

Report to: Development Services Committee Date Reported: November 18, 2014

**SUBJECT:** 

Notable Changes to the Ontario Building Code in 2015:

Use of wood in mid-rise buildings, and increased requirements for

barrier-free accessibility.

PREPARED BY:

Tim Moore, Director, Building Standards, ext. 4712

#### **RECOMMENDATION:**

1) That the Report titled "Notable changes to the Ontario Building Code In 2015: Use of wood in mid-rise buildings and increased requirements for barrier free accessibility" dated November 18, 2015, be received for information;

2) That Staff be authorized to do all things necessary to give effect to this resolution.

### **EXECUTIVE SUMMARY:**

Not applicable.

### **PURPOSE:**

The purpose of this report is to provide Council with a summary of recently announced amendments to the Ontario Building Code which come into effect on January 1, 2015, because they are substantive matters which align with certain aspects of the City's strategic priorities.

The building code is usually updated and reissued by the government according to a 5 year cycle. In addition, it may be periodically amended mid-cycle to introduce new regulations associated with evolving government policy interests. The present building code (the 2012 Building Code, Ontario Regulation 332/12) came into force on January 1, 2014, but changes in this regulation were generally minor. The more significant and anticipated changes concerning the increased use of wood in mid rise buildings and accessibility were not included because the government's consultation and regulation writing process had not been completed at that time.

#### **BACKGROUND:**

Amendments to Ontario's Building Code Allowing Mid-Rise Wood Frame Buildings On September 23, 2014, Ontario Regulation 191/14 was filed to amend the 2012 Building Code. These amendments increase the permitted height of certain wood frame buildings from four to six storeys, and take effect on January 1, 2015.

Under the new Building Code provisions, residential and office buildings can be constructed using wood-frame construction up to six storeys. Mixed use buildings which include retail, restaurants and parking garage uses below the third floor are also permitted. This method of construction is currently permitted in most European countries and in other parts of North America, including British Columbia and Quebec.

Affording builders greater flexibility in construction materials is anticipated to lead to more innovative architecture, more cost effective design solutions, increased affordability, and more successful urban intensification projects at this scale. These changes were strongly advocated by the development industry, and are supported by many City planners for these reasons.

To ensure that they meet high safety standards, six storey wood buildings are required to incorporate additional safety provisions not currently required in four storey wood buildings, including:

- full automatic sprinklering;
- building height limits including height limits to the fire access route;
- noncombustible or combustion-resistant exterior cladding and roof covering;
- sprinklering and compartmentalization for large spaces such as attics;
- requirements for proximity to a fire department access route;
- exit stairwells must be of noncombustible construction with a 1½ hour fire resistance rating;
- higher seismic load requirements apply as compared to similar noncombustible buildings, and
- more robust occupancy permit requirements, to ensure completion of required components prior to the building being used.

Ontario's safety requirements are somewhat greater than have been applied in other jurisdictions. Some concerns were raised during the government's consultation process, which Markham Fire and Emergency Services participated in, about the consequences of construction site fires involving larger wood buildings. To mitigate this concern, the Ministry of Municipal Affairs and Housing is currently working with the Ministry of Labour and the Ministry of Community Safety and Correctional Services, responsible for the Office of the Fire Marshall and Emergency Management, to develop guidelines for site fire safety during construction of five and six storey wood buildings.

## New Accessibility Amendments to Ontario's Building Code

Ontario Regulation 368/13 amended the Building Code on December 27, 2013, to include enhanced requirements for accessibility in new construction and extensive renovations. These requirements will also come into effect on January 1, 2015.

The amended requirements maintain Ontario's leadership in setting requirements for barrier-free design in most new buildings and those undergoing extensive renovations. The new requirements are extensive and cover a range of areas. Some of the more notable changes include:

- Requirements for an elevator to be provided in most multi storey buildings. Some limited exemptions will apply to small residential and business occupancies
- Requirements for power door operators to be provided at entrances to a wider range of buildings, and at entrances to barrier-free washrooms and common rooms in multi-unit residential buildings
- Increased requirements for barrier-free washrooms, and new requirements for larger universal washrooms
- Requirements for visual fire alarms in multi-unit residential buildings

- Requirements for smoke alarms in all buildings, including houses, to include a visual component
- Requirements for barrier-free access to public pools and spas
- Updated requirements for accessible and adaptable seating spaces in public assembly buildings such as theatres, lecture halls and places of worship

Existing buildings and houses where no work is planned are not affected by these new requirements. New houses are not required to meet most accessibility requirements, with the exception of smoke alarm requirements.

In 2005, the government committed to the development of new accessibility standards under the *Accessibility for Ontarians with Disabilities Act*. These Building Code amendments are part of the government's comprehensive accessibility initiatives for public spaces and the built environment. Markham's Chief Building Official participated in consultations which led to the development of these new requirements, through his appointment to the provincial Barrier Free Design Technical Advisory Committee in 2013.

### **OPTIONS/ DISCUSSION:**

Not applicable.

# FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)

Building Standards undertakes in house staff training when changes in regulations take place as a matter of routine, using materials provided by the Ministry and other external sources where necessary. Although the scope of these changes will require targeted training and a ramp up of staff knowledge, additional enforcement resources are not anticipated to be necessary as a result of these changes.

## **HUMAN RESOURCES CONSIDERATIONS**

Not applicable.

# ALIGNMENT WITH STRATEGIC PRIORITIES:

The provincial building code changes are generally well aligned with the City's growth management, environment, public safety, diversity and accessibility priorities.

# BUSINESS UNITS CONSULTED AND AFFECTED:

The Planning and Fire Departments have reviewed this report and their comments have been incorporated.

## **RECOMMENDED BY:**

Tim Moore OAA

Director, Building Standards

Jim Baird, M.C.I.P., RPP

Commissioner, Development Services

ATTACHMENTS:

N/A