MEMORANDUM

TO: Jason Haselkorn, Mayor
Jim Lyons, Vice Mayor
Members of the Town Council

FROM: Leonard G. Rubin, Town Attorney

RE: Ordinance No. 687 (Adoption of New Floodplain Management Regulations)

DATE: July 22, 2016

CC: Joseph Lo Bello, Town Manager
Vanessa Mutchnik, Town Clerk
Ruben Cruz, Planning and Zoning Director

Background:

Commencing with the 2010 edition, the Florida Building Code retained flood provisions from the model International Codes that form the basis of the Florida Building Code. Consequently, local governments throughout the state are required to amend their local floodplain management regulations and local administrative amendments to properly coordinate with the Florida Building Code.

Rather than amend the prior model floodplain management ordinance, the Florida Division of Emergency Management developed a completely new model ordinance to coordinate with the Florida Building Code and to satisfy the requirements of the National Flood Insurance Program ("NFIP") administered by FEMA.

The attached ordinance repeals the Town's existing floodplain management regulations and adopts the new model ordinance, including amendments to the administrative provisions of the Florida Building Code. Additionally, the Ordinance adopts the following "higher standards" to satisfy the requirements of the NFIP, thereby ensuring that the Town's residents continue to receive insurance discounts through the Community Rating System:

1. *Freeboard*: The Town's regulations increase the minimum elevation requirement from the base flood elevation to the base flood elevation plus eighteen (18) inches.

2. *Cumulative substantial improvement*: The Town's regulations track the accumulation of the costs of improvements and repairs of buildings over a

ten-year period. Once the cumulative cost reaches fifty percent (50%) of the market value of the structure within a ten-year period, the structure must comply with all current floodplain regulations.

3. *Repetitive loss*. The Town's regulations require that buildings that sustain repetitive loss over a ten-year period be included within the definition of "substantial damage." If the structure sustains flood related damage on two separate occasions during a ten-year period, for which the cost of repairs for each event equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred, the structure must comply with all current floodplain regulations.

The Town's current floodplain management regulations already include these additional standards.

The Planning and Zoning Board considered this Ordinance at its June 27, 2016 meeting and recommended approval by the Town Council. The Town Council adopted the Ordinance on first reading at its July 21, 2016 meeting without modification.

Recommendation:

Staff recommends that the Town Council consider and approve, on second and final reading, Ordinance No. 687, adopting new floodplain managements for the Town based on the model ordinance promulgated by the Florida Division of Emergency Management.

TOWN OF JUNO BEACH

ORDINANCE NO. 687

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF JUNO BEACH, FLORIDA, AMENDING THE TOWN CODE OF ORDINANCES BY REPEALING ARTICLE III, "FLOOD DAMAGE PROTECTION," OF CHAPTER 6, "BUILDINGS AND BUILDING REGULATIONS," AND SIMULTANEOUSLY ADOPTING A NEW CHAPTER 7, "FLOODPLAIN REGULATIONS;" ADOPTING FLOOD HAZARD MAPS; DESIGNATING A FLOODPLAIN ADMINISTRATOR; ADOPTING PROCEDURES AND CRITERIA FOR DEVELOPMENT IN FLOOD HAZARD AREAS; ADOPTING LOCAL TECHNICAL AMENDMENTS TO THE FLORIDA BUILDING CODE PERTAINING TO THE DESIGN AND CONSTRUCTION OF BUILDINGS AND STRUCTURES IN FLOOD HAZARD AREAS; PROVIDING FOR APPLICABILITY, CODIFICATION, SEVERABILITY, CONFLICTS AND AN EFFECTIVE DATE; AND FOR OTHER PURPOSES

WHEREAS, the Legislature of the State of Florida has in Chapter 166, Florida Statutes, conferred upon municipalities 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 Town of Juno Beach 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 Town of Juno Beach was accepted for participation in the National Flood Insurance Program on December 1, 1978 and the Town Council 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 Town Council adopted a requirement to increase the minimum elevation requirements for buildings and structures in flood hazard areas prior to July 1, 2010 and, pursuant to Section 553.73(5), Florida Statutes, is formatting that requirement to coordinate with the Florida Building Code; and

WHEREAS, the Town Council adopted regulations to require: (1) buildings that sustain repetitive flood damage over a ten (10) year period to be included in the definition of "substantial damage;" and (2) accumulation of costs of improvements and repairs to buildings, based on the issued building permits, over a ten (10) year period; and

WHEREAS, the Town Council 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 Town Council of the Town of Juno Beach that the following floodplain management regulations, and the following local administrative amendments to the *Florida Building Code,* are hereby adopted.

Section 1. The foregoing "whereas" clauses are ratified as true and correct and are incorporated herein by reference.

Section 2. The Town Council hereby repeals Article III, "Flood Damage Protection," of Chapter 6, "Buildings and Building Regulations," of the Town Code of Ordinances in its entirety and simultaneously adopts a new Chapter 7, "Floodplain Regulations," to read as follows:

Chapter 7

FLOODPLAIN REGULATIONS

ARTICLE I. ADMINISTRATION

Sec. 7-1. General provisions.

(a) *Title.* This chapter shall be known as the *Floodplain Management Ordinance of the Town of Juno Beach*, hereinafter referred to as "this ordinance" or "this chapter."

(b) *Scope.* The provisions of this ordinance 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*; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development.

(c) *Intent.* The purposes of this ordinance 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, watercourses, 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 the Title 44 Code of Federal Regulations, Section 59.22.

(e) *Coordination with the Florida Building Code.* This ordinance 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.*

(f) *Warning.* The degree of flood protection required by this ordinance and the *Florida Building Code*, as amended by the town, 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 ordinance does not imply 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 the town 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 ordinance.

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

Sec. 7-2. Applicability.

(a) *In general.* Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

(b) *Areas to which this ordinance applies.* This ordinance shall apply to all flood hazard areas within the Town of Juno Beach, as established in subsection 7-2(c) below.

(c) *Basis for establishing flood hazard areas.* The Flood Insurance Study and Wave Height Analysis for the Town of Juno Beach, Florida, Palm Beach County dated March 31, 1982, 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 ordinance 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 Town Center.

(d) *Submission of additional data to establish flood hazard areas.* To establish flood hazard areas and base flood elevations, pursuant to Section 7-5 of this chapter, 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 town 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 ordinance 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 ordinance shall not be deemed to nullify any provisions of local, state or federal law.

(f) *Abrogation and greater restrictions.* This ordinance supersedes any ordinance in effect for management of development in flood hazard areas. However, it is not intended to repeal or abrogate 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 ordinance and any other ordinance, the more restrictive shall govern. This ordinance shall not impair any deed restriction, covenant or easement, but any land that is subject to such interests shall also be governed by this ordinance.

(g) *Interpretation.* In the interpretation and application of this ordinance, 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.

Sec. 7-3. Duties and powers of the floodplain administrator.

(a) *Designation.* The planning and zoning director 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 ordinance. The Floodplain Administrator shall have the authority to render interpretations of this ordinance consistent with the intent and purpose of this ordinance 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 ordinance without the granting of a variance pursuant to Section 7-7 of this chapter.

(c) *Applications and permits.* The Floodplain Administrator, in coordination with other pertinent offices of the town, 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 ordinance;

(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 floodplain development permits or approvals 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 ordinance 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 ordinance.

(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: for proposed work to repair damage caused by flooding, evaluation of previous permits issued to repair flood-related damage as specified in the definition of "substantial damage"; and 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 ordinance is required.

(e) *Modifications of the strict application of the requirements of the Florida Building Code.* 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 7-7 of this chapter.

(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 ordinance.

(g) *Inspections.* The Floodplain Administrator shall make the required inspections as specified in Section 7-6 of this chapter 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 subsection (d) above;

(2) Require that applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency Management, State Floodplain Management Office, and submit copies of such notifications to the Federal Emergency Management Agency (FEMA);

(3) 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, flood hazard area boundaries, or floodway designations; such submissions shall be made within 6 months of such data becoming available;

(4) Review required design certifications and documentation of elevations specified by this ordinance and the *Florida Building Code* to determine that such certifications and documentations are complete;

(5) Notify the Federal Emergency Management Agency when the corporate boundaries of the town are modified; and

(6) 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.* Regardless of any limitation on the period required for retention of public records, the Floodplain Administrator shall maintain and permanently keep and make available for public inspection all records that are necessary for the administration of this ordinance 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 ordinance; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this ordinance and the flood resistant construction requirements of the *Florida Building Code*. These records shall be available for public inspection at the Town Center.

Sec. 7-4. 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 ordinance, 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 ordinance and all other applicable codes and regulations has been satisfied.

(b) *Floodplain development permits or approvals.* Floodplain development permits or approvals shall be issued pursuant to this ordinance 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 floodplain development permit or approval 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), floodplain development permits or approvals 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 ordinance:

(1) Railroads and ancillary facilities associated with the railroad.

(2) Nonresidential farm buildings on farms, as provided in section 604.50, *Florida Statutes*.

(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,*Florida Statutes*, 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 two hundred and fifty (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.

(9) Structures identified in section 553.73(10)(k), *Florida Statutes*, 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 floodplain development permit or approval the applicant shall first file an application in writing on a form furnished by the town. 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 7-5 of this chapter.

(5) State the valuation of the proposed work.

(6) Be signed by the applicant or the applicant's authorized agent.

(7) Give such other data and information as required by the Floodplain Administrator.

(e) *Validity of permit or approval.* The issuance of a floodplain development permit or approval pursuant to this ordinance shall not be construed to be a permit for, or approval of, any violation of this ordinance, the *Florida Building Codes*, or any other ordinance of the town. 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 floodplain development permit or approval shall become invalid unless the work authorized by such permit is commenced within one hundred and eighty (180) days after its issuance, or if the work authorized is suspended or abandoned for a period of one hundred and eighty (180) days after the work commences. Extensions for periods of not more than one hundred and eighty (180) days each shall be requested in writing and justifiable cause shall be demonstrated.

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

(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, *Florida Statutes.*

(2) Florida Department of Health for onsite sewage treatment and disposal systems; section 381.0065, *Florida Statutes,* and Chapter 64E-6, *Florida Administrative Code.*

(3) Florida Department of Environmental Protection for construction, reconstruction, changes, or physical activities

for shore protection or other activities seaward of the coastal construction control line; section 161.141, *Florida Statutes*.

(4) Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, *Florida Statutes*.

(5) 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.

(6) Federal permits and approvals.

Sec. 7-5.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 ordinance shall be drawn to scale and shall include, as applicable to the proposed development:

(1) Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.

(2) Where base flood elevations or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with subsection 7-5(b)(2) or (b)(3) below.

(3) Where the parcel on which the proposed development will take place will have more than fifty (50) lots or is larger than five (5) acres and the base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with subsection 7-5(b)(1) below.

(4) Location of the proposed activity and proposed structures, and locations of existing buildings and structures; in coastal high hazard areas, new buildings shall be located landward of the reach of mean high tide.

(5) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.

(6) 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.

(7) Delineation of the Coastal Construction Control Line or notation that the site is seaward of the coastal construction control line, if applicable.

(8) Extent of any proposed alteration of sand dunes or mangrove stands, provided such alteration is approved by the Florida Department of Environmental Protection.

(9) Existing and proposed alignment of any proposed alteration of a watercourse.

The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by this ordinance 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 ordinance.

(b) *Information in flood hazard areas without base flood elevations (approximate Zone A).* Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Floodplain Administrator shall:

(1) Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.

(2) Obtain, review, and provide to applicants base flood elevation and floodway data available from a federal or state agency or other source or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.

(3) Where base flood elevation and floodway data are not available from another source, where the available data are deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data are known to be scientifically or technically incorrect or otherwise inadequate:

a. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or

b. Specify that the base flood elevation is two (2) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than two (2) feet.

(4) Where the base flood elevation data are to be used to support a Letter of Map Change from FEMA, advise the applicant that the analyses shall be prepared by a Florida licensed engineer in a format required by FEMA, and that it shall be the responsibility of the applicant to satisfy the submittal requirements and pay the processing fees.

(c) *Additional analyses and certifications.* As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall have the following analyses signed and sealed by a Florida licensed engineer for submission with the site plan and construction documents:

(1) For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such analysis to FEMA as specified in subsection 7-5(d) below and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.

(2) For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the Flood Insurance Study or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses that demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one (1) foot at any point within the town. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.

(3) For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in subsection 7-5(d) below.

(4) For activities that propose to alter sand dunes or mangrove stands in coastal high hazard areas (Zone V), an engineering analysis that demonstrates that the proposed alteration will not increase the potential for flood damage.

(d) *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, change floodway boundaries, 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.

Sec. 7-6.Inspections.

(a) *In general.* Development for which a floodplain development permit or approval 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 ordinance and the conditions of issued floodplain development permits or approvals.

(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 ordinance and the conditions of issued floodplain development permits or approvals.

(1) *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:

a. If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or

b. If the elevation used to determine the required elevation of the lowest floor was determined in accordance with Section 7-5(b)(3)b of this ordinance, the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

(2) *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 subsection (c)(1) above.

(d) *Manufactured homes.* The Floodplain Administrator shall inspect manufactured homes that are installed or replaced in flood hazard areas to determine compliance with the requirements of this ordinance and the conditions of the issued permit. Upon placement of a manufactured home, certification of the elevation of the lowest floor shall be submitted to the Floodplain Administrator.

Sec. 7-7.Variances and appeals.

(a) *In General.* The zoning board of adjustment and appeals shall hear and decide on requests for appeals and requests for variances from the strict application of this ordinance. Pursuant to section 553.73(5), *Florida Statutes*, the zoning board of adjustment and appeals 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) The zoning board of adjustment and appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the

administration and enforcement of this ordinance. 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 zoning board of adjustment and appeals shall base its decisions on variances on technical justifications submitted by applicants, the considerations for issuance in subsection (g) below, the conditions of issuance set forth in subsection (h) below, and the comments and recommendations of the Floodplain Administrator and the Building Official. The zoning board of adjustment and appeals has the right to attach such conditions as it deems necessary to further the purposes and objectives of this ordinance.

(d) *Restrictions in floodways.* A variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in Section 7-5(c) of this chapter.

(e) *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 11 Historic Buildings, upon a determination 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*.

(f) *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 ordinance, provided the variance meets the requirements of subsection (d) above, 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.

(g) *Considerations for issuance of variances.* In reviewing requests for variances, the zoning board of adjustment and appeals shall consider all technical evaluations, all relevant factors, all other applicable provisions of the *Florida Building Code*, this ordinance, 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 town;

(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.

(h) *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 ordinance or the required elevation standards;

(2) Determination by the zoning board of adjustment and appeals 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;

(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.

Sec. 7-8.Violations.

(a) *Violations.* Any development that is not within the scope of the *Florida Building Code* but that is regulated by this ordinance that is performed without an issued permit, that is in conflict with an issued permit, or that does not fully comply with this ordinance, shall be deemed a violation of this ordinance. 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 ordinance 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 ordinance 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.* 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 for violations of this Code or as otherwise provided by law.

ARTICLE II. DEFINITIONS

Sec. 7-11. In general.

(a) *Scope.* Unless otherwise expressly stated, the following words and terms shall, for the purposes of this ordinance, have the meanings shown in this section.

(b) *Terms defined in the Florida Building Code.* Where terms are not defined in this ordinance and are defined in the *Florida Building Code*, such terms shall have the meanings ascribed to them in that code.

(c) *Terms not defined.* Where terms are not defined in this ordinance or the *Florida Building Code*, such terms shall have ordinarily accepted meanings such as the context implies.

Sec. 7-12. Definitions.

Alteration of a watercourse. A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

Appeal. A request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance.

ASCE 24. A 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. A flood having a 1-percent chance of being equaled or

exceeded in any given year. [Also defined in FBC, B, Section 1612.2.]The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation. 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 1612.2.]

Basement. The portion of a building having its floor subgrade (below ground level) on all sides. [Also defined in FBC, B, Section 1612.2.]

Coastal construction control line. The line established by the State of Florida pursuant to section161.053, *Florida Statutes*, and recorded in the official records of the town, which defines that portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.

Coastal high hazard area. 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.

Design flood. The flood associated with the greater of the following two areas: [Also defined in FBC, B, Section 1612.2.]

(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 town's flood hazard map, or otherwise legally designated.

Design flood elevation. The elevation of the "design flood," including wave height, relative to the datum specified on the town'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 1612.2.]

Development. 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. 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. Any buildings and structures for which the "start of construction" commenced before December 1, 1978. [Also defined in FBC, B, Section 1612.2.]

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 December 1, 1978.

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).

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

Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land from: [Also defined in FBC, B, Section 1612.2.]

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood damage-resistant materials. 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 1612.2.]

Flood hazard area. The greater of the following two areas:[Also defined in FBC, B, Section 1612.2.]

(1) The area within a floodplain subject to a 1-percent or greater chance of flooding in any year.

(2) The area designated as a flood hazard area on the town's flood hazard map, or otherwise legally designated.

*Flood Insurance Rate Map (FIRM).*The official map of the town on which the Federal Emergency Management Agency has delineated both special flood hazard areas and the risk premium zones applicable to the town. [Also defined in FBC, B, Section 1612.2.]

Flood Insurance Study (FIS). 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 1612.2.]

Floodplain Administrator. The office or position designated and charged with the administration and enforcement of this ordinance (may be referred to as the Floodplain Manager).

Floodplain development permit or approval. An official document or certificate issued by the town, or other evidence of approval or concurrence, which authorizes performance of specific development activities that are located in flood hazard areas and that are determined to be compliant with this ordinance.

Floodway. The channel of a river or other riverine watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. [Also defined in FBC, B, Section 1612.2.]

Floodway encroachment analysis. An engineering analysis of the impact that a proposed encroachment into a floodway is expected to have on the floodway boundaries and base flood elevations; the evaluation shall be prepared by a qualified Florida licensed engineer using standard engineering methods and models.

Florida Building Code. 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; Florida Building Code, Fuel Gas.*

Functionally dependent use. 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. The highest natural elevation of the ground surface prior to construction next to the proposed walls or foundation of a structure.

Historic structure. Any structure that is determined eligible for the exception to the flood hazard area requirements of the *Florida Building Code, Existing Building*, Chapter 11 Historic Buildings.

Letter of Map Change (LOMC). 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. 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, or

(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.

Lowest floor. 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 1612.2.]

Manufactured home. A structure, transportable in one or more sections, which is eight (8) feet or more in width and greater than four hundred (400) square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer." [Also defined in 15C-1.0101, *Florida Administrative Code*]

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

Market value. 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 ordinance, 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. For the purposes of administration of this ordinance and the flood resistant construction requirements of the *Florida Building Code*, structures for which the "start of construction" commenced on or after December 1, 1978 and 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 December 1, 1978.

Park trailer. A transportable unit which has a body width not exceeding fourteen (14) feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances. [Defined in section 320.01, *Florida Statutes*]

Recreational vehicle. A vehicle, including a park trailer, which is: [See section 320.01, *Florida Statutes*)

(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 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. 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 1612.2.]

Start of construction. 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 one hundred and eighty(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, 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 1612.2.]

Substantial damage. 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. The term also includes flood-related damage sustained by a structure on two separate occasions during a ten (10) year period for which the cost of the repairs at the time of each such flood event, on average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred. [Also defined in FBC, B Section 1612.2.]

Substantial improvement. Any combination of repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure taking place during a ten (10) year period, the cumulative cost of which equals or exceeds fifty (50) percent of the market value of the building or structure before the improvement or repair is started. For each building or structure, the ten (10) year period begins on the date of the first permit issued for improvement or repair of that building or structure subsequent to June 1, 1993.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: [Also defined in FBC, B, Section 1612.2.]

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

Variance. A grant of relief from the requirements of this ordinance, or the flood resistant construction requirements of the *Florida Building Code*, which permits construction in a manner that would not otherwise be permitted by this ordinance or the *Florida Building Code*.

Watercourse. A river, creek, stream, channel or other topographic feature in, on, through, or over which water flows at least periodically.

ARTICLE III. FLOOD RESISTANT DEVELOPMENT

Sec. 7-21. Buildings and structures.

(a) *Design and construction of buildings, structures and facilities exempt from the Florida Building Code.* Pursuant to Section 7-4(c) of this chapter, 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 7-27 of this chapter.

(b) *Buildings and structures seaward of the coastal construction control line.* If extending, in whole or in part, seaward of the coastal construction control line and also located, in whole or in part, in a flood hazard area:

(1) Buildings and structures shall be designed and constructed to comply with the more restrictive applicable requirements of the *Florida Building Code, Building* Section 3109 and Section 1612 or *Florida Building Code, Residential* Section R322.

(2) Minor structures and non-habitable major structures as defined in section 161.54, *Florida Statutes*, shall be designed and constructed to comply with the intent and applicable provisions of this ordinance and ASCE 24.

Sec. 7-22. Subdivisions.

(a) *Minimum requirements.* Subdivision proposals, including proposals for manufactured home parks and subdivisions, 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, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:

(1) Delineation of flood hazard areas, floodway boundaries and flood zones, and design flood elevations, as appropriate, shall be shown on preliminary plats;

(2) Where the subdivision has more than fifty (50) lots or is larger than five (5) acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with Section 7-5(b)(1) of this chapter; and

(3) Compliance with the site improvement and utilities requirements of Section 7-23 of this chapter.

Sec. 7-23. 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,*Florida Administrative* Code, 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, *Florida Administrative Code*, and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.

(d) *Limitations on sites in regulatory floodways.* No development, including but not limited to site improvements, and land disturbing activity involving fill or re-grading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in Section 7-5(c)(1) of this chapter demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.

(e) *Limitations on placement of fill.* Subject to the limitations of this ordinance, 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*.

(f) *Limitations on sites in coastal high hazard areas (Zone V).* In coastal high hazard areas, 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 7-5(c)(4) of this chapter 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 7-27(h)(3) of this chapter.

Sec. 7-24. Manufactured homes.

(a) *In General.* All manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to section 320.8249, *Florida Statutes*, and shall comply with the requirements of Chapter 15C-1, *Florida Administrative Code*, and the requirements of this ordinance. If located seaward of the coastal construction control line, all manufactured homes shall comply with the more restrictive of the applicable requirements.

(b) *Foundations.* All new manufactured homes and replacement manufactured homes installed in flood hazard areas shall be installed on permanent, reinforced foundations that:

(1) In flood hazard areas (Zone A) other than coastal high hazard areas, are designed in accordance with the foundation requirements of the *Florida Building Code, Residential* Section R322.2 and this ordinance. Foundations for manufactured homes subject to subsection (d)(2) below are permitted to be reinforced piers or other foundation elements of at least equivalent strength.

(2) In coastal high hazard areas (Zone V), are designed in accordance with the foundation requirements of the Florida Building Code, Residential Section R322.3 and this ordinance.

(c) *Anchoring.* All new manufactured homes and replacement manufactured homes shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. This anchoring requirement is in addition to applicable state and local anchoring requirements for wind resistance.

(d) *Elevation.* Manufactured homes that are placed, replaced, or substantially improved shall comply with subsection (d)(1) or (d)(2) below, as applicable.

(1) *General elevation requirement.* Unless subject to the requirements of subsection (d)(2) below, all manufactured homes that are placed, replaced, or substantially improved on sites located: (a) outside of a manufactured home park or subdivision; (b) in a new manufactured home park or subdivision; (c) in an expansion to an existing manufactured home park or subdivision; or (d) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated such that the bottom of the frame is at or above the elevation required, as applicable to the flood hazard area, in the *Florida Building Code, Residential* Section R322.2 (Zone A) or Section R322.3 (Zone V).

(2) *Elevation requirement for certain existing manufactured home parks and subdivisions.* Manufactured homes that are

not subject to subsection (d)(1) above, including manufactured homes that are placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:

a. Bottom of the frame of the manufactured home is at or above the elevation required, as applicable to the flood hazard area, in the *Florida Building Code, Residential* Section R322.2 (Zone A) or Section R322.3 (Zone V); or

b. Bottom of the frame is supported by reinforced piers or other foundation elements of at least equivalent strength that are not less than fifty-four (54) inches in height above grade.

(e) *Enclosures.* Enclosed areas below elevated manufactured homes shall comply with the requirements of the *Florida Building Code, Residential* Section R322.2 or R322.3 for such enclosed areas, as applicable to the flood hazard area.

(f) *Utility equipment.* Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the *Florida Building Code, Residential* Section R322, as applicable to the flood hazard area.

Sec. 7-25. Recreational vehicles and park trailers.

(a) *Temporary placement.* Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

(1) Be on the site for fewer than one hundred and eighty (180) consecutive days; or

(2) Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.

(b) *Permanent placement.* Recreational vehicles and park trailers that do not meet the limitations in subsection (a) above for

temporary placement shall meet the requirements of Section 7-24 of this chapter for manufactured homes.

Sec. 7-26. 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 subsection (c) below shall:

(1) Be permitted in flood hazard areas (Zone A) other than coastal high hazard areas, 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.

(2) Not be permitted in coastal high hazard areas (Zone V).

(c) *Above-ground tanks, elevated.* Above-ground tanks in flood hazard areas shall be attached to and elevated to or above the design flood elevation on 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.

Sec. 7-27. 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 ordinance or the *Florida Building Code*, shall:

(1) Be located and constructed to minimize flood damage;

(2) Meet the limitations of Section 7-23(d) of this chapter if located in a regulated floodway;

(3) Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;

(4) Be constructed of flood damage-resistant materials; and

(5) 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) *Fences in regulated floodways.* Fences in regulated floodways that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 7-23(d)of this ordinance.

(d) *Retaining walls, sidewalks and driveways in regulated floodways.* Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of section 7-23(d) of this chapter.

(e) *Roads and watercourse crossings in regulated floodways.* Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Section 7-23(d) of this chapter. Alteration of a watercourse that is part of a road or watercourse crossing shall meet the requirements of Section 7-5(c)(3) of this chapter.

(f) *Concrete slabs used as parking pads, enclosure floors, landings, decks, walkways, patios and similar nonstructural uses in coastal high hazard areas (Zone V).* In coastal high hazard areas, 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.

(g) *Decks and patios in coastal high hazard areas (Zone V).* In addition to the requirements of the *Florida Building Code*, in coastal high hazard areas 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 run-up 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 run-up and wave reflection.

(h) *Other development in coastal high hazard areas (Zone V).* In coastal high hazard areas, 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 run-up 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, *Florida Administrative Code*, as filled systems or mound systems.

(i) *Nonstructural fill in coastal high hazard areas (Zone V).* In coastal high hazard areas:

(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 run-up 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 run-up 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. The *Florida Building Code, Building* is hereby amended by adopting the following technical amendments (additional language is underlined):

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 50 percent of the market value of the structure before the damage occurred. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT. Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a 10 year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. For each building or structure the 10 year period begins on the date of the first permit issued for improvement or repair of that building or structure subsequent to June 1, 1993. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, including 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. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

1612.4.1 Elevation requirements. The minimum elevation requirements shall be as specified in ASCE 24 or the base flood elevation plus eighteen inches (18"), whichever is higher.

Section 4. The *Florida Building Code, Existing Building* is hereby amended by adopting the following technical amendments (additional language is underlined):

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 50 percent of the market value of the structure before the damage occurred. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT. Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a 10 year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. For each building or structure the 10 year period begins on the date of the first permit issued for improvement or repair of that building or structure subsequent to June 1, 1993. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, including 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. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

Section 5. The *Florida Building Code, Residential*, is hereby amended by adopting the following technical amendments (additional language is underlined and deleted language is ~~stricken through~~):

R322.2.1 Elevation requirements.

1. Buildings and structures in flood hazard areas not designated as Coastal A zones shall have the lowest floors elevated to or above the base flood elevation plus eighteen inches (18") or the design flood elevation, whichever is higher.

2. Buildings and structures in flood hazard areas designated as Coastal A Zones shall have the lowest floors elevated to or above the base flood elevation plus eighteen inches (18")~~1 foot (305mm)~~, or to the design flood elevation, whichever is higher.

3. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated at least as high above the highest adjacent grade as the depth number specified in feet on the FIRM plus eighteen inches (18"), or at least three feet six inches (3'6")~~2 feet (610mm)~~ if a depth number is not specified.

4. Basement floors that are below grade on all sides shall be elevated to or above the base flood elevation plus eighteen inches (18") or the design flood elevation, whichever is higher.

Exception: Enclosed areas below the design flood elevation, including basements whose floors are not below grade on all sides, shall meet the requirements of Section R322.2.2.

R322.3.2. Elevation requirements.

1. All buildings and structures erected within coastal high-hazard areas shall be elevated so that the lowest portion of all structural members supporting the lowest floor, with the exception of piling, pile caps, columns, grade beams and bracing, is elevated to or above the base flood elevation plus eighteen inches (18") or the design flood elevation, whichever is higher.

2. Basement floors that are below grade on all sides are prohibited.

3. The use of fill for structural support is prohibited.

4. Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.

Exception: Walls and partitions enclosing areas below the design flood elevation shall meet the requirements of Sections R322.2.4 and R322.3.5.

Section 6. For the purposes of jurisdictional applicability, this ordinance shall apply within the corporate limits of the Town of Juno Beach. 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 7. The provisions of this Ordinance shall become and be made a part of the Code of Ordinances of the Town of Juno Beach, Florida.

Section 8. If any section, paragraph, sentence, clause, phrase, or word of this Ordinance is for any reason held by a court of competent jurisdiction to be unconstitutional, inoperative or void, such holding shall not affect the remainder of the Ordinance.

Section 9. All Ordinances and Resolutions or parts of Ordinances or Resolutions directly in conflict with this Ordinance are hereby repealed only to the extent of such conflict.

Section 10. This Ordinance shall be effective immediately upon adoption.

FIRST READING this _____ day of _____, 2016.

SECOND, FINAL READING AND ADOPTION this _____ day of _____, 2016.

_____	_____	_____
AYE	NAY	JASON HASELKORN, MAYOR
_____	_____	_____
AYE	NAY	JIM LYONS, VICE MAYOR
_____	_____	_____
AYE	NAY	FRANK FAHY, VICE MAYOR PRO TEM
_____	_____	_____
AYE	NAY	ELLEN ANDEL, COUNCILMEMBER
_____	_____	_____
AYE	NAY	BILL GREENE, COUNCILMEMBER

ATTEST:

_____
VANESSA MUTCHNIK, MMC
TOWN CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

_____
LEONARD G. RUBIN
TOWN ATTORNEY