

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Furnish and install a complete graphical user interface, touch screen, PC programmable, TCP/IP, VoIP/SIP/Analog telephone entry system as described herein and shown on the plans. The system shall include all necessary boards, power supplies, keypads, loudspeakers, special mounting boxes, cable, connectors, and accessories for a complete operational communication system.
- B. Scope of work shall include all networkable and phone line interfacing components to support number of residents specified in RFP documentation.

1.2 CONTRACT DOCUMENTS

- A. All equipment and work specified in this section shall comply, with all the General Conditions of the specifications, contract documents, and drawings as indicated.

1.3 RELATED WORK

- A. Contractor shall coordinate all work with other contractors and trades where necessary.
- B. All necessary conduit, raceways, pull boxes, standard boxes, (and special boxes provided by Grand Dunes Entry Systems), shall be installed by the electrical contractor.
- C. Installation of the communication/access systems shall be coordinated with the installation of other related systems.

1.4 QUALITY ASSURANCE

- A. Installation shall comply with all applicable codes.
- B. All equipment shall be new, in current production, and the standard products of a manufacturer of telephone entry system equipment.
- C. Manufacturer shall guarantee availability of parts, for a minimum of 5-years from date of shipment.
- D. If required, manufacturer shall be able to demonstrate features, functions and operating characteristics.
- E. System shall be installed by a factory authorized contractor, with technicians specifically trained in this system.
- F. On-site maintenance and repair service shall be available locally and within 4-hours, of notification for emergency condition.
- G. System shall interface with other workstations and server systems to allow remote PC programming.

1.5 REFERENCE STANDARDS

- A. QAI Laboratories Inc. (QAI), UL 0950-1/22
- B. Telephone Entry System shall be tested for compliance to UL 0950-1/22 and shall be LISTED by a Nationally Recognized Testing Laboratory (NRTL).

#### 1.6 SUBMITTALS

- A. Provisions: Comply with specified submittals.
- B. Shall include an equipment list, and data sheet, system description and block diagrams on equipment to be finished.
- C. Shall include all data necessary to evaluate design, quality, and configuration of proposed equipment and system(s).

#### 1.7 WARRANTY

- A. Systems shall include a factory warranty that equipment is free from defects in design, material, manufacturing and operation.
- B. Factory warranty period shall be for two (2) years parts and workmanship; 24-months from date of shipment. Manufacturer shall not be responsible for improper use, handling, or installation of the product.
- C. Installing communications contractor shall guarantee the equipment, wire, cable, and installation for 12-months from date of acceptance.

### PART 2 - PRODUCTS

#### 2.1 ACCEPTABLE MANUFACTURERS

- A. The system as described herein, is based on the GD1200/GD1900/GD2400 Series Touchscreen Entry system manufactured by Grand Dunes Entry Systems., Marysville, Washington. The GD1200/GD1900/GD2400 series system specified meets requirements of the specifications and shall be considered as the acceptable Base Bid.
- B. Substitutions must meet requirements of Prior Approval, as outlined in the contract documents. Substitutions that meet Prior Approval requirements must be listed as alternates by addendum and shall be shown separately on the bid forms. Consideration will be based on ability to comply with all aspects of the specifications, the desired functional operation, quality, reliability, design, size, and appearance of the equipment, and the support capabilities of the manufacturer.

#### 2.2 SYSTEM DESCRIPTION

- A. The touchscreen entry system shall provide "full duplex," (hands-free at guest end) voice communication from the entry location to the resident telephone. Half duplex or simplex type communication will not be allowed.
- B. The system shall be capable of storing up to 1000 user names and phone numbers (all models), and up to 3000 phone numbers).
- C. The system transaction buffer shall store up to 1000 call records.

- D. The system shall be capable of being programmed via a personal computer and web access portal (included with the system). Several different methods of connection to the system shall be made available:
  - 1. Cellular
  - 2. Internet (VoIP)
  - 3. POTS (Plain Old Telephone Service)
- E. The system shall provide for live streaming video feed and one-way video calls to resident smart phones running the Grand Dunes free application, so they may see who is at the entry point and choose whether to grant them access or not.
- F. The system shall be capable of independently controlling a main entry access point.
- G. Resident names shall be automatically sorted and shall be displayed in alphabetical order on the built-in LCD touchscreen directory with minimum 1/4-inch characters.
- H. System shall incorporate "Unit Numbers" and "Search" buttons to allow guests to search through the resident and unit directory.
  - 1. The system shall be designed so that when "search" button is pressed, a list of alphabetic letters is displayed. This allows the guest to select a letter and display all names with that first letter.
  - 2. Pressing the "Unit Numbers" button will display a list of all programmed unit numbers, in a correct order.
  - 3. Pressing the "Return Home" button, will return the guest to the first name page.
  - 4. All pages will display 50 tiles and will have navigation arrows to go to more pages as needed.
- I. System will place a call when a resident's name or unit is pressed.
- J. During a call, a red "end call" button will be available to terminate the call if desired otherwise the system can be programmed to terminate the call after a specified time.
- K. Tone-open numbers to grant guest access shall be configurable.
- L. The system will be able to display multiple screensavers in a scrolling method. The time each image is displayed, will be easily adjusted through the management interface. Images will be easily uploaded and deleted from the interface.
- M. The system will be able to place calls in a cascading manner or an all at once manner if the number of lines available allows it.
- N. The system will be of modular design, so that any one component can be replaced independent of others without significant down time or cost to the owner.
- O. The system shall have an "Import / Export" feature to allow database transfer between systems for ease of backup and restoration.

- P. The system will have the ability to have entry codes configurable by the administrator to be used an unlimited number of times and will expire when they define.
- Q. Users will also be able to request one-time codes for access to the property, through the application for deliveries and guest.
- R. Additional telephone entry systems can share the same user database to control additional access points.
- S. The system will store the last 10,000 codes generated and used for history purposes.
- T. In conjunction with the Entry System and providing and adequate internet connection exist. The system will work with a free Android and iPhone app that can be used to see who is at the door and grant access to the building.
- U. Cabinet
  - 1. Cabinet is constructed from 16-gauge steel and is lockable, gasketed, IP64 rated enclosure.
  - 2. The telephone entry system shall be of hands-free design.
  - 3. The speaker holes shall be guarded by a screen to protect the speaker from vandalism.
  - 4. The cabinet will contain a camera at the top center for video calling and shall have a replaceable lens.
  - 4. The cabinet will be constructed in a manner to maintain an IP64 rating.
  - 5. The control board shall be mounted to the rear of the system enclosure to protect it from vandalism.
  - 6. The screen shall have a UV/IR/Vandal coating that can be easily replaced in the event of vandalism that also rejects heat and prevents solar clearing.

### 2.3 EQUIPMENT

- A. Model GD1200 Touch Screen Telephone Entry System.
  - 1. Controls one access points.
  - 2. 12" Vandal resistant touch screen.
  - 3. Initial 50 resident capacity.
  - 4. App, DSL, Cellular, VOIP, and POTS line ready.
  - 5. Mounting: Surface/Wall/or Flush mount kit available
- B. Model GD1900 Touch Screen Telephone Entry System.
  - 1. Controls one access points.
  - 2. 19" Vandal resistant touch screen.
  - 3. Initial 100 resident capacity.
  - 4. App, DSL, Cellular, VOIP, and POTS line ready.
  - 5. Mounting: Surface/Wall/or Flush mount kit available

- C. Model GD2400 Touch Screen Telephone Entry System.
  - 1. Controls one access points.
  - 2. 24" Vandal resistant touch screen.
  - 3. Initial 150 resident capacity.
  - 4. App, DSL, Cellular, VOIP, and POTS line ready.
  - 5. Mounting: Surface/Wall/or Flush mount kit available

## 2.4 OPTIONS

- A. Flush Mount Kit (p/n f-GD-XX).
  
- B. Custom Pedestal Mount (p/n pedestal).

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Should be installed by qualified technicians who have been factory trained.
  
- B. Wiring shall be uniform and in accordance with national electric codes and manufacturers instructions.
  
- C. Conform to the manufacturers written requirements for installation. Systems are available for the following types of installation.
  - 1. Surface, Flush, Pedestal, or Wall mounting.
  - 2. Flush mounted with the use of a flush kit (p/n F-GD-XX).
  - 3. Pedestal mounted with custom mount (p/n pedestal).
  
- D. Equipment shall be firmly secured, plumb, and level.
  
- E. All splices shall be in easily accessible junction boxes or on terminal boards.
  
- F. All cable runs at the main control cabinets, in all auxiliary cabinets and at all phone blocks shall be tagged and identified.
  
- G. Coordinate all work with other effected trades and contractors.
  
- H. Fastenings:
  - 1. Fasten on gypsum board wall surfaces with screws into wood or metal blocking, or with bolts or molly anchors, not less than 1/4" diameter. Screwing into gypsum board or plaster with plugs will not be acceptable.
  - 2. Fasten into concrete or masonry with self-drilling masonry anchors Phillips Redhead, Bulldog or Rawl Sabertooth.

### 3.2 SYSTEM INITIALIZING AND PROGRAMMING

- A. System shall include all software and/or instructions necessary for system configuration.
- B. System shall be turned on and adjustment made to meet requirements of specifications and on-site conditions.
- C. System shall be programmed to function as specified at the factory and shipped ready to use.
- D. Directory numbers, feature codes, and special programming shall be documented, printed and made available to all owners.

### 3.3 SYSTEM TEST PROCEDURES

- A. System shall be completely tested to assure that the exchange and all components, stations, speakers, and accessories are hooked-up and in working order.
- B. System shall be pre-tested by contractor and certified to function in accordance with plans and specifications.
- C. System shall be tested in presence of owner's representative.

### 3.4 OWNER INSTRUCTIONS

- A. Installation contractor shall conduct up to (4) hours of instruction in use and operation of the system to designated owner representatives, within (30) days of acceptance.
- B. Installation contractor shall conduct up to (4) hours of technical training, in programming, troubleshooting, and service of the system, to designated owner representatives within (90) days of system acceptance.

### 3.6 MANUALS AND DRAWINGS

- A. Contractor shall provide owner with (2) copies of standard factory prepared operation, installation and maintenance manuals. Manuals shall include typical wiring diagrams.
- B. Contractor shall provide owner with (2) copies of any risers, layouts, and special wiring diagrams showing any changes to standard drawings, if required on project.

END OF SECTION