ELECTRICAL SYMBOLS

ONE-LINE

- CIRCUIT BREAKER 3 POLE OR AS NOTED
- DRAW OUT CIRCUIT BREAKER 3 POLE OR AS NOTED
- MEDIUM VOLTAGE LOAD INTERRUPTER
- MEDIUM VOLTAGE FAULT INTERRUPTER
- DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH 3 POLE OR AS NOTED
- SPD — SURGE PROTECTIVE DEVICE
- GROUND
- FUSE - SIZE IN AMPERES
- DIESEL GENERATOR
- ## — MOTOR OR OTHER EQUIPMENT ## INDICATES HORSEPOWER UON
- 3 PHASE TRANSFORMER DELTA (Δ) PRIMARY / GROUNDED WYE SECONDARY
- CURRENT TRANSFORMERS
- 3E — POTENTIAL TRANSFORMER
- PQM — POWER QUALITY METER
- PM, M — POWER METER
- SURGE ARRESTER
- TRANSFER SWITCH AUTOMATIC OR MANUAL AS INDICATED
- PANEL BOARD - NAME, VOLTAGE, AND MCB CONFIGURATION AS NOTED
- ENCLOSURE BLOCK, DISTRIBUTION PANEL, NAME AND RATINGS AS INDICATED
- DC BATTERY
- STATIC BYPASS SWITCH
- CONTINUATION
- K1 — BREAKER ABLE TO CLOSE AND KEY WILL BE HELD CAPTIVE
- K1 — BREAKER LOCKED OPEN AND KEY ABLE TO BE REMOVED
- K1, K1, K1 — KEY TRANSFER BLOCK

ONE-LINE

- TAP BOX
- ASD — ADJUSTABLE SPEED DRIVE
- FSS — FUSED SAFETY SWITCH
- # — KEYED NOTE CALLOUT
- AC-DC INVERTER / RECTIFIER
- DC-AC INVERTER
- DC-DC COUPLER

ONE-LINE DRAWING ORGANIZATION

- ONE-LINE TYPE DESIGNATION
  - 0 = FEEDER SCHEDULE / MV / HOUSE
  - 1 = CRITICAL BLOCK
- DATA HALL DESIGNATION
- BLOCK DESIGNATION
  - A01 = BLOCK A01
  - A02 = BLOCK A02
  - B01 = BLOCK B01
  - B02 = BLOCK B02
  - C01 = BLOCK C01
  - C02 = BLOCK C02
  - D01 = BLOCK D01
  - D02 = BLOCK D02
  - E01 = BLOCK E01
  - E02 = BLOCK E02

E01-11.2A01

DRAWING INDICATORS

- 1 / E02-51 — DETAIL NUMBER; CALLOUT SOW; SHEET NUMBER WHERE DETAIL IS DRAWN
  DETAIL INDICATION
- 1 / E02-51 — DETAIL NUMBER; DIRECTION OF VIEW; SHEET NUMBER WHERE DETAIL IS DRAWN
  SECTION INDICATION

LINE TYPE LEGEND

- NEW WORK
- DEMO WORK
- FUTURE WORK
- EXISTING WORK

CONDUIT ONELINE LINE TYPE LEGEND

- NEW WORK
- DEMO WORK
- FUTURE WORK
- EXISTING WORK

FEEDER NAMING

INDICATES CONDUCTOR MATERIAL
INDICATES 3 OR 4 WIRE
INDICATES AMPACITY
250-4-AL
C-AG — CONDUCTOR CONVEYANCE
INDICATES CONDUCTOR VOLTAGE CLASS/USAGE

MATERIAL LEGEND:

AL	ALUMINUM
CU	COPPER

CONVEYANCE LEGEND:

C-AG	ABOVE GRADE CONDUIT
C-BG	BELOW GRADE CONDUIT
C-BUS	CABLEBUS
T-MC	MC CABLE IN TRAY
T-CT	CABLE TRAY WIRE IN TRAY

CLASS/USAGE LEGEND:

[BLANK]	600V, TYP. LV DISTRIBUTION
T	600V, FOR LV XFMR
G	600V, FOR LV GENERATOR
MV	35KV, MV DISTRIBUTION

BREAKER KEY

- XXXX AT — AMPERE TRIP RATING
- XXXX AF — AMPERE FRAME RATING
- XXX — TRIP UNIT TYPE
- XX% — CONTINUOUS RATING

NOTE:

-TRIP UNIT SENSOR OR PLUG RATING SHALL MATCH THE FRAME RATING U.O.N.

TRIP UNIT KEY

L	LONG TIME
S	SHORT TIME
I	INSTANTANEOUS
G	GROUND
A	ALARM

GROUNDING

- GROUND BAR
- EQUIPMENT GROUND CONNECTION
- FUTURE EQUIPMENT GROUND CONNECTION
- GROUND ROD
- GROUND TEST WELL
- PERMANENT GROUND CONNECTION
- PEDESTAL BOND
- GROUND LOOP
- EQUIPMENT GROUNDING OVERHEAD
- EQUIPMENT GROUNDING UNDER SLAB
- CONTINUATION TO EQUIPMENT ON FLOOR ABOVE/BELOW
- EQUIPMENT GROUNDING CONDUCTOR ROUTED THROUGH CONDUIT WITH POWER CABLES

LIGHTNING PROTECTION

- CLASS 1 AIR TERMINAL, 1/2" DIA. SOLID ALUMINUM WITH SAFETY TIP.
  TYPE "A" UNLESS OTHERWISE NOTED:
  - TYPE "A": 18"L, ADHERED TO INNER SIDE OF PARAPET
  - TYPE "B": 24"L, ADHERED DIRECTLY TO ROOF
- CLASS 1 ALUMINUM LIGHTNING CONDUCTOR, MAIN SIZE EXCEPT WHERE BONDING CONDUCTORS ARE EXPLICITLY ALLOWED BY CODE :
  - MAIN CONDUCTOR: MINIMUM 95 LB PER 1000', 24 STRANDS #14 AWG
  - BONDING CONDUCTOR: MINIMUM 39 LB PER 1000', 10 STRANDS #14 AWG
- COPPER DOWN CONDUCTOR TO BURIED GROUND RING, CONCEALED IN SEAM OF PRE-CAST BUILDING PANELS

LIGHTING

- $ — SINGLE POLE SWITCH; WALL MTD. 48" AFF TO CL.
- $a — LOWER CASE LETTER INDICATES SWITCHING ZONE
- $3 — SWITCH-THREE WAY; WALL MTD. 48" AFF TO CL UON
- $4 — SWITCH- FOUR WAY; WALL MTD. 48" AFF TO CL UON
- $LV — LOW VOLTAGE SWITCH ON/OFF; WALL MTD. 48" AFF.
- $D — LOW VOLTAGE DIMMER SWITCH; WALL MTD. 48" AFF.
- $OS — OCCUPANCY SENSOR WALL SWITCH ON/OFF; WALL MTD. 48" AFF.
- $OSD — OCCUPANCY SENSOR WALL SWITCH DIMMING/ON-OFF; WALL MTD. 48" AFF.
- OCCUPANCY SENSOR; CEILING MTD. UON
- DL — DAY LIGHT SENSOR: CEILING MTD. UON

NOTE: IN CORRIDORS, WHERE SWITCHES ARE INSTALLED ON DRYWALL WITH REVEALS, LOWER SWITCH MOUNTING HEIGHT TO 42" TO COORDINATE WITH REVEAL.

- L1D2E — LIGHTING CONTROL ID TAG. REFER TO LTG CONTROL SCHEDULE ON E05-50 SERIES.
  - E = WITH EMERGENCY RELAY
  - # = SEQUENCE NUMBER

REQUIREMENETS
D = DIMMING,
S = DIM TO XX%,
P = DAYLIGHT PHOTOCELL,
L = PLUG LOAD CONTROLLER
# = NUMBER OF ZONES

TYPICAL FIXTURE TAGS

FIXTURE TYPE (REFER TO LUMINAIRE SCHEDULE) — A
NL INDICATES NIGHT LIGHT (FEED WITH UNSWITCHED POWER) — NL
SWITCHING IDENTIFICATION — a
LP-1 #23 — PANEL AND CIRCUIT IDENTIFICATION
SOLID SHADING OR FILLED IN CIRCLE THROUGH FIXTURE INDICATES EMERGENCY POWER

POWER

- RECEPTACLE - SIMPLEX, 18" AFF TO CL UON
- RECEPTACLE - DUPLEX, 18" AFF TO CL UON
- RECEPTACLE - DUPLEX, 6" TO CL ABOVE COUNTER UON
- GFI — RECEPTACLE - DUPLEX, GFI, 18" AFF TO CL UON
- OS — RECEPTACLE - DUPLEX OCCUPANCY SENSOR CONTROLLED
- RECEPTACLE - DOUBLE DUPLEX, 18" AFF TO CL UON
- RECEPTACLE - DOUBLE DUPLEX, 6" TO CL ABOVE COUNTER UON
- GFI — RECEPTACLE - DUPLEX, GFI, 18" AFF TO CL UON
- USB — RECEPTACLE - DUPLEX, INTEGRAL USB, 6" TO CL ABOVE COUNTER UON
- x — SPECIALTY RECEPTACLE - TYPE AS NOTED WITH SUBSCRIPT
- FLUSH CEILING/FLOOR DUPLEX RECEPTACLE
- FLUSH FLOOR BOX. PROVIDE ADDITIONAL GANGS AS INDICATED.
- J — JUNCTION BOX / MISC. EQUIPMENT CONNECTION
- E — EQUIPMENT CONNECTION. REFER TO ELEC EQUIP AND CONTROL SCHEDULE
- DISCONNECT SWITCH (SAFETY SWITCH); X/X/X = AMP RATING/POLE/FUSE SIZE; NF = NON-FUSED
- CEILING MOUNTED RECEPTACLE, CORD REELS
- TH — SINGLE POLE MANUAL STARTER WITH THERMAL OVERLOAD PROTECTION FOR FRACTIONAL HORSEPOWER MOTORS
- C, W, F — DRY TYPE TRANSFORMER
  - F = FLOOR MOUNTED
  - C = CEILING MOUNTED (TRAPEZE)
  - W= WALL MOUNTED

DRAWING ORGANIZATION

- ELEC DISCIPLINE PREFIX
- GROUP DESIGNATION
- DRAWING NUMBER / LEVEL
- SECTION/SEGMENT/AREA

E00-01A	GENERAL
E00-02	SITE
E01-00	ONE-LINE DIAGRAM
E02-01	POWER
E02-11	ROUTING
E03-01	GROUNDING
E03-11	FIRE ALARM(IF APPLICABLE)
E04-01	LIGHTING
E05-01	PANEL SCHEDULES

- CLASS OF EQUIPMENT

ATS	AUTOMATIC TRANSFER SWITCH
BIB	BATTERY ISOLATION BREAKER
CCS	CRITICAL COLLECTOR SWBD
CDB	CRITICAL DISTRIBUTION BOARD
CDP	CRITICAL DIST. PANEL
CRB	CRITICAL RESERVE BUS
CSB	CRITICAL SWBD
DCP	DIRECT-CURRENT PANELBOARD
DP	DIST. PANEL
ECS	ESSENTIAL COLLECTOR SWBD
EDP	ESSENTIAL DIST. PANEL
ELDP	EM LIGHTING DIST. PANEL
ELP	EMERGENCY LIGHTING PANEL
ERB	ESSENTIAL RESERVE BUS
ESB	ESSENTIAL SWBD
GMP	GENERATOR MECH PANEL
GRP	GENERATOR RECEPTACLE PANEL
HVS	HIGH VOLTAGE SWITCHGEAR
LP	LIGHTING PANEL
MCP	MOTOR CONTROL PANEL
MDP	MECH DIST. PANEL
MP	MECH PANEL
MPZ	MINI-POWER ZONE
MSB	MAIN SWBD
MSG	MAIN SWITCH GEAR
MVTS	MEDIUM VOLTAGE TRANSFER SWITCH
POP	PUMP DIST. PANEL
PP	POWER PANEL
RMDP	RESERVE MECH DIST. PANEL
RP	RECEPTACLE PANEL
STS	STATIC TRANSFER SWITCH
T	TRANSFORMER
UP	UPS PANEL
UPS	UNINTERRUPTIBLE POWER SUPPLY
USB	UPS SWBD

- ROOM IDENTIFIER

XXX-XXX##-X##-XXX

- BREAKER IDENTIFIER

FB	FEEDER BREAKER
MBB	MAINT. BYPASS BREAKER
MCB	MAIN CIRCUIT BREAKER
MIB	MODULE INPUT BREAKER
MOB	MODULE OUTPUT BREAKER
UIB	UNIT INPUT BREAKER
LBB	LOAD BANK BREAKER
UMB	UTILITY MAIN BREAKER
GIB	GENERATOR ISOLATION BREAKER
GMB	GENERATOR MAIN BREAKER
HMB	HAIL MARY BREAKER

- EQUIPMENT IDENTIFIER
  - A01.102
  - SEQUENCE
  - ALTERNATE SOURCE (1,2)(0 INDICATES NONE)
  - BLOCK NUMBER (1, 2,...24, R)
  - ELEC SYSTEM (A, B)

EXAMPLE:

UPS:
UPS-UPS243-A01.001

TRANSFORMER:
T-UPS243-A01.001

BUSWAY:
BW-CR18-A01.201

ELECTRICAL SYSTEM KEY

CRITICAL BLOCK	A,B
DISTRIBUTION	

EQUIPMENT NAMING CONVENTION

X-X-XXX-X-XXX-X-X

- COLUMN - ROW
- EQUIPMENT TYPE
- INTERATION
- UP STREAM EQUIPMENT FEED
- DATAHALL- BLOCK

ELECTRICAL SHEET LIST

Sheet Number	SHEET NAME
E00-01	LEGEND AND ABBREVIATIONS
E00-02	SITE POWER PLAN - OVERALL
E00-03	SITE LIGHTING PLAN
E00-04	SITE PHOTOMETRIC PLAN
E01-00	POWER BLOCK DIAGRAM
E01-00A	ADMIN POWER BLOCK ONE-LINE DIAGRAM
E01-00M	MV DISTRIBUTION ONE-LINE
E01-01	POWER BLOCK DIAGRAM 7 TO MAKE 6 TYPICAL
E01-01A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 1-1
E01-01B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 1-2
E01-01C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 1-3
E01-02A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 2-1
E01-02B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 2-2
E01-02C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 2-3
E01-03A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 3-1
E01-03B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 3-2
E01-03C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 3-3
E01-04A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 4-1
E01-04B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 4-2
E01-04C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 4-3
E01-05A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 5-1
E01-05B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 5-2
E01-05C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 5-3
E01-06A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 6-1
E01-06B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 6-2
E01-06C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 6-3
E01-07A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 7-1
E01-07B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 7-2
E01-07C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 7-3
E01-08A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 8-1
E01-08B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 8-2
E01-08C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 8-3
E01-09A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 9-1
E01-09B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 9-2
E01-09C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 9-3
E01-10A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 10-1
E01-10B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 10-2
E01-10C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 10-3
E01-11A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 11-1
E01-11B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 11-2
E01-11C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 11-3
E01-12A	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 12-1
E01-12B	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 12-2
E01-12C	CRITICAL POWER BLOCK ONE-LINE DIAGRAM 12-3
E01-17R	RESERVE POWER BLOCK ONE-LINE DIAGRAM 1/7
E01-28R	RESERVE POWER BLOCK ONE-LINE DIAGRAM 2/8
E01-39R	RESERVE POWER BLOCK ONE-LINE DIAGRAM 3/9
E01-50	ELECTRICAL FEEDER SCHEDULES
E01-410R	RESERVE POWER BLOCK ONE-LINE DIAGRAM 4/10
E01-511R	RESERVE POWER BLOCK ONE-LINE DIAGRAM 5/11
E01-612R	RESERVE POWER BLOCK ONE-LINE DIAGRAM 6/12
E02-01	LEVEL 1 - POWER PLAN - OVERALL
E02-01A	LEVEL 1 - POWER PLAN - SEGMENT A
E02-01B	LEVEL 1 - POWER PLAN - SEGMENT B
E02-01C	LEVEL 1 - POWER PLAN - SEGMENT C
E02-01D	LEVEL 1 - POWER PLAN - SEGMENT D
E02-01E	LEVEL 1 - POWER PLAN - SEGMENT E
E02-01F	LEVEL 1 - POWER PLAN - SEGMENT F
E02-01G	LEVEL 1 - POWER PLAN - SEGMENT G
E02-01H	LEVEL 1 - POWER PLAN - SEGMENT H
E02-01J	LEVEL 1 - POWER PLAN - SEGMENT J
E02-01K	LEVEL 1 - POWER PLAN - SEGMENT K
E02-01L	LEVEL 1 - POWER PLAN - SEGMENT L
E02-01M	LEVEL 1 - POWER PLAN - SEGMENT M
E02-01N	LEVEL 1 - POWER PLAN - SEGMENT N
E02-01P	LEVEL 1 - POWER PLAN - SEGMENT P
E02-02	LEVEL 2 - POWER PLAN - OVERALL
E02-02B	LEVEL 2 - POWER PLAN - SEGMENT B
E02-02C	LEVEL 2 - POWER PLAN - SEGMENT C
E02-02D	LEVEL 2 - POWER PLAN - SEGMENT D
E02-02E	LEVEL 2 - POWER PLAN - SEGMENT E
E02-02F	LEVEL 2 - POWER PLAN - SEGMENT F
E02-02G	LEVEL 2 - POWER PLAN - SEGMENT G
E02-02H	LEVEL 2 - POWER PLAN - SEGMENT H
E02-03	ROOF - POWER PLAN - OVERALL
E02-03A	ROOF - POWER PLAN - SEGMENT A
E02-03B	ROOF - POWER PLAN - SEGMENT B
E02-03C	ROOF - POWER PLAN - SEGMENT C
E02-03D	ROOF - POWER PLAN - SEGMENT D
E02-03E	ROOF - POWER PLAN - SEGMENT E
E02-03F	ROOF - POWER PLAN - SEGMENT F
E02-03G	ROOF - POWER PLAN - SEGMENT G
E02-03H	ROOF - POWER PLAN - SEGMENT H
E02-04	EQUIPMENT PLATFORM - POWER PLAN - OVERALL
E02-04C	EQUIPMENT PLATFORM - POWER PLAN - SEGMENT C
E02-04D	EQUIPMENT PLATFORM - POWER PLAN - SEGMENT D
E02-04E	EQUIPMENT PLATFORM - POWER PLAN - SEGMENT E
E02-04F	EQUIPMENT PLATFORM - POWER PLAN - SEGMENT F
E02-04G	EQUIPMENT PLATFORM - POWER PLAN - SEGMENT G
E02-04H	EQUIPMENT PLATFORM - POWER PLAN - SEGMENT H
E02-11	LEVEL 1 - CONDUIT ROUTING PLAN - OVERALL
E02-11A	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT A
E02-11B	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT B
E02-11C	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT C
E02-11D	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT D
E02-11E	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT E
E02-11F	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT F
E02-11G	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT G
E02-11H	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT H
E02-11J	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT J
E02-11K	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT K
E02-11L	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT L
E02-11M	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT M
E02-11N	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT N
E02-11P	LEVEL 1 - CONDUIT ROUTING PLAN - SEGMENT P
E02-12	LEVEL 2 - CONDUIT ROUTING PLAN - OVERALL
E02-12B	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT B
E02-12C	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT C
E02-12D	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT D
E02-12E	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT E
E02-12F	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT F
E02-12G	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT G
E02-12H	LEVEL 2 - CONDUIT ROUTING PLAN - SEGMENT H
E02-13	ROOF - CONDUIT ROUTING PLAN - OVERALL
E02-13A	ROOF - CONDUIT ROUTING PLAN - SEGMENT A
E02-13B	ROOF - CONDUIT ROUTING PLAN - SEGMENT B
E02-13C	ROOF - CONDUIT ROUTING PLAN - SEGMENT C
E02-13D	ROOF - CONDUIT ROUTING PLAN - SEGMENT D
E02-13E	ROOF - CONDUIT ROUTING PLAN - SEGMENT E
E02-13F	ROOF - CONDUIT ROUTING PLAN - SEGMENT F
E02-13G	ROOF - CONDUIT ROUTING PLAN - SEGMENT G
E02-13H	ROOF - CONDUIT ROUTING PLAN - SEGMENT H
E02-14	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - OVERALL
E02-14C	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - SEGMENT C
E02-14D	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - SEGMENT D

ELECTRICAL SHEET LIST

Sheet Number	SHEET NAME
E02-14E	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - SEGMENT E
E02-14F	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - SEGMENT F
E02-14G	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - SEGMENT G
E02-14H	EQUIPMENT PLATFORM - CONDUIT ROUTING PLAN - SEGMENT H
E02-20	ENLARGED POWER PLANS
E02-50	POWER DETAILS
E02-51	POWER DETAILS
E03-00	GROUNDING RISER DIAGRAM
E03-01	LEVEL 1 - GROUNDING PLAN - OVERALL
E03-01A	LEVEL 1 - GROUNDING PLAN - SEGMENT A
E03-01B	LEVEL 1 - GROUNDING PLAN - SEGMENT B
E03-01C	LEVEL 1 - GROUNDING PLAN - SEGMENT C
E03-01D	LEVEL 1 - GROUNDING PLAN - SEGMENT D
E03-01E	LEVEL 1 - GROUNDING PLAN - SEGMENT E
E03-01F	LEVEL 1 - GROUNDING PLAN - SEGMENT F
E03-01G	LEVEL 1 - GROUNDING PLAN - SEGMENT G
E03-01H	LEVEL 1 - GROUNDING PLAN - SEGMENT H
E03-01J	LEVEL 1 - GROUNDING PLAN - SEGMENT J
E03-01K	LEVEL 1 - GROUNDING PLAN - SEGMENT K
E03-01L	LEVEL 1 - GROUNDING PLAN - SEGMENT L
E03-01M	LEVEL 1 - GROUNDING PLAN - SEGMENT M
E03-01N	LEVEL 1 - GROUNDING PLAN - SEGMENT N
E03-01P	LEVEL 1 - GROUNDING PLAN - SEGMENT P
E03-02	LEVEL 2 - GROUNDING PLAN - OVERALL
E03-02B	LEVEL 2 - GROUNDING PLAN - SEGMENT B
E03-02C	LEVEL 2 - GROUNDING PLAN - SEGMENT C
E03-02D	LEVEL 2 - GROUNDING PLAN - SEGMENT D
E03-02E	LEVEL 2 - GROUNDING PLAN - SEGMENT E
E03-02F	LEVEL 2 - GROUNDING PLAN - SEGMENT F
E03-02G	LEVEL 2 - GROUNDING PLAN - SEGMENT G
E03-02H	LEVEL 2 - GROUNDING PLAN - SEGMENT H
E03-11	ROOF - LIGHTNING PROTECTION PLAN - OVERALL
E03-50	GROUNDING DETAILS
E04-01	LEVEL 1 - LIGHTING PLAN - OVERALL
E04-01A	LEVEL 1 - LIGHTING PLAN - SEGMENT A
E04-01B	LEVEL 1 - LIGHTING PLAN - SEGMENT B
E04-01C	LEVEL 1 - LIGHTING PLAN - SEGMENT C
E04-01D	LEVEL 1 - LIGHTING PLAN - SEGMENT D
E04-01E	LEVEL 1 - LIGHTING PLAN - SEGMENT E
E04-01F	LEVEL 1 - LIGHTING PLAN - SEGMENT F
E04-01G	LEVEL 1 - LIGHTING PLAN - SEGMENT G
E04-01H	LEVEL 1 - LIGHTING PLAN - SEGMENT H
E04-01L	LEVEL 1 - LIGHTING PLAN - SEGMENT L
E04-01P	LEVEL 1 - LIGHTING PLAN - SEGMENT P
E04-02	LEVEL 2 - LIGHTING PLAN - OVERALL
E04-02A	LEVEL 2 - LIGHTING PLAN - SEGMENT A
E04-02B	LEVEL 2 - LIGHTING PLAN - SEGMENT B
E04-02C	LEVEL 2 - LIGHTING PLAN - SEGMENT C
E04-02D	LEVEL 2 - LIGHTING PLAN - SEGMENT D
E04-02E	LEVEL 2 - LIGHTING PLAN - SEGMENT E
E04-02F	LEVEL 2 - LIGHTING PLAN - SEGMENT F
E04-02G	LEVEL 2 - LIGHTING PLAN - SEGMENT G
E04-02H	LEVEL 2 - LIGHTING PLAN - SEGMENT H
E04-03	ROOF - LIGHTING PLAN - OVERALL
E04-04	EQUIPMENT PLATFORM - LIGHTING PLAN - OVERALL
E04-50	LUMINAIRE SCHEDULE AND DETAILS
E05-01	PANEL SCHEDULES - 1A
E05-02	PANEL SCHEDULES - 1B
E05-03	PANEL SCHEDULES - 1C
E05-04	PANEL SCHEDULES - 1D
E05-05	PANEL SCHEDULES - 1E
E05-06	PANEL SCHEDULES - 1F
E05-07	PANEL SCHEDULES - 1G
E05-08	PANEL SCHEDULES - 1H
E05-15	PANEL SCHEDULES - 2B
E05-16	PANEL SCHEDULES - 2C
E05-17	PANEL SCHEDULES - 2D
E05-18	PANEL SCHEDULES - 2E
E05-19	PANEL SCHEDULES - 2F
E05-20	PANEL SCHEDULES - 2G
E05-21	PANEL SCHEDULES - 2H
TOTAL: 196	

PROJECT GENERAL NOTES

1. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF CEILING MOUNTED DEVICES AND SWITCHES WITH ARCHITECT PRIOR TO ROUGH-IN.
2. PROVIDE ACCESS PANEL PER CODE AND AS REQUIRED FOR J-BOXES, PULL BOXES OR CABLE TRAY. COORDINATE WITH ARCHITECT AND CEILING CONTRACTOR.
3. PROVIDE AND INSTALL BARRIER BETWEEN SEPARATELY DERIVED SYSTEM CONDUCTORS WITHIN THE SAME ENCLOSURE OR RACEWAY. DO NOT INSTALL CONDUCTORS FROM DIFFERENT POWER SOURCES WITHIN THE SAME ENCLOSURE, CABLE, OR RACEWAY.
4. REFER TO ARCHITECTURAL DRAWINGS FOR WALL LOCATIONS. CONTRACTOR SHALL PROVIDE PENETRATIONS AS REQUIRED AND FIREPROOFING INSULATION TO MAINTAIN RATING OF ANY FIRE-RATED WALLS.
5. CONTRACTOR IS RESPONSIBLE TO REVIEW ARCHITECTURAL DRAWINGS TO CONFIRM CEILING TYPES IN EACH ROOM (ACCESSIBLE, EXPOSED, OR "HARD") AND TO USE THE APPROPRIATE WIRING METHOD FOR EACH TYPE. ENSURE J-BOXES ARE ACCESSIBLE AFTER OTHER TRADES HAVE COMPLETED THEIR SCOPES OF WORK. DO NOT LOCATE ANY J-BOXES, PULL BOXES OR CABLE TRAY ABOVE "HARD" CEILINGS; CONTRACTOR MAY INSTALL J-BOXES ABOVE OTHER TRADE'S ACCESS DOORS IF FEASIBLE AND DOES NOT INTERFERE WITH ACCESS.
6. PROVIDE SEISMIC BRACING FOR PENDANT AND CABLE HUNG FIXTURES WHERE REQUIRED BY CODE.
7. CONTRACTOR SHALL ARRANGE FOR INSPECTION OF ELECTRICAL EQUIPMENT IN A DE-ENERGIZED STATE.
8. CONTRACTOR SHALL PROVIDE SIGNAGE AT SERVICE ENTRANCE EQUIPMENT INDICATING TYPE AND LOCATION OF OPTIONAL STANDBY POWER SOURCE, IN COMPLIANCE WITH NEC ARTICLE 702.8.
9. PROVIDE FIELD APPLIED LABELS PER NEC ARTICLE 110.16 AND NFPA 70E-2015 ON SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL PANELS AND MOTOR CONTROL CENTERS WARNING QUALIFIED PERSONNEL OF POTENTIAL ARC FLASH HAZARDS AND APPROPRIATE PPE REQUIRED.
10. CONDUCTORS 1000V, NOMINAL OR LESS OF DIFFERENT SYSTEMS INSTALLED WITHIN THE SAME RACEWAY SHALL HAVE AN INSULATION RATING EQUAL TO AT LEAST THE MAXIMUM CIRCUIT VOLTAGE APPLIED TO ANY CONDUCTOR IN A RACEWAY. NEC 300.3(C)1.
11. CONTRACTOR SHALL PROVIDE AN ACCURATE, TYPED, AND LEGIBLE CIRCUIT DIRECTORY FOR EACH PANELBOARD AND SWITCHBOARD AS REQUIRED BY NEC ARTICLE 408.4. LOCATE THE DIRECTORY ON THE FACE OR ON THE DOOR OF EACH PANELBOARD OR AT EACH DEVICE ON A SWITCHBOARD.
12. PROVIDE FLEXIBLE CONNECTIONS TO ANY ELEMENT/ASSEMBLY FOR WHICH ONE OF THE FOLLOWING CONDITIONS APPLY: THE ELEMENT/ASSEMBLY CROSSES A SEISMIC JOINT, EXPANSION JOINT, IS SUBJECT TO STRUCTURAL DEFLECTION, WHERE DIFFERENT STRUCTURAL ELEMENTS SUPPORT ADJACENT SECTIONS OF A BRANCH, OR WHERE IT TERMINATES WITH A CONNECTION TO EQUIPMENT THAT IS ANCHORED TO A DIFFERENT STRUCTURAL ELEMENT FROM THE ONE SUPPORTING IT.
13. INSTALL CRITICAL POWER CONDUCTORS, DC POWER CONDUCTORS, AND NORMAL POWER FEEDER CONDUCTORS WITHOUT SPLICES UNLESS EXPLICITLY DETAILED ON ENGINEERING DRAWINGS. INSTALLING CONTRACTOR SHALL SUBMIT DETAILS AND PLANS, IDENTIFYING EACH INSTANCE, OF PROPOSED SPLICES TO THE ENGINEER AND OWNER FOR APPROVAL PRIOR TO INSTALLATION.
14. EQUIPMENT DENOTED AS OFCI ON SINGLE LINE DIAGRAMS SHOWS EQUIPMENT IS TO BE OWNER PRE-PURCHASED. CONTRACTOR IS TO RECEIVE, COORDINATE, INSTALL, AND TEST ALL OFCI EQUIPMENT.
15. INSTALL A FLEXIBLE CONNECTION IN RUNS OF RACEWAY, CABLES, WIRE WAYS, CABLE TRAYS, BUSWAYS, PIPES, CONDUIT, OR DUCTS WHERE THEY CROSS SEISMIC JOINTS OR ARE SUBJECT TO STRUCTURAL DEFLECTIONS, WHERE ADJACENT SECTIONS OF BRANCHES ARE SUPPORTED BY DIFFERENT STRUCTURAL ELEMENTS AND WHERE THEY TERMINATE WITH CONNECTIONS TO EQUIPMENT THAT ARE ANCHORED TO DIFFERENT STRUCTURAL ELEMENTS FROM THE ELEMENTS SUPPORTING THEM AS THEY APPROACH EQUIPMENT.

APPLICABLE CODES

2012 INTERNATIONAL FIRE CODE
2010 INTERNATIONAL MECHANICAL CODE
2006 INTERNATIONAL PLUMBING CODE
2017 NATIONAL ELECTRICAL CODE
2009 INTERNATIONAL ENERGY CONSERVATION CODE
2006 INTERNATIONAL FUEL CODE

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CORGAN
TGRWA STRUCTURAL ENGINEERS
kW Mission Critical Engineering Member of WSP
EP ENGINEERING PLUS
Kimley»Horn

ISSUES		
1	11/12/2025	CONCEPTUAL DESIGN
2	12/12/2025	SCHEMATIC DESIGN
3	12/17/2025	STEEL MILL ORDER
4	1/23/2026	DESIGN DEVELOPMENT

REVISIONS

kW Mission Critical Engineering
Contact: David Adams Phone: 703.926.0715
Engineer: Matthew Fagert
License #: 123456 Exp. Date: 00/00/0000

NOT FOR CONSTRUCTION

Date: 00/00/0000

SERVERFARM
Clarksville, AR

LEGEND AND ABBREVIATIONS

JOB US0049903.5614
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