

CITY OF CORAL GABLES, FLORIDA

ORDINANCE NO. 2021-XX

AN ORDINANCE OF THE CITY OF CORAL GABLES, FLORIDA, REPEALING AND REPLACING CHAPTER 113 “FLOOD DAMAGE PREVENTION” OF THE CITY OF CORAL GABLES CODE; TO ADOPT FLOOD HAZARD MAPS, TO DESIGNATE A FLOODPLAIN ADMINISTRATOR, TO ADOPT PROCEDURES AND CRITERIA FOR DEVELOPMENT IN FLOOD HAZARD AREAS, TO ADOPT AMENDMENTS TO THE FLORIDA BUILDING CODE; AND FOR OTHER PURPOSES; PROVIDING FOR APPLICABILITY; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, the Legislature of the State of Florida has, in Chapters 163 and 166, Florida Statutes, conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

WHEREAS, the Federal Emergency Management Agency has identified special flood hazard areas within the boundaries of the City of Coral Gables and such areas may be subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare; and

WHEREAS, the City of Coral Gables was accepted for participation in the National Flood Insurance Program on September 29, 1972 and the City Commission desires to continue to meet the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60, necessary for such participation; and

WHEREAS, Chapter 553, Florida Statutes, was adopted by the Florida Legislature to provide a mechanism for the uniform adoption, updating, amendment, interpretation, and enforcement of a state building code, called the *Florida Building Code*; and

WHEREAS, the City Council previously adopted requirements to (1) require use of FEMA Elevation Certificate and Floodproofing Certificate forms; (2) limit partitioning of and access to enclosures below elevated dwellings; and (3) accumulate costs of improvements over specific periods of time; and the City Commission is adopting new requirements to (1) require protection of critical facilities to a higher level of protection; and (2) apply coastal high hazard area requirements in the Coastal A Zone (when delineated by FEMA) for the purposes of the National Flood Insurance Program’s Community Rating System; and, pursuant to Chapter 8 Article III of the Miami-Dade County Code and Section 553.73(5), Florida Statutes, is formatting that requirement to coordinate with the Florida Building Code; and

WHEREAS, the City Commission has determined that it is in the public interest to adopt the proposed floodplain management regulations that are coordinated with the *Florida Building Code*.

NOW, THEREFORE, BE IT ORDAINED by the City Commission of the City of Coral Gables that the following floodplain management regulations are hereby adopted.

SECTION 1. The foregoing “WHEREAS” clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance upon adoption thereof.

SECTION 2. Chapter 113 “Flood Damage Prevention of the Official Code of the City of Coral Gables is hereby repealed and replaced as follows:

CHAPTER 113 – FLOOD DAMAGE PREVENTION

SECTION 113-1 GENERAL

(a) Title. These regulations shall be known as the *Flood Damage Prevention Ordinance* of the City of Coral Gables, hereinafter referred to as “this chapter.”

(b) Scope. The provisions of this chapter shall apply to all development that is wholly within or partially within any flood hazard area, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the *Florida Building Code*; installation or replacement of tanks; installation of swimming pools; and any other development.

(c) Intent. The purposes of this chapter and the flood load and flood resistant construction requirements of the *Florida Building Code* are to establish minimum requirements to safeguard the public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas to:

- (1) Minimize unnecessary disruption of commerce, access, and public service during times of flooding;
- (2) Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
- (3) Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
- (4) Manage the alteration of flood hazard areas and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
- (5) Minimize damage to public and private facilities and utilities;
- (6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;

- (7) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and
- (8) Meet the requirements of the National Flood Insurance Program for community participation as set forth in Title 44 Code of Federal Regulations, Section 59.22.

(d) Coordination with the *Florida Building Code*. This chapter is intended to be administered and enforced in conjunction with the *Florida Building Code*. Where cited, ASCE 24 refers to the edition of the standard that is referenced by the *Florida Building Code*.

(e) Warning. The degree of flood protection required by this chapter and the *Florida Building Code*, is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by man-made or natural causes. This chapter does not imply and should not be interpreted to mean that land outside of mapped special flood hazard areas, or that uses permitted within such flood hazard areas, will be free from flooding or flood damage. The flood hazard areas and base flood elevations contained in the Flood Insurance Study and shown on Flood Insurance Rate Maps and the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60, may be revised by the Federal Emergency Management Agency, requiring this community to revise these regulations to remain eligible for participation in the National Flood Insurance Program. No guaranty of vested use, existing use, or future use is implied or expressed by compliance with this chapter.

(f) Disclaimer of Liability. This chapter shall not create liability on the part of the City Commission of the City of Coral Gables or by any officer or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision lawfully made thereunder.

SECTION 113-2 APPLICABILITY

(a) General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

(b) Areas to which this chapter applies. This chapter shall apply to all flood hazard areas within the City of Coral Gables, as established in Section 113-2(c) herein.

(c) Basis for establishing flood hazard areas. The Flood Insurance Study for Miami-Dade County, Florida and Incorporated Areas dated September 11, 2009, and all subsequent amendments and revisions, and the accompanying Flood Insurance Rate Maps (FIRM), and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this chapter and shall serve as the minimum basis for establishing flood hazard areas. Studies and maps that establish flood hazard areas are on file at the Development Services Department, 405 Biltmore Way, Third Floor, Coral Gables, FL 33134.

(d) Submission of additional data to establish flood hazard areas. To establish flood hazard areas and base flood elevations, pursuant to Section 113-5 the Floodplain Administrator may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the community indicates that

ground elevations:

- (1) Are below the closest applicable base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as flood hazard area and subject to the requirements of this chapter and, as applicable, the requirements of the *Florida Building Code*.
- (2) Are above the closest applicable base flood elevation, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the special flood hazard area.

(e) Other laws. The provisions of this chapter shall not be deemed to nullify or otherwise affect any provisions of local, state, or federal law.

(f) Abrogation and greater restrictions. This chapter supersedes any ordinance in effect for management of development in flood hazard areas. However, it is not intended to repeal, abrogate, or otherwise affect any existing ordinances including but not limited to land development regulations, zoning ordinances, stormwater management regulations, or the *Florida Building Code*. In the event of a conflict between this chapter and any other ordinance, the more restrictive shall govern. This chapter shall not impair any deed restriction, covenant, or easement, but any land that is subject to such interests shall also be governed by this chapter.

(g) Interpretation. In the interpretation and application of this chapter, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

SECTION 113-3 DUTIES AND POWERS OF THE FLOODPLAIN ADMINISTRATOR

(a) Designation. The Development Services Director or his/her designee is designated as the Floodplain Administrator. The Floodplain Administrator may delegate performance of certain duties to other employees.

(b) General. The Floodplain Administrator is authorized and directed to administer and enforce the provisions of this chapter. The Floodplain Administrator shall have the authority to render interpretations of this chapter consistent with the intent and purpose of this chapter and may establish policies and procedures, in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this chapter without the granting of a variance pursuant to Section 113-7.

(c) Applications and permits. The Floodplain Administrator, in coordination with other pertinent offices of the community, shall:

- (1) Review applications and plans to determine whether proposed new development will be located in flood hazard areas;
- (2) Review applications for modification of any existing development in flood hazard areas for compliance with the requirements of this chapter;

- (3) Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries; a person contesting the determination shall have the opportunity to appeal the interpretation;
- (4) Provide available flood elevation and flood hazard information;
- (5) Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant;
- (6) Review applications to determine whether proposed development will be reasonably safe from flooding;
- (7) Issue development permits for development other than buildings and structures that are subject to the *Florida Building Code*, including buildings, structures and facilities exempt from the *Florida Building Code*, when compliance with this chapter is demonstrated, or disapprove the same in the event of noncompliance; and
- (8) Coordinate with and provide comments to the Building Official to assure that applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this chapter.

(d) Substantial improvement and substantial damage determinations. For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

- (1) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
- (2) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
- (3) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of “substantial improvement”; and
- (4) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the *Florida Building Code* and this chapter is required.

(e) Modifications of the strict application of the requirements of the *Florida Building Codes*. The Floodplain Administrator shall review requests submitted to the Building Official that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the *Florida Building Code* to determine whether such requests require the granting of a variance pursuant to Section 113-7.

(f) Notices and orders. The Floodplain Administrator shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this chapter.

(g) Inspections. The Floodplain Administrator shall make the required inspections as specified in Section 113-6 for development that is not subject to the *Florida Building Code*, including buildings, structures, and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect flood hazard areas to determine if development is undertaken without issuance of a permit.

(h) Other duties of the Floodplain Administrator. The Floodplain Administrator shall have other duties, including but not limited to:

- (1) Establish, in coordination with the Building Official, procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to Section 113-3(d);
- (2) Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps if the analyses propose to change base flood elevations or flood hazard area boundaries; such submissions shall be made within 6 months of such data becoming available;
- (3) Review required design certifications and documentation of elevations specified by this chapter and the *Florida Building Code* to determine that such certifications and documentations are complete;
- (4) Notify the Federal Emergency Management Agency when the corporate boundaries of the City of Coral Gables are modified; and
- (5) Advise applicants for new buildings and structures, including substantial improvements, that are located in any unit of the Coastal Barrier Resources System established by the Coastal Barrier Resources Act (Pub. L. 97-348) and the Coastal Barrier Improvement Act of 1990 (Pub. L. 101-591) that federal flood insurance is not available on such construction; areas subject to this limitation are identified on Flood Insurance Rate Maps as “Coastal Barrier Resource System Areas” and “Otherwise Protected Areas.”

(i) Floodplain management records. The Floodplain Administrator shall maintain and permanently keep records in accordance with State and Federal requirements and make available for public inspection all records that are necessary for the administration of this chapter and the flood resistant construction requirements of the *Florida Building Code*, including Flood Insurance Rate Maps; Letters of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the *Florida Building Code* and this chapter; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this chapter and the flood resistant construction requirements of the *Florida Building Code*. These records shall be available for public inspection at Development Services Department, 405

Biltmore Way, Third Floor, Coral Gables, FL 33134.

SECTION 113-4 PERMITS

(a) Permits required. Any owner or owner's authorized agent (hereinafter "applicant") who intends to undertake any development activity within the scope of this chapter, including buildings, structures, and facilities exempt from the *Florida Building Code*, which is wholly within or partially within any flood hazard area shall first make application to the Floodplain Administrator, and the Building Official if applicable, and shall obtain the required permit(s) and approval(s). No such permit or approval shall be issued until compliance with the requirements of this chapter and all other applicable codes and regulations has been satisfied.

(b) Development permits. Development permits shall be issued pursuant to this chapter for any development activities not subject to the requirements of the *Florida Building Code*, including buildings, structures, and facilities exempt from the *Florida Building Code*. Depending on the nature and extent of proposed development that includes a building or structure, the Floodplain Administrator may determine that a development permit is required in addition to a Building permit.

(c) Buildings, structures, and facilities exempt from the *Florida Building Code*. Pursuant to the requirements of federal regulation for participation in the National Flood Insurance Program (44 C.F.R., Sections 59 and 60), development permits shall be required for the following buildings, structures, and facilities that are exempt from the *Florida Building Code* and any further exemptions provided by law, which are subject to the requirements of this chapter:

- (1) Railroads and ancillary facilities associated with the railroad;
- (2) Nonresidential farm buildings on farms, as provided in Section 604.50, F.S.;
- (3) Temporary buildings or sheds used exclusively for construction purposes;
- (4) Mobile or modular structures used as temporary offices;
- (5) Those structures or facilities of electric utilities, as defined in Section 366.02, F.S., which are directly involved in the generation, transmission, or distribution of electricity;
- (6) Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term "chickee" means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other non-wood features;
- (7) Family mausoleums not exceeding 250 square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete;
- (8) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system; and
- (9) Structures identified in Section 553.73(10)(k), F.S., are not exempt from the *Florida Building Code* if such structures are located in flood hazard areas established on Flood Insurance Rate Maps.

(d) Application for a permit or approval. To obtain a development permit, the applicant shall

first file an application in writing on a form furnished by the community. The information provided shall:

- (1) Identify and describe the development to be covered by the permit or approval;
- (2) Describe the land on which the proposed development is to be conducted by legal description, street address, or similar description that will readily identify and definitively locate the site;
- (3) Indicate the use and occupancy for which the proposed development is intended;
- (4) Be accompanied by a site plan or construction documents as specified in Section 113-5;
- (5) State the valuation of the proposed work;
- (6) Be signed by the applicant or the applicant's authorized agent; and
- (7) Give such other data and information as required by the Floodplain Administrator.

(e) Validity of permit or approval. The issuance of a development permits pursuant to this chapter shall not be construed to be a permit for, or approval of, any violation of this chapter, the *Florida Building Codes*, or any other ordinance of this community. The issuance of permits based on submitted applications, construction documents, and information shall not prevent the Floodplain Administrator from requiring the correction of errors and omissions.

(f) Expiration. A development permit shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. Extensions for periods of not more than 180 days each shall be requested in writing of the Floodplain Administrator and justifiable cause shall be demonstrated.

(g) Suspension or revocation. The Floodplain Administrator is authorized to suspend or revoke a development permit if the permit was issued in error, on the basis of incorrect, inaccurate or incomplete information, or in violation of this chapter or any other ordinance, regulation or requirement of this community.

(h) Other permits required. Floodplain development permits and building permits shall include a condition that all other applicable state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:

- (1) The South Florida Water Management District; Section 373.036, F.S.;
- (2) Florida Department of Health for onsite sewage treatment and disposal systems; Section 381.0065, F.S. and Chapter 64E-6, F.A.C.;
- (3) Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; Section 161.055, F.S.
- (4) Florida Department of Environmental Protection for activities that affect wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act; and
- (5) Federal permits and approvals.

SECTION 113-5 SITE PLANS AND CONSTRUCTION DOCUMENTS

(a) Information for development in flood hazard areas. The site plan or construction documents for any development subject to the requirements of this chapter shall be drawn to scale and shall include, as applicable to the proposed development:

- (1) Delineation of flood hazard areas, flood zone(s), base flood elevation(s), and ground elevations, if necessary, for review of the proposed development;
- (2) Location of the proposed activity and proposed structures, and locations of existing buildings and structures; in coastal high hazard areas and Coastal A Zones, new buildings shall be located landward of the reach of mean high tide;
- (3) Location, extent, amount, and proposed final grades of any filling, grading, or excavation and evidence that development and fill will not block historic flow patterns and cause offsite increases in flooding;
- (4) Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose; and
- (5) Extent of any proposed alteration of sand dunes or mangrove stands, provided such alteration is approved by the Florida Department of Environmental Protection.

The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this chapter but that are not required to be prepared by a registered design professional if it is found that the nature of the proposed development is such that the review of such submissions is not necessary to ascertain compliance with this chapter.

(b) Additional analyses and certifications. For activities that propose to alter sand dunes or mangrove stands in coastal high hazard areas (Zone V), the applicant shall have an engineering analysis that demonstrate the proposed alteration will not increase the potential for flood damage signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents.

(c) Submission of additional data. When additional hydrologic, hydraulic, or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida licensed engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

SECTION 113-6 INSPECTIONS

(a) General. Development for which a development permit is required shall be subject to inspection.

(b) Development other than buildings and structures. The Floodplain Administrator shall inspect all development to determine compliance with the requirements of this chapter and the conditions of issued development permits.

(c) Buildings, structures, and facilities exempt from the *Florida Building Code*. The Floodplain Administrator shall inspect buildings, structures, and facilities exempt from the *Florida Building Code* to determine compliance with the requirements of this chapter and the conditions of issued development permits.

(d) Buildings, structures, and facilities exempt from the *Florida Building Code*, lowest floor inspection. Upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure, or facility exempt from the *Florida Building Code*, or the owner's authorized agent, shall submit to the Floodplain Administrator the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor.

(e) Buildings, structures, and facilities exempt from the *Florida Building Code*, final inspection. As part of the final inspection, the owner or owner's authorized agent shall submit to the Floodplain Administrator a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade; such certifications and documentations shall be prepared as specified in Section 113-6(d).

SECTION 113-7 VARIANCES AND APPEALS

(a) General. The Construction Regulation Board shall hear and decide on requests for appeals and requests for variances from the strict application of this chapter. Pursuant to Section 553.73(5), F.S., the Construction Regulation Board shall hear and decide on requests for appeals and requests for variances from the strict application of the flood resistant construction requirements of the *Florida Building Code*. This section does not apply to Section 3109 of the *Florida Building Code, Building*.

(b) Appeals. The City Commission shall hear and decide appeals from the Construction Regulation Board, which shall be based on the record and not *de novo*, when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator or the Construction Regulation Board in the administration and enforcement of this chapter. Any person aggrieved by the decision may appeal such decision to the Circuit Court, as provided by Florida Statutes.

(c) Limitations on authority to grant variances. The Construction Regulation Board shall base its decisions on variances on technical justifications submitted by applicants, the considerations for issuance in Section 113-7(f), the conditions of issuance set forth in Section 113-7(g), the minimum requirements of the Florida Building Code, FEMA and the comments and recommendations of the Floodplain Administrator, and the Building Official. The Construction Regulation Board shall not grant variances to allow buildings to have the lowest floor, or level of

dry floodproofing, lower than the base flood elevation shown on the FIRM. The Construction Regulation Board has the right to attach such conditions as it deems necessary to further the purposes and objectives of this chapter.

(d) Historic buildings. A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings, upon a determination, by the Historic Preservation Board, that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the *Florida Building Code*.

(e) Functionally dependent uses. A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this chapter, provided the variance is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.

(f) Considerations for issuance of variances. In reviewing requests for variances, the Construction Regulation Board shall consider all technical evaluations, all relevant factors, all other applicable provisions of the *Florida Building Code*, this chapter, and the following:

- (1) The danger that materials and debris may be swept onto other lands resulting in further injury or damage;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;
- (4) The importance of the services provided by the proposed development to the community;
- (5) The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;
- (6) The compatibility of the proposed development with existing and anticipated development;
- (7) The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;
- (8) The safety of access to the property in times of flooding for ordinary and emergency vehicles;
- (9) The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

- (10) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

(g) Conditions for issuance of variances. Variances shall be issued only upon:

- (1) Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this chapter or the require elevation standards; and
- (2) Determination by the Construction Regulation Board that:
 - (a) Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;
 - (b) The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and
 - (c) The variance is the minimum necessary, considering the flood hazard, to afford relief; and
- (3) Receipt of a signed statement by the applicant that the variance, if granted, shall be recorded in the Office of the Clerk of the Court in such a manner that it appears in the chain of title of the affected parcel of land; and
- (4) If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Floodplain Administrator to the applicant for the variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25 for \$100 of insurance coverage), and stating that construction below the base flood elevation increases risks to life and property.

SECTION 113-8 VIOLATIONS

(a) Violations. Any development that is not within the scope of the *Florida Building Code*, but that is regulated by this chapter, that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this chapter, shall be deemed a violation of this chapter. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by this chapter or the *Florida Building Code* is presumed to be a violation until such time as that documentation is provided.

(b) Authority. For development that is not within the scope of the *Florida Building Code* but that is regulated by this chapter and that is determined to be a violation, the Floodplain

Administrator is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work.

(c) Unlawful continuance; penalties. Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by law. Nothing herein shall prevent the city from taking such other lawful actions as are necessary to prevent or remedy any violation.

SECTION 113-9 DEFINITIONS

Unless otherwise expressly stated, the following words and terms shall, for the purposes of this chapter, have the meanings shown in this section. Where terms are not defined in this chapter and are defined in the *Florida Building Code*, such terms shall have the meanings ascribed to them in that code. Where terms are not defined in this chapter or the *Florida Building Code*, such terms shall have ordinarily accepted meanings such as the context implies.

Accessory structure means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure and limited to parking and storage. Accessory structures should constitute a minimal investment, may not be used for human habitation, and must be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Appeal means a request for a review of the Floodplain Administrator's interpretation of any provision of this chapter or a review of a decision by the Construction Regulation Board.

ASCE 24 means the standard titled *Flood Resistant Design and Construction* that is referenced by the *Florida Building Code*. ASCE 24 is developed and published by the American Society of Civil Engineers, Reston, VA.

Base flood means the flood having a 1-percent chance of being equaled or exceeded in any given year. [Also defined in FBC, B, Section 202.] The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation means the elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM). [Also defined in FBC, B, Section 202.]

Basement means the portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 202; see "Basement (for flood loads)".]

Breakaway walls mean any type of wall, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal plastic, or any other suitable building material, which is not part of the structural support of the building and is intended through its design and construction to

collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system or any other building to which they might be carried by floodwaters. The design of a breakaway wall must be certified by a registered structural engineer.

Coastal A Zone means the area within a special flood hazard area, landward of a V zone, or landward of an open coast without mapped coastal high hazard areas. In a coastal A zone, the principal source of flooding must be astronomical tides, storm surges, seiches or tsunamis, not riverine flooding. During the base flood conditions, the potential for breaking wave height shall be greater than or equal to 1 ½ feet (457 mm). The inland limit of the coastal A zone is (a) the Limit of Moderate Wave Action if delineated on a FIRM, or (b) designated by the authority having jurisdiction. [Also defined in FBC, B, Section 202.]

Coastal high hazard area means a special flood hazard area extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Coastal high hazard areas are also referred to as “high hazard areas subject to high velocity wave action” or “V Zones” and are designated on Flood Insurance Rate Maps (FIRM) as Zone V1-V30, VE, or V.

Critical Facility means:

- (1) Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic and/or water-reactive materials;
- (2) Hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood;
- (3) Police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers that are needed for flood response activities before, during, and after a flood;
- (4) Public and private utility facilities that are vital to maintaining or restoring normal services to flooded areas before, during, and after a flood; and
- (5) Buildings and structures assigned to Flood Design Class 4 in ASCE 24, latest edition and/or as amended.

Design flood means the flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) Area with a floodplain subject to a 1-percent or greater chance of flooding in any year; or
- (2) Area designated as a flood hazard area on the community’s flood hazard map, or otherwise legally designated.

Design flood elevation means the elevation of the “design flood,” including wave height, relative to the datum specified on the community’s legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building’s perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet. [Also defined in FBC, B, Section 202.]

Development means any man-made change to improved or unimproved real estate, including but

not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land disturbing activities.

Encroachment means the placement of fill, excavation, buildings, permanent structures, or other development into a flood hazard area which may impede or alter the flow capacity of riverine flood hazard areas.

Existing building and existing structure means any buildings and structures for which the “start of construction” commenced prior to September 29, 1972. [Also defined in FBC, B, Section 202.]

Federal Emergency Management Agency (FEMA) means the federal agency that, in addition to carrying out other functions, administers the National Flood Insurance Program.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land from: [Also defined in FBC, B, Section 202.]

- (1) The overflow of inland or tidal waters; or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood damage-resistant materials means any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. [Also defined in FBC, B, Section 202.]

Flood hazard area means the greater of the following two areas: [Also defined in FBC, B, Section 202.]

- (1) The area within a floodplain subject to a 1-percent or greater chance of flooding in any year; or
- (2) The area designated as a flood hazard area on the community’s flood hazard map, or otherwise legally designated.

Flood Insurance Rate Map (FIRM) means the official map of the city on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the community. [Also defined in FBC, B, Section 202.]

Flood Insurance Study (FIS) means the official report provided by the Federal Emergency Management Agency that contains the Flood Insurance Rate Map, the Flood Boundary and Floodway Map (if applicable), the water surface elevations of the base flood, and supporting technical data. [Also defined in FBC, B, Section 202.]

Floodplain Administrator means the office or position designated and charged with the administration and enforcement of this chapter (may be referred to as the Floodplain Manager). The Floodplain Administrator means the office or position designated and charges with the administration and enforcement of this chapter (may be referred to as the Floodplain Manager). The Floodplain Administrator shall be either a Building Official, Professional Engineer,

Registered Architect or an Association of State Floodplain Managers' Certified Floodplain Manager.

Florida Building Code means the family of codes adopted by the Florida Building Commission, including: *Florida Building Code, Building*; *Florida Building Code, Residential*; *Florida Building Code, Existing Building*; *Florida Building Code, Mechanical*; *Florida Building Code, Plumbing*; and *Florida Building Code, Fuel Gas*.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, including only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities; the term does not include long-term storage or related manufacturing facilities.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls or foundation of a structure.

Historic structure means any structure that is registered in a local, state, or national registry of historic places and is determined eligible for the exception to the flood hazard area requirements of the *Florida Building Code, Existing Building*, Chapter 12 Historic Buildings.

Letter of Map Change (LOMC) means an official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

Letter of Map Revision Based on Fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

Light-duty truck means, as defined in 40 C.F.R. 86.082-2, any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000

pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

- (1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle;
- (2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
- (3) Available with special features enabling off-street or off-highway operation and use.

Limit of Moderate Wave Action means a line shown on FIRMs to indicate the inland limit of the 1 ½-foot (457 mm) breaking wave height during the base flood. [Also defined in FBC, B, Section 202.]

Lowest floor means the lowest floor of the lowest enclosed area of a building or structure, including basement, but excluding any unfinished or flood-resistant enclosure, other than a basement, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of the non-elevation requirements of the *Florida Building Code* or ASCE 24. [Also defined in FBC, B, Section 202.]

Market value means the price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used in this chapter, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, Actual Cash Value (replacement cost depreciated for age and quality of construction), or tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.

New construction means, for the purposes of administration of this chapter and the flood resistant construction requirements of the *Florida Building Code*, structures for which the “start of construction” commenced on or after September 29, 1972 and includes any subsequent improvements to such structures.

Sand dunes means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Special flood hazard area means an area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. Special flood hazard areas are shown on FIRMs as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V. [Also defined in FBC, B Section 202.]

Start of construction means the date of issuance of permits for new construction and substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement is within 180 days of the date of the issuance. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, or the construction of columns.

Permanent construction does not include land preparation (such as clearing, grading, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or

foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main buildings. For a substantial improvement, the actual “start of construction” means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building. [Also defined in FBC, B Section 202.]

Substantial damage means damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. [Also defined in FBC, B Section 202.]

Substantial improvement means any combination of repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure taking place during a five-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. The period of accumulation begins when the first improvement or repair of each building is permitted. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include: [Also defined in FBC, B, Section 202.]

- (1) Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions; or
- (2) Reserved;
- (3) Repairs for damage from any origin that are determined to be less than substantial damage.

Variance means a grant of relief from the requirements of this chapter which permits construction in a manner that would not otherwise be permitted by this chapter.

SECTION 113-10 BUILDINGS AND STRUCTURES

(a) Design and construction of buildings, structures, and facilities exempt from the *Florida Building Code*. Pursuant to Section 113-4(c), buildings, structures, and facilities that are exempt from the *Florida Building Code*, including substantial improvement or repair of substantial damage of such buildings, structures, and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the *Florida Building Code* that are not walled and roofed buildings shall comply with the requirements of Section 113-16.

(b) Specific methods of construction and requirements. Pursuant to Chapter 8 Article III of the Miami-Dade County Code, the following specific methods of construction and requirements apply:

- (1) Elevation Certificates. Amend Section 110.3 inspection requirements to require submission of FEMA Elevation Certificate (FEMA Form 086-0-33) for foundation and

final inspections to certify elevations.

- (2) Dry Floodproofing Certificates. Amend Section 1612 flood hazard documentation to require use of FEMA Floodproofing Certificate (FEMA Form 086-0-34) for statements for dry floodproofing designs.
- (3) Limitations on Enclosures Under Elevated Dwellings. Enclosed areas shall: (a) have the minimum necessary access 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 elevated building (stairway or elevator); (b) not have the interior portion partitioned or finished into separate rooms except for stairwells, ramps and elevators, unless a partition is required by the fire code.
- (4) Registered Design Professional Required. Designs for foundations of dwellings in flood hazard areas shall be prepared and sealed by registered design professionals.
- (5) Coastal A Zones:
 - a. In the Florida Building Code, Residential, Section R322.3, in foundations remove the exception (stem wall foundations in Coastal A Zones);
 - b. In the Florida Building Code, Building, Section 1612, delete and reserve Section 1612.4.1 (modification of ASCE 24 to permit dry floodproofing in Coastal A Zones);
 - c. In the Florida Building Code, Building, Section 1612, add new Section 1612.4.3 as follows:

1612.4.3 Modification of ASCE 24 (Coastal A Zone). Section 4.5.13 in ASCE 24 shall be modified as follows:

 1. Paragraph 1 shall be modified: “In Coastal High Hazard Areas and Coastal A Zones, stem walls shall not be permitted.”
 2. Paragraph 2 shall be deleted.
- (6) Critical facilities. Critical facilities shall be elevated or dry floodproofed to or above the 500-year (0.2%) flood elevation plus 1 foot.
- (7) Cumulative Substantial Improvement. In the Florida Building Code, Building and Florida Building Code, Existing Building, Section 202 definitions for the term “Substantial Improvement” shall be as follows:

Substantial improvement. Any combination of repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure taking place during a five-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. The period of accumulation begins when the first improvement or repair of each building is permitted. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that

are the minimum necessary to assure safe living conditions.

- (2) ~~Reserved. Any alteration of a historic structure provided the alteration will not preclude the structure's continued designation as a historic structure.~~

(c) Detached accessory structures. Detached accessory structures are permitted below the base flood elevation provided the accessory structures are used only for parking or storage and:

- (1) If located in special flood hazard areas (Zone A/AE) other than coastal high hazard areas, are one-story and not larger than 600 sq. ft.;
- (2) If located in special flood hazard areas (Zone A/AE) other than coastal high hazard areas, have flood openings in accordance with Section R322.2 of the Florida Building Code, Residential;
- (3) If located in coastal high hazard areas (Zone V/VE), are not located below elevated buildings and are not larger than 100 sq. ft.;
- (4) Are anchored to resist flotation, collapse, or lateral movement resulting from flood loads;
- (5) Have flood damage-resistant materials used below the base flood elevation plus one (1) foot; or
- (6) Have mechanical, plumbing, and electrical systems, including plumbing fixtures, elevated to or above the base flood elevation plus one (1) foot. If served by electricity, have not more than one switch and one outlet located below the base flood elevation and connected to a ground fault interrupt breaker.

(d) Temporary structures. Temporary development permits may be issued for certain types of structures (e.g., construction trailers, construction site offices) located temporarily on property, for not more than 180 days, without having to comply with the anchoring, elevation, and other requirements for buildings in flood hazard areas provided the following criteria are met:

- (1) The structure is mobile, or can be made so, and is capable of being removed from the site with a minimum of 36 hours' warning;
- (2) The applicant submits a plan for the removal of the structure, containing the following documentation:
 - a. The name, address, phone number and emergency contact point of the individual responsible for the removal of the structure;
 - b. The time at which the structure will be removed (i.e., a minimum of 72 hours in advance of the projected landfall of a hurricane);
 - c. A copy of a contract or other suitable instrument with a trucking company to ensure the availability of removal of the structure when needed, together with the name, address, and emergency phone number of the responsible trucking company agent;
 - d. Designation, accompanied by documentation (e.g., signed consent of the property owner), of a site outside the city to which the structure will be moved; and

- e. Signatures of the applicant, property owner on which the structure will be placed, and owner of the structure, agreeing to abide by the terms of the removal plan.
- (3) Upon review and approval by the Floodplain Administrator, the permittee shall provide a copy of the permit and removal plan to the local emergency management coordinator.

SECTION 113-11 SUBDIVISIONS

(a) Minimum requirements. Subdivision proposals shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- (3) Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(b) Subdivision plats. Where any portion of proposed subdivisions lies within a flood hazard area, the following shall be required:

- (1) Delineation of flood hazard areas, flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats; and
- (2) Compliance with the site improvement and utilities requirements of Section 113-12.

SECTION 113-12 SITE IMPROVEMENTS, UTILITIES AND LIMITATIONS

(a) Minimum requirements. All proposed new development shall be reviewed to determine that:

- (1) Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
- (2) All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
- (3) Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

(b) Sanitary sewage facilities. All new and replacement sanitary sewage facilities, private sewage treatment plants (including all pumping stations and collector systems), and on-site waste disposal systems shall be designed in accordance with the standards for onsite sewage treatment and disposal systems in Chapter 64E-6, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into flood waters, and impairment of the facilities and systems.

(c) Water supply facilities. All new and replacement water supply facilities shall be designed in

accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.

(d) Limitations on placement of fill. Subject to the limitations of this chapter, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the *Florida Building Code*.

(e) Limitations on sites in coastal high hazard areas (Zone V) and Coastal A Zones. In coastal high hazard areas and Coastal A Zones, alteration of sand dunes and mangrove stands shall be permitted only if such alteration is approved by the Florida Department of Environmental Protection and only if the engineering analysis required by Section 113-5(b) demonstrates that the proposed alteration will not increase the potential for flood damage. Construction or restoration of dunes under or around elevated buildings and structures shall comply with Section 113-16(e)(3).

SECTION 113-13 MANUFACTURED HOMES AND RECREATIONAL VEHICLES

Manufactured homes, recreational vehicles, and park trailers are not permitted in the City of Coral Gables.

SECTION 113-14 TANKS

(a) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty.

(b) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Section 113-14(c) shall:

- (1) Be permitted in flood hazard areas (Zone A) other than coastal high hazard areas and Coastal A Zones, provided the tanks are anchored or otherwise designed and constructed to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris; and
- (2) Not be permitted in coastal high hazard areas (Zone V) and Coastal A Zones.

(c) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the design flood elevation and attached to a supporting structure that is designed to prevent flotation, collapse, or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area.

(d) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

- (1) At or above the design flood elevation or fitted with covers designed to prevent the

inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and

- (2) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

SECTION 113-15 OTHER DEVELOPMENT

(a) General requirements for other development. All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in this chapter or the *Florida Building Code*, shall:

- (1) Be located and constructed to minimize flood damage;
- (2) Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;
- (3) Be constructed of flood damage-resistant materials; and
- (4) Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

(b) Concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios, and similar nonstructural uses in coastal high hazard areas (Zone V) and Coastal A Zones. In coastal high hazard areas and Coastal A Zones, concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios, and similar nonstructural uses are permitted beneath or adjacent to buildings and structures provided the concrete slabs are designed and constructed to be:

- (1) Structurally independent of the foundation system of the building or structure;
- (2) Frangible and not reinforced, so as to minimize debris during flooding that is capable of causing significant damage to any structure; and
- (3) Have a maximum slab thickness of not more than four (4) inches.

(c) Decks and patios in coastal high hazard areas (Zone V) and Coastal A Zones. In addition to the requirements of the *Florida Building Code*, in coastal high hazard areas and Coastal A Zones decks and patios shall be located, designed, and constructed in compliance with the following:

- (1) A deck that is structurally attached to a building or structure shall have the bottom of the lowest horizontal structural member at or above the design flood elevation and any supporting members that extend below the design flood elevation shall comply with the foundation requirements that apply to the building or structure, which shall be designed to accommodate any increased loads resulting from the attached deck.
- (2) A deck or patio that is located below the design flood elevation shall be structurally independent from buildings or structures and their foundation systems and shall be

designed and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable of causing structural damage to the building or structure or to adjacent buildings and structures.

- (3) A deck or patio that has a vertical thickness of more than twelve (12) inches or that is constructed with more than the minimum amount of fill necessary for site drainage shall not be approved unless an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to the building or structure or to adjacent buildings and structures.
- (4) A deck or patio that has a vertical thickness of twelve (12) inches or less and that is at natural grade or on nonstructural fill material that is similar to and compatible with local soils and is the minimum amount necessary for site drainage may be approved without requiring analysis of the impact on diversion of floodwaters or wave runup and wave reflection.

(d) Other development in coastal high hazard areas (Zone V) and Coastal A Zones. In coastal high hazard areas and Coastal A Zones, development activities other than buildings and structures shall be permitted only if also authorized by the appropriate federal, state or local authority; if located outside the footprint of, and not structurally attached to, buildings and structures; and if analyses prepared by qualified registered design professionals demonstrate no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures. Such other development activities include but are not limited to:

- (1) Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;
- (2) Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the design flood or otherwise function to avoid obstruction of floodwaters; and
- (3) On-site sewage treatment and disposal systems defined in 64E-6.002, F.A.C., as filled systems or mound systems.

(e) Nonstructural fill in coastal high hazard areas (Zone V) and Coastal A Zones. In coastal high hazard areas and Coastal A Zones:

- (1) Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around buildings.
- (2) Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall be permitted only if an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures.
- (3) Where authorized by the Florida Department of Environmental Protection or applicable local approval, sand dune construction and restoration of sand dunes under or around elevated buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection if the scale and location of the dune work is consistent with local beach-dune morphology and the vertical

clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building.

SECTION 3. In terms of design, plan application review, construction and inspection of buildings and structures, the cost impact as an overall average is negligible in regard to the local technical amendments because all development has been subject to the requirements of the local floodplain management ordinance adopted for participation in the National Flood Insurance Program. In terms of lower potential for flood damage, there will be continued savings and benefits to consumers.

SECTION 4. For the purposes of jurisdictional applicability, this ordinance shall apply in the City of Coral Gables. This ordinance shall apply to all applications for development, including building permit applications and subdivision proposals, submitted on or after the effective date of this ordinance.

SECTION 5. It is the intent of the City Commission that the provisions of this ordinance shall become and be made a part of the City of Coral Gables Code of Ordinances, and that the sections of this ordinance may be renumbered or relettered and the word “ordinance” may be changed to “section,” “article,” “regulation,” or such other appropriate word or phrase, in order to accomplish such intentions.

SECTION 6. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any part thereof, other than the part so declared.

SECTION 7. This ordinance become effective upon the date of its passage and adoption herein.

PASSED on first reading **{insert date}**.

PASSED and ADOPTED in regular session, with a quorum present and voting, by the **City Commission**, upon second and final reading this **{insert date}**.

APPROVED

RAUL VALDES-FAULI
MAYOR

ATTEST:

BILLY Y. URQUIA
CITY CLERK

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

MIRIAM SOLER RAMOS
CITY ATTORNEY