Fire Suppression Systems

Fire Suppression systems shall be installed in accordance with the Middletown Township Fire Detection/ Suppression Ordinance, International Building Code, International Fire Code and NFPA 13, 13R, 13D, 101.

Submittal Requirements

1. Provide three (3) copies of plans and one (1) set of original equipment data sheets or a copy of the UL Directory page. These drawings and water calculations must be stamped by a licensed architect or professional engineer (Act 45 section 403.42a.c), and contain the name of the person who created the drawings, their phone number and their signature.

2. Drawings shall be legible, scaled with shop number and revision number and date, have compass points, and contain only fire suppression components. The intended use and occupancy classification (IBC), classification of occupancy (NFPA 13) of each room with walls (mark fire ratings), doors (door swings), HVAC Openings and other sprinkler obstructions, and ceiling heights shall also be listed on the plan.

3. All symbols shall conform to NFPA 170 (Fire Safety Symbols) standards where applicable. A symbol key shall be included in the submittal documentation for all symbols.

4. All sprinklers are to be identified by make, type, orifice size, temperature rating, and thermal sensitivity.

5. All piping shall be identified to size, type, inside diameter, schedule, and slope.

6. All ceiling information including height, types, architectural profiles, and construction assembly.

7. Identify the water supply including size at the street and type of system, dead end, loop or grid.

8. Identify underground pipe size, length, location, type, point of connection to “city water”, black flow prevention devices, indicating valves, riser, fire department connections, and supervisory systems.

9. Identify the location, size, and type of hanger

10. All hydraulic name plate information.

11. Settings for pressure reducing valves, if used .

12. For storage areas provide type, height, description of commodities, etc.

13. Method of maintaining the water temperature to be above 40 degrees

14. Identify the remote area, and other hydraulic areas.

15. Identify fire pumps and their locations (if required).

16. Standpipe systems (if required) shall identify connection, riser, fire department connection, (if different from the sprinkler riser). The pipe size, hose connection, pressure-reducing valves and pressure set. First aid systems shall identify hose length, size, and nozzle.

17. A written contactors certification statement shall be provided by the installing contractor to the fire marshal’s office prior to the final inspection.

Hydraulic Calculations

1. Provide the water supply, test location and date (must be within the last 12 months)
2. Provide hydraulic calculations (include demand vs. supply graph)

Not included documents that need to be referenced:

Fire Detection and Suppression Systems