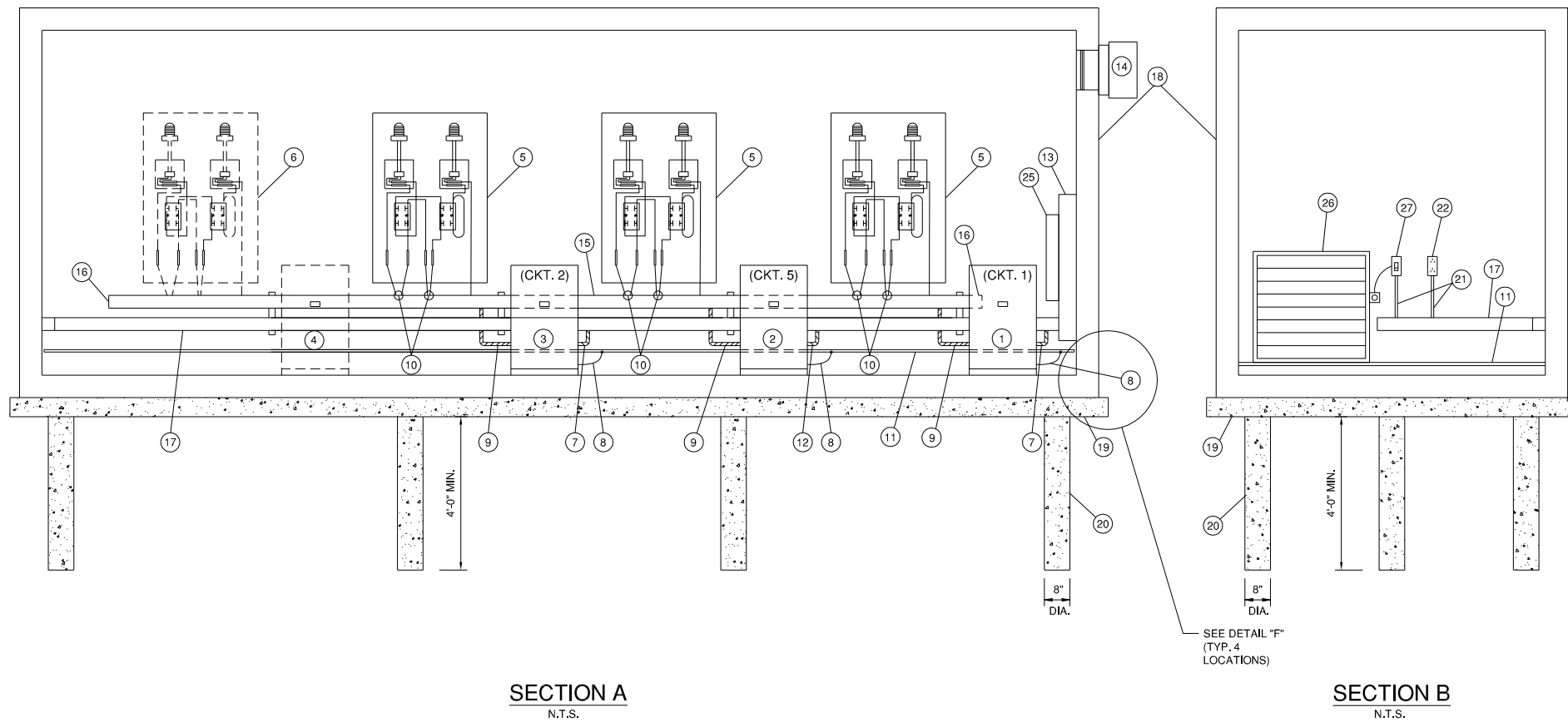


**CE032**

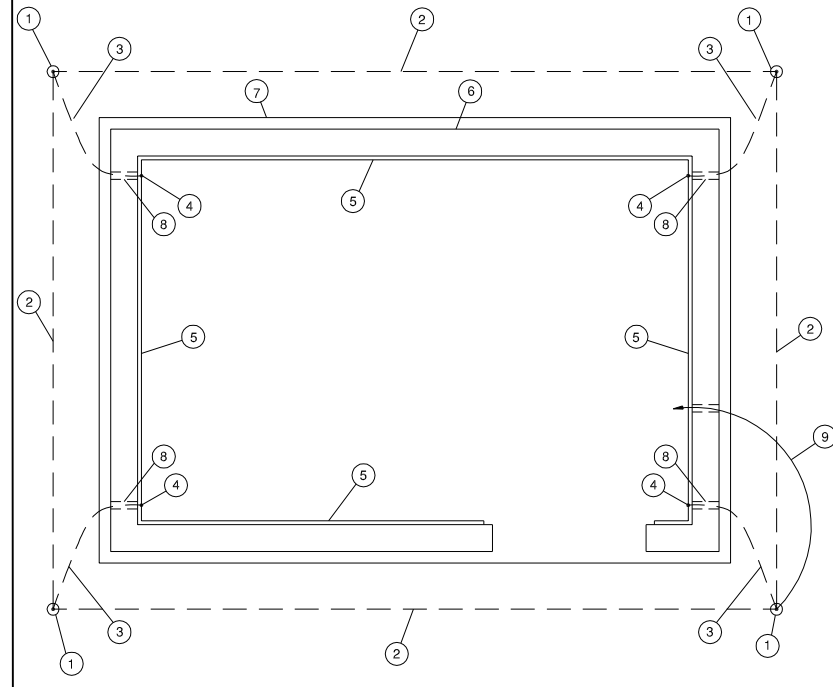
REVISIONS		
NUMBER	BY	DATE

0 1 2  
 THIS BAR IS EQUAL TO 2"  
 AT FULL SCALE (34X22).



**SECTION A**  
N.T.S.

**SECTION B**  
N.T.S.



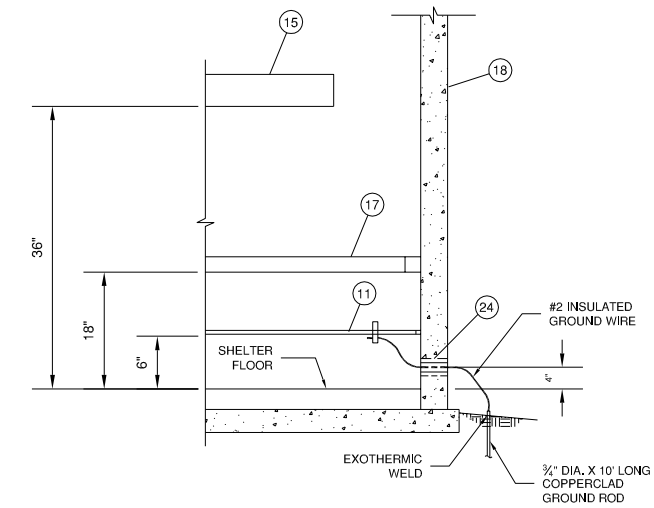
**VAULT GROUND RING KEYED PLAN**  
N.T.S.

○ **VAULT GROUNDING & BONDING NOTES**

- 3/4" DIAMETER x 10' LONG COPPERCLAD GROUND ROD. BOND GROUND WIRES TO GROUND ROD USING EXOTHERMIC WELD, CADWELD, OR EQUIVALENT. CLAMPED CONNECTIONS SHALL NOT BE ACCEPTABLE.
- #2/0 BARE COPPER GROUND WIRE.
- #2 INSULATED GROUND WIRE.
- CLAMP #2 INSULATED GROUND WIRE TO VAULT GROUND BUS.
- VAULT GROUND BUS, 1/8"x3/4" COPPER BUS BAR. STAND-OFF MOUNT, 6" MINIMUM ABOVE VAULT FLOOR ON ALL SIDES.
- PRE-FABRICATED EQUIPMENT SHELTER.
- 6" THICK REINFORCED CONCRETE VAULT PAD.
- PRE-FABRICATED EQUIPMENT SHELTER TO BE DELIVERED WITH 1/2" HOLES AT EACH CORNER AS SHOWN.
- #2/0 BARE COPPER GROUND WIRE TO GROUND BAR OF POWER DISTRIBUTION PANEL BOARD, DELIVER WITH PROVIDED 1/2" HOLE IN EQUIPMENT SHELTER.

○ **VAULT DETAILS 1 NOTES**

- NEW 7.5 KW REGULATOR, 208V INPUT, 3-STEP 6.6A OUTPUT. PROVIDE ENGRAVED NAMEPLATE READING "RUNWAY 18/36".
- RELOCATED 10 KW REGULATOR, 208V INPUT, 3-STEP 6.6A OUTPUT. PROVIDE ENGRAVED NAMEPLATE READING "TAXIWAY A".
- RELOCATED 7.5 KW REGULATOR, 208V INPUT, 3-STEP 6.6A OUTPUT. PROVIDE ENGRAVED NAMEPLATE READING "RUNWAY 09/27".
- SPACE FOR FUTURE 10 KW REGULATOR.
- REGULATOR INDICATING LIGHTS ASSEMBLY. FOR ADDITIONAL INFORMATION, SEE REGULATOR INDICATING LIGHT DETAILS SHEET.
- SPACE FOR FUTURE REGULATOR INDICATING LIGHTS ASSEMBLY.
- TWO #4 THWN (208V TO REGULATOR), ONE 8 GND IN 1" FLEXIBLE METALLIC CONDUIT.
- #6 INSULATED GROUND WIRE FROM REGULATOR. CLAMP TO GROUND BUS.
- 2-1/C #8, L-824, TYPE C, 5 KV CABLES IN 1" FLEXIBLE METALLIC CONDUIT. ROUTE TO INDICATING LIGHT EQUIPMENT.
- 2-1/C #8, L-824, TYPE C, 5 KV CABLES (ONE SET TO REGULATOR, ONE SET TO EDGE LIGHTS). WHERE CABLES ENTER TOP OF HIGH VOLTAGE WIREWAY, CONTRACTOR SHALL INSTALL GROMMETS TO SEAL AROUND CABLES.
- 1/8" x 3/4" COPPER GROUND BUS, ALL AROUND INSIDE OF VAULT. STAND-OFF MOUNT A MINIMUM OF 1/4" FROM WALL.
- TWO #2 THWN (208V TO REGULATOR), ONE 8 GND IN 1" FLEXIBLE METALLIC CONDUIT.
- POWER DISTRIBUTION PANELBOARD, 30-POLE, 400A, 208Y/120V, 3-PHASE, 4-WIRE, WITH 300A, 3P MAIN CIRCUIT BREAKER, SQUARE D NQ, OR EQUIVALENT.
- EXHAUST FAN, GREENHECK MODEL CWB-300-7, 120V, 3/4 HP, 6,200 CFM, WITH MOTORIZED BACKDRAFT DAMPER AND MOTOR STARTER MS1P-1, OR EQUIVALENT.
- 4"x4" NEMA 1 HIGH VOLTAGE WIREWAY. INSTALL A MINIMUM OF TWO ADHESIVE WARNING LABELS ON HINGED DOOR, READING "CAUTION: HIGH VOLTAGE".
- END OF HIGH VOLTAGE WIREWAY.
- 4"x4" LOW VOLTAGE WIREWAY.
- PRE-FABRICATED CONCRETE EQUIPMENT SHELTER, 25"x10"x9"H. SEE SPECIFICATIONS. PROVIDE WARNING SIGN ON DOOR READING "CAUTION: HIGH VOLTAGE".
- STEEL REINFORCED CONCRETE VAULT PAD.
- REINFORCED CONCRETE VAULT PAD FOOTINGS, TYPICAL OF 10.
- TWO #12 THWN, ONE #12 GROUND IN 3/4" CONDUIT.
- GFCI RECEPTACLE.
- EXHAUST FAN THERMOSTAT, LINE VOLTAGE, HONEYWELL T6051A WITH HONEYWELL Q651A1009 AUTO-OFF-ON SUBBASE. PROVIDE ENGRAVED NAMEPLATE READING "EXHAUST FAN".
- 1/2" PVC CONDUIT NIPPLE THROUGH SHELTER WALL (BY SHELTER MFR.) AFTER INSTALLATION OF #2 INSULATED GROUND WIRE, SEAL OPENING TO MAKE WATER TIGHT.
- L-821 RELAY CABINET.
- INTAKE LOUVER, RUSKIN ELF375DXH, 48"Wx42"H, MIN. FREE AREA 7.10 SQ.FT. WITH EXTENDED SILL, BIRD SCREEN, KYNAR FINISH TO MATCH SHELTER COLOR (OR AS DIRECTED BY OWNER), CD 35 MOTORIZED DAMPER (POWER-OPEN/SPRING-CLOSE), OR EQUIVALENT. NOTE: CONTRACTOR SHALL PROVIDE AN INTERIOR FILTER RACK WITH A REPLACEABLE FILTER.
- FRACTIONAL HORSEPOWER STARTER WITH OVERLOADS SIZED FOR LOUVER MOTOR. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER.



**DETAIL "F"**  
N.T.S.

CITY OF CENTRALIA, ILLINOIS  
 CENTRALIA MUNICIPAL AIRPORT  
 CENTRALIA, ILLINOIS

**CONSTRUCT NEW ELECTRICAL VAULT; REHABILITATE  
 MIRLS, PAPI & REILS ON RUNWAY 18/36  
 VAULT DETAILS 1**

© Copyright CMT, Inc.  
**CMT**  
 CRAWFORD, MURPHY & TILLY, INC.  
 CONSULTING ENGINEERS  
 License No. 184-000613

DESIGN BY:	WDP
DRAWN BY:	ADD, DPA
CHECKED BY:	TM
APPROVED BY:	RLV
DATE:	MAY 2, 2014
JOB No:	11072-02
IL PROJ. NO.	ENL-4230
PROJ. NO.	3-17-SBGP-XX
SHEET	24 OF 30 SHEETS