

**UN051**

REVISIONS		
NUMBER	BY	DATE

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

WILLARD AIRPORT  
 UNIVERSITY OF ILLINOIS

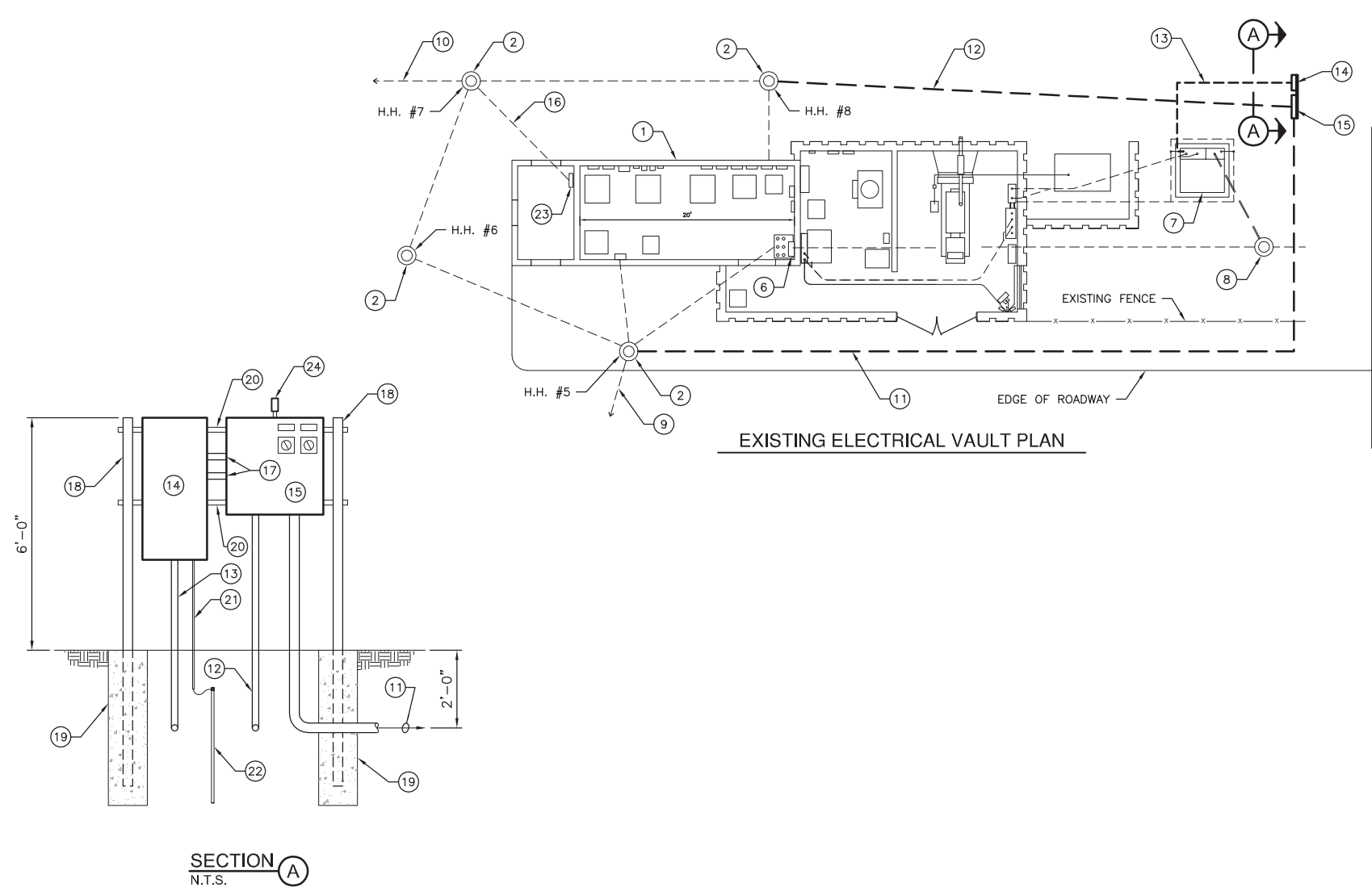
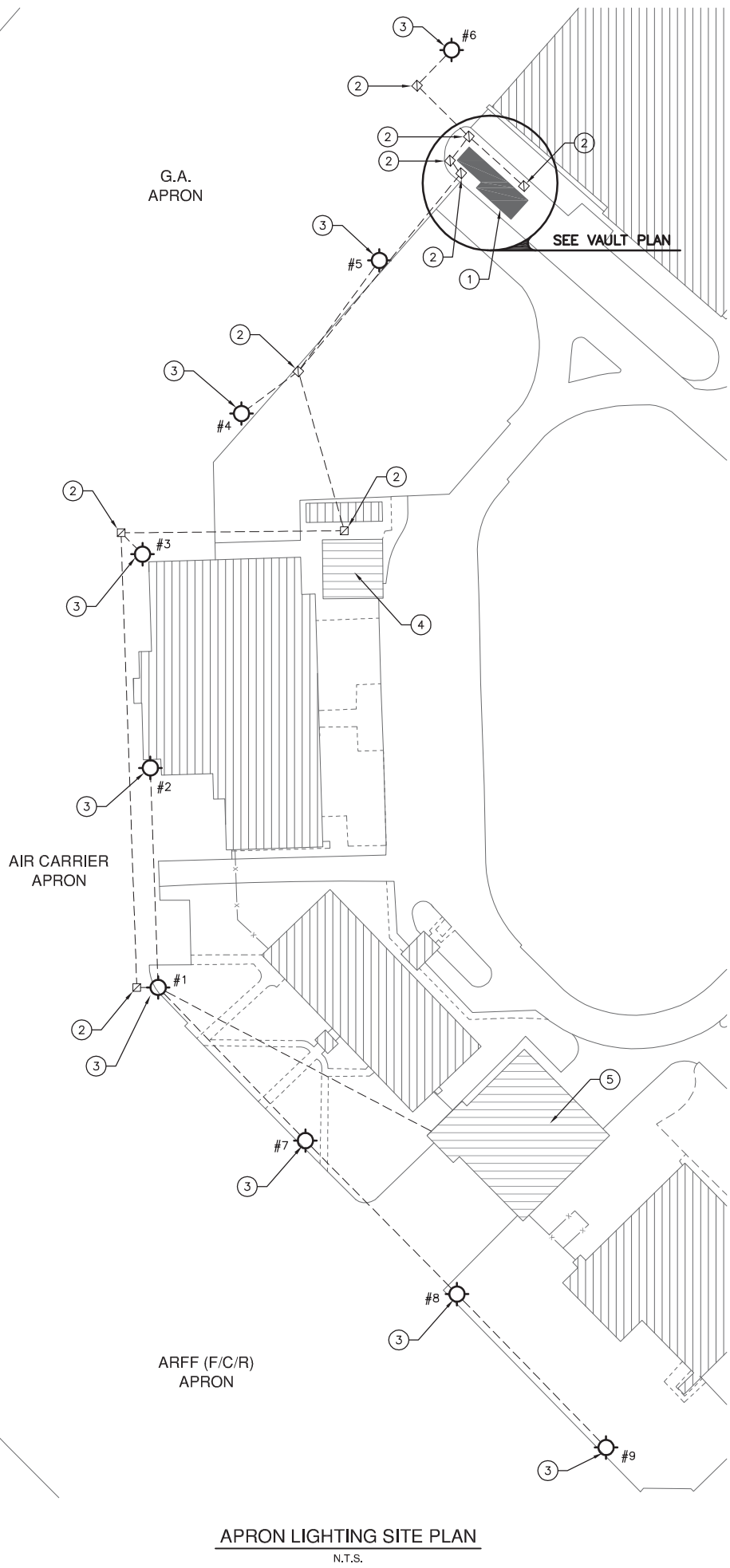
NEW AIRFIELD LIGHTING VAULT  
 EXISTING APRON LIGHTING DETAILS - 1

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DESIGN BY:	WDP
DRAWN BY:	CMT
CHECKED BY:	CBG
APPROVED BY:	CET
DATE:	APRIL 20, 2012
JOB No:	11059-03
IL PROJ. NO.	CMI-4100
AIP PROJ. NO.	3-17-0016-XX
SHEET	45 OF 60 SHEETS



**KEYED NOTES**

- EXISTING VAULT TO BE REMOVED.
- EXISTING ELECTRICAL HANDHOLE.
- EXISTING APRON LIGHT.
- EXISTING AIR TRAFFIC CONTROL TOWER.
- EXISTING ARFF (F/C/R) BUILDING WITH APRON LIGHTING ON/OFF CONTROL STATION.
- EXISTING APRON LIGHTING CONTROL PANEL.
- EXISTING VAULT UTILITY TRANSFORMER TO REMAIN.
- EXISTING UTILITY MANHOLE.
- EXISTING APRON LIGHT 240V POWER WIRING (APRON LIGHTS #1 THROUGH #5 AND #7 THROUGH #9) AND ON/OFF CONTROL WIRING FROM ARFF CONTROL STATION.
- EXISTING APRON LIGHT #6 240V POWER WIRING.
- NEW WIRING IN NEW 3" GRS CONDUIT:
  - THREE #4 TYPE USE (240V POWER WIRING TO APRON LIGHTS #1, #2, #3), ONE #8 GROUND.
  - THREE #4 TYPE USE (240V POWER WIRING TO APRON LIGHTS #7, #8, #9), ONE #8 GROUND.
  - THREE #8 TYPE USE (240V POWER WIRING TO APRON LIGHTS #4 & #5), ONE #8 GROUND.
  - 5/C #18 CONTROL CABLE.
- SPLICE NEW WIRING TO EXISTING WIRING IN EXISTING HANDHOLE. PROVIDE LABELS ON WIRING IDENTIFYING CIRCUITS.
- NEW WIRING IN NEW 2" GRS CONDUIT:
  - THREE #8 TYPE USE (240V POWER WIRING TO APRON LIGHT #6), ONE #8 GROUND.
  - TWO #10 TYPE USE (120V POWER TO HANGAR #1 OBSTRUCTION LIGHTS), ONE #10 GROUND.
- SPLICE NEW WIRING TO EXISTING WIRING IN EXISTING HANDHOLE #7. PROVIDE LABELS ON WIRING IDENTIFYING CIRCUITS.
- FOUR #1/0 TYPE USE (120/240V, 3-PHASE, 4-WIRE, HIGH "B" LEG) IN NEW 2" GRS CONDUIT. CONNECT TO SECONDARY OF EXISTING TRANSFORMER.
- APRON LIGHTING AND HANGAR #1 PANELBOARD, SERVICE ENTRANCE RATED, 30-POLE, 150A,
- 120/240V, THREE PHASE, 4-WIRE, HIGH "B" LEG, IN NEMA 3R ENCLOSURE. BOND NEUTRAL BAR TO GROUND BAR IN PANELBOARD. PROVIDE SURGE PROTECTIVE DEVICE. SEE SCHEDULE, SHEET #42. PROVIDE LABEL READING:
 

ARFF APRON LIGHTS,  
 AIR CARRIER APRON LIGHTS &  
 G.A. APRON LIGHTS PANELBOARD  
 150A, 120/240V, 3-PHASE, 4-WIRE  
 HIGH "B" LEG. DO NOT INSTALL  
 ANY 1-POLE (120V) CKT BKRS  
 ON THE "B" PHASE
- APRON LIGHTING CONTROL PANEL IN HINGED COVER NEMA 4 ENCLOSURE. PROVIDE DOOR MOUNTED SELECTOR SWITCHES SHOWN. SEE SCHEMATIC, SHEET #42, FOR ADDITIONAL INFORMATION.
- EXISTING 120V WIRING IN CONDUIT TO HANGAR #1 OBSTRUCTION LIGHTS.
- 2" GRS CONDUITS FOR THE FOLLOWING WIRING:
  - THREE #8 THWN (240V POWER WIRING TO APRON LIGHTS #1, #2, #3), ONE #8 GROUND.
  - THREE #8 THWN (240V POWER WIRING TO APRON LIGHTS #7, #8, #9), ONE #8 GROUND.
  - THREE #8 THWN (240V POWER WIRING TO APRON LIGHTS #4, #5, #6), ONE #8 GROUND.
  - TWO #10 THWN (120V POWER TO HANGAR #1 OBSTRUCTION LIGHTS), ONE #10 GROUND.
  - TWO #12 THWN (APRON LIGHTING 120V CONTROL POWER), ONE #12 GROUND.
- 3" CONCRETE FILLED GALVANIZED STEEL SUPPORT POST, PAINTED WITH MINIMUM TWO COATS YELLOW EPOXY PAINT.
- 12" DIAMETER BY 48" DEEP CONCRETE FOOTING.
- GALVANIZED STEEL STRUT-TYPE FRAMING, UNISTRUT P-1000, OR EQUIVALENT, AS NEEDED.
- #6 GROUNDING ELECTRODE CONDUCTOR (GEC) IN 1/2" SCHEDULE 40 PVC CONDUIT TO MINIMUM 1'-0" BELOW GRADE.
- 3/4" DIAMETER X 10 FOOT LONG COPPERCLAD GROUND ROD. CONNECTION TO GEC SHALL BE VIA EXOTHERMIC WELD, CADWELD OR EQUIVALENT.
- EXISTING PANELBOARD FEEDING HANGAR #1 OBSTRUCTION LIGHTS.
- PHOTOCELL, ORIENTED NORTH.