ZONING STAFF REPORT
UDC TEXT CHANGE:
Housekeeping Amendment # 14

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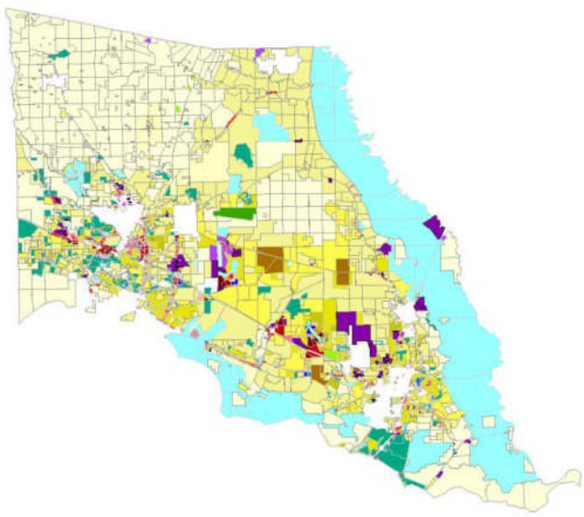
Location: Parish Wide – Unified Development Code Text Change **Ordinance Calendar No:** TBD

Commission Hearing: June 10, 2025 **Determination:** Approved



Housekeeping Text Amendment # 14:

An Ordinance to repeal the existing Section 900-6.7, Flood Hazard Area Requirements, including associated definitions applicable solely to the aforementioned Section, and to replace in its entirety.

OVERVIEW/HISTORY

1. The Federal Emergency Management Agency (FEMA) conducted a Community Assistance Visit (CAV) with St. Tammany Parish on March 11, 2024, to evaluate compliance with National Flood Insurance Program (NFIP) requirements. A review of community policies, procedures and site visits in the field conducted during the CAV identified deficiencies with the St. Tammany Parish Flood Damage Prevention Ordinance.
2. FEMA is requiring the Parish adopt revisions to the Unified Development Code to maintain NFIP eligibility and ensure property owners continue to have access to flood insurance and post-disaster federal assistance. The proposed amendments focus on aligning Parish code with federal standards and clarifying updates to local floodplain management regulations. These updates are critical to maintain St. Tammany Parish's standing in the NFIP and ensure consistent, enforceable standards and regulatory requirements for floodplain development.

THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) EXPLAINED

1. The National Flood Insurance Program (NFIP) is a federal program administered by the Federal Emergency Management Agency (FEMA). It was created by Congress in 1968 to provide flood insurance to property owners, renters, and businesses, encourage sound floodplain management through local regulations, and reduce the impact of flooding on private and public structures.
2. To participate, communities must adopt and enforce floodplain management regulations to reduce local flood risks. In return, residents become eligible to purchase federally backed flood insurance and qualify for disaster aid.
3. The NFIP currently provides 29,618 flood insurance policies within St. Tammany Parish, affording $9.29 billion in coverage. Policyholders filed 24,867 claims since 1971, providing a cumulative claim payment history of $1.2 billion.

THE COMMUNITY RATING SYSTEM EXPLAINED

1. Participation in the NFIP is a prerequisite to participate in the Community Rating System (CRS), which is a voluntary program within the National Flood Insurance Program that rewards communities for taking actions that reduce flood risk and promote flood awareness.
2. Property owners in CRS-participating communities can receive discounts on their flood insurance based on the community's CRS class. Class values range from 10, which is the lowest and does not provide any discount, to 1, which is the highest, and provides a 45% discount on insurance premiums.
3. Currently, St. Tammany Parish is rated a 7 which provides a 15% discount on flood insurance totaling $2,698,257 in premium savings throughout the Parish. To participate in the CRS program, communities must be in good standing with the NFIP program.

CONSISTENCY WITH NEW DIRECTIONS 2040

The proposed text change is consistent with the following goals, policies, and strategies of the Comprehensive Plan:

i. Goal 1:3: The character of existing residential areas, expansive rural landscapes, and sensitive ecological areas will be preserved.
ii. Goal 1:4: Land and buildings will be developed in ways that lower the risk and incidence of flooding and flood damage caused by rainfall and storm surge.
iii. Goal 1.7: Resilient building and land development practices will reduce or eliminate the potential impact of flood and wind hazards, particularly at critical facilities.
iv. Goal 3:3: Our waterways, watersheds, floodplains, and groundwater will be protected, maintained, and restored to maximize water quality and sustain a drinkable water supply.

Proposed Changes Key:

Blue and Underlined Text – Added Text

~~Red and strikethrough text~~ - Deleted Text

Proposed amendments to St. Tammany Parish's Code of Ordinances, Part II– Unified Development Code, include the following:

1. Amend Chapter 900 – Infrastructure to repeal the existing Section 900-6.7 Flood Hazard Area Requirements, including associated definitions applicable solely to the aforementioned Section, and replace in its entirety with the new text as shown below, to read as follows:

SEC. 900-6.7 FLOOD HAZARD AREA REQUIREMENTS.

A. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

1. **AUTHORIZATION** - The Legislature of the State of Louisiana has in statute LRS 38:84 delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Parish Council of St. Tammany Parish, Louisiana, does ordain as follows:

2. **FINDINGS OF FACT**
   a. The flood hazard areas of St. Tammany Parish are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
   b. These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

3. **STATEMENT OF PURPOSE** - It is the purpose of this Flood Damage Prevention Ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
   a. Protect human life and health;
   b. Minimize expenditure of public money for costly flood control projects;
   c. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
   d. Minimize prolonged business interruptions;

e. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
f. Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
g. Ensure that potential buyers are notified that property is in a flood area.

4. METHODS OF REDUCING FLOOD LOSSES - In order to accomplish its purposes, this Flood Damage Prevention Ordinance uses the following methods:

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

B. DEFINITIONS - Unless specifically defined below, words or phrases used in this Flood Damage Prevention Ordinance shall be interpreted to give them the meaning they have in common usage and to give this ordinance its most reasonable application. As defined in this Section 900-6.7 Flood Hazard Area Requirements, the words listed below shall have the following meaning only in Section 900-6.7 Flood Hazard Area Requirements of the St. Tammany Parish Unified Development Code, and shall have no application to resolve any conflict with a defined term elsewhere in the Unified Development Code or Code of Ordinances. Unless specifically defined in this in this Section 900-6.7 Flood Hazard Area Requirements, words or phrases shall be interpreted to give them the meaning they have in common usage and to give this ordinance its most reasonable application

ACCESSORY STRUCTURES - means structures that are on the same parcel of property as a principal structure, the use of which is incidental to the use of the principal structure. Accessory structures must be used for parking or storage, be small and represent a minimal investment by owners, and have low damage potential. Accessory structure size limits based on flood zone, no larger than a 600 sq. ft. in flood zones identified as A zones (A, AE, A1-30, AH, AO, A99, and AR) and not larger than 100 square feet in flood zones identified as V zones (V, VE, V1 30, and VO). Examples of small accessory structures include, but are not limited to, detached garages, storage and tool sheds, and small boathouses. Accessory structures specifically exclude structures used for human habitation.

AGRICULTURAL STRUCTURES - means structures that are used exclusively for agricultural purposes or uses in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock.

ALLUVIAL FAN FLOODING - means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and, unpredictable flow paths.

APEX - means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

APPURTENANT STRUCTURE - means a structure that is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

AREA OF FUTURE CONDITIONS FLOOD HAZARD - means the land area that would be inundated by the 1-percent-annual-chance (100-year) flood based on future-conditions hydrology.

AREA OF SHALLOW FLOODING - means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD - is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For purposes of these regulations, the term ``special flood hazard area" is synonymous in meaning with the phrase ``area of special flood hazard".

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

BASE FLOOD ELEVATION- The elevation shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a 1% chance of equaling or exceeding that level in any given year – also called the Base Flood.

BASEMENT - means any area of the 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.

BUILDING – see structure.

COASTAL HIGH HAZARD AREA - means an area of special flood hazard 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.

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

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 the effective date of the floodplain management regulations adopted by a community.

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 manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FLOOD OR FLOODING –

a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
    i. the overflow of inland or tidal waters.
    ii. the unusual and rapid accumulation or runoff of surface waters from any source.
b. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

FLOOD ELEVATION STUDY - means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

FLOOD HAZARD BOUNDARY MAP (FHBM) - means an official map of a community, issued by the Administrator, where the boundaries of the flood, mudslide (i.e., mudflow) related erosion areas having special hazards have been designated as Zones A, M, and/or E.

FLOOD INSURANCE RATE MAP (FIRM) - means an official map of a community, on which the Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY (FIS) - see Flood Elevation Study

FLOODPLAIN OR FLOOD-PRONE AREA - means any land area susceptible to being inundated by water from any source (see definition of ``flooding").

FLOODPLAIN MANAGEMENT - means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and flood plain management regulations.

FLOODPLAIN MANAGEMENT REGULATIONS - means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a flood plain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOOD PROTECTION SYSTEM - means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

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

FLOODWAY - see Regulatory Floodway

FLOODWAY ENCROACHMENT LINES - mean the lines marking the limits of floodways on Federal, State and local flood plain maps.

FREEBOARD - means a factor of safety usually expressed in feet above a flood level for purposes of flood plain management. ``Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

FUNCTIONALLY DEPENDENT USE - means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

FUTURE-CONDITIONS FLOOD HAZARD AREA, OR FUTURE-CONDITIONS FLOODPLAIN - see Area of future-conditions flood hazard.

FUTURE-CONDITIONS HYDROLOGY - means the flood discharges associated with projected land-use conditions based on a community's zoning maps and/or comprehensive land-use plans and without consideration of projected future construction of flood detention structures or projected future hydraulic modifications within a stream or other waterway, such as bridge and culvert construction, fill, and excavation.

HIGHEST ADJACENT GRADE - means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE - means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
    a. By an approved state program as determined by the Secretary of the Interior or
    b. Directly by the Secretary of the Interior in states without approved programs.

LEVEE - means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

LEVEE SYSTEM - means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

LOWEST FLOOR - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; Provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR Sec. 60.3.

MANUFACTURED HOME - means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term ``manufactured home" does not include a "recreational vehicle".

MANUFACTURED HOME PARK OR SUBDIVISION - means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

MAP - means the Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for a community issued by the Agency.

MEAN SEA LEVEL - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

NEW CONSTRUCTION - means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

NEW MANUFACTURED HOME PARK OR SUBDIVISION - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

PROGRAM DEFICIENCY - means a defect in a community' s flood plain management regulations or administrative procedures that impairs effective implementation of those flood plain management regulations or of the standards in 44 CFR Sec. 60.3, 60.4, 60.5, or 60.6.

REASONABLY SAFE FROM FLOODING - means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

RECREATIONAL VEHICLE - means a vehicle which is (i) built on a single chassis; (ii) 400 square feet or less when measured at the largest horizontal projection; (iii) designed to be self-propelled or permanently towable by a light duty truck; and (iv) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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

REMEDY A VIOLATION - means to bring the structure or other development into compliance with State or local flood plain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

RIVERINE - means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SHEET FLOW AREA - see area of shallow flooding.

SPECIAL FLOOD HAZARD AREA - see ``area of special flood hazard". Special hazard area means an area having special flood, mudslide (i.e., mudflow), or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, AR, AR/A1-30, AR/ AE, AR/AO, AR/AH, AR/A, A99, AH, VO, V1-30, VE, V, M, or E.

START OF CONSTRUCTION - (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of 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 and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first

alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STATE COORDINATING AGENCY - means the agency of the state government, or other office designated by the Governor of the state or by state statute at the request of the Administrator to assist in the implementation of the National Flood Insurance Program in that state.

STORM CELLAR - means a space below grade used to accommodate occupants of the structure and emergency supplies as a means of temporary shelter against severe tornado or similar wind storm activity.

STRUCTURE - means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

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

SUBSTANTIAL IMPROVEMENT - means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the ``start of construction'' of the improvement. This term includes structures which have incurred ``substantial damage'', regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or
2. Any alteration of a ``historic structure'', provided that the alteration will not preclude the structure's continued designation as a ``historic structure''

V ZONE - see coastal high hazard area.

VARIANCE - means a grant of relief by a community from the terms of a flood plain management regulation. (For full requirements see 44 CFR Sec. 60.6.)

VIOLATION - means the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Sec. 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

WATERCOURSE - means the channel of a river, stream or drainage way and not the adjacent overbank areas. Watercourses include not only rivers or streams that are the source of flooding used to determine the base flood and the floodplain boundaries, but

also smaller streams, drainage ways and ditches within the floodplain that could flood during smaller more frequent events.

WATER SURFACE ELEVATION - means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

C. GENERAL PROVISIONS

1. **LANDS TO WHICH THIS ORDINANCE APPLIES** - This Flood Damage Prevention Ordinance shall apply to all areas of special flood hazard within the jurisdiction of St. Tammany Parish.

2. **BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD** - The areas of special flood hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for St. Tammany Parish," dated April 21, 1999, with accompanying Flood Insurance Rate Maps (FIRM) dated April 21, 1999, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance.

3. **ESTABLISHMENT OF DEVELOPMENT PERMIT** - A Floodplain Development Permit shall be required to ensure conformance with the provisions of this ordinance.

4. **COMPLIANCE** - No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this ordinance and other applicable regulations.

5. **ABROGATION AND GREATER RESTRICTIONS** - This Flood Damage Prevention Ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these ordinances and other ordinances, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

6. **INTERPRETATION** - In the interpretation and application of this Flood Damage Prevention Ordinance, all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

7. **WARNING AND DISCLAIMER OR LIABILITY** - The degree of flood protection required by this Flood Damage Prevention Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This Flood Damage Prevention Ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Flood

Damage Prevention Ordinance shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on this ordinance, or any administrative decision lawfully made hereunder.

D. ADMINISTRATION

1. **DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR** - The Chief Building Official, or their designated appointee is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

2. **DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR** Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:
    a. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance.
    b. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.
    c. Review, approve or deny all applications for development permits required by adoption of this Flood Damage Prevention Ordinance.
    d. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
    e. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.
    f. Notify, in riverine situations, adjacent communities and the State Coordinating Agency, which is the Louisiana Department of Transportation and Development, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
    g. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
    h. When base flood elevation data has not been provided in accordance with Section (C)(2) – Basis for Establishing the areas of Special Flood Hazard, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Section (E) – Provisions for Flood Hazard Reduction.
    i. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within

Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

j. Under the provisions of 44 CFR Article 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than 1 foot, provided that the community first completes all of the provisions required by Section 65.12.

k. After a disaster or other type of damage occurrence to structures in the community of St. Tammany Parish, determine if the residential and non-residential structures and manufactured homes have been substantially damaged, and enforce the substantial improvement requirement.

l. Maintain a record of all actions involving an appeal from a decision of the Board of Adjustments.

3. PERMIT PROCEDURES

a. Application for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

i. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

ii. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;

iii. A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of Section (E) – Provisions for Flood Hazard Reduction, Section (E)(2)(b) – Nonresidential Construction.

iv. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

v. Maintain a record of all such information in accordance with Section D - Administration, Section (D)(2)(a) – Duties and Responsibilities of the Floodplain Administrator.

b. Approval or denial of a Floodplain Development Permit by the Floodplain Administrator shall be based on all of the provisions of this ordinance and the following relevant factors:

i. The danger to life and property due to flooding or erosion damage;

ii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
iii. The danger that materials may be swept onto other lands to the injury of others;
iv. The compatibility of the proposed use with existing and anticipated development;
v. The safety of access to the property in times of flood for ordinary and emergency vehicles;
vi. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
vii. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;
viii. The necessity to the facility of a waterfront location, where applicable;
ix. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

4. VARIANCE PROCEDURES

a. The Board of Adjustments shall hear and render judgment on requests for variances from the requirements of this ordinance.
b. The Board of Adjustments shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this Flood Damage Prevention Ordinance.
c. Any person or persons aggrieved by a decision of the Board of Adjustments may appeal such decision to the 22nd Judicial District Court following the procedures found within Chapter 200 – Procedures.
d. The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
e. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this Flood Damage Prevention Ordinance.
f. Variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section (D) – Administration, Section (D)(3)(b) have been fully considered. As the lot size increases beyond the 1/2 acre, the technical justification required for issuing the variance increases.
g. Upon consideration of the factors noted above and the intent of this Flood Damage Prevention Ordinance, the Board of Adjustments may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Flood Damage Prevention Ordinance (Section

A – Statutory Authorization, Findings of Fact, Purpose and Methods, Section (A)(3) – Statement of Purpose).

h. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

i. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

j. Prerequisites for granting variances:

   i. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

   ii. Variances shall only be issued upon:

      1. showing a good and sufficient cause;
      2. a determination that failure to grant the variance would result in exceptional hardship to the applicant, and
      3. a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

   iii. Any application to which a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

k. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:

   i. the criteria outlined in Section (D) - Administration, Section (D)(4)(a-i) are met, and

   ii. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

E. PROVISIONS FOR FLOOD HAZARD REDUCTION

1. GENERAL STANDARDS - In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

a. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

c. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
d. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
e. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
f. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
g. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

2. **SPECIFIC STANDARDS** - In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Section (C) – General Provisions, Section (C)(2), (ii) Section (D) – Administration, Section (D)(2)(h), or (iii) Section (E) – Provisions for Flood Hazard Reduction, Section (E)(3)(c), the following provisions are required:
   a. Residential Construction - new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), at or above the base flood elevation plus 12 inches. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in Section (D) – Administration, Section (D)(3)(a)(i) is satisfied.
   b. Nonresidential Construction - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) at or above the base flood level plus 12 inches, or together with attendant utility and sanitary facilities, be designed so that the structure is watertight at plus 12 inches above the base flood elevation with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.
   c. Enclosures - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of

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

i. A minimum of two openings on separate walls having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.
ii. The bottom of all openings shall be no higher than 1 foot above grade.
iii. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

d. Manufactured Homes –

i. Require that all manufactured homes to be placed within Zone A on a community's FIRM shall be installed using methods and practices that minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
ii. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the bottom of the I-beam is elevated at or above the base flood elevation plus 12 inches and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces. The manufactured home shall be installed by a licensed installer according to Louisiana State law and compliance herewith shall be certified in writing to the Floodplain Administrator by said installer prior to habitation of the manufactured home.
iii. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either:
    1. the bottom of the longitudinal structural I beam of the manufactured home is at or above the base flood elevation, or
    2. the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be

securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

e. Recreational Vehicles- Require that recreational vehicles placed on sites within Zones A1-30, AH, AO and AE on the St. Tammany Parish FIRM either:

i. Be on a site for fewer than 180 consecutive days,
ii. Be fully licensed and ready for highway use, or
iii. Meet the permit requirements of Section (D) - Administration, Section (D)(3), and the elevation and anchoring requirements for "manufactured homes" in paragraph (d) of this section. A recreational vehicle is ready for highway use if it is on wheels or jacking system, is attached to the site only by a quick disconnect type utilities and security devices and has no permanently attached additions.

f. Accessory Structure- Accessory structures to be placed on sites within Zones A1-30, AH, AO and AE on the St. Tammany Parish FIRM shall comply with the following:

i. The structure shall be used only for parking and limited storage;
ii. The structure shall not be used for human habitation. Prohibited activities or uses include but are not limited to working, sleeping, living, entertainment, cooking, or restroom use;
iii. The structure shall be unfinished on the interior.
iv. Structures shall be small in size, not to exceed 600 sq. ft.
v. Structures exceeding the size of 600 sq. ft. will be required to meet all applicable standards of Section (C) – General Provisions, Section (C)(3), Section (D) – Administration, Section (D)(3), Section (E) – Provisions for Flood Hazard Reduction, Section (E)(1) & (E)(2) including relevant subsections.
vi. Service facilities such as electrical and heating equipment must be elevated to or above the BFE plus 12 inches;
vii. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
viii. The structure shall be considered low in value, designed to have low flood damage potential and constructed with flood resistance materials;
ix. The structure shall be firmly anchored to prevent flotation, collapse, and lateral movement;
x. Floodway requirements must be met in the construction of the structure;
xi. Openings to relieve hydrostatic pressure during a flood shall be provided below the BFE; and be placed on a minimum of two (opposing) walls with the net area of not less than 1 square inch for every square foot of the size of the footprint of the structure (Flood Vents);
xii. The openings (flood vents) shall be located no higher than 1 foot above grade;
xiii. The openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

3. STANDARDS FOR SUBDIVISION PROPOSALS

a. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Section (A) – Statutory Authorization, Findings of Fact, Purpose, and Methods: Sections (A)(2), (A)(3), and (A)(4) of this Flood Damage Prevention Ordinance.

b. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Floodplain Development Permit requirements of Section (C) – General Provisions: Section (C)(3); Section (D) – Administration: Section (D)(3); and the provisions of Section (E) – Provisions for Flood Hazard Reduction of this Flood Damage Prevention Ordinance.

c. Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which are greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to Section (C) – General Provisions: Section (C)2 or Section (D) – Administration: Section (D)(2)(h) of this Flood Damage Prevention Ordinance.

d. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

e. All subdivision proposals including the placement of manufactured home parks and other proposed new development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

4. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES) – Located within the areas of special flood hazard established in Section (C) – General Provisions: Section (C)(2), are areas designated as shallow flooding. These areas have special flood hazards associated with flood depths of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

a. All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated at or above the base flood elevation plus 12 inches, or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM plus 12 inches (at least 2 feet if no depth number is specified).

b. All new construction and substantial improvements of non-residential structures;

   i. have the lowest floor (including basement) elevated at or above the base flood elevation plus 12 inches or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM plus 12 inches (at least 2 feet if no depth number is specified), or

   ii. together with attendant utility and sanitary facilities be designed so that the structure is watertight 12 inches or more above the base flood elevation with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

c. A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this Section, as proposed in Section (D) – Administration: Section (D)(3) are satisfied.

d. Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

5. FLOODWAYS - Floodways - located within areas of special flood hazard established in Section (C) – General Provisions: Section (C)(2), are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

a. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
b. If Section (E) – Provisions for Flood Hazard Reduction: Section (E)(5)(a) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section (E) – Provisions for Flood Hazard Reduction.
c. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by Section 65.12.

6. COASTAL HIGH HAZARD AREAS - Located within the areas of special flood hazard established in Section (C) – General Provisions: Section (C)(2), are areas designated as Coastal High Hazard Areas (Zones V1-30, VE, and/or V). These areas have special flood hazards associated with high velocity waters from tidal surges and hurricane wave wash; therefore, in addition to meeting all provisions outlined in this ordinance, the following provisions must also apply:

a. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures, and whether or not such structures contain a basement. The Floodplain Administrator shall maintain a record of all such information.
b. All new construction shall be located landward of the reach of mean high tide.
c. All new construction and substantial improvements shall be elevated on pilings and columns so that:
    i. the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level plus 12 inches;
    ii. the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the

design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of (c)(i) and (ii) of this Section.

d. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.
For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
    i. breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
    ii. the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards. Such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.

e. Prohibit the use of fill for structural support of buildings.
f. Prohibit man-made alteration of sand dunes and mangrove stands that increase potential flood damage.
g. Accessory structures shall be limited in size to 100 square feet, constructed on pilings and columns, and comply with all other requirements of Section (E): Provisions for Flood Hazard Reduction: Section (E)(2)(f)(i,ii,iii,vi,vii,viii,and ix).
    i. Structures exceeding the size of 100 square feet will be required to meet all applicable standards of Section (C) – General Provisions: Section (C)(3), Section (D): Administration: Section (D)(3), Section (E): Provisions for Flood Hazard Reduction: Section (E)(1), (E)(2) and (E)(6), including relevant subsections.

7. SEVERABILITY - If any section, clause, sentence, or phrase of this Flood Damage Prevention Ordinance are held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Flood Damage Prevention Ordinance.

8. PENALTIES FOR NON COMPLIANCE - No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who

violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than $500.00 or imprisoned for not more than one (1) year, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Each day the violation continues shall be deemed a new violation. Nothing herein contained shall prevent St. Tammany Parish from taking such other lawful action as is necessary to prevent or remedy any violation.

9. CERTIFICATION OF ADOPTION - It is hereby found and declared by St. Tammany Parish that severe flooding has occurred in the past within its jurisdiction and will certainly occur within the future; that flooding is likely to result in infliction of serious personal injury or death, and is likely to result in substantial injury or destruction of property within its jurisdiction; in order to effectively comply with minimum standards for coverage under the National Flood Insurance Program, and in order to effectively remedy the situation described herein an emergency is hereby declared to exist, and this ordinance, being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect and after its passage and approval

~~**A. Purpose.**~~

~~Flood hazard area regulations described in this section aim to mitigate the impacts of the periodic inundation experienced in the flood hazard areas of the parish, to enhance public safety, and to minimize public and private losses due to flood conditions in certain areas. In so doing, flood hazard regulations are designed to achieve the following:~~

1. ~~To protect human life and health.~~
2. ~~To minimize expenditure of public money for costly flood control projects.~~
3. ~~To reduce vulnerabilities and minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.~~
4. ~~To minimize prolonged business interruptions.~~
5. ~~To minimize the impacts of obstructions in the floodplain that may cause an increase in flood heights and velocities.~~
6. ~~To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains.~~
7. ~~To help maintain a stable tax base by providing for the sound use and development of flood prone areas.~~
8. ~~To ensure that potential buyers are notified that property is in a flood area.~~

~~**A. Methods of Reducing Flood Losses.**~~

~~In order to accomplish its purposes, this section uses the following methods:~~

1. ~~Restricts or prohibits uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities.~~

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

3. Controls the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters.

4. Control filling, grading, dredging and other development which may increase flood damage.

5. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

B. Applicability.

The flood hazard area regulations of this section apply to all areas of special flood hazard within the jurisdiction of the parish. To establish areas of special flood hazards, the parish shall use tools provided by the Federal Emergency Management Agency (FEMA), including but not limited to the "Flood Insurance Study for St. Tammany Parish, Louisiana (Unincorporated Areas)" dated October 17, 1989, with accompanying Flood Insurance Rate Maps and Flood Boundary Floodway Maps (FIRM and FBFM), as they may be amended from time to time by FEMA. The subsequent letters of map changes or amendments made by FEMA to the rate maps and Flood Boundary Floodway Maps or Flood Insurance Studies and reports shall be automatically assimilated and made part of this section without further promulgation or documentation.

C. Warning and Disclaimer of Liability.

The degree of flood protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by manmade or natural causes. This section does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This section shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder.

E. Floodplain Administration.

1. *Designation of the Floodplain Administrator*. The Department of Permits and Inspections is hereby appointed the floodplain administrator to administer and implement the provisions of this section and other appropriate sections of 44 Code of Federal Regulations (CFR) (National Flood Insurance Program regulations) pertaining to floodplain management.

2. *Duties and Responsibilities of the Floodplain Administrator*. Duties and responsibilities of the floodplain administrator include:

   a. Maintain and hold open for public inspections all records pertaining to the provisions of this section.

   b. Review all development permit applications to determine whether proposed building site will be reasonably safe from flooding.

   c. Review, approve or deny all applications for development permits based on their compliance with this section and the following relevant factors:

      i. The danger to life and property due to flooding or erosion damage;

ii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

iii. The danger that materials may be swept onto other lands to the injury of others;

iv. The safety of access to the property in times of flood for ordinary and emergency vehicles;

v. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;

vi. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;

vii. The necessity to the facility of a waterfront location, where applicable;

viii. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

A. Review permits for proposed development to assure that all necessary permits have been obtained from those federal, state or local governmental agencies (including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334) from which prior approval is required.

B. Maintain a record of all actions involving appeals of the enforcement of these requirements and report variances of these provisions by the Board of Adjustments to the Federal Emergency Management Agency upon request.

C. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the floodplain administrator shall make the necessary interpretation.

D. Notify, in riverine situations, adjacent communities and the state coordinating agency, which is the Department of Urban and Community Affairs, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

E. Ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.

F. When base flood elevation data is not available, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of this section.

G. When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1-30 and AE on the community's FIRM unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

F. Provisions for Flood Hazard Reduction.

The following requirements apply to all special flood hazard areas:

1. Construction of any structures or alteration of land which occurs in the 100-year flood zone as established by the Federal Emergency Management Agency shall require approval from the Department of Permits and Inspections prior to issuance of a building permit.

   a. All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

   b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

   c. All new and replacement electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding, such facilities shall be located a minimum of 12 inches or 1 foot above the Base Flood Elevation.

   d. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

   e. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters.

   f. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Standards for Specific Uses

   a. *Residential Construction.* New construction and substantial improvements of any residential structure shall have the lowest floor, including the basement, elevated to a minimum of 12 inches or 1 foot above the base flood elevation; or 12 inches above the centerline of the street or top of curb fronting the home, whichever is greater. A registered professional engineer, architect or land surveyor shall submit a certificate of elevation, documented on the Federal Emergency Management Agency Form 81-31 or subsequent agency form, indicating that the standards of this subsection have been satisfactorily met.

   b. *Nonresidential Construction.* New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to or above the base flood level or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is floodproofed or watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer and architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection, in relation to mean sea level, to which such structures are floodproofed shall be maintained by the floodplain administrator.

H. *Enclosures.* New construction and substantial improvements, with fully enclosed areas below the lowest floor that are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this

requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

i. A minimum of 2 openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

ii. The bottom of all openings shall be no higher than one foot above grade.

iii. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

I. *Manufactured Homes.* Manufactured homes, including those within existing mobile home parks, to be placed or substantially improved in any flood zones designated "A" on the community's FIRM shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

i. All manufactured homes shall comply with the residential construction requirements as outlined above.

J. Manufactured homes to be placed or substantially improved within flood zones designated A0, A1-30, AH or AE on the community's FIRM shall be elevated on a permanent foundation such that the lowest point of the lowest horizontal structural member of the manufactured home is at a minimum of 12 inches or 1 foot or above the base flood elevation, or 12 inches or 1 foot above the centerline of the street or top of curb fronting the home, whichever is greater; and be securely anchored to an adequately anchored foundation system.

K. *Low cost small accessory structures.* The construction of accessory structures in flood zones designated "A" must satisfy the following standards:

i. May be constructed with the floor below the design flood elevation (DFE). The DFE is a minimum of 12 inches or 1 foot above the base flood elevation (BFE); or 12 inches above the centerline of the street or top of curb fronting the home, whichever is greater; or the advisory base flood elevation (ABFE) for the site plus freeboard, if required by the Parish's Flood Hazard Prevention Ordinances.

ii. Shall be anchored to resist flotation, collapse, and lateral movement.

iii. Portions of structure located below the DFE shall be constructed of flood-resistant materials.

iv. Shall be designed for the automatic entry and exit of flood waters.

v. Mechanical and utility equipment must be elevated or flood-proofed to or above the DFE.

vi. Shall comply with the floodway encroachment provisions of the NFIP regulations.

vii. Use shall be limited to parking and/or limited storage.

viii. Structure shall not be used for human habitation, including work, sleeping, living, cooking, or restroom facilities.

ix. Structure cannot be modified for a different use after permitting.

x. Unless elevated on piles or columns, accessory structures in V Zones are limited to low cost, small structures, such as metal, plastic or wooden sheds that are "disposable." They shall be less than or equal to 100 square feet in size, and not more than $1,000.00 in value. If constructed, fill cannot be used for structural support and the areas below the DFE must remain free of obstruction or be constructed with non-supporting breakaway walls, open latticework, or insect screening. All accessory structures are to be located so as not to cause damage to adjacent and nearby structures.

Standards for Areas of Shallow Flooding (AO/AH Zones). A registered professional engineer or architect shall submit a certificate of elevation, documented on the Federal Emergency Management Agency Form 81-31 or subsequent agency form, to the floodplain administrator that the standards of this section have been satisfactorily met.

Coastal High-Hazard Areas (V1-30, VE, and V Zones). These areas have special flood hazards associated with high velocity waters from tidal surges and hurricane wave wash. The following additional standards apply to development in these zones:

a. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new substantially improved structures, and whether or not such structures contain a basement. The floodplain administrator shall maintain a record of all such information.

b. All new construction shall be located landward of the reach of mean high tide.

c. All new construction and substantial improvements shall be elevated on pilings and columns so that:

i. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or a minimum of 12 inches or 1 foot above the base flood level;

L. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a 1 percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

A licensed professional engineer registered in the State of Louisiana or architect shall develop or review the structural design, specifications, and plans for the construction and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this section. The licensed professional engineer shall:

a. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.

i. A breakaway wall shall have a design safe loading resistance of not less than 10 pounds and not more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a licensed professional engineer registered in the State of Louisiana or architect certifies that the designs proposed meet the following conditions:

Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and

The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

If breakaway walls are utilized, such enclosed space shall be usable solely for parking of vehicles, building access or storage. Such space shall not be used for human habitation.

b. Prohibit the use of fill for structural support of buildings.

c. Prohibit manmade alteration of sand dunes and mangrove stands which would increase potential flood damage.

d. Any alteration, repair, reconstruction, or improvements to a structure started after the enactment of the ordinance from which this article is derived shall not enclose the space below the lowest floor unless breakaway walls are used as provided for in division 3 of this article.

e. Prior to construction, plans for any structure that will have breakaway walls must be submitted to the Floodplain Administrator for approval.