

## **Craig Pre-action Sprinkler Valve Work**

**Submitted by Steve Henri, Principal Architect with Architects Alaska**

### Timeline

- Bid Package – 1/21/2025  
Original design drawings included new sprinkler system in the Craig Elementary School. The school did not previously have a sprinkler system, and this improvement will help bring it into IBC code compliance per State requirements.
- Sprinkler system shop drawing submittal – 6/10/2025  
Sprinkler system is designed as a dry pipe system based on original specifications. That involves air pressurized pipes, with water released through pipes once the pressure drops in response to an alarm.
- RFI 63 – Sent 8/14/2025  
Contractor requested approval to use pre-action valve for sprinkler pipes serving cold spaces (exterior areas at vestibules). Overall pressure available to building is not enough to serve sprinkler heads in cold areas with the standard dry-pipe system. Pre-action valves have a two-step process – first a smoke or heat detector is triggered, then valve serving particular sprinkler head is activated.  
  
Pre-action valves installed at no change in cost by mechanical subcontractor, but additional electrical and control work needed. (Smoke and heat detectors are required in order for pre-action valves to work properly and be tied into fire protection system.) Alternative is installation of booster pump and additional piping (likely \$40,000 minimum for pump, plus cost of piping and labor for a total of \$50,000 - \$60,000.)  
  
Request approved.
- COP 14 – Sent 11/05/2025, modified 11/24/2025  
COP is for full scope of work (electrical and controls) to integrate pre-action valves into sprinkler system. This involves additional controls parts and electrical design. Preliminary design effort is necessary to provide actual cost for additional electrical subcontractor labor to install the controls.  
  
Cost of COP: \$21,402.65  
  
Cost of additional labor to install controls and electrical connections: approx. \$10,000.  
  
Projected total cost of COP: Approximately \$31,000 - \$36,000 (\$21,402 + \$10 - \$15,000)  
  
General contractor has asked electrical contractor to proceed with design to get to a more solid total number.