

DEVELOPMENT REGULATIONS OF BRAZORIA COUNTY, TEXAS
FOR FLOODPLAIN MANAGEMENT



AS

ADOPTED SEPTEMBER 24, 2007

REVISED APRIL 23, 2024

FLOODPLAIN/BUILDING PERMIT OFFICE

451 NORTH VELASCO STREET
SUITE 210
ANGLETON, TEXAS 77515

THE COUNTY OF BRAZORIA

DEVELOPMENT REGULATIONS AS REQUIRED

BY

THE NATIONAL FLOOD INSURANCE ACT

TITLE 42

THE COMMISSIONERS' COURT

COUNTY JUDGE

L.M. "MATT" SEBESTA, JR.

COUNTY COMMISSIONERS

DONALD "DUDE" PAYNE	PRECINCT NO. 1
RYAN CADE	PRECINCT NO. 2
STACY ADAMS	PRECINCT NO. 3
DAVID LINDER	PRECINCT NO. 4

FLOODPLAIN ADMINISTRATION

REVISED APRIL 23, 2024

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FLOOD DAMAGE PREVENTION REGULATIONS

ARTICLE 1

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Texas has in Acts of the 61st Legislature, 1969, Page 2107, Chapter 2720 (Art 1581 (e) –V.A.T.C.S.) and Page 2313, Chapter 782 (Art 8280-13 V.A.T.C.S.) delegated the responsibility to the local governmental units to adopt regulations designed to minimize flood losses.

The Legislature of the State of Texas has in Section 16.311 *et. seq.* of the Texas Water Code and Section 240.901 of the Local Government Code authorized local governmental units to adopt regulations designed to regulate land use and minimize flood losses.

Therefore, the Commissioners Court of Brazoria County, Texas, does ordain as follows:

SECTION B. FINDINGS OF FACT

1. The flood hazard areas of Brazoria County 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.
2. These flood losses are created by the cumulative effect of obstructions in floodplains which cause 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, flood-proofed or otherwise protected from flood damage.
3. It is hereby found by the Commissioners Court of Brazoria County that severe flooding has occurred in the past within its jurisdiction and is likely to occur in the future, and that damage to property occurs for many reasons including flooding from the tidal waters of the Gulf of Mexico; and that the entire area within its jurisdiction is prone to rising water.

SECTION C. STATEMENT OF PURPOSE

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

1. Protect human life and health;
2. Minimize expenditures 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, and streets and bridges located in the floodplains;

6. Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such manner as to minimize future flood blight areas; and
7. Ensure that potential buyers are notified that property is in a flood area.

SECTION D. METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, these Regulations use the following methods:

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increase 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 accommodations of flood waters;
4. Control filling, grading, dredging, and other development which may increase flood damage; and
5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION E. SEVERABILITY

It is the intention of these Regulations that the sections, paragraphs, sentences, clauses and phrases of these Regulations are severable; and if any section, paragraph, sentence, clause or phrase of these Regulations shall be declared void, ineffective or unconstitutional by a valid judgment or final decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining sections, paragraphs, sentences, clauses or phrases hereof, since the same would have been enacted by this Court without the incorporation herein of any such unconstitutional section, paragraph, sentence, clause or phrase.

ARTICLE 2 DEFINITIONS

Unless specifically defined below, words or phrases used in these Regulations shall be interpreted to give them the meaning they have in common usage and to give these Regulations the most reasonable application. Defined terms listed below may not all be used in these Regulations, rather they are provided as information relating to FEMA requirements and guidelines.

ACCESSORY STRUCTURES – When accessory structures of one-hundred (100) square feet or less are to be placed in the floodplain, the following criteria shall be met:

1. Accessory structures shall not be used for human habitation (including work, sleeping, living, cooking or restroom areas);
2. Accessory structures shall be designed to have low flood damage potential and all parts of the structure below the base flood elevation (if not insured) and one foot above (if insured) must be made of FEMA-approved flood resistant materials.

ALLUVIAL FAN FLOODING – 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, deposition, and unpredictable flow paths.

APEX – 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.

APPEAL – A request for a review of the Floodplain Administrator’s interpretation of any provision of these Regulations or a request for a variance.

APPURTENANT STRUCTURE – 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 – The land area that would be inundated by the one percent (1%) annual chance (100-year) flood based on future conditions hydrology.

AREAS OF SHALLOW FLOODING – A designated AO, AH, or VO zone on a community’s Flood Insurance Rate Map (FIRM) with a one percent (1%) chance 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 – The land in the Floodplain within a community subject to a one percent (1%) 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 ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

BASE FLOOD – The flood having a one percent (1%) chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION (BFE) – 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 or AR that indicates the water surface elevation resulting from the flood that has a one percent (1%) chance of equaling or exceeding that level in any given year – also called the Base Flood.

BASEMENT – Any area of the building having its floor subgrade below ground level.

BREAKAWAY WALLS – 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 PERMIT – The same as a development permit or permit.

COASTAL HIGH HAZARD AREA – The area subject to high velocity waters, including but not limited to hurricane wave wash or tsunamis. The area is designated on a FIRM as Zone V1-30, VE or V.

CRITICAL FEATURE – An integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

DEVELOPMENT – Any man-made change in improved and/or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

DEVELOPMENT PERMIT – A permit for the construction of a development. Also called a building permit or permit in these Regulations.

DRAINAGE – The runoff which flows over land as a result of precipitation. This shall include sheet flow, flow in streets and flows which may concentrate in local drainage systems with or without defined channels.

ELEVATED BUILDING – A non-basement building: (1) built in the case of a building in Zones A1-30, AE, A, A99, A0, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of piling, columns, (post or piers), or shear walls parallel to the flow of the water; and (2) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood.

In the case of Zones V1-30, VE, or V, “elevated building” also includes a building otherwise meeting the definition of “elevated building”, even though the lower area is enclosed by means of breakaway walls meet the standards, of Section 60.3 (e) (5) of the National Flood Program Regulations.

EXISTING CONSTRUCTION – For the purpose of determining rates, structures for which the “start of construction” commenced before the effective date of the FIRM or before January 1, 1975, for FIRM’s effective before that date. “Existing construction” may also be referred to as “existing structure.”

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION – 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 – 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 the streets, and either final site grading or the pouring of concrete pads).

FILLING – The placement of natural sands, dirt, soil, or rock above the natural grade to raise the elevation of the ground. Fill may also include concrete, cement, soil cement, or similar material as approved on a case-by-case basis.

FLOOD ELEVATION STUDY – 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 OR FLOODING – A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters; or
2. the unusual and rapid accumulation of runoff of surface waters from any source.

FLOOD INSURANCE RATE MAP (FIRM) – A Federal Emergency Management Agency official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk of premium zones applicable to the community.

FLOOD INSURANCE STUDY – The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway Map.

FLOODPLAIN – Any land area susceptible to being inundated by water from any source (see definition of “Flooding”).

FLOODPLAIN MANAGEMENT – 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 – Zoning ordinances, subdivisions 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 describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOODPLAIN MITIGATION – A hydraulically equivalent volume of floodplain storage sufficient to offset a reduction in floodplain storage or conveyance capacity.

FLOOD PRONE AREA – An area that is subject to damage from rising water or flooding from the Gulf of Mexico or its tidal waters, including lakes, bays, inlets, and lagoons.

FLOOD PROOFING – 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.

FLOOD PROTECTION SYSTEM – 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 areas 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.

FLOODWAY (REGULATORY FLOODWAY) – A 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.

FREEBOARD – A factor of safety usually expressed in feet above a flood level for purposes of Floodplain 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 condition, such as a wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

FUNCTIONALLY DEPENDENT USE – A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term only includes 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.

HABITABLE FLOOR – Any floor usable for the following purposes, including working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used for storage purpose only is not a habitable floor.

HIGHEST ADJACENT GRADE – The highest natural elevation of the ground surface prior to construction next to the proposed wall of a structure.

HISTORIC STRUCTURE – Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary 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.

HOUSE TRAILER – A vehicle defined under Chapter 541.201(5) of the Texas Transportation Code, including a trailer or semitrailer, other than a towable recreational vehicle, that is transportable on a highway in one or more sections; is less than 45 feet in length, excluding tow bar, while in the traveling mode; is built on a permanent chassis; is designed to be used as a dwelling or for commercial purposes if connected to required utilities; and includes plumbing, heating, air-conditioning, and electrical systems.

HOUSE TRAILER PARK – a parcel (or contiguous parcels) of land with two or more house trailers for rent.

IMPROVEMENT – The process of erecting, constructing, enlarging, altering, and/or repairing of any development.

LEEVE – 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.

LEEVE SYSTEM – 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 – The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used 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 an 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 regulation.

MANUFACTURED HOME – A structure as defined under Chapter 1201.003 (12), (18), and (20) of the Texas Occupation Code – Manufactured Housing – including transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For Floodplain management purposes the term “manufactured homes” also includes

park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term “manufactured homes” does not include park trailers, travel trailers, or other similar vehicles.

MANUFACTURED HOME PARK OR SUBDIVISION – A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

MEAN SEA LEVEL – For the purpose of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community’s Flood Insurance Rate Map (FIRM) is referenced.

NATURAL GROUND – The grade unaffected by construction techniques such as fill, landscaping, or berms.

NEW CONSTRUCTION – For Floodplain management purposes, structures for which the “start of construction” commenced on or after the effective date of a Floodplain management regulation adopted by a community.

NEW MANUFACTURED HOME PARK OR SUBDIVISION – 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.

PERSON – An individual, sole proprietorship, corporation, nonprofit corporation, partnership, joint venture, organization and/or limited liability company.

PRIMARY FRONTAL DUNE – 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.

RECREATIONAL VEHICLE – A vehicle which is built on a single chassis; 400 square feet or less when measured at the largest horizontal projections; self-propelled or permanently towable by a light duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOODWAY (FLOODWAY) – 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.

RISING WATER – The increase in level and/or intensity of an overflowing of water onto normally dry land.

RIVERINE – Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SAND DUNES – Naturally occurring accumulation of sand ridges or mounds landward of a beach.

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 permit was issued, provided the actual start of construction, repair, reconstruction, 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 pouring of a slab or footing, 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 the streets, and/or walkways; nor does it include excavation for basement, footing, 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.

STRUCTURE – 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 – Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENTS – Any reconstruction, rehabilitation, addition, or improvement of structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before “start of construction”, of the improvement. This 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 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.”

TEXAS OPEN BEACHES ACT – This statute, enacted by the Texas Legislature in 1959, prohibits encroachment by private owners on the area seaward of the line of vegetation in areas fronting on the Gulf of Mexico.

TOPOGRAPHY – The description of the three-dimensional shape of the land surface based upon elevation contours. For purposes of determining if a development permit is required, an alteration of topography is considered to occur if fill placement is applied greater than 20 loads (250 cubic yards) or grading changes result in the modification to existing drainage and/or the increase in any elevation by six (6) inches or more. Determinations and clarifications to be provided by the Floodplain Administrator.

UNINCORPORATED AREA – The area in Brazoria County, Texas, that is not within an incorporated area of a city, town or village.

UTILITY – A person, as defined herein, engaged in this State in the:

1. generation, transmission, or distribution and sale of electric power;
2. transportation, distribution and sale through a local distribution system of natural or other gas for domestic, commercial, industrial, or other use;
3. ownership or operation of a pipeline for the transmission or sale of natural or other gas, natural gas liquids, crude oil or petroleum products to other pipeline companies, refineries, local distribution systems, municipalities, or industrial consumers;
4. provision of telephone or telegraph service to others;
5. production, transmission, or distribution and sale of steam or water;

6. operation of a railroad; or
7. the provisions of sewer service to others.

VARIANCE – A grant of relief from the requirements of these Regulations when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by these Regulations. (For full requirements see Section 60.6 of the National Flood Insurance Program regulations.)

VIOLATION – The failure of a structure or other development to be fully compliant with the community's Floodplain management regulations. 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), (d) (3), (e) (2), (e) (4), or (e) (5) is presumed to be in violation until at such time the documentation is provided.

WATER SURFACE ELEVATION – The height, in relation to the North American Vertical Datum (NAVD) of 1988, (or other datum, where specified), of floods of various magnitudes and frequencies in the Floodplains of coastal or riverine areas.

ARTICLE 3 GENERAL PROVISIONS

SECTION A. LAND TO WHICH THESE REGULATIONS APPLY

These Regulations shall apply to all unincorporated areas within the jurisdiction of Brazoria County, Texas.

SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Management Agency is the current scientific and engineering report entitled, "Flood Insurance Study (FIS) for Brazoria County TX and Incorporated Areas," dated effective December 30, 2020, with accompanying Flood Insurance Rate Maps and/or Flood Boundary-Floodway Maps (FIRM and/or FBFM) dated December 30, 2020. Any revisions thereto are hereby adopted by reference and declared to be a part of these Regulations.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT

A development permit **SHALL** be required to ensure conformance with the provisions of these Regulations as follows:

1. Property outside the flood zone:
 - a. any fully enclosed structure over 200 sq. feet (i.e. barn, garage, workshop, storage building, well/pump house);
2. Property inside the flood zone:
 - a. **ALL** fully enclosed structures regardless of square footage whether for occupation or not.
 - b. **ALL** fill material in the flood zone.
3. Development of improved or unimproved real estate as defined in these Regulations.

No person shall erect, construct, enlarge, alter, repair, or improve any building or development structure or manufactured home as defined under Chapter 1201.003 (12), (18), and (20) of the Texas Occupation Code, Manufactured Housing, or alter the topography that would affect others or violate Section 11.086 of the Texas Water Code in the applicable jurisdiction, or cause such to be done, without first obtaining a separate building permit for such buildings or structures from the Floodplain Administrator.

A person shall schedule and attend a Predevelopment Meeting for any Development, with the exception of a Development solely consisting of a single-family residence and its Appurtenant Structures (barns, garages, workshops, storage buildings, well/pump houses, etc.). In addition to any other requirements under these Regulations, permits may not be issued unless a Predevelopment Meeting has been held.

SECTION D. COMPLIANCE

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

If a person has violated, is violating, or is threatening to violate these Regulations in any manner, the County may institute a civil suit in the appropriate court for injunctive relief to restrain the person from continuing the violation or threat of violation including, but not limited to, an order directing the person to remove illegal improvements and restore preexisting conditions. In addition, a person who violates these Regulations is subject to a civil penalty of not more than \$100.00 for each act of violation and for each day of violation.

Any person who diverts or impounds the natural flow of surface waters or permits a diversion or impounding by him to continue in a manner that damages the property of another by the overflow of the water diverted or impounded may be subject to a civil suit in the appropriate court for injunctive relief to restrain the person from continuing the violation and directing the person to remove illegal improvements and restore the property to preexisting conditions and seek a civil penalty of \$100.00 for each act of violation and for each day of the violation.

Brazoria County shall file against any parcel of land that is in violation of these Regulations a notice in the real property records identifying any condition on the property that the County determines violates the rules adopted by these Regulations.

The County shall notify a mortgage holder and the flood insurance carrier of any violations of these Regulations and identify the owner, developer, and tract of land affected.

No person may provide utility services that connect the land and/or improvements with utility services without written certification from the County that the property complies with rules adopted.

SECTION E. ABROGATION AND GREATER RESTRICTIONS

These Regulations are not intended to repel, abrogate, or impair any existing easements, covenants or deed restrictions. However, where these Regulations and other restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION

In the interpretation and application of these Regulations, all provisions shall be (1) considered as minimum requirements; (2) liberally construed in favor of the government body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

SECTION G. WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by these Regulations is 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. These Regulations do not imply that the land outside the areas of the special flood hazards or uses permitted within such areas will be free from flooding or flood damage. These Regulations shall not create liability on the part of the County or any official or employee therefore for any flood damage that result from the reliance on these Regulations or any administrative decision lawfully made thereunder.

ARTICLE 4 ADMINISTRATION

SECTION A. SCOPE

Subject to Article 3, Section C, provisions of these Regulations shall apply to all new construction or development, proposed subdivisions, proposed manufactured home communities and/or manufactured housing as defined under Chapter 1201.003 (12), (18), and (20) of the Texas Occupation Code, Manufactured Housing, alter the topography that would affect others or violate Section 11.086 of the Texas Water Code, and to the construction, alteration, repair, use, location, or maintenance of every building or structure or any appurtenances connected to or attached to such buildings or structures, within the designated area affected by these Regulations.

No person shall erect, construct, enlarge, alter, repair, or improve any building, development structure or manufactured housing as defined under Chapter 1201.003 (12), (18), and (20) of the Texas Occupation Code, Manufactured Housing, or alter the topography that would affect others or violate Section 11.086 of the Texas Water Code, in the applicable jurisdiction, or cause such to be done without first obtaining a separate building permit for such buildings or structures from the Floodplain Administrator.

SECTION B. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Floodplain Administrator is hereby appointed to administer and implement the provisions of these Regulations and other appropriate sections of 44CFR (National Flood Insurance Program Regulations) pertaining to Floodplain management.

SECTION C. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but are not limited to, the following:

1. Maintain and hold open for public inspection all records pertaining to the provisions of these Regulations.
2. Review permit applications to determine whether proposed building sites will be reasonably safe from flooding.
3. Review, approve or deny all applications for development permits required by adoption of these Regulations.
4. Review permits for proposed development to assure 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.
5. 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.

6. Notify, in riverine situations, adjacent communities and the Texas Water Commission, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management.
7. Assure that the flood-carrying capacity within the altered or relocated watercourse is maintained.
8. When base flood elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data available from a Federal, State or other source, in order to administer the provisions of Article 5.
9. 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 A 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 (1) foot at any point within the community.
10. The Floodplain Administrator, or his duly authorized representative, may enter any building, structure, or premises to perform any duties imposed upon him by these Regulations.
11. Determine non-compliance with diversion or impoundment of the natural flow of surface waters and referral to the District Attorney's Office for enforcement when necessary.
12. Administer and enforce Local Government Code §240.901 and rules adopted by the Brazoria County Commissioners Court as it relates to the connection of utility services and referral to the District Attorney's Office for enforcement when necessary.
13. Upon notice from an affected drainage district or the Brazoria County Engineer's Office that the work on any building, structure, dike, bridge, or any improvement which would affect water drainage, is being done contrary to the provisions of these Regulations, contrary to the site and/or building plans approved by an affected drainage district or the County Engineer, or in a dangerous or unsafe manner, such work shall be immediately stopped. Such notice shall be in writing and shall be given to the owner of the property or to his agent, or to the person doing the work. Where an emergency exists, the Floodplain Administrator is not required to give written notice and may refer the violation to the District Attorney's Office for enforcement when necessary.
14. Any violation of a plan approved by a drainage district or failure to obtain a required drainage plan from a drainage district under Chapter 49 of the Texas Water Code shall be considered a violation of these Regulations. Usage of a drainage plan mandated by a drainage district is an essential aspect of these Regulations.
15. The Floodplain Administrator may revoke a permit issued under the provisions of these Regulations if there has been any false statement or misrepresentation as to a material fact in the application or plans upon which the permit or approval was based.
16. File against any parcel of land that is in violation of these Regulations a notice in the real property records identifying any condition on the property that the Floodplain Administrator determines violates the rules adopted by these Regulations.
17. Notify a mortgage holder and a flood insurance carrier of any violations of these Regulations and identify

the owner, developer, and tract of land affected.

18. Provide written certification to the appropriate utility services that a property owner may connect utility services once they have complied with County regulations.

SECTION D. PERMIT PROCEDURES

1. When required:
 - a. When anyone desires to construct a development as defined herein, a development permit is required. When fill is needed, a person must first check with the County Floodplain Administrator to determine if a floodplain fill permit is required.
 - b. For any fill within the floodplain or flood-prone areas, a fill and grading permit is required. A drainage plan is required to be submitted with permit application.
 - c. Outside the floodplain or flood-prone areas, fill and grading permits are not required unless
 - i. the fill exceeds 20 loads (250 cubic yards) per acre;
 - ii. the change in grading results in a modification to existing drainage; or
 - iii. the elevation is increased by six (6) inches or more.
 - d. Ordinary and minor repairs may be made without a permit provided that such repairs shall not violate any of the provisions of these Regulations.
 - e. For residential construction, renovations, ordinary and minor repairs or any additions to an existing structure that exceeds 50% or more of the present evaluation are required to obtain a building permit.
 - f. **Where construction is commenced before a permit is obtained, the permit fee shall be doubled.**
2. Application for a Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and shall include plans in duplicate drawn to scale showing the following:
 - a. The location, dimensions, and elevation of proposed landscape alterations;
 - b. Existing and proposed structures;
 - c. The location of the foregoing in relation to areas in the special flood hazard; and
 - d. Relationship to all easements and roadways.
3. If a watercourse or natural drainage will be altered or relocated as a result of proposed development, a certificate and/or permit from the U.S. Army Corps of Engineers - Galveston District authorizing the changes shall be provided to the Floodplain Administrator prior to beginning any development.
4. Developer and/or owner shall provide to the Floodplain Administrator information pertaining to the mortgage holder and flood insurance carrier for property being developed and for structures being built.

5. Commercial Structures, Public Buildings or Residential Structures 5,000 Sq. Ft. or More:
 - a. Any person who intends to build a residential structure of 5,000 sq. feet or more; or any sized commercial and/or public structure shall submit building plans and specifications to the drainage district in which the structure will be erected. The appropriate drainage district must approve the plan or provide a letter of no objection prior to a Floodplain permit being issued.
 - b. If no drainage district exists for that area, then the person shall provide the building plans and specifications to a Texas professional engineer to prepare a site study and then submit the site study to the Brazoria County Engineer's Office for approval.
 - c. Brazoria County has a Fire Code for commercial and public structures. Any commercial or public structure of this nature must be inspected and permitted under the Fire Code. No building permit shall be issued until a fire code permit has been approved by the Brazoria County Fire Marshal and provided to the Brazoria County Floodplain Administrator.
6. Flexible, Pliable, Tent-Type Structures:
 - a. Structures constructed of flexible, pliable materials similar to a tent, sheet, tarp, cardboard, fabric, type of membrane, canopies, air-supported, air-inflated, tensioned membrane structures, or any other materials for the purpose of providing sleeping quarters and/or a residence for human habitation may not be built, constructed, erected, or placed on properties.
 - b. For purposes of this article, materials include but are not limited to, tents, sleeping bags, bedrolls, blankets, sheets, tarps, cardboard, or other materials, to provide sleeping quarters for human habitation.
 - c. This provision does not include primitive camping allowed in County and/or State parks for recreational purposes and subject to rules and regulations of the parks.
7. Brazoria County has in effect a Drainage Criteria Manual. All development must comply with the requirements of the Manual if the development is not located within a drainage district. Its contents and regulations are herein incorporated by reference. A copy of the Manual may be obtained from either the Brazoria County Clerk or the Brazoria County Engineer's Office.
8. A final signature on the fire code permit shall be provided to the Floodplain Administrator within 30 days of completion of the commercial and/or public structure.
9. Additionally, the following information SHALL be provided to the Floodplain Administrator within six (6) months of obtaining a development permit:
 - a. Final Elevation Certificate
 - b. Building Inspection Checklist
 - c. As-Built Plan for
 - i. Commercial Development
 - ii. Coastal High Hazard Area (VE) Properties

iii. Residential Development more than 5,000 square feet

10. Elevation of the natural ground, in relation to mean sea level, of the lowest floor (including basement) of all new and substantially improved structures;
 - a. Elevation in relation to mean sea level to which any nonresidential structure shall be flood-proofed;
 - b. A certificate from a registered professional engineer or architect that the nonresidential flood-proofed structure shall meet the flood proofing criteria of Article 5, Section B (2);
 - c. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development; and
 - d. Maintain a record of all such information in accordance with Article 4, Section (C) (1).
11. Approval or denial of a development permit by the Floodplain Administrator shall be based on all of the provisions of all of these Regulations and the following relevant factors:
 - a. The danger to life and property due to the flooding or erosion damage;
 - b. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - c. The danger that materials may be swept onto other lands to the injury of others;
 - d. The compatibility of the proposed use with existing and anticipated development;
 - e. The safety of access to the property in times of flood for ordinary and emergency vehicle;
 - f. The cost 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;
 - g. The expected heights, velocity, duration, rate of rise and sediment transport of the flood water and the effects of wave action if applicable, expected at the site;
 - h. The necessity to the facility of a waterfront location, where applicable;
 - i. The availability of alternative locations, not subject to flooding or erosion damage, for the purpose of use;
 - j. The relationship of the proposed use to the comprehensive plan for that area.
12. An application for a permit for any proposed work shall be deemed void six (6) months after the date of filing, unless before then a permit shall have been issued; provided that, for cause, one or more extensions of time for periods not exceeding 90 days each shall be allowed by the Floodplain Administrator.

SECTION E. EXISTING BUILDINGS

1. If additions or repairs that would affect FEMA regulations costing fifty percent (50%) or more of the

current market value of the building are made to an existing building, such building shall be made to conform to the requirements of these Regulations for new buildings.

2. If an existing building is damaged by fire or otherwise fifty percent (50%) or more than market value before such damage is repaired and would affect FEMA regulations, it shall be made to conform to the requirements of these Regulations for new buildings.
3. For the purpose of this section, market value of the building shall be determined based upon the appraised value.

SECTION F. VARIANCE PROCEDURES

1. The Brazoria County Commissioners Court shall hear and render judgment on request for variance from the requirements of these Regulations.
2. The Brazoria County Commissioners Court 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 these Regulations.
3. Any person or persons aggrieved by the decision of the Brazoria County Commissioners Court may appeal such a decision in the courts of competent jurisdiction.
4. 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.
5. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places, certified or preliminary, determined by the Secretary of Interior to contribute historical significance, the State Inventory of Historic Places, a local inventory (if one exists) or historic places in the community that have been certified without regard to the procedures set forth in the remainder of these Regulations.
6. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half 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 C(2) of this Article have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing a variance increases.
7. Upon consideration of the factors noted above and the intent of this Court order, the Brazoria County Commissioners Court may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of these Regulations (Article 1, Section C).
8. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
9. Prerequisites for granting variances:
 - a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;
 - b. Variances shall only be issued upon: (i) showing a good and sufficient cause; (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and (iii) 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 regulations; and

- c. Any applicant to whom 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.
10. 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 Article 4, Section D (1)-(12) are met; and (ii) the structure or other development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.

ARTICLE 5

PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION A. GENERAL STANDARDS

In UNINCORPORATED AREAS OF BRAZORIA COUNTY the following provisions are required for all new construction and substantial improvements:

1. No alteration, diversion, encroachment, or enlargement shall be made to any bayou, lake, creek, natural drainage, drainage ditch, or waterway without specific written authorization from the County Floodplain Administrator and the U.S. Army Corps of Engineers - Galveston District, if applicable.
2. No person may divert or impound the natural flow of surface waters or permit a diversion or impounding by him to continue in a manner that damages the property of another by the overflow of the water diverted or impounded.
3. 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.
4. All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
5. All new construction or substantial improvements shall be constructed with materials resistant to flood damage.
6. 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 as to prevent water from entering or accumulating within the components during conditions of flooding.
7. All new and replacement water systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
8. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into floodwaters.

9. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
10. No building permit will be issued until a Brazoria County Environmental Health Department septic system permit has been obtained.

SECTION B. SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Article 3, Section B, (ii) Article 4, Section C (8), or (iii) Article 5, Section C (4), the following provisions are required:

1. **RESIDENTIAL CONSTRUCTION** – New construction and substantial improvement of any residential structure with A1-30, AE or AH Zones shall have the lowest floor (including basement), elevated two (2) feet above the base flood elevation. 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 Article 4, Section D (1) a, is satisfied.
2. **NON-RESIDENTIAL CONSTRUCTION** – New construction and substantial improvements of any commercial, industrial or other non-residential structure shall either have the lowest floor (including basement) elevated two (2) feet above the base flood level or, together with attendant utility and sanitary facilities, 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 construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice 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 flood-proofed shall be maintained by the Floodplain Administrator. Commercial, public or other non-residential structures shall also obtain a fire code permit prior to construction and provide to the Floodplain Administrator. Once construction is complete, the Final fire code permit shall be provided to the Floodplain Administrator.
3. **COMMERCIAL STRUCTURES, PUBLIC BUILDINGS OR RESIDENTIAL STRUCTURES 5,000 SQ. FT. OR MORE:** Any person who intends to build a residential structure of 5,000 sq. feet or more; or any sized commercial structure SHALL submit building plans and specifications to the drainage district in which the structure will be erected. If no drainage district exists for that area, then the person SHALL provide the building plans and specifications to the County Engineering Department who will retain the services of a Texas professional engineer, at the expense of the person seeking the permit, to prepare a site study and then submit it to the Brazoria County Engineer's Office for approval. Brazoria County has a Fire Code for commercial and public structures. Any commercial or public structure of this nature must be inspected and permitted under the fire code. No Building Permit shall be issued until a drainage plan is approved and a fire code permit has been approved by the County Fire Marshal and provided to the Brazoria County Floodplain Administrator.
4. **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 flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum requirements:
 - a. A minimum of two (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;

- b. The bottom of all openings shall be no higher than one (1) foot above grade; and
- c. Openings shall be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

5. APPURTENANT STRUCTURES – The construction of such structures must satisfy the following standards in unnumbered and numbered A Zones:

- a. Structure is low-valued and represents a minimal investment;
- b. Structure shall be small in size, not exceeding 600 square feet in size;
- c. Structure shall be unfinished on the interior;
- d. Structure can be used only for parking and limited storage;
- e. Structure shall not be used for human habitation (including work, sleeping, living, cooking, or restroom areas);
- f. Service facilities such as electrical and heating equipment must be elevated to or above the BFE or flood-proofed;
- g. Structure is constructed and placed on building site so as to offer minimum resistance to the flow of floodwaters;
- h. Structure is designed to have low flood damage potential, ie: constructed with flood resistant materials;
- i. Structure is firmly anchored to prevent flotation, collapse, and lateral movement;
- j. Floodway requirements must be met in the construction of the structure; and
- k. Openings to relieve hydrostatic pressure during a flood shall be provided below BFE.

No accessory structures are allowed in V Zones except for “disposable” sheds. If constructed, fill cannot be used for structural support and the areas below the BFE must remain free of obstruction or be constructed with non-supporting breakaway walls, open latticework, or insect screening. All appurtenant structures are to be located so as not to cause damage to adjacent and nearby structures.

6. MANUFACTURED HOMES

- a. All manufactured homes, including manufactured housing as defined under Chapter 1201.003 (12), (18), and (20) of the Texas Occupation Code, to be placed within Zone A, 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 **MUST** be in compliance with State and local anchoring requirements for resisting wind forces and must include, but not limited to, use of over-the-top or frame ties to ground anchors.
- b. All manufactured homes shall be in compliance with Article 5, Section B (1).

- c. Requirement that all manufactured homes to be placed or substantially improved within Zones A, AO, AH, and AE on the community's FIRM be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section B (4) of this Article.
- d. No manufactured home shall be placed in a coastal high hazard area. (velocity zone)
- e. Manufactured homes may be placed in a floodway provided they meet the same standards as conventional housing and other development (e.g. their placement would be prohibited unless it could be demonstrated that there would be no increase in the base flood elevation in the community).
- f. Brazoria County has a Manufactured Home Rental Community Ordinance which must be complied with in addition to these Regulations if the land is to be developed into a manufactured home park.

7. HOUSE TRAILERS

- a. All house trailers with a total interior space of 400 square feet or less are governed by this section. All house trailers with a total interior space of 401 square feet or more are regulated under the manufactured home section of these regulations.
- b. This section will cease to be in effect on January 1, 2022.
- c. House trailers with a total interior space of 400 square feet or less are not required to be elevated above base flood elevation or to be in compliance with State and local anchoring requirements for manufactured homes.
- d. All house trailers with a total interior space of 400 square feet or less that exceed eight (8) feet six (6) inches in width or 14 feet in height must have a valid state or County issued oversize vehicle permit at all times. Renewed permits shall be provided annually to the Floodplain Department.
- e. All house trailers with a total interior space of 400 feet or less which are connected to utilities shall use RV-style utility hookups.
- f. All house trailers to be placed within Zone A, AO, AH, and AE on the community's FIRM shall:
 - 1. Provide an evacuation plan at the time of permitting or may be elevated, anchored and tied down in the same manner as required of a manufactured home;
 - 2. Be able to evacuate immediately during storm events or upon County evacuation orders unless anchored and tied down in the same manner as required of a manufactured home; and
 - 3. Not have any accessory structures that would prevent the trailer from being evacuated, unless anchored and tied down in the same manner as required of a manufactured home.

- g. All house trailers placed in a coastal high hazard area (velocity zone) must be:
 - 1. Maintained in a manner that keeps it capable of evacuation, including all licensing requirements for traveling on public roads;
 - 2. May not be anchored or tied down;
 - 3. No accessory structures are allowed that would prevent the trailer from being evacuated; and
 - 4. Shall be evacuated at such time as the storm is located within the area of 90° longitude and 22° latitude. The first warning will be issued when the storm is within 85° longitude and 20° latitude.
- h. No house trailers may be placed in a floodway unless they meet the same standards as conventional housing.
- i. Occupied house trailers are subject to Brazoria County's regulations regarding On-Site Sewage Facilities.
- j. Any house trailer park requires a house trailer park development permit. The permit application will include a Letter of Permission for continuing Floodplain Management and Environmental Health Department access to the premises and the interiors of the house trailers and an evacuation plan, including proof of ability to tow all House Trailers in the event of an emergency, unless anchored and tied down in the same manner as required of a manufactured home (Zones AE / A / AO ONLY).
- k. All house trailer park road designs and specifications shall be reviewed and approved by the Brazoria County Engineering Department.
- l. All house trailer parks must obtain a permit from the Fire Marshal.

8. RECREATIONAL VEHICLES

- a. Any recreational vehicle remaining at one location in excess of 180 days shall be permitted and elevated above the base flood elevation required. All recreational vehicles shall be tied down to resist flotation.
- b. Any person, who moves a recreational vehicle from a location in order to avoid having to permit, elevate and tie down as required in these Regulations, must remove the recreational vehicle for a period in excess of 24 hours. If the vehicle is removed for a period consisting of 24 hours or less, then the permitting requirements will apply and the property owner will be required to comply with the requirements set forth in 8(a) above.
- c. Any recreational vehicle that is being used as a residence must be permitted, elevated and tied down in the same manner as required for manufactured homes and the above 24 hour rule does not apply.
- d. All recreational vehicles shall be in good working condition, whether self-propelled or dependent on external power, so that such vehicle is capable of evacuation as required.
- e. Egress of recreational vehicles shall not be prevented by stored or fixed items such as stairs,

porches, storerooms, etc.

- f. In a coastal high hazard area (velocity zone), all recreational vehicles shall be evacuated at such time as the storm is located within the area of 90° longitude and 22° latitude. The first warning will be issued when the storm is within 85° longitude and 20° latitude.
- g. Recreational vehicles stored on a homeowner's lot where the house already exists are exempt from the 180-day permit regulations subject to other ordinances or restrictions. These vehicles must be unoccupied and not connected to water or sewer facilities. It must have a current license, inspection sticker, and be capable of highway use.

9. FLOODWAYS - located within areas of special flood hazard established in Article 3, Section B 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:

- a. Encroachments are prohibited, including fill, new construction, substantial improvements and other development unless certification by a professional registered engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrences of the base flood discharge.
- b. If Article 5, Section B (5) (a) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.

10. FILL MATERIAL

- a. No permit is required if the fill material to be placed is no more than 20 loads (250 cubic yards) of dirt per acre of land and the land is not within the Floodplain. Each acre may not contain more than 20 loads of dirt. Property owner is required to equally disperse and spread the fill material to ensure no more than 20 loads of fill being placed on each acre.
- b. If more than 20 loads (250 cubic yards) of fill material is to be placed per acre of land, a permit must be obtained from the Floodplain Administrator and the property owner will be required to provide a hydraulic analysis (drainage plan) certified by a registered professional engineer and approved by the appropriate drainage district.
- c. The property owner must be able to provide to the County information relating to the location from which the dirt came, if it was from a governmental project, and who hauled/delivered the fill material.
- d. Fill material shall be placed no closer than ten (10) feet from the edge of the property line.
- e. If the fill is placed on a piece of property in which the natural flow of water is conveyed on the proposed fill site, then the property owner is required to mitigate for the altered flow. Natural flow could be by sheet flow, swale, ditch, slough or other natural or man-made means of conveyance of water. Mitigation could include ditches, swales, detention/retention ponds and any other means of conveyance/detention/retention.
- f. All fill material must be spread evenly and as per permit represents within six (6) months of the permit issuance date. If the fill material is not spread within this time period, the property owner may be requested to remove the material.

- g. Any reduction in floodplain storage or conveyance capacity must be offset with a hydraulically equivalent (one-to-one) volume of mitigation sufficient to offset the reduction. The reduction may result from development or the placement of fill within the 1% floodplain or 100-year floodplain. Such mitigation shall be within the same watershed and shall be provided on the same property or within the same hydrologic sub-watershed. Mitigation at an alternate site requires approval of the County Engineer. A full hydrological and hydraulic analysis must be submitted to support a request for mitigation outside the boundaries of the property being developed.

SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS

1. All subdivision proposals including manufactured home parks and subdivisions shall be consistent with Article 1, Sections B, C, and D of these Regulations.
2. All proposals for development of subdivisions including manufactured home parks and subdivisions shall meet Development Permit requirements of Article 3, Section C; Article 4, Section C; and the provisions of Article 5 of these Regulations.
3. Base flood elevation data shall be generated for subdivision proposals and other proposed development including manufactured home parks and subdivisions, which is greater than 50 lots or five (5) acres, whichever is lesser, if not otherwise provided pursuant to Article 3, Section B or Article 4, Section C (8) of these Regulations.
4. All subdivision proposals including manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
5. All subdivision proposals including manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.
6. Brazoria County has a Subdivision Ordinance which must also be followed in addition to these Regulations. Copies may be obtained from the Brazoria County Engineer's Office.

SECTION D. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding. These areas have special flood hazards associated with the base flood depths of one to three feet where a clearly defined channel does not exist and 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 have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified).
2. All new construction and substantial improvements of non-residential construction shall:
 - a. have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified); or

- b. together with the 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 the structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects on 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 Article 4, Section D (1) a, are satisfied.
4. Shall have adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures within Zones AH or AO.
5. No person, company or organization may provide utility services that connect the land with utility services without written certification from the County that the property complies with these Regulations.

SECTION E. COASTAL HIGH HAZARD AREAS

Located within the areas of special flood hazard established in Article 3, Section B, 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 these Regulations, the following provisions must 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 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 to or above the base flood level;
 - 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. Wind and water loading values shall each have a one percent chance of being equaled to or exceeded in any given year (100-year mean recurrence interval); and
 - c. 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 methods of construction to be used are in accordance with the accepted standards of practice for meeting the provisions of (3) (a), (b) and (c) of this section.
4. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed of no more than 300 square feet 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. 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 certified that the proposed designs meet the following conditions:

- a. 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). 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).
5. If breakaway walls are utilized, such enclosed space shall be used 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 man-made alteration of sand dunes and mangrove stands which would increase potential flood damage. Brazoria County has in effect a Dune Protection and Beach Access Plan under Commissioners Court Order No. 17 dated August 9, 1993. It is recommended that this plan be reviewed before any work is begun on or around sand dunes. The Dune Protection and Beach Access Plan can be obtained from the Brazoria County Clerk or the Brazoria County Floodplain Administrator's Office.

SECTION F. DEPTH CRITERIA REGULATIONS

Floodplain areas below the base flood elevation and above the specified depth criterion, as shown on the effective Flood Insurance Rate Map in selected reaches of the Brazos River, Oyster Creek, and San Bernard River Floodplains, are hereby designated as the floodway fringe. These fringe areas may be developed, or otherwise filled, above the base flood elevation, without performing an analysis of impact on flood levels. However, levee systems or other continuous fills in the floodway fringe exceeding 500 feet in any dimension, or forming a potential barrier to the movement of waters during the occurrence of the base flood are not permitted unless hydrologic and hydraulic analysis, certified by a registered professional engineer, demonstrated that less than one (1) foot increase in flood levels will occur from the proposed fill when evaluated in combination with all similar fills which could be placed by other property owners similarly situated.

No development, including fill, may be placed within designated floodways, natural stream channels or other Floodplain areas not designated as floodway fringe unless a hydrologic or hydraulic analysis, certified by a registered professional engineer, demonstrates that no increase in base flood elevations will occur.

However, it is recognized that buildings may be constructed on approved piers or pilings in areas below the depth criterion if Brazoria County determines that the cross-sectional area of the restrictions removed, or proposed to be removed, is equal to or greater than that proposed to be built. If this data, supplied by the owner, is obvious to Brazoria County, a permit may be issued without an engineering study.

Prior to granting a permit for construction of a structure, designed for purposes of human occupancy, on a site where the greatest depth of flooding below the base flood elevation will exceed 1.5 feet, the Floodplain Administrator will review the availability of suitable evacuation routes and emergency services during the occurrence of base flood levels and will deny those permits where health and safety considerations will prevail.

SECTION G. ADDITIONAL REQUIREMENTS FOR BASE FLOOD ELEVATIONS

Brazoria County will require an elevation to two (2) feet above the base flood elevation for development in flood hazard area Zones “A” and “AE”, as indicated on the National Flood Insurance Program FIRM map for the County.

Brazoria County will require compliance with the Brazoria County Drainage Criteria Manual which is incorporated by reference herein and may be obtained from either the Brazoria County Clerk or the Brazoria County Engineer’s Office.

In areas where the base flood elevations change more than one (1) foot, the elevation required will be interpolated by the Floodplain Administrator with the best available information.

ARTICLE 6 UTILITIES

Any structure or other development may not be connected with water, sewer, and electricity or gas utility service if it is not in compliance with these Regulations.

ARTICLE 7 HAZARDOUS WASTE

SECTION A. DEFINITIONS

1. “Hazardous Waste Management Facilities” including facilities for storage, processing or disposal of any waste identified or listed as hazardous by the Administrator of the United States Environmental Protection Agency, pursuant to 42 U.S.C.6901, et seq., as amended.
2. On Site Storage Processing or Disposal includes those activities defined in Section 335.42 (a) (44) [156.22.05.102 (a) (44)] Texas Administrative Code.

SECTION B. STATEMENT OF PURPOSE

In order to promote and protect the public interest in providing appropriate protection against the perils of flood losses, no building or development permits will be granted for the construction of any injection well or other type of disposal site for hazardous material or any hazardous waste management facilities in any flood prone areas or Floodplain areas having special flood hazards, as delineated on the Official Flood Hazard Map of Brazoria County, with the exception of hazardous waste management facilities for storage, processing or disposal of on-site generated waste. See Article 5, Section A (6) and A (7).

ARTICLE 8 OTHER REGULATIONS

In addition to these Regulations, any development must also consider the following Plans or Ordinances:

SEPTIC PERMITS: Septic permits are required through the Texas Health and Safety Code or Brazoria County regulations for all properties that are less than ten (10) acres and do not have access to a public sewer system or larger than ten (10) acres but have more than one structure requiring a septic system. To determine if a person must have a septic permit, contact the Brazoria County Environmental Health Department.

FIRE CODE: Brazoria County has adopted a Fire Code for New Construction of Commercial and Public

Structures. Information pertaining to its requirements or a copy of the Ordinance may be obtained from the Brazoria County Clerk or Brazoria County Fire Marshal.

DRAINAGE PLAN: Each drainage district's rules apply to properties located within each districts respective boundaries. Property not located within a drainage district must comply with Brazoria County's Drainage Criteria Manual Information pertaining to its requirements or a copy of the plan may be obtained from the Brazoria County Engineering Department.

LOCAL DRAINAGE DISTRICTS: If the development is located within a drainage district, the owner or developer shall consult with the local drainage district to determine if plans, drawings or designs need to be submitted for its approval.

MANUFACTURED HOME ORDINANCE: Brazoria County has adopted a Manufactured Home Ordinance which must be complied with in the development of a manufactured home park. Copies of these Regulations may be obtained from the Brazoria County Clerk or Brazoria County Engineering Department.

SUBDIVISIONS: Brazoria County has adopted a Subdivision Ordinance which must be complied with in the development of any subdivisions. Copies of these Regulations may be obtained from either the Brazoria County Clerk or the Brazoria County Engineering Department.

SAND DUNE PROTECTION PLAN: Brazoria County has adopted a Dune Protection and Beach Access Plan which must be complied with when any development is planned to occur at, near or around any sand dunes and/or beach. Copies of these Regulations may be obtained from either the Brazoria County Clerk or the Brazoria County Floodplain Department.

ARTICLE 9 VIOLATIONS AND PENALTIES

SECTION A. REVOCATION OF PERMIT

The Floodplain Administrator may revoke a permit or approval issued under the provisions of these Regulations, in cases where there have been false statement or misrepresentation as to a material fact in the application or plans upon which the permit or approval was based.

SECTION B. CONTEMPT OF COMMISSIONERS COURT

Any person, firm, corporation or agent who violates a provision of these Regulations, or fails to comply therewith, or with any of the requirements therefore, or who erects, constructs, or alters any structure, or has erected, constructed, altered or repaired a building or structure in violation, shall be guilty of Contempt of Commissioners Court of Brazoria County, Texas. Each person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any such provisions of these Regulations is committed, or continued and upon conviction of any such violation such person shall be punished within the limits as provided by state law.

Commissioners Court may punish contempt by fine or imprisonment in accord with the provisions of Section 81.023 of the Texas Local Government Code, as amended. Any person securing a permit under these Regulations does so on the representation to Commissioners Court that he will comply with the terms of the permit and with these requirements and other County regulations. Commissioners Court has the power to enforce its orders by civil contempt for violations of such representations. If the Commissioners Court finds the defendant to be guilty of contempt, it will enter such orders consistent with general law as it deems appropriate to punish the person guilty of contempt, and will enter such other and further orders enforceable by civil and criminal contempt, and consistent with its authority under general laws, as Commissioners Court

deems necessary to enforce and protect its jurisdiction over the matter, and to uphold the integrity of these Regulations. Procedures for contempt proceedings before Commissioners Court will be consistent with procedures in actions before other courts in this State for enforcement of court orders, and for the protection of the jurisdiction of courts by the process of contempt.

SECTION C. VIOLATIONS AND PENALTIES

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of these Regulations and other applicable regulations. Violation of the provisions of these Regulations by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a Class C misdemeanor. Each violation of these Regulations and each day of a continuing violation is a separate offense.

Nothing herein contained shall prevent a community from taking such other lawful action as is necessary to prevent or remedy any violation. If it appears that a person has violated, is violating or is threatening to violate these Regulations in any manner, the County may institute a civil suit in the appropriate court for injunctive relief to restrain the person from continuing the violation or threat of violation including, but not limited to, an order directing the person to remove illegal improvements and restore preexisting conditions. In addition, a person who violates these Regulations is subject to a civil penalty of not more than \$100.00 for each act of violation and for each day of violation.

Any person who diverts or impounds the natural flow of surface waters or permits a diversion or impounding by him to continue in a manner that damages the property of another by the overflow of the water diverted or impounded may be subject to a civil suit in the appropriate court for injunctive relief to restrain the person from continuing the violation and directing the person to remove illegal improvements and restore the property to preexisting conditions and seek a civil penalty of \$100.00 for each act of violation and for each day of the violation.

The County shall notify a mortgage holder and a flood insurance carrier of any violations of these Regulations and identify the owner, developer, and tract of land affected.

County shall file against any parcel of land that is in violation of these Regulations, a notice in the real property records identifying any condition on the property that the County determines violates the rules adopted by these Regulations.

No Person may provide utility services that connect the land and/or improvements with utility services without written certification from the County that the property complies with rules adopted.

CERTIFICATION OF ADOPTION

APPROVED: _____
(community official)

PASSED: _____
(adoption date)

ORDINANCE BECOMES EFFECTIVE: _____
(effective date)

I, the undersigned, _____, do hereby certify that the above is a true and correct copy of an ordinance duly adopted by the Commissioners Court of Brazoria County, at a regular meeting duly convened on _____.

{Signature of Certifying Official}

{SEAL}