Staff Report to the St. Petersburg Development Review Commission
Prepared by the Planning & Development Services Department,
Construction Services and Permitting Division

For Public Hearing Review on Wednesday, January 6, 2021
at 2 p.m. in the Council Chambers, City Hall
175 – 5th Street North, St. Petersburg, Florida 33701

City File: LDR 2021-01

Floodplain Management Ordinance

This is a City-initiated application requesting that the Development Review Commission (DRC), in its capacity as the Land Development Regulations Commission (LDRC), make a finding of consistency with the Comprehensive Plan and recommend to City Council **APPROVAL** of the following text amendments to the City Code, Chapter 16, Land Development Regulations (LDRs) pertaining to Floodplain Management.

APPLICANT INFORMATION

APPLICANT: City of St. Petersburg
175 5th Street North
St. Petersburg, Florida 33712

STAFF CONTACT: Scott Crawford, CBO, CFM, Floodplain Administrator and Deputy Building Official and Noah Taylor, CFM, Planner III
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Planning and Development Services Department
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INTRODUCTION

This application includes text amendments to Chapter 16 relating to the Floodplain Management Ordinance (FPM), to update and comply with the National Flood Insurance Program (NFIP) based on the State Department of Emergency Management (DEM) model ordinance, to incorporate policy driven inspection and plan review requirements, and to promote consistency.

The National Flood Insurance Program (NFIP) is a program run by the Federal Emergency Management Agency (FEMA). It was established in 1968 to provide federally supported (subsidized) flood insurance for properties with significant flood risk. In return, supported communities must meet minimum flood plain management standards. Risk areas are designated and mapped by FEMA with their Flood Insurance Rate Maps (FIRMs). Depicted on the maps are special Flood Hazard Areas (SFHAs). These are areas with a 1% or greater risk of annual flooding. As maps are updated communities must adopt them and enact minimum standards to regulate development in flood designated areas. If a community does not adopt their FIRMs or does not maintain their standards they can be put on probation or suspended from the Program. If a community does not participate with the NFIP, properties within those boundaries cannot purchase reduced rate flood insurance. Individuals in these areas can also face challenges receiving federal disaster assistance in flood hazard areas, or in receiving federally backed mortgages. The minimum standards are intended to:

- Constrict the development of land which is exposed to flood damage where appropriate.
- Guide the development of proposed construction away from locations which are threatened by flood hazards.
- Assist in reducing damage caused by floods.
- Otherwise improve the long-range land management and use of flood-prone areas

Overall, the program reduces the socio-economic impact of disasters by promoting the purchase and retention of Risk Insurance in general, and National Flood Insurance in particular.

The ordinance that will be presented to City Council will include a companion amendment to Chapter 8, (Building Code), adopting local technical amendments, to comply with the NFIP's Community Rating System (CRS) Section 211 new requirements for reducing flood insurance premiums. All structures within a community will be required to comply with the freeboard elevation requirements (including mobile homes) as a Class 8 pre-requisite.

The National Flood Insurance Program (NFIP) implemented the Community Rating System (CRS) as a voluntary program that encourages and rewards floodplain management. Communities can participate by implementing local mitigation strategies, floodplain management, and outreach activities. The three main objectives are to reduce flood damage to insured property, strengthen and support the insurance aspects of NFIP, and encourage a comprehensive approach to floodplain management. There are nine class ratings, and for every class improvement, the community produces a 5-percent increased discount on their flood insurance premiums. CRS Credit is awarded to communities for any of 19 creditable activities within the public information, mapping and regulations, flood damage reduction, and warning and response categories.

The City of St. Petersburg is currently rated as a Class 5 community, with a 25% discount to all flood insurance premiums within the Special Flood Hazard Area (SFHA), which results in a savings of over 10 million dollars a year to those paying flood insurance. New requirements from the CRS program starting in January 2021 will require that all buildings, including mobile homes, be elevated above the Base Flood Elevation (BFE). Failure to adopt the new requirement will result in a reclassification from the current Class 5 back to a Class 9, and the current 25% discount will be eliminated. The other option to increasing the BFE for mobile homes would be to prohibit all together any new manufactured or mobile homes in flood zones.

PROPOSED LDR TEXT AMENDMENT

The proposed amendments to the LDRs are shown as specific text changes, in the Strike-through/Underline format, in the attached exhibit and relate to:

Administrative, technical amendments and clarification of specific sections of the LDR include:

- Determination of cost of improvements,
- Mitigation of substantially damaged or substantially improved structures,
- Structures with existing health, sanitary or safety violations,
- Fill and grade elevations,
- New flood zones (Coastal A Zones),
- Affidavit and private provider inspections,
- Elevation and floodproofing certifications,
- Non-conversion agreements,
- Protection of sand dunes and mangrove stands,
- Requirement for all structures (including mobile homes) to meet the elevation requirements, storage tanks, accessory and agricultural structures.

CONSISTENCY with the COMPREHENSIVE PLAN

Pursuant to Section 16.80.020.1 of the City Code of Ordinances, the DRC, acting as the LDRC, is responsible for reviewing and making a recommendation to the City Council on all proposed amendments to the LDRs. The following objectives and policies from the City's Comprehensive Plan are applicable to the proposed Land Development Regulations amendment:

OBJECTIVE LU21: The City shall, on an ongoing basis, review and consider for adoption, amendments to existing or new innovative land development regulations that can provide additional incentives for the achievement of Comprehensive Plan Objectives.

OBJECTIVE CM11: The City will reduce natural hazard impacts through compliance with FEMA regulations, participation in NFIP's Community Rating System (CRS) and by targeting repetitive flood loss and vulnerable properties for mitigation.

OBJECTIVE C1:
The City of St. Petersburg shall attempt to reduce the potential for property damage and safety hazards caused by storm flooding through complying with or exceeding of minimum FEMA regulations.

C1.1 The City will actively enforce minimum building standards identified in the Florida Building Code and Land Development Regulations for construction within the 100-year flood plain.

C1.2 The City will cooperate with the Federal Emergency Management Agency to regularly update the 100-year flood plain and to continue FEMA regulations.

OBJECTIVE CM11:
The City will reduce natural hazard impacts through compliance with FEMA regulations, participation in NFIP's Community Rating System (CRS) and by targeting repetitive flood loss and vulnerable properties for mitigation.

CM11.9 The City shall continue to participate in the Federal Emergency Management Agency's National Flood Insurance Program and Community Rating System in order to achieve higher flood insurance premium discounts.

CM11.14 In order to reduce flood risk resulting from or associated with high-tide events, storm surge, flash floods, stormwater runoff and the impacts related to sea-level rise, the City shall continue to promote the use of the development and redevelopment principles, strategies and engineering solutions contained in the Florida Building Code and the Land Development Regulations.

CM11.15 Through implementation of the Land Development Regulations, the City will continue to be consistent with, and in some instances more stringent than, the flood-resistant construction requirements in the Florida Building Code and federal flood plain management regulations.

PUBLIC COMMENTS

Amendments related to Mobile Home design standards were presented to the HERS committee on 12-12-19, a meeting was held at Americana Cove on 2-12-20, and a notice package was sent to Pinewood Mobile Village in July 2020. The proposed amendments were distributed to CONA, neighborhood and business associations in December 2020.

PUBLIC HEARING PROCESS

The proposed ordinance associated with the LDR text amendment requires one (1) public hearing before the Development Review Commission (DRC) and one (2) City Council public hearing. The City Council first reading is tentatively scheduled for February 4, 2021.

RECOMMENDATION

Staff recommends that the Development Review Commission, in its capacity as the Land Development Regulation Commission, make a finding of consistency with the Comprehensive Plan and recommend to City Council **APPROVAL** of the City Code, Chapter 16 LDR text amendments.

List of Attachments:
Proposed FPM amendments

City of St. Petersburg
Housing Affordability Impact Statement

Each year, the City of St. Petersburg receives approximately $2 million in State Housing Initiative Partnership (SHIP) funds for its affordable housing programs. To receive these funds, the City is required to maintain an ongoing process for review of local policies, ordinances, resolutions, and plan provisions that *increase the cost of housing construction, or of housing redevelopment,* and to establish a tracking system to estimate the cumulative cost per housing unit from these actions for the period July 1– June 30 annually. This form should be attached to all policies, ordinances, resolutions, and plan provisions which increase housing costs, and a copy of the completed form should be provided to the City's Housing and Community Development Department.

I. **Initiating Department:** Planning & Development Services Development

II. **Policy, Procedure, Regulation, or Comprehensive Plan Amendment Under Consideration for adoption by Ordinance or Resolution:**

See attached amendment to Chapter 16 and Chapter 12, City Code of Ordinances (City File LDR 2021-01).

III. **Impact Analysis:**

A. Will the proposed policy, procedure, regulation, or plan amendment, (being adopted by ordinance or resolution) increase the cost of housing development? (i.e. more landscaping, larger lot sizes, increase fees, require more infrastructure costs up front, etc.)

No _ (No further explanation required.)
Yes X Explanation: It is estimated that the ordinance change will increase mobile home costs $5,000 - $10,000 depending on size.

If Yes, the **per unit cost increase** associated with this proposed policy change is estimated to be: $5,000 - $10,000 depending on the size of the mobile home.

B. Will the proposed policy, procedure, regulation, plan amendment, etc. increase the time needed for housing development approvals?

No X (No further explanation required)
Yes _ Explanation:

IV: Certification

It is important that new local laws which could counteract or negate local, state and federal reforms and incentives created for the housing construction industry receive due consideration. If the adoption of the proposed regulation is imperative to protect the public health, safety and welfare, and therefore its public purpose outweighs the need to continue the community's ability to provide affordable housing, please explain below:

CHECK ONE:

☐ The proposed regulation, policy, procedure, or comprehensive plan amendment will **not** result in an increase to the cost of housing development or redevelopment in the City of St. Petersburg and no further action is required. (Please attach this Impact Statement to City Council Material, and provide a copy to Housing and Community Development department.)

_____ _____

Director, Planning & Development Services (signature) Date

OR

☒ The proposed regulation, policy, procedure, or comprehensive plan amendment being proposed by resolution or ordinance *will increase housing costs* in the City of St. Petersburg. (Please attach this Impact Statement to City Council Material, and provide a copy to Housing and Community Development department.)

/s/ Elizabeth Abernethy December 30, 2020

Director, Planning & Development Services (signature) Date

Copies to: City Clerk
Joshua A. Johnson, Director, Housing and Community Development

SECTION 16.40.050. - FLOODPLAIN MANAGEMENT

16.40.050.1. - Generally.

16.40.050.1.1. - Title.

These regulations shall be known as the Floodplain Management Ordinance of the City of St. Petersburg, Florida, hereinafter referred to as "this section."

16.40.050.1.2. Scope. The provisions of this section shall apply to all development that is wholly within or partially within any flood hazard area, unless otherwise specified, including but not limited to the subdivision of land; filling, grading, and other site improvements and utility installations; construction, alteration, remodeling, enlargement, improvement, replacement, repair, relocation or demolition of buildings, structures, and facilities that are exempt from the Florida Building Code; placement, installation, or replacement of manufactured homes and manufactured buildings; installation or replacement of tanks; placement of recreational vehicles; installation of swimming pools; and any other development. This ordinance also applies to properties outside of flood hazard areas for the purpose of establishing minimum floor elevations.

16.40.050.1.3. Intent and Purpose.

The purpose of this section and the flood load and flood resistant design and construction requirements of the Florida Building Code and ASCE-24 are to establish minimum requirements to safeguard the public health, safety, and general welfare and to minimize public and private losses due to flooding through regulation of development in flood hazard areas to:

1. Minimize unnecessary or prolonged disruption of commerce, access and public service during times of flooding;
2. Require the use of appropriate practices, at the time of initial construction, in order to prevent or minimize future flood damage;
3. Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
4. Manage the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
5. Minimize damage to public and private facilities and utilities, ~~such as~~ including but not limited to water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
6. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas in such a manner as to minimize future flood blight areas;
7. Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events;
8. Meet the requirements of the National Flood Insurance Program for community participation as set forth in the Title 44 Code of Federal Regulations, Section 59.22;
9. Protect human life and health;
10. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
11. Ensure that property owners are notified yearly the property is in a flood prone area;
12. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities; and
13. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

16.40.050.1.4. Findings of fact.
1. The flood hazard areas of the City are subject to periodic inundation which results in loss of life; loss of property; health and safety hazards; disruption of commerce and governmental services; extraordinary public expenditure for flood protection and relief; and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
2. These flood losses are caused by the cumulative effect of obstructions in floodplains, causing increases in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods or hazardous to other lands, which are inadequately elevated, floodproofed or otherwise protected from flood damage.

16.40.050.1.5. Coordination with the Florida Building Code. This section is intended to be administered and enforced in conjunction with the Florida Building Code. Where cited, ASCE 24 and ASCE 7 refers to the edition of the standard that is referenced by the Florida Building Code.

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

16.40.050.1.7. Disclaimer of Liability. This section shall not create liability on the part of the City, its officers, agents, elected or appointed officials or employees thereof for any flood damage that results from reliance on this section or any administrative decision lawfully made thereunder.

16.40.050.2. APPLICABILITY.

16.40.050.2.1. Conflict. Where there is a conflict between a general requirement and a specific requirement in this section, the specific requirement shall be applicable. Where the requirements of this section and another law, code or regulation conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

16.40.050.2.2. Areas to which this section applies. This section shall apply to all flood hazard areas within the City as established in 16.40.050.2.3.

16.40.050.2.3. Basis for establishing flood hazard areas. The Flood Insurance Study for Pinellas County, Florida and Incorporated Areas dated August 18, 2009**,** and all subsequent amendments and revisions, and the accompanying FIRMs, and all subsequent amendments and revisions to such maps, are adopted by reference as a part of this section and shall serve as the minimum basis for establishing flood hazard

areas. Studies and maps that establish flood hazard areas are on file at the Planning and ~~Economic~~ Development Services Department, One 4th Street N, St. Petersburg, FL 33701.

16.40.050.2.4. Submission of additional data to establish flood hazard areas. To establish flood hazard areas and base flood elevations, pursuant to 16.40.050.5. the Building Official may require submission of additional data. Where field surveyed topography prepared by a Florida licensed professional surveyor or digital topography accepted by the City indicates that ground elevations:

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

16.40.050.2.5. Other laws. The provisions of this section shall not be deemed to nullify any provisions of state or federal law.

16.40.050.2.6. Abrogation. This section supersedes any ordinance or City Code in effect for management of development in flood hazard areas. However, it is not intended to repeal or abrogate any existing ordinances or City Codes including but not limited to land development regulations, zoning ordinances, stormwater management regulations, or the Florida Building Code. This section shall not repeal, abrogate, or impair any existing deed restriction, covenant or easement, but any land that is subject to such interests shall also be governed by this section.

16.40.050.2.7. Interpretation. In the interpretation and application of this section, all requirements shall be:

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

16.40.050.3. ADMINISTRATION.

16.40.050.3.1. Designation. The Building Official is designated as the Person Officially Designated (POD) and Floodplain Administrator for the purposes of this section. The Building Official may delegate the performance of certain duties to other employees.

16.40.050.3.2. General. The Building Official is authorized and directed to administer and enforce the provisions of this section. The Building Official shall have the authority to render interpretations of this section consistent with the intent and purpose of this section and may establish policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall not have the effect of waiving requirements specifically provided in this section without the granting of a variance pursuant to this section.

16.40.050.3.3. Applications and permits. The duties of the Building Official shall include, but not be limited to:

1. Review all applications and plans to determine whether proposed new development will be located in flood hazard areas;
2. Review all applications for modification of any existing development in flood hazard areas for compliance with the requirements of this section;
3. Interpret flood hazard area boundaries where such interpretation is necessary to determine the exact location of boundaries and a person contesting the determination shall have the opportunity to appeal the interpretation;
4. When interpretation is needed as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Building Official shall make the necessary interpretation;
5. Provide available flood elevation and flood hazard information;
6. Determine whether additional flood hazard data shall be obtained from other sources or shall be developed by an applicant;
7. Review all applications to determine whether proposed development will be reasonably safe from flooding;
8. Issue floodplain development permits or approvals for development other than buildings and structures that are subject to the Florida Building Code, including buildings, structures and facilities exempt from the Florida Building Code, when compliance with this section is demonstrated, or disapprove the same in the event of noncompliance;
9. Coordinate with and provide comments to the ~~Building~~ Planning and Development Services Department employees to assure that applications, plan reviews, and inspections for buildings and structures in flood hazard areas comply with the applicable provisions of this section;
10. Review all applications for permits to ensure that the permit requirements of this section have been satisfied;
11. Advise applicant that additional federal and state permits may be required and ensure that all required stated and federal permits have been received. The City ~~Building Official~~ shall require that copies of such permits be provided and maintained on file with the City permit.

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

1. Require the applicant to ~~obtain~~ submit a~~n~~ certified, comparative appraisal of the current market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;
2. Compare the cost to perform the improvement or alteration, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, etc., if applicable, to the market value of the building or structure;
3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and
4. Notify the applicant if it is determined that the scope of work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the Florida Building Code and this section is required.

For the purpose of making this determination, the cost to perform the improvements and the cost to perform the repairs shall not be cumulative from project to project. All previously issued permits shall be closed-out or the value of these permits will be included with the value of the current application under review. Costs of improvements and costs of repairs shall include all costs attributed to a project and shall be determined:

1. By submission of a detailed and accurate cost estimate, also known as a FEMA Substantial Improvement/Damage Review Package, when the estimated cost of the project is or has been determined to be greater than 25% of market value of the structure, by the applicant a licensed contractor, provided such estimate includes all work required to complete the work described in the permit application.
2. By submission of a summation, FEMA Substantial Improvement/Damage Review Package, of the prevailing market cost for all materials and labor, at prevailing market rates, including all expenses normally charged or incurred if the work were performed by a contractor (e.g., construction supervision and management, insurance, overhead and profit, demolition, etc.); or
3. By the Building Official if the applicant's submission and supporting data do not, in the opinion of the Building Official, reasonably reflect the actual project cost; alternatively, the Building Official may require submission of another estimate additional information to determine the actual cost. If determined by the Building Official, the Building Official may use (a) the most recent (at the start of construction) square foot valuation data for this area published by the International Code Council. ; or (b) the replacement cost (at the start of construction) identified by a qualified independent appraiser.
4. The minimum cost of improvements or construction value of the project shall also be determined by the City by using the latest edition of the ICC Building Valuation Data Square Foot Construction Costs table in conjunction with the latest edition of the COSP's Policy Statement Concerning Construction Values as per 16.40.050.3.8.

16.04.050.3.4.1 Buildings or structures that have been determined to be substantially damaged or substantially improved:

1. Buildings or structures that have been determined to be substantially damaged shall not be permitted and shall meet the design requirements as per this ordinance and ASCE-24.
2. Projects that are determined to be a substantial improvement before the start of work and before being permitted shall not be permitted.
3. Projects that have been determined to be substantial improvements after the start of work but before or after being permitted shall meet the design requirements as per this ordinance and ASCE-24.

16.40.050.3.5. Modifications of the strict application of the requirements of the Florida Building Code and this ordinance. The Building Official shall review requests that seek approval to modify the strict application of the flood load and flood resistant construction requirements of the Florida Building Code to determine whether such requests require the granting of a variance pursuant to this section.

16.40.050.3.6. Notices and orders. The Building Official shall coordinate with appropriate local agencies for the issuance of all necessary notices or orders to ensure compliance with this section.

16.40.050.3.7. Inspections. The Building Official shall make the required inspections as specified in this section for development that is not subject to the Florida Building Code, including buildings, structures and facilities exempt from the Florida Building Code. The Building Official ~~shall~~ has the authority to inspect flood hazard areas to determine if development is undertaken without issuance of a permit.

16.40.050.3.8. Other duties of the Building Official. The Building Official shall have other duties, including but not limited to:

1. Establish procedures for administering and documenting determinations of substantial improvement and substantial damage made pursuant to 16.40.050.3.4.;
2. Require that applicants proposing alteration of a watercourse notify adjacent communities and the Florida Division of Emergency Management, State Floodplain Management Office, and submit copies of such notifications to FEMA and ensure that the entity responsible for maintenance within the altered or relocated portion of said watercourse is identified so that the flood-carrying capacity is not diminished;
3. Inform an applicant that if the watercourse being altered or relocated is noted as a water/drainage feature on the City's Future Land Use Map, any change to the watercourse would require a Comprehensive Plan amendment to change the map, subject to agency and local government review including the Departments of Economic Opportunity, Environmental Protection, State, Transportation, Tampa Bay Regional Planning Council and Pinellas County;
4. Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the FIRMs if the analyses propose to change base flood elevations, flood hazard area boundaries, or floodway designations. Such submissions shall be made within six (6) months of such data becoming available;
5. Review required design certifications and documentation of elevations specified by this section and the Florida Building Code to determine that such certifications and documentations are complete; and
6. Notify FEMA when the corporate boundaries of the City are modified.

16.40.050.3.9. Floodplain management records. Regardless of any limitation on the period required for retention of public records, the Building Official shall maintain and permanently keep and make available for public inspection all records that are necessary for the administration of this section and the flood resistant construction requirements of the Florida Building Code, including FIRMs; Letters of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations specified by the Florida Building Code and this section; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, in addition to documentation kept by the Zoning Official, including justification for issuance or denial; and records of enforcement actions taken pursuant to this section and the flood resistant construction requirements of the Florida Building Code. These records shall be available for public inspection. at the Planning and ~~Economic~~ Development Services Department~~, One 4th Street N., St. Petersburg, FL 33701~~.

16.40.050.4. PERMITS.

16.40.050.4.1. Permits required. Any applicant who intends to undertake any development activity within the scope of this section, including buildings, structures and facilities exempt from the Florida Building Code, which is wholly within or partially within any flood hazard area shall first make application to the Building Official and shall obtain the required permit(s) and approval(s). Permits shall include a condition that all other applicable City, state or federal permits be obtained before commencement of the permitted development. Issuance of a permit by the City does not in any way create any right on the part of an applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

16.40.050.4.2. Floodplain development permits or approvals. Floodplain development permits or approvals shall be issued pursuant to this section for any development activities not subject to the requirements of the Florida Building Code, including buildings, structures and facilities exempt from the Florida Building Code. Depending on the nature and extent of proposed development that includes a building or structure, the Building Official may determine that a floodplain development permit or approval is required in addition to a building permit.

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

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

16.40.050.4.4. Permit Procedures. To obtain a permit or approval the applicant shall first file an application with the Building Official in writing on a form furnished by the City with any required fee

prior to the start of development. The information provided shall include, but shall not be limited to, the following:

1. Identify and describe the development to be covered by the permit or approval;
2. Describe the land on which the proposed development is to be conducted by legal description, street address or similar description that will readily identify and definitively locate the site;
3. Indicate the use and occupancy for which the proposed development is intended;
4. Be accompanied by a site plan or construction documents as specified in this section;
5. The plans or construction documents must be in duplicate and drawn to scale showing the nature, location, dimensions and elevations of the area in question, existing or proposed structure, fill, storage of materials, drainage facilities and their location;
6. State the valuation of the proposed work;
7. Evidence that the proposed development will fully comply with all the provisions of this section;
8. ~~Base~~ Design flood elevation data for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than 50 lots or five acres, whichever is less;
9. For proposed enclosed areas below the design flood elevation, a signed Declaration of Land Restriction (Non-conversion Agreement); the agreements shall be recorded on the property deed prior to issuance of the Certificate of Occupancy;
10. Be signed by the applicant or the applicant's authorized agent;
11. Give such other data and information as required by the Building Official.

16.40.050.4.4.1 Projects with existing and documented health, sanitary, or safety code violations shall meet all of the following:

1. Conduct a pre-inspection by a City inspector, prior to any work commencing.

2. All existing, documented, health, sanitary, or safety code violations shall be reviewed separately from any additions, alterations, remodeling, renovations, etc. If the construction cost of the separate additions, alterations, remodeling, renovations, etc., is compliant with the 49% Rule, as applicable, and the health, sanitary, or safety code violations are substantiated, the project may be permitted as one project.

3. If the existing and documented health, sanitary, or safety code violations, cited by the Building Official, Fire Marshall, Code Compliance or any local, State or Federal agency or body, are not substantiated, the existing health, sanitary, or safety code violations shall be permitted first, if they are compliant with the 49% Rule, and completed, before any work is started or permits issued for separate additions, alterations, remodeling, renovations, etc.

16.40.050.4.5. Validity of permit or approval. The issuance of a permit pursuant to this section shall not be construed to be a permit for, or approval of, any violation of this section, the Florida Building Code, or any other ordinance or City Code. The issuance of permits based on submitted applications, construction documents, and information shall not prevent the Building Official from requiring the correction of errors and omissions.

16.40.050.4.6. Issuance of permit. The Building Official shall issue a permit if the application fully complies with the provisions of this section, and shall deny the application and refuse to issue a permit if the application does not fully comply with the provisions of this section.

16.40.050.4.7. Expiration. A permit shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. Extensions for periods of not more than ~~180~~ 90 days each shall be requested in writing and justifiable cause shall be demonstrated.

16.40.050.4.8. Suspension or revocation. The Building Official is authorized to suspend or revoke a permit if the permit was issued in error, on the basis of incorrect, inaccurate or incomplete information, or in violation of this section or any other City, state or federal ordinance, regulation or requirement, or if the permitted scope of work has been exceeded.

16.40.050.4.9. Other permits required. Permits shall include a condition that all other applicable City, state or federal permits be obtained before commencement of the permitted development, including but not limited to the following:

1. The Southwest Florida Water Management District; section 373.036, Florida Statutes
2. Florida Department of Health for onsite sewage treatment and disposal systems; section 381.0065, Florida Statutes and Chapter 64E-6, F.A.C.
3. Florida Department of Environmental Protection for construction, reconstruction, changes, or physical activities for shore protection or other activities seaward of the coastal construction control line; section 161.141, Florida Statutes
4. Florida Department of Environmental Protection for activities subject to the Joint Coastal Permit; section 161.055, Florida Statutes.
5. Florida Department of Environmental Protection for activities that affect wetlands and alter surface water flows, in conjunction with the U.S. Army Corps of Engineers; Section 404 of the Clean Water Act.
6. Federal permits and approvals.

16.40.050.5. SITE PLANS AND CONSTRUCTION DOCUMENTS.

16.40.050.5.1. Information for development in flood hazard areas. The site plan or construction documents for any development subject to the requirements of this section shall be drawn to scale and shall include, but is not limited to the following, as applicable to the proposed development:

1. Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevation(s), and ground elevations if necessary for review of the proposed development.
2. Where base flood elevations, or floodway data are not included on the FIRM or in the FIS, they shall be established in accordance with 16.40.050.5.2(2) or (3).
3. Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and the base flood elevations are not included on the FIRM or in the FIS, such elevations shall be established in accordance with 16.40.050.5.2 (1).
4. Location of the proposed activity and proposed structures, and locations of existing buildings and structures.
5. Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
6. Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill areas; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.
7. Existing and proposed alignment of any proposed alteration of a watercourse.
8. The grade elevations on project site plans shall show existing and proposed grade elevations and elevations of existing and proposed structures including retaining walls and swales, etc. The

grade elevations on abutting property lots shall be shown from one (1) to 12 inches from each property line and there shall be a minimum of elevations or shots shown at all corners and two a minimum of three, or as many as deemed necessary, equally spaced elevations between corners. The site plan must show provide positive drainage away from the building site to an approved point of collection that does not create a hazard or drainage problem to neighboring properties. The Building Official or Deputy Building Official may require additional grade elevations if deemed necessary for proper drainage analysis. The authority having jurisdiction may require elevations for additions and swimming pools, etc., in special flood hazard areas if necessary

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

16.40.050.5.2. Information in flood hazard areas without base flood elevations (approximate Zone A, Unnumbered A & AO Zones). Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the Building Official shall:

1. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices.
2. Obtain, review, and provide to applicants base flood elevation and floodway data available from a federal or state agency or other source or require the applicant to obtain and use base flood elevation and floodway data available from a federal or state agency or other source.
3. Where base flood elevation and floodway data are not available from another source, where the available data are deemed by the Floodplain Administrator to not reasonably reflect flooding conditions, or where the available data are known to be scientifically or technically incorrect or otherwise inadequate:
    a. Require the applicant to include base flood elevation data prepared in accordance with currently accepted engineering practices; or
    b. Specify that the base flood elevation is two (2) feet above the highest adjacent grade at the location of the development, provided there is no evidence indicating flood depths have been or may be greater than two (2) feet.

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

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

1. For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such

analysis to FEMA as specified in 16.40.050.5.4. and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.

2. For development activities proposed to be located in a riverine flood hazard area for which base flood elevations are included in the FIS or on the FIRM and floodways have not been designated, hydrologic and hydraulic analyses that demonstrate that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one (1) foot at any point within the community. This requirement does not apply in isolated flood hazard areas not connected to a riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.
3. For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity; the applicant shall submit the analysis to FEMA as specified in 16.40.050.5.4.

16.40.050.5.4. Submission of additional data. When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a Florida licensed professional engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant. Coastal engineering or wave runup analysis shall be required, as deemed necessary, for projects on: in-fill lots, Coastal A and V/VE Zones, Coastal A Zone projects with stem walls and projects with more than minor fill.

16.40.050.6. INSPECTIONS.

16.40.050.6.1. General. Development for which a permit is required shall be subject to inspection.

16.40.050.6.2. Development other than buildings and structures. The Building Official shall inspect all development to determine compliance with the requirements of this section and the conditions of issued permits.

16.40.050.6.3. Buildings, structures and facilities exempt from the Florida Building Code. The Building Official shall inspect buildings, structures and facilities exempt from the Florida Building Code to determine compliance with the requirements of this section and the conditions of issued permits.

16.40.050.6.4. Buildings, structures and facilities, exempt from the Florida Building Code, lowest floor inspections.

1. **For structures located in an A Zone (A or AE Zone),** upon placement of the lowest floor, including basement, and prior to further vertical construction, the owner of a building, structure or facility ~~exempt from the Florida Building Code~~, or the owner's authorized agent, shall submit to the Building Official**:** an Elevation Certificate (Under Construction), with a current effective date prior to further construction or inspection.

2. For structures located in a V/VE or Coastal A Zone, etc., upon placement of the lowest horizontal structural member, with the exception of, piles, pile caps, footings, grade beams, columns, bracing and shear walls, designed and constructed as per ASCE 24, Section 4.5, and prior to further construction, the owner of a building, structure or facility, or the owner's authorized agent, shall submit to the Building Official an Elevation Certificate (Under Construction), with a current effective date prior to further construction or inspection.

1. If a design flood elevation was used to determine the required elevation of the lowest floor, the certification of elevation of the lowest floor prepared and sealed by a Florida licensed professional surveyor; or
2. If the elevation used to determine the required elevation of the lowest floor was determined in accordance with 16.40.050.5.2(3)(b), the documentation of height of the lowest floor above highest adjacent grade, prepared by the owner or the owner's authorized agent.

16.40.050.6.4.1 Affidavit and Private Provider inspections. Permits that are being inspected by affidavit and/or private provider as per the Florida Building Code (FBC) 105.14 107.6 and/or Florida State Statutes (FSS) 553.791, shall have a FEMA pre-inspection prior to the commencement of any work and a FEMA final inspection immediately prior to the approval of a final building inspection. The FEMA pre-inspection and final inspections shall be conducted by City inspectors.

16.40.050.6.5. Buildings, structures and facilities including those exempt from the Florida Building Code, final inspection. As part of the final inspection, the owner or owner's authorized agent shall submit to the Building Official a final certification of elevation of the lowest floor or final documentation of the height of the lowest floor above the highest adjacent grade.; such certifications and documentations shall be prepared as specified in 16.40.050.6.4.

1. For structures located in an A/AE (including Unnumbered A and AO), Coastal A and V/VE Zones, etc.), as part of the final inspection, the owner or the owner's authorized agent shall submit to the Building Official an Elevation Certificate (Finished Construction), with a current effective date.

2. For structures located in an A/AE (including Unnumbered A and AO), Coastal A and V/VE Zones, etc.), with an enclosure 5 feet or greater in height between the floor and the ceiling, or floor framing system for the story immediately above the enclosed area, as part of the final inspection, the owner or the owner's authorized agent shall submit to the Building Official a Declaration of Land Restriction (Non-conversion Agreement) including documentation the declaration has been recorded with the Clerk of the County Court as a deed restriction.

3. For structures located in a Coastal A Zone and/or Coastal High Hazard Area (V or VE Zone, etc.), as part of the final inspection, the owner or the owner's authorized agent shall submit to the Building Official a V/VE - Zone Design Certificate.

4. For non-residential flood proofed structures located in A Zone (A or AE Zone, etc.), as part of the final inspection, the owner or the owner's authorized agent shall submit to the Building Official a flood proofing certificate.

16.40.050.6.5.1 Affidavit and Private Provider inspections. Permits that are being inspected by affidavit and/or private provider as per the Florida Building Code (FBC) and/or Florida State Statutes (FSS) shall have a FEMA pre-inspection prior to the commencement of any work and a FEMA final inspection immediately prior to the approval of a final building inspection. The FEMA pre-inspection and final inspections shall be conducted by City inspectors.

16.40.050.6.6. Manufactured homes. The Building Official shall inspect manufactured homes that are installed or replaced in flood hazard areas to determine compliance with the requirements of this section and the conditions of the issued permit. Upon placement or substantial improvement of a manufactured home, certification of the elevation of the lowest floor as established in this ordinance shall be submitted to the Building Official.

16.40.050.7. APPEALS AND VARIANCES.

16.40.050.7.1. General. The Development Review Commission (hereinafter referred to as the "Commission") shall hear and decide on requests for appeals and requests for variances from the strict application of this section. Pursuant to section 553.73(5), Florida Statutes, the Commission and the Board of Adjustment and Appeals of the Pinellas County Construction Licensing Board (PCCLB) shall hear and decide on requests for appeals and variances to the Florida Building Code and ASCE-24. and requests for variances from the strict application of the flood resistant construction requirements of the Florida Building Code.

16.40.050.7.2. Appeals. Appeals to the Commission may be made in the manner provided in the appeals section by any person aggrieved or affected by any order, written decision, or determination made by the Building Official in the administration and enforcement of this section. Any person aggrieved by the decision of the Commission may appeal such decision to the Circuit Court, as provided by Florida Statutes. The Building Official shall maintain the records of all appeals, both granted and denied and report any variances to FEMA as requested.

16.40.050.7.3. Limitations on authority to grant variances. The Commission may authorize variances from the provisions of this section after receipt of an application which provides all relevant information required by the Building Official. For variance procedures, see 16.70.040.1.12. of the City Code for planning and zoning decisions. The Commission shall base its decisions on variances on technical justifications, the considerations for issuance in 16.40.050.7.7., and the conditions of issuance, all of which are contained in 16.40.050.7.8., and the comments and recommendations of the Building Official, including those based upon the Florida Building Code. The Commission has the right to attach such conditions as it deems necessary to further the purposes and objectives of this section.

16.40.050.7.4. Restrictions in floodways. A variance shall not be issued for any proposed development in a floodway if any increase in base flood elevations would result, as evidenced by the applicable analyses and certifications required in 16.40.050.5.3.

16.40.050.7.5. Historic buildings and structures. A variance is authorized to be issued for the repair, improvement, reconstruction, restoration or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the Florida Building Code, Existing Buildings, upon a determination that the proposed repair, improvement, reconstruction,

restoration or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building. If the proposed work precludes the building's continued designation as a historic building, a variance shall not be granted and the building and any repair, improvement, reconstruction, restoration and rehabilitation shall be subject to the requirements of the Florida Building Code. Historic properties may be required to obtain a certificate of appropriateness pursuant to the City Code. No fee shall be required for the variance application and, if the historic structure has a current certificate of appropriateness, no notice of the variance shall be required.

16.40.050.7.6. Functionally dependent uses. A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use, as defined in this section, provided the variance meets the requirements of 16.40.050.7.4., is the minimum necessary considering the flood hazard, and all due consideration has been given to use of methods and materials that minimize flood damage during occurrence of the base flood.

16.40.050.7.7. Considerations for issuance of variances. In reviewing requests for variances, the Commission shall consider all technical evaluations, all other applicable provisions of the Florida Building Code, this section, and the following:

1. The danger that materials and debris may be swept onto other lands resulting in further injury or damage;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future individual owners;
4. The importance of the services provided by the proposed development to the community;
5. The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion for the proposed use;
6. The compatibility of the proposed use with existing and anticipated development;
7. The relationship of the proposed use to the Comprehensive Plan, the FIS for the area and this section;
8. The safety of access to the property in times of flooding for ordinary and emergency vehicles;
9. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;
10. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges;
11. The necessity to the development of a waterfront location; and
12. Economic hardship and self-created hardship are not relevant factors and shall not be considered as reasons to grant a variance.

16.40.050.7.8. Conditions for issuance of variances. After consideration of the factors listed above and the purposes of this section variances shall be granted by the Commission only upon:

1. Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this section or the required elevation standards;
2. Determination by the Commission that:

a. Failure to grant the variance would result in exceptional hardship, based on the considerations set forth for issuance of a variance, due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship; and
b. The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing laws and ordinances; and
c. The variance is the minimum necessary, considering the flood hazard, to afford relief; and
d. The variance receives the affirmative vote of at least a majority of the Commission.
e. No variance shall be granted for development which was constructed without a permit, or beyond the scope of a permit, unless it meets the considerations set forth for the issuance of a variance and receives the affirmative vote of a super-majority of the Commission.

3. No variance, if granted, shall be effective until a copy of the variance with the name of the owner and the legal description of the property is recorded in the Office of the Clerk of the Court so that it appears in the chain of title of the affected parcel of land; and

4. If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the Building Official to the applicant for the variance, specifying the difference between the ~~base~~ design flood elevation (DFE) and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation and stating that construction below the ~~base~~ DFE increases risks to life and property. The application shall provide notice to, and each application shall acknowledge that, the granting of a variance will result in increased premium rates for flood insurance (in some cases amounts as high as $25 for $100 of insurance coverage or increases of 100% or greater) and construction pursuant to the variance increases risks to life and property.

16.40.050.8. VIOLATIONS.

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

16.40.050.8.2. Declaration of violation.

1. Where a violation of this section has been found to exist by:
   a. A court of competent jurisdiction;
   b. The Code Enforcement Board;
   c. The written admission of a property owner; or
   d. The City Council.

The violation has not been corrected, the City Council may declare the property to be in violation of this section and forward the declaration to FEMA. The issuance of the declaration may cause the property to be denied flood insurance and no permits will be issued for any improvements to the property except permits for the maintenance of structures existing at the time the declaration is made and permits for the removal of violations of this section.

2. The declaration shall be approved by resolution of the City Council and should meet the requirements of section 1316 of the National Flood Insurance Act of 1968 as implemented by part 73 of 44 CFR and any other applicable law. The declaration shall be recorded in the public records. The owner/occupant shall be required to obtain a new certificate of occupancy stating the existence of a compliant structure from the Building Official to ensure compliance. The declaration may be rescinded by resolution of the City Council, provided that the resolution meets the requirements of section 1316 of the National Flood Insurance Act.

3. Structures existing on the property at the time a declaration is approved by City Council shall not be, in addition, cited for violating the requirements of this section. Violations of the City Code, not including violations of this section, which exist on the date of the declaration, may be cited.

4. Any violation existing on the date of the declaration for which no building permit was issued which does not meet the requirements of the Florida Building Code (except the provisions of this section) shall be removed. Any violation which is required to obtain a building permit to correct shall be removed (except the provisions of this section).

5. The Building Official may require such documents and certificates and perform such inspections as are reasonably necessary prior to issuing a certificate of occupancy.

6. Any work done after the date of the declaration is a violation of this section, may be cited for violating this section, and shall be removed. No variances to this subsection shall be granted.

16.40.050.8.3. Authority. For development that is not within the scope of the Florida Building Code but that is regulated by this section and that is determined to be a violation, the Building Official is authorized to serve notices of violation or stop work orders to owners of the property involved, to the owner's agent, or to the person or persons performing the work.

16.40.050.8.4. Unlawful continuance. Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by law**.**

16.40.050.9. DEFINITIONS.

16.40.050.9.1. Scope. Unless otherwise expressly stated, the following words and terms shall have the meanings shown in this section.

16.40.050.9.2. Terms defined in the Florida Building Code. Where terms are not defined in this section or the City Code and are defined in the Florida Building Code, such terms shall have the meanings ascribed to them in the Florida Building Code.

16.40.050.9.3. Terms not defined. Where terms are not defined in this section, the City Code, or the Florida Building Code, such terms shall have the ordinarily accepted meanings such as the context implies.

16.40.050.9.4. Definitions.

A/AE Zones means Special Flood Hazard Areas that are not V1 – V30, V/VE or Coastal A Zones.

Accessory structure means a structure which is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure. For floodplain management purposes, the term includes only structures used for parking and storage and specifically excludes structures used for human habitation.

Agricultural structure means a structure, for floodplain management purposes, a walled and roofed structure used exclusively for agricultural purposes or uses in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock, including aquatic organisms. Structures that house tools or equipment used in connection with these purposes or uses are also considered to have agricultural purposes or uses and specifically excludes any structures used for human habitation.

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

Affidavit Inspection means an inspection, performed by an individual who is qualified to conduct affidavit inspections as per the Florida Building Code, and submits a written report that meets the affidavit inspection report requirements.

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

Attendant utilities and equipment means utilities, mechanical, electrical, fuel gas, plumbing, HVAC, and related equipment, as well as services associated with new construction and substantial improvements.

Base flood means a flood having a 1-percent chance of being equaled or exceeded in any given year. The base flood is commonly referred to as the "100-year flood" or the "1-percent-annual chance flood."

Base flood elevation (BFE) means the elevation of flooding, including wave height, having a 1% chance of being equaked or exceeded in any given year. means the elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the FIRM.

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

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system while allowing for the free passage of water.

Building means any structure means any structure consisting of walls and a roof, built of permanent construction that is impervious to the elements, and built for the support, shelter or enclosure of persons, animals, chattels or property of any kind. means a structure with one or more outside rigid walls and a roof, that is affixed to a permanent site; or a manufactured home (a "manufactured home," also known as a mobile home, is a structure built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or a travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws. "Building" does not mean a gas or liquid storage tank or a recreational vehicle, a park trailer, or other similar vehicle, except as described above.

Bulkhead means a wall or structure to retain or prevent sliding or erosion of the land; sometimes used to prevent wave action.

City means City of St. Petersburg, Florida (COSP).

COASTAL A ZONE means an area within a special flood hazard area, landward of a V zone or landward of an open coast without mapped coastal high hazard areas. In a coastal A zone, the principal source of flooding must be astronomical tides, storm surges, seiches or tsunamis, not riverine flooding. During the base flood conditions, the potential for breaking wave height shall be greater than or equal to $1^1/_2$ feet (457 mm). The inland limit of the coastal A zone is (a) the Limit of Moderate Wave Action (LiMWA) if delineated on a FIRM, or (b) designated by the authority having jurisdiction.

Coastal construction control line means the line established by the State of Florida pursuant to section 161.053, Florida Statutes, and recorded in the official records of the community, which defines that portion of the beach-dune system subject to severe fluctuations based on a 100-year storm surge, storm waves or other predictable weather conditions.

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

Community Rating System (CRS) means a program developed by FEMA to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

COSP: see City.

Cost, Construction Cost or Construction Value means the International Code Council (ICC) square footage cost based on the latest edition of the ICC Valuation Data and /or a complete and accurate Substantial Damage/Improvement package value, whichever is greater, when required by the POD.

Crawlspace means an under-floor space that has its interior floor area (finished or not) no more than 5 feet below the top of the next-higher floor.

Datum means the vertical reference on which FIRM maps are drawn, including but not limited to the North American Vertical Datum of 1988 (NAVD) and the National Geodetic Vertical Datum of 1929 (NGVD).

Debris flow means the mass movement of sediment, including boulders, organic materials, and other debris; debris flows typically move in surges and are characterized by a steep frontal wave.

Debris impact load means loads on a structure caused by flood borne debris striking the structure, or a portion thereof.

Declaration of Land Restriction (Non-conversion Agreement). A form signed by the owner and recorded on the property deed in Official Records of the Clerk of Courts, to agree not to convert or modify in any manner that is inconsistent with the terms of the building permit and these regulations, certain enclosures below elevated buildings when the enclosed area has a height greater than 5 feet between the floor and the ceiling, or floor framing system for the story immediately above the enclosed area.

Design flood means the flood associated with the greater of the following two areas:

1. Area within a floodplain subject to a 1-percent or greater chance of flooding in any year; or
2. Area designated as a flood hazard area on the City's flood hazard map, or otherwise legally designated.

Design flood elevation (DFE) means the elevation of the "design flood," which is the base flood plus 2 feet of freeboard, and including wave height, relative to the datum specified on the City's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation shall be the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where the depth number is not specified on the map, the depth number shall be taken as being equal to two (2) feet. In areas of shallow flooding (AO Zones) and Unnumbered A zones, buildings and structures shall have the lowest floor (including basement) elevated to a height above the highest adjacent grade of not less than the depth number specified in feet (mm) on the FIRM plus 2 feet, or at least 4 feet above the highest adjacent grade if a depth number is not specified.

Development means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, tanks, temporary structures, temporary or permanent storage of equipment or materials, mining, dredging, filling, grading, paving, excavations, drilling operations or any other land disturbing activities.

Drainage means the removal and/or redirection of water from a property without causing the water to runoff onto abutting properties or to cause adverse conditions to abutting properties.

Dry floodproofing means a combination of measures that results in a structure, including the attendant utilities and equipment, being watertight with all elements substantially impermeable and the structural components having the capacity to resist flood loads.

Elevated structure or building means a structure or building that has no basement and that has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns. Solid (perimeter) foundations walls are not an acceptable means of elevating buildings in V and VE zones.

Elevation certificate means the current effective edition of the Elevation Certificate published by the U.S. department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program.

Enclosed area or enclosure means that portion of an elevated building below the design flood elevation (DFE) that is either partially or fully confined.

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

Erosion means the wearing away of the land surface by detachment and movement of soil and rock fragments during a flood or storm or over a period of years, through the action of wind, water or other geologic processes.

Essential facility means buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes.

Existing means prior to any alteration or construction.

Existing building and **existing structure** means any building and structure for which the "start of construction" commenced before the effective date (May 28, 1971) of the first floodplain management code, ordinance, or standard adopted by the authority having jurisdiction.

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, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before May 28, 1971.

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, the construction of streets, and either final site grading or the pouring of concrete pads).

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

FEMA: see Federal Emergency Management Agency.

Fill means any material such as soil, gravel, or crushed stone that is placed in an area to increase ground elevation(usually soil, dirt, sand or similar nonbiodegradable material) used to elevate the grade of property to a level higher than the grade of the property as it existed prior to the start of construction.

FIRM means Flood Insurance Rate Map.

FIS means Flood Insurance Study.

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

1. The overflow of inland or tidal waters.
2. The unusual and rapid accumulation or runoff of surface waters from any source.
3. Mudflow.
4. Collapse or subsidence of land along the shore of a bay or similar body of water as a result of erosion or undermining caused by wave action or water currents resulting in a flood as defined above.

Flood damage-resistant materials means any construction material capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair. any building product material, component or system capable of withstanding direct or prolonged contact, of at least 72 hours, with floodwaters without sustaining significant damage requiring more than cosmetic repair including cleaning, sanitizing, surface sanding, repair of joints and repainting, of which cost is less than the cost of replacement of the material and which must not cause degradation of adjacent materials or systems of which the materials are a part and are a Class 4 or 5 rated material as per FEMA Technical Bulletins.

Flood Design Class (Risk Category) means a classification of buildings and other structures for determination of flood, wind, snow, ice and earthquake loads and conditions, and determination of minimum elevation requirements on the basis of risk associated with unacceptable performance.

Flood hazard area means an area subject to flooding during the design flood. the greater of the following two areas:

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

Flood Insurance Rate Map (FIRM) means the official map of the City on which FEMA has delineated both special flood hazard areas and the risk premium zones applicable to the City.

Flood Insurance Study (FIS) means the official report provided by FEMA that contains the FIRM, the Flood Boundary and Floodway Map (if applicable), the water surface elevations of the base flood, and supporting technical data.

Flood openings, flood vents or hydrostatic openings: see openings.

Flood vents: see openings.

Floodplain means any land area, including watercourse, susceptible to being partially or completely inundated by floodwaters from any source.

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

Floodproofing means any combination of structural or nonstructural adjustments, changes or actions that reduce or eliminate flood damage to a structure, contents, and attendant utilities and equipment.

Floodway or regulatory floodway means the channel and that portion of the floodplain reserved to convey the base flood without cumulatively increasing the water surface elevation more than a designated height. of a river or other riverine watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

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

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

Foundation Wall means masonry walls, poured concrete walls or precast concrete walls, regardless of height, that extend above grade and support the weight of a building.

Freeboard means an additional amount of height above the Base Flood Elevation used as a factor of safety (e.g., 2 feet above the Base Flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed to be in accordance with state or community floodplain management regulations.

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

Grade elevation means the lowest or highest finished ground level.

Hardship means the inability to comply with an NFIP floodplain management regulation and make reasonable use of a property because of unusual physical and topographical conditions that are unique to the property, are not caused by the applicant, and pertain to the land and not any structures, its inhabitants, or the personal circumstances of the property owner.

Hazard Mitigation means any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event, e.g., demolition, elevating the lowest floor to the DFE or higher and/or

creating an enclosed area below the lowest floor to be used solely for vehicle parking, building access or storage of items which otherwise would be stored outside of a building, e.g., cooking grill, lawn mower, folding chairs, etc. .

High Risk Flood Hazard Area means a flood hazard area where one or more of the following hazards are known to occur: alluvial fan flooding, flash floods, mudslides, ice jams, high velocity flows, high velocity wave action, breaking wave heights greater than or equal to 1.5 ft. (Coastal High Hazard Area and Coastal A Zone), or erosion.

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

Historic structure means any structure that is:
(1) Determined eligible for the exception to the flood hazard area requirements of the Florida Building Code, Existing Building, Chapter 11 Historic Buildings;
(2) Listed individually on the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
(3) 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;
(4) Individually listed on the state inventory of historic places as long as the state historic preservation program is approved by the Secretary of the Interior; or
(5) Individually listed as a local landmark pursuant to the City's historic preservation program as long as the City's historic preservation program is certified by the state as a certified local government program, and the state historic preservation program is approved by the Secretary of the Interior.

Humidifier means a piece of mechanical equipment or a system, used to control humidity only.

Hydrodynamic load means loads imposed on an object by water flowing against and around it.

Hydrostatic load means loads imposed on an object by a standing mass of water.

Hydrostatic openings: see openings.

Impact loads means loads that result from debris, ice, or any object transported by floodwaters striking against structures or parts thereof.

ICC means International Code Council.

Letter of Map Change (LOMC) means an official determination issued by FEMA that amends or revises an effective FIRM or FIS. Letters of Map Change include:

Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current

effective FIRM and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

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

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

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

Light-duty truck. As defined in 40 C.F.R. 86.082-2, any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

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

Limit of Moderate Wave Action (LiMWA), see also Coastal A Zones**:** means the line shown on FIRM's to indicate the inland limit of the 1.5 ft. breaking wave height during the base flood.

Local scour means during flood conditions, the removal of materials from a localized portion of a channel cross section or land surface due to an abrupt change in flow direction or velocity around an object or structural element.

Lot drainage: see drainage.

Lowest Adjacent Grade means the lowest point of the ground level immediately next to a building or structure.

Lowest floor means the lowest floor of the lowest enclosed area of a building or structure, including basement; however, an unfinished or flood-resistant enclosure used solely for parking of vehicles, building access, or storage shall not be considered the lowest floor provided such enclosure is built a specified in this ordinance. but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the on-elevation requirements of the Florida Building Code or ASCE 24.

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

Manufactured home means a mobile home fabricated on or after June 15, 1976, in an offsite manufacturing facility for installation or assembly at the building site, with each section bearing a seal certifying that it is built in compliance with the federal Manufactured Home Construction and Safety Standard Act. means a structure, transportable in one or more sections, which is eight (8) feet or more in width and greater than four hundred (400) square feet, and which is built on a permanent, integral chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" or "park trailer."

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.

Market value means the price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. As used in this ordinance, the term refers to the market value of buildings and structures, excluding the land and other improvements on the parcel. Market value may be established by a qualified independent appraiser, with a signed, original, certified comparative appraisal, using at least 3 comparative properties and which is no more than 12 months old, or in the case of unusual properties which are not frequently bought or sold, including but not limited to structures such as churches, colleges or hospitals, for example, by other types of appraisals, Actual Cash Value (replacement cost depreciated for age and quality of construction), or the Pinellas County Property Appraiser's Replacement Cost Depreciated (RCD) Value tax assessment value adjusted to approximate market value by a factor provided by the Property Appraiser.

Massive stairs or ramps means access stairs or ramps constructed of concrete and/or steel with enclosed sides and/or risers.

Mean sea level means the mean sea level set forth in the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum of 1988.

Mitigated means to elevate the lowest floor to or above the DFE, abandon the ground floor to make it an enclosed space used solely for vehicle parking, storage, or building access and construct the next higher floor to be at or above the DFE, or to demolish a structure.

Minimal Investment means an accessory structure that has a floor or ground area of 600 square feet or smaller and cost $1,000 or less to construct or to purchase and install.

Minimum fill: see minor fill.

Minor: inferior in importance, non-consequential.

Minor fill means on lots less than or equal to 60' in width, up to 6" of site compatible non-structural fill and on lots greater than 60' in width, up to 12" of site compatible non-structural fill, similar to the natural soils in the area and similarly graded and sloped to match the existing local topography in the immediate vicinity, to be used for: in the front yard as is necessary in the construction of a driveway to a garage, the front entrance for access to the structure, landscaping, drainage under and around buildings, support of parking slabs, pool decks, patios, walkways and similar site elements, which will not prevent the free passage of floodwaters and waves, and will not divert floodwaters or deflect waves such that increased damage is sustained by adjacent or nearby property, or that runoffs onto abutting properties. Minor fill shall transition to existing natural grade.

Mobile home means a structure, transportable in one or more sections, which is 8 body feet or more in width and which is built on an integral chassis and designed to be used as a dwelling when connected to the required utilities and includes the plumbing, heating, air-conditioning, and electrical systems contained therein.

Modular Building means a building that is usually transported to its site on a steel frame or special trailer because it does not have a permanent chassis like a manufactured (mobile) home. A modular building is classified and rated under 1 one of the other building types.

Monumental stairs or ramps: see massive stairs or ramps.

National Geodetic Vertical Datum (NGVD) means the vertical control used as a reference for establishing varying elevations within the floodplain.

Natural grade means the grade or ground unaffected by construction techniques such as fill, landscaping or berming.

NAVD: see North American Vertical Datum.

National Flood Insurance Program (NFIP) means the program of flood insurance coverage and floodplain management administered under the National Flood Insurance Act of 1968 and applicable federal regulations promulgated in Title 44 of the Code of Federal Regulations, Subchapter B.

New construction means for the purposes of administration of this section and the flood resistant construction requirements of the Florida Building Code, structures for which the "start of construction" commenced on or after the effective date, (May 28, 1971) of an initial Flood Insurance Rate Map (FIRM) or after, December 31, 1974, whichever is later and includes any subsequent improvements to such structures including work determined to be substantial improvements.

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 May 28, 1971.

NFIP: see National Flood Insurance Program.

Non-conversion Agreement: see Declaration of Land Restriction.

Nonresidential means any building or structure or portion thereof that is not classified as residential.

Non-structural Fill means fill that does not provide structural support or protection to a structure.

North American Vertical Datum (NAVD) of 1988 means the control datum established for the vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988. NAVD replaces the National Geodetic Vertical Datum (NGVD) of 1929 and is a vertical control used as a reference for establishing varying elevations within the floodplain.

Obstruction means any object or component that can cause an increase in flood elevation, deflect floodwaters or transfer flood loads to any structure**.**

Openings, flood openings, flood vents, hydrostatic openings or hydrostatic vents means all enclosures below the lowest elevated floor must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings must be provided, with positioning on at least two walls, having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding. Openings shall not be less than 3 inches in any direction in the plane of the wall. The bottom of all openings must be no higher than 1 foot above the higher of the adjacent exterior grade or interior floor, immediately below the openings. The presence of louvers, blades, screens, and faceplates or other covers and devices shall not block or impede the automatic flow of floodwaters into and out of the enclosed areas and shall be accounted for in the determination of the net open area.

Park trailer means a transportable unit which has a body width not exceeding fourteen (14) feet and which is built on a single chassis and is designed to provide seasonal or temporary living quarters when connected to utilities necessary for operation of installed fixtures and appliances.

POD means person officially designated by COSP.

Post-FIRM Building means a building for which construction or substantial improvement occurred after December 31, 1974 or on or after the effective date of an initial Flood Insurance Rate Map (FIRM), whichever is later.

Pre-FIRM Building means a building for which construction or substantial improvement occurred on or before December 31, 1974 or before the effective date of an initial Flood Insurance Rate Map (FIRM).

Private Provider means a State Registered engineer or architect who is acting as a plans examiner or inspector as per Florida State Statute requirements.

Prolonged contact means partial or total inundation by floodwaters for 72 hours or more.

Project means any work done for which a permit is required during the time period from when the work begins until the permit is closed and shall include all work and permits necessary to make a structure

safe to be occupied. A permit may be closed by issuance of a certificate of occupancy or an approved final inspection.

Rapid drawdown means the rapid lowering of flood elevation at a rate equal or exceeding 5 ft/hr.

Rapid rise means a rapid increase in flood elevation at a rate equal to or exceeding 5 ft/hr.

Recreational vehicle means a vehicle, including a park trailer, which is:

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

Repetitive loss or repetitive loss structure means flood-related damage sustained by a structure on at least two (2) separate occasions during a ten-year period for which the cost of repairs at the time of each such event is either:

4. Greater than $1,000; or
5. On average, equals or exceeds 25% of the market value of the structure before damage occurred.

Residential means, for the purposes of this ordinance, (1) buildings and structures and portions thereof where people live or that are used for sleeping purposes on a transient or non-transient basis; (2) structures including but not limited to 1- and 2-family dwellings, townhouses, condominiums, multifamily dwellings, apartments, congregate residences, boarding houses, lodging houses, rooming houses, hotels, motels, apartment buildings, convents, monasteries, dormitories, fraternity houses, vacation time-share properties; and (3) institutional facilities where people are cared for or live on a 24-hour basis in a supervised environment, including but not limited to board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers, convalescent facilities, hospitals, nursing homes, mental hospitals, detoxification facilities, prisons, jails, reformatories, detention centers, correctional centers and prerelease centers.

Risk Category: see Flood Design Class.

Seawall means a wall separating land and water areas, primarily designed to prevent erosion and other damage due to wave action.

Section 1316. Section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that FEMA finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

Severe repetitive loss means any building that:

1. Is covered under a Standard Flood Insurance Policy;
2. Has incurred flood damage for which:
   a. Four or more separate claim payments have been made under a Standard Flood Insurance Policy issued pursuant to this title, with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or
   b. At least two separate claims payments have been made under a Standard Flood Insurance Policy, with the cumulative amount of such claim payments exceed the fair market value of the insured building on the day before each loss.

Shear walls means load bearing or nonload-bearing walls that transfer, by in-plane lateral forces, lateral loads acting on a structure to its' foundation and can be used for structural support but not structurally joined or enclosed at the ends (except by breakaway walls). Shear walls are parallel or nearly parallel, to the flow of the water and can be used in any flood zone.

Shield means a removable or permanent substantially impermeable protective cover for an opening in a structure below the DFE, used in dry floodproofing the structure.

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

Standard exterior door means a movable barrier used to seal or close-off entry to a building which is constructed of wood, metal or glass, not more than thirty-six (36) inches wide and that swings on hinges.

Start of construction means the date the building permit was issued, for either new construction or substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement occurred within 180 days of the date of the permit was issued. The actual start of construction means either the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, 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, or filling), the installation of streets or walkways, excavation for a basement, footings, piers, or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main buildings. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Stem wall means a partial height masonry or concrete wall, that may be back filled with soil or gravel, etc., that fully or partially supports a floor or wall system.

Stillwater depth means the vertical distance between the ground and stillwater elevation.

Stillwater elevation means that the surface of the water would assume in the absence of waves referenced to a datum.

Structural fill means fill placed to provide structural support or protection to a structure.

Structure means any building or other structure that is constructed or assembled, including gas and liquid storage tanks.

Subgrade crawlspace means a crawlspace foundation where the subgrade under-floor area is no more than 5 ft. below the top of the next-higher floor and no more than 2 ft. below the lowest adjacent grade on all sides.

Substantial damage means damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before-damaged condition would be equal to or exceed 50 49 percent of the market value of the building or structure before the damage occurred.

Substantial improvement means any repair, reconstruction, rehabilitation, alteration, addition, or other improvement or modification of a building or structure, the cost of which equals or exceeds 50 49 percent of the market value of the building or structure before the construction of the improvement, alteration or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official or fire marshal and that are the minimum necessary to assure safe living conditions.
2. Any alteration of a historic structure provided the alteration will not preclude the structure's continued designation as a historic structure.

Substantially impermeable means the use of flood-resistant materials and techniques for dry floodproofing all or a portion of a structure, which results in a space free of through cracks, openings, or other channels that permit unobstructed passage of water and/ or seepage during flooding.

Swale means a low-lying or depressed, a minimum of 6 inches deep, narrow path of land, dirt, etc., typically at the bottom of a slope, with 4:1 side slopes, used to convey water for the purposes of controlling or directing drainage.

Temperature controlled means controlling, by direct venting and/or the use of a thermostatic control device, the air temperature of an enclosed area or space by the use of mechanical equipment or a mechanical system.

Unfinished area means an enclosed area that is used only for the parking of vehicles, building access or storage purposes and that does not meet the definition of a finished (habitable) area.

V Zone means Velocity Zones V, VO, VE, or V1-30. (see also Coastal High Hazard Area).

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

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

Wave means a ridge, deformation, or undulation of the water surface.

Wave height means the vertical distance between the crest and the trough of a wave.

Wave loads means loads imparted on a structure caused by waves striking a structure or portion thereof.

Wave runup means the rush of wave water running up over a slope or structure.

Wet floodproofing means a floodproofing method that relies on the use of flood damage-resistant materials, flood openings and construction techniques in areas of a structure that are below the elevation required, by intentionally allowing those areas to flood.

16.40.050.10. BUILDINGS AND STRUCTURES.

16.40.050.10.1. Design and construction of buildings, structures and facilities exempt from the Florida Building Code. Pursuant to 16.40.050.4.3., buildings, structures, and facilities, including those in 16.04.050.4.3 and that are exempt from the Florida Building Code, including substantial improvement or repair of substantial damage of such buildings, structures and facilities, shall be designed and constructed in accordance with the flood load and flood resistant construction requirements of ASCE 24. Structures exempt from the Florida Building Code that are not walled and roofed buildings shall comply with the requirements of 16.40.050.16.

16.40.050.10.1.1 Protection of mechanical, plumbing and electrical systems. Electrical systems, equipment and components; heating, ventilation, air conditioning, including humidifiers and dehumidifiers; plumbing appliances, fixtures; duct systems; and other service equipment shall be located at or above the design flood elevation and as allowed by this ordinance. If replaced as part of a substantial improvement, electrical systems, equipment and components; heating, ventilation, air conditioning, including humidifiers and dehumidifiers; plumbing appliances, fixtures; duct systems; and other service equipment shall be located at or above the design flood elevation. Equipment for pools, spas, water features and electric vehicle charging stations, etc., shall be permitted below the design flood elevation provided it is elevated to the extent practical, is anchored to prevent flotation and resist flood forces and is supplied by branch circuits that have ground-fault circuit interrupter (GFCI) protection. Electrical wiring systems are permitted to be located below the required elevation provided that they conform to the provisions for wet locations.

16.40.050.10.1.2 Improvements to existing buildings, structures, facilities, mechanical, plumbing and electrical systems. Improvements to existing buildings, structures, facilities, mechanical, plumbing and electrical systems shall not increase the likelihood or potential for flood damage to the existing components.

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

(1) Buildings and structures shall be designed and constructed to comply with the more restrictive applicable requirements of the Florida Building Code, Building Section 3109 or Section 1612, or Florida Building Code, Residential Section R322, as applicable.
(2) Minor structures and non-habitable major structures as defined in section 161.54, Florida Statutes, shall be designed and constructed to comply with the intent and applicable provisions of this section and ASCE 24.

16.40.050.10.3. - Buildings and structures above the crown of the nearest roadway.
In all areas of the city, and in addition to the requirements for elevation specified in the Florida Building Code, the lowest floor of all new buildings and structures shall be at least one (1) foot above the crown of road, at it's average point, to which the building fronts, and not less than a minimum elevation of 103.00 per city datum.

16.40.050.11. SUBDIVISIONS.

16.40.050.11.1. Minimum requirements. Subdivision proposals, including proposals for manufactured home parks and subdivisions, shall be reviewed to determine that:

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

16.40.050.11.2. Subdivision plats. Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:

1. Delineation on flood hazard area, floodway boundaries and flood zones, and design flood elevations, as appropriate shall be shown on preliminary plats.
2. Where the subdivision has more than 50 lots or is larger than 5 acres and base flood elevations are not included on the FIRM, the base flood elevations determined in accordance with 16.40.050.5.2(1).; and
3. Compliance with the site improvement and utilities requirements of 16.40.050.12.

16.40.050.12. SITE IMPROVEMENTS, UTILITIES AND LIMITATIONS.

16.40.050.12.1. Minimum requirements. All proposed new development shall be reviewed to determine that:

1. Such proposals are consistent with the need to minimize flood damage and will be reasonably safe from flooding;
2. In Coastal A Zones and coastal high hazard areas (Zone V/VE):
   a. Buildings and structures are located a minimum of ten (10) feet landward of the reach of mean high tide;

b. New construction and substantial improvement shall be sited landward of shoreline construction setbacks, where applicable; and
c. New construction and substantial improvement shall not remove or otherwise alter sand dunes and mangrove stands.

3. All public utilities and facilities such as sewer, gas, electric, communications, and water systems are located and constructed to minimize or eliminate flood damage; and
4. Adequate drainage is provided to reduce exposure to flood hazards; in ~~Zones AH and AO~~ all zones, adequate drainage paths shall be provided to guide floodwaters around and away from proposed structures.

16.40.050.12.1.1. Use of nonstructural fill in flood hazard areas (Zone A). A/AE Zones. In flood hazard areas other than coastal high hazard areas (Zone A V/VE) and Coastal A Zones (LiMWA), fill on the outside of the footprint of the foundation of single-family through quadruplex residential structures on lots which are not part of a development with a master grading plan approved by the POD is prohibited, except for minor fill in the front yard which is necessary in the construction of a driveway to a garage, and the front entrance for access to the structure, landscaping, and drainage around buildings, support of parking slabs, pool decks when within the perimeter walls of pool decks and the pool deck perimeter walls are in the buildable lot area and are tied-in to the perimeter wall foundation of the primary structure, patios, walkways and similar minor site elements which will not prevent the free passage of floodwaters and waves and will not divert floodwaters or deflect waves such that damage is sustained by adjacent or nearby property, or that runoffs onto abutting properties. Minor fill shall transition to natural grade. If a site plan with lot elevations and proposed fill is submitted for plan review prior to issuance of a permit and approved in advance by the POD Building Official, and if the use of fill does not create any additional stormwater runoff onto abutting properties, minor amounts of fill shall be allowed to:

1. Provide adequate lot grading for drainage;
2. Raise a side yard up to the elevation of an abutting property; and
3. The use of fill shall not create any additional stormwater runoff onto abutting property and shall gradually transition to abutting properties.

16.40.050.12.1.1.1. Use of nonstructural fill in flood hazard areas (Zone A) A/AE Zones behind sea walls. Nonstructural fill may be used behind sea walls under the following limitations:

1. Signed documentation from the abutting property owners that they approve of the placement of the fill as shown on the approved construction documents.
2. Documentation by a State of Florida registered architect or engineer must be provided that the fill will not divert or deflect floodwaters onto abutting properties.
3. The fill must not be higher than the permitted grade at the abutting properties and must gradually transition to the permitted grade at the abutting properties. If there is a retaining wall or other restrictive structure (sea wall return, bulkhead, etc.) between the properties, fill must still not be higher than the permitted grade at the abutting properties and still must gradually transition to the permitted grade at the abutting properties as though there is no retaining wall or other restrictive structure between the properties.
4. The use of properly constructed swales shall be used to divert the direction of floodwaters and aid in drainage of the property.

16.40.050.12.1.1.1.2. Use of structural fill for pool/patio decks in flood hazard areas (Zone A). A/AE Zones. Structural fill may be used in flood hazard areas (A/AE Zones) under buildings or structures, within the perimeter walls in the buildable lot areas.
1) When using structural fill for pool/patio decks within the perimeter walls of pool decks, the pool deck perimeter walls must be in the buildable lot area and must tie-in to the perimeter wall foundation of the primary structure.

16.40.050.12.1.2. Use of nonstructural fill in coastal high hazard areas (Zone V) V/VE Zones and Coastal A Zones (LiMWA). In coastal high hazard areas (Zone V/VE) and Coastal A Zones (LiMWA), limited noncompacted minor fill not exceeding six inches in depth) may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge (thereby rendering the building free of obstructions) prior to generating excessive loading forces, ramping effects or wave deflection. The POD ~~Building Official~~ shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect and/or soil scientist, along with the any supporting data required by the POD ~~Building Official~~, which demonstrates that the following factors have been fully considered:

1. Particle composition of fill material does not have a tendency for excessive material compaction.
2. Volume and distribution of fill will not cause wave deflection to adjacent properties;
3. Slope of fill will not cause wave run up or ramping; and
4. The use of fill shall not create any additional stormwater runoff onto abutting property and shall gradually transition to abutting properties.
5. Structural fill in V/VE and Coastal A Zones is prohibited.

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

16.40.050.12.3. Water supply facilities. All new and replacement water supply facilities shall be designed in accordance with the water well construction standards in Chapter 62-532.500, F.A.C. and ASCE 24 Chapter 7 to minimize or eliminate infiltration of floodwaters into the systems.

16.40.050.12.4. Limitations on sites in regulatory floodways. No development, including but not limited to site improvements, and land disturbing activity involving fill or regrading, shall be authorized in the regulatory floodway unless the floodway encroachment analysis required in 16.40.050.5.3(1) demonstrates that the proposed development or land disturbing activity will not result in any increase in the base flood elevation.

16.40.050.12.5. Limitations on placement of fill. Subject to the limitations of this section, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of

floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A/AE Zones only), structural fill shall comply with the requirements of the Florida Building Code, state and federal laws and this ordinance.

16.40.050.12.6. Limitations on sites in ~~c~~Coastal ~~h~~High ~~h~~Hazard ~~a~~Areas (Zone V) V/VE and coastal A zones (LiMWA)**.** In coastal high hazard areas and coastal A zones (LiMWA), alteration of sand dunes and mangrove stands shall be permitted only if such alteration is approved by the Florida Department of Environmental Protection and only if the engineering analysis required by 16.40.050.5.3(4) demonstrates that the proposed alteration will not increase the potential for flood damage. Construction or restoration of dunes under or around elevated buildings and structures shall comply with 16.40.050.16.8(3).

16.40.050.13. MANUFACTURED HOMES.

16.40.050.13.1. General. All new, relocated, substantially improved or substantially damaged manufactured homes installed in flood hazard areas shall be installed by an installer that is licensed pursuant to section 320.8249, Florida Statutes., and shall comply with the requirements of Chapter 15C-1, F.A.C. and the requirements of this section. If located seaward of the coastal construction control line, all manufactured homes shall comply with the more restrictive of the applicable requirements.

16.40.050.13.1.1. Limitations on location. Installation of manufactured homes in regulated floodways, and in coastal high hazard areas V/VE Zones and Coastal A Zones (LiMWA) is prohibited, unless an installation it is to replace an existing manufactured home, that has not been substantially improved or substantially damaged, in an existing manufactured home park.

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

(1) In flood hazard areas (Zone A/AE) other than coastal high hazard areas V/VE and Coastal A Zones, are designed in accordance with the foundation requirements of the Florida Building Code, Residential Section R322.2 and Section 16.40.050.
(2) In coastal high hazard areas (Zone V/VE) and Coastal A Zones are designed in accordance with the foundation requirements of the Florida Building Code, Residential Section R322.3 and Section 16.40.050.

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

16.40.050.13.4. Elevation. Manufactured homes that are placed, replaced, or substantially improved shall comply with 16.40.050.13.5. or 16.40.050.13.6. as applicable.

16.40.050.13.5. General elevation requirement. Unless subject to the requirements of 16.40.050.13.6., all manufactured All new, relocated, substantially improved or substantially damaged manufactured homes in A/AE Zones that are placed, replaced, or substantially improved or substantially damaged on sites located: (a) outside of a manufactured home park or subdivision; (b) in a new manufactured home park or subdivision; (c) in an expansion to an existing manufactured home park or subdivision; or (d) in an existing manufactured home park or subdivision upon which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated such that the bottom top of the frame is at or above the design flood elevation required, as applicable to the flood hazard area, in the Florida Building Code, - Residential Section R322.2.1, as modified. (Zone A/AE). All new, relocated, substantially improved or substantially damaged manufactured homes in V/VE and Coastal A zones shall be elevated such that the bottom of the frame is at or above the design flood elevation, as applicable to the flood hazard area, in the Florida Building Code – Residential Section R322.2.1, as modified. The frame shall be the lowest horizontal structural member. In areas of shallow flooding (AO Zones) and Unnumbered A zones, all new, relocated, substantially improved or substantially damaged manufactured homes shall have the top of the frame elevated to a height above the highest adjacent grade of not less than the depth number specified in feet (mm) on the FIRM plus 2 feet, or at least 4 feet above the highest adjacent grade if a depth number is not specified. The frame shall be the lowest horizontal structural member.

16.40.050.13.6. Reserved ~~**Elevation requirement for certain existing manufactured home parks and subdivisions.** Manufactured homes that are not subject to 16.40.050.13.5., including manufactured homes that are placed, replaced, or substantially improved on sites located in an existing manufactured home park or subdivision, unless on a site where substantial damage as result of flooding has occurred, shall be elevated such that either the:~~

1. ~~Bottom Top of the frame of the manufactured home is at or above the elevation required in the Florida Building Code, Residential Section R322.2 (Zone A) or R322.3 (Zone V); or~~
2. ~~Bottom of the frame is supported by reinforced piers or other foundation elements of at least equivalent strength that are not less than thirty-six (36) inches in height above grade~~

16.40.050.13.7. Enclosures. Enclosed areas below elevated manufactured homes shall comply with the requirements of the Florida Building Code, Residential Section ASCE 24 and this Ordinance for such enclosed areas.

16.40.050.13.8. Utility equipment. Utility equipment that serves manufactured homes, including electric, heating, ventilation, plumbing, and air conditioning equipment and other service facilities, shall comply with the requirements of the Florida Building Code, Residential Section ASCE 24 and this Ordinance.

16.40.050.14. RECREATIONAL VEHICLES AND PARK TRAILERS.

16.40.050.14.1. Temporary placement. Recreational vehicles and park trailers placed temporarily in flood hazard areas shall:

1. Be on the site for fewer than 180 consecutive days; or
2. Be fully licensed and ready for highway use, which means the recreational vehicle or park model is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and

security devices, and has no permanent attachments such as additions, rooms, stairs, decks and porches.

16.40.050.14.2. Permanent placement. Recreational vehicles and park trailers that do not meet the limitations in 16.40.050.14.1. for temporary placement shall meet the requirements of 16.40.050.13. for manufactured homes.

16.40.050.15. TANKS.

16.40.050.15.1. Underground tanks. Underground tanks in flood hazard areas shall be designed, by a professional engineer, constructed, installed and anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic, and hydrostatic and all flood-related and other loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty. Loads on underground tanks exposed to flooding shall be determined assuming at least 1.5 times the potential buoyant and other flood forces acting on an empty tank and shall take into consideration the eroded ground elevation.

16.40.050.15.2. Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of 16.40.050.15.3. shall:

(1) Be permitted in flood hazard areas (Zone A/AE) other than coastal high hazard areas and Coastal A zones, provided the tanks and their foundations are anchored or and otherwise designed, by a professional engineer, and constructed and installed to prevent flotation, collapse or lateral movement resulting from hydrodynamic, and hydrostatic and all flood-related and other loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty and the effects of flood-borne debris. Loads on tanks exposed to flooding shall be determined assuming at least 1.5 times the potential buoyant and other flood forces acting on an empty tank and shall take into consideration the eroded ground elevation.
(2) Not be permitted in coastal high hazard areas (Zone V/VE) and Coastal A zones.

16.40.050.15.3. Above-ground tanks, elevated. Above-ground tanks in flood hazard areas, including Coastal High Hazard Areas (V Zone) and Coastal A zones, shall be attached to and elevated to or above the design flood elevation on a supporting structure or platform, that is designed by a professional engineer, to prevent flotation, collapse or lateral movement, hydrodynamic, hydrostatic and all flood-related and other loads including flood-borne debris and including the effects of buoyancy assuming the tank is empty, during conditions of the design flood. Loads on tanks exposed to flooding shall be determined assuming at least 1.5 times the potential buoyant and other flood forces acting on an empty tank and shall take into consideration the eroded ground elevation. Where attached to structures, the structure and the structures foundation system shall be designed, by a professional engineer, to accommodate any increased loads resulting from the attached tank and it's attachment system. Tanks shall not be attached to breakaway walls or under elevated structures. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area, the Florida Building Code , ASCE 24 and this ordinance.

16.40.050.15.4. Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

1. At or above the design flood elevation or fitted with covers, designed, by a professional engineer, constructed and installed to prevent the inflow of floodwater or outflow or release of the contents of the tanks during conditions of the design flood including flood-borne debris; and
2. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic, and all flood-related and other loads including flood-borne debris loads, including and the effects of buoyancy, during conditions of the design flood.

16.40.050.16. OTHER DEVELOPMENT.

16.40.050.16.1. General requirements for other development. All development, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in Section 16.40.050. or the Florida Building Code, shall:

1. Be located and constructed to minimize flood damage;
2. Meet the requirements of 16.40.050.12.4. if located in a regulated floodway;
3. Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, and soil erosion, during conditions of the design flood;
4. Be constructed of flood damage-resistant materials; and
5. Have mechanical, plumbing, and electrical systems above the design flood elevation, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of the currently adopted Florida Building Code – Building, Florida Building Code – Residential, National Electrical Code, Florida Fire Prevention Code and ASCE-24, for wet locations.

16.40.050.16.2. Access stairs and ramps in V/VE and Coastal A Zones:
1) Shall be constructed with open sides and risers to minimize flood loads on the stairs and ramps and to minimize transfer of flood loads to the structure they are connected to.
2) Shall be designed to breakaway during base flood conditions without causing damage to the building they are attached to or it's foundation or,
3) Shall be designed to resist flood loads and remain in place during a base flood and the elevated building or structure they are connected to, and its foundation, must be designed to resist any flood loads that are transferred to the stairs or ramp to the building without causing damage to the building or structure.
4) Exterior massive or monumental stairs constructed of concrete and or steel with enclosed sides and/or enclosed risers are not permitted unless specifically required by life safety codes.

16.40.050.16.~~2~~3. Fences and retaining walls in regulated regulatory floodways, Special Flood Hazard Areas (A/AE Zones), Coastal A Zones and Coastal High Hazard Areas (V/VE Zones) . Fences and retaining walls in regulated regulatory floodways that have the potential to block the passage of floodwaters, such as, masonry walls, stockade fences and wire mesh fences, shall meet the limitations of 16.40.050.12.4. Fences and retaining walls in Special Flood Hazard Areas (A/AE zones), Coastal A Zones and Coastal High Hazard Areas (V/VE Zones) shall not obstruct or divert flood flow or waves. Fences and retaining walls in Coastal A Zones and Coastal High Hazard Areas (V Zones) must be designed, by a State registered design professional, and constructed to fail under design flood conditions without causing harm to nearby buildings.

16.40.050.16.~~3~~4. Retaining walls, sidewalks Sidewalks and driveways in regulated regulatory floodways, A/AE, V/VE and Coastal A Zones. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated regulatory floodways shall meet the requirements of 16.40.050.12.4.

16.40.050.16.5. Roads and watercourse crossings in regulated regulatory floodways. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated regulatory floodways shall meet the limitations of 16.40.050.12.4. Alteration of a watercourse that is part of a road or watercourse crossing shall meet the requirements of 16.40.050.5.3(3).

16.04.050.16.6. **Accessory Structures in A/AE Zones.** Accessory structures are subject to all floodplain management regulations. When an accessory structure represents a minimal investment, as determined by the City, the elevation or dry-floodproofing standards need not be met. However, all other requirements applicable to structures shall apply.
Accessory structures in A/AE-Zones, without elevating the first floor level to the DFE, shall implement the following standards:

1) Accessory structures shall be used only for parking and storage and shall not be used for human habitation including work, sleeping, living, cooking or restroom areas.
2) Accessory structures are limited to 1-story in height and may not be larger than 600 sq. ft. in area.
3) Accessory structures shall be designed to have low flood damage potential.
4) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
5) Accessory structures shall be firmly anchored, by engineered methods, to prevent flotation, collapse, or lateral movement resulting from flood waters.
6) Service equipment such as electrical, plumbing or mechanical equipment, including plumbing fixtures, etc., shall be elevated to the design flood elevation (DFE) at a minimum.
7) Accessory structures with the floor built below the DFE shall be constructed of flood resistant materials below the DFE.
8) Accessory structures built below the DFE shall have flood openings in accordance with R322.2 of the Florida Building Code, to relieve hydrostatic pressure during a flood event.

16.04.050.16.7. **Accessory Structures in Coastal A and V/VE-Zones**. In addition to the requirements of 1. through 8., immediately above, the following standards are required to properly regulate accessory structures:

9) The structural system shall use pilings or piers, adequately embedded to resist scour and lateral deflection.
10) Accessory structures must not be located below elevated structures and must not be larger than 100 sq. ft. in area.
11) Any enclosure below the DFE shall be constructed of wooden lattice or insect screening, or shall be designed as a "breakaway wall".
12) Floors shall be at or within 6 inches of grade.
13) The lowest horizontal structural member of the roof system, including plates and beams connecting the upright supports of the structure, shall be placed at or above the DFE.

16.04.050.16.8. **Agricultural Structures in A/AE- Zones.** A variance is authorized to be issued for the construction or substantial improvement of agricultural structures provided the requirements of this section are satisfied and:

(1) A determination has been made that the proposed agricultural structure:
   (a) Is used exclusively in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock, or storage of tools or equipment used in connection with these purposes or uses, and will be restricted to such exclusive uses.
   (b) Has low damage potential (amount of physical damage, contents damage, and loss of function).
   (c) Does not increase risks and pose a danger to public health, safety, and welfare if flooded and contents are released, including but not limited to the effects of flooding on manure storage, livestock confinement operations, liquified natural gas terminals, and production and storage of highly volatile, toxic, or water-reactive materials.
   (d) Is not located in a coastal high hazard area (Zone V/VE), except for aquaculture structures dependent on close proximity to water.
   (e) Complies with the wet floodproofing construction requirements of paragraph (2), below.

(2) Wet floodproofing construction requirements.
   (a) Anchored to resist flotation, collapse, and lateral movement.
   (b) When enclosed by walls, walls shall have flood openings that comply with the flood opening requirements of ASCE 24, Chapter 2.
   (c) Flood damage-resistant materials are used below the design flood elevation.

(3) Mechanical, electrical, and utility equipment, including plumbing fixtures, are elevated at or above the design flood elevation.

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

(1) Structurally independent of the foundation system of the building or structure;
(2) Frangible and not reinforced, so as to minimize debris during flooding that is capable of causing significant damage to any structure; and
(3) Have a maximum slab thickness of not more than four (4) inches, shall not have turned-down edges or contain reinforcement and shall have control or construction joints every four (4) feet in both directions.
(4) On minor fill only.
(5) Shall be self-supporting, structural slabs capable of remaining intact and functional under base flood conditions, including erosion and local scour, and the main structure shall be capable of resisting any added flood loads and effects of local scour caused by the presence of the slabs.

16.40.050.16.6.10. Decks and patios in coastal high hazard areas (Zone V/) V/VE and Coastal A zones. In addition to the requirements of the Florida Building Code, and ASCE 24, in coastal high hazard areas and Coastal A zones, decks and patios shall be located, designed, and constructed in compliance with the following:

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

(2) A deck or patio that is located below the design flood elevation~~,~~ shall be no more than 4" thick, shall be without reinforcement or turned down edges, shall be structurally independent from buildings or structures and their foundation systems, and shall be designed by a State registered design professional and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable of causing structural damage to the building or structure or to adjacent buildings and structures, with no harmful diversion of floodwaters, wave runup, or wave deflection that would increase damage to adjacent buildings and structures.

(3) A deck or patio that has a vertical thickness of more than twelve (12) inches or that is constructed with more than the minimum amount of minor fill necessary for site drainage shall not be approved unless an analysis prepared by a qualified registered design professional demonstrates no harmful diversion or deflection of floodwaters or wave runup and wave deflection ~~reflection~~ that would increase damage to the building or structure or to adjacent buildings and structures or that causes water runoff onto abutting properties.

(4) A deck or patio that has a vertical thickness of twelve (12) inches or less and that is at natural grade or on nonstructural minor fill material that is similar to and compatible with local soils and is the minimum amount necessary for site drainage may be approved without requiring analysis of the impact on diversion of floodwaters or wave runup and wave reflection.

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

(1) Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;

(2) Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the design flood or otherwise function to avoid obstruction of floodwaters; and

(3) On-site sewage treatment and disposal systems defined in 64E-6.002, F.A.C., as filled systems or mound systems.

16.40.050.16.8.12. Nonstructural fill in coastal high hazard areas (Zone V/VE) and Coastal A zones. In coastal high hazard areas and V/VE and Coastal A zones, in addition to the requirements of 16.40.050.12.1.2:

(1) Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around buildings.

(2) Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall be permitted only if an analysis prepared by a qualified registered design professional

demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures.
(3) Where authorized by the Florida Department of Environmental Protection or applicable local approval, sand dune construction and restoration of sand dunes under or around elevated buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection if the scale and location of the dune work is consistent with local beach-dune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building.

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

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