



## POUDRE SCHOOL DISTRICT R-1

IFB #21-700-001

### FIRE ALARM REPLACEMENT PROJECTS

#### Addendum 2.0

**ADDENDUM POSTING DATE:** Thursday, November 5, 2020

**IFB CLOSING DATE:** Tuesday, November 17, 2020, 2:00 p.m. MST

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**Below and attached are updates to the scope of work, plans and alternates, for IFB 21-700-001, as of November 5, 2020.**

**Please complete and submit the revised bid form as provided with this addendum.**

**CLPM, FCHS, Lincoln MS, PHS, RMHS, Traut ES, Weber MS:** The goal of this limited notification upgrade is to provide NFPA compliant visual notification and to include additional horn/strobes to provide audibility (60 dba minimum) throughout the schools. Utilize notifier by tech electronics.

1. Existing horn/strobes and strobes shall be replaced with the latest system sensor model, to produce a synchronized flash and temporal 3 tone. The contractor is responsible for converting four wire notification appliances to two wire, synchronized notification circuits. Maintain circuit integrity of the unused circuit utilizing wire nuts or WAGO connectors. Spare wires shall be identified with type-written, heat-shrink labels as "SPARE". The means and methods used by the contractor shall comply with the NEC (2017) and NFPA 72 (2016). Horn/strobes and strobes shall be red and labeled "FIRE".
2. Add additional power supplies where required. All power supplies shall be protected with a smoke detector. Also, the supplemental intercom non-compliant tone shall be removed. Additional power supplies, if required, shall be compatible with existing power supplies to achieve synchronized notification circuits. If power supplies must be replaced to achieve synchronization, utilize intelligent power supplies or Potter PSN-106 10A as approved by PSD. **Locations shall be field coordinated and approved by PSD.**

3. Provide updated graphic map and include additional smoke detectors and power supplies.
4. The contractor shall carry a budget for 10% additional added devices to be installed at the owner's request or to be used as spare parts. The additional devices may be used to replace strobes with horn/strobes in order to achieve 60 dba minimum. The contractor is responsible for providing additional components, if necessary, to achieve the goals stated herein.
- 5. Provide and install relays to shut down gym, cafeteria and auditorium sound systems and turn on auditorium lights.**
- 6. Provide accurate record drawings which include existing notification devices present at each facility that may not be shown on the bid documents.**

**Alternates:**

Note: The scope of work for this alternate includes, but is not limited to, work outlined in this narrative. Any omissions do not relieve the contractor's responsibility to provide a complete and properly functioning system as required by Poudre school district.

1. The intent of this alternate is to upgrade the fire alarm control panel.
  - A. Program fire system with point by point contact id reporting to district monitoring station.
  - B. Provide and install dialer capture ethernet module to MDF room.
  - ~~C. Provide and install FACP web card.~~
  - D. Modify FACP programming to match field signage.
  - E. Add new graphic maps at FACP and annunciator (coordinate with PSD).
  - F. Provide fire watch for buildings occupied during the FACP swap-out during out of service time in accordance with the fire watch procedure located in the fire alarm logbook. Contractor shall provide a dedicated individual for fire watch.
    - a. Existing wiring shall be reused except where additional wire is required for new devices.
  - G. Provide and install new batteries and power supply in FACP.
  - H. Dialer: provide digital alarm communicator transmitter (**UDACT-2**) that shall transmit all control panel off normal condition, including alarm, water flow, supervisory, or trouble. The DACT shall utilize one (1) cat6e voice line to comply with NFPA 72 requirements, shall utilize contact id type point-by-point communication format. The DACT shall be notifier model uDACT-2 or district approved equivalent transmitter (DACT). The contractor shall provide all point-by-point programming to support transmission of all control panel off normal conditions, including alarm, supervisory, water flow and trouble.
  - I. Fire alarm contractor shall upgrade all firmware in fire alarm system to most recent versions.
    - a. Replace existing CPU with latest technology (CPU-2)
    - b. Replace existing SLC cards with flash scan technology.
    - c. Replace existing FACP power supplies with latest technology.
    - d. Replace existing panel components with latest technology.

J. Existing devices that are above and beyond the current standards shall remain in place.

~~K. Ethernet communications (NWS 3): provide ethernet topology data communications module (LAN) that shall transmit all control panel off normal condition, including alarm, water flow, supervisory, or trouble via email. The LAN module shall utilize a category 6 rj45 data ethernet connection port for interconnection to the district LAN/wan network. The LAN module shall support remote web browsing and email alert functions.~~

2. Contractor shall provide and install new voice evacuation notification appliances in accordance with PSD design criteria and project specifications. Added audible notification may be accomplished by adding speaker only devices or utilization of spare circuit and replacing horns/strobes with speaker/strobes or a combination of the aforementioned methods. **If the contractor elects to utilize spare circuits for new speakers, megger testing is required to verify circuit integrity.**
  - A. Add digital voice command and daa2-series amplifiers.
  - B. Contractor shall include design-build notification appliance layout.
  - C. Contractor shall replace existing sound system shutdowns with low level audio and ducking modules (aux gymnasium, gymnasium, cafeteria/auditorium, etc.).
3. Bosch communicator (**Programming by PSD**):
  - A. Provide two (2) phone line from the nearest telecom 66 blocks (provide additional block if required) and terminated in the FACP in rj31x boxes and one data line from closest network patch panel in a IDF or MDF room. Bosch 465 dialer capture ethernet module:
    - a. Extend DACT phone line from MDF 66 block to Bosch 465 module. Phone line shall return to 66 block for connection to a leased voice line.
    - b. The Bosch 465 shall utilize a category 6 rj45 data ethernet connection port for interconnection to the district LAN/wan network.
    - c. Provide three (3) fire alarm monitor modules to supervise Bosch b465 system trouble, b465 loss of 120vac, b465 battery fail.
    - d. Electrical contractor is responsible for coordinating the install location of the Bosch communicator, phone and data drops with owner and engineer.
  - B. Electrical contractor is responsible for all raceway, boxes, sleeves, etc. As required. Coordinate with low voltage cabling contractor for requirements.
  - C. Electrical contractor shall employ district approved telecom\data cabling contractor to run all data and telephone cabling and drops. District it department shall make all final cross-connects to ensure line seizure at the FACP.
4. Provide carbon monoxide detection in accordance with the IFC.
- 5. Provide and install new wire for visual notification appliance circuits.**
- 6. Provide and install new wire for audible notification appliance circuits.**