

Ordinance No. : 4207

AN ORDINANCE AMENDING CHAPTER 46 OF THE CODE OF ORDINANCES OF THE CITY OF DEER PARK IN ITS ENTIRETY AND ANY INCONSISTENT PROVISIONS OF PREVIOUS FLOOD REGULATIONS SHALL BE DELETED FROM THE CODE OF ORDINANCES, PROVIDING COMPREHENSIVE FLOOD REGULATIONS; PROVIDING OTHER DETAILS;

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DEER PARK:

Chapter 46 of the Code of Ordinances of the City of Deer Park is hereby amended in its entirety and any inconsistent provisions of previous flood regulation shall be deleted from the code of ordinances so that it shall hereafter read as follows:

CHAPTER 46. FLOODS.

ARTICLE I. IN GENERAL.

SECTION 1. DESIGN CRITERIA FOR FLOOD DETENTION FACILITIES.

Design criteria for flood detention facilities are hereby established for property being developed within the city as follows:

1. Basic Standards:
  - a. The minimum detention storage rate shall be fifty-five hundredths (0.55) acre-feet per acre (ac-ft./ac) or greater for all new development larger than one (1) acre. Minimum storage rate does not apply for a single-family residential structure and/or accessory buildings proposed on an existing lot
  - b. The use of hydrograph timing as a substitution for detention on any project is prohibited.
  - c. The design for localized storm conveyance systems or detention facilities are required to incorporate the most recent Harris County, Region 3 rainfall data as specified in the current Harris County Engineering Department (HCED) development regulations, OR the design for localized storm conveyance systems or detention facilities are required to utilize Atlas 14 rainfall data for design.
  - d. For drainage areas being developed which are fifty (50) acres or larger, the detention facility design and criteria shall be approved by the Director of Planning & Development.
2. Additional Standards – The detention facility shall be designed for easy maintenance and every consideration shall be given to designing of the facility for multi-purpose use, such as playgrounds, ball fields, mini-parks, etc. To ensure that maintenance will be accomplished, the design shall include the following:

- a. A twenty (20) foot maintenance roadway shall encompass the perimeter of the detention facility and be considered a part of the facility.
- b. A twelve (12) foot wide reinforced concrete access ramp shall be provided into the basin for maintenance equipment access.
- c. An earthen detention basin shall have a minimum on side slopes of four to one (4:1) and minimum bottom width of ten (10) feet.
- d. A minimum of five (5) foot wide, six (6) inch thick, reinforced concrete, trickle channel shall be constructed through the basin bottom to accommodate low flow and allow fast drying.
- e. The bottom of the detention basin shall have a minimum of twenty-five hundredths percent (0.25%) cross slope to facilitate quick drainage.
- f. Inlets, outlets and required trash racks shall be located for easy accessibility.
- g. Inlets and outlet pipes shall have erosion control devices.
- h. When necessary, high overflow shall be constructed six (6) inches above the design water surface elevation.
- i. Detention shall be designed in order to have a minimum of twelve (12) inch freeboard.
- j. The detention basin, maintenance roadway, and right-of-way shall be hydro-mulched with Bermuda seed and watered to facilitate full grass coverage, prevent erosion, and provide slope stabilization and protection.
- k. When necessary, provide for ingress/egress to the detention basin including dedicated right-of-way.
- l. Maximum detention basin release is five-tenths (0.5) cubic-feet per second per acre (cfs/ac).

SECTIONS 2 – 20. RESERVED.

ARTICLE II. FLOOD DAMAGE PREVENTION AND CONTROL.

DIVISION 1. GENERALLY.

SECTION 46-21. STATUTORY AUTHORIZATION; FINDINGS OF FACT.

- a. The Legislature of the State of Texas has in Vernon's Texas Codes and Statutes Annotated (VTCA), Texas Water Code, Section 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the City Council of Deer Park, Texas, does ordain this article.

- b. The flood hazard areas of Deer Park 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 diversely affect the public health, safety and general welfare.
- c. These flood losses are created by the cumulative effect of obstructions in floodplains, which cause an increase in flood heights and velocities, and by occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood-proofed, or otherwise protected from flood damage.

#### SECTION 46-22. STATEMENT OF PURPOSE.

It is the purpose of this ordinance to promote the public health, safety and general welfare; and to minimize public and private losses due to flood conditions and specific reasons 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, utilities and infrastructure such as water, sewer and gas mains, electric, communication, streets, bridges and other facilities located in floodplains;
- 6. Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas;
- 7. Ensure that potential buyers are notified that property is in a flood area; and
- 8. Regulate all fill in the floodplain.

#### SECTION 46-23. METHODS OF REDUCING FLOOD LOSSES.

In order to accomplish its purpose, this ordinance 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 the 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; and
6. Ensure that all fill in the floodplain is mitigated by compensating cut in the floodplain, so that no increase of flood levels will result.

#### SECTION 46-24. DEFINITIONS.

Unless specifically defined in this Section, words or phrases used in this ordinance shall be interpreted to give them the meanings they have in common usage and to give this ordinance its most reasonable application and intent. The most current FEMA National Flood Insurance Program (NFIP) terminology index shall prevail over definition discrepancies in this section, and used to define word or phrases not defined in this Section, but used within this Ordinance.

**100-YEAR FLOOD (ONE-HUNDRED YEAR FLOOD)** – means a flood having a one percent (1%) annual exceedance probability (chance of equaling or exceeding that level in any given year). Same as **BASE FLOOD**.

**500-YEAR FLOOD (FIVE-HUNDRED YEAR FLOOD)** – means a flood having a two-tenths percent (0.2%) annual exceedance probability (chance of equaling or exceeding that level in any given year).

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

**ANCHORED** – means to affix firmly and stably; and adequately secured to prevent flotation, collapse or lateral movement.

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

**APPEAL** – means a request for a review of the Floodplain Administrator's interpretation of any provisions of this ordinance or a request for a variance.

**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 (i.e., a detached garage servicing a one to four (1–4) family dwelling

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

**AREA OF SPECIAL FLOOD HAZARD** – same as SPECIAL FLOOD HAZARD AREA.

**ATLAS-14** – is an ongoing study used to analyze historical rainfall data in order to update statistical hypothetical rainfall events in Texas. The statistical events are used to analyze waterways and help design storm water infrastructure. Based on historical data, Atlas 14 will assign probabilities to rainfall volumes to estimate the likelihood of a rainfall event occurring in any given year.

**BASE FLOOD** – means a flood having a one percent (1%) annual exceedance probability (chance of equaling or exceeding that level in any given year). Same as 100-YEAR FLOOD.

**BASE FLOOD DEPTH (BFD)** – means the depth shown on the Flood Insurance Rate Map (FIRM) for Zone AO that indicates the depth of water above highest adjacent grade resulting from a base flood.

**BASE FLOOD ELEVATION (BFE)** – means the elevation of surface water resulting from a base flood. The BFE is shown on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1–A30, AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, V1–V30 and VE.

**BASEMENT** – means any area of the building, including sunken room or sunken portion of a room, having its floor below ground level (subgrade) 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.

**COMMUNITY RATING SYSTEM (CRS)** – as a part of the National Flood Insurance Program (NFIP), the CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum program requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community. Actions meeting the three (3) goals of the CRS are to; reduce flood damage to insurable property, strengthen and support the insurance aspects of the NFIP, and encourage a comprehensive approach to floodplain management.

**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.

**CUT** – means the excavation and removal of earth or other solid material below the natural ground surface elevation prior to, or during construction. A net decrease in volume of earth or other solid material onsite.

**CURVILINEAR LINE** – means the border on either the flood hazard boundary map (FHBM) or Flood Insurance Rate Map (FIRM) that delineates the special flood, mudslide (i.e. mudflow) and/or flood-related erosion hazard areas and consists of curved or contour line that follows the topography.

**DEVELOPMENT** – means any human-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or equipment or materials.

**DEVELOPMENT PERMIT** or **FLOODPLAIN DEVELOPMENT PERMIT** – the permit describing the fill, drainage, grading for the property to be developed.

**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** or **EXISTING STRUCTURES** – means, for the purpose of determining rates, structures for which the “start of construction” commenced before the effective date of the Flood Insurance Rate Map (FIRM) or before January 01, 1975, for FIRMs effective before that date.

**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 anchored (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 adopted date of the flood management regulations.

**EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION** – mean the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be anchored (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) will begin after the adopted date of the flood management regulations.

**FILL** – means the placement and installation of earth or other solid material above the natural ground surface elevation prior to, or during construction. A net increase in volume of earth or other solid material onsite.

**FLOOD** or **FLOODING** – means general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters and/or 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 mud- slide (i.e. mudflow) and/or flood-related erosion hazards.

**FLOOD HAZARD BOUNDARY MAP (FHBM)** – Official map of a community issued by FEMA, where the boundaries of the flood, mudflow and related erosion areas having special hazards have been designated.

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

**FLOOD INSURANCE STUDY (FIS)** – means a compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community. When a flood study is completed for the NFIP, the information and maps are assembled into an FIS. The FIS report contains detailed flood elevation data in flood profiles and data tables.

**FLOODPLAIN or FLOOD PRONE AREA** – means any land area susceptible to inundation by water from flooding.

**FLOODPLAIN ADMINISTRATOR** – means the City Manager of Deer Park or his designee.

**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 describes such state or local regulations, in any combination thereof, which provide standard for the purpose of flood damage prevention and reduction.

**FLOOD PROTECTION SYSTEM** – means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the 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.

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

**FLOODWAY or 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.

**FREEBOARD** – means an additional amount of height above the Base Flood Elevation (BFE) used as a factor of safety (e.g. one (1) foot above the BFE) in determining the level at which a structure’s lowest floor must be elevated or flood proofed to be in accordance with the State or Community floodplain management regulations.

**FUNCTIONALLY DEPENDENT USE** – means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or

passengers, and ship 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 designated 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 human-made structure; usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

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

**LOWEST FLOOR** – means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or 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 44 CFR 60.3 of the National Flood Insurance Program regulations.

**MANUFACTURED HOME** – means a structure transportable in one or more sections, which is built in a permanent chassis, and is designed for use with or without a permanent foundation when connected to the required utilities. The term “manufactured home” does not include a recreational vehicle.

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

**MEAN SEA LEVEL** – means, for purposes of the National Flood Insurance Program, The North American Vertical Datum (NAVD) 1988, 2001 adjusted, or most recent vertical datum adopted by FEMA, to which base flood elevations shown on a community’s Flood Insurance Rate Map are referenced.

**MODERATE FLOOD HAZARD AREAS** – areas between the limits of the one-hundred (100) year and five-hundred (500) year flood areas. Moderate flood hazard areas are shown on flood maps as zones labeled with the letters B or X-shaded.

**NATIONAL FLOOD INSURANCE PROGRAM (NFIP)** – means the program that makes federally backed flood insurance available in those states and communities that agree to adopt and enforce flood-plain management ordinances to reduce future flood damage.

**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 Flood Insurance Rate Map (FIRM) or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvement 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 anchored (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.

**ORDINANCE** – the entire contents of this document (Chapter 46 of the Code of Ordinances of the City of Deer Park – Texas). Same as, including but not limited to, ordinance(s), rule(s), regulation(s), article(s), division(s), section(s), et cetera.

**RECREATIONAL VEHICLE** – means a vehicle which is:

1. built on a single chassis;
2. four-hundred (400) square feet or less when measured at the largest horizontal projections;
3. designed to self-propel or permanently towable by a light duty truck; and
4. not designed primarily for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use; and the term “recreational vehicle” does not include a “manufactured home”.

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

**SEVERE REPETITIVE LOSS PROPERTY or SL** – property means a residential property that is covered under an NFIP flood insurance policy and that has:

1. at least four (4) NFIP claim payments, including building and contents, over five-thousand dollar (\$5,000) each, and the cumulative amount of such claims payments exceeds twenty-thousand dollars (\$20,000); or
2. for which a least two (2) separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

and with at least two (2) of the referenced claims must have occurred within any ten (10) year period, and must be greater than ten (10) days apart.

**SPECIAL FLOOD HAZARD AREA (SFHA) or AREAS OF SPECIAL FLOOD HAZARD** – An area having special flood, mudflow or flood-related erosion hazards and shown on a Flood Hazard Boundary Map (FHBM) or a Flood Insurance Rate Map (FIRM) Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE or V. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. For the purpose of determining Community Rating System (CRS) premium discounts, all AR and A99 zones are treated as non-SFHAs.

**START OF CONSTRUCTION** – (for other than new construction or substantial improvement under the Coastal Barrier Resource 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 one-hundred and eighty (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 of 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 fifty-percent (50%) 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 fifty-percent (50%) 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, not including:

1. Any project for improvement of a structure to correct existing violation of state or local health, sanitary, or safety code specification which have been identified by the local code enforcement official an which are the minimum necessary to assure safe living conditions or;
2. Any alteration of a “historic structure”, providing that the alteration will not preclude the structure’s continued designation as a “historic structure”.

**VARIANCE** – means a grant of relief by a community from the terms of the floodplain management regulations. (For full requirements, see Section 60.6 of the National Flood Insurance Program Regulations)

**VIOLATION** – means the failure for 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 44 CFR 60.3 (b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4) or (e)(5) is presumed to be in violation until that documentation is provided.

**WATER SURFACE ELEVATION** – means the height, in relation to the National American Vertical Datum (NAVD) 1988, 2001 adjusted or most recent vertical datum adopted by FEMA (where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

#### **SECTION 46-25. LANDS TO WHICH THIS ORDINANCE APPLIES.**

The ordinance shall apply to all areas of special flood hazard and moderate flood hazard with the jurisdiction of the City of Deer Park.

#### **SECTION 46-26. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD.**

The areas of special flood hazard identified by FEMA in a scientific and engineering report entitled “The Flood Insurance Study (FIS) for The City of Deer Park, Community No. 480291” dated January 6, 2017 with accompanying Flood Insurance Rate Maps (FIRM) and Flood Boundary Floodway Maps (FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance.

SECTION 46-27. ESTABLISHMENT OF DEVELOPMENT PERMIT.

A Floodplain Development Permit shall be required for any development within the Special Flood Hazard Area (SFHA) or moderate flood hazard area, to ensure conformance with the provisions of this ordinance. For areas outside the SFHA or moderate flood hazard area, a Building Permit will be required to ensure conformance with freeboard requirements.

SECTION 46-28. COMPLIANCE.

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

SECTION 46-29. ABROGATION AND GREATER RESTRICTIONS

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

SECTION 46-30. INTERPRETATION

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

1. considered as minimum requirements;
2. liberally construed in favor of the governing body; and
3. deemed to neither limit, nor repeal, any other powers granted under state statutes.

SECTION 46-31. WARNING AND DISCLAIMER OR LIABILITY

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

SECTIONS 32 – 50. RESERVED.

DIVISION 2. ADMINISTRATION.

SECTION 46-51. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR.

The City Manager, or his/her designated appointee, is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION 46-52. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR.

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

1. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance.
2. Review permit application to determine whether proposed building site, 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 this ordinance.
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 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 an actual field conditions) the floodplain Administrator shall make the necessary interpretation.
6. Notify, in riverine situations, adjacent communities and the State Coordinating Agency, which is Texas Water Commission, 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 46-26, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Division 3.

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 with Zones A1-30 and AE on the community's Flood Insurance Rate Map (FIRM), unless it is demonstrated that the cumulative effect on the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
10. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in zones A1-30, AE, AH, on the community's Flood Insurance Rate Map (FIRM) which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM revision through FEMA.
11. In addition to the areas designated on the Flood Insurance Rate Map (FIRM) as susceptible to flooding, the administrator should indicate additional areas that, through experience, he/she has found to be susceptible to flooding and make the information available to the public.

#### SECTION 46-53. PERMIT PROCEDURES.

- a. Application for a development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not 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 non-residential structure shall be flood proofed;
  3. A certificate from a registered professional engineer or architect that the nonresidential flood proofed structure shall meet the flood proofing criteria of Section 46-83(b)(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 46-52(1).
  6. Approval or denial of a Development Permit by the Floodplain Administrator shall be based on all of the provisions of this ordinance and the following relevant factors:
    7. The danger to life and property due to flooding or erosion damage;

8. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
9. The danger that materials may be swept onto other lands to the injury of others;
10. The compatibility of the proposed use with existing and anticipated development;
11. The safety of access to the property in times of flood for ordinary and emergency vehicles;
12. 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;
13. 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.
14. The necessity to the facility of a waterfront location, where applicable;
15. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
16. The relationship of the proposed use to the comprehensive plan for that area;
17. The floodplain administrator may revoke a permit or approval issued under the provisions of this regulation, in cases where 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;
18. Upon notice from the floodplain administrator that work on any building, structure, bridge or any improvement which would affect water drainage, is being done contrary to the provisions of this regulation, or in a dangerous or unsafe manner, such work shall be immediately stopped. Such a 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, and shall state the conditions under which work may be resumed. Where an emergency exists, no written notice shall be required to be given by the floodplain administrator, provided written notice shall follow within twenty-four (24) hours from the time the oral notice to stop work was issued; and
19. The floodplain administrator, or his duly authorized representative, may enter any building, structure, or premise to perform any duties imposed upon him by this regulation.

#### SECTION 46-54. VARIANCE PROCEDURES.

- a. The Appeal Board as established by the community shall hear and render judgment on requests for variances from the requirements of this ordinance.

- 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 ordinance.
- c. Any person or persons 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. Variance may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Registry of Historic Places or the State inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.
- f. 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 46-53(2) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- g. Upon consideration of the factors noted above and the intent of this ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this ordinance (Section 46-22).
- 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. Variance shall only be used upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  - 2. Variance 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 ordinances.
  - 3. Any application 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.

- k. Variances may be issued by a community for new construction and substantial improvements and for other developments necessary for the conduct of a functionally dependent use provided that:
  - i. the criteria outlined in this Section are met, and
  - ii. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to the public safety.

SECTIONS 55 – 81. RESERVED.

DIVISION 3. PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION 46-82. GENERAL STANDARDS.

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 to be located so as to prevent water from entering or accumulating within the components during conditions of flooding.
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 flood waters into the system and discharge from the systems into flood waters; and
7. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

8. An elevation certificate (Standard FEMA form), signed by a professional engineer or a Texas Registered Land Surveyor, is required for each, and every, building within the City of Deer Park, regardless of its location with respect to the flood hazard boundary. No final building inspection nor certificate of occupancy will be issued until the elevation certificate has been received and reviewed for accuracy.

There shall be no adverse flooding impact on any property from any fill placed in the same or nearby watershed.

### CRS Class 8 Prerequisite

#### SECTION 46-83. SPECIFIC STANDARDS.

- a. In areas outside the special flood hazard area and moderate flood hazard area, the following provisions are required:
  1. All new construction, of both residential and non-residential structures, shall have the lowest floor (including basement) elevated two (2) feet above the centerline of the street or one (1) foot above the highest adjacent grade, whichever is higher.
  - b. In all areas of special flood hazard area (SFHA) and moderate flood hazard area where base flood elevation and 500-year water surface elevation data has been provided as set forth in Sections 46-26, 46-52(8), or 46-84(3), the following provisions are required:
    1. Residential Construction – new construction and substantial improvement of any residential structure and any severe repetitive loss structure, including machinery and equipment, shall have the lowest floor (including basement), elevated at or above the five-hundred (500) year water surface elevation, two (2) feet above the centerline of the street, or one (1) foot above the base flood elevation (BFE), whichever is higher. 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 46-53(1)(a), is satisfied.
    2. Non-residential Construction – new construction and substantial improvements of any commercial, industrial or other non-residential structure and any severe repetitive loss structure shall either have the lowest floor (including basement), including machinery and equipment, elevated at or above the five-hundred (500) year water surface elevation, two (2) feet above the centerline of the street, or one (1) foot above the base flood elevation (BFE), whichever is higher, or together with attendant utility and sanitary facilities, be designed so that below the five-hundred (500) year water surface elevation 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 subsection. The Floodplain

Administrator shall maintain a record of such certification(s), which includes the specific elevation (in relation to mean sea level), to which such structures are flood proofed.

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 of 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 be certified by either a registered professional engineer or architect, or meet or exceed the following minimum criteria:
  - 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.
  - 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 community's flood hazard boundary map (FHBM) or Flood Insurance Rate Map (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 community's Flood Insurance Rate Map (FIRM) on sites:
    - i. outside of a manufactured home park or subdivision, \
    - ii. in a new manufactured home park or subdivision,
    - iii. in an expansion to an existing manufactured home park or subdivision, or
    - iv. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to the 500-year water surface elevation or two (2) feet above the base flood elevation, whichever is higher, 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 community's Flood Insurance Rate Map (FIRM) that are not subject to the provisions of paragraph (4) of this section be elevated so that either:

1. the lowest floor of the manufactured home be higher than the five-hundred (500) year water surface elevation or, two (2) feet above the base flood elevation, whichever is higher; or
2. the manufactured home chassis is supported by reinforced piers or other foundation elements, of at least equivalent strength, that are no less one (1) foot above the BFE and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
3. Mechanical equipment/ductwork must be elevated one (1) foot above the BFE.
5. Recreational Vehicles – Require that recreational vehicles placed on sites within Zones A1-30, and AE on the community’s Flood Insurance Rate Map (FIRM) either:
  - i. be on the site for fewer than one-hundred and eighty (180) consecutive days,
  - ii. be fully licensed and ready for highway use, or
  - iii. meet the permit requirements of Section 46-53(1), and the elevation and anchoring requirements for “manufactured homes” in 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. Critical Facilities – There shall be no critical facilities constructed in the one-hundred (100) year flood zone.
7. Floodplain Storage Capacity – Fill placed within the one-hundred (100) year and five-hundred (500) year flood zones shall be mitigated, such that; no flood storage capacity is lost and there is no net increase in volume of earth or other solid material onsite.

#### SECTION 46-84. STANDARDS FOR SUBDIVISION PROPOSALS.

- a. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Sections 46-21, 46-22, and 46-23 of this ordinance.
- b. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of Sections 46-27 and 46-53; and the provisions of Division 3 of this ordinance.
- c. Base flood elevation (BFE) data shall be generated for subdivision proposals and other proposed development including: the placement of manufactured home parks and subdivisions (comprised of more than fifty (50) lots or five (5) acres, whichever is less), if not otherwise provided pursuant to Sections 46-26 or 46-52(8) of this ordinance.
- d. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

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

**SECTION 46-85. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES).**

Located within the areas of special flood hazard established in Section 46-26, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable; 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 improvement of residential structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least above the base flood depth (BFD) specified in feet on the community's Flood Insurance Rate Map (FIRM), at or above the five-hundred (500) year water surface elevation, or at least two (2) feet above the centerline of the street, whichever is highest.
2. All new construction and substantial improvements of non-residential structures;
  - a. Shall have the lowest floor (including basement) elevated above the highest adjacent grade at least above the base flood depth (BFD) specified on the community's Flood Insurance Rate Map (FIRM), at or above the 500-year water surface elevation, or at least two (2) feet above the centerline of the street, whichever is highest, or
  - b. be designed, together with attendant utility and sanitary facilities, 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 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 46-53(1)(a), 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.

**SECTION 46-86. FLOODWAYS.**

Located within areas of special flood hazard established in Section 46-26, 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 apply:

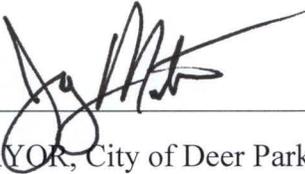
1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standards engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
2. If Section 46-86(1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Division 3.
3. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional Flood Insurance Rate Map (FIRM) and floodway revision through FEMA.

SECTIONS 87 – 100. RESERVED.

#### SECTION 46-101. FINDINGS AND DECLARATIONS.

It is hereby found and declared by The City of Deer Park that severe flooding has occurred in the past within its jurisdiction and will certainly occur within the future; that flooding is likely to result in infliction of serious personal injury or death, and is likely to result in substantial injury or destruction of property within its jurisdiction; in order to effectively comply with minimum standards for coverage under the National Flood Insurance Program; and in order to effectively remedy the situation described herein, it is necessary that this ordinance become effective immediately.

In accordance with Article VIII, Section 1 of the City Charter, this Ordinance was introduced before the City Council of the City of Deer Park, Texas, PASSED, APPROVED AND ADOPTED on this the 1<sup>st</sup> day of December, 2020 by a vote of 6 "Ayes" and 0 "Noes".



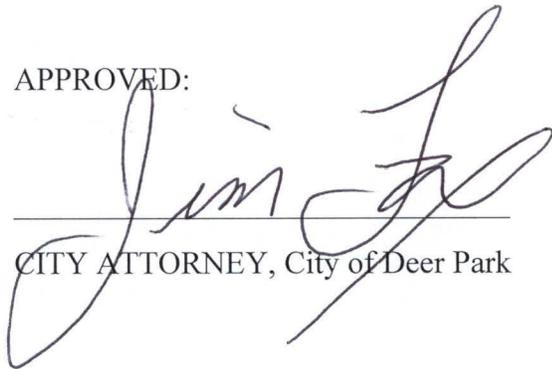
\_\_\_\_\_  
MAYOR, City of Deer Park

ATTEST:



\_\_\_\_\_  
CITY SECRETARY, City of Deer Park

APPROVED:



\_\_\_\_\_  
CITY ATTORNEY, City of Deer Park