

AN ORDINANCE OF THE CITY OF PORT ST. LUCIE, FLORIDA, SPECIFICALLY REPEALING CHAPTER 152 OF THE PORT ST. LUCIE CODE OF ORDINANCES AND SUBSTITUTING THE FOLLOWING AMENDED CHAPTER 152 IN ITS PLACE; PROVIDING AN EFFECTIVE DATE

THE CITY OF PORT ST. LUCIE HEREBY ORDAINS:

Section 1. That Chapter 152, Port St. Lucie City Code, is hereby specifically repealed and the following amended Chapter 152 shall be substituted in its place and read as follows:

CHAPTER 152. - FLOOD PLAIN REGULATIONS

Sec. 152.01. - Findings of fact.

Sec. 152.02. - Statement of purpose.

Sec. 152.03. - Objectives.

Sec. 152.04. - Definitions.

Sec. 152.05. - General provisions.

Sec. 152.06. - Administration.

Sec. 152.07. - Provisions for flood hazard reduction.

Sec. 152.08. - Standards for streams without established base flood elevation and/or floodways.

Sec. 152.09. - Standards for subdivision proposals.

Sec. 152.10. - Standards for areas of shallow flooding (AO zones).

Sec. 152.99. - Penalty.

Sec. 152.00 – Statutory Authorization

The Legislature of the State of Florida has authorized and delegated in Chapter 166, Florida Statutes, the responsibility of local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Port St. Lucie does hereby adopt the following Flood Plain management regulations.

Sec. 152.01. - Findings of fact.

(a) The flood areas of the city are subject to periodic inundation which results 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.

(b) These flood losses are caused by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

(Ord. 91-91, passed 1-13-92)

Sec. 152.02. - Statement of purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (a) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (b) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (c) Control the alteration of natural flood plains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- (d) Control filling, grading, dredging and other development which may increase erosion or flood damage; and
- (e) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

(Ord. 91-91, passed 1-13-92)

Sec. 152.03. - Objectives.

The objectives of this chapter are to:

- (a) Protect human life and health;
- (b) Minimize expenditure of public money for costly flood control projects;
- (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (d) Minimize prolonged business interruptions;
- (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;
- (f) Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and
- (g) Insure that potential home buyers are notified that property is in a flood area.

(Ord. 91-91, passed 1-13-92)

Sec. 152.04. - Definitions.

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

Addition (to an-existing building). Any walled and roofed expansion to the perimeter or height of a building ~~in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.~~

Appeal. A request for a review of the building official or Flood Plain Administrator's interpretation of any provision of this ordinance or a request for a variance.

Area of shallow flooding. A designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard. The land in the flood plain within a community subject to a one (1) percent or greater chance of flooding in any given year. This term is synonymous with the phrase "special flood hazard area".

Base flood. The flood having a one (1) percent chance of being equaled or exceeded in any given year.

Basement. That portion of a building having its floor subgrade (below ground level) on all sides.

Breakaway wall. A wall that 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.

Building. See *Structure*.

Building official. The building official of this city, or his designee.

Coastal high hazard area. The area subject to high velocity waters caused by, but not limited to hurricane wave wash. This area is designated on a FIRM as Zone V1-30, VE or V.

Development. Any man-made change to improved or unimproved real estate including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating and drilling operations, or storage of materials or equipment. (The building official addresses all buildings and/or structures.)

Elevated building. A non-basement building built to have the lowest floor elevated above the ground level by solid foundation perimeter walls, pilings, columns (posts and piers) or shear walls.

Existing construction. Any structure for which the "start of construction" commenced before February 19, 1982. This term may also be referred to as "existing structures".

Existing manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before February 19, 1982.

Expansion to an existing manufactured home park or subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from:

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

Flood hazard boundary map (FHBM). An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as Approximate Zone A.

Flood insurance rate map (FIRM). An official map of a community, on which the Federal Emergency Management Agency has delineated both the area of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study (FIS). The official hydrology and hydraulics report provided by FEMA. The study contains an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation, and determination of mudslide (i.e., mudflow) and other flood-related erosion hazards. The study may also contain flood profiles, as well as the FIRM, FHBM (where applicable), and other related data and information.

Floodproofing. Any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway. The channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Functionally dependent facility. A facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair, ~~or seafood processing facilities~~. The term does not include long-term storage, manufacture, sales, or service facilities.

Highest adjacent grade. The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

Historic structure. Any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the department of interior) or preliminarily determined by the secretary of the interior as meeting the requirements for individual listing on the National Register;

- (2) Certified or preliminarily determined by the secretary of the interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the secretary of the interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the secretary of the interior; or
 - b. Directly by the secretary of the interior in states without approved programs.

Lowest adjacent grade. The lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design standards of this chapter.

Mangrove stand. An assemblage of mangrove trees which is mostly low trees noted for a copious development of interlacing adventitious roots above the ground and which contain one (1) or more of the following species: black mangrove (*Avicennia Nitida*); red mangrove (*Rhizophora Mangle*); white mangrove (*Languncularia Racemosa*); and buttonwood (*Conocarpus Erecta*).

Manufactured home. A building, transportable in one (1) or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for one hundred eighty (180) consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mean sea level. The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the flood plain. For purposes of this chapter, the term is synonymous with North American Vertical Datum (NAVD).

North American Vertical Datum (NAVD). As corrected in 1988 is a vertical control used as a reference for establishing varying elevations within the flood plain.

New construction. Any structure for which the "start of construction" commenced on or after February 19, 1982. The term also includes any subsequent improvements to such structures.

New manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after February 19, 1982.

Recreational vehicle. A vehicle which is:

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

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

Special flood hazard area. See *Area of special flood hazard*.

Start of construction. (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P. L. 97-348)), includes substantial improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement or permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. 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.

Structure. A walled and roofed building, including gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

Substantial improvement. Any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during the life of a structure, in which the

cumulative cost equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the code enforcement official and which are solely necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Substantially improved existing manufactured home parks or subdivisions. Where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Variance. A grant of relief from the requirements of this ordinance ~~which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship.~~

Violation. The failure of a structure or other site development to be fully compliant with the requirements of this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

~~*Watercourse. Ditch or larger*~~

(Ord. 91-91, passed 1-13-92)

Sec. 152.05. - General provisions.

(a) *Lands to which this chapter applies.* This chapter shall apply to all areas of special flood hazard within the jurisdiction of this city.

(b) *Basis for establishing the areas of special flood hazard.* The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Study for St. Lucie County, dated February 16, 2012, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this chapter.

(c) *Establishment of development permit.* A development permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities.

(d) *Compliance.* No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this chapter and other applicable regulations.

(e) *Abrogation and greater restrictions.* This chapter is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance conflict or overlap, whichever imposes the most stringent restrictions shall prevail.

(f) *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.

(g) *Warning and disclaimer of liability.* The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of this city or any officer or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision lawfully made hereunder.

(Ord. 91-91, passed 1-13-92)

Cross reference— Penalty, see section 152.99.

Sec. 152.06. - Administration.

(a) *Designation of the Flood plain Administrator.* The City Engineer or their designee official is hereby appointed to administer and implement provisions of this chapter and is herein referred to as the Flood Plain Administrator.

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

- (1) *Application stage. Flood Plain Administrator*
 - a. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;
 - b. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development

Application stage. Building official

- a. Elevation in relation to mean sea level to which any nonresidential building will be floodproofed;
- b. Certificate from a registered professional engineer or architect that the nonresidential floodproofed building will meet the floodproofing criteria of subsection 152.07(b)(2);
- c. Elevation in relation to mean sea level of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer or architect indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that are in accordance with accepted standards of practice in Coastal High Hazard Areas.

(2) *Construction stage.* Upon placement of the lowest floor, or floodproofing by whatever construction means, or upon placement of the lowest horizontal structural member, whichever is applicable, it shall be the duty of the permit holder to submit to the building official a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest portion of the lowest horizontal structural member, whichever is applicable, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The building official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

- (c) *Duties and responsibilities of the building official.* Duties of the building official shall include, but not be limited to the following:

(1) Require copies of additional Federal, State of Florida, or local permits, especially as they relate to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065; and 553, Part IV, Florida Statutes, be submitted along with the development permit application and maintain such permits on file with the development permit.

(2) Verify and record the actual elevation (in relation to mean seal level) of the lowest floor (A-Zones) or bottom of the lowest horizontal structural member of the lowest floor (V-Zones) of all new and substantially improved buildings, in accordance with section 152.060.

(3) Verify and record the actual elevation (in relation to mean sea level) to which the

new and substantially improved buildings have been flood-proofed, in accordance with Section 152.06.

(4) In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the building is designed and securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash.

(5) In coastal high hazard areas, the building official shall review plans to ensure that if the area below the lowest horizontal structural member of the lowest floor is enclosed, it may be done so with open wood lattice and insect screening or with non-supporting breakaway walls that meet the standards of this chapter.

(6) When floodproofing is utilized for a particular building, the building official shall obtain certification from a registered professional engineer or architect, in accordance with section 152.07, certifying that all areas of the building, together with attendant utilities and sanitary facilities, below the required elevation are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy and flood-borne debris in accordance with this chapter.

(7) Where base flood elevation data is utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements in accordance with this chapter. All records pertaining to the provisions of this chapter shall be maintained in the office of the building official and shall be open for public inspection.

(d) *Duties and responsibilities of the Flood Plain Administrator.* Duties of the Flood Plain Administrator shall include, but not be limited to the following:

(1) Review all site development permits to assure sites are reasonably safe from flooding.

(2) Require copies of additional Federal, State of Florida, or local permits, especially as they relate to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065; and 553, Part IV, Florida Statutes, be submitted along with the development permit application and maintain such permits on file with the development permit.

(3) Notify adjacent communities, the Florida Division of Emergency Management State Flood Plain Management Office, the South Florida Water Management District, the Federal Emergency Management Agency, and other Federal and/or State of Florida agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse.

(4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.

(5) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Flood Plain Administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this chapter.

(6) When base flood elevation data or floodway data has not been provided in accordance with subsection 152.05(b), the Flood Plain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of section 152.07.

(7) Notify FEMA within (6) months when new technical or scientific data becomes available to the community concerning physical changes affecting flooding conditions so that risk premium rates and Flood Plain management requirements will be based on current data.

(e) *Variance procedures.* Variance procedures shall be as follows:

(1) The city council shall hear and decide appeals and requests for variances from the requirements of this chapter.

(2) The city council shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the building official and/or Flood Plain Administrator in the enforcement or administration of this chapter.

(3) Variances may be issued for the repair or rehabilitation of historic structures (see section 152.04 for definition) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum to preserve the historic character and design of the structure.

(4) In passing upon such applications, the city council shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this chapter; and:

- a. The danger that materials may be swept onto other lands to the injury of others;
- b. The danger to life and property due to flooding or erosion damage;
- c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- d. The importance of the services provided by the proposed facility to the community;
- e. The necessity of the facility to a waterfront location, in the case of a functionally dependent facility:

- f. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - g. The compatibility of the proposed use with existing and anticipated development;
 - h. The relationship of the proposed use to the comprehensive plan and Flood Plain management program for that area;
 - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
 - k. 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, and streets and bridges.
- (5) Upon consideration of the factors listed above, and the purposes of this chapter, the city council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- (6) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (7) Conditions for variances. Conditions for variances shall be as follows:
- a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
 - b. Variances shall only be issued upon a showing of good and sufficient cause; a determination that failure to grant the variance would result in exceptional hardship; and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - c. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the building is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the ~~reduced~~ being located below the base flood elevation.
 - d. The building official and/or Flood Plain Administrator shall maintain the records of all appeal actions and report any variances to the Florida Division of Emergency Management, State Flood Plain Management Office and/or Federal

Emergency Management Agency upon request.

(8) Variances shall not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

(Ord. 91-91, passed 1-13-92)

Cross reference — Penalty, see section 152.99.

Sec. 152.07. - Provisions for flood hazard reduction.

(a) *General standards.* In all areas of special flood hazard the following provisions are required:

- (1) New construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (9) Any alteration, repair, reconstruction or improvements to a building which is in compliance with the provisions of this chapter shall meet the requirements of "new construction" as defined in section 152.04 and as regulated in this chapter; and
- (10) Any alteration, repair, reconstruction or improvements to a building which is not in compliance with the provisions of this chapter shall be undertaken only if said

nonconformity is not furthered, extended, or replaced.

(11) All necessary permits from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334 shall be submitted along with the application for floodplain development permit application.

(b) *Specific standards.* In all A-Zones, where base flood elevation data has been provided, as set forth in sections 152.04 or 152.06, the following provisions, in addition to those specified in section 152.07 (a) and section 152.09, are required:

(1) *Residential construction.* New construction and substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated no lower than six (6) inches above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters automatic equalization of hydrostatic flood forces shall be provided in accordance with the standards of subsection 152.06(b)(3).

(2) *Nonresidential construction.* New construction and substantial improvement of any commercial, industrial, or nonresidential building (or manufactured home) shall have the lowest floor, including basement, elevated no lower than one (1) foot above the level of the base flood elevation. Buildings located in all A-zones may be floodproofed in lieu of being elevated provided that all areas of the building below the required elevation are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection (b)(2) are satisfied. Such certification shall be provided to the building official as set forth in section 152.06 including the corresponding engineering data, and the operational and maintenance plans.

(3) *Elevated buildings.* New construction and substantial improvements that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.

a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet or exceed the following minimum criteria:

1. Provide a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
2. The bottom of all openings shall be no higher than one (1) foot above adjacent interior grade (which must be equal to or higher in elevation than the adjacent exterior grade)

3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of flood waters in both directions.

b. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

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

(4) *Standards for manufactured homes and recreational vehicles.*

a. All manufactured homes placed, or substantially improved, within Zones A1-30, AH and AE, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring to resist floatation, collapse and lateral movement.

b. All manufactured homes placed or substantially improved in an existing manufactured home park must be elevated so that:

1. The lowest floor of the manufactured home is elevated at or above the level of the base flood elevation; or

2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than thirty-six (36) inches in height above grade.

3. The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

c. All recreational vehicles placed on sites must either:

1. Be on site for fewer than 180 consecutive days,

2. Be fully licensed and ready for highway use; or

3. The recreational vehicle must meet all the requirements for new construction, including anchoring and elevation requirements, of subsections 152.07(b)(4)a. and 152.07(b)(4)b.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached structures.

(5) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures within Zones AO and AH.

(6) *Standards for waterways with established Base Flood Elevations, but without Regulatory Floodways.* Located within the areas of special flood hazard established in section 152.05 (b), where streams exist for which base flood elevation data has been provided by the Federal Emergency Management Agency without the delineation of the regulatory floodway (Zones AE and A1-30), the following provisions, in addition to those set forth in section 152.07 (b) (1) through (5), shall apply:

- (a) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development including fill shall be permitted within the areas of special flood hazard, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (b) Development activities which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies – with the community’s endorsement – for a conditional FIRM revision, and receives the approval of the Federal Emergency Management Agency (FEMA).

(7) *Floodways.* Located within areas of special flood hazard established in section 152.05, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following provisions shall apply:

- a. Encroachments, including fill, new construction, substantial improvements and other developments shall be prohibited unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;
- b. If subsection 152.07(b)(5)a. is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of section 152.07.
- c. The placement of manufactured homes (mobile homes) shall be prohibited, except in an existing manufactured home (mobile home) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of subsection 152.07(a)(2); the elevation standards of subsection 152.07(b)(1) and 152.07(b)(2); and the encroachment standards of subsection 152.07(b)(7)a., are met.

(Ord. 91-91, passed 1-13-92)

Cross reference— Penalty, see section 152.99.

Sec. 152.08. - Standards for streams ~~without~~with established base flood elevations ~~and/or but~~ without regulatory floodways.

Located within the areas of special flood hazard established in subsection 152.05(b), where streams exist but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions in addition to those specified in section 152.07 (a) and section 152.09, apply:

(a) No encroachments, including fill material or structures, shall be located within areas of special flood hazard, unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

(b) New construction or substantial improvements of buildings shall be elevated or floodproofed to elevations established in accordance with subsection 152.06(c)(11).

(Ord. 91-91, passed 1-13-92)

Sec. 152.09. - Standards for subdivision proposals and other proposed new development.

(a) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(c) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.

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

(Ord. 91-91, passed 1-13-92)

Cross reference— Penalty, see section 152.99.

Sec. 152.10. - Standards for areas of shallow flooding (AO zones).

Located within the areas of special flood hazard established in subsection 152.05(b), are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions in addition to those specified in section 152.07 (a) and section 152.09, apply:

- (a) All new construction and substantial improvements of residential buildings shall have the lowest floor, including basement, elevated to at least as high as the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade.
- (b) All new construction and substantial improvements of nonresidential buildings shall:
 - (1) Have the lowest floor, including basement, elevated to at least as high as the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade; or
 - (2) Together with attendant utility and sanitary facilities be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrodynamic loads and effects of buoyancy.

(Ord. 91-91, passed 1-13-92)

Cross reference— Penalty, see section 152.99.

Sec 152.11. – Specific standards for A-Zones without base flood elevations and regulatory floodways.

Located within the areas of special flood hazard established in section 152.05 (b), where there exist A Zones for which no base flood elevation data and regulatory floodway have been provided or designated by the Federal Emergency Management Agency, the following provisions shall apply:

- (a) ~~Require s~~SStandards of section 152.07 (a).

- (b) ~~Require that a~~All new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, shall include within such proposals base flood elevation data.
- (c) The building official and/or Flood Plain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of this ordinance. When such data is utilized, provisions of section 152.07 (b) shall apply. The Building Official and/or Flood Plain Administrator shall:
- (1) Obtain the elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures,
 - (2) Obtain, if the structure has been floodproofed in accordance with the requirements of section 152.07 (b) (2), the elevation in relation to the mean sea level to which the structure has been floodproofed, and
 - (3) Maintain a record of all such information.
- (d) The Flood Plain Administrator shall notify, in riverine situations, adjacent communities, the Florida Division of Emergency Management State Flood Plain Management Office, and the South Florida Water Management District prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.
- (e) The Flood Plain Administrator shall assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (f) The building official shall assure Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State of Florida and local anchoring requirements for resisting wind forces.
- (g) When the data is not available from any source, in accordance with standard set forth in section 152.11 (b) of this chapter, the lowest floor of the structure shall be elevated to no lower than two feet, plus required freeboard, above the highest adjacent grade. Standards set forth in section 152.07 (b) shall apply.

Sec. 152.12. – Standards for coastal high hazard areas (V-Zones)

Located within areas of special flood hazard established in section 152.05 (b) are Coastal High Hazard Areas, designated as Zones V1–30, VE, or V (with BFE). The following provisions shall apply:

- (1) Meet the standards of section 152.06 (b), and sections 152.07 (a) and (b); 152.10, and 152.11.
- (2) All new construction and substantial improvements in Zones V1–V30, VE, and V (with BFE) shall be elevated on pilings or columns so that:
 - a) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to no lower than the base flood elevation **plus freeboard** whether or not the structure contains a basement; and
 - b) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading will be those values associated with the base flood. Wind loading values will be those required by applicable State of Florida or local, if more stringent than those of the State of Florida, building standards.
 - c) For all structures located seaward of the Coastal Construction Control Line (CCCL), the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the 100-year flood elevation established by the Florida Department of Environmental Protection or the base flood elevation **plus freeboard**, whichever is the higher.
- (3) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this Section.
- (4) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures. The Flood Plain Administrator shall maintain a record of all such information.
- (5) All new construction and substantial improvements shall be located landward of the reach of mean high tide.
- (6) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20

pounds per square foot (either by design or when so required by State of Florida or local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

- a) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and
 - b) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). The water loading shall be those values associated with the base flood. The wind loading values shall be those required by applicable Florida or local, if more stringent than those of the State of Florida, building standards.
 - c) Such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be finished, partitioned into multiple rooms, or temperature-controlled.
- (7) Prohibit the use of fill for structural support. No development permit shall be issued for development involving fill in coastal high hazard areas unless it has been demonstrated through appropriate engineering analyses that the subject fill does not cause any adverse impacts to the structure on site or other properties.
- (8) Prohibit man-made alteration of sand dunes and mangrove stands that would increase potential flood damage.
- (9) Standards for Manufactured Homes
- (a) All manufactured homes to be placed or substantially improved on sites: (i) Outside a manufactured home park or subdivision, (ii) In a new manufactured home park or subdivision, (iii) In an expansion to an existing manufactured home park or subdivision, or, (iv) In an existing manufactured home park or subdivision in which a manufactured home has incurred "substantial damage" as the result of a flood, must meet the standards of section 152.12 (2) through (8), or
 - (b) All manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision shall meet the requirements of section 152.07 (b) (4) (b).
- (10) Recreational vehicles placed on sites within Zones VE, V1-V30, V (with base flood elevation) on the FIRM either
- (a) Be on the site for fewer than 180 consecutive days,

- (b) Be fully licensed and ready for highway use (on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions); or
 - (c) Meet the requirements of section 152.12 (2) through (8).
 - ~~(d) Prohibit the placement of recreational vehicles, except in an existing recreational vehicle park. Recreational vehicles placed on other sites in an existing recreational park must be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (on its wheels or jacking system, is attached to the site by quick disconnect type utilities and security devices, and has no permanently attached additions). They shall also have a plan for removal in case of a threat at least four hours prior to the arrival of the threat.~~
- (11) For all structures located seaward of the Coastal Construction Control Line (CCCL), the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements shall be elevated to the flood elevation established by the Florida Department of Environmental Protection or the base flood elevation **plus freeboard**, whichever is higher. All non-elevation design requirements section 15.12 (2) through (10) shall apply.

(12) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, in coastal high hazard area, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood nor cause any adverse impacts to the structure on site or other properties by wave ramping or deflection.

Sec. 152.99. - Penalty.

Violation of the provisions of this chapter or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than five hundred dollars (\$500.00) or imprisoned for not more than ten (10) days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent this city from taking such other lawful actions as are necessary to prevent or remedy any violation.

(Ord. 91-91, passed 1-13-92)

Section 2. This ordinance shall become effective February 16, 2012.

PASSED AND APPROVED by the City Council of the City of Port St. Lucie, Florida,
this ____ day of _____, 2012.

CITY COUNCIL
CITY OF PORT ST. LUCIE

BY: _____
JoAnn M. Faiella, Mayor

ATTEST:

Karen A. Phillips, City Clerk

APPROVED AS TO FORM: _____
Roger G. Orr, City Attorney

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