY TO THIS PROJECT. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIFIC SECTION DOES NOT APPLY TO THIS PROJECT. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MET IN SECTION DOES NOT APPLY TO THIS PROJECT. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MET IN SECTION DOES NOT APPLY TO THIS PROJECT. A. P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUST THIS SECTION DOES NOT APPLY TO THIS PROJECT.	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF))	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Light of the California Code of Regulations. 5. I will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd	Report Page: Banner Lava Cap Road Date Prepared:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
C. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LE This section does not apply to this project. M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LE This section does not apply to this project. N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LE This section does not apply to this project. N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECITIVE SECTION DOES NOT APPLY TO THIS PROJECT. D. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE ME	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF))	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand and manufactured devices for the building design or system design identified on this Certification in this Designation of Compliance are consistent with the information provided on other applicable complition this building permit application. hall be made available with the building permit(s) issued for the building, and made available Compliance is required to be included with the documentation the builder provides to the buil Responsible Designer Signature: Date Signed: 2024-10-24 License: E23735 Phone:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
C. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. C. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. C. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. C. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LET IN SECTION DOES NOT APPLY TO THIS PROJECT. C. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIFIC SECTION DOES NOT APPLY TO THIS PROJECT. C. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MET IN SECTION DOES NOT APPLY TO THIS PROJECT. C. P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUST This Section does not apply to this project. C. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF))	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand and manufactured devices for the building design or system design identified on this Certification in this Designation of Compliance are consistent with the information provided on other applicable complition this building permit application. hall be made available with the building permit(s) issued for the building, and made available Compliance is required to be included with the documentation the builder provides to the buil Responsible Designer Signature: Date Signed: 2024-10-24 License: E23735 Phone:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
ERTIFICATE OF COMPLIANCE TOJECT Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECI This section does not apply to this project. A. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE ME This section does not apply to this project. A. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUST This section does not apply to this project. A. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER This section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF))	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand and manufactured devices for the building design or system design identified on this Certification in this Designation of Compliance are consistent with the information provided on other applicable complition this building permit application. hall be made available with the building permit(s) issued for the building, and made available Compliance is required to be included with the documentation the builder provides to the buil Responsible Designer Signature: Date Signed: 2024-10-24 License: E23735 Phone:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
Addoor Lighting ERTIFICATE OF COMPLIANCE TOJECT Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIAL THIS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER THIS SECTION DOES NOT APPLY TO THIS PROJECT.	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF))	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand and manufactured devices for the building design or system design identified on this Certification in this Designation of Compliance are consistent with the information provided on other applicable complition this building permit application. hall be made available with the building permit(s) issued for the building, and made available Compliance is required to be included with the documentation the builder provides to the buil Responsible Designer Signature: Date Signed: 2024-10-24 License: E23735 Phone:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
Addoor Lighting ERTIFICATE OF COMPLIANCE TOJECT Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIAL THIS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER THIS SECTION DOES NOT APPLY TO THIS PROJECT.	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF))	NRCC-LTI-E (Page 5 of 7)	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Banner Lava Cap Road Date Prepared: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand and manufactured devices for the building design or system design identified on this Certification in this Designation of Compliance are consistent with the information provided on other applicable complition this building permit application. hall be made available with the building permit(s) issued for the building, and made available Compliance is required to be included with the documentation the builder provides to the buil Responsible Designer Signature: Date Signed: 2024-10-24 License: E23735 Phone:	nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
Addoor Lighting ERTIFICATE OF COMPLIANCE TOJECT Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE This section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY This section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L This section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIAL THIS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MENTS SECTION DOES NOT APPLY TO THIS PROJECT. I. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER THIS SECTION DOES NOT APPLY TO THIS PROJECT.	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF)) AATIONS DNS	NRCC-LTI-E (Page 5 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E.	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. responsibility for the building design or system design identified on this Certificat and manufactured devices for the building design or system design identified on this Certification if the building permit application. The suitable building permit application. The suitable made available with the building permit (s) issued for the building, and made available. Compliance is required to be included with the documentation the builder provides to the building permit (s) issued for the building permit on the building permit (s) issued for the building permit (s) iss	california energy commission (NRCC-ITI) (Page 7 of 10/24/202) nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / Specific Spection does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIFIC	IGHTING IAL EFFECTS ERCHANDISE EMENT FACTOR (PAF)) RATIONS ONS Generated Date/Time:	NRCC-LTI-E (Page 5 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE There are no NRCA forms required for this project.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title Generated Date/Time:	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E. Documentation Software: EnergyPro	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 1233; DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd Gity/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certification is submitted to the enforcement agency for approval v 5. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance Singulations. Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 At. responsibility for the building design or system design identified on this Certificat and manufactured devices for the building design or system design identified on this Certificatificate of Compliance are consistent with the information provided on other applicable complith this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building besigner Signature: Date Signed: 2024-10-24 License: E23735 Phone: (916) 626-5518 Generated Date/Time:	california Energy COMMISSIC NRCC-ITI (Page 7 of 10/24/202 10/24/202 nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy. Documentation Software: EnergyPro
RTIFICATE OF COMPLIANCE Deject Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIAL his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIAL his section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE ME his section does not apply to this project. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUST his section does not apply to this project. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER his section does not apply to this project. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTION his section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE MENT FACTOR (PAF)) AATIONS DNS	NRCC-LTI-E (Page 5 of 7) 10/24/2024	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E.	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 12337 DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT Lecrtify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and corree 2. Lam eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Cert plans and specifications submitted to the enforcement agency for approval values of the California Code of Regulations. 1. Will ensure that a completed signed copy of this Certificate of Responsible Designer Name: Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip:	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 At. responsibility for the building design or system design identified on this Certificat and manufactured devices for the building design or system design identified on this Certificatificate of Compliance are consistent with the information provided on other applicable complith this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building besigner Signature: Date Signed: 2024-10-24 License: E23735 Phone: (916) 626-5518 Generated Date/Time:	california energy commission (NRCC-ITI) (Page 7 of 10/24/202) nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, to the enforcement agency for all applicable ding owner at occupancy.
Addoor Lighting ERTIFICATE OF COMPLIANCE Oject Name: Station 86 TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE Dis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY DIS section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK L DIS section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIAL DIS section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MEDIS section does not apply to this project. I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MEDIS section does not apply to this project. I. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER DIS section does not apply to this project. I. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER DIS section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE IMENT FACTOR (PAF)) RATIONS ONS Generated Date/Time: Report Version: 2022.0.000	NRCC-LTI-E (Page 5 of 7) 10/24/2024 10/24/2024 Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE There are no NRCA forms required for this project.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title Generated Date/Time: Report Version: 2022.0.000	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E. Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 1233; DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd Gity/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certification is submitted to the enforcement agency for approval v 5. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance Singulations. Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand manufactured devices for the building design or system design identified on this Certificate of Compliance are consistent with the information provided on other applicable compliants this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building pate Signature: Date Signed: 2024-10-24 License: E23735 Phone: (916) 626-5518 Generated Date/Time: Report Version: 2022.0.000	california Energy COMMISSIC NRCC-ITI (Page 7 of 10/24/202 10/24/202 nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, or the enforcement agency for all applicable ding owner at occupancy. Documentation Software: EnergyProportional Compliance ID: EnergyPro-5910-1024-332:
ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECI- Dis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECI- Dis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MEnis section does not apply to this project. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUST his section does not apply to this project. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTER his section does not apply to this project. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTION is section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE IMENT FACTOR (PAF)) RATIONS ONS Generated Date/Time: Report Version: 2022.0.000	NRCC-LTI-E (Page 5 of 7) 10/24/2024 10/24/2024 Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE There are no NRCA forms required for this project.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title Generated Date/Time: Report Version: 2022.0.000	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E. Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 1233; DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd Gity/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certification is submitted to the enforcement agency for approval v 5. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance Singulations. Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand manufactured devices for the building design or system design identified on this Certificate of Compliance are consistent with the information provided on other applicable compliants this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building pate Signature: Date Signed: 2024-10-24 License: E23735 Phone: (916) 626-5518 Generated Date/Time: Report Version: 2022.0.000	california Energy COMMISSIC NRCC-ITI (Page 7 of 10/24/202 10/24/202 nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, or the enforcement agency for all applicable ding owner at occupancy. Documentation Software: EnergyProportional Compliance ID: EnergyPro-5910-1024-332:
ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / Specific Spection does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Lenis section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE / SPECIFIC	IGHTING IAL EFFECTS ERCHANDISE IMENT FACTOR (PAF)) RATIONS ONS Generated Date/Time: Report Version: 2022.0.000	NRCC-LTI-E (Page 5 of 7) 10/24/2024 10/24/2024 Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE There are no NRCA forms required for this project.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title Generated Date/Time: Report Version: 2022.0.000	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E. Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 1233; DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd Gity/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certification is submitted to the enforcement agency for approval v 5. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance Singulations. Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand manufactured devices for the building design or system design identified on this Certificate of Compliance are consistent with the information provided on other applicable compliants this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building pate Signature: Date Signed: 2024-10-24 License: E23735 Phone: (916) 626-5518 Generated Date/Time: Report Version: 2022.0.000	california Energy COMMISSIC NRCC-ITI (Page 7 of 10/24/202 10/24/202 nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, or the enforcement agency for all applicable ding owner at occupancy. Documentation Software: EnergyProportional Compliance ID: EnergyPro-5910-1024-332:
ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIfies section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Less to this section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Less to this section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK Less to this section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIfies section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE METAILORED DECORATIVE /SPECIfies section does not apply to this project. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE METAILORED DECORATIVE /SPECIfies section does not apply to this project. ADDITIONAL LIGHTING CONTROL CREDIT (POWER ADJUST This section does not apply to this project.	IGHTING IAL EFFECTS ERCHANDISE IMENT FACTOR (PAF)) RATIONS ONS Generated Date/Time: Report Version: 2022.0.000	NRCC-LTI-E (Page 5 of 7) 10/24/2024 10/24/2024 Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF) This section does not apply to this project. T. DWELLING UNIT LIGHTING This section does not apply to this project. U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION Selections have been made based on information provided in this document Additional Remarks. These documents must be provided to the building insp. NRCI-LTI-E - Must be submitted for all buildings V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE There are no NRCA forms required for this project.	Report Page: Date Prepared: If any selections have been changed by permit applica ector during construction and can be found online Form/Title Generated Date/Time: Report Version: 2022.0.000	CALIFORNIA ENERGY COMMISSION NRCC-LTI-E (Page 6 of 7) 10/24/2024 Int, an explanation should be included in Table E. Documentation Software: EnergyPro Compliance ID: EnergyPro-5910-1024-3321	Indoor Lighting CERTIFICATE OF COMPLIANCE Project Name: Station 86 Project Address: 1233; DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is ac Documentation Author Name: Alex Batista Company: Optimized Energy & Facilities Consulting Address: 5734 Lonetree Blvd Gity/State/Zip: Rocklin CA 95765 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Compliance is true and correct and eligible under Division 3 of the Business and Professions Code to accept 3. The energy features and performance specifications, materials, components of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certification is submitted to the enforcement agency for approval v 5. I will ensure that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance is inspections. I understand that a completed signed copy of this Certificate of Compliance Singulations. Alex Batista Company: Optimized Energy & Facilities Consulting, Inc Address: 5734 Lonetree Blvd City/State/Zip: Rocklin CA 95765	Report Page: Curate and complete. Documentation Author Signature: Signature Date: 2024-10-24 CEA/ HERS Certification Identification (if applicable): Phone: (916) 626-5518 t. t. responsibility for the building design or system design identified on this Certificate of Compliand manufactured devices for the building design or system design identified on this Certificate of Compliance are consistent with the information provided on other applicable compliants this building permit application. hall be made available with the building permit(s) issued for the building, and made available compliance is required to be included with the documentation the builder provides to the building pate Signature: Date Signed: 2024-10-24 License: E23735 Phone: (916) 626-5518 Generated Date/Time: Report Version: 2022.0.000	california Energy COMMISSIC NRCC-ITI (Page 7 of 10/24/202 10/24/202 nce (responsible designer) te of Compliance conform to the requirement ance documents, worksheets, calculations, or the enforcement agency for all applicable ding owner at occupancy. Documentation Software: EnergyProportional Compliance ID: EnergyPro-5910-1024-332:

Indoor Lighting	CALIFORNIA ENERGY COMMISSI
CERTIFICATE OF COMPLIANCE	NRCC-LT
Project Name: Station 86	Report Page: (Page 4 of
	Date Prepared: 10/24/20

04	05	06	07	08	09	10	11	1	L2
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) /	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field In	spect
		` ,	,		160.5(b)4D	, ,	, ,	Pass	1
Squad, Gym, & Laundry	All Other Space Types	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Garage daylight adaption	NA: Garage daylight adaption	No		
	•						13		
						Plan Shee	t Showing Day	lit Zones:	

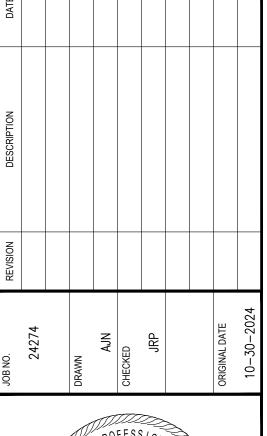
Each area complying using the Con	plete Building or Area Category Methods per 140.6(I	b) are included in thi	s table. Column	06 indicates if addition	al lighting power a	llowances per
140.6(c) or adjustments per 140.6(a) are being used .					
Unconditioned Spaces						
01	02	03	04	05	(06
Area Description	Complete Building or Area Category Primary	Allowed Density	Area (ft²)	Allowed Wattage	Additional Allowa	ance / Adjustmer
Area Description	Function Area	(W/ft ²)	Area (Tt-)	(Watts)	Area Category	PAF
Squad & Laundry	All Other Space Types	0.4	915	366	No	No
	•	TOTALS:	915	366	See Tables J,	or P for detail

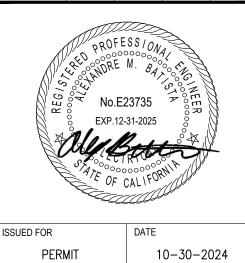
J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM
This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:

Report Version: 2022.0.000 Schema Version: rev 20220101 Documentation Software: EnergyPro
Compliance ID: EnergyPro-5910-1024-3321
Report Generated: 2024-10-24 14:48:28







STATION 86 RENOVATION 12337 BANNER LAVA CAP ROAD NEVADA CITY, CA 95959

> TITLE 24 ENERGY

NO.

EN0

rojec	t Name: Station 86 Fire Station		Calculatio	n Date/Time: 2024-10-30T16:20:08-0	05:00 (Page 1 of 1:						
Calcula	ation Description: Title 24 Analysis		•	Input File Name: 24274 Russell Davidson Arch Station 86 Fire Station Nevada City.ribd22x							
GENER	AL INFORMATION										
01	Project Name	Station 86 Fire Station									
02	Run Title	Title 24 Analysis									
03	Project Location	12337 Banner Lava Cap Rd									
04	City	Nevada City	05	Standards Version	2022						
06	Zip code	95959	07	Software Version	EnergyPro 9.3						
08	Climate Zone	11	09	Front Orientation (deg/ Cardinal)	135						
10	Building Type	Single family	11	Number of Dwelling Units	1						
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	3						
14	Addition Cond. Floor Area (ft ²)	129	15	Number of Stories	2						
16	Existing Cond. Floor Area (ft²)	1248	17	Fenestration Average U-factor	0.3						
18	Total Cond. Floor Area (ft²)	1377	19	Glazing Percentage (%)	12.45%						
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a						
22	Fuel Type	Propane	23	No Dwelling Unit:	No						

COMPLIANCE RESULTS

CA Building Energy Efficiency Standards - 2022 Residential Compliance

02 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. O3 This building incorporates one or more Special Features shown below CHELKS

Registration Number: 424-P010266206A-000-000-00000-0000 NOTICE: This document has been generated by California Home Foemy Efficiency, Rating Services (CHEERS	Registration Date/Time: 10/30/2024 15:07	HERS Provider: CHEERS related to CHEERS. Therefore, CHEERS is not responsible for.
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERs and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance	Report Version: 2022.0.000	Report Generated: 2024-10-30 14:20:35
	Schema Version: rev 20220901	

oject Name								• -									(Page 5 of 13)	
alculation D	<u>.</u>	Title 24 A	nalysis				Input File Name: 24274 Russell Davidson Arch Station 86 Fire Station Nevada City.ribd22x										vada	
DPAQUE SURF						<u>'</u>												
01	0	2	03	04		05	\perp	06			07	08	l		09		10	11
Name	Zo	ne	Construction	Azimu	th O	rientatio	on Gross Area (ft ²)			ndow and r Area (ft2) Tilt (deg		leg)	g) Wall Exception		St	atus	Verified Existing Condition	
Raised Floor	Exis	ting	Existing Floor (crawlspac	n/a		n/a		1248			n/a	n/a	9			Exi	isting	No
N 2	Gar	age	R-0 Wall (stucco)	45		Right		362			150.1	90	1	\vdash	none	Exi	isting	No
E 2	Gar	age	R-0 Wall (stucco)	135		Front		388			53	90)		none	Exi	isting	No
S 2	Gar	age	R-0 Wall (stucco)	225		Left		60			0	90)		none	Exi	isting	No
W 6	Gar	age	R-0 Wall (stucco)	315		Back	1	267		11	37	90)		none	Exi	isting	No
							4 11			н								
ATTIC 01			02				03	04	1		05	06	0	7	08	Г	09	10
Nam	Name Construction		on		Ty	Roof Rise (x in 12)			oof Roof ectance Emittance		ı	Radiant Barrier Cool		f Status		Verified Existing Condition		
AtticGa	AtticGarage Attic Garage Ro		of Cons		Ventilate		ted 6		0.1		0.85	N	0	No	Ex	isting	No	
Attic Exi	ting		Attic RoofExis	ting	by d	Vent	ntilated 6		0.1		0.85	N	No		Existing		No	
Attic Ado	ition		Attic RoofAdd	ition		Vent	Ventilated 6		0.1		0.85	N	No N		Ex	isting	No	
								ATT	100	100								
ENESTRATION	.							_										
01	02	03	04	05	06	07	08	09	1	LO	11	12		13	1	.4	15	16
Name	Туре	Surface	e Orientatio	Azimuth	Width (ft)	Heigh t (ft)	Mult.	Area (ft ²)	U-fa	actor	U-factor Source	SHGC	SH	GC Sour	ro I	erior ding	Status	Verified Existing Condition
6640	Window	E	Front	135			1	26	C	1.4	NFRC	0.35		NFRC	Bug S	creen	Existing	No
6640 2	Window	Е	Front	135			1	26 0.4		1.4	NFRC	0.35		NFRC	Bug S	creen	Existing	No
6640 3	Window	E	Front	135			1	1 26 0.		.4	NFRC	0.35		NFRC	Bug S	creen	Existing	No
6036	Window	S	Left	225			1	21	C	0.4	NFRC	0.35	\perp	NFRC	Bug S	creen	Existing	No
2030	Window	S	Left	225			1	6	_ c	.4	NFRC	0.35		NFRC	Bug S	creen	Existing	No

Report Version: 2022.0.000

Schema Version: rev 20220901

Report Generated: 2024-10-30 14:20:35

oject Name: Station 8	6 Fire Stati	on		Calc	ulation Date/Ti	me: 2024-10-30T1	5:20:08-05:	00 (Page 9 of
Iculation Description:	Title 24 Ar	nalysis		Inpu	t File Name: 24	274 Russell Davids	on Arch Sta	tion 86 Fire Station Nevada
PAQUE SURFACE CONSTR	RUCTIONS			City.	ribd22x			
01	0	2	03	04	05	06	07	08
Construction Name	Surfac	е Туре	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Attic RoofAddition	RoofAddition Attic Roofs Wood Framed Ceiling		2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4	
Existing Floor (crawlspac			Wood Framed Floor	2x12 @ 16 in. O. C.	R-O	None / None	0.216	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12
R-O Attic	Ceilings		Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-O	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
Existing Attic	Ceilings att		Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-22 None / None		0.043	Over Ceiling Joists: R-12.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
R-38 Attic	R-38 Attic Ceilings (below Wood Fram attic) Ceiling		Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-28.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
JILDING ENVELOPE - HER	ILDING ENVELOPE - HERS VERIFICATION						'	
01			02	03		04		05
Quality Insulation Installa	ation (QII)	High R-va	lue Spray Foam Insulation	Building Envelope Ai	r Leakage	CFM50		CFM50
Not Required			Not Required	N/A		n/a		n/a

Registration Number: 424-P010266206A-000-000-00000-0000 NOTICE: This document has been generated by California Home Energy Efficiency Rating Services and cannot guarantee, the accuracy or completeness of the information contained in this documen	Registration Date/Time: 10/30/2024 15:07 (CHEERS) using information uploaded by third parties not affiliated wi	HERS Provider: CHEERS th or related to CHEERS. Therefore, CHEERS is not responsible for,
and cannot guarantee, the accuracy or completeness of the Information contained in this documen CA Building Energy Efficiency Standards - 2022 Residential Compliance	t. Report Version: 2022.0.000 Schema Version: rev 20220901	Report Generated: 2024-10-30 14:20:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD		CF1R-PRF-0
Project Name: Station 86 Fire Station	Calculation Date/Time: 2024-10-30T16:20:08-05:00	(Page 13 of 1
Calculation Description: Title 24 Analysis	Input File Name: 24274 Russell Davidson Arch Station 86 Fire State	tion Nevada
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	on, made and	
1. I certify that this Certificate of Compliance documentation is accurate and complete.		
Documentation Author Name: Jenna Green	Documentation Author Signature: Jenna Green	
Company: Optimized Energy and Facilities Consulting, Inc.	Signature Date: 10/30/2024	
Address: 5734 Lonetree Blvd	CEA/ HERS Certification Identification (If applicable):	
City/State/Zip: Rocklin, CA 95765	Phone: 916-626-5518	
RESPONSIBLE PERSON'S DECLARATION STATEMENT		
I certify the following under penalty of perjury, under the laws of the State of California: I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the I certify that the energy features and performance specifications identified on this Certificate of C The building design features or system design features identified on this Certificate of Compliance calculations, plans and specifications submitted to the enforcement agency for approval with this	ompliance conform to the requirements of Title 24, Part 1 and Part 6 of the Californ are consistent with the information provided on other applicable compliance docu	
Responsible Designer Name: Russell Davidson	Responsible Designer Signature: Russell Davidson	
Company: Russell Davidson Architecture + Design	Date Signed: 10/30/2024	
Address: 149 Crown Point Ct, Suite C	License: C36895	
City/State/Zip: Grass Valley, CA 95945	Phone: 5309132370	

CERTIFICATE OF COMP	LIANCE - RESIDENTIAL PERFO	RMANCE COMPLIANCE METH	IOD			CF1R-PRF-01-E
Project Name: Station	86 Fire Station		Calculation Date/Time	: 2024-10-30T16:20:08-05:00		(Page 2 of 13)
Calculation Description	n: Title 24 Analysis		Input File Name: 24274 City.ribd22x	4 Russell Davidson Arch Statio	n 86 Fire Station N	levada
ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)

ENERGY USE SUMMARY			City.ribd22x			
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	112.3	0	116.36	0	-4.06
Space Cooling	0	115.85	0	118	0	-2.15
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	47.96	0	41.46	0	6.5
Self Utilization/Flexibility Credit				0		0
Efficiency Compliance Total	0	276.11	0	275.82	0	0.29
Photovoltaics		0		0		
Battery				0		
Flexibility				4/2		
Indoor Lighting	0	8.32	0	8.32		
Appl. & Cooking	0	23.13	0	23.13		
Plug Loads	0	41.29	0	41.29		
Outdoor Lighting	0	1.78	0	1.78		
TOTAL COMPLIANCE	0	350.63	0	350.34		

Registration Number: 424-P010266206A-000-000-000000-00000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-10-30 14:20:35 Schema Version: rev 20220901

oject Nam	e: Station 86	Fire Station						C	alculation	Date/Time:	2024-10-	30T16:20:08-05	:00		(Page 6 of 1
lculation [Description: 1	itle 24 Analy	/sis						•		Russell D	avidson Arch St	ation 86 Fire	Station Neva	ada
NESTRATIO	N / GLAZING							C	ity.ribd22x						
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Туре	Surface	Orientatio n	Azimuth	Width (ft)	Heigh t (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
4040	Window	w	Back	315	4	4	1	16	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
4040 2	Window	w	Back	315	4	4	1	16	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
4040 3	Window	W	Back	315	4	4	1	16	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
3630	Window	W	Back	315	3.5	3	1	10.5	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
2040	Window	W 2	Back	315			1	8	0.3	NFRC	0.22	NFRC	Bug Screen	New	NA
3939	Window	N 2	Right	45			1	14.1	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
4040 4	Window	E 2	Front	135			1	16	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
4040 5	Window	E 2	Front	135	-7/		1	16	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
4040 6	Window	W 6	Back	315			1	16	0.4	NFRC	0.35	NFRC	Bug Screen	Existing	No
PAQUE DOC)RS														
	01		02			03				04		05		0	6
N	lame	Si	ide of Buildin	g		Area (f	t ²)		U	-factor		Status	,	/erified Existi	ng Conditio
3	3070		Е			21				0.5		Existing		N	0
3	070 2		W	Steeren		21				0.5	-	Existing		N	0
3	070 3		W 2			21		\Box		0.5		New		n/	'a
4	1070		N 2			28				0.5		Existing		N	0
9	0120		N 2			108				1		Existing		N	0
3	070 4		E 2			21				0.5		Existing		N	0
30	070 5		W 6			21				0.5		Existing	Existing No		

Registration Number: 424-P010266206A-000-000-000000-0000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Report Version: 2022.0.000 Schema Version: rev 20220901

Report Generated: 2024-10-30 14:20:35

Project Na	me: Station	86 Fire	Station					Calc	ulation Da	ite/Time: 202	4-10-30T16	20:08-05:0	10		F1R-PRF-01- Page 10 of 13	
Calculation	n Descriptio	n: Title		:		Input File Name: 24274 Russell Davidson Arch Station 86 Fire Station N City.ribd22x										
WATER HEA	TING SYSTEN	/IS														
01	0:	2	03		04	05	06	(07	08	09	1	0	11	12	
Name	Systen	т Туре	Distributi Type	on V	Vater Heater Name	Number of Units	Solar Heat System	0	npact bution	HERS Verification	Water Heat Name (#)	er Sta	tus E	erified existing endition	Existing Wat Heating System	
DHW Sys	1 Domes Water		Standar	3 [OHW Heater 1	1	n/a	No	one	n/a	DHW Heate 1 (1)	er Ne	ew .	NA		
WATER HEA	TERS								\overline{A}	7						
01	02		03	04	05	06	07	08	09	10	11	12	13	14	15	
Name	Heating Element Type	Tan	k Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating o	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Locatio	on Status	Verified Existing Condition	
DHW Heater 1	Propane		sumer	1	0	UEF	0.96	Btu/Hr	200000	0	n/a	n/a		New	n/a	
WATER HEA	TING - HERS	VERIFIC	ATION										•	•	•	
	01	Т	02			03		04		05		0(6		07	
							100000	(8) (50)	2000		and the same of th					

SPACE CONDIT	ONING SYSTEMS	5									
01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Existing HVAC System
HVAC1	Heating and cooling system other	Heating Component 1	1	Cooling Component 1	1	HVAC Fan 1	Air Distribution System 1	n/a	Existing	No	
NOTICE: This docur and cannot guarant	umber: 424-P01 ment has been gene ee, the accuracy or ergy Efficiency St	rated by California F completeness of the	lome Energy Efficier information contair	cy Rating Services led in this document	(CHEERS) using info Report \	tion Date/Time: ormation uploaded b /ersion: 2022.0.0 Version: rev 202	000	7 ffiliated with or relat		CHEERS refore, CHEERS is not ted: 2024-10-30	

DHW Sys 1 - 1/1 Not Required Not Required Not Required None Not Required Not Required

Project Name: Station 86	Fire Station		Calculation Dat	e/Time: 2024-10-30T	16:20:08-05:00	(Pag
Calculation Description: T	itle 24 Analysis		Input File Nam City.ribd22x	e: 24274 Russell David	dson Arch Station 86 Fire St	ation Nevada
ENERGY USE INTENSITY			<i>,</i>			
	Standard Design (k	Stu/ft ² - yr) Propo	sed Design (kBtu/ft² - yr)	Compliance Margin	ı (kBtu/ft² - yr) M	largin Percentag
Gross EUI ¹	41.48		41.09	0.39		0.94
Net EUI ²	41.48		41.09	0.39		0.94
	e Total (not including PV) / Total Bu otal (including PV) / Total Building					
REQUIRED SPECIAL FEATURE	S					
The following are features th	nat must be installed as condition f	or meeting the modeled o	energy performance for this	computer analysis.		
Window overhangs an	nd/or fins					
Window overhangs arNew ductwork addedDucts in crawl space	nd/or fins is less than 25 ft. in length		4			
 New ductwork added 			13	4		
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary of	is less than 25 ft. in length of the features that must be field-v				gy performance for this comp	uter analysis. Ad
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary of detail is provided in the build.	is less than 25 ft. in length				gy performance for this comp	uter analysis. Ad
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary of	is less than 25 ft. in length of the features that must be field-v				gy performance for this comp	uter analysis. Ad
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary of detail is provided in the build.	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R				gy performance for this comp	uter analysis. Ad
New ductwork added outs in crawl space HERS FEATURE SUMMARY The following is a summary detail is provided in the build Kitchen range hood	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R				gy performance for this comp	
New ductwork added outs in crawl space HERS FEATURE SUMMARY The following is a summary detail is provided in the build Kitchen range hood BUILDING - FEATURES INFOR	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R	og	to be completed in the HER	S Registry		07 Number o
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary detail is provided in the build Kitchen range hood BUILDING - FEATURES INFORM	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R RMATION 02	ts and CF3Rs are required 03 Number of Dwelling	to be completed in the HER	6 Registry 05	06 Number of Ventilation	07 Number of
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary detail is provided in the build Kitchen range hood BUILDING - FEATURES INFOR 01 Project Name Station 86 Fire Station	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R RMATION 02 Conditioned Floor Area (ft²)	os and CF3Rs are required 03 Number of Dwelling Units	to be completed in the HER 04 Number of Bedrooms	6 Registry 05 Number of Zones	06 Number of Ventilation Cooling Systems	07 Number of Heating St
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary of detail is provided in the builc Kitchen range hood BUILDING - FEATURES INFOR	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R RMATION 02 Conditioned Floor Area (ft²)	os and CF3Rs are required 03 Number of Dwelling Units	to be completed in the HER 04 Number of Bedrooms	6 Registry 05 Number of Zones	06 Number of Ventilation Cooling Systems	07 Number or Heating S
New ductwork added Ducts in crawl space HERS FEATURE SUMMARY The following is a summary of detail is provided in the build Kitchen range hood BUILDING - FEATURES INFOR 01 Project Name Station 86 Fire Station ZONE INFORMATION	is less than 25 ft. in length of the features that must be field-v ding tables below. Registered CF2R RMATION 02 Conditioned Floor Area (ft²) 1377	03 Number of Dwelling Units 1	04 Number of Bedrooms	05 Number of Zones	06 Number of Ventilation Cooling Systems 0	07 Number of Heating St

Registration Number: 424-P010266206A-000-000-000000-0000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using Information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-10-30 14:20:35 Report Version: 2022.0.000 Schema Version: rev 20220901

CF1R-PRF-01-E

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

OVERHANGS AND I	INS							City.ribd	<u></u> n							
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
			Overhang				Left	Fin			Righ	t Fin				
Window	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Тор Uр	Dist L	Bot Up	Depth	Тор Uр	Dist R	Bot Up	Status	Verified Existing Condition	Existing Constructio
4040	10.5	1	10	10	0	0	0	0	0	0	0	0	0	Exist ing	No	
4040 2	10.5	1	10	10	0	0	0	0	0	0	0	0	0	Exist ing	No	
4040 3	10.5	1	10	10	0	0	0	0	0	0	0	0	0	Exist ing	No	
3630	10.5	1	10	10	0	0	0	0	0	0	0	0	0	Exist ing	No	
LAB FLOORS	·				7											•
01	02		03		04		05	0	6	07		08		09		10
Name	Zone	Aı	rea (ft²)	Perin	neter (ft)	R-val	e Insul. ue and epth	Edge R-valu De		Carpeted	Fraction	Heate	d	Stat	us	erified Existing
Slab-on-Grade	Addition		129		0.1	n	one	()	809	%	No		Nev	v	n/a
Slab-on-Grade 2	Garage		915		108	n	one	()	0%	ó	No		Exist	ing	No

Registration Number: 424-P010266206A-000-000-0000000-0000	Registration Date/Time: 10/30/2024 15:07	HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Servi and cannot guarantee, the accuracy or completeness of the information contained in this docur	ices (CHEERS) using information uploaded by third parties not affiliated ment.	with or related to CHEERS. Therefore, CHEERS is not responsible
CA Building Energy Efficiency Standards - 2022 Residential Compliance	Report Version: 2022.0.000	Report Generated: 2024-10-30 14:20:35
	Schema Version: rev 20220901	

Project Name										•		-10-30T16:20:08-0					age
Calculation D			s						I nput City.ri		1274 Russ	ell Davidson Arch S	Station	86 Fire	Station	Neva	da
HVAC - HEATIN	NG UNIT TYPES																
	01			02	:		_		03			04				05	
	Name			System	Туре	1		19	Number of Unit	ts	He	eating Efficiency		Heating Unit Brand			
Heatin	ng Component :	1	Ce	ntral gas	furnac	ce			1			AFUE - 78				n/a	
HVAC - COOLII	NG UNIT TYPES	;					н				19						
01		02		03	T		04		05	06	5	07		08			09
Name	Sys	tem Type	Numb	er of Ur	nits	Efficien	icy Met	ric	Efficiency EER/EER2/CEE	Efficie R SEER/S		Zonally Controlled		1ulit-sp		HERS	S Veri
Cooling Componen		ral split AC		1		EER	:/SEER		8	10	0	Not Zonal	Si	ngle Sp	eed	Co	Cool ompo hers
HVAC - DISTRI	BUTION SYSTE	MS					H		+								
01	02	03	04	05	06	07	08	09	10	11	12	13	14	4	15	;	
	_			t Ins. alue		uct	Surfa	ce Area	2000	Duct Leakage	HERS		Veri		Exist Distrib		Ne
Name	Type	Design Type	Suppl	Retur n	Suppl	Retur	Suppl y	Retur	Bypass Duct	Duct Leakage	Verificat	ion Status	Exist Cond		syste		>
Air Distribution System 1	Unconditio ned crawl space	Non- Verified	R-8	R-8	Cra wl Spa ce	Cra wl Spa ce	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distribut Syster 1-hers-c	n New	N	0			
HVAC - FAN SY	'STEMS																
		01						02				03				04	
	Na	ame						Туре			Fan Pow	ver (Watts/CFM)				Name	
							Н										ers-fa

Registration Number: 424-P010266206A-000-000-0000000-0000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-10-30 14:20:35 Schema Version: rev 20220901

Calculation Des	cription: Title 24	- Analysis			Input	File Name: 24274	Russell David	son Arch Station 86	Fire Station	Nevada	
ZONE INFORMAT	ION				City.ri	bd22x					
01		02	03		04 0		05 06			07	
Zone Name Addition		Zone Type	HVAC System Name		Zone Floor Area (ft ²) Avg. Cei	ling Height	Water Heating Syste	em 1	Status New	
		Conditioned	HVAC	1	129		9	DHW Sys 1			
OPAQUE SURFAC	ES		-11		7/1	7 //					
01	02	03	04	05	06	07	08	09	10	11	
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft ²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions Status		Verified Existin	
N	Existing	Existing Wall (wood sidin	45	Right	38	0	90	none	Existing	No	
E	Existing	Existing Wall (wood sidin	135	Front	408	99	90	none	Existing	No	
S	Existing	Existing Wall (wood sidin	225	Left	339	27	90	none	Existing	No	
w	Existing	Existing Wall (wood sidin	315	Back	420	79.5	90	none	none Existing		
W 2	Addition	R-15 Wall (wood siding)	315	Back	105	29	90	none	New	No	
W 3	Addition	R-15 Wall (wood siding)	315	Back	1	0	90	none New		No	
W 4	Addition	R-15 Wall (wood siding)	315	Back	1	0	90	none New		No	
W 5	Addition	R-15 Wall (wood siding)	315	Back	1	0	90	none New		No	
Interior Surface	Existing>>Gar age	Existing Garage Wall	n/a	n/a	238	0	n/a	Existing		No	
Interior Surface 2	Addition>>Ga rage	R-21 Garage Wall	n/a	n/a	348	0	n/a	New		n/a	
Roof	Existing	Existing Attic	n/a	n/a	1395	n/a	n/a		Existing	No	
Roof 2	Addition	R-38 Attic	n/a	n/a	144	n/a	n/a		New	No	
Roof 3	Garage	R-0 Attic	n/a	n/a	1023	n/a	n/a		Existing	No	

CF1R-PRF-01-E

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Registration Number: 424-P010266206A-000-000-000000-0000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using Information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-10-30 14:20:35 Schema Version: rev 20220901

ERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD		CF1R-PRF-01-E
roject Name: Station 86 Fire Station	Calculation Date/Time: 2024-10-30T16:20:08-05:00	(Page 8 of 13)
alculation Description: Title 24 Analysis	Input File Name: 24274 Russell Davidson Arch Station 86 Fire Station Nevada City.ribd22x	

01	02	03	04	05	06	07	08	
Construction Name	Surface Type			Interior / Exterior Continuous U-factor R-value U-factor		Assembly Layers		
R-0 Wall (stucco)	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-O	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco	
Existing Wall (wood sidin	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-11	None / None	0.103	Inside Finish: Gypsum Board Cavity / Frame: R-11 / 2x4 Exterior Finish: Wood Siding/sheathing/decking	
R-15 Wall (wood siding)	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.089	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Wood Siding/sheathing/decking	
Existing Garage Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-11	None / None	0.099	Inside Finish: Gypsum Board Cavity / Frame: R-11 / 2x4 Other Side Finish: Gypsum Board	
R-21 Garage Wall	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.064	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Other Side Finish: Gypsum Board	
Attic Garage Roof Cons	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-O	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4	
Attic RoofExisting Attic Roofs Wood Framed Ceiling		2x4 @ 24 in. O. C.	R-O	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4		

Registration Number: 424-P010266206A-000-000-0000000-00000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-10-30 14:20:35 Schema Version: rev 20220901

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMAN	CE COMPLIANCE METHOD		CF1R-PRF-01-E		
Project Name: Station 86 Fire Station	Calculation Date/Time: 2024	(Page 12 of 13)			
Calculation Description: Title 24 Analysis		Input File Name: 24274 Russell Davidson Arch Station 86 Fire Station Nevada City.ribd22x			
HVAC FAN SYSTEMS - HERS VERIFICATION					
01		03	na		

Verified Fan Watt Draw

Registration Number: 424-P010266206A-000-00000000-00000 Registration Date/Time: 10/30/2024 15:07 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-10-30 14:20:35 Schema Version: rev 20220901

STATION 86 RENOVATION R LAVA CAP ROAD , CA 95959 12337 BANNER L NEVADA CITY, C

EXP.12-31-2025

10-30-2024

FA

ISSUED FOR

PERMIT

SHEET TITLE TITLE 24

SHEET NO.

EN1

ENERGY

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

Registration Number: 424-P010268206A-000-000-000000-0000

Registration Date/Time: 10/30/2024 15:07

**Registra Report Version: 2022.0.000 Schema Version: rev 20220901