

7. First Reading of an ordinance and scheduling of public hearing. (Note: The First Reading is not a public hearing and no discussion or testimony will be taken unless the ordinance changes permitted conditional or prohibited uses as required by State Statute.)

- c. **ORDINANCE 08-013 ADOPTING THE FLOOD INSURANCE STUDY FOR THE CITY OF SANIBEL CONTAINED IN THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S STUDY FOR LEE COUNTY, FLORIDA AND AMENDING THE SANIBEL CODE, PART II LAND DEVELOPMENT CODE; CHAPTER 94 FLOODS, TO ADOPT A NEW FLOOD INSURANCE RATE MAP (FIRM), TO ADD A PURPOSE STATEMENT AND TO UPDATE THE CITY'S FLOODPLAIN MANAGEMENT REGULATIONS AND PROCEDURES CONSISTENT WITH NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS; AND AMENDING CHAPTER 82 ADMINISTRATION; ARTICLE IV DEVELOPMENT PERMITS; DIVISION 2 PROCEDURE; SECTION 82-382 FILING PROCEDURE, TO ALLOW SURVEYS TO INDICATE GROUND ELEVATIONS IN NORTH AMERICAN VERTICAL DATUM (NAVD); PROVIDING FOR CONFLICT AND SEVERANCE; PROVIDING FOR CODIFICATION; AND PROVIDING AN EFFECTIVE DATE**

CITY OF SANIBEL

ORDINANCE 08-013

AN ORDINANCE ADOPTING THE FLOOD INSURANCE STUDY FOR THE CITY OF SANIBEL CONTAINED IN THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S STUDY FOR LEE COUNTY, FLORIDA AND AMENDING THE SANIBEL CODE, PART II LAND DEVELOPMENT CODE; CHAPTER 94 FLOODS, TO ADOPT A NEW FLOOD INSURANCE RATE MAP (FIRM), TO ADD A PURPOSE STATEMENT AND TO UPDATE THE CITY'S FLOODPLAIN MANAGEMENT REGULATIONS AND PROCEDURES CONSISTENT WITH NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS; AND AMENDING CHAPTER 82 ADMINISTRATION; ARTICLE IV DEVELOPMENT PERMITS; DIVISION 2 PROCEDURE; SECTION 82-382 FILING PROCEDURE, TO ALLOW SURVEYS TO INDICATE GROUND ELEVATIONS IN NORTH AMERICAN VERTICAL DATUM (NAVD); PROVIDING FOR CONFLICT AND SEVERANCE; PROVIDING FOR CODIFICATION; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of Sanibel has participated in the National Flood Insurance Program since 1979; and

WHEREAS, this participation has resulted in structural protection and damage mitigation for the buildings in the City of Sanibel that have been constructed under this Program and a discount in flood insurance rates for the property owners in the community; and

WHEREAS, the City of Sanibel intends to continue its participation in the National Flood Insurance Program and to maintain or improve its community rating in the Program; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has prepared a Flood Insurance Study for Lee County, Florida, and the City of Sanibel is included in that study; and

WHEREAS, in October 2006, the City was notified that FEMA had proposed modified Base Flood Elevations for the City of Sanibel; and

WHEREAS, in November 2006, FEMA initiated a 90-day appeal period, which has elapsed; and

WHEREAS, FEMA has evaluated and resolved the appeals that were filed to FEMA's satisfaction with the issuance of the January 10, 2008 revised preliminary Flood Insurance Rate Map and Flood Insurance Study; and

WHEREAS, in March 2008, the City was notified by FEMA that the Base Flood Elevation determinations for the City are considered final by FEMA and that the revised Base Flood Elevations and Map Panels are to be effective as of August 28, 2008; and

WHEREAS, to continue participation in the National Flood Insurance Program, the City acknowledges that it has to adopt the new FEMA prepared Flood Insurance Rate Map and amend its flood regulations to be consistent with changes in Section 60.3(e) of the National Flood Insurance Program regulations; and

WHEREAS, a procedure has been established to revise and amend the Land Development Code in a manner consistent with the *Sanibel Plan*; and

WHEREAS, such revisions have been referred to the Planning Commission for a recommendation as to the consistency of this Amendment with the *Sanibel Plan*; and

WHEREAS, City Council deems it necessary to make such amendment to the Land Development Code, as contained in this ordinance; and

WHEREAS, all required public notices and public hearings for such amendment have been properly given and held.

NOW, THEREFORE, BE IT ORDAINED by the Council for the City of Sanibel, Lee County, Florida:

SECTION 1. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article I In General, is hereby amended by adding a new Section 94-01 Purpose, with underlining indicating additions, as follows:

Section 94-01. Purpose.

The purpose of this chapter is to provide regulations to protect lives and property in the City of Sanibel from the impacts of floods. An additional purpose of these flood

regulations allows the City to continue participation in the National Flood Insurance Program.

The scientific and engineering report prepared by the Federal Emergency Management Agency, entitled "Flood Insurance Study for Lee County, Florida and Incorporated Areas", including the City of Sanibel, dated January 10, 2008, with an accompanying Flood Insurance Rate Map (FIRM), designated all lands within the City of Sanibel in an area of special flood hazard and established Base Flood Elevations. This preliminary FIS and FIRM provided the primary source of the data used in the amendment of these flood regulations (initially adopted April 16, 1979).

To promote health, safety and general welfare considerations, the degree of flood protection provided by these regulations is reasonable but is not intended to provide total flood protection. The City of Sanibel is not liable for flood damage to buildings that are constructed in accordance with these flood regulations.

SECTION 2. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article I In General, Section 94-1. Definitions, is hereby amended with underlining indicating additions and ~~strikethroughs~~ indicating deletions, as follows:

Section 94-1. Definitions.

The following words, terms and phrases when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

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

Area of special flood hazard means the land in the floodplain within the city subject to a one percent or greater chance of flooding in any given year. All of the City of Sanibel in an Area of Special Flood Hazard.

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

[Base Flood Elevation means the water-surface elevation associated with the base flood.](#)

Basement means any area of a building having its floor below ground level on all sides.

Breakaway walls means any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other building material, which are not a part of the structural support of the building and which are so designed and constructed as to break away or collapse under specific lateral loading forces such as abnormally high tides or wave action, without causing damage to the structural integrity of the building on which they are used or to the elevated portion of the building, or the supporting foundation system, or any buildings to which they might be carried by floodwaters.

Coastal high hazard area means the area subject to high velocity waters including, but not limited to, hurricane wave wash or tsunamis. The area is designated on the Flood Insurance Rate Map (FIRM), as zone s VE 1-30. This definition of coastal high hazard area is used for implementation of these flood regulations.

It is important to note that the State of Florida (Chpt. 9J-5.003, FAC) has a different definition for coastal high hazard area. As determined by the State's definition, the City of Sanibel is entirely within the coastal high hazard area. The State's definition of coastal high hazard area is more similar to the definition for Special Flood Hazard Area used for these flood regulations.

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

Elevated building means a nonbasement building:

- (1) Built, in the case of a building in zone s AE 1-30, to have the top of the elevated floor, or in the case of a building in zone s VE 1-30, to have the bottom of the lowest horizontal structure member of the elevated floor

- elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the flow of the water; and
- (2) Adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of zone s ~~AE 1-30, or B~~, the term "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters. In the case of zone s ~~VE 1-30~~, "elevated building" also includes a building otherwise meeting the definition of elevated building, even though the lower area is enclosed by means of breakaway walls if the breakaway walls meet the standards of this section.

Existing 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, either final site grading or pouring of concrete pads, and the construction of streets) was completed prior to April 16, 1979.

Existing Construction means, for the purposes of floodplain management, structures for which “the start of construction” commenced before the date of the initial Flood Insurance Rate Map (FIRM). Existing construction, means for the purposes of determining rates, structures for which the “start of construction” commenced before April 16, 1979, the effective date of the City’s first FIRM. This term may also be referred to as “existing structures”.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets) in an existing manufactured home park or subdivision beyond those that had been completed prior to April 16, 1979.

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

- (1) The overflow of inland or tidal waters; or

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

It also means the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this section.

Flood hazard boundary map (FHBM) means the official map of the city, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as zones AE and VE.

Flood insurance rate map (FIRM) means the official map of the city on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and risk premium zones applicable to the community.

Flood insurance study (FIS) means the official report in which the Federal Emergency Management Agency has provided flood profiles, as well as the flood hazard boundary floodway map and the water surface elevation of the base flood. ~~(Also known as flood elevation study.)~~

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to properties and structures which reduce or eliminate flood damage to lands, water and sanitary facilities, structures, and contents of buildings.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. ~~(Also known as regulatory floodway.)~~

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. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding, and ship repair facilities, but does not include long-term storage, manufacture, sales, or service 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 (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary of the Interior to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior in states without approved programs.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of volume 44 of the Code of Federal Regulations, section 60.3, or this chapter, whichever is the more restrictive. Any floor containing:

- (1) A toilet, or similar sanitary plumbing fixture;
- (2) A floor drain; or
- (3) A sink or stationary tub equipped with a floor drain below the base flood elevation; shall be deemed a lowest floor.

Any floor equipped for such uses as kitchen, bathroom, office, dining room, living room, family or recreation room, bedroom, professional studio or commercial occupancy shall be deemed a lowest floor.

Manufactured home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" does not include a "recreational vehicle."

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

Mean sea level is the average height of the sea and means, for purposes of the National Flood Insurance Program, the North American National Geodetic Vertical Datum (NAVD) of 1988 (NGVD) of 1929 is used to establish mean sea level and elevations above and below mean sea level.

New construction means, for the purposes of determining insurance rates, structures for which the start of construction commenced on or after April 16, 1979 and includes any subsequent improvements to such structures. For floodplain management purposes, the term "new construction" means structures for which the start of construction commenced on or after April 16, 1979 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, either final site grading or pouring of pads and the construction of streets) was completed on or after April 16, 1979.

North American Vertical Datum of 1988 (NAVD) is the vertical control datum established for vertical control surveying in North America. Elevations indicated in National Geodetic Vertical Datum, previously used to administer the National Flood Insurance Program, can be converted to this different datum. For information regarding conversion between the national Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov>.

Recreational vehicle means the same as provided in F.S. § 320.01. However, the terms "temporary living quarters" and "seasonal or temporary living quarters" as used in F.S. § 320.01 shall, in reference to recreational vehicles placed in recreational vehicle parks, relate to the period of time the recreational vehicle is occupied as a living quarter during each year and not to the period of time it is located in the recreational vehicle park

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

Screen room means an accessory structure adjacent to, but not permanently attached to, a manufactured home or recreational vehicle. The screen room may have a floor and a roof but must be open on the side adjacent to the manufactured home or recreational vehicle. The other sides may be enclosed but only with screening material, except for the area below 30 inches above the floor. Aluminum or vinyl encasements for window enclosures may be added to the screen portion of the accessory structure.

Special flood hazard area means an area having special flood hazards, and shown on the FIRM as zones AE 1-30 or VE 1-30. All of the City of Sanibel in a Special Flood Hazard Area.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 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 improvement was within 180 days of the permit date. The actual start means either 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 the manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as 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 (not including swimming pools), that is principally above ground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure, including damage from demolition in connection with any reconstruction, rehabilitation, addition or other improvement of the 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.

Substantial improvement means any repair, reconstruction, rehabilitation, addition or other improvement, or combination or accumulation of any repair, reconstruction, rehabilitation, addition or other improvement of a structure, taking place since February 16, 1988, in which the cumulative cost of the improvements equals or exceeds 50 percent of the market value of the structure at the time of the application. The accumulation of costs shall be for the five-year period immediately preceding the date of the application ~~or February 16, 1988, whichever is the most recent~~. For structures which have sustained damage, including substantial damage, the value shall be determined as of the time immediately before the damage occurred. As a further limitation, the term "substantial improvement" means and includes any addition, or combination or accumulation of additions, to a structure, taking place since September 18, 1990, which increases the floor area of a structure by 50 percent or more over the floor area of the structure on September 18, 1990, ~~or the beginning of the five-year period immediately preceding the application, whichever is more recent~~, regardless of cost. Notwithstanding anything to the contrary, however, where the start of construction has preceded the filing of the application, the date for determining accumulation of costs and for determining value shall be the date immediately preceding the start of construction.

Violation means the failure of a structure or other development to be fully compliant with the requirements of this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this

ordinance is presumed to be in violation until such time as that documentation is provided.

SECTION 3. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article I In General, Section 94-2 Applicability, is hereby amended with underlining indicating additions and ~~striketroughs~~ indicating deletions, as follows:

Section 94-2. Applicability.

All development shall be in conformance with the floodproofing and stormproofing standards set forth in this chapter. Conformance with these flood regulations shall be reviewed and assured during the issuance of development and building permits for all buildings proposed for development in the City of Sanibel. Applications that include plans that fail to demonstrate conformance with these flood regulations shall result in the denial of the application. Construction of buildings that do not follow approved plans, including failure to conform with these flood regulations and procedures, are subject to the provisions for violations and penalties contained in the Sanibel Code of Ordinances, including Section 94-31 Administration of development and building permits, in article II of this chapter.

SECTION 4. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article I In General, Section 94-3 Exclusion regarding substantial improvement, is not amended and continues to read as follows:

Section 94-3. Exclusion regarding substantial improvement.

- (a) 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 assure safe living conditions; or

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

(b) In determining the market value of a structure, recognized standards and methods of appraisal shall be used. For purposes of determining the cost of the improvement, the greater of the following shall be used:

- (1) Good faith estimates of costs certified by a licensed professional;
- (2) Actual costs as evidenced by a contract or group of contracts, certified by a licensed professional; or
- (3) An estimate of costs based upon the prevailing costs in the city for similar construction.

(c) In any event, the costs shall include, without limitation, labor, materials, overhead, profit and demolition costs.

(d) The city manager shall have the authority to verify and to determine the costs.

(e) Further, for purposes of this section, market value shall be determined as follows:

(1) The city manager shall have the authority to require the owner or applicant to provide an appraisal report containing an opinion as to market value of the structure, as defined in subsection (b) of this section, in any case where the reconstruction, rehabilitation, addition or other improvements exceed \$5,000.00 and where he determines that a good faith question exists as to whether the proposed reconstruction, rehabilitation, addition, or combination or accumulation of the proposed reconstruction, rehabilitation, addition or other improvement qualify as a substantial improvement as defined in this chapter. Cost of the appraisal shall be borne by the owner or applicant.

(2) Where an appraisal report is required, it shall be prepared by a qualified appraiser, holding membership in a recognized appraisal organization, or certified under state law, conducting the appraisal within his area of designation, and conducting the appraisal in accordance with generally recognized standards and methods of appraisal. The appraisal report shall exhibit that the requirements of this section have been met.

- (3) Upon submittal by the owner or applicant of the appraisal report, the city manager shall have the authority to have the appraisal report reviewed by a qualified appraiser or to have an appraisal conducted by a qualified appraiser. The cost of this appraisal review or appraisal shall be borne by the city.

SECTION 5. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article I In General, Section 94-4 Regulations adopted, is hereby amended with underlining indicating additions and ~~strikethroughs~~ indicating deletions, as follows:

Section 94-4. Regulations adopted.

(a) The scientific and engineering report entitled "Flood Insurance Study for Lee County, Florida and Incorporated Areas", including the City of Sanibel, Florida," dated August 28, 2008 ~~October 15, 1985~~, with an accompanying Flood Insurance Rate Map s (FIRM) and any other supporting data, designating areas of special flood hazard identified by the Federal Emergency Management Agency, is hereby adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at city hall and available for inspection by the public. The Flood Insurance Rate Map s dated September 29, 1996 ~~adopted on October 15, 1985~~, have ~~has~~ been revised and replaced with a Flood Insurance Rate Map s dated August 28, 2008 ~~September 29, 1996~~, issued by the Federal Emergency Management Agency and identified by Community Panel Numbers 120402-0506F, 120402-0507F, 120402-0508F, 120402-0509F, 120402-0517F, 120402-0530F, 120402-0531F, 120402-0533F, 120402-0534F, 120402-0536F, 120402-0537F and 120402-0541F, 120402-0001E, 120402-0002E, 120402-0003E, 120402-0004E, 120402-0005E, 120402-0006E and 120402-0007E, which are hereby adopted by reference and declared to be a part of this chapter.

(b) The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations, including the FEMA "Flood Insurance Study for Lee County, Florida", dated January 10, 2008. Larger floods can and will occur on rare occasions. Flood heights may be increased by human-made ~~manmade~~ or natural causes. ~~This section does not imply that land outside~~

~~the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages.~~ This chapter shall not create liability on the part of the city, any officer or employee of the city, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made under this chapter, or any amendment to this chapter.

(c) These flood regulations do not impair or remove the requirement to comply with applicable laws and regulations, including complying with additional flood regulations such as those in the State's Coastal Construction Program that are administered through the Florida Building Code.

SECTION 6. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article II Administration, Section 94-31 Development permits, is hereby amended with underlining indicating additions and ~~striketroughs~~ indicating deletions, as follows:

Section 94-31. Administration of development and building permits.

The city manager is hereby appointed to administer and implement this chapter by granting or denying development permit applications, short form, and making recommendations to the planning commission for all other development permits that involve a question of floodproofing, in accordance with the following:

- (1) Review all development permit applications to determine that the permit requirements of this section have been satisfied.
- (2) Review all development permit applications to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
- (3) Review all development permit applications in the coastal high hazard area to determine if the proposed development alters mangrove stands, sand dunes or other existing features, so as to increase potential flood damage.
- (4) Review plans for walls to be used to enclose space below the base flood level in accordance with subsection 94-52(f) or subsection 95-53(6).

- (5) Notify adjacent communities and the state coordinating agency prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (6) Require that maintenance is provided within the altered or relocated portion of such watercourse so that the flood-carrying capacity is not diminished.
- (7) Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards. A person wishing to contest the interpretation may appeal the interpretation to the planning commission.
- (8) Assure that applications comply with the general and specific standards of article III of this chapter.
- (9) Assure that the developer (permit holder) provides 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. Upon placement of the lowest floor, 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 building official 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 such registered land surveyor or professional engineer. When floodproofing is utilized for a particular building, such certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by such professional engineer or architect. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The building official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed.

Failure to submit the survey or failure to make such corrections required hereby, shall be cause to issue a stop work order for the project.

- (10) Verify and maintain records of the actual elevation (in relation to mean sea level using North American Vertical Datum) of:
- a. The lowest floor;
 - b. The horizontal structural members of the lowest floor; or
 - c. The floodproofed elevation of all new or substantially improved structures.

SECTION 7. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article II Administration, Section 94-32 Contents of application for development permit, is hereby amended with underlining indicating additions and ~~strike-throughs~~ indicating deletions, as follows:

Section 94-32. ~~Contents of~~ Additional application for development permit application requirements.

Each application for a development permit for a building or for alteration of a water course shall contain:

- (1) Elevation, using North American Vertical Datum in relation to mean sea level, of the lowest floor of all new and substantially improved structures;
- (2) Elevation using North American Vertical Datum, in relation to mean sea level, to which any structure has been floodproofed in accordance with subsection 94-52(b);
- (3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in subsection 94-52(b); and
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.

SECTION 8. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article II Administration, Section 94-33 Variances, is not amended and continues to read as follows:

Section 94-33. Variances.

(a) The city manager 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.

(b) Such notification shall be maintained with a record of all variance actions as required in subsection (c) of this section.

(c) The city manager shall:

- (1) Maintain a record of all variance actions, including justification for their issuance; and
- (2) Report such variances issued in its annual or biennial report submitted to FEMA.

SECTION 9. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article III Flood Hazard Reduction Standards, Section 94-51 Areas of Special Flood Hazard, is hereby amended with underlining indicating additions and ~~striketroughs~~ indicating deletions, as follows:

Section 94-51. Areas of special flood hazard.

~~In all areas~~ The City of Sanibel is entirely in a special flood hazard area, and all development is subject to the following provisions ~~are required:~~

- (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral

movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

- (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (3) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (4) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.
- (5) New and replacement wastewater disposal systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- (6) On-site wastewater disposal systems shall be located and constructed to avoid impairment to them or contaminations from them during flooding.
- (7) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions shall be consistent with the need to minimize flood damage.
- (8) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall have public utilities and facilities such as sewer, electrical, gas and water systems located and constructed to minimize or eliminate flood damage.
- (9) All subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall have adequate drainage provided to reduce contribution to and exposure to flood damage.
- ~~(10) Base flood elevation data shall be provided in an application which involves a subdivision proposal or other development which contains either 50 or more lots or five or more acres. However, this requirement shall not apply if the Federal Emergency Management Agency has established base flood elevations for the proposed site.~~
- (10) Accessory structures of the type described below may be exempted from meeting the elevation or floodproofing requirements of this chapter only if the following standards are met:

a. Garages:

1. Shall be securely anchored to resist flotation or lateral movement;
2. Shall not exceed 600 square feet in floor area;
3. Shall comply with the standards of subsection 94-52(f); and if located in a VE zone, or within 500 feet of the Gulf of Mexico, Blind Pass, San Carlos Bay, or Pine Island Sound, shall also comply with the standards of subsection 94-53(6)b for breakaway wall construction;
4. Shall be used exclusively for the parking of vehicles and passive storage;
5. Shall be accessible by driveway from a street;
6. Shall be equipped with garage doors or openings for vehicular access;
7. Shall have all interior wall, floor and ceiling materials located below the base flood elevation unfinished and resistant to flood damage.

b. Storage buildings:

1. Shall be a maximum of 150 square feet in floor area;
2. Shall utilize breakaway wall construction if located in a VE zone;
3. Shall be securely anchored to resist flotation or lateral movement;
4. Shall have openings in its walls in conformance with subsection 94-52(f)(1), if located in an AE zone;
5. Shall be used exclusively for passive storage;
6. Shall have all interior wall, floor and ceiling materials located below the base flood elevation unfinished and resistant to flood damage;
7. Shall have no electrical or other utility connections below the base flood elevation;

8. Shall have no plumbing connections or fixtures.
- c. Screen rooms as accessory structures to manufactured homes and recreational vehicles may be exempted from meeting the elevation or floodproofing only if:
 1. The structure is used exclusively as an accessory use;
 - i. No electrical wiring or outlets are permitted on the structure;
 - ii. No plumbing or plumbing fixtures are permitted on the structure; and
 - iii. No mechanical heating or cooling of the structure is permitted;
 2. The value of the structure does not exceed \$15,750.00 ~~\$10,000.00~~; however, this value limitation is to be adjusted annually so that it is equivalent to the value established here in 2008 ~~1991~~ U.S. dollars;
 3. The structure is self-supporting;
 4. The floor of the structure is elevated at or higher than the floor of the manufactured home or recreational vehicle;
 5. The maximum height of the structure does not exceed the height of the manufactured home or recreational vehicle;
 6. The structure does not extend beyond the front, where the hitch is or was located, or rear of the manufactured home or recreational vehicle;
 7. The total floor area of the structure does not exceed 400 square feet;
 8. The structure is not permanently attached to the manufactured home or recreational vehicle;
 9. The structure is built with materials resistant to flood damage;
 10. Any solid enclosure of the structure does not extend more than 30 inches above the floor; however, aluminum or vinyl

encasements for window enclosures may be added to the screened portion of the structure.

- d. Accessory structures other than garages, storage buildings and screen rooms may be exempted from meeting the elevation or floodproofing requirements only if:
1. The value of the structure is \$7,875.00 ~~\$5,000.00~~ or less; however, this value limitation is to be adjusted annually so that it is equivalent to the value established in 2008 ~~1991~~ U.S. dollars;
 2. The structure is securely anchored to resist flotation or lateral movement;
 3. The structure is built with materials resistant to flood damage;
 4. Another provision of this section does not require the structure to be either elevated or floodproofed.

(11 ~~2~~) The provisions of this section are intended to comply with the requirements and limitations of 44 CFR parts 59 and 60, setting forth the general requirements and land management criteria for the National Flood Insurance Program. Where the provisions of such parts 59 and 60 conflict with the provisions of this chapter, the more precise or restrictive standards shall apply. Further, interpretations and calculations under this section shall be made in accordance with and in furtherance of the regulations, policies, procedures and interpretations set forth in the National Flood Insurance Program.

(12 ~~3~~) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding, except for county electric cooperative meters, provided such meter shall be installed at approximately five feet six inches, above grade, and where an electrical equipment room is provided, the meter shall be installed in the equipment room.

- (13 4) Any alteration, repair, reconstruction or improvement to a structure which is in conformance with the provisions of this land development code, shall meet the requirements of new construction as contained in this land development code.
- (14 5) Manufactured homes that are placed or substantially improved within ~~zones~~ an AE 1-30 zone on-sites:
- a. Outside of a manufactured home park or subdivision;
 - b. In a new manufactured home park or subdivision;
 - c. In an expansion to an existing manufactured home park or subdivision;
- or
- d. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood,
- shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- (15 6) Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within ~~zones~~ an AE 1-30 zone, that are not subject to the provisions of subsection (15) of this section shall be elevated so that either:
- a. The lowest floor of the manufactured home is at or above the base flood elevation; or
 - b. The manufactured home chassis is 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 be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.
- (16 7) Site-built additions to manufactured homes that are elevated above grade in accordance with the requirements of this section are permitted only if the following standards are met:

- a. The addition is 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 be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement;
 - b. The value of the addition does not exceed ~~\$39,375.00~~ 25,000.00; however, the value limitation is to be adjusted annually so that it is equivalent to the value established in 2008 ~~1991~~ U.S. dollars;
 - c. The total floor area of the addition does not exceed 400 square feet; and
 - d. The maximum height of the addition does not exceed the height of the manufactured home.
- (~~17~~ 8) Recreational vehicles placed on-sites within ~~zones~~ an AE 1-30 zone., shall either:
- a. Be on the site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use; or
 - c. Obtain a development permit and meet the elevation and anchoring requirements for manufactured homes in subsection (16) of this section.

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.

- (~~18~~ 9) Site-built additions to recreational vehicles are not permitted.
- (~~19~~ 20) The owner of a manufactured home park or subdivision shall develop a plan for evacuating residents of the manufactured home park or subdivision, and shall have this plan approved by and on file with the city emergency management officials.
- (20) All applicable additional Federal, State and local permits shall be obtained and submitted to the City's Floodplain Administrator. Copies of such permits shall be maintained on file with the development permit. State of Florida permits may include, but are not limited to:

- a. South Florida Water Management District permits, in accordance with Chapter 373.036 Florida Statutes, Section(2)(a) Flood Protection and Floodplain Management;
- b. Department of Community Affairs permits, in accordance with Chapter 380.05 Florida Statutes Areas of Critical State Concern, and Chapter 553, Part IV Florida Statutes., Florida Building Code;
- c. Department of Health permits, in accordance with Chapter 381.0065 Florida Statutes Onsite Sewage Treatment and Disposal Systems; and
- d. Department of Environmental Protection Coastal Construction Control Line permits, in accordance with Chapter 161.053 Florida Statutes Coastal Construction and Excavation.

SECTION 10. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article III Flood Hazard Reduction Standards, Section 94-52 Specific standards, is hereby amended with underlining indicating additions and ~~strikethroughs~~ indicating deletions, as follows:

Section 94-52. Specific standards.

(a) New construction or substantial improvements of any residential structure shall have the lowest floor elevated to or above the base flood elevation designated in the FIRM. Should solid foundation perimeter walls be used to elevate a structure (permitted in an AE zone ~~s~~ only not within 500 feet of San Carlos Bay, Pine Island Sound, Blind Pass or the Gulf of Mexico), openings sufficient to facilitate the unimpeded movement of floodwaters shall be provided in accordance with the standards of subsection (f)(1) of this section. New construction or substantial improvements located in a coastal high hazard area or within 500 feet of San Carlos Bay, Pine Island Sound, Blind Pass or the Gulf of Mexico, shall be developed in compliance with the standards of section 94-53.

(b) New construction and substantial improvements of any commercial or other nonresidential structure within ~~zones~~ an AE 1-30 zone shall either have the lowest floor elevated to or above the level of the base flood elevation, or:

- (1) Together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- (2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy expected for a base flood at that site;
- (3) A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of subsections (b)(1) and (2) of this section; and
- (4) A record of such certificates which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the city manager.

(c) All nonconforming manufactured homes, all new or substantially improved manufactured homes, and all new recreational vehicles that are elevated in accordance with the requirements of subsection 94-51(16), regardless of location, shall be anchored to prevent flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Special requirements shall be that:

- (1) Over-the-top ties must be provided at each of the four corners of the manufactured home, with two additional ties per side at intermediate locations. Manufactured homes less than 50 feet long and recreational vehicles require only one additional tie per side.
- (2) Frame ties must be provided at each corner of the home with five additional ties per side at intermediate points. Manufactured homes less than 50 feet long and recreational vehicles require only four additional ties per side.
- (3) All components of the anchoring system must be capable of withstanding a force of 4,800 pounds.
- (4) Any additions to the manufactured home must be similarly anchored.
- (5) Adequate surface drainage and access for a hauler must be provided.

(d) When fill is used for structural support, such fill shall be adequately sloped and compacted so as to reasonably protect the foundation from washout.

(e) No person shall divide land into lots or parcels if any lot or parcel created by such division would be situated so that:

(1) All or any part of a dwelling unit on such lot or parcel is located or developed seaward of the State's 1991 coastal construction control line; or

(2) All or any part of a dwelling unit on such lot or parcel could only be developed seaward of the State's 1991 coastal construction control line.

(f) New construction or substantial improvements of elevated buildings located in ~~zones~~ an AE 1-30 zone and more than 500 feet from San Carlos Bay, Pine Island Sound, Blind Pass or the Gulf of Mexico that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

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

a. Provide a minimum of two openings 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 entry and exit of floodwaters.

(2) The area below the base flood elevation and under an elevated building shall be usable solely for parking of vehicles, building access or storage.

(3) Electrical, plumbing, and other utility connections and machinery or equipment which service a building such as furnaces, air conditioners, heat pumps, hot water heaters, washers, dryers, elevator lift equipment, electrical junction and circuit breaker boxes, and food freezers are

prohibited below the base flood elevation, except for county electric cooperative meters, provided such meter shall be installed at approximately five feet six inches, above grade, and where an electrical equipment room is provided, the meter shall be installed in the equipment room.

- (4) All construction materials and all interior wall, floor and ceiling materials used or installed below the base flood elevation shall be resistant to flood damage. However, materials and finishings which are necessary to meet fire-resistance codes adopted by the city are permitted.

SECTION 11. The Code of Ordinances of the City of Sanibel, Chapter 94 Floods, Article III Flood Hazard Reduction Standards, Section 94-53 Coastal high hazard area standards, is hereby amended with underlining indicating additions and ~~striketroughs~~ indicating deletions, as follows:

Section 94-53. Coastal high hazard area standards.

Coastal high hazard areas (VE zones) are located within the areas of special flood hazard established pursuant to subsection 94-4(a). These areas, as well as any area within 500 feet of San Carlos Bay, Pine Island Sound, Blind Pass, or the Gulf of Mexico, have special flood hazards associated with high velocity waters from tidal surges and hurricane wave wash; therefore, in such areas, the following provisions, which are in addition to the general and specific standards, shall apply:

- (1) All new construction or substantial improvements except beach walkways shall be located landward of the reach of the mean high tide or the State's 1974 coastal construction control line, whichever is more landward.
- (2) All new construction or substantial improvements shall be elevated on pilings and columns so that the bottom of the lowest horizontal structural member of the lowest floor is elevated to or above the base flood level, with all space below the lowest floor open so as not to impede the flow of water, except for breakaway walls, open lattice work, decorative screening or mesh screening.

- (3) The pile or column foundation and the structure attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state or local building standards.
- (4) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (2) and (3) of this section.
- (5) There shall be no fill used as structural support. Non-compacted fill may be used around the perimeter of a structure for landscaping or aesthetic purposes provided the fill will wash out from storm surge, (thereby rendering the structure free of obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. The city manager shall approve design plans for landscaping or aesthetic fill only after the applicant has demonstrated that the following factors have been fully considered:
 - a. Particle composition of fill material does not have a tendency for excessive natural compaction;
 - b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
 - c. Slope of fill will not cause wave run-up or ramping.

The city manager may require the applicant to furnish an analysis by an engineer, architect, and/or soil scientist that the three factors referenced have been fully considered.

- (6) Space below the lowest floor:
 - a. All new construction or substantial improvements, and any alteration, repair, reconstruction or improvement to a structure started after the adoption of the ordinance from which this chapter is derived shall not enclose the space below the lowest floor unless the enclosure is

constructed with non-supporting breakaway walls, open lattice work, decorative screening, insect screening or mesh screening.

- b. Non-supporting breakaway walls, open lattice work, decorative screening, insect screening or mesh screening shall be allowed below the base flood elevation provided they are not part of the structural support of the building and are designed so as to break away or collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this chapter, a breakaway wall shall have a design safe loading resistance of not less than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 1. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state or local building standards.
- c. In coastal high hazard areas which are within 500 feet of San Carlos Bay, Pine Island Sound, Blind Pass or the Gulf of Mexico, and which are also located in an AE zone ~~s-A1-30~~ (as designated by the FIRM), fully enclosed areas below the base flood elevation formed by nonsupporting breakaway walls shall also be designed to automatically

equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for complying with this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

1. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 2. The bottom of all openings shall be no higher than one foot above grade; and
 3. Openings may be equipped with screens, louvers, valves or other coverings or devices, provided they permit the automatic entry and exit of floodwaters.
- d. Such enclosed space shall not be used or designed for, nor provide facilities for, human habitation, but shall be designed to be usable only for parking of vehicles, building access, or storage. Partitioning of storage areas shall be limited to two separately enclosed areas.
- e. Prior to issuance of a development permit, plans for any breakaway walls must be submitted to the city for approval.
- (7) There shall be no alteration of sand dunes or mangrove stands or other existing features which would increase potential flood damage.
- (8) The placement of manufactured homes and recreational vehicles shall be prohibited in the coastal high hazard area (VE zones), and areas within 500 feet of San Carlos Bay, Pine Island Sound, Blind Pass, or the Gulf of Mexico, except as may be authorized by a temporary use permit.

SECTION 12. The Code of Ordinances of the City of Sanibel, Chapter 82 Administration, Article IV Development Permits, Division 2 Procedure; Subdivision I Generally, Section 82-382 Filing Procedure, is hereby amended with underlining indicating additions and ~~strikethroughs~~ indicating deletions, as follows:

Section 82-382. Filing procedure.

The developer shall file with the city manager, or the manager's ~~his~~ designated representative, a complete application for development permit, made upon forms supplied by the City and containing or accompanied by the following:

...

(7) An up-to-date, (meaning accurately reflecting present conditions), certified survey of the subject parcel bearing the signature and raised seal of a state registered land surveyor or professional engineer. If the land borders or contains an open body of water, the survey must be dated within six months prior to the date the application is filed. The survey must indicate or comply with the following:

a. ...

...

j. Ground elevations (sufficient in number to accurately depict the site contours), referenced to National Geodetic Vertical Datum (NGVD) or 1929 or North American Vertical Datum (NAVD) of 1988. Flood elevations on the Flood Insurance Rate Map are referenced in North American Vertical Datum. These flood elevations must be compared to structure and ground elevations referenced in the same vertical datum. Although a survey may list ground elevations in either or both datum, only North American Vertical Datum can be used to reference ground and structure elevations in relation to Base Flood Elevations.

k. ...

SECTION 13. Codification.

This ordinance shall be an amendment to the Code of Ordinances of the City of Sanibel. Sections 94-1, 94-2, 94-4, 94-31, 94-32, 94-51, 94-52 and 94-53 are hereby amended and a new Section 94-01 is hereby added to Chapter 94 of Subpart B, Part II, Sanibel Code of Ordinances.

SECTION 14. Conflict.

Vote of Council Members:

Denham _____

Ruane _____

Jennings _____

Johnston _____

Pappas _____

Date filed with the City Clerk: _____

RESOLUTION NO. 08-14

**CITY OF SANIBEL
PLANNING COMMISSION**

A RESOLUTION APPROVING AND RECOMMENDING ENACTMENT BY THE CITY COUNCIL OF AN ORDINANCE ADOPTING THE FLOOD INSURANCE STUDY FOR THE CITY OF SANIBEL CONTAINED IN THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S STUDY FOR LEE COUNTY, FLORIDA AND AMENDING THE SANIBEL CODE, PART II LAND DEVELOPMENT CODE; CHAPTER 94 FLOODS, TO ADOPT A NEW FLOOD INSURANCE RATE MAP (FIRM), TO ADD A PURPOSE STATEMENT AND TO UPDATE THE CITY'S FLOODPLAIN MANAGEMENT REGULATIONS AND PROCEDURES CONSISTENT WITH NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS; AND AMENDING CHAPTER 82 ADMINISTRATION; ARTICLE IV DEVELOPMENT PERMITS; DIVISION 2 PROCEDURE; SECTION 82-382 FILING PROCEDURE, TO ALLOW SURVEYS TO INDICATE GROUND ELEVATIONS IN NORTH AMERICAN VERTICAL DATUM (NAVD); PROVIDING FOR CONFLICT AND SEVERANCE; PROVIDING FOR CODIFICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, to continue participation in the National Flood Insurance Program, the City is required to adopt the new FEMA prepared Flood Insurance Rate Map and amend its flood regulations to be consistent with Section 60.3(e) of the National Flood Insurance Program regulations; and

WHEREAS, an application (no. 07-4589 LDC) has been made by the City of Sanibel to adopt the Flood Insurance Study for the City of Sanibel contained in the Federal Emergency Management Agency's Study for Lee County, Florida and the new Flood Insurance Rate Map, as well as to amend its land use regulations to update the City's floodplain management regulations and procedures consistent with National Flood Insurance Program regulations; and

WHEREAS, a public hearing was legally and properly advertised and held on June 24, 2008; and

WHEREAS, the Planning Commission made reference to the *Sanibel Plan* and determined that the proposed amendments to the land development regulations is consistent with the intent and purpose of the *Sanibel Plan*; and

WHEREAS, the Planning Commission determined that the proposed amendment:

- a. Will encourage the most appropriate use of land and City resources, consistent with the public interest;
- b. Will prevent the overcrowding of land and avoid the undue concentration of population;

- c. Will not adversely affect the development of adequate and efficient provisions for transportation, water, sewage, schools, parks, recreation facilities, and the environmental, social and economic resources of the City;
- d. Will not adversely affect the character stability of the present and future land use and development of the community;
- e. Will not adversely affect orderly growth and development;
- f. Will preserve, promote, protect and improve the public health, safety and general welfare of the community; and
- g. Is consistent with the City Charter.

WHEREAS, at the public hearing on June 24, 2008, all Commissioners were present, except for Commissioner Sprankle.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission, that after discussion and review of the proposed ordinance, the Planning Commission recommends that City Council enact the amendment to the Land Development Code as proposed in draft no. 1 of the ordinance (dated 5-27-8), the title of which is provided in this resolution.

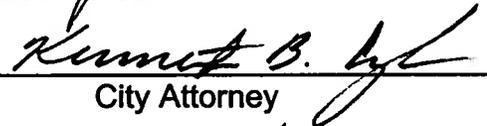
The foregoing Resolution was adopted by the Planning Commission upon a motion by Planning Commission Member David Berger and seconded by Planning Commission Member Tom Krekel, and the vote was as follows:

| | | | |
|---------------|------------|--------------------|----------------|
| David Berger | <u>Yes</u> | Paul Reynolds | <u>Yes</u> |
| Les Forney | <u>Yes</u> | Patricia Sprankle | <u>Excused</u> |
| Thomas Krekel | <u>Yes</u> | Michael Valiquette | <u>Yes</u> |
| Phillip Marks | <u>Yes</u> | | |

DULY PASSED AND ADOPTED this ____ day of _____, 2008.

SANIBEL PLANNING COMMISSION

Signed:  6/24/08
 Chair Person Date Signed

Approved As To Form:  6/18/08
 City Attorney Date Signed

Date Filed with City Manager: 6/24/08



City of Sanibel

Planning Department

STAFF REPORT

Planning Commission Meeting:
Planning Commission Agenda Item:
Application Number
Applicant Name:

June 24, 2008
No. 8b
08-4589LDC
City of Sanibel

RE: Consideration of an ordinance that adopts a new Flood Insurance Rate Map and updates the City's Floodplain Management Regulations and Procedures. The ordinance is entitled:

an ordinance adopting the Flood Insurance Study for the City of Sanibel contained in the Federal Emergency Management Agency's study for Lee County, Florida and amending the Sanibel Code, Part II Land Development Code; Chapter 94 Floods, to adopt a new Flood Insurance Rate Map (FIRM), to add a purpose statement and to update the City's floodplain management regulations and procedures consistent with National Flood Insurance Program regulations; and amending Chapter 82 Administration; Article IV Development Permits; Division 2 Procedure; Section 82-382 Filing Procedure, to allow surveys to indicate ground elevations in North American Vertical Datum (NAVD); Providing for conflict and severance; Providing for codification; and Providing an effective date.

Submitted by the City of Sanibel. Application no. 08-4589LDC.

ISSUES

Is the proposed amendment to the Land Development Code consistent with the intent and purpose of the *Sanibel Plan*?

Is the proposed amendment in accordance with the standards set forth in LDC Section 82-241? These standards are provided in the Procedure Section of this staff report.

BACKGROUND

The City of Sanibel has participated in the National Flood Insurance Program since 1979. That Program designates **all lands in the City of Sanibel in a Special Flood Hazard Area.**

The Flood Insurance Rate Map (FIRM), a minimum requirement for participation in the National Flood Insurance Program, establishes the Base Flood Elevation for construction in flood zones. A Flood Insurance Rate Map, prepared by the Federal Emergency Management Agency (FEMA), was adopted as part of the City's Flood- and Stormproofing Regulations and Floodplain Management Program in 1979. The FIRM was revised by FEMA and adopted by the City in 1985. In 1996, the City adopted a new FIRM, prepared by FEMA, which established "Coastal Barrier Resources System" (where Federal Flood Insurance is not available).

As part of the National Flood Insurance Program, FEMA has prepared a Flood Insurance Study for Lee County, including its incorporated areas. This Flood Insurance Study for Lee County is the first comprehensive review of County flood zones in 22 years and is part of FEMA's nationwide remapping of flood zones.

The City received a copy of the preliminary Flood Insurance Study, and accompanying new Flood Insurance Rate Map, in August 2006. FEMA held a local, public open house in October 2006 to present and discuss the preliminary maps. Also in October 2006, City Council authorized and submitted an Appeal to Flood Zone Designations for the City of Sanibel, based on this available technical data and scientific analysis of the application of the Study's methodology.

FEMA has now released its final revisions for the preliminary Flood Insurance Rate Map to the City of Sanibel. This final update was based in part on the City's appeal of the preliminary July 2006 re-mapping of the FIRM.

The City has been notified by FEMA that the agency has determined that **the Base Flood Elevations for the City of Sanibel are considered final.** FEMA has also declared that the modified Base Flood Elevations, as presented on the map panels for the **new Flood Insurance Rate Map, are effective as of August 28, 2008.**

The City has received a letter from David I. Maurstad, Assistant Administrator, Mitigation Directorate, Federal Emergency Management Agency, stressing the need for the City to comply with mandatory program requirements in order to avoid suspension from the National Flood Insurance Program.

PROPOSAL

The Planning Department has prepared revisions to the City's current Flood Regulations. In summary, these amendments to the Land Development Code:

Revise definitions, such as reflecting that *mean sea level* is to be based on North American Vertical Datum (NAVD)

Correct references to new flood Zones, now that A-Zones are AE-Zones and V-Zones are VE-Zones

Adopt, and update references, to the Flood Insurance Study (FIS) and the new Flood Insurance Rate Map (FIRM)

Amend regulations, as required, to comply with the standards of *Section 60.3(e) of the National Flood Insurance Program*

A copy of the draft ordinance (no. 08-4589LDC - draft 1) is provided with this staff report as **Attachment A**. Note that Section 94-4 adopts the new Flood Insurance Rate Map with new Base Flood Elevations.

ANALYSIS

In 2005, the City hired a qualified coastal engineer, Tomasello Consulting Engineers, Inc. (TCE) to evaluate the draft Flood Insurance Study prepared by FEMA. The City's review of the technical data that is the basis for the flood hazard information shown on the preliminary FEMA-proposed Flood Insurance Rate Map identified available data more appropriate for the Sanibel portion of the study and suggested modifications to the application of the Study's methodology.

The City's appeal and recommendations to FEMA better reflect the South Florida Water Management District's (SFWMD) still water elevations and apply the Coastal Hazard Analysis and Modeling Program (CHAMP)/Wave Height Analysis Flood Insurance Study (WHAFIS) methods as described in the programs most up-to-date input descriptions.

On October 3, 2006, City Council authorized and submitted an Appeal to Flood Zone Designations for the City of Sanibel, based on this available technical data and scientific analysis of the application of the Study's methodology. On October 31, 2006, the City was notified by FEMA that the City's appeal had been received.

On November 3, 2006, the Federal Emergency Management Agency (FEMA) published its "Proposed Base Flood Elevation Determination for Various Communities in Lee County, Florida" in the Fort Myers NewPress (Classified Marketplace). This notice started the appeal period.

On October 17, 2007, the City (through TCE) was notified by FEMA (through its consultant – Dewberry Associates) that revisions were being made to the proposed new FIRM taking into account the City's appeal. In general, FEMA applied the bay side still water elevations as the City recommended in its appeal; however, FEMA continued to apply open coast still water flood elevations (storm surge and setup) from the open coast shoreline to the back side of the primary dune.

On November 20, 2007, the Planning Department informed FEMA's consultant that applying open coast surge (without setup) at points along the transect, considerably inland of the coast, is not justified and that the City continues to appeal that the open coast surge be reduced across the island to the computed bayside still water elevations.

On December 1, 2007, FEMA (through its consultant) addressed the City's continued appeal with this response.

"Thanks for your comments and clarifying your concerns. As you have mentioned in your email the open coast still water elevation in the revised preliminary analyses is consistent with the SFWMD report and your recommendations. Sanibel Island transects are based on picking the logical break points of the open coast SWEL considering the information submitted, topo and engineering interpretation of the SWEL data. From the submitted SFWMD reported SWELs and the identified SWEL in the grid cells, the back bay elevations are not reached for several thousand feet from the coastline. Most of the inland SFWMD grid cells submitted do not provide surge elevations over Sanibel. Because the coastal area in Sanibel is low land, the "dune" is overtopped by 100yr SWEL, as a result the SWEL will not drop dramatically after the "dune". This situation does not apply to wave set up, since most of the wave energy will be dissipated close to the shoreline. So, the open coast SWEL is kept constant, then transitions to the adopted back bay SWEL. The open coast SWEL + Wave Setup was carried till the dune or dune like profile (about 100' to 400'), then wave setup begins to drop until 1000' to 1500', standard FEMA guidance recommends dropping wave setup at a rate of 1' every 1000', then the open coast SWEL is carried to a logical breaking point based on a geographical feature (topo and land characteristics) and the provided SWEL data. Except for modeled transects 22 and 23, the open coast SWEL only carries inland at most to 1500'. Open coast SWEL on modeled transects 22 and 23 goes further inland due to their being near the low lying inlet.

I hope this helps to explain how the open coast SWEL was carried overland."

Essentially, the FEMA consultant is stating that FEMA's Study methodology has changed since the City performed its initial analysis of FEMA Flood Insurance Study.

The City's 2007 Annual Progress Report on the 2005 Comprehensive Floodplain Management Plan contains the following recommendation.

Continue the regulatory, flood damage reduction, surface water management, public information, communication, flood warning, and program assistance activities in the Floodplain Management Plan that have earned the City its Community Ratings Service (CRS) rating.

This upcoming year, focus efforts on the review, finalization and implementation of the new Flood Insurance Rate Map (FIRM). In the review process for a new FIRM, review adequacy of the City's Flood- and Storm-proofing regulations (Chapter 94 of the Land Development Code).

The Flood Insurance Rate Map establishes the Base Flood Elevation for construction in flood zones and is a minimum requirement for participation in the National Flood Insurance Program.

City Flood regulations currently do and will continue to require that the lowest habitable floor of all new buildings or substantial improvements to nonconforming buildings to be elevated to or above the Base Flood Elevation. For nonresidential buildings, the City currently allows and will continue to allow buildings to be flood-proofed and requires that

those buildings to be flood-proofed to or above an elevation that is 1-foot higher than the base flood elevation.

A copy of the new Flood Insurance Rate Map has been provided by FEMA and is available for inspection in the Planning Department. This copy of the new FIRM will be available at the June 24th public hearing. In addition, the Planning Department is preparing an illustrative reproducible copy of the August 28, 2008 Flood Insurance Rate Map that provides easy reference of flood zones to specific parcels of land. This copy of the new FIRM uses the flood zones and geographical references provided on the "Official FEMA FIRM" as well as the property lines from the Lee County Property Appraiser's Office. A copy of this draft map will also be available at the June 24th public hearing.

The new Flood Insurance Rate Map changes the scale used for determining the Base Flood Elevation. The currently adopted FIRM expresses elevations in NGVD (National Geodetic Vertical Datum). **The proposed new FIRM expresses elevation in NAVD (North American Vertical Datum)**

On Sanibel, measurements using NAVD to determine elevations are generally 1.2 feet higher than measurements of elevation using NGVD. For example, a Base Flood Elevation (BFE) of 10 feet NAVD is generally equivalent to 11.2 feet NGVD.

On a related matter, it is important that flood elevations for a building be compared to ground elevations referenced to the same vertical datum. Therefore, this proposed amendment also allows surveys to indicate ground elevations in North American Vertical Datum (Section 82-382).

The proposed amendment to the City's flood regulations includes the addition of a purpose statement. This section was added and other sections of the City's flood regulations were revised in order to update and clarify these flood regulations and to address the requirements of *Section 60.3(e) of the National Flood Insurance Program*.

SUMMARY

In order to continue participation in the National Flood Insurance Program, the City needs to adopt the "Flood Insurance Study of Lee County, Florida and Incorporated Areas", including the City of Sanibel, date January 10, 2008, with the accompanying Flood Insurance Rate Map before August 28, 2008.

PROCEDURE

The Planning Commission may recommend to the City Council amendments to regulations of the Land Development Code, in accordance with the standards set forth in LDC Section 82-241.

- (1) The Planning Commission shall make reference to the Sanibel Plan to determine if the proposed amendment to the land development regulations is consistent with the intent and purpose of the Sanibel Plan.*

(2) The Planning Commission shall determine whether the proposed amendment:

- a. Will encourage the most appropriate use of land and City resources, consistent with the public interest;*
- b. Will prevent the overcrowding of land and avoid the undue concentration of population;*
- c. Will adversely affect the development of adequate and efficient provisions for transportation, water, sewage, schools, parks, recreation facilities, and the environmental, social and economic resources of the city;*
- d. Will adversely affect the character and stability of the present and future land use and development of the community;*
- e. Will adversely affect orderly growth and development;*
- f. Will preserve, promote, protect and improve the public health, safety and general welfare of the community; and*
- g. Is consistent with the City Charter.*

The proposed amendments to the flood regulations in the Land Development Code are important to the community and it is also important that these amendments be adopted prior to August 28, 2008, for the City to continue participation in the National Flood Insurance Program.

RECOMMENDATION

The Planning Department supports the proposed amendments to the City's flood regulations as contained in the draft ordinance (draft 1 – 5-27-8) and recommends its approval.

ATTACHMENT

Draft Ordinance (draft 1 – 5-27-8)

CHANGES RECOMMENDED BY FEMA TO THE PENDING FLOOD REGULATIONS ORDINANCE

On July 1, 2008, the Planning Department received recommendations from FEMA for revisions to the City's pending flood regulations ordinance.

These recommended revisions are identified in blue type on the pending ordinance (No. 08-4589LDC - Draft 2 – 7-3-8).

In summary, these revisions included

1. Adding or changing definitions for the following terms (Sec 94-1):
 - Base Flood Elevation
 - Development
 - Existing Construction
 - Violation

2. Changing the date to the referenced scientific and engineering report entitled "Flood Insurance Study for Lee County, Florida and Incorporated Areas", including the City of Sanibel, Florida," to August 28, 2008 (Sec. 94-4).

3. Adding the following provision (Sec 94-51) that all development is subject to:
 - (20) All applicable additional Federal, State and local permits shall be obtained and submitted to the City's Floodplain Administrator. Copies of such permits shall be maintained on file with the development permit. State of Florida permits may include, but are not limited to:
 - a. South Florida Water Management District permits, in accordance with *Chapter 373.036 Florida Statutes, Section(2)(a) Flood Protection and Floodplain Management*;
 - b. Department of Community Affairs permits, in accordance with *Chapter 380.05 Florida Statutes Areas of Critical State Concern, and Chapter 553, Part IV Florida Statutes., Florida Building Code*;
 - c. Department of Health permits, in accordance with *Chapter 381.0065 Florida Statutes Onsite Sewage Treatment and Disposal Systems*; and
 - d. Department of Environmental Protection Coastal Construction Control Line permits, in accordance with *Chapter 161.053 Florida Statutes Coastal Construction and Excavation*.



City of Sanibel
Planning Department

MEMORANDUM

DATE: July 8, 2008

TO: City Council

FROM: Robert J. Duffy, AICP, Planning Director

SUBJECT: **REQUESTED COUNCIL ACTION AND SUMMARY OF PACKET MATERIALS FOR CONSIDERATION OF AMENDMENTS TO THE CITY'S FLOOD REGULATIONS**

Requested Action by City Council

At the public hearing for consideration of amendments to the City's Floodplain Management Regulations and Procedures, the **City Council is requested to enact an ordinance that:**

Adopts the August 28, 2008 Flood Insurance Study for the City of Sanibel contained in the Federal Emergency Management Agency's study for Lee County, Florida

Adopts the August 28, 2008 Flood Insurance Rate Map (FIRM) for the City

Amends the Sanibel Code, Part II Land Development Code; **Chapter 94 Floods**, to add a purpose statement and to update the City's floodplain management regulations and procedures consistent with National Flood Insurance Program regulations

The scheduled date for City Council's second reading and public hearing on the proposed amendments to the City's Floodplain Management Program, including adoption of FEMA's Flood Insurance Study and new Flood Insurance Rate Map is August 19, 2008.

For the City to remain compliant with the National Flood Insurance Program, the **new FIRM has to become effective as of August 28, 2008** and the City's Flood Regulations must be compliant with mandatory National Flood Insurance Program requirements.

A summary of the timetable for the City's participation in the National Flood Insurance Program is provided with the packet materials for this ordinance. The contents of the packet materials are summarized on page two of this memorandum.

Summary of Packet Materials

1. **Copy of the proposed ordinance** (appl. no. 08-4589LDC – Draft 2 – 7-3-8), that includes changes recommended by the Federal Emergency Management Agency. A one page summary of those recommended changes is provided with the ordinance. FEMA recommended changes are highlighted in **blue type** in the draft ordinance.
2. **Copy of Planning Commission Resolution no. 08-14** recommending adoption of the ordinance.
3. **Copy of the Planning Department Staff Report**, dated June 24, 2008.
4. A summary of the **Timeframe for the City's Participation in the National Flood Program**