#### BYLAW NUMBER 12P2014

### BEING A BYLAW OF THE CITY OF CALGARY TO AMEND THE MUNICIPAL DEVELOPMENT PLAN BYLAW 24P2009

WHEREAS it is desirable to amend the Municipal Development Plan Bylaw 24P2009, as amended;

AND WHEREAS Council has held a public hearing as required by Section 692 of the <u>Municipal Government Act</u>, R.S.A. 2000, c.M-26, as amended.

# NOW, THEREFORE, THE COUNCIL OF THE CITY OF CALGARY ENACTS AS FOLLOWS:

- 1. This Bylaw may be cited as the "Municipal Development Plan Amendment Number 11 Bylaw."
- 2. The Municipal Development Plan attached to and forming part of Bylaw 24P2009, as amended, is hereby further amended as follows:
  - (a) After Section "4.3.3 Airport Vicinity Protection Area (AVPA)", insert a new section "4.4 Flood Hazard Areas" with the following text:

### "4.4 Flood Hazard Areas

This section provides policies that give direction to guide the planning and regulations that govern the development within the Flood Hazard Area (FHA), in concert with other administrative policies and the Land Use Bylaw.

In Canada, floods are the natural disasters that cause the most damage and expense to communities. Climate change models indicate flood events will likely occur more frequently and severely than in the past. Therefore it is imperative The City be proactive in its approach to increasing resiliency and be forward thinking with regard to regulating land uses and development within Flood Hazard Areas.

Throughout its history, Calgary has experienced flooding of varying degrees with recent major events occurring in 2005 and 2013. Though these floods caused minimal loss of life, they significantly impacted the city in causing social, environmental and economic damages. All citizens of Calgary are stakeholders, either directly or indirectly, in being impacted by flooding and in how The City responds to flood events. Therefore, the approach to flood risk reduction will place a priority on the public good over private interests.

The City's top priorities in the approach to reducing impacts from flood events are to:

 Increase public safety through appropriate land use and development regulations in the FHA;

- Minimize property damage by requiring all development and redevelopment in the FHA to be flood proofed;
- Enhance Calgary's flood resiliency by employing a comprehensive approach to flood risk reduction measures; and
- Align The City's policies and regulations to meet at least the minimum standards set by the Province.

Flood hazard mapping is developed by the Province and identifies the floodway, flood fringe and overland flow areas, each with varying levels of flood risk. These maps are based on the 100-year flood event and are a crucial part of informing policy direction regulating development. The 100-year flood event has a 1% likelihood of occurring in any given year, which is generally linked to a river water flow-rate. It does not mean that this size of flood event will only occur every 100 years.

The floodway is the area closest to rivers and has the highest risk for damage to buildings and development located there as the flood water is the deepest and fastest moving. Development in the floodway may potentially increase upstream water levels and therefore increase the risk of damage to those areas. Reducing the level of development within the floodway overtime will contribute to a reduction in risk exposure to people, property and the environment.

Flood fringe and overland flow areas have comparatively lower risk for flood damage, since flood water is shallower and slower moving than in the floodway. People can generally tolerate occasional flooding in these areas, and development does not cause higher upstream river water levels. Flood risk reduction measures can be incorporated into development to reduce the amount of damage that is likely to occur during a 100-year flood.

Due to this discrepancy in risk, a graduated approach to regulating land use and development in the FHA is appropriate, with the floodway having higher strictness than the flood tringe and overland flow areas.

The City regulates land use and development; however, where development and redevelopment in the FHA is allowed to occur, it is undertaken by choice of the land owner, and involves their acceptance of risk of potential flood damage.

## Policies

- a. Increase public safety, reduce private and public property damage and enhance the city's flood resiliency, through the following:
  - i. Flood risk reduction work undertaken by, or on behalf, of The City of Calgary within the floodway, consisting of repairing river banks, erosion control, and land stability where the primary purpose is to enhance public safety, protect public infrastructure and ensure proper function of river morphology, be allowed without requiring a development permit;
  - ii. All new development in the floodway should be refused by the Development Authority, with the exception of the following;

- uses related to agriculture, open space, outdoor recreation, parks, transportation infrastructure and utilities; and
- the redevelopment of low density residential buildings on the existing building footprint where sufficient risk reduction measures have been taken to the satisfaction of the Development Authority.
- iii. For redevelopment of existing buildings where the building footprint straddles both the floodway and flood fringe, the redeveloped building should be located exclusively in the flood fringe;
- iv. All redevelopment of existing low density residential buildings in the floodway must be done through a discretionary permit process;
- v. All buildings located in the floodway, flood tringe or overland flow area must be designed to prevent:
  - damage by floodwaters;-

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- damage by elevated groundwater; and
- incremental increase of upstream river water levels.
- vi. The Development Authority, when reviewing applications that propose flood risk reduction measures, ensure that public safety and minimizing property damage take precedence in considering development relaxations that may alter the existing built form context and development pattern in a neighbourhood. Approved relaxations should be commensurate with the degree of proposed flood risk reduction measures;

vii. Align The City's flood policy and development regulations to at least meet the minimum standards set by the Government of Alberta; and

Recognize the importance of using up to date flood modelling information as the basis for informing policy and development regulations. "

3. This Bylaw comes into force on the date it is passed.

