

GUIDELINE

CONSTRUCTION FIRE SAFETY PLANS (C-FSP)

A Construction Fire Safety Plan (C-FSP) is required prior to the commencement of construction, alteration or demolition operations as per the BC Building Code (BCBC) Section 8.1 and the BC Fire Code (BCFC) Sections 2.8 and 5.6. The C-FSP is required to comply with the BCFC, BCBC, the Office of the Fire Commissioner Bulletin (revised 2018), and City of Prince George Fire Bylaw 8272, 2013. Those requirements are summarized in this guideline.

The C-FSP is required to be **SITE SPECIFIC** and include (1) who prepared the plan, (2) the site address, (3) the revision date, and (4) page numbers. It should be submitted with your Building Permit Application, and be emailed to fireprevention@princegeorge.ca. The BCFC 5.6.1.2 "Protection of Adjacent Buildings" report should accompany your submission, and will form an appendix to the C-FSP. ***Submitted C-FSP shall be formatted addressing each section and associated bullet list in order...Include the information requested in the opening sentence of this paragraph, Section 1: address bullets, Section 2: address bullets, Section 3: address bullets, etc. C-FSP that are not formatted in order, will not be accepted.***

The C-FSP may be phased depending on your construction project, i.e. Demolition, Excavation and Shoring, and Construction Above Grade. The BCFC 5.6.1.2 report will need to be received and accepted, and mitigation measures must be in place before construction begins above grade (or as noted in the report). A C-FSP is considered to be a living document which may be required to be revised and/or updated over the course of the project.

Section 1 - Appointment of Supervisory Staff

- Who is the designated and backup person responsible at site?
 - Emergency contact information
 - 24-hour emergency contacts and estimated response time
 - Site safety officer
- Security Officer
 - What type of security is being provided (Fully fenced site with locked gate, monitored alarm, CCTV, 24 hour security guard)
 - Role of security personnel
 - 24-hour contact information for security personnel
 - Security personnel to have access keys to all areas
- Training of supervisory staff
 - Who is responsible for ensuring that supervisory staff know their responsibilities

Section 2 - Responsibilities of Supervisory Staff

- Compliance of the site with the C-FSP
- BCFC 5.6.1.2 “Protection of Adjacent Building” measures are over and above what is identified in the Fire Safety Plan and shall be incorporated into the construction site safety procedures
- Shipping containers on site that store flammable or combustible liquids shall have additional ventilation added and signage posted identifying flammable and combustible liquids. (Contact Prince George Fire Prevention for ventilation and signage requirements)
- Control of fire hazards and fire safety around the site
 - Combustibles around site and buildings
 - General housekeeping
 - Removing excess pallets, garbage/waste (also as per BCBC 8.2.5)
 - Securing temporary enclosures (tarps) from being blown against ignition sources
 - Separation of combustibles from open flame devices and ignition sources in conformance with BCBC Part 6
 - Termination of building services during demolition to comply with BCFC 5.6.1.9, and the BC Electrical Code
 - Fuel supply installations to comply with BCFC 5.6.1.10 and CAN/CSA B139-M and the BC Gas Safety Regulation
 - Tank, Piping and Machinery Reservoir at demolition sites shall be in conformance with BCFC 4.3.16 and 5.6.1.11.
 - A 1 hour fire separation is required between construction activities and occupied portions of the building
- Maintaining Fire Department Access and Firefighting Services
 - Site address sign visible from street and up-to-date with emergency contact information
 - Access route to fire hydrant and fire department connection
 - Access onto site
 - Delivery vehicle parking
 - Standpipe installation:
 - Installed in conformance with BCBC 3.2.5. and BCFC 5.6.1.6
 - Active not more than one floor below the highest forms, staging and similar combustible elements at all times
 - Accessible on all floor levels
 - Wet unless threat of freezing
 - Procedure to ensure reactivation when taken off line
 - Access to water valve if system dry (threat of freezing)
 - Provide signage when system not charged
 - Sprinkler installation/activation as soon as practicable
 - Building systems available for firefighter access (construction elevator, stairs, etc.)
- Posting of emergency procedures
- Designating and maintaining at least one exit from floor area
 - No storage of combustibles in exit route, stairs
- Inspection and maintenance of building facilities, systems, equipment and devices
- Fire separations activated once installed (door closed/latched at end of construction day)

- In occupied buildings:
 - Fire separations to be made safe by the end of the construction day
 - Life safety systems impairment procedures (notification of occupants, fire watch as per City of PG Bylaw 8272, 2013. Part 13)

Section 3 - Procedures to be used in case of emergency

- Designated and backup person responsible for sounding the alarm and calling 9-1-1
- Are there different horn sounds for different emergencies
- Procedures in the event of a fire
 - Sounding the fire alarm
 - Activating the fire alarm in occupied buildings
 - Sounding the horn for construction sites (description of blast alert)
 - Evacuating occupants
 - Confining, controlling, and extinguishing the fire if trained and safe to do so
 - Evacuating to muster area
 - Accounting for site personnel
- Meeting the fire department

Section 4 - Training of site personnel on evacuation procedures

- Site orientation
- Site fire safety meetings
- Holding of fire drills
- Maintaining a list of on-site personnel and their emergency training
- Training of site personnel for what to do in an emergency, muster location, use of fire extinguisher, site fire wardens/trade representatives
- Smoking restrictions

Section 5 - Site Diagrams

- Site plan with FD access information
 - Hydrant(s)
 - Fire department connection
 - Site trailer
 - Safety office
 - Electrical services
 - Emergency stations (fire extinguishers, horns, instructions to site workers/occupants)
 - Site access
 - Locations of propane and flammable/combustible storage
 - Crane (if applicable)
- Floor plans
 - Exit paths/stairs
 - Standpipe locations
 - Standpipe isolation valve/water supply (if threat of freezing)
 - Fire extinguisher locations
 - Building services

- Fire extinguisher locations
 - Emergency locations
 - Fuel operated equipment
 - Combustible storage locations
 - Flammable/combustible and propane storage
 - Adjacent to hot works
 - Minimum 2A10BC on moveable equipment
 - Minimum 4A40BC in all other locations

Section 6 - Hot Works (also see BCFC Section 5.2)

- Area clear of flammable and combustible materials and protection if required
- Assigned fire watch during and for 60 minutes after completion
- Final inspection 4 hours after completion
- Trained/certified personnel
- Hot works permit
- Fire extinguisher
- Proper ventilation

Section 7 - Fire Watch (also see City of PG Bylaw 8272, 2013. Part 13)

- Hot Works
- Impairments to fire separations and life safety systems (fire alarm, sprinkler system)
- Tours at intervals not more than 1 hour. Tour start/end times to be documented
- Capable of sounding a warning to notify site personnel/occupants and call 911

Section 8 - Propane Storage and Flammable/Combustible Storage

- Located away from egress and access routes
- Storage, handling and use (also see BCFC Part 3, 4, and 5)
- Separation from combustibles by 3 metres
- Storage area locked and vented
- Propane use and storage (no storage of propane in building)
- If using shipping container, additional ventilation and signage required.
- Safety data sheet location
- Portable extinguishers

Section 9 - Additional Information and Forms (as per your organizational requirements)

Appendix

- BC Fire Code 5.6.1.2 Report “Protection of Adjacent Buildings”
 - **Prepared by a registered professional**
 - Include a risk analysis
 - Identification of neighbouring properties (construction type, life safety systems, distances)
 - Proposed mitigating measures

Contact Information

Fire Prevention Office 250-561-7667 or fireprevention@princegeorge.ca