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## MECHANICAL / PLUMBING PLAN

1/4"=1'-0"

## ELECTRICAL PLAN

1/4"=1'-0"

MECHANICAL / PLUMBING KEYNOTES		ELECTRICAL KEYNOTES		MECHANICAL / PLUMBING LEGEND		ELECTRICAL LEGEND																								
<div><div>MP1</div><div>INDOOR UNIT MINI SPLIT SYSTEM.</div></div> <div><div>MP2</div><div>WATER CONSERVING FIXTURES: NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GAL. OF WATER PER FLUSH. LAVATOIRES LIMITED TO 1.2 GPM. KITCHEN FAUCETS NOT TO EXCEED 1.8 GPM AT 60 PSI THEY CAN INCREASE THE FLOW MOMENTARILY BUT CANT EXCEED 2.2GALLONS PER MIN. AT 60 PSI &amp; MUST DEFAULT TO A MAX. FLOW RATE OF 1.8GALLONS PER MIN AT 60 PSI. &amp; SHOWERS NOT EXCEED 1.8 GPM AT 80 PSI AND ALL SHALL BE CERTIFIED TO MEET THE PERFORMANCE CRITERIA OF THE EPA WATERSENSE SPECIFICATIONS FOR SHOWERHEADS. CPC SECTIONS 407, 408, 411, 412 AND SECTION 38011-1 CAL GREEN CODE AND CIVIL CODE 1101.3(c).</div></div> <div><div>MP3</div><div>EXHAUST HOOD ABOVE/ TO BE SMOOTH METALLIC INTERIOR SURFACE (CMC 504.3)</div></div> <div><div>MP4</div><div>NEW WATER HEATER. - TO HAVE CONDENSATE DRAIN INSTALLED NO HIGHER THAN 2' ABOVE THE BASE OF THE WATER HEATER THAT ALSO ALLOWS GRAVITY DRAINAGE</div></div> <div><div>MP5</div><div>CONTROL VALVES IN SHOWERS, BATHTUBS, &amp; BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIX VALVES.</div></div> <div><div>MP6</div><div>MINIMUM OF 3 FT CLEARANCE TO ANY OPENING INTO BUILDING FOR EXHAUST FAN TERMINATIONS</div></div> <div><div>MP7</div><div>CLEARANCE FOR WATER CLOSET TO BE A MIN. OF 24" IN FRONT, AND 15" FROM ITS CENTER TO ANY SIDE WALL OR OBSTRUCTION. (CPC 402.5)</div></div> <div><div>MP8</div><div>THE 1/2" SIZE HOT WATER PIPE TO THE KITCHEN SINK AND THE COLD WATER PIPE WITHIN 5' OF WATER HEATER BOTH REQUIRE 1" INSULATION</div></div> <div><div>MP9</div><div>DRYER EXHAUST OUTLET FROM DRYER TO EXTERIOR MAX LENGTH 14' WITH MINIMUM OF TWO 90° ELBOWS EXHAUST VENT MUST TERMINATE A MIN. OF 3' FROM ANY OPENING. MIN. TYPE 1 CLOTHES DRYER EXHAUST DUCTS SHALL BE OF RIGID METAL &amp; SHALL HAVE SMOOTH INTERIOR SURFACES. THE DIAMETER SHALL BE NOT LESS THAN 4 INCHES NOMINAL (100 MM), &amp; THE THICKNESS SHALL BE NOT LESS THAN 0.016 OF AN INCH (0.406 MM). EXHAUST DUCTS &amp; DRYER VENTS SHALL BE EQUIPPED WITH BACK DRAFT DAMPERS</div></div> <div><div>MP10</div><div>NEW WATER HEATER WITH T&amp;P RELIEF VALVE AND DISCHARGE PIPE AT EXTERIOR. PROVIDE COMBUSTION AIR AND CLEARANCES PER MANUFACTURER REQUIREMENTS</div></div> <div><div>MP11</div><div>NEW WATER HEATER SHALL HAVE ISOLATION VALVES ON BOTH THE COLD AND THE HOT WATER PIPING LEAVING THE WATER HEATER COMPLETE WITH HOSE BIBS OR OTHER FITTINGS ON EACH VALVES FOR FLUSHING THE WATER HEATER WHEN THE VALVES ARE CLOSED</div></div> <div><div>MP12</div><div>ALL DOMESTIC HOT WATER PIPING TO HAVE THE FOLLOWING MINIMUM INSULATION INSTALLED: 3" PIPE (6" INSULATION); 2" PIPE (1" INSULATION); 1" TO 1-1/2" PIPE (1-1/2" INSULATION)</div></div> <div><div>MP13</div><div>OUTDOOR CONDENSING UNIT TO BE PIPED TO INDOOR HVAC UNIT</div></div> <div><div>MP14</div><div>RANGE HOOD DUCTED TO EXTERIOR. FAN IS TO BE EITHER INTERMITTENT 100CFM OR CONTINUOUS 5 AHP CHANGES PER HOUR AND MUST HAVE A SONE RATING OF 1 FOR CONTINUOUS FAN AND 3 FOR INTERMITTENT FAN.</div></div> <div><div>MP15</div><div>WATER HEATER TO BE DUCTED AND EXHAUST TO ROOF PER MANUFACTURES SPECIFICATIONS</div></div> <div><div>E1</div><div>DEDICATED 50 AMP/ 240V POWER FOR ELECTRIC COOKTOP AND 30AMP/240V FOR ELECTRIC DRYER TO BE WITHIN 3FT OF APPLIANCES.</div></div> <div><div>E2</div><div>OUTLET FOR NEW WATER HEATER WITHIN 3' OF WATER HEATER.</div></div> <div><div>E3</div><div>ELECTRICAL - SUB PANEL LOCATION</div></div> <div><div>E4</div><div>OUTLET AT COUNTER HEIGHT - SHALL COMPLY WITH CEC ARTICLE 210.52(C); IN KITCHENS A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH COUNTER SPACE 12" OR WIDER. SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL IS MORE THAN 24" ISLAND IN PENINSULAR COUNTERTOPS 12" X 24" LONG (OR GREATER) SHALL HAVE AT LEAST ONCE RECEPTACLE</div></div> <div><div>E5</div><div>OUTDOOR LIGHTING FIXTURES ARE REQUIRED TO BE HIGH EFFICACY OR CONTROLLED BY A COMBINATION PHOTOCONTROL / MOTION SENSOR.</div></div> <div><div>E6</div><div>OUTLET DEDICATED FOR INDOOR HVAC UNIT</div></div> <div><div>E7</div><div>WEATHER RESISTANT TYPE RECEPTACLES GFCI PROTECTED</div></div> <div><div>E8</div><div>OVER-CURRENT FEEDER TO EXTEND TO EXISTING PANEL- ALUMINUM CONDUCTOR BURIED UNDER GROUND WITH AWG ALLOWABLE VOLTAGE DROP PER CEC 250.4</div></div> <div><div>E9</div><div>SEPARATE GROUND ELECTRODE SYSTEM PER CEC 250.4</div></div> <div><div>E10</div><div>OUTDOOR CONDENSING UNIT RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF THE HEATING AND COOLING EQUIPMENT AND SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF THE EQUIPMENT. THIS RECEPTACLE SHALL BE GFCI/WP PROTECTED.</div></div> <div><div>E11</div><div>A DISCONNECTING MEANS CAPABLE OF DISCONNECTING AIR-CONDITIONING AND REFRIGERATING EQUIPMENT, INCLUDING MOTOR-COMPRESSORS AND CONTROLLERS FROM THE CIRCUIT CONDUCTOR IS REQUIRED WITHIN SIGHT FROM THE EQUIPMENT LOCATION PER CEC SECTION 440.11</div></div> <div><div>E12</div><div>PER CEC 2022 150.0(N).1.A: THE DESIGNATED SPACE AND WATER HEATER IS TO COMPLY WITH ELECTRICAL NOTES 158.16 ON SHEET 00.2. A DEDICATED 125 VOLT, 20AMP ELECTRICAL RECEPTACLE THAT IS CONNECTED TO THE ELECTRICAL PANEL WITH A 120/240 VOLT 3 CONDUCTOR, 10AWG COPPER BRANCH CIRCUIT, WITHIN 3 FT FROM THE WATER HEATER.</div></div> <div><div>E13</div><div>CONTRACTOR TO VERIFY MAIN PANEL</div></div> <div><div>E14</div><div>MAIN PANELBOARD LOCATION SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS. ALL SINGLE-FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING ENERGY STORAGE SYSTEMS (ESS) READY REQUIREMENTS: ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CEC. SEE SHEET 00.2, ELECTRIC READY 150.0(n) FOR REQUIREMENTS. SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3FT OF THE MAIN PANELBOARD. RACERWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD &amp; THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.</div></div> <tr><td colspan="2"><div><div></div><div>EXHAUST FAN: MINIMUM 50 CFM TO BE DUCTED TO THE EXTERIOR AND SHALL PROVIDE FIVE AIR CHANGES PER HOUR. SECTION 1003.3. CFM AND NOISE RATING MAXIMUM. 3 SONE FOR INTERMITTENT USE. 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project  
Santa Ana  
ADU

address

revisions



description

## Electrical / Mechanical Plan

date  
MAY 2023

project no.  
2022\_SANTA\_ANA\_ADU

drawn by  
DESIGN PATH STUDIO

sheet no.

A2.1