

ELECTRICAL SYMBOLS

	LOW-VOLTAGE CIRCUIT BREAKER. RATING AND NUMBER OF POLES AS SHOWN
	FUSE: SIZE AND NUMBER OF FUSES AS NOTED
	FUSIBLE SWITCH: CURRENT RATING, FUSE SIZE, AND QUANTITY AS INDICATED
	NON-FUSED SWITCH: CURRENT RATING, AND NUMBER OF POLES INDICATED
	DISCONNECT OR DRAWOUT CONNECTION
	MOTOR STARTER AND SEPARATELY MOUNTED COMBINATION MOTOR STARTER
	MOTOR CONTROLLER AND SEPARATELY MOUNTED MOTOR CONTROLLER WITH SHORT CIRCUIT PROTECTION AND DISCONNECT
	MOTOR STARTER AND CONTROLLER SUBSCRIPTS: A- MOTOR STARTER NEMA SIZE B-STARTER TYPE FVNR- FULL VOLTAGE NON-REVERSING FVR- FULL VOLTAGE REVERSING 2S- TWO SPEED RVAT- REDUCED VOLTAGE AUTO TRANSFORMER C- CONTROL DIAGRAM D- CONTROLLER TYPE VFD- VARIABLE FREQUENCY DRIVE SS- SOLID STATE
	NON-FUSED DISCONNECT OR SAFETY SWITCH. SIZE AND NUMBER OF POLES AS NOTED
	FUSED DISCONNECT OR SAFETY SWITCH. X INDICATES SIZE, Y INDICATES FUSE SIZE, AND NUMBER OF POLES AS NOTED
	SEPARATELY MOUNTED CIRCUIT BREAKER
	MOTOR WITH DESIGN HORSEPOWER
	GENERATOR
	TRANSFORMER Δ 3-PHASE, 3 WIRE DELTA CONNECTION Y 3-PHASE, 4 WIRE WYE CONNECTION
	VOLTAGE TRANSFORMER (VT OR PT)
	CURRENT TRANSFORMER
	GROUND
	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	SELECTOR SWITCH
	PUSH BUTTON
	INSTRUMENTATION/CONTROL DEVICE
	CONTROL PANEL
	JUNCTION BOX
	THERMOSTAT
	PANELBOARD (250V-600V)
	PANELBOARD (LESS THAN 250V)

ELECTRICAL SYMBOLS

	LIGHT SWITCH
	LIGHT SWITCH, X WAY
	FLOOR BOX WITH DUPLEX RECEPTACLE
	FLOOR BOX FOR DATA/COMMUNICATION
	WALL BOX FOR DATA/COMMUNICATION
	DUPLEX RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET WITH GROUND FAULT INTERRUPTER
	WEATHERPROOF RECEPTACLE OUTLET WITH GFCI PROTECTION
	QUAD RECEPTACLE OUTLET
	CIRCUITING NOTATION: X DENOTES PANEL AND ## DENOTES CIRCUIT NUMBER
	DENOTES CIRCUITING FOR STANDARD ELECTRICAL DEVICES

CONTROL SYMBOLS

	ELECTRICAL CONNECTION
	NO ELECTRICAL CONNECTION
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	NORMALLY OPEN TIME DELAY RELAY CONTACT. CLOSING UPON TIME DELAY AFTER ACTIVATING COIL
	NORMALLY CLOSED TIME DELAY RELAY CONTACT. OPENS UPON TIME DELAY AFTER ACTIVATING COIL
	NORMALLY OPEN TIME DELAY RELAY CONTACT. OPENS UPON TIME DELAY AFTER DE-ACTIVATING COIL
	NORMALLY CLOSED TIME DELAY RELAY CONTACT. CLOSING UPON TIME DELAY AFTER DE-ACTIVATING COIL
	NORMALLY OPEN TEMPERATURE SWITCH: CLOSING ON RISING TEMPERATURE
	NORMALLY CLOSED TEMPERATURE SWITCH: OPENS ON RISING TEMPERATURE
	NORMALLY OPEN FLOW SWITCH: CLOSING ON INCREASING FLOW
	NORMALLY CLOSED FLOW SWITCH: OPENS ON INCREASING FLOW
	NORMALLY OPEN LEVEL SWITCH: CLOSING ON INCREASING LEVEL
	NORMALLY CLOSED LEVEL SWITCH: OPENS ON INCREASING LEVEL
	NORMALLY OPEN PRESSURE SWITCH: CLOSING ON INCREASING PRESSURE
	NORMALLY CLOSED PRESSURE SWITCH: OPENS ON INCREASING PRESSURE
	NORMALLY OPEN LIMIT SWITCH: CLOSING UPON REACHING LIMIT
	NORMALLY CLOSED LIMIT SWITCH: OPENS ON REACHING LIMIT
	MICROPROCESSOR INPUT
	MICROPROCESSOR OUTPUT
	FIELD WIRING EXTERNAL TO CONTROL PANEL
	3-POSITION SELECTOR SWITCH, MAINTAINED CONTACTS
	NORMALLY OPEN PUSHBUTTON, MOMENTARY CONTACT
	NORMALLY CLOSED PUSHBUTTON, MOMENTARY CONTACT
	INDICATING LIGHT, X INDICATES COLOR
	PUSH TO TEST INDICATING LIGHT, X INDICATES COLOR LENS COLOR: R- RED Y-YELLOW G- GREEN W-WHITE B-BLUE A- AMBER
	SOLENOID VALVE
	THERMAL OVERLOAD ELEMENT
	THERMAL OVERLOAD ELEMENT RELAY CONTACT
	ELAPSED TIME METER
	MOTOR STARTS COUNTER

EQUIPMENT DESIGNATIONS

EXAMPLE:

AREA DESIGNATIONS

CW	COLLECTOR WELL PUMP STATION
SW	STORMWATER PUMP STATION
VW	VERTICAL WELLS

EQUIPMENT ABBREVIATIONS

A	ALARM
AHU	AIR HANDLING UNIT
ATS	AUTOMATIC TRANSFER SWITCH
BV	BALL VALVE
BD	BACKDRAFT DAMPER
CB	CIRCUIT BREAKER
CKV	CHECK VALVE
CP	CONTROL PANEL
CPU	CENTRAL PROCESSING UNIT
CR	CRANE
CTU	CTPT CABINET (UTILITY)
CU	CONDENSING UNIT
CV	CONTROL VALVE
D	DAMPER
DHF	DEHUMIDIFIER
ESEW	EMERGENCY EYEWASH AND SHOWER
EF	EXHAUST FAN
EUH	ELECTRIC UNIT HEATER
F	FAN
FD	FLOOR DRAIN
FM	FLOW METER
GEN	GENERATOR
HO	HOIST
HB	HOSE BIB
IA	INTRUSION ALARM
KGV	KNIFE GATE VALVE
L	LAVATORY
LP	LIGHTING PANEL, LOW VOLTAGE (<250V)
LR	LEVEL RECORDER
LS	LEVEL SWITCH
LVR	LOUVER
MCC	MOTOR CONTROL CENTER
MOD	MOTOR OPERATED DAMPER
MR	MOP RECEPTOR
OIT	OPERATOR INTERFACE TERMINAL
P	PUMP
PDC	POWER DISTRIBUTION CENTER
PG	PRESSURE GAUGE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PT	PRESSURE TRANSDUCER
PZW	PIEZOMETER WELL
RH	RADIANT HEATER
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
SBD	SWITCHBOARD
SF	SUPPLY FAN
SP	SCADA PANEL
SS	SOLID STATE MOTOR CONTROLLER
SV	SOLENOID VALVE
SW	SWITCH
T	THERMOSTAT
TS	TEMPERATURE SWITCH
U	URINAL
US	ULTRASONIC LEVEL SENSOR
V	VALVE
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
WC	WATER CLOSET
XFMR	TRANSFORMER
YH	YARD HYDRANT

FILE NAME = G:\115\1150223\Work\Drawn\3_M0_Ave_P12\ACADD_Sheets\0876099-ahc-KL.A_Elect.dgn



USER NAME = seb	DESIGNED - JJN	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JJN	REVISED -
PLOT DATE = 8/23/2014	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ELECTRICAL AND INSTRUMENTATION LEGEND			
MISSOURI AVENUE DEEP WELL FACILITY			
SCALE: AS NOTED	SHEET 1 OF 2 SHEETS	STA. TO STA.	

F.A.I. RTE. 64	SECTION 82-4T-1	COUNTY ST. CLAIR	TOTAL SHEETS 185	SHEET NO. 157
CONTRACT NO. 76C99				
ILLINOIS FED. AID PROJECT				

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