

City of Whitefish Fire Department

also serving the Whitefish Fire Service Area

275 Flathead Avenue -- PO Box 158 -- Whitefish, Mt 59937

406-863-2483

Fax: 406-863-2499



DEVELOPER'S GUIDE

PURPOSE:

This guide is designed as a quick reference to help developers and designers with some of the items we are looking for in any new building or subdivision within our response area.

The Whitefish Fire Department is a combination fire department providing an all-hazard emergency response. As a combination fire department, we are staffed with a few career Firefighter/Paramedics supported by a dwindling number of volunteers. It is incumbent upon us to try and keep our community's development from outpacing our ability to provide proper emergency services.

REFERENCE:

- International Fire Code
- International Wildland Urban Interface Code

FIRE STATIONS:

The Whitefish Fire Department operates out of two fire stations:

- Station # 21 located at 275 Flathead Avenue in City of Whitefish.
- Station # 22 located at the corner of Whitefish Stage and Hodgson Roads in the Whitefish Fire Service Area.

As a reference the Insurance Services Office, ISO looks to have a fire station located within five road miles of a property.

NFPA considers any location more than eight road miles from a fire station to be remote.

The Whitefish Fire Department currently holds an ISO-PPC rating of 5 for properties within five road miles of a fire station and a rating of 10 for those properties beyond five road miles.

We have received credit for "hailed water" within the five road miles.

EQUIPMENT:

The current apparatus in our structural firefighting fleet are:

1 st Due Engine,	2014	750-gallons, 1500-gpm pump
2 nd Due Engine,	1997	1500-gallons, 1500-gpm pump
Reserve Engines	1995	1500-gallons, 1500-gpm pump
Tender	2015	3,000-gallons, 750-gpm pump

The current apparatus in our wildland firefighter fleet are:

Type-6 wildland engine	1998
Type-5 wildland engine	2009

The tallest ladder we carry is a 35-foot extension ladder which when placed at the proper angle gives us about a 28-foot working height.

ACCESS:

- At least two ways in and out of the area, preferable opposite each other.
- Proper Road signage.
- Primary roads a minimum of 26-feet wide.
- Secondary roads and fire access roads a minimum of 20-feet wide.
- No more than three homes on a common driveway.
- Dead ends are highly discouraged.
 - If a dead-end road is over 150-foot long, it must terminate in a cul-de-sac or approved turn-around.
- Fire Access Roads must allow our fire engine to get within 150-feet of all ground level exterior portions of the building.

ROADS:

- Road width: minimum 20-feet, 26-feet preferred.
- Overhead clearance: minimum 13-feet 6-inches.
- Inside turning radius: minimum 28-feet.
- Outside turning radius: minimum 50-feet.
- Primary & Secondary Rd grade less than 5%
- Driveways: maximum grade of 9%.
- Imposed load: support at least 30-ton.

GATES:

Highly discouraged. If allowed must be siren activated at least 20-feet wide.

UTILITIES:

Should be underground.

WATER SUPPLY:

Fire Flow

Minimum Fire Flow is the amount of water required to fight a fire in an individual building. There are several factors to consider:

- Construction type
- Sprinkler system
- Area effected
- Occupancy type
- Exposures (hazards / adjacent buildings)

Hydrant System

- Fire hydrants, if installed, shall provide enough gpm to meet the required fire flow for the largest building in the subdivision. For a typical residential neighborhood, no less than 750 GPM. In commercial areas typically require 1500 GPM out of two adjacent hydrants. All flows are at 20 PSI.
- Fire hydrants shall be dry barrel with two 2-1/2 and one 4-1/2 male outlets.
- Fire hydrant spacing in residential areas should be 500-feet apart, in rural areas less than 1,000-feet from the structure.
- Fire hydrants shall be painted red with their top caps color coded by their flow at 20 PSI:
 - Red less than 500 GPM
 - Orange 500 to 999 GPM
 - Green 1000 to 1499 GPM
 - Blue 1500 GPM or more

Non-Hydranted Area or more than 1,000-feet away from hydrant

Some general minimum needed fire flows:

- For 1- or 2-family dwelling is 500 gpm for 1-hour
- For apartments, hotels, etc. is 1,000 gpm for 2-hours.

Hydrant System

Fire hydrant located within 1,000-feet of the structure, capable of meeting the needed fire flow.

Tender Shuttle

Water is hauled to the scene using water tender fire apparatus. The travel time to a tender refill site, either from a distant fire hydrant or an established tender refill site, factors into the calculation along with the number of tenders used. In general, we would like an adequate tender refill site within five road miles of the incident.

Tender refill

Within 5-road miles of the property. Minimum of 30,000-gallons cistern or pond at 100-year low water level. Capable of supplying a minimum of 750-gpm draft of fed.

WILDLAND FIRE SAFETY:

Harden the home against embers.

Provide defensible space around homes, the Home Ignition Zone.

Establish and maintain a fire safe community (Firewise).

Support forest management efforts.

Homeowner Associations should be required to maintain vegetation control:

- along roadways.
- around and under any overhead power lines.
- around any fire hydrants for at least three feet.

RESIDENTIAL HOMES:

- Properly display house number:
 - o Visible from the street, from both directions of travel.
 - If not visible from street, add at end of driveway plus on the house.
 - o Contrasting color to the background.
 - o Minimum 4 inches high
 - o Minimum half inch stroke width
- Smoke detectors in each sleeping area plus one on each level including the basement and attic.
- CO alarms outside of bedrooms
- GFCI (ground Fault) outlets in kitchen and bathrooms.
- Residential Home Sprinklers highly recommended.

COMMERCIAL MULTI-RESIDENTAL BUILDINGS

- Properly display building number:
 - o Visible from the street, from both directions of travel.
 - o Contrasting color to the background.
 - o Minimum 4 inches high
 - o Minimum half inch stroke width
- FDC, standpipe, Knox Box, and alarm panel shall be located near each other and where the fire engine would stage, typically a front corner of the building.
- Locate a fire hydrant near the fire engine staging area that can meet the needed fire flow for the building.
- Code says buildings over 4-stories require roof access via a protected stairway. In Whitefish our tallest ladder is a 35-foot ground ladder which when properly placed gives us a 28-foot working height. We would like roof access to any building over 28-feet.
- Standpipes shall be of quantity and location in protected stairwells to allow a 150-foot-long hose to reach all areas inside the building.
- MSDS sheet to be located near the alarm panel.
- Elevators to be sized to accept our stretcher lying flat.