-5/8" DIA. x 8'L UL LISTED COPPERCLAD GND ROD WITH #8 AWG (MIN.) BARE SOLID CU FROM FENCE FABRIC & TENSION WIRE TO GND ROD. CONNECTION TO GND ROD SHALL BE EXOTHERMIC WELD. CONNECTION TO FENCE FABRIC SHALL BE WITH UL LISTED BRONZE GROUND CONNECTORS WITH BRONZE OR STAINLESS STEEL BOLTS & WASHERS. LOCATE GND RODS WITHIN 100 FT. OF EACH SIDE OF EACH

NO. OF TURNS

3 TURNS

2 TURNS

2 TURNS

2 TURNS

2 TURNS

5/8" DIA. x 8'L UL LISTED COPPERCLAD

GND ROD WITH #8 AWG (MIN.) BARE

SOLID CU FROM FENCE FABRIC &

CONNECTION TO GND ROD SHALL BE

EXOTHERMIC WELD. CONNECTION TO

LISTED BRONZE GROUND CONNECTORS

BOLTS & WASHERS. LOCATE GND RODS

WITHIN 100 FT. OF EACH SIDE OF EACH

WITH BRONZE OR STAINLESS STEEL

FENCE FABRIC SHALL BE WITH UL

TENSION WIRE TO GND ROD.

2 TURNS

RESPECTIVE POWER SOURCE

GATF.

VEHICLE DETECTOR LOOPS

LOOP SIZE

4' X 6'

4' X 10

4' X 14'

4' X 18'

6' X 22'

6' X 26'

8' TO 12'

12'TO 16

16' TO 20'

20' TO 24'

24' TO 30

30' TO 34'

BE REMOVED & REPLACED WITH A NEW HEAVY DUTY SLIDE GATE OPERATOR. SEE NOTE 1. 3/4" DIA x 10'L UL LISTED COPPERCLAD GND ROD WITH #6 AWG BARE COPPER GROUNDING

ELECTRODE CONDUCTOR BONDED TO THE GATE OPERATOR FRAME & EXOTHERMIC WELDED TO THE GND ROD. PROVIDE 1" SCHED 40 PVC CONDUIT ELBOW INTO GATE OPERATOR

NEMA 4X S.S. ENCLOSURE. SEE NOTE 16. -30A, 2P, 240VAC NEMA 4X S.S. HEAVY DUTY FUSIBLE SAFETY SWITCH

PROVIDE 1" GRSC FROM ENCLOSURE/GATE

OPERATOR TO PAVEMENT EDGE FOR LOOP

PHOTO-ELECTRIC EYE CONTROL WIRING IN -

NEMA 4X S.S. ENCLOSURE. SEE NOTE 16.

CHAIN LINK FENCE-

NEW SLIDE GATE TO

POWER & CONTROL CONDUITS TO GATE OPERATOR.

240 VAC POWER FEED SHALL BE IN A SEPARATE

EXISTING GATE OPERATOR AND FOUNDATION TO BE

3/4" DIA x 10'L UL LISTED COPPERCLAD GND ROD WITH

BONDED TO THE GATE OPERATOR FRAME & EXOTHERMIC

WELDED TO THE GND ROD. PROVIDE 1" SCHED 40 PVC

CONDUIT ELBOW INTO GATE OPERATOR FOUNDATION.

#6 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR

REMOVED & REPLACED WITH A NEW HEAVY DUTY

SLIDE GATE OPERATOR. SEE NOTE 1.

REPLACE EXISTING

120/240 VAC. 1PH. 3W PLUS GND POWER

CIRCUIT IN GRSC FROM RESPECTIVE POWER

30A, 2P, 240VAC NEMA 4X S.S. HEAVY-

DUTY FUSIBLE SAFETY SWITCH

DEDICATED CONDUIT

3/4" GRSC

DETECTOR LEAD-IN WIRING (TYP. EACH LOOP)

SIGN DETAIL NOTES: **ELECTRIC GATE DETAIL (ISOMETRIC)** 0.08 GA. ALUMINUM ALLOY SHEET LETTERING COLOR NOT TO SCALE SHALL BE RED. EACH GATE NOTE: PHOTO-ELECTRIC EYES ARE REQUIRED FOR SHALL REQUIRE ONE SIGN. THE GATE OPENING BUT NOT SHOWN THIS DETAIL. EVERY 100' OF FENCE SHALL REQUIRE ONE SIGN.

REMOVED & REPLACED WITH NEW

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20'-0"

GATE

POST

DETECTOR LOOPS.

DRIVEWAY

ENTER

OUTER LOOP

INNER LOOP

EXIT

AIRPORT ACCESS

-EXISTING EXIT CARD READER

TO BE REMOVED.

- GATE

POST

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RELOCATE SIGNS ON EXISTING GATE TO NEW GATE.

NEW BOLLARD (TYP.) NEW CARD READER UNIT. NEW CARD READER SHALL BE LOCATED 20' FROM GATE. PUSH BUTTON STATION FOR ENTRY REQUEST NOTIFICATION BELL EXISTING CARD READER UNIT TO BE REMOVED AND TURNED OVER TO THE AIRPORT. EXISTING FOUNDATION AND BOLLARDS SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER. (TYP. FOR 2) -EXISTING BOLLARD TO BE REMOVED (TYP.)

INFRARED PHOTO-ELECTRIC EYE WITH MOUNTING POST -CARD READER POWER & CONTROL WIRING WITH #12 EQUIPMENT GND IN 1" GRSC

EDGE OF PAVEMENT

GND ROD NOTIFICATION BELL WIRING IN 1" GRSC PHOTO-ELECTRIC EYE CONTROL WIRING IN 3/4" GRSC

-3/4" GRSC DIRECTIONAL BORE BELOW PAVEMENT AND/OR SAW CUT & REPAIR

> - ELECTRICAL WIRING FOR OPEN-CLOSE-STOP STATIONS AND ENTRY REQUEST

NOTIFICATION BELL IN 1" GRSC -CARD READER & BELL PUSH BUTTON WIRING WITH #12 GND IN 1" GRSC DIRECTIONAL BORE

BELOW PAVEMENT.

ELECTRIC GATE PLAN "NOT TO SCALE

- MANUFACTURED BY TYMETAL CORPORATION OR APPROVED EQUAL.
- (RESERVED).
- CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE RESPECTIVE OWNER'S REPRESENTATIVE AND THE AIRPORT
- INCLUDE AC SURGE PROTECTOR FOR THE GATE OPERATOR, UL 1449 LISTED, SURGE CURRENT RATING OF 40KA, SUITABLE FOR USE ON A 120/240 VAC, 1 PHASE, 3 WIRE SYSTEM WITH LED INDICATING OPERATIONAL STATUS, JOSLYN MODEL 1265-21, SQUARE D CAT. NO. TVS120XR50S OR APPROVED EQUAL. INCLUDE MOUNTING BRACKET.
- CONCRETE USED FOR INSTALLING THE GATE OPERATOR, CARD READER, & FENCE SHALL MEET THE REQUIREMENTS OF STRUCTURAL PORTLAND CEMENT CONCRETE ITEM 610.
- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE FOLIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE UL LISTING, ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- PROVIDE A WEATHERPROOF ENGRAVED PHENOLIC OR PLASTIC LEGEND PLATE FOR THE SAFETY SWITCH AT THE RESPECTIVE GATE OPERATOR NOTING THE GATE SERVED, VOLTAGE, AND RESPECTIVE POWER SOURCE CIRCUIT AND
- PAYMENT FOR EACH SLIDE GATE, CARD READER, GATE OPERATOR, AND ALL ASSOCIATED CONTROL & SAFETY DEVICES 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, TOOLS, COORDINATION, TESTING, AND INCIDENTALS REQUIRED TO INSTALL THE GATE COMPLETE AND IN OPERATING CONDITION.
- CONTROL CIRCUIT WIRING SHALL NOT BE ROUTED THROUGH THE SAFETY SWITCH/DISCONNECT.
- INCLUDE CORROSION RESISTANT SUPPORT POSTS AND HARDWARE WITH THE PHOTO-ELECTRIC EYE SAFETY DEVICES.
- ALL CONTROL POWER TRANSFORMERS, SURGE PROTECTORS, POWER SUPPLIES, RECEPTACLES, LOOP DETECTOR AMPLIFIERS, SECONDARY SAFETY DEVICE FOUIPMENT, AND ANY OTHER ASSOCIATED CONTROLS SHALL BE INSTALLED EITHER INSIDE THE GATE OPERATOR CONTROL PANEL OR INSIDE A SEPARATE NEMA 4 STAINLESS STEEL CONTROL PANEL ENCLOSURE. WHERE THE CONTROL EQUIPMENT IS TO BE INSTALLED INSIDE THE GATE OPERATOR CONTROL PANEL THE CONTRACTOR SHALL COORDINATE THIS WITH THE GATE OPERATOR MANUFACTURER AND THE RESPECTIVE GATE OPERATOR EQUIPMENT SUPPLIER LOCATING THESE CONTROLS OUTSIDE OF GATE OPERATOR CONTROL PANEL BUT WITHIN THE GATE OPERATOR HOUSING WILL NOT MEET THIS REQUIREMENT.

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fessional South South Sixth Illinois 62 1450 Fax: (Spring (217) 7

> 직끈 PROPOSED ELECTRIC GATE DETAILS - GAI

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