Automatic Fire Sprinkler Systems

Requirements
Fire sprinkler system requirements can be found in Section [F]902.3 of the Geneva Building Code amendments.

Submittals
Submittals to the Fire Department are required on all new automatic fire sprinkler systems and alterations to existing fire sprinkler systems.
Submittals are not required for routine maintenance or testing of systems provided no changes or alterations are being performed.
Systems shall be designed and calculated to the latest appropriate NFPA Standard. The highest anticipated hazard within the structure shall be the guide for the design perameters.
Submittals should include:

Three sets of scaled floor plans including;

- A site plan showing the building footprint, streets and incoming water mains and fire hydrants.
- Wall sections showing ceiling and roof heights.
- 4" Storz fire department connection. Storz connections shall have a 30° downward angle from the face of the building.
- Manufacturer's specifications sheets on piping and equipment to be installed.
- Hydraulic calculations.
- A photocopy of the Fire Sprinkler Contractor license issued by the Office of the State Fire Marshall.

Water Supply
A combined potable water and fire service main may be brought into the building. Mains shall be adequately sized to accommodate the combined fire sprinkler requirements and highest anticipated potable demand.
Flow test information is available by contacting the Fire Department at 630-232-2530.

Backflow Preventers
Standard wet and dry fire sprinkler systems shall be equipped with double detector check valves.
Bypass meters shall be measured in gallons.
Systems which utilize chemical additives shall be equipped with reduced pressure zone (RPZ) backflow preventers.

Alarms
Water flow, tamper, high and low air pressure switches and fire pumps shall be monitored by the building fire alarm system.
A ten inch bell, activated by the sprinkler flow switch shall be mounted above the FDC.

Fees
Fees for plan reviews and inspections are collected at the time the building permit is issued. However, if the plans are beyond the capability of in-house review, the submitting contractor shall be responsible for all costs associated with third party review.

Testing

The two hour, 200 psi hydrostatic test shall be witnessed by the Fire Department. All labels and placards must be present at the time of the test. Alterations to systems which involve installation or relocation of 20 or more sprinkler heads shall be subject to hydrostatic testing.
Main drain, wet and dry trip testing shall be witnessed by the Fire Department. All connections to the automatic Fire Alarm system must be completed and the alarm system monitoring connection in place. These tests must be performed prior to occupancy of the building.
Tests must be scheduled at least 24 hours in advance by calling 630-232-2530.
After the initial acceptance test, annual testing shall be performed in accordance with NFPA Standard 25 by a contractor licensed with the Office of the State Fire Marshall.
Annual test reports shall be submitted to the Fire Department at 200 East Side Drive, Geneva, IL 60134 or faxed to 630-208-9353.