PROJECT DESCRIPTION

STORE 57

ICO CANYON RD. STEVENSON RANCH, CA 91381

SHEET INDEX

ELECTRICAL COVER SHEET, GENERAL NOTES & SYMBOL LEGEND E002 ROOFTOP POWER LAYOUT

SCOPE OF WORK

1. REMOVE AND REPLACE (5) ROOF TOP UNITS.

APPLICABLE CODE:

CALIFORNIA PLUMBING CODE 2016 CALIFORNIA MECHANICAL CODE 2016. CALIFORNIA BUILDING CODE 2016. CALIFORNIA ENERGY CODE 2016. TITLE 19, CCR, PUBLIC SAFETY STATE FIRE MARSHAL REGULATIONS.

TITLE 24 MANDATORY LIGHTING MEASURES

- APPROVED FOR INSTALLATION IN ACCORDANCE WITH CALIFORNIA ENERGY
- 2. BI-LEVEL SWITCHING TO BE PROVIDED AND INSTALLED FOR ALL OPEN AREAS AND FOR INDIVIDUAL ROOMS GREATER THAN 100 SQUARE FEET
- 32 WATT LAMPS, ELECTRONIC TWO-LAMP OR THREE-LAMP BALLASTS.
- ALL AUTOMATIC CONTROL DEVICES SPECIFIED TO BE CERTIFIED AND APPROVED FOR INSTALLATION IN ACCORDANCE WITH CALIFORNIA ENERGY
- 5. EACH ROOM AND AREA IN THIS TENANT SPACE IS EQUIPPED WITH A
- 6 ALL ROOMS AND AREAS GREATER THAN 100 SQUARE FEET AND MORE THAN
- WITH BI-LEVEL SWITCHING FOR UNIFORM REDUCTION OF LIGHTING.
- 7 ROOMS WITH WINDOWS THAT ARE GREATER THAN 250 SQUARE FEET, AND IAT ALLOW FOR THE EFFECTIVE USE OF DAYLIGHT IN THE AREA SHALL HAVE 50% OF THE LAMPS IN EACH DAYLIT AREA CONTROLLED BY A SEPARATE SWITCH.
- 8. ANY BUILDING SPACE GREATER THAN 5,000 SQUARE FEET TO HAVE A CERTIFIED AUTOMATIC SHUT-OFF CONTROL. IN ADDITION TO THE SHUT-OFF CONTROL, EACH SPACE TO HAVE AN OVERRIDE FOR THE AUTOMATIC CONTROLS CONSISTING OF A MANUAL TIMER TO ALLOW THE LIGHTING TO REMAIN ON FOR NO MORE THAN TWO HOURS, ALSO, MANUAL OVERRIDE TO

CONTROL LIGHTS IN AN AREA NOT EXCEEDING 5,000 SQUARE FEET.

ELECTRICAL NOTES

- THIS DESIGN MAY BE USED FOR SECURING PERMITS. BID. PLANNING. THE COMPANY'S REVIEW THESE APPROVALS A REQUIREMENT FOR SERVICES OR THE COMPLETION OF THIS WORK
- 2. THE ELECTRICAL CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTION AND TAXES APPLICABLE TO THE ELECTRICAL WORK. PROVIDE ALL INSTRUMENTS AND PERFORM ALL TESTS REQUIRED BY THE AHJ, CORRECT ALL FAILURES AND CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE TESTS.
- 3. THIS DESIGN IS NOT A COMPLETE SET OF CONSTRUCTION DRAWING OR SHOP DRAWINGS. THIS DESIGN REPRESENTS DIAGRAMMATIC REPRESENTATION OF INTENDENT SCOPE OF WORK.
- THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR GENERAL USE ON ALL PROJECTS. THEREFORE, NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR ROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY
- 5. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE NATIONAL ELECTRICAL CODE. IECC. LIFE SAFETY CODE. LOCAL BUILDING CODE. OSHA REGULATIONS. OCAL. STATE DERAL AND AUTHORITY HAVING JURISDICTION CODES APPLICABLE AT THE TIME OF THE
- 6. GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA 1 STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION (ANSI)
- 7 ALL MATERIALS PROVIDED BY THE CONTRACTOR SHALL BE NEW AND FREE OF DEFECTS ORGANIZATION THAT IS ACCEPTABLE TO THE AHJ.
- 8. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SCHEDULING DELIVERY, RECEIVING UNLOADING, STORING, SETTING IN PLACE, AND PROTECTING FROM DAMAGE, VANDALISM, THEFT OR WEATHER DURING CONSTRUCTION FOR ALL NEW EQUIPMENT PROVIDED BY THE ELECTRICAL CONTRACTOR OR PROVIDED BY OTHER PARTIES TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION BY THE ELECTRICAL CONTRACTOR.
- 9. THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS ARE INTENDED TO DESCRIBE AND ILLUSTRATE SYSTEMS WHICH WILL NOT INTERFERE WITH THE STRUCTURE OF THE BUILDING AND WHICH WILL FIT INTO THE AVAILABLE SPACES. THE CONTRACTOR IS RESPONSIBLE FOR CAREFULLY LAYING OUT ALL WORK TO CONFORM TO NATIONAL ELECTRICAL CODE CLEARANCES, ARCHITECTURAL, STRUCTURAL, MECHANICAL AND SITE CONDITIONS, TO AVOID OBSTRUCTIONS AND TO ALLOW THE PROPER INSTALLATION OF EACH ITEM.
- 10. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE WITH DRAWINGS OF OTHER TRADES TO FIT THE ACTUAL SPACE CONDITIONS, HEADROOM AND SPACE CONDITION TO BE MAINTAINED.
- 11. THE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC ONLY AND DO NOT NECESSARILY SHOW THE EXACT LOCATION AND DETAILS OF THE WORK TO BE INSTALLED
- 12. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF RECEPTACLES, AND LIGHTING FIXTURES, ETC.
- 13. UPON THE COMPLETION OF THE WORK, THE ENTIRE ELECTRICAL SYSTEM SHALL BE TESTED AND SHALL BE SHOWN TO BE IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE
- 14. PREPARE AND FURNISH TO OWNER 'AS-BUILT' PLANS FOR ALL WORK INSTALLED. 15. ELECTRICAL CONTRACTOR SHALL FURNISH RECORD SET OF DRAWINGS WITH ANY DEVIATIONS

MARKED IN RED INK.

- 16. TEST AND INSPECT ALL WIRING AND EQUIPMENT INSTALLED UNDER THIS SECTION OF
- SPECIFICATIONS. ALL WIRING MUST BE FREE OF SHORTS AND BROKEN WIRE. LEAVE ALL MATERIALS AND APPARATUS IN PROPER AND SATISFACTORY WORKING CONDITIONS.
- 17. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE CORRECT PHASE SEQUENCE OF ALL THREE-PHASE FEEDERS AND BRANCH CIRCUITS. VERIFY PROPER ROTATION OF ALL MOTORS.
- 18. ELECTRICAL CONTRACTOR SHALL VERIFY PHASE LOAD BALANCING ON POWER PANELS UPON COMPLETION OF THE ELECTRICAL INSTALLATION.
- 19. PROVIDE IDENTIFICATION ON ALL PANELBOARDS, SWITCHES, STARTERS, DIMMERS, SWITCHES IN DISTRIBUTION PANELBOARDS AND SWITCHBOARDS. 20. CONDUIT RUNS WHEN SHOWN ARE DIAGRAMMATICAL. FINAL LOCATION AND ROUTING SHALL BE ESTABLISHED BY THE CONTRACTOR BASED ON THE INSTALLATION CONDITIONS AND SHALL BE
- 21. CONDUIT RUNS SHALL BE PARALLEL WITH OR AT RIGHT ANGELS TO WALLS AND CEILINGS. CONDUIT SHALL BE SUPPORTED BY APPROVED MEANS. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A DRAG WIRE.

VERIFIED IN THE FIELD. ALL CONDUIT TYPES AND INSTALLATION REQUIREMENTS SHALL BE IN

- 22. ALL SUSPENDED CONDUITS SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE BY MEANS OF APPROVED CONDUIT FASTENERS, HANGERS, STRAPS, SUPPORTS, CLAMPS, ETC.,
- FIRMLY ANCHORED IN PLACE AND SPACED AT INTERVALS NOT TO EXCEED 10'-0". 23. PULLBOXES , JUNCTION BOXES, CONDUIT BODIES, AND EXPANSION JOINTS SHALL BE
- 24. PROVIDE CONDUIT EXPANSION FITTINGS WITH BONDING JUMPERS FOR ALL CONDUITS PASSING
- 25. PROVIDE SLEEVES FOR PENETRATIONS THROUGH BLOCK OR CONCRETE WALLS AND FLOORS. 26. THE USE OF FLEXIBLE CONDUIT FROM LIGHTING FIXTURES TO JUNCTION BOX IS PERMITTED ONLY WHEN A SEPARATE GROUND WIRE IS INSTALLED WITH THE CONDUCTORS INSIDE LEXIBLE CONDUIT. THE GROUND WIRE MUST BOND THE FIXTURE HOUSING TO THE JUNCTION
- 27. FLEXIBLE CONDUIT INSTALLED OUT OF DOORS, IN ANY MECHANICAL EQUIPMENT ROOMS, OR IN NORMALLY WET AREAS SHALL BE LIQUID TIGHT FLEX WITH SUITABLE FITTINGS.

BOX. MAXIMUM LENGTH SHALL BE 6'-0".

ABBREVIATIONS

AFF

AFCI

ATS

CCTV

CLG

CNTL

DISC

ASYM

AMPERE

ABOVE FINISHED FLOOR

ASYMMETRICAL

CIRCUIT BREAKER

BREAKER

CONDUIT

CIRCUIT

CEILING

CONTROL

COPPER

DEMOLISH

DIAMETER

DISCONNECT

DOWN

CENTER LINE

ABOVE FINISHED GRADE

ARC FLASH INTERRUPTER

AMERICAN WIRE GAUGE

CLOSED CIRCUIT TELEVISION

CONTROL POWER TRANSFORMER

CURRENT TRANSFORMER

DISTRIBUTION PANEL BOARD

ARC FLASH CIRCUIT INTERRUPTER

AUTOMATIC TRANSFER SWITCH

- 28. PROVIDE CONDUIT, WIRING, CIRCUITING AND REQUIRED CONNECTIONS TO ALL DEVICES. FIXTURES AND EQUIPMENT. CONNECT TO CIRCUITS AS INDICATED. CIRCUIT NUMBERS ARE FOR INFORMATION PURPOSES ONLY. ACTUAL CIRCUIT NUMBERS SHALL BE DETERMINED IN THE FIELD AND REFLECTED IN THE PANEL SCHEDULE DIRECTORY AND ON THE AS-BUILT
- 29. CONTRACTOR SHALL VERIFY AND COORDINATE ALL MOUNTING HEIGHTS OF ALL DEVICES MOUNTED IN CASEWORK OR IN ABOVE COUNTERS WITH EXISTING EQUIPMENT.
- 30. UNLESS SPECIFICALLY DIRECTED OTHERWISE, FURNISH AND INSTALL EACH AND EVERY ITEM CONTAINED IN AND ASSOCIATED WITH, THE WORK INVOLVED AS SHOWN ON THE DRAWINGS
 AND/OR DESCRIBED IN THE ACCOMPANYING SPECIFICATIONS, TOGETHER WITH ALL APPURTENANCES, COMPONENTS AND INCIDENTALS NECESSARY TO COMPLETE THE WOLK. CONTRACTOR SHALL PROVIDE CONDUIT, WIRING AND CABLING TO ALL DEVICES, FIXT ETC. FOR A COMPLETE WORKING SYSTEM BASED ON THE CIRCUITS NOTED.
- 31. PROVIDE INDEPENDENT SUPPORT FOR DISCONNECT SWITCHES, CONTROL STATIC IS, I
- PANELS, ETC. WHERE NO WALLS OR OTHER STRUCTURAL SURFACE EXISTS 32. EQUIPMENT SIZED AND LOCATIONS ARE APPROXIMATE. ACTUAL DIMENSIONS TO
- 33 PROVIDE BRANCH CIRCUIT WIRING TO ALL ITEMS REQUIRING ELECTRICAL CONNECTIONS VHERE BRANCH CIRCUIT WIRING IS NOT SHOWN, CONNECT ITEMS TO CIRCUITS INDICATED. THE CONTRACTOR SHALL DETERMINE EXACT ROUTING OF CONDUITS AND WIRING. UNLESS INDICATED OTHERWISE, ALL BRANCH CIRCUITS SHALL BE MINIMUM #12 THHN AWG COPPER.
- 34. PROVIDE JUNCTION BOX FOR ANY DEVICE WITH PIG TAIL SUCH AS SOLENOID VALVES, LIMIT SWITCHES, SMOKE DETECTORS AND ETC. FOR PROPER ELECTRICAL CONNECTION. PROVIDE ALL HARDWARE FOR MOUNTING OF JUNCTION BOX.
- 35. ALL FIRE ALARM SYSTEMS RACEWAY, SWITCHES, AND JUNCTION BOXES SHALL BE PAINTED
- 36. TIGHTEN SCREWS AND BOLTS FOR CONNECTORS AND TERMINALS ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE - TIGHTENING VALUES.
- 37. EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL AND PLUMBING DRAWINGS. COORDINATE WITH MECHANICAL AND PLUMBING CONTRACTORS.

DWG DRAWING

EQUIP EQUIPMENT

FA FIRE ALARM

FEEDER

FIXTURE

FLOOR

GROUND

GENERATOR

HORSE POWER

INPUT / OUTPUT

JUNCTION BOX

KILOVOLT

EXIST (e) EXISTING

FDR

FIXT

G.C.

GEN

GFCI

HP

ELEVATION

ELECTRICAL

ELECTRICAL CONTRACTOR

FURNISHED BY OTHER

GENERAL CONTRACTOR

GROUND FAULT CIRCUIT INTERRUPTER

GROUND FAULT INTERRUPTER

HIGH INTENSITY DISCHARGE

HAND-OFF-AUTOMATIC

INTERRUPTING CAPACITY

38. WHEREVER THE INSTALLATION OF ELECTRICAL EQUIPMENT AS SHOWN ON THE DRAWINGS IS CONTRACTOR SHALL INSTALL THE EQUIPMENT AT NEW LOCATIONS AS DIRECTED BY THE

- 39. DESIGN IS BASED ON ALL CONDUCTORS TO BE THHN COPPER AND NO MORE THAN 4 CURRENT RRYING CONDUCTORS IN THE SAME RACEWAY OR CONDUIT, UNLESS OTHERWISE NOTED
- HE LOAD MUST BE REMOVED FROM THE JUNCTION BOX OR THE CIRCUIT BREAKER. DO NOT LEAVE UNUSED CONDUCTORS IN THE FIELD WITH ENDS TAPED WITH TAPE OR WIRE NUTS
- 41. SPARE WIRES INSTALLED SHALL BE NEATLY COILED. BOUND AND PLACED IN SPACE AVAILABLE.
- 42. WHERE EXISTING CIRCUIT TO REMAIN ARE INTERRUPTED DUE TO NEW CONSTRUCTION, ONDUIT AND WIRE SHALL BE EXTENDED RE-ENERGIZED.
 - 43. PROVIDE DISCONNECT SWITCHES FOR ELECTRICAL HEATER, HVAC EQUIPMENT AND EXHAUST FANS WITHIN EYE SIGHT OF THE EQUIPMENT 44. PROVIDE SERVICE RECEPTACLE WITHIN 25 FEET OF EACH HVAC EQUIPMENT.
 - 45. ELECTRICAL CONTRACTOR TO VERIFY ACTUAL INSTALLED EQUIPMENT ELECTRICAL NAME PLATE DATA BEFORE ENERGIZING THE CIRCUIT. CONFIRM ELECTRICAL DESIGN VALUES AND ACTUAL EQUIPMENT BEING INSTALLED ARE IN COMPLIANCE WITH ELECTRICAL CODE AND MANUFACTURER INSTALLATION REQUIREMENTS 46. DISCONNECT SWITCHES SHALL BE HEAVY-DUTY, QUICK-MADE, QUICK-BREAK TYPE, NEMA 1
 - NCLOSURE FOR INDOOR LOCATIONS (NEMA 3R FOR OUTDOOR LOCATIONS). SWITCHES SHALL E AS MANUFACTURED BY SQUARE 'D', GENERAL ELECTRIC, OR SIEMENS (I.T.E.). PROVIDE FUSES AS MANUFACTURED BY BUSSMAN, GOULD-SHAWMUT, OR LITTLE-FUSE. ALL CONDUCTOR TERMINALS TO BE U.L. LISTED FOR A MAXIMUM OF 75°C. SWITCHES USED AS SERVICE
 - 47. PANEL BOARDS SHALL BE MANUFACTURED BY SQUARE-D. EATON, GENERAL ELECTRIC, OR SIMILAR, MEETING U.L. STANDARDS 50 AND 67, WITH U.L. LABEL. PANELS USED AS SERVICE ENTRANCE EQUIPMENT TO BE U.L. LISTED AS "SER" RATED EQUIPMENT.
 - 48. ALL SWITCHBOARDS AND PANELBOARDS SHALL BE MARKED WITH IDENTIFYING NAMEPLATES D INDICATE THE DESIGNATIONS USED ON THESE DRAWINGS. PROVIDE NEW PANELBOARD
 - SCHEDULES, CORRECTLY FILLED OUT FOR EVERY PANELBOARD. 49. ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS TO
 - 50. BREAKERS: THERMAL, MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, PLUG-IN TYPE FOR LOAD CENTERS AND BOLT IN TYPE FOR PANEL BOARDS AND SINGLE UNIT CONSTRUCTION. TWO POLE BREAKERS SHALL BE SINGLE UNIT COMMON TRIP TYPE. BREAKERS USED AS SWITCHES FOR 120V LIGHTING CIRCUITS SHALL BE APPROVED FOR THAT USE AND MARKED "SWD". ALL BREAKERS FOR HVAC AND REFRIGERATION EQUIPMENT SHALL BE "HACR" RATED BREAKERS
 - 51 GROUNDING SYSTEM: PERMANENTLY AND EFFECTIVELY GROUND ALL METALLIC CONDUIT SUPPORTS, CABINETS, PANEL BOARDS AND SYSTEM NEUTRAL CONDUCTORS, MAINTAIN CONTINUITY OF EQUIPMENT GROUND THROUGHOUT THE SYSTEM. GROUND CLAMPS SHALL BE APPROVED TYPE, SPECIFICALLY DESIGNED FOR GROUNDING, WHERE GROUNDING CONDUCTOR IS ENCLOSED IN CONDUIT, GROUND CLAMP SHALL BE OF A TYPE WHICH SROUNDS BOTH CONDUCTOR AND CONDUIT. ALL CIRCUITS IN FLEXIBLE METAL OR PLASTIC CONDUIT SHALL INCLUDE A GROUND WIRE SIZED AND INSTALLED IN ACCORDANCE WITH
 - 52. PROVIDE AND INSULATED GREEN GROUNDING WIRE IN THE SAME CONDUIT AS THE BRANCH CIRCUIT OR FEEDER WIRING AND FOR ALL (3) PHASES AND/OR SINGLE PHASE, BRANCH CIRCUITS AND FOR ALL FEEDERS, SHOWN OR NOT SHOWN.
 - 53. ALL WORK SHALL BE PERMANENTLY AND EFFECTUALLY GROUNDED WHETHER OR NOT SUCH NNECTIONS ARE SPECIFICALLY SHOWN OR SPECIFIED. GROUND RESISTANCE AT ANY POINT SHALL NOT EXCEED 25 OHMS.
 - 54. ALL CONDUITS SHALL BE EMT UNLESS OTHERWISE NOTED.
 - 55. CONDUIT SHALL BE SIZED TO COMPLY WITH NEC FOR NUMBER AND SIZE OF CO INSTALLED PER NEC. PROVIDE SCHEDULE 40 PVC PLASTIC OR RIGID STEEL CO GRADE, MINIMUM 3/4". PROVIDE ELECTRICAL METAL TUBING (EMT) MEETING ES FLEXIBLE METAL CONDUIT (IN LENGTHS 6' OR LESS) FOR INTERIOR LOCA CONNECTORS AND COUPLING SHALL BE SET-SCREW TYPE. "MC" & "AC" T TALLED IN ACCORDANCE WITH N.E.C. AND CAN NOT BE SUPF SUPPORT WIRES.
 - 56. ELECTRICAL CONTRACTOR SHALL INSTALL SIZE OF CONDUIT §
 - 57. ALL CONDUIT AND RACEWAY SYSTEMS TO BE INSTALLED WILLSEN, RATE GROUNI CONDUCTOR. CONDUIT SYSTEM IS NOT TO BE USED AS TO SEE GROUNDING MEANS
 - 58. CONDUCTORS: INSULATED SOFT ANNEALED 98% PURE TOPPER WITH COLOR CODING, B AND S GAGE, #10 AND SMALLER TO BE SOLID, #8 AND L (AC. R). BE STRANDED, MINIMUM #12 UNLESS OTHERWISE INDICATED. CONDUCTORS MUST BE 15T LLED IN ACCORDANCE WITH NEC AND CANNOT BE SUPPORTED FROM CEILING SUT 15 ... (ES. THHN MAY NOT BE USED UNDERGROUND, AT SERVICE ENTRANCE, (175) FE, OR IN WET LOCATIONS. ALL INSULATION TO BE BATED FOR 200 V AND TYPES AS ECO.
 - BE RATED FOR 600 V AND TYPES A #10 AND #12: THWN OR THHN THWN OR THHN SE-RHW OR USE-RHW #8 TO 4/0: SERVICE ENTRA OVER #4/0 ORDINA THHN OR XHHN
 - IT A RAC WAY SYSTEMS TO BE INSTALLED WITH SEPARATE GROUND OF CO. TO A SYSTEM IS NOT TO BE USED AS THE SOLE GROUNDING MEANS.
 - CE COLOR-CODED AS FOLLOWS 8 VOLT SYSTEM 277/480 SYSTEM PHASE A: BROWN PHASE B: ORANGE

PHASE B OR L2: RED PHASE C OR L3: BLUE

KVA

LTG

MAX

MCC

MCS

MDP

MIN

MSG

NTS

PNL

P

KILOVOLT AMPERE

KILOWATT HOUR

LIGHTING PANE

LIGHTING

MAXIMUM

MINIMUM

LOCAL CONTROL PAN

LOAD INTERRUPTER SWITCH

MOTOR CONTROL CENTER

MAIN DISTRIBUTION PANEL

MANUAL TRANSFER SWITCH

NATIONAL ELECTRIC CODE

MOLDED CASE SWITCH

MAIN SWITCHBOAR

MAIN SWITCHGEAR

NON-AUTOMATIC

NORMALLY CLOSED

NORMALLY OPEN

NOT TO SCALE

POLE

PHASE

PANEL

GROUND: GREEN GROUND: WIRE CONNECTORS SHALL BE EQUAL TO "SCOTCH LOCK" FOR #8 AWG WIRE AND SMALLER AND EQUAL TO T & B "LOCK TIGHT" FOR #6 AWG AND LARGER.

PHASE C: YELLOW

POTENTIAL TRANSFORMER

POWER PANEL

SHIELDED CABLE

SURGE SUPRESSION

POWER

REVISION

SPARE

SWBD SWITCHBOARD

SWGR SWITCHGEAR

SYM SYMMETRICAL

TELEPHONE

UNDERGROUND

VOLT AMPERE

WATTS

WHM WATT HOUR METER

WIREWAY

XFMR TRANSFORMER

U.O.N. UNLESS OTHERWISE NOTED

VOLT OR VOLTAGE

WEATHERPROOF

VARIABLE FREQUENCY DRIVE

TYPICAL

RECEP RECEPTACLE

PWR

REV

WP

WW

- 62. LIGHT FIXTURES & LAMPS ARE FURNISHED BY CONTRACTOR EXCEPT AS NOTED ON THE LIGHT FIXTURE SCHEDULE. FIXTURE INSTALLATION SHALL BE BY THE ELECTRICAL CONTRACTOR
- 63. EMERGENCY LIGHTING SHALL HAVE A MINIMUM OF 90 MIN. BATTERY BACK-UP, OR AS REQUIRED BY LOCAL CODE AUTHORITY. PROVIDE LOCK-ON CIRCUIT BREAKERS FOR CIRCUITS SERVING EXIT SIGN FIXTURES AND EMERGENCY BATTERY PACK FIXTURES.
- 64. ALL EMERGENCY LIGHTS SHALL BE CONNECTED AHEAD OF ANY LOCAL SWITCH.
- 65. ALL EXIT SIGNS SHOWN ARE PER ARCHITECTURAL LAYOUT AND SHALL BE APPROVED BY FIRE 66. LAYOUT BRANCH CIRCUIT WIRING AND ARRANGEMENT OF HOME RUNS FOR MAXIMUM
- DNOMY AND EFFICIENCY. INCREASE WIRE SIZE IF 100 FEET OF LENGTH IS EXCEEDED 67. CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILINGS OR IN WALL OR FLOOR

NSTRUCTION WHERE POSSIBLE. INSTALL CONDUITS PARALLEL TO BUILDING LINES, AND TO

CLEAR ALL OPENING, DEPRESSIONS, PIPES, DUCTS, STRUCTURE, ETC. 68. INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90 DEGREE BENDS, SECURELY FASTEN IN PLACE WITH STAMPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. DO NOT SUPPORT CONDUIT FROM SUSPENDED CEILING GRID OR SUSPENSION WIRES. REAM CONDUIT ENDS BEFORE INSTALLATION AND THOROUGHLY CLEAN

ERMINALS ON SWITCHES AND OUTLET SHALL NOT BE USED TO "FEED THRU" TO THE NEXT

- 69. PROVIDE SINGLE GANG PLASTER RING AND A 1/8" DIAMETER NYLON PULL ROPE TO ACCESSIBLE CEILING SPACE FROM ALL NEW TELEPHONE AND/OR DATA OUTLETS.
- 70. FOR ALL WIRING DEVICES, VERIFY FINISH COLOR WITH ARCHITECT.

PANEL					
#33 225A MCB 3P - 4W ELEC	ELECTRICAL PANEL LETTERS AND NUMBERS INDICATE PANELBOARD IDENTIFICATION TAG SEE PANEL SCHEDULE FOR DETAILS.				
P1-5,7 P1-5,7,9	HOMERUN CIRCUITS TO PANELBOARD. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUIT HOMERUNS. 1 PH 120V				
P-1000 2 SETS 3/4" C 3 #12 1 #12 G	FEEDER TAG WITH CONDUIT AND WIRE SIZE AND DATA				
	INDICATES NEW OR EXISTING EQUIPMENT/CONDUIT				
	INDICATES CONCEALED NEW OR EXISTING EQUIPMENT/CONDUIT				
+++++++	INDICATES EXISTING EQUIPMENT/CONDUIT TO BE DEMOLISHED AND/OR REMOVED				
	BUSS BAR				
·······	FLEXIBLE CONNECTION				
o	CONDUIT TURNING UP				
	CONDUIT TURNING DOWN				
	CAPPED CONDUIT				
	CABLE TRAY (LADDER STYLE) NUMBER DENOTES WIDTH IN INCHES				
	BUS DUCT				
HOAA	HAND OFF AUTO SELECTOR SWITCH				
C S	CONTROL STATION				
	PUSHBUTTON STATION				
M	INDICATING LIGHT STATION				
Ø					
DATA & TELEPH	ONE				
	ONE DATA SYSTEM SYSTEM OUTLET BOX, WITH 3/4" CONDUIT SUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS				
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DATA & TELEPH	DATA SYSTEM SYSTEM OUTLET BOX, WITH 3/4" CONDUIT SUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS TELEPHONE SYSTEM OUTLET BOX, WITH 3/4" CONDUIT SUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS COMBINATION TELEPHONE/DATA BOX WITH 1" CONDUIT STUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS DATA OUTLET BOX - FLOOR MOUNTED TELE OUTLET BOX - FLOOR MOUNTED COMBINATION TELEPHONE/DATA OUTLET FLOOR MOUNTED TELEPHONE POKE THRU DATA POKE THRU				
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DATA & TELEPH	DATA SYSTEM SYSTEM OUTLET BOX, WITH 3/4" CONDUIT SUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS TELEPHONE SYSTEM OUTLET BOX, WITH 3/4" CONDUIT SUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS COMBINATION TELEPHONE/DATA BOX WITH 1" CONDUIT STUB UP ABOVE HUNG CEILING WITH DRAG LINE AND BUSHED ENDS DATA OUTLET BOX - FLOOR MOUNTED TELE OUTLET BOX - FLOOR MOUNTED COMBINATION TELEPHONE/DATA OUTLET FLOOR MOUNTED TELEPHONE POKE THRU DATA POKE THRU TELEPHONE / DATA POKE THRU TELEPHONE / DATA POKE THRU TELEPHONE/DATA TERMINAL BOARD. 3/4" x 4' x 6' PLYWOOD FASTENED TO THE				

SYMBOL LEGEND

ELECTRICAL EQUIPMENT

EQUIPMENT: NUMBER DENOTES PANEL CIRCUIT NUMBER

ARC FAULT CIRCUIT INTERRUPTER

DUPLEX RECEPTACLE

SINGLE RECEPTACLE

DOUBLE DUPLEX RECEPTACLE

RATING AS INDICATED ON DRAWING

DUPLEX RECEPTACLE - FLOOR MOUNTED

SPECIAL RECEPTACLE - FLOOR MOUNTED

CEILING MOUNTED DUPLEX RECEPTACLE

ELECTRICAL OR TELEPHONE MANHOLE

ELECTRICAL OR TELEPHONE HANDHOLE

INDICATED ON DRAWINGS

FLOOR JUNCTION BOX

WALL MOUNTED JUNCTION BOX

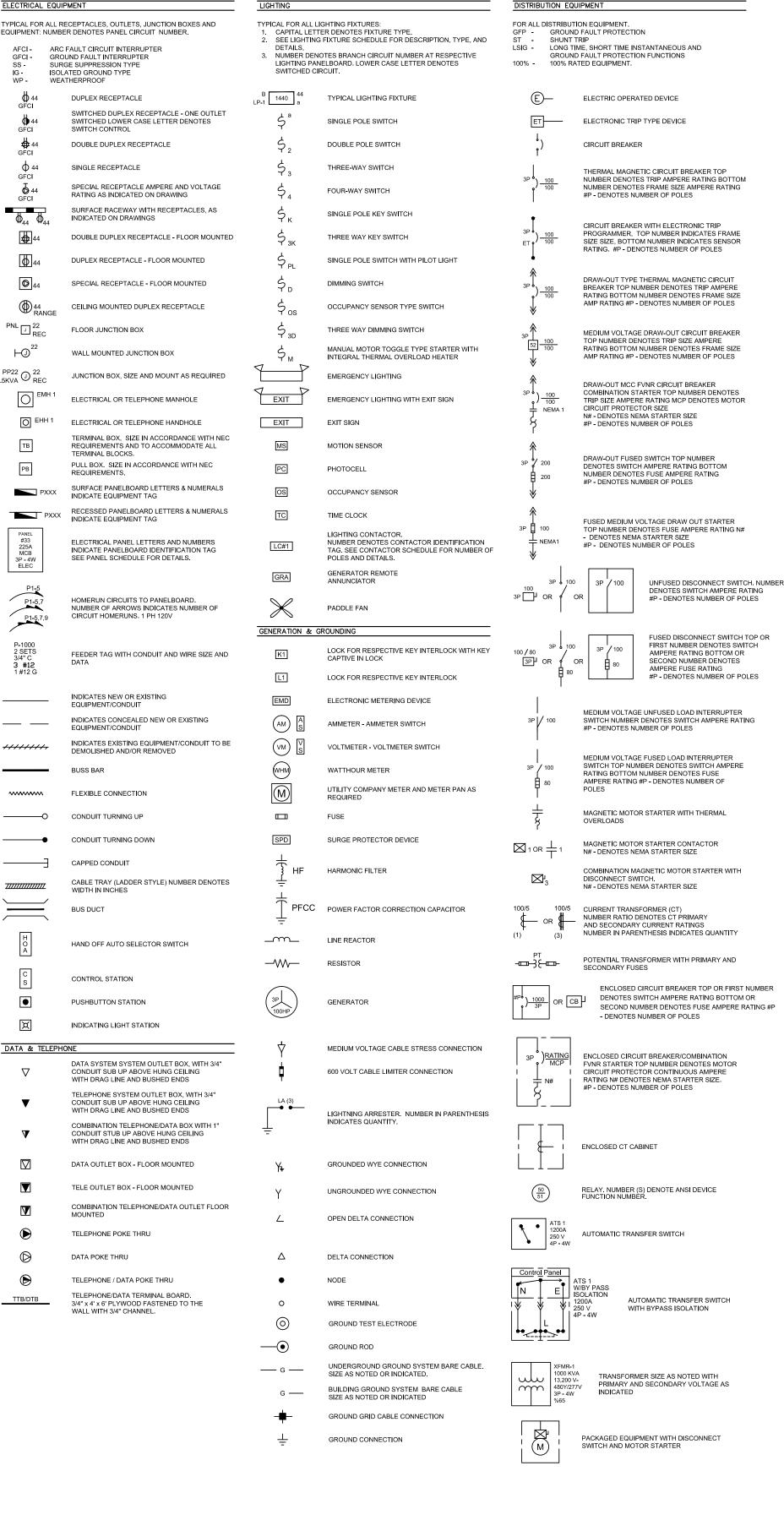
INDICATE EQUIPMENT TAG

INDICATE EQUIPMENT TAG

GROUND FAULT INTERRUPTER

SURGE SUPPRESSION TYPE ISOLATED GROUND TYPE

WEATHERPROOF



STIPULATION FOR REUSE ITH ITS ISSUE TER TIME. USE FERENCE OR ID ENGINEERS AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

ISSUE BLOCK

CHECKED BY: DRAWN BY: DOCUMENT DATE: 08/26/202





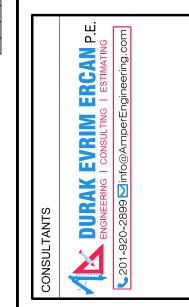
ELECTRICAL SHEET **GENERAL** NOTES & SYMBOL LEGEND

SHEET:



					RTU REPLACE	ИENT SCHEDULE					
EXISTING UNIT	INFORMATION (TO BE R	EMOVED)				NEW UNIT INF	ORMATION				
TAG BRAND	BRAND	MODEL NO.	ELECTRICAL RATING		TAG	BRAND	MODEL NO.	ELECTRICAL RATING			
IAG	BRAND	MODEL NO.	MCA	МОСР	VOLT/PH/HZ	TAG BRAND	WIODEL NO.	MCA	МОСР	VOLT/PH/HZ	
RTU-1	LENNOX	GCS24-1603-270	64	80	208-230/3/60	RTU-1	CARRIER	580JP14D180A2A0AD	63	80	208/3/60
RTU-2	LENNOX	GCS24-1603-270	64	80	208-230/3/60	RTU-2	CARRIER	580JP14D180A2A0AD	63	80	208/3/60
RTU-3	LENNOX	GCS24-1603-270	64	80	208-230/3/60	RTU-2	CARRIER	580JP14D180A2A0AD	63	80	208/3/60
RTU-4	LENNOX	GCS24-1353-270	56	70	208-230/3/60	RTU-2	CARRIER	580JP14D180A2A0AD	63	80	208/3/60
RTU-5	LENNOX	GCS24-1603-270	64	80	208-230/3/60	RTU-2	CARRIER	580JP14D180A2A0AD	63	80	208/3/60

STIPULATION FOR REUSE ITH ITS ISSUE
IS NOT
IFFERENT
IER TIME. USE
FERENCE OR
OJECT
OF PROPERLY
ID ENGINEERS.
IRAWING FOR
REUSE ON ANOTHER PROJECT IS NOT
AUTHORIZED AND MAY BE CONTRARY TO
THE LAW.



24840 PICO CANYON RD EVENSON RANCH, CA 913

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ROOFTOP POWER LAYOUT

E002

- 1. $\frac{3}{4}$ " CONDUIT WITH PULLSTRING TO FIRE ALARM PANEL LOCATION, IF REQUIRED BY LOCAL CODE.
- 2. EXISTING RTUs #'s 1,2,3,4 & 5 TO REMOVE AND REPLACE (5) NEW ROOFTOP UNITS. ELECTRICAL CONTRACTOR TO VERIFY EXISTING DISCONNECT SWITCHES IF IT IS IN GOOD CONDITION AND REUSE, IF NOT REPLACE IT WITH A NEW ONE.
- 3. NEW RTUs # 1,2,3,4 & 5 WILL CONNECT TO THE SAME EXISTING MAIN SWITCHBOARD WHERE EXISTING RTUs ARE BEING FED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF EXISTING LOAD, UPDATE THE CIRCUIT BREAKER, WIRE SIZE AND SERVICE CAPACITY FOR NEW LOADS AS REQUIRED.
- 4. ELECTRICAL CONTRACTOR TO FIELD VERIFY EXISTING GFCI WP RECEPTACLE WITHIN 25 FT OF EACH RTU. IF GFCI WP RECEPTACLES DOES NOT EXIST, INSTALL NEW ONE.
- 5. ELECTRICAL CONTRACTOR TO PERFORM ALL REQUIRED MODIFICATIONS FOR A COMPLETE OPERATING SYSTEM IN CONFORMANCE WITH NEC 2020 EDITION.
- 6. COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION OF EQUIPMENT REQUIRING EXACT POINT OF ELECTRICAL CONNECTION.
- 7. DUCT MOUNTED SMOKE DETECTOR BY OTHERS. ELECTRICAL CONTRACTOR TO FULLY COORDINATE LOCATION WITH MECHANICAL CONTRACTOR AND PROVIDE FINAL POWER CONNECTION.