

Part 1 General**1.1 CONSTRUCTION FIRE SAFETY**

- .1 The Contractor shall provide construction fire safety in accordance with the National Fire Code of Canada, 2010.

1.2 FIRE DEPARTMENT BRIEFING

- .1 Departmental Representative will co-ordinate arrangements for pre-commencement meeting following contract award. Contractors will be briefed on Fire Safety by the Chief Fire Inspector or his designated representative before work starts.

1.3 REPORTING FIRES

- .1 The Contractor shall inform the Departmental Representative and Chief Fire Inspector of all fire incidents at the construction site, regardless of size.
- .2 Know location of nearest fire alarm box and telephone, including emergency phone number.
- .3 Report immediately fire incidents to Fire Department as follows:
 - .1 Activate nearest fire alarm box; or
 - .2 Telephone.
- .4 Person activating fire alarm box will remain at box to direct Fire Department to scene of fire.
- .5 When reporting fire by telephone, give location of fire, name or number of building and be prepared to verify location.

1.4 FIRE SAFETY PLAN

- .1 Submit a fire safety plan for the construction site prior to commencement of construction work. The fire safety plan shall conform to the National Fire Code of Canada.
- .2 The fire safety plan shall be submitted to the Departmental Representative for review by local fire department. Any comments by local fire department shall be implemented by the Contractor.
- .3 The fire safety plan shall be limited to the area of construction only. Contractor is not responsible for amending fire safety plans in existing buildings.
- .4 Post the fire safety plan at the entrance to the construction site or near the construction site's health and safety board.
- .5 The fire safety plan shall conform to the National Fire Code of Canada, and shall contain, at minimum:
 - .1 Emergency procedures to be used in case of fire, including:
 - .1 Sounding the fire alarm;
 - .2 Notifying the fire department;
 - .3 Instructing occupants on procedures to be followed when the fire alarm sounds;

UNCLASSIFIED

- .4 Evacuating occupants, including special provisions for persons requiring assistance; and
- .5 Confining, controlling and extinguishing fires.
- .2 The appointment and organization of designated supervisory staff to carry out fire safety duties.
- .3 The training of supervisory staff and other occupants in their responsibilities for fire safety.
- .4 Documents including diagrams, showing the type, location and operation of building fire emergency systems.
- .5 The control of fire hazards in the building.
- .6 The inspection and maintenance of building facilities provided for the safety of occupants.

1.5 FIRE WARNING SYSTEM

- .1 A fire warning shall be provided to notify construction personnel of a fire emergency in the construction area.
- .2 The system used shall be capable of being heard throughout the building.

1.6 INTERIOR AND EXTERIOR FIRE PROTECTION AND ALARM SYSTEMS

- .1 Fire protection and alarm system will not be:
 - .1 Obstructed;
 - .2 Shut-off; and
 - .3 Left inactive at end of working day or shift without authorization from Chief Fire Inspector.
- .2 Do not use fire hydrants, standpipes or hose systems for other than fire-fighting purposes unless authorized by Chief Fire Inspector.

1.7 FIRE PROTECTION SYSTEM IMPAIRMENT

- .1 Notify the Departmental Representative and the Chief Fire Inspector 48 hours prior to shutting down any active fire protection system, including water supply, fire suppression, fire detection and life safety systems.
- .2 Where a fire protection system that provides fire alarm monitoring is impaired in an existing building, a fire watch may be required at the discretion of the Chief Fire Inspector.
- .3 Implement all fire protection system impairments in accordance with the National Fire Code of Canada and Base Fire Orders. Fire Orders will be provided at the Pre-Commencement Meeting.

1.8 FIRE EXTINGUISHERS

- .1 In addition to other requirements of this specification, supply fire extinguishers, as identified by the Chief Fire Inspector, necessary to protect work in progress and contractor's physical plant on site.

UNCLASSIFIED

- .2 Fire extinguishers may be required in the following areas as directed by the Chief Fire Inspector.
 - .1 Adjacent to hot works;
 - .2 In areas where combustibles are stored;
 - .3 Near or on any internal combustion engines;
 - .4 Adjacent to areas where flammable liquids or gases are stored or handled;
 - .5 Adjacent to temporary oil fired or gas fired equipment; and
 - .6 Adjacent to bitumen heating equipment.
- .3 Extinguishers shall be sized as 4-A: 40-B: C (9 kg) unless otherwise directed by the Chief Fire Inspector.
- .4 Extinguishers shall be of the dry chemical type unless otherwise required by the hazard being protected.
- .5 The Contractor may assume the quantity of extinguishers based on a maximum travel distance between extinguishers of 23 meters.

1.9 ACCESS FOR FIRE FIGHTING

- .1 Access for firefighting shall be provided in accordance with the National Fire Code of Canada.
- .2 Advise the Chief Fire Inspector of work that would impede fire apparatus response. This includes violation of minimum horizontal and overhead clearance, as prescribed by the Chief Fire Inspector, erecting of barricades and digging of trenches.
- .3 Minimum horizontal clearance: clear width of not less than 5m, or as defined by the Chief Fire Inspector.
- .4 Minimum vertical clearance: overhead height of or less than 6m, or as defined by the Chief Fire Inspector.

1.10 SMOKING PRECAUTIONS

- .1 Smoking is prohibited in all buildings. Observe posted smoking restrictions near existing buildings.

1.11 RUBBISH AND WASTE MATERIALS

- .1 Keep rubbish and waste materials at minimum quantities.
- .2 Burning of rubbish is prohibited.
- .3 Removal:
 - .1 Remove rubbish from work site at end of work day or shift or as directed.

UNCLASSIFIED

- .4 Storage:
 - .1 Store oily waste in approved receptacles to ensure maximum cleanliness and safety.
 - .2 Deposit greasy or oily rags and materials subject to spontaneous combustion in approved receptacles and remove specified.

1.12 FLAMMABLE AND COMBUSTIBLE LIQUIDS

- .1 Handle, store and use of flammable and combustible liquids in accordance with the National Fire Code of Canada.
- .2 Keep flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Obtain written authorization from the Chief Fire Inspector for storage of quantities of flammable and combustible liquids exceeding 45 litres.
- .3 Do not transfer flammable or combustible liquids inside buildings or on jetties.
- .4 Do not transfer flammable or combustible liquids in vicinity of open flames or any type of heat-producing devices.
- .5 Do not use flammable liquids having flash point below 38 degrees C such as naphtha or gasoline as solvents or cleaning agents.
- .6 Store flammable and combustible waste liquids for disposal in approved containers located in safe ventilated area. Keep quantities to a minimum and notify Chief Fire Inspector when disposal is required.

1.13 HOT WORKS

- .1 The Contractor shall implement a hot works program in accordance with the National Fire Code of Canada and NFPA 51, Standard for the Design & Installation of Oxygen Fuel Gas Systems for Welding, Cutting and Allied Processes. (2013).
- .2 The Contractor shall obtain from the Chief Fire Inspector a "Hot Work" permit for all hot works in the construction area. Frequency of renewal for hot works permits is at the discretion of the Chief Fire Inspector.
- .3 When Work is carried out in dangerous or hazardous areas involving use of heat provide fire watchers equipped with sufficient fire extinguishers. Determination of dangerous or hazardous areas along with level of protection necessary for Fire Watch is at discretion of the Chief Fire Inspector.
- .4 Provide fire watch service for work on scale established and in conjunction with the Chief Fire Inspector as defined in the Fire Department Briefing. Fire watchers shall be trained in the use of fire extinguishing equipment.
- .5 Area of hot works
 - .1 Hot works shall be carried out in an area free of combustible and flammable content.

UNCLASSIFIED

- .2 Where 1.13.5.1 is not possible
 - .1 All flammable and combustible materials within 15m of the hot works shall be protected in accordance with the National Fire Code of Canada.
 - .2 A fire watch shall be provided during the hot work and for a period of not less than 60 minutes unless otherwise directed by the Chief Fire Inspector.
 - .3 A final inspection of the hot work area shall be conducted not less than 4 hours after the completion of hot works unless otherwise directed by the Chief Fire Inspector.
- .3 Where there is a possibility of sparks leaking onto combustible materials in areas adjacent to the areas where the hot work is carried out.
 - .1 Openings in walls, floors or ceilings shall be covered or closed to prevent the passage of sparks to such adjacent areas or,
 - .2 Sentence 1.13.5.2 shall apply for those areas.
- .6 Protection of flammable and combustible materials.
 - .1 Any combustible or flammable material, dust or residue shall be
 - .1 Removed from the area where hot works is carried out; or
 - .2 Protected from ignition by non combustible materials.
- .7 Fire extinguisher
 - .1 A fire extinguisher shall be provided within 3 m of all hot works. Minimum size shall be 20lbs ABC unless otherwise directed by Chief Fire Inspector.

1.14 HAZARDOUS SUBSTANCES

- .1 Work entailing use of toxic or hazardous materials, chemicals and/or explosives, or otherwise creating hazard to life, safety or health, shall be in accordance with National Fire Code of Canada.
- .2 Provide ventilation where flammable liquids, such as lacquers or urethanes are used. Eliminate sources of ignition. Inform Chief Fire Inspector prior to and at cessation of such work.

1.15 QUESTIONS AND/OR CLARIFICATION

- .1 Direct questions or clarification on Fire Safety in addition to above requirements to the Departmental Representative.
- .2 Departmental Representative is responsible to obtain clarification from the Chief Fire Inspector. The Contractor is not to liaise directly with the Chief Fire Inspector for notification, authorization or any requests unless the situation constitutes an immediate emergency.

1.16 FIRE INSPECTION

- .1 Co-ordinate site inspections by the Chief Fire Inspector through Departmental Representative.
- .2 Allow the Chief Fire Inspector unrestricted access to work site.

- .3 Co-operate with the Chief Fire Inspector during routine fire safety inspection of work site.
- .4 Immediately remedy unsafe fire situations observed by the Chief Fire Inspector.

Part 2 Products**2.1 NOT USED**

- .1 Not Used.

Part 3 Execution**3.1 NOT USED**

- .1 Not Used.

END OF SECTION