REQUIREMENTS FOR FIRE ALARM AND SPRINKLER PLAN SUBMITTALS

In order to expedite your permits and clarify the process we ask that you read the applicable portions of this information sheet, and provide all necessary information. It is in your best interest to submit all required documents and information. Submitted plans that are incorrect or incomplete will be returned to the contractor/designer for correction - resulting in delays and additional fees. Please keep in mind that until a permit is issued the Village cannot schedule alarm or sprinkler tests. Adherence to the following will reduce the need for resubmittals, delays, and unnecessary costs.

******WORKING WITHOUT A PERMIT WILL RESULT IN A $750 FINE IN ADDITION TO NORMAL PLAN REVIEW FEES.******

FIRE ALARM

The Village of Oak Brook Fire Prevention Bureau requires all designs to meet the criteria listed in IFC 2015 and NFPA 72-2013 as well as other applicable adopted codes, standards and local amendments. Contact the Village of Oak Brook Fire Prevention Bureau for a complete listing of current applicable fire and building codes.

1. Two (2) sets of fire alarm plans indicating the type, location and total count of all devices. (Colored or highlighted devices is preferred, although not required.)

2. The fire alarm plans must be to scale. (1/8" = 1'-0" is preferred)

3. A legend indicating symbols for all devices must be part of the submitted plan(s).

4. Battery calculations must be a part of the submittal.

5. A low voltage electrical permit application and copy of the electrical contractors license must be submitted.

6. Manufacturer's data sheets must be submitted for all new devices and equipment. If the manufacturer's data sheets include multiple variations of a device type, the designer/contractor must indicate which specific device is being used.

7. If multiple strobe intensities are being utilized in the design, the designer/contractor must indicate the candela rating of each individual strobe on the drawing. Strobes on the submitted plan(s) that do not have a specified candela rating will be assumed the lowest candela rating listed in the manufacturer's data sheets (typically 15 candela). This includes existing strobe appliances. (For example, a "15/75" listed strobe is considered a 15 candela strobe.)

SPRINKLER SYSTEM

GENERAL

The Village of Oak Brook Fire Prevention Bureau requires all designs to meet the criteria listed in IFC 2015 and NFPA 13-2013 as well as other applicable adopted codes, standards and local amendments. Contact the Village of Oak Brook Fire Prevention Bureau for a complete listing of current applicable fire and building codes.

1. Submit two (2) sets of sprinkler system plans indicating the type, location and total count of all sprinklers. (We request folded plans, rather than rolled.)

2. A legend indicating symbols for all sprinklers and sprinkler system devices must be part of the submitted plan(s).

3. The sprinkler system plans must be to scale – 1/8" = 1' is preferred.

4. Designers/Contractors must base their system design or modification on an accepted basis of design such as *Pipe Schedule* design criteria (NFPA 13-2013) or hydraulic calculations.

PIPE SCHEDULE DESIGN

1. Show both new and existing sprinkler piping within as well as outside the area of contract so that the reviewer can verify that the sprinkler system meets the criteria of NFPA 13-2013. This includes new and existing piping from the area(s) of modification all the way back to the source, which is where the water supply test data is derived from (typically a hydrant).

2. Submit manufacturer's data sheets for all new devices, piping, valves, and fittings.

HYDRAULIC CALCULATION DESIGN

1. Provide hydraulic calculations for the hydraulically most remote area of the sprinkler system.

2. Indicate all fittings, valves, pipe diameters, pipe lengths, hydraulic nodes, pumps, and sprinklers on the submitted plan(s).

3. A riser diagram must be included (if applicable).

4. The hydraulic calculations must account for all piping back to the source, which is where the water supply test data is derived from (typically a hydrant). All piping must be shown on the submitted plan(s) back to the source as well.

5. Submit manufacturer's data sheets for all new devices, piping, valves, and fittings.

6. If a fire pump is part of the design, submit the manufacturer's data sheet for the pump, which must include a pump curve indicating pump performance (pressure) at various

flows. The hydraulic calculations must incorporate the appropriate data from the pump curve.

7. Provide water flow test information. Water flow tests information may not be older then one year.

INSPECTIONS

1. Inspections may not be scheduled within (3) business days of paying for and receiving an approved permit from the Oak Brook Bureau of Fire Prevention.

2. Please allow a MINIMUM of 24 hours notice for all fire inspection requests.

3. Inspections must be scheduled no later than 11:00 a.m. the day prior to be given 24-hour consideration.

AS-BUILT DRAWINGS

As-built drawings should be submitted once installation is complete or at your final inspection. If there are any deviations from the approved drawing, separate plans must be submitted, marked "Re-Submittal" with your original permit number. If deviations occur and plans are not resubmitted for review, inspections and final occupancy will be delayed until proper documentation is submitted, reviewed and re-approved.

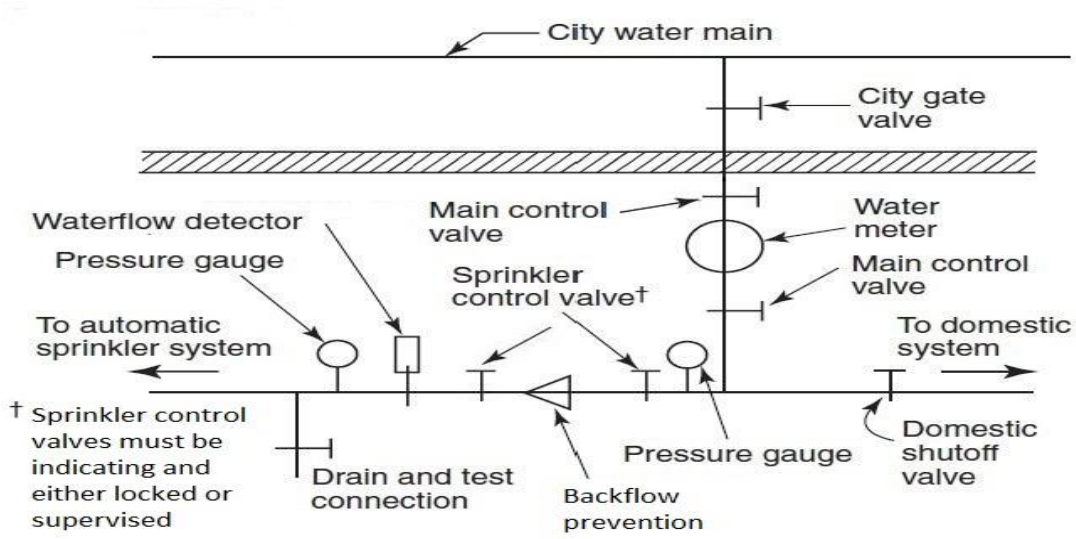
13D RESIDENTIAL SYSTEMS

All residential fire sprinkler water must be metered. Please refer to 2013 NFPA 13D Figure A.6.2(c) ***"Acceptable Arrangement with Valve Supervision – Option 2".*** Please specify detail and note accordingly and adequate for review, including the meter characteristics in the fire sprinkler system hydraulic calculations.

Residential submissions will NOT be accepted until the Development Services Department has approved drawings and has issued a permit.

Requirements:

1. Install AFTER the meter.
2. Supervised control valves.
3. Water flow detector activates the alarm.
4. Backflow prevention.
    a. RPZ or double detector check.
    b. In place with test report.
5. Spare heads are recommended.



QUESTIONS AND CLARIFICATIONS

Address questions and clarifications regarding these or other requirements:

Village of Oak Brook Fire Prevention Bureau
1200 Oak Brook Road
Oak Brook, IL 60523
(630) 368-5220