# HOUSTON COMMUNITY COLLEGE SYSTEM DESIGN STANDARDS / APPENDICES ISSUE DATE: 01.21.14

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#### SECURITY SYSTEM CONCEPT

### **PART 1 - GENERAL**

# 1.1 **SUMMARY**

A. Security systems should be layered to provide the best possible protection for the facility and those who frequent it. Layering the systems permits very functional data collection and early warning systems without the high cost of single solution technologies.

# **PART 2 - OVERVIEW**

# 2.1 PARKING AREA

- A. The parking areas have natural "choke points" in their driveways. Each driveway should be fitted with adequate lighting at a level enabling the interior of the vehicle to light as the vehicle passes. The driveways should have video surveillance cameras fixed with proper lenses to capture license plate numbers and images of the driver as a minimum. Entry and exit points should be monitored. Lighting, including minimum foot-candle requirements, should be coordinated with MEP.
- B. Parking areas with topography that would enable entry or exit via paths other than the driveways should be enhanced to prevent that from occurring. Dirt berms, culverts and cable fences etc. should be considered as deterrents to entering and exiting away from the monitored driveways.
- C. Throughout the parking areas lighting is a critical component of a comprehensive crime prevention effort and should be considered a basic necessity to the overall parking lot security plan. Minimum lighting standards are well established and readily available to designers assigned these projects.

# 2.2 BUILDING PERIMETERS

- A. Building perimeters should be controlled and provide access to only those with granted access via a vetting process. The physical configuration is as follows:
  - 1. The main or front entrance into a facility should be controlled after hours by a card access system and monitored by video surveillance. During the day (working hours) these doors will be left open and provide entry into a staffed lobby. The lobby attendant will have the ability to record the identity of visitors and be able to issue temporary or visitor badges for movement through the facility. When leaving the lobby area on a 24 X7 basis an individual will need to pass an access controlled portal into the remainder of the facility.

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2. Entries not considered the main entry, but which are adjacent to parking, picnic/open space areas and the like will also be controlled by access control systems and monitored by video surveillance. This will permit the free entry and exit for authorized persons through these "convenience portals".

- 3. There are portals in most facilities which are intended for exclusive egress in emergency situations only. These portals should be locked at all times from the exterior of the facility, they should be fitted with emergency egress hardware, a door position switch, and where appropriate an local door alarm.
- 4. Critical function areas i.e. mechanical, electrical, network and security closets should also be protected by access control, a door position switch and monitored by video surveillance.
- 5. General video surveillance views of the facility should be limited to the major corridors with minimal cameras installed. Only those required to provide general monitoring of the activity in any major corridor should be deployed.
- 6. Based on the functionality of the space there maybe "special application" areas which should be considered for additional security measures. Some examples are the pharmacy drug storage, computer labs, welding labs etc. These situations can be addressed during the building design process and appropriate security packages can be identified and included based on need and function of the space.
- 7. Open spaces, courtyards and exterior passages should be monitored via video surveillance with special attention to minimize blind or abstracted spots in the view. These exterior or foot traffic passages must include lighting to support monitoring after dark. Due to the unique design of these types of spaces, it is critical that a design be developed very early in the planning stages of these spaces. When possible and reasonable to d so the cameras viewing these spaces should be mounted on adjacent buildings to minimize the cost of cabling, power and maintenance as well as having the least impact on the look and feel of the exterior space.

#### 2.3 ACTIVE SHOOTER

#### A. Classroom locks

All current information regarding active shooter scenarios dictate that occupants of a facility "run" evacuate if they can do so safely or "hide" secure themselves in the facility and make the area secure and appear to be vacant. To that end, each classroom should be fitted with a door lock that can be operated from the secure (interior of the room). The door lock should be

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common to all classrooms to ensure similar operation. The door lock should be key entry from the hall (unsecure) side. Those locks should be common keyed to ensure the college administration can access the rooms on a daily basis and emergency first responders can open the rooms in emergency events. The master level keys should strictly controlled and several should be available for first responders in the event of an emergency.

### B. Communication

The requirement to notify the community that there is an emergency event in progress has been enhanced over the years. The college has implemented mass notification systems, telephone systems and internal TV control systems. However the need to communicate with the affected building population is critical. Each facility should be fitted with a public address system that can be activated via the administration or via a telephone system for remote activation. The speaker system and volume capabilities should meet or exceed the standards used for life safety systems in high rise facilities.

#### 2.4 GUIDANCE

- A. Access control locking hardware shall be electronic mortis as a standard. Electronically controlled panic hardware can be specified if the application requires emergency egress hardware and access control at the same location.
- B. Magnetic locking and electric mortis locking is not an acceptable standard and will only be used if it is determined that no other option is available. It will not be acceptable if these types of locking devices are used to protect the perimeter of any facility.
- C. Video surveillance cameras will be IP/POE cameras. There megapixel rating, low light capability, etc. will be specified when the location and camera tasking has been made clear. Alternatives can be used for special applications, i.e. wireless, solar applications.
- D. Glass break detection will be installed in any facility where glass can be accessed at the street level or on second floor glass that is adjacent to a roof area. Glass detection will be duel technology devices to reduce the occurrences of false activation.
- E. Door position switches will be mounted in the door frame at the jam in a manner that they will be protected from access to the devise or connecting wires from either the secure or unsecure side of the door.
- F. Motion detection may be used in specific applications other than video surveillance image recording triggers. The type of devise and specific tasking will drive the required specification.

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- G. All security system components (including door hardware) must be supported by a four hour UPS system and (where possible) be on an emergency generator.
- H. Card access for standard personnel door

The door will be equipped with:

- 1. Electric mortis lock
- 2. Card reader/access control interface devise
- 3. Door position switch
- 4. REX devise
- 5. video surveillance image of the transactions at the access control point
- I. Emergency exit only

The door will be fitted with:

- 1. Door position switch
- 2. Video surveillance image of the portal
- 3. Local door alarm (if appropriate)
- J. Loading dock/roll up door
  - 1. Door position switch cable plug type is preferred, door/guide rail DPS is acceptable, floor mounted is a last resort if needed.
  - 2. Access control for roll up doors can be used if the doors are power opened.
- K. Un-used portals

Un-used portals should be fitted with:

- 1. Blank hardware set on the unsecure side of the door.
- 2. A door positions switch should be installed
- 3. Video surveillance is optional

#### **END OF SECTION**