

SECTION 28 23 00 - LOW VOLTAGE SURVEILLANCE SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. The system for this project will include cabling, cameras, and mounts. Camera and lens adjustment for proper view area will be part of the bid, and will need to be coordinated with School District Personnel.
- B. Cameras will view areas as noted on plans.
- C. The camera locations and the head-end equipment are indicated on the plans.

1.2 RELATED DOCUMENTS

- A. Division 26, 27.
- B. Any part of the plans or specifications, which have information dealing with this trade or any other trade that may affect how the system shall be installed.

1.3 SUBMITTAL AND RECORD DOCUMENTATION

- A. Submit product data for the recording device, camera enclosures, cameras, lens and all accessories needed for a complete install.
- B. Submit shop drawings, which shall include complete wiring and schematic diagrams for equipment layout and connection details. Include any specific power needs the system may have.
- C. The submittals shall be in a 3-ring binder separated by device to indicate which components are to be used together. If a particular piece is used for more than one device show the piece in each section so this is clearly identified.
- D. See also Section 28 00 10 for additional information on submittals and requirements.

1.4 UNIT PRICING

- A. Provide with your bid a unit price for additional cameras whether inside or outside.
- B. The unit price is to be available to the customer during the project and up one year following the project.

PART 2 - PRODUCTS

2.1 HARDWARE

- A. Outlet Boxes.
- B. Cable Components: As required for install or approved.
- C. Cable: Has been detailed in specification 27 1500 Horizontal Copper Cabling.

2.2 CAMERA

- A. Outdoor Dome and Camera
 - 1. 3 megapixel with 1080p
 - 2. Day and night with low light sensitivity and adaptive IR LED
 - 3. 4.3x zoom with f2.8-12mm / f1.4-2.8, auto focus
 - 4. 30fps at 2048x1536
 - 5. Weatherproof
 - 6. Vandalproof
 - 7. PoE Class 3 IEEE802.3af
 - 8. (1) Ethernet (10/100 Base-T), RJ-45 connector
- B. Indoor Dome and Camera
 - 1. 2mp
 - 2. Fixed lens with f3.6mm/F1.85
 - 3. Wide angle
 - 4. Event trigger, response and notification

2.3 CABLE

- A. Cat 6, blue jacket
- B. Proper grade for ceiling type.

PART 3 - INSTALLATION

3.1 CABLE

- A. Install cables, boxes and all sleeves and raceways shown and necessary for cable connection. Cables routes shall be done to minimize length, maintain fire rating of structure, and avoid electrical interference.
- B. Refer to specification 27 15 00 Horizontal Copper Cabling.

3.2 CAMERA AND ENCLOSURE

- A. Cameras and enclosure are to be mounted using all manufacture recommended mounting devices.
- B. Mounting and locations to achieve the area of view as shown on the plans.
- C. Verify view area with customer designated representative before completing the install.

3.3 CLEANING

- A. Clean installed items using methods and materials recommended by manufacturer.
- B. Clean system components, including distribution components and outlets.

PART 4 - TESTING AND DOCUMENTATION

4.1 TESTING

- A. Testing of the system will be done in conjunction with an Owner representative to approve of the camera view.
- B. Additional testing of running the system through all possible operating options and checking for proper playback, control and lighting.

4.2 DOCUMENTATION

- A. All cables are to be labeled within 6" of termination point.
- B. As-built drawing will show cable routing, connections, numbering of cameras and all equipment.
- C. All manuals and warranty information will be left with the Owner.

END OF SECTION 28 23 00