Standpipe Protection
Guide to Protection of Above Ground Piping
NFPA 14 – 2013 Edition

This document is intended as a general guideline for determining when above ground piping of a standpipe system is required to be protected with a fire-resistance rating in buildings with an automatic sprinkler system.

The Ontario Building Code (OBC) Division B, 3.2.9.2.(1) specifies that where a standpipe system is required it shall conform with NFPA 14 “Installation of Standpipe and Hose Systems”.

To assist with consistent interpretation and enforcement, some key definitions from the 2013 edition of NFPA 14 need to be identified and clarified;

3.3 General Definitions.

3.3.2 Branch Line. A piping system, generally in a horizontal plane, connecting not more than one hose connection with a standpipe.

3.3.8 Main.
   3.3.8.1 Feed Main. The portion of a standpipe system that supplies water to one or more standpipes.
   Note: Where a Feed Main contains a control valve(s), downstream of the valve(s) is considered a Standpipe. (see schematic)

3.3.14 Standpipe. The system piping that delivers the water supply for hose connections, and for sprinklers on combined systems, vertically from floor to floor.
   Note: A Standpipe can run either vertically or horizontally. The key is does it deliver water supply from floor to floor (storey to storey).

3.3.14.1 Horizontal Standpipe. The horizontal portion of the system piping that delivers the water supply for two or more hose connections, and for sprinklers on combined systems, on a single level.
   Note: A Horizontal Standpipe can run either vertically or horizontally. The key is does it deliver water supply only on a single floor (storey).

The requirements for protection of above ground piping in the 2013 edition are prescribed under subsection 6.1.2. of the Standard;

6.1.2 Protection of Aboveground Piping.

6.1.2.2 Feed mains, standpipes, horizontal standpipes, and branch lines supplied by standpipes shall be located in enclosed exit stairways or shall be protected by a degree of fire resistance equal to that required for enclosed exit stairways in the building in which they are located.

6.1.2.2.1 In buildings equipped with an approved automatic sprinkler system, horizontal standpipes, feed mains, and branch lines shall not be required to be protected.
The figure below illustrates our interpretation of elements that would require protection in buildings equipped with an approved automatic sprinkler system and where the design is in accordance with NFPA 14 – 2013 Edition.