



**VAULT ELECTRICAL EQUIPMENT PLAN**  
 SCALE 1/2"=1'-0"  
 1 0 2 4 FEET

**KEYED NOTES**

- 1 2 #4/0 XHHW, 1 #4/0 XHHW NEUTRAL, 1 #2 GND IN 3" SCHED 40 PVC FROM SERVICE BREAKER TO VAULT PANEL CONDUIT TO TRANSITION TO GRSC WHERE EMERGING FROM GRADE.
- 2 VAULT PANEL. SEE VAULT PANEL SCHEDULE.
- 3 AC SURGE PROTECTOR/TVSS, SEE NEW VAULT ELECTRICAL ONE LINE DIAGRAM.
- 4 RELAY/LIGHTING CONTACTOR PANEL. SEE AIRFIELD LIGHTING WIRING SCHEMATIC AND RELAY/CONTACTOR PANEL DETAIL. MOUNT PHOTOCELL ON ROOF. FIELD VERIFY LOCATION FOR PROPER CONTROL AND OPERATION.
- 5 L-854 RADIO CONTROL UNIT WITH RELAY INTERFACE PANEL BELOW. EXTEND RADIO ANTENNA CABLE AND MOUNT ANTENNA ON THE BEACON TOWER AS REQUIRED FOR PROPER OPERATION.
- 6 RELAY INTERFACE PANELS (BELOW L-854 RADIO CONTROL UNIT). SEE AIRFIELD LIGHTING WIRING SCHEMATIC FOR WIRING REQUIREMENTS.
- 7 ELECTRIC WALL HEATER EH-1, 3000 WATT, 240 VAC, 1 PHASE, SUITABLE FOR SURFACE MOUNTING WITH INTEGRAL THERMOSTAT, Q-MARK MODEL CWH3407, OR APPROVED EQUAL. BOTTOM OF HEATER SHALL BE 3" ABOVE THE UPPER ELECTRICAL WIREWAY.
- 8 ELECTRIC WALL HEATER EH-2, 2000 WATT, 240 VAC, 1 PHASE, SUITABLE FOR SURFACE MOUNTING WITH INTEGRAL THERMOSTAT, Q-MARK MODEL CWH3404, OR APPROVED EQUAL. BOTTOM OF HEATER SHALL BE 3" ABOVE THE UPPER ELECTRICAL WIREWAY.
- 9 EXHAUST FAN EF-1, 2000 CFM AT .25" STATIC PRESSURE WITH 1/2 HP, 120 VAC MOTOR, COOK MODEL 20S10D, OR APPROVED EQUAL. INCLUDE WALL HOUSING WITH GUARD, GRAVITY BACK DRAFT DAMPER, ALUMINUM WEATHER-HOOD PAINTED TO MATCH BUILDING EXTERIOR, STAINLESS STEEL INSECT SCREEN, AND FRACTIONAL HP ELECTRICAL DISCONNECT. INSTALL FAN AS HIGH AS POSSIBLE. PROVIDE 120 VAC THERMOSTAT WITH CONTACTOR AND AUTO-OFF-MANUAL CONTROL SWITCH AT 48" AFF. MOUNT THERMOSTAT ON 2" THICK INSULATED BASE. SEE EXHAUST FAN CONTROL SCHEMATIC FOR WIRING REQUIREMENTS.
- 10 INTAKE LOUVER L-1, 24" WIDE BY 48" HIGH INTAKE LOUVER WITH STAINLESS STEEL INSECT SCREEN, 120 VAC MOTORIZED DAMPER WITH LIMIT SWITCH, KYNAR FINISH MATCHING BUILDING EXTERIOR, RUSKIN MODEL ELF375DX, OR APPROVED EQUAL. SEE EXHAUST FAN CONTROL SCHEMATIC FOR WIRING REQUIREMENTS.
- 11 6" BY 6" LOW VOLTAGE WIREWAY. LABEL "LOW VOLTAGE" EVERY 4 FEET. INSTALL ABOVE HIGH VOLTAGE WIREWAY.
- 12 6" BY 6" HIGH VOLTAGE WIREWAY. LABEL "HIGH VOLTAGE" EVERY 4 FEET. INSTALL BELOW LOW VOLTAGE WIREWAY.
- 13 EXISTING RUNWAY 18-36 & TAXIWAY CONSTANT CURRENT REGULATOR RELOCATED FROM EXISTING VAULT, (TO SERVE AS SPARE). SEE GENERAL NOTE 1.
- 14 NEW RUNWAY 18-36 & TAXIWAY CONSTANT CURRENT REGULATOR (TO SERVE AS NORMAL UNIT). SEE GENERAL NOTE 1.
- 15 TWO SERIES PLUG CUTOUTS, TYPE S-1, WIRED FOR MANUAL TRANSFER OPERATION WITH ONLY ONE HANDLE PLUG IN A NEMA 1 OR NEMA 12 ENCLOSURE WITH HINGED COVER.
- 16 4-4" GRSC FROM LOW VOLTAGE WIREWAY TO LOW VOLTAGE HANDHOLE.
- 17 2-4" GRSC FROM HIGH VOLTAGE WIREWAY TO HIGH VOLTAGE HANDHOLE.
- 18 VEGETATION BARRIER CONSISTING OF A MIN. 3" PEA GRAVEL SURFACE OVER FILTER OR LANDSCAPING FABRIC. PROPOSED SURFACE TREATMENT WILL COVER ENTIRE AREA BENEATH VAULT STRUCTURE AS WELL AS 18" AROUND THE PERIMETER OF THE BUILDING EDGE. THE STONE AND FABRIC AS WELL AS ANY EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS TASK WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE PROPOSED ELECTRICAL VAULT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 19 ENTRANCE PAD CONSTRUCTED OF 6" CONCRETE SLAB W/6X6-W5XW5 WELDED WIRE FABRIC ON A COMPACTED SUBGRADE. MINIMUM DIMENSIONS OF PAD WILL BE 7'Wx5'Dx6"H, SLOPED AT A MIN. OF 0.5"/FT AWAY FROM THE VAULT ENTRANCE. PCC USED TO CONSTRUCT THE PAD WILL CONFORM TO ITEM 610. ALL MATERIALS, LABOR AND EQUIPMENT USED TO CONSTRUCT THE PAD INCLUDING ANY GRADING REQUIRED WILL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE PROPOSED ELECTRICAL VAULT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 20 BOND BEACON TOWER TO GND RING WITH #2 AWG BARE STR. CU. PROVIDE UL LISTED PIPE CLAMP TO CONNECT TO TOWER LEG.

**GENERAL NOTES**

1. SEE "NEW VAULT ELECTRICAL ONE LINE DIAGRAM" FOR LOW VOLTAGE INPUT POWER WIRING REQUIREMENTS TO CCR'S (CONSTANT CURRENT REGULATORS). SEE "HIGH VOLTAGE WIRING SCHEMATIC" FOR CCR OUTPUT WIRING REQUIREMENTS. SEE "AIRFIELD LIGHTING WIRING SCHEMATIC" FOR CCR CONTROL WIRING REQUIREMENTS. PROVIDE 5 FEET MINIMUM CLEAR WORKING SPACE IN FRONT OF EACH CCR AND EACH SERIES PLUG CUTOUT.
2. CONSTANT CURRENT REGULATORS AND THEIR RESPECTIVE SERIES PLUG CUTOUTS SHALL BE CLEARLY LABELED TO IDENTIFY THE RESPECTIVE REGULATOR DESIGNATION, RUNWAY OR TAXIWAY SERVED, POWER SOURCE OR CIRCUIT, AND VOLTAGE SYSTEM.
3. SEE ELEVATION VIEWS FOR ADDITIONAL INFORMATION ON PROPOSED EQUIPMENT LAYOUTS.
4. COORDINATE CONDUIT & SLEEVE ENTRANCES THROUGH FLOOR SLAB AND WALLS.

BY	
REVISION	
DATE	

**METROPOLIS MUNICIPAL AIRPORT  
 METROPOLIS, ILLINOIS**  
 I.L. PROJ.: M30-3541 A.I.P. PROJ.: 3-17-0067-88

REL. Project No.	816-06VLD 0800
Filename	EP-101.DWG
Scale	1/2"=1'-0"
Date	12/02/05
LAYOUT	KNL 11/17/05
DRAWN	MW 11/21/05
REVIEWED	CAH 12/16/05



**CONSTRUCT  
 NEW VAULT**  
**PROPOSED  
 AIRPORT ELECTRICAL VAULT  
 EQUIPMENT PLAN**

JAN 12, 2006 1:36 PM CAH  
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