

October, 2019
BUILDING DIVISION

FIRE SPRINKLER PERMIT PROCESS

General Information

A fire sprinkler permit is required for any new installation or alteration of a fire sprinkler system, standpipe system, or hose station. **Detailed sprinkler design drawings and calculations are required at the time of building permit application, and must be accepted prior to issuance of the building permit.** The sprinkler submission will be circulated and reviewed as part of the building permit approval process, similar to other disciplines (e.g. plumbing, electrical). After building permit issuance, the fire sprinkler permit application should be submitted without any accompanying drawings or calculations, and the fire sprinkler permit fees should be paid based on the counts in the accepted drawings.

If the required sprinkler submission is not available at the time of building permit application, the City will accept a letter of undertaking (see attached template) by the applicant acknowledging that the building permit will not be issued until the required sprinkler submission is made, reviewed, and accepted.

Requirement for Registered Professional of Record Involvement

For all new buildings and additions, the fire sprinkler design requires the involvement of a Registered Professional of Record. Sealed and signed sprinkler drawings and calculations shall demonstrate the complete detailed design of the entire building(s). It is not acceptable to submit sprinkler drawings and Schedule B for performance specifications or general layout only.

For tenant improvements, any modifications to sprinkler systems will require sprinkler drawings. A Registered Professional of Record is required for projects that involve **5 or more new, or 20 or more relocated** sprinklers. However, this generally applies to simple projects in relatively new buildings. If the complexity and specific site conditions warrant it, the inspector or other building officials may request the involvement of a Registered Professional of Record at any time, regardless of the sprinkler count. Any installation or alteration of standpipe systems or hose stations will require a Registered Professional of Record. Furthermore, the owner is responsible for correcting any existing deficiencies prior to the final acceptance of the fire sprinkler permit and building permit.

Required Submission at Building Permit Application

The following must be submitted at the time of building permit application:

- four (4) sets of detailed design sprinkler drawings;
- two (2) sets of detailed design hydraulic calculations, or justification that hydraulic calculations are not necessary;
- if a Registered Professional of Record is required, a completed Schedule B;
- if a Registered Professional of Record is required, all drawings and calculations must be signed and sealed.

For Certified Professional (CP) projects, the CP stamp is required on the sprinkler drawings and calculations. If there are any Building Code alternative solutions that involve sprinklers, the sprinkler drawings and calculations must also be reviewed and stamped by the alternative solution proponent.

Drawing Requirements

Sprinkler drawings are required for any sprinkler system modifications, regardless of whether or not a Registered Professional of Record is required. Sprinkler drawings must include, as a minimum:

- civic address(es) of the project;
- all rooms and spaces labelled;
- all rooms and sprinkler spacing drawn to an indicated scale;
- location of existing mains and branch lines;
- existing, new, and relocated sprinklers shown as different symbols;
- a sprinkler legend showing the sprinkler type, model number, K-factor, response type, count, and any other special characteristics for each sprinkler symbol;
- counts of relocated sprinklers and new sprinklers.

Inspections and Final Acceptance

Where there is no Registered Professional of Record involved, an inspection must be called after the installation is complete. The inspector reserves the right to request the involvement of a Registered Professional of Record at any time.

Where a Registered Professional of Record is involved, a completed Schedule C-B from the Registered Professional of Record must be submitted to the Plumbing Section of the Building Division. The City of Surrey may rely on Schedules B and C-B for assurance that the installation substantially complies in all material respects with the applicable requirements of the *British Columbia Building Code* and its referenced standards; thus, it may not be necessary to call for an inspection at the rough-in or final stages, or for an inspector to witness the functional tests of the fire suppression system. The City may nevertheless conduct site visits at any stage during construction to monitor the fire sprinkler system installation for substantial conformance in all material respects with the *British Columbia Building Code* and its referenced standards.

For new buildings and additions, the Registered Professional of Record must also submit a sealed, signed and dated field review report to the Coordinating Registered Professional every month

during installation, and attend the group final inspection of the building. The monthly field review reports must be made available to the City's Building Division upon request.

Revisions

Revised drawings, including record (or "as-built") drawings, are required to be submitted to the City **only if design changes have occurred after the sprinkler drawings were accepted**. If design changes occurred after the issuance of the building permit, revised sprinkler drawings and calculations must be submitted as a revision building permit application, with a complete list of changes. Kindly consult the Building Division to determine whether any proposed change constitutes a design change.

Fees

The fire sprinkler fee must be paid at the time of sprinkler permit application, based on the counts in the accepted drawings. Revised drawings addressing significant deficiencies, as part of the sprinkler submission review process, will be assessed additional review fees according to the City of Surrey Plumbing Bylaw. Any fire sprinkler system installed without a permit will be subject to a fee penalty and/or a Stop Work Order.

LETTER OF UNDERTAKING
UNAVAILABLE FIRE SPRINKLER SUBMISSION AT TIME OF BUILDING PERMIT APPLICATION

Manager, Building Division
City of Surrey
13450 – 104 Avenue
Surrey, BC V3T 1V8

Dear Sir/Madam:

Re: _____
(civic address)

(building permit application number)

I acknowledge that the City of Surrey requires a fire sprinkler submission when a building permit application is made to the City.

I certify that the required fire sprinkler submission is not available at the time of the above-referenced building permit application.

I acknowledge that the City of Surrey will not issue the building permit(s) for the above-referenced address until the City has reviewed and accepted the fire sprinkler submission.

I acknowledge that the review and acceptance of the fire sprinkler submission will require some time for processing by the City and that, consequently, the City may issue the building permit(s) at a later date than if the fire sprinkler submission had been made at the time of the building permit application.

I undertake to submit, or have submitted, the required fire sprinkler drawings and calculations as soon as possible and, in any case, before the issuance of the building permit.

Yours truly,

(Print Name of Building Permit Applicant)

(Signature of Building Permit Applicant)

Signed the _____ day of _____, 20_____.