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MEMORANDUM

TO: Fort Myers Beach Local Planning Agency
FROM: Bill Spikowski
DATE: May 7, 2004
SUBJECT: LAND DEVELOPMENT CODE, CH. 6 – FLOODPLAIN REGULATIONS
LPA public hearing at noon on 5/18/04

On May 18 the Local Planning Agency will hold a public hearing on proposed changes to the town's floodplain regulations, which are found in Article IV of Chapter 6 of the Land Development Code.

CHAPTER 6

The original version of Chapter 6 of the Land Development Code was Lee County's version of that chapter, which was adopted by the Town Charter as it existed on the date of incorporation.

Chapter 6 was completely revised by Fort Myers Beach Ordinance 00-12 in June 2000. These amendments added a new Article I, establishing property maintenance regulations for existing developed areas of the town. The three remaining articles of Chapter 6 are unusual in that their content is heavily controlled by state and federal agencies:

- Article II contains the town's building codes. The state decides what the minimum buildings codes will be; city and county governments must then follow the state's direction, although some latitude is available for addressing fire codes, contractor licensing, improvements to existing buildings, and administrative matters including variances and interpretations.
- Article III contains the coastal construction codes mandated by state law.
- Article IV contains the floodplain regulations that federal law requires of any local government before federal flood insurance can be sold to property owners within that local government's jurisdiction.

Additional amendments were made to Chapter 6 through Ordinance 02-01 to clarify various provisions and to maintain consistency between Chapter 6 and other chapters of the code as they were being revised.

PROPOSED AMENDMENTS TO CHAPTER 6

The amendments now being proposed to Chapter 6 affect only the floodplain regulations in Article IV. The content of this article is heavily controlled by the federal government through its Federal Emergency Management Agency (FEMA). FEMA requires local floodplain regulations to comply with National Flood Insurance Program requirements, as found in 44 CFR Parts 59 & 60.

These federal requirements are monitored by FEMA staff, often through "Community Assistance Visits" (CAV) where federal flood specialists provide technical consultation to communities. During a CAV, officials discuss current local floodplain regulations and how those regulations are administered.

The result for Fort Myers Beach was a letter from FEMA dated April 5, 2004 (copy attached). As to the floodplain regulations, the FEMA letter listed 12 "required ordinance revisions" and 7 "recommended ordinance changes." The letter asked that ordinance changes be made by July 2, 2004. This letter also addressed several administrative matters that are being responded to separately by town and county staff.

A proposed ordinance has been prepared in response to the FEMA letter. Also attached to this memo is a chart that summarizes how this ordinance responds to the individual "required" and "recommended" changes in the FEMA letter.

COMPREHENSIVE PLAN ISSUES

The Comprehensive Plan discusses floodplain and coastal regulations in some depth (see pages 4-1 and 4-9 through 4-17), because these regulations can have major impacts on how a community develops or redevelops. These regulations are required by state and federal agencies that are focused on solving a single problem (inadequate construction techniques, or potential for flood damage), without balancing those needs against all other needs in local communities.

The result of this examination was Objective 4-E and Policies 4-E-3 and 4-E-4. Policy 4-E-4 has been fully implemented in Chapter 6 and is not being disputed by FEMA:

POLICY 4-E-4 FLOODPROOFING OF COMMERCIAL BUILDINGS: Where commercial development is allowed by this comprehensive plan, full-height dry floodproofing is the most desirable alternative for providing ground-level commercial space in pedestrian areas.

Policy 4-E-3 is more ambitious:

POLICY 4-E-3 NATIONAL FLOOD INSURANCE PROGRAM: The town will continually maintain a floodplain ordinance that reduces future damage from flooding and qualifies landowners for the National Flood Insurance Program. The town shall modify its current floodplain ordinance in accordance with this comprehensive plan through measures such as:

- i. not counting costs of strengthening buildings as "improvements" that are limited to 50% of a building's value; and*
- ii. minimizing the negative effects of the 50% rule on historic buildings; and*
- iii. adjusting the time period for calculating the 50% rule to encourage healthy redevelopment in this plan's "Pedestrian Commercial" category; and*
- iv. providing reasonable alternatives for determining the value of older buildings.*

All four items in Policy 4-E-3 were implemented through previous changes to Chapter 6:

- i. The first item was implemented through the second exception in the definition of “substantial improvement” in § 6-405. Because a property owner may choose to avail himself of this exception at the same time as making other improvements to a building, it is possible that these improvements might cost more than 50% of a building’s value in a single year, something that is not allowed by a strict reading of federal regulations. To avoid conflict with FEMA, the changes now proposed to the ordinance would forbid combined improvements that cost more than 50% in a single year. This change will reduce the incentive to landowners to improve the storm resistance of their buildings as contemplated in the Comprehensive Plan, but as long as FEMA insists on the strictest possible reading of their regulations, the town has little choice but to comply.
- ii. The second item was implemented through changes to the definition of “historic structure.” FEMA has taken exception to even this very minor change to the definition of “historic structures.” This is quite unfortunate for the character of the town, but unless the town is willing to risk a fight with FEMA, some changes are now needed. To comply with FEMA regulations, the proposed ordinance would require historic structures to be listed on the Florida Master Site File and also be on the town’s historic register in order to qualify for relief from floodplain regulations (rather than one or the other). The main problem with this change is that it will be much more difficult to move a historic building when it is in danger of being demolished.
- iii. The third item was implemented by allowing the 50% improvements for strengthening a building to be repeated every year, rather than being cumulative over a five-year-period. The proposed changes in the ordinance would keep this concept; the only change will be that strengthening improvements may not be able to be made in the same year as other improvements, as discussed under the first item above.
- iv. The fourth item was implemented through changes to the definition of “market value” that allow private appraisals as an alternative to accepting the building’s valuation as established by the Lee County Property Appraiser. Certain safeguards were also included to avoid potential abuses with private appraisals, and an additional safeguard is being added in the proposed ordinance.

The cumulative effect of the proposed changes will be to implement the Comprehensive Plan less fully than the existing ordinance. However, I believe that these changes are still consistent with the Comprehensive Plan, as Policy 4-E-3 cites *examples* of changes the town should make to its floodplain regulations — they are not mandatory changes that must be made regardless of their effects on the town’s crucial standing with the National Flood Insurance Program.

NEXT STEPS

After taking public input on May 18, the LPA is required to make a formal finding as to whether this ordinance is consistent with the Comprehensive Plan. The LPA also has an opportunity to make recommendations to the Town Council on the contents of this ordinance.

The schedule for adopting this ordinance is for it to be introduced before the Town Council on June 7, with two public hearings to be held on June 21 at 6:30 P.M. and June 30 at 3:00 P.M.

Attachments: *Proposed ordinance amending Chapter 6 of the Land Development Code*
Letter from FEMA to Fort Myers Beach dated April 5, 2004
Chart showing “required” and “recommended” revisions, with proposed responses to each

AN ORDINANCE AMENDING THE FLOODPLAIN REGULATIONS IN CHAPTER 6 OF THE TOWN OF FORT MYERS BEACH LAND DEVELOPMENT CODE; PROVIDING AUTHORITY; ADOPTING AMENDMENTS TO ARTICLE IV (FLOODPLAIN REGULATIONS) OF CHAPTER 6 OF THE LAND DEVELOPMENT CODE WHICH IS TITLED "MAINTENANCE CODES, BUILDING CODES, AND COASTAL REGULATIONS," AND WHICH PROVIDES ARTICLE IV FLOODPLAIN REGULATIONS, DIVISION 1 GENERALLY, DIVISION 2 ADMINISTRATION, AND DIVISION 3 STANDARDS; PROVIDING SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

IT IS HEREBY ORDAINED BY THE TOWN OF FORT MYERS BEACH AS FOLLOWS:

SECTION 1. AUTHORITY. This ordinance is enacted pursuant to the provisions of Chapter 95-494, Laws of Florida, Chapters 163 and 166, Florida Statutes, and other applicable provisions of law.

SECTION 2. ADOPTION OF AMENDMENTS TO ARTICLE IV OF CHAPTER 6 OF THE LAND DEVELOPMENT CODE. Chapter 6 of the Town of Fort Myers Beach land development code is titled "MAINTENANCE CODES, BUILDING CODES, AND COASTAL REGULATIONS." Article IV of this chapter, titled "FLOODPLAIN REGULATIONS," is hereby amended as shown in Exhibit A. Entirely new language is indicated with underlining. Language being repealed from the existing code is indicated with ~~strike-throughs~~. Existing language being retained is neither underlined nor struck through. The amended Article IV of Chapter 6 contains the following divisions and sections:

ARTICLE IV. FLOODPLAIN REGULATIONS

Division 1. Generally

- Sec. 6-401. Reserved.
- Sec. 6-402. Findings of fact.
- Sec. 6-403. Purpose of article.
- Sec. 6-404. Objectives of article.
- Sec. 6-405. Definitions.
- Sec. 6-406. Penalty for violation of article.
- Sec. 6-407. Applicability of article.
- Sec. 6-408. Basis for establishing flood regulations.
- Sec. 6-409. Reserved.
- Sec. 6-410. Conflicting provisions.
- Sec. 6-411. Reserved.
- Sec. 6-412. Warning and disclaimer of liability.
- Secs. 6-413--6-440. Reserved.

Division 2. Administration

- Sec. 6-441. Designation of administrator.
- Sec. 6-442. Reserved
- Sec. 6-443. Permit required. ~~Reserved.~~
- Sec. 6-444. Applications and certifications.

- Sec. 6-445. Appeals.
- Sec. 6-446. Variances.
- Secs. 6-447--6-470. Reserved.

Division 3. Standards

- Sec. 6-471. General standards.
- Sec. 6-472. Specific standards.
- Sec. 6-473. ~~Reserved. Repeated damage by flooding.~~
- Sec. 6-474. Standards for subdivision proposals.

SECTION 3. SEVERABILITY. If any provision of this ordinance should be held contrary to any express provision of law, or contrary to the policy of express law although not expressly prohibited, or against public policy, or for any reason whatsoever be held invalid, then such provision shall be null and void and shall be deemed separate from the remaining provisions of this ordinance, and in no way shall affect the validity of all other provisions of this ordinance.

SECTION 4. EFFECTIVE DATE. This ordinance shall take effect immediately upon its adoption.

The foregoing ordinance was enacted by the Town Council upon a motion by Council Member _____ and seconded by Council Member _____; upon being put to a vote, the result was as follows:

Bill Thomas	_____
Garr Reynolds	_____
Howard Rynearson	_____
W. H. "Bill" Van Duzer	_____
Don Massucco	_____

DULY PASSED AND ENACTED this ____ day of June, 2004.

ATTEST:

TOWN OF FORT MYERS BEACH

By: _____
Marsha Segal-George, Town Clerk

By: _____
Bill Thomas, Mayor

Approved as to form by:

Richard V.S. Roosa, Town Attorney

EXHIBIT A

FORT MYERS BEACH LAND DEVELOPMENT CODE

CHAPTER 6 MAINTENANCE CODES, BUILDING CODES, AND COASTAL REGULATIONS

ARTICLE IV. FLOODPLAIN REGULATIONS

DIVISION 1. GENERALLY

Sec. 6-401. Reserved.

Sec. 6-402. Findings of fact.

(a) The Town of Fort Myers Beach is subject to periodic inundation which may result in the loss of life and property, as well as 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 occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated or floodproofed or otherwise unprotected from flood damages.

Sec. 6-403. Purpose of article.

It is the purpose of this article 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:

- (1) 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; and

- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.

Sec. 6-404. Objectives of article.

The objectives of this article are to:

- (1) Protect human life and health;
- (2) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (3) Minimize prolonged business interruptions;
- (4) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains; and
- (5) Help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas.

Sec. 6-405. Definitions.¹

The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. Unless specifically defined in this section, words or phrases used in this article shall be interpreted so as to give them the meanings they have in common usage and to give this article its most reasonable application.

Accessory structure means a building or structure which is customarily incidental and subordinate to a principal building or to the principal use of the premises, and located on the same premises.

Addition means any walled and roofed expansion that increases the ~~habitable~~ floor space of an existing building in which the addition is connected by a common loadbearing wall other than a firewall. Any walled and roofed addition which is connected by a firewall or is separated by independent

¹*Cross reference(s)--Definitions and rules of construction generally, § 1-2.*

perimeter loadbearing walls is considered new construction.

Appeal means a request for a review of the coordinator’s interpretation of any provision of this article. A request for a variance from the precise terms of this article is not an appeal.

Area of special flood hazard means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The entire Town of Fort Myers Beach has been designated an area of special flood hazard by the Federal Emergency Management Agency (see § 6-408).

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year.

Breakaway walls means any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic, or any other suitable building materials, which are not part of the structural support of the building and which are designed and constructed to collapse under specific lateral loading forces without causing damage to the elevated portion of the buildings or the supporting foundation system on which they are used.

Building means any structure built for support, shelter, or enclosure for any occupancy or storage.

Coastal high-hazard area means the area subject to high-velocity waters caused by storms. The coastal high-hazard area is designated on the flood insurance rate map as zones V1--V30.

Coordinator means Lee County’s flood insurance coordinator, who has been designated by the Board of County Commissioners to implement, administer, and enforce the county’s floodplain regulations.

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, dredging, filling, grading, paving, excavating, drilling operations, or storage of materials or equipment.

Elevated building means a building built to have the lowest floor elevated above the ground level by

means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), or shear walls.

Existing, when referring to a building or structure, means that construction had commenced on the building or structure, or portion thereof, prior to August 31, 1984.

Existing manufactured home park or manufactured home subdivision means a parcel or contiguous parcels of land divided into two or more manufactured home lots or sites for rent or sale for which the construction of facilities for servicing the lot or site on which the manufactured home is to be affixed, including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets, was completed prior to August 31, 1984.

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

Flood and flooding mean 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 insurance rate map (FIRM) means the official map of Fort Myers Beach on file with the coordinator, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones for Fort Myers Beach, including base flood elevations and coastal high hazard areas (V zones).

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures features that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, buildings and/or their contents. There are three major ~~two distinct~~ kinds of floodproofing in coastal areas:-

- (1) Elevation of the lowest floor is the most common and economical method for

floodproofing structures and is the only acceptable method under this code for floodproofing new or substantially improved residential structures.

- (2) For dry floodproofing, a commercial building is made watertight up to the base flood elevation and strengthened to resist all hydrostatic and hydrodynamic loads and to counter the effects of buoyancy. See § 6-472(4).
- (3) For wet floodproofing, damage to a building is avoided by allowing flood waters to temporarily fill the building to equalize loads and prevent buoyancy. See §§ 6-446(e) and 6-472(5)b.

Floor means the top surface of an enclosed area in a building, i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used for parking vehicles.

Functionally dependent facility means 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 passengers. The term does not include longterm storage, manufacture, sales, or entertainment facilities.

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

Historic structure means any structure that is:

- (1) Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register of Historic Places; or
- (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; or
- (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 and also ~~(4)~~ listed on a local inventory of historic places, either individually or as a

contributing structure in a historic district, pursuant to ch. 22 of this code.

Lowest floor means the lowest floor of the lowest enclosed area, including any floors below grade. An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, 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 non-elevation design requirements of this article.

Mangrove stand means an assemblage of mangrove trees, which are mostly low trees noted for a copious development of interlacing adventitious roots above the ground, which contains one or more of the following species: black mangrove (Avicennia nitida), red mangrove (Rhizophora mangle), white mangrove (Languncularis racemosa), and buttonwood (Conocarpus erecta).

Manufactured home means a structure, transportable in one 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. This definition includes mobile homes and most park trailers (those larger than 400 square feet and/or not towable by a light duty truck), as defined in F.S. § 320.01(2), but does not include other types of a recreational vehicles, as defined in F.S. § 320.01(1). However, a manufactured building as defined in F.S. ch. 553, pt. IV is not considered a manufactured home.

Market value of the structure, depending on the context, means either:

- (1) the value of the structure prior to the start of the improvement, or
- (2) in the case of damage, the value of the structure prior to the damage occurring.

Value will be as determined (for the structure only) by the Lee County Property Appraiser or by a private appraisal acceptable to the coordinator. This value shall not include the value of the land on which the structure is located, nor the value of other structures or site improvements on the site, nor the value of the structure after the proposed improvements are completed. Any proposed value submitted via private appraisal that exceeds the Property Appraiser's valuation by more than 20 percent shall be ~~is~~ subject to peer review by a qualified local appraiser, to be commissioned by the

coordinator at town expense, with the full cost of the review appraisal paid by the applicant to the town prior to initiation of the review process.

Mean sea level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, to which base flood elevations shown on the flood insurance rate map are referenced.

National Geodetic Vertical Datum (NGVD), as corrected in 1929, is a vertical control used as a reference for establishing varying elevations within the floodplain.

New construction means structures for which the start of construction commenced on or after May 1, 1990, and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means 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 August 31, 1984.

Primary frontal dune means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Reconstruction means an improvement to an existing building that substantially replaces all or a portion of an existing building with a new building, or physically moves an existing building to a different location.

Recreational vehicle means, for floodplain management purposes, a vehicle which is:

- (1) Built on a single chassis;
- (2) ~~Five~~ Four hundred 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.

Registered architect means an architect registered or licensed by the state of Florida to practice architecture, or who is authorized to practice architecture in Florida under a reciprocal registration or licensing agreement with another state.

Registered professional engineer means an engineer registered or licensed by the state of Florida to practice engineering, or who is authorized to practice engineering in Florida under a reciprocal registration or licensing agreement with another state.

Registered land surveyor means a land surveyor registered or licensed by the state of Florida to practice land surveying, or who is authorized to practice surveying in Florida under a reciprocal registration or licensing agreement with another state. This term includes professional surveyors and mappers registered by the state of Florida.

Rehabilitation means an improvement to an existing building that does not expand its external dimensions.

Repair means the replacement or renewal of nonstructural elements of an existing building.

Reinforced pier means a system designed and sealed by a state-registered architect or engineer which is an integral part of a foundation and anchoring system for the permanent installation of a manufactured home or recreational vehicle, as applicable, so as to prevent flotation, collapse or lateral movement of the manufactured home or recreational vehicle due to flood forces. At a minimum, a reinforced pier would have a footing adequate to support the weight of the manufactured home or recreational vehicle under saturated soil conditions such as occur during a flood. In areas subject to high-velocity floodwaters and debris impact, cast-in-place reinforced concrete piers may be appropriate. Nothing in this division shall prevent a design which uses pilings, compacted fill

or any other method, as long as the minimum flood and wind standards are met.

Repetitive loss means flood-related damages sustained by a structure on two separate occasions during any ten-year period, for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damages occurred. For the purposes of computing this 25 percent cost only, the cost of nonstructural interior finishings may be deducted from the cost of repairs, including, but not limited to, the cost of finish flooring and floor coverings, base molding, nonstructural substrates, drywall, plaster, paneling, wall covering, tapestries, window treatments, decorative masonry, paint, interior doors, tile, cabinets, moldings and millwork, decorative metal work, vanities, electrical receptacles, electrical switches, electrical fixtures, intercoms, communications and sound systems, security systems, HVAC grills and decorative trim, freestanding metal fireplaces, appliances, water closets, tubs and shower enclosures, lavatories, and water heaters.

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

Start of construction, for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Public Law 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure 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 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 structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. 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 means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Substantial damage means 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. Actual repair work need not have been performed on flood-related damage. **Substantial damage** also means flood-related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred (actual repair work need not have been performed on all flood-related damage).

Substantial improvement means any repair, reconstruction, rehabilitation, addition, or other improvements to of a structure, when the cumulative cost of which the improvement or repair equals or exceeds, over any five-year period, a cumulative total of 50 percent of the market value of the structure either before the start of construction of the improvement or, if the structure has been damaged and is being restored, before the damage occurred. The term “substantial improvement” includes structures that have incurred “substantial damage” or “repetitive loss,” (However, for structures that have incurred “substantial damage” as defined in this article, regardless of the actual repair work performed, the term “substantial improvement” includes any additions, reconstruction, and rehabilitation of the structure, but does not include the cost of nonstructural interior finishings as defined herein.) The term “substantial improvement” does not, however, include either:

- (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to ensure safe living conditions; or

- ~~(2)~~ costs of nonstructural interior finishings, including, but not limited to, finish flooring and floor coverings, base molding, nonstructural substrates, drywall, plaster, paneling, wall covering, tapestries, window treatments, decorative masonry, paint, interior doors, tile, cabinets, moldings and millwork, decorative metal work, vanities, electrical receptacles, electrical switches, electrical fixtures, intercoms, communications and sound systems, security systems, HVAC grills and decorative trim, freestanding metal fireplaces, appliances, water closets, tubs and shower enclosures, lavatories, and water heaters, or roof coverings; or
- (2) ~~(3)~~ costs of alterations or improvements whose express purpose is the mitigation of future storm damage, provided they do not exceed 50 percent of the market value of the structure over any one-year period; examples of such mitigation include the installation of storm shutters or shatterproof glass, strengthening of roof attachments, floors, or walls, and minor floodproofing.
 - a. Storm mitigation improvements may be made during the same year as other improvements, but the total cost of improvements of both types that are made in any one calendar year may not exceed 50% of the market value of the structure.
 - b. The annual allowance for storm mitigation improvements is not applicable to any costs associated with a lateral or vertical addition to an existing structure or to the complete replacement of an existing structure; or
- (3) ~~(4)~~ any alteration of a “historic structure” provided that the alteration would not preclude the structure’s continued designation as a “historic structure.” ~~listed on the National Register of Historic Places or designated under ch. 22 of this code as a historic resource (individually, or as a contributing property within a historic district).~~

Variance means a grant of relief to a person from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

Sec. 6-406. Penalty for violation of article.

The director and the coordinator are authorized to pursue any one or combination of the enforcement mechanisms provided in this code (for example, § 1-5, or article V of ch. 2) for any violation of this article.

Sec. 6-407. Applicability of article.

This article shall apply to the entire Town of Fort Myers Beach. No structure or land shall be located, extended, converted, or structurally altered without full compliance with the terms of this article.

Sec. 6-408. Basis for establishing flood regulations.

The entire Town of Fort Myers Beach has been designated an area of special flood hazard by the Federal Emergency Management Agency. Their maps illustrating the minimum federal floodplain regulations as adopted on September 19, 1984, and all revisions thereto, are adopted by reference and declared to be a part of this article. These flood insurance rate maps show base flood elevations and coastal high-hazard areas (V zones) for the entire town and are available for inspection at town hall and at the Lee County Administration Building, 2115 Second Street, Fort Myers, or can be viewed at www.fema.gov, or can be purchased by calling 1-800-358-9616. The individual map panels are numbered as follows:

<i>General area shown</i>	<i>Panel number</i>	<i>Latest</i>
Bowditch – Donora	125124 0429D	9/20/96
Donora – Gulfview	125124 0433B	9/19/84
Gulfview – Flamingo	125124 0441B	9/19/84
Flamingo – Buccaneer	125124 0442C	7/20/98
Buccaneer – Big Carlos	125124 0444D	7/20/98

Sec. 6-409. Reserved.

Sec. 6-410. Conflicting provisions.

Where this article and any other part of this code conflict or overlap, whichever imposes the more stringent restriction shall prevail.

Sec. 6-411. Reserved.

Sec. 6-412. Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article shall not create liability on the part of the town council, or by any officer or employee thereof, for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

Secs. 6-413--6-440. Reserved.

DIVISION 2. ADMINISTRATION

Sec. 6-441. Designation of administrator.

Lee County's flood insurance coordinator ("coordinator") is hereby appointed to administer and implement the provisions of this article on behalf of the Town of Fort Myers Beach.

Secs. 6-442--6-443. Reserved.

Sec. 6-443. Permit required.

All land-disturbing activities and improvements to land that are defined in this article as "development" must comply with all provisions of this article and must obtain permits in accordance with the procedures in this division.

Sec. 6-444. Applications and certifications.

(a) The provisions of this article will be enforced concurrently with review of proposed building permits and development orders. No separate application is required. However, the following information is required on the plans submitted for review:

- (1) Elevation, in relation to mean sea level, of the proposed lowest floor of all structures;
- (2) Elevation in relation to mean sea level to which any nonresidential structure will be floodproofed; ~~and~~
- (3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria in § 6-472, when dry or wet floodproofing is proposed; and
- (4) An operation and maintenance plan when dry floodproofing is proposed:
 - a. At a minimum this plan must identify who is responsible for maintenance and installation of the flood barriers that will protect wall and door openings and where the flood barriers will be stored when not in use.
 - b. This plan must also provide a realistic estimate of the manpower, time, and equipment required for installation.
 - c. This plan must also include a binding commitment for present and future owners to conduct a test installation annually of all flood barriers, with

advance notice provided to the coordinator and the town manager to allow them to witness this test.

(b) Prior to issuance of approvals, applicants must supply evidence that all necessary permits have been received 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.

(c) (b) A permit holder must submit to the coordinator a floor elevation or floodproofing certification after the lowest floor is completed, or, in instances where the structure is subject to the regulations applicable to coastal high-hazard areas, after placement of the horizontal structural members of the lowest floor:

- (1) Within 21 calendar days of establishment of the lowest floor elevation, or floodproofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the coordinator a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level. Such certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by a registered land surveyor or professional engineer.
- (2) When floodproofing is utilized for a particular building, the certification shall be prepared by or under the direct supervision of a registered professional engineer or architect and certified by a registered professional engineer or architect.
- (3) Any work done within the 21-day calendar period and prior to submission of the certification shall be at the permit holder's risk.

(d) (c) The coordinator 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 the

corrections required by this section shall be cause to issue a stop work order for the project.

Sec. 6-445. Appeals.

Any affected person may file an appeal alleging that there has been an error in any requirement, decision or determination made by the coordinator in the enforcement or administration of this article. Such appeals shall be processed and decided in the same manner as for appeals under ch. 34 of this code.

Sec. 6-446. Variances.

(a) Variances from base flood elevation requirements may only be granted upon a clear showing by the applicant that an exceptional hardship would result from compliance with the requirements. If a variance is granted, the coordinator shall notify the applicant, in writing, that:

- (1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage; and
- (2) Such construction below the base flood level increases risks to life and property.

Such notification shall be maintained with a record of all variance actions.

(b) Variances shall only be granted upon a determination, based upon competent substantial evidence presented by the applicant, that:

- (1) It will not result in increased flood heights, additional threats to public safety or extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing regulations or ordinances; and
- (2) The lot or parcel in question is so small or has such unusual characteristics that the prescribed standards cannot be met without some relief so as to allow a reasonable use of the property.

(c) Variances shall only be issued upon a determination that the variance being granted is the minimum necessary, considering the flood hazard, to afford relief.

(d) Variances may be issued for repair or rehabilitation of historic structures 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 necessary to preserve the historic character and design of the structure.

(e) Variances may be issued to allow non-residential buildings other than those already identified in § 6-472(5) to contain wet-floodproofed space below the base flood elevation, provided:

- (1) the building is not in the coastal high-hazard areas; and
- (2) such action is determined to be in the public interest.

Any such buildings must meet the technical standards for wet floodproofing found in § 6-472(5)b.

(f) A variance is a deviation from the exact terms and conditions of this article. Requests for variances shall be processed and decided in the same manner as for variances under ch. 34 of this code following public hearings before the local planning agency and town council.

(g) In passing upon variance applications, the town council shall consider all technical evaluations, all relevant factors including local and federal policies on flood protection, all standards specified in this article, and:

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage, and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront location, in the case of a functionally dependent facility;
- (6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (7) The compatibility of the proposed use with existing and anticipated development;
- (8) The relationship of the proposed use to the comprehensive plan;

- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters, and the effects of wave action, if applicable, expected at the site; and
- (11) 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.

(h) Upon consideration of the factors listed in subsection (g) of this section and purposes of this article, the town council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

Secs. 6-447--6-470. Reserved.

DIVISION 3. STANDARDS

Sec. 6-471. General standards.

The following general standards must be followed within the Town of Fort Myers Beach:

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;
- (2) Manufactured homes shall be securely anchored to an adequately anchored foundation system to prevent flotation, collapse, or 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) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) Electrical, heating, ventilation, plumbing and air conditioning equipment, and other service facilities shall be designed and located so as to prevent water from entering or accumulating within the components during conditions of flooding. Utility equipment shall be exempt from this requirement as long as the utility company which owns the equipment accepts the sole responsibility for any flood damage to the equipment by filing written acceptance of such responsibility with the local building director prior to claiming the exemption;
- (6) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters; and
- (8) Any alteration, repair, reconstruction, or improvement to a structure which is in compliance with the provisions of this article

shall meet the requirements of new construction as contained in this article.

Sec. 6-472. Specific standards.

The following specific standards must be followed within the Town of Fort Myers Beach:

- (1) ***Conventional residential construction.*** New construction or substantial improvement of any residential structure shall have the lowest floor elevated to or above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection (5) of this section. (See subsection (7) for additional restrictions in V zones.)
 - a. When an improvement to an existing residential structure involves reconstruction or includes an addition, and the improvement's cost exceeds the 50 percent threshold in this article's definition of "substantial improvement," then the reconstruction or addition shall be elevated the same as new construction, with its lowest floor elevated to or above the base flood elevation.
 - b. Some partial reconstructions or additions to existing residential structures may fall below the 50 percent threshold and are therefore not considered to be "substantial improvements." In this situation:
 1. If the structure was approved **after** 1984 and thus was elevated in accordance with this code, the reconstructed or additional ~~habitable~~ floor space shall also be elevated the same as new construction, with its lowest floor at or above the base flood elevation. Any enclosed space below the base flood elevation shall be subject to the same restrictions that apply to post-1984 structures as found in subsection (5) of this section.
 2. If the structure was approved **before** 1984, the reconstructed or additional ~~habitable~~ floor space must be elevated to or above the elevation of the structure's existing lowest ~~habitable~~ floor. Any enclosed space

below the structure's existing lowest ~~habitable~~ floor shall be subject to the same restrictions that apply to post-1984 structures as found in subsection (5) of this section. For purposes of this subsection only, "existing lowest ~~habitable~~ floor" does not include enclosed space of less than 500 square feet below an elevated structure and does not include any space that has been used to park vehicles.

- (2) **Manufactured homes.** New or expanded parks or subdivisions for manufactured homes are not allowed in the Town of Fort Myers Beach. Where zoning allows existing manufactured homes to be replaced or substantially improved:
- a. on individual subdivision lots, replacement or substantially improved manufactured homes must be elevated so that the lowest floor of the manufactured home is at or above the base flood elevation in compliance with the anchoring requirements of § 6-471(2), or
 - b. on an existing site in a mobile home park, the manufactured home chassis must be supported by reinforced piers, or other foundation elements of at least equivalent strength, that are no less than 36 inches in height above grade, and the manufactured home shall comply with the anchoring requirements of § 6-471(2). However, the 36-inch alternative in subsection (2)b. may not be used if a manufactured home on that specific site has incurred "substantial damage" from flooding, as defined in this article; if "substantial damage" has occurred, the manufactured home or a replacement manufactured home on that site must be elevated so that the lowest floor is at or above the base flood elevation in compliance with the anchoring requirements of § 6-471(2).

- (3) **Recreational vehicles.** New parks or subdivisions for recreational vehicles are not allowed in the Town of Fort Myers Beach. Where zoning allows recreational vehicles to be placed or substantially improved on a site located in an existing recreational vehicle park, they must be either:
 - a. placed on the site for fewer than 180 consecutive days and fully licensed and ready for highway use (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 additions); or
 - b. elevated so that the lowest floor of the recreational vehicle is at or above the base flood elevation in compliance with the anchoring requirements of § 6-471(2).

- (4) **Nonresidential construction.** New construction or substantial improvement of any commercial or other nonresidential structure shall either:
 - a. have the lowest floor elevated to or above the base flood elevation, or,
 - b. together with attendant utility and sanitary facilities, be dry-floodproofed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
 1. Dry-floodproofing up to the base flood elevation is the preferred alternative for providing sidewalk-level commercial space in the Future Land Use Map's Pedestrian Commercial category.
 2. A registered professional engineer or architect shall certify that the dry-floodproofing standards of this subsection are satisfied. Such certification shall be provided to the coordinator.
 3. An operation and maintenance plan must be submitted in accordance with § 6-444(a)(4). Failure to conduct the

annual test installation required by this plan shall subject the owner to the code enforcement mechanisms provided in this code (for example, § 1-5, or article V of ch. 2).

- c. No person may construct a series of improvements, additions, and/or demolitions that connects two or more existing structures in a manner that evades the requirement to either elevate or dry-floodproof new construction or substantial improvements to nonresidential structures.

(5) ***Space below elevated buildings (A zones).***

New construction or substantial improvements of elevated buildings, both residential and non-residential, may contain space below the base flood elevation that is usable solely for parking, building access, or storage (additional restrictions for coastal high-hazard areas are provided in subsection (7) below).

- a. The amount of such space is limited only by setback and other regulations of ch. 34 provided the space is not enclosed or is enclosed only by latticework or decorative screening with less than 50 percent solid surfaces. This 50 percent enclosure rule can also be met with full-height solid walls that enclose no more than 50 percent of the perimeter of the floor area, or with partial-height solid walls that extend less than 50 percent of the height of all walls, or any equivalent combination. For purposes of this rule, operable doors and windows shall be considered solid surfaces.
- b. In addition to the unenclosed or 50 percent enclosed space described in subsection a., space below the base flood elevation may include garages and fully enclosed areas formed by exterior walls provided that this space is wet-floodproofed, designed to preclude finished living space in the area below the base flood elevation, and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on such exterior walls below the base flood elevation. Fully enclosed areas must comply with all setback requirements for the zoning

district in which located. Fully enclosed space below the base flood elevation cannot extend beyond the perimeter of the elevated structure.

1. Designs for complying with this requirement must either be certified by a registered professional engineer or architect, or meet the following minimum criteria:
 - a- A minimum of two openings shall be provided having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - b- The bottom of all openings shall be no higher than one foot above grade; and
 - c- Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
2. Electrical, plumbing, and other utility connections are prohibited below the base flood elevation.
3. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage or other overhead door), limited storage of maintenance equipment used in connection with the premises (standard exterior door with no more than a single door opening of up to 36 inches in any single wall segment, or windowless double exterior doors with no more than 72 inches of opening in any single wall segment), plus internal entry to the living area (stairway or elevator).
4. The interior portion of such enclosed area shall not be partitioned, temperature-controlled, or finished into separate ~~habitable~~ rooms.
5. All structural and non-structural components must be constructed of materials that are durable, resistant to flood forces, and resistant to deterioration caused by repeated inundation by flood water.
6. These provisions apply to space below the base flood elevation to be used for parking, building access, or

storage. Other uses proposed for wet-floodproofed space may be approved by variance as provided in § 6-446(e), and may include functionally dependent facilities, historic buildings, and utility structures.

7. Any application for a garage or other enclosed area formed by exterior walls below the base flood elevation must be accompanied by a signed and notarized acknowledgment of the limitations on allowable uses of the enclosed space, using a form provided by the coordinator. This agreement shall be recorded in the official record books in the office of the clerk of the circuit court to provide additional notice of these limitations to future purchasers.

(6) **Accessory structures.** Accessory structures may be exempted from meeting the elevation requirements only if:

- a. The structure is securely anchored to resist flotation or lateral movement and offers the minimum resistance to the flow of floodwaters; and
- b. The total cost of the structure does not exceed \$16,000 or 10% of the market value of the principal building, whichever is greater; and
- c. The structure is used exclusively for nonhabitable recreational, security, or storage purposes and not used as offices, kitchens, or living space; and
- d. All electrical, air conditioning, or heating equipment is elevated above the base flood elevation or floodproofed; and
- e. Openings to equalize hydrostatic pressure during a flood are provided in conformance with § 6-472(5)b.1; and
- f. For accessory structures located in coastal high-hazard zones (V zones), the following additional requirements also apply:
 1. Only breakaway walls may be ~~are~~ used below the base flood elevation.
 2. The structure must be constructed with a piling or column foundation system that is adequately embedded to resist scour and lateral deflection.

3. Floor slabs may not be structurally attached to pilings or columns and must be located at existing grade.
4. The lowest horizontal structural member of roof systems, including plates and beams connecting the pilings or columns, must be placed at or above the base flood elevation.

(7) **Coastal high-hazard areas (V zones).**

Certain areas of the town are designated as coastal high-hazard areas (V zones) because they have special flood hazards associated with wave wash. In V zones, the following additional provisions shall apply:

- a. All new construction shall be located landward of the reach of the mean high tide line.
- b. All new construction and substantial improvements shall be elevated so that the lowest supporting horizontal member, excluding pilings or columns, is located at or above the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water. Breakaway walls may be permitted and must be designed to wash away in the event of abnormal wave action in accordance with the remainder of this subsection.
- c. Some partial reconstructions or additions may fall below the 50 percent threshold and are therefore not considered to be “substantial improvements” as defined by this chapter. In this situation:
 1. If the structure was approved after 1984 and thus was elevated in accordance with this code, the reconstructed or additional ~~habitable~~ floor space shall also be elevated the same as new construction in V zones. Space below this elevation shall be subject to the same restrictions as for new structures.
 2. If the structure was approved before 1984, the reconstructed or additional ~~habitable~~ floor space shall be elevated to or above the elevation of the structure’s existing lowest ~~habitable~~ floor. Any enclosed space below the structure’s existing lowest ~~habitable~~ floor shall be subject to the same restrictions as for new

structures in V zones. For purposes of this subsection only, “existing lowest habitable floor” does not include enclosed space of less than 500 square feet below an elevated structure and does not include any space that has been used to park vehicles.

- d. All new construction and substantial improvements shall be securely anchored on pilings or columns.
- e. All pilings and columns and the attached structures shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100-year mean recurrence interval (one percent annual chance flood).
- f. Compliance with the provisions contained in subsections (7)b, d, and e of this section shall be certified by a registered professional engineer or architect.
- g. There shall be no fill used as structural support.
- h. There shall be no man-made alteration to damage to existing sand dunes and mangrove stands that would increase potential flood damage.
- i. Nonsupporting breakaway walls, latticework or decorative screening shall be allowed below the base flood elevation provided it is not part of the structural support of the building and is designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the building on which it is to be used, and provided the following design specifications are met:
 - 1. Design safe loading resistance of each wall shall be not less than ten and not more than 20 pounds per square foot; or
 - 2. If more than 20 pounds per square foot, a registered professional engineer or architect shall certify that the design wall collapse would result from a water load less than that

which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall 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 during the base flood event. Water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval). Wind loading values shall be those required by local and state law.

- j. If breakaway walls are utilized, such enclosed space shall not be used for human habitation, but shall be designed to be used only for parking of vehicles, building access or limited storage of maintenance equipment used in connection with the premises. Space enclosed by latticework and breakaway walls in a V zone is subject to the same limitations as to size, usage, and formal acknowledgments that apply below base flood elevation in an A zone, as provided in subsection (5)a. and (5)b. above.
- k. Prior to construction, plans for any structure that will have breakaway walls must be submitted to the coordinator for approval.
 - l. Any alteration, repair, reconstruction, or improvement to a structure shall not enclose the space below the lowest floor except with breakaway walls, and except as provided for in the remainder of this subsection.
- m. The placement of manufactured homes is prohibited. A replacement recreational vehicle may be placed in an existing recreational vehicle park, provided the mobility standards of § 6-472(3)a. are met.

Sec. 6-473. Reserved. Repeated damage by flooding.

~~Buildings previously damaged by flooding, evidenced by one or more flood losses greater than \$1,000 paid by the National Flood Insurance~~

~~Program after 1978 shall be brought into compliance with the standards in this article if they are flooded again and claim a flood loss greater than \$5,000.~~

Sec. 6-474. Standards for subdivision proposals.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewers, electrical and water systems located and constructed to minimize flood damage.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(d) Base flood elevation data shall be provided for all subdivision and development proposals.

LEE COUNTY
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SECOND FLOOR

April 5, 2004

Ms. Marsha Segal-George
Town Manager
Town of Fort Myers Beach
2523 Estero Boulevard
Fort Myers Beach, Florida 33931

Reference: National Flood Insurance Program (NFIP) Community Assistance Visit (CAV)

Dear Ms. Segal-George:

This is a follow-up to the CAV that the Federal Emergency Management Agency (FEMA) conducted in the Town of Fort Myers Beach on February 24 and 26, 2004. Susan Wilson, of my staff, conducted the CAV. The Town of Fort Myers Beach has participated in the Regular Phase of the NFIP since December 17, 1996, shortly after its incorporation from Lee County. Currently there are 907 flood insurance policies in force for a total of more than \$121 million in flood insurance coverage. It is very likely that many structures located in the Town of Fort Myers Beach still have flood insurance policies written using the community identification number for Lee County. Since joining the NFIP, thirty (30) flood insurance claims have been paid for a total of \$341,611.

Since the Town of Fort Myers Beach contracts with Lee County to perform floodplain management, development permitting and inspections, an initial meeting was conducted with Mr. Robert Stewart, the Lee County Building Official at his office in Fort Myers. An additional meeting was conducted at the Town Hall on February 26, 2004. At that meeting the Town of Fort Myers Beach was represented by Mr. John Gucciardo, Deputy Town Manager, Mr. Dan Folke, Community Development Director, and Mr. Stewart.

It appears that the staff charged with administering and enforcing the Town of Fort Myers Beach's adopted program of floodplain management has a good understanding of the requirements of the NFIP and that the Town has a sound, basic program of local floodplain management.

CAV Findings

Lee County, as administrator of the floodplain management program for the Town of Fort Myers Beach, has developed an extensive permit review system to assure compliance with the Town's adopted floodplain management requirements. As appropriate, the development may be reviewed by a number of different departments, including, building, zoning, engineering, and emergency management. Large projects are also reviewed by the South Florida Water

Management District to assure the adequacy of stormwater management, drainage and surface water retention. Developments proposed for locations in the Special Flood Hazard Areas (SFHA) are identified in the permit database. During the period under review, the Town of Fort Myers Beach had 78 developments permitted in the SFHA. From the permit files reviewed, it appears that the development in Fort Myers Beach is fairly evenly divided between new and replacement residential construction, improvements to existing residential structures, and construction or improvements to non-residential or large residential structures.

Lee County has an established procedure for evaluating whether a development constitutes a substantial improvement that must comply with the floodplain development requirements. The procedure involves obtaining the market value of the structure before the improvements by using an adjusted value from the Lee County Tax Assessor, or from an appraisal performed by a qualified real estate appraiser. The costs of the proposed improvements are reviewed and compared to standard building code valuation tables for the specific work performed. If using the code tables derives a higher amount, that figure is used to compare against the structure's market value. The calculations and determination was notated in the permit file for the structures where improvements were proposed.

During the CAV, development records for permits and variances requested or issued since January 1, 2002, were reviewed. According to the records maintained by Lee County, the Town of Fort Myers Beach has neither received nor approved any variances from the floodplain management requirements established by the floodplain management regulations. Floodproofing has only been utilized in a few instances as an alternative to elevation on fill or foundation system to protect a non-residential structure.

There is one existing, pre-FIRM manufactured home park that accommodates conventional manufactured homes, as well as travel trailers and recreational vehicles. Conventional manufactured homes, recreational vehicles that do not meet the adopted ordinance requirements, being on site less than 80 consecutive days or being licensed and road ready, must meet the elevation, foundation and anchoring requirements specified in the Land Development Code.

Most of the permit files that were reviewed contained an elevation certificate. However, some of the elevation certificates referenced buildings under construction and the files did not include the final, "as-built" elevation certificate.

As part of the CAV, Article IV of the Fort Myers Beach Land Development Code, Floodplain Regulations, was reviewed. Article IV of the Land Development Code includes a number of provisions that exceed the minimum requirements of the NFIP. These provisions are listed as follows:

- Article IV includes a definition of "substantial improvement" that considers improvements cumulative during a five year period.
- Article IV includes a definition of "market value".
- Article IV, Section 6-472.6 establishes development requirements for accessory structures.
- Article IV, Section 6-472.5 limits the enclosure of space below the lowest floor of an elevated building to no more than 50 percent of the flood space.

- Article IV, Section 6-472.5 require that any application for a garage or other enclosed area formed by exterior walls below the base flood elevation must be accompanied by a signed and notarized acknowledgment of the limitation on allowable uses of the closed
- space, which is recorded by the clerk of the circuit court to provide additional notice of these limitations to future purchasers of the property.
- Article IV, Section 6-473 requires that "buildings previously damage by flooding, evidenced by one or more flood losses greater than \$1,000 paid by the National Flood Insurance Program after 1978 shall be brought into compliance with the standards in this article if they are flood again and claim a flood loss greater than \$5,000.

These provisions that exceed minimum NFIP requirements notwithstanding, as was discussed during our meeting on February 26, 2004, Article IV of the Fort Myers Beach Land Development Code is **not fully compliant** with the minimum requirements of the National Flood Insurance Program. In particular, a number of definitions have been omitted, and the Code contains a definition of "substantial improvement" that excludes many improvements that, according to the NFIP, must be included and considered in the substantial improvement calculation.



Required Ordinance Revisions:

1. Add definitions for "accessory structure", "area of special flood hazard", "development", "existing construction", "highest adjacent grade", "lowest floor", "mangrove stand", "primary frontal dune", "repetitive loss", and "start of construction".
2. Revise the definitions of "Flood insurance rate map (FIRM)", "floodproofing", "historic structure", "structure" and "substantial improvement" so that they are compliant with the definitions in the NFIP Regulations (44 CFR Section 59.1).
3. Revise the definition of "recreational vehicle" so that it means a vehicle that is **400 hundred square feet** or less when measured at the largest horizontal projection.
4. The ordinance does not clearly establish the requirement for all a development permit for all land disturbing activities described as "development" in the NFIP Regulations.
5. Article IV does not require submission of other local, state or federal permits, as required by 44 CFR, Section 60.3(a)(2). This section requires the community to "review proposed development to assure that all necessary permits have been received 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."
6. Revise Section 6-472 (1) and (4) so that they agree with the revised definition of "substantial improvement".
7. Remove references in Section 6-472(1)(b) to "habitable floor space" or "lowest habitable floor". It is possible for an unfinished area to be considered the "lowest floor" for floodplain management purposes, if it is not constructed of flood resistant materials or is otherwise not constructed in compliance with the non-elevation design criteria.

8. In Section 6-472(2)(b) require that manufactured homes that have incurred "substantial damage" from flooding must be elevated to or above the base flood elevation.
9. In Section 6-472(3)(b) add a provision to require that the recreational vehicle be anchored to a permanent foundation.
10. In Section 6-472(6) add provisions to require accessory structures in VE zones to be constructed on piling or column foundation systems that is adequately embedded to resist scour and lateral deflection. A copy of a guidance document on accessory structures is enclosed for your information.
11. Revise Section 6-472(7)(c) to agree with the revised definition of "substantial improvement".
12. Revise Section 6-472(7)(h) to read, "There shall be no man-made alteration to sand dunes and mangrove stands that would increase potential flood damage."

Recommended Ordinance Changes:

1. Delete the discussion of dry and wet floodproofing in the definition of "floodproofing". Wet floodproofing should only be considered in rare instances and requires issuance of a variance.
2. Revise the definition of "market value" to require the review of all appraisals that deviate by more than 20 percent from the value determined by the Lee County Property Appraiser.
3. Also consider revising the definition to specify the types of appraisal methods that are acceptable for the establishment of "market value".
4. Require in Section 6-444(a) submission of an operation and maintenance plan for instances when non-residential buildings are proposed for floodproofing.
5. Specify, in Section 6-446, who hears and rules on variance requests.
6. In Section 6-472 for residential construction, manufactured homes and non-residential construction, require a one foot "freeboard", that would require new or substantially improved structures to be elevated or floodproofed, as appropriate, to at least one foot above the base flood elevation. Adoption of a one foot freeboard will provide a measure of safety from flood events that exceed the base flood level, compensate for uncertainties in flood studies modeling and development in the watershed, and reduce flood insurance premiums by as much as 25 percent.
7. Add language to prevent the incremental improvement of two or more existing structures through a series of improvements, additions and demolition of walls, that effectively creates one large, connected and internally open structure, without compliance with the provisions of the code.

Enclosed is a copy of a draft sample flood damage prevention ordinance that is compliant with the minimum standards of the NFIP.

I. Potential Program Deficiencies and Violations.

A. A number of building permits files reviewed contained an elevation certificate that was based on the building while it was under construction. Commonly, elevation certificates for building under construction are prepared prior to the installation of machinery and equipment, the installation of hydrostatic venting, or the construction of breakaway walls under elevated V-Zone structures. In order to reduce or eliminate the potential of buildings to be completed that are not in full compliance with the Code, please revise the administrative procedures to assure that the final inspection is not conducted and the certificate of occupancy issued without obtaining an elevation certificate based on final "as-built" construction.

B. Some V-Zone construction did not have the required engineering or architectural certification required for the foundation system, anchoring, and, if applicable, breakaway wall construction. We recommend that a separate V-Zone certificate be obtained prior to issuance of a building permit for new or substantially improved structures in the V-Zones. The V-Zone certification may also be placed on the building plans provided the plans are retained in the community's records in perpetuity. At your request, we can provide a sample V-Zone certification form, that can be customized with the community seal or logo, that is acceptable as documentation of the anchoring, foundation and, if applicable, breakaway wall certifications.

*Bonita
Med. Term
Beach
Club*

C. The files for structures that were supposed to be floodproofed lacked evidence of any type of plan for the how the structures would be sealed or the operation and maintenance of the floodproofing devices.

D. We have serious concerns that the Shipwreck Treasures retail store, located at 237 San Carlos Boulevard may be in violation to your floodplain management ordinance. It appears that, through a number a permits for renovation, construction, and demolition, three separate, unconnected and structurally independent structures have been combined into one, large commercial building. Perhaps due to the Land Development Code being non-compliant with the NFIP Regulations, these three independent structures were renovated and combined through construction of new additions and demolition of portions of the original buildings so that they form one structure that is not elevated or floodproofed.

In addition, the appraisal report submitted for 237 and 245 San Carlos Boulevard utilized an income approach to estimate the structure values. The determination of substantial improvement requires the pre-improvement fair market value of the building to be compared against the cost of the proposed improvements, as they would cost on the local market, including materials, labor, project supervision, overhead and profit. Although there are a number of appraisal methods, only the cost approach to value provides a fair market value of a structure that can be directly compared to the cost of the proposed improvements. The cost approach to value determines the cost to replace the structure, as it were new at today's prices, then deducts an appropriate depreciation factor. The depreciation reflects the physical deterioration of the building components due to normal wear, environmental factors, and building maintenance. Depreciation also includes functional obsolescence due to outmoded designs or equipment, and changes in building codes. Neither economic obsolescence nor post-storm neighborhood decline should be included in the depreciation factor.

The income approach, such as was submitted for the Shipwreck Treasures, is not acceptable for determining fair market value for purposes of determining substantial improvement and substantial damage. In the income approach, the value of the building is determined by the present value of income that it would generate. Some appraisers even base the value of the building on a projection of future income, that the building would generate once it is fully renovated or improved. To estimate the income generating potential of the building, many factors are utilized which are totally unrelated to the replacement cost of the building and its degree of physical and functional deterioration. Such a value cannot, therefore, be compared against the cost of improvement or repairs to determine substantial improvement or substantial damage.

E. During the CAV, the following files were identified as potential program violations because they lacked the required documentation.

1. The following permit files lacked the required final, "as-built" lowest floor elevation certificate, that includes the elevation of machinery and equipment, and the number and size of hydrostatic vents:
 - a. Permit #Res 2002-05987, 301 Natureview
 - b. Permit #Res 2001-08422, 315 Mango Street ("as-built" elevation certificate did not indicated the number and size of the foundation vents)

2. The following permit files lacked the required Floodproofing Certificate:
 - a. Permit #Com 2002-00494, 4130 Bay Beach Lane, four unit cabana.
 - b. Permit #Com 2002-00446, 1131 First Street, Snug Harbor Restaurant. The file indicated that the building, located in a Zone AE with a 12-foot elevation, had been floodproofed 8.6 feet to a height of 13 feet MSL. The floodproofing certificate on file had been altered to exclude portions of the required engineer or architect's certification. From the site inspection, it did not appear that there was any means to install devices to seal off the building openings in the event of a flood.

II. Required actions to correct potential program deficiencies and violations.

By no later than July 2, 2004, please provide evidence that the Town of Fort Myers Beach has taken the following actions:

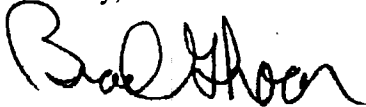
- A. Provide a copy of an adopted Flood Damage Prevention Ordinance that, at a minimum, includes the twelve required ordinance revisions. The Town of Fort Myers Beach is strongly encouraged to adopt the recommended ordinance changes.
- B. Revise the permitting and record keeping systems to assure that the structure is not issued a certificate of occupancy or compliance prior to having the necessary certifications, including the "as-built" elevation certificate, floodproofing, and V-Zone foundation, anchoring and breakaway wall certifications.
- C. Revise the permitting procedures to require the submission of an operation and maintenance plan for all non-residential structures that

location at which the floodproofing devices will be stored, equipment necessary to install the measures, identification of personnel who will be responsible for installing the closure devices, and schedule for exercising the installation plan and inspection and maintenance of the closure devices.

- D. Review and revise the procedure for calculating substantial improvements to assure that comparable fair market values of the pre-improvement value of the structure are compared against the fair market cost of the improvements.
- E. Inspect the Shipwreck Treasures building to determine if any retrofitting measures can be employed that would reduce the structure's flood risk potential. At a minimum, this inspection should identify if machinery, equipment or utility services could be elevated to or above the BFE or floodproofed, if the materials and methods utilized in the construction, renovation and expansion of the three original buildings is flood resistant, and if the building openings can be retrofitted with floodproofing devices. Provide a report that evaluates potential options for reducing the flood damage potential to this structure.
- F. Provide copies of the "as-built" lowest floor elevation certificates for the structures identified in Article I, Section E.1 of this letter.
- G. Provide copies of the floodproofing certificates for the two non-residential structures identified in Article I, Section E.2 of this letter.

Our overall assessment is that the Town of Fort Myers Beach has a sound, basic program of floodplain management, as administered through Lee County. If we may be of any assistance to the Town of Fort Myers Beach concerning any aspect of its floodplain management program, please contact Susan Wilson at (770) 220-5414.

Sincerely,



Brad G. Loar, Chief
Community Mitigation Programs Branch
Mitigation Division

Enclosure

FEMA REQUIRED ORDINANCE REVISIONS

Response by Fort Myers Beach:

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- | | |
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| 1. Add definitions for "accessory structure", "area of special flood hazard", "development", "existing construction", "highest adjacent grade", "lowest floor", "mangrove stand", "primary frontal dune", "repetitive loss", and "start of construction". | <i>Definitions of these terms have been added into § 6-405.</i> |
| 2. Revise the definitions of "Flood insurance rate map (FIRM)", "floodproofing", "historic structure", "structure" and "substantial improvement" so that they are compliant with the definitions in the NFIP Regulations (44 CFR Section 59.1). | <ul style="list-style-type: none">• <i>Definitions of "flood insurance rate map," "historic structure," and "structure" have been revised in § 6-405 to closely track the definitions in 44 CFR 59.1 or to be more restrictive than the federal definitions.</i>• <i>The definition of "floodproofing" is fully compliant with 44 CFR 59.1 but still includes some additional explanatory text that will assist users of this code in understanding FEMA floodplain terminology (see item 1 under "recommended changes" below).</i>• <i>The definition of "substantial improvement" has been modified to eliminate the language questioned by FEMA that allowed the deduction of "nonstructural interior finishings" (that deduction would now be available only to certain optional restrictions imposed by the town on "repetitive loss" properties). Other language in this definition on storm mitigation improvements has been modified to avoid any conflicts with mandatory requirements of FEMA regulations.</i> |
| 3. Revise the definition of "recreational vehicle" so that it means a vehicle that is 400 hundred square feet or less when measured at the largest horizontal projection. | <i>The previous definition of "recreational vehicle" in § 6-405 matched state of Florida standards; it has now been revised to follow federal standards (which exclude RVs between 400 and 500 square feet).</i> |
| 4. The ordinance does not clearly establish the requirement for a development permit for all land disturbing activities described as "development" in the NFIP Regulations. | <i>This requirement already appears in other chapters of this code; it has now been added to § 6-443 as well.</i> |
| 5. Article IV does not require submission of other local, state or federal permits, as required by 44 CFR, Section 60.3(a)(2). This section requires the community to "review proposed development to assure that all necessary permits have been received 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, 33U.S.C. 1334." | <i>This requirement also appears in other chapters of this code; it has now been added to § 6-444(b) as well.</i> |
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- 6. Revise Section 6-472 (1) and (4) so that they agree with the revised definition of "substantial improvement".** *No changes are required to § 6-472(1) or (4) to make them agree with the revised definition of "substantial improvement." The language in 6-472(1) that was added by the town in Ordinance 02-01 is explanatory material that clarifies what happens when a proposed improvement is NOT a "substantial improvement; this clarification also establishes a new rule that such improvements cannot be lower than the existing lowest floor. This definition is now being modified, however, to eliminate references to "habitable" floor space, in accordance with the next item below.*
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- 7. Remove references in Section 6-472(1)(b) to "habitable floor space" or "lowest habitable floor". It is possible for an unfinished area to be considered the "lowest floor" for floodplain management purposes, if it is not constructed of flood resistant materials or is otherwise not constructed in compliance with the non-elevation design criteria.** *The references to "habitable" space have been eliminated from § 6-472(1)(b) and also from § 6-472(7)c.*
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- 8. In Section 6-472(2)(b) require that manufactured homes that have incurred "substantial damage" from flooding must be elevated to or above the base flood elevation.** *This requirement already exists in the ordinance; more wording has been added to the end of § 6-472(2)(b) to make this requirement even clearer.*
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- 9. In Section 6-472(3)(b) add a provision to require that the recreational vehicle be anchored to a permanent foundation.** *This provision has been added to § 6-472(3)(b); it will apply if an RV is placed on a permanent foundation rather than remaining on a site for less than 180 days and kept ready for highway use.*
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- 10. In Section 6-472(6) add provisions to require accessory structures in VE zones to be constructed on piling or column foundation systems that is adequately embedded to resist scour and lateral deflection. A copy of a guidance document on accessory structures is enclosed for your information.** *These provisions have been added to § 6-472(6).*
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- 11. Revise Section 6-472(7)(c) to agree with the revised definition of "substantial improvement".** *No changes are required to § 6-472(7)(c) to make it agree with the revised definition of "substantial improvement." The language in § 6-472(7)(c) that was added by the town in Ordinance 02-01 is explanatory material that clarifies what happens when a proposed improvement is NOT a "substantial improvement; this clarification also establishes a new rule that such improvements cannot be lower than the existing lowest floor. This definition is now being modified, however, to eliminate references to "habitable" floor space, in accordance with the item 7 above.*
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- 12. Revise Section 6-472(7)(h) to read, "There shall be no man-made alteration to sand dunes and mangrove stands that would increase potential flood damage."** *Mangrove stands are protected much more definitively by article IV of Chapter 14, but the requested wording about mangrove stands has been added to § 6-472(7)(h).*
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FEMA RECOMMENDED ORDINANCE CHANGES *Response by Fort Myers Beach:*

- 1. Delete the discussion of dry and wet floodproofing in the definition of "floodproofing". Wet floodproofing should only be considered in rare instances and requires issuance of a variance.**

The discussion of dry and wet floodproofing in the definition of "floodproofing" in § 6-405 is helpful explanatory text and nothing more. For commercial buildings, dry floodproofing has always been an acceptable alternative under FEMA regulations. Wet floodproofing is not acceptable under most circumstances and this ordinance already requires a variance for wet floodproofing (see 6-446(e)); the only exception is for space under elevated homes, where wet floodproofing is allowed by right in accordance with § 6-472(5). Requiring a variance for every new home would be exceedingly burdensome and would serve no public purpose.

- 2. Revise the definition of "market value" to require the review of all appraisals that deviate by more than 20 percent from the value determined by the Lee County Property Appraiser.**

This concept has been added to the definition of "market value" in § 6-405.

- 3. Also consider revising the definition to specify the types of appraisal methods that are acceptable for the establishment of "market value".**

Ordinance 02-01 previously added language to the standard FEMA definition of "market value" to disallow certain types of appraisals that would yield spurious results, and also to provide for peer review of appraisals that are questioned by the flood insurance coordinator. This definition is now being further enhanced by the previous item.

- 4. Require in Section 6-444(a) submission of an operation and maintenance plan for instances when non-residential buildings are proposed for floodproofing.**

This concept has been added to § 6-444(a)(4).

- 5. Specify, in Section 6-446, who hears and rules on variance requests.**

§ 6-446(g) already identifies the Town Council as the decision maker on variances, but an additional reference to the process has been added to § 6-446(f).

- 6. In Section 6-472 for residential construction, manufactured homes and non-residential construction, require a one foot "freeboard", that would require new or substantially improved structures to be elevated or floodproofed, as appropriate, to at least one foot above the base flood elevation. Adoption of a one foot freeboard will provide a measure of safety from flood events that exceed the base flood level, compensate for uncertainties in flood studies modeling and development in the watershed, and reduce flood insurance premiums by as much as 25 percent.**

This is a standard suggestion that FEMA makes to all local communities and also rewards through its Community Rating System. It has not been incorporated into this draft. As a practical matter, most new homes at Fort Myers Beach are elevated higher than one foot above base flood elevation in order to allow adequate headroom in the space below elevated homes.

- 7. Add language to prevent the incremental improvement of two or more existing structures through a series of improvements, additions and demolition of walls, that effectively creates one large, connected and internally open structure, without compliance with the provisions of the code.**

This language has been added to § 6-472(4)c.
