

Ordinance amending Section 14-544, 14-552 and 14-556 of the Corpus Christi Code to update certain provisions to comply with Federal Emergency Management Agency (FEMA) requirements; providing for a penalty; and publication.

WHEREAS, by adopting the ISO/FEMA recommended changes to the City's Flood Hazard Prevention Code the City will minimize public and private losses due to changing flood conditions in areas of special flood hazard and improve the public health, safety and welfare of its citizens.

WHEREAS, the City is a participant in a voluntary program of the National Flood Insurance Program called the Community Rating System. This program awards points for going above and beyond the minimum standards of a participating community.

WHEREAS, adopting higher flood hazard prevention standards provides additional points to the City that can help reduce flood insurance premiums for flood insurance policies in Special Flood Hazard Areas in the City.

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CORPUS CHRISTI, TEXAS, THAT:

SECTION 1. The Corpus Christi Code, Section 14-544 is amended by adding the following language that is underlined (added) and deleting the language that is stricken (~~deleted~~) as delineated below:

Sec. 14-544. - Variance procedures.

- (a) The construction trade advisory & appeals board hears and renders judgment on requests for variances from the requirements of this ~~article-code~~.
- (b) The construction trade advisory & appeals board hears and renders judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this ~~article-code~~.
- (c) Any person or persons aggrieved by the decision of the construction trade advisory & appeals board may appeal such decision to a court of competent jurisdiction.
- (d) The floodplain administrator maintains a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (e) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this ~~article-code~~.
- (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 subsection 14-541(1) 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 division, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this chapter, section 14-502.
- (h) Variances may 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 of design of the structure.

(j) *Prerequisites for granting variances:*

(1) Variances may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(2) Variances may only be issued upon:

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

(3) Any applicant, to whom a variance is granted, may 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 for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:

(1) The criteria outlined in subsections 14-~~534~~ 544(a) through (i) are met; and

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

Sec. 14-552. - Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in ~~section 14-522, subsection 14-532(8)~~ [section 14-521, subsection 14-542\(8\)](#), or subsection 14-543(c), the following provisions are required:

- (1) *Residential construction.* New construction of any residential structure must have the lowest floor (including basement) and machinery or equipment, elevated to one (1) foot above the base flood elevation. Substantial damage and substantial improvement must have the lowest floor (including basement) and machinery or equipment, elevated to one (1) foot above the base flood elevation. Attached garages and enclosures below elevated buildings must meet the minimum NFIP requirements (elevated to the base flood elevation or have proper openings). 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 14-533(b)(1), is satisfied.
- (2) *Nonresidential construction.* New construction of any commercial, industrial, or other nonresidential structure must either have the lowest floor (including basement) elevated to one (1) foot above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is 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. Substantial damage and substantial improvement must have the lowest floor (including basement), elevated to at or above the base flood elevation or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this 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 must 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 (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding must be provided.
 - b. The bottom of all openings must 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. All manufactured homes to be placed within zone A on a city's FHBM or FIRM must be installed using methods and practices which minimize flood damage.
 - 1. For the purposes of this requirement, a manufactured home must be elevated and anchored to resist flotation, collapse or lateral movement.
 - 2. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
 - 3. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- b. Manufactured homes that are placed or substantially improved within zones A1-30, AH, and AE on the city's FIRM must be 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 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 one (1) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- c. Manufactured homes must be placed on substantially improved on sites in an existing manufactured home park or subdivision with zones A1-30, AH, and AE on the city's FIRM that are not subject to the provisions of subsection (4) of this section must be elevated ~~so that either~~ and the more stringent of the two is required:
 - 1. The lowest floor of the manufactured home is one (1) foot above the base flood elevation, ~~or~~
 - 2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (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.* Recreational vehicles placed on sites within zones A1-30, AH, and AE on the city's FIRM either:

- a. Must be on the site for fewer than one hundred eighty (180) consecutive days,
- b. Must be fully licensed and ready for highway use, or
- c. Must meet the permit requirements of subsection 14-545(a), and the elevation and anchoring requirements for manufactured homes in subsection (4) of this section.

- (6) 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.

Sec. 14-556. Coastal high hazard areas.

- (a) Areas that are subject to possible high-energy wave action, and which are identified as areas of special flood hazard established in section 14-522, are areas designated as coastal high hazard areas (zones V1-30, VE, and/or V).
- (b) 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-code](#), the following provisions also apply:
- (1) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures, and whether or not such structures contain a basement. The floodplain administrator maintains a record of all this information.
 - (2) All new construction must be located landward of the reach of mean high tide.
 - (3) All new construction and substantial damage must 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 one (1) foot above the base flood elevation.
 - b. Substantial improvements must have the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) elevated to at or above the base flood elevation.
 - c. The pile or column foundation and structure attached to the foundation is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
 1. Water loading values used must be those associated with the base flood.
 2. Wind loading values used shall be those required by applicable state or local building standards.
 - (4) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsections (3)a. and (3)b. of this section.
 - (5) All new construction and substantial improvements must have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.
 - (6) For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than ten (10), and not more than twenty (20) pounds per square foot.

- (7) Use of breakaway walls, which exceed a design safe loading resistance of twenty (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 must 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 may 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).
 1. Water loading values used shall be those associated with the base flood.
 2. Wind loading values used shall be those required by applicable state or local building standards.
- (8) Enclosed space below the lowest floor may be useable solely for parking of vehicles, building access or storage. The enclosed space below the lowest floor may not be used for human habitation.
 - a. All enclosed areas below base flood elevation that are greater than five (5) feet in height will be required to sign a non-conversion agreement that will be filed with the deed.
- (9) The use of fill for structural support of buildings is prohibited.
- (10) The use of manmade alteration of sand dunes and mangrove stands, which would increase potential flood damage, is prohibited.
- (11) Manufactured homes, which have incurred substantial damage as the result of a flood, must meet the standards of subsections (b)(1) through (b)(10) of this section, if they are placed or substantially improved within zones V1-30, V, and VE on the city'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.
- (12) 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 city's FIRM meet the requirements of subsection 14-542(4) of this Code.
- (13) Recreational vehicles, which are placed on sites within zones V1-30, V, and VE on the city's FIRM, must either:
 - a. Be on the site for fewer than one hundred eighty (180) consecutive days,
 - b. Be fully licensed and ready for highway use, or
 - c. Meet the requirements in section 14-522 of this ~~article~~[code](#) and subsections (b)(1) through (b)(10) of this section.
- (14) 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.
- (15) For properties within the boundaries of the North Beach Development Plan, minor grading and the placement of minor quantities of nonstructural fill are allowed in Zone V only for landscaping, drainage under and around buildings, and support of parking slabs, pool decks, patios, walkways, and similar site

elements. Nonstructural fill shall not prevent the free passage of floodwater and waves beneath elevated buildings, divert floodwater or waves such that building damage is exacerbated, or lead to damaging flood and wave conditions on a site or adjacent sites. Nonstructural fill is assumed to wash away and shall not be used in foundation design calculations.

- a. Nonstructural fill placed on Zone V sites ~~shall~~ ~~should~~ be similar to natural soils in the area. In many coastal areas, natural soils are clean sand or sandy soils free of large quantities of clay, silt, and organic material. Nonstructural fill shall not contain large rocks and debris. The developer/owner shall submit test results providing the classification of the existing and proposed soil using the Unified Soil Classification System (American Society for Testing and Materials (ASTM) Standard D2487) to the City's Floodplain Administrator for approval prior to fill being placed on Zone V sites.
- b. Placement of up to 2 feet of nonstructural fill under or around an elevated building is allowed without engineering analysis or certification, provided basic site drainage principles are not violated and provided there are no other site-specific conditions or characteristics that would render the placement of the fill damaging to nearby buildings. Placement of fill under or around an elevated building that exceeds 2 feet or that does not abide by basic site drainage principles requires an engineering analysis showing no diversion of floodwaters or waves that building damage is exacerbated or lead to damaging flood and wave conditions on the site or adjacent sites. In cases where site development involves removing a layer of soil and fill is added to the site later, the fill thickness should be evaluated relative to the pre-removal soil elevation, not the removed soil elevation.
- c. Minimum slopes for building sites to facilitate drainage away from buildings shall be shallower than 1 unit vertical to 5 units horizontal (regardless of fill height).
- d. ~~Parks, d~~Dunes, and dune vegetation will be conserved and remain in their natural state and not elevated. Placement of nonstructural fill in ~~dunes~~, and dune vegetation is prohibited.

SECTION 2. If for any reason any section, paragraph, subdivision, clause, phrase, word, or provision of this ordinance shall be held invalid or unconstitutional by final judgment of a court of competent jurisdiction, it shall not affect any other section, paragraph, subdivision, clause, phrase, word or provision of this ordinance, for it is the definite intent of this City Council that every section, paragraph, subdivision, clause, phrase, word or provision hereof be given full force and effect for its purpose.

SECTION 3. Publication shall be made in the official publication of the City of Corpus Christi as required by the City Charter of the City of Corpus Christi.

SECTION 4. A violation of this ordinance or requirements implemented under this ordinance constitutes an offense punishable under Section 1 - 6 and Section 14 -557 of the Corpus Christi Code.

SECTION 5. This ordinance takes effect after official publication.

Introduced and voted on the _____ day of _____, 2024.

PASSED and APPROVED on the _____ day of _____, 2024.

ATTEST:

Paulette Guajardo, Mayor

Rebecca Huerta, City Secretary