

## CARD ACCESS & CLOSED CIRCUIT TV SYSTEM DESIGN

Miller Consulting Group, LLC takes an integrated approach to security design, fully considering the needs and expectations of the client as well as architectural and code issues. The principal of MCG works closely with the owner, architects and engineers of a project, to ensure a system's optimum performance and the client's full satisfaction. The following outlines MCG's approach to designing a security system involving card access and/or closed circuit TV.

I. Provide a detailed design for card access and/or closed circuit TV systems that encompasses the following criteria:

**A. Owner Considerations**

1. Previous experience with maintenance and operation of such systems
2. Budget considerations
3. Guard force/staffing criteria
4. Integration to other systems
5. Level of security desired
6. Insurer's criteria for system
7. Future expansion for system

**B. Architectural Considerations**

1. Aesthetic consideration of device placement
2. Coordination with door hardware consultant
3. Understanding of door types and features
4. Handicap entrances
5. Elevator interface

**C. Authority Having Jurisdiction**

1. Ensure that system meets criteria for emergency/non-emergency egress

II. Design Process

**A. Obtain owner's input into system criteria**

1. Achieve a thorough understanding of what their expectations are for system design and operation based upon criteria of I.A above.

**B. Review architectural plans with architect based upon criteria from I.B above**

**C. Design the card access and /or CCTV system consisting of:**

1. Devices on floor plan with appropriate notes, and indicating owner's desired field of view
2. Project specific riser diagram, including indication of switch/recording/monitor looping
3. Functional matrix
4. Project/system specification
5. Details pertinent to the project
6. Device legend (complete and project specific)
7. Written cost estimate for specific scope of work

**D. Submit to "client" for review and PE stamp**

**E. Design revision based upon "client"/architect/AHJ input, and submit for construction package**

III. Bid Support

**A. Review and approve/disapprove substitution request**

**B. Support questions from vendors and contractors**

**C. Issue addendums as necessary for clarification to original scope of work**

IV. Post Bid Review

**A. Review of Data Sheets**

1. Make recommendation for approval/disapproval of data sheet submittals based upon compliance with specification and construction drawings. Allow for two (2) submissions of data sheets before item 2 below is initiated.
2. Resubmission of previously disapproved data sheets chargeable at a predetermined hourly rate.

**B. Review of Shop Drawings**

1. Make recommendation for approval/disapproval of shop drawing submittals based upon compliance with specification and construction drawings. Allow for two (2) submissions of shop drawings before item 2 below is initiated.
2. Resubmission of previously disapproved shop drawings chargeable at a predetermined hourly rate.

**C. Review of Vendor/Contractor's Acceptance Test Procedure prior to system commissioning**

V. Other Services Available

**A. Represent owner as qualified entity to witness Card Access and/or CCTV system acceptance testing, and sign off for owner**

**B. Evaluation of existing systems**

1. For interface to new system
2. For integration to new system
3. For reusable components with new system

**C. Provide as-built drawings for existing systems (requires extensive onsite work with electrician and/or technician)**