GENERAL:
To provide minimum standards for Access Control Systems.

PART 1 Common Work Results For Access Control System

1.1 Owner will provide server and software for connecting control panels through the use of the owner provided TCP/IP network.

1.2 Owner shall provide necessary means for Access Control System Integrator to configure all controllers using Owner’s server and existing control software installation. The Access Control System Integrator shall configure all controllers and doors in the Owner provided software.

1.3 The system shall be capable of utilizing the existing LAN / WAN connecting the buildings or a dedicated security Ethernet network for controller and client communications.

1.4 After installation, the Owner shall be able to perform hardware configuration changes as desired without the services of the Integrator.

1.5 Owner shall utilize existing campus ID cards. Integrator shall not provide cards for use with the system.

1.6 Integrator must provide Authorized Dealer Certificate and Certified Training Certificates of Integrators who will be working on this project.

1.7 Integrator shall provide shop drawings to include:

1.7.1. Drawings showing layout of equipment

1.7.2. Field controller equipment location wall layouts, including size requirements

1.7.3. Detailed wiring diagrams of field controllers, door details, and head-end devices

1.7.4. Load calculations of all security equipment for proper sizing of electrical and standby emergency generator circuits

1.8 Integrator shall provide as-built drawings prior to final acceptance by Owner.

1.9 Integrator shall be a Company specializing in intrusion detection and access control systems with a minimum of three years’ experience on systems of similar size and scope. Technicians performing installation, configuration, and final terminations on the access control system shall have been certified by the manufacturer of the controller and software used for this project in accordance with the manufacturer’s requirements.

1.10 All equipment, materials, and labor shall be guaranteed for a period of 12 months from the date of final acceptance by the Owner.

1.11 Doors shall be controlled by panels located on the same floor as the door itself. Controlling doors from floors above or below the connected door will not be permitted unless approved by the Project Manager.

1.12 All doors shall be equipped with a card reader, request to exit device (REX), and a door position switch.
1.13 Control wiring shall be installed in conduit until above ceiling level; above ceiling level, cable may be installed in cable tray or J-hooks are permitted.

1.14 Controls panels shall be located in a lockable room, typically the telecommunications closet.

1.15 All control panels and door hardware power supplies shall be connected to emergency power.

1.16 All doors shall fail secure.

1.17 Card readers shall be Owner’s custom smart card readers unless otherwise directed.

1.18 Install wiring for detection and signal circuit conductors in conduit. Use 22 AWG minimum size conductors.

1.19 Controllers shall be named in software upon creation in accordance with the owners naming convention. Do not create, then rename. Convention:

1.19.1. SCP: “[Owner’s 3-digit building number]-[floor number]-[room number where controller is located] – [Official Building Name]”

1.19.2. SIO: “[Owner’s 3-digit building number]-[floor number]-[room number where controller is located]-[sequence # (1,2,3,…)]”

1.19.3. Doors:

1.19.3.1. Exterior Door: “[Owner’s 3-digit building number]-[floor number]-800 – [North/South/East/West Entrance]”

1.19.3.2. Interior Door: “[Owner’s 3-digit building number]-[floor number]-[room number of secure side of door]”

1.20 Where electric panic is specific, do not allow latching (unlocking) of panic device to override the access control system (do not include method for “dogging down” of panic hardware).

**PART 2** Acceptable Door Hardware Configurations

2.1 Single doors not requiring panic hardware

2.1.1. Electric strike, door position switch, motion detector, smart card reader

2.2 Single doors requiring panic hardware

2.2.1. Electric panic hardware with RQE integrated into panic, door position switch, smart card reader

2.3 Double doors

2.3.1. Electric panic hardware with RQE integrated into panic (each door), door position switch (each door), smart card reader

**PART 3** Operation

3.1 Doors requiring automatic door operators

3.1.1. Locked mode

3.1.1.1. Pressing secure side automatic door opener actuator opens door.
3.1.1.2. Pressing unsecure side automatic door opener actuator without presenting valid card performs no action.

3.1.1.3. Presenting valid card unlocks door. Pressing unsecure side automatic door opener actuator within unlock timeframe activates automatic door opener.

3.1.2. Unlocked mode

3.1.2.1. Pressing automatic door opener actuator on either side activates automatic door operator

PART 4 Products

4.1 Control Software

4.1.1. RS2: Software and licenses provided by owner. RS2 system shall be specified unless otherwise noted.

4.1.2. Hirsch Velocity: Software and licenses provided by owner. Hirsch Velocity system shall only by specified upon specific instruction by Owner.

4.2 Controllers

4.2.1. Mercury Security Hardware

4.2.1.1. EP1502

4.2.1.2. EP1501: Permitted only with Owner’s approval.

4.2.2. No Substitutions

4.3 Smart Card Readers

4.3.1. HID Multiclass SE (for use with RS2 system only)

4.3.1.1. Not available; specify magnetic stripe card readers.

4.3.2. HID Multiclass SE (for use with Hirsch Velocity system only):

4.3.2.1. R10 Form Factor Manufacturer’s Part Number: 900NWNNEKE0535

4.3.2.2. R15 Form Factor Manufacturer’s Part Number: 910NWNNEKE0535

4.3.2.3. R40 Form Factor Manufacturer’s Part Number: 920NWNNEKE0535

4.3.2.4. RK40 Form Factor Manufacturer’s Part Number: 921NWNNEKE0535

4.4 Magnetic Stripe Readers

4.4.1. HID: Request model number from Owner

4.4.2. No Substitutions

4.5 Door Position Switches

4.5.1. Schlage flush mount magnetic switches

4.5.2. Substitutions permitted upon Owner approval.
4.6 Electric Strikes
   4.6.1. Von Duprin
   4.6.2. Substitutions permitted upon Owner approval.

4.7 Electrified Panic
   4.7.1. Von Duprin EL/RX 99-L
   4.7.2. No Substitutions

4.8 Motion Detectors
   4.8.1. Bosch
   4.8.2. Substitutions permitted upon Owner approval.

4.9 Power Transfer Hinges
   4.9.1. Von Duprin EPT-10
   4.9.2. Von Duprin EPT-2
   4.9.3. No Substitutions