

1. THE CONTRACTOR PROVIDED ESS SHALL BE COMPATIBLE AND FULLY INTEGRATED WITH THE EXISTING GE FACILITY COMMANDER SECURITY MANAGEMENT SYSTEM SERVER LOCATED IN THE MONTGOMERY COLLEGE, GERMANTOWN CAMPUS. THE WORK SHALL INCLUDE THE INSTALLATION OF SYSTEM COMPONENTS, CONDUIT AND RACEWAY SYSTEMS (WHERE NECESSARY), CABLING AND TERMINATION FOR THE SYSTEM SIGNALS AND COMMUNICATIONS, PROGRAMMING AND TESTING OF ALL SYSTEM COMPONENTS.

1. ABOVE ACCESSIBLE CEILING ROUTE SECURITY CABLE IN SHARED IT CABLE TRAY OR ON J-HOOKS.
2. IN AREAS WITH HARD CEILING OR NO CEILING ROUTE SECURITY CABLING IN CONDUIT.
3. CONDUIT WILL COMPLY WITH NEC AND LOCAL REQUIREMENTS.
4. CONTRACTOR SHALL PROVIDE COMPRESSION TYPE CONDUIT FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE.
5. MOUNT ALL SECURITY CONDUITS AND RACEWAY TO MASONRY WALLS. PAINT ALL SECURITY CONDUITS AND RACEWAYS TO MATCH WALL.
6. PAINT ALL JUNCTION BOXES, DEVICE BOXES, TERMINAL CABINETS AND WIRE TROUGH TO MATCH WALL.
7. PROVIDE OWNER APPROVED SECURITY SCREWS AND FASTENERS FOR ALL SECURITY JUNCTION BOXES AND SCREW COVER ENCLOSURES.

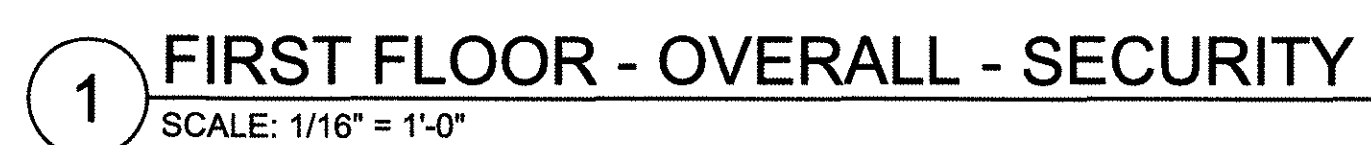
SYMBOLS	DESCRIPTION
	CONDUIT
	CONDUIT CONTINUATION
	CONDUIT TERMINATION
	JUNCTION BOX, SIZED AS REQUIRED
	ELECTRIC LOCK, M - MORTISE LOCK SET
	24VDC LOCK POWER SUPPLY
	MAGNETIC DOOR CONTACT, X = S - SURFACE MOUNT, R - RECESSED MOUNT
	CARD READER, X = M - MULLION MOUNT, P - PEDESTAL MOUNT, W - WALL MOUNT
	PASSIVE INFRARED REQUEST TO EXIT DEVICE
	PUSH BUTTON REQUEST TO EXIT DEVICE
	LOCAL SOUNDER
	ACCESS CONTROL PANEL (READER MODULES, INPUT/OUTPUT MODULES AS REQUIRED)
	NETWORK SWITCH
	120VDC 20A EMERGENCY POWER CIRCUIT (PROVIDED BY ELECTRICAL CONTRACTOR)

1. PROVIDE ALL WIRE AND CABLE FOR A COMPLETE AND FUNCTIONAL SECURITY SYSTEM.
2. PROVIDE WIRE AND CABLE THAT COMPLY WITH NEC AND UL REQUIREMENTS OR COMPLY WITH LOCAL CODES AND ORDINANCES. THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
3. WIRE AND CABLE CONDUCTORS FOR DATA CIRCUITS, CONTROL CIRCUITS, AND COMMUNICATIONS WIRING SHALL BE #22 AWG MINIMUM. UP SIZE CONDUCTORS AS REQUIRED TO PROVIDE A MAXIMUM VOLTAGE DROP OF 10%.
4. WIRE AND CABLE CONDUCTORS FOR LOW VOLTAGE POWER DISTRIBUTION AND CONTROL CIRCUIT WIRING SHALL BE #18 AWG MINIMUM. UP SIZE CONDUCTORS AS REQUIRED TO PROVIDE A VOLTAGE DROP LESS THAN 10%.
5. MANUFACTURER'S INTERNAL INTERCONNECT WIRING SHALL BE UL LISTED AND SIZED IN ACCORDANCE WITH THE MANUFACTURER'S MINIMUM REQUIREMENTS.
6. PROVIDE SHIELDED CABLE FOR ALL LOW SPEED SERIAL DATA CIRCUITS, CONTROL CIRCUITS, AND COMMUNICATIONS WIRING.
7. PROVIDE UTP CAT6 CABLE FOR ALL HIGH SPEED DATA CIRCUITS (ETHERNET).
8. GROUND LOOPS ARE NOT PERMITTED. GROUND SHIELD DRAIN WIRES TO VERIFIED EARTH GROUND TERMINAL LUGS AT THE CONTROL CABINET OR ORIGINATING EQUIPMENT. INSULATE SHIELDS AND DRAIN WIRES AT THE DEVICE OR REMOTE TERMINATION POINT USING UL LISTED INSULATORS. THE USE OF AC POWER NEUTRAL CONDUCTORS FOR GROUND CONNECTIONS IS UNACCEPTABLE.
9. PROVIDE UNSHIELDED TWISTED PAIR CABLE ASSEMBLIES FOR ALL DC LOW VOLTAGE POWER DISTRIBUTION AND CONTROL CIRCUITS.
10. PROVIDE SHIELDED TWISTED PAIR CABLE ASSEMBLIES FOR ALL AC LOW VOLTAGE POWER DISTRIBUTION.

<u>ABBREVIATION</u>	<u>DESCRIPTION</u>
AC	ALTERNATE CURRENT
ACS	ACCESS CONTROL SYSTEM
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTES
APPROX	APPROXIMATE
ASTM	ASTM INTERNATIONAL
ATC	ACOUSTICAL TILE CEILING
AWG	AMERICAN WIRE GAUGE
BICSI	BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL
C	CONDUCTOR
CAB	COUNSELING AND ADVISING BUILDING
CCTV	CLOSED CIRCUIT TELEVISION
CM	CEILING MOUNTED
COMM	COMMUNICATION
DAR	DISCONNECT AND REMOVE
DC	DIRECT CURRENT
DVR	DIGITAL VIDEO RECORDER
EMT	ELECTRICAL METALLIC TUBING
ESS	ELECTRONIC SECURITY SYSTEM
IDS	INTRUSION DETECTION SYSTEM
IN	INTERIOR TYPE ENCLOSURE
IP	INTERNET PROTOCOL
MCF-NET	MONTGOMERY COLLEGE FACILITIES NETWORK
MDF	MAIN DISTRIBUTION FRAME
MTD	MOUNTED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NC	NETWORK INTELLIGENT CONTROLLER
NTS	NOT TO SCALE
PC	PERSONAL COMPUTER
PoE	POWER OVER ETHERNET
PIR	PASSIVE INFRARED
PR	PAIR
PSU	POWER SUPPLY UNIT
RM	ROOM
RRE	REMOTE READER ELECTRONICS
RRM	REMOTE RELAY OUTPUT MODULE
RTE	REQUEST-TO-EXIT
SMS	SECURITY MANAGEMENT SYSTEM
TBD	TO BE DETERMINED
TSP	TWISTED SHIELDED PAIR
Typ	TYPICAL
UL	UNDERWRITERS LABORATORIES
UPS	UNINTERRUPTED POWER SUPPLY
UNO	UNLESS NOTED OTHERWISE
VAC	VOLTS ALTERNATING CURRENT
WM	WALL MOUNTED
WP	WEATHER PROOF TYPE ENCLOSURE

<u>ABBREVIATION</u>	<u>DESCRIPTION</u>
AC	ALTERNATE CURRENT
ACS	ACCESS CONTROL SYSTEM
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTES
APPROX	APPROXIMATE
ASTM	ASTM INTERNATIONAL
ATC	ACOUSTICAL TILE CEILING
AWG	AMERICAN WIRE GAUGE
BICSI	BUILDING INDUSTRY CONSULTING SERVICE INTERNATIONAL
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CAB	COUNSELING AND ADVISING BUILDING
CCTV	CLOSED CIRCUIT TELEVISION
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IN	INTERIOR TYPE ENCLOSURE
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MCF-NET	MONTGOMERY COLLEGE FACILITIES NETWORK
MDF	MAIN DISTRIBUTION FRAME
MTD	MOUNTED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
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UNO	UNLESS NOTED OTHERWISE
VAC	VOLTS ALTERNATING CURRENT
WM	WALL MOUNTED
WP	WEATHER PROOF TYPE ENCLOSURE

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0 8' 16' 24' 32'

$X_{16}'' = 1'-0$

BID SET

No.	Date	Description	By
	01/22/16	Bid Set (County Response Set)	
	11/20/15	Pricing/Permit Set	
	08/28/15	100% Design Development	

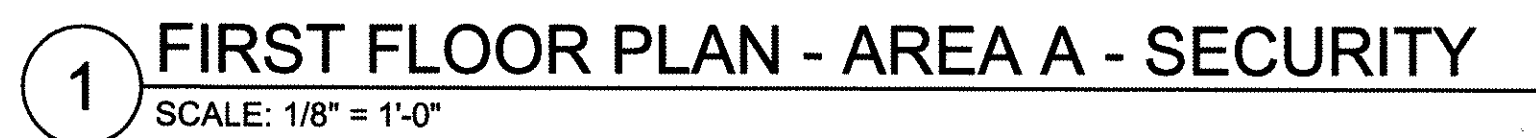
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GERMANTOWN CAMPUS
20200 OBSERVATION DRIVE
GERMANTOWN, MD 20876**

Project

Drawing Title

Seal

EY100



KEY PLAN

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1. WIRE DOOR CONTACTS IN SERIES FOR EACH SET OF DOUBLE DOORS.
2. PAINT SURFACE MOUNTED CONDUIT TO MATCH WALLS.
3. MOUNT CONDUIT TO MASONRY WALL A MINIMUM OF 10' AFF.

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BID SET

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Project

PARTIAL FIRST FLOOR PLAN SECURITY

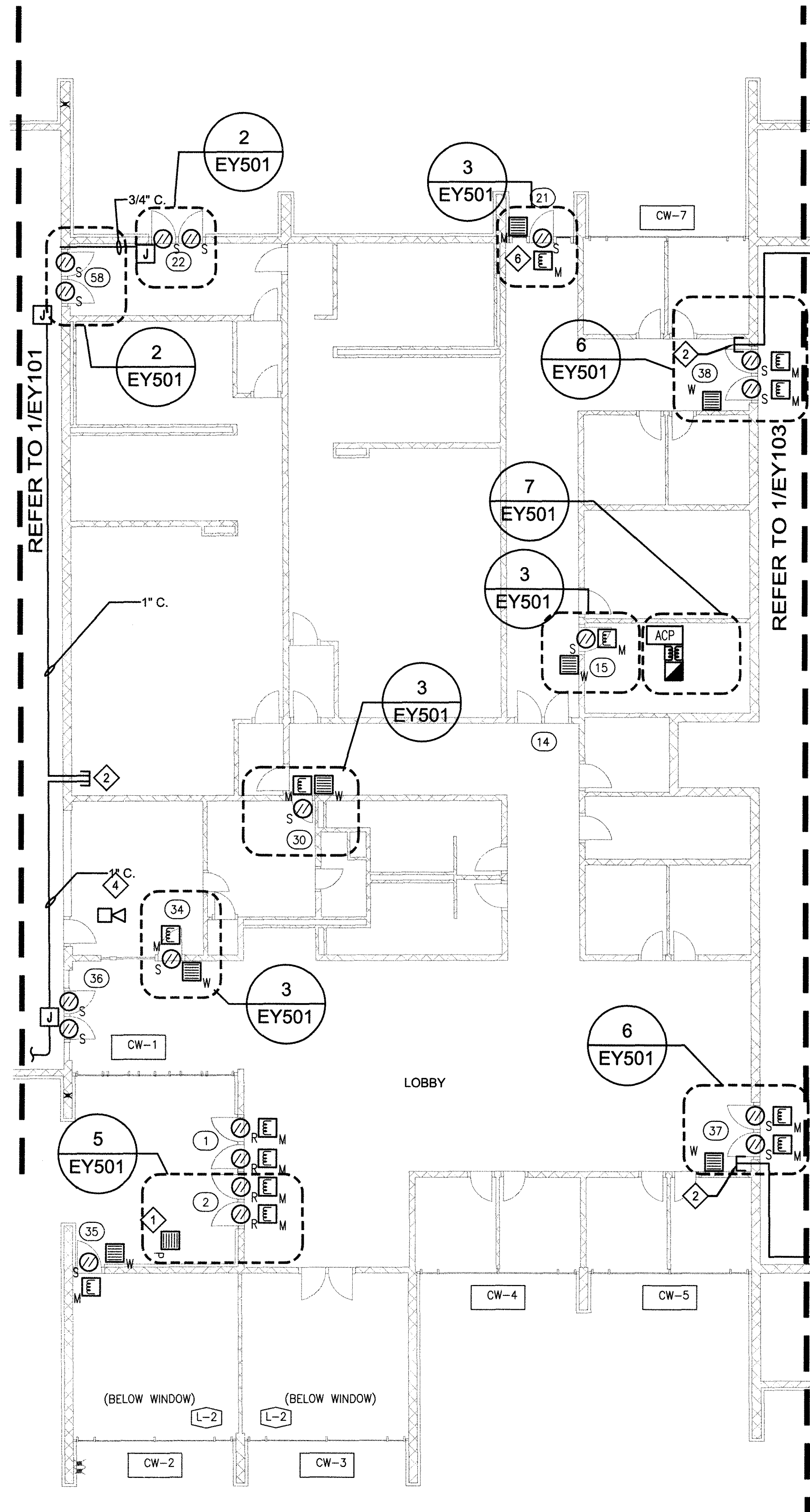
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Project No. 150049.01	Checked DMS	Date 01/22/16
Drawn MSM	Approved DRM	Scale AS NOTED

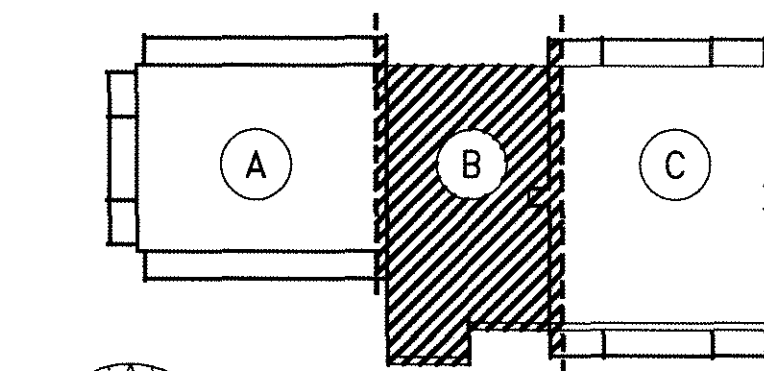
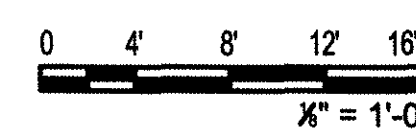
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EY101



1 FIRST FLOOR PLAN - AREA B - SECURITY
SCALE: 1/8" = 1'-0"



KEY PLAN

SHEET NOTES

1. PAINT SURFACE MOUNTED CONDUIT TO MATCH WALLS.
2. MOUNT CONDUIT TO MASONRY WALL A MINIMUM OF 10' AFF.

KEY NOTES

- 1 MOUNT CARD READER TO EXISTING ADA PEDESTAL. INTEGRATE ACS WITH ADA OPERATOR.
- 2 CONTINUE SECURITY CABLE TO IT CLOSET ON J-HOOKS ABOVE ATC.
- 3 ROUTE NEW SECURITY CABLING IN EXISTING BULK HEAD TO IT CLOSET.
- 4 WALL MOUNT SOUNDER ABOVE DOOR OR ON ADJACENT WALL.
- 5 MOUNT ACP BEHIND DOOR IN TELECOM CLOSET. INSTALL DOOR STOP IN FLOOR TO PREVENT FDOOR FROM DAMAGING PANELS.
- 6 120 VAC, 20 A POWER AT DOOR (BY OTHERS).

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BID SET

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11/20/15	Pricing/Permit Set		
08/28/15	100% Design Development		
No.	Date	Description	By

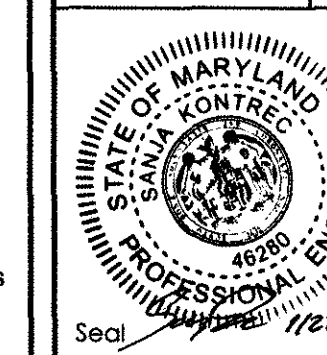
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PARTIAL FIRST FLOOR PLAN SECURITY

Drawing Title

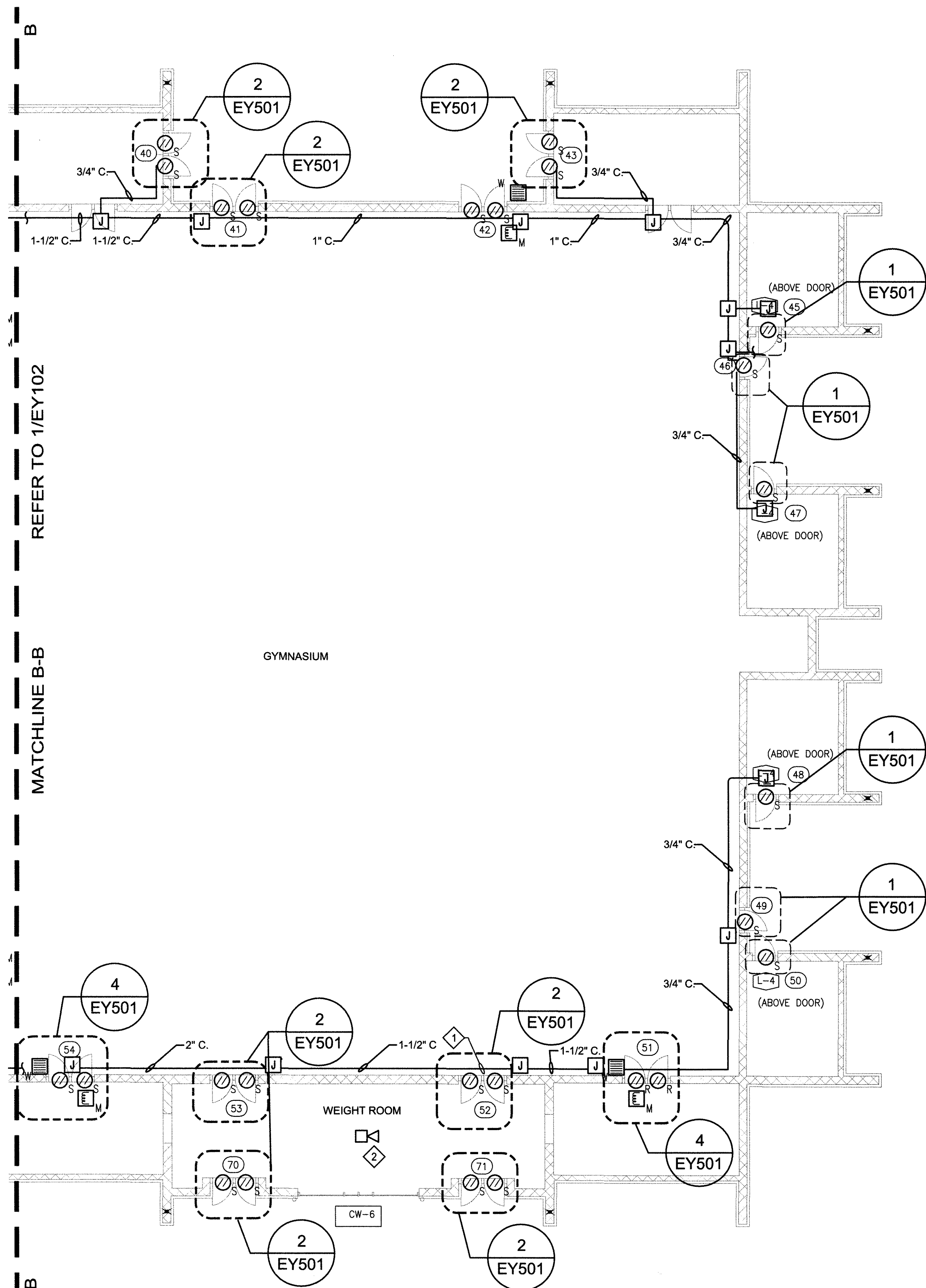
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Drawn MSM	Approved DRM	Scale AS NOTED



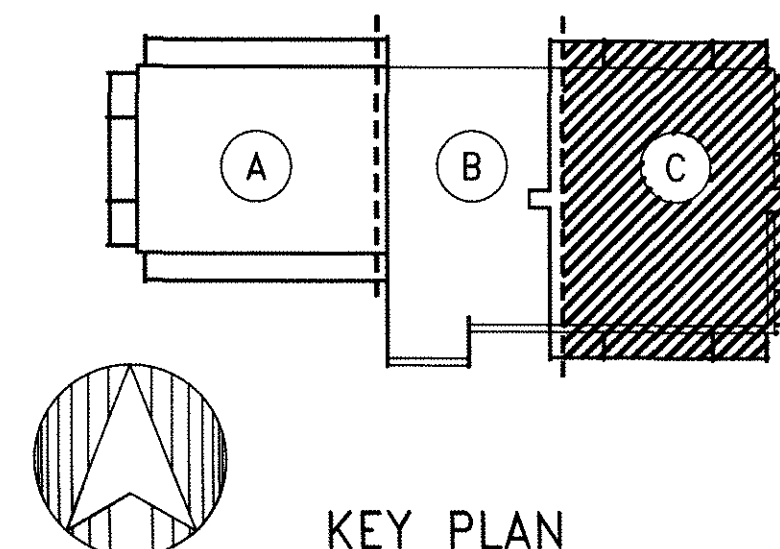
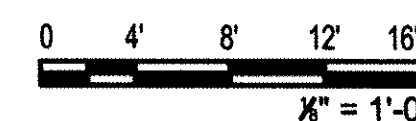
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1 FIRST FLOOR PLAN - AREA C - SECURITY
SCALE: 1/8" = 1'-0"



- ### SHEET NOTES
1. MOUNT CONDUIT TO MASONRY WALL A MINIMUM OF 10 FEET AFF.
 2. PAINT CONDUIT TO MATCH WALLS.

- ### KEY NOTES
- 1 INSTALL NEW SURFACE MOUNTED CONDUIT IN GYMNASIUM. ROUTE SECURITY CABLING IN CONDUIT.
 - 2 CEILING MOUNT SOUNDER.

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Consultant

BID SET

01/22/16	Bid Set/County Response Set	
11/20/15	Pricing/Permit Set	
08/28/15	100% Design Development	
No.	Date	Description
		By

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GERMANTOWN, MD 20876

Project

**PARTIAL FIRST
FLOOR PLAN
SECURITY**

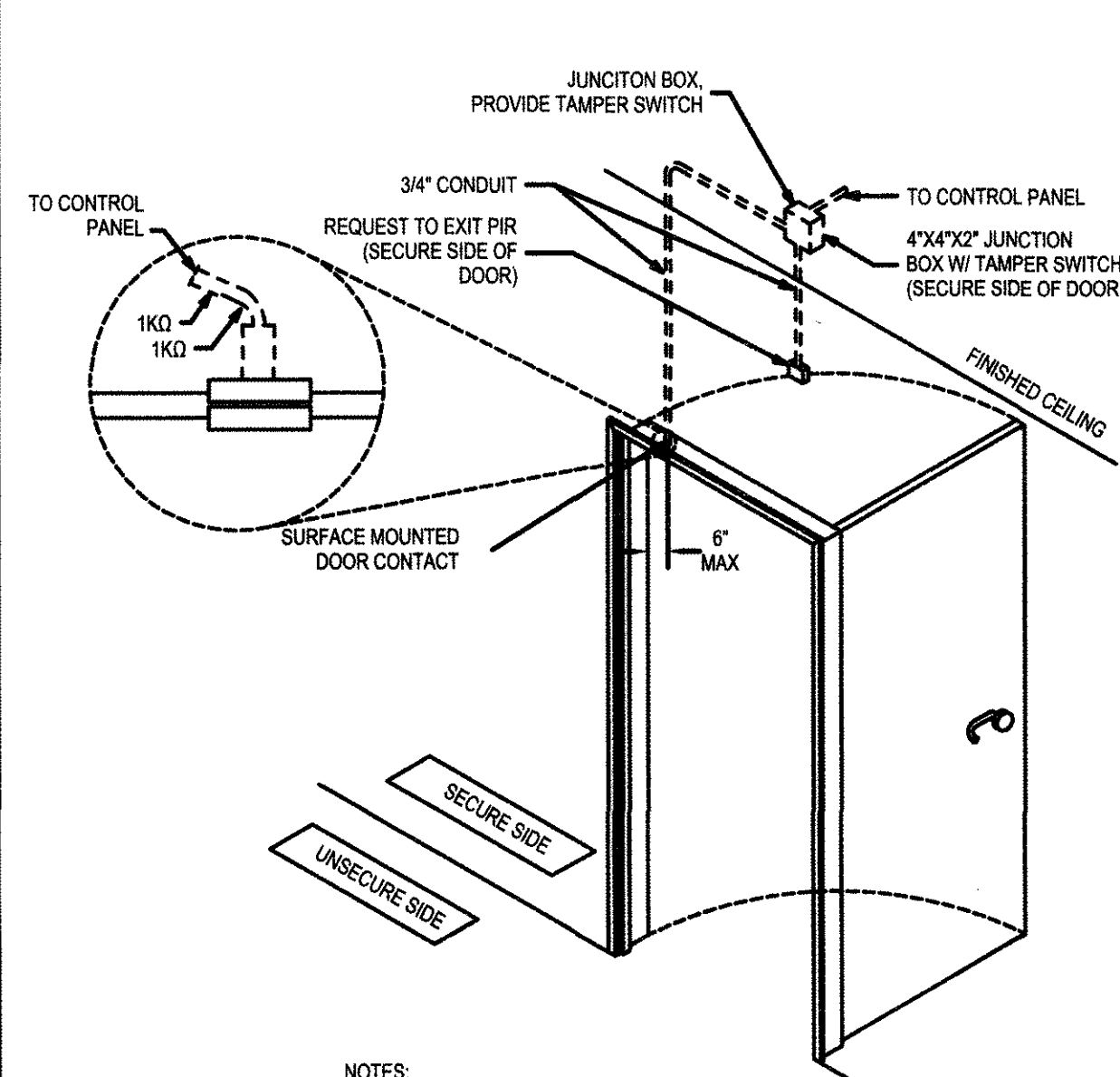
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Project No. 150049.01	Checked DMS	Date 01/22/16
Drawn MSM	Approved DRM	Scale AS NOTED

Drawing No.
EY103

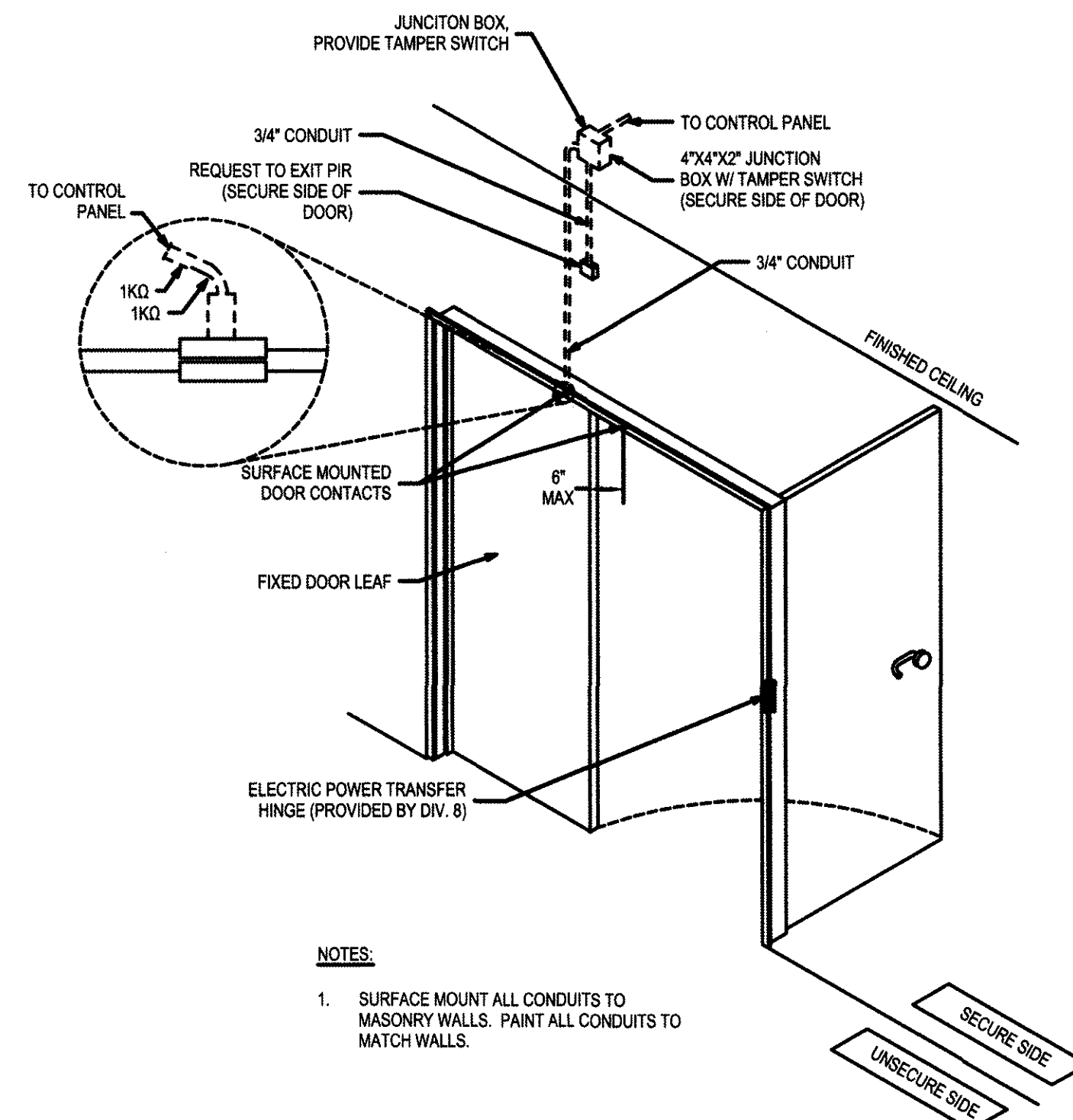
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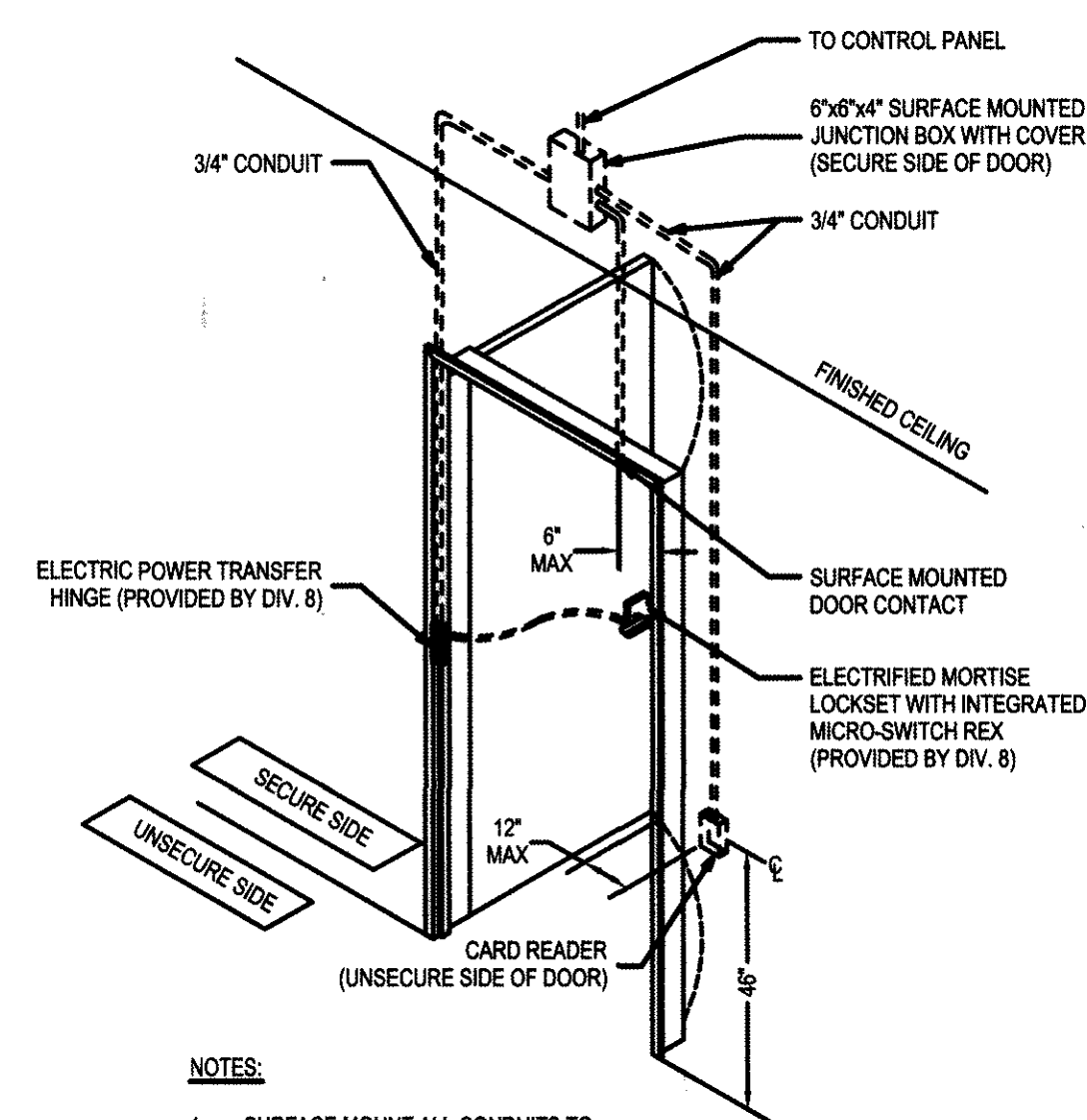
- NOTES:
1. SURFACE MOUNT ALL CONDUITS TO MASONRY WALLS. PAINT ALL CONDUITS TO MATCH WALLS.

SINGLE IDS DOOR
NOT TO SCALE



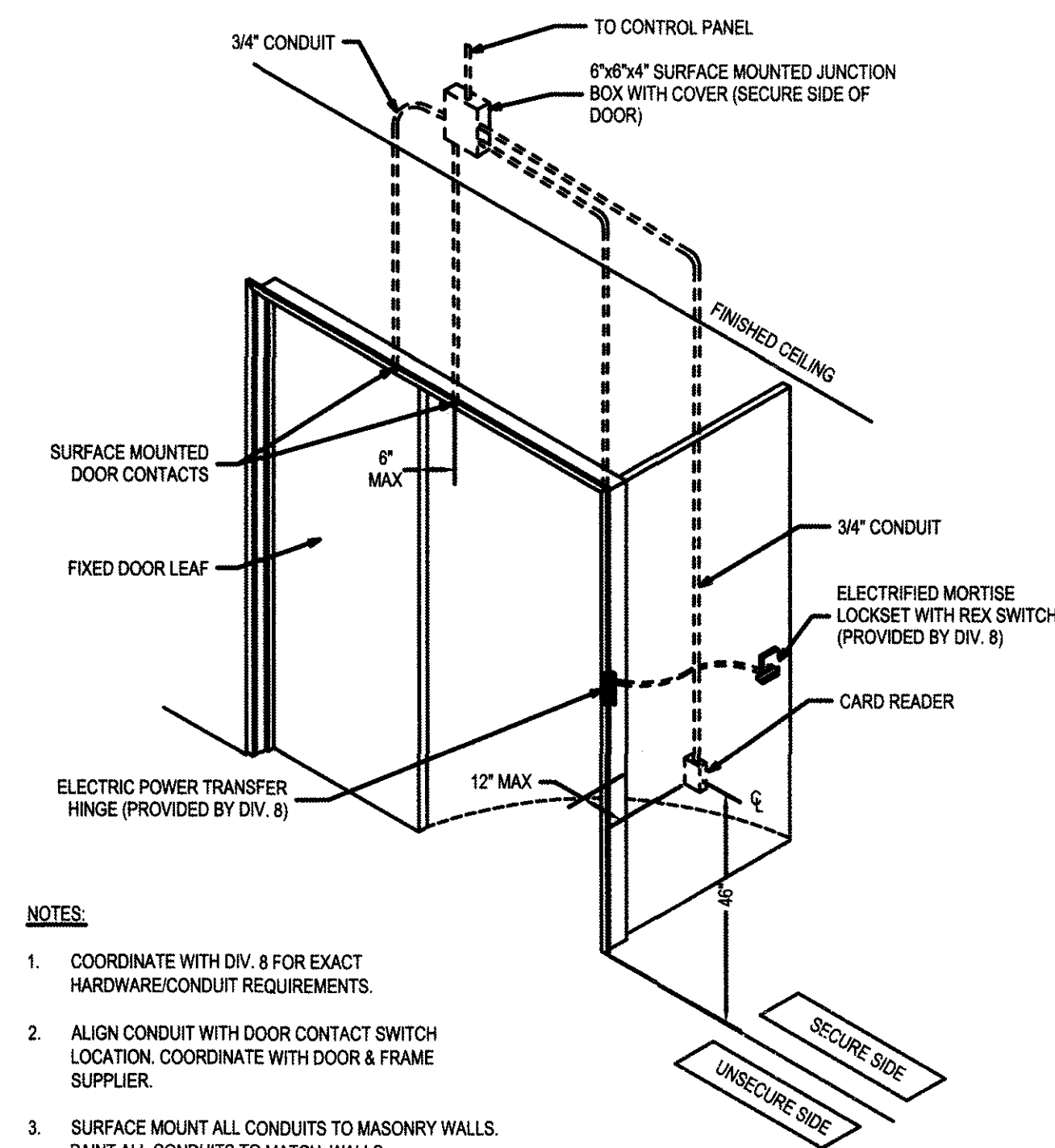
- NOTES:**
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DOUBLE IDS DOOR
NOT TO SCALE



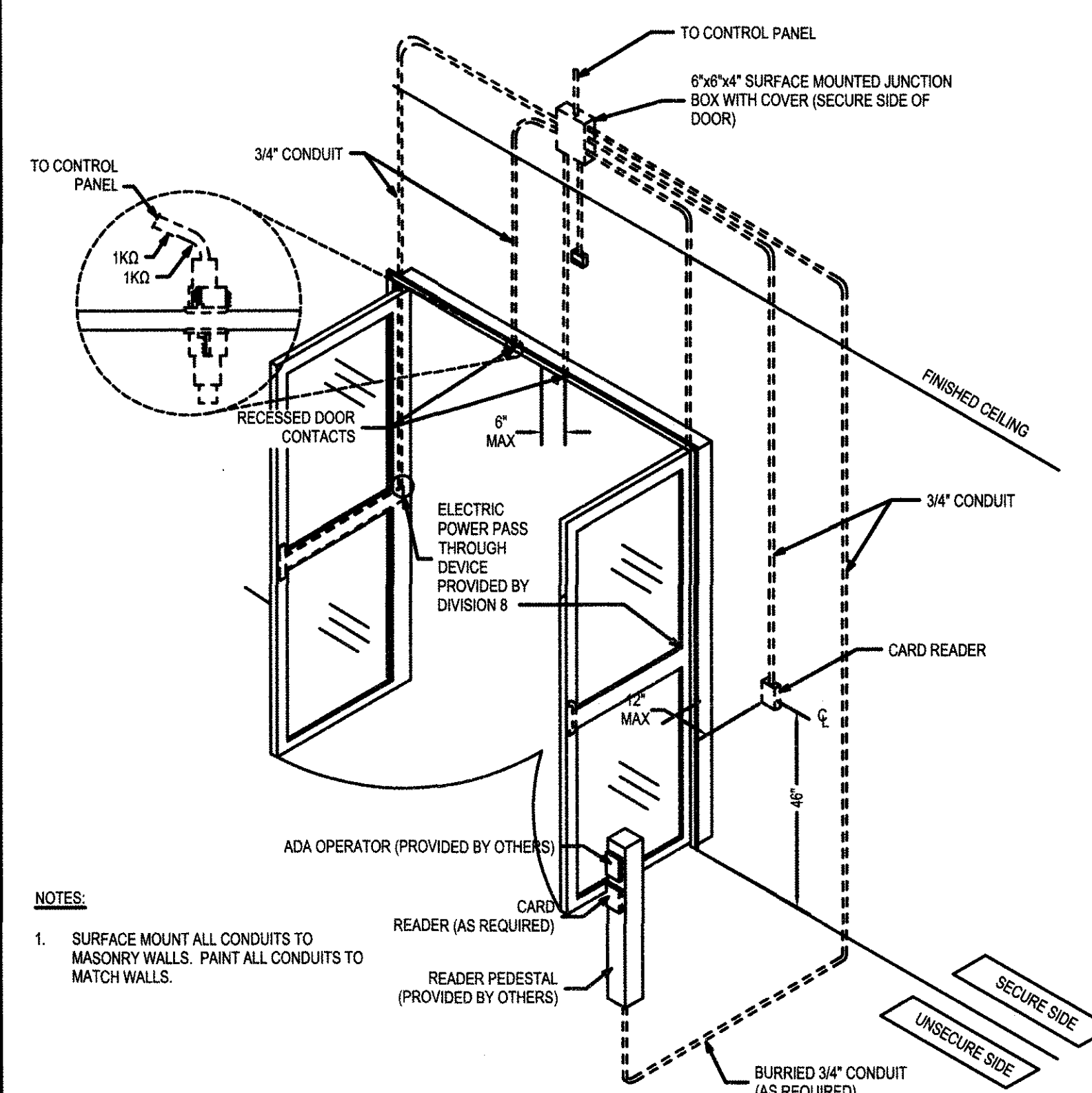
- NOTES:**
1. SURFACE MOUNT ALL CONDUITS TO MASONRY WALLS. PAINT ALL CONDUITS TO MATCH WALLS.

SINGLE ACS DOOR WITH MORTISE
LOCKSET W/ INTEGRATED REX
NOT TO SCALE



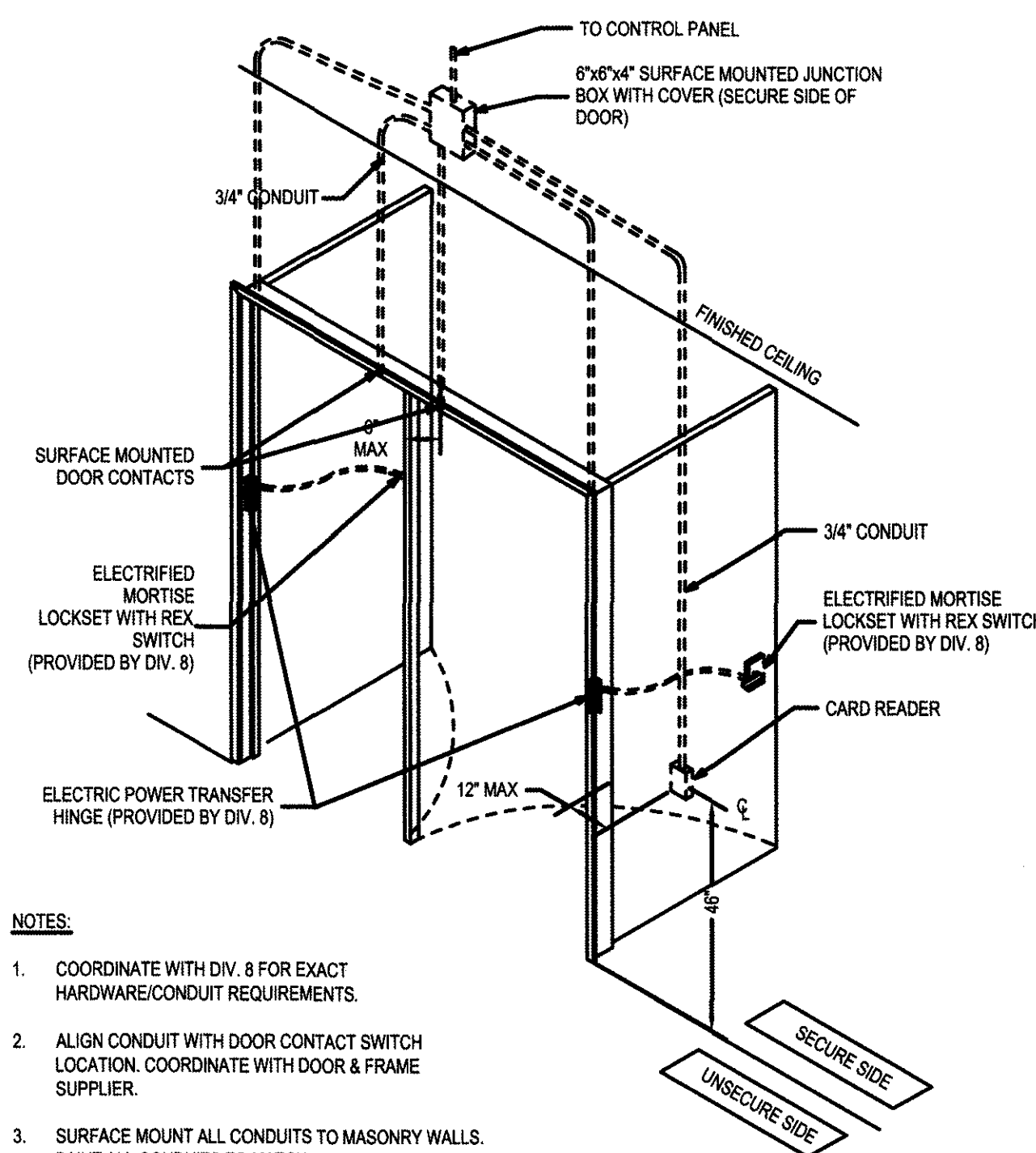
- NOTES:**
1. COORDINATE WITH DIV. 8 FOR EXACT HARDWARE/CONDUIT REQUIREMENTS.
 2. ALIGN CONDUIT WITH DOOR CONTACT SWITCH LOCATION. COORDINATE WITH DOOR & FRAME SUPPLIER.
 3. SURFACE MOUNT ALL CONDUITS TO MASONRY WALLS. PAINT ALL CONDUITS TO MATCH WALLS.

DOUBLE ACS DOOR WITH MORTISE LOCKSET
AND A FIXED LEAF
NOT TO SCALE



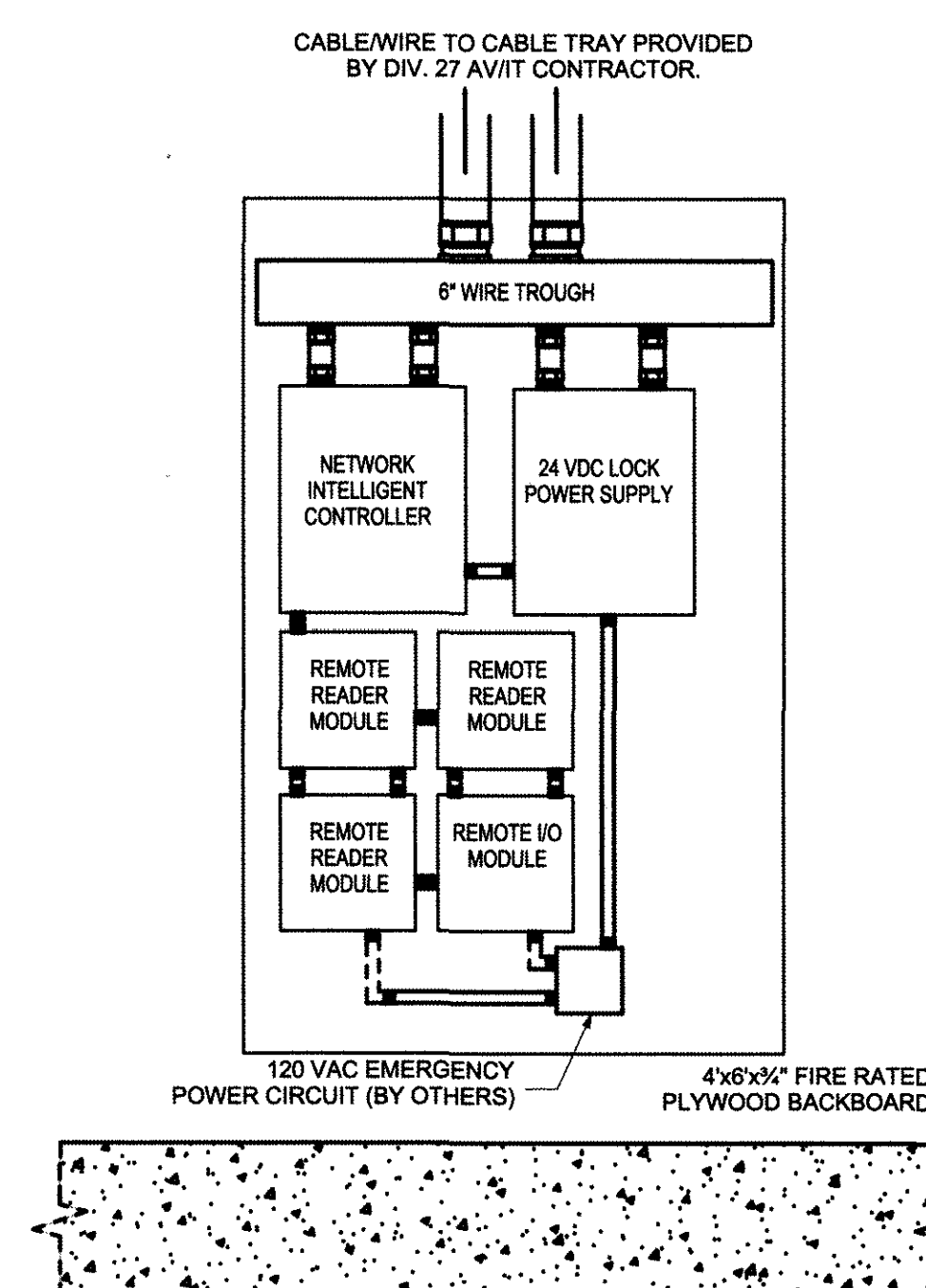
- NOTES:**
1. SURFACE MOUNT ALL CONDUITS TO MASONRY WALLS. PAINT ALL CONDUITS TO MATCH WALLS.

DOUBLE ACS DOOR WITH MORTISE LOCKSET
W/ INTEGRATED REX
NOT TO SCALE



- NOTES:**
1. COORDINATE WITH DIV. 8 FOR EXACT HARDWARE/CONDUIT REQUIREMENTS.
 2. ALIGN CONDUIT WITH DOOR CONTACT SWITCH LOCATION. COORDINATE WITH DOOR & FRAME SUPPLIER.
 3. SURFACE MOUNT ALL CONDUITS TO MASONRY WALLS. PAINT ALL CONDUITS TO MATCH WALL S.

DOUBLE ACS DOOR WITH MORTISE LOCKSET
W/ INTEGRATED REX
NOT TO SCALE



ELEVATION PLAN - IT CLOSET
NOT TO SCALE