

ABBREVIATIONS

| | | | |
|--------|--|------|---|
| A | AMPERE | NC | NORMALLY CLOSED |
| AC | ALTERNATING CURRENT | NEG | NEGATIVE |
| ACR | CONTROL RELAY "A" (TYP) | NEU | NEUTRAL |
| AFF | ABOVE FINISHED FLOOR | NIC | NOT IN CONTRACT |
| AFG | ABOVE FINISHED GRADE | NO | NORMALLY OPEN |
| AI | ANALOG INPUT (PLC) | NTS | NOT TO SCALE |
| AIC | AMPERE INTERRUPTING CAPACITY | OH | OVERHEAD |
| AL | ALUMINUM | OL | OVERLOAD |
| AO | ANALOG OUTPUT (PLC) | OQA | ON-OFF-AUTOMATIC |
| ASYM | ASYMMETRICAL | OSY | OUTSIDE STEM AND YOKE VALVE (FA SYSTEM) |
| ATC | AUTOMATIC TEMPERATURE CONTROL | P | PUSHBUTTON |
| ATS | AUTOMATIC TRANSFER SWITCH | PB | PERSONAL COMPUTER |
| AUX | AUXILIARY | PE | PRESSURE ELEMENT |
| AWG | AMERICAN WIRE GAUGE | PF | POWER FACTOR |
| BFG | BELOW FINISHED GRADE | PH | PHASE |
| BKR | BREAKER | PIT | PRESSURE INDICATOR TRANSMITTER |
| BOS | BOTTOM OF STEEL | PLC | PROGRAMMABLE LOGIC CONTROLLER |
| C | CONDUIT | PNL | PANEL |
| CATV | CABLE TELEVISION | PRI | PRIMARY |
| CB | CIRCUIT BREAKER | PT | POTENTIAL TRANSFORMER |
| CCF | CARTON CANISTER FILTER | PT | PRESSURE TRANSMITTER |
| CI | CONTROL INTERLOCK | PT | POLYVINYL CHLORIDE |
| CKT | CIRCUIT | PVC | LOAD KW INDICATOR |
| CP | CONTROL PANEL | QI | REMOTE |
| CR | CONTROL RELAY | R | RIGID GALVANIZED STEEL CONDUIT |
| CPT | CONTROL POWER TRANSFORMER | RGS | RED INDICATING LIGHT (TYP) |
| CT | CURRENT TRANSFORMER | RIL | B=BLUE, G=GREEN, A=AMBER |
| CU | COPPER | RSC | RIGID STEEL CONDUIT |
| DACT | DIGITAL ALARM COMMUNICATOR TRANSMITTER | RTD | RESISTANCE TEMPERATURE DETECTOR |
| DB | DIRECT BURIED | RVSS | REDUCED VOLTAGE SOLID STATE SURFACE |
| DBH | DIESEL BLOCK HEATER | S | SECONDARY |
| DC | DIRECT CURRENT | SF | SUPPLY FAN |
| DI | DIGITAL INPUT (PLC) | SHLD | SHIELDED CABLE |
| DISC | DISCONNECT | SI | SPEED INDICATOR |
| DN | DOWN | SN | SOLID NEUTRAL |
| DO | DIGITAL OUTPUT (PLC) | SP | SPARE |
| EC | ELECTRICAL CONTRACTOR | STP | SHIELDED TWISTED PAIR |
| EF | EXHAUST FAN | STT | SHIELDED TWISTED TRIPLET |
| EG | EQUIPMENT GROUND | SV3 | 3 WAY VALVE |
| EH | ELECTRICALLY HELED | SW | SWITCH |
| EM | EMERGENCY | SWBD | SWITCHBOARD |
| EMT | ELECTRICAL METALLIC TUBING | SWGR | SWITCHGEAR |
| EO | ELECTRICALLY OPERATED | SYM | SYMMETRICAL |
| EP | EXPLOSION PROOF CL 1 DIV 1 GR D | T | TRANSFORMER |
| EPR | ETHYLENE PROPYLENE RUBBER | TB | TERMINAL BLOCKS |
| EQUIP | EQUIPMENT | TOS | TOP OF STEEL |
| ES | EMERGENCY STOP | TS | THERMOSTAT |
| EW | ELECTRIC WATER COOLER | TC | COOLING THERMOSTAT |
| EX | EXTERIOR | TD | TEL DIALER |
| EXTG | EXISTING | TDR | TIME DELAY RELAY |
| F | FIELD | TE | TEMPERATURE ELEMENT |
| FA | FIRE ALARM | TEL | TELEPHONE |
| FAA | FIRE ALARM ANNUNCIATOR | TF | FREEZE STAT |
| FACP | FIRE ALARM CONTROL PANEL | TH | HUMIDISTAT |
| FBO | FURNISHED BY OTHERS | TIT | TEMPERATURE INDICATING TRANSMITTER |
| FC | FOOT-CANDLE | TL | TEMPERATURE LOW |
| FE | FLOW ELEMENT | TOA | THERMOSTAT OUTSIDE AIR TRANSF |
| FIT | FLOW INDICATOR TRANSMITTER | TS | THERMOSTAT |
| FLUOR | FLUORESCENT | TS | TEMPERATURE SWITCH |
| FS | FIN TUBE RADIATOR | TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSOR |
| FU | FUSE | UG | UNDERGROUND |
| FWE | FURNISHED WITH EQUIPMENT | UH | UNIT HEATER |
| FVNR | FULL VOLTAGE NON REVERSING | UPS | UNINTERRUPTABLE POWER SUPPLY |
| FVR | FULL VOLTAGE REVERSING | V | VOLT |
| GCP | GENERATOR CONTROL PANEL | VA | VOLT-AMPERE |
| GEN | GENERATOR | VAR | VOLT-AMPERE REACTIVE |
| GF | GROUND FAULT | VFD | VARIABLE FREQUENCY DRIVE |
| GFI | GROUND FAULT CIRCUIT INTERRUPTER | VPS | VACUUM PRESSURE SWITCH |
| GND | GROUND | W | WIRE |
| HH | HAND HOLE | WH | WATT HOUR |
| HID | HIGH INTENSITY DISCHARGE | WM | WATT METER |
| HIT | HIGH INTENSITY TUNGSTEN | WP | WEATHERPROOF |
| HOA | HAND-OFF-AUTOMATIC | W | CROSS LINKED POLYETHYLENE |
| HP | HORSE POWER | W | WIRE |
| HPS | HIGH PRESSURE SODIUM | W | WIRE |
| HTR | HEATER | W | WIRE |
| HV | HIGH VOLTAGE | W | WIRE |
| HVAC | HEATING VENTILATING AIR CONDITIONING | W | WIRE |
| HZW | HOT WATER VALVE | W | WIRE |
| HZ | HERTZ | W | WIRE |
| IG | ISOLATED GROUND | W | WIRE |
| IMC | INTERMEDIATE METAL CONDUIT | W | WIRE |
| INCAND | INCANDESCENT | W | WIRE |
| JB | JUNCTION BOX | W | WIRE |
| K | KILO | W | WIRE |
| KCMIL | THOUSAND CIRCULAR MILS | W | WIRE |
| KV | KILOVOLT | W | WIRE |
| KVA | KILOVOLT-AMPERE | W | WIRE |
| KVAR | KILOVOLT-AMPERE REACTIVE | W | WIRE |
| KWH | KILOWATT | W | WIRE |
| L | KILOWATT-HOUR | W | WIRE |
| LA | LOCAL | W | WIRE |
| LCS | LOCAL CONTROL STATION | W | WIRE |
| LE | LEVEL ELEMENT | W | WIRE |
| LI | LEVEL INDICATOR | W | WIRE |
| LIT | LEVEL INDICATOR TRANSMITTER | W | WIRE |
| LP | LIGHTING PANEL | W | WIRE |
| LPS | LOW PRESSURE SODIUM | W | WIRE |
| LSW | LIGHT SWITCH | W | WIRE |
| LS | LEVEL SWITCH | W | WIRE |
| LT | LEVEL TRANSMITTER | W | WIRE |
| LTG | LIGHTING | W | WIRE |
| LV | LOW VOLTAGE | W | WIRE |
| MC | METAL CLAD | W | WIRE |
| MCB | MAIN CIRCUIT BREAKER | W | WIRE |
| MCC | MOTOR CONTROL CENTER | W | WIRE |
| MCP | MOTOR CIRCUIT PROTECTOR | W | WIRE |
| MFR | MANUFACTURER | W | WIRE |
| MI | MINERAL INSULATED | W | WIRE |
| MH | MAIN HOLE | W | WIRE |
| MLO | MAIN LUG ONLY | W | WIRE |
| MO | MECHANICALLY OPERATED | W | WIRE |
| MOD | MOTOR OPERATED DAMPER | W | WIRE |
| MOV | MOTOR OPERATED VALVE | W | WIRE |
| MTD | MOUNTED | W | WIRE |
| MTS | MANUAL TRANSFER SWITCH | W | WIRE |
| MVA | MEGAVOLT-AMPERE | W | WIRE |

GROUNDING

| | |
|-----|--|
| ○ | GROUND ROD |
| — | EXOTHERMIC WELD CONNECTION |
| □ | BOLTED CONNECTION |
| — | BARE COPPER CONDUCTOR RUN EXPOSED |
| --- | BARE COPPER CONDUCTOR EMBEDDED IN CONCRETE OR BURIED |

SECURITY SYSTEM

| DESCRIPTION |
|---|
| [SACP] SECURITY ALARM CONTROL PANEL |
| [KWP] SECURITY SYSTEM FUNCTION KEYPAD |
| [OH] WEATHERPROOF |
| [W] OVERHEAD DOOR TYPE |
| [W] GLASS BREAK CONTACT, GLASS MOUNTED TYPE |
| [A] AREA GLASS BREAK DETECTOR |
| [RA] INFRARED INTRUDER SENSOR |

POWER

| DESCRIPTION |
|--|
| 200/3 UNFUSED SAFETY SWITCH, RATING AS NOTED |
| 30/15/3 FUSED SAFETY SWITCH, RATING AS NOTED |
| ⊗ MAGNETIC MOTOR STARTER, RATING AS NOTED |
| ⊗ COMBINATION TYPE MAGNETIC MOTOR STARTER, RATING AS NOTED |
| ⊗ PUSHBUTTON OR SELECTOR SWITCH STATION |
| ⊗ MAINTAINED RED MUSHROOM-HEAD EMERGENCY STOP P.B. |
| ⊗ SOLENOID |
| ⊗ RELAY |
| ⊗ MOD MOTOR OPERATED DAMPER |
| ⊗ LIGHTING OR POWER CONTACTOR |
| ⊗ ENCLOSED CIRCUIT BREAKER |
| ⊗ THERMOSTAT |
| ⊗ COOLING ONLY |
| ⊗ FREEZE STAT |
| ⊗ DUCT-MOUNTED |
| ⊗ UTILITY METER |
| ⊗ PANELBOARD, SURFACE MTD. |
| ⊗ PANELBOARD, FLUSH MTD. |
| ⊗ EQUIPMENT, TERMINAL, OR CONTROL CABINET |
| ⊗ MOTOR |
| ⊗ TRANSFORMER |
| ⊗ PAD MOUNTED TRANSFORMER |
| ⊗ ELECTRIC WATER HEATER |
| ⊗ ELECTRICAL HANDHOLE |
| ⊗ JUNCTION BOX |
| ⊗ PRESSURE SWITCH |
| ⊗ ELECTRIC ACTUATED VALVE |

LIGHTING FIXTURES

| DESCRIPTION |
|---|
| 37Wm FLUORESCENT FIXTURE, 2x4 SURFACE TROFFER TYPE |
| — CIRCUIT (37) FIXTURE (M) SWITCH (h) |
| FLUORESCENT FIXTURE, STRIP, OPEN REFLECTOR, ENCLOSED OR WRAPAROUND TYPE |
| INCANDESCENT WALL MOUNTED FIXTURE |
| INCANDESCENT CEILING FIXTURE |
| INCANDESCENT LIGHT WITH GLOBE AND GUARD |
| H.I.D. WALL MOUNTED FIXTURE |
| H.I.D. CEILING FIXTURE |
| EXIT SIGN, CEILING MOUNTED ARROW INDICATES EGRESS DIRECTION |
| EXIT SIGN, WALL MOUNTED SHADING INDICATES SIGN FACE |
| EMERGENCY LIGHTING BATTERY UNIT WITH 2 LAMP HEADS |
| REMOTE EMERGENCY LIGHTING 1 OR 2 LAMP HEADS |
| POLE MOUNTED SITE LIGHT |

WIRING

| DESCRIPTION |
|--|
| WIRING, CONCEALED IN FINISHED AREAS, EXPOSED WHERE PERMITTED BY SPECIFICATIONS |
| WIRING INSTALLED IN OR BELOW FLOOR SLAB (O.K.T. NO. AS SHOWN) |
| HOME RUN (NO. REFERS TO COND. & WIRE SCHED.) |
| DC WIRING |
| CONDUIT DOWN |
| CONDUIT UP |

SINGLE LINE DIAGRAM

| DESCRIPTION |
|---|
| SAFETY DISCONNECT SWITCH |
| TRANSFORMER |
| CURRENT TRANSFORMER |
| POTENTIAL TRANSFORMER |
| 100AF FRAME SIZE |
| 70AF TRIP AMPS |
| SURGE CAPACITOR |
| LIGHTNING ARRESTER |
| COMBINATION MOTOR STARTER AND BREAKER |
| AUTOTRANSFORMER-TYPE MOTOR STARTER |
| REVERSING MOTOR STARTER |
| TWO-SPEED TWO-WINDING MOTOR STARTER |
| REDUCED VOLTAGE SOLID-STATE MOTOR STARTER |
| DELTA CONNECTION |
| WYE CONNECTION |
| GROUND CONNECTION |
| MOTOR (HP AS SHOWN) |
| GENERATOR |
| TRANSFER SWITCH |
| EMERGENCY STOP MUSHROOM SWITCH (RED) |
| TRANSIENT VOLTAGE SURGE SUPPRESSOR |
| METER |
| A - AMMETER |
| V - VOLTMETER |
| W - WATTMETER |
| WH - WATT HOURMETER |
| KWH - KILOWATT HOUR |
| VAR - VAR METER |
| HZ - FREQUENCY METER |
| PF - POWER FACTOR METER |

SCHEMATIC DIAGRAM

| DESCRIPTION |
|---|
| MANUAL MOTOR STARTER, O/L, RIL FRACTIONAL H.P. |
| CONTROL RELAY |
| MOTOR CONTACTOR |
| CONTACT NORMALLY OPEN |
| CONTACT NORMALLY CLOSED |
| OVERLOAD HEATER ELEMENT |
| SINGLE POLE SINGLE THROW SWITCH |
| SELECTOR SWITCH |
| START PUSHBUTTON, MOMENTARY CONTACT |
| STOP PUSHBUTTON, MOMENTARY CONTACT |
| RED MUSHROOM-HEAD MAINTAINED-TYPE EMERGENCY STOP PUSHBUTTON |
| LIMIT SWITCH |
| TEMPERATURE SWITCH |
| FLOAT SWITCH |
| PRESSURE SWITCH |
| TIMED CONTACT |
| PILOT LIGHT, LETTER INDICATES COLOR |
| G - GREEN |
| R - RED |
| A - AMBER |
| FUSE |

WIRING DEVICES

| DESCRIPTION |
|---|
| 20 AMPERE, 120 VOLT DUPLEX RECEPTACLE |
| GFI 20 AMPERE, 120 VOLT DUPLEX RECEPTACLE |
| +48" INDICATES INCHES AFF MOUNTING HEIGHT |
| WP WEATHERPROOF |
| IG ISOLATED GROUND |
| CTR COUNTER TOP |
| 20 AMPERE, 120 VOLT QUAD RECEPTACLE |
| 20 AMPERE, 120 VOLT SINGLE RECEPTACLE |
| CLOCK OUTLET |
| 30 SINGLE SPECIAL PURPOSE RECEPTACLE |
| INDICATES AMPERE SIZE |
| PLUGMOLD |
| S SINGLE POLE WALL SWITCH |
| DP DOUBLE POLE SWITCH |
| 3 THREE WAY SWITCH |
| 4 FOUR WAY SWITCH |
| P NEON PILOT LIGHT |
| WP WEATHERPROOF |
| K KEY OPERATED |
| EP EXPLOSION PROOF |
| D DIMMER SWITCH |
| T MOTOR RATED |

TELEPHONE/PAGING/INTERCOM SYSTEM

| DESCRIPTION |
|------------------------------|
| PAGING SPEAKER, CEILING MTD. |
| PAGING HORN, WALL MTD. |
| TELEPHONE OUTLET RJ11 |
| TELEPHONE RJ11/DATA RJ45 |
| W WALL MOUNTED |

FIRE ALARM SYSTEM

| DESCRIPTION |
|---|
| F MANUAL PULL STATION |
| F 30/75 AUDIO/VISUAL ALARM STATION |
| L 15/75 CANDELA RATING (ADA) |
| L 15/75 VISUAL ALARM |
| S CANDELA RATING (ADA) |
| S SMOKE DETECTOR |
| H 135 HEAT DETECTOR |
| SD DUCT-MOUNTED SMOKE DETECTOR, REMOTE ALARM & TEST |
| FACP FIRE ALARM SYSTEM CONTROL PANEL |
| F1 FIROMATIC SWITCH |
| TS SPRINKLER SYSTEM TAMPER SWITCH |
| FAA FIRE ALARM ANNUNCIATOR |
| FS SPRINKLER SYSTEM FLOW SWITCH |

NEMA CLASSIFICATIONS FOR ELECTRICAL EQUIPMENT AND ENCLOSURES

(UNLESS OTHERWISE NOTED)

| ROOM NO. | ROOM NAME | NEMA RATING |
|----------|----------------|-------------------|
| B01 | PUMP ROOM | NEMA 4 |
| B02 | STAIR | NEMA 1 |
| 101 | FUEL STORAGE | NEMA 12 |
| 102 | CORRIDOR | NEMA 1 |
| 103 | SHOWER | NEMA 1 |
| 104 | RESTROOM | NEMA 1 |
| 105 | OFFICE | NEMA 1 |
| 106 | MECH ROOM | NEMA 12 |
| 107 | ELECT ROOM | NEMA 1 |
| 108 | GENERATOR ROOM | NEMA 1 |
| 109 | STAIR | NEMA 1 |
| 111 | HEADWORKS | CL 1, DIV 1, GR D |
| | WETWELLS 1 & 2 | CL 1, DIV 1, GR D |
| | LOADING DOCK | NEMA 4X |
| | OUTDOOR | NEMA 4X |

GENERAL NOTES

- ALL CONDUIT AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE CURRENT NATIONAL ELECTRICAL CODE.
- CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURES. CONDUITS SHALL BE CONCEALED IN WALLS, AND ABOVE ANY SUSPENDED CEILINGS WHERE APPLICABLE. EXPOSED CEILING CONDUITS SHALL BE PERMITTED WHERE SUSPENDED CEILINGS ARE NOT USED. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS.
- CONDUITS SHALL BE PROPERLY TERMINATED WITH NEAT CONNECTIONS TO ALL ASSOCIATED EQUIPMENT.
- CONTROL AND INSTRUMENTATION CONDUIT SIZES AND NUMBER OF CONDUCTORS ARE TO BE DETERMINED FROM SCHEMATIC DIAGRAMS, INSTRUMENTATION DIAGRAMS, AND/OR SPECIFICATIONS, IF NOT DIRECTLY SHOWN ON POWER PLANS. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL AND INSTRUMENTATION EQUIPMENT. MODIFICATIONS REVIEWED BY THE ENGINEER WITH NO EXCEPTIONS TAKEN, MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. EACH CONTROL AND INSTRUMENTATION CONDUIT SHALL ALSO CONTAIN 10 PER CENT SPARE CONDUCTORS, WITH A MINIMUM OF TWO SPARES, UP TO THE LIMIT OF CONDUIT FILL AS SPECIFIED BY THE NATIONAL ELECTRICAL CODE. INSTRUMENTATION SHIELDED CABLES SHALL BE INSTALLED IN RGS CONDUIT, SEPARATE FROM OTHER POWER WIRING.
- EACH CONDUIT TO CARRY GROUND WIRE(S) ACCORDING TO SPECIFICATION #16450, IN ADDITION TO NUMBER OF CONDUCTORS SHOWN ON DRAWINGS OR PER NOTE 4 ABOVE. ALL GROUNDING MUST CONFORM TO ARTICLE 250 OF CURRENT NATIONAL ELECTRICAL CODE.
- MINIMUM CONDUIT SIZE SHALL BE .75" C. MINIMUM POWER WIRING SHALL BE 20#12 AWG WITH GROUND, AND 20#14 FOR CONTROL. INSTRUMENTATION CABLE SHALL BE 20#16 TWS AND 30#16 TWS FOR SPEED POTENTIOMETER, LIGHTING, RECEPTACLE, AND HVAC MAY BE .5" CONDUIT INSTALLED PER NEC. PROVIDE CONDUIT AND WIRING AS INDICATED.
- ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO FINISHED FLOOR SHALL NOT EXCEED 6'-6".
- ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INSIDE OF EXTERIOR WALLS ABOVE GRADE, OR IN OTHER LOCATIONS CONSIDERED AS DAMP, SHALL BE MOUNTED TO MAINTAIN A 1/4" AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.
- ELECTRICAL EQUIPMENT LOCATIONS ARE APPROXIMATE ONLY. COORDINATE LOCATIONS WITH PROCESS PIPING, ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. CONTRACTOR SHALL COORDINATE MANUFACTURERS EQUIPMENT REQUIREMENTS WITH SPACE AVAILABLE. FINAL CONTROL PANEL LOCATIONS SHALL BE FIELD COORDINATED.
- ALL FIELD CONTROL CONDUCTORS WILL TERMINATE AT INDIVIDUAL TERMINAL BLOCKS WITHIN THE CONTROL ENCLOSURE. SERIES AND PARALLEL CONNECTION OF FIELD CONTROL CONDUCTORS WILL BE MADE ONLY AT CONTROL PANEL OR MOTOR CONTROL CENTER TERMINAL BLOCKS.
- GROUND ALL CONDUCTOR SHIELDS AT PANEL ONLY - DO NOT GROUND SHIELDS AT BOTH ENDS.
- AT THE FOLLOWING LOCATIONS, UNLESS OTHERWISE NOTED, PULL, JUNCTION, TERMINAL, SWITCH, AND OUTLET BOXES SHALL BE CAST IRON WHERE STEEL CONDUIT IS TERMINATED; OR SHALL BE CAST ALUMINUM WHERE ALUMINUM CONDUIT IS TERMINATED:
A - AT LOCATIONS WHERE VAPORTIGHT LIGHTING FIXTURES AND/OR WATERTIGHT RECEPTACLES ARE INDICATED.
B - AT LOCATIONS ON OR IN ALL OUTSIDE WALLS.
C - OUTDOORS
- NAMEPLATES SHALL CONFORM STRICTLY TO INSTRUCTIONS IN THE ELECTRICAL SPECIFICATIONS AND ON THE DRAWINGS. THE FOLLOWING SHALL HAVE NAMEPLATES:
A - ALL MAIN BREAKERS AND TIE BREAKERS.
B - ALL COMPARTMENTS OF MOTOR CONTROL CENTERS EXCLUDING UNUSED COMPARTMENTS.
C - ALL LOCAL CONTROL STATIONS AT OR NEAR EQUIPMENT.
D - ALL PANELBOARDS.
E - GANGED LIGHT SWITCHES.
- PIPE SLEEVES FOR CONDUITS PASSING FROM NON-HAZARDOUS AREAS TO HAZARDOUS AREAS SHALL HAVE CAULKING APPLIED TO MAKE THE INSTALLATION GASTIGHT.
- COORDINATE ELECTRICAL DEVICES WITH OFFICE FURNITURE ARRANGEMENT, WHERE APPLICABLE.
- CONTRACTOR SHALL PROVIDE ALL DISCONNECTS AND SERVICE RECEPTACLES FOR HVAC AS REQUIRED BY NEC.
- CONTRACTOR SHALL PROVIDE ALL CONDUIT, WIRING, EQUIPMENT, AND CONTROL DEVICES AS INDICATED BY SCHEMATICS, SINGLE LINE DIAGRAMS, SCHEDULES, PLANS, SPECIFICATIONS, AND VENDOR DOCUMENTATION TO PROVIDE A COMPLETE WORKING SYSTEM. SINCE NOT ALL HOME RUNS ARE SHOWN ON PLAN, THE CONTRACTOR SHALL REFERENCE ALL SINGLE LINE AND SCHEMATIC DIAGRAMS, SCHEDULES, AND VENDOR DOCUMENTATION TO DETERMINE CONDUIT AND WIRING REQUIREMENTS.
- PROVIDE CONDUIT FREEZE EXPANSION FITTINGS FOR ALL EXTERIOR CONDUIT SYSTEMS.
- EXACT NUMBER, LOCATION, HORSEPOWER, VOLTAGE, AND PHASE OF ALL MOTORS AND DEVICES ASSOCIATED WITH THE GRINDER SYSTEM AND PLANT WATER, AND OTHER EQUIPMENT SYSTEMS AS APPLICABLE, PROVIDED UNDER THIS CONTRACT SHALL BE COORDINATED WITH THE ACTUAL EQUIPMENT SUPPLIER. CONDUIT AND WIRING TO BE PROVIDED SHALL BE ADJUSTED ACCORDINGLY AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE CONCRETE HOUSEKEEPING PADS (4" HIGH) UNDER FLOOR MOUNTED ELECTRICAL AND INSTRUMENTATION EQUIPMENT. PROVIDE SUBMITTAL SKETCH FOR ENGINEER REVIEW.
- COORDINATE ELECTRICAL EMBEDMENTS WITH STRUCTURAL.
- CONTRACTOR SHALL PROVIDE A COMPLETE WORKING OPERATING SYSTEM IN ACCORDANCE WITH ALL DRAWINGS, SPECIFICATIONS, CODES AND STANDARDS.
- HANDHOLES SHALL BE PREMANUFACTURED ASSEMBLES SEPARATED FOR 480V AND 120V POWER. POWER CONDUIT UNDERGROUND SHALL BE SCHEDULE 80 PVC WITH RGS FITTINGS ABOVE GROUND. RGS FITTINGS SHALL EXTEND 2'-6" BELOW GROUND. INSTRUMENTATION AND CONTROL HANDHOLES SHALL BE SEGREGATED FOR INSTRUMENTATION AND 120 VOLT CONTROL

NOTE:

1. ALL GENERAL NOTES, SYMBOL LISTS, AND ABBREVIATIONS SHALL BE CONSIDERED AS APPLICABLE TO ALL ELECTRICAL DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION IN THE DESIGN.