

## ORDINANCE NO. 2009-

1  
2 AN ORDINANCE OF THE BOARD OF COUNTY  
3 COMMISSIONERS OF BROWARD COUNTY, FLORIDA,  
4 PERTAINING TO FLOODPLAIN MANAGEMENT;  
5 AMENDING CHAPTER 13½ OF THE BROWARD COUNTY  
6 CODE OF ORDINANCES, "FLOODPLAIN MANAGEMENT,"  
7 SECTION 13½-1, "INTENT," PROVIDING FOR INTENT OF  
8 CHAPTER; AMENDING SECTION 13½-2, "TITLE,"  
9 PROVIDING FOR CHAPTER TITLE; AMENDING SECTION  
10 13½-3, "DEFINITIONS," ESTABLISHING DEFINITION OF  
11 TERMS; AMENDING SECTION 13½-4, "GENERAL  
12 PROVISIONS," ESTABLISHING REQUIREMENTS FOR  
13 FLOOD PROTECTION; AMENDING SECTION 13½-5,  
14 "ADMINISTRATION," PROVIDING FOR IMPLEMENTATION  
15 OF FLOOD PROTECTION REGULATIONS; AMENDING  
16 SECTION 13½-6, "STANDARDS," ESTABLISHING  
17 STANDARDS FOR FLOOD HAZARD REDUCTION;  
18 PROVIDING FOR SEVERABILITY; PROVIDING FOR  
19 INCLUSION IN THE CODE; AND PROVIDING FOR AN  
20 EFFECTIVE DATE.

(Sponsored by the Board of County Commissioners)

21 BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF  
22 BROWARD COUNTY, FLORIDA:

23 Section 1. Chapter 13½, "Floodplain Management," is hereby amended to  
24 read as follows:

**Sec. 13½-1. Intent.**

It is the intent of the Broward County, Florida, ~~h~~Board of ~~e~~County  
eCommissioners ("~~h~~Board") to bring Broward County into compliance with the revised  
requirements of the National Flood Insurance Program ("NFIP"), as required by the  
Federal Emergency Management Agency ("FEMA").

1 **Sec. 13½-2. Title.**

2 In order to bring Broward County into compliance with the NFIP, the ~~b~~Board  
3 hereby creates this chapter, entitled "~~National Flood Insurance Program~~ Floodplain  
4 Management Regulations."

5 **Sec. 13½-3. Definitions.**

6 Unless specifically defined below, words or phrases used in this chapter shall be  
7 interpreted so as to give them the meaning they have in common usage and to give this  
8 chapter its most reasonable application.

9 ...

10 (b) *Appeal* means a request for a review of the ~~b~~Board's interpretation of any  
11 provision of this chapter or a request for a variance.

12 ...

13 (j) *Development* means any ~~man-made~~ human-caused change to improved  
14 or unimproved real estate, including, but not limited to, buildings or other structures,  
15 mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent  
16 storage of materials or equipment.

17 ...

18 (u) *Historic structure* means any structure that is:

19 (1) Listed individually in the National Register of Historic Places (a listing  
20 maintained by the Department of Interior) or preliminarily determined by  
21 the Secretary of the Interior as meeting the requirements for individual  
22 listing on the National Register;

23 (2) Certified or preliminarily determined by the Secretary of the Interior as  
24 contributing to the historical significance of a registered historic district or a

1 district preliminarily determined by the Secretary to qualify as a registered  
2 historic district;

3 (3) Individually listed on a sState inventory of historic places in states with  
4 historic preservation programs which have been approved by the  
5 Secretary of the Interior; or

6 (4) Individually listed on a local inventory of historic places in communities  
7 with historic preservation programs that have been certified either:

8 (i)a. By an approved sState program as determined by the Secretary of  
9 the Interior; or

10 (ii)b. Directly by the Secretary of the Interior in states without approved  
11 programs.

12 ...  
13 (z) *Mean sea level* means the ~~average height of the sea for all stages of the~~  
14 ~~tide datum (vertical reference surface) to which base flood elevations shown on a~~  
15 ~~community's FEMA Flood Insurance Rate Map (FIRM) are referenced.~~ It is used as a  
16 reference for establishing various elevations within the floodplain. For purposes of this  
17 chapter, the term is synonymous with the datum used on the most current version of the  
18 FIRMs for Broward County, either the National Geodetic Vertical Datum (NGVD) of  
19 1929 or the North American Vertical Datum of 1988 (NAVD 88), as applicable.

20 (aa) *National Geodetic Vertical Datum (NGVD) as corrected in 1929 is a*  
21 ~~vertical control used as a reference for establishing varying elevations within the~~  
22 ~~floodplain~~ is based on mean sea level at twenty-six (26) locations along the United  
23 States coastline. It was formerly known as the "Mean Sea Level Datum of 1929 (MSL)."  
24

1 (bb) *New construction* means structures for which the "start of construction"  
2 commenced on or after ~~the effective date of this chapter~~ [January 19, 1988], and  
3 includes any subsequent improvements to such structures.

4 (cc) *North American Vertical Datum of 1988 (NAVD 88)* is based on mean sea  
5 level at one location, Father's Point, Quebec, Canada. NAVD 88 replaced NGVD 29 as  
6 the standard datum of the United States.

7 ~~(ee)~~(dd) *New manufactured home park or subdivision* means a manufactured  
8 home park or subdivision for which the construction of facilities for servicing the lots on  
9 which the manufactured homes are to be affixed (including, at a minimum, the  
10 installation of utilities, the construction of streets, and either final site grading or the  
11 pouring of concrete pads) is completed on or after the effective date of floodplain  
12 management regulations adopted by a community.

13 ~~(dd)~~(ee) *Recreational vehicle* means a vehicle which is:

- 14 (1) Built on a single chassis;
- 15 (2) Four hundred (400) square feet or less when measured at the largest  
16 horizontal projections;
- 17 (3) Designed to be self-propelled or permanently towable by a light-duty truck;  
18 and
- 19 (4) Designed primarily not for use as a permanent dwelling but as temporary  
20 living quarters for recreational, camping, travel, or seasonal use.

21 ~~(ee)~~(ff) *Sand dunes* means naturally occurring accumulations of sand in ridges or  
22 mounds landward of the beach.

23 ~~(ff)~~(gg) *Start of construction* (for other than new construction or substantial  
24 improvements under the Coastal Barrier Resources Act (P.L. 97-348)), includes

1 substantial improvement and means the date the building permit was issued, provided  
2 the actual start of construction, repair, reconstruction, rehabilitation, addition, or  
3 improvement was within one hundred eighty (180) days of the permit date. The actual  
4 start means the first placement of permanent construction of a structure (including a  
5 manufactured home) on a site, such as the pouring of slabs or footings, piers, or  
6 foundations, or the erection of temporary forms; ~~nor does it~~ does not include the  
7 installation on the property of accessory buildings such as garages or sheds not  
8 occupied as dwelling units or not part of the main structure. For a substantial  
9 improvement, the actual start of construction means the first alteration of any wall,  
10 ceiling, floor, or other structural part of a building, whether or not that alteration affects  
11 the external dimensions of the building.

12 ~~(gg)~~(hh) *Structure* means a walled and roofed building that is principally above  
13 ground, a manufactured home, a gas or liquid storage tank, or other ~~man-made~~ human-  
14 made facilities or infrastructures.

15 ~~(hh)~~(ii) *Substantial damage* means damage of any origin sustained by a structure  
16 whereby the cost of restoring the structure to its ~~before-damaged~~ condition before the  
17 damage would equal or exceed fifty (50) percent of the market value of the structure  
18 before the damage occurred.

19 ~~(ii)~~(j) *Substantial improvement* means any reconstruction, rehabilitation,  
20 addition, or other improvement to a structure, the cost of which equals or exceeds fifty  
21 (50) percent of the market value of the structure, before the "start of construction" of the  
22 improvement. This term includes structures which have incurred "substantial damage,"  
23 regardless of the actual repair work performed. For purposes of this definition,  
24 "substantial improvement" is considered to occur with the first alteration of any wall,

1 ceiling, floor, or other structural part of the building dimensions of the structure. The  
2 term does not, however, include either (1) any project for improvement of a structure  
3 required to correct existing health, sanitary, or safety code specifications which are the  
4 minimum necessary to assure code living conditions or (2) any alteration of a "historic  
5 structure," provided that the alteration will not preclude the structure's continued  
6 designation as an "historic structure."

7 ~~(j)~~(kk) *Variance* is a grant of relief from the requirements of this chapter which  
8 permits construction, in a manner otherwise prohibited by this chapter, where specific  
9 enforcement would result in unnecessary hardship.

10 **Sec. 13½-4. General provisions.**

11 ~~(1)~~(a) *Lands to Which This Chapter Applies:* This chapter shall apply to all areas  
12 within the unincorporated portions of Broward County.

13 ~~(2)~~(b) *Basis for Establishing the Areas of Special Flood Hazard:* The area of  
14 special flood hazard identified by the Federal Emergency Management Agency in its  
15 latest Flood Insurance Study of Broward County, Florida, along with accompanying  
16 maps and other supporting data, and any revision thereto, are adopted by reference  
17 and declared to be a part of this chapter. Copies of the report and maps, and  
18 subsequent revisions thereto, shall be maintained on file and be available for public  
19 inspection in the ~~water resources management~~ Development and Environmental  
20 Regulation Division, or successor agency.

21 ~~(3)~~(c) *Requirement of Building Permit:* A building permit shall be required in  
22 conformance with the provisions of this chapter and the Florida Building Code prior to  
23 the commencement of any development activities.

24

1     ~~(4)~~(d)     *Compliance:* No structure or land shall hereafter be located, extended,  
2 converted, or substantially improved without full compliance with the terms of this  
3 chapter and other applicable regulations.

4     ~~(5)~~(e)     *Abrogation and Greater Restriction:* This chapter is not intended to  
5 repeal, abrogate, or impair any existing easements, covenants, or deed restrictions.  
6 Where there are regulations on the same point, as contained in any other Broward  
7 County ordinance or resolution, which are less restrictive than this chapter, the  
8 provisions of this chapter shall govern; and where the regulations of the other Broward  
9 County ordinance or resolution are more restrictive than those of this chapter, the other  
10 ordinance or resolution shall govern. In the event any of the provisions of this chapter  
11 conflict with any of the provisions of the ~~South~~ Florida Building Code, as applicable to  
12 Broward County, the applicable provisions of the ~~South~~ Florida Building Code shall  
13 govern.

14     ~~(6)~~(f)     *Interpretation:* In the interpretation and application of this chapter, all  
15 provisions shall be considered as minimum requirements; liberally construed in favor of  
16 the governing body, and deemed neither to limit nor repeal any other powers granted  
17 under ~~s~~State statutes.

18     ~~(7)~~(g)     *Warning and Disclaimer of Liability:* The degree of flood protection  
19 required by this chapter is considered reasonable for regulatory purposes and is based  
20 on scientific and engineering consideration. Larger floods can and will occur on rare  
21 occasions. Flood heights may be increased by ~~man-made~~ human-made or natural  
22 causes. This chapter does not imply that land outside the areas of special flood hazard  
23 or uses permitted within such areas will be free from flooding or flood damages. This  
24 chapter shall not create liability on the part of the ~~b~~Board or by any officer or employee

1 thereof for any flood damages that result from reliance on this chapter or any  
2 administrative decision lawfully made thereunder.

3 ~~(8)~~(h) *Penalties for Violation:* Violation of the provisions of this chapter or failure  
4 to comply with any of its requirements, including violation of conditions and safeguards  
5 established in connection with grants of variance or special exceptions, shall constitute  
6 a violation. Any person who violates this chapter or fails to comply with any of its  
7 requirements shall, upon conviction thereof, be fined not more than five hundred dollars  
8 (\$500.00) or imprisoned for not more than sixty (60) days, or both, and, in addition, shall  
9 pay all costs and expenses involved in the case. Each day such a violation continues  
10 shall be considered a separate offense. Nothing herein contained shall prevent  
11 Broward County from taking such other lawful action as is necessary to prevent or  
12 remedy any violation.

13 **Sec. 13½-5. Administration.**

14 ~~(1)~~(a) *Designation of ~~Director of Building and Permitting~~ Chief Building Official:*  
15 ~~The director of building and permitting~~ Chief Building Official for Broward County, or  
16 designee, is hereby appointed to administer and implement the provisions of this  
17 chapter.

18 ~~(2)~~(b) *Permit Procedures:* Application for a building permit shall be made to the  
19 ~~eChief bBuilding eOfficial [director of building and permitting] on forms furnished by him~~  
20 ~~or her~~ pursuant to the provisions of the Florida Building Code prior to any development  
21 activities, and may include, but not be limited to, the following plans, in duplicate, drawn  
22 to scale showing the nature, location, dimensions, and elevations of the areas and  
23 adjacent roads in question; existing or proposed structures, fill, storage of materials,  
24

1 drainage facilities, and the location of the foregoing. Specifically, the following  
2 information is required:

3 ~~(a)~~(1) *Application stage:*

4 ~~(1)~~a. Elevation in relation to mean sea level of the proposed lowest floor  
5 (including basement) of all structures and the highest adjacent road  
6 crown;

7 ~~(2)~~b. Elevation in relation to mean sea level to which any nonresidential  
8 structure will be floodproofed;

9 ~~(3)~~c. Signed and sealed certification by a professional engineer or  
10 architect registered in the State of Florida that the nonresidential  
11 floodproofed structure will meet the floodproofing criteria in  
12 Subsection 13 $\frac{1}{2}$ -6(1)(b)2 ~~13 $\frac{1}{2}$ -6(a)(2)b.~~; and

13 ~~(4)~~d. Description of the extent to which any watercourse will be altered or  
14 relocated as a result of proposed development; ~~and.~~

15 ~~(b)~~(2) *Construction stage:* Provide a floor elevation or ~~flood-proofing~~  
16 floodproofing certification after the lowest floor is completed; or, in  
17 instances where the structure is subject to the regulations applicable to  
18 coastal high-hazard areas, after placement of the horizontal structural  
19 members of the lowest floor. Upon placement of the lowest floor, ~~or~~  
20 floodproofing by whatever construction means, or upon placement of the  
21 horizontal structural members of the lowest floor, whichever is applicable,  
22 it shall be the duty of the permit holder to submit to the ~~e~~Chief bBuilding  
23 Official [~~director of building and permitting~~] a certification of the elevation  
24 of the lowest floor, floodproofed elevation, or the elevation of the lowest

1 portion of the horizontal structural members of the lowest floor, whichever  
2 is applicable, as built, in relation to mean sea level. Said certification shall  
3 be prepared by or under the direct supervision of a land surveyor or  
4 professional engineer registered in the State of Florida and certified by  
5 same. When floodproofing is utilized for a particular building, said  
6 certification shall be prepared by or under the direct supervision of a  
7 professional engineer or architect registered in the State of Florida and  
8 certified by same. Any work undertaken prior to submission of the  
9 certification or prior to the Chief Building Official's approval of said  
10 certification shall be at the permit holder's risk. The eChief bBuilding  
11 eOfficial [~~director of building and permitting~~] shall review the floor elevation  
12 survey data submitted. Deficiencies detected by such review shall be  
13 corrected by the permit holder immediately and prior to further progressive  
14 work ~~being permitted to proceeding~~. Failure to submit the survey or failure  
15 to make said corrections required hereby shall be cause to issue a stop-  
16 work order for the project.

17 (3)(c) *Duties and Responsibilities of the Chief Building Official* [~~Director of~~  
18 ~~Building and Permitting~~]: Duties of the eChief bBuilding eOfficial [~~director of building~~  
19 ~~and permitting~~] shall include, but not be limited to:

20 (a)(1) Reviewing all building permits to assure that the permit requirements of  
21 this chapter have been satisfied;

22 (b)(2) Adviseing permittees that additional federal or state permits may be  
23 required, and, if specific federal or state permit requirements are known,  
24

1           requireing that copies of such permits be provided and maintained on file  
2           with the building permits;

3           ~~(c)~~(3)   Notifying adjacent communities and the State Department of Community  
4           Affairs prior to any alteration or relocation of a watercourse, and  
5           submitting evidence of such notification to the Federal Emergency  
6           Management Agency;

7           ~~(d)~~(4)   Assureing that maintenance is provided within the altered or relocated  
8           portion of said watercourse so that the flood-carrying capacity is not  
9           diminished;

10          ~~(e)~~(5)   Requireing verification of the actual elevation (in relation to mean sea  
11          level) of the lowest floor (including basement) of all new or substantially  
12          improved structures, which verification shall be submitted by the permit  
13          holder; the verification shall be prepared by an engineer or land surveyor  
14          registered in the State of Florida;

15          ~~(f)~~(6)   Requireing verifications of the actual elevation (in relation to mean sea  
16          level) to which the new or substantially improved structures have been  
17          floodproofed, which verification shall be submitted by the permit holder;  
18          the verification shall be prepared by a professional engineer or land  
19          surveyor registered in the State of Florida;

20          ~~(g)~~(7)   Requireing certification in coastal high-hazard areas from a professional  
21          engineer or architect registered in the State of Florida that the structure is  
22          designed to be securely anchored to pilings or columns in order to  
23          withstand velocity waters and hurricane wave wash-;

- 1     ~~(h)~~(8)     In coastal high-hazard areas, ~~the chief building official [director of building~~  
2                   ~~and permitting]~~ shall reviewing plans for adequacy of breakaway walls;
- 3     ~~(i)~~(9)     Where interpretation is needed as to the exact location of boundaries of  
4                   the areas of special flood hazard (for example, where there appears to be  
5                   a conflict between a mapped boundary and actual field conditions), ~~the~~  
6                   ~~chief building official [director of building and permitting]~~ shall makeing the  
7                   necessary interpretation; the person contesting the location of the  
8                   boundary shall be given a reasonable opportunity to appeal the  
9                   interpretation as provided in ~~s~~Subsection (4)(a)(d)(1) of this section; and
- 10    ~~(j)~~(10)    All ~~records pertaining to the provisions of this chapter shall be~~  
11                   ~~m~~Maintaineding in the public office of the ~~e~~Chief ~~b~~Building ~~e~~Official  
12                   ~~[director of building and permitting]~~ and all records pertaining to the  
13                   provisions of this chapter; said records shall be open for public inspection;
- 14    ~~(4)~~(d)     *Variance Procedures.*
- 15    ~~(a)~~(1)     The ~~b~~Board shall hear and decide appeals and requests for variances  
16                   from the requirements of this chapter and hear and decide appeals when it  
17                   is alleged there is an error in any requirement, decision, or determination  
18                   made by the ~~e~~Chief ~~b~~Building ~~e~~Official ~~[director of building and permitting]~~  
19                   in the enforcement or administration of this chapter.
- 20    ~~(b)~~(2)     Variances may be issued for the reconstruction, rehabilitation, or  
21                   restoration of structures listed on the National Register of Historic Places  
22                   or the ~~s~~State inventory of places upon a determination that (i) the  
23                   proposed repair or rehabilitation will not preclude the structure's continued  
24

1 designation as an historic structure and (ii) the variance is the minimum  
2 necessary to preserve the historic character and design of the structure.

3 ~~(e)~~(3) In passing upon such applications, the ~~b~~Board shall consider technical  
4 evaluations, all relevant factors, all standards specified in other sections of  
5 this chapter, and:

6 4-a. The danger that materials may be swept onto other lands to the  
7 injury of others;

8 2-b. The danger to life and property due to flooding or erosion damage;

9 3-c. The susceptibility of the proposed facility and its contents to flood  
10 damage and the effect of such damage on the individual owner;

11 4-d. The importance of the services provided by the proposed facility to  
12 the community;

13 5-e. The necessity of the facility to a waterfront location, in the case of a  
14 functionally dependent facility;

15 6-f. The availability of alternative locations, not subject to flooding  
16 erosion damage, for the proposed use;

17 7-g. The compatibility of the proposed use with existing and anticipated  
18 development;

19 8-h. The relationship of the proposed use comprehensive plan and  
20 floodplain management program for that area;

21 9-i. The safety of access to the property in times of flood for ordinary  
22 and emergency vehicles;

1 40.i. The expected heights, velocity, duration, rate of rise, and sediment  
2 transport of the floodwaters, and the effects of wave action, if  
3 applicable, expected at the site; and

4 41.k. The costs of providing governmental services during and after flood  
5 conditions, including maintenance and repair of public utilities and  
6 facilities such as sewer, gas, electrical, and water systems, and  
7 streets and bridges.

8 (d)(4) Upon consideration of the factors above, and the purposes of this chapter,  
9 the Board may attach such conditions to the granting of variances as it  
10 deems necessary to further the purposes of this chapter.

11 (e)(5) Variances shall not be issued within any designated floodway if any  
12 increase in flood levels during the base flood discharge would result.

13 (f)(6) *Conditions for variances:*

14 4.a. Variances shall only be issued upon a determination that the  
15 variance is the minimum necessary to afford relief, considering the  
16 flood hazard, ~~to afford relief~~; and, in the instance of an historical  
17 building, a determination that the variance is the minimum  
18 necessary so as not to destroy the historic character design of the  
19 building;

20 2.b. Variances shall only be issued upon:

21 (i)1. A showing of good and sufficient cause;

22 (ii)2. A determination that failure to grant the variance would result  
23 in exceptional hardship; and  
24

1 (iii)3. A determination that the granting of a variance will not result  
2 in an increase of flood heights, additional threats to public  
3 safety or extraordinary public expense; create nuisances;  
4 cause fraud on or victimization of the public; or conflict with  
5 existing local laws or ordinances;

6 3.c. Any applicant to whom a variance is granted shall be given written  
7 notice specifying the difference between the base flood elevation  
8 and the elevation to which the structure is to be built and stating  
9 that the cost of flood insurance will be commensurate with the  
10 increased risk resulting from the reduced lowest flood elevation;

11 4.d. The ~~water resources management~~ Development and  
12 Environmental Regulation Division shall maintain the records of all  
13 appeal actions and report any variances to the Federal Emergency  
14 Management Agency, upon request.

15 **Sec. 13<sup>1</sup>/<sub>2</sub>-6. Standards.**

16 (1)(a) *Provisions for Flood Hazard Reduction:*

17 (a)(1) *General standards:* In all areas of special flood hazard, the following  
18 provisions are required:

19 1.a. New construction and substantial improvement shall be anchored  
20 to prevent flotation, collapse, or lateral movement of the structure;

21 2.b. Manufactured homes shall be anchored to prevent flotation,  
22 collapse, or lateral movement; ~~Methods~~ Methods of anchoring may  
23 include, but are not limited to, use of over-the-top or frame ties to  
24

1 ground anchors; this standard shall be in addition to and consistent  
2 with applicable ~~s~~State requirements for resisting wind forces;

3 ~~3.c.~~ New construction and substantial improvements shall be  
4 constructed with materials and utility equipment resistant to flood  
5 damage;

6 ~~4.d.~~ New construction or substantial improvements shall be constructed  
7 by methods and practices that minimize flood damage;

8 ~~5.e.~~ Electrical, heating, ventilation, plumbing, air conditioning  
9 equipment, and other service facilities shall be designed and/or  
10 located so as to prevent water from entering or accumulating within  
11 the components during conditions of flooding;

12 ~~6.f.~~ New and replacement water supply systems shall be designed to  
13 minimize or eliminate infiltration of floodwaters into the system;

14 ~~7.g.~~ New and replacement sanitary sewage systems shall be designed  
15 to minimize or eliminate infiltration of floodways into the system and  
16 discharges from the systems into the floodwaters;

17 ~~8.h.~~ On-site waste disposal systems shall be located and constructed to  
18 avoid impairment to them or contamination from them during  
19 flooding; and

20 ~~9.i.~~ Any alteration, repair, reconstruction, or improvements to a  
21 structure which is in compliance with the provisions of this chapter;  
22 shall meet the requirements of "new construction" as contained in  
23 this chapter.  
24

1     ~~(b)~~(2)     *Specific standards:* In all areas of unincorporated Broward County, the  
2 following provisions are required:

3     1-a.     *Residential construction:* New construction or substantial  
4 improvement of any residential structure shall have the lowest floor,  
5 including basement, elevated no lower than the base flood  
6 elevation. Should solid foundation perimeter walls be used to  
7 elevate a structure, openings sufficient to facilitate the unimpeded  
8 movements of flood waters shall be provided in accordance with  
9 standards of subparagraph 3 c. of this paragraph ~~(b)~~ (2).

10     2-b.     *Nonresidential construction:* New construction or substantial  
11 improvement of any commercial, industrial, or nonresidential  
12 structure shall have the lowest floor, including basement, elevated  
13 no lower than the level of the base flood elevation. Structures  
14 located in all A-zones may be floodproofed in lieu of being elevated,  
15 provided that all areas of the structure below the required elevation  
16 are watertight with walls substantially impermeable to the passage  
17 of water, and use structural components having the capability of  
18 resisting hydrostatic and hydrodynamic loads and the effect of  
19 buoyancy. A professional engineer or architect registered in the  
20 State of Florida shall certify that the standards of this subsection  
21 are satisfied.

22     3-c.     *Elevated buildings:* New construction or substantial improvements  
23 of elevated buildings that include fully enclosed areas formed by  
24 foundation and other exterior walls below the base flood elevation

1 shall be designed to preclude finished living space and designed to  
2 allow for the entry and exit of floodwaters to automatically equalize  
3 hydrostatic flood forces on exterior walls.

4 a.1. Designs for complying with this requirement must either be  
5 certified by a professional engineer or architect registered  
6 with the State of Florida or meet the following minimum  
7 criteria:

8 1)a) Provide a minimum of two (2) openings having a total  
9 net area of not less than one (1) square inch for every  
10 square foot of enclosed area subject to flooding;

11 2)b) The bottom of all openings shall be no higher than  
12 one (1) foot above grade; and

13 3)c) Openings may be equipped with screens, louvers,  
14 valves, or other coverings or devices, provided they  
15 permit the automatic flow of floodwaters in both  
16 directions;

17 ~~b.2.~~ Electrical, plumbing, and other utility fixtures are prohibited  
18 below the base flood elevation;

19 ~~e.3.~~ Access to the enclosed area shall be the minimum  
20 necessary to allow for parking of vehicles (garage door) or  
21 limited storage of ~~maintenance~~ equipment used in  
22 ~~connection without~~ for the maintenance of the premises  
23 (standard exterior door) or entry to the living area (stairway  
24 or elevator); and

1                   ~~d.4.~~ The interior portion of such enclosed area shall not be  
2                   partitioned or finished into separate rooms.

3           4.d. *Coastal high-hazard areas (V zones):* Located within the areas of  
4           special flood hazard established in the flood insurance rate map are  
5           areas designated as coastal high-hazard areas. These areas have  
6           special flood hazards associated with wave wash; therefore, the  
7           following provisions shall apply:

8           ~~a.1.~~ All buildings or structures shall be located landward of the  
9           reach of the mean high tide;

10           ~~b.2.~~ All buildings or structures shall be elevated so that the  
11           bottom of the lowest supporting horizontal member  
12           (excluding pilings or columns) is located no lower than the  
13           base flood elevation level, with all space below the lowest  
14           supporting member open so as not to impede the flow of  
15           water; open latticework or decorative screening may be  
16           permitted for aesthetic purposes only and must be designed  
17           to wash away in the event of abnormal wave action;  
18           breakaway walls may be permitted and must be designed to  
19           wash away in the event of abnormal wave action;

20           ~~c.3.~~ All buildings or structures shall be securely anchored on  
21           pilings or columns;

22           ~~d.4.~~ All pilings and columns and the attached structures shall be  
23           anchored to resist flotation, collapse, and lateral movement  
24           due to the effect of the wind and water loads acting

1 simultaneously on all building components; the anchoring  
2 and support system shall be designed with water loading  
3 values ~~{which}~~ water loading values shall be those  
4 associated with the base flood; wind loading values shall be  
5 those required by the ~~South~~ Florida Building Code;

6 e.5. A professional engineer or architect registered in the State of  
7 Florida shall certify that the design, specifications, and plans  
8 for construction are in compliance with the provisions of this  
9 chapter;

10 f.6. There shall be no fill used as structural support;  
11 noncompacted fill may be used around the perimeter of a  
12 building for landscaping, and aesthetic purposes, provided  
13 the fill will wash out from storm surf (thereby rendering the  
14 building free of obstruction) prior to generating excessive  
15 loading forces, ramping effects, or wave deflection; the  
16 ~~e~~Chief ~~b~~Building ~~e~~Official shall approve design plans for  
17 landscaping/aesthetic fill only after the applicant has  
18 provided an analysis by an engineer, architect, and/or soil  
19 scientist which demonstrates that the following factors have  
20 been fully considered:

21 1)a) Particle composition of fill material does not have a  
22 tendency for excessive natural compaction;

23 2)b) Volume and distribution of fill will not cause wave  
24 deflection to adjacent properties; and

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3)c) Slope of fill will not cause wave run-up or ramping;

g.7. There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage;

h.8. Nonsupporting breakaway walls, open latticework, or mesh screening shall be allowed below the base flood elevation, provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specifications are met:

4)a) Design safe loading resistance of each wall shall not be less than ten (10) nor more than twenty (20) pounds per square foot; or

2)b) If more than twenty (20) pounds per square foot, a professional engineer or architect registered in the State of Florida shall certify that the design wall collapse would result from a water load less than that which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components during the base flood

Coding:

Words in ~~struck-through~~ type are deletions from existing text. Words in underscored type are additions.

1 event; water loading values shall be those associated  
2 with the base flood; wind loading values shall be  
3 those required by the ~~South~~ Florida Building Code;

4 i-9. If breakaway walls are utilized, such enclosed space shall  
5 not be designed to be usable for human habitation but shall  
6 be designed to be usable only for the parking of vehicles,  
7 building access, or limited storage of maintenance  
8 equipment used in connection with the premises;

9 j-10. Prior to construction, plans for any structures that will have  
10 breakaway walls must be submitted to the ~~e~~Chief ~~b~~Building  
11 ~~e~~Official for approval;

12 k-11. Any alteration, repair, reconstruction, or improvement to a  
13 structure shall not enclose the space below the lowest floor,  
14 except with breakaway walls, as provided for in  
15 subparagraphs ~~h-8.~~ and i-9. of this subsection;

16 l-12. Prohibit the placement of manufactured homes (mobile  
17 homes), except in an existing manufactured home (mobile  
18 homes) park or subdivision after meeting all the  
19 requirements for new construction, including the anchoring  
20 standards of paragraph ~~(a)2(1)b.~~ and elevation standards of  
21 paragraph ~~(b)4(2)a.~~ of this subsection ~~(4)(a)~~; a replacement  
22 manufactured home may be placed on a lot in an existing  
23 subdivision, provided the anchoring standards of paragraph  
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1                    ~~(a)~~2(1)~~b~~. and the elevation standards of paragraph ~~(b)~~1(2)~~a~~.  
2                    of this subsection ~~(1)~~(a) are met; and

3                    ~~m.~~13. All recreational vehicles placed on sites must be either:

4                    ~~1)~~a) Be on the site for fewer than one hundred eighty (180)  
5                    consecutive days; or

6                    ~~2)~~b) Be fully licensed and ready for highway use; or

7                    ~~3)~~c) Meet all the requirements for new construction,  
8                    including the anchoring and elevation standards set  
9                    forth above.

10                  ~~(2)~~(b)        *Standards for Subdivision Proposals.*

11                  ~~(a)~~(1)        All subdivision proposals shall be consistent with the need to minimize  
12                  flood damage;

13                  ~~(b)~~(2)        All subdivision proposals shall have public utilities and facilities such as  
14                  sewer, gas, electrical, and water systems located and constructed to  
15                  minimize flood damage;

16                  ~~(c)~~(3)        All subdivision proposals shall have adequate drainage provided to reduce  
17                  exposure to flood hazards; and

18                  ~~(d)~~(4)        Base flood elevation data shall be provided for subdivision proposals and  
19                  other proposed development (including manufactured home parks and  
20                  subdivisions) which is greater than the lesser of fifty (50) lots or five (5)  
21                  acres.

22                  Section 2.    SEVERABILITY.

23                  If any portion of this Ordinance is determined by any Court to be invalid, the  
24                  invalid portion shall be stricken, and such striking shall not affect the validity of the

1 remainder of this Ordinance. If any Court determines that this Ordinance, or any portion  
2 hereof, cannot be legally applied to any individual(s), group(s), entity(ies), property(ies),  
3 or circumstance(s), such determination shall not affect the applicability hereof to any  
4 other individual, group, entity, property, or circumstance.

5 Section 3. INCLUSION IN CODE.

6 It is the intention of the Board of County Commissioners that the provisions of  
7 this Ordinance shall become and be made a part of the Broward County Code; and that  
8 the sections of this Ordinance may be renumbered or re-lettered and the word  
9 "ordinance" may be changed to "section," "article," or such other appropriate word or  
10 phrase in order to accomplish such intentions.

11 Section 4. EFFECTIVE DATE.

12 This Ordinance shall become effective as provided by law.

13 ENACTED

14 FILED WITH THE DEPARTMENT OF STATE

15 EFFECTIVE

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