

## SECTION 28 00 00 - ELECTRONIC SAFETY AND SECURITY

### PART 1 - GENERAL

#### A. SECURITY DESIGN PROCESS

1. Concept Design (5%)
  - a. Two sets of drawings and two sets of specification books to the ESD and its contractor(s). Drawings to also be provided to security contractors in electronic format, (AutoCAD 2000 or higher, .dwg), where possible.
  - b. Security requirements identified, after initial and concept design conferences:
    - 1) Controlled Portals
    - 2) Monitored Portals
    - 3) CCTV Surveillance
    - 4) High Value and High-Risk Areas
    - 5) Interior compartmentalization needs
    - 6) Adjacency and Campus Integration Issues
    - 7) Areas of regulatory or compliance requirement
  - c. Hand out worksheets and conference notes
  - d. Discuss the project and establish security preliminary budgets as part of the overall construction budget.
2. Schematic Design (35% documents)
  - a. Two sets of revised drawings to ESD and security contractor(s) (electronic and paper)
  - b. Continued participation in all design conferences
  - c. Review space configuration and design narrative
  - d. Security conferences with tenants to ascertain work processes, occupant flow, risk analysis, hours of operation, compartmentalization issues, public access, high-value areas, etc.
  - e. Security conferences with security contractor(s) to ensure security overlays are sent to the architect
  - f. Security conferences with the electrical contractor and the supplier of door hardware regarding the integration of components
3. Design Development (65% Documents)
  - a. Two sets of revised drawings to ESD and security contractor(s)
  - b. Continued participation in all design conferences
  - c. Review interior building configuration and elevations
  - d. Resolve security specifications and update overlays
  - e. Continued refinement of project costs and schedule with security contractor(s)
  - f. Construction Documents (95% Documents)
  - g. Two sets of revised drawings to ESD and security contractor(s)
  - h. Continued participation in all design conferences
  - i. Continued audit of revised drawings to security specifications
  - j. Continued revision of costs and construction schedule with security contractor(s)
4. Construction (100% Documents Final)
  - a. Two sets of revised drawings to ESD and security contractor(s)
  - b. Continued participation in all design conferences
  - c. Construction schedule with security contractor(s)
  - d. Construction delivery and coordination
  - e. Participation in contractor/subcontractor site conferences
5. Accepting the Security System by ESD
  - a. Review security processes and signoff requirements of GC
  - b. A commissioning check list will be developed for each project
  - c. A functional test of all systems before acceptance is complete.

B. SAFETY DESIGN PROCESS

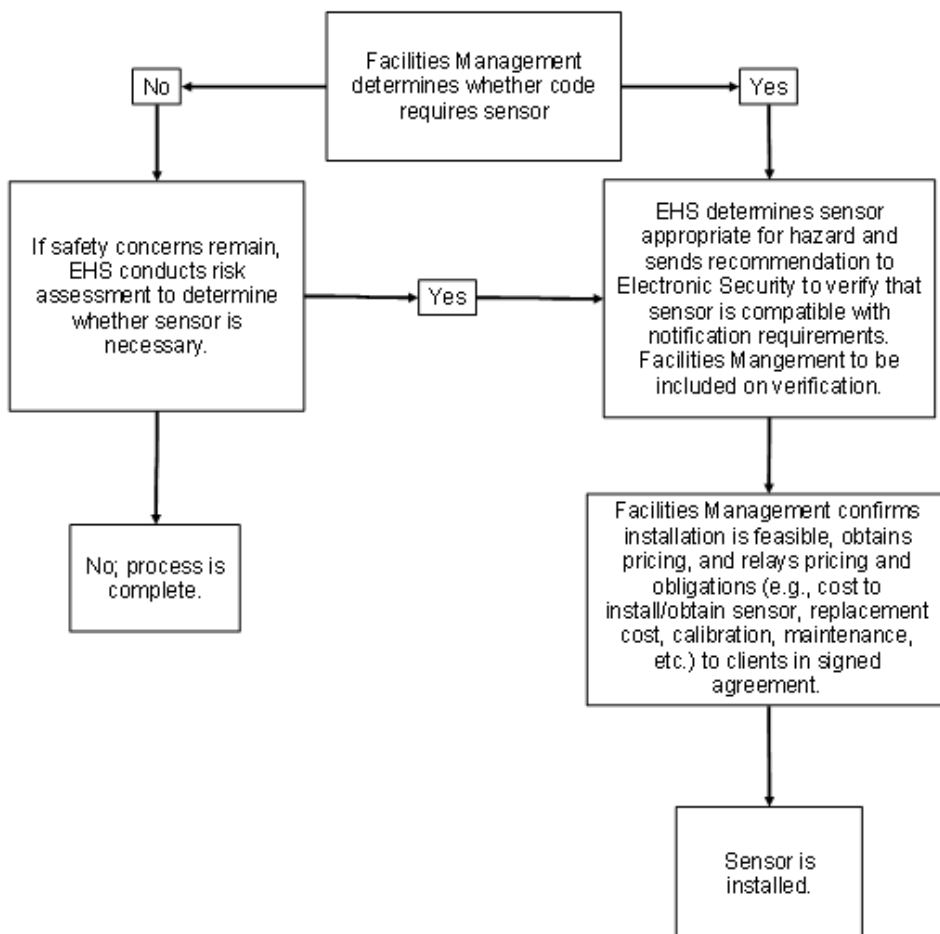
1. Identification of Hazards that will be present.
  - a. Outline all chemicals and quantities and gasses that will be present in the designed space.
  - b. Evaluate the volumes and concentrations that will pose a hazard.
  - c. Determine sensors that need to be integrated with building automation systems.
  - d. Consult with University Environmental Health and Safety through the Project Manager to evaluate hazards and sensor/notification requirements.
2. Procedure for Selection of Chemical Sensors
  - a. Follow attached Procedure for Selection of Chemical Sensors.

C. SAFETY DESIGN PROCESS

1. Identification of Hazards that will be present.
  - a. Outline all chemicals and quantities and gasses that will be present in the designed space.
  - b. Evaluate the volumes and concentrations that will pose a hazard.
  - c. Determine sensors that need to be integrated with building automation systems.
  - d. Consult with University Environmental Health and Safety through the Project Manager to evaluate hazards and sensor/notification requirements.
2. Procedure for Selection of Chemical Sensors
  - a. Follow attached Procedure for Selection of Chemical Sensors.

## Procedure for Selection of Chemical Sensors

Some chemicals can create hazardous concentrations in air and/or deplete oxygen in a space, and as such a sensor may be needed. Below are the steps required for determining sensor requirements.



Indicate yes, no, or N/A for each line item:

\_\_\_ Sensor required by code; Facilities Management representative (name): \_\_\_\_\_

\_\_\_ Sensor required by EHS for safety concerns; EHS representative (name): \_\_\_\_\_

\_\_\_ Sensor not required; EHS representative name: \_\_\_\_\_

\_\_\_ Sensor meets Electronic Security requirements; representative (name): \_\_\_\_\_

\_\_\_ If sensor is required, end user understands requirements and cost responsibility related to:

☐ Maintenance and repair as required

☐ Replacement components

☐ Calibration costs as required

End user name, signature, and date: \_\_\_\_\_

\*This form shall be kept on file by EHS.

**END OF SECTION 28 00 00**