



Office of the Town Manager

Rafael G. Casals  
Town Manager

**MEMORANDUM**

**To:** Honorable Mayor and Town Council  
**From:** Rafael G. Casals, Town Manager  
**Date:** February 17, 2016  
**Re:** Amending Town Ordinances No. 06-10, 09-06 and 10-04 Relating to Floodplain Management Regulations (*First Reading*)

**REQUEST**

**AN ORDINANCE OF THE MAYOR AND TOWN COUNCIL OF THE TOWN OF CUTLER BAY, FLORIDA, AMENDING ORDINANCES 06-10, 09-06 AND 10-04 RELATING TO “FLOODPLAIN MANAGEMENT REGULATIONS”; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION IN THE CODE; PROVIDING FOR CONFLICTS; AND PROVIDING FOR AN EFFECTIVE DATE.**

**BACKGROUND AND ANALYSIS**

In order for the Town residents to be eligible for participation in the National Flood Insurance Program (NFIP), the Town adopted a Floodplain Management Ordinance, Town Ordinance No. 06-10 on May 25, 2006. Town Staff and consulting engineers have met with the Federal Emergency Management Agency (FEMA) to determine how to improve the Town’s initial rating under the NFIP’s Community Rating System (CRS) Program. A higher rating with the CRS will provide additional savings to Town residents, who currently pay for flood insurance.

One of the activities that the Town may undertake to improve its CRS rating is to amend the existing Floodplain Management Regulations to include more stringent regulatory standards.

Previously reviewed by the Town’s Certified Floodplain Managers (CFM) and Town Consultant David Stroud, Emergency and Hazard Mitigation Lead for Amec Foster Wheeler, the Town’s Floodplain Management Regulations were found to be deficient and in need of higher regulatory standards. The goal of this ordinance is to amend Ordinance 06-10 Floodplain Management Regulations, to provide clear and balanced regulations that reflect the vision of the Town while meeting the needs and safety of the residents within the Town.

The scope of this analysis should not be interpreted as a re-write of the existing Floodplain Management Regulations but rather an evaluation of the existing regulatory standards.





## **SUMMARY OF RECOMMENDED CHANGES**

Town Staff has found that applying the changes illustrated below to the existing Floodplain Management Regulations will not only create higher regulatory standards but also prevent clear direction for future redevelopment of areas affected by flooding hazards. These changes will result in the Town's earning of an additional approximate of 360 points (*Attachment "A"*).

Town Staff is recommending changes<sup>1</sup> to the following Articles:

### **ARTICLE 1. INTENT AND PURPOSE**

### **ARTICLE 2. DEFINITIONS**

**Crown of road (center line)** shall mean a line running parallel with the highway right-of-way which is half the distance between the extreme edges of the official right-of-way width as shown on a map approved by the Department of Public Works.

**On Site Retention** shall mean the containment and disposal of stormwater runoff by means other than positive drainage within the limit of the property and/or project site.

### **ARTICLE 3. GENERAL PROVISIONS**

#### **SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES**

This ordinance shall apply to all areas ~~of special flood hazard~~ within the jurisdiction of the Council of the Town of Cutler Bay:

#### **SECTION E. COMPLIANCE.**

##### **(1) Prohibitions.**

**(a) It shall be unlawful and a violation of this ordinance to encroach on or into the floodway including secondary and private canals without the review and approval of the Towns Public Works Department. Submittal must provide proof that there will be no change in flood elevations and flow through the canal as result of the encroachment.**

**(b) It shall be unlawful and a violation of this ordinance to dispose of any rainwater, stormwater runoff or other liquids by allowing or causing the same flow on, over or across any adjoining property, ROW, easement, and drainage canal either private or public. Exceptions to this condition may be allowed on a limited basis for necessary repairs to swimming pools, based on a case by case review and approval of the Towns Public Works Department as long as**

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<sup>1</sup> Coding: underlined words are additions to existing text, ~~struck through~~ words are deletions from existing text.



necessary treatment of the water meets the minimum standards as established by Miami- Dade County DERM, SFWMD or the governing agency.

## ARTICLE 4. ADMINISTRATION

### SECTION A. PERMIT PROCEDURES

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application Stage:

- ~~(b) Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;~~
- (b) Certificate from a registered professional land surveyor engineer or architect that any the non-residential flood-proofed building residential structure will meet the flood-proofing criteria in Article 4, Section A (2) and Article 5, Section B (2) highest of the following criteria:
  - (i) Base Flood Elevation as depicted on the current FIRM plus one foot (one foot of freeboard)
  - (ii) Highest Adjacent Crown of road plus one foot
  - (iii) Back of sidewalk elevation plus one foot
  - (iv) Street abutting property plus one foot
  - (v) Highest edge of cross section of road plus one foot
- (c) Certificate from a registered professional land surveyor that any non-residential structure will meet the highest of the following criteria:
  - (i) Base Flood Elevation as depicted on the current FIRM plus one foot (one foot of freeboard)
  - (ii) Highest Adjacent Crown of road plus one foot
- (d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and
- (e) Elevation in relation to mean sea level of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer or architect indicating that they have developed and or reviewed the structural designs, specifications and plans of the construction





and certified that are in accordance with accepted standards of practice in Coastal High Hazard Areas.

## ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

### SECTION B. SPECIFIC STANDARDS.

(3) *Elevated Buildings.* ~~New construction or substantial improvements of elevated buildings that include enclosed areas formed by foundation and other exterior walls below the lowest floor elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.~~ shall prohibit enclosures below the elevated floor to protect the integrity of the building from wave action or from hydrostatic pressure. Enclosures include, but are not limited to solid walls, Breakaway walls, louvers, screening, or lattice work or any other kind of obstruction below the elevated floor or below the Base Flood Elevation for the zone in which the building is located. This means that an enclosure on one side (or any side) of the lower level of an elevated building is also prohibited.

(a) ~~Designs for complying with this requirement must be certified by a professional engineer or architect and meet or exceed the following minimum criteria:~~ Areas below the elevated flood may be used only for parking of vehicles, access to the building or limited storage of materials used in connection with the building.

(i) ~~Provide openings in each wall having a total net area of not less than 50% of the total wall area subject to flooding and shall equal or exceed one square inch for each square foot of enclosed area.~~

(ii) ~~Provide at least one opening per wall and the bottom elevation of all such openings shall be no higher than one foot above grade; and~~

(iii) ~~Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of floodwaters in both directions.~~

(b) ~~Enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage, and building access. Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door), limited storage of maintenance equipment used in connection with the premises (standard exterior door), or entry to the living area (stairway or elevator); and~~





~~(e) The interior portion of such enclosed area shall not be finished or partitioned into separate rooms.~~

- (10) *Critical Facilities.* New and substantially improved critical facilities shall be constructed on properly compacted fill and have the lowest floor (including basement) elevated to at least one (1) foot above the elevation of the 0.2% annual chance (500-year) flood (this regulation also applies to all X zone areas).

## **SECTION E. COASTAL HIGH HAZARD AREAS (V-ZONES)**

~~(6) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions: New construction or substantial improvements of elevated buildings shall prohibit enclosures below the elevated floor to protect the integrity of the building from wave action or from hydrostatic pressure. Enclosures include, but are not limited to solid walls, Breakaway walls, louvers, screening, or lattice work or any other kind of obstruction below the elevated floor or below the Base Flood Elevation for the zone in which the building is located. This means that an enclosure on one side (or any side) of the lower level of an elevated building is also prohibited.~~

~~(a) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and Areas below the elevated flood may be used only for parking of vehicles, access to the building or limited storage of materials used in connection with the building.~~

## **RECOMMENDATION**

Town Staff is recommending the adoption of the attached Town Ordinance amending Ordinances No. 06-10, 09-06 and 10-04 relating to “Floodplain Management Regulations”; updating definitions and revising Town standards to the Federal Emergency Management Agency (FEMA) guidelines.

