ORDINANCE NO. 2022-

AN ORDINANCE AMENDING CHAPTER 50, ENTITLED "FLOODS" OF THE CODE OF ORDINANCES OF THE CITY OF LEAGUE CITY TO UPDATE AND CLARIFY VARIOUS SECTIONS; PROVIDING FOR CODIFICATION, PUBLICATION, AND AN EFFECTIVE DATE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LEAGUE CITY, TEXAS, as follows:

Section 1. That Section 50-35, entitled "Definitions" of the League City Code of Ordinances is hereby AMENDED to add the following definition (addition):

In-fill lot means undeveloped residential lots within an area platted prior to July 1, 2018.

Section 2. That Section 50-81, entitled "General Standards" of the League City Code of Ordinances is hereby AMENDED to read as follows (additions, ~~deletions~~):

Sec. 50-81. General standards.

In all areas of special flood hazard, the following provisions are required for all new construction and substantial improvements:

(1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
(2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
(3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
(4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located 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 flood waters 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 system 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) All elevation requirements noted in this chapter shall be documented using the FEMA elevation certificate, shall be certified by a registered professional engineer, surveyor, or architect, and shall be submitted to the floodplain administrator.

(9) Elevation certificates shall be submitted to the city floodplain coordinator for review and acceptance prior to a certificate of occupancy being issued.

(10) A structure shall be deemed to be substantially improved or substantially damaged when the cumulative costs of the improvements or damage repairs, when combined incrementally over a five-year period of time, equal or exceed 50 percent of the market value of the structure. Structures located within the 0.2 percent flood zone will be excluded from this requirement.

(11) For all new construction related to in-fill residential lots including but not limited to electrical, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) must be elevated a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street, or the highest adjacent grade (as defined by FEMA) to the building.

(~~11~~ 12) For all new and substantially improved construction ~~permitted on or after October 1, 2018~~, the electrical, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) must be elevated (residential) or floodproofed (nonresidential) to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood elevation.

~~(12) Substantial improvements to structures completed prior to October 1, 2018, must have the electrical, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) elevated (residential) or floodproofed (nonresidential) to a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building.~~

(13) For all new and substantially improved construction in areas of special flood hazard and 0.2 percent annual chance floodplain ~~permitted on or after October 1, 2018~~, the lowest floor and all attendant utilities must be elevated (residential) or floodproofed (nonresidential) to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood elevation.

~~(14) Substantial improvements to structures completed prior to October 1, 2018, in areas of special flood hazard and 0.2 percent annual chance floodplain, must have the lowest floor and all attendant utilities elevated (residential) or floodproofed (nonresidential) to a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building.~~

(~~15~~ 14) When fill or any other development is placed in the special flood hazard area that has the effect of reducing the storage volume of flood waters in the floodplain, then an equal amount of storage volume must be created in another location of the same floodplain to compensate for the storage capacity lost. Fill or other development within the special floodplain hazard area and the 0.2 percent floodplain shall not negatively affect upstream/downstream properties.

(~~16~~ 15) All new construction and substantial improvements permitted on or after October 1, 2018, shall have the lowest floor (including basement) elevated a minimum of

24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood.

Section 3. That Section 50-82, entitled "Specific Standards" of the League City Code of Ordinances is hereby AMENDED to read as follows (additions, ~~deletions~~):

Sec. 50-82. Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in sections 50-61, 50-63(8), or 50-83(3), the following provisions are required:

(1) Residential construction.

~~a.~~ New construction and substantial improvement of any residential structure ~~permitted on or after October 1, 2018~~ (excluding allowable in-fill lots), shall have the lowest floor (including basement), elevated a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood. In areas where the 500-year flood elevation is not published, ~~the 500-year wave envelope elevation at the nearest transect will govern~~ Table 5 – Coastal Transect Data from the most current FEMA Flood Insurance Study (FIS) will govern. 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 subsection 50-65(a)(1), is satisfied.

~~b. Substantial improvements to any residential structures completed prior to October 1, 2018, shall have the lowest floor (including basement), elevated a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building. 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 subsection 50-65(a)(1), is satisfied.~~

(2) Nonresidential construction.

~~a.~~ New construction and substantial improvements of any commercial, industrial or other nonresidential structures ~~permitted on or after October 1, 2018~~, shall have the lowest floor (including basement, and attendant utility and sanitary facilities) elevated or floodproofed to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.

~~b. Substantial improvements to any commercial, industrial, or other nonresidential structures completed prior to October 1, 2018, shall have the lowest floor (including~~

~~basement and attendant utility and sanitary facilities), elevated or floodproofed to a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.~~

(3) Enclosures. New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

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

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

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

(4) Manufactured homes.

a. All manufactured homes to be placed within zone A 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. All manufactured homes that are placed or substantially improved within zones A1-30, AH, and AE on sites:

1. Outside of a manufactured home park or subdivision,
2. In a new manufactured home park or subdivision,
3. In an expansion to an existing manufactured home park or subdivision, or
4. In an existing manufactured home park or subdivision,

on which a manufactured home has incurred "substantial damage" as a result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building; be a minimum of three inches above the nearest 500-year flood; and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

c. All manufactured homes that are placed or substantially improved on sites in an existing manufactured home park or subdivision within zones A1-30, AH and AE

that are not subject to the provisions of subsection (4) of this section must be elevated so that it achieves the higher of either:

1. The lowest floor of the manufactured home is elevated to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood; or
2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(5) Recreational vehicles. All recreational vehicles placed on sites within zones A1-30, AH, and AE must either:

a. Be on the site for fewer than 180 consecutive days,
b. Be fully licensed and ready for highway use, or
c. Meet the permit requirements of subsection 50-65(a),

and the elevation and anchoring requirements for "manufactured homes" in subsection (4) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnection type utilities and security devices, and has no permanently attached additions.

Section 4. That Section 50-84, entitled "Standards for areas of shallow flooding (AO and AH zones)" of the League City Code of Ordinances is hereby AMENDED to read as follows (additions, ~~deletions~~):

Sec. 50-84. Standards for areas of shallow flooding (AO and AH zones).

Located within the areas of special flood hazard established in section 50-61 are areas designated as shallow flooding. These areas have special flood hazards associated with 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 ~~permitted on or after October 1, 2018~~, shall have the lowest floor (including basement) elevated 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood.

~~(2) Substantial improvements to any residential structure completed prior to October 1, 2018, shall have the lowest floor (including basement), elevated a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building. 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 subsection 50-65(a)(1), is satisfied.~~

(~~3~~ 2) All new construction and substantial improvements of nonresidential structures ~~permitted on or after October 1, 2018~~, shall:

a. Have the lowest floor (including basement) elevated above the highest adjacent grade, at least as high as 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood; or

b. Together with attendant utility and sanitary facilities be elevated or floodproofed to 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood so the structure is watertight with walls substantially impermeable to the passage of water and with structural components that have the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy. A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this subsection, as proposed in subsection 50-65(a)(3), are satisfied.

c. A registered professional engineer or land surveyor shall submit a certification to the floodplain administrator that the standards of this section, as proposed in subsection 50-65(a)(1), are satisfied.

d. Within zones AH and AO, adequate drainage paths are required around structures on slopes, to guide floodwaters around and away from proposed structures.

~~(4) Substantial improvements to nonresidential structures completed prior to October 1, 2018, shall:~~

~~a. Have the lowest floor (including basement) elevated above the highest adjacent grade, at least as high as 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building; or~~

~~b. Together with attendant utility and sanitary facilities be elevated or floodproofed to 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building so the structure is watertight with walls substantially impermeable to the passage of water and with structural components that have the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy. A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this subsection, as proposed in subsection 50-65(a)(3), are satisfied.~~

~~c. A registered professional engineer or land surveyor shall submit a certification to the floodplain administrator that the standards of this section, as proposed in subsection 50-65(a)(1), are satisfied.~~

~~d. Within zones AH and AO, adequate drainage paths are required around structures on slopes, to guide floodwaters around and away from proposed structures.~~

Section 5. That Section 50-86, entitled "Coastal high-hazard areas" of the League City Code of Ordinances is hereby AMENDED to read as follows (additions, ~~deletions~~):

Sec. 50-86. Coastal high-hazard areas.

Located within the areas of special flood hazard established in section 50-61 are areas designated as coastal high-hazard areas (zones V1-30, VE, and V). These areas have special flood hazards associated with high velocity waters from tidal surges and hurricane wave wash; therefore, in addition to meeting all provisions outlined in this article, the following provisions also apply:

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

(2) All new construction shall be located landward of the reach of mean high tide.

(3) All new construction and substantial improvements ~~permitted on or after October 1, 2018~~, 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 a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest effective 500-year flood elevation included in the flood insurance study.

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 0.2 percent chance of being equaled or exceeded in any given year (500-year mean recurrence interval). A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction and certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (3)(a) and (b) of this section.

~~(4) All substantial improvements to structures completed prior to October 1, 2018, shall be elevated on piling 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 a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building.~~

~~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 or exceeded in any given year (100-year mean recurrence interval). A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction and certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (3)(a) and (b) of this section.~~

(~~5~~ 4) All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with nonsupporting 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 the supporting foundation system. For the purpose of this section, a

breakaway wall shall have a design safe loading resistance of not less than ten and not more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed 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 valued to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

(~~6~~ 5) If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access or storage. Such space shall not be used for human habitation.

(~~7~~ 6) The use of soil fill for structural support of buildings is prohibited.

(~~8~~ 7) Manmade alteration of sand dunes and mangrove stands which would increase potential flood damage is prohibited.

(~~9~~ 8) Manufactured homes that are placed or substantially improved within zones V1-30, V, and VE on the community's FIRM on sites:

a. Outside of a manufactured home park or subdivision,

b. In a new manufactured home park or subdivision,

c. In an expansion to an existing manufactured home park or subdivision, or

d. In an existing manufactured home park or subdivision,

on which a manufactured home has incurred "substantial damage" as the result of a flood, shall meet the standards of paragraphs (1)—(7) of this section and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision within zones V1-30, V, and VE on the community's FIRM shall meet the requirements of section 50-82(4) of this chapter.

(~~10~~ 9) Recreational vehicles placed on sites within zones V1-30, V, and VE on the community's FIRM are required to either (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the requirements in section 50-82(5) of this chapter and paragraphs (1)—(7) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

Section 6. That Section 50-87, entitled “Areas between limits of 100-year flood and 500-year flood zone X (shaded)” of the League City Code of Ordinances is hereby AMENDED to read as follows (additions, ~~deletions~~):

Sec. 50-87. Areas between limits of 100-year flood and 500-year flood zone X (shaded).
All new construction and substantial improvement of residential and nonresidential structures within zone X (shaded) designations shall meet the following standards:

(1) All new construction and substantial improvements of residential structures permitted on or after October 1, 2018, shall have the lowest floor, including basement, elevated a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the 500-year flood.

(2) Substantial improvements to structures completed prior to October 1, 2018, shall have the lowest floor, including basement, elevated a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building.

(3) All new construction and substantial improvements of nonresidential structures ~~permitted on or after October 1, 2018~~, shall:

a. Have the lowest floor, including basement, elevated a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the nearest 500-year flood; or

b. Together with attendant utility and sanitary facilities, be floodproofed to a minimum of 24 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building and be a minimum of three inches above the 500-year flood so that 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 effect of buoyancy. A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this subsection as proposed in subsection 50-65(a)(3), are satisfied.

~~(4) Substantial improvements to nonresidential structures completed prior to October 1, 2018, shall:~~

~~a. Have the lowest floor, including basement, elevated a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building; or~~

~~b. Together with attendant utility and sanitary facilities, be floodproofed to a minimum of 18 inches above the larger of the base flood elevation (BFE), the crown of the nearest street or the highest grade adjacent to the building so that 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 effect of buoyancy. A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this subsection as proposed in subsection 50-65(a)(3), are satisfied.~~

(~~5~~ 4) A registered professional engineer or registered public surveyor shall submit a certification to the floodplain administrator that the standards of this section, as proposed in subsection 50-65(a)(1), are satisfied.

Section 7. Savings. All rights and remedies which have accrued in favor of the City under this Ordinance and amendments thereto shall be and are preserved for the benefit of the City.

Section 8. Severability. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid, unconstitutional or otherwise unenforceable by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validityof the remaining portions thereof.

Section 9. Repealer. All ordinances and parts of ordinances in conflict herewith are hereby repealed but only to the extent of such conflict.

Section 10. Codification. It is the intent of the City Council of the City of League City, Texas, that the provisions of this Ordinance shall be codified in the City's official Code of Ordinances as provided hereinabove.

Section 11. Publication and Effective Date. The City Secretary shall cause this Ordinance, or its caption, to be published in the official newspaper of the City of League City, upon passage of such Ordinance. This Ordinance shall become effective upon passage.

PASSED first reading the _____ day of _____, 2022.

PASSED AND ADOPTED the ____ day of _____, 2022.

_____
PAT HALLISEY
Mayor

ATTEST:

_____
DIANA M. STAPP
City Secretary

APPROVED AS TO FORM:

_____
NGHIEM V. DOAN
City Attorney