Fire Suppression - Piping & Instrumentation Diagram (P&ID) Guidelines

Division 210000-3

The Facilities Services Subgroup designer shall clearly communicate the piping and instrumentation concepts and requirements for applicable systems. The P&ID is the preferred method for conveying this information. The following guidelines reflect the Owner’s P&ID content preferences for this particular CSI division of the Facility Services Subgroup.

Division 21 Fire Suppression P&ID Guidelines:

- The P&ID should utilize industry recognized symbols and abbreviations.
- A schedule should be presented on the P&ID or other referenced drawing, identifying all symbols, abbreviations and instrumentation function identifiers.
- System directional flow arrows should be utilized on the P&ID.
- Design flow quantities and temperature and pressure setpoints are to be presented on the P&ID or corresponding schedule.
- P&ID components are to be labeled with unique tags or identifiers.
- Piping system lines are to be labeled at regular intervals to better facilitate the following of the lines on the drawing. Where P&ID lines extend to subsequent drawings, those drawings are to be incorporated into an off-sheet identifier, referencing the system line type and the location of the continuation of the piping system line.
- The P&ID may be used to present line sizes and type information, insulation requirements, heat tracing requirements, etc. where scale or complexity prohibit such presentation on the plans.
- Fire Suppression P&ID’s are intended to depict the isolation, control and annunciation components and any pumping / storage requirements, in a schematic format, including fire department connections and stand pipes. It is not intended to present the complete system beyond the zone branch level.