PROJECT DESCRIPTION

POINT CONDOMINIUMS

PROJECT LOCATION:
COMMON TO THE TOTAL PROJECT LOCATION:
TO TOTAL PROJECT LOCATION: KAHUKU, HI 96731

SHEET INDEX

E-1 ELECTRICAL COVER SHEET, GENERAL NOTES & SYMBOL LEGEND E-2 ONE LINE DIAGRAM

ELECTRICAL NOTES

THIS DESIGN MAY BE USED FOR SECURING PERMITS, BID, PLANNING, THE COMPANY'S REVIEW OR SOME OTHER GOAL THIS DESIGN DOES NOT GUARANTEE THESE APPROVALS, NOR ARE THESE APPROVALS A REQUIREMENT FOR SERVICES 21. DESIGN IS BASED ON ALL CONDUCTORS TO BE THIN COPPER AND NO MORE THAN 4 CURRENT CARRYING

- DIAGRAMMATIC REPRESENTATION OF INTENDENT SCOPE OF WORK.
- THE SYMBOLS AND ABBREVIATIONS LIST ON THIS SHEET IS A COMPREHENSIVE STANDARD GUIDE INTENDED FOR
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE NATIONAL ELECTRICAL CODE, IECC, LIFE
- SAFETY CODE, LOCAL BUILDING CODE, OSHA REGULATIONS, OCAL, STATE, FEDERAL AND AUTHORITY HAVING JURISDICTION CODES APPLICABLE AT THE TIME OF THE CONSTRUCTION. GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA I STANDARD FOR COMPLIANCE WITH ELECTRICAL CODE AND MANUFACTURER INSTALLATION REQUIREMENTS.
- GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION (ANSI) ALL MATERIALS PROVIDED BY THE CONTRACTOR SHALL BE NEW AND FREE OF DEFECTS, LISTED/LABELED FOR THE INTENDED PURPOSE BY UNDERWRITERS (UL) OR OTHER ORGANIZATION THAT IS ACCEPTABLE TO THE AHJ.
- 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 33. PANEL BOARDS SHALL BE MANUFACTURED BY SQUARE-D. EATON, GENERAL ELECTRIC, OR SIMILAR, MEETING U. TO ALLOW THE PROPER INSTALLATION OF EACH ITEM
- 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.
- THE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC ONLY AND DO NOT NECESSARILY SHOW THE EXACT LOCATION AND DETAILS OF THE WORK TO BE INSTALLED. . UPON THE COMPLETION OF THE WORK, THE ENTIRE ELECTRICAL SYSTEM SHALL BE TESTED AND SHALL BE SHOWN TO
- SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL SYSTEM READY FOR OPERATION AND INSPECTION TEST AND INSPECT ALL WIRING AND EQUIPMENT INSTALLED UNDER THIS SECTION OF SPECIFICATIONS, ALL WIRING MUST

BE IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS, I'

- BE FREE SHORTS AND BROKEN WIRE. LEAVE ALL MATERIALS AND APPARATUS IN PROPER AND SATISFACTORY 36. CONDUIT SHALL BE SIZED TO COMPLY WITH NEC FOR NUMBER AND SIZE OF CONDUCTORS INSTALLED PER NEC. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE CORRECT PHASE SEQUENCE OF ALL THREE-PHASE FEEDERS
- AND BRANCH CIRCUITS. VERIFY PROPER ROTATION OF ALL MOTORS.
- CONTRACTOR BASED ON THE INSTALLATION CONDITIONS AND SHALL BE VERIFIED IN THE FIELD. ALL CONDUIT TYPES AND INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- 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. . PROVIDE CONDUIT EXPANSION FITTINGS WITH BONDING JUMPERS FOR ALL CONDUITS PASSING THROUGH EXPANSION
- 6. 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 FLEXIBLE CONDUIT. THE GROUND WIRE MUST BOND THE FIXTURE HOUSING TO THE JUNCTION BOX. MAXIMUM LENGTH SHALL BE 6'-O". FLEXIBLE CONDUIT INSTALLED OUT OF DOORS, IN ANY MECHANICAL EQUIPMENT ROOMS, OR IN NORMALLY WET AREAS
- SHALL BE LIQUID TIGHT FLEX WITH SUITABLE FITTINGS.). 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
- 9. CONTRACTOR SHALL VERIFY AND COORDINATE ALL MOUNTING HEIGHTS OF ALL DEVICES MOUNTED IN CASEWORK OR IN ABOVE COUNTERS WITH EXISTING EQUIPMENT.
- 20. 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

 39. WIRE CONNECTORS SHALL BE EQUAL TO "SCOTCH LOCK" FOR #8 AWG WIRE AND SMALLER AND EQUAL TO T & B SPECIFICATIONS, TOGETHER WITH ALL APPURTENANCES, COMPONENTS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. CONTRACTOR SHALL PROVIDE CONDUIT, WIRING AND CABLING TO ALL DEVICES, FIXTURES AND ETC. FOR
- . PROVIDE INDEPENDENT SUPPORT FOR DISCONNECT SWITCHES, CONTROL STATIONS, BOXES, PANELS, ETC. WHERE NO WALLS OR OTHER STRUCTURAL SURFACE EXISTS.
- 22. EQUIPMENT SIZED AND LOCATIONS ARE APPROXIMATE. ACTUAL DIMENSIONS TO BE DETERMINED BY EQUIPMENT
- 23, PROVIDE BRANCH CIRCUIT WIRING TO ALL ITEMS REQUIRING ELECTRICAL CONNECTIONS, WHERE 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 AWG. 4. 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
- 25. 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.
- 26, WHEREVER THE INSTALLATION OF ELECTRICAL EQUIPMENT AS SHOWN ON THE DRAWINGS IS IMPRACTICAL DUE TO LOCAL INTERFERENCE OR UNFORESEEN FIELD CONDITIONS, THE CONTRACTOR SHALL INSTALL THE EQUIPMENT AT NEW LOCATIONS AS DIRECTED BY THE ENGINEER.

- CONDUCTORS IN THE SAME RACEWAY OR CONDUIT, UNLESS OTHERWISE NOTED. THIS DESIGN IS NOT A COMPLETE SET OF CONSTRUCTION DRAWING OR SHOP DRAWINGS. THIS DESIGN REPRESENTS 28. WHEN EQUIPMENT IS BEING REMOVED/DEMO FROM THE FIELD, ALL WIRING ASSOCIATED WITH THE LOAD MUST BE REMOVED FROM THE JUNCTION BOX OR THE CIRCUIT BREAKER. DO NOT LEAVE UNISED CONDUCTORS IN THE FIELD
- GENERAL USE ON ALL PROJECTS. THEREFORE, NOT ALL THE SYMBOLS AND ABBREVIATIONS CONTAINED IN THIS LIST ARE NECESSARILY USED ON THIS PARTICULAR PROJECT AND SHOULD BE USED FOR CLARIFICATION ONLY.

 29. PROVIDE DISCONNECT SWITCHES FOR ELECTRICAL HEATER, HVAC EQUIPMENT AND EXHAUST FANS WITHIN EYE SIGHT OF THE EQUIPMENT.
 - 30. PROVIDE SERVICE RECEPTACLE WITHIN 25 FEET OF EACH HVAC EQUIPMENT. 31. 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
 - 32. DISCONNECT SMITCHES SHALL BE HEAVY-DUTY, QUICK-MADE, QUICK-BREAK TYPE, NEMA I ENCLOSURE FOR INDOOR LOCATIONS (NEMA 3R FOR OUTDOOR LOCATIONS). SWITCHES SHALL BE 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 MINIMUM OF 15°C. SWITCHES USED AS SERVICE ENTRANCE EQUIPMENT TO BE U.L. LISTED AS "SER" RATED EQUIPMENT.
- CODE CLEARANCES, ARCHITECTURAL, STRUCTURAL, MECHANICAL AND SITE CONDITIONS, TO AVOID OBSTRUCTIONS AND STANDARDS 50 AND 67, WITH U.L. LABEL. PANELS USED AS SERVICE ENTRANCE EQUIPMENT TO BE U.L. LISTED AS "SER"
 - 34. 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.
 - 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 GROUNDS BOTH CONDUCTOR AND CONDUIT. ALL CIRCUITS IN FLEXIBLE METAL OR PLASTIC CONDUIT SHALL INCLUDE A GROUND WIRE SIZED AND INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE.
 - PROVIDE SCHEDULE 40 PVC PLASTIC OR RIGID STEEL CONDUIT BELOW GRADE, MINIMUM 3/4". PROVIDE ELECTRICAL METAL TUBING (EMT) MEETING FS W-C563, FLEXIBLE METAL CONDUIT (IN LENGTHS 6' OR LESS) FOR INTERIOR LOCATIONS, EMT CONNECTORS AND COUPLING SHALL BE SET-SCREW TYPE, "MC" & "AC" TYPE CABLES MUST BE INSTALLED IN ACCORDANCE WITH N.E.C. AND CAN NOT BE SUPPORTED FROM CEILING SUPPORT WIRES.
- CONDUIT RUNS WHEN SHOWN ARE DIAGRAMMATICAL. FINAL LOCATION AND ROUTING SHALL BE ESTABLISHED BY THE 31. ALL CONDUIT AND RACEWAY SYSTEMS TO BE INSTALLED WITH SEPARATE GROUND CONDUCTOR. CONDUIT SYSTEM IS NOT TO BE USED AS THE SOLE GROUNDING MEANS.
 - 38. CONDUCTORS: INSULATED SOFT ANNEALED 48% PURE COPPER WITH COLOR CODING, B AND S GAGE, #IO AND SMALLER TO BE SOLID, #8 AND LARGER TO BE STRANDED, MINIMUM #12 UNLESS OTHERWISE INDICATED. CONDUCTORS MUST BE INSTALLED IN ACCORDANCE WITH NEC. AND CANNOT BE SUPPORTED FROM CEILING SUPPORT WIRES. THHN NOT BE USED UNDERGROUND, AT SERVICE ENTRANCE, OUTSIDE, OR IN WET LOCATIONS. ALL INSULATION TO BE RATED FOR 600 V AND TYPES AS FOLLOWS:

AND #12:	THWN OR THHN
TO 4/0:	THWN OR THHN
RVICE ENTRANCE:	SE-RHW OR USE-RHW
ER #4/0 ORDINARY SERVICE:	THHN OR XHHN
ER #4/0 WET OR HOT SERVICE:	XHHM
RE THRU FLUORESCENT FIXTURES	

OR WHITHIN OF HTG EQIP .: 39. ALL WIRING TO BE COLOR-CODED AS FOLLOWS:

WITH ENDS TAPED WITH TAPE OR WIRE NUTS.

120/208 VOLT SYSTEM PHASE A OR LI: BLACK PHASE B OR L2: RED PHASE C OR L3: BLUE

277/480 SYSTEM PHASE B: ORANGE PHASE C: YELLOW NEUTRAL: GRAY

- "LOCK TIGHT" FOR #6 AWG AND LARGER.
- 40. LIGHT FIXTURES & LAMPS ARE FURNISHED BY CONTRACTOR EXCEPT AS NOTED ON THE LIGHT FIXTURE SCHEDULE FIXTURE INSTALLATION SHALL BE BY THE ELECTRICAL CONTRACTOR ACCORDING TO LOCAL CODE AUTHORITY. 41. 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.
- 42. LAYOUT BRANCH CIRCUIT WIRING AND ARRANGEMENT OF HOME RUNS FOR MAXIMUM ECONOMY AND EFFICIENCY. INCREASE WIRE SIZE IF 100 FEET OF LENGTH IS EXCEEDED.
- 43, CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILINGS OR IN WALL OR FLOOR CONSTRUCTION WHERE POSSIBLE, INSTALL CONDUITS PARALLEL TO BUILDING LINES, AND TO CLEAR ALL OPENING, DEPRESSIONS, PIPES, DUCTS,
- 44. INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90 DEGREE BENDS. FROM SUSPENDED CEILING GRID OR SUSPENSION WIRES, REAM CONDUIT ENDS BEFORE INSTALLATION AND THOROUGH DENDS.

 THOROUGHLY CLEAN BEFORE INSTALLATION. OPENINGS SHALL BE PLUGGED OR COVERED TO KEEP CONDUIT CLEAN. TERMINALS ON SWITCHES AND OUTLET SHALL NOT BE USED TO "FEED THRU" TO THE NEXT SWITCH OR OUTLET.

A AFF AFG AFI AFCI ASYM ATS AWG BKR C CB CCTV CKT	AMPERE ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ARC FLASH INTERRUPTER ARC FLASH CIRCUIT INTERRUPTER ASYMMETRICAL AUTOMATIC TRANSFER SWITCH AMERICAN WIRE GAUGE BREAKER CONDUIT CIRCUIT BREAKER CLOSED CIRCUIT TELEVISION CIRCUIT	DWG E.C. EL ELEC EQUIP EXIST FA FBO FDR FIXT FL G	DRAWING ELECTRICAL CONTRACTOR ELEVATION ELECTRICAL EQUIPMENT (e) EXISTING FIRE ALARM FURNISHED BY OTHER FEEDER FIXTURE FLOOR GROUND	KV KVA KWH LCP LIS LP LTG MAX MCC MCS MDP MIN	KILOVOLT KILOVOLT AMPERE KILOWATT KILOWATT KILOWATT HOUR LOCAL CONTROL PANEL LOAD INTERRUPTER SWITCH LIGHTING PANEL LIGHTING MAXIMUM MOTOR CONTROL CENTER MOLDED CASE SWITCH MAIN DISTRIBUTION PANEL	PT POTENTIAL TRANSFORMER PP POWER PANEL PWR POWER RECEP RECEPTACLE REV REVISION SH SHIELDED CABLE SP SPARE SS SURGE SUPRESSION SWBD SWITCHBOARD SWGR SWITCHBOARD SWGR SYMMETRICAL TEL TELEPHONE TYP TYPICAL U/G UNDERGROUND U.O.N. UNLESS OTHERWISE NOTED V VOLT OR VOLTAGE VA VOLT AMPERE VFD VARIABLE FREQUENCY DRIVE W WATTS WHM WATT HOUR METER WP WEATHERPROOF WW WIREWAY XFMR TRANSFORMER
CL CLG CNTL CPT CT CU D DIA DISC DN DP	CENTER LINE CEILING CONTROL CONTROL CONTROL POWER TRANSFORMER CURRENT TRANSFORMER COPPER DEMOLISH DIAMETER DISCONNECT DOWN DISTRIBUTION PANEL BOARD	G.C. GEN GFCI GFI HID HDA HP IC I/O JB	GENERAL CONTRACTOR GENERATOR GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT INTERRUPTER HIGH INTENSITY DISCHARGE HAND-OFF-AUTOMATIC HORSE POWER INTERRUPTING CAPACITY INPUT / OUTPUT JUNCTION BOX	MSB MSG MTS NA NC NEC NII NTS P PH PNL	MAIN SWITCHBOARD MAIN SWITCHGEAR MANUAL TRANSFER SWITCH NON-AUTOMATIC NORMALLY CLOSED NATIONAL ELECTRIC CODE NORMALLY OPEN NOT TO SCALE POLE PHASE PANEL	

SYMBOL LEGEND ELECTRICAL EQUIPMENT DISTRIBUTION EQUIPMENT TYPICAL FOR ALL RECEPTACLES, DUTLETS, JUNCTION BOXES AND EQUIPMENT: NUMBER DENOTES PANEL CIRCUIT NUMBER. FOR ALL DISTRIBUTION EQUIPMENT. GFP - GROUND FAULT PROTECTION TYPICAL FOR ALL LIGHTING FIXTURES:

THREE-WAY SWITCH

THREE WAY KEY SWITCH

FOUR-WAY SWITCH

DIMMING SWITCH

EMERGENCY LIGHTING

EXIT SIGN

PHOTOCELL

TIME CLOCK

MOTION SENSOR

OCCUPANCY SENSOR

GENERATOR REMOTE

GENERATION & GROUNDING

WITH KEY CAPTIVE IN LOCK

ELECTRONIC METERING DEVICE

AMMETER - AMMETER SWITCH

SURGE PROTECTOR DEVICE

MEDIUM VOLTAGE CABLE STRESS

600 VOLT CABLE LIMITER CONNECTION

LIGHTNING ARRESTER. NUMBER IN PARENTHESIS INDICATES QUANTITY.

GROUNDED WYE CONNECTION

UNGROUNDED WYE CONNECTION

OPEN DELTA CONNECTION

GROUND TEST ELECTRODE

UNDERGROUND GROUND SYSTEM BARE CABLE. SIZE AS NOTED OR INDICATED

SIZE AS NOTED OR INDICATED

GROUND CONNECTION

GROUND GRID CABLE CONNECTION

BUILDING GROUND SYSTEM BARE CABLE

DELTA CONNECTION

WIRE TERMINAL

GROUND ROD

— •

WATTHOUR METER

HARMONIC FILTER

AS REQUIRED

FUSE

LOCK FOR RESPECTIVE KEY INTERLOCK

UTILITY COMPANY METER AND METER PA

ANNUNCIATOR

PADDLE FAN

CAPITAL LETTER DENDTES FIXTURE TYPE.
SEE LIGHTING FIXTURE SCHEDULE FOR DESCRIPTION, AFCI - ARC FAULT CIRCUIT 3. NUMBER DENOTES BRANCH CIRCUIT NUMBER AT GROUND FAULT INTERRUPTER RESPECTIVE LIGHTING PANELBOARD, LOWER CASE LETTER DENOTES SWITCHED CIRCUIT. SURGE SUPPRESSION TYPE ISOLATED GROUND TYPE WEATHERPROOF B LP-1 1440 a DUPLEX RECEPTACLE TYPICAL LIGHTING FIXTURE SINGLE POLE SWITCH

EXIT

GRA

EMD

SWITCHED DUPLEX RECEPTACLE - DNE DUTLET SWITCHED LOWER CASE LETTER DENOTES SWITCH CONTROL DOUBLE DUPLEX RECEPTACLE DOUBLE POLE SWITCH SINGLE RECEPTACLE

SPECIAL RECEPTACLE AMPERE AND VOLTAGE RATING AS INDICATED ON AS INDICATED ON DRAWINGS DOUBLE DUPLEX RECEPTACLE - FLOOR DUPLEX RECEPTACLE - FLOOR MOUNTED

INTERRUPTER

SPECIAL RECEPTACLE - FLOOR MOUNTED CEILING MOUNTED DUPLEX RECEPTACLE

PNL J REC FLOOR JUNCTION BOX WALL MOUNTED JUNCTION BOX JUNCTION BOX, SIZE AND MOUNT AS 1.5K∨A ⁽¹⁾ REC REQUIRED

ELECTRICAL OR TELEPHONE MANHOLE ELECTRICAL OR TELEPHONE HANDHOLE

TERMINAL BOX. SIZE IN ACCORDANCE ACCOMMODATE ALL TERMINAL BLOCKS. PULL BOX. SIZE IN ACCORDANCE WITH NEC REQUIREMENTS

SURFACE PANELBOARD LETTERS & NUMERALS INDICATE EQUIPMENT TAG NUMERALS INDICATE EQUIPMENT TAG

ELECTRICAL PANEL LETTERS AND NUMBERS INDICATE PANELBOARD IDENTIFICATION TAG SEE PANEL SCHEDULE FOR DETAILS.

FEEDER TAG WITH CONDUIT AND WIRE

HOMERUN CIRCUITS TO PANELBOARD. NUMBER OF ARROWS INDICATES NUMBER DF CIRCUIT HOMERUNS, 1 PH 120V

INDICATES NEW OR EXISTING

INDICATES CONCEALED NEW OR EXISTING TO BE DEMOLISHED AND/OR REMOVED BUSS BAR

FLEXIBLE CONNECTION CONDUIT TURNING UP

CONDUIT TURNING DOWN CAPPED CONDUIT CABLE TRAY (LADDER STYLE) NUMBER DENOTES WIDTH IN INCHES

BUSS DUCT

HAND OFF AUTO SELECTOR SWITCH

CONTROL STATION PUSHBUTTON STATION INDICATING LIGHT STATION

DATA SYSTEM SYSTEM DUTLET BOX, W 3/4" CONDUIT SUB UP ABOVE HUNG WITH DRAG LINE AND BUSHED END 3/4" CONDUIT SUB UP ABOVE CONDUIT STUB UP

DATA & TELEPHONE

- FLOOR MOUNTED

HONE/DATA OUTLE

ELEPHONE / DATA POKE THRU ELEPHONE/DATA TERMINAL BOARD. $3/4" \times 4' \times 6'$ PLYWOOD FASTENED TO THE WALL WITH 3/4" CHANNEL.

GROUND FAULT PROTECTION SHUNT TRIP LSIG - LONG TIME, SHORT TIME INSTANTANEOUS AND GROUND FAULT PROTECTION FUNCTIONS 100% - 100% RATED EQUIPMENT. ELECTRIC OPERATED DEVICE ELECTRONIC TRIP TYPE DEVICE CIRCUIT BREAKER NUMBER DENOTES TRIP AMPERE RATING AMPERE RATING #P - DENDTES NUMBER SINGLE POLE KEY SWITCH CIRCUIT BREAKER WITH FLECTRONIC TRIP PROGRAMMER. TOP NUMBER INDICATES
FRAME SIZE SIZE, BOTTOM NUMBER
INDICATES SENSOR RATING. #P -DENOTES NUMBER OF POLES SINGLE POLE SWITCH WITH PILOT LIGHT DRAW-DUT TYPE THERMAL MAGNETIC CIRCUIT BREAKER TOP NUMBER DENOTES DENOTES FRAME SIZE AMP RATING #P OCCUPANCY SENSOR TYPE SWITCH THREE WAY DIMMING SWITCH BREAKER TOP NUMBER DENOTES TRIP SIZE AMPERE RATING BOTTOM NUMBER DENOTES FRAME SIZE AMP RATING #P -MANUAL MOTOR TOGGLE TYPE STARTER WITH INTEGRAL THERMAL OVERLOAD HEATER DENOTES NUMBER OF POLES COMBINATION STARTER TOP NUMBER
DENOTES TRIP SIZE AMPERE RATING MCP
DENOTES MOTOR CIRCUIT PROTECTOR SIZE EMERGENCY LIGHTING WITH EXIT #P - DENOTES NUMBER OF POLES DRAW-DUT FUSED SWITCH TOP NUMBER DENOTES SWITCH AMPERE RATING BOTTOM NUMBER DENOTES FUSE AMPERE RATING #P - DENOTES NUMBER OF POLES STARTER TOP NUMBER DENOTES FUSE AMPERE RATING N# - DENOTES NEMA NUMBER DENDTES CONTACTOR
IDENTIFICATION TAG. SEE CONTACTOR STARTER SIZE #P - DENOTES NUMBER OF POLES SCHEDULE FOR NUMBER OF POLES AND UNFUSED DISCONNECT SWITCH. NUMBER DENOTES SWITCH LOCK FOR RESPECTIVE KEY INTERLOCK 100/80

3PP □R ﴿ NUMBER DENOTES DENOTES NUMBER OF POLES M V TAGE UNFUSED LOAD TE R SWITCH NUMBER DEN /ITCH AMPERE RATING CH NUMBER DEN□TES

DENOTES NUMBER OF POLES TUM VOLTAGE FUSED LOAD TES SWITCH AMPERE RATING BOTTOM

#P - DENOTES NUMBER OF POLES MAGNETIC MOTOR STARTER WITH THERMAL

COMBINATION MAGNETIC MOTOR STARTER

N# - DENOTES NEMA STARTER SIZE NUMBER RATIO DENOTES CT PRIMARY
- AND SECONDARY CURRENT RATINGS NUMBER IN PARENTHESIS INDICATES

POTENTIAL TRANSFORMER WITH PRIMARY AND SECONDARY FUSES ENCLOSED CIRCUIT BREAKER TOP OR FIRST NUMBER DENOTES SWITCH AMPERE RATING BOTTOM OR SECOND NUMBER DENOTES FUSE

AMPERE RATING #P - DENOTES NUMBER OF ENCLUSED CIRCUIT BREAKER/COMBINATION

≑ №#

FVNR STARTER TOP NUMBER DENOTES MOTOR CIRCUIT PROTECTOR CONTINUOUS AMPERE RATING N# DENOTES NEMA STARTER SIZE P - DENOTES NUMBER OF POLES

ENCLOSED CT CABINET

RELAY, NUMBER (S) DENOTE ANSI DEVICE FUNCTION NUMBER.

AUTOMATIC TRANSFER SWITCH

AUTOMATIC TRANSFER SWITCH WITH BYPASS ISOLATION

XFMR-1 1000 KVA 13,200 V-480Y/277V 3P - 4W %65 PRIMARY AND SECONDARY VOLTAGE AS INDICATED



PACKAGED EQUIPMENT WITH DISCONNECT SWITCH AND MOTOR STARTER



NO ALTERATION PERMITTED EXCEPT AS PROVIDED UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

Digitally signed by

Durak Evrim Ercan DN: c=US, st=New Jersey, I=Montclair. DURAK EVRIM ERCAN P.E. O=Durak Evrim Ercan, cn=Durak Evrim Ercan, 201-920-2899
 info@AmperEngineering.com email=info@AmperEngi neering.com Date: 2020.10.15 13:18:09 -04'00'

O 10/13/2020 ISSUED FOR PERMIT APPLICATION REV. DATE DESCRIPTION CLIENT:

CONDOMINIUMS

PROJECT: **GENERATOR INSTALLATION**

HIGHWAY, UNIT 18 KAHUKU, HI 96731

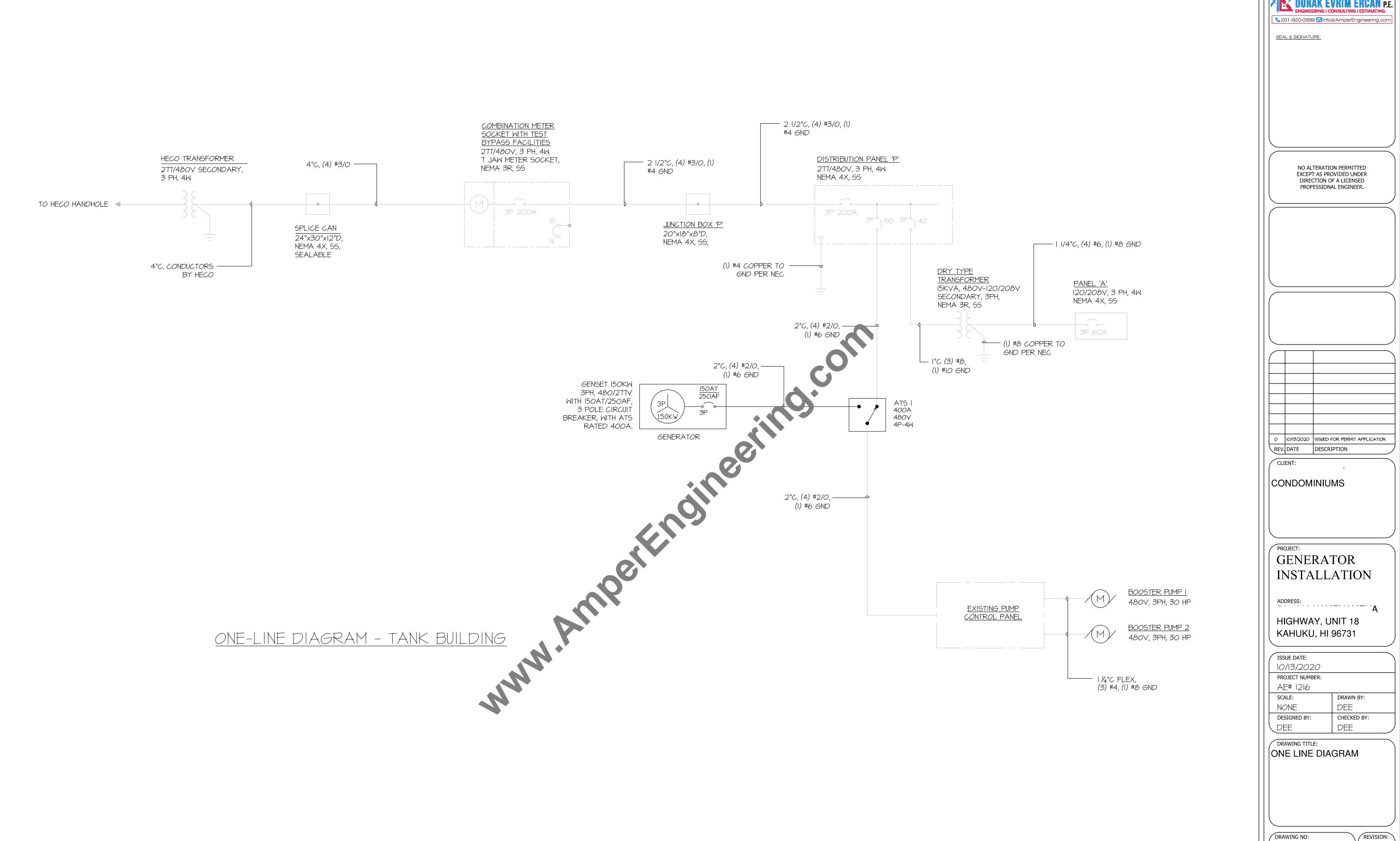
ISSUE DATE:

10/13/2020 PROJECT NUMBER: AE# 1216 SCALE: DRAWN BY: NONE DESIGNED BY: CHECKED BY: DEE DEE DRAWING TITLE:

ELECTRICAL COVER SHEET, GENERAL NOTES & SYMBOL LEGEND

DRAWING NO:

REVISION:



PROFESSIONAL ENGINEERING: DURAK EVRIM ERCAN P.E. ENGINEERING I CONSULTING I ESTIMATING