# SECTION 12 – FLOODPLAIN LANDS

#### 12.1 INTERPRETATION

In addition to the terms defined in this *By-law*, the following terms shall have the corresponding meanings for the purposes of this Section:

- (a) "100 Year Flood" means the Flood which has a return period of 100 years on average or which has a 1% chance of occurring or being exceeded in any given year, as determined by the Grand River Conservation Authority;
- (b) "Conversion" means the alteration or change of Use of any Place from the existing Use of such Place;
- (c) *"Development"* means:
  - the construction, erection or placing of one or more *Buildings* or *Structures* on lands;
  - ii) activities such as site grading, excavation, removal of top soil or peat and the placing or dumping of fill;
  - iii) drainage works, except for the maintenance of existing municipal and agricultural drains; and
  - iv) various forms of intensification.

In spite of the above definition, for Section 12.4 of this **By-law** – Regulations for Lands Within the Special Policy Area (S.P.A.) development means the construction, erection or placing of one or more **Buildings** or **Structures** on lands, or an addition or alteration to a **Building** or **Structure** which adds more than 50% of the existing **Ground Floor Area** to a **Building** or **Structure** 

- (d) "Fill, Construction and Alteration to Waterways Regulations" means a regulation passed pursuant to Section 28 of the <u>Conservation</u> <u>Authorities Act</u>, R.S.O 1990, Chapter C.27, or any successor thereof, whereby a Conservation Authority may, among other matters, regulate:
  - i) the straightening, changing, diverting, or interfering in any way with the existing channel of a river, creek, stream or watercourse;
  - ii) the construction of any *Building* or *Structure* in or on a pond or swamp or in any area susceptible to *Flooding*; and

- iii) the placing or dumping of fill of any kind in any defined part of the area over which the Conservation Authority has jurisdiction in which, in the opinion of the Conservation Authority, the control of flooding or pollution or the conservation of land may be affected;
- (e) *"Flood"* means a temporary rise in the water level resulting in the inundation of areas in the *Flood Plain* not ordinarily covered by water;
- (f) *"Flood Fringe"* means the area in the "Two **Zone Flood Plain**" concept which lies between the *Floodway* and the *Regulatory Flood* level;
- (g) *"Flood Plain"* means the area adjoining a watercourse which has been or may be covered by *Flood* water. The *Regulatory Flood* line delimits the boundaries of the *Flood Plain*.
- (h) "Floodproofing" means a combination of Structure changes or adjustments incorporated into the basic design or construction of individual Buildings, Structures, or properties subject to flooding so as to reduce or eliminate Flood damage. Various forms of Floodproofing are available as outlined in the Implementation Guidelines of the Flood Plain Policy Statement;
  - "Dry Floodproofing" means the use of fill, columns, or design modifications to elevate openings in a *Building* or *Structure* above the *Regulatory Flood* level or the use of water-tight doors, seals, berms or floodwalls to prevent water from entering openings below the *Regulatory Flood* level;
  - ii) *"Passive Floodproofing"* means *Floodproofing* techniques which are permanently in place and do not require advance warning and action in order to make the *Flood* protection effective;
- (i) *"Floodway"* means the area of a *Flood Plain* that is required for the safe passage of *Flood* flow or the area where *Flood* depths or velocities pose a potential threat to life or property. The delimitation of the *Floodway* is calculated by the Grand River Conservation Authority;
- (j) "Hydraulic Floodway" means the minimum channel required to pass the Regulatory Flood, as calculated by the Grand River Conservation Authority;
- (k) "Redevelopment" means the removal of a Building or Structure from land and the construction of a new Building or Structure on the said land or the rehabilitation and renewal of an existing Building or Structure.

In spite of the above definition, for Section 12.4 of this **By-law** – Regulations for Lands Within the Special Policy Area (S.P.A) redevelopment means the removal of a **Building** or **Structure** from any **Place** and the construction or erection of a new **Building** or **Structure** at the said **Place** and includes an addition to an existing **Building** or **Structure** which is larger than 50% of the total **Ground Floor Area** of the existing **Building** or **Structure**;

- (I) "Regulatory Flood" means the Flood resulting from the Hurricane Hazel Regional Storm, as determined by the Grand River Conservation Authority;
- (m) "Renovation" means the improvement, alteration or addition of less than 50% of the total Ground Floor Area of an existing Building or Structure;
- (n) "Residential Infill" means Single Detached Dwellings or Semi-Detached Dwellings to be built on a vacant Lot that has not been previously built upon; and
- (o) "Safe Access" means unobstructed direct, or elevated access for pedestrians or Vehicles in an area which may be covered by Flood water at a Regulatory Storm Level. The Grand River Conservation Authority has calculated this level to be: where the product of depth and velocity of Flood water during a regulatory storm is less than or equal to 0.4 m<sup>2</sup> per second and the depth and velocity does not exceed 0.8 metres and 1.7 metres per second, respectively.

# 12.2 FLOODWAY (FL) ZONE

The *Floodway* (FL) *Zone* applies to *Floodway* lands within the *City*. No permanent *Structures* or *Buildings* are permitted in this *Zone*. The following permitted *Uses* are intended to provide for *Development* of low impact recreational facilities which have limited *Structures* and *Buildings* and require locations within or adjacent to the Speed and Eramosa Rivers.

12.2.1 <u>Permitted Uses</u>

The following are permitted **Uses** within the **Floodway** (FL) **Zone**: **Conservation Area Flood Control Facility** 

Municipal services and public utilities, excluding essential emergency services such as: police department, fire department and ambulance service **Outdoor Sportsfield Facilities** (approved by the Grand River Conservation Authority) Picnic Area (no limit on number of tables) **Recreation Trail Wildlife Management Area** 

#### 12.2.2 <u>Regulations</u>

- 12.2.2.1 No *Buildings* or *Structures* or placement of fill is permitted within the *Floodway* (FL) *Zone* except when associated with *Flood* or erosion control measures approved by the Grand River Conservation Authority.
- 12.2.2.1.1 Notwithstanding Section 12.2.2.1, *Buildings* or *Structures* associated with a municipal sewage treatment facility shall be permitted within the *Floodway* (FL) *Zone* subject to the approval of the Grand River Conservation Authority.
- 12.2.2.2 Any expansion, reconstruction, or extension of any existing **Use** shall be subject to the "Fill, Construction and Alteration to Waterways" regulations of the Grand River Conservation Authority, and in consultation with the Ministry of Natural Resources.
- 12.2.2.3 **Buildings** and **Structures** within the **Floodway** (FL) **Zone** which existed legally prior to the passage of this **By-law** shall be deemed legal non-conforming.

# 12.3 REGULATIONS FOR LANDS WITHIN THE FLOOD FRINGE

Despite Section 4.2, no lands which have a shading pattern indicating *Flood Fringe* on the Defined Area Maps shall be *Used* and no *Building* or *Structure* shall be erected, located or *Used* thereon <u>except</u> in accordance with the regulations prescribed in this *By-law* for the *Zone* in which such lands are located <u>and</u> the regulations prescribed below:

<sup>&</sup>lt;sup>1</sup> Anyone who proposes to undertake the development or redevelopment of lands which are shaded on the Defined Area Zoning Maps is reminded that the approval of the Grand River Conservation Authority pursuant to regulations made under the <u>Conservation Authorities Act</u>, R.S.O 1990, Chapter C.27, or any successor thereof, may be required in addition to any requirements of this By-law.

# 12.3.1 <u>Restricted Uses</u>

12.3.1.1 The following **Uses** shall not be permitted unless **Floodproofed** to the **Regulatory Flood** level: Elementary **Schools** (portable classrooms are not permitted) **Group Home Hotel Medical Treatment Facility Home for the Aged** or rest home

Any other residential care and institutional facilities which provides accommodation.

- 12.3.1.2 Any **Use** requiring bulk storage of dangerous, flammable, explosive, toxic, corrosive or buoyant materials shall not be permitted on lands shaded on the Defined Area Maps.
- 12.3.1.3 The following **Uses** shall not be permitted in the **Flood Fringe**: ambulance service, fire department, and police department.

Facilities existing at the time of the passing of this *By-law* will be permitted to expand or extend with the approval of the *City* of Guelph and the Grand River Conservation Authority.

Major expansions to **Uses** existing at the time of the passing of this **Bylaw** will be required to meet the Provincial requirements for **Safe Access** and egress by emergency **Vehicles**.

#### 12.3.2 <u>Construction of *Parking Facilities*</u>

**Parking Facilities** shall be permitted subject to approval by the **City** and the Grand River Conservation Authority.

- 12.3.3 <u>Regulations for Residential Construction</u>
- 12.3.3.1 <u>New Development and Redevelopment of Buildings, Residential</u> Infill, and Conversion of Non-Residential Buildings or Structures to Residential Use New Development and Redevelopment of Buildings, Residential Infill and Conversion of non-residential Buildings or Structures to residential Use shall be permitted in accordance with the following regulations:
- 12.3.3.1.1 *Floodproofing Dry Passive Floodproofing* shall be required for the *Building* to the

### Regulatory Flood level.

- 12.3.3.1.2 <u>Minimum Habitable Floor Space Elevation</u> The Habitable Floor Space elevation of new Dwelling Units shall not be permitted below the Regulatory Flood level.
- 12.3.3.1.3 <u>Location of *Building* Openings</u> Windows, doors and other *Building* openings shall not be permitted below the *Regulatory Flood* level.
- 12.3.3.1.4 <u>Location of *Building* Equipment</u> Mechanical, electrical and heating equipment shall not be located below the *Regulatory Flood* level.
- 12.3.3.1.5 <u>Access</u> Shall be provided for all **Dwelling Units**.
- 12.3.3.2 **Renovation** of Existing Residential **Buildings Renovation** of existing residential **Buildings** will be permitted provided any new **Habitable Floor Space** is not lower than the elevation of the existing floor level and no new units are created below the **Regulatory Flood** level.
- 12.3.4 <u>Regulations Governing Non-Residential Construction</u>

accordance with the following regulations:

12.3.4.1 <u>New Development and Redevelopment of Non-Residential Buildings</u> or Structures and Conversion of Existing Non-Residential Buildings or Structures to Commercial Use New Development and Redevelopment of new non-residential Buildings or Structures and Conversion of existing non-residential Buildings or Structures to commercial Use shall be permitted in

# 12.3.4.1.1 *Floodproofing Dry Floodproofing* shall be required for the *Building* or *Structure* to the *Regulatory Flood* level.

A certificate of approval from a Structural Engineer which indicates that the *Building* or *Structure* will maintain its structural integrity during a regional storm.

12.3.4.1.2 <u>Location of *Building* Equipment</u> Mechanical, electrical, and heating equipment shall not be located below the *Regulatory Flood* level.

#### 12.3.5 Enforcement of Site Plan Control

All **Development, Redevelopment, Conversion** and **Renovation** of **Buildings** or **Structures** shall be subject to the site plan control provisions of Section 41 of <u>The Planning Act</u> R.S.O 1990, Chapter P.13, or any successor thereof.

### 12.4 <u>REGULATIONS FOR LANDS WITHIN THE SPECIAL POLICY AREA</u> (S.P.A.)<sup>2</sup>

Despite Section 4.2, no lands which have a shading pattern indicating Special Policy Area on the Defined Area Maps shall be **Used** and no **Building** or **Structure** shall be erected, located or **Used** thereon <u>except</u> in accordance with the regulations prescribed in this **By-law** for the **Zone** in which such lands are located <u>and</u> the regulations prescribed below:

- 12.4.1 <u>Restricted Uses</u>
- 12.4.1.1 **Development** or **Redevelopment** is not permitted within the **Hydraulic Floodway**.
- 12.4.1.2 *Hotels* may be permitted if the *Use* can be *Floodproofed* to the *Regulatory Flood* level and *Safe Access* can be provided.
- 12.4.1.3 Within the S.P.A., *Vehicle Service Stations, Vehicle Gas Bars* and other *Uses* involving the *Manufacture*, disposal, consumption or storage of chemical, flammable, explosive, toxic, corrosive or other dangerous materials shall not be permitted.
- 12.4.1.4 Within the S.P.A., *Parking Facilities* shall be designed to the satisfaction of the *City* and the Grand River Conservation Authority.

#### 12.4.2 General *Floodproofing* Requirements

*Floodproofing* shall be required for all forms of *Building* activity within the S.P.A. to the satisfaction of the *City* and the Grand River Conservation Authority.

<sup>&</sup>lt;sup>2</sup> Anyone who proposes to undertake the development or redevelopment of lands which are shaded on the Defined Area Zoning Maps is reminded that the approval of the Grand River Conservation Authority pursuant to regulations made under the <u>Conservation Authorities Act</u>, R.S.O. 1990, Chapter C.27, or any successor thereof, may be required in addition to any requirements of this by law.

- 12.4.2.1 Any new *Building* or *Structure* shall be designed such that its structural integrity is maintained during a *Regulatory Flood*.
- 12.4.2.2 All forms of *Floodproofing*, as outlined in the <u>"Implementation</u> <u>Guidelines of the Provincial Policy Statement on Flood Plain Planning"</u>, may be *Used* to achieve the necessary *Floodproofing* requirements of this *By-law*.

#### 12.4.3 *Floodproofing* Requirements for Residential *Uses*

The following regulations apply to the **Renovation** of, intensification of, **Conversion** to, and **Development** or **Redevelopment** of residential **Uses**.:

- 12.4.3.1 **Renovation** of existing residential **Buildings** shall be permitted provided any new **Habitable Floor Space** is not lower than the elevation of the existing ground floor level.
- 12.4.3.2 Residential intensification, comprising the *Building* of a new *Single Detached, Semi-Detached* or *Duplex Dwelling* on an existing vacant *Lot*, <u>or</u> adding an additional unit to an existing *Single Detached, Semi-Detached*, or *Duplex Dwelling* <u>or</u> the creation of a new *Lot* for a *Single Detached, Semi-Detached*, or *Duplex Dwelling*, shall be permitted provided that the new *Building* or *Structure* is *Floodproofed* to an elevation no lower than 1 metre below the *Regulatory Flood* level; and
- <sup>15692</sup> 12.4.3.2.1 the *Habitable Floor Space* is constructed to an elevation equal to, or greater than the elevation of at least one of the adjacent *Buildings* but in no case lower than 1 metre below the *Regulatory Flood* level;
  - 12.4.3.2.2 basements will only be permitted in instances where the elevation of the basement floor is greater than the elevation of 1 metre below the *Regulatory Flood* level. In instances where this basement floor level elevation cannot be achieved, a crawl space of a maximum height of 1.2 metres may be permitted to facilitate servicing;
  - 12.4.3.2.3 mechanical, electrical and heating equipment will be located no lower than 1 metre below the *Regulatory Flood* level; and
  - 12.4.3.2.4 access is available to an elevation no lower than 1 metre below the **Safe Access** level.
  - 12.4.3.3 **Conversion** of a non-residential **Building** to a residential **Use** will be permitted provided the **Building** is **Floodproofed** to an elevation no lower than 1 metre below the **Regulatory Flood** level; and

- 12.4.3.3.1 the *Habitable Floor Space* elevation of any new residential unit is located at an elevation no lower than 1 metre below the *Regulatory Flood* level;
- 12.4.3.3.2 mechanical, electrical and heating equipment will be located no lower than 1 metre below the *Regulatory Flood* level; and
- 12.4.3.3.3 access is available to the site at an elevation no lower than 1 metre below the *Safe Access* level.
- 12.4.3.4 **Development** and **Redevelopment** of new Residential Units shall be permitted provided that the new **Building** and related **Structures** are **Floodproofed** to the **Regulatory Flood** level; and
- 12.4.3.4.1 the *Habitable Floor Space* of any new residential unit is constructed to an elevation equal to or greater than the *Regulatory Flood* level;
- 12.4.3.4.2 windows, doors and other *Building* openings for any new residential unit will be located above the *Regulatory Flood* level;
- 12.4.3.4.3 mechanical, electrical and heating equipment for any new residential unit will be located above the *Regulatory Flood* level;
- 12.4.3.4.4 access is available to the site at an elevation no lower than 1 metre below the *Safe Access* level; and
- 12.4.3.4.5 unenclosed **Parking Facilities** shall be located at or above an elevation of the **100 Year Flood** level. Enclosed facilities shall be **Floodproofed** to the **Regulatory Flood** level.

#### 12.4.4 *Floodproofing* Requirements for Non-Residential *Uses*

In addition to the requirements of Section 12.4.2, the **Renovation** of, **Conversion** to, and **Development** and **Redevelopment** of non-residential **Uses** shall be permitted provided that:

- 12.4.4.1 the *Building* or *Structure* is *Floodproofed* to a minimum elevation no lower than 1 metre below the *Regulatory Flood* level;
- 12.4.4.2 The minimum elevation of any floor area is at or above the **100 Year** level.