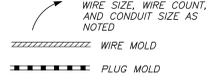


POWER

SYMBOL	DESCRIPTION
⊕	DUPLEX RECEPTACLE
⊕⊕	TWO DUPLEX IN TWO GANG BOX (QUAD)
⊕⊕	SPLIT WIRED DUPLEX RECEPTACLE
GFI	GROUND FAULT INTERRUPTER
AC	ABOVE COUNTER
F	FLOOR RECEPTACLE
WP	WEATHERPROOF
SS	SURGE SUPPRESSION
⊙	FLOOR BOX
▲	SPECIAL PURPOSE OUTLET, SUBSCRIPT REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	POWER / COMMUNICATION POLE
⊕	ELECTRIC HAND DRYER
⊕	PUSHBUTTON
⊕	BELL OR BUZZER
⊕	FUSED DISCONNECT, DESIGNATION REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	NONFUSED DISCONNECT, DESIGNATION REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	MAGNETIC MOTOR STARTER, DESIGNATION REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	MANUAL MOTOR STARTER, FRACTIONAL HORSEPOWER, TOGGLE OPERATOR
⊕	COMBINATION MAGNETIC MOTOR STARTER, DISCONNECT SWITCH, DESIGNATION REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	MOTOR CONNECTION, DESIGNATION REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	VARIABLE FREQUENCY DRIVE, DESIGNATION REFERS TO ELECTRIC EQUIPMENT CONTROL SCHEDULE
⊕	MANUAL MOTOR STARTER, INTEGRAL HORSEPOWER, PUSH BUTTON OPERATOR
⊕	ELECTRIC METER
⊕	JUNCTION BOX
⊕	BUSPLUG
⊕	PULLBOX
⊕	ENCLOSED CIRCUIT BREAKER
⊕	SINGLE FACE PEDESTAL BOX
⊕	DOUBLE FACE PEDESTAL BOX
⊕	EMERGENCY POWER RECEPTACLE
⊕	POWER CONNECTION
⊕	DROP CORD
⊕	CORD REEL
⊕	THERMOSTAT
⊕	POWER POLE



LIGHTING

SYMBOL	DESCRIPTION
\$	SINGLE POLE LIGHT SWITCH
\$	SINGLE POLE LIGHT SWITCH - OCCUPANCY SENSOR OPERATED
\$	SINGLE POLE LIGHT SWITCH - KEY OPERATED
\$	THREE WAY LIGHT SWITCH
\$	FOUR WAY LIGHT SWITCH
o.b.	INDICATES MULTI-LEVEL SWITCHING
⊕	DIMMER SWITCH
⊕	TIME CLOCK / SWITCH
⊕	PHOTO CONTROL
⊕	2'x4" RECESSED FIXTURE, DESIGNATION REFERS TO FIXTURE SCHEDULE
⊕	2'x2" RECESSED FIXTURE, DESIGNATION REFERS TO FIXTURE SCHEDULE
⊕	1'x4" RECESSED FIXTURE, DESIGNATION REFERS TO FIXTURE SCHEDULE
EM	INDICATES FIXTURE ON EMERGENCY CIRCUIT
⊕	6"-8" ROUND RECESSED DOWNLIGHT
⊕	12" ROUND RECESSED DOWNLIGHT
⊕	12" SQUARE RECESSED DOWNLIGHT
⊕	2" WALL MOUNTED FIXTURE, DESIGNATION REFERS TO FIXTURE SCHEDULE
⊕	3" WALL MOUNTED FIXTURE, DESIGNATION REFERS TO FIXTURE SCHEDULE
⊕	4" WALL MOUNTED FIXTURE, DESIGNATION REFERS TO FIXTURE SCHEDULE
⊕	ROUND WALL SCONCE
⊕	SQUARE WALL SCONCE
⊕	4 FT. STRIP FIXTURE
⊕	3 FT. STRIP FIXTURE
⊕	2 FT. STRIP FIXTURE
⊕	4 FT. TRACK LIGHT
⊕	WALL MOUNTED EXIT SIGN
⊕	WALL MOUNTED EXIT SIGN, DOUBLE FACE
⊕	WALL MOUNTED COMBINATION EXIT SIGN/EMERGENCY EGRESS LIGHTING, SINGLE FACE
⊕	CEILING MOUNTED EXIT SIGN, SINGLE FACE
⊕	CEILING MOUNTED EXIT SIGN, DOUBLE FACE
⊕	EMERGENCY LIGHTING FIXTURE WITH INTEGRAL BATTERY
⊕	EMERGENCY LIGHTING FIXTURE WITH REMOTE BATTERY (TWO HEADS)
⊕	EMERGENCY LIGHTING FIXTURE WITH REMOTE BATTERY (SINGLE HEAD)
⊕	LIGHTING CONTACTOR
⊕	WALL MOUNTED OCCUPANCY SENSOR
⊕	CEILING MOUNTED OCCUPANCY SENSOR

MISCELLANEOUS

SYMBOL	DESCRIPTION
① OR ②	REFERENCE TO DRAWING NOTE
⊕	REFERENCE TO FEEDER SCHEDULE
⊕	ROOM NUMBER
▶	ARROWHEAD LINE TERMINATOR
⊕	WALL SECTION SYMBOL
⊕	MULTIPLE ELEVATION SYMBOL
⊕	DETAIL REFERENCE SYMBOL
⊕	DRAWING REFERENCE SYMBOL

ONE LINE SYMBOLS

SYMBOL	DESCRIPTION
⊕	TRANSFORMER
⊕	CURRENT TRANSFORMER
⊕	POTENTIAL TRANSFORMER
⊕	THERMAL MAGNETIC MOLDED CASE CIRCUIT BREAKER DESIGNATION INDICATES AMPERE RATING
⊕	THERMAL MAGNETIC MOLDED CASE CIRCUIT BREAKER DRAW-OUT TYPE DESIGNATION INDICATES AMPERE RATING
⊕	SOLID STATE BREAKER DESIGNATIONS INDICATE FUNCTIONS: CL - CURRENT LIMITING L - LONG TIME TRIP S - SHORT TIME TRIP I - INSTANTANEOUS TRIP G - GROUND FAULT TRIP
⊕	SHUNT TRIP TYPE CIRCUIT BREAKER
⊕	FUSED DISCONNECT SWITCH
⊕	FUSE
⊕	BRANCH CIRCUIT DISTRIBUTION PANEL, REFER TO PANELBOARD SCHEDULES
⊕	GROUND CONNECTION
⊕	LIGHTNING ARRESTOR
⊕	SCHEMATIC MOTOR
⊕	EMERGENCY GENERATOR
⊕	AUTOMATIC TRANSFER SWITCH
⊕	MANUAL TRANSFER SWITCH
⊕	METER DESIGNATION INDICATES TYPE: A - AMPERE V - VOLTMETER KW/H - KILOWATT-HOUR METER
⊕	AMMETER SELECTOR SWITCH
⊕	VOLTMETER SELECTOR SWITCH
⊕	GROUND FAULT
⊕	DRAW OUT DEVICE

PUBLIC ADDRESS

SYMBOL	DESCRIPTION
⊕	CEILING MOUNTED SPEAKER, DESIGNATION REFERS TO TYPE IN SPECIFICATION
⊕	WALL MOUNTED SPEAKER, DESIGNATION REFERS TO TYPE IN SPECIFICATION
⊕	PROFESSIONAL QUALITY SPEAKER
⊕	SPEAKER CLUSTER
⊕	PUBLIC ADDRESS EQUIPMENT RACK
⊕	PUBLIC ADDRESS CONTROL CENTER
⊕	PUBLIC ADDRESS SPEAKER VOLUME CONTROL
⊕	WALL MOUNTED MICROPHONE OUTLET
⊕	FLOOR MOUNTED MICROPHONE OUTLET
⊕	PUBLIC ADDRESS INTERCOM STATION
⊕	WALL MOUNTED CLOCK LETTER REFERS TO TYPE IN SPECIFICATIONS
⊕	WALL MOUNTED DIGITAL CLOCK LETTER REFERS TO TYPE IN SPECIFICATIONS
⊕	WALL MOUNTED CLOCK AND SPEAKER LETTER REFERS TO TYPE IN SPECIFICATIONS
⊕	WIRELESS CLOCK TRANSMITTER
⊕	CLOCK SYSTEM BOOSTER POWER SUPPLY S - SYNCHRONOUS TYPE I - IMPULSE TYPE

SCHEMATIC SYMBOLS

SYMBOL	DESCRIPTION
⊕	HAND-OFF-AUTO SELECTOR SWITCH
⊕	SOLENOID VALVE COIL
⊕	N.O. PUSHBUTTON
⊕	N.C. PUSHBUTTON
⊕	N.O. RELAY CONTACT
⊕	N.C. RELAY CONTACT
⊕	N.O. FLOW SWITCH
⊕	N.C. FLOW SWITCH
⊕	N.O. LEVEL SWITCH
⊕	N.C. LEVEL SWITCH
⊕	N.O. PRESSURE SWITCH
⊕	N.C. PRESSURE SWITCH
⊕	N.O. TEMPERATURE SWITCH
⊕	N.C. TEMPERATURE SWITCH
⊕	N.O. SWITCH
⊕	N.C. SWITCH
⊕	N.O. LOW LIMIT SWITCH
⊕	N.C. LOW LIMIT SWITCH
⊕	N.O. HIGH LIMIT SWITCH
⊕	N.C. HIGH LIMIT SWITCH
⊕	EMERGENCY STOP PUSHBUTTON
⊕	RELAY COIL
⊕	INDICATOR LIGHT

SECURITY

SYMBOL	DESCRIPTION
⊕	CARD READER
⊕	MAGNETIC DOOR CONTACT
⊕	KEYPAD
⊕	SPECIAL INTRUSION DETECTION SENSOR
⊕	MOTION DETECTOR
⊕	CONNECT TO SECURITY SYSTEM HARDWARE OR DEVICE PROVIDED BY OTHERS
⊕	EXIT REQUEST
⊕	ELECTRO MAGNETIC LOCK
⊕	INTERCOM
⊕	ELECTRIC LATCH RETRACTION BAR
⊕	ELECTRIC LOCK
⊕	POWER SUPPLY
⊕	INTRUSION DETECTION CONTROL CENTER
⊕	CLOSED CIRCUIT TELEVISION CAMERA (FIXED)
⊕	CLOSED CIRCUIT TELEVISION CAMERA (PAN-TILT-ZOOM)
⊕	KEYPAD POWER SUPPLY
⊕	ELECTRIC LATCH RETRACTION BAR POWER SUPPLY

FIRE ALARM SYSTEM

SYMBOL	DESCRIPTION
⊕	MANUAL PULL STATION
⊕	CEILING MOUNTED SMOKE DETECTOR
⊕	DUCT MOUNTED SMOKE DETECTOR
⊕	VISUAL FIRE ALARM STROBE
⊕	AUDIO-VISUAL FIRE ALARM LETTER REFERS TO TYPE IN DESCRIPTION
⊕	CEILING MOUNTED THERMO DETECTOR LETTER REFERS TO TYPE IN SPECIFICATIONS
⊕	CEILING MOUNTED CARBON DIOXIDE DETECTOR
AUX	INDICATES AUXILIARY CONTACTS ON FIRE ALARM DEVICE
⊕	WALL MOUNTED MAGNETIC DOOR HOLDER
⊕	FLOOR MOUNTED MAGNETIC DOOR HOLDER
⊕	CONNECTION TO MAGNETIC DOOR HOLDER PROVIDED BY THE ARCHITECT
⊕	CONNECTION TO ROOF MOUNTED SMOKE HATCH OR WALL MOUNTED LOWER
⊕	CONNECTION TO SPRINKLER FLOW SWITCH
⊕	CONNECTION TO ELEVATOR CAPTURE CONTROL
⊕	CONNECTION TO SPRINKLER SYSTEM TAMPER SWITCH
⊕	FIRE ALARM SYSTEM EMERGENCY PHONE
⊕	FIRE ALARM CONTROL PANEL
⊕	FIRE ALARM REMOTE ANNUNCIATOR PANEL
⊕	VOICE CONTROL CENTER PANEL ANNUNCIATOR PANEL
⊕	NOTIFICATION APPLIANCE EXTENDER PANEL
⊕	ZONE ADDRESS MODULE
⊕	INDIVIDUAL ADDRESS MODULE
⊕	COLLECTIVE ZONE INTERFACE
⊕	AUXILIARY POWER SUPPLY S - SIGNAL DEVICES D - DOOR HOLD OPENS
⊕	FAN SHUTDOWN
⊕	ADDRESSABLE MONITOR MODULE
⊕	SMOKE DAMPER

ABBREVIATIONS:

⊕	NORMALLY OPEN AUXILIARY CONTACT
ACA	AC AMMETER
ACV	AC VOLTMETER
ALM	ALARM
AVR	AUTOMATIC VOLTAGE REGULATOR
AVS	AMMETER / VOLTMETER PHASE SELECTOR SWITCH
BACV	BUS AC VOLTMETER
BFM	BUS FREQUENCY METER
C	INDICATING LIGHT C.B. CLOSED
CCCT	CROSS COUPLED CURRENT TRANSFORMER
CS	CIRCUIT BREAKER CONTROL SWITCH
CT	CURRENT TRANSFORMER
DCA	DC AMMETER
DCV	DC VOLTMETER
DMD	DIGITAL METERING DISPLAY
E	EMERGENCY SOURCE
ECS	ENGINE CONTROL SWITCH
ESPB	EMERGENCY STOP PUSHBUTTON
F	FUSE
FT	FLEXITEST SWITCHES
GAL	GENERATOR AVAILABLE LIGHT
GEN	GENERATOR
IACV	INCOMING AC VOLTMETER
IFM	INCOMING FREQUENCY METER
LTS	LAMP TEST PUSHBUTTON
MPU	MAGNETIC PICK-UP
N	NORMAL SOURCE
O	INDICATING LIGHT C.B. OPEN
PT	POTENTIAL TRANSFORMER
S1	SOURCE 1
S2	SOURCE 2
SCS	SYSTEM CONTROL SWITCH
SHTC	SHUNT TRIP COIL
SIL	ALARM SILENCE PUSHBUTTON
SS	SYNCHRONIZING SWITCH
STB	SHORTING TERMINAL BOARD
SYNC	SYNCHROSCOPE
TS	TEMPERATURE SCANNER
VAR	VOLTAGE ADJUST RHEOSTAT
WRE	WARNING RESET PUSHBUTTON
WTD	WATT TRANSDUCER

NOTE:

1. NOT ALL SYMBOLS, ABBREVIATIONS AND LINE DESIGNATIONS ARE NECESSARILY USED ON THIS PROJECT.

POWER DISTRIBUTION COMMUNICATIONS

SYMBOL	DESCRIPTION
⊕	BRANCH CIRCUIT PANELBOARD 208Y/120V OR 240/120V REFER TO PANELBOARD SCHEDULE
⊕	EXISTING BRANCH CIRCUIT PANELBOARD 208Y/120V OR 240/120V, REFER TO PANELBOARD SCHEDULE
⊕	BRANCH CIRCUIT PANELBOARD 480/277V REFER TO PANELBOARD SCHEDULE
⊕	DISTRIBUTION PANELBOARD 1200A MAX REFER TO PANELBOARD SCHEDULE
⊕	DISTRIBUTION PANELBOARD 800A MAX REFER TO PANELBOARD SCHEDULE
⊕	MOTOR CONTROL CENTER SECTION
⊕	3-45 KVA TRANSFORMER
⊕	75-225 KVA TRANSFORMER
⊕	TRANSFORMER 480-208Y/120V, (500 KVA SIZE SHOWN) DESIGNATION REFERS TO TRANSFORMER SCHEDULE
⊕	SWITCHBOARD SECTION (800-2000AMP SIZE SHOWN)
⊕	2500 AMP SWITCHBOARD SECTION
⊕	3000 AMP SWITCHBOARD SECTION
⊕	4000 AMP SWITCHBOARD SECTION

LINE TYPES

SYMBOL	DESCRIPTION
⊕	EXISTING WORK
⊕	REMOVAL WORK
⊕	NEW WORK

ANSI STANDARD DEVICE FUNCTION NUMBERS

2	TIME-DELAY STARTING OR CLOSING RELAY
3	MASTER CONTACTOR
12	OVER-SPEED DEVICE
13	SYNCHRONOUS-SPEED DEVICE
14	UNDER-SPEED DEVICE
15	SPEED OR FREQUENCY MATCHING DEVICE
21	DISTANCE RELAY
25	SYNCHRONIZING OR SYNCHRONISM-CHECK DEVICE
27	UNDERVOLTAGE RELAY
29	ISOLATING CONTACTOR
32	DIRECTIONAL POWER RELAY
40	FIELD RELAY
42	RUNNING CIRCUIT BREAKER
46	REVERSE-PHASE OR PHASE-BALANCE CURRENT RELAY
47	PHASE-SEQUENCE VOLTAGE RELAY
47N	PHASE BALANCE RELAY
50	INSTANTANEOUS OVERCURRENT OR RATE-OF-RISE RELAY
51	AC TIME OVERCURRENT RELAY
51N	NEUTRAL TIME OVERCURRENT
51V	TIME OVERCURRENT WITH VOLTAGE CONTROL
52	AC CIRCUIT BREAKER
59	OVERVOLTAGE RELAY
59I	PEAK OVERVOLTAGE
59N	GROUND FAULT OVERVOLTAGE RELAY
60	VOLTAGE OR CURRENT BALANCE RELAY
62	TIME-DELAY STOPPING OR OPENING RELAY
64	GROUND PROTECTIVE RELAY
65	GOVERNOR
67	AC DIRECTIONAL OVERCURRENT RELAY
74	ALARM RELAY
79	AC CLOSING RELAY
81	FREQUENCY RELAY
81o/u	UNDERFREQUENCY / OVERFREQUENCY RELAY
86	LOCKOUT RELAY, MANUALLY RESET
87	DIFFERENTIAL PROTECTIVE RELAY
87G	EARTH CURRENT DIFFERENTIAL PROTECTION
89	LINE SWITCH

VA WESTERN NEW YORK HEALTHCARE SYSTEM
222 RICHMOND AVENUE
BATAVIA, NEW YORK 14020



15 Schoon Pkce
Suite 303
Pittsford, NY 14534
Phone: (585) 641-7121
Fax: (585) 362-4175
www.ecab.com

Consultant stamp

Architect / Engineer stamp

CARDIOLOGY MANAGER DATE

ENGINEERING MANAGER DATE

INFECTON CONTROL DATE

CARELINE MANAGER DATE

SAFETY OFFICER DATE

CHIEF OF STAFF DATE

Drawing Title
ELECTRICAL LEGEND &
ABBREVIATIONS

Project Title
VA BATAVIA EMERGENCY
POWER UPGRADES

Date
June 6, 2014

Station No.
528-13-201

Building Number
1

Checked
EJS

Drawn
RS

13-201-E001

Location
V.A.M.C. BATAVIA, NEW YORK



100% SUBMISSION 02-06-14

Revisions Date