ARTICLE IX. FLOOD PREVENTION AND PROTECTION

DIVISION 1. GENERALLY

Sec. 36-237. Statutory authorization.

The state legislature has in R.S. 38:84 delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the parish council, does ordain as provided in this article.

(Code 1993, § 10-1; Ord. No. 10-33, art. 1, § A, 6-14-2010; Ord. No. 21-06, § 17-10.1, 1-25-2021)

Sec. 36-238. Findings of fact.

- (a) The flood hazard areas of the parish are subject to periodic inundation, which may result 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.

(Code 1993, § 10-2; Ord. No. 10-33, art. 1, § B, 6-14-2010; Ord. No. 21-06, § 17-10.2, 1-25-2021)

Sec. 36-239. Statement of purpose.

It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as 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 floodprone areas in such a manner as to minimize future flood blight areas; and
- (7) Ensure that potential buyers are aware that property is in a special flood hazard area (SFHA).

(Code 1993, § 10-3; Ord. No. 10-33, art. 1, § C, 6-14-2010; Ord. No. 21-06, § 17-10.3, 1-25-2021)

Sec. 36-240. Methods of reducing flood losses.

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

- (1) 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;
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control 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.

(Code 1993, § 10-4; Ord. No. 10-33, art. 1, § D, 6-14-2010; Ord. No. 21-06, § 17-10.4, 1-25-2021)

Sec. 36-241. Definitions.

(a) Unless specifically defined below, words or phrases used in this article shall be interpreted to give them the meaning they have in common usage and to give this article its most reasonable application. Definitions in this article shall supersede any conflicting definitions in section 36-9.

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 which 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 one 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 the parish's flood insurance rate map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three 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 means the land in the floodplain within the parish subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the flood hazard boundary map (FHBM). After detailed rate making has been completed in preparation for publication of the FIRM, 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, V1-30, VE or V.

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

Base flood elevation means 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 one percent 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.

Critical feature means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Elevated building means, for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

Existing construction means, for the purposes of determining rates, structures for which the start of construction commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. Existing construction may also be referred to as "existing structures."

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 the parish.

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).

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

- (1) The overflow of inland or tidal waters.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

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 insurance rate map (FIRM) means an official map of the parish, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the parish.

Flood insurance study (FIS). See Flood elevation study.

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 parish 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.

Floodplain or *floodprone area* means any land area susceptible to being inundated by water from any source (see *Flood* or *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 floodplain management regulations.

Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control

ordinance) and other applications of police power. The term "floodplain management regulations" describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodproofing 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.

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 "functionally dependent use" 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.

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 manmade 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 requirement of section 60.3 of the National Flood Insurance Program regulations.

Mean sea level means, for purposes of the National Flood Insurance Program, the North American Vertical Datum (NGVD) of 1988, or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

New construction means, for the purpose of determining insurance rates, structures for which the start of construction commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, the

term "new construction" means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by the parish 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 the parish.

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

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.

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

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

Special flood hazard area. See Area of special flood hazard.

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 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.

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 start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term "substantial improvement" does not, however, include either:

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

Variance means a grant of relief by the parish from the terms of a floodplain management regulation. (For full requirements see section 60.6 of the National Flood Insurance Program regulations.)

Violation means the failure of a structure or other development to be fully compliant with this article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) of the NFIP regulations is presumed to be in violation until such time as that documentation is provided.

Water surface elevation means the height, in relation to the North American Vertical Datum (NGVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

(b) The following definitions refer to urban stormwater runoff and non-point source pollution. Point source pollution, such as industrial and wastewater discharges, are governed separately by specific discharge permits issued by the state DEQ and EPA.

Amenity area means a common area within the development which are provided for active and or passive recreational or social purposes and may be shared between all residents of the development.

Best management practices (BMPs) means the controls and activities used to prevent stormwater pollution during construction. BMPs can be structural, such as a silt fence, secondary containment for hazardous materials, or seeding disturbed land or non-structural, such as picking up trash, maintaining equipment, or training staff.

Bioswales means a vegetated, shallow, linear channel designed to capture, treat, and infiltrate stormwater runoff as it moves downstream. They are typically sized to treat and convey at a minimum the first one inch of stormwater runoff which is the first and often most polluted volume of water resulting from a storm event, also known as the "first flush."

Clean Water Act (CWA) means the primary federal law in the United States governing water pollution. Its objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and non-point pollution sources, improving wastewater treatment, and maintaining the integrity of wetlands. It is administered by the U.S. Environmental Protection Agency (EPA), in coordination with state governments. The CWA is codified in 40 CFR 100—140, 401—471, and 501—503.

Construction means any human activity that includes clearing, grading, excavation, filling, or other placement, movement, removal, or depositing of soil, rock, organic materials, or earth minerals, and construction of facilities such as roads, parking, playgrounds, and buildings.

Contaminated means containing any material designated by EPA or state DEQ as a pollutant which is introduced into stormwater conveyances by urban stormwater contact with impervious surfaces.

Conveyance means drainage infrastructure that moves water from one place to another, including ditches, bioswales, pipes, canals, and waterways.

Detention pond, sometimes called a "dry pond", means an area which temporarily stores water after a storm, but eventually empties out at a controlled rate to a downstream water body. It also differs from an infiltration basin which is designed to direct stormwater to groundwater through permeable soils or retention pond which is designed to permanently store stormwater.

Discharge means any stormwater, including but not limited to sheet flow and point source, introduced into the MS4, drainage infrastructure, conveyances, ditches, or waterways of the parish, or into waters of the United States.

Facility means any building, structure, property, installation, process or activity from which there is or may be a discharge of a pollutant.

First flush means the first one inch of rain.

(Supp. No. 4)

Green infrastructure is an approach to stormwater management that protects, restores, or mimics the natural water cycle. At its essence, green infrastructure reduces runoff, increases infiltration, and improves water quality. Green infrastructure is effective, economical, and enhances community safety and quality of life.

Hazardous substance means any of the following: any substance determined to be hazardous according to 49 CFR 171.8 or listed in Table 302.4 of 40 CFR 302 or section 311(b)(2)(A) of the Clean Water Act (33 USC 1317(a) and 1321(b)(A)).

Hazardous waste means any substance identified or listed as a hazardous waste by the EPA pursuant to 40 CFR 261.

Louisiana discharge permit elimination system (LPDES) permit or national discharge permit elimination system (NPDES) permit means the permit issued by the state DEQ or the EPA, under authority delegated pursuant to 33 USC 1342(b) that authorizes the discharge of pollutants to waters of the United States.

Low impact development refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality.

Municipal separate storm sewer system (MS4) means roadside drainage systems, catchbasins, curbs, gutters, ditches, manmade channels, or storm drains used for collecting and/or conveying stormwater that is not intentionally connected with wastewater treatment outflows (combined sewers).

Permeable paving materials means a variety of surfacing techniques for roads, parking lots, and pedestrian walkways, unified under the common goal to allow for infiltration of stormwater runoff. Permeable pavement material surfaces typically include pervious concrete, paving stones, aggregate and interlocking pavers. Porous asphalt shall not be allowed as a permeable paving material. Unlike traditional impervious paving materials, permeable paving systems allow stormwater to percolate and infiltrate through the material and into the aggregate layers and/or soil below. In addition to reducing surface runoff, permeable paving systems can trap suspended solids, thereby filtering pollutants from stormwater. The goal is to control stormwater at the source, reduce runoff, and improve water quality by filtering pollutants in the subsurface layers.

Person means any individual, partnership, firm, company, corporation, association, trust, estate, entity, or any legal representative, agent, or assignee.

Point source means the discharge of pollutants at a specific location from pipes, outfalls, channels, or other discernible or discrete conveyances whose source is identifiable. The term "point source" does not include irrigation flow returns from agricultural stormwater runoff.

Pollutant in urban stormwater runoff means suspended sediments, heavy metals, phosphorus, nitrogen, petrochemicals, bacteria, and other so designated material that is collected by stormwater runoff.

Pollution means the contamination of the physical, thermal, chemical, or biological quality of waters that causes impairment of the designated uses of a water body as stipulated in the current EPA integrated report or renders the water harmful, detrimental, injurious to humans, animal life, vegetation, or impairs the usefulness for the public enjoyment of the water for any lawful or reasonable purpose.

Retention pond, sometimes called a wet pond, means a manmade pond with vegetation around the perimeter, a vegetative littoral shelf, and includes a permanent pool of water in its design. It is used to manage stormwater runoff to prevent flooding and downstream erosion, and improve water quality in an adjacent river, stream, lake or bay.

Sanitary sewage means the domestic sewage and/or industrial waste that is discharged into the sanitary sewer system and passes through the sanitary sewer system to any public or privately owned sewage treatment plant.

(Supp. No. 4)

Sanitary sewer (or sewer) means the system of pipes, conduits, and other conveyances which carry industrial waste and sanitary sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, to any sewage treatment plant.

Sediment means soil, sand, clay, and minerals washed from land into roadways, drainage infrastructure, and waterways, usually during or after a rain. Sediment may cause a reduction in storage capacity, impede drainage, destroy fish nesting areas, clog animal habitats, and cloud waters to such an extent as to prevent sunlight from reaching aquatic biota.

Stormwater means stormwater runoff, surface runoff and drainage runoff. (Agricultural stormwater may be excluded, subject to the provisions of L.A.C. 33.IX.2313.)

Stormwater pollution prevention plan (SWPPP) is a site-specific written document and drawings required by the EPA and state DEQ for LPDES general permits for discharge of stormwater from construction activities (LAR100000 and LAR200000), LPDES multi-sector general permit, or any LPDES individual permit which describes and ensures the implementation of practices that are to be used to reduce the pollutants in stormwater discharges associated with construction or other industrial activity at the facility.

Undisturbed vegetative area means an area where the existing vegetation is left undisturbed during and after construction. Only selective removal of trees that present a hazard to property or people, or non-native invasive vegetative species, shall be removed. Additionally, an undisturbed vegetative area may be an area disturbed by construction that is intended to become an amenity, such as a buffer zone adjacent to a retention pond, that is left with a temporary protective ground cover that allows the natural succession of native plants to become established. Any form of maintenance, mowing, or weed control is prohibited.

Wastewater means any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

Waters of the United States (WOTUS) means any waters within the federal definition of "waters of the United States" at 40 CFR 122.2, but not including any waste treatment systems, treatment ponds, or lagoons designed to meet the requirements of the federal Clean Water Act.

Wetland indicator status.

Indicator Code	Indicator Status	Designation	Comment
OBL	Obligate wetland	Hydrophyte	Almost always occur in wetlands
FACW	Facultative wetland	Hydrophyte	Usually occur in wetlands, but may occur in non-wetlands
FAC	Facultative	Hydrophyte	Occur in wetlands and non-wetlands
FACU	Facultative upland	Nonhydrophyte	Usually occur in non-wetlands, but may occur in wetlands
UPL	Obligate upland	Nonhydrophyte	Almost never occur in wetlands

(Code 1993, § 10-5; Ord. No. 10-33, art. 2, 6-14-2010; Ord. No. 21-06, § 17-10.5, 1-25-2021; Ord. No. 21-24, § 17-10.5, 5-10-2021)

Sec. 36-242. Lands to which this article applies.

The article shall apply to all unincorporated areas within the jurisdiction of the parish.

(Code 1993, § 10-6; Ord. No. 10-33, art. 3, § A, 6-14-2010; Ord. No. 21-06, § 17-10.6, 1-25-2021)

Sec. 36-243. 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 Tangipahoa Parish, Louisiana and Incorporated Areas," dated July 22, 2010, with accompanying flood insurance rate maps (FIRM) dated July 22, 2010, and any revisions thereto are hereby adopted by reference and declared to be a part of this article.

(Code 1993, § 10-7; Ord. No. 10-33, art. 3, § B, 6-14-2010; Ord. No. 21-06, § 17-10.7, 1-25-2021)

Sec. 36-244. Establishment of development permit.

A floodplain development permit shall be required to ensure conformance with the provisions of this article.

(Code 1993, § 10-8; Ord. No. 10-33, art. 3, § C, 6-14-2010; Ord. No. 21-06, § 17-10.8, 1-25-2021)

Sec. 36-245. Compliance.

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

(Code 1993, § 10-9; Ord. No. 10-33, art. 3, § D, 6-14-2010; Ord. No. 21-06, § 17-10.9, 1-25-2021)

Sec. 36-246. Abrogation and greater restrictions.

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Code 1993, § 10-10; Ord. No. 10-33, art. 3, § E, 6-14-2010; Ord. No. 21-06, § 17-10.10, 1-25-2021)

Sec. 36-247. Interpretation.

In the interpretation and application of this article, all provisions shall be:

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

(Code 1993, § 10-11; Ord. No. 10-33, art. 3, § F, 6-14-2010; Ord. No. 21-06, § 17-10.11, 1-25-2021)

Sec. 36-248. Warning and disclaimer of liability.

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

(Code 1993, § 10-12; Ord. No. 10-33, art. 3, § G, 6-14-2010; Ord. No. 21-06, § 17-10.12, 1-25-2021)

Sec. 36-249. Penalties for noncompliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this article and other applicable regulations. Violation of the provisions of this article 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 article 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 30 days, or both, for each violation. Each day the violation continues shall be deemed a new violation. In addition, the violator shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the parish from taking such other lawful action as is necessary to prevent or remedy any violation.

(Code 1993, § 10-68; Ord. No. 10-33, art. 5, § H, 6-14-2010; Ord. No. 21-06, § 17-10.68, 1-25-2021)

Secs. 36-250—36-264. Reserved.

DIVISION 2. ADMINISTRATION

Sec. 36-265. Designation of the floodplain administrator.

The floodplain administrator is hereby appointed by the parish president to administer and implement the provisions of this article and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program regulations) pertaining to floodplain management.

(Code 1993, § 10-36; Ord. No. 10-33, art. 4, § A, 6-14-2010; Ord. No. 18-04, § 1, 2-14-2018; Ord. No. 21-06, § 17-10.36, 1-25-2021)

Sec. 36-266. Duties and responsibilities of the floodplain administrator.

- (a) Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:
 - (1) Maintain and hold open for public inspection all records pertaining to the provisions of this article.
 - (2) Review permit application to determine whether to ensure that the proposed building site project, including the placement of manufactured homes, will be reasonably safe from flooding.
 - (3) Review, approve or deny all applications for development permits required by adoption of the ordinance from which this article is derived.
 - (4) 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.
 - (5) Where 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), make the necessary interpretation.
 - (6) Notify, in riverine situations, adjacent communities and the state coordinating agency, which is the 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.
 - (7) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
 - (8) When base flood elevation data has not been provided in accordance with section 36-243, 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 division 3 of this article.
 - (9) When a regulatory floodway has not been designated, require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the parish'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 parish.
- (b) Under the provisions of section 65.12 of the National Flood Insurance Program regulations (44 CFR 65.12), 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 one foot, provided that the community first completes all of the provisions required by said section 65.12.

(Code 1993, § 10-37; Ord. No. 10-33, art. 4, § B, 6-14-2010; Ord. No. 21-06, § 17-10.37, 1-25-2021)

Sec. 36-267. Permit procedures.

- (a) Application for a floodplain development permit shall be presented to the floodplain administrator on forms furnished by him 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:
 - (1) Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures;
 - (2) Elevation (in relation to mean sea level) to which any nonresidential structure shall be floodproofed;

- (3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of section 36-285(a)(2);
- (4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;
- (5) Maintain a record of all such information in accordance with section 36-266(a)(1).
- (b) Approval or denial of a floodplain development permit by the floodplain administrator shall be based on all of the provisions of this article and the following relevant factors:
 - (1) The danger to life and property due to flooding or erosion damage;
 - (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (3) The danger that materials may be swept onto other lands to the injury of others;
 - (4) The compatibility of the proposed use with existing and anticipated development;
 - (5) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (6) 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;
 - (7) 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;
 - (8) The necessity to the facility of a waterfront location, where applicable;
 - (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

(Code 1993, § 10-38; Ord. No. 10-33, art. 4, § C, 6-14-2010; Ord. No. 21-06, § 17-10.38, 1-25-2021)

Sec. 36-268. Variance procedures.

- (a) The appeal board, as established by the parish, shall hear and render judgment on requests for variances from the requirements of this article.
- (b) The appeal board 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 article.
- (c) Any person aggrieved by the decision of the appeal board may appeal such decision in the courts of competent jurisdiction.
- (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 article.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot of onehalf-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 36-267(b) have been fully considered.

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- (g) Upon consideration of the factors noted above and the intent of this article, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this article.
- (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:
 - (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (2) Variances shall only be issued upon:
 - a. Showing a good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. 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.
 - (3) 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 the parish for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that:
 - (1) The criteria outlined in subsections (a) through (i) of this section are met; and
 - (2) 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.

(Code 1993, § 10-39; Ord. No. 10-33, art. 4, § D, 6-14-2010; Ord. No. 21-06, § 17-10.39, 1-25-2021)

Secs. 36-269—36-282. Reserved.

DIVISION 3. PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 36-283. Stormwater management and water quality.

- (a) General standards for stormwater.
 - (1) Development drainage requirements.
 - a. The developer will plan all drainage for his project in accordance with the requirements of the appropriate parish drainage authority and must meet the flood prevention and protection requirements of this article.

- b. The need for a drainage impact study will be determined by the drainage board and/or the parish engineer in consultation with the planning commission.
- c. All areas outside of a parish drainage district authority shall follow the stormwater requirements and the flood prevention and protection requirements of this article.
- d. No individual, partnership or corporation will deepen, widen, fill, reroute, or in any manner change or alter the course or location of existing ditch, or drainage canal without first obtaining written permission from the appropriate parish drainage authority.
- e. Whenever any stream or improved surface drainage course is located in an area that is being subdivided, the subdivider will dedicate an adequate servitude along the stream as determined by the appropriate parish drainage authority.
- f. Adequate provision will be made for the disposal of stormwater subject to the approval of the appropriate parish drainage authority. Necessary storm drainage will be located within the street right-of-way except where it is located in a servitude to facilitate outfall needs or for subdivision interconnection.
- g. All subdivision restrictive covenants will include a restriction against any construction, fill matter, or fences in any drainageway, designated drainage servitudes or the parish right-of-way, without approval from the appropriate parish authority. No fences, sheds, movable or immovable appurtenances shall be placed in designated drainage servitudes. Relocation of said obstructions shall be the sole responsibility of the property owner and the property owner shall bear all cost associated with the relocation.
- h. There will be no construction of any drainage facilities prior to the submittal and approval of plans by the appropriate parish drainage authority.
- (2) Development best management practices requirements.
 - a. All major subdivisions developments, special use residential commercial developments, and general commercial developments shall include a stormwater pollution prevention plan (SWPPP).
 - b. BMPs required for sediment and erosion control, stormwater retention, and mitigation during construction.
 - 1. The contractor's use and description of the approved BMPs shall be included with their SWPPP.
 - 2. The contractor shall include all BMPs and provide verification of the SWPPP to the parish prior to construction.
 - 3. Installation of these BMPs may be inspected by the parish for proper maintenance during the project construction phase, unless the state inspects such activity as part of an approved SWPPP.
- (3) BMPs. Construction activity requirements for major subdivisions and special use residential commercial developments shall comply with Louisiana Department of Environmental Quality (LDEQ) requirements for developing and submitting a SWPPP based upon the development size, prior to construction of infrastructure or structures and shall meet the minimum following standards. The contractor is responsible for the SWPPP, maintaining SWPPP documentation, and implementation.
 - a. Design of the SWPPP shall meet the latest requirements of the LDEQ. A SWPPP shall be developed and implemented for all developments disturbing one acre or greater. On developments over five acres a SWPPP shall be developed and a permit secured from LDEQ before implementing the SWPPP.

- b. The SWPPP document and its LDEQ approval shall be submitted to the parish prior to receiving approval for a land clearing application.
 - 1. Design and construction of the SWPPP BMPs shall meet the minimum requirements of the latest version of LaDOTD standard plans for temporary erosion controls.
 - 2. Once construction begins the SWPPP documents must be maintained, updated, and available on-site to the parish engineer, floodplain administrator, consolidated drainage district administrator, and LDEQ.
 - 3. The SWPPP will contain BMPs components for control measures including methods for sediment control, stabilization practices for disturbed areas, and structural practices. Controls for off-site vehicle tracking of sediment and generation of dust shall be included. The project SWPPP shall demonstrate compliance with local waste and sewer system requirements, description of control methods for construction and waste materials stored on site, and description of control methods for pollutant sources, such as fuels, paints, chemicals, and concrete and asphalt waste.
 - 4. Maintenance of control methods shall be provided in a timely manner to ensure proper operation. Maintenance needs identified by inspection shall be accomplished before the next anticipated storm event or as soon as practicable.
 - Inspections of SWPPP BMPs shall be conducted by the construction contractor or its designee every 14 days, before every anticipated storm event, and within 24 hours of every 0.5-inch rain event. Inspections shall be documented, identify actions required, and included in the SWPPP.
- c. Parish government staff are authorized to inspect any infrastructure development site or building construction project site for violations of its SWPPP. All noncompliant conditions or any work being done contrary to the provisions of this article or otherwise required by law or development agreement or which is determined to be in a dangerous or unsafe manner shall be reported to the contractor's on-site representative and a remediation plan will be established. The contractor shall have 48 hours to comply with the remediation plan to correct all violations.
 - 1. If upon a subsequent inspection the violations have not been corrected as per the remediation plan, then a written notice of violation shall be issued, along with a written stop work order.
 - (i) The parish engineer or designee shall issue in writing the above notices for work to cease on any infrastructure development site within the affected area.
 - (ii) The building official or designee shall issue in writing the above notices for work to cease on any building construction sites for structures within the affected area.
 - (iii) Any work shall be immediately stopped by the owner or owner's agent or to the person doing the work.
 - 2. Violations are subject to the fines and penalties stated in section 1-13. Fines shall accrue until a SWPPP notice of compliance is issued by the parish government.
 - 3. Any fines or penalties shall be rectified prior to the issuance of a resume work order.
- (b) *General standards for water quality.* Development water quality requirements shall be in accordance with 303(d) of the Clean Water Act, total maximum daily loads (TMDL) as developed by the LDEQ, and in compliance with La Title 51 Chapter 13, Sanitary Code. All major commercial development projects in the parish, as identified in this chapter, all commercial projects, all change of use for commercial buildings, and

all major subdivisions and special use residential commercial developments shall submit a "Request for Preliminary Determination of LPDES Permit Issuance" (RPD) to the LDEQ. Applicants shall provide a copy of LDEQ's response letter to the Tangipahoa Parish Environmental Health - Louisiana Department of Health -Office of Public Health (LDH-OPH). This document must be provided to LDH-OPH before any approvals can be granted by the parish planning or permit departments.

(Ord. No. 21-24, § 17-10.60, 5-10-2021)

Sec. 36-284. General standards.

- (a) Procedure and minimum requirements for the non-districted areas of the parish.
 - (1) Areas of poor drainage. Whenever a plat is submitted for an area that is subject to flooding or the development results in a drainage situation that adversely impacts the property of others, the developer shall demonstrate to the parish engineer how any potential adverse impact will be mitigated. In the case of an official designated floodway or special flood hazard area, a plat proposing prohibited types of development as specified in section 36-285, shall be rejected.
 - (2) Dedication of drainage easements. When a subdivision is traversed by a watercourse, channel or stream, there shall be provided a drainage easement or right-of-way conforming substantially to the lines of said watercourse, channel or stream, and of a minimum 50-foot width sufficient (as determined by the parish engineer) to maintain said watercourse, channel, or stream.
 - (3) Design requirements. Design and construction of all drainage shall be in accordance with specifications and standards of the state department of transportation and development (DOTD) unless otherwise directed.
 - (4) The following design requirement shall be included in a drainage impact study:
 - a. A watershed map with development site clearly defined and acreage and slope of basins within the watershed area indicated.
 - b. All drainage shall be predicated on a 100-year storm frequency of 24-hour duration.
 - c. Inventory of downstream structures of receiving outfall.
 - d. The minimum grade along the bottom of a drainage course shall ensure a design velocity of at least three feet per second (fps).
 - e. Design features that reduce the site post-development surface water runoff rate to an amount ten percent less than the pre-development surface water runoff rate based on a 25-year design storm and the 100-year design storm for a 24-hour rain event.
 - f. Documentation that the development will not obstruct any off-site flows or that it will provide a drainage system to convey that flow through or around the development without increasing the upgradient water surface elevation.
 - g. Documentation that fill placed in the development will not reduce the flood carrying capacity of a nearby stream which could cause an increase in water surface elevation. A "nearby stream" is one that is located within 500 feet of the development boundary from a "stream" designated on the USGS quadrangular sheet or designated on the Consolidated Gravity Drainage District No. 1 "Lateral Map."
 - h. Approved jurisdictional determination from the U.S. Army Corps of Engineers.
 - i. Ditches shall not be utilized for retention calculations.

- j. Rear lot line drainage ditch and servitudes should be avoided where practicable. In the event a rear lot line drainage ditch is required, it shall conform to the typical section as shown in the Appendix B to the ordinance from which this chapter is derived. In the cases where there is a large drainage ditch, the servitude may need to be widened to accommodate future maintenance. This servitude shall not be included in any lot sold for home ownership. The parish engineer reserves the right to widen the required servitude based on maintenance needs.
- k. Side slope of all surface drainage courses shall have at least a 3H:IV design.
- I. All retention and detention ponds shall meet the standards and requirements of subsections (a)(5)a and b of this section.
- (5) Low impact developments (LIDs). Low impact developments are recognized methods used to improve water quality. The following are specific LID requirements for projects in the parish. Other proven LIDs may be utilized to improve water quality with the review and acceptance by the parish engineer.
 - a. Retention ponds utilized for stormwater management in developments shall be constructed to the following standards and submitted to the parish engineer for design approval:
 - 1. All retention ponds shall have a minimum 30-foot-wide buffer measured from the top of the pond. The buffer must remain as an undisturbed vegetative area other than areas designated as maintenance accessways.
 - 2. The undisturbed vegetative area, where feasible, may be used as a bioremediation area to improve stormwater quality.
 - 3. All retention ponds shall provide a means to circulate the retention pond water, with natural or mechanical means, to avoid stagnation that would breed algae and mosquitoes.
 - 4. A ten-foot-wide maintenance accessway shall be provided through the buffer area to the pond.
 - 5. A ten-foot-wide cleared area around the top edge of the pond will provide maintenance access to the overflow and inlet structures and for general pond maintenance.
 - 6. Maintenance accessways may also contain the minimum four-foot-wide pedestrian trail which would designate the pond and buffer as an amenity area.
 - 7. The maintenance accessways shall not be planted with any landscape materials that would interfere with maintenance activities of the pond.
 - 8. For a retention pond and its buffer area to be considered part of the stormwater management area, an amenity area trail shall provide access to a minimum of 50 percent of the buffer area.
 - 9. An amenity area shall have a four-foot-wide trail traversing the area and the trail shall be connected to an adjacent trail or to an accessway that is accessible to all of the development's residents.
 - 10. An amenity trail may be located within the undisturbed vegetative area buffer when the area is not used for bioremediation of stormwater. When a trail does traverse through an undisturbed vegetative area, the maximum clearing for the trail shall be eight feet wide.
 - 11. Littoral shelves shall be continuous around the perimeter of the pond when the size of the pond allows, a minimum of 48 inches wide, constructed 12 inches to 36 inches below the designed permanent water level, and planted with emergent, submerged, floating leaved, or free-floating native vegetation listed in section 36-10. Where possible the littoral shelf shall vary in depth to promote a variety of vegetation types. The littoral shelf need not be

continuous around a retention pond due to physical constraints of the site if approved by the parish engineer.

- 12. The littoral shelf shall be located adjacent to control structures or pipe inlets in order to maximize water quality benefits. The littoral shelf shall be located no closer than 20 feet from any discharge structure or pipe intake as measured from the water side of the discharge structure toward the center of the pond so as to not impede flow.
- 13. All littoral shelves and any planting in the buffer area shall be designed with native plants. All shrubs planted in the littoral shelf shall be a minimum of one gallon and spaced 36 inches on center maximum. Planting plans shall be stamped by a state-licensed landscape architect or state-licensed landscape horticulturist.
- 14. All retention ponds side slopes shall have maximum steepness of 4H:1V from the top of the pond bank to the littoral shelf and shall have a slope no steeper than 3H:1V from the littoral shelf to the bottom of the pond.
- 15. A maintenance program for retention ponds and littoral shelves shall be submitted to the parish engineer for review and acceptance of the program.
- 16. All detention ponds shall be maintained by the developer until after the formation of a homeowners' association (HOA) or the acceptance by the HOA or other private entity and shall be included in each development's codes, covenants, and deed restrictions as requiring maintenance in perpetuity.
- b. Detention ponds utilized for stormwater management for all developments within the parish shall be constructed to the following standards:
 - 1. Detention ponds shall meet the same requirements as retention ponds but shall not be required to have a littoral shelf.
 - 2. Detention ponds shall fully drain within 48 hours of the end of each rain event.
 - 3. All detention ponds shall have a minimum 30-foot buffer measured from the top of the pond. The buffer must remain as an undisturbed vegetative area other than areas designated as maintenance accessways.
 - 4. The undisturbed vegetative area, where feasible, may be used as a bioremediation strip to improve stormwater quality.
 - 5. A ten-foot-wide maintenance accessway shall be provided through the buffer area to the pond.
 - 6. A ten-foot-wide cleared area around the top edge of the pond will be used as a maintenance accessway to the overflow and inlet structures and for general pond maintenance.
 - 7. Maintenance accessways may also contain the four-foot-wide trail and count as an amenity area.
 - 8. The maintenance accessways shall not be planted with any landscape materials that would interfere with maintenance activities of the pond.
 - 9. For a detention pond and its buffer area to be considered as part of the stormwater management area an amenity area trail shall provide access to a minimum of 50 percent of the buffer area.

- 10. An amenity area shall have a four-foot-wide trail traversing the area and the trail shall be connected to an adjacent trail or to an accessway that is accessible to all of the development's residents.
- 11. An amenity trail may be located within the undisturbed vegetative area buffer when the area is not used for bioremediation of stormwater. When a trail does traverse through an undisturbed vegetative area, the maximum clearing for the trail shall be eight feet wide.
- 12. A detention pond's side slopes shall have maximum steepness of 3H:1V.
- 13. A maintenance program for detention ponds shall be included in the water quality impact study.
- 14. All detention ponds shall be maintained by the developer until after the formation of a homeowners' association (HOA) or the acceptance by the HOA or other private entity and shall be included in each development's codes, covenants, and deed restrictions as requiring maintenance in perpetuity.
- c. Bioretention areas are planted landscape areas designed to receive, detain, infiltrate, and filter stormwater runoff. Bioretention areas include bioswales and undisturbed vegetative areas when properly incorporated into a water quality impact study (WQIS). Bioretention areas shall meet the following requirements:
 - 1. No bioswale shall be installed within a road right-of-way or will be accepted into the parish road maintenance program.
 - 2. Bioswales shall be part of the stormwater management area and shall not be included as part of any individual lot. Ownership and maintenance responsibility of all bioswales shall be either the responsibility of the homeowners' association or a private entity.
 - 3. Areas identified as undisturbed vegetative areas (UVA) and undisturbed vegetative buffer areas may be utilized as bioretention areas as long as stormwater is dispersed into the area as sheet flow that does not cause any erosion in the buffer area. No stormwater flowing out of the undisturbed vegetative area shall cause an adverse impact to any adjoining property or lots and shall be collected and conveyed in an approved manner to a retention pond, detention pond, swale or stream.
 - 4. Only native plants as listed in section 36-10 shall be used in an area designated as a bioretention area.
 - 5. Bioretention areas and bioswales shall be designed by a state-licensed landscape architect to filter and retain pollutants from the first one-inch flush of stormwater. Plans shall be submitted as part of the water quality impact study. All LIDs shall be maintained by the developer until the formation of a homeowners' association or the acceptance by a private entity and shall be included in each development's codes, covenants, and deed restrictions requiring maintenance in perpetuity.
- (6) Water quality impact study (WQIS). Where a WQIS is required in section 36-285 it shall meet the requirements below and be submitted to the parish engineer for review and acceptance:
 - a. The WQIS shall identify low impact developments (LIDs) methods to reduce flood risk and stormwater runoff pollution through preservation of existing vegetation and hydrology, stormwater runoff infiltration and filtration, sediment and erosion control, and stormwater retention and detention.

- b. As part of the WQIS plans and details the developer shall identify low impact development methods that will reduce water runoff pollutants to assist the parish in meeting its water quality guidelines.
- c. The development of the WQIS shall follow the process and procedures identified in Stormwater Best Management Practices, East Baton Rouge, Parish-Master Development Program.
- d. The submittal requirements for the WQIS are found in Appendix D to the ordinance from which this chapter is derived.
- e. All stormwater LID methods to be constructed on site must meet engineering and landscape architecture industries standard practices for design, implementation plans, and maintenance plans.
- f. A private stormwater quality design certification signed and sealed by a state-licensed engineer or landscape architect shall be included with all WQIS. See Appendix D to the ordinance from which this chapter is derived for the certification form.
- g. A private stormwater quality maintenance covenant shall be notarized and signed by the developer/owner and recorded with the parish clerk of court and then submitted to the parish engineer. See Appendix D to the ordinance from which this chapter is derived for the required private stormwater quality covenant.
- h. A post-construction inspection report prepared by a state-licensed engineer or landscape architect shall be provided by the party responsible for the development or maintenance of the low impact development methods at the request or on a schedule approved by the parish engineer. The report shall be consistent with the drainage maintenance plan and describe the conditions and recommended maintenance requirements of all components of the water quality impact study, including but not limited to ponds, forebays, bioswales and any subsurface manufactured water quality features. When deficiencies and problems are identified in the report, corrective action shall be completed within 90 days of the submission of the inspection report with evidence that the work has been completed and provided to parish engineer.
- i. Parish government staff are authorized to inspect a development for violations of its private stormwater quality maintenance covenant. All noncompliant conditions shall be reported to the homeowners' association (HOA) or the responsible private entity representative and a remediation plan will be established. The HOA or private entity shall have 30 business days to comply with the remediation plan to correct all violations. Once improvements are completed, the HOA or private entity must notify the parish's planning department for a new inspection to be conducted. If upon the subsequent inspection the violations have not been corrected as per the remediation plan, then a notice of violation shall be issued. Violations are subject to the fines and penalties stated in section 1-13. Fines shall accrue until a notice of compliance is issued by the parish government. All fines shall be paid prior to the issuance of any new permits for lot development or construction within the development.
- (7) Procedural process for review.
 - a. *Plan review and board action.* Plans will be reviewed by the parish engineer and the developer or the developer's engineer shall be notified if there are any corrections needed on the final plans. The developer or the developer's engineer shall make corrections, if needed, and submit ten sets of the plans to be reviewed by the planning commission's board at time of final plan approval request. If the plans are approved, a letter granting approval of final plans shall be issued by the planning commission authorizing the developer to begin construction of infrastructure. No work toward the construction of the drainage infrastructure may begin until said letter has been issued. If the plans are rejected the developer has the option to revise the plans and re-submit.

- b. *Completion of construction/maintenance period.* Upon completion of construction, the developer will request an inspection of the drainage improvements by the parish engineer. This request will be by letter and be accompanied by a set of as-built drawings. The as-builts shall profile all drainage facilities at 100-foot intervals. The developer shall rework any drainage facilities that do not meet standards as approved by planning commission.
- c. *Photo evidence of sign placement.* Included with the submittal of the preliminary drainage plan and hydraulic study, the engineer/developer shall include a photo of the notification sign indicating the date, location and time of the planning commission board meeting at which the development will be discussed. Omission of this required submittal shall result in the delayed placement of the proposed development on the planning commission board's agenda.
- (b) In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:
 - (1) 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;
 - (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
 - (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
 - (4) 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 to be elevated to at least 12 inches above the base flood elevation;
 - (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
 - (6) 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; and
 - (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(Code 1993, § 10-61; Ord. No. 10-33, art. 5, § A, 6-14-2010; Ord. No. 21-06, § 17-10.61, 1-25-2021; Ord. No. 21-24, § 17-10.61, 5-10-2021)

Sec. 36-285. Specific standards.

- (a) In all areas of special flood hazard where base flood elevation data has been provided as set forth in section 36-243, 36-266(a)(8), or 36-286(c), the following provisions are required:
 - (1) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to at least 12 inches above the base flood elevation.
 - a. 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 36-266(a), is satisfied.
 - b. All standalone enclosed appurtenant structures shall have hydrostatic flood equalizing per this section and shall not exceed 549 square feet.

- c. All standalone enclosed appurtenant structures 550 square feet or greater shall be elevated to the base flood elevation plus the required freeboard.
- (2) 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 at least 12 inches above the base flood elevation or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water 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 section. 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.
- (3) 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:
 - a. A minimum of two openings on separate walls 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.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (4) Manufactured homes.
 - a. Require that all manufactured homes to be placed within Zone A on a parish's FHBM or FIRM shall be installed using methods and practices which 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.
 - b. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the parish's FIRM on sites:
 - 1. Outside of a manufactured home park or subdivision;
 - 2. In a new manufactured home park or subdivision;
 - 3. In an expansion to an existing manufactured home park or subdivision; or
 - 4. 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 longitudinal structural I beam of the manufactured home is elevated to at least 12 inches above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

c. 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 parish's FIRM that

are not subject to the provisions of this subsection (4) be elevated so that the bottom of the longitudinal structural I beam of the manufactured home is at least 12 inches above the base flood elevation.

- (5) *Recreational vehicles.* Require that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the parish's FIRM either:
 - a. Be on the site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use; or
 - c. Meet the permit requirements of section 36-267(a), and the elevation and anchoring requirements for manufactured homes in subsection (4) of this section.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

- (6) Prohibited structures and functions. No facility or structure shall be used by any entities required by the LDEQ and/or EPA to report and/or track flammable, explosives, toxic, or hazardous materials unless stored in a vessel or tank, and in a manner approved by the regulatory agency.
- (b) Developments that require a water quality impact study (WQIS).
 - (1) A conservation development may reduce its stormwater management area from 45 percent of the gross development area to 40 percent provided a water quality impact study (WQIS) per section 36-284(a)(6) is provided, and the development implements low impact development (LIDs) methods to detain and treat the first one-inch flush of stormwater. The 25-foot development perimeter buffer area and the 50-foot undisturbed riparian buffer along each side of drainage laterals and channels are stormwater management areas that shall not be reduced.
 - a. A minimum of 75 percent of the stormwater runoff must be detained in retention or detention ponds meeting the requirements of section 36-284(a)(5).
 - b. Provide bioretention for all stormwater first flush (one inch) runoff utilizing vegetative bioretention areas, retention ponds, bioswales, constructed wetlands, or existing undisturbed vegetative areas or a combination. Bioretention areas and bioswales shall be constructed of native vegetation as per section 36-10. Individual lot owners are encouraged to construct bioswales and rain gardens on their property if they do not interfere with the development's drainage pattern.
 - c. Provide a forebay to facilitate sediment removal prior to stormwater entering any retention ponds, detention pond or vegetative bioretention areas.
 - 1. Forebays shall be designed by a state-licensed engineer or a state-licensed landscape architect.
 - 2. No forebay shall be installed within a road right-of-way that is eligible for inclusion in parish road maintenance system.
 - d. All development pavement other than roads eligible for inclusion in the parish road maintenance program shall be constructed with permeable paving materials.
 - 1. Off street parking located within the road right-of-way may be constructed of permeable paving materials if approved by the parish engineer.
 - 2. Drive aisles for parking lots of common amenities and pads for trash bins may be constructed of impervious paving.

- 3. Walkways and amenity trails may be constructed of impervious materials with the parish engineer's approval.
- 4. Individual lot owners are encouraged to use permeable pavement for their driveways, parking, walkways, patios, and other paved areas as allowed by deed restrictions.
- 5. Any path, walk or trail used as an ADA accessible path of travel must be constructed of materials approved by the parish.
- (2) Any major subdivision or special use residential commercial development other than those specified within this section that provides a WQIS and implements LID methods to improve stormwater quality may reduce its stormwater management area by an area equal in area size to the LID areas, but not greater than five percent of the total development area and use that area for development. The 25-foot development perimeter buffer area and the 50-foot undisturbed riparian buffer along each side of drainage laterals and channels are stormwater management areas that shall not be reduced.
 - a. A minimum of 75 percent of the stormwater runoff must be detained in retention or detention ponds meeting the requirements of section 36-284(a)(5).
 - b. Provide bioretention for all stormwater first flush (one inch) runoff utilizing vegetative bioretention areas, bioswales, constructed wetlands, or existing undisturbed vegetative areas or a combination. Bioretention areas and bioswales shall be constructed of native vegetation as per section 36-10. Individual lot owners are encouraged to construct bioswales and rain gardens on their property if they do not interfere with the development's drainage pattern.
 - c. Provide a forebay to facilitate sediment removal prior to stormwater entering all retention ponds, detention pond or vegetative bioretention areas.
 - 1. Forebays shall be designed by a state-licensed engineer or state-licensed landscape architect.
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 - 1. Off street parking located within the road right-of-way may be constructed of permeable paving materials if approved by the parish engineer.
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 - 4. Individual lot owners are encouraged to use permeable pavement for their driveways, parking, walkways, patios, and other paved areas as allowed by deed restrictions.
 - 5. Any path, walk or trail used as an ADA accessible path of travel must be constructed of materials approved by the parish.

(Code 1993, § 10-62; Ord. No. 10-33, art. 5, § B, 6-14-2010; Ord. No. 18-04, § 2, 2-14-2018; Ord. No. 21-06, § 17-10.62, 1-25-2021; Ord. No. 21-24, § 17-10.62, 5-10-2021)

Sec. 36-286. Standards for subdivision proposals.

- (a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 36-238, 36-239, and 36-240.
- (b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet floodplain development permit requirements of sections 36-244, 36-267, and the provisions of this article.
- (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 is greater than 50 lots or five acres, whichever is lesser, if not otherwise provided pursuant to section 36-243 or 36-266(a)(8).
- (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 subdivisions shall have equipment, instruments, and control devises other than conveyance lines of public and private utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

(Code 1993, § 10-63; Ord. No. 10-33, art. 5, § C, 6-14-2010; Ord. No. 21-06, § 17-10.63, 1-25-2021)

Sec. 36-287. Standards for areas of shallow flooding (AO/AH zones).

Located within the areas of special flood hazard established in section 36-243, are areas designated as shallow flooding. These areas have special flood hazards associated with flood depths of one to three 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:

- (1) All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated to at least 12 inches above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the parish's FIRM (at least three feet if no depth number is specified).
- (2) All new construction and substantial improvements of nonresidential structures shall:
 - a. Have the lowest floor (including basement) elevated to at least 12 inches above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the parish's FIRM (at least two feet if no depth number is specified); or
 - b. Together with attendant utility and sanitary facilities, be designed so that below the base specified flood depth in an AO zone, or below the base flood elevation in an AH zone, level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
- (3) A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this section, as proposed in section 36-267, are satisfied.
- (4) Require within zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(Code 1993, § 10-64; Ord. No. 10-33, Art. 5, § D, 6-14-2010; Ord. No. 18-04, § 2, 2-14-2018; Ord. No. 21-06, § 17-10.64, 1-25-2021; Ord. No. 21-24, § 17-10.64, 5-10-2021)

Sec. 36-288. Floodways.

Located within areas of special flood hazard established in section 36-243 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

- (1) 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 parish during the occurrence of the base flood discharge.
- (2) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this division 3.
- (3) Under the provisions of section 65.12 of the National Flood Insurance Program regulations (44 CFR 65.12), 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 said section 65.12.

(Code 1993, § 10-65; Ord. No. 10-33, art. 5, § E, 6-14-2010; Ord. No. 21-06, § 17-10.65, 1-25-2021)

Sec. 36-289. Coastal high hazard areas.

Located within the areas of special flood hazard established in section 36-243, 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 article, the following provisions must also apply:

- (1) 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 and substantially improved structures, and whether or not such structures contain a basement. The floodplain administrator shall maintain a record of all such information.
- (2) All new construction shall be located landward of the reach of mean high tide.
- (3) All new construction and substantial improvements shall be elevated on pilings and columns so that:
 - a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated at least 12 inches above the base flood elevation;
 - b. 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 this subsection (3).
- (4) 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 latticework, 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.

- (5) For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - a. The breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - b. 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.
- (6) Prohibit the use of fill for structural support of buildings.
- (7) Prohibit manmade alteration of sand dunes and mangrove stands that increase potential flood damage.
- (8) Manufactured homes. Require that manufactured homes placed or substantially improved within Zones V1-30, V, and VE on the parish's FIRM on sites:
 - a. Outside of a manufactured home park or subdivision;
 - b. In a new manufactured home park or subdivision;
 - c. In an expansion to an existing manufactured home park or subdivision; or
 - d. In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood;

meet the standards of subsections (1) through (6) of this section and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision within Zones V1-30, V, and VE on the parish's FIRM meet the requirements of section 36-285(a)(4).

- (9) Recreational vehicles. Require that recreational vehicles placed on sites within Zones V1-30, V, and VE on the parish's FIRM either:
 - a. Be on the site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use; or
 - c. Meet the requirements in section 36-285(a)(5) and subsections (1) through (6) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

(Code 1993, § 10-66; Ord. No. 10-33, art. 5, § F, 6-14-2010; Ord. No. 18-04, § 3, 2-14-2018; Ord. No. 21-06, § 17-10.66, 1-25-2021)