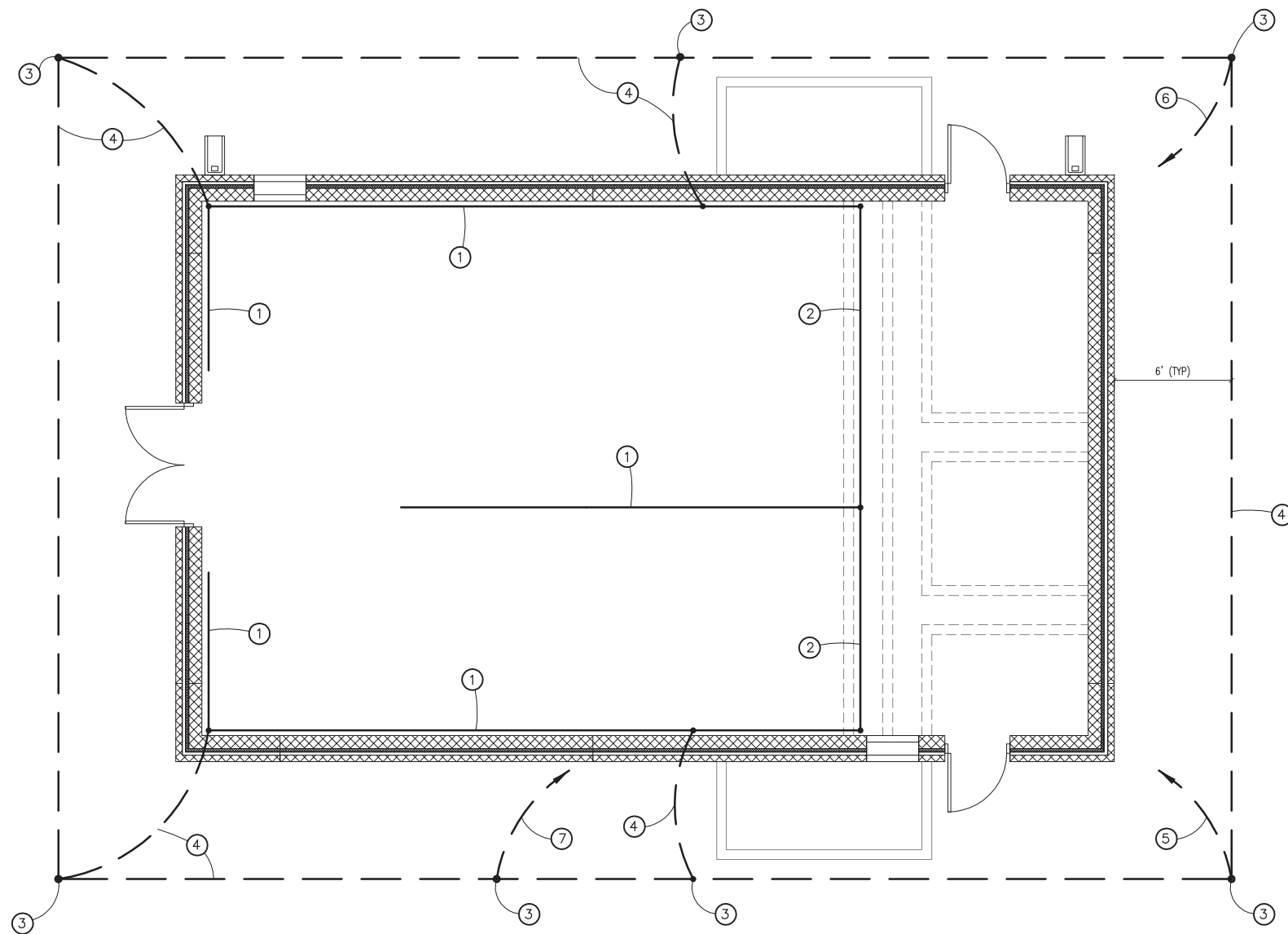
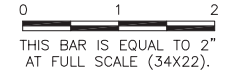


UN051

REVISIONS		
NUMBER	BY	DATE



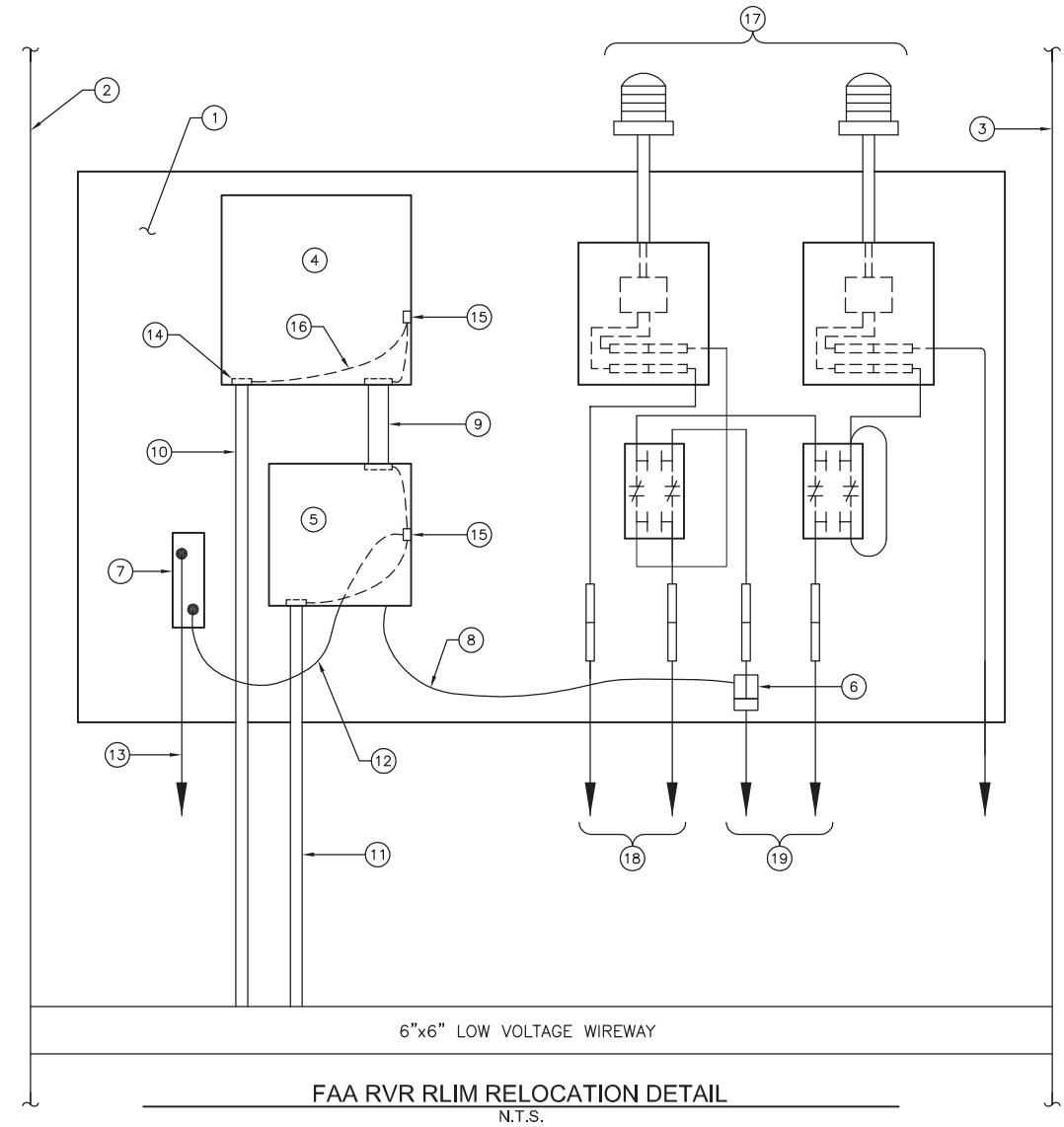
○ KEYED NOTES

- 1 VAULT GROUND BUS, 1/4" x 3/4" COPPER BUS BAR, STAND-OFF MOUNTED 6" MINIMUM ABOVE FLOOR.
 - 2 VAULT GROUND BUS, 1/4" x 3/4" COPPER BUS BAR, STAND-OFF MOUNTED IN THE IN-FLOOR TRENCH.
- NOTE: ALL VAULT GROUND BUS SHOWN SHALL BE ELECTRICALLY BONDED TO CREATE ONE CONTINUOUS GROUND BUS AS DETAILED.
- 3 3/4" DIAMETER x 10' LONG COPPERCLAD GROUND ROD, MINIMUM BURY: 30". BOND GROUND WIRES TO GROUND RODS USING EXOTHERMIC WELD, CADWELD, OR EQUIVALENT. CLAMPED CONNECTIONS SHALL NOT BE ACCEPTABLE.
 - 4 #2/0 BARE COPPER GROUND WIRE, MINIMUM BURY: 30".
 - 5 #2/0 INSULATED GROUND WIRE TO AN "UFER" GROUND IN BUILDING FOUNDATION.
 - 6 #2/0 BARE COPPER GROUND WIRE TO AUTOMATIC TRANSFER SWITCH NEUTRAL BAR.
 - 7 #2/0 INSULATED COPPER GROUND WIRE TO FAA RVR RLIM EQUIPMENT.

NOTES

- 1.) BELOW-GRADE GROUND ROD AND ASSOCIATED GROUND WIRE SHALL BE CLEAN AND DRY BEFORE PERFORMING THE EXOTHERMIC WELD. VERIFY THAT THE PROPER SIZE AND TYPE OF EXOTHERMIC WELD KIT IS USED BEFORE BEGINNING WORK. EXOTHERMIC WELDS SHALL BE LEFT EXPOSED FOR INSPECTION AND APPROVAL BEFORE BACKFILLING OR OTHERWISE CONCEALING. ANY UNACCEPTABLE EXOTHERMIC WELDS SHALL BE REDONE, INCLUDING ANY NECESSARY REPLACEMENT MATERIAL (GROUND RODS, GROUND WIRES, ETC.) AS NEEDED TO PROVIDE AN ACCEPTED EXOTHERMIC WELD.

VAULT GROUND BUS & GROUND RING INSTALLATION
 SCALE: N.T.S.



FAA RVR RLIM RELOCATION DETAIL
 N.T.S.

○ KEYED NOTES

- 1 ALUMINUM MOUNTING PANEL, SIZED AS REQUIRED FOR EQUIPMENT INSTALLED.
- 2 RUNWAY 14L/32R REGULATOR, 50 KW.
- 3 SPARE REGULATOR #1, 50 KW (RUNWAY 14L/32R BACKUP REGULATOR).
- 4 RELOCATED FAA RLIM SIE BOX.
- 5 RELOCATED FAA TERMINAL CABINET.
- 6 RELOCATED FAA CURRENT SENSOR. ROUTE ONE LEG OF RWY 14L/32R SERIES CIRCUIT CABLE THROUGH SENSOR.
- 7 RELOCATED FAA GROUND PLATE.
- 8 RELOCATED FAA CURRENT SENSOR CABLE. TRIM EXCESS CABLE AS NEEDED.
- 9 1" GRS CONDUIT WITH RELOCATED FAA CABLE.
- 10 TWO #12 THWN (120V POWER FROM PANEL #2), ONE #12 GROUND IN 3/4" GRS CONDUIT.
- 11 25 PAIR #19 RUS/REA PE-39 CONTROL CABLE IN 2" GRS CONDUIT. SPLICE TO FAA CABLE IN TERMINAL CABINET. ROUTE 25 PAIR CONTROL CABLE VIA NEW AND EXISTING DUCT BANKS TO EXISTING FAA RVR EQUIPMENT IN AIR TRAFFIC CONTROL TOWER (ATCT) AND TERMINATE PER FAA REQUIREMENTS.
- 12 #6 INSULATED GROUND WIRE. TERMINATE ON RELOCATED FAA GROUND PLATE.
- 13 #2/0 INSULATED GROUND WIRE TO GROUND ROD AT VAULT BUILDING GROUND RING. CONNECTION TO GROUND ROD SHALL BE VIA EXOTHERMIC WELD.
- 14 CONDUIT GROUNDING BUSHING (TYP.)
- 15 GROUND LUG.
- 16 #6 INSULATED GROUND WIRE (TYP.).
- 17 SEE "NEW VAULT DETAILS 4" (SHEET #53).
- 18 TO REGULATOR.
- 19 RWY 14L/32R SERIES CIRCUIT HOMERUN CABLES.

WILLARD AIRPORT
 UNIVERSITY OF ILLINOIS

NEW AIRFIELD LIGHTING VAULT
 NEW VAULT DETAILS 1

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CHECKED BY:	JEH
APPROVED BY:	JEH
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SHEET	51 OF 60 SHEETS