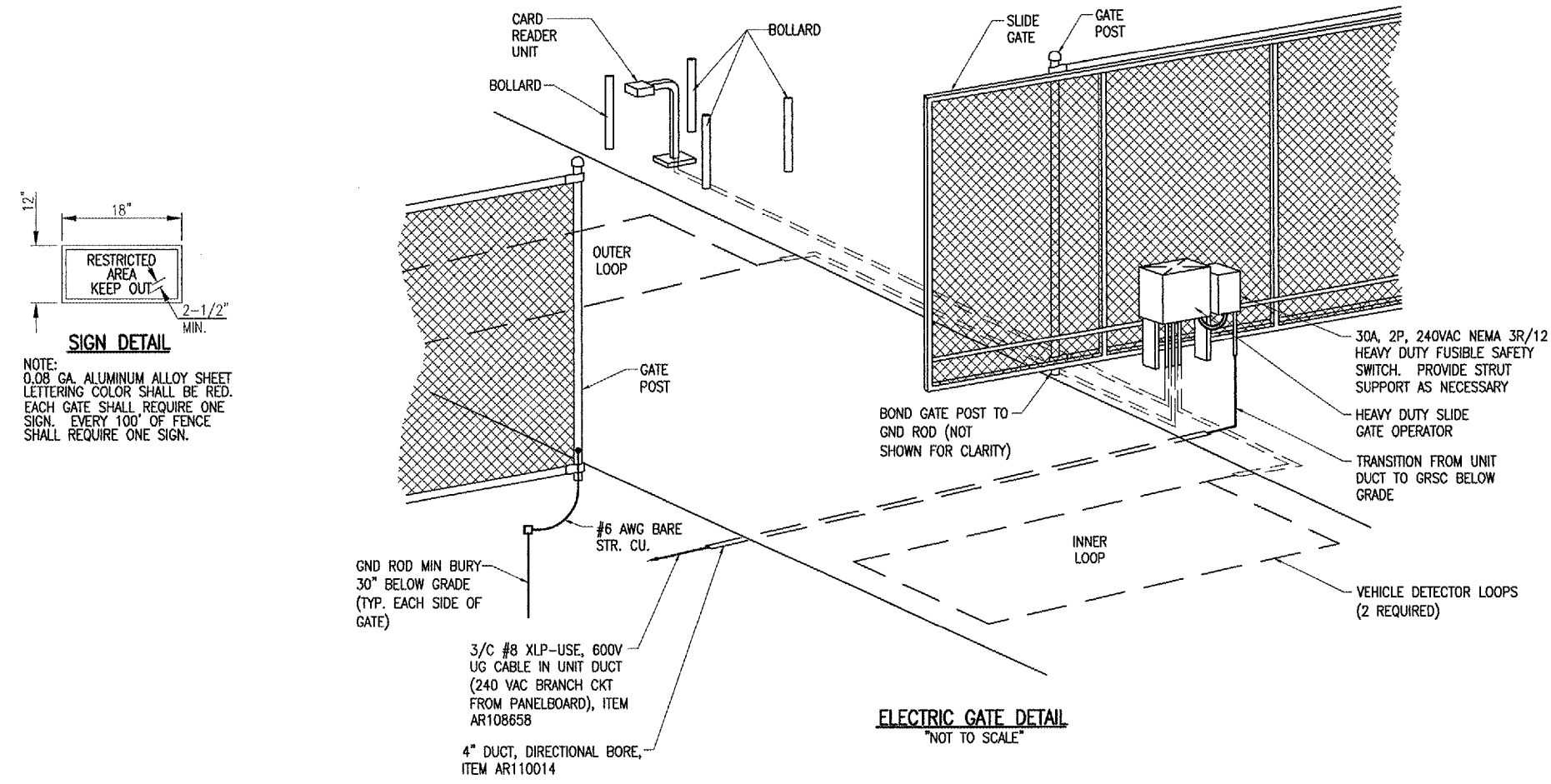
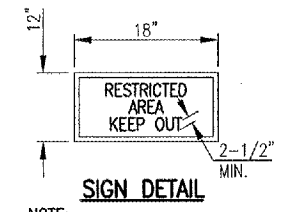
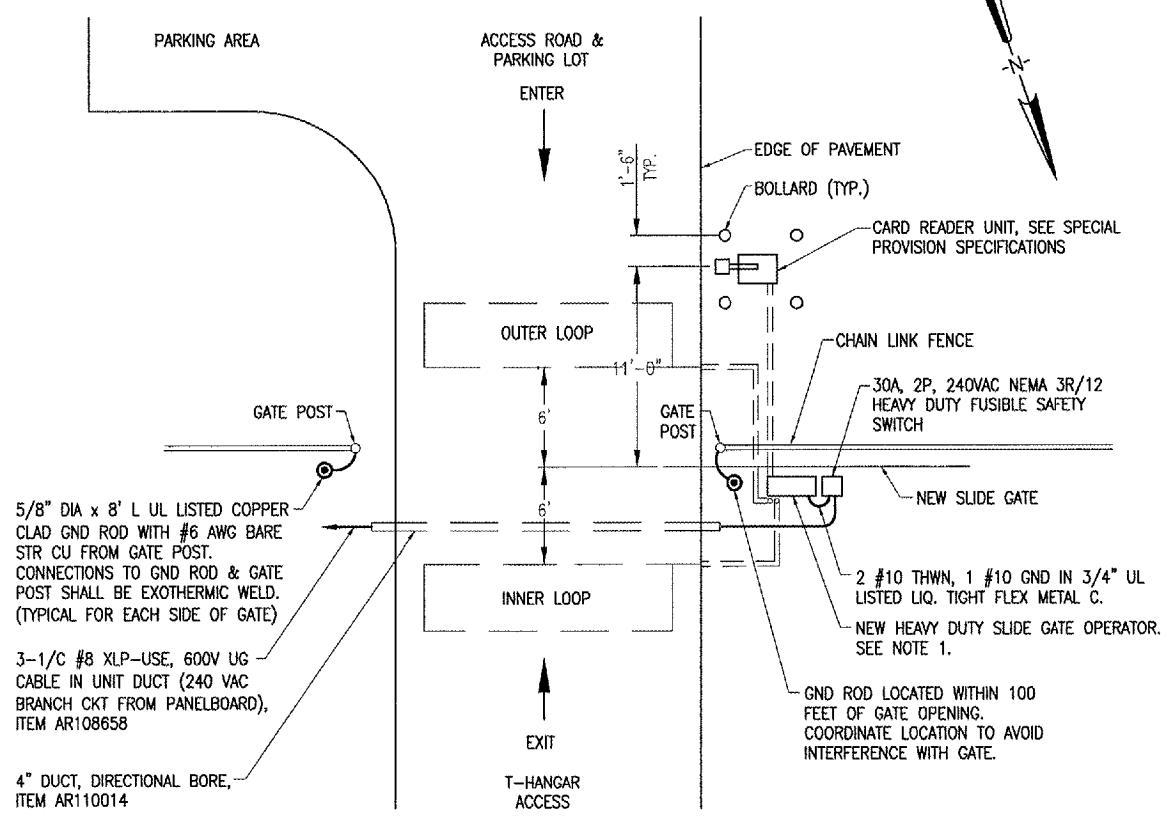


VEHICLE DETECTOR LOOPS		
GATE SIZE	LOOP SIZE	NO. OF TURNS
8' TO 12'	4' X 6'	3 TURNS
12' TO 16'	4' X 10'	2 TURNS
16' TO 20'	4' X 14'	2 TURNS
20' TO 24'	4' X 18'	2 TURNS
24' TO 30'	6' X 22'	2 TURNS
30' TO 34'	6' X 26'	2 TURNS



**NOTES:**

- THE OPERATOR SHALL BE A HYDRAULIC SLIDE GATE OPERATOR AS MANUFACTURED BY B&B ARMOR MODEL LXL-15VP (240 VAC, 1 PHASE), OR APPROVED EQUAL. SEE SPECIAL PROVISION SPECS.
- ALL DIMENSIONS AND LAYOUT INFORMATION SHOWN SHOULD BE ADJUSTED AS RECOMMENDED BY THE MANUFACTURER.
- CONCRETE FOOTINGS SHALL BE PROVIDED FOR THE SLIDE GATE OPERATOR AND THE CARD READER UNIT. THESE FOOTINGS SHALL BE 36" IN DEPTH AND OF THE SIZE RECOMMENDED BY THE MANUFACTURER.
- 1" GRSC CONDUIT WITH CONTROL WIRING WILL BE REQUIRED BETWEEN THE SLIDE GATE OPERATOR AND THE CARD READER UNIT AND BETWEEN THE SLIDE GATE OPERATOR AND THE DETECTOR LOOPS. CONFIRM CONTROL WIRING REQUIREMENTS WITH THE RESPECTIVE GATE OPERATOR SYSTEM MFR SALES REPRESENTATIVE. THE MINIMUM BURYING DEPTH IS 24".
- THE PIPE BOLLARDS SHALL BE 4" DIA. CONCRETE FILLED, STEEL PIPE AND SHALL EXTEND FROM THE TOP OF THE CARD CONTROL UNIT TO A DEPTH OF 48" BELOW THE GROUND LINE.
- THE PIPE BOLLARDS BELOW GROUND SHALL BE ENCASED IN 12" OF P-610 CONCRETE. THE PIPE SHALL BE PAINTED WITH A YELLOW ENAMEL PAINT FINISH.
- THE SLIDING GATE SHALL BE CANTILEVER TYPE OF THE SIZE CALLED FOR ON THE PLANS, SHALL HAVE AN ENCLOSED ROLLER ASSEMBLY WHICH IS PROTECTED FROM FREEZING RAIN AND SNOW, AND SHALL BE AS MANUFACTURED BY ANCHOR FENCE, TYMETAL CORPORATION OR APPROVED EQUAL.
- AS PART OF THIS ITEM 250 CARDS FOR THE GATE CARD READER SHALL BE PROVIDED BY THE CONTRACTOR. COORDINATE PROGRAMMING OF CARDS WITH THE AIRPORT MANAGER.
- THE GATE MANUFACTURER SHALL CONSTRUCT A GUARD FOR EACH ROLLER TO PREVENT THE INSERTION OF AN OBJECT BETWEEN THE ROLLER AND THE GATE. THIS GUARD WILL BE APPROVED BY THE AIRPORT MANAGER PRIOR TO INSTALLATION OF THE SLIDE GATE.
- PAYMENT FOR THE CARD OPERATED SLIDE GATE SHALL BE ON A LUMP SUM BASIS AND SHALL BE FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, CABLE IN CONDUIT, DUCT, OR UNIT DUCT, GROUNDING, LABOR AND INCIDENTALS REQUIRED TO INSTALL THE GATE COMPLETE AND IN OPERATING CONDITION.
- THE SLIDE GATE OPERATOR IS TO BE MOUNTED ON A STEEL PLATFORM LOCATED APPROXIMATELY TWO FEET ABOVE THE GROUND. SHOP DRAWING APPROVAL IS REQUIRED.
- INCLUDE UL LISTED SECONDARY SURGE ARRESTER FOR EACH GATE OPERATOR SUITABLE FOR USE ON 240 VAC, 1 PHASE, 2 WIRE PLUS GROUND SYSTEM, WITH SURGE CURRENT RATING OF 100 KA PER MODE, LIFETIME PRODUCT REPLACEMENT WARRANTY, AND AS RECOMMENDED BY THE GATE OPERATOR MANUFACTURER'S REPRESENTATIVE. SEE SPECIFICATIONS.
- INCLUDE LOW VOLTAGE LINE PROTECTOR FOR CARD READER UNIT SUITABLE FOR USE ON THE RESPECTIVE CONTROL VOLTAGE SYSTEM, WITH SURGE CURRENT RATING OF 3000 AMPS, DITEK MODEL DTK-4LVLP-CR, OR APPROVED EQUAL.
- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTINGS (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
- CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE RESPECTIVE OWNER & THE AIRPORT MANAGER.
- PROVIDE A WEATHERPROOF ENGRAVED PHENOLIC OR PLASTIC LEGEND PLATE FOR THE SAFETY SWITCH AT THE RESPECTIVE GATE OPERATOR NOTING THE RESPECTIVE POWER SOURCE CIRCUIT AND LOCATION.
- ALL CONCRETE USED FOR INSTALLING THE GATE OPERATOR, CARD READER & FENCE SHALL MEET THE REQUIREMENTS OF STRUCTURAL PORTLAND CEMENT CONCRETE ITEM AR610.



**SIGN DETAIL**  
NOTE:  
0.08 GA. ALUMINUM ALLOY SHEET  
LETTERING COLOR SHALL BE RED.  
EACH GATE SHALL REQUIRE ONE  
SIGN. EVERY 100' OF FENCE  
SHALL REQUIRE ONE SIGN.

3/C #8 XLP-USE, 600V  
UG CABLE IN UNIT DUCT  
(240 VAC BRANCH CKT  
FROM PANELBOARD), ITEM  
AR108658  
4" DUCT, DIRECTIONAL BORE,  
ITEM AR110014

5/8" DIA x 8' L UL LISTED COPPER  
CLAD GND ROD WITH #6 AWG BARE  
STR CU FROM GATE POST.  
CONNECTIONS TO GND ROD & GATE  
POST SHALL BE EXOTHERMIC WELD.  
(TYPICAL FOR EACH SIDE OF GATE)

3-1/C #8 XLP-USE, 600V UG  
CABLE IN UNIT DUCT (240 VAC  
BRANCH CKT FROM PANELBOARD),  
ITEM AR108658

4" DUCT, DIRECTIONAL BORE,  
ITEM AR110014

**ELECTRIC GATE PLAN**  
"NOT TO SCALE"

DATE	REVISION	BY

ST. LOUIS REGIONAL AIRPORT  
  
 EAST ALTON, ILLINOIS  
 ILL. PROJ. #: ALN-3355

I.E. Project No. 837-04RDD Element R-542ELE.DWG Scale NONE Date 03/08/04	LAYOUT KNL 03/29/04 DRAWN MW 03/29/04 REVIEWED WJM 06/23/04
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**HANSON**  
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 Springfield, IL 62766  
 Offices Nationwide

CONSTRUCT T-HANGER  
 ACCESS ROAD  
 ELECTRIC GATE DETAILS