

MECHANICAL SPECIFICATIONS

PROVIDE EQUIPMENT INDICATED ON THE DRAWINGS, AND AS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM. DEFINITIONS: FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION. INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE. PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE. WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT THE OWNER'S OPTION. PROVIDE OPERATION MANUALS, MAINTENANCE MANUALS AND SCHEMATICS FOR ALL MECHANICAL EQUIPMENT INSTALLED. COORDINATION: COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. ROOF PENETRATIONS SHALL COMPLY WITH "SMACNA" AND "NRCA" STANDARDS, AND WITH THE REQUIREMENTS OF THE EXISTING ROOFING WARRANTY, IF APPLICABLE. DO NOT PERFORM ROOFING PENETRATIONS IN A MANNER WHICH WOULD VOID OR OTHERWISE LIMIT THE EXISTING ROOF WARRANTY. DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON THE DRAWINGS ARE INSIDE CLEAR DIMENSIONS. SHEET METAL DUCTWORK: PROVIDE SHEET METAL DUCTWORK FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS, FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A". SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, WITH G90 ZINC COATING. SHEET STEEL SHALL COMPLY WITH ASTM A653 STANDARD SPECIFICATION FOR STEEL SHEET METAL, ZINC COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY THE HOT DIP PROCESS, AND A924 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR SHEET, METALLIC-COATED BY THE HOT DIP PROCESS. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR TIGHT. PROVIDE TURNING VANES AT ALL 90° ELBOWS. TRAPEZE DUCT HANGERS: PROVIDE MINIMUM 1" X 2" X 1" X 18 GAUGE CHANNELS WITH MINIMUM 1" X 18 GAUGE STRAPS TO STRUCTURAL SUPPORT. ROUND SHEET METAL DUCT: PROVIDE SPIRAL SEAM (ALL SIZES) OR SNAP LOCK (DUCT SIZES UP TO 10") GALVANIZED STEEL COMPLYING WITH SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1. FIBER GLASS DUCT BOARD IS AN ACCEPTABLE ALTERNATIVE IF APPROVED BY OWNER AND THE LOCAL BUILDING CODE OFFICIAL. PRODUCT AND INSTALLATION MUST MEET NAIMA STANDARDS AND OTHER APPLICABLE CODES AND REGULATIONS. EXPOSED DUCTWORK: EXPOSED DUCTWORK SHALL BE CLEANED OF DEBRIS AND OIL, THEN WIPED DOWN WITH VINEGAR OR OTHER SURFACE PREPARING CHEMICAL TO PREPARE DUCT FOR PAINT. DUCT SEALANT: PROVIDE POLYMERIC RUBBER TYPE SEALANT FOR USE ON BOTH INTERIOR LOCATED DUCTWORK AND DUCTWORK EXPOSED TO OUTDOOR CONDITIONS. SEALER SHALL HAVE HIGH BONDING STRENGTH FOR SURE, FIRST TIME SEALING OF JOINTS IN LOW, MEDIUM, AND HIGH PRESSURE DUCT SYSTEMS. SEALER SHALL BE HIGH IN SOLID CONTENT. PROVIDE A TWO PART TAPE SEALING SYSTEM, CONSISTING OF WOVEN FIBER TAPE IMPREGNATED WITH A GYPSUM MINERAL COMPOUND, AND A MODIFIED ACRYLIC/SILICONE ACTIVATOR THAT REACTS EXOTHERMICALLY WITH THE TAPE. TWO PART TAPE SEALING SYSTEM MUST BE RATED FOR BOTH INDOOR AND OUTDOOR APPLICATION. TAPE SHALL NOT CONTAIN ASBESTOS. DUCT INSULATION: MATERIAL FOR SUPPLY AND RETURN AIR DUCT ABOVE CEILING INSIDE THE BUILDING SHALL HAVE THE EQUIVALENT THERMAL RESISTANCE OF MINIMUM R-6. THE REQUIRED R VALUES ARE FOR INSTALLED INSULATION WITH 25% COMPRESSION AT THE CORNERS. PROVIDE PINS AND WASHERS IN ACCORDANCE WITH SMACNA REQUIREMENTS AND AS REQUIRED TO PREVENT INSULATION FROM SAGGING. PROVIDE ADEQUATE INSULATION AT THE SUPPLY AIR DIFFUSERS TO PREVENT CONDENSATION. FLEXIBLE DUCT: UL #181 LISTED, CLASS 1, AND CONTAIN A 0.1 PERM RATED POLYETHYLENE INNER LINER, WITH R-8 FIBERGLASS INSULATION. FLEXIBLE DUCTS SHALL BE SECURED TO RIGID SHEET METAL COLLARS AND AIR DIFFUSERS WITH NYLON TIES OR STAINLESS STEEL WORM GEAR STRAPS. SEAL ALL CONNECTIONS AND JOINTS AIRTIGHT. SUPPORT FLEXIBLE DUCTS FROM THE BUILDINGS STRUCTURE WITH MINIMUM 1" WIDE, 18 GAUGE, GALVANIZED STEEL STRAP AT MAXIMUM 4'-0" CENTERS. PROVIDE 4" WIDE SHEET METAL SADDLES AT EACH SUPPORT EACH STRAP. SAG OF FLEXIBLE DUCT BETWEEN HANGERS SHALL NOT EXCEED 1/2" PER FOOT OF SUPPORT SPACING. RADIUS FOR TURNS OF FLEXIBLE DUCTS SHALL BE A MINIMUM OF ONE DUCT DIAMETER. FLEXIBLE DUCT RUNS SHALL NOT EXCEED 10'-0" IN LENGTH AND SHALL BE THE SAME SIZE AS THE DIFFUSER NECK CONNECTION. ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS, WITH LOCKING POSITION REGULATOR. REGULATOR SHALL BE POSITIONED WITH SHEET METAL BRACKET BEYOND DUCT COVERING. WHERE POSITIONING REGULATOR IS NOT ACCESSIBLE, PROVIDE COUPLING AND EXTENSION ROD WITH REGULATOR FOR CEILING OR WALL INSTALLATION. AS REQUIRED. RECTANGULAR VOLUME DAMPERS: PROVIDE MINIMUM 16 GAUGE GALVANIZED STEEL CHANNEL FRAME, 16 GAUGE GALVANIZED STEEL BLADES, MINIMUM ½" HEXAGONAL AXLE, BOLDDED SYNTHETIC BEARINGS, WITH 3/8" SQUARE PLATED STEEL CONTROL SHAFT. LINKAGES SHALL BE CONCEALED IN THE FRAME. OPERATING SHAFT SHALL EXTEND BEYOND FRAME AND DUCT TO A LOCKING QUADRANT WITH ADJUSTABLE LEVER. MAXIMUM BLADE WIDTH SHALL NOT EXCEED 6".

HVAC GENERAL NOTES

- THE INTENT OF THESE PLANS AND SPECIFICATIONS IS TO INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND SERVICES NECESSARY TO FURNISH, INSTALL, TEST, AND ADJUST A COMPLETE WORKABLE HEATING, VENTILATION, AND AIR CONDITIONING SYSTEM AS SHOWN, PRESCRIBED, OR REASONABLY IMPLIED BUT NOT LIMITED TO THAT EXPLICITLY INDICATED IN THE CONTRACT DOCUMENTS, BUT NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE INTENT THEREOF.
- THE ENTIRE INSTALLATION SHALL CONFORM TO THE APPLICABLE CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION. IN THE EVENT OF CONFLICT BETWEEN SPECIFICATIONS, CODES, AND REGULATIONS, THE MORE RESTRICTIVE SHALL APPLY.
- DRAWINGS FOR HVAC WORK ARE DIAGRAMATIC SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. PROVIDE ALL DUCTWORK, MATERIALS, CONNECTIONS, ACCESSORIES, FITTINGS, OFFSETS, TRANSITIONS, DAMPERS AS REQUIRED FOR A COMPLETE WORKABLE SYSTEM.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED LISTING. ALL EQUIPMENT, PIPING AND SUPPORTS SHALL BE RESTRAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE "GUIDLINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA). ALL EQUIPMENT SHALL BE ANCHORED TO RESIST THE LATERAL FORCE REQUIREMENTS OF CHAPTER 16 OF THE 2012 CALIFORNIA BUILDING CODE.
- COORDINATE THE INSTALLATION OF THE HVAC SYSTEM WITH ALL OTHER TRADES PRIOR TO FABRICATION OR INSTALLATION. COORDINATE THE LOCATIONS OF PENETRATIONS AND FINAL LOCATION OF ALL EQUIPMENT WITH THE GENERAL CONTRACTOR. PROVIDE EQUIPMENT WEIGHTS, EQUIPMENT DIMENSIONS, PLATFORM SIZES & LOCATIONS, CURB SIZES & LOCATIONS. CONCRETE PAD SIZES AND LOCATIONS AST REQUIRED. COORDINATE LOCATIONS OF GAS & CONDENSATE LINES WITH PLUMBING CONTRACTOR. COORDINTAE LOCATIONS OF POWER, DISCONNECTS, AND CONTROL CONDUIT WITH THE ELECTRICAL CONTRACTOR. COORDINATE LOCATIONS OF ALL DIFFUSERS, REGISTERS, AND GRILLES WITH ARCHITECTURAL PLANS, ELECTRICAL LIGHTING PLANS AND ARCHITECTURAL ELEVATIONS.
- DETAILS FOR EQUIPMENT PADS, PLATFORMS, AND FLASHINGS SHALL BE AS INDICATED BY THE ARCHITECTURAL/STRUCTURAL/CIVIL DRAWINGS, UNLESS NOTED OTHERWISE.
- ALL EQUIPMENT, DUCTS, PIPING, SUPPORTS, AND OTHER DEVICES OUTSIDE OF THE BUILDING OR EXPOSED TO WEATHER, SHALL BE COMPLETELY WEATHER-PROOFED.
- OUTSIDE AIR INTAKES SHALL BE AT LEAST 40 FT. AWAY OR 3 FT. BELOW ANY VENT OR EXHAUST DISCHARGE.
- ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS. DUCTWORK SHALL BE CONSTRUCTED, ERECTED, INSULATED AND TESTED IN ACCORDANCE CHAPTER 6 OF THE 2022 CALIFORNIA MECHANICAL CODE.
- ALL EXHAUST FANS SHALL BE EQUIPPED WITH A BACK DRAFT DAMPER.
- DUCT AND AIR TRANSFER PENETRATIONS THRU BUILDING ASSEMBLIES REQUIRING PROTECTION SHALL BE PROTECTED WITH FIRE DAMPERS, SMOKE DAMPERS, COMBINATION SMOKE/FIRE DAMPERS AND CEILING RADIATION DAMPERS IN ACCORDANCE WITH SECTION 607 OF THE CALIFORNIA MECHANICAL CODE. DUCTS NOT REQUIRING DAMPERS SHALL COMPLY WITH SECTION 714 & 717 OF THE 2022 CALIFORNIA BUILDING CODE.
- INSTALL SMOKED DETECTORS AND PROVIDE FOR SMOKE DETECTION AND AUTOMATIC SHUT-OFF OF ALL AIR HANDLING EQUIPMENT IN ACCORDANCE WITH SECTION 606 OF THE 2022 CALIFORNIA MECHANICAL CODE.
- UNLESS NOTED OTHERWISE, ALL LINE VOLTAGE WIRING, CONDUIT, FINAL CONNECTIONS, DISCONNECTS, STARTERS, AND OVER CURRENT PROTECTION DEVICES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THESE MECHANICAL DRAWINGS AND/OR ELECTRICAL DRAWINGS AND/OR ELECTRICAL SECTION OF THE SPECIFICATIONS.
- INSTALL ALL LOW VOLTAGE HVAC CONTROL WIRE AND DEVICES PER PLAN. ALL WIRE SHALL BE IN CONDUIT PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS NOTEDD OTHERWISE.
- PROVIDE OWNER WITH THREE COPIES OF A CERTIFIED AIR BALANCE REPORT PREPARED IN BY A THIRD PARTY CERTIFIED BY THE AABC OR NEBB. TEST, ADJUST AND BALANCE THE HVAC SYSTEM IN ACCORDANCE WITH AABC OR NEBB PROCEDURES. PROVIDE START-UP/TEST REPORTS FOR ALL AIR HANDLING EQUIPMENT, FANS, AND REFRIGERATION EQUIPMENT. TEST AND VERIFY PROPER OPERATION OF ALL MAKE-UP AIR/EXHAUST AIR INTERLOCK SYSTEMS AND THIER SEQUENCES OF OPERATION. BALANCE ALL AIR FLOWS WITHIN 5% OF DESIGN VALUES. PERMANENTLY MARK BALANCE POSITION OF ALL REGULATING DEVICES.
- PROVIDE OWNER WITH THREE SETS OF AS-BUILT PLANS AND OPERATIONS AND MAINTENANCE MANUALS. CLEARLY IDENTIFY ALL EQUIPMENT WITH PERMANENT PLASTIC OR METAL LABELS/TAGS (PEN MARKING NOT ACCEPTABLE).
- PROVIDE ONE YEAR WARRANTY ON ALL LABOR, PARTS AND MATERIALS.
- ANY CHANGE OR DEVIATION FROM THESE PLANS OR SPECIFICATIONS SHALL REQUIRE THE WRITTEN APPROVAL OF THE ENGINEER PRIOR TO COMMENCEMENT OF SUCH WORK. 19.0
 - DUCTS FOR DEMAND CONTROLLED VENTILATION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE FAN MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE PROVISIONS ASHRAE 62.2, TABLE 5.3, OR THE AIRFLOW SHALL BE MEASURED AS REQUIRED BY AND IN COMPLIANCE WITH ASHRAE 62.2, 5.4.
 - DUCTS FOR KITCHEN COOKTOPS OR RANGES SHALL BE SHOWN OF METAL WITH A SMOOTH INTERIOR.
 - DUCTS FOR DOMESTIC CLOTHES DRYERS SHALL BE INSTALLED IN ACCORDANCE WITH CMC 504.0.
 - DUCTS FOR DOMESTIC CLOTHES DRYERS SHALL BE RIGID METALLIC DUCTS WITH A MINIMUM MILL THICKNESS OF 16 (0.016-INCH), SHALL HAVE A MINIMUM 4-INCH DIAMETER AND A SMOOTH INTERIOR. THE COMBINED HORIZONTAL AND VERTICAL LENGTH OF THE DUCTS OF THE DUCTS SHALL BE 14-FEET, WHICH SHALL BE REDUCED BY 2-FEET FOR EVERY 90-DEGREE ELBOW IN EXCESS OF TWO ELBOWS.
 - LISTED CLOTHES DRYER TRANSITION DUCTS NOT MORE THAN 6-FEET IN LENGTH SHALL BE PERMITTED TO CONNECT THE DRYER TO THE EXHAUST DUCTS AS LONG AS THEY ARE NOT CONCEALED WITHIN CONSTRUCTION, AND THEY ARE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

LEGEND

		DUCT WORK (WIDTHxDEPTH)
		LINED DUCT WORK (WIDTHxDEPTH DIMENSIONS ARE FOR I.D.)
		SUPPLY DUCT, SECTION
		RETURN DUCT, SECTION
		EXHAUST DUCT, SECTION
		RISE OR DROP IN DIRECTION OF AIR FLOW
	FLEX. CONN.	FLEXIBLE CONNECTION
		DUCT TRANSITION, ROUND AND RECTANGULAR
		SPLITTER DAMPER
		EXTRACTOR AT BRANCH DUCT
		TURNING VANES
		FLEXIBLE DUCT
		SINGLE LINE DUCT WORK
	AVD	AUTOMATIC VOLUME DAMPER
	MYD	MANUAL VOLUME DAMPER
	BDD	BACKDRAFT DAMPER
	MD	MODULATING DAMPER
	AFD	AUTOMATIC FIRE DAMPER
	AD	ACCESS DOOR
	SD	SUPPLY DIFFUSER
	RR	RETURN REGISTER
	ER	EXHAUST REGISTER
	SWR	SIDE WALL SUPPLY REGISTER
	SWE	SIDE WALL RETURN OR EXHAUST
	LD	LINEAR DIFFUSER
	DL	DOOR LOUVER
	UC	UNDER CUT DOOR
	VAV	VARIABLE AIR VOLUME
		THERMOSTAT
		DUCT SMOKE DETECTOR
	T/B	TO BELOW
	F/B	FROM BELOW
	T/A	TO ABOVE
	F/A	FROM ABOVE

SPECIAL NOTICE TO CONTRACTORS

- ALL CONTRACTORS (GENERAL CONTRACTOR AND SUB-CONTRACTORS) BIDDING THIS PROJECT ARE REQUIRED TO VISIT THE JOB SITE AND VERIFY THE EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID. CONTRACTORS ARE TO CAREFULLY REVIEW ALL CONSTRUCTION DOCUMENTS AND NOTE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE CONDITIONS OBSERVED AT THE JOB SITE PRIOR TO SUBMISSION OF ANY BID. THE BUILDING OWNER REPRESENTATIVE LISTED BELOW MAY BE CONTACTED FOR ACCESS TO THE JOB SITE.
- CONTRACTORS ARE RESPONSIBLE FOR VERIFYING THE LOCATION AND CONDITION OF ALL POINTS OF CONNECTION, LOCATION AND CONDITION OF ALL BUILDING (ROOF/FLOOR/CEILING) PENETRATIONS, LOCATION AND CONDITION OF ALL UTILITIES AND BUILDING SYSTEMS INCLUDING, BUT NOT LIMITED TO, GAS, WATER, SEWER, VENT, ELECTRICAL, BUILDING MECHANICAL SYSTEMS, DUCT CONNECTIONS, EXHAUST/OUTSIDE AIR CONNECTIONS, SECURITY, FIRE ALARM, DATA, AND PHONE PRIOR TO SUBMISSION OF THEIR BID.
- ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE CONDITIONS OBSERVED SHALL BE BROUGHT TO THE ATTENTION, IN WRITING, TO THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- NO WORK SHALL BE DONE ON ANY PART OF THE BUILDING BEYOND THE POINT INDICATED IN EACH SUCCESSIVE INSPECTION WITHOUT FIRST OBTAINING THE WRITTEN APPROVAL OF THE CODE OFFICIAL. NO CONSTRUCTION SHALL BE CONCEALED WITHOUT BEING INSPECTED AND APPROVED.

MECHANICAL LIST OF DRAWINGS (LoD):

SHEET TAG	TITLE	SCALE
M 0.00	MECH GENERAL NOTES AND SPECIFICATIONS.	NTS
M 0.01	MECHANICAL CODE CHECKING.	NTS
M 1.01	MAIN FLOOR - MECHANICAL LAYOUT.	3/8"=1'-0"
M 2.01	MECHANICAL EQUIPMENT SCHEDULE.	NTS
M 3.01	HEAT LOADS CALCULATIONS.	NTS
M 4.01	MECHANICAL EQUIPMENT DATA SHEETS.	NTS
M 5.01	MECHANICAL GENERAL DETAILS.	NTS

CLIENT:

ADDRESS:
347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE DESIGNER AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT CONSENT OF THE DESIGNER.

NOTES:

- ALL DIMENSIONS HEREIN ARE IN IMPERIAL UNITS UNLESS STATED OTHERWISE.
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT DESIGNER, ENGINEER OR SPECIALIST DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
MECH GENERAL NOTES
AND SPECIFICATIONS

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: NTS
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DRAWING NO.
M 0 . 0 0

REV.

CALIFORNIA MECHANICAL CODE CHECKING:

DUCT SIZING, THICKNESS & INSULATION

PLEASE REFER TO TABLE 506.2(1) FOR MINIMUM SHEET METAL THICKNESS FOR ROUND DUCTS

604.0 Insulation of Ducts.

604.1 General. Air ducts conveying air at temperatures exceeding 140°F (60°C) shall be insulated to maintain an insulation surface temperature of not more than 140°F (60°C). Factory-made air ducts and insulations intended for installation on the exterior of ducts shall be legibly printed with the name of the manufacturer, the thermal resistance (R) value at installed thickness, flame-spread index, and smoke developed index of the composite material. Internal duct liners and insulation shall be installed in accordance with SMACNA HVAC Duct Construction standards – Metal and Flexible. **[OSHPD 1, 1R, 2, 3, 4 & 5]** Cold air ducts shall be insulated wherever necessary or to prevent condensation.

Exceptions:

- (1) Factory-installed plenums, casings, or ductwork furnished as part of HVAC equipment tested and rated in accordance with approved energy efficiency standards.
- (2) Ducts or plenums located in conditioned spaces where heat gain or heat loss will not increase energy use.
- (3) For runouts less than 10 feet (3048 mm) in length to air terminals or air outlets, the rated R-value of insulation need not exceed R-3.5.
- (4) Backs of air outlets and outlet plenums exposed to unconditioned or indirectly conditioned spaces with face areas exceeding 5 square feet (0.5m²) need not exceed R-2; those 5 square feet (0.5m²) or smaller need to be insulated.
- (5) Ducts and plenums used exclusively for evaporative cooling systems.

E 502.4 Ducts. Ducts shall be sized, installed, and tested in accordance with Section E 502.4.1 though Section E 502.4.4.

E 502.4.1 Insulation and Ducts. Portions of the air distribution system installed in or on buildings for heating and cooling shall be R-8. Where the mean outdoor dew-point temperature in a month exceeds 60°F (16°C), vapor retarders shall be installed on conditioned-air supply ducts. Vapor retarders shall have a water vapor permeance not exceeding 0.5 perm [2.87 E-11 kg/(Pa.s.m²)] where tested in accordance with Procedure A in ASTM E96.

Insulation shall not be required where the ducts are within the conditioned space. [ASHRAE 90.2.6.4]

E 502.4.4 Duct Sizing. Duct systems shall be sized in accordance with ACCA Manual D or other methods approved by the Authority Having Jurisdiction with the velocity in the main duct not exceed 1000 feet per minute (ft/min) (5.08m/s) and the velocity in the secondary branch duct not to exceed 600 ft/min (3.048 m/s).

CONDENSATE DRAIN:

310.0 Condensate Wastes and Control.

310.1 Condensate Disposal. Condensate from air washers, air-cooling coils, condensing appliances, and the overflow from evaporative coolers and similar water-supplied equipment or similar air-conditioning equipment shall be collected and discharged to an approved plumbing fixture or disposal area. Where discharged into the drain system, equipment shall drain by means of an indirect waste pipe. The Waste pipe shall have a slope of not less than 1/8 inch per foot (10.4 mm/m) or 1 percent slope and shall be of approved corrosion-resistant material not smaller than the outlet size in accordance with Section 310.3 or Section 310.4 for air-cooling coils or condensing appliances, respectively. Condensate or wastewater shall not drain over a public way.

310.3 Condensate Waste Pipe Material and Sizing.

Condensate waste pipes from air-cooling coils shall be sized in accordance with the equipment capacity as specified in Table 310.3. The material of the piping shall comply with the pressure and temperature rating of the appliance or equipment, and shall be approved for use with the liquid being discharged.

TABLE 310.3
MINIMUM CONDENSATE WASTE PIPE SIZE

EQUIPMENT CAPACITY IN TONS OF REFRIGERATION	MINIMUM CONDENSATE PIPE DIAMETER (inches)
Up to 20	3/4
21 – 40	1
41 – 90	1 1/4
91 – 125	1 1/2
126 – 250	2

For SI units: 1 ton of refrigeration = 3.52 kW, 1 inch = 25 mm

310.3.1 Cleanouts. Condensate drain lines shall be configured or provided with a cleanout to permit the clearing of blockages and for maintenance without requiring the drain line to be cut.

310.5 Point of Discharge. Air conditioning condensate waste pipes shall connect indirectly, except where permitted in Section 310.6, to the drainage system through an air gap or air break to trapped and vented receptors, dry wells, leach pits, or the tailpiece of plumbing fixtures. A condensate drain shall be trapped in accordance with the appliance manufacturer's instructions or as approved.

310.6 Condensate Waste From Air-Conditioning Coils. Where the condensate waste from air-conditioning coils discharges by direct connection to a lavatory tailpiece or to an approved accessible inlet on a bathtub overflow, the connection shall be located in the area controlled by the same person controlling the air-conditioned space.

AIR INTAKE AND EXHAUST:

402.4 Outdoor Air Intake Protection. Required outdoor-air intakes shall be covered with a screen having not less than 1/4 of an inch (6.4 mm) openings, and shall have not more than 1/2 of an inch (12.7 mm) openings.

402.4.1 Weather Protections. Outdoor air intakes that are part of the mechanical ventilation system shall be designed to manage rain entrainment, to prevent rain intrusion, and manage water from snow in accordance with ASHRAE 62.1.

402.5 Bathroom Exhaust Fans. [HCD 1 & HCD 2] Each bathroom shall be mechanically ventilated in accordance with Division 4.5 of the California Green Building Standards Code (CALGreen).

407.2.2 Exhaust Outlets. Exhaust outlets shall be located a minimum of 10 feet (3048 mm) above adjoining grade and 10 feet (3048 mm) from doors, occupied areas, and operable windows.

Exception: Airborne infection isolation rooms shall comply with Section 414.1.

701.10.1 Minimum Screen Mesh Size. Screens shall be not less than 1/4 of an inch (6.4 mm) mesh. [NFPA 54:9.3.7.2]

311.3 Prohibited Source. Outside or return air for a heating or cooling air system shall not be taken from the following locations:

- (1) Less than 10 feet (3048 mm) in distance from an appliance vent outlet, a vent opening of a plumbing drainage system, or the discharge outlet of an exhaust fan, unless the outlet is 3 feet (914 mm) above the outside-air inlet.
- (2) Less than 10 feet (3048 mm) above the surface of an abutting public way, sidewalk, street, alley, or driveway.

GAS CLOTHES DRYER:

502.1 Exhaust Opening Protection. Exhaust openings terminating to the outdoors shall be covered with a corrosion-resistant screen having not less than 1/4 of an inch (6.4 mm) openings, and shall have not more than 1/2 of an inch (12.7 mm) openings.
Exception: Clothes dryers.

504.4 Clothes Dryers. A clothes dryer exhaust duct shall not be connected to a vent connector, gas vent, chimney, and shall not terminate into a crawl space, attic, or other concealed space. Exhaust ducts shall not be assembled with screws or other fastening means that extend into the duct and that are capable of catching lint, and that reduce the efficiency of the exhaust system.

504.4.1 Provisions for Makeup Air. Make up air shall be provided in accordance with the following:
(1) Makeup air shall be provided for Type 1 clothes dryers in accordance with the manufacturer's instructions. [NFPA 54: 10.4.3.1] Where a closet is designed for the installation of a clothes dryer, an opening of not less than 100 square inches (0.065 m²) for makeup air shall be provided in the door or by other approved means.
(2) Provision for makeup air shall be provided for Type 2 clothes dryers, with a free area of not less than 1 square inch (0.0006 m²) for each 1000 British thermal units per hour (Btu/g)(0.293 kW) total input rating of the dryer(s) installed [NFPA 54:10.4.3.2].

504.4.2.1 Length Limitation

Unless otherwise permitted or required by the dryer manufacturer's instructions and approved by the Authority Having Jurisdiction, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14 feet (4267 mm), including two 90 degree (1.57 rad) elbows. A length of 2 feet (610 mm) shall be deducted for each 90 degree (1.57 rad) elbow in excess of two

504.4.3.1 Exhaust Ducts for Type 2 Clothes Dryers. Exhaust ducts for Type 2 clothes dryers shall comply with the following:
(1) Exhaust ducts for Type 2 clothes dryers shall comply with Section 504.4. [NFPA 54:10.4.5.1]
(2) Exhaust ducts for Type 2 clothes dryers shall be constructed of sheet metal or other noncombustible material. Such ducts shall be equivalent in strength and corrosion resistance to ducts 0.0195 of an inch (0.4953 mm) thick. [NFPA 54:10.4.5.2]
(3) Type 2 clothes dryers shall be equipped or installed with lint-controlling means. [NFPA 54:10.4.5.3]
(4) Exhaust ducts for Type 2 clothes dryers shall be installed with a clearance of not less than 6 inches (152 mm) from adjacent combustible material. Where exhaust ducts for Type 2 clothes dryers are installed with reduced clearances, the adjacent combustible material shall be protected in accordance with Table 303.10.1. [NFPA 54:10.4.5.4]
(5) Where ducts pass through walls, floors, or partitions, the space around the duct shall be sealed with noncombustible material. [NFPA 54:10.4.5.4]

FACTORY-MADE AIR DUCTS

FACTORY-MADE AIR DUCTS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181 AND INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTING. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE.

FACTORY-MADE AIR DUCTS SHALL NOT BE USED FOR VERTICAL RISERS IN AIR-DUCT SYSTEMS SERVING MORE THAN TWO STORIES AND SHALL NOT PENETRATE A FIRE-RESISTANCE-RATED ASSEMBLY OR CONSTRUCTION.

FACTORY-MADE AIR DUCTS SHALL BE INSTALLED WITH NOT LESS THAN 4 INCHES (102 MM) OF SEPARATION FROM EARTH, EXCEPT WHERE INSTALLED AS A LINER INSIDE OF CONCRETE, TILE, OR METAL PIPE AND SHALL BE PROTECTED FROM PHYSICAL DAMAGE.

THE TEMPERATURE OF THE AIR TO BE CONVEYED IN A DUCT SHALL NOT EXCEED 250°F (121° C). FLEXIBLE AIR CONNECTORS SHALL NOT BE PERMITTED.

RECTANGULAR DUCTS

SUPPORTS FOR RECTANGULAR DUCTS SHALL BE INSTALLED ON TWO OPPOSITE SIDES OF EACH DUCT AND SHALL BE RIVETED, BOLTED, OR METAL SCREWED TO EACH SIDE OF THE DUCT AT INTERVALS SPECIFIED.

METAL DUCTS

DUCTS SHALL BE SUPPORTED AT EACH CHANGE OF DIRECTION AND IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE. RISER DUCTS SHALL BE HELD IN PLACE BY MEANS OF METAL STRAPS OR ANGLES AND CHANNELS TO SECURE THE RISER TO THE STRUCTURE.

METAL DUCTS SHALL BE INSTALLED WITH NOT LESS THAN 4 INCHES (102 MM) SEPARATION FROM EARTH. DUCTS SHALL BE INSTALLED IN A BUILDING WITH CLEARANCES THAT WILL RETAIN THE FULL THICKNESS OF FIRE-PROOFING ON STRUCTURAL MEMBERS.

COMBUSTIBLES WITHIN DUCTS OR PLENUMS

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.

EXCEPTIONS:

- 1. RETURN-AIR AND OUTSIDE-AIR DUCTS, PLENUMS, OR CONCEALED SPACES THAT SERVE A DWELLING UNIT.
- 2. AIR FILTERS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 311.2.
- 3. WATER EVAPORATION MEDIA IN AN EVAPORATIVE COOLER.
- 4. CHARCOAL FILTERS WHERE PROTECTED WITH AN APPROVED FIRE SUPPRESSION SYSTEM.
- 5. PRODUCTS LISTED AND LABELED FOR INSTALLATION WITHIN PLENUMS IN ACCORDANCE WITH SECTION 602.2.1 THROUGH SECTION 602.2.3.
- 6. SMOKE DETECTORS.
- 7. DUCT INSULATION, COVERINGS, AND LININGS AND OTHER SUPPLEMENTARY MATERIALS INSTALLED IN ACCORDANCE WITH SECTION 604.0.
- 8. MATERIALS IN A HAZARDOUS FABRICATION AREA INCLUDING THE AREAS ABOVE AND BELOW THE FABRICATION AREA SHARING A COMMON AIR RECIRCULATION PATH WITH THE FABRICATION AREA.

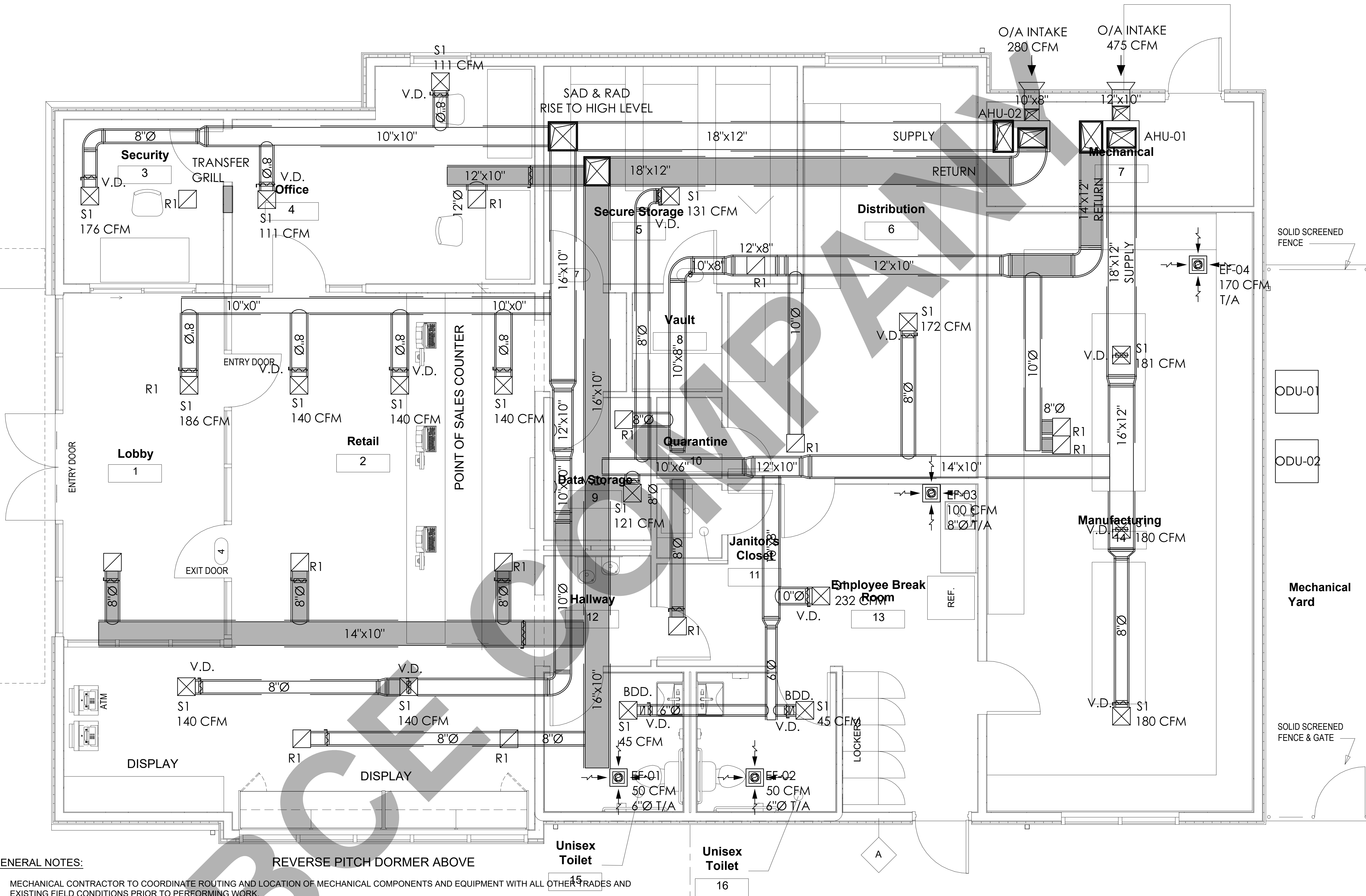
NOTES ON DUCTS MATERIAL & CONSTRUCTION:

FLEXIBLE AIR DUCTS

FLEXIBLE AIR DUCTS SHALL COMPLY WITH UL 181, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE.

FLEXIBLE AIR DUCT INSTALLATIONS SHALL COMPLY WITH THE FOLLOWING:

- 1. DUCTS SHALL BE INSTALLED USING THE MINIMUM REQUIRED LENGTH TO MAKE THE CONNECTION.
- 2. HORIZONTAL DUCT RUNS SHALL BE SUPPORTED AT NOT MORE THAN 4 FEET (1219 MM) INTERVALS.
- 3. VERTICAL RISERS SHALL BE SUPPORTED AT NOT MORE THAN 6 FEET (1829 MM) INTERVALS.
- 4. SAG BETWEEN SUPPORT HANGERS SHALL NOT EXCEED 1/2 INCH (12.7 MM) PER FOOT (305 MM) OF SUPPORT SPACING.
- 5. SUPPORTS SHALL BE RIGID AND SHALL BE NOT LESS THAN 1 1/2 INCHES (38 MM) WIDE AT POINT OF CONTACT WITH THE DUCT SURFACE.
- 6. DUCT BENDS SHALL BE NOT LESS THAN ONE DUCT DIAMETER BEND RADIUS.
- 7. SCREWS SHALL NOT PENETRATE THE INNER LINER OF NON-METALLIC FLEXIBLE DUCTS UNLESS PERMITTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 8. FITTINGS FOR ATTACHING NON-METALLIC DUCTS SHALL BE BEADED AND HAVE A COLLAR LENGTH OF NOT LESS THAN 2 INCHES (51 MM) FOR ATTACHING THE DUCT.
- EXCEPTION: A BEAD SHALL NOT BE REQUIRED WHERE METAL WORM-GEAR CLAMPS ARE USED OR WHERE ATTACHING METALLIC DUCTS USING SCREWS IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 9. DUCT INNER LINER SHALL BE INSTALLED AT NOT LESS THAN 1 INCH (25.4 MM) ON THE COLLAR AND PAST THE BEAD PRIOR TO THE APPLICATION OF THE TAPE AND MECHANICAL FASTENER. WHERE MASTIC IS USED INSTEAD OF TAPE, THE MASTIC SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 10. DUCT OUTER VAPOR BARRIERS SHALL BE SECURED USING TWO WRAPS OF APPROVED TAPE. A MECHANICAL FASTENER SHALL BE PERMITTED TO BE USED IN PLACE OF, OR IN COMBINATION WITH, THE TAPE.
- 11. FLEXIBLE AIR DUCTS SHALL NOT PENETRATE A FIRE-RESISTANCE-RATED ASSEMBLY OR CONSTRUCTION.
- 12. THE TEMPERATURE OF THE AIR TO BE CONVEYED IN A FLEXIBLE AIR DUCT SHALL NOT EXCEED 250°F (121° C).
- 13. FLEXIBLE AIR DUCTS SHALL BE SEALED IN ACCORDANCE WITH SECTION 603.10.



GENERAL NOTES:

- MECHANICAL CONTRACTOR TO COORDINATE ROUTING AND LOCATION OF MECHANICAL COMPONENTS AND EQUIPMENT WITH ALL OTHER TRADES AND EXISTING FIELD CONDITIONS PRIOR TO PERFORMING WORK.
- CONTRACTOR TO CUT AND PATCH AS REQUIRED TO PERFORM THE WORK.
- ACCESS DOORS ARE REQUIRED FOR ANY COMPONENT REQUIRING ACCESS ABOVE HARD LID CEILINGS. COORDINATE SIZE, LOCATION AND FINISH WITH ARCHITECT PRIOR TO PERFORMING WORK.
- REFER TO THE DIAGRAMS THAT APPLY TO THIS SHEET WHICH PROVIDE GENERAL GUIDANCE FOR INSTALLATION THOUGH NOT ALL COMPONENTS AND ACCESSORIES MAY BE SHOWN.
- PRIOR TO INSTALLATION, CONFIRM SPECIFIC LOCATION FOR ALL THERMOSTATS / SENSORS WITH ARCHITECT. MOUNT AT 48" A.F.F. OR IN ACCORDANCE WITH ADA REQUIREMENTS. PROVIDE LOCKING COVERS.
- COORDINATE AND CONFIRM BORDER, FRAME, FINISH, AND LOCATION WITH ARCHITECT PRIOR TO ORDERING.
- ANY PENETRATIONS THROUGH WALL STUDS, FLOOR JOISTS, OR ROOF TO BE IN ACCORDANCE WITH THE LATEST ADOPTED BUILDING CODE.
- DUCT DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS.
- CONTRACTOR TO CONFIRM ADEQUATE RETURN AIR PATH BACK TO MAIN AIR HANDLING UNIT.

REVERSE PITCH DORMER ABOVE

CLIENT:

ADDRESS:

347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

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- THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:

Proposed Property Development
Element 7 Cannabis Retail

TITLE:

MECH. LAYOUTS AND
EQUIPMENT SCHEDULE.

PROJ. NO.

PROJ. ENGR.

SCALE @ 24X36:

3/8"=1'-0"

DRAWING NO.

REV.

M 1 . 0 1

SCHEDULE No. 1
HEAT PUMP INDOOR UNIT

TAG	AHU-01,02
SERVING	MANU., DISTR., STO., B.R. RETAIL
MANUFACTURER	GOODMAN
INDOOR MODEL	ARUF37C14
POWER SUPPLY	208-230/1/60
MAXIMUM CURRENT (A)	4
NOMINAL CAPACITY (BTU/H)	36,000
AIR FLOW RATE (CFM)	1,285

SCHEDULE No. 2
HEAT PUMP OUTDOOR UNIT

TAG	ODU-01,02
SERVING	AHU-01,02
MANUFACTURER	GOODMAN
INDOOR MODEL	GSZ140361K
POWER SUPPLY	208-230/1/60
MAXIMUM CURRENT (A)	20.2
MOP (A)	35.0
NOMINAL CAPACITY (BTU/HR)	36,000

SCHEDULE No. 3
FAN SCHEDULE

TAG	EF-01, 02, 03	EF-04
LOCATION	BATHROOMS & BREAK ROOM	MANUFACTURING
SELECTED FLOW (CFM)	50	170
SELECTED PRESSURE DROP (IN. H2O)	0.25"	0.1"
ELECTRICAL (V / PH / HZ)	120 / 1 / 60	120 / 1 / 60
POWER / Amps	25 W	42 W
MOTOR SPEED (RPS)	MULTI SPEED	MULTI SPEED
FAN TYPE	CEILING FANS	CEILING FANS
MANUFACTURER	PANASONIC	PANASONIC
MODEL	WHISPER FV-0511VKS2	WHISPER CEILING FV-20VQ3

NOTES:

1. PROVIDE UL LISTING.
2. PROVIDE ENERGY STAR COMPLIANCE.
3. INTERLOCK WITH WALL SWITCH.
4. PROVIDE MOTOR WITH THERMAL OVERLOADS.

SCHEDULE No. 4
AIR OUTLETS

TAG	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING
S1	SUPPLY DIFFUSER	TITUS	12in. x 12in.	Duct Mounted
R1	RETURN DIFFUSER	TITUS	12in. x 12in.	Duct Mounted

NOTES:

1. COORDINATE FINISH, COLOR, BORDER AND EXACT LOCATION WITH OWNER PRIOR TO ORDERING.
2. PROVIDE OPPOSED BLADE DAMPER ACCESSIBLE THROUGH DIFFUSER FACE FOR GYP BD. CEILING INSTALLATIONS.
3. PROVIDE DUCT TRANSITIONS AS REQUIRED.
4. RETURNS R1 ARE PROVIDED WITH PROPER FILTERS.

AS PER CEC STANDARD: REQUIREMENTS FOR VENTILATION AND INDOOR AIR QUALITY
TABLE 120.1-A: MINIMUM VENTILATION RATES

S.N.	SPACE NAME	AREA (FT2)	CFM/FT2	TOTAL CFM
AHU-01				
1	DISTRIBUTION	272	0.15	41
2	SECURE STORAGE	177	0.15	27
3	DATA STORAGE	48	0.15	7
4	QUARANTINE	17	0.15	3
5	JANITOR'S CLOSET	15	0.15	2
6	EMPLOYEE BREAK ROOM	230	0.5	115
7	TOILET E	61	-	50
8	TOILET W	61	-	50
9	HALLWAY	37	0.15	6
10	VAULT	26	0.15	4
11	MANUFACTURING	506	-	170
TOTAL		1,450	-	475

AHU-02				
1	OFFICE	185	0.15	28
2	SECURITY	83	0.15	12
3	LOBBY	177	0.5	89
4	RETAIL	605	0.25	151
TOTAL		1,050	-	280

AS PER 2022 CMC - TABE 402.3:

- MANUFACTURING AREA MINIMUM OUTDOOR ACH = 2
- MINIMUM O/A REQUIRED FOR MANUFACTURING AREA = 2 x 506 x 10 / 60 = 170 CFM

CLIENT:

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APN: 002-041-056-000

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
MECHANICAL
EQUIPMENT SCHEDULE.

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
NTS

DRAWING NO.
M 2 . 0 1

REV.

Air System Sizing Summary for AHU-01

Project Name: Element 7 Cannabis Retail
Prepared by: E. MJ

01/17/2023
01:26PM

Air System Information

AHU-01
SPLT AHU
SZCAV

Number of zones: 1
Floor Area: 1449.9 ft²
Location: San Jose, California

Sizing Calculation Information

Calculation Months: Jan to Dec
Sizing Data: Calculated

Zone CFM Sizing: Sum of space airflow rates
Space CFM Sizing: Individual peak space loads

Central Cooling Coil Sizing Data

Total coil load: 2.9 Tons
Total coil load: 34.9 MBH
Sensible coil load: 34.9 MBH
Coil CFM at Jul 1700: 1680 CFM
Max block CFM: 1680 CFM
Sum of peak zone CFM: 1680 CFM
Sensible heat ratio: 1.000
CFM/Ton: 578.5
RT/Ton: 498.2
BTU/(hr-ft²): 24.0
Water flow @ 10.0 °F rise: N/A

Load occurs at: Jul 1700
OA DB / WB: 96.8 / 66.3 °F
Entering DB / WB: 79.4 / 64.1 °F
Leaving DB / WB: 60.2 / 57.2 °F
Coil ADP: 98.0 °F
Bypass Factor: 0.100
Resulting RH: 50 %
Design supply temp.: 58.0 °F
Zone T-stat Check: 1 of 1 OK
Max zone temperature deviation: 0.0 °F

Central Heating Coil Sizing Data

Max coil load: 29.6 MBH
Coil CFM at Des Htg: 1680 CFM
Max coil CFM: 1680 CFM
Water flow @ 20.0 °F drop: N/A

Load occurs at: Des Htg
BTU/(hr-ft²): 20.4
Ent. DB / Lvg DB: 61.9 / 73.3 °F

Supply Fan Sizing Data

Actual max CFM: 1680 CFM
Standard CFM: 1677 CFM
Actual max CFM/ft²: 1.16 CFM/ft²

Fan motor BHP: 0.00 BHP
Fan motor kW: 0.00 kW
Fan static: 0.00 in wg

Outdoor Ventilation Air Data

Design airflow CFM: 378 CFM/ft²
CFM/ft²: 0.26 CFM/ft²

CFM/person: 37.80 CFM/person

Hourly Analysis Program 5.10

Page 1 of 22

Zone Sizing Summary for AHU-01

Project Name: Element 7 Cannabis Retail
Prepared by: E. MJ

01/17/2023
01:26PM

Air System Information

AHU-01
SPLT AHU
SZCAV

Number of zones: 1
Floor Area: 1449.9 ft²
Location: San Jose, California

Sizing Calculation Information

Calculation Months: Jan to Dec
Sizing Data: Calculated

Zone CFM Sizing: Sum of space airflow rates
Space CFM Sizing: Individual peak space loads

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/ft²	Reheat Coil Load (MBH)	Reheat Coil Water gpm @ 20.0 °F	Zone Htg Unit Coil Load (MBH)	Zone Htg Unit Water gpm @ 20.0 °F	Mixing Box Fan Airflow (CFM)
Zone 1	1680	1680	1.16	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (ft²)
Zone 1	30.5	Jul 1900	15.4	1449.9

Space Loads and Airflows

Zone Name / Space Name	Mult.	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (ft²)	Space CFM/ft²
Zone 1	1	3.9	Jun 1800	211	2.0	272.0	0.78
DISTRIBUTION	1	2.6	Jun 1900	141	2.1	177.0	0.80
SECURE STORAGE	1	2.8	Jun 2000	155	0.1	47.9	3.23
DATA STORAGE	1	0.2	Jun 2000	8	0.0	17.0	0.49
QUARANTINE	1	0.1	Jun 2000	7	0.0	15.0	0.49
JANITOR'S CLOSET	1	5.0	Jul 1900	273	1.7	230.0	1.19
EMPLOYEE BREAK ROOM	1	1.3	Aug 1900	71	1.0	61.0	1.16
TOILET E	1	1.4	Aug 1900	77	1.2	61.0	1.27
TOILET W	1	0.3	Jun 2000	16	0.1	37.0	0.49
HALLWAY	1	0.5	Jun 2000	27	0.0	29.0	1.03
VAULT	1	12.7	Aug 1900	692	7.2	506.0	1.37
MANUFACTURING	1	12.7	Aug 1900	692	7.2	506.0	1.37

Hourly Analysis Program 5.10

Page 2 of 22

Air System Sizing Summary for AHU-02

Project Name: Element 7 Cannabis Retail
Prepared by: E. MJ

01/17/2023
01:26PM

Air System Information

AHU-02
SPLT AHU
SZCAV

Number of zones: 1
Floor Area: 1050.0 ft²
Location: San Jose, California

Sizing Calculation Information

Calculation Months: Jan to Dec
Sizing Data: Calculated

Zone CFM Sizing: Sum of space airflow rates
Space CFM Sizing: Individual peak space loads

Central Cooling Coil Sizing Data

Total coil load: 2.3 Tons
Total coil load: 27.2 MBH
Sensible coil load: 27.2 MBH
Coil CFM at Jul 1600: 1327 CFM
Max block CFM: 1327 CFM
Sum of peak zone CFM: 1327 CFM
Sensible heat ratio: 1.000
CFM/Ton: 584.4
RT/Ton: 462.5
BTU/(hr-ft²): 25.9
Water flow @ 10.0 °F rise: N/A

Load occurs at: Jul 1600
OA DB / WB: 92.3 / 66.8 °F
Entering DB / WB: 79.6 / 64.3 °F
Leaving DB / WB: 60.5 / 57.5 °F
Coil ADP: 98.4 °F
Bypass Factor: 0.100
Resulting RH: 50 %
Design supply temp.: 58.0 °F
Zone T-stat Check: 1 of 1 OK
Max zone temperature deviation: 0.0 °F

Central Heating Coil Sizing Data

Max coil load: 25.1 MBH
Coil CFM at Des Htg: 1327 CFM
Max coil CFM: 1327 CFM
Water flow @ 20.0 °F drop: N/A

Load occurs at: Des Htg
BTU/(hr-ft²): 23.9
Ent. DB / Lvg DB: 62.2 / 79.7 °F

Supply Fan Sizing Data

Actual max CFM: 1327 CFM
Standard CFM: 1324 CFM
Actual max CFM/ft²: 1.26 CFM/ft²

Fan motor BHP: 0.00 BHP
Fan motor kW: 0.00 kW
Fan static: 0.00 in wg

Outdoor Ventilation Air Data

Design airflow CFM: 279 CFM
CFM/ft²: 0.27 CFM/ft²

CFM/person: 21.46 CFM/person

Hourly Analysis Program 5.10

Page 1 of 15

Zone Sizing Summary for AHU-02

Project Name: Element 7 Cannabis Retail
Prepared by: E. MJ

01/17/2023
01:26PM

Air System Information

AHU-02
SPLT AHU
SZCAV

Number of zones: 1
Floor Area: 1050.0 ft²
Location: San Jose, California

Sizing Calculation Information

Calculation Months: Jan to Dec
Sizing Data: Calculated

Zone CFM Sizing: Sum of space airflow rates
Space CFM Sizing: Individual peak space loads

Zone Terminal Sizing Data

Zone Name	Design Supply Airflow (CFM)	Minimum Supply Airflow (CFM)	Zone CFM/ft²	Reheat Coil Load (MBH)	Reheat Coil Water gpm @ 20.0 °F	Zone Htg Unit Coil Load (MBH)	Zone Htg Unit Water gpm @ 20.0 °F	Mixing Box Fan Airflow (CFM)
Zone 1	1327	1327	1.26	0.0	-	0.0	-	0

Zone Peak Sensible Loads

Zone Name	Zone Cooling Sensible (MBH)	Time of Peak Sensible Cooling Load	Zone Heating Load (MBH)	Zone Floor Area (ft²)
Zone 1	24.1	Jul 1800	14.8	1050.0

Space Loads and Airflows

Zone Name / Space Name	Mult.	Cooling Sensible (MBH)	Time of Peak Sensible Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (ft²)	Space CFM/ft²
Zone 1	1	4.2	Jun 1800	229	2.5	185.0	1.24
OFFICE	1	3.3	Jun 2000	182	2.6	83.0	2.19
SECURITY	1	3.5	Jun 1800	192	3.5	177.0	1.08
LOBBY	1	13.3	Jul 1800	724	6.3	605.0	1.20
RETAIL	1	13.3	Jul 1800	724	6.3	605.0	1.20

Hourly Analysis Program 5.10

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
MECHANICAL HEAT
LOADS CALCULATIONS.

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
NTS

DRAWING NO. REV.

M 3 . 0 1

ARUF SERIES

*MULTI-POSITION,
MULTI-SPEED AIR HANDLER
WITH PSC MOTOR
1½ TO 5 TONS*

Overclock

Contents

Nomenclature	2
Product Specifications	3
Heater W/ Noncondensing	3
Dimensions	4
Airflow Data	5
Heat Kf Data	6
Wiring Diagrams	9
Accessories	11

Product Features

- Check Rewinder for cooling and heat pump applications
- Direct drive, multi-speed PSC blower motor
- All-aluminum evaporator coil
- Coil-mounting track for quick repositioning
- Cabinet air leakage less than 2.0% at 1.0 inch H₂O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H₂O when tested in accordance with ASHRAE standard 193
- 3 kW – 25 kW electric heater kits
- AHRI certified; ETL listed

- Rigid SmartName™ cabinet
- Horizontal or vertical configuration capabilities
- 21" depth for easier access
- Dead-BE-Free thermoplastic drain pan with secondary drain connections
- Grow less sides and back flange to reduce condensation when installed in humid locations
- Full-faced insulation covers the internal casing to reduce cabinet vibration
- Galvalume®, leather grain-embossed finish
- Glue-less cabinet insulation retention
- Tool-less filter access

Goodman has many models available from our full product line. All of our products are UL listed and carry a 10 year limited warranty. Some equipment may be available only in certain states. Other restrictions may apply. Always refer to the product literature for complete details.

SG-ARUF

www.goodmanmfg.com

5/16

PRODUCT SPECIFICATIONS

	ARJ-P 280A*	ARJ-P 280A1*	ARJ-P 310A*	ARJ-P 310A1*	ARJ-P 350A*	ARJ-P 350A1*	ARJ-P 400A*	ARJ-P 400A1*	ARJ-P 450A*	ARJ-P 450A1*	ARJ-P 480A*	ARJ-P 480A1*	ARJ-P 520A*	ARJ-P 520A1*
Powering Features														
Maximum Torque	24,000	25,000	25,000	26,000	36,000	42,000	48,000	56,000	42,000	43,000	42,000	42,000	49,000	50,000
Filter Size	0.051	0.051	0.051	0.075	0.075	0.080	0.075	0.075	0.076	0.076	0.080	0.080	0.076	0.076
Blower														
Diameter	90"	90"	90"	104"	104"	104"	104"	104"	104"	104"	104"	104"	111"	111"
Width	6"	6"	6"	8"	8"	8"	10"	10"	10"	10"	10"	10"	10"	10"
COIL CONNECTIONS														
Unit	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Coil	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Coil Drain Connect (DPT)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
ELECTRICAL DATA														
	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230	206/230
Input Disconnect	2,400/4	2,400/4	2,400/4	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1
Over Current Device (Breaker)	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15	10/15
Maximum VAC	197	197	197	197	197	197	197	197	197	197	197	197	197	197
Maximum WAC	253	253	253	253	253	253	253	253	253	253	253	253	253	253
Blower Motor														
Full Load Amps (FLA)	1.9	1.9	1.9	3.0	3.0	3.0	3.1	3.0	3.5	3.5	3.5	3.5	3.6	3.6
horsepower (HP)	3/32	3/32	3/32	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16	3/16
See Warning (W-1)	300	300	300	350	350	350	350	350	350	350	350	350	350	350

Note: For a properly matched system and proper wiring information, refer to Armaflex plans for each of the corresponding Armaflex® outdoor units. Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for branch without supplemental heat treated. Refer to unit catalogue and/or label for data for specifications with approved accessories.

SG-GRJLRI

www.goodmanmfg.com

[illegible]

AIRFLOW DATA

Model	Motor Speed	Static Pressure (in. Wg) at Various CFM							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
AUF29B14	Low	650	620	595	540	490	450	420	375
	Med	865	865	825	815	785	755	725	660
	High	1255	1275	1130	1090	965	925	890	800
AUF29B14	Low	650	620	595	540	490	450	420	375
	Med	865	865	825	815	785	755	725	660
	High	1255	1275	1130	1090	965	925	890	800
AUF31B14	Low	660	635	595	560	520	480	440	390
	Med	930	905	865	820	765	730	700	590
	High	1275	1285	1130	1060	900	870	835	745
AUF33C14	Low	1120	1095	1040	1000	940	875	840	765
	Med	1425	1385	1345	1285	1200	1145	1100	1000
	High	1625	1575	1520	1460	1375	1295	1260	1160
AUF41C14	Low	1130	1085	1040	1000	940	875	840	765
	Med	1425	1385	1345	1285	1200	1145	1100	1000
	High	1625	1575	1520	1460	1375	1295	1260	1160
AUF49C14	Low	1265	1255	1225	1175	1100	1055	970	890
	Med	1535	1485	1440	1370	1295	1235	1130	1050
	High	1725	1680	1600	1535	1452	1360	1260	1160
AUF37D14	Low	1155	1115	1070	1015	955	895	840	765
	Med	1505	1470	1440	1375	1300	1230	1135	1055
	High	1765	1725	1680	1625	1555	1460	1365	1265
AUF48D14	Low	1410	1360	1290	1210	1130	1070	1000	900
	Med	1610	1540	1470	1390	1300	1230	1135	1055
	High	1900	1860	1740	1665	1540	1420	1320	1220
AUF47D14	Low	1420	1370	1310	1240	1165	1095	1020	960
	Med	1625	1585	1515	1445	1350	1285	1195	1095
	High	1900	1860	1820	1735	1635	1535	1435	1335
AUF49D14	Low	1410	1360	1290	1210	1130	1070	995	900
	Med	1610	1540	1470	1390	1300	1230	1135	1055
	High	1900	1830	1740	1665	1540	1420	1320	1220
AUF51D14	Low	1510	1450	1380	1300	1215	1145	1065	965
	Med	1950	1905	1800	1765	1745	1650	1555	1455
	High	2235	2175	2100	2020	1905	1815	1725	1625

Notes:

- All flow rates indicated at 200W without an air filter.
- The peak flow rate information will be approximately 10% higher than the measured static pressure method at the same air velocity.
- The flow rates are measured at 100% duty cycle.
- Use the 100% maximum RPM for the horizontal and 0% for the vertical RPM if needed without a blower fan.

SGS-GARUP

www.goodmanair.com

5

GSZ14

COOLING CAPACITY: 18,000 TO 60,000 BTU/H

HEATING CAPACITY: 18,000 TO 60,000 BTU/H

ENERGY-EFFICIENT

SPILT SYSTEM HEAT PUMP

UP TO 12 SEER & 9.0 HSPF

1½ TO 5 TONS

Energy saving and limitation of emissions is related to the energy efficiency of the split system air conditioning and heat pump units and the heat pump and air conditioning units are subject to the Energy Star program and the program for details is please visit www.energystar.gov

Contents

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Product Specifications	7
Expanded Cooling Data	5
Expanded Heating Data	11
Performance Data	34
Dimensions	37
Wiring Diagram	38
Accessories	39

Standard Features

- High-efficiency scroll compressor
- SmartStat™ technology to ensure quiet reliable effort
- Factory-installed in-flow liquid line filter drier
- Factory-installed suction-line accumulator
- Factory-installed compressor crankcase heater
- Factory-installed high-capacity muffler
- High- and low-pressure switches
- Service valves with sweat connections and easy access to gauge ports
- Copper tube/enamel-coated aluminum fin coil
- Fully charged for 12" of tubing length
- Connector with lug connection
- Ground lug connection
- AHRI Certified; ETL Listed

Cabinet Features

- Goodman® brand sound control design
- Steel lower coil guard
- Heavy-gauge galvanized steel cabinet
- Attractive Architectural Gray powder-paint finish with 500-hour salt-spray approval
- Top and side maintenance access
- Service ports and controls are accessible while unit is operating
- When properly anchored, meets the 2017 Florida Building Code wind and seismic requirements for hurricane-force winds (Anchor brackets kits available)

10 YEARS
PARTS
WARRANTY

*Warranty periods apply to the heat pump and condenser coils only. To obtain the 10 Year Parts Limited Warranty, the unit must be registered with Goodman or www.goodman.com. See dealer for the 10 Year Parts Limited Warranty. This registration must be completed within 90 days of installation. Online registration is not required in Florida or Canada.

55-GSZ14

www.goodman.com

05/22

05/20/2022

[illegible]



Panasonic

WhisperCeiling® ventilation fans

FV-09VGS, FV-09VGL, FV-11VGS, FV-11VGL, FV-20VGS,
 FV-30VGS, FV-40VGS*



FV-09VGS

WhisperLite® ventilation fans

FV-09VLS, FV-11VGLS, FV-11VGLS



FV-11VGLS

- Quiet, yet powerful – 2W for new and remodeled residential applications
- Integrated 4" or 6" duct adapter for 50-110 CFM models
- Large volume (100-300 CFM) options available for light commercial use
- Whispered in models feature (3) 12" wall self-sustaining 0.24 base CFL lamps
- Can be used to comply with ASHRAE 62.2 LEED, WAP, EarthCraft, CxA Title 24 and NYS code

ADDITIONAL BENEFITS

- Built-in metal grille provides looking for penetrations through drywall as an air barrier, and assists with the sound-deadening by the Building Envelope during blower door testing
- UL listed for 120V power and includes built-in GFCI protection
- 50-150 CFM models fit 2 x 8 construction
- Optional designer grille and motion-sensor available for some models
- Warranty on parts, 3 year on CFL lamps

*FV-40VGS does not comply with the ENERGY STAR® 4 standard.



ENERGY STAR
PAINTER OF THE YEAR
Sustained Excellence
2009-2011

www.panasonic.com/usa
www.panasonic.com/usa/ventilation

[illegible]

Power of Performance, Efficiency Improved.

Lighted Module

WhisperCeiling's revolutionary flush mount offers unprecedented 32,100 LUMENS/STAIR rated self-ballasted LED's base CFL lamps and a 4-in night light, 3500 KWHIGH DEPEND Lumens per lamp/70,000 hours tested average WhisperCeiling to 22 T8W fluorescent strips.

12,130 lumens ballasted 0.54 base CFL lamps included

WhisperCeiling™

FV-00V05 850 CFM @ 4' x 6' Duct	FV-11V05 190 CFM @ 4' x 6' Duct	FV-00V05 850 CFM @ 4' x 6' Duct	FV-18V05 190 CFM @ 6' Duct
<p>CFM RPM Watts</p>	<p>CFM RPM Watts</p>	<p>CFM RPM Watts</p>	<p>CFM RPM Watts</p>
FV-20V03 190 CFM Duct	FV-30V03 280 CFM Duct	FV-40V04 580 CFM @ 6' Duct	
<p>CFM RPM Watts</p>	<p>CFM RPM Watts</p>	<p>CFM RPM Watts</p>	
<p>4' x 6' or 6' duct</p>			

Panasonic

WhisperGreen® Select[®] Connected Ventilation Fan

WhisperGreen Select[®]

Fan Only Models: PV-051TWG2

PV-051TWG2, PV-1119WG2

Fan/Light Models: PV-051VWL2,

PV-051VWGL2, PV-1119WGL2

HEALTHY AIR, HEALTHY HOME

Five Flow ratings at 0.375" static pressure provide powerful airflow to assure code compliant, healthy homes.

KEY FEATURES

- Precision, whole-house ventilation solution ideal for use in the bathroom, living room, sun room, basement or garage
- Helps ensure good indoor air quality for a healthy home and healthy living
- Operates as a standalone fan or as part of the Cosmos[®] Healthy Home System through two-way wireless communication
- Customizable, connected fan and fan/immalle LED light combinations
- Pick-A-Flow airflow selection 50–80–110 or 110–130 CFM models combine with SmartFlow[®] technology simplifies the selection process and ensures optimal performance to meet code and reduce call backs
- Elegant grille design complements the aesthetics of any room
- Simple/hinged-Fix-2-Fast[®] bracket provides flexible, fast and easy installation
- Can be used to comply with ASHRAE 62.2, LEED, CALGreen, IMC California Title 24, WA Ventilation Code and ENERGY STAR for Homes 3.0

ADDITIONAL BENEFITS

- Ideal IAQ solution for green buildings
- Environmentally friendly 26 gauge housing using Zinc-Aluminum-Magnesium (ZAM) coating
- Integrated 4" or 6" duct duct-edge blocking for penetrations through drywall, an air barrier
- Built-in metal flange provides blocking for penetrations through drywall, an air barrier, consistent with the decrease in leakage in the building envelope during blower door testing
- Suitable for installation in ceilings insulated up to R40
- Duct access junction box simplifies wiring in tight spaces
- Ultra low for sub/above enclosure when GFCI protected
- UL Listed for use with the Panasonic Ceiling Radiation DANGER (IPCC-RD050)
- 4-year warranty on ECM motor, 5 years on LED, 3 years on parts

*Industry research indicates static pressure in typical installations ranges from 0.25" to 0.375"

reinvestingvent.com

One Connected Fan. Endless Possibilities.

The customizable IQAQ solution for virtually any space

Over 20 years, Triad has delivered innovative solutions that improve indoor air quality and healthy homes building. On our mission to help you build healthy homes, WhisperGreen® Select offers a powerful, customizable IQAQ solution that delivers healthy indoor air quality for healthy living in any space. Now even more versatile, it operates as a standalone unit or as part of the GreenSense® Healthy Home Add-on system for two-way wireless communication.

WHISPERGREEN SELECT™ IS AS EASY AS 1-2-3

Step 1: Select a Base Fan Model

Select a base model to start building the perfect IQAQ solution that satisfies your ventilation design requirements.

Fan	Fan/Light
PV-511VWSL 50 to 110 CFM single speed	PV-511VWSL 50 to 110 CFM single speed + LED Light
PV-511VWSL 50 to 110 CFM pre-installed multi-speed	PV-511VWSL 50 to 110 CFM pre-installed multi-speed + LED Light
PV-1130VSL 50 to 110 CFM single speed	PV-1130VSL 50 to 110 CFM single speed + LED Light

Pick-A-Fan® Airflow Technology

Pick-A-Fan® airflow technology – one fan you choose. The CFM provides the unique ability to select your required airflow from 50-80-110 and 110-130-150 CFM models with the simple flip of a switch.

Step 2: Select Value Added Features

WhisperGreen Select® offers a unique set of three patented models that allow you to further customize your fan:

Multi-Speed with Time Delay (PV-511VSK1) – Allows you to select the pre-set CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level, then elevates to a maximum level of operation when the wall switch is turned on, or when the SmartConnect® motion sensor or condensation sensor module is activated. A high/low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.

SmartAction™ Motion Sensor (PV-MSK1) – Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic, making it great for people with disabilities and assisted living environments such as nursing homes and retirement communities. This module also activates an automatic 20-minute delay of timer for the fan.

Condensation Sensor (PV-CKSK1) – Helps control bathroom condensation to prevent mold and mildew. An advanced sensor technology detects relative humidity and temperature used to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for most conditions (50% to 80%, 10% incremental) and provides an additional 20% delay. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates an automatic 20-minute delay of timer for the fan.

Multi-Speed with
Time Delay
(PV-511VSK1)

SmartAction™
Motion Sensor
(PV-MSK1)

Condensation
Sensor
(PV-CKSK1)

Step 3: Install Your Ideal Fan with the New! Flex-X-Fast™ Installation System

Single bracket is attached using a single lag bolt to ceiling joist using single hole.

Easily position bracket in between the joist or ceiling joist.

End bracket attached to desired length.

Ingenuously designed installation brackets flexible, fast and easy installation for all your new construction or renovation projects.

Super-Installed Performance up to 0.375" and Certified Quiet Operation at 0.25" Static Pressure

Although ASHRAE, ENERGY STAR®, LEED for Homes, and HVI have set the industry standard for performance measurement in the fan world, WhisperGreen Select™ has exceeded the standard with a proven, high performance CFM output at 0.375" that is more representative of typical installations. Some have also been certified at 0.25" to provide a more realistic, installed value, so they are quiet under pressure and after installation.

WhisperGreen® Select™ Connected Ventilation Fans

WhisperGreen® Select™
ventilation fans

HEALTHY AIR, HEALTHY HOME

True Flow ratings at 0.2" static pressure provide powerful airflow to assure code compliant, healthy homes.

PFV-511WV2
(with Pre-Installed Multi-Speed module)

PFV-115WV2
(with Pre-Installed Multi-Speed module)

PFV-951WV2

PFV-115WV2

PFV-951WV2

Specifications	WhisperGreen® Select™ (Fan Only)									
	Base Fan					PFV-115WV2				
	1	2	3	4	5	1	2	3	4	5
Base Power Input (Watt)	4.5	12	18	24	30	4.5	12	18	24	30
Base Power Input (VA)	4.5	12	18	24	30	4.5	12	18	24	30
Base Noise (dBA)	45	52	57	62	66	45	52	57	62	66
Base Noise (dB)	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(C))	45	52	57	62	66	45	52	57	62	66
Base Noise (dB(A))	45	52	57	62	66					

CLIENT:			
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REV. NO.	DESCRIPTION	DATE	BY
PROJECT: Proposed Property Development Element 7 Cannabis Retail			
TITLE: MECHANICAL EQUIPMENT DATA SHEETS.			
PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: NTS	
DRAWING NO. M 4 . 0 1		REV.	

GENERAL NOTES

1. MECHANICAL CONTRACTOR SHALL EXAMINE ALL OTHER SPECIFICATIONS, DRAWINGS AND ALL FEATURES OF BUILDING CONSTRUCTION WHICH MAY AFFECT HIS WORK AND SHALL B GOVERNED BY THESE AND OTHER SPECIFICATIONS, INCLUDIN THE GENERAL CONDITIONS AND PARTICULAR INSTRUCTIONS T ALL BIDDER AND SUPPLIERS
2. ALL WORK SHALL BE EXECUTED AND INSPECTED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND/OR STATE CODES, LAWS, ORDINANCES, RULES AND REGULATIONS APPLICABLE TO THIS PARTICULAR CLASS OF WORK, AND EACH CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL APPLICABLE SERVICE CHARGES, FEES, PERMITS, TAXES, AND OTHER SIMILAR COSTS IN CONNECTION THEREWITH
3. PRIOR TO FABRICATION OF DUCTWORK, THE MECHANICAL CONTRACTOR SHALL EXAMINE AND VERIFY ALL CONDITIONS ABOVE AND BELOW THE CEILING WHICH MAY INTERFERE WITH THE DUCT SYSTEM AND NOTIFY THE ARCHITECT OF ANY CONFLICT ENCOUNTERED .CONTRACTOR SHALL PROVIDE ALL OFFSETS, ETC WHICH MAY BE REQUIRED, WITHOUT ADDITIONAL COST TO THE OWNER
4. ALL SHEET METAL DUCT CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARD
5. TURNING VANES SHALL BE INSTALLED IN ALL BENDS IN RECTANGULAR DUCT EXCEEDING 30"
6. ALL DUCTS SHALL BE SUPPORTED WITH 1"WIDE, 16 GAUGE, GALVANIZED STEEL BANDS
7. ALL RECTANGULAR DUCT SHALL BE INSULATED WITH A MIN. OF 1"INTERNAL LINER, 2 LBS. DENSITY R-60. ALL ROUND DUCTS AND DIFFUSER TOPS SHALL HAVE A MIN. 2" THICK OF FOIL BACKED BLANKET TYPE INSULATION R=4-4.2, WITH ALL JOINTS BUTTED AND TAPED
8. ALL DUCT DIMENSIONS SHOWN ON PLANS ARE INTERNAL
9. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF SUPPLY AND RETURN AIR REGISTERS, DUCTS, GRILLES AND DIFFUSERS WITH LIGHTING AND CEILING PATTERNS
10. PROVIDE LATERAL BRACING OF ALL DUCTS AND PIPES AS REQUIRED BY CODE
11. INSULATE AND SEAL ALL DUCTWORK PER CHAPTER 10 OF THE STATE MECHANICAL CODE (T-24, PART 4)
12. MOUNT ALL THERMOSTATS AT 48" ABOVE FINISHED FLOOR
13. ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES
14. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE MECHANICAL ENGINEER
15. DUCT SMOKE DETECTOR SHALL BE INSTALLED BELOW THE ROOF
16. ALL MECHANICAL EQUIPMENT AND SYSTEMS INSTALLED AS PART OF PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2022 CALIFORNIA MECHANICAL CODE AND THE 2022 CALIFORNIA BUILDING CODE AND THE 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
17. OUTSIDE AIR FOR A HEATING OR COOLING SYSTEM SHALL NOT BE TAKEN FROM CLOSER THAN 10 FEET FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN, UNLESS THE OUTLET IS 3 FT ABOVE THE OUTSIDE AIR INLET (CMC, 314.3)
18. PROVIDE 120 VOLT ELECTRICAL OUTLETS WITHIN 25 FT. OF ALL MECH. EQUIPT. (CMC 309)
19. HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH CMC 317.1 REQUIREMENTS

A. AABC NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE

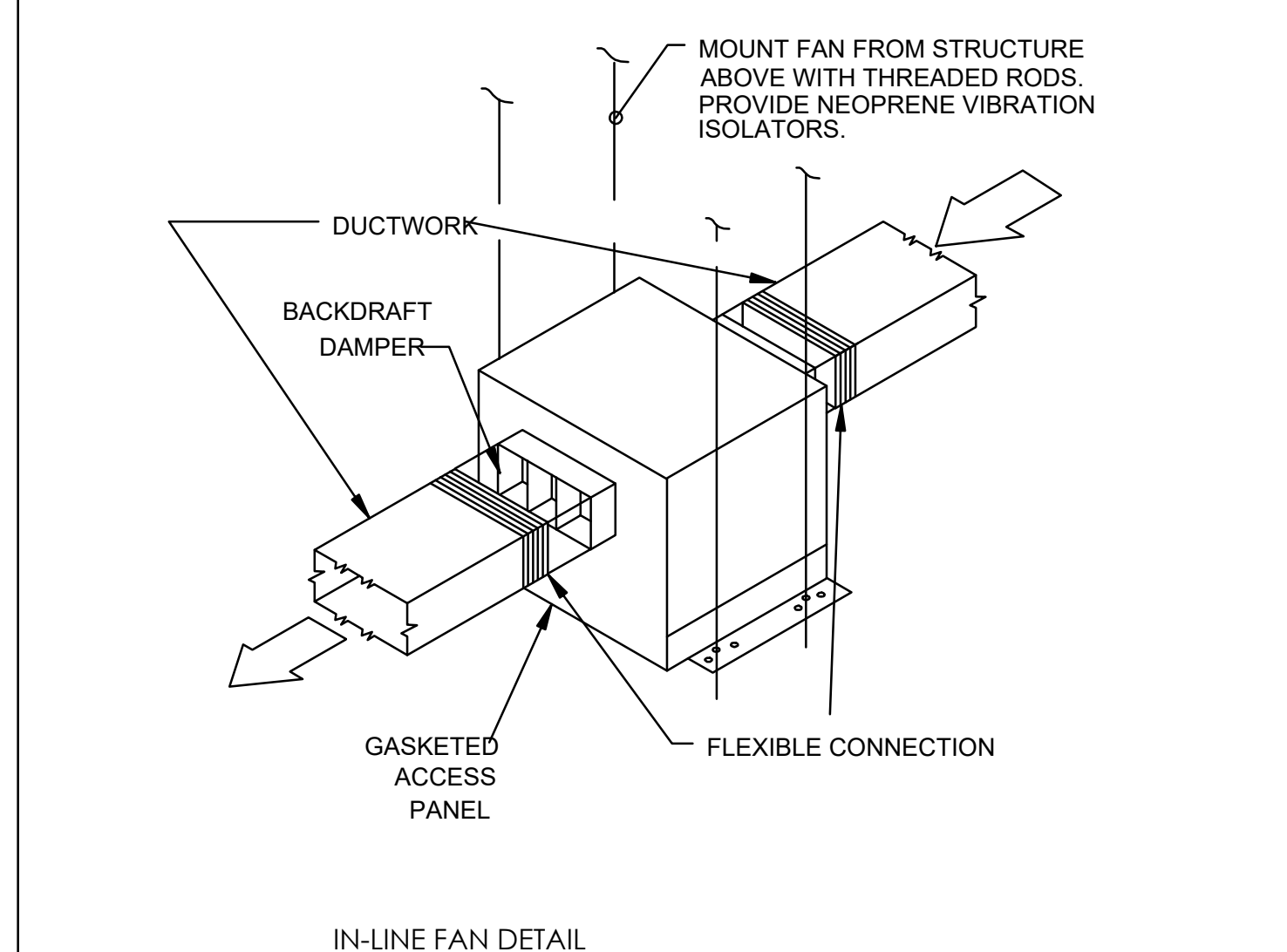
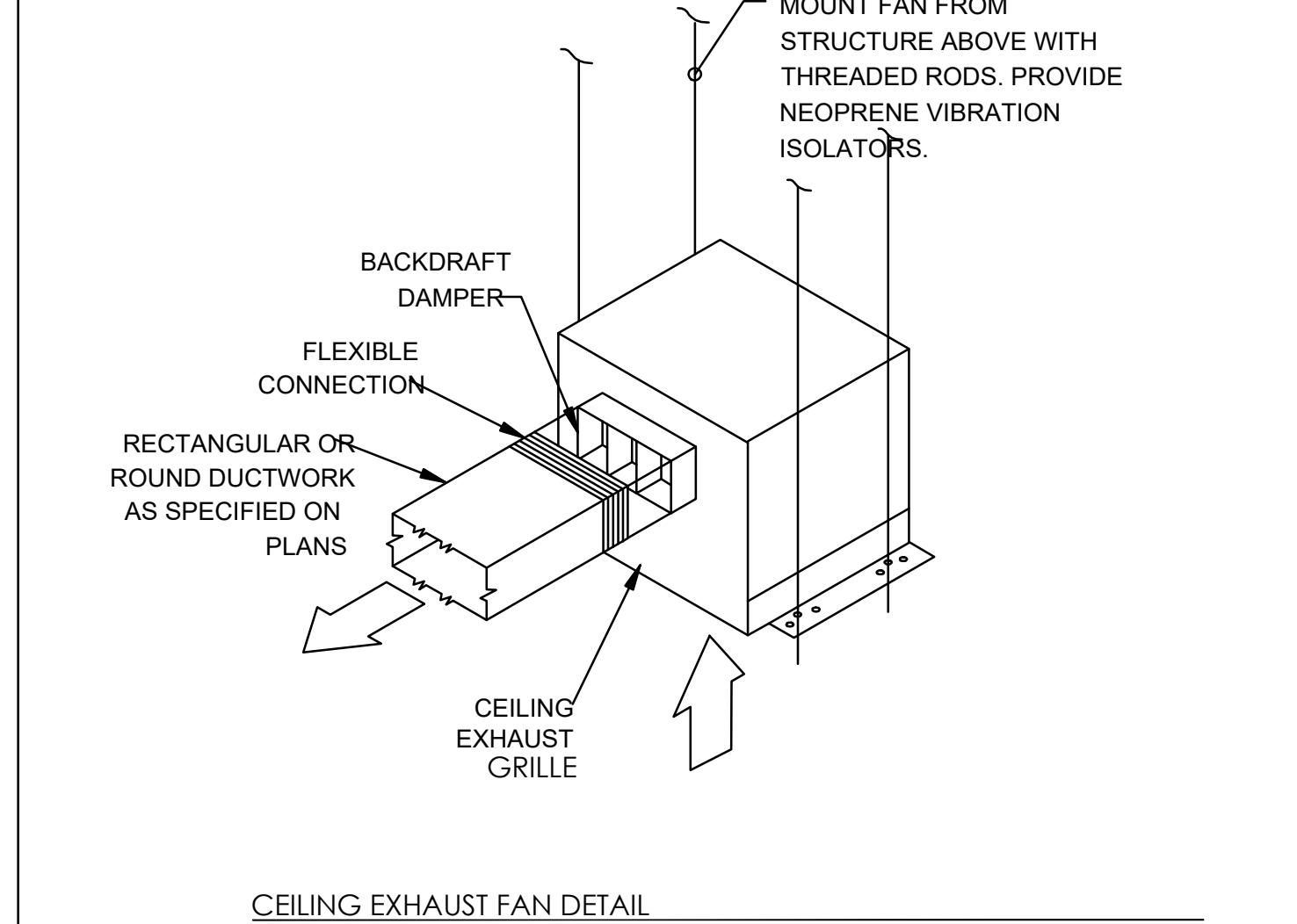
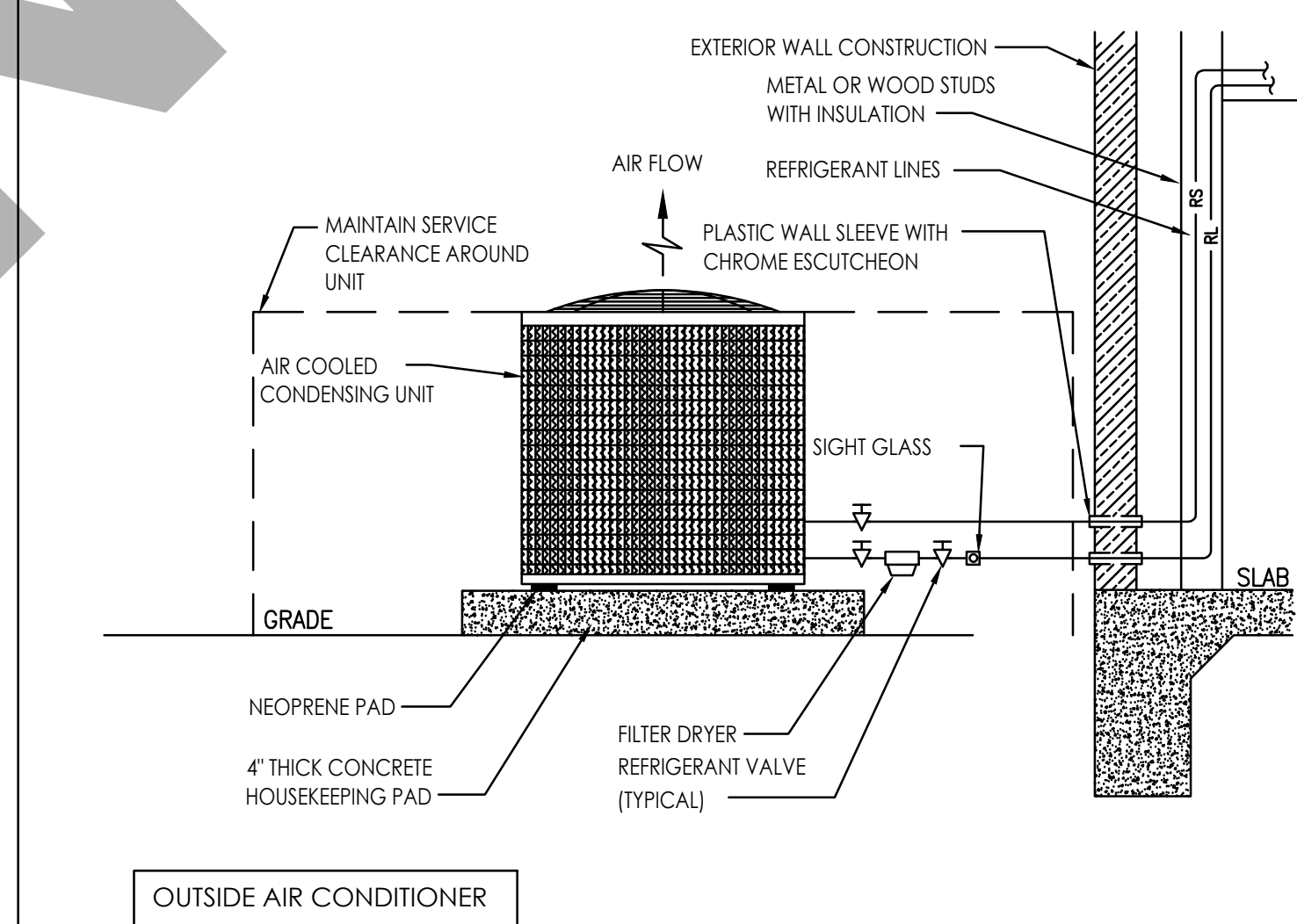
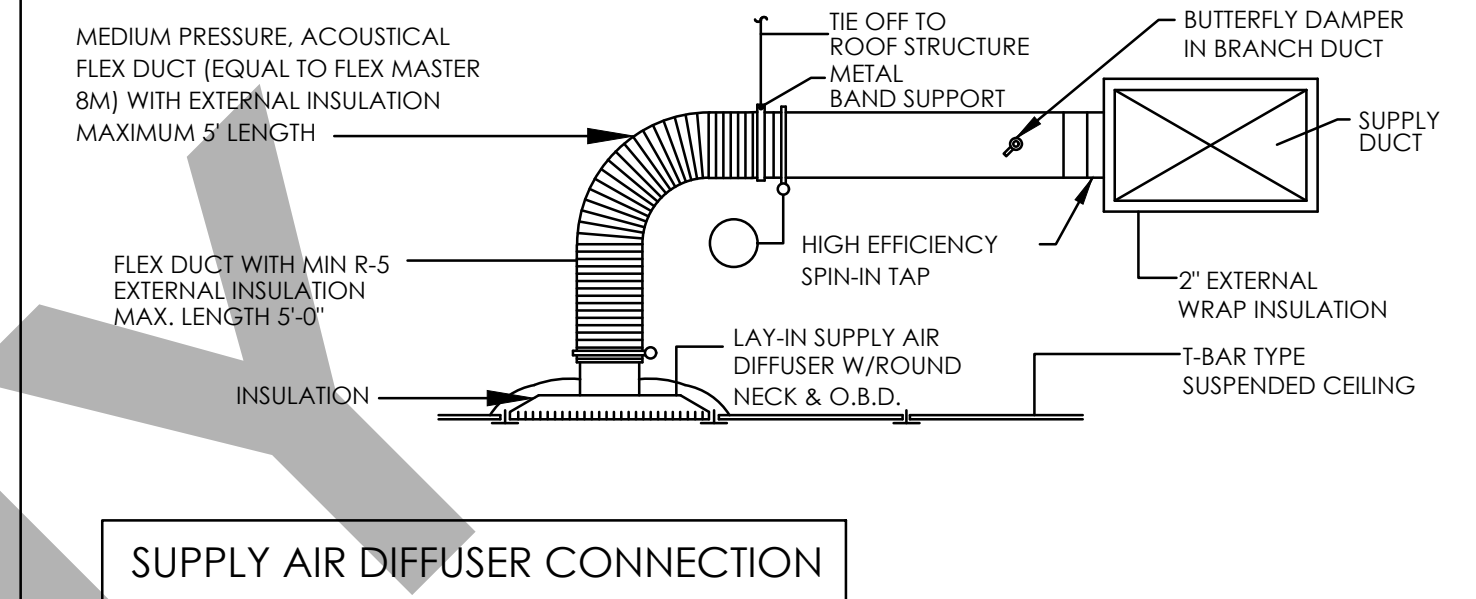
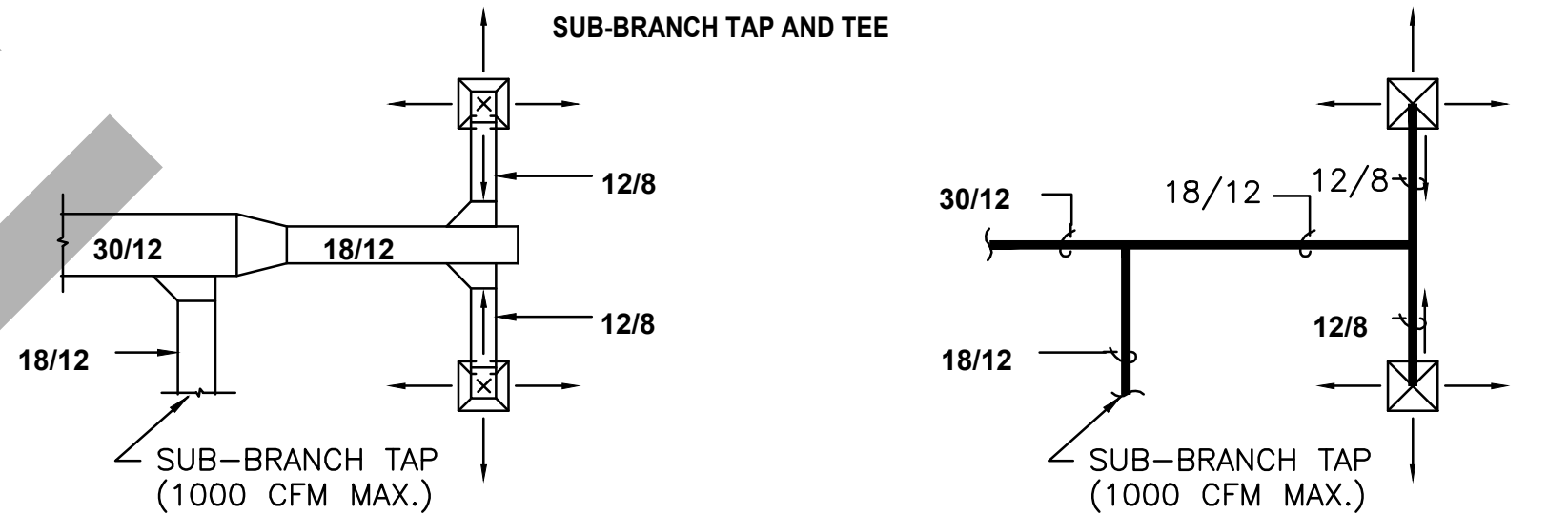
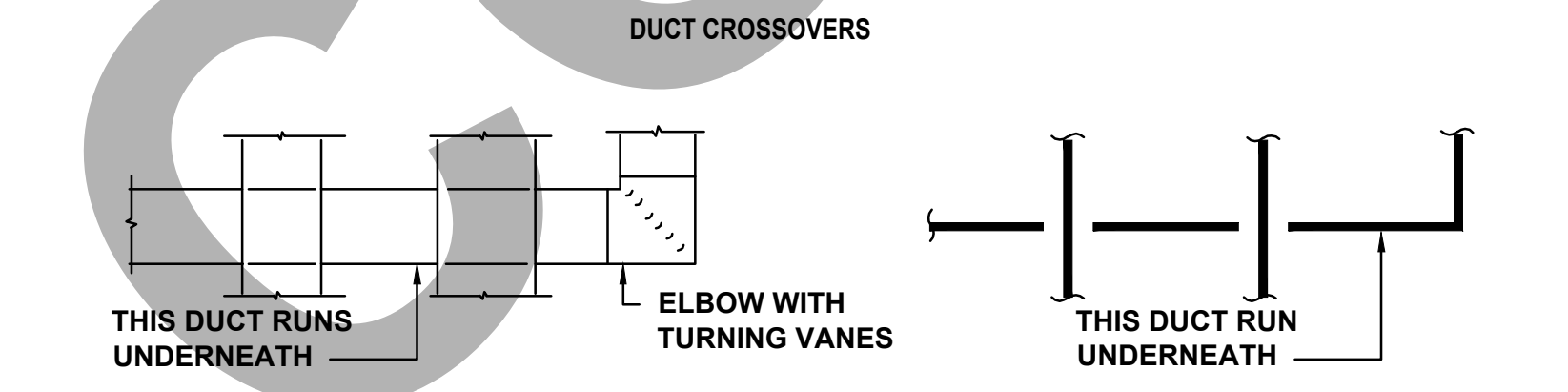
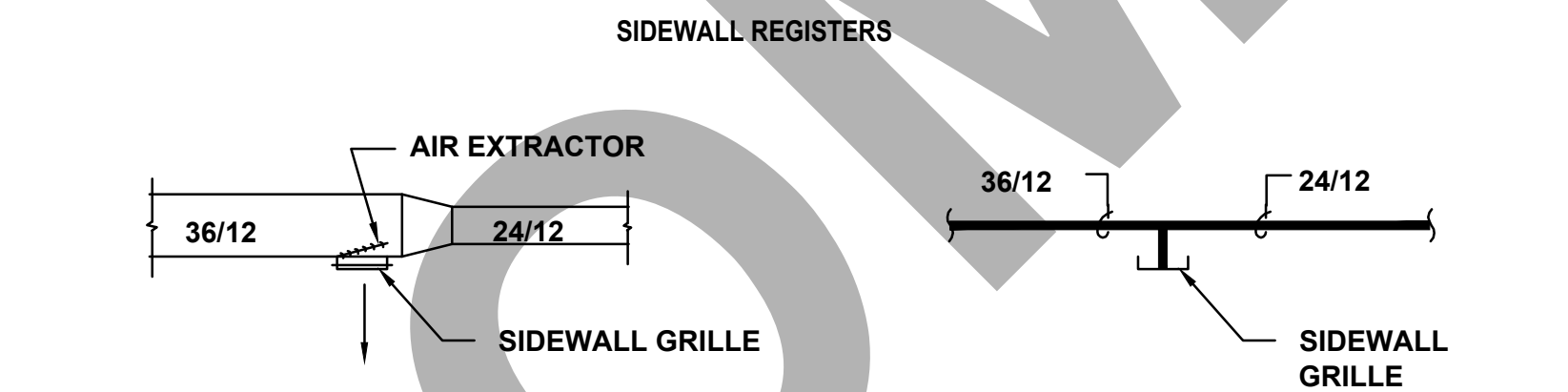
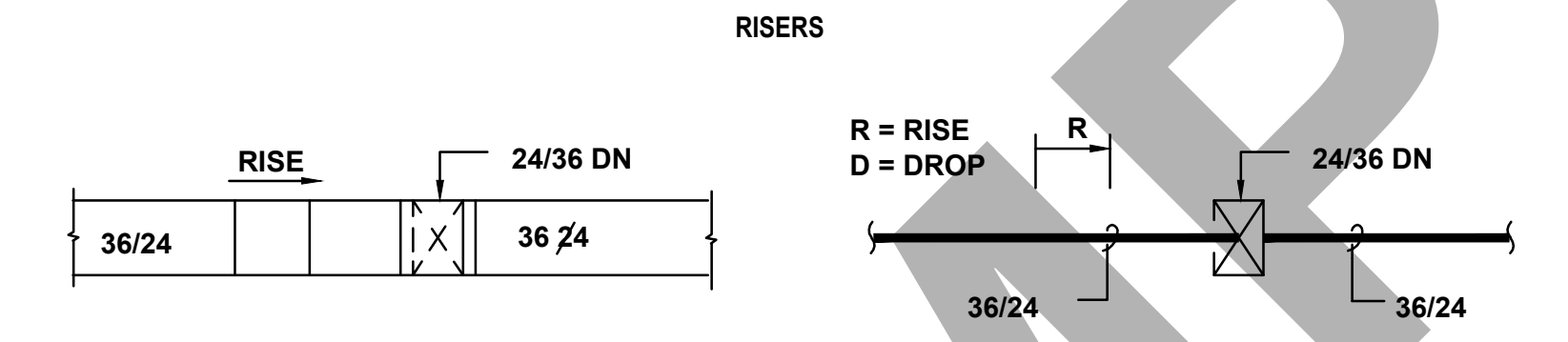
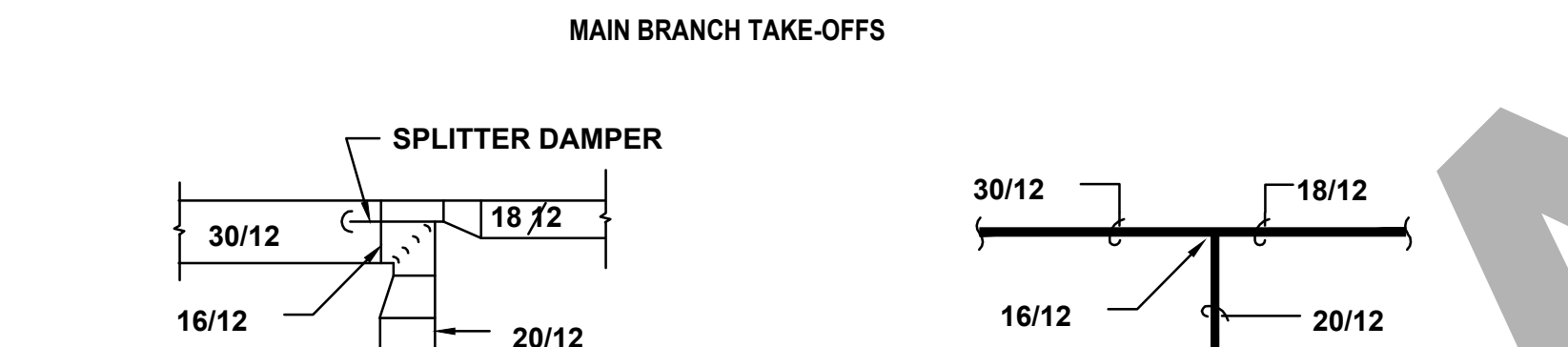
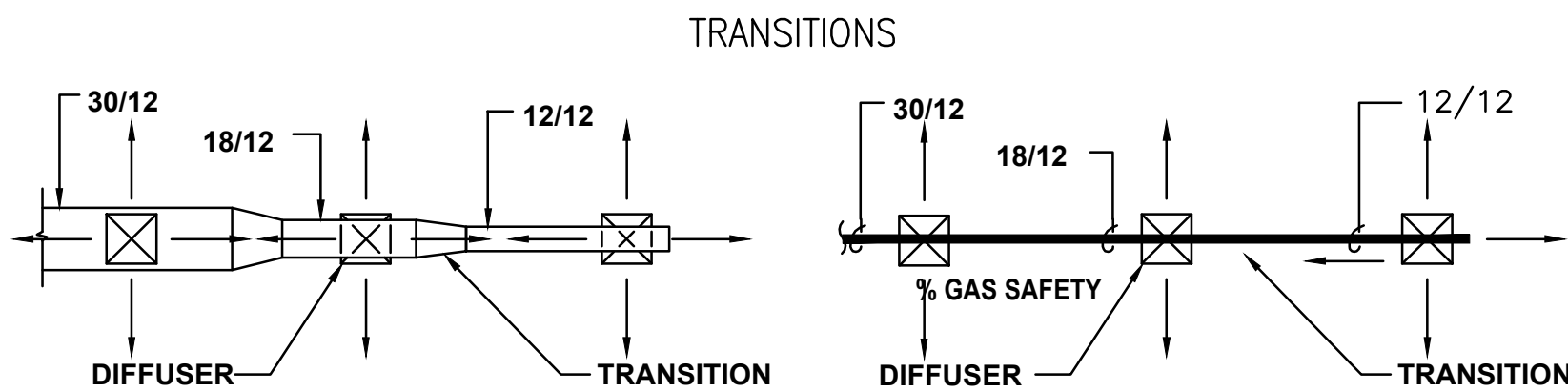
B. ACCA MANUAL B

C. ASHRAE 111

D. NEBB PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS

E. SMACNA HVAC TESTING, ADJUSTING, AND BALANCING
20. MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL BE NON COMBUSTIBLE 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

DUCTWORK SYMBOLS LEGEND



CLIENT:

ADDRESS:

347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
MECHANICAL GENERAL
DETAILS.

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: NTS
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DRAWING NO. M 5 . 0 1	REV.
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GENERAL NOTES

- A. ALL EXISTING COMPONENTS OF THIS ELECTRICAL DIAGRAM ARE TO REMAIN AS INSTALLED AND ARE SHOWN FOR REFERENCE ONLY.

B. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL FIRE PROTECTION

C. ASSOCIATION (NFPA) 70, NATIONAL ELECTRICAL CODE. ALL ITEMS ARE ON AN OR EQUAL BASIS.

D. ALL SINGLE PHASE BRANCH CIRCUITS (RECEPTACLES, LIGHTING, ETC.; ARE 1/2" CONDUIT OR EMT WITH THIN, 90C WIRING, UNLESS NOTED OTHERWISE. ALL OTHER CONDUIT AND WIRING SHALL BE AS INDICATED ON THE PLANS. ACTUAL ROUTING AND HOME RUN GROUPINGS ARE TO BE DETERMINED IN THE FIELD.

E. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC EXCEPT FOR DETAILS AND ELEVATIONS. DO NOT SCALE FROM DIAGRAMMATIC DRAWINGS. EXACT LOCATIONS OF DEVICES AND PANELS ARE TO BE DETERMINED AND ROUGHED-IN DURING CONSTRUCTION TO AVOID INTERFERENCE. TO MEET USER REQUIREMENTS, TO PROVIDE ADEQUATE MOUNTING, AND TO MEET NEC LINEAR ACCESS AND CLEARANCE REQUIREMENTS.

F. BACK TO BACK MOUNTING OF RECEPTACLES IS NOT PERMITTED.

G. IN ADDITION TO THE NEC REQUIREMENTS FOR GFCI PROTECTION FOR RECEPTACLES, THE FOLLOWING RECEPTACLES SHALL ALSO HAVE GFCI PROTECTION: (1)-ALL RECEPTACLES LOCATED WITHIN 8 FEET OF A SINK, (2)-ALL RECEPTACLES WHICH ARE PROVIDED FOR CONVENIENCE IN SERVICING HVAC EQUIPMENT REGARDLESS OF LOCATION.AS REQUIRED TO ACCOMMODATE CONDUCTOR PULLING EASE, FIELD LIFE SAFETY.

H. PROVIDE A LAMICOID NAMEPLATE (WHITE LETTERS ON BLACK BACKGROUND; ON EACH PANELBOARD, MOTOR STARTER,CONTACTOR, TRANSFORMER, ETC. LETTERS SHALL BE 0.75 INCH MINIMUM.

I. CONTRACTOR SHALL CUT AS REQUIRED TO INSTALL ELECTRICAL EQUIPMENT REPAIR OF FLOOR OR WALLS SHALL BE COORDINATED WITH GENERAL CONTRACTOR CONTRACTOR SHALL ALSO REPAIR ALL OPENINGS LEFT DUE TO EQUIPMENT REMOVAL.

J. CONDUCTORS ARE COPPER UNLESS OTHERWISE SHOWN. ALL CONDUCTORS LARGER THAN #10 SHALL BE STRANDED.

K. PANELBOARDS SHALL CONTAIN A TYPEWRITTEN DIRECTORY WITH A PLASTIC COVER AFFIXED TO THE INSIDE DOOR.
- L. ALL FIXTURES, DEVICES, CONDUIT, AND EQUIPMENT SHALL BE SECURED WITH APPROVED HANGERS AND ANCHORS AND IN ACCORDANCE WITH APPROVED STANDARDS OF INSTALLATION.

M. ALL BREAKERS SHOWN IN THE PANELBOARD SCHEDULE SHALL BE RATED AS SHOWN FOR BOTH CIRCUIT CAPACITY AND FAULT CURRENT INTERRUPTING CAPACITY.

N. ALL PANELBOARDS, DISCONNECT SWITCHES, MOTOR STARTERS, AND CONTACTORS SHALL BE NEMA 1, UNLESS OTHERWISE NOTED.

O. ELECTRICAL CONTRACTOR MUST BE AVAILABLE AT TIME OF DBS INSPECTION. COORDINATE WITH GENERAL CONTRACTOR.

P. FIELD VERIFY THE AVAILABLE FAULT CURRENT AT THE LANDLORD'S EXISTING PANEL AND PROVIDE A NEW, FULLY RATED, PANEL TO MATCH EXISTING.

Q. CONTRACTOR TO MAKE FINAL CONNECTIONS IN EMS PANEL FOR LANDLORD PROVIDED LIGHTING CIRCUITS. 50% OF THE GENERAL LIGHTING CIRCUITS SHOULD BE ROUTED THROUGH THE CUSTOMER CONTROL ZONE .

GENERAL ELECTRICAL NOTES	
#	DESCRIPTION
1	GENERAL CONTRACTOR SHALL VERIFY FIELD CONDITIONS BEFORE SUBMITTING BID.
2	ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2019 NEC, AS AMENDED BY 2019 ELECTRICAL CODE, 2019 ENERGY CODE AND ANY ADDITIONAL STATE OR LOCAL CODES WHICH MAY APPLY.
3	GENERAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, CERTIFICATES, ETC. REQUIRED.
4	GENERAL CONTRACTOR SHALL OBTAIN AND PAY FOR BOTH ROUGH AND FINAL UNDER-WRITERS OR OTHER APPROVED INSPECTION AGENCY CERTIFICATES "ELECTRICAL INSPECTION". THESE CERTIFICATES SHALL BE PRESENTED WITH REQUEST FOR FINAL PAYMENT.
5	IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE OPERATING ELECTRICAL SYSTEM. THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, EQUIPMENT, MATERIAL, ETC. REQUIRED, EXCEPT WHERE SPECIFICALLY NOTED AS BEING FURNISHED BY OTHERS. SHOULD THERE BE ANY QUESTIONS CONCERNING RESPONSIBILITY, THEY SHALL BE ADDRESSED TO ARCHITECT PRIOR TO BID. NO EXTRA CHARGES WILL BE ALLOWED.
6	ELECTRICAL SERVICE SHALL BE COORDINATED WITH THE EXISTING FIELD CONDITIONS.
7	CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO ALL CONTROLS, OWNER-SUPPLIED EQUIPMENT, MECHANICAL AND PLUMBING EQUIPMENT AS REQUIRED.
8	REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATION DETAILS. ALL FIXTURE AND DEVICE LOCATIONS SHOWN ON ARCHITECTURAL DRAWINGS SUPERSEDE THOSE SHOWN ON ELECTRICAL PLANS.
9	CIRCUIT NUMBER ON THE DRAWINGS ARE FOR IDENTIFICATION ONLY AND DO NOT INDICATE THE POSITION ON THE PANEL BOARD. CONNECT THE CIRCUITS WITH THE LIGHTEST LOADS AND THE RECEPTACLE CIRCUITS NEAR THE TOP OF THE PANEL, AND THE MORE HEAVILY LOADED CIRCUITS NEAR THE BOTTOM. BALANCE ALL CIRCUITS EVENLY BETWEEN PHASE SO THAT FEEDER WIRES CARRY APPROXIMATELY EQUAL CURRENT. ALL PHASES MUST BE BALANCED WITHIN 10% OR LESS. G.C. SHALL REBALANCE IF NECESSARY.
10	BRANCH CIRCUIT CONDUCTOR INSULATION SHALL BE COLOR CODED AND SHALL BE 600 VOLT. TYPE THHN/THWN.
11	CABLES IN HIGH TEMPERATURE AREAS SHALL HAVE INSULATION TYPE SUITABLE FOR THE TEMPERATURE. CABLES USED IN SPACES FOR ENVIRONMENTAL AIR SHALL CONFORM WITH APPLICABLE N.E.C REQUIREMENTS.
12	ALL WIRING USED IN RETURN OR DISCHARGE AIR PLENUMS SHALL BE PLENUM RATED OR INSTALLED PER METHODS APPROVED BY THE LATEST EDITION OF THE N.E.C. FOR SUCH APPLICATION.
13	ALL WIRE AND CABLE CONDUCTORS SHALL BE COPPER WITH INSULATION RATED 600V. CONDUCTORS SIZED #10 AWG AND SMALLER SHALL BE SOLID OR STRANDED. CONDUCTORS SIZED LARGER THAN #10 AWG SHALL BE STRANDED WIRE.
14	BRANCH CIRCUITS FOR POWER AND LIGHTING SHALL NOT BE LESS THAN #12 AWG. OR AS NOTED. WIRES ARE TO BE SIZED FOR THE APPLICABLE VOLTAGE DROPS. SEE WIRE SIZE SCHEDULE ON THIS SHEET.
15	ALL DATA CABLES SHALL BE CAT6, PLENUM RATED, TO BE PROVIDED BY OWNER. SELECTED VENDOR. ELECTRICAL WORK SHALL BE TO PROVIDE OUTLET BOXES AND "RING AND STRING" FOR PULLING OF CABLES IN CONCEALED SPACES.
16	CONTROL WIRING SHALL NOT BE LESS THAN #14 AWG UNLESS OTHERWISE NOTED.
17	HOMERUNS SHOWN ARE SCHEMATIC. CONTRACTOR MAY ORIGINATE HOMERUNS FROM DIFFERENT LOCATIONS. ALL WIRE INCLUDING HOMERUNS SHALL BE DELINEATED ON AS-BUILT DRAWINGS.
18	ALL WIRING INSTALLED UNDER THIS CONTRACT SHALL BE TESTED FOR PROPER CONNECTIONS AND SHORT CIRCUITS PRIOR TO THE TURNING OVER OF WORK AS A COMPLETE UNIT.
19	PROVIDE ALL ELECTRICAL SYSTEM GROUNDING IN ACCORDANCE WITH N.E.C. REQUIREMENTS EVEN IF IT IS NOT SHOWN ON THE DRAWINGS. INCLUDE ADDITIONAL GROUNDING CONDUCTORS IN ALL RACEWAYS EVEN THOUGH THE DRAWINGS SHOW ONLY CIRCUIT AND/OR NEUTRALS CONDUCTORS. THE PLUMBING AND PIPING SYSTEM SHALL NOT BE USED AS A GROUND. ALL TRANSFORMER NEUTRALS SHALL BE GROUNDED TO BUILDING STEEL IN ACCORDANCE WITH NEC 250-70.
20	ALL CONDUITS PASSING THROUGH PARTITIONS ARE TO BE APPROPRIATELY SLEEVED AND SEALED.
21	FURNISH AND INSTALL ALL CONDUIT WITH PULL WIRES AS REQUIRED. ALL OUTLET BOXES SHALL BE STEEL, EXTRA DEEP WITH GROUNDING PIGTAILS. GROUNDING PUSH-CLIPS ARE NOT ACCEPTABLE.
22	ALL PENETRATIONS SHALL BE INSTALLED AND SEALED PER NATIONAL STATE AND LOCAL CODES.
23	DO NOT MAKE ANY CHANGES OR SUBSTITUTIONS WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ARCHITECT OR ENGINEER.
24	GUARANTEE ALL WORK, MATERIAL AND EQUIPMENT FOR A PERIOD OF ONE YEAR FROM THE DATE OF APPROVAL AND FINAL ACCEPTANCE.
25	THIS DESIGN IS BASED ON INITIAL DESIGN DATA. GENERAL CONTRACTOR TO SUPPLY AND INSTALL FEEDERS, FUSES AND CIRCUIT BREAKERS TO MATCH THE NAMEPLATE RATING OF ALL EQUIPMENT. THIS SHALL BE INCLUDED IN THE INITIAL BID PROPOSAL AND NO EXTRAS SHALL BE ENTERTAINED.

GENERAL ELECTRICAL NOTES	
#	DESCRIPTION
26	LABEL ALL JUNCTION BOXES, OUTLETS, LIGHT SWITCH, ETC. WITH CIRCUIT NUMBER ON INTERIOR ON COVER PLATE. USE SELF-ADHESIVE "DYMO" LABEL 1/8" HIGH LETTERS.
27	GENERAL CONTRACTOR SHALL PROVIDE SEISMIC RESTRAINTS AND SUPPORTS FOR ALL FLOOR, WALL, AND CEILING MOUNTED ELECTRICAL EQUIPMENT TO RESIST EARTHQUAKE EFFECTS DETERMINED IN ACCORDANCE WITH THE BUILDING CODE.
28	THE G.C. SHALL PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR TO COMPLETE ALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER AND IN ACCORDANCE WITH GOOD COMMERCIAL PRACTICE INCLUDING THE INSTALLATION OF ALL THE EQUIPMENT MATERIALS AND SYSTEMS AND THE FINAL CONNECTIONS TO THE OWNER'S EQUIPMENT AND FIXTURES AS REQUIRED BY THE OWNER. THE G.C. SHALL ALSO FURNISH TEMPORARY WIRING AND LIGHTING TO PROVIDE A MINIMUM OF 25 FC IN WORK AREAS FOR USE OF ALL THE TRADES DURING CONSTRUCTION AND THE INSTALLATION OF THE OWNERS FIXTURES. THE G.C. IS RESPONSIBLE TO REMOVE ALL TEMPORARY WIRING UPON COMPLETION OF CONSTRUCTION OF ALL TRADES.
29	THIS CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL SUPPLEMENTARY SUPPORT, INCLUDING SUPPORT STEEL AS REQUIRED TO HANG ALL EQUIPMENT AND LIGHTING FROM THE EXISTING STRUCTURE IN ACCORDANCE WITH THE ARCHITECTURAL/STRUCTURAL SUPPORT AND LOADING CRITERIA.
30	IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE FULLY DIMENSIONED COORDINATION DRAWINGS FOR ALL OF HIS RESPECTIVE WORK. THESE DRAWINGS MUST BE FULLY COORDINATED WITH ALL EXISTING CONDITIONS. ALL HVAC, PLUMBING, FIRE PROTECTION, ELECTRICAL, LIGHTING, STRUCTURAL AND ARCHITECTURAL SYSTEMS PRIOR TO PREPARING COMPOSITE MULTIDISCIPLINE COORDINATION DRAWINGS.
31	ALL DISCONNECTING MEANS AND EQUIPMENT INDICATED ON THE DRAWING SHALL BE IDENTIFIED BY NAMEPLATE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE 110-22.
32	ALL WIRING FOR THE EMERGENCY LIGHTING AND EMERGENCY SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE ARTICLE 700.
33	THE WIRING METHODS AND MATERIALS INDICATED IN THE SPECIFICATIONS AND ON THE DRAWINGS SHALL BE INSTALLED AND CONNECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE ARTICLE 300.
34	THE ELECTRICAL SERVICE AND DISTRIBUTION SYSTEM AS INDICATED ON THE RISKER DIAGRAM AND MATERIALS INDICATED IN THE SPECIFICATIONS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE ARTICLE 230, SERVICES.
35	ALL OVER CURRENT PROTECTION SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE SECTION 240, OVERCURRENT PROTECTION.
36	ALL GROUNDING REQUIREMENTS OF THE COMPLETE ELECTRICAL DISTRIBUTION SYSTEM AND AS INDICATED IN THE SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ARTICLE 250, GROUNDING AND BONDING.
37	AND/OR CUTTING OF ROOF, CONTRACTOR SHALL COORDINATE WITH BUILDING ENGINEER.
38	FOR ALL LIGHTING FIXTURES MOUNTED IN HUNG CEILING THE GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL INDIVIDUAL SUPPORT AT EACH CORNER OF RECESSED LIGHTING TROFFER CONNECTED TO BUILDING STEEL ABOVE ALL CONDUIT AND MC CABLE MOUNTED ABOVE HUNG CEILING SHALL BE INDIVIDUALLY SUPPORTED IN THE SAME FASHION AS PER NEC REQUIREMENTS.
39	DO NOT SCALE FROM THESE DRAWINGS.
40	PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUITS INDICATED BY CIRCUITS NUMBERS. PROVIDE AND INSTALL ALL CONDUITS, CONDUCTORS, BOXES, MISCELLANEOUS FITTINGS, ETC. FOR A COMPLETE AND OPERABLE SYSTEM (HOME RUN SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS AND N.E.C.
41	ELECTRICAL RECEPTACLE, SWITCH AND CONTROL HEIGHTS: (CBC-1136A.1.) RECEPTACLE HEIGHTS: ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES (1219MM) MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15 INCHES (381MM) MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF FINISHED FLOOR OR WORKING PLATFORM. IF THE REACH IS OVER AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET) BETWEEN 20 AND 25 INCHES (508 AND 635MM) IN DEPTH, THE MAXIMUM HEIGHT MEASURED AT THE BOX IS REDUCED TO 44 INCHES (1118MM) FOR FORWARD APPROACH, OR 46 INCHES (1168MM) FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24 INCHES (610MM) IN DEPTH. OBSTRUCTION SHALL NOT EXCEED MORE THAN 25 INCHES (635MM) FROM THE WALL BENEATH THE RECEPTACLE.
42	SWITCH AND CONTROL HEIGHTS: (CBC 1136A.2.) CONTROL OR SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, ALARMS OR COOLING, HEATING AND VENTILATING EQUIPMENT SHALL BE LOCATED NO MORE THAN 48 INCHES (1219MM) MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES (381MM) MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM. IF THE REACH IS OVER A PHYSICAL BARRIER OR AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET) BETWEEN 20 AND 25 INCHES (508 AND 635MM) IN DEPTH, THE MAXIMUM HEIGHT IS REDUCED TO 44 INCHES (1118MM) FOR FORWARD APPROACH, OR 46 INCHES (1168MM) FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24 INCHES (610MM) IN DEPTH. PHYSICAL BARRIERS OR OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25 INCHES (635MM) FROM THE WALL BENEATH A CONTROL.

ELECTRICAL LEGEND

- ALITHONIA LIGHTING BLT4 40L ADP LP885 BEST-IN-VALUE LOW-PROFILE RECESSED LED TROFFER, 3500K - 33 WATTS
- MOTION DETECTOR
- LIGHT SWITCH
- LIGHT SWITCH WITH OCCUPANCY SENSOR
- LIGHT SWITCH WITH TIMER
- 2 WAY LIGHT SWITCH
- SELF-CONTAINED SMOKE/CARBON MONOXIDE (120 W/BATTERY BACKUP) - CEILING MOUNTED
- NEW DOUBLE OUTLET
- NEW 4PLEX OUTLET
- NEW FLOOR OUTLET
- NON-FUSED DISCONNECT SWITCH - SIZE AS INDICATED
- WALL MOUNTED EMERGENCY LIGHT WITH 90 MINUTES BACK UP BATTERY
- WALL MOUNTED EXIT SIGN WITH 90 MINUTES BACK UP BATTERY
- SURFACE MOUNTED PANEL BOARD
- CEILING JUNCTION BOX FOR EXHAUST FAN
- WALL MOUNTED JUNCTION BOX WITH FLEX CABLE CLAMPS FOR XRAY MACHINE
- FLOOR MOUNTED JUNCTION BOX
- DAYLIGHT SENSOR
- USB
- DATA OUTLET

WIRE SCHEDULE AND NOTES				
LOAD PER PH (KVA)	WIRE SIZE (AWG)	MAXIMUM LENGTH OF BRANCH CIRCUIT PER UTILIZATION VOLTAGE		
		(120, 1PH, MAX V.D. 3%)	(240, 1PH, MAX V.D. 3%)	(240, 3PH, MAX V.D. 3%)
< 1.92	#12	56 FT	85 FT	98 FT
	#10	94 FT	141 FT	163 FT
	#8	144 FT	217 FT	250 FT
< 1.44	#6	230 FT	345 FT	398 FT
	#12	75 FT	113 FT	130 FT
	#10	125 FT	188 FT	217 FT
< 1.26	#8	192 FT	289 FT	334 FT
	#6	306 FT	460 FT	531 FT
	#12	86 FT	129 FT	149 FT
< 1.08	#10	143 FT	215 FT	248 FT
	#8	220 FT	330 FT	381 FT
	#12	100 FT	150 FT	173 FT
< 0.9	#10	167 FT	250 FT	289 FT
	#8	256 FT	385 FT	445 FT
	#12	120 FT	180 FT	240 FT
<0.72	#10	200 FT	300 FT	347 FT
	#12	150 FT	225 FT	260 FT
#	NOTES			
1	CONTRACTOR SHALL REFER TO THIS TABLE PRIOR TO START OF BRANCH CIRCUIT ROUGH-IN.			
2	CONTRACTOR SHALL USE THE APPROPRIATE WIRE SIZE IN CONJUNCTION WITH THE LENGTH OF THE PROPOSED FIELD VERIFIED ROUTING OF BRANCH CIRCUIT WIRING (INCLUDING VERTICAL & LATERAL RUN, ROUTED PARALLEL/PERPENDICULAR TO THE BUILDING STRUCTURE).			
3	SEE PANEL SCHEDULE FOR THE CORRESPONDING KVA LOAD PER PHASE OF A PARTICULAR BRANCH CIRCUIT.			
4	RESISTANCE VALUES USED ARE FOR UNCOATED COPPER WIRES IN STEEL CONDUIT, 75 DEGREE C., OPERATING AT 60HZ.			
5	THE VALUES IN "120V, 1PH" COLUMN IS TO BE USED FOR GENERAL PURPOSE RECEPTACLE LOADS.			

ABBREVIATIONS AND TAGS			
ABB.	DESCRIPTION	ABB.	DESCRIPTION
EWB	ELECTRIC WATER HEATER	SD	SMOKE DETECTOR
(E)	EXISTING TO REMAIN	TEL	TELEPHONE
EC	ELECTRICAL CONTRACTOR	TX	TRANSFORMER
FA	FIRE ALARM	TV	TELEVISION
FMT	FLEXIBLE METALLIC TUBING	UAC	UNDER ANOTHER CONTRACT
GC	GENERAL CONTRACTOR	UAS	UNDER ANOTHER SECTION
GFCI	GROUND FAULT INTERUPTER	UON	UNLESS OTHERWISE NOTED
IG	ISOLATED GROUND	V.D.	VOLTAGE DROP
LL	LANDLORD	W	WIRE
LV	LOW VOLTAGE	WP	WEATHERPROOF
AC 1	MECHANICAL UNIT TAG. SEE MECHANICAL DRAWINGS FOR ADDITIONAL DESCRIPTION.	E-4	DETAIL TAG. REFER TO DETAIL 4 ON SHEET NUMBER E-4.

CLIENT:

ADDRESS:

347 W. Market St, Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS
APPEARING HEREIN CONSTITUTE THE
ORIGINAL AND UNPUBLISHED WORK OF THE
DESIGNER AND THE SAME MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT
CONSENT OF THE DESIGNER.

NOTES:

1. ALL DIMENSIONS HEREIN ARE IN IMPERIAL UNITS UNLESS STATED OTHERWISE.
2. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT DESIGNER, ENGINEER OR SPECIALIST DRAWINGS AND SPECIFICATIONS.
3. THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development

Element 7 Cannabis Retail

TITLE:
ELECTRICAL LIST OF SYMBOLS
AND GENERAL NOTES

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
NTS

DRAWING NO. REV.

E 0 . 0

ELECTRICAL SPECIFICATIONS										
PART 1		GENERAL	PART 2		PRODUCTS	PART 2		PRODUCTS	PART 3	EXECUTION
1.01		SCOPE OF WORK: Furnish and install all materials and equipment and provide all labor, tools, transportation, superintendence and services required and necessary to complete the work shown on the drawings and/or specified herein. Also include all other work and miscellaneous items, not specifically mentioned, but reasonably inferred for a complete installation including all accessories and appurtenances required for testing the system. It is the intent of the drawings and specifications that all systems be complete, and ready for operation.	2.01		MATERIAL APPROVAL: All materials must be new and bear Underwriter's Laboratories label. Materials that are not covered by UL testing standards shall be tested and approved by an independent testing laboratory or a governmental agency. Material not in accordance with these specifications may be rejected either before or after installation.	2.01		DRY TYPE TRANSFORMERS: General: Equipment shall conform to or exceed requirements of NEMA, ANSI Standard C89.2 for Dry Type Transformers for General Applications. Acceptable products are those of General Electric Company's "QL," Line or equivalent Square D, Siemens-ITE, or Eaton. Electrical Ratings: 1. Primary windings voltage: 480 Volts, 3-Phase, delta. Secondary windings voltages: 240Y/120 Volts, 3-Phase grounded. Frequency: 60 Hz. KVA rating: As shown on drawings. Taps: Six (6) 2.5% full capacity taps; 2 above and 4 below, rated voltage. Impedance: For transformers larger than 75 KVA, 4.5% minimum, 5.75% maximum. 2. Winding temperature rise shall be 150 degrees Centigrade in accordance with UL Specification Article 506. 3. Transformer shall be capable of operating at 100% of nameplate rating continuously while in an ambient temperature not exceeding 40 degrees Centigrade. 4. Transformer shall meet the daily overload requirements of ANSI Standard C57.96. Vibration Isolation, Factory-Installed: Provide neoprene rubber pads to isolate core and coil assembly from transformer enclosure.	3.06	INSTALLATION OF WIRES: A. Pull no wire into any portion of the conduit system until all construction work, which might damage the wire has been completed. B. Install all wire continuous from outlet to outlet or terminal to terminal. Splices in cables when required shall be made in handholes, pull boxes or junction boxes. Make branch circuit splices in outlet boxes with 8" of correctly color-coded tails left in the box. C. Splices in wires and cables shall be made utilizing materials and methods described herein before. D. Make all ground, neutral and line connections to receptacle and wiring device terminals as recommended by manufacture. Provide ground jumper from outlet box to ground terminal of devices when the device is not approved for grounding through the mounting screws. E. Provide Brady wire markers where number of conductors in a box exceeds four. F. Megger and record insulation resistance of all 600 Volt insulated conductors size #4/0 and larger using 500 Volt megger for one minute. Make tests with circuits isolated from source and load.
		REGULATORY REQUIREMENTS: Code compliance is mandatory. Nothing in these Drawings and Specification permits work not conforming to these codes. Where work is shown to exceed minimum code requirements, comply with drawings and specifications. All work and materials shall comply with the latest rules, codes and regulations, including, but not limited to the following: 1. Occupational Safety and Health Act Standards (OSHA). 2. NFPA #70: National Electric Code (NEC). 3. NFPA #101: Life Safety Code. 4. State Fire Marshal. 5. Local Utilities Companies.			CONDUITS AND OTHER RACEWAYS: A. Rigid Steel: Hot-dipped galvanized. B. Intermediate Metal Conduit (IMC): Hot-dipped galvanized. C. Electrical Metallic Tubing (EMT): Electro-galvanized. D. Wireway: Code gauge steel, with knockouts and hinged cover, corrosion resistant, gray baked enamel finish. E. Provide fittings and accessories approved for the purpose equal in all respects to the conduit or raceway. EMT connectors and couplings shall be steel setscrew type indoors and steel compression type in wet locations and outdoors.					
1.02		LICENSE, FEES AND PERMITS: Electrical contractor shall pay for all licenses, permits and inspection fees required by the authority having jurisdiction and shall arrange for all required inspections.	2.02		WIRES AND CABLES: A. For power and lighting system 600V or less: 1. Conductor: minimum size #12 AWG. a. #12 and #10 AWG solid copper. b. #8 AWG and larger shall be stranded copper. 2. Insulation type: a. #12 to #1 AWG: THWN for wet or underground and THHN for dry locations. b. #1/0 through #4/0 AWG: XHHW (55 mils). c. #250 MCM and larger: XHHW (65 mils). d. Grounding wire: TW. B. For signal and communications circuit: 1. Special cables shall be as specified on drawings. 2. Conductors for general use shall be stranded copper conductor, #16 AWG minimum, with THWN insulation for underground or wet locations and THHN insulation for dry locations. C. Acceptable Products: General Electric, Amcoada, Okonite, Paronite or Triangle products conforming or exceeding applicable IPCEA standards.	2.12		Installation: 1. Anchor transformer securely with minimum 1/2" diameter bolts. Strength of bolts used to secure the transformer shall be sufficient to resist shear and uplift produced by force equal to 1/2 of the equipment mass applied horizontally at center of gravity. 2. Provide 1" thick high resiliency pads to isolate transformer from floor or platform. Korlund "Elasto Rid" or equivalent. 3. Use flexible conduits at least 24" long for electrical connections. 4. Provide grounding of each transformer secondary including all conduits, wires, and connectors in accordance with NEC 250-26 and any local additional regulations.	3.07	IDENTIFICATION: A. Provide nameplates for switchgears, panelboards, and all similar devices. Nameplates shall be screwed (no adhesives) engraved bakelite or photo-etched metallic nameplate identification showing panel designation, voltage and phase in minimum 1/4" high letters. B. Provide dymo labels on all lighting switches and convenience and special purpose receptacles to show panel and circuit number to which the device is connected. C. Each panelboard shall contain a metal-framed circuit directory inside cover, with plastic protector. D. Panelboard Schedule: After completion of work, provide typewritten updated panelboard schedules for all panelboards.
1.03		SAFETY AND INDEMNITY: The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of work. This requirement will apply continuously and not be limited to normal working hours. No act, service, drawing review or construction review by the Owner, the Engineers or their Consultants, is intended to include review of the adequacy of the Contractor's safety measures, in, on, or near the construction site.			OUTLET BOXES, JUNCTION AND PULL BOXES: A. Outlet boxes: 4" square x 1-1/2" deep (or larger) galvanized sheet steel KO-type with plaster ring and cover for general interior use and cast metal type FS or FD with matching screw covers for exterior and exposed interior locations (gasketed in damp or wet locations). B. Junction boxes shall be same as outlet boxes up to 42 cu. in. and codegauge steel in larger sizes with surface or flush-type screw-mounted trim covers and primed and painted inside out. C. Pull boxes shall be same as junction boxes unless indicated otherwise on the drawings, with covers. D. Telephone outlet boxes shall be the type and size required by the serving telephone company but not smaller than 4-11/16" square x 2-1/8" deep with single-gang ring and Sierra #S-754N split plate bushing.					
1.04		DRAWINGS AND SPECIFICATIONS: All drawings and all Divisions of these specifications shall be considered as a whole and work of this Division shown anywhere therein shall be furnished under this Division. Drawings are diagrammatic and indicate the general arrangement of equipment and wiring. Most direct routing of conduits and wiring is not assured. Exact requirements shall be governed by conditions of the job. Consult all other drawings in preparation of the bid. Extra lengths of wiring or addition of pull or junction boxes, etc., necessitate by such conditions shall be included in the bid.	2.03		WRING DEVICES AND PLATES: Wiring devices and plates shall be by Pass and Seymour or approved equal. 1. Standard design: a. Switch and receptacles devices shall be plastic bodies, color per architect. b. Wall plates shall be metal type 430, stainless steel, color per architect. c. Isolated ground receptacles shall be white with orange triangle as required per NEC, manufactured by "Leviton" # 5362-IGW or approved equal.	2.04		GENERAL: A. Electric system layouts indicated on the drawings are generally diagrammatic and shall be followed as closely as actual construction and work of other trades will permit. Govern exact routing of cable and wiring and the locations of outlets by the structure and equipment served. Take all dimensions from architectural drawings. B. Consult all other drawings, verify scales and report any dimensional discrepancies to other trades with Owner before submitting bid. C. All home runs to panelboards are indicated as starting from the outlet nearest the panel and continuing in the general direction of that panel. Continue such circuits to the panel as though the routes were completely indicated. Terminate homeruns of signal, alarm, and communication systems in a similar manner. D. Avoid cutting and boring holes through structure or structural members wherever possible. Obtain prior approval of Owner and conform to all structural requirements when cutting or boring the structure is necessary and permitted. F. Furnish and install all necessary hardware, hangers, blocking, brackets, bracing, runners, etc. required for equipment specified under this Section. Provide necessary backing required to insure rigid mounting of outlet boxes.	3.08	REMODELING WORK: A. Existing electrical wiring which will not be made obsolete and which will be disturbed due to construction changes required by this contract shall be restored to operating condition. Where construction changes require, outlets and conduit runs shall be relocated. Extend conduits and pull in new wiring or install junction boxes and splice in new wiring. B. Outlets from which fixtures, switches, receptacles, and/or other electrical devices are moved and which are not replaced or reused shall be removed, where outlets boxes, etc., are completely removed, the contractor shall cut off conduits and remove wiring. C. Where conduits extending through floors are to be abandoned, the contractor shall cut and cap or plug conduit, and the conduit shall not protrude above the floor. D. Where existing conduit is to be abandoned, the conduit shall be removed if it is exposed, in a crawl space or in accessible ceiling. Where it is impossible to remove the conduit, it shall be cut off and capped or plugged. E. Remove all existing wiring not reused or required to maintain continuity circuits to remain. F. The contractor shall be held fully responsible for the proper restoration of all existing surfaces requiring patching, plastering, painting and/or other repairs due to the installation of electrical work under the terms of this specification. Close all openings, repair all surfaces, etc., as required. G. Maintain circuit continuity to areas outside of this work. Provide new conduit and conductors as required to maintain continuity and maintain area as existing.
1.05		WORKMANSHIP AND CONTRACTOR'S QUALIFICATIONS: Only quality workmanship will be accepted. Haphazard or poor installation will be cause for rejection of work.			CONDUIT HANGERS: For individual conduit runs not directly fastened to the structure, use rod hangers manufactured by Caddy, Unistrut or Powerstrut. For multiple conduit runs, use Unistrut or Powerstrut trapeze type conduit support designed for maximum deflection not greater than 1/8".					
1.06		SHOP DRAWINGS AND MATERIALS LISTS: Submit to Owner in a single package six (6) copies of complete shop drawings and materials list, as noted below, for review within fifteen (15) days after award of contract. Submittals required as follows: 1. Wiring devices: switches, receptacles, device plates. 2. Enclosures for utility company metering. 3. Main fused disconnect switch. 4. Panelboards. 5. Disconnect switches. 6. Lighting fixtures, lamps and lighting control equipment.	2.05		WIRE CONNECTORS: For wire sizes #8 AWG and smaller: Insulated pressure type (with live spring) rated 105 degrees C, 600V, for building wiring and 1000V in signs or fixtures. Scotchklok or Ideal. For wire size #6 AWG and larger: T & B or equivalent compression type with 3M #33+ or Plymouth "Slipknot Grey" tape insulation.	2.06		WIRING METHODS: A. Install all wiring in raceway or use MC cable. Where approved by all Applicable codes, Conduit shall be rigid steel, IMC or EMT as follows: 1. Above ground: Use rigid steel, IMC or EMT. a. Wet locations: Rigid steel or IMC only. b. Locations subject to mechanical injury: Rigid steel or IMC only. c. Dry locations and not subject to mechanical injury: EMT, IMC or rigid steel conduit. 2. Underground: Use rigid steel. B. Use flexible conduits in the following applications: 1. Recessed lighting fixtures. 2. Motor connections. 3. At building joints. At wet locations, flexible conduit shall be liquid tight type.	3.09	GROUNDING: A. Electrical service and separately derived alternating current system shall be grounded in accordance with NEC Article 250-3 to 250-26, inclusive. B. Ground non-current carrying metal parts of electrical equipment enclosures, frames, conductor raceways or cable trays to provide a low impedance path for line-to-ground fault current and to bond all non-current carrying metal parts together. Provide ground conductor in each raceway system in addition to conductors shown. Equipment ground conductor shall be electrically and mechanically continuous from the electrical circuit source to the equipment to be grounded. Size ground conductors per NEC Article 250-95 unless larger conductors are shown on drawings. C. Grounding conductors shall be identified with green insulation. Where green insulation is not available on larger sizes, black insulation shall be used and suitable identified with green tape at each junction box or device enclosure.
1.07		SUBSTITUTIONS: One or more makes of materials or methods may have been specified to establish the standard of quality, workmanship, finish and design required, but other materials, or methods equal in quality, workmanship, finish, design, and guaranteed performance, will be accepted. However, all changes and substitutions shall be requested in letter form and shall be accompanied with a statement of the amount of money to be returned to the contract if the substitution is permitted. No work involving materials submitted for substitution shall proceed until written acceptance is received from the Owner. The Owner is the sole judge of acceptability of preferred substitutions. If a substitution item is permitted, and any re-design effort is thereby necessitated, the required redesign shall be at the Contractor's expense.			PANELBOARDS: A. Construction: Cabinets shall be of code gauge, galvanized steel, surface or flush mounted as indicated. Doors shall be of cold-rolled steel with concealed hinges and flush catch and lock. All panels shall be keyed alike. Panels located adjacent to each other shall have identically sized enclosures and trims. Minimum panel width shall be 20". Finish exposed part with one coat of primer and one coat of light grey enamel suitable for overpainting in field if desired. Bus Bars: Provide ground block with full complement of terminals in addition to insulated neutral bus. Future breaker spaces shall have complete provision including busses and connecting hardware. C. Manufacturers: Panelboards shall be General Electric Type "AQ" or type "AE" or equivalent products of Eaton, Square-D or Siemens-ITE. D. Circuit Breakers: Shall be quick-make, quick-break, molded case type: 1. 120/240 Volt Panels: Shall be General Electric Type "Q" line, bolt-on type, with minimum symmetrical interrupting capacity as shown. 2. Provide multi-pole units with common trip element. 3. Circuit breakers used on "ON-OFF" control of fluorescent lighting (panelboard switching) shall be Underwriters' Laboratories listed and marked "SWD" to indicate their suitability.	2.07		INSTALLATION OF CONDUITS: A. General: 1. Run all conduit concealed unless otherwise noted or shown. 2. Run all conduit parallel to or at right angles to center lines of columns and beams. 3. Conduits above ceilings shall not obstruct removal of ceiling tiles, lighting fixtures, air diffusers, etc. 4. Conduits shall not cross any duct shaft or area designated as future duct shaft horizontally. Conduit risers when allowed in duct shaft must be coordinated with Mechanical work to avoid any conflict. B. Conduit Supports: 1. Support conduits with Underwriter's Laboratories listed steel conduit supports at intervals required by the National Electric Code. Wires or sheet metal strips are not acceptable for conduit support. Use conduit hangers for conduit not directly fastened to structure and for any multiple conduit runs. Do not attach any conduit to mechanical ducts or pipes. 2. Individual conduits 1/2" and 3/4" size for lighting may be supported from ceiling support wires with Caddy clips only if acceptable to local code. Only one conduit is permitted to be attached to any ceiling support wire. Hang such conduit so as not to affect level of ceiling. 3. Avoid attaching conduit to fan plenums. When it is necessary to support conduit from fan plenum, provide a length of flexible conduit between portion attached fan plenum and portion attached to the building to minimize transmission of vibration to the building structure.	3.01	END OF SECTION
1.08		COORDINATION: Coordinate work with other trades to avoid conflict and to provide correct rough-in and connection for equipment furnished under other trades that require electrical connections. Inform Contractors of other trades of the required access to and clearances around electrical equipment to maintain service ability and code compliance. Verify equipment dimensions and requirements with provisions specified under this Section. Check all conditions before fabricating work. Report necessary changes in time to prevent needless work. Changes or additions, subject to additional compensation, which are made without written authorization and an agreed price, shall be at the Contractor's risk and expense.			INDIVIDUALLY MOUNTED MOTOR CONTROLLERS: A. For Polyphase Motors: Combination motor circuit protector and magnetic starter, with 5-leg overload protection. Provide two interlock contacts of the interchangeable open-close type. Provide hand-off-automatic selector switch, motor running pilot light and reset button in cover. Circuits 300V and over shall be provided with 120V control transformers. B. Starters for fractional horsepower 120V motors shall be manual type unless shown otherwise, equipped with built-in overload protection. C. Acceptable manufacturers: General Electric, Siemens, Square D, Eaton, and Westinghouse.	2.08		CONNECTIONS TO EQUIPMENT: A. General: 1. Furnish and install required power supply conduit and wiring to all equipment. See below for other wiring required. 2. Furnish and install a disconnect switch immediately ahead of and adjacent to each magnetic motor starter or appliance unless the motor appliance is located adjacent and within sight of the serving panelboard, circuit breaker or switch. Verify all equipment nameplate current ratings prior to installation. 3. Install all rough-in work for equipment from approved shop drawings to suit the specific requirements of the equipment. 4. Furnish and install manual thermal protection for all motors not integrally equipped with thermal protection. 5. Furnish 120 Volt power to each control panel and time switch requiring a source of power to operate.	3.03	
1.09		CUTTING AND PATCHING: All cutting and patching required for work of this Division is included herein. Coordination with General Contractor and other trades is imperative. Contractor shall bear the responsibility for and the added expense of adjusting for improper holes, supports, etc.	2.09		LIGHTING: A. Furnish and install all fixtures complete, including lamps and ballast ready for service. B. Supports: Proper supports and mounting accessories, such as hangers, stems, yokes, plaster frames, etc. shall be provided as required by the type of ceiling installed. Where swivel canopies or ball aligners are specified, they shall cause fixture to hang plumb regardless of ceiling slope. C. Fixture Designation: Fixture types are designated on drawings. Where only one fixture designation is shown, it applies to all fixtures in that room or area. For exact fixture count and location refer to reflected ceiling plan. D. Wire 1-lamp and 3-lamp fluorescent fixtures in tandem where required by code. E. Ballasts: Advance, GE, or Approved high frequency electronic, full light output, energy saving, Class "P", high power factor, ETL certified, sound rating "A" or as indicated on drawings.	2.10		WIRE COLOR CODE: Color coding shall be continuous for wire #12 through #10 AWG. Phase conductors #8 and larger and nconductors of any size in cable assemblies may have colored phasing tape at terminations. Color code wires as follows: Voltage Phase A Phase B Phase C Neutral Ground 120/208V Black Blue White Green 277/480V Brown Orange Yellow Gray Green	3.04	
1.10		ACCEPTANCE DEMONSTRATION: Upon completion of the work, at a time to be designated by the Owner, the Contractor shall demonstrate for the Owner the operation of the electrical installation including any and all special items installed by him or installed under his supervision. Properly set automatic time switches to perform switching operations in accordance with schedules provided by the Owner's representative, and demonstrate (using the manufacturer's operating instructions) how to override and/or test time switches programming.			MISCELLANEOUS MATERIALS: A. Safety Switches: Heavy duty type, 600V, horsepower rated for motors, fused or non-fused as required. Mount in enclosure with NEMA rating as required for the specific application General Electric, Square D or Westinghouse.					
1.11		RECORD DRAWINGS, EQUIPMENT DATA: Maintain one set of clean working drawings at the job site and enter daily such "as-built" information as feeder and service routes, pull box locations and changes in layout or arrangement which occur during construction. Deliver completed drawings to the Owner.	2.11			2.11			3.05	
1.12		CLEAN-UP: Rid the premises of scrap materials, trash and debris both during construction and at completion of the project. Leave the building and surrounding area in a clean and orderly condition.								
1.13		GUARANTEE: Guarantee the installation free from defects of workmanship and materials for a period of one year after Date of Certification of final payment and promptly remedy any defects developing during this period, without charge.	2.12			2.12			3.06	
1.14		TEMPORARY SERVICES: Provide adequate and safe temporary electrical power and lighting throughout the construction and finishing of the premises. In addition to special or unusual requirements, provide at least these items: 1. Three 20-amp circuits for construction power tools. Provide GFI temporary circuits with coverplates to meet OSHA requirements. 2. Three or more light strings suspended approximately one foot below the height of finish ceiling with lamps spaced not more than twelve feet on centers. Strings shall be run the length of the store space parallel to the demising walls, with one string within eight feet of each wall and one (or more) intermediate string(s) arranged to limit the spacing between rows to sixteen feet or less. 3. Flood lighting and task lighting for painting and other finish work. When permanent electrical service is operable, disconnect and remove from the premises the materials and equipment used for temporary power and lighting, and restore modifications and repair damage caused by the installation, use or removal of temporary service provisions.								
1.15			2.13			2.13			3.07	
1.16										

CLIENT:

ADDRESS:
347 W. Market St., Salinas, CA 93901
APN: 002-041-056-000

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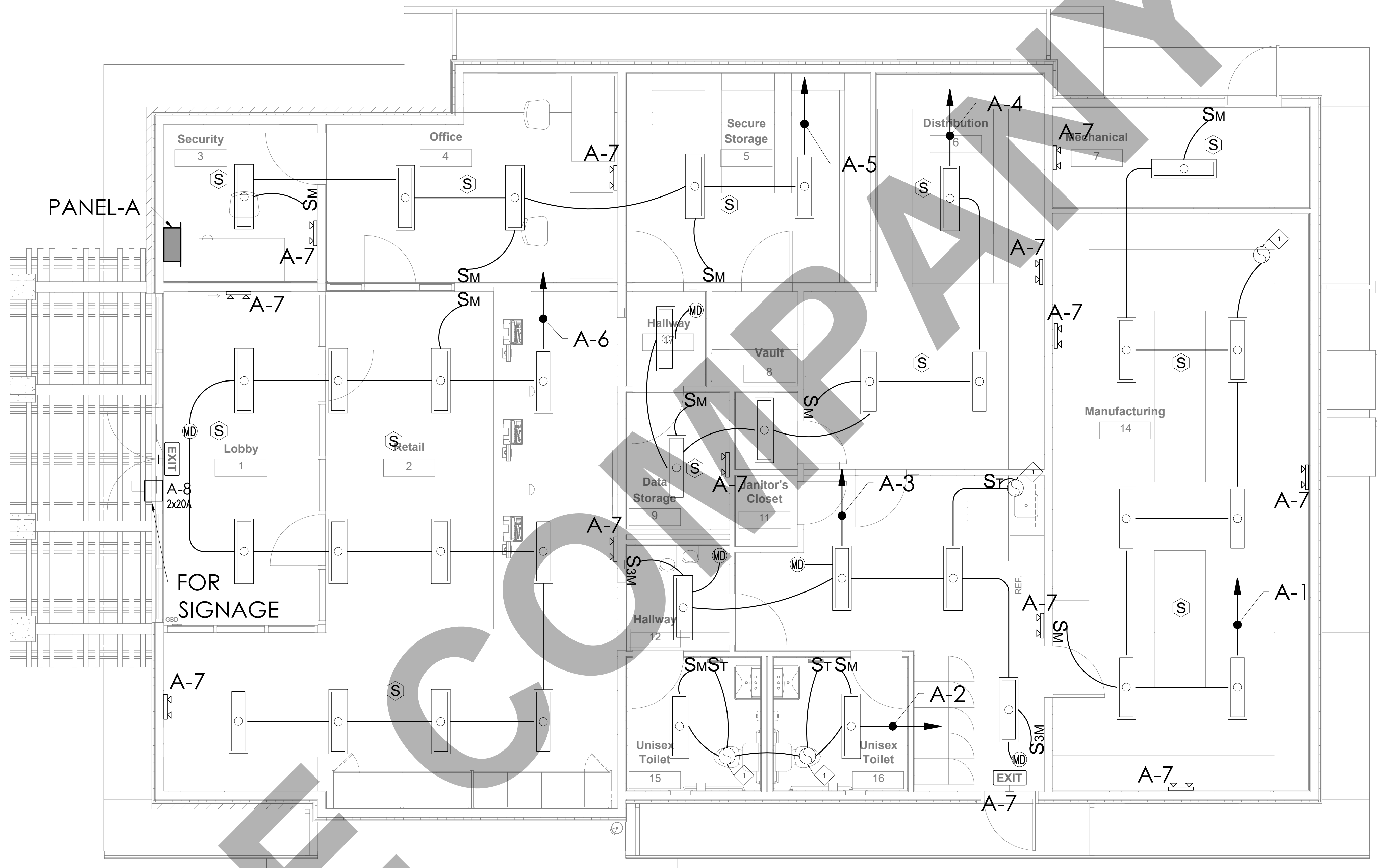
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REV. NO.	DESCRIPTION	DATE	BY

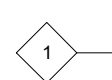
PROJECT:
Proposed Property Development
Element 7 Cannabis Retail
TITLE:
ELECTRICAL SPECIFICATION

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36:	REV.
		NTS	

E 1 . 0



SHEET NOTES:



PROVIDE HEAVY DUTY JUNCTION BOX, FLUSH IN CEILING (OR WALL) FOR EXHAUST FANS THAT TURNS ON WHEN THE TIMER SWITCH OF THIS FAN IS TURNED ON

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

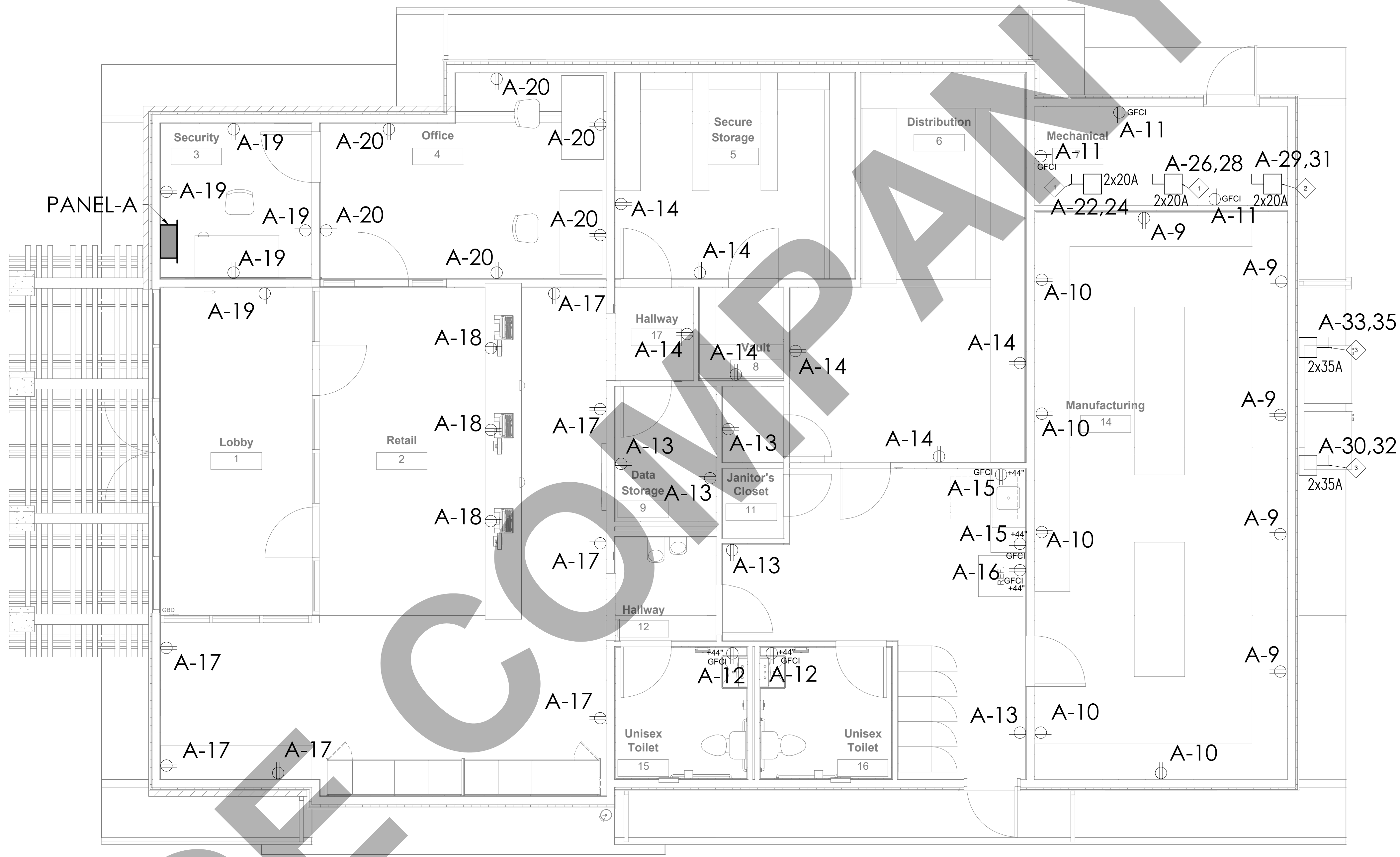
TITLE:
LIGHTING LAYOUT

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: 1/2"=1'-0"
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DRAWING NO.

E 2 . 0

REV.



SHEET NOTES:

- 1—PROVIDE NEMA 3R DISCONNECT SWITCH FOR AHU
- 2—PROVIDE NEMA 3R DISCONNECT SWITCH FOR ELECTRIC WATER HEATER
- 3—PROVIDE NEMA 3R DISCONNECT SWITCH FOR ELECTRIC ODU

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

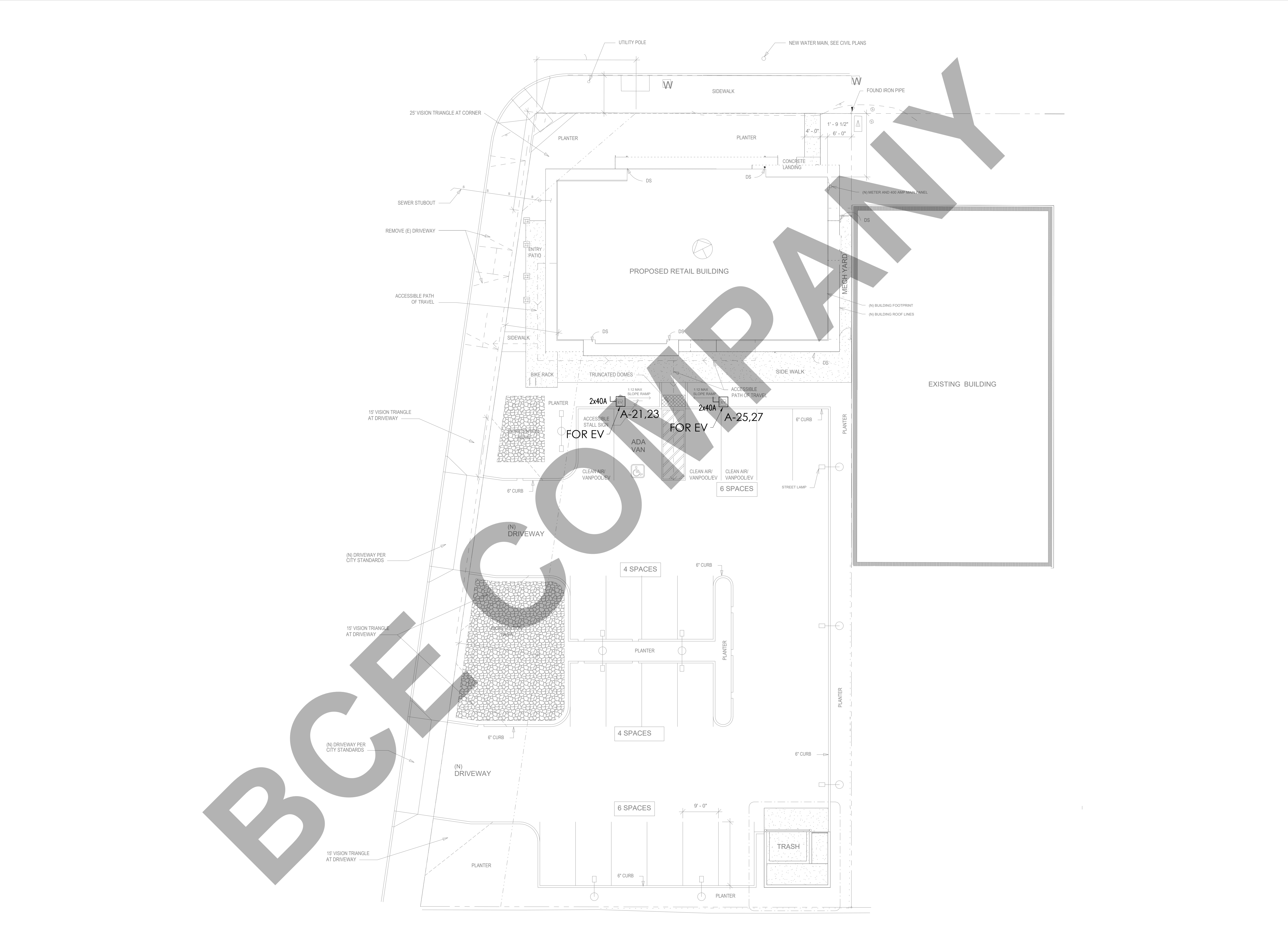
TITLE:
POWER LAYOUT

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
1/2"=1'-0"

DRAWING NO.

E 3 . 0

REV.



CLIENT:

ADDRESS:
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APN: 002-041-056-000

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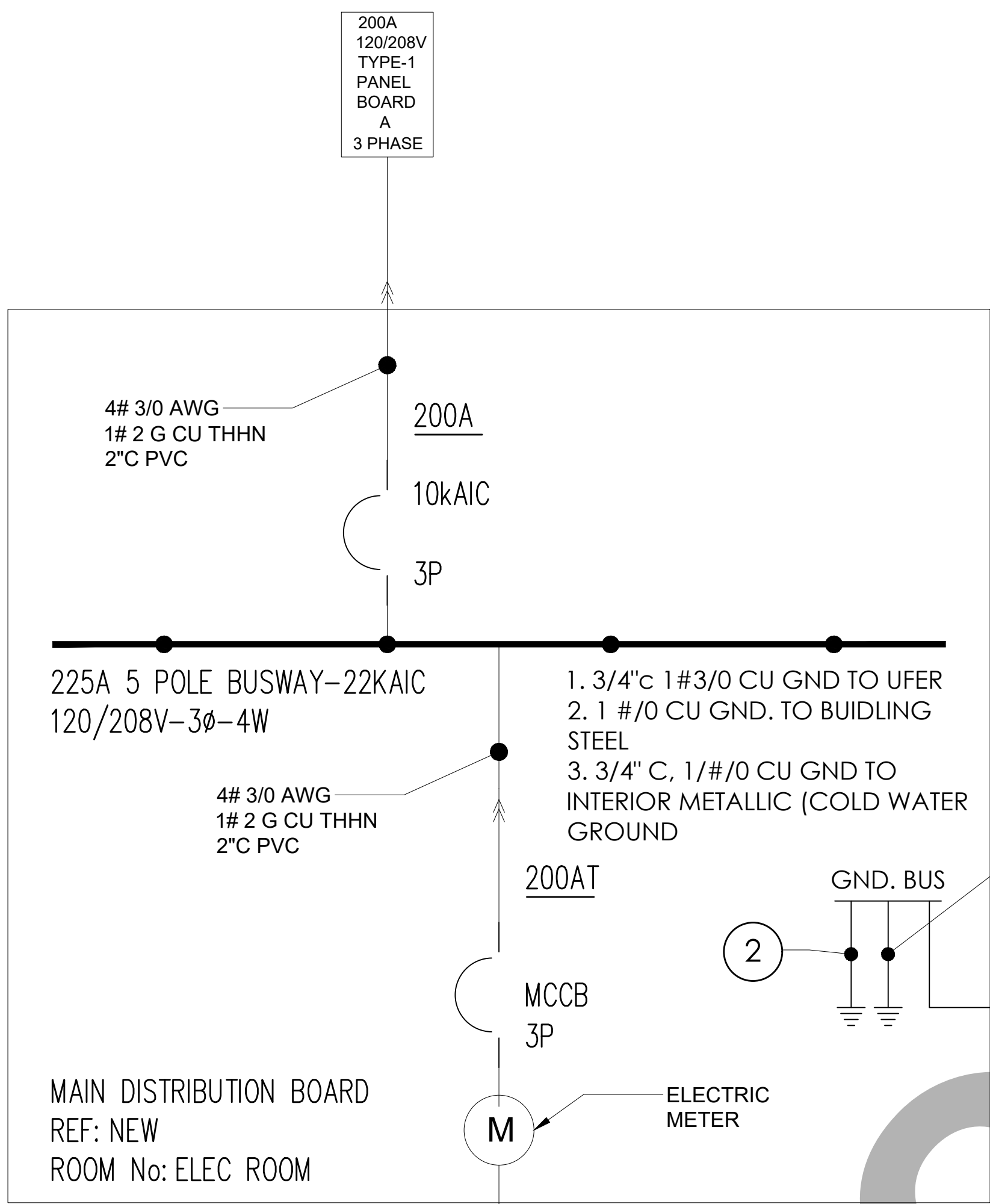
REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
POWER LAYOUT SITE PLAN

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: 3/8"=1'-0"
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DRAWING NO. E 3 . 1	REV.
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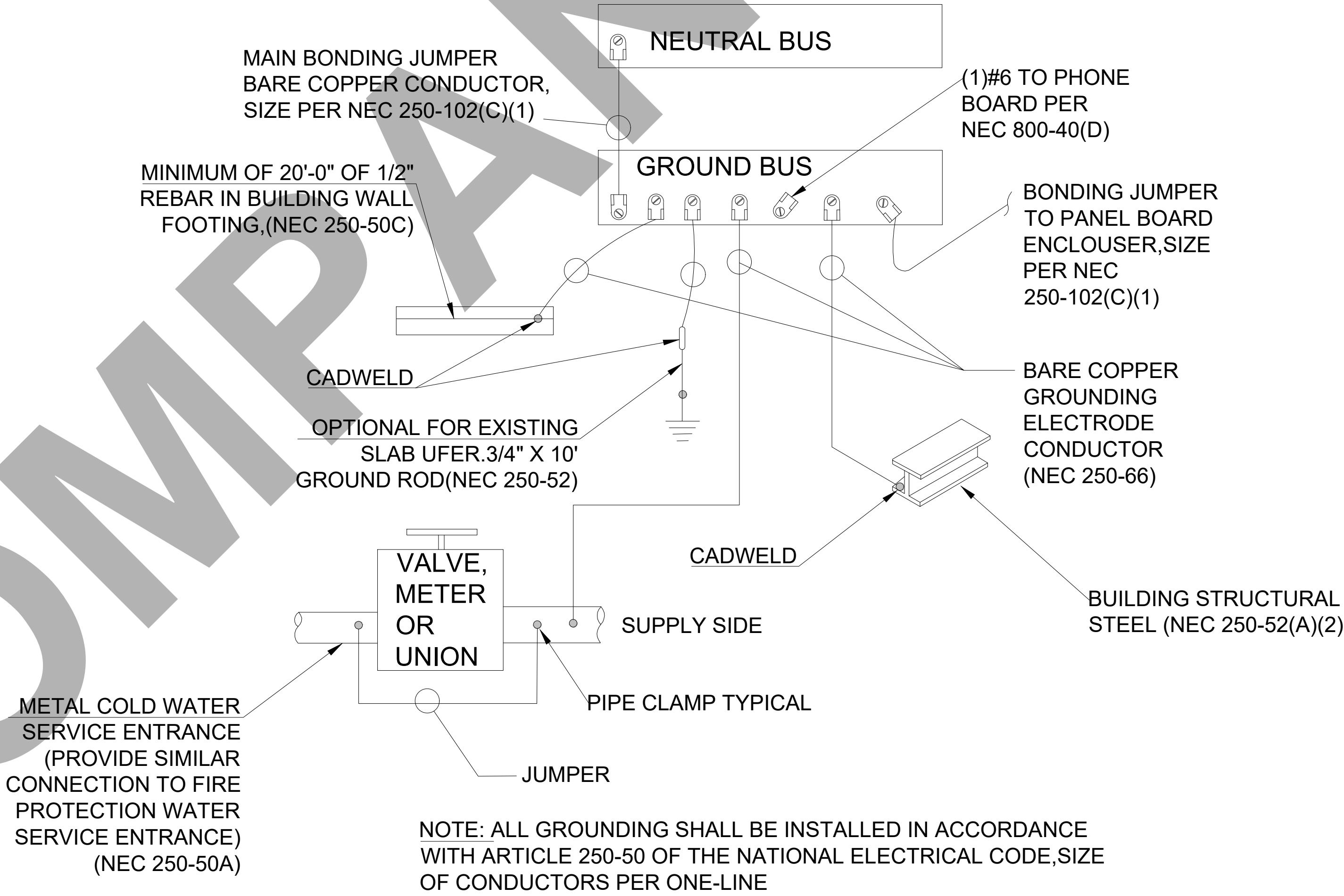
SERVICE ENTRANCE
FROM UTILITY
208/120 V, 3φ, 60Hz

FIRST FLOOR

2
E-1

POWER RISER DIAGRAM

SCALE NTS



NOTE: ALL GROUNDING SHALL BE INSTALLED IN ACCORDANCE
WITH ARTICLE 250-50 OF THE NATIONAL ELECTRICAL CODE, SIZE
OF CONDUCTORS PER ONE-LINE

GROUNDING DETAIL

CLIENT:

ADDRESS:

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APN: 002-041-056-000

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
ONE LINE DIAGRAM

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
NTS

DRAWING NO. REV.
E 4 . 0

Location: SECURITY				CONNECTED LOAD			DEMAND
*	LOAD SUMMARY	CL	DF	A	B	C	TOTAL
L	Lighting	1.98	1.25	1.06	0.33	0.59	2.48
R	Convenience Recept	9.84		4.32	2.16	3.36	9.84
H	Heating (Space)	3.50	1.25	1.75		1.75	4.38
C	Cooling		1.00				
A	HVAC	11.60	1.00	2.90	3.38	5.32	11.60
P	Process		1.00				
O	Other Continuous		1.25				
K	Kitchen		0.65		0.50		
N	Noncontinuous	16.80	1.00	4.20	8.40	4.20	16.80
M	Motor		1.00				
	Total	43.73		14.23	14.77	15.23	45.10

Total Demand Load (KVA)	45.10
Total Demand Current (A)	108.48
Min. Feeder Ampacity (A)	135.60

PANEL A	
PANELBOARD DESIGNATION	
SYSTEM VOLTAGE	240V, 3Φ, 3W
BUS SIZE	200
SYSTEM TYPE	NORMAL
FEEDER PROT	200A-3P C/B Bus Plug
CONDUCTOR SIZE	3/0 AWG - #2G CU
CONDUCTOR/PHASE	1
MAINS	200A MCB
SCCR	FULLY RATED
MCB RATING	80%
GROUND FAULT	NO
FEEDER LENGTH (FT)	50
FEEDER V. DROP (%)	0.555
FAULT CURRENT	
KAIC RATING	10
ENCLOSURE	TYPE 1

DESCRIPTION		*	WIRE	GRD	CB	KVA	A	B		KVA	CB	WIRE	GRD	DESCRIPTION	*
1	LIGHTING MANUFACTURING-MECH	L	2x 14 AWG	- #14G	15A-1P	0.23	0.35			0.12	15A-1P	2x 14 AWG	- #14G	LIGHTING TOILETS	L 2
3	LIGHTING KITCHEN	L	2x 14 AWG	- #14G	15A-1P	0.13		0.33		0.20	15A-1P	2x 14 AWG	- #14G	LIGHTING DISTRIBUTION-DATA STORAGE-HALLWAY	L 4
5	LIGHTING SECURITY-OFFICE- SECURE STORAGE	L	2x 14 AWG	- #14G	15A-1P	0.20			0.59	0.40	20A-1P	2x 12 AWG	- #12G	LIGHTING RETAIL-LOBBY	L 6
7	LIGHTING EMERGENCY-EXIT	L	2x 14 AWG	- #14G	15A-1P	0.21	0.71			0.50	20A-1P	2x 12 AWG	- #12G	SIGNAGE	L 8
9	RECEPTACLES MANUFACTURING	R	2x 12 AWG	- #12G	20A-1P	0.90		1.80		0.90	20A-1P	2x 12 AWG	- #12G	RECEPTACLES MANUFACTURING	R 10
11	RECEPTACLES MECH. ROOM	R	2x 12 AWG	- #12G	20A-1P	0.54			0.90	0.36	20A-1P	2x 12 AWG	- #12G	RECEPTACLES TOILETS	R 12
13	RECEPTACLES KITCHEN-DATA STORAGE	R	2x 12 AWG	- #12G	20A-1P	0.90	2.16			1.26	20A-1P	2x 12 AWG	- #12G	RECEPTACLES DISTRIBUTION-DATA STORAGE-SECURE STORAGE	R 14
15	RECEPTACLES KITCHEN	R	2x 12 AWG	- #12G	20A-1P	0.36		0.86		0.50	20A-1P	2x 12 AWG	- #12G	FRIDGE	K 16
17	RECEPTACLES RETAIL	R	2x 12 AWG	- #12G	20A-1P	1.26			2.46	1.20	20A-1P	2x 12 AWG	- #12G	RECEPTACLES DESKTOPS	R 18
19	RECEPTACLES SECURITY	R	2x 12 AWG	- #12G	20A-1P	0.90	2.16			1.26	20A-1P	2x 12 AWG	- #12G	RECEPTACLES OFFICE	R 20
21	EV	N	3x 8 AWG	- #8G	40A-2P	4.20		4.68		0.48	15A-2P	3x 14 AWG	- #14G	AHU-02	A 22
23		N				4.20			4.68	0.48					A 24
25	EV	N	3x 8 AWG	- #8G	40A-2P	4.20	4.68			0.48	15A-2P	3x 14 AWG	- #14G	AHU-01	A 26
27		N				4.20		4.68		0.48					A 28
29	ELECTRIC WATER HEATER	H	3x 12 AWG	- #12G	20A-2P	1.75			4.17	2.42	35A-2P	3x 8 AWG	- #8G	ODU-02	A 30
31		H				1.75	4.17			2.42					A 32
33	ODU-01	A	3x 8 AWG	- #8G	35A-2P	2.42		2.42						SPACE	34
35		A				2.42			2.42					SPACE	36
(KVA)															
Total Connected Load							14.23	14.77	15.23						

CLIENT:

ADDRESS:

347 W. Market St, Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS
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TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
PANEL BOARDS SCHEDULES

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
NTS

DRAWING NO. REV.

E 5 . 0

PLUMBING SPECIFICATIONS

THE WORK INCLUDES MODIFICATION TO THE EXISTING PLUMBING SYSTEM AND PROVIDING NEW MATERIALS, FITTINGS AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. THE WORK ALSO INCLUDES ROUGH-IN AND FINAL CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BEVERAGE DISPENSING EQUIPMENT PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION. HOOK-UP CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS A PART OF THIS SECTION. WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT THE OWNER'S OPTION. THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURE INSTALLATION REQUIREMENTS. COMPLY WITH ALL APPLICABLE ADA INSTALLATION REQUIREMENTS. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PIPING SYSTEMS - GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK SUCH AS DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIALECTIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. FIXTURES/EQUIPMENT FURNISHED BY OTHERS: PLUMBING CONTRACTOR SHALL PROVIDE UTILITY CONNECTIONS REQUIRED SUCH AS WATER, GAS, AIR, SUPPLIES, WASTE OUTLET, TRAPS, ETC. AT ALL PLUMBING TYPE FIXTURES OR EQUIPMENT FURNISHED BY OWNER, GENERAL CONTRACTOR, FOOD SERVICE CONTRACTOR, EQUIPMENT SUPPLIER, ETC. INCLUDED ARE STOP VALVES, ESCUTCHEONS, AND CHROME PLATED BRASS TUBING WITH COMPRESSION FITTINGS. SEWER AND WASTE PIPING: PROVIDE ALL DRAINS AND SEWERS WITHIN THE SPACE WITH CONNECTION TO THE EXISTING DRAINAGE SYSTEMS ON-SITE. SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE CO-EXTRUDED PVC DWV (SCHEDULE 40) PIPE, FITTINGS AND CONNECTIONS. SANITARY DRAINAGE PIPING BELOW GRADE SHALL BE CO-EXTRUDED PVC DWV (SCHEDULE 40) PIPE WITH SOLVENT WELD FITTINGS MAY BE USED (WHERE PERMITTED BY CODE/LOCAL AUTHORITIES). ALL DRAINAGE PIPING SHALL BE UNIFORMLY PITCHED, 1/4" PER FOOT UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS, OR INDICATED ON THE DRAWINGS. VENTS: PROVIDE A COMPLETE SYSTEM OF STANDARD WEIGHT CAST IRON NO-HUB VENT RISERS WHERE THE CEILING SPACE IS USED AS A RETURN AIR PLENUM OR USE CO-EXTRUDED PVC DWV (SCHEDULE 40) PIPE (WHERE PERMITTED BY CODE/LOCAL AUTHORITIES) WHERE THERE IS A DUCTED RETURN AIR SYSTEM. DO NOT USE PVC PIPE IN RETURN AIR PLENUM SPACES. THE VENT SYSTEM SHALL BE CARRIED THROUGH THE ROOF WITH APPROPRIATE FLASHING. CONDENSATE AND INDIRECT DRAIN PIPING:PIPING ABOVE FLOOR SHALL BE CO-EXTRUDED PVC DWV (SCHEDULE 40) PIPE, FITTINGS AND CONNECTIONS. PIPING BELOW GRADE SHALL BE CO-EXTRUDED PVC DWV(SCHEDULE 40) PIPE WITH SOLVENT WELD FITTINGS. CLEANOUTS: PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE, CONFORMING TO CODE REQUIREMENTS. PROVIDE SUITABLE WALL OR FLOOR CLEANOUTS WITH ACCESSORIES TO OBSCURE FROM VIEW. WATER DISTRIBUTION PIPING: LAYOUT WATER PIPING SO THAT THE ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE 1/2" MIN. CPVC PIPE WITH SOLVENT FITTING. PROVIDE WATER HAMMER ARRESTERS AT EACH FIXTURE OR GROUP OF FIXTURES AS REQUIRED. INSTALL CHROME PLATED BRASS ESCUTCHEON PLATES AT ALL PENETRATIONS THROUGH FINISHED SURFACES (INCLUDING CABINET INTERIORS). PIPE INSULATION: INSULATE (AS ALLOWED BY CODE) ALL LISTED SERVICE PIPING AS FOLLOWS. DOMESTIC COLD/HOT WATER, HOT WATER RETURN, STORM WATER PIPING. PROVIDE 1" PREFORMED FIBERGLASS, AS/JS-11, FLAME SPREAD 25, SMOKE DEVELOPED 50, ASTM C-547. FOR CONDENSATE PIPING PROVIDE 1/2" THICK INSULATION OF SAME CHARACTERISTICS AS LISTED FOR 1" ABOVE. WHERE PERMITTED BY LOCAL CODES, PROVIDE 1/2" SELF-ADHESIVE UNICELLULAR FOAM PIPE INSULATION WITH PRE-FORMED PVC FITTING COVERS - EQUAL TO SELF-ADHESIVE ARMSTRONG 2000 WITH K FACTOR OF 0.27 AT 75 DEGREES MEAN TEMPERATURE. INSULATE ANY EXPOSED CONDENSATE PIPING WITH WASTE TEMPERATURE BELOW 60 DEGREES F. SHUTOFF VALVES, WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE, FOOD SERVICE EQUIPMENT ITEM OR OTHER EQUIPMENT ITEM, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. VALVES SHALL BE EQUAL TO JENKINS #902-T BALL VALVE, CHROME-FINISHED BRONZE, TEFLON SEATS AND PACKING, 400 LB. W.O.G., SOLDER END. ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETC. ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY-IN SUSPENDED CEILINGS, ACCESS PANELS ARE NOT REQUIRED. PIPING SYSTEM- PVC SCHEDULE 40, SCHEDULE 80 AND CPVC PIPE WITH SOLVENT FITTINGS SHALL BE USED WHERE PERMITTED BY CODE/LOCAL AUTHORITIES. INSTALLATION: THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT, AND OMIT ESCUTCHEONS. REPAIR EXISTING PLUMBING SYSTEM COMPONENTS DAMAGED BY CONSTRUCTION OPERATIONS AND RESTORE TO ORIGINAL CONDITIONS. TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED. ROOF PENETRATIONS SHALL COMPLY WITH "SMACNA" AND "NRCA" STANDARDS, AND WITH THE REQUIREMENTS OF THE EXISTING ROOFING WARRANTY, IF APPLICABLE. DO NOT PERFORM ROOFING PENETRATIONS IN A MANNER WHICH WOULD VOID OR OTHERWISE LIMIT THE EXISTING ROOFING WARRANTY.

GENERAL NOTES

1. THE INTENT OF THESE PLANS AND SPECIFICATIONS IS TO INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND SERVICES NECESSARY TO FURNISH, INSTALL, TEST, AND ADJUST A COMPLETE WORKABLE PLUMBING INSTALLATION AS SHOWN, PRESCRIBED, OR REASONABLY IMPLIED BUT NOT LIMITED TO THAT EXPLICITLY INDICATED IN THE CONTRACT DOCUMENTS, BUT NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE INTENT THEREOF.
2. THE ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA ENERGY CONSERVATION CODE AND ALL OTHER APPLICABLE CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION. IN THE EVENT OF CONFLICT BETWEEN SPECIFICATIONS, CODES, AND REGULATIONS, THE MORE RESTRICTIVE SHALL APPLY.
3. COORDINATE ENTIRE INSTALLATION OF THE PLUMBING SYSTEM WITH THE WORK OF OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. REPORT ANY DISCREPANCIES, IN WRITING, TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.
- 5

4. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS WITH ALL CHANGES NOTED THEREON AT THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE ONE YEAR WARRANTY ON ALL PARTS AND LABOR.

6. THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW SCOPE. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES TO PROVIDE THE BEST ARRANGEMENT OF ALL DUCT, PIPE, CONDUIT, ETC. ALL CUTTING AND PATCHING OF THE EXISTING STRUCTURE SHALL BE PROVIDED UNDER OTHER SECTIONS OF THE WORK. PROVIDE NECESSARY REQUIREMENTS TO THE PROJECT SUPERINTENDENT.

8. ALL HOT WATER PIPING AND RE-CIRCULATION PIPING (EXCEPT RUNOUTS 12 FT. OR SHORTER TO INDIVIDUAL FIXTURES) SHALL BE INSULATED TO MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA ENERGY CONSERVATION CODE

9. CONDENSATE DRAINS SHALL BE PROVIDED FOR EACH AIR CONDITIONING UNIT. HORIZONTAL CONDENSATE DRAINS ABOVE ANY CEILING SHALL BE INSULATED WITH MIN. 3/8" THICK CLOSED CELL INSULATION.

10. PIPING:

A. WASTE, VENT, AND STORM DRAIN PIPING SHALL BE CO-EXTRUDED PVC SCHEDULE 40) PIPE

B. WATER PIPE SHALL BE CPVC PIPE

C. CONDENSATE PIPING SHALL BE CO-EXTRUDED PVC (SCHEDULE 40) PIPE

D. INSIDE GAS PIPING SHALL BE BLACK IRON SCHEDULE 40 WITH MALLEABLE IRON FITTINGS. OUTSIDE SHALL BE GALVANIZED IRON SCHEDULE 40 WITH GALVANIZED FITTINGS. GAS LINE TO BE PAINTED GRAY IN COLOR. A 24 HOUR METERED GAS TEST SHALL BE REQUIRED.

E. ALL PIPING NOT ENCLOSED IN CONDITION SPACE OR AT EXTERIOR WALLS SHALL BE INSULATED.

F. PIPING: PVC SCHEDULE 40, SCHEDULE 80 AND CPVC PIPING WITH SOLVENT WELD FITTINGS SHALL BE USED WHERE PERMITTED BY CODE/LOCAL AUTHORITIES

11. ALL VENTS OR EXHAUSTS SHALL BE AT LEAST 10 FT. AWAY OR 3 FT. ABOVE ANY WINDOW, DOOR, OPENING, OR AIR INTAKE.

12. CLEANOUTS SHALL BE INSTALLED PER THE CALIFORNIA PLUMBING CODE.

13. PROVIDE WATER TIGHT FLASHINGS WHEREVER PIPES PASS THROUGH EXTERIOR WALLS, ROOFS, OR FLOORS.

14. PROVIDE ISOLATION FOR ALL PIPES THAT COME IN CONTACT WITH THE STRUCTURE.

15. LOCATION OF EXISTING UTILITIES AND POINTS OF CONNECTION ARE APPROXIMATE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICES PRIOR TO STARTING WORK OF THIS SECTION. IF INDICATED POINTS OF CONNECTION CANNOT BE MADE TO EXISTING UTILITIES AS FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO INSTALLING ANY WORK WHICH MAY BE AFFECTED.

16. VALVES SHALL BE NIBCO, JENKINS, HAMMOND, RED & WHITE OR APPROVED EQUAL. SERVICE PRESSURE SHALL BE SUITABLE FOR SERVICE INTENDED. THE MAIN WATER SHUT OF VALVE SHALL BE A FULL PORT BALL TYPE AND APPROVED FOR SERVICE INTENDED.

17. CONTRACTOR SHALL PROVIDE ALL SHUT OFF VALVES AS NECESSARY TO ISOLATE ANY EQUIPMENT, PLUMBING ITEMS, OR FIXTURES, THAT MAY NEED SERVICING OR ARE SUBJECT TO FAILURE WHETHER OR NOT SUCH VALVES ARE SHOWN ON THE DRAWINGS.

18. PROVIDE HANGERS AND SUPPORTS AS REQUIRED. PLUMBERS TAPE AND WIRE ARE NOT ACCEPTABLE.

19. CONTRACTOR IS RESPONSIBLE FOR HIS OWN TRENCHING, BACKFILL, AND COMPACTION OF TRENCHES NECESSARY TO COMPLETE HIS SCOPE OF WORK. BACKFILLED TRENCHES SHALL BE RETURNED TO THEIR ORIGINAL GRADE UNLESS NOTED OTHERWISE.

20. CONTRACTOR SHALL AFFIX A MAINTENANCE LABEL TO ALL EQUIPMENT REQUIRING ROUTINE MAINTENANCE AND SHALL PROVIDE MAINTENANCE AND OPERATIONAL MANUALS IN ACCORDANCE WITH THE SPECIFICATIONS.

21. ALL EQUIPMENT THAT REQUIRES KEYS OR SPECIAL TOOLS TO OPERATE SHALL SUPPLY THE OWNER WITH TWO OF ANY SUCH KEYS OR TOOLS FOR EACH PIECE OF EQUIPMENT THAT REQUIRE THE SAME.

25. ANY CHANGE OR DEVIATION FROM THESE PLANS OR SPECIFICATIONS SHALL REQUIRE THE APPROVAL, IN WRITING, OF THE ENGINEER PRIOR TO COMMENCEMENT OF SUCH WORK.

26. ALL PLUMBING, ELECTRICAL, AND GAS LINES SHALL BE CONCEALED WITHIN THE THE BUILDING STRUCTURE TO AS GREAT EXTENT AS POSSIBLE. ALL LINES NOT CONCEALED SHALL BE SECURED 6" OFF THE FLOOR AND 3/4" FROM THE WALLS USING STANDOFF BRACKETS

27. AN APPROVED BACKFLOW PREVENTOR SHALL BE PROPERLY INSTALLED UPSTREAM OF ANY POTENTIAL HAZARD BETWEEN THE POTABLE WATER SUPPLY AND SOURCE OF CONTAMINATION.

28. WATER SUPPLY CARBONATORS SHALL BE PROTECTED BY AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR. THE RELIEF VALVE SHALL DRAIN IN-DIRECTLY TO A FLOOR SINK WITH A 1" MIN. AIR GAP.

PLUMBING LEGEND		
SYMBOL	ABBRV	DESCRIPTION
	SS or W	NEW SEWER OR WASTE
	V	NEW VENT
	CW	NEW COLD WATER
	HW	NEW HOT WATER
	S	NEW GAS
	CD	NEW CONDENSATE DRAIN
	CA	COMPRESSED AIR
— CA —	FCO	FLOOR CLEANOUT
— Ho —	WCO	WALL CLEANOUT
— [] —	FD	FLOOR DRAIN
— [] —	FS	FLOOR SINK
— [] —	TP	TRAP PRIMER & TRAP PRIMER PIPING
— [] —	SOV	SHUT-OFF VALVE
— [] —	CV	CHECK VALVE
— [] —	PRV	BACKFLOW PREVENTER W SOV'S
	T & P	
— [] —	DN	PIPE DOWN
— [] —	UP	PIPE UP
— [] —	POC	POINT OF CONNECTION
— [] —	-	PLUMBING NOTE CALL-OUT
	ABV	ABOVE
	AFF	ABOVE FINISH FLOOR
	AP	ACCESS PANEL
	BEL	BELOW
	BLDG	BUILDING
	CLG	CEILING
	CONT	CONTINUATION
	EL	ELEVATION
	FIN	FINISH
	FL	FLOOR
	GR	GRADE
	NTS	NOT TO SCALE
	OC	ON CENTER
	S %	SLOPE AT A PERCENTAGE
	SH	SHEET
	TYP	TYPICAL
	VTR	VENT THRU ROOF

PLUMBING / GENERAL NOTES

BATHTUBS AND WHIRLPOOL BATHTUBS. THE MAX. HOT WATER TEMPERATURE DISCHARGING SHALL BE LIMITED TO 120 DEGREES.

BATHTUBS WASTE OPENING IN FLOOR OVER CRAWL SPACES SHALL BE PROTECTED BY A METAL SCREEN NOT EXCEEDING 12" OR SOLID COVER.

SHOWERS AND TUB-SHOWERS COMBINATIONS IN ALL BUILDINGS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION OF BOTH THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. VALVES SHALL BE ADJUSTED TO DELIVER A MAXIMUM MIXED WATER SETTING OF 120 DEGREES FAHRENHEIT. THE WATER HEATER THERMOSTAT SHALL NOT BE CONSIDERED A SUITABLE CONTROL FOR MEETING THIS PROVISION. VERIFY AND WHERE WATER PRESSURE EXCEEDS 80 PSI AN APPROVED PRESSURE REGULATOR PRECEDED BY AN ADEQUATE STRAINER SHALL BE INSTALLED

1-INSTALL TEMPERATURE AND PRESSURE RELIEF VALVE WITH MINIMUM 34" DRAIN PIPE AND TERMINATE TO THE EXTERIOR OF THE BUILDING OVER WINDOW, DOOR OR VISIBLE LOCATION. DISCHARGE FROM A RELIEF VALVE INTO A WATER HEATER PAN SHALL BE PROHIBITED

2-PROVIDE (ON THE PLANS) A GAS PIPING DIAGRAM OF THE GAS PIPING SYSTEM THAT INCLUDES ALL PIPE SIZES, PIPE LENGTHS AND BTU RATINGS.

3-SUBMIT GAS LOAD CALCULATIONS IN ACCORDANCE WITH CPC TABLE 12-8 TO VERIFY THE PIPE SIZES ARE ADEQUATE FOR THE MAXIMUM DELIVERY CAPACITY OF CUBIC FEET OF GAS PER HOUR.

4- A WHOLE HOUSE HAS TEST IS REQUIRED UPON COMPLETION OF THE INSTALLATION, ALTERATION, OR REPAIR OF ANY GAS PIPING. THE CITY SHALL BE NOTIFIED WHEN GAS PIPING IS READY FOR INSPECTION.

5- 2 GPM SHOWER FIXTURE, MAX.1.5 GPM BATHROOM FAUCET, MAX. 2 GPM KITCHEN FAUCET, AND MAX 1.28 WATER CLOSET TO CONFORM TO CITY GREEN REQUIREMENTS.

BATHROOMS: PROVIDE AN EXHAUST FAN (AT LEAST 50 CFM) DUCTED TO THE OUTSIDE [MINIMUM 4" DIAMETER FLEX DUCT WITH A MAXIMUM LENGTH OF 70']WITH A MINIMUM VENTILATION RATE OF 100 CFM, IDENTIFY THE REQUIREMENT FOR A BACKDRAFT DAMPER ON THE DUCT, AN ENERGY STAR COMPLIANT EXHAUST FAN THAT IS CONTROLLED BY A HUMIDITY SENSOR THAT IS CAPABLE OF BEING ADJUSTED BETWEEN ≤ 50-PERCENT TO 80-PERCENT HUMIDITY; AND A SEPARATE SWITCH FROM THE LIGHT UNLESS THE FAN IS ALLOWED TO OPERATE WITH THE LIGHT SWITCHED OFF.

6-NOTE THAT ALL PLUMBING VENTS SHALL TERMINATE NOT LESS THAN 6" ABOVE ROOF NOR LESS THAN 1' FROM ANY VERTICAL SURFACE. VENTS SHALL TERMINATE NOT LESS THAN 10" FROM OR 3' ABOVE ANY WINDOW, DOOR OPENING AIR INTAKE, OR VENT SHAFT NOR 3' FROM LOT LINE. IF WATER PRESSURE EXCEEDS 80 PSI, AND EXPANSION TANK AND AN APPROVED PRESSURE REGULATOR SHALL BE INSTALLED.

NON-REMOVABLE BACK FLOW PRE-VENTER OR BIBB-TYPE VACUUM BREAKER WILL BE INSTALLED ON ALL EXTERIOR HOSE BIBS. HOT WATER RE-CIRCULATING SYSTEM IS INSTALLED, THE ENTIRE LENGTH OF HOT WATER PIPES SHALL BE INSULATED.

NOTES:

1-Projects which disturb less than one acre of soil shall manage storm water drainage during construction by one of the following: A. Retention basins. B. Where storm water is conveyed to a public drainage system, water shall be filtered by use of a barrier system, wattle or other approved method.

2-Slope grading or drainage system will manage all surface water flows to keep water from entering buildings (swales, water collection, French drains, etc.), CGC Section 4.106.3. Exception: Additions not altering the drainage path.

3-When a shower is provided with multiple shower heads, the sum of flow to all the heads shall not exceed 1.8 gpm @ 80 psi, or the shower shall be designed so that only one head is on at a time. CGC Section 4.303.1.3.2.

4-Landscape irrigation water use shall have weather or soil based controllers. CGC Section 4.304.1.

5-The plans that a minimum of 65% of construction waste is to be recycled. CGC Section 4.408.1.

6-The contractor shall submit a Construction Waste Management Plan, per CGC Section 4.408.2.

7-The builder is to provide an operation manual (containing information for maintaining appliances, etc.) for the owner at the time of final inspection. CGC Section 4.410.1.

8-The gas fireplace(s) shall be a direct-vent sealed- combustion type. Woodstove or pellet stoves must be US EPA Phase II rated appliances. CGC Section 4.503.1.

WATER SAVING STANDARDS.

THE WATER SAVING PERFORMANCE STANDARDS FOR A PLUMBING FIXTURE ARE THOSE ESTABLISHED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), CURRENT REVISION, OR THE FOLLOWING STANDARDS, WHICHEVER ARE THE MORE RESTRICTIVE

1-THE MAXIMUM FLOW FROM A SINK OR LAVATORY FAUCET OR A FAUCET AERATOR SHALL NOT EXCEED 0.5 GALLONS OF WATER PER MINUTE AT A PRESSURE OF 60 POUNDS PER SQUARE INCH WHEN TESTED IN ACCORDANCE WITH ANSI TESTING PROCEDURES. 2- THE MAXIMUM VOLUME OF WATER PER FLUSH FROM A TOILET SHALL NOT EXCEED AN AVERAGE OF 1.28 GALLONS WHEN TESTED IN ACCORDANCE WITH ANSI TESTING PROCEDURES

3- THE MAXIMUM VOLUME OF WATER PER FLUSH FROM A URINAL AND THE ASSOCIATED FLUSH VALVE, IF ANY, SHALL NOT EXCEED AN AVERAGE OF ONE GALLON WHEN TESTED IN ACCORDANCE WITH ANSI TESTING PROCEDURES

SPECIAL NOTICE TO CONTRACTORS

1. ALL CONTRACTORS (GENERAL CONTRACTOR AND SUB-CONTRACTORS) BIDDING THIS PROJECT ARE REQUIRED TO VISIT THE JOB SITE AND VERIFY THE EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID. CONTRACTORS ARE TO CAREFULLY REVIEW ALL CONSTRUCTION DOCUMENTS AND NOTE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE CONDITIONS OBSERVED AT THE JOB SITE PRIOR TO SUBMISSION OF ANY BID. THE BUILDING OWNER REPRESENTATIVE LISTED BELOW MAY BE CONTACTED FOR ACCESS TO THE JOB SITE.
2. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING THE LOCATION AND CONDITION OF ALL POINTS OF CONNECTION, LOCATION AND CONDITION OF ALL BUILDING (ROOF/FLOOR/CEILING) PENETRATIONS, LOCATION AND CONDITION OF ALL UTILITIES AND BUILDING SYSTEMS INCLUDING, BUT NOT LIMITED TO, GAS, WATER, SEWER, VENT, ELECTRICAL, BUILDING MECHANICAL SYSTEMS, DUCT CONNECTIONS, EXHAUST/OUTSIDE AIR CONNECTIONS, SECURITY, FIRE ALARM, DATA, AND PHONE PRIOR TO SUBMISSION OF THEIR BID.
3. ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE CONDITIONS OBSERVED SHALL BE BROUGHT TO THE ATTENTION, IN WRITING, TO THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

PLUMBING LIST OF DRAWINGS (LoD):

SHEET TAG	TITLE	SCALE
P 0.00	PLUMBING GENERAL NOTES AND SPECIFICATIONS.	NTS
P 0.01	PLUMBING CODE CHECKING.	NTS
P 1.01	MAIN FLOOR - WATER SUPPLY LAYOUT.	3/8"=1'-0"
P 2.01	MAIN FLOOR - SEWER LAYOUT.	3/8"=1'-0"
P 3.01	HOT WATER SIZING AND DATA SHEETS	NTS
P 3.02	PLUMBING GENERAL DETAILS.	NTS

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3. THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO	DESCRIPTION	DATE	BY

PROJECT:
**Proposed Property Development
Element 7 Cannabis Retail**

TITLE:
**PLUMBING GENERAL NOTES
AND SPECIFICATIONS**

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36:
		NTS

DRAWING NO.	REV.
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P 0 . 0 0

CALIFORNIA PLUMBING CODE CHECKING:

PIPE SUPPORTS:

TABLE 313.3
HANGERS AND SUPPORTS

MATERIALS	TYPES OF JOINTS	HORIZONTAL	VERTICAL
Cast	Lead and Oakum	5 feet, except 10 feet where 10 foot length are installed ^{2,3}	Base and each floor, not to exceed 15 feet
	Compression Gasket	Every other joint, unless over 4 feet then support each joint ^{2,3}	Base and each floor, not to exceed 15 feet
Cast-iron Hubless	Shielded Coupling	Every other joint, unless over 4 feet then support each joint ^{2,3,4}	Base and each floor, not to exceed 15 feet
Copper & Copper Alloys	Soldered, Brazed, Threaded, or Mechanical	1 ½ inches and smaller, 6 feet; 2 inches and larger, 10 feet	Each floor, not to exceed 10 feet ⁵
Steel Pipe for Water or DWV	Threaded or Welded	¾ inch and smaller, 10 feet; 1 inch and smaller, 12 feet	Every floor, not to exceed 25 feet ⁵
Steel Pipe for Gas	Threaded or Welded	¾ inch, 6 feet; ¾ inch and 1 inch, 8 feet; 1 ¼ inches and larger, 10 feet	¾ inch, 6 feet; ¾ inch and 1 inch, 8 feet; 1 ¼ inches every floor level
Schedule 40 PVC and ABS DWV	Solvent Cemented	All sizes, 4 feet; allow for expansion every 30 feet ³	Base and each floor; provide mid-story guides; provide for expansion every 30 feet
CPVC	Solvent Cemented	1 inch and smaller, 3 feet; 1 ¼ inches and larger, 4 feet	Base and each floor; provide mid-story guides
CPVC-AL-CPVC	Solvent Cemented	¾ inch, 5 feet; ¾ inch, 65 inches; 1 inch, 6 feet	Base and each floor; provide mid-story guides
Lead	Wiped or burned	Continuous Support	Not to exceed 4 feet
Steel	Mechanical	In accordance with standards acceptable to the Authority Having Jurisdiction	
PEX	Cold Expansion, Insert and Compression	1 inch and smaller, 32 inches; 1 ¼ inches and larger, 4 feet	Base and each floor; provide mid-story guides
PEX-AL-PEX	Metal Insert and Metal compression	¾ inch ¾ inch 1 inch } All sizes 98 inches	Base and each floor; provide mid-story guides
PE-AL-PE	Metal Insert and Metal compression	¾ inch ¾ inch 1 inch } All sizes 98 inches	Base and each floor; provide mid-story guides
PE-RT	Insert and Compression	1 inch and smaller, 32 inches; 1 ¼ inches and larger, 4 feet	Base and each floor; provide mid-story guides
Polypropylene (PP)	Fusion weld (socket, butt, saddle, electrofusion), threaded (metal threads only), or mechanical	1 inch and smaller, 32 inches; 1 ¼ inches and larger, 4 feet	Base and each floor; provide mid-story guides

For Si units: 1 inch = 25.4 mm, 1 foot = 304.8 mm

Notes:

¹ Support adjacent to joint, not to exceed 18 inches (457 mm)

² Brace not to exceed 40 foot (12 192 mm) intervals to prevent horizontal movement.

³ Support at each horizontal branch connection.

⁴ Hangers shall not be placed on the coupling.

⁵ Vertical water lines shall be permitted to be supported in accordance with recognized engineering principles with regard to expansion and contraction, where first approved by the Authority Having Jurisdiction.

DRAINAGE:

719.0 Cleanouts.

719.1 Locations. Cleanouts shall be placed inside the build ing near the connection between the building drain and the building sewer or installed outside the building at the lower end of the building drain and extended to grade.

Additional building sewer cleanouts shall be installed at intervals not to exceed 100 feet (30 480 mm) in straight runs and for each aggregate horizontal change in direction exceeding 135 degrees (2.36 rad)

719.2 No additional Cleanouts. Where a building sewer or a branch thereof does not exceed 10 feet (3048 mm) in length and is a straight-line projection from a building drain that is provided with a cleanout, no cleanout will be required at its point of connection to the building drain.

721.0 Location.

721.1 Building Sewer. Except as provided in Section 721.2, no building sewer shall be located in a lot other than the lot that is the site of the building or structure served by such sewer nor shall a building sewer be located at a point having less than the minimum distances referenced in Table 721.1.

706.0 Changes in Direction of Drainage Flow.

706.1 Approved Fittings. Changes in the direction of drainage piping shall be made by the approximate use of approved fittings and shall be of the angles presented by a one-sixteenth bend, one-eighth bend, or one-sixth bend, or other approved fittings of equivalent sweep.

706.2 Horizontal to Vertical. Horizontal drainage lines, connecting with a vertical stack, shall enter through 45 degree (0.79 rad) wye branch, 60 degree (1.05 rad) wye branches, combination wye and one-eighth bend branches, sanitary tee or sanitary topped tee branches, or other approved fittings of equivalent sweep.

706.4 Vertical to Horizontal. Vertical drainage lines con necting with horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and one-eighth bend branches, or other approved fittings of equivalent sweep. Branches, or other approved fittings of equivalent sweep. Branches or offsets of 60 degrees (1.05 rad) shall be permitted to be used where installed in a true vertical posi- tion.

707.4 Location. Each horizontal drainage pipe shall be provided with a cleanout at its upper terminal, and each run of piping that is more than 100 feet (30 480 mm) in total developed length shall be provided with a cleanout for each 100 feet (30 480 mm), or fraction thereof, in length of such piping. An additional cleanout shall be provided in a drainage line for each aggregate horizontal change in direction exceeding 135 degrees (2.36 rad). A cleanout shall be installed above the fixture connecting fitting, serving each urinal, regardless of the location of the urinal in the building.

Exceptions

(1) Cleanouts shall be permitted to be omitted on a horizontal drain line less than 5 feet (1524 mm) in length unless such line is serving sinks or urinals

TABLE 703.2: MAXIMUM UNIT LOADING AND MAXIMUM LENGTH OF DRAINAGE AND VENT PIPING

SIZE OF PIPE (inches)	1 ¼	1 ½	2	3	4	5	6	8	10	12
Maximum Units										
Drainage Piping ¹										
Vertical	1	2 ²	16 ³	48 ⁴	256	600	1380	3600	5400	8400
Horizontal	1	1	8 ³	35 ⁴	216 ⁵	426 ⁵	720 ⁵	2640 ⁵	4680 ⁵	8200 ⁵
Maximum Length										
Drainage Piping										
Vertical	45	65	85	212	300	390	510	750	—	—
Horizontal										
Vent Piping										
Horizontal and Vertical ⁴										
Maximum Units	1	8 ³	24	84	256	600	1380	3600	—	—
Maximum Lengths, (feet)	45	60	120	212	300	390	510	750		

For Si units: 1 inch = 25 mm, 1 foot = 304.8 mm

Notes:

¹ Excluding trap arm.

² Except for sinks, urinals, and dishwashers – exceeding 1 fixture unit.

³ Except for six-unit traps and water closets.

⁴ Only four water closets or six-unit traps allowed on a vertical pipe or stack, and not to exceed three water closets or six-unit traps on a horizontal branch or drain.

⁵ Based on ¼ inch per foot (20.8 mm/m) slope. For ½ of an inch per foot (10.4 mm/m) slope, multiply horizontal fixture units by a factor of 0.8.

⁶ The diameter of an individual vent shall be not less than 1 ¼ inches (32 mm) nor less than one-half the diameter of the drain to which it is connected. Fixture unit load values for drainage and vent piping shall be computed from Table 702.1 and Table 702.2(2). Not to exceed one third of the total permitted length of a vent shall be permitted to be installed in a horizontal position. Where vents are increased one pipe size for their entire length, the maximum length limitations specified in this table do not apply. This table is in accordance with the requirements of Section 901.3.

707.5 Cleaning. Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil or waste or at right angles thereto and, except in the case of wye branch and end-of-line cleanouts, shall be installed vertically above the flow line of the pipe.

708.0 Grade of Horizontal Drainage Piping.

708.1 General. Horizontal drainage piping shall be run in practical alignment and a uniform slope of not less than ¼ inch per foot (20.8 mm/m) or 2 percent toward the point of disposal provided that, where it is impractical due to the depth of the street sewer, to the structural features, or to the arrangement of a building or structure to obtain a slope of ¼ inch per foot (20.8 mm/m) or 2 percent, such pipe or piping 4 inches (100 mm) or larger in diameter shall be permitted to have a slope of not less than ½ inch per foot (10.4 mm/m) or 1 percent, where first approved by the Authority Having Jurisdiction.

TABLE 721.1

MINIMUM HORIZONTAL DISTANCE REQUIRED FROM BUILDING SEWER (feet)

Buildings or structures ¹	2
Property line adjoining private property	Clear ²
Water supply wells	50 ³
Streams	50
On-site domestic water service line	1 ⁴
Public water main	10 ^{5,6}

WATER CONVERSION & WATER CONSUMPTION:

WATER CONSERVING PLUMBING FIXTURES AND FITTINGS	
Plumbing fixtures and fittings shall comply with the following: (2022 CGBCSC, California Plumbing Code (CPC) and Table 1401.1 of the CPC)	
4303.1.1 All Water closets: ≤1.28 gal/flush Tank type water closet shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.	
4303.1.2 Urinals: ≤0.5 gal/flush	
4303.1.3.1 Single showerheads: ≤1.8 gpm @ 80 psi	
4303.1.3.2 Multiple showerheads: combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gpm @ 80 psi or only one shower outlet is to be in operation at a time.	
4303.1.4.1 Residential Lavatory Faucets: 0.8 gpm @ 20 psi ≤ Flow Rate ≤1.2 gpm @ 60 psi	
4303.1.4.2 Lavatory Faucets in common and Public Use Areas (outside of dwellings or sleeping units) in residential buildings: ≤0.5 gpm @ 60 psi	
4303.1.4.3 Metering Faucets: ≤0.25 gallons per cycle	
4303.1.4.4 Kitchen Faucets: ≤1.8 gpm @ 60 psi; Maximum Flow Rate of 1.8 gpm	
PLUMBING FIXTURE CERTIFICATION REQUIRED: A plumbing fixture certification must be completed and signed by either a licensed general contractor, or a plumbing subcontractor, or the building owner certifying the flow rate of the fixtures installed. A copy of the certification can be obtained from the development services department.	

407.3 Limitation of Hot water Temperature for Public Lavatories.

Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F (49°C) by a device that complies with ASSE 1070/ASME A112.1070/CSA B125.70. The water heater thermostat shall not be considered a control for meeting this provision.

407.5 Waste Outlet. Lavatories shall have a waste outlet and fixtures tailpiece not less than 1 ¼ inches (32 mm) in diameter.

409.4 Limitation of Hot Water in Bathtubs and Whirlpool Bathtubs.

The maximum hot water temperature discharging from the bathtub and whirlpool bathtub filler shall be limited to 120°F (49°C) by a device that complies with ASSE 1070/ASME A112.1070/CSA B125.70. The water heater thermostat shall not be considered a control for meeting this provision.

WATER HEATER:

501.1 Applicability.

The minimum capacity for storage water heaters shall be in accordance with the first-hour rating listed in Table 501.1(2).

Number of Bathrooms	1 to 1.5			2 to 2.5				3 to 3.5			
Number of Bedrooms	1	2	3	2	3	4	5	3	4	5	6
First hour rating, ² Gallons	38	49	49	49	62	62	74	62	74	74	74

For Si units: 1 gallon = 3.785 L.

Notes:

¹ The first-hour rating is found on the "Energy Guide" label.

² Solar water heaters shall be sized to meet the appropriate first-hour rating as shown in the table.

504.0 Water Heater Requirements.

504.1 Location. Water heater installations in bedrooms and bathrooms shall comply with one of the following [NFPA54;10.27.1]:

- Fuel-burning water heaters shall be permitted to be installed in a closet located in the bedroom or bathroom provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device. The self-closing door assembly shall meet the requirements of Section 504.1.1. The door assembly shall meet the requirements of Section 504.1.2. Combustion air for such installations shall be obtained from the outdoors in accordance with Section 506.4. The closet shall be for the exclusive use of the water heater.

- Water heater shall be of the direct vent type. [NFPA 54; 10.27.1 (2)]

504.2 Vent. Water heaters of other than the direct-vent type shall be located as close as practical to the chimney or gas vent.

507.2 Seismic provisions. Water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third (⅓) and lower one-third (⅓) of its vertical dimensions. At the lower point, a minimum distance of four (4) inches (102 mm) shall be maintained above the controls with the strapping.

507.4 Ground Support. A water heater supported from the earth shall rest on level concrete or other approved base extending not less than 3 inches (76 mm) above the adjoining ground level.

507.5 Drainage Pan. Where a water heater is located in an attic, in or on an attic ceiling assembly, floor-ceiling assembly, or floor-subfloor assembly where damage results from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater with not less than ¼ of an inch (20 mm) diameter drain to an approved location. Such pan shall be not less than 1 ½ (38 mm) in depth.

507.13 Installation in Residential Garages. Appliances in residential garages and in adjacent spaces that open to the garage and are not part of the living space of a dwelling unit shall be installed so that all burners and burner-ignition devices are located not less than 18 inches (457 mm) above the floor unless listed as flammable vapor ignition resistant. [NFPA 54;9.1.10.1]

508.4.4 Lighting and Convenience Outlet. A permanent 120 V receptacle outlet and a lighting fixture shall be installed near the appliance. The switch controlling the lighting fixture shall be located at the entrance to the passageway. [NFPA 54;9.5.3]

508.2.1 Installation at roof: Clearance. Appliances shall be installed on a well-drained surface of the roof. At least 6 feet (1829 mm) of clearance shall be available between any part of the appliance, and the edge of a roof or similar hazard, or rigidly fixed rails, guards, parapets, or other building structures at least 42 inches (1067 mm) in height shall be provided on the exposed side. [NFPA 54;9.4.2.2]

VENT:

906.0 Vent Termination.

906.1 Roof Termination. Each vent pipe or stack shall extend through its flashing and shall terminate vertically not less than 6 inches (152 mm) above the roof nor less than 1 foot (305 mm) from a vertical surface. ABS and PVC piping exposed to sunlight shall be protected by water based synthetic latex paints.

906.2 Clearance. Each vent shall terminate not less than 10 feet (3048 mm) from, or not less than 3 feet (914 mm) above, an openable window, door, opening, air intake, or vent shaft, or not less than 3 feet (914 mm) in every direction from a hot line, alley and street excepted.

909.0 Special Venting for Island Fixtures.

909.1 General. Traps for island sinks and similar equipment shall be roughed in above the floor and shall be permitted to be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it down- ward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye branch immediately below the floor and extending to the nearest partition and then through the roof to the open air, or shall be permitted to be connected to other vents at a point not less than 6 inches (152 mm) above the flood-level rim of the fixtures served. Drainage fittings shall be used on the vent below the floor level, and a slope of not less than ¼ inch per foot (20.8 mm/m) back to the drain shall be maintained. The return bend used under the drainboard shall be a one-piece fitting or an assembly of a 45 degree (0.79 rad), a 90 degree (1.57 rad), and a 45 degree (0.79 rad) elbow in the order named. Pipe sizing shall be as elsewhere required in this code.

The island sink drain, upstream of the returned vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

WATER SUPPLY:

TABLE 611.4
SIZING OF RESIDENTIAL WATER SOFTENERS⁴

REQUIRED SIZE OF SOFTENER CONNECTION (inches)	NUMBER OF BATHROOM GROUPS SERVED ¹
¾	up to 2 ²
1	up to 4 ³

For Si units: 1 inch = 25 mm

Notes:

¹ Installation of a kitchen sink and dishwasher, laundry tray, and automatic clothes washer

permitted without additional size increase.

² An additional water closet and lavatory permitted.

³ Over four bathroom groups, the softener size shall be engineered for the specific installation.

⁴ See also Appendix A, Recommended Rules for Sizing the Water Supply Systems, and Appendix C, Alternate Plumbing Systems, for alternate methods of sizing water supply systems.

A backflow preventer shall not be required to separate a stand-alone sprinkler syste from the water distribution system where the sprinkler system material is in accordance with the requirements of Section 604.0.

606.1 General. Valves up to and including 2 inches (50 mm) in size shall be copper alloy or other approved material. Sizes exceeding 2 inches (50 mm) shall be permitted to have cast iron or copper alloy bodies. Each gate or ball valve shall be a fullway or full-port type with working parts of the non-corrosive material. Valves carrying water used in potable water systems intended to supply drinking water shall comply with the requirements of NSF 61 and ASME A112.4.14, ASME B16.34, ASTM F1970, ASTM F2389 AWWA C500, AWWA C504, AWWA C507, IAPMO Z1157, MSS SP-67, MSS SP- 70, MSS SP-71, MSS SP-72, MSS SP-78, MSS SP-80, MSS SP-110, MSS SP-122, or NSF 359.

608.4 Pressure Relief Valves. Each pressure relief valve shall be an approved automatic type with drain, and each such relief valve shall be set at a pressure of not more than 150 psi (1034 kPa). No shutoff valve shall be installed between the relief valve and the system.

FIRESTOP PROTECTION

1404.0 Combustible Piping Installations.

1404.2 Fire-Resistance Rating. Where penetrating a fire-resistance-rated wall, partition, floor, floor-ceiling assembly, roof-ceiling assembly, or shaft enclosure, the fire-resistance rating of the assembly shall be restored to its original rating.

1404.3 Firestop Systems. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa). Systems shall have and F rating of not less than 1 hour but not less than the required fire-resistance rating of the assembly being penetrated. Systems protecting floor penetrations shall have a T rating of not less than 1 hour but not less than the required fire-resistance rating of the floor penetrations shall have a T rating of not less than 1 hour but not less than the required fire-resistance rating of the floor being penetrated. Floor penetrations contained within the cavity of a wall at a location of the floor penetration do not require a T rating. No T rating shall be required for floor penetrations by piping that is not in direct contact with combustible material.

1404.6 Sleeves. Where sleeves are used, the sleeves shall be securely fastened to the fire-resistance-rated assembly. The (inside) annular space between the sleeve and the fire-resistance-rated assembly shall be firestopped in accordance with this chapter.

1405.0 Noncombustible Piping Installations.

1405.3 Firestop Systems. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa). Systems shall have an F rating of not less than 1 hour but not less than the required fire-resistance rating of the assembly being penetrated. Systems protecting floor penetrations shall have a T rating of not less than 1 hour but not less than the required fire-resistance rating of the floor being penetrated. Floor penetrations contained within the cavity of a wall at a location of the floor penetration do not require a T rating. No T rating shall be required for floor penetrations by piping that is not in direct contact with combustible material.

1405.6 Sleeves. Where sleeves are used, the sleeves shall be securely fastened to the fire-resistance-rated assembly. The (inside) annular space between the sleeve and the penetrating item and the (outside) annular space between the sleeve and the fire-resistance-rated assembly shall be firestopped in accordance with this chapter.

CLIENT:

ADDRESS:
347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS
APPEARING HEREIN CONSTITUTE THE
ORIGINAL AND UNPUBLISHED WORK OF THE
DESIGNER AND THE SAME MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT
CONSENT OF THE DESIGNER.

NOTES:

1. ALL DIMENSIONS HEREIN ARE IN IMPERIAL
UNITS UNLESS STATED OTHERWISE.
2. THESE DRAWINGS ARE TO BE READ IN
CONJUNCTION WITH ALL RELEVANT DESIGNER,
ENGINEER OR SPECIALIST DRAWINGS AND
SPECIFICATIONS.
3. THE CONTRACTOR MUST CHECK ALL
DIMENSION AT SITE BEFORE COMMENCING
WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR
PROVIDING ALL NECESSARY TEMPORARY
SUPPORT TO THE BUILDING AND ANY
ADJACENT STRUCTURES.

REV. NO	DESCRIPTION	DATE	BY

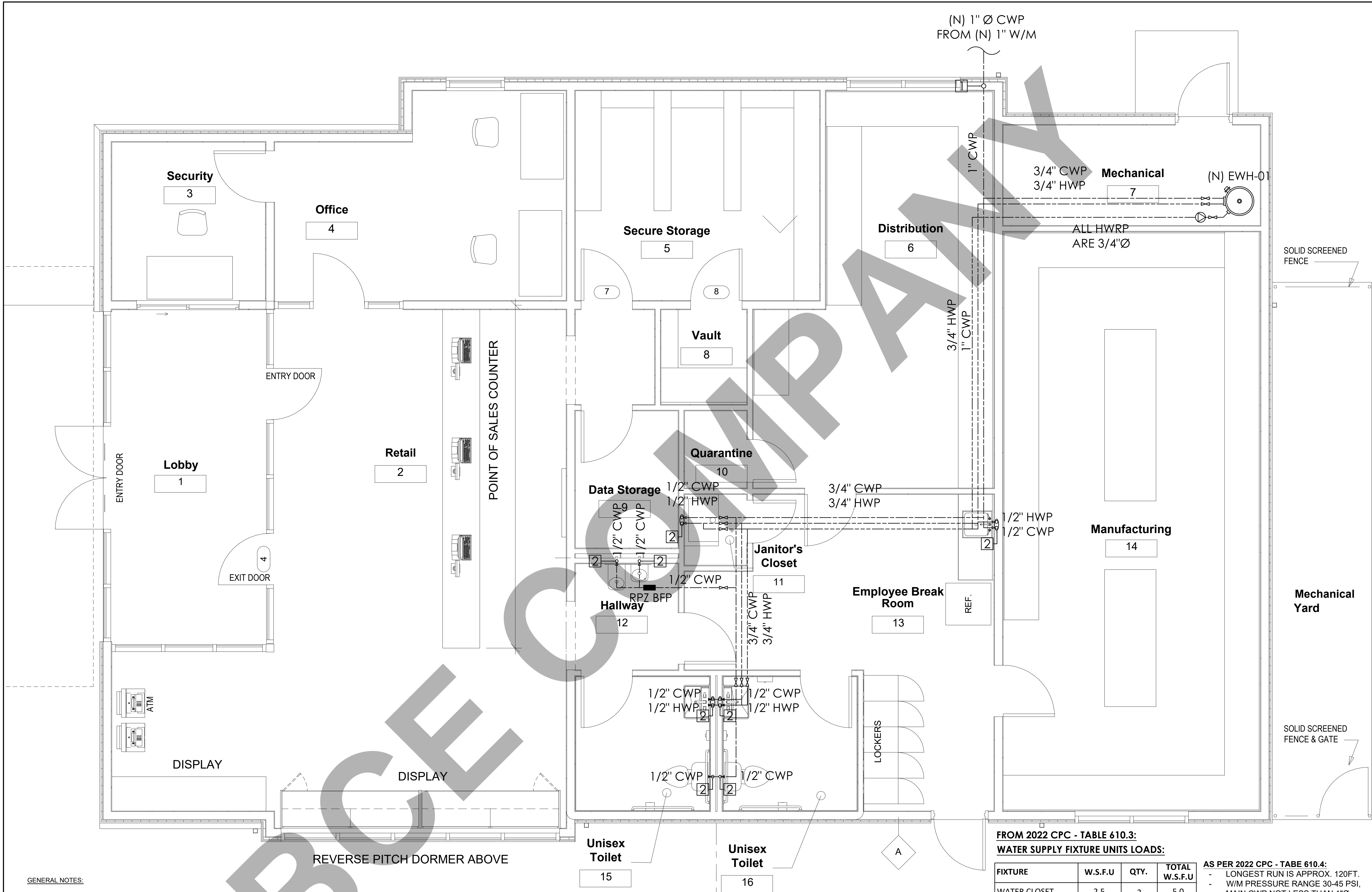
PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
PLUMBING CODE
CHECKING.

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
NTS

DRAWING NO. REV.

P 0 . 0 1



GENERAL NOTES:

- PRIOR TO PERFORMING WORK, CONTRACTOR TO COORDINATE EXACT PIPE SIZES, INVERT ELEVATIONS, PRESSURES FOR LOCATIONS OF ANY SEWER, WATER PIPING AND WATER METER WITH CIVIL UTILITIES DRAWINGS, AND ANY OTHER ENGINEER AS APPLICABLE.
- PRIOR TO PERFORMING WORK, CONTRACTOR TO COORDINATE PIPE ROUTING WITH ALL OTHER TRADES AND EXISTING FIELD CONDITIONS.
- REFER TO MECHANICAL PLANS FOR PLUMBING SPECIFICATION OF MATERIAL, INSULATION AND INSTALLATION REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ROUGH-IN COORDINATION AND LOCATIONS, REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND FIXTURES.
- CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED CUTTING AND PATCHING.
- ALL NOTCHING, BORING, AND CUTTING OF HOLES IN WALL STUDS AND FLOOR JOISTS SHALL BE PERFORMED BASED ON THE LATEST ADOPTED AND APPROVED EDITION OF THE BUILDING CODE.
- ALL PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
- ALL WATER PIPING SHALL BE INSTALLED ON INTERIOR SIDE OF THE BUILDING WALL INSULATION.
- CONTRACTOR SHALL PROVIDE VALVES LOCATED ABOVE LAY-IN CEILING OR 24"x24" CEILING ACCESS PANEL COORDINATE FINAL LOCATION AND SIZE WITH ARCHITECT. PROVIDE BALANCING VALVES FOR HOT WATER RETURN SYSTEM AS REQUIRED.
- ALL SANITARY DRAINAGE PIPING 4" AND SMALLER SHALL BE SLOPED AT $\frac{1}{8}$ " PER FOOT. PIPING 4" AND LARGER SHALL BE SLOPED AT $\frac{1}{4}$ " PER FOOT.
- ALL CONDENSATE DRAIN PIPING SHALL BE SLOPED AT $\frac{1}{8}$ " PER FOOT AND PROVIDE ACCESSIBLE CLEANOUTS AT ALL CHANGES OF DIRECTION.
- VENTS THAT TERMINATE AT THE ROOF SHALL BE A MINIMUM OF 10' FROM ANY FRESH AIR INTAKE.
- REFER TO THE PLUMBING DIAGRAMS FOR GUIDANCE OF INSTALLATION INTENT. CONTRACTOR IS TO PROVIDE ALL COMPONENTS NECESSARY TO MEET THE DESIGN INTENT, WHETHER SHOWN IN DIAGRAM OR NOT.

WATER SUPPLY SHEET NOTES:

- 1 — DCW, DHW RISE TO HIGH LEVEL.
- 2 — DCW/DHW TO FIXTURE CONNECTION.

FROM 2022 CPC - TABLE 610.3:

WATER SUPPLY FIXTURE UNITS LOADS:

FIXTURE	W.S.F.U	QTY.	TOTAL W.S.F.U
WATER CLOSET	2.5	2	5.0
LAVATORY	1.0	2	2.0
SINK	1.5	1	1.5
DRINKING FOUNTAIN	0.5	2	1.0
MOP BASIN	3.0	1	3.0
TOTAL BUILDING WSFU =			12.5

AS PER 2022 CPC - TABE 610.4:

- LONGEST RUN IS APPROX. 120FT.
- W/M PRESSURE RANGE 30-45 PSI,
- MAIN CWP NOT LESS THAN 1"Ø
- W/M SIZE NOT LESS THAN 3/4"Ø

CLIENT:

ADDRESS:

347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

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- THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:

Proposed Property Development
Element 7 Cannabis Retail

TITLE:

MAIN FLOOR
WATER SUPPLY LAYOUT

PROJ. NO.

PROJ. ENGR.

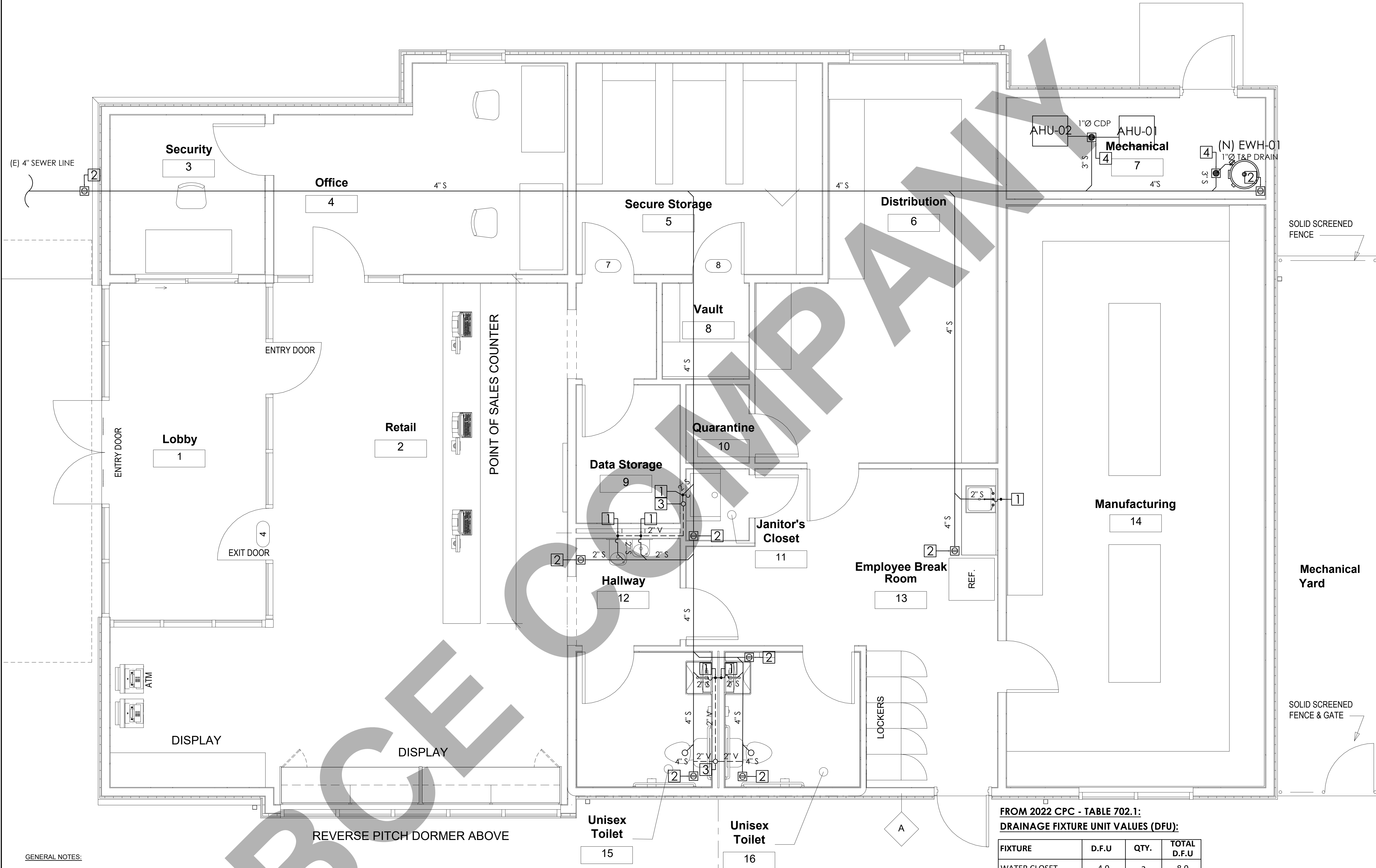
SCALE @ 24X36:

3/8"=1'-0"

DRAWING NO.

REV.

P 1 . 0 1



- GENERAL NOTES:**
1. PRIOR TO PERFORMING WORK, CONTRACTOR TO COORDINATE EXACT PIPE SIZES, INVERT ELEVATIONS, PRESSURES FOR LOCATIONS OF ANY SEWER, WATER PIPING AND WATER METER WITH CIVIL UTILITIES DRAWINGS, AND ANY OTHER ENGINEER AS APPLICABLE.
 2. PRIOR TO PERFORMING WORK, CONTRACTOR TO COORDINATE PIPE ROUTING WITH ALL OTHER TRADES AND EXISTING FIELD CONDITIONS.
 3. REFER TO MECHANICAL PLANS FOR PLUMBING SPECIFICATION OF MATERIAL, INSULATION AND INSTALLATION REQUIREMENTS.
 4. CONTRACTOR IS RESPONSIBLE FOR ROUGH-IN COORDINATION AND LOCATIONS, REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND FIXTURES.
 5. CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED CUTTING AND PATCHING.
 6. ALL NOTCHING, BORING, AND CUTTING OF HOLES IN WALL STUDS AND FLOOR JOISTS SHALL BE PERFORMED BASED ON THE LATEST ADOPTED AND APPROVED EDITION OF THE BUILDING CODE.
 7. ALL PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
 8. ALL WATER PIPING SHALL BE INSTALLED ON INTERIOR SIDE OF THE BUILDING WALL INSULATION.
 9. CONTRACTOR SHALL PROVIDE VALVES LOCATED ABOVE LAY-IN CEILING OR 24"x24" CEILING ACCESS PANEL COORDINATE FINAL LOCATION AND SIZE WITH ARCHITECT, PROVIDE BALANCING VALVES FOR HOT WATER RETURN SYSTEM AS REQUIRED.
 10. ALL SANITARY DRAINAGE PIPING 4" AND SMALLER SHALL BE SLOPED AT $\frac{1}{8}$ " PER FOOT, PIPING 4" AND LARGER SHALL BE SLOPED AT $\frac{1}{4}$ " PER FOOT.
 11. ALL CONDENSATE DRAIN PIPING SHALL BE SLOPED AT $\frac{1}{8}$ " PER FOOT AND PROVIDE ACCESSIBLE CLEANOUTS AT ALL CHANGES OF DIRECTION.
 12. VENTS THAT TERMINATE AT THE ROOF SHALL BE A MINIMUM OF 10' FROM ANY FRESH AIR INTAKE.
 13. REFER TO THE PLUMBING DIAGRAMS FOR GUIDANCE OF INSTALLATION INTENT. CONTRACTOR IS TO PROVIDE ALL COMPONENTS NECESSARY TO MEET THE DESIGN INTENT, WHETHER SHOWN IN DIAGRAM OR NOT.

SANITARY SHEET NOTES:

- 1 — WASTE DROP AND 2" VENT RISE.
2 — 4" FLOOR CLEAN-OUT.
3 — 3" VENT STACK TO ABOVE.
4 — 3" FLOOR DRAIN.

**FROM 2022 CPC - TABLE 702.1:
DRAINAGE FIXTURE UNIT VALUES (DFU):**

FIXTURE	D.F.U	QTY.	TOTAL D.F.U
WATER CLOSET	4.0	2	8.0
LAVATORY	1.0	2	2.0
SINK	2.0	1	2.0
DRINKING FOUNTAIN	0.5	2	1.0
MOP BASIN	3.0	1	3.0
TOTAL BUILDING DFU =			16.0

CLIENT:

ADDRESS:
347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

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 4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
**Proposed Property Development
Element 7 Cannabis Retail**

TITLE:
**MAIN FLOOR
SEWER LAYOUT**

PROJ. NO. PROJ. ENGR. SCALE @ 24X36:
3/8"=1'-0"

DRAWING NO. REV.
P 2 . 0 1



A. O. Smith
Phone: 1.866.362.9898
www.hotwater.com

Pro-Size Selection Report

January 17, 2023

Project Information

Project #: _____ Prepared for: _____
Project Name: Element 7 Salinas Prepared by: _____
Location: _____
Engineer: _____
Contractor: _____

Selected Product

DEL-20S-3.5 Dura-Power Preferred® Light Duty Commercial Tank-Type

Heaters: 1 Heater Recovery: 14 USGPH @ 100 °F Rise
Model Number: DEL-20S-3.5 1st Hour Delivery: 30 USGPH
Heater Storage (ea): 20 USG 3 Hour Average: 20 USGPH
Input (ea): 3.5 kW Est. Storage Recovery: 83 min
New External Tanks: 0 % Of Demand: 178%
Tank Capacity (ea): 0 USG
Total Usable Storage: 16 USG



Model Number	Wt. Cube Trailer Load Factor	Gallon Capacity	Recovery Capacity GPH 100 Degree Rise	Input KW	Height	Diameter	Approx. Shipping Weight (lbs.)
DEL-20S-3.5	0.1	20	0	3.5	22.25	21.75	73

- Field Convertible to 1 Phase
- 120/277 Volt Wired for Single Phase
- Meet or exceed the thermal efficiency and/or standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1
- Surface Mounted Thermostats
- Tin Plated Copper Sheath Elements
- Dual Element Models Wired for 3 Phase - 208/240/480

Application Loads

Summary

Peak Demand: 17 USGPH Temperature Rise: 100 °F

Sizing Notes

Hot water loads for pools, hot tubs, or other uses should be considered separately. Restaurant or food service loads should be considered separately if independent water heating equipment is to be used.

Application Settings

Type: Office Building
Building Use: Not Specified
Peak Demand Period: 1.00 Hours

Cold Water Temp: 40 °F
Stored Water Temp: 140 °F
Approx. Storage: 25%

January 17, 2023

Equipment:	Water Heaters Only (no external storage)	# Storage Tanks:	Not Specified
Fuel Type:	Electric	Existing Storage:	None
Location:	Indoor		
LoNOx:	Not Required		
UltraLowNOx:	Not Required		
ASME:	Not Required		
# Heaters:	Not Specified		
Altitude:	Less than 2000 ft		

Load Data

Shower Head Flowrate: 2.5 USGPM
Number of Occupants: 0
Number of Private Lavatories: 0
Number of Public Lavatories: 2
Number of Kitchen Sinks: 1
Number of Pantry Sinks: 0
Number of Shower Heads: 0
Number of Service Sinks: 1
Number of Bradley Washfountains (Full): 0
Number of Bradley Washfountains (Half): 0
Laundry Model 1: 0 @ 0 lbs
Laundry Model 2: 0 @ 0 lbs
Additional Load: 0 USGPH
Design Oversize: 10%

Page 2 of 2

SCHEDULE No. 1

ELECTRIC WATER HEATER SCHEDULE

TAG	(N) EWH-01
LOCATION	MECHANICAL
MANUFACTURER	A.O.SMITH
MODEL	DEL-20S-3.5
TYPE	ELECTRIC
CAPACITY (GALLONS)	20
INPUT kW	3.5
APPROX. WEIGHT (lbs)	73
WIDTH x DEPTH (in.)	21-3/4"
HEIGHT (in)	22-1/4"
WATER CONNECTION SIZE	3/4"
RE-CIRCULATION PUMP	120/1/60 - 350 watts

CLIENT:

ADDRESS:

347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

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A. O. SMITH

Designed for use as a recovery heater having its own storage tank. Available in upright standard models (DEN) and lowboy models (DEL).

FEATURES

GLASS-LINED TANK - Thirteen sizes; 6 thru 119 gallon capacity. Tank interior is coated with glass specially developed by A. O. Smith Ceramic Research for water heater use. Tanks rated 150 psi working pressure; tested at 300 psi. Foam insulation provides maximum energy savings by minimizing radiant standby heat loss.

ELEMENTS - Zinc plated copper sheaths for longer life. Medium watt density; means lower surface temperature to minimize scale build-up and more surface to heat water. Element sizes from 1.5 to 6 KW. Maximum input 12 KW (see chart on back).

STANDARD VOLTAGES - 120, 277 single phase and 208, 240 and 480V unbalanced three-phase delta; easily converted to single-phase at terminal block (except 208V with 6000 watt elements). Single element heater, single-phase only.

TERMINAL BLOCK - Factory installed. Just bring the service to heater and connect to block. Terminal block not supplied on 120V & 277 volt models.

CONTROLS - Temperature control (adjustable through a range of 110° to 170°F on single element and 120° to 180°F on dual element) and manual reset high temperature cutoff per element (dual element models). Factory wired for non-simultaneous operation; easily converted to simultaneous element operation (three phase models only).

OPTIONAL

GOLDENROD ELEMENTS - All DEN & DEL models are available with the Goldenrod 24K gold plated elements (patent pending). Goldenrod elements provide long life and 6 times the scaling resistance of standard incoloy elements. Goldenrod elements carry a three-year warranty against failure due to lime scale build-up.

Dura-Power

COMMERCIAL ELECTRIC WATER HEATERS
DEN & DEL MODELS

Meets or exceeds the requirements of ASHRAE 90.1-1999
Standard for energy efficiencies.

See page C 029.0 for service wiring and fuse selection.



DEL MODELS



DEN MODELS

LIMITED WARRANTY OUTLINE

If the tank should leak any time during the first three years, under the terms of the warranty, A. O. Smith will furnish a replacement heater; installation, labor, handling and local delivery extra. **THIS OUTLINE IS NOT A WARRANTY.** For complete information, consult the written warranty or A. O. Smith Water Products Company.

OTHER STANDARD FEATURES

- Simplified circuitry, color coded for ease of service
- Anode rod for maximum corrosion protection
- Cabinet has bondervized undercoat with baked enamel finish
- Top inlet and outlet openings
- Drain valve
- UL approved field conversion program.

Input	120V	208V	240V	277V	480V
1,500	YES	YES	YES	YES	—
2,000	YES	YES	YES	YES	YES
2,500	YES	YES	YES	YES	YES
3,000	YES	YES	YES	YES	YES
3,500	—	—	YES	—	—
4,000	—	YES	YES	YES	YES
4,500	—	YES	YES	YES	YES
5,000	—	YES*	YES*	YES*	YES*
5,500	—	—	YES*	—	—
6,000	—	YES**	YES	YES	YES

NOTE: DEL-6 not available in above 2.5 KW.

DEL-6 not available in 480V.

* Not available in DEL-10, DEL-15 and DEN-30.

** AE non-simultaneous control only.

ROUGH-IN DIMENSIONS										Approx. Shipping Weight.	
Models	No. of Elements	Tank Capacity	A		B		C		D		
Dimensions		US Gals. Litres	inches	mm	inches	mm	inches	mm	inches	Lbs. Kg.	
DEL-6	1	6	23	15.2	39 1/4	14.1/4	36 1/2	11	27 9	35	19
DEL-10	1	10	39	19 1/4	49 1/4	18	43 1/2	12 1/2	31 9	54	24
DEL-15	1	15	57	27	69 1/4	18	47 1/2	20 1/2	42 1	88	39
DEL-20	2	20	76	32 1/4	81 3/4	21 3/4	55 1/2	15 3/8	39 1	109	49
DEL-30	2	30	114	39 1/8	124 1/4	24 3/4	65 1/2	21 1/8	45 1	163	73
DEL-40	2	40	151	32 1/4	161 1/4	24	81 1/2	25 9/16	44 9	225	102
DEL-50	2	50	189	32 1/4	199 1/4	24 1/2	97 1/2	25 1/8	50 3	266	120
DEN-30	1	30	114	34 1/2	87 1/2	20 1/2	59 1	8	203	98	44
DEN-40	2	40	151	45 1/8	114 1/8	20 1/2	82 1	8	203	113	51
DEN-50	2	50	189	54 7/8	139 1/4	20 1/2	94 1	8	203	131	59
DEN-66	2	66	250	60 3/4	154 3/4	21 3/4	95 1	8	203	176	79
DEN-80	2	80	303	59 3/8	150 3/8	24	81 1/2	8	203	211	95.7
DEN-120	2	119	450	62 7/16	158 1/2	29 3/8	74 1/2	8	203	326	147

ELECTRIC CHARACTERISTICS AND CAPACITIES

NON-SIMULTANEOUS AND SINGLE ELEMENT OPERATION

Element Wattage	Recovery Capacities GPH @ Temperature Rise Of					Full Load Current In Amperes Connected to Single Phase Power (All Terminals - L1,L2,L3)		
	Upper/Lower	40°	60°	80°	100°	120°	208V	240V
1500	15	10	8	6	5	7.2	6.3	3.2
2000	21	14	10	8	7	9.6	8.3	4.2
2500	26	18	13	10	9	12.0	10.4	5.2
3000/3000	31	20	15	12	10	14.4	12.5	6.3
4000/4000	41	27	20	16	14	19.2	16.7	8.3
4500/4500	46	31	23	18	15	21.6	18.8	9.4
5000/5000	51	34	26	20	17	24.0	20.8	10.4
6000/6000	61	41	31	25	20	28.8	25.0	12.5

SIMULTANEOUS DUAL ELEMENT OPERATION (both elements on when entire tank is cold)

Element Wattage	Recovery Capacities GPH @ Temperature Rise Of					Full Load Current In Amperes Connected to Three Phase Power (Terminal L2/Terminals L1 & L3)		
	Upper/Lower	40°	60°	80°	100°	120°	208V	240V
3000/3000	81	41	31	24	20	25.0/14.4	21.7/12.5	10.8/6.3
4000/4000	81	54	41	33	27	33.3/19.2	28.9/16.7	14.4/8.3
4500/4500	91	61	45	37	31	37.5/21.6	32.5/18.8	16.2/9.4
5000/5000	102	68	51	41	34	41.6/24.0	36.1/20.8	18.0/10.4
6000/6000	122	81	61	49	41	N/A	43.3/25.0	21.7/12.5

Recovery capacities at 100°F rise equal: for non-simultaneous element operation - 4.1 gal. x KW of one element; for simultaneous element operation - 4.1 gal. x 2/3 KW of both elements. For other rises multiply element KW as previously explained by 410 and divide by temperature rise. Full load current for single phase = total watts ÷ voltage.

SUGGESTED SPECIFICATIONS

The water heater(s) shall be Dura-Power Model(s) No. _____ as manufactured by A. O. SMITH or an approved equal. Heater(s) shall be rated at _____ KW, _____ volts, _____ phase, 60 cycle AC, and listed by Underwriters' Laboratories. Tank(s) shall be _____ gallon capacity. Heater(s) shall have 150 psi working pressure and be equipped with extruded high density anode rod. All internal surfaces of the heater(s) exposed to water shall be glass-lined with an alkaline borosilicate composition that has been fused to steel by firing at a temperature range of 1600°F. Electric heating elements shall be medium watt density with zinc plated copper sheath. Each element shall be controlled by an individually mounted thermostat and high temperature cutoff switch. The outer jacket shall be of baked enamel finish and shall be provided with full size control compartment for performance of service and maintenance through hinged front panels and shall enclose the tank with foam insulation. Electrical junction box with heavy duty terminal block shall be provided (except on 120V & 277V [no junction box on DEL-6 thru 20]). The drain valve shall be located in the front for ease of servicing. Heater tank shall have a three year limited warranty as outlined in the written warranty. Fully illustrated instruction manual to be included.

A. O. Smith Water Products Co., Inc. On Line
www.aosmithwaterheaters.com

For Technical Information and
Automated Fax Service,
Phone: 800-527-1953

A. O. Smith
Water Products Company
Ashland City, TN
A Division of A. O. Smith Corporation

A. O. Smith Corporation reserves the right to make product changes or improvements at any time without notice.

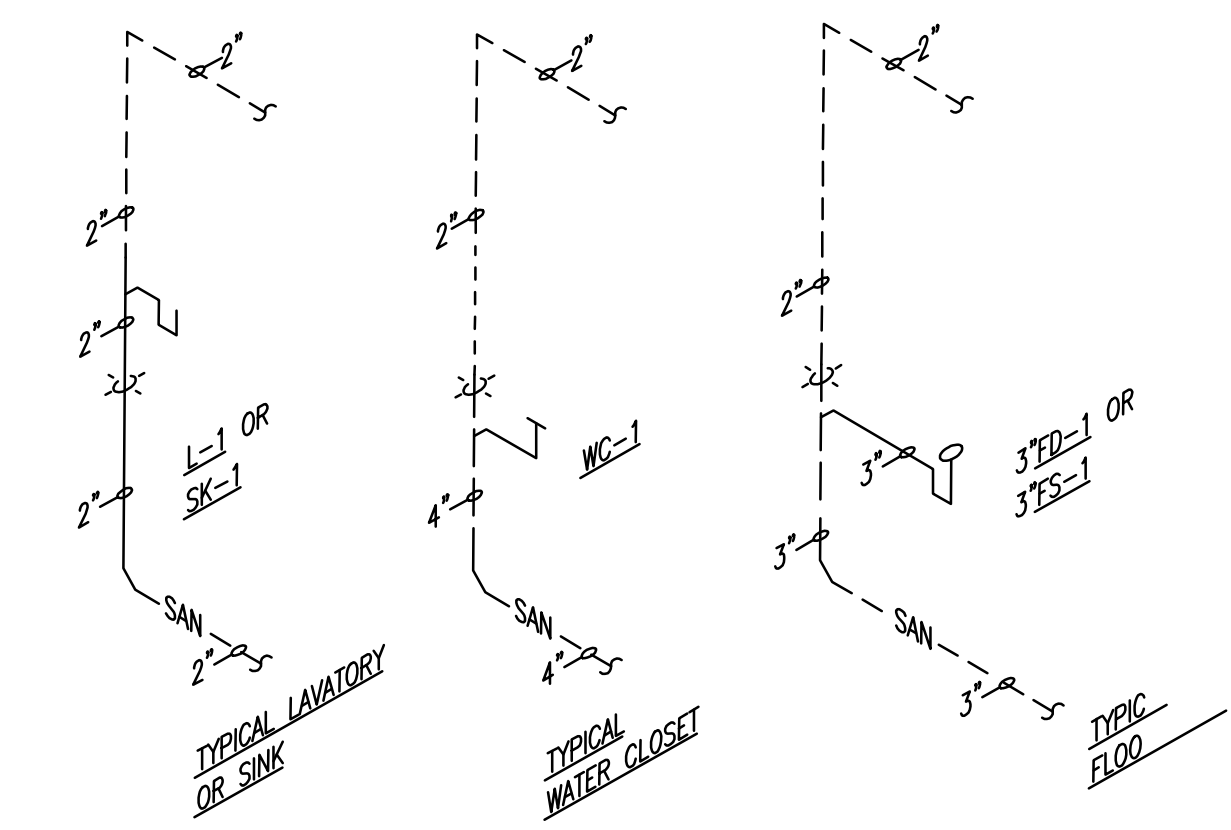
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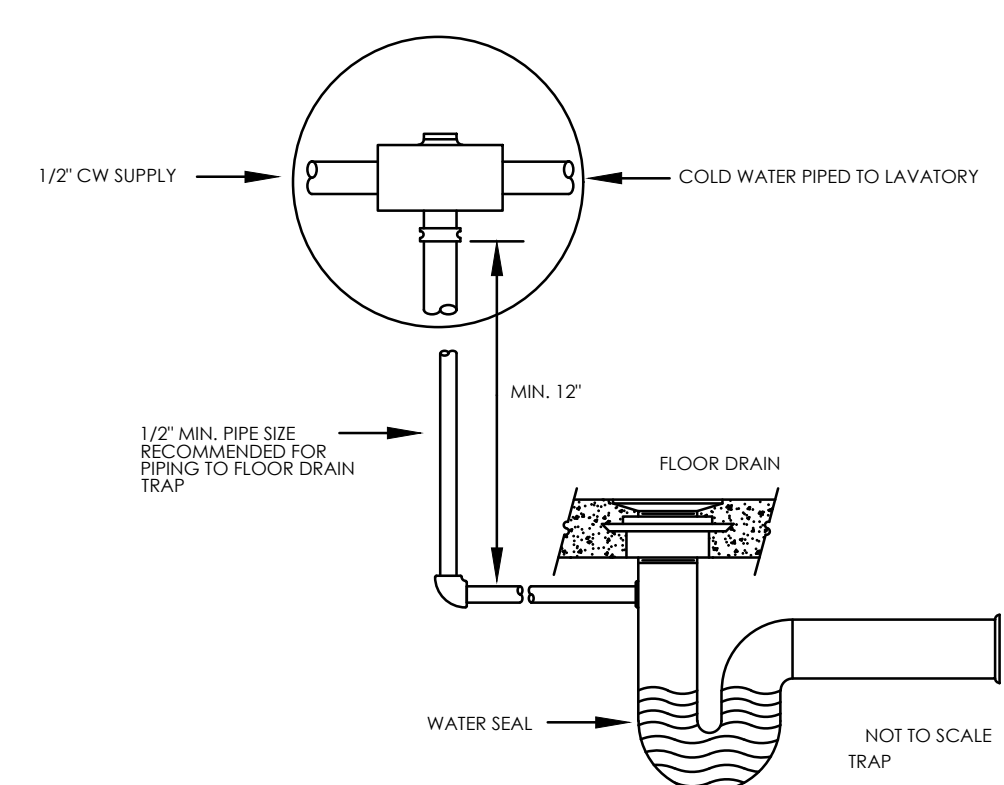
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Revised August 2004

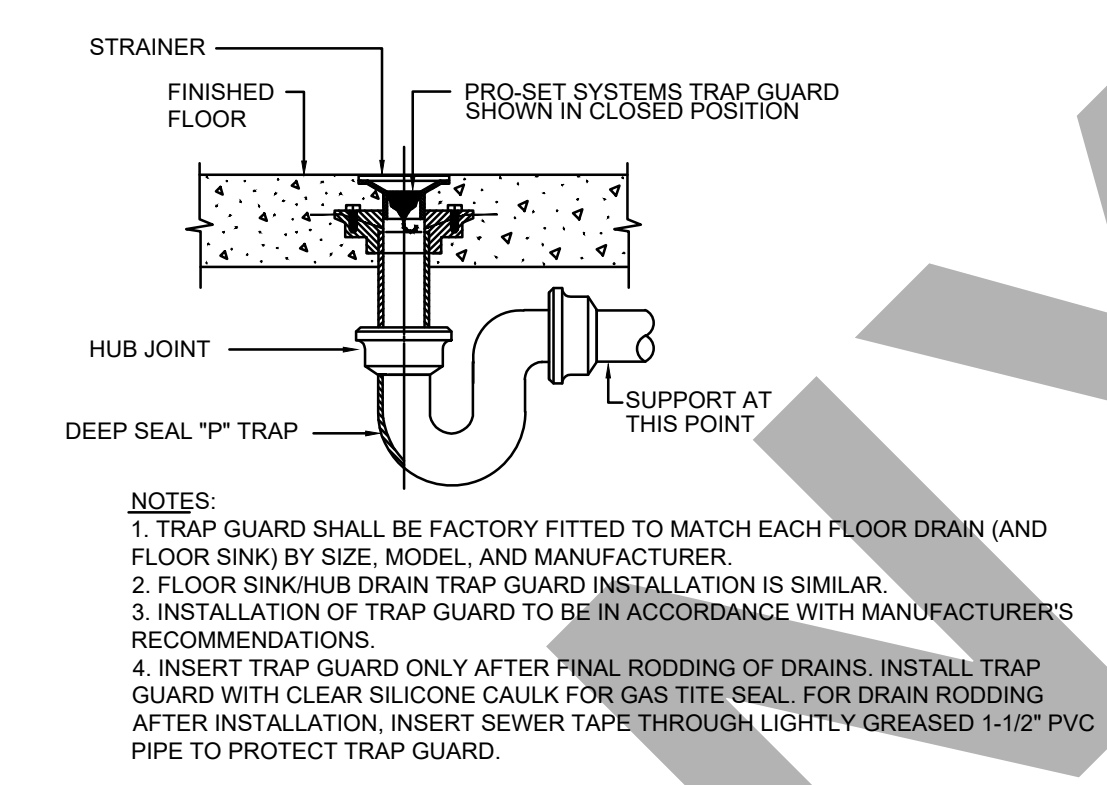
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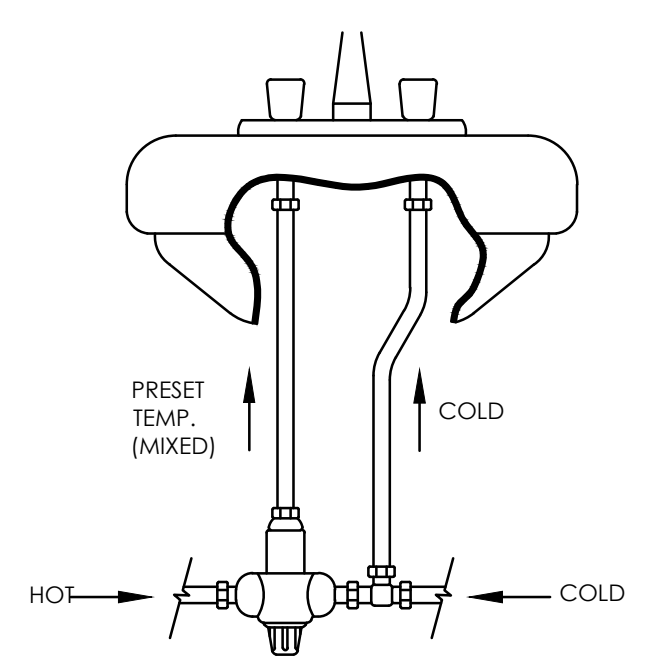
1 TYPICAL WASTE AND VENT RISERS
SCALE: NONE



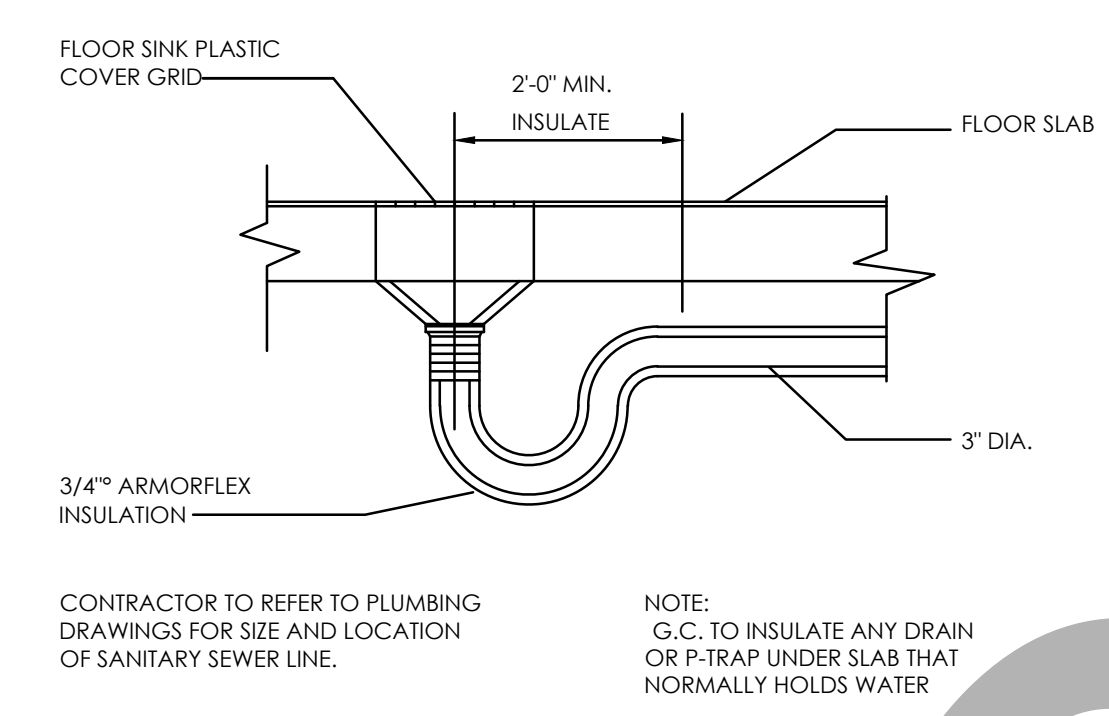
2 TRAP PRIMER
SCALE: NONE



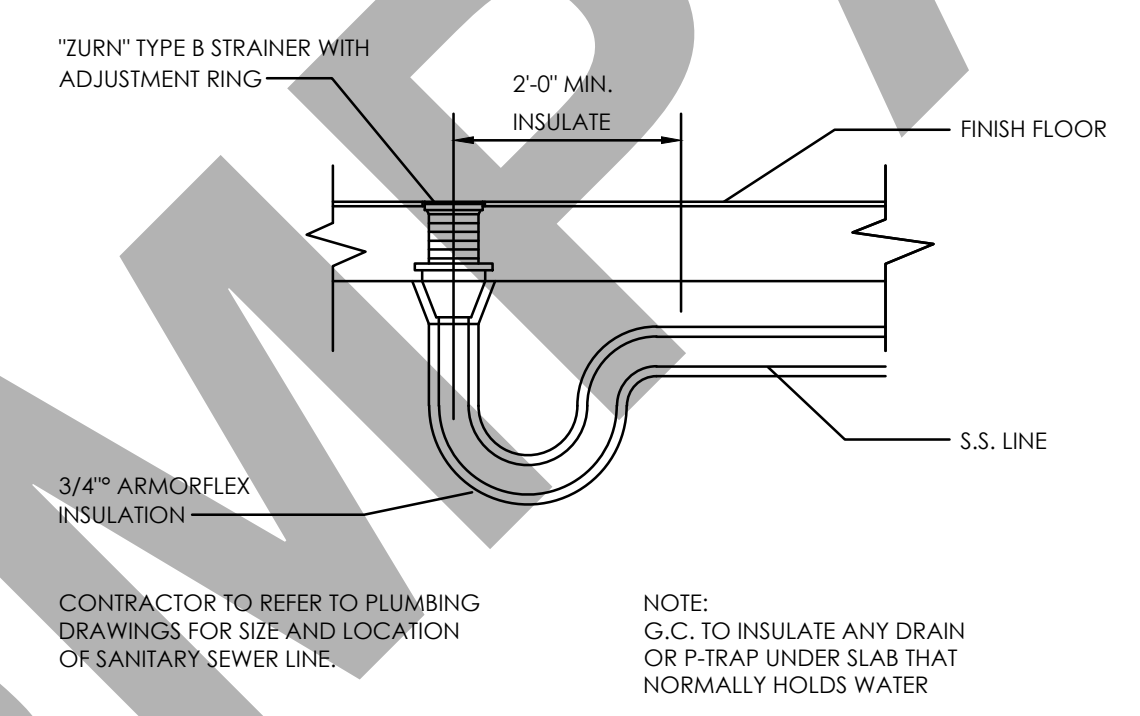
3 FLOOR DRAIN WITH TRAP SEAL PROTECTION
SCALE: NONE



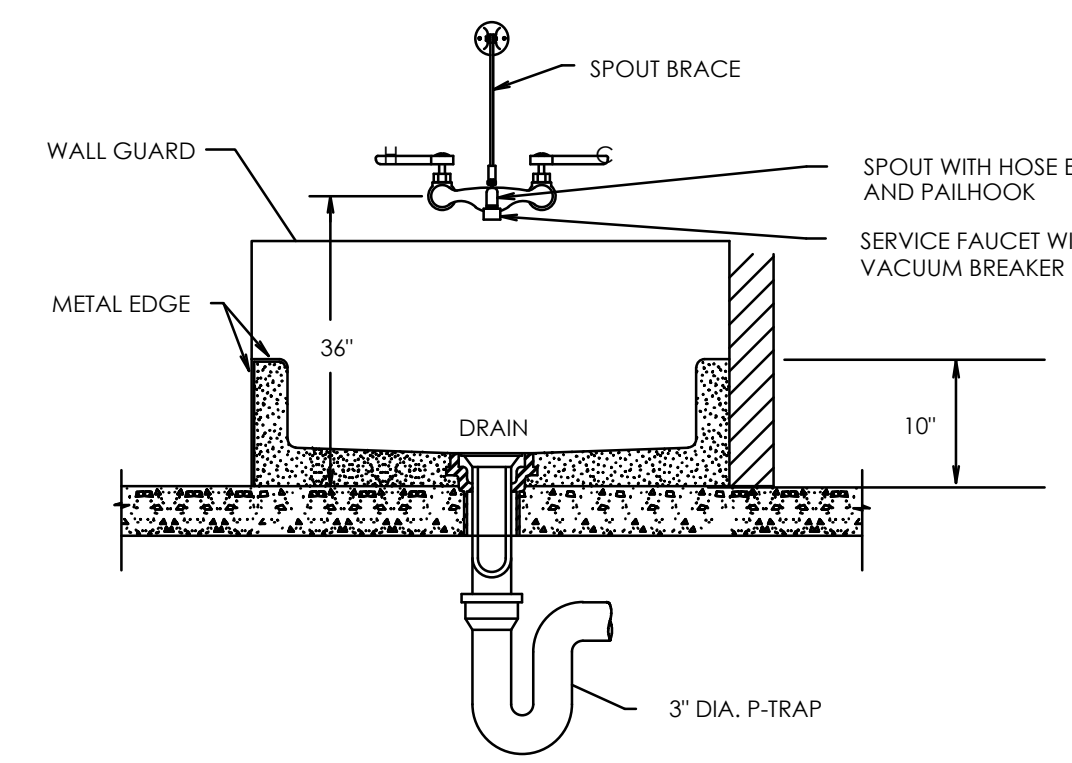
ANTI-SCALD MIXING VALVE
NO SCALE



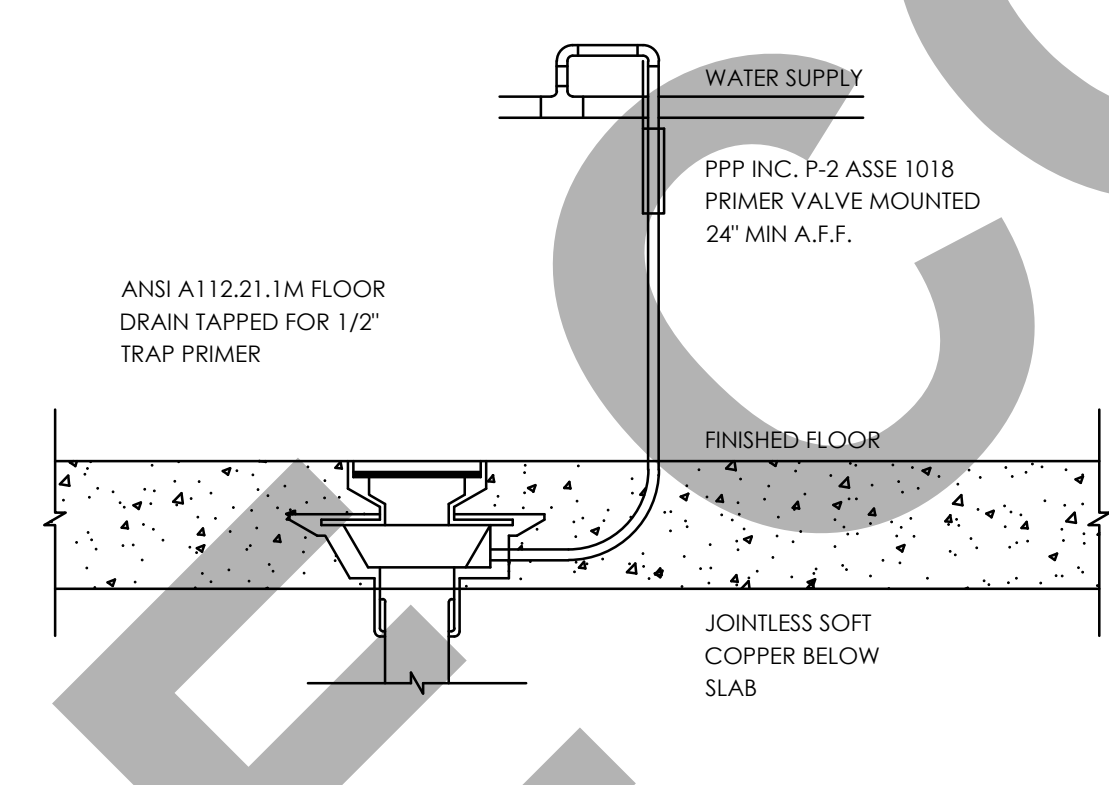
FLOOR SINK DETAIL
NO SCALE



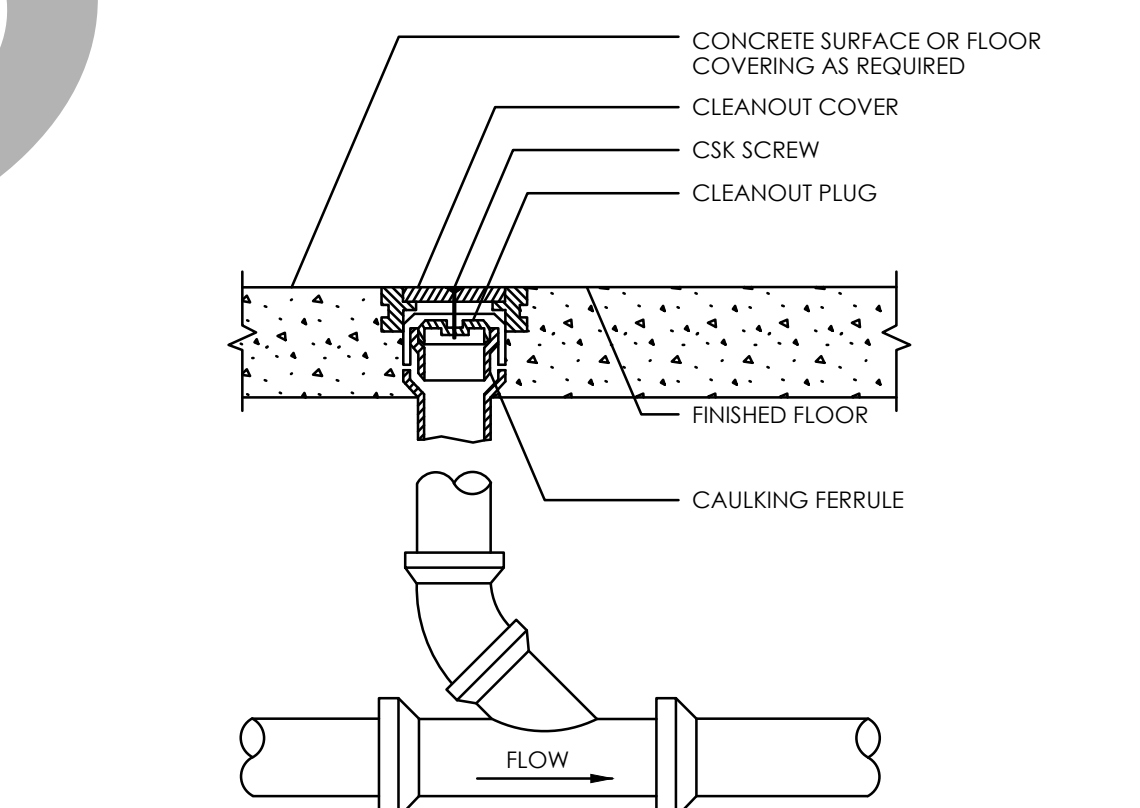
FLOOR DRAIN DETAIL
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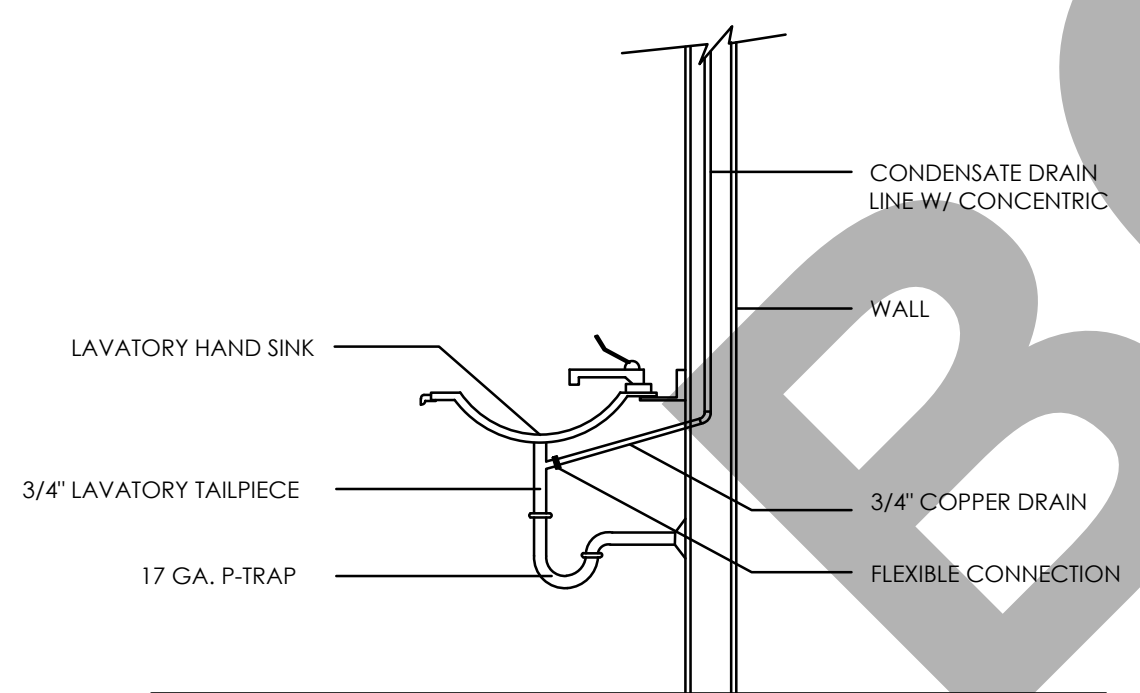
MOP SINK DETAIL
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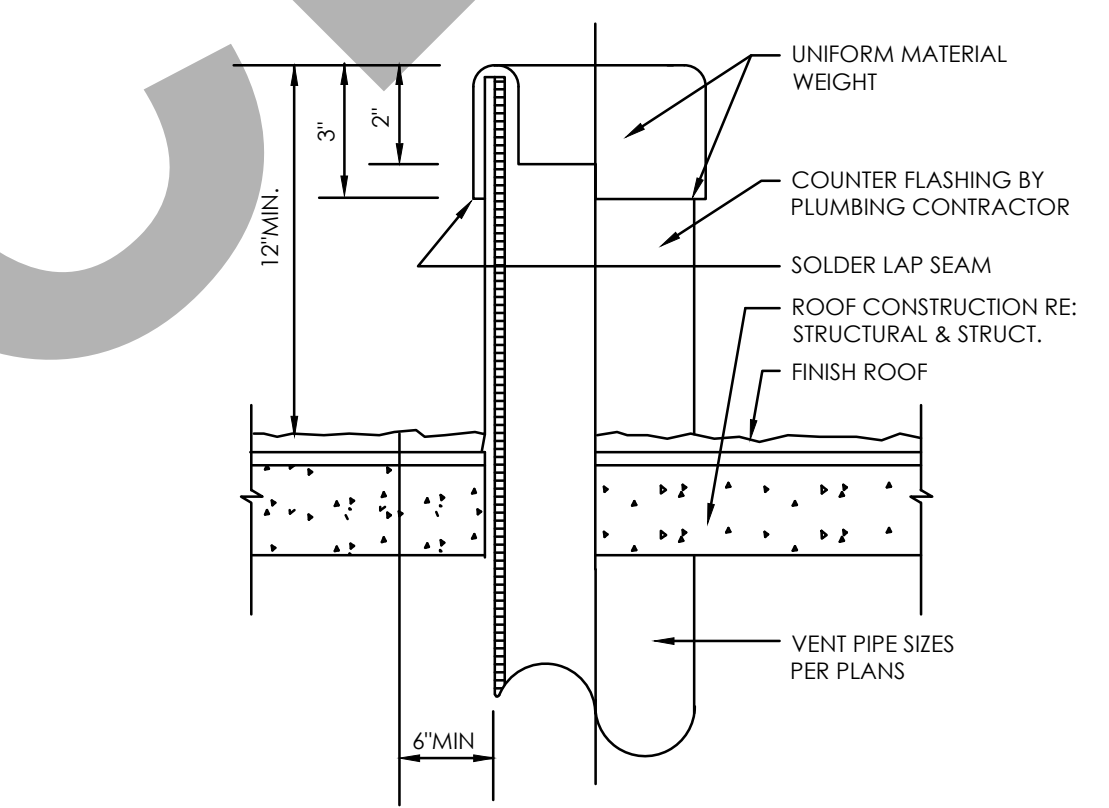
TRAP PRIMER DETAIL
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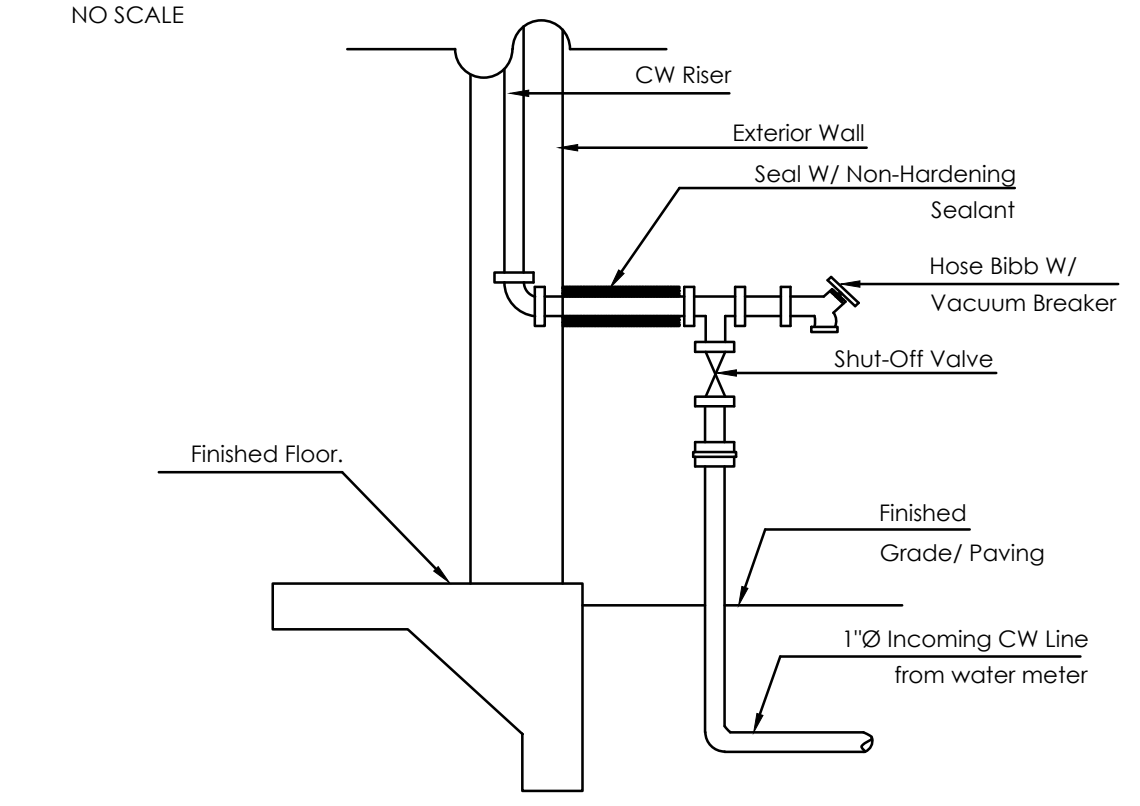
FLOOR CLEANOUT DETAIL
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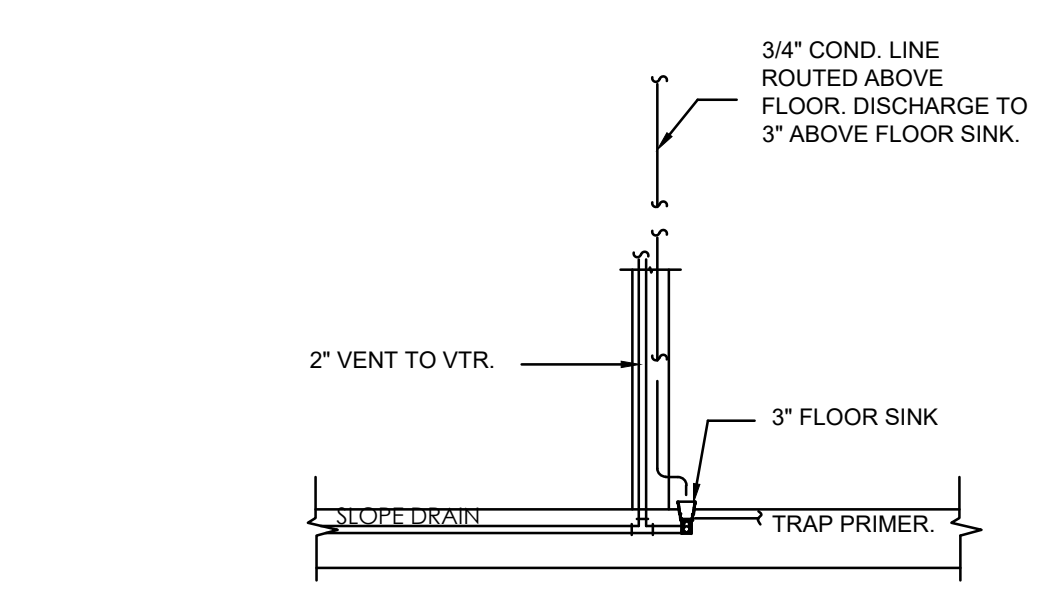
CONDENSATE DETAIL
NO SCALE



VENT THRU ROOF DETAIL
NO SCALE



WATER ENTRY DETAIL
NO SCALE



COND. ON FLOOR SINK DETAIL
NO SCALE

CLIENT:

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APN: 002-041-056-000

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REV. NO.	DESCRIPTION	DATE	BY

PROJECT:
Proposed Property Development
Element 7 Cannabis Retail

TITLE:
PLUMBING GENERAL DETAILS.

PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: NTS
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DRAWING NO. P 4 . 0 1	REV.
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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ELC-6

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

A. GENERAL INFORMATION

01	Project Location (city)	St. Salinas	02	Climate Zone	3
03	Occupancy Types Within Project:	All Other OccupanciesData Center/OfficeRetailWarehouse			

B. PROJECT SCOPE

This table includes electrical systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/Description	Scope of Work ¹	Rating ² (kVA)	Utility Provided Metering System Exception to 130.5(a)/160.6(a)	System subject to CA EEC Code Article 517 Exception to 130.5(a) and 160.6(a)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Main	New electrical service equipment and meter	50	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

FOOTNOTES:

Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.
¹ Common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.
² Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-50207-0323-0131

Scheme Version: rev 20220101

Report Generated: 2023-03-23 07:19:28

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ELC-6

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable table referenced below.

01	02	03	04	05	06				
Service Electrical Monitoring 130.5(a)/160.6(a) (See Table F)	AND	Separation for Monitoring 130.5(b)/160.6(b) (See Table G)	AND	Voltage Drop 130.5(c)/160.6(c) (See Table H)	AND	Controlled Receptacles 130.5(d)/160.6(d) (See Table I)	AND	Electric Ready 160.9 (See Table J)	Compliance Results
Yes	AND	Yes	AND	Yes	AND	Yes	AND	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. SERVICE ELECTRICAL METERING

This table includes new or replacement electrical service systems OR equipment to demonstrate compliance with 130.5(a) / 160.6(a). For multifamily occupancies, submetered systems that provide power to common use areas must meet the following metering requirements. Submetered systems providing power to dwelling units do not.

01	02	03	04	05
Electrical Service Designation/Description	Rating ¹ (kVA)	Instantaneous Demand (kW)	Historical Peak Demand (kW)	Field Inspector
Main	50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

FOOTNOTES:

Common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ELC-6

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05
Load Type per Table 130.5-B ¹	Minimum Required Separation of Load per Table 130.5-B	Compliance Method ²	Location of Requirements in Construction Documents	Field Inspector
Main	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attached	<input type="checkbox"/>

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c) / 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)(2)(iv) / 180.2(b)(iv).

01	02	03	04	05
Electrical Service Designation/Description	Combined Voltage Drop in Installed Feeder/Branch Circuit Conductors Compliance Method	Location of Requirements in Construction Documents	Field Inspector	Pass
Main	<input checked="" type="checkbox"/>	Attached	<input type="checkbox"/>	<input type="checkbox"/>

I. FOOTNOTES:

Method 1: Submetered/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 2: Submetered/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring.
Method 4: Complete metering system measures and reports loads by type.
See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ELC-6

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

J. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(d)/160.6(d). Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

01	02	03	04	05	06	07
Room name or description	Location/Type of Controlled Receptacles ¹	Shut-Off Controls	Demand Responsive Controls	Permanent Durable Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector
						Pass

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

This section does not apply to this project.

Form/Title

NRCC-ELC-6 - Must be submitted for all buildings.

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-50207-0323-0131

Scheme Version: rev 20220101

Report Generated: 2023-03-23 07:19:28

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ENV-4

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Signature:

Mohammad Nohayli

Signature Date:

2023-03-23

Address:

726 Foxborough

City/County:

Pleasanton CA 94566

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 1 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance consistent to the requirements of Title 24, Part 1 and Part 2 of the California Code of Regulations.

3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

4. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner or occupancy.

Responsible Designer Name:

Sayed P. Alam

Signature Date:

2023-03-23

Address:

726 Foxborough

City/County:

Pleasanton CA 94566

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-50207-0323-0131

Scheme Version: rev 20220101

Report Generated: 2023-03-23 07:19:28

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ENV-4

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

A. GENERAL INFORMATION

01	Project location (city)	St. Salinas	05	# of Stories (Habitable Above Grade)	1
02	Zipcode	93901	06	Total Conditioned Floor Area (ft²)	2648
03	Climate Zone	3	07	Total Unconditioned Floor Area (ft²)	0

B. PROJECT SCOPE

This table includes new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05
Electrical Service Designation/Description	Rating ¹ (kVA)	Instantaneous Demand (kW)	Historical Peak Demand (kW)	Field Inspector
Main	50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

FOOTNOTES:

Method 1: Submetered/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 2: Submetered/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring.
Method 4: Complete metering system measures and reports loads by type.
See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ENV-4

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

B. PROJECT SCOPE

This table includes new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05
Electrical Service Designation/Description	Rating ¹ (kVA)	Instantaneous Demand (kW)	Historical Peak Demand (kW)	Field Inspector
Main	50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

FOOTNOTES:

Method 1: Submetered/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 2: Submetered/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring.
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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ENV-4

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

F. ROOF ASSEMBLY SCHEDULE

This table includes new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	06	07	08	09	10	11	12	13
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design ¹	Continuous Insulation per Design ²	Thermal Performance Unit	Required Thermal Performance	U-factor per Design	Net Area ³ ft²			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	605			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	500			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	288			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	175			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	150			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	90			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	175			
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	87			

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ENV-4

CERTIFICATE OF COMPLIANCE

Project Name: Element 7 Cannabis RetailReport Page: 3/23/2023

Project Address: 347 W. MarketSt. Salinas, CA 93101

F. ROOF ASSEMBLY SCHEDULE

This table includes new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to be shown.

07	08	09	10	11	12	13	14	15	16
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design ¹	Continuous Insulation per Design ²	Thermal Performance Unit	Required Thermal Performance	U-factor per Design	Net Area ³ ft²
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	605
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	500
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	288
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	175
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	150
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	90
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	175
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	87

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Project Address: 347 W. MarketSt. Salinas, CA 93101

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Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design ¹	Continuous Insulation per Design ²	Thermal Performance Unit	Required Thermal Performance	U-factor per Design	Net Area ³ ft²
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	250
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	124
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	48
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	54
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	62

Registration Number:

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Documentation Software: EnergyPro

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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

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Project Address: 347 W. MarketSt. Salinas, CA 93101

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07	08	09	10	11	12	13	14	15	16
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design ¹	Continuous Insulation per Design ²	Thermal Performance Unit	Required Thermal Performance	U-factor per Design	Net Area ³ ft²
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	250
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	124
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	48
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	54
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	62

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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

NRCC-ENV-4

CERTIFICATE OF COMPLIANCE

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Project Address: 347 W. MarketSt. Salinas, CA 93101

F. ROOF ASSEMBLY SCHEDULE

This table includes new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to be shown.

07	08	09	10	11	12	13	14	15	16
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design ¹	Continuous Insulation per Design ²	Thermal Performance Unit	Required Thermal Performance	U-factor per Design	Net Area ³ ft²
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	250
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	124
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	48
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	54
Roof	J44 Tables	Wood	38	0	U-factor	0.034	0.034	0.028	62

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CLIENT:

ADDRESS:

347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE DESIGNER AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT CONSENT OF THE DESIGNER.

NOTES:

- ALL DIMENSIONS HEREIN ARE IN IMPERIAL UNITS UNLESS STATED OTHERWISE.
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT DESIGNER, ENGINEER OR SPECIALIST DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR MUST CHECK ALL DIMENSION AT SITE BEFORE COMMENCING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:

Proposed Property Development

Element 7 Cannabis Retail

TITLE:

T24-01

PROJ. NO.

PROJ. ENGR.

SCALE @ 24X36:

NTS

DRAWING NO.

REV.

T 2 4 - 0 1

STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 6 of 9)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Data Storage	Copy Room	0.7	62	43.4	No	No
TOTALS:		2,648		1,765.8		See Tables I, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

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 LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Registration Number:

Generated Date/Time:

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 7 of 9)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOUR ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

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

Form/Title

NRCC-LTH-E - Must be submitted for all buildings

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Compliance ID: EnergyPro-50207-0323-0334

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 8 of 9)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title

Systems/Spaces To Be Field Verified

NRCC-LTH-Q2-A - Must be submitted for occupancy sensors and automatic time switch controls.

Whole Building Time Switch; Retail Zone: Manufacturing; Distribution; Security; Storage; Office; Security; Lobby; Mechanical; Breakrooms; Restroom 01; Restroom 02; Hallway; Vault; Data Storage;

NRCC-LTH-Q3-A - Must be submitted for automatic daylight controls.

Retail Zone Lobby;

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 9 of 9)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamed Nohayil

Documentation Author Signature: Mohamed Nohayil

Company: InnoTech, Inc.

Signature Date: 2023-03-23

Address: 726 Foothrough

City/State: Pleasanton CA 94566

CEA/HERC Certification Identification (if applicable):

Phone:

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 in this Certificate of Compliance is true and correct.

2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).

3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of this XL 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 Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Syed F. Alam

Responsible Designer Signature: Syed Alam

Company: InnoTech Inc.

Date Signed: 2023-03-23

Address: 726 Foothrough

City/State: Pleasanton CA 94566

License: 27087

Phone:

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

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STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 1 of 12)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

A. GENERAL INFORMATION

01 Project Location (city): St. Salinas

04 Total Conditioned Floor Area: 2648

02 Climate Zone: 3

05 Total Unconditioned Floor Area: 0

03 Occupancy Types Within Project: 06 # of Stories (Habitable Above Grade): 1

• Data Center • Office • Retail • Warehouse • All Other Occupancies

B. PROJECT SCOPE

This table includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 140.4(b)(2) and 180.2(b)(2) for alterations.

01	02	03
Air System(s)	Wet System Components	Dry System Components
<input checked="" type="checkbox"/> Heating Air System	<input type="checkbox"/> Water Economizer	<input checked="" type="checkbox"/> Air Economizer
<input checked="" type="checkbox"/> Cooling Air System	<input type="checkbox"/> Pumps	<input type="checkbox"/> Electric Resistance Heat
<input checked="" type="checkbox"/> Mechanical Controls	<input type="checkbox"/> System Piping	<input checked="" type="checkbox"/> Fan Systems
<input checked="" type="checkbox"/> Mechanical Controls (existing to remain, altered or new)	<input type="checkbox"/> Cooling Towers	<input checked="" type="checkbox"/> Ductwork (existing to remain, altered or new)
<input type="checkbox"/> Chillers	<input type="checkbox"/> Ventilation	<input type="checkbox"/> Zonal Systems/Terminal Boxes
<input type="checkbox"/> Boilers	<input type="checkbox"/>	<input type="checkbox"/>

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 2 of 12)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If the table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, or the table indicated as not compliant for guidance.

01	02	03	04	05	06	07	08	09								
System Summary	110.1, 110.2, 140.4, 170.2(c)	Pumps AND Economizers	140.4(c), 140.4(d), 170.2(c)	AND	System Controls	110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation AND Terminal Box Controls	120.1, 160.2, 140.4(f), 170.2(c) & 170.2(c)(4)	AND	Distribution	120.3, 140.4(f), 160.2, 160.3	AND	Cooling Towers	110.2(c)(2)	Compliance Results
(See Table F)	(See Table G)	(See Table H)	(See Table I)	(See Table J)	(See Table K)	(See Table L)	(See Table M)	(See Table N)	(See Table O)	(See Table P)	(See Table Q)	(See Table R)	(See Table S)	(See Table T)	(See Table U)	COMPLIES
Yes	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	COMPLIES

Mandatory Measures Compliance (See Table Q for Details)

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05
System Name	Quantity	System Serving	System Status	Space Type
AHU-01&02	2	Single zone	New/ Addition	Utilizing Recycled Heat

Registration Number:

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STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 3 of 12)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Dry System Equipment Sizing (Includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)(2) and 170.2(c)(4)	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available ¹ 140.4(a) and 170.2(c)(1)	Heating Output ² Per Design (kBtu/h)	Rated (kBtu/h)	Cooling Output ³ Per Design (kBtu/h)	Rated (kBtu/h)	Load Calculations ⁴ Total Heating Load (kBtu/h)	Rated Sensible Cooling Load (kBtu/h)	Design Sensible Cooling Load (kBtu/h)
AHU-01&02	Unitary Heat Pumps	Air-cooled, split (3 phase)	NA: Load Controls	47.45	36	0	65.85	30	138.76	106.7

¹ FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a)(2) and 170.2(c)(1). Healthcare facilities are excepted.
² It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.
³ If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.
⁴ Authority having jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).

G. PUMPS

This section does not apply to this project.

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

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STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 4 of 12)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(d), 170.2(c)(3), and 170.2(c)(4) for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name	AHU-01&02	Quantify	2	Fan System Status	New	System Zoning	all other system s	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	2,400	Site Elevation	69	Economizer	Fixed Temperature
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g.)	Compressor Allowance	Fan Allowance (watt/cfm)	Design Electrical Input Power Method	Motor Nameplate Horsepower	Design Electrical Input Power (kW)	0.27				
SR	Supply	2	Base Allowance for system serving spaces <=6 floors away	1,200		278									
			MERV 13-16 Filter upstream of thermal conditioning equipment	1,200		167									
			Hydronic/DX cooling coil or heat pump coil	1,200		167									
			Economizer Return Damper	1,200		55									
			Fan System Allowance (kW) ¹												

¹ FOOTNOTES: Fans serving spaces with design background noise goals below NC35
² Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

I. EXHAUST AIR HEAT RECOVERY 140.4(a), 170.2(c)(4D)

01	02	03	04	05	06	07	08	09	10	11

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STATE OF CALIFORNIA

Mechanical Systems

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 5 of 12)

Project Name: 347 W. Market

Project Address: 3/23/2023

Date Prepared:

H. EXHAUST AIR HEAT RECOVERY 140.4(a), 170.2(c)(4D)

Fan System Name	Qty	Hours of Operation per Year	Design Supply Airflow Rate	Outdoor Airflow	% Outdoor Air at Full Design Airflow	Exemptions to Exhaust Air Heat Recovery Requirement per 140.4(a) & 170.2(c)(4D)	Exhaust Air Heat Recovery 140.4(a) & 170.2(c)(4D)	Type Of Heat Recovery Rating	Required Recovery Ratio	Energy Recovery Bypass
Fan Energy Index (FEI)										
01		02		03		FEI Exception				
Name or Item Tag		FEI		FEI		FEI				

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (g), 170.2(c)(4D) 170.2(c)(4), or requirements in 141.0(b)(2) 180.2(b)(2) for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats	Shut-Off Controls	Isolation Zone Controls	Demand Response	Supply Air Temp. Reset	Window Interlocks
AHU-01&02	Single zone	<= 25,000 ft²	Setback	Auto-Timer	4 Hour Timer	EMCS	NA: Would increase energy use	Provided

¹ FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.

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Element 7 Cannabis Retail

Report Page: (Page 6 of 12)

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J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1, 120.2(c)(38) 140.4(a) and 140.4(a) for all nonresidential and hotel/motel and 120.1(d)(4)(a), 120.2, 160.3(c)(38), 170.2(b)(4D), 170.2(b)(4D) for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflow may be shown on the plans or the calculations can be presented in a spreadsheet.

01	02	03	04	05	06	07		
01	<input type="checkbox"/>	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.						
02	<input type="checkbox"/>	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.						
03	<input type="checkbox"/>	Check the box if the project is showing natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)(2).						
Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems								
System Name	AHU-01&02	System Design OA CFM Airflow	1862	System Design Transfer Air CFM	0	Air Filtration per 120.1(c) 141.0(b)(2) and 160.2(c)(21) ¹		
08	09	10	11	12	13	14	15	16
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)(3) ² & 160.2(c)(3)	Conditioned Floor Area (ft²)	# of Shower heads/ toilets	# of people ³	Required Min OA CFM	Required Min CFM	Provided per Design CFM	DCV or Sensor Controls per 120.1(d)(3), 120.1(d)(5), and 120.1(c)(19) ⁴ 160.2(c)(5D) 160.2(c)(5E) 160.2(c)(5D)
Retail Zone	Retail sales	605		151.2	0	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Manufacturing	All others	500		75	0	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type

¹ FOOTNOTES: System CFM shall include both mechanical and natural ventilation for the entire system.
² Air filtration requirements apply to the following three system types per 120.1(c)(14): space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
³ Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.
⁴ See Standards Tables 120.1-4 and 120.1-8.
⁵ For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.
⁶ 120.2(c)(3) requires systems serving rooms that are required by 120.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft² or smaller, multipurpose rooms less than 1,000 ft², classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stock aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 120.1(c).

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STATE OF CALIFORNIA

Mechanical Systems

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Element 7 Cannabis Retail

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J. VENTILATION AND INDOOR AIR QUALITY

Distribution	Retail sales	288	72	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Security Storage	All others	175	26.2	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Office	Office space	190	28.5	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Security	Office space	90	13.5	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Lobby	Main Entry Lobby	175	87.5	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Mechanical	All others	87	0	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Breakroom	Break room	250	125	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type

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CERTIFICATE OF COMPLIANCE

Element 7 Cannabis Retail

Report Page: (Page 8 of 12)

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Project Address: 3/23/2023

Date Prepared:

J. VENTILATION AND INDOOR AIR QUALITY

Restroom 01 & 02	Locker room (athletic facility)	124	2	0	140	140	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Hallway	Lobbies	48		7.2	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Vault	Lobbies	54		8.1	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
Data Storage	All others	62		9.3	0	0	DCV NA: Not required per 120.1(d)(3) NA: Not required space type
17 Total System Required Min OA CFM		604	18	Ventilation for this System Complies?		Yes	

¹ FOOTNOTES: System CFM shall include both mechanical and natural ventilation for the entire system.
² Air filtration requirements apply to the following three system types per 120.1(c)(14): space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
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Compliance ID: EnergyPro-50207-0323-0333

Report Generated: 2023-03-23 07:19:33

CLIENT:

ADDRESS:

347 W. Market St. Salinas, CA 93901
APN: 002-041-056-000

CONFIDENTIALITY STATEMENT:

ALL DRAWINGS AND WRITTEN MATERIALS
APPEARING HEREIN CONSTITUTE THE
ORIGINAL AND UNPUBLISHED WORK OF THE
DESIGNER AND THE SAME MAY NOT BE
DUPLICATED, USED OR DISCLOSED WITHOUT
CONSENT OF THE DESIGNER.

NOTES:

1. ALL DIMENSIONS HEREIN ARE IN IMPERIAL UNITS
UNLESS STATED OTHERWISE.
2. THESE DRAWINGS ARE TO BE READ IN
CONJUNCTION WITH ALL RELEVANT DESIGNER,
ENGINEER OR SPECIALIST DRAWINGS AND
SPECIFICATIONS.
3. THE CONTRACTOR MUST CHECK ALL DIMENSION
AT SITE BEFORE COMMENCING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR
PROVIDING ALL NECESSARY TEMPORARY SUPPORT
TO THE BUILDING AND ANY ADJACENT STRUCTURES.

REV. NO.	DESCRIPTION	DATE	BY

PROJECT:

Proposed Property Development

Element 7 Cannabis Retail

TITLE:

T24-03

PROJ. NO.

PROJ. ENGR.

SCALE @ 24X36:

NTS

DRAWING NO.

REV.

T 2 4 - 0 3

Domestic Water Heating System		CALIFORNIA ENERGY COMMISSION	
CERTIFICATE OF COMPLIANCE		NMCC-PUB-18	
Project Name:	Element 7 Canabasis Retail	Report Pages:	Page 4 of 43
Project Address:	347 W. Market	Date Prepared:	1/23/2023


DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamed Nohayyi Mohamed Nohayyi, Inc. Address: 728 Foxborough City/State/Zip: Pleasanton CA 94566	Documentation Author Signature: Mohamed Nohayyi Signature Date: 2023-03-23 C2A NRCC Certification Identification (if applicable): None
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RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 1 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The building design and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design and/or system design features identified on this Certificate of Compliance are consistent with the Information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I affirm that I completed signed copy of this Certificate of Compliance that is made available with the building permit(s) issued to the building owner and to the building owner at all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Syed P. Alam Company: Hemeded Inc. Address: 728 Foxborough City/State/Zip: Pleasanton CA 94566	Responsible Designer Signature: Syed Alam Date Signed: 2023-03-23 License: 27087 None
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Registration Number:	Generated Date/Time:	Documentation Software: Eng'pro
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HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY									
Project Title: Element: 7 Cannabis Retail System Name: AHU-01 802						Date: 3/23/2023 Floor Area: 2,648			
ENGINEERING CHECKS		SYSTEM LOAD		COIL COOLING PEAK			COIL HTG. PEAK		
Number of Systems	2			CFM	Sensible	Latent	CFM	Sensible	
Heating System		Total Room Loads		3,616	66,341	63,802	30	13,799	
Outdoor per System	36,000	Return Vented Lighting			0				
Total Outdoor (btuh)	72,000	Return Air Ducts			3,312			690	
Output (btuh/coil)	27.2	Return Fan						0	
Cooling System		Supply Fan		1,802	13,476	-59,596	1,802	83,700	
Outdoor per System	36,000	Ventilation			1,842			-1,842	
Total Outdoor (btuh)	72,000	Supply Air Ducts			3,312			690	
Total Outdoor (Tons)	6	TOTAL SYSTEM LOAD							
Total Output (btuh/coil)	27.2			88,183	25,257			97,037	
Total Output (watt/Ton)	441.3								
Air System		HVAC EQUIPMENT SELECTION							
CFM per System	1,800	Standard Heil Pump			65,852	9,720		47,449	
Airflow (cfm)	2,800								
Airflow (cfm/coil)	0.98								
Airflow (cfm/Ton)	400.0								
Outside Air (%)	77.5%	Total Adjusted System Output			65,852	9,720		47,449	
Outside Air (cfm/coil)	670	(Adjusted for Peak Design conditions)							
Note values above given at ARI conditions		TIME OF SYSTEM PEAK		Aug 3 PM		Jan 1 AM			
HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)									
COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)									

CLIENT:				
ADDRESS: 347 W. Market St. Salinas, CA 93901 APN: 002-041-056-000				
CONFIDENTIALITY STATEMENT: ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE DESIGNER AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT CONSENT OF THE DESIGNER.				
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REV. NO.	DESCRIPTION	DATE	BY	
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TITLE: T24-04				
PROJ. NO.	PROJ. ENGR.	SCALE @ 24X36: NTS		
DRAWING NO. T 2 4 - 0 4		REV.		