

## SECTION 08740 – CARD ACCESS SYSTEM

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 GENERAL

## A. Introduction

1. This document includes a general description, functional requirements, characteristics, and criteria for the Card Access System.
2. Provide a complete sophisticated, easy-to-use, Card Access System. The Card Access System shall include intelligent field advanced processing controller (apC/8X), communication devices, card readers/keypads, access cards, I/O boards, power supplies, conduit, raceways, enclosures, mounting hardware, and all other equipment as indicated on the contract drawings and as specified herein. All material shall be the manufacturer's standard catalog products.

## B. General Description

1. The required Card Access System shall be fully functional with field devices, such as card readers, alarm inputs, control points, etc., and shall be connected to fully distributed intelligent field controllers (apC/8X) capable of operating without host computer intervention.

## 1.3 DESCRIPTION OF WORK

1. The Security Management Control System shall manage the security operations for a single site. This system shall be compatible with C•Cure 800 system presently in use in County facilities in Fort Worth, Texas.

## 1.4 SUBMITTALS

## A. Shop Drawings: Provide complete shop drawings which include the following:

1. Indicate all system device locations on architectural floor plans. No other system(s) shall be included on these plans.
2. Include full schematic wiring information on these drawings for all devices. Wiring information shall include cable type, conductor routings, quantities, and connection details at devices.
3. Include a complete access control system one-line, block diagram.
4. Include a statement of the system sequence of operation.

## B. Product Data: Provide complete product data that includes the following:

## PART 2 - PRODUCTS

## I MANUFACTURERS

- A. Security Management Control System Software: Sensormatic Access Control Division C•CURE 800/8000 System.
- B. Security Management Control System Field Hardware: Sensormatic Access Control Division apC/8X controllers.

## PART 3 - EXECUTION

## 3.1 ACCESS CONTROL SYSTEM - INSTALLATION

- A. General: The contractor shall install all system components and appurtenances in accordance with the manufacturer's instructions, and shall furnish all necessary interconnections, services, and adjustments required for a complete and operable system as specified and shown. Control signal, communications, and data transmission line grounding shall be installed as necessary to preclude ground loops, noise, and surges from adversely affecting system operation. Provide mounting hardware as required.
- B. Installation: All low voltage wiring outside the control console, cabinets, boxes, and similar enclosures, shall be plenum rated where required by code. Cable shall not be pulled into conduits or placed in raceways, compartments, outlet boxes, junction boxes, or similar fittings with other building wiring.
- C. Device Wiring and Communication Circuit Surge Protection: All inputs shall be protected against surges induced on device wiring. Outputs shall be protected against surges induced on control and device wiring installed outdoors and as shown. All communications equipment shall be protected against surges induced on any communications circuit. All cables and conductors, except fiber optics, which serve as communications circuits from security console to field equipment, and between field equipment, shall have surge protection circuits installed at each end.

## 3.2 TRAINING

- A. General: The contractor shall conduct training courses for personnel designated by the owner. Training shall cover the maintenance and operation of the Card Access System. The training shall be oriented to the specific system being installed under this contract including central processor. Training manuals shall be delivered for each trainee with two additional copies delivered for archiving at the project site. The manuals shall include an agenda, defined objectives for each lesson, and a detailed description of the subject matter for each lesson. The contractor shall furnish audiovisual equipment and other training materials and supplies as necessary. Where the contractor presents portions of the course by audiovisual material, copies of the audiovisual material shall be delivered to the owner on the same media as that used during the training session.

1. Manufacturer's data for all material and equipment, including terminal devices, local processors, access cards, and any other equipment provided as part of the Card Access System.  
A system description, including analysis and calculations used in sizing equipment required by the Card Access System. Description to show how the equipment shall operate as a system to meet the performance requirements of the Card Access System.
- C. Contract Close-Out Submittals: Provide three (3) sets of manuals including operating instructions, maintenance recommendations and parts list including wiring and connection diagrams modified to reflect as-built conditions.
- D. As-Built Drawings: During system installation, the Contractor shall maintain a separate hard copy set of drawings, elementary diagrams, and wiring diagrams of the Card Access System to be used for record drawings. This set shall be accurately kept up to date by the Contractor with all changes and additions to the Card Access System. In addition to being complete and accurate, this set of drawings shall be kept neat and shall not be used for installation purposes. Copies of the final as-built drawings shall be provided to the end user in DXF format using the latest version of AutoCAD.

#### 1.5 QUALITY ASSURANCE

- A. The manufacturers of all hardware and software components employed in the system shall be established vendors to the access control/security monitoring industry for no less than five (5) years.
- B. The security system integrator shall have been regularly engaged in the installation and maintenance of integrated access control systems similar in size and scope to that outlined herein for a period of no less than five (5) years.
- C. The security system integrator shall supply information attesting to the fact that their firm is an authorized product dealer for the system proposed.
- D. The security system integrator shall supply information attesting to the fact that their installation and service technicians are competent factory trained personnel capable of maintaining the system and providing reasonable service time.
- E. The security system integrator shall provide a minimum of three (3) references whose systems are of similar complexity and have been installed and maintained by the security system integrator in the last five (5) years.
- F. There shall be a local representative and factory authorized local service organization that shall carry a complete stock of parts and provide maintenance for these systems.

### 3.3 TESTING

- A. General: The contractor shall perform pre-delivery testing, site testing, and adjustment of the completed Card Access System. The contractor shall provide all personnel, equipment, instrumentation, and supplies necessary to perform all testing. Written notification of planned testing shall be given to the owner at least fourteen (14) days prior to the test, and in no case shall notice be given until after the contractor has received written approval of the specific test procedures. Test procedures shall explain in detail, step-by-step actions and expected results demonstrating compliance with the requirements of the specification. Test reports shall be used to document results of the tests. Reports shall be delivered to the owner within seven (7) days after completion of each test.
- B. Performance Verification Test: The contractor shall demonstrate that the completed Card Access System complies with the contract requirements. Using approved test procedures, all physical and functional requirements of the project shall be demonstrated and shown.

### 3.4 WARRANTY, MAINTENANCE AND SERVICE

- A. Warranty: The Card Access System shall be warranted by the contractor for one (1) year from the date of final system acceptance.
- B. Maintenance and Service: The contractor shall provide all services required and equipment necessary to maintain the entire Card Access System in an operational state as specified for a period of one (1) year after formal written acceptance of the system, and shall provide all necessary material required for performing scheduled adjustments or other nonscheduled work.
- C. Personnel: Service personnel shall be qualified to accomplish all work promptly and satisfactorily. Provide proof that Service personnel have successfully completed the appropriate level of both hardware and software training offered by the system manufacturer. The owner shall be advised in writing of the name of the designated service representative and of any change in personnel.
- D. Inspections: The contractor shall perform two inspections at six (6) month intervals or more often if required by the manufacturers. This work shall be performed during regular working hours, Monday through Friday, excluding Federal holidays.
- E. Emergency Service: The owner shall initiate service calls when the Card Access System is not functioning properly. Qualified personnel shall be available to provide service to the complete Card Access System. The owner shall be furnished with the telephone number where the contractor's service supervisor can be reached at all times. Service personnel shall be at the site within four (4) hours after receiving a request for service. The Card Access System shall be restored to proper operating condition after one (1) calendar day.

END OF SECTION 08740

## Equipment Typical for Tarrant County

### Access Control System

ISTAR 16 reader panel STAR0016W-64A

HID ProxPRO 5355

Locknetics Magforce Maglock 320+

Von Duprin 5100 door strike

Bosch Request to Exit motion DS150i

Rutherford Request to Exit button 908MO

Sentrol door contact 1078

Plenum rated wire 22/4 and 18/4

RM module with enclosure and Relay RM-DCM-2

Power Supply for locks and motions BASE Electronics #201144

All of the above connect to the existing Tarrant County C-cure 800 system