

BILLINGS FIRE DEPARTMENT

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CITY OF BILLINGS

International Fire Code Requirements for Construction Sites Access/Water Supply July 12, 2010

Background:

The fire code contains access and water supply requirements to insure protection of structures whether they are completed or in the process of construction. These provisions have been in existence for many years dating back to the 1985 edition of the fire code. Buildings under construction are at an elevated risk of fire. This has been proven in our city by the numerous fires we have had in partially constructed buildings. Examples include the Primrose Assisted Living fire, the Country Inn and Suites fire, and the Twin Oaks Drive fires last year in the Heights. There have been many more fires at construction sites in the past.

It has come to the attention of the Billings Fire Department that residences within the City of Billings are being constructed in subdivisions and private developments that do not contain the required fire apparatus access roads and water supplies. Historically, the Fire Department does not review each residential building permit issued by the Building Department. **The Billings Fire Department was not aware that this has been an ongoing practice by the development community, especially with single family and duplex construction.**

Problem:

Structures including residential and commercial, are subject to an increased vulnerability to fire during construction. This is due to the fact that they typically contain exposed combustible construction, are not secured, and are not occupied. Fires that occur at construction sites usually spread quickly and can become quite large with minimal warning. Construction site fires can easily extend to surrounding buildings endangering the lives and property of others.

The International Fire Code has addressed this issue with the following code requirements:

1410.1 Required access.

Approved vehicle access for fire fighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

1412.1 When required.

An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site.

***To protect life and property
while recognizing our people as the key to our success***

Having adequate access roads and water supplies at construction sites is essential for fire fighting operations. These are two of the most basic and fundamental needs of a fire department to help ensure a quick and effective response.

Conclusion:

The Billings Fire Department as well as the Planning, Engineering, and Building Departments are currently working on this issue as it relates to current and proposed construction projects. As with most process changes, there will be an adjustment period that City staff as well as private industry will need to work through. The City is currently in the process of determining how to permanently address this issue in all future developments through the subdivision, site development review, master site plan review, and building permit processes.

To help you through this process, the building department has agreed to issue “conditioned” permits that will allow construction on basements/foundations until the required access and water supplies are in place. This allowance will only be granted for developments that have been recently approved and have started the construction process through building permits, master site plan review applications, and private contracts and are slated for construction before November 1, 2010.

At a minimum, temporary emergency access roads and fire hydrants need to be installed to meet the minimum requirements contained in the fire code. Paved roads do not need to be in place during construction, but at a minimum, a gravel road (min. 20’ wide) or gravel road base must be provided to the construction site. The access roads are required to support fire apparatus vehicle loading (40 tons) during all weather conditions. If the permanent approved roads and water supply are in place prior to the start of construction, there is no issue and construction of buildings may commence without delay.

Michael E. Spini
Fire Marshal