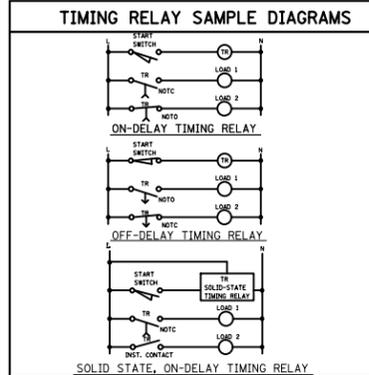


| BUILDING PLANS | |
|----------------|--|
| SYMBOL | DESCRIPTION |
| | FLUORESCENT FIXTURE (F1 INDICATES FIXTURE TYPE - REFER TO FIXTURE SCHEDULE - 2G INDICATES CIRCUIT No.2 ON SWITCH QJKTYP.) |
| | FLUORESCENT FIXTURE, WALL MOUNTED |
| | INCANDESCENT, COMPACT FLUORESCENT OR HID FIXTURE |
| | WALL MOUNTED INCANDESCENT, COMPACT FLUORESCENT OR HID FIXTURE |
| | FLUORESCENT FIXTURE ON EMERGENCY CIRCUIT |
| | INCANDESCENT, COMPACT FLUORESCENT OR HID FIXTURE ON EMERGENCY CIRCUIT |
| | EXIT SIGN SINGLE SIDED (ABOVE DOOR) |
| | DIRECTIONAL EXIT SIGN - DOUBLE SIDED (DIRECTION AS INDICATED - TYP.) |
| | DIRECTIONAL EXIT SIGN - SINGLE SIDED |
| | BATTERY UNIT FOR EMERGENCY LIGHT |
| | BATTERY OPERATED EMERGENCY LIGHT |
| | EMERGENCY LIGHT, REMOTE HEAD |
| | ELECTRIC PULLBOX |
| | ELECTRIC JUNCTION BOX |
| | BARE GROUND CABLE |
| | EXPOSED CONDUIT |
| | CONCEALED CONDUIT IN FLOOR OR UNDERGROUND |
| | CONCEALED CONDUIT IN CEILING OR WALLS |
| | CONDUIT HOME-RUN TO PANEL AS INDICATED (LP-1-6 DENOTES PANEL DESIGNATION, SLASH LINES INDICATE QUANTITY OF WIRE, GROUND WIRE INDICATED AS LONG LINE WITH DOT, NEUTRAL WIRE INDICATED AS LONG LINE, PHASE WIRE AND SWITCH LEGS INDICATED AS SHORT LINES.) |
| | CABLE TRAY |
| | CONDUIT TURNED UP OR DOWN |
| | CONDUIT TERMINATED OR CAPPED |
| | SINGLE POLE TOGGLE SWITCH |
| | DOUBLE POLE TOGGLE SWITCH |
| | THREE-WAY TOGGLE SWITCH |
| | FOUR-WAY TOGGLE SWITCH |
| | KEY OPERATED SWITCH |
| | MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD PROTECTION |
| | TOGGLE SWITCH WITH PILOT LIGHT |
| | DIMMER SWITCH |
| | SINGLE RECEPTACLE |
| | DUPLEX RECEPTACLE |
| | QUADRUPLEX RECEPTACLE |
| | DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER |
| | DUPLEX RECEPTACLE WITH ISOLATED GROUND |

| BUILDING PLANS | |
|----------------|--|
| SYMBOL | DESCRIPTION |
| | SPECIAL PURPOSE RECEPTACLE |
| | TELEPHONE OUTLET |
| | DATA OUTLET |
| | FLUSH MOUNTED PANELBOARD (PANEL TYPE (LIGHTING PANEL) LP-1- UNIT NUMBER) |
| | SURFACE MOUNTED PANELBOARD |
| | MANUAL DISCONNECT SWITCH NONFUSED (RATING AS INDICATED) |
| | MANUAL DISCONNECT SWITCH FUSED (RATING AS INDICATED) |
| | MAGNETIC MOTOR STARTER (RATING AS INDICATED) |
| | COMBINATION MAGNETIC MOTOR & FUSED DISCONNECT SWITCH (RATING AS INDICATED) |
| | PUSHBUTTON STATION (1, 2 & 3 BUTTONS SHOWN) |
| | 50HP SINGLE SPEED ELECTRIC MOTOR (KW OR HP RATING AS INDICATED) |
| | 20HP 50HP DOUBLE SPEED ELECTRIC MOTOR (KW OR HP RATING AS INDICATED) |
| | 250 KW ELECTRIC GENERATOR SET (KW RATING AS INDICATED) |
| | LIMIT SWITCH |
| | FLOAT SWITCH |
| | PRESSURE SWITCH |
| | FLOW SWITCH |
| | ELECTRIC - PNEUMATIC SWITCH |
| | PNEUMATIC - ELECTRIC SWITCH |
| | TORQUE SWITCH |
| | TRANSFORMER |
| | FIRE ALARM PULL STATION |
| | AUDIO VISUAL ALARM |
| | FIREALARM STROBE |
| | SMOKE DETECTOR |
| | HEAT DETECTOR |
| | COMBUSTIBLE GAS DETECTOR |
| | THERMOSTAT |
| | UNIT HEATER - HORIZONTAL TYPE |
| | UNIT HEATER - DOWNBLAST TYPE OR CENTRIFUGAL FAN TYPE |
| | CABINET UNIT HEATER |
| | ALARM HORN |

| SCHEMATIC SYMBOLS | |
|-------------------|---|
| SYMBOL | DESCRIPTION |
| | CONDUCTOR CONNECTION |
| | NO CONNECTION |
| | TERMINAL ON A DEVICE |
| | NORMALLY OPEN CONTACT |
| | NORMALLY CLOSED CONTACT |
| | SINGLE POLE, SINGLE THROW SWITCH |
| | SINGLE POLE, DOUBLE THROW SWITCH |
| | DOUBLE POLE, SINGLE THROW SWITCH |
| | DOUBLE POLE, DOUBLE THROW SWITCH |
| | THREE WAY ROTARY SWITCH |
| | NORMALLY CLOSED MOMENTARY PUSH BUTTON SWITCH |
| | NORMALLY OPEN MOMENTARY PUSH BUTTON SWITCH |
| | 2 POSITION PUSH BUTTON (EXTRA CONTACT BLOCK) |
| | NORMALLY OPEN DOUBLE BREAK SINGLE THROW CONTACT BLOCK |
| | NORMALLY CLOSE DOUBLE BREAK SINGLE THROW CONTACT BLOCK |
| | DOUBLE BREAK DOUBLE THROW CONTACT BLOCK |
| | MUSHROOM HEAD PUSH BUTTON |
| | MAINTAINED CONTACT PUSHBUTTON |
| | 2 OR 3 POSITIONS SELECTOR SWITCH (CLOSED CONTACTS INDICATED BY "X") |
| | MULTI-POSITION, MULTI-CONTACT SELECTOR SWITCH (CLOSED CONTACTS INDICATED BY "X") |
| | TEMPERATURE SWITCH - CLOSSES ON RISING TEMPERATURE |
| | TEMPERATURE SWITCH - OPENS ON RISING TEMPERATURE |
| | PRESSURE SWITCH - CLOSSES ON RISING PRESSURE |
| | PRESSURE SWITCH - OPENS ON RISING PRESSURE |
| | DIFFERENTIAL PRESSURE SWITCH - CLOSSES WHEN THE DIFFERENTIAL IN PRESSURE BETWEEN TWO DIAPHRAGMS EXCEEDS A SET POINT |
| | DIFFERENTIAL PRESSURE SWITCH - OPENS WHEN THE DIFFERENTIAL IN PRESSURE BETWEEN TWO DIAPHRAGMS EXCEEDS A SET POINT |
| | TIME DELAY RELAY SWITCH - CLOSSES ON TIME DELAY AFTER ENERGIZATION OF RELAY COIL. |
| | TIME DELAY RELAY SWITCH - CLOSSES ON TIME DELAY AFTER DE-ENERGIZATION OF RELAY COIL. |
| | TIME DELAY RELAY SWITCH - OPENS ON TIME DELAY AFTER DE-ENERGIZATION OF RELAY COIL. |
| | LIMIT SWITCH - NORMALLY OPEN |
| | LIMIT SWITCH - NORMALLY CLOSED |
| | LIMIT SWITCH - NORMALLY OPEN HELD CLOSED |

| SCHEMATIC SYMBOLS | |
|-------------------|---|
| SYMBOL | DESCRIPTION |
| | LIMIT SWITCH - NORMALLY CLOSED HELD OPEN |
| | LEVEL SWITCH - CLOSSES ON RISING LEVEL |
| | LEVEL SWITCH - OPENS ON RISING LEVEL |
| | FLOW SWITCH - CLOSSES ON FLOW |
| | FLOW SWITCH - OPENS ON FLOW |
| | TRANSFORMER - (TYPE AND RATING AS INDICATED) |
| | CONNECTION TO GROUND |
| | LIGHTNING OR SURGE ARRESTER |
| | THERMAL OVERLOAD ELEMENT |
| | FUSE |
| | CIRCUIT BREAKER |
| | HEATING ELEMENT |
| | SOLENOID VALVE |
| | COIL C - CLOSE CR - CONTROL RELAY F - FAST OR FORWARD M - MOTOR STARTER MX - MOTOR STARTER AUXILIARY RELAY N - NORMAL O - OPEN OL - OVERLOAD RELAY R - REVERSE S - SLOW TD - TIME DELAY RELAY TDAE - TIME DELAY AFTER ENERGIZATION TDAD - TIME DELAY AFTER DE-ENERGIZATION |
| | INDICATOR LIGHT (SEE SCHEMATIC DIAGRAM DEVICE TABLE FOR COLOR SYMBOLS) |
| | DEVICE ENCLOSURE |
| | ANNUNCIATOR |
| | COUNTER |
| | ELAPSED TIME METER |
| | ELECTRONIC TIMER |
| | TOTALIZER |



INFORMATION ONLY

| ONE-LINE DIAGRAMS | |
|-------------------|---|
| SYMBOL | DESCRIPTION |
| | POWER CIRCUIT |
| | EQUIPMENT ENCLOSURE |
| | CONTROL OR INTERLOCK CIRCUIT |
| | BUS (RATING AS INDICATED) |
| | CONDUCTOR CONNECTION |
| | DRAWOUT DEVICE |
| | DRAWOUT MOLDED CASE CIRCUIT BREAKER (600V, THERMAL-MAGNETIC TYPE, UNLESS NOTED OTHERWISE) (TRIP SETTING (TYP.) FRAME SIZE (TYP.)) |
| | MOLDED CASE CIRCUIT BREAKER (600V, THERMAL-MAGNETIC TYPE, UNLESS NOTED OTHERWISE) |
| | AIR CIRCUIT BREAKER |
| | INSULATED CASE CIRCUIT BREAKER |
| | FUSE (RATING AS INDICATED) |
| | DRAWOUT FUSE (RATING AS INDICATED) |
| | FUSE - SWITCH (RATING AS INDICATED) |
| | NON-FUSIBLE DISCONNECT SWITCH |
| | THERMAL OVERLOAD ELEMENT |
| | INSTANTANEOUS CONTACT |
| | CONNECTION TO GROUND |
| | LIGHTNING OR SURGE ARRESTER |
| | CURRENT TRANSFORMER-DOUGHNUT TYPE (QUANTITY, RATIO AND RATING AS INDICATED) |
| | CURRENT TRANSFORMER-WINDOW TYPE (RATIO AND RATING AS INDICATED) |
| | POTENTIAL TRANSFORMER (QUANTITY, RATIO AND RATING AS INDICATED) |
| | CAPACITOR |
| | BATTERY |
| | AMMETER SWITCH |
| | VOLTMETER SWITCH |
| | SELECTOR SWITCH |
| | AMMETER (RANGE AS INDICATED) |
| | VOLTMETER (RANGE AS INDICATED) |
| | KILOWATT-HOUR METER |
| | KIRK-KEY INTERLOCK |
| | GROUND FAULT RELAY |

| ONE-LINE DIAGRAMS | |
|-------------------|--|
| SYMBOL | DESCRIPTION |
| | 50HP SINGLE SPEED ELECTRIC MOTOR (KW OR HP RATING AS INDICATED) |
| | DOUBLE SPEED ELECTRIC MOTOR (KW OR HP RATING AS INDICATED) |
| | 250 KW ELECTRIC GENERATOR SET (TYPE & KW RATING AS INDICATED) |
| | TRANSFER SWITCH (TYPE AND RATING AS INDICATED) |
| | SINGLE SPEED NON-REVERSING MANUAL STARTER (NEMA OR IEC DESIGNATION AS SPECIFIED OR SHOWN) |
| | SINGLE SPEED NON-REVERSING MAGNETIC STARTER (NEMA OR IEC DESIGNATION AS SPECIFIED OR SHOWN) |
| | COMBINATION DISCONNECT SWITCH & SINGLE SPEED NON-REVERSING STARTER (NEMA OR IEC DESIGNATION AS SPECIFIED OR SHOWN) |
| | COMBINATION CIRCUIT BREAKER & SINGLE SPEED REVERSING MAGNETIC STARTER (NEMA OR IEC DESIGNATION AS SPECIFIED OR SHOWN) |
| | COMBINATION CIRCUIT BREAKER & TWO SPEED NON-REVERSING MAGNETIC STARTER (NEMA OR IEC DESIGNATION AS SPECIFIED OR SHOWN) |
| | REDUCED VOLTAGE STARTER, AUTO TRANSFORMER TYPE (NEMA OR IEC DESIGNATIONS AS SPECIFIED OR SHOWN) |
| | REDUCED VOLTAGE STARTER, WYE-DELTA TYPE (NEMA OR IEC DESIGNATIONS AS SPECIFIED OR SHOWN) |
| | REDUCED VOLTAGE STARTER, PRIMARY-RESISTOR TYPE (NEMA OR IEC DESIGNATIONS AS SPECIFIED OR SHOWN) |
| | SOLID STATE REDUCED VOLTAGE STARTER |

| SCHEMATIC DIAGRAM DEVICE DESIGNATIONS | |
|---------------------------------------|---|
| SYMBOL | DESCRIPTION |
| | DESIGNATION DESCRIBING DEVICE OPERATION OR FUNCTION |
| | AUTOMATIC |
| | ACKNOWLEDGE |
| | CLOSE |
| | FAST |
| | FORWARD |
| | HIGH |
| | HAND |
| | INSTANTANEOUS |
| | LOW |
| | LOCKOUT-STOP |
| | HAND RESET |
| | HIGH SPEED |
| | LOW SPEED |
| | NORMAL |
| | NORMALLY CLOSED |
| | NORMALLY CLOSED TIMED CLOSED |
| | NORMALLY CLOSED TIMED OPEN |
| | NORMALLY OPEN |
| | NORMALLY OPEN TIMED CLOSED |
| | NORMALLY OPEN TIMED OPEN |
| | OFF |
| | OPEN |
| | REMOTE |
| | REVERSE |
| | SLOW |
| | AMBER |
| | BLUE |
| | CLEAR |
| | GREEN |
| | RED |
| | WHITE |
| | YELLOW |

| ABBREVIATIONS | |
|---------------|--|
| SYMBOL | DESCRIPTION |
| AC | ALTERNATING CURRENT |
| ACK | ACKNOWLEDGE |
| A/C | AERIAL CABLE |
| AFG | ABOVE FINISHED GRADE |
| AFF | ABOVE FINISHED FLOOR |
| ANN | ANNUNCIATOR |
| ATS | AUTOMATIC TRANSFER SWITCH |
| CB | CIRCUIT BREAKER |
| CKT | CIRCUIT |
| CM | CENTIMETER |
| CT | CURRENT TRANSFORMER |
| CP | CONTROL PANEL |
| DC | DIRECT CURRENT |
| DIA | DIAMETER |
| DP | DISTRIBUTION PANEL |
| EF | EXHAUST FAN |
| EMER | EMERGENCY |
| EMT | ELECTRICAL METALLIC TUBING |
| FT | FEET OR FOOT |
| FND CON | FOUNDATION CONCRETE |
| FU | FUSE |
| FNVR | FULL VOLTAGE NON-REVERSING |
| FVR | FULL VOLTAGE REVERSING |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER |
| GFR | GROUND FAULT RELAY |
| GND | GROUND |
| HID | HIGH INTENSITY DISCHARGE |
| HP | HORSEPOWER |
| IG | ISOLATED GROUND |
| JB | JUNCTION BOX |
| KVA | KILOVOLT AMPERE |
| KW | KILOWATTS |
| LP | LIGHTING PANEL |
| M | METER |
| MCC | MOTOR CONTROL CENTER |
| MM | MILLIMETER |
| MTG HT | MOUNTING HEIGHT |
| MTS | MANUAL TRANSFER SWITCH |
| NL | NIGHT LIGHT |
| NO, # | NUMBER |
| PB | PUSH BUTTON |
| PLC | PROGRAMMABLE LOGIC CONTROLLER |
| PNL | PANEL |
| PT | POTENTIAL TRANSFORMER |
| RECP | RECEPTACLE |
| RGC | RIGID GALVANIZED CONDUIT |
| RVS | REDUCED VOLTAGE STARTER |
| SCADA | SUPERVISORY CONTROL AND DATA ACQUISITION |
| SEL SW | SELECTOR SWITCH |
| SF | SUPPLY FAN |
| SPARE | SPARE |
| SPACE | SPACE |
| SS | STAINLESS STEEL |
| STA | STATION |
| SWGR | SWITCHGEAR |
| TMP | TEMPORARY |
| TEMP | TEMPERATURE |
| T' STAT | THERMOSTAT |
| TEFC | FULLY ENCLOSED FAN COOLED |
| UH | UNIT HEATER |
| VFD | VARIABLE FREQUENCY DRIVE |
| WP | WEATHERPROOF |
| XFER | TRANSFER |
| XFMR | TRANSFORMER |
| XP | EXPLOSION-PROOF (CLASS 1, DIV 1, GROUP C & D UNLESS NOTED OTHERWISE) |