



## City of Richmond

## Report to Committee

**To:** Community Safety Committee  
**From:** Ron Beaman  
Acting Fire Chief  
**Re:** Upgrades to Non-Sprinklered Buildings

**Date:** October 30, 2008

**File:** 5140-01

### Staff Recommendation

That the "Upgrades to Non-Sprinklered Buildings" report (dated October 30, 2008), from the Acting Fire Chief be received for information.

Ron Beaman  
Acting Fire Chief  
(604-303-2701)

FOR ORIGINATING DEPARTMENT USE ONLY			
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>	
Building Approvals.....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
<b>REVIEWED BY TAG</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	<b>REVIEWED BY CAO</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

## **Staff Report**

### **Origin**

A report to Committee in May 2006 presented a comprehensive survey of Fire and Life Safety systems in all hotels, community care facilities and significant public assembly buildings in the City of Richmond. The survey looked at three main features: sprinklers; fire alarms; and fire separations and exiting.

The report concluded that while all of the facilities met the minimum applicable Building Code requirements for the date they were constructed, there were many buildings that fell below what would be required or acceptable if they were constructed today.

The Provincial *Fire Services Act*, Municipal Charter, and B.C. Fire Code Regulations provide the context for enforcing and maintaining a minimum standard of life safety and building protection.

It is explicit in the legislation that the current Building Code standard is not intended to be applied retroactively to existing buildings. That context constrains the department's desire to have buildings upgraded to meet the standards of today, and generally limits Richmond Fire-Rescue's enforcement authority to maintaining the conditions acceptable at the time of construction.

Fire Inspectors are therefore not legally empowered in most cases to improve that which has already been approved.

At the Community Safety Committee meeting of May 2006, Richmond Fire-Rescue was directed to prepare a report that outlined options, including terms of a Fire Bylaw that would require installation of sprinklers and/or equivalencies in buildings with overnight public assemblies.

### **Analysis**

Notwithstanding the limitations of Richmond Fire-Rescue's authority, since 2006, its Fire Prevention Division has been very successful in persuading some building owners to voluntarily take action and make what are often significant financial investments in bringing their properties to a higher level of safety than required by Building Code standard.

While drafting the new Fire Protection and Life Safety Bylaw, consideration was given to including requirements for the installation of sprinklers in overnight public assembly buildings. During the legal review of the Bylaw, we received advice that if it included any provisions requiring sprinklers as an upgrade, the entire Bylaw would be reviewed and likely not approved by the Province.

### ***Summary of Analysis***

#### **Hotels**

Hotels are the highest priority for upgrades as they present the greatest life safety threat. In 2006, there were a total of 23 hotels in Richmond. Of these, 16 were fully sprinklered, four were partially sprinklered and three had no sprinkler protection.

In 2008, we now have a total of 25 hotels. The new hotels are required to be sprinklered. We have also successfully persuaded three of the partially-sprinklered high-rise hotels to voluntarily

upgrade to full sprinkler protection. All of these hotels also underwent extensive renovations and brought their fire alarm systems, fire separations and exiting up to current Building Code standards.

One of the older hotels which was sprinklered to an older standard also agreed to voluntarily upgrade the hotel's sprinklers; install a new monitored fire alarm system and kitchen suppression system; and improve fire separations and exiting to bring the building up to a reasonable, and much higher level of life safety than the original construction standards required.

The goal is to have all hotels in the City of Richmond fully sprinklered before the 2010 Olympics.

Status	2006	2008
Fully Sprinklered	16	21
Partially Sprinklered	4	1
Non-Sprinklered	3	3

### Community Care Facilities

Community care facilities are also a high priority in that the residents are often mobility impaired. In 2006, there were seven major community care facilities in Richmond. Five of these had a reasonable level of sprinkler protection; however, two had either no protection or very limited protection.

In 2008, there are now eight Community Care facilities. The new facility required sprinklers, and both of the under-protected facilities have constructed major additions in the past two years. This created the opportunity to have their sprinkler and fire alarm systems brought up to code.

One other existing sprinklered facility has also voluntarily completed some major improvements to their fire alarm system.

Status	2006	2008
Fully Sprinklered*	5	8
Partially Sprinklered		
Non-Sprinklered	2	

\* or in process

### Public Assembly Buildings

Richmond has a significant number of public assembly buildings. In 2006, all of these met the minimum requirements of the Building Code and sprinkler protection for when they were approved. While these buildings are always of concern due to the large occupant loads, it should be noted that they are not intended or used for overnight accommodation, and therefore present a lower risk to life safety.

Some notable **sprinklered** Public Assembly Buildings include:

- Watermania
- Silver City Cinemas
- Richmond Ice Rinks on Triangle Road
- Several newer Elementary and High Schools
- Cambie Community Centre
- Hamilton Community Centre
- Gateway Theatre
- Thompson Community Centre (new)

Some notable **non-sprinklered** Public Assembly Buildings include:

- Several older schools
- Several older churches
- Public Safety (RCMP) Building
- Richmond Arenas
- Steveston Community Centre
- Martial Arts Centre
- South Arm Community Hall
- East Richmond Community Hall
- Sea Island Community Hall
- Minoru Aquatic Centre
- Minoru Sports Pavilion
- Riverside Banquet Hall
- Thompson Community Centre (old)

There are no additional expenditures for the Department related to the upgrades to non-sprinklered buildings in 2008.

**Financial Impact**

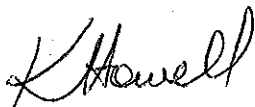
There is no financial impact.

**Conclusion**

Despite the challenges of our limited authority, the retirement of experienced staff, and the significant cost of adding sprinklers and other life safety and building protection features to existing buildings, the Fire Prevention Division of Richmond Fire-Rescue has made significant progress in upgrading existing hotels and community care facilities.

As new sprinklered buildings replace old buildings, sprinklers will become more prevalent in schools, churches and other public assembly buildings, further improving public safety in the community.

Fire Prevention will continue to work toward full sprinkler protection of all hotels by the 2010 Olympics.



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