

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 7, BUILDINGS, ARTICLE VIII, FLOODPLAIN PROVISIONS, OF THE CODE OF ORDINANCES OF THE CITY OF FORT WORTH (2015), AS AMENDED, TO REPEAL AND REPLACE IN ITS ENTIRETY REVISING THE FLOODPLAIN MANAGEMENT REGULATIONS TO PROVIDE A REVISED STATEMENT OF PURPOSE RELATED AWARENESS OF FLOODPLAINS; CLARIFICATIONS AND ADDITIONS TO THE METHODS OF REDUCING FLOOD LOSS; REVISING AND ADDING DEFINITIONS RELATED TO FLOODPLAIN MANAGEMENT; REVISING REQUIREMENTS FOR FLOODPLAIN DEVELOPMENT PERMITS; CLARIFYING THE DUTIES OF THE FLOODPLAIN ADMINISTRATOR; REVISING PERMIT AND VARIANCE PROCEDURES AND REVISING STANDARDS FOR FLOODPLAIN DEVELOPMENT; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Legislature of the State of Texas has, in Chapters 51 and 214 of the Texas Local Government Code conferred upon local governments the authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

WHEREAS, the City of Fort Worth City Council adopted Floodplain Management regulations to protect people and property, ensure Federal flood insurance and disaster assistance if available, save tax dollars and reduce future flood losses; and

WHEREAS, the Federal Emergency Management Agency has identified special flood hazard areas within the boundaries of the City of Fort Worth and such areas may be subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare, and

WHEREAS, the City of Fort Worth was accepted for participation in the National Flood Insurance Program on June 4, 1980, and the City Council desires to continue to meet the requirements of Title 44 Code of Federal Regulations, Sections 59 and 60, necessary for such participation; and

WHEREAS, the City of Fort Worth adopted building and rehabilitation codes, pursuant to Chapter 214 of the Texas Local Government Code, to protect the public, health, safety and welfare, and such building and rehabilitation codes contain certain provisions that apply to the design and construction of buildings and structures in flood hazard areas; and

WHEREAS, The Legislature of the State of Texas has in the Flood Control Insurance Act, Texas Water Code, Section 16.315, delegated the responsibility of local government units to adopt regulations designed to minimize flood losses.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, TEXAS:

SECTION 1.

That the Code of the City of Fort Worth, Texas (2015), as amended, is hereby further amended by revising Chapter 7, Buildings, Article VIII, Floodplain Provisions to provide a revised statement of purpose related to awareness of floodplains; provide clarifications and additions to the methods of reducing flood loss; add and clarify definitions related to floodplain management; revise and clarify requirements for floodplain development permits; clarify the duties of the floodplain administrator; revise and clarify abatement and variance procedures; and clarify standards for floodplain development, which shall be and read as follows:

ARTICLE VIII: FLOODPLAIN PROVISIONS

DIVISION 1: PURPOSE, OBJECTIVES AND DEFINITIONS

Sec. 7-301 FINDINGS OF FACT.

(a) The flood hazard areas of Fort Worth are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

Sec. 7-302 STATEMENT OF PURPOSE.

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

- (a) Protect human life and health;
- (b) Minimize the need for future expenditures of public funds for costly flood control projects;
- (c) Minimize the need for rescue and relief efforts associated with flooding and that are generally undertaken at the expense of the general public;
- (d) Minimize prolonged business interruptions;
- (e) Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer lines, streets and bridges, that are located in floodplains;

- (f) 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 potential future flood blight areas;
- (g) Ensure that property owners, occupants, and potential property owners are aware of property located in flood hazard areas; and
- (h) Require that persons who knowingly occupy flood-prone areas assume full responsibility for their actions.

Sec. 7-303 METHODS OF REDUCING FLOOD LOSSES.

In order to accomplish reduction of flood loss, this article uses the following methods:

- (a) Restrictions or prohibitions to uses that are dangerous to health, safety or property in times of flood, or cause increases in erosion, flood heights or velocities;
- (b) Requiring that uses vulnerable to floods, including public facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (c) Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which are involved in the accommodation of flood waters;
- (d) Control filling, grading, dredging, excavation and other development which may increase flood damage;
- (e) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood-hazards to other lands;
- (f) Controlling development which would cause greater erosion or potential flood damage such as grading, dredging, excavation, and filling;
- (g) Imposing a regulatory 1% annual chance floodplain that requires using the ultimate development of the watershed to determine the fully developed base flood elevation. New developments must be constructed above this elevation.
- (h) Using any other method reasonably calculated to accomplish the purpose of this article and to promote the public health, safety and general welfare.

Sec. 7-304 DEFINITIONS.

Unless specifically defined below, words or phrases used in this article shall be interpreted to give them the meaning they have in common usage and to give this article its most reasonable application. The following definitions apply only to this article:

1% ANNUAL CHANCE FLOODPLAIN (also referred to as the **BASE FLOOD** or **100-YEAR FLOODPLAIN**). The land within a community subject to a 1% percent or greater chance of flooding in any given year. These areas are typically designated as a Federal Emergency Management Agency (FEMA) Zone A, AE, AH, or AO on FEMA Flood Insurance Rate Maps (FIRM Panels).

ACCESSORY STRUCTURE. A structure which is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principle structure. For example a residential structure may have a detached garage or storage shed for garden tools as

accessory structures. Other examples of accessory structures include gazebos, picnic pavilions, boathouses, small pole barns, storage sheds, and similar buildings. National Flood Insurance Program (NFIP) regulation for new construction generally apply to new and substantially improved accessory structures.

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

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

APPEAL. A request for a review by the boards or commissions specified herein of the floodplain administrator's interpretation of any provision of this article or a request for a variance.

APPURTENANT STRUCTURE. A structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

AREA OF FUTURE CONDITIONS FLOOD HAZARD. The land area that would be inundated by the 1% annual chance (100-year) flood based on future conditions hydrology.

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

AREA OF SPECIAL FLOOD HAZARD. The land in a floodplain within a community subject to a 1% or greater chance of flooding in any given year. The area may be designated as 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 on the Flood Hazard Boundary Map (FHBM) or a Flood Insurance Rate Map (FIRM).

BASE FLOOD. The flood having a 1% percent chance of being equaled or exceeded in any given year; also known as the **100-YEAR FLOOD** and **1% ANNUAL CHANCE FLOOD**.

BASE FLOOD DEPTH (BFD). The depth shown on the Flood Insurance Rate Map (FIRM) for Zone AO that indicates the depth of water above the highest adjacent grade resulting from a flood that has a 1% percent chance of equaling or exceeding that level in a given year.

BASE FLOOD ELEVATION (BFE). The elevation shown on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1—A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1—V30 or VE that indicates the water surface elevation resulting from the flood that has a 1% chance of equaling or exceeding that level in any given year. Also called the **BASE FLOOD**.

BASEMENT. Any area of the building having its floor subgrade (below ground level) on all sides.

BREAKAWAY WALL. 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.

CITY or COMMUNITY. The City of Fort Worth, Texas unless the context clearly indicates otherwise.

CONDITIONAL LETTER OF MAP REVISION (CLOMR). FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The letter does not revise an effective NFIP map, it indicates whether the project, if built as proposed, would be recognized by FEMA.

CRITICAL FACILITY. Those buildings and facilities that are essential for the delivery of vital services or protection of a community, especially during or after a disaster. When constructed, these facilities must be protected from flooding to the higher of 2.0 feet above the FEMA 0.2% chance (“500-year”) storm or the City 1% chance (“100-year”) storm occurring on fully-developed basin conditions. Examples of Critical Facilities include but are not limited to the following:

- (1) Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic and/or water-reactive materials;
- (2) Hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood;
- (3) Police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers that are needed for flood response activities before, during, and after a flood; and
- (4) Public and private utility facilities that are vital to maintaining or restoring normal services to flooded areas before, during, and after a flood.

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

DEVELOPMENT. Any human-made change in improved and unimproved real estate, including, but not limited to, the construction or alteration of buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials.

ELEVATED BUILDING. 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. For the purpose of determining rates, structures for which the “start of construction” commenced before the effective date of the initial Flood Insurance Rate Map (FIRM) or before January 1, 1975, for FIRMs effective before that date. **EXISTING CONSTRUCTION** is used interchangeably in this article with the term **EXISTING STRUCTURES**.

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulation adopted by a community.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FLOOD or FLOODING. A general and temporary condition of partial or complete inundation of normally dry land areas from:

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

FLOOD ELEVATION STUDY. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

FLOOD INSURANCE RATE MAP (FIRM). The 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. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

FLOOD INSURANCE STUDY (FIS). The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevations or the base flood, as well as data tables. Also see **FLOOD ELEVATION STUDY**.

FLOODPLAIN or FLOODPRONE AREA. Any land area susceptible to being inundated by water from any source (see definition of Flood or Flooding).

FLOODPLAIN DEVELOPMENT PERMIT (FDP). An authorization issued by the City for any work or development to be performed within areas of the floodplain.

FLOODPLAIN MANAGEMENT. The operation of an overall program of corrective and preventive measures for reducing flood damage, including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.

FLOODPLAIN MANAGEMENT REGULATIONS. Zoning ordinances, 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 standards for the purpose of flood damage prevention and reduction.

FLOOD PROTECTION SYSTEM. Those physical structural works for which funds have been authorized, appropriated and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a special flood

hazard as described in § 7-301 herein and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes, storm drain systems and detention/retention systems. These specialized flood modifying works are those constructed to conform to sound engineering standards.

FLOOD PROOFING. Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY. See **REGULATORY FLOODWAY.**

FULLY DEVELOPED. For watershed hydrology, all existing developed areas shall reflect current land use or current zoning, whichever yields the greatest runoff. All existing undeveloped areas shall reflect anticipated future land use, by the city's comprehensive plan, or by an approved concept plan, or as defined in the City of Fort Worth Stormwater Management Design Manual.

FULLY DEVELOPED BASE FLOOD ELEVATION. The elevation that indicates the water surface elevation resulting from the flood based upon Fully Developed hydrology that has a 1% chance of equaling or exceeding that level in any given year.

FUNCTIONALLY DEPENDENT USE. A use, which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

FUTURE CONDITIONS HYDROLOGY. See **FULLY DEVELOPED.**

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

HISTORIC STRUCTURES. Any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing, maintained by the Department of Interior) or preliminary determined by the Secretary of the Interior as meeting the requirements for individual listings on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a register historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
- (4) Individually listed on a local inventory or 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. 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 IMPACT ZONE. An area within 250 feet of the toe of a levee, levee system component or associated structure, where additional review is required to determine the impacts of the proposed development on the safety or performance of the levee system. Projects with potential levee system impacts must obtain approval from the levee system owner.

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

LOWEST FLOOR. The lowest floor of the lowest enclosed area (including basement and finished garage). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of 44 C.F.R. Part 60, § 60.3 of the National Flood Insurance Program regulations.

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

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

MEAN SEA LEVEL. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 (NAVD) or other datum, to which base flood elevations shown on a community's FIRM are referenced.

NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS. The regulations set forth for the National Flood Insurance Program in Title 44 of the Code of Federal Regulations.

NEW CONSTRUCTION. For the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM, June 4, 1980, 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 the CITY and includes any subsequent improvements to such structures.

NEW MANUFACTURED HOME PARK OR SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the community.

100-YEAR FLOOD. See **BASE FLOOD.**

PERSON. Any individual or group of individuals, firm, partnership, association, corporation, or any other entity including State and local governments and agencies.

RECREATIONAL VEHICLE. A vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projections;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel or seasonal use.

REGULATORY FLOODWAY. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

REPETITIVE LOSS. Flood-related damages sustained by a structure on two (2) separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, exceeds \$1,000 for each.

RIVERINE. Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc. in a natural or improved condition.

SPECIAL FLOOD HAZARD AREA (SFHA). See **AREA OF SPECIAL FLOOD HAZARD.**

START OF CONSTRUCTION. For other than new construction or substantial improvements under the Coastal Barriers Resources Act (CRBA), this is the date the building permit was issued, and pertains to substantial improvement to an existing structure as well as construction of a new structure, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvements was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For 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. 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. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT. Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before “start of construction” of the improvement. This term includes structures which have incurred “substantial damage”, regardless of the actual repair work performed. The term does not, however, include either:

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

ULTIMATE DEVELOPMENT. See **FULLY DEVELOPED.**

VARIANCE. A grant of relief from the requirements of this article. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article. For full requirements see 44 C.F.R. Part 60, § 60.6 of the National Flood Insurance Program Regulations.

VIOLATION. The failure of a structure or other development to be fully compliant with the community’s floodplain management regulations. A structure or other development without the elevation certificate, other certifications, permits or other evidence of compliance required in said 44 C.F.R. § 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4) or (e)(5) of the National Flood Insurance Program regulations is presumed to be in violation until such time as that documentation is provided.

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

Secs. 7-305—7-315 RESERVED.

DIVISION 2: GENERAL PROVISIONS

Sec. 7-316 LANDS TO WHICH THIS ARTICLE APPLIES.

This article shall apply to all special flood hazard areas within the City of Fort Worth or otherwise under its jurisdiction and control.

Sec. 7-317 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD.

The areas of special flood hazard, as identified by the Federal Emergency Management Agency (FEMA) in the current scientific and engineering report entitled, “The Flood Insurance Study (FIS) for Tarrant County, Texas and Incorporated Areas”, dated March 19, 2019, with accompanying FIRMs dated September 25, 2009 and March 19, 2019; current scientific and engineering report entitled, “The Flood Insurance Study (FIS) for Denton County, Texas and Incorporated Areas”, dated June 19, 2020, with accompanying FIRMs dated April 18, 2011, and June 19, 2020; current scientific and engineering report entitled, “The Flood Insurance Study (FIS) for Parker County, Texas and Incorporated Areas”, dated April 5, 2019, with

accompanying FIRMs dated September 26, 2008 and April 5, 2019; and current scientific and engineering report entitled, “The Flood Insurance Study (FIS) for Wise County, Texas and Incorporated Areas”, dated December 16, 2011, with accompanying FIRMs dated December 16, 2011; and all subsequent amendments and revisions thereto are hereby adopted by reference and declared to be a part of this article. Those areas, which have not yet been delineated on the FEMA FIRMs, but are known to constitute a special flood hazard are also included.

Sec. 7-318 ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT.

A floodplain development permit shall be required to ensure compliance with the provisions of this article. No structure or land in an area of special flood hazard shall hereafter be located, altered, have its use changed, or otherwise be developed unless a floodplain development permit has been issued, pursuant to the terms of this floodplain article. Proposed work must be started within six (6) months of the date of approval of a floodplain development permit, otherwise the permit will become null and void. The floodplain development permit shall expire and have no further effect twenty-four (24) months from the date of the approval of the floodplain development permit unless an extension is approved by the floodplain administrator. Extensions shall be requested in writing to the floodplain administrator with justifiable cause demonstrated. If the extension is not approved then the applicant must apply for a new floodplain development permit before beginning or continuing development within the floodplain.

When issued, the floodplain permit shall be valid only as to the applicant (i.e. Property owner and/or engineer) to whom it was originally issued and shall not be transferred to another applicant. A new floodplain development permit must be obtained by the new applicant. Any significant revisions to the approved development covered by the floodplain development permit will require additional review for approval. The determination that revisions are significant are within the discretion of the floodplain administrator.

Building permits, floodplain permits or plat approvals shall not be issued for properties with unresolved floodplain violations unless the aforementioned permits will remedy the violation.

The floodplain administrator is authorized to suspend or revoke a permit issued under these regulations whenever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any article or code of the city.

Procedures to obtain floodplain development permit are set forth in § 7-333 of this article.

Sec. 7-319—7-330 RESERVED.

DIVISION 3: ADMINISTRATION

Sec. 7-331 DESIGNATION OF THE LOCAL FLOODPLAIN ADMINISTRATOR.

The Director of Transportation and Public Works or designee is hereby appointed the floodplain administrator to administer and implement the provisions of this article and other appropriate sections of 44 C.F.R. (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management regulations.

Sec. 7-332 DUTIES AND RESPONSIBILITIES OF THE LOCAL FLOODPLAIN ADMINISTRATOR.

Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:

(a) Maintain and hold open for public inspection all records pertaining to the provisions of this article;

(b) Review permit applications for sites located in, or adjacent to, the regulatory floodplain, including the placement of manufactured homes, to determine if the proposed development site will be reasonably safe from flooding;

(c) Review and approve or deny all applications for development permits required by adoption of this article;

(d) Review permits for proposed development within a floodplain to provide reasonable assurance that all other necessary permits have been obtained from those federal, state or local governmental agencies (including § 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required;

(e) Review all applications for permits for development within a floodplain to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of § 7-350(a) are met;

(f) Interpret, as needed, the exact location of the boundaries of the areas of special flood hazards. For example, where there appears to be a conflict between a mapped boundary and actual field conditions, the floodplain administrator shall make the necessary interpretation. The floodplain administrator shall make such determinations in a reasonably prudent manner. When any such interpretation results in a determination that an area is not a special flood hazard, the issuance of any building permits for any part of the area subsequent thereto shall be subject to the applicant's agreement to indemnify, hold harmless, and defend the City of Fort Worth and the floodplain administrator for any adverse consequences resulting from or related to such a determination;

(g) Notify, in riverine situations, adjacent communities and the Texas Water Development Board (TWDB) and also the Texas Commission on Environmental Quality (TCEQ), prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency;

(h) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained or increased;

(i) When base flood elevation data has not been provided in accordance this article, the floodplain administrator shall obtain, review and reasonably utilize, any base flood elevation data and floodway data available from a federal, state or other reliable source, in order to administer Division 4 of this article;

(j) When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements or other development (including the placement of fill) shall be permitted within zones A1—30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined

with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community;

(k) Grant variances in conformance with the provisions of § 7-334, Variance procedures.

(l) Require applicants who submit hydrologic and hydraulic engineering analyses to support permit applications to submit to FEMA the data and information necessary to maintain the Flood Insurance Rate Maps when the analyses propose to change discharges, cross sections, base flood elevations, flood hazard area boundaries, or floodway designations; such submissions shall be made within six (6) months of such data becoming available.

Sec. 7-333 PERMIT PROCEDURES.

(a) Application Requirements:

(1) No person shall proceed with development of property within the floodplain until an application is submitted and a Floodplain Development Permit (FDP) is issued.

(2) Prior to issuance of the Floodplain Development Permit (FDP), or authorization to excavate or fill in the floodplain, all required permits must be obtained by the owner from all State and Federal regulatory bodies with jurisdiction in such matters. A copy of the appropriate agency's approved permit must be provided to the City with the FDP application.

(3) Application for a Floodplain Development Permit (FDP) must be presented to the floodplain administrator on forms provided on the City's website. The permit application must include, but not be limited to, plans 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:

a. An Elevation Certificate for structures on property located in or abutting the floodplain. The certificate must be completed by a registered public land surveyor or professional engineer and include the elevation in relation, to mean sea level, of the lowest floor including basement, finished garage and lowest elevation of machinery or equipment servicing the building, of all new and substantially improved structures. The certificate must be submitted within 60 days of completion of construction or substantial improvement;

b. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed (floodproofing requirements are set forth in § 7-347(b));

c. Certification from a registered professional engineer or architect that the nonresidential floodproofed structures shall meet the floodproofing criteria of § 7-347(b);

d. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;

e. Valley storage evaluation for sites located within a sump area associated with the Trinity River levee system. The determination of valley storage impacts consists of a comparison of pre-project (existing) conditions and post-project conditions. The maximum allowable valley storage decrease for the 1% annual chance flood is 0.0%; and

f. For existing structures within the floodplain that do not conform to current floodplain management standards, the Substantial Improvement or Substantial Damage Review Package must be submitted to obtain the substantial improvement or substantial damage determination.

1. If the proposed work is determined to be a substantial improvement then the entire structure must be brought into compliance with this article.
2. If the proposed work does not constitute a substantial improvement then the existing structure may be improved (remodeled) without conforming to requirements in this article. Once a property has been issued a floodplain development permit using the fifty (50) percent rule, any additional improvements thereafter will be tracked over a total of five (5) years. These improvements within the five-year period cannot exceed fifty (50) percent of the fair market value of the existing structure at the time of issuance of said first floodplain development permit.

(4) No application shall be accepted for review until the application meets the requirements of this article, including all necessary documents and supporting information. Applications that do not include all necessary documentation and supporting information shall be deemed not complete.

(b) Permit Evaluation. Approval or denial of a floodplain development permit by the floodplain administrator shall be based on all of the provisions of this article and the following relevant factors:

- (1) The danger to life and property due to flooding or erosion damage;
- (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (3) The danger that materials may be swept on to other lands to the injury of other persons or property;
- (4) The compatibility of the proposed use with existing and anticipated developments;
- (5) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
- (7) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
- (8) The necessity to the facility of a waterfront location, where applicable;
- (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (10) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area; and
- (11) The cumulative effects of development and the associated loss of stormwater storage and/or detention; and

(12) The impact the development may have on the overall function of the stormwater facilities and the impact on properties in its own and connecting watersheds. This may include but not be limited to changes in discharges as a result of changes in impervious cover, velocity, storage, creek roughness, etc.

(c) If a floodplain development permit application is disapproved, the floodplain administrator shall notify the applicant in writing of the section and specific requirement of this article with which the proposed development does not comply and the nature of such noncompliance.

(d) No building permits, inspections, or certificates of occupancy to structures will be issued unless the terms and conditions of this article are met.

Sec. 7-334 VARIANCE AND APPEAL OF INTERPREATION PROCEDURES.

(a) **Variances.** 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 the criteria outlined in subsections (1) through (8) below are met, and 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.

(1) A request for a variance shall be submitted in writing to the floodplain administrator. The administrator may issue a variance consistent with the provisions of this section.

(2) Prior to the request being considered, at minimum, the following supporting information shall be forwarded to the floodplain administrator for review and recommendations.

a. Plans drawn to scale showing the nature, location, dimensions and elevations of the property, existing and proposed structures, fill, storage of materials, floodproofing measures and the relationship of the above to the location of the channel and floodway and the minimum building elevation.

b. Furnish the following additional information as is deemed necessary by the floodplain administrator for the evaluation of the effects of the proposed use upon flood flows and other factors necessary to render an opinion on the suitability of the proposed use:

(i) Cross-sections showing the channel of the stream, elevation of land areas adjoining each side of the channel, and cross-sectional areas to be occupied by the proposed development.

(ii) A site plan showing elevations or contours of the ground, pertinent structure, fill or storage elevations; size, location and spatial arrangement of all proposed and existing streets, water supply, sanitary facilities, soil types and other pertinent information.

(iii) Profile showing the slope of the bottom of the channel or flow line of the stream.

(iv) Hydraulic information including water surface profiles for a minimum of the 1% annual chance event for existing and proposed improvements.

(v) Specifications for building construction and materials, floodproofing, filling, dredging, grading, channel improvement, storage of materials, water supply, and sanitary facilities.

(vi) Photographs showing existing land uses and vegetation upstream and downstream.

(3) Denial of a variance by the floodplain administrator concerning design standards for floodproofing which have been set forth in a nationally recognized standard acceptable to the city,

shall be made to the construction and fire prevention board of appeals. The board may only approve alternate methods and shall not approve the omission thereof.

(4) 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.

(5) 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, provided the relevant factors in § 7-333(b) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

(6) Upon consideration of the factors noted above and the intent of this article, the floodplain administrator or appropriate appeal board may attach such conditions to the granting of variances as deemed necessary to further the purposes and objectives of this article.

(7) Variances shall not be issued within any designated floodway if any increases in flood levels during the base flood discharge would result.

(8) A variance shall only be issued upon a determination that:

- a. The variance is the minimum necessary considering the flood hazard to accord relief;
- b. A showing of good and sufficient cause is made;
- c. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
- d. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, the creation of nuisances, fraud on or victimization of the public (including future owners) or conflict with existing local laws or ordinances.

(9) The Floodplain Administrator shall provide a determination to grant or deny a variance within 30 days from submittal of the variance request, unless additional information was requested to support the variance request which delays the completion of the review.

(10) The Floodplain Administrator shall provide signed, written notice mailed by certified mail, return receipt requested, to an applicant prior to the granting of a variance stating that should a structure be permitted to be built with the lowest floor elevation below the standard minimum floor elevation, the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation. Such notice shall be effective upon deposit in United States mail.

(b) **Interpretation.** If there is an alleged error in an interpretation of any requirement, decision or determination made by the floodplain administrator in the enforcement or administration of this article, other than that set forth in § 7-333 may be appealed to the construction and fire prevention board of appeals.

(1) An appeal of an interpretation must be in writing and filed with the flood administrator and appeal board and specifically allege the error in the decision or determination of the floodplain

administrator for the property in question. All such appeals to the appeal board must be made 30 days from the date of the floodplain administrator's official written decision or determination.

(2) Applicants shall provide any additional information upon request of the appeal board that is deemed necessary to review the request for variance.

Secs. 7-335—7-345 RESERVED.

DIVISION 4: PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 7-346 GENERAL STANDARDS.

In all areas of special flood hazards the following provisions are required.

(a) 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.

(b) All new construction or substantial improvements shall be constructed using methods and practices that minimize flood damage.

(c) All new construction or substantial improvements shall be constructed with materials resistant to flood damage.

(d) 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 or located at least two feet above the fully developed base flood elevation so as to prevent water from entering or accumulating within the components during conditions of flooding.

(e) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(f) All new and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(g) All new and replacement on-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(h) All new parking lots shall be designed to not exceed twelve (12) inches of water depth during the fully developed base flood unless provisions have been made to remove motor vehicles during flood events.

Sec. 7-347 SPECIFIC STANDARDS.

In all areas of special flood hazards where base flood elevation data have been provided, the following provisions are required.

(a) **Residential Construction.** New construction and substantial improvement of any residential structure shall have the lowest floor (including basement, finished garage, and machinery or equipment servicing the building), elevated at least two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevation, whichever is greater. A registered public

land surveyor or professional engineer shall submit a certification to the floodplain administrator that the standards of this subsection (a) and Sec 7-333(a)(3) are satisfied.

(b) **Nonresidential Construction.** New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall have either:

(1) The lowest floor (including basement, finished garage, and machinery or equipment servicing the building), elevated two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevations, whichever is greater; or

(2) The lowest floor (including basement, finished garage, and machinery or equipment servicing the building) together with attendant utility and sanitary facilities, be floodproofed and shall:

a. Be designed so that below the level of two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevation, whichever is greater, 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;

b. Have a registered professional engineer or architect develop and/or review structural design, specifications and plans for the construction, and certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection (b) and adhere to FEMA standards; and

c. Provide a record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed. The record shall be maintained by the floodplain administrator.

(c) **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 and meet or exceed the following minimum criteria:

(1) A minimum of two openings on separate walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

(2) The bottom of all openings shall be no higher than one foot above grade; and

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

(d) **Manufactured Homes.** For new or existing manufactured home parks or subdivisions located within areas of special flood hazard the following shall apply.

(1) All new and replacement manufactured homes to be placed or substantially improved within an area of special flood hazard must be elevated on a permanent foundation such that the bottom of the frame of the manufactured home is elevated two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevation, whichever is higher.

(2) All new and replacement manufactured homes to be placed or substantially improved within areas of special flood hazard, shall be installed using methods and practices which minimize

flood damage. The manufactured home must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement with certification by a registered professional engineer that the improvements will not increase flood flows, heights, or damages. 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.

(3) All manufactured homes shall be in compliance with subsection (a) of this section.

(4) Fully enclosed areas below elevated manufactured homes shall comply with the requirements of subsection (c) of this section.

(5) Mechanical equipment and outside appliances shall be elevated two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevation, whichever is higher.

(6) No manufactured home will be allowed to be placed within a floodway.

(e) Recreational Vehicles.

(1) All recreational vehicles to be placed on sites within areas of special flood hazard 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 Sec. 7-333, and the elevation and anchoring requirements for “manufactured homes” in subsection (d) of this section.

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

(f) Temporary Structures and Temporary Storage.

(1) *Temporary structures placed in areas of special flood hazard.* Temporary structures shall be erected for a period of less than 180 days. Temporary structures shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the base flood. Fully enclosed temporary structures shall have flood openings that are in accordance with subsection (c) of this section to allow for the automatic entry and exit of flood waters.

(2) *Temporary storage in areas of special flood hazard.* Temporary storage includes storage of goods and materials for a period of less than 180 days. Stored materials shall not include hazardous materials.

(3) *Floodway encroachment.* Temporary structures and temporary storage in floodways shall meet the requirements of Section 7-350 of this article.

(h) Critical Facilities.

Construction of new critical facilities shall be, to the extent possible, located outside of the limits of the area of special flood hazard. Construction of new critical facilities shall be permissible within the area of special flood hazard area if no feasible alternative site is available. Access routes

elevated to or above the base flood elevation shall be provided to all critical facilities to the maximum extent possible.

(i) Tanks.

(1) New and replacement tanks in flood hazard areas shall either be elevated above the base flood elevation on a supporting structure designed to prevent flotation, collapse or lateral movement during conditions of the base flood, or be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of 1.5 times the buoyant forces assuming the tank is empty, during conditions of the base flood.

(2) New and replacement tank inlets, fill openings, outlets and vents shall be placed a minimum of two feet above the base flood elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tank during conditions of the base flood.

(j) Fences and Walls.

(1) Fences are a form of development and require a floodplain development permit. Evaluation of floodplain development permit applications for proposed fences will be based on the following criteria:

a. Fencing that consists of solid walls, creates a barrier impervious to stream flow or fencing that greatly restricts the passage of water will not be allowed. These include masonry walls, retaining walls, chain link fencing, space board-type fencing or similar fencing that creates a solid wall either by design or the accumulation of debris.

b. Fencing outside of the floodway but within the special flood hazard area will be restricted to the least flow-restrictive types of open fencing that allows the passage of water.

(2) New and replacement fencing shall be designed to collapse under conditions of the base flood or to allow the passage of water and debris. The following provisions shall apply to all fences permitted in the special flood hazard area:

a. Fences in the regulatory floodway are prohibited;

b. Fences must be setback a minimum of five feet from the top-of-bank;

c. Fencing must be built in removable sections;

d. Fencing that consists of solid walls, creates a barrier impervious to stream flow or fencing that greatly restricts the flow of water is prohibited; and

e. Fences that are significantly damaged or destroyed by a flood shall require a floodplain development permit to ensure that reconstruction methods are consistent with the need to minimize future flood damages.

Sec. 7-348 STANDARDS FOR SUBDIVISION PROPOSALS.

(a) All subdivision proposals including manufactured home parks and subdivisions shall be consistent with §§ 7-301, 7-302 and 7-303 of this article.

(b) All proposals for the development of subdivisions including manufactured home parks and subdivisions shall meet floodplain development permit requirements of §§ 7-318, 7-333 and the provisions of Division 4 of this article.

(c) Base flood elevation data for FEMA regulatory and fully developed conditions shall be generated for subdivision proposals and other proposed development, including the placement of manufactured home parks, and subdivisions which are greater than 1 acre, if not otherwise provided pursuant to this article.

(d) All subdivision proposals including manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

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

(f) Base flood elevation data shall be generated by a detailed engineering study for all Zone A areas, within 100 feet of the contour lines of Zone A areas, and other streams not mapped by FEMA, as indicated on the community's FIRM.

(g) FEMA floodplains and the City's fully developed floodplains must be mapped anywhere that the contributing drainage area is 64 acres or greater. Post-project FEMA floodplain delineations must be submitted to FEMA through the Letter of Map Change (LOMC) process, and compliant with all applicable Federal regulations. FEMA floodplains must be based upon either the FEMA current effective hydrologic model for the basin, or a new hydrologic model that reflects existing land uses with the proposed project in place. The City's fully developed floodplains must be based upon fully developed basin conditions from either a hydrologic model previously accepted by the City, or from a new hydrologic model compliant with criteria in the most current Stormwater Criteria Manual.

(h) Existing channels must not be increased or decreased from their natural state until engineering data meeting the requirements of Stormwater Management has been approved.

(i) When development is proposed in areas that do not indicate an established floodway (Zones A and AE), a licensed professional engineer shall define the regulatory floodway through hydrologic and hydraulic analyses. The Floodplain Administrator can make the determination to not require establishment of a floodway for sites where it might not be possible to designate a typical one foot flood rise floodway using the standard FEMA approved models or where one would make little practical sense.

(j) If building permits are requested for the individual lots which are shown located within the effective FEMA floodplain (not including floodway) before the LOMR to revise the FEMA floodplain to reflect the subdivision has become effective then separate Floodplain Development Permits will be required for each lot. For lots located within the effective FEMA floodway, FDPs cannot be issued until the LOMR to revise the floodway has become effective. As a condition of approval for the FDPs, an elevation certificate for the individual lot must be submitted to the city within 60 days upon completion of construction. In addition, the following conditions must be met to obtain approval of the permit:

(1) Either, the LOMR flood study must be reviewed and approved by the City and submitted to FEMA for review with the FEMA case number provided to the City; or,

(2) A preconstruction elevation certificate for the individual lot must be provided to verify the grading matches the approved plans and to confirm the structure will be built to the correct minimum finished floor elevation.

Sec. 7-349 STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES).

Areas of shallow flooding are designated as AO or AH Zones within areas of special flood hazard. These shallow flooding areas have special flood hazards 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 and indeterminate, and where velocity flow may be evident. Such flooding is characterized by pond or sheet flow; therefore, in these areas the following provisions shall apply:

(a) All new construction and substantial improvements of residential structures must have the lowest floor (including basement, finished garage, and machinery or equipment servicing the building) elevated two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevation, or two feet above the highest adjacent grade, or two feet above the depth number specified in feet on the FIRM (at least two feet if no depth number is specified), whichever is higher controls.

(b) All new construction and substantial improvement of nonresidential structures shall comply with either (b)(1) or (b)(2) below.

(1) The lowest floor (including basement, finished garage, and machinery or equipment servicing the building) must be elevated two feet above the fully developed base flood elevation or the FEMA regulatory base flood elevation, or two feet above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified), whichever is higher controls; or

(2) The structure and attendant utility and sanitary facilities must be floodproofed to or above the controlling elevation described in subsection (b)(1) above, so that below the base specified flood depth in an AO Zone, or below the base blood elevation in an AH Zone, and any space below that elevation 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.

(c) A registered professional engineer, or architect, as applicable, shall submit a certification to the floodplain administrator that the standards of this article are satisfied.

(d) Adequate drainage paths shall be provided around structures on slopes within Zones AH or AO to guide flood waters around and away from proposed structures.

Sec. 7-350 FLOODWAYS.

Floodways are areas located within areas of special flood hazard. The floodway can be an extremely hazardous area due to the velocity of flood waters which can carry debris, potential projectiles and erosion concerns. Therefore, the following provisions shall apply:

(a) Encroachments are prohibited, including fill, new construction, substantial improvements of non-conforming structures, and other development within the adopted regulatory floodway unless it has been demonstrated to the satisfaction of the floodplain administrator by a professional registered engineer through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment, individually or collectively, shall not result in any increase in flood flows or damages and shall not increase the base flood elevation during the occurrence of the 1% annual chance storm event for fully developed conditions. The registered

professional engineer must submit a no-rise certificate with supporting documentation to the floodplain administrator if a no-rise analysis is completed.

(b) If the provisions of the foregoing subsection (a) are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article.

(c) Under the provisions of 44 C.F.R. Chapter 1, § 65.2, 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 completes all of the provisions required by Section 65.12 of the National Flood Insurance Program regulations.

(d) Exemptions for minor projects. Small projects that are not an obstruction to floodwaters, do not increase the natural grade, and will not increase flood stages can be permitted without requiring a no-rise certification per the discretion of the floodplain administrator. Minor project examples include paving of a driveway or parking area at the existing grade, and small isolated obstructions such as a mailbox, a pitcher's mound, or a single telephone pole.

(e) No person shall proceed with development of property within the floodway until a Floodplain Development Permit has been issued and the development is in compliance with this section.

Sec. 7-351 PENALTIES FOR NONCOMPLIANCE.

No structure or land shall hereafter be constructed, located, extended, converted, altered or have its use changed without full compliance with the terms of this article and other applicable regulations. Violation of the provisions of this article by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$2,000 for each violation in accordance with § 1-6(b), and each and every day the violation occurs shall constitute a separate violation. Nothing herein contained in this section or any other section of this article shall prevent the City of Fort Worth from taking such other lawful action as is necessary to prevent or remedy any violation, including but not limited to refusal to approve a plat or to issue a building permit, or to obtain injunctive relief against the violator pursuant to Tex. Local Government Code § 54.016 or any other statute, or any other legal remedy available to the city.

Sec. 7-352 ABROGATION AND GREATER RESTRICTIONS.

This article is designed to be cumulative and in no way abrogate other provisions of the state law, the city code, ordinances, rules, approved policies of various City of Fort Worth and other governmental commissions and departments dealing with flooding, or any existing easements, covenants or deed restrictions. If there exists any apparent conflict or overlap between provisions of this article and other ordinances, rules or regulations, or any easements, covenants or deed restrictions affecting the property in question, the more stringent provision shall apply. All procedures and permits mandated by other provisions of the city's laws shall remain in full force and effect and are incorporated as if reproduced in full herein. Some examples of these other materials include the subdivision ordinance, as amended, and the zoning ordinance, as amended. There are federal and state laws that are and remain applicable to this subject matter.

Sec. 7-353 INTERPRETATION.

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

- (a) Considered as minimum requirements;
- (b) Liberally construed in favor of the City of Fort Worth; and
- (c) Deemed neither to limit nor repeal any other powers granted under state statutes.

Sec. 7-354 WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by human-made or natural causes. This article does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damage. This article shall not create liability on the part of the City of Fort Worth, or any officer or employee thereof for any flood damages that results from reliance on this article or any administrative decision lawfully made thereunder. In no case shall responsibility or liability arise from the design or operation of drainage facilities dedicated to the City.

Secs. 7-355—7-370 RESERVED.

DIVISION 5: ABATEMENT

Sec. 7-371 ORDER OF ABATEMENT.

Whenever the floodplain administrator, or designee, or any code compliance officer finds, that a violation of the provisions of this article has occurred, he or she shall advise the property owner of this violation in writing and direct said owner to abate the violation. For purposes of this article, said notice shall be mailed by certified mail and shall be effective when deposited in the mail addressed to the person or entity listed as the owner on the tax rolls of the City of Fort Worth, regardless of whether such person or entity owns record title to the property or is otherwise the legal owner of the property. The notice shall detail the nature of the violation and shall establish a reasonable abatement period.

Sec. 7-372 EXTENSION OF TIME.

Whenever an order has been given by the floodplain administrator, or designee, or code compliance officer to abate any violation of this article under the provisions of § 7-371 the owner thereof shall have the right, within the period of time given in the order for abatement, to appear at the office of the floodplain administrator with a written explanation to show cause why such order should not or cannot be complied with, and the floodplain administrator may, at his or her discretion, give such extension of time for the abatement or removal of such violation as may be

necessary, provided that there is no immediate danger to the public health, safety or general welfare.

Sec. 7-373 VOLUNTARY ABATEMENT.

The owner of any property found to be in violation under the provisions of this article may abate the violation at any time within the abatement period by repair or removal. The floodplain administrator shall be advised in writing by the owner of the property that the abatement has occurred and may inspect the premises to ensure that the violation has been abated. Should any of the items which constitute a violation be placed on other public or private property without consent from the owner or person in control of such property, this will constitute a separate violation of this article and appropriate enforcement action shall be taken by the floodplain administrator or his or her designee or any code compliance officer.

Sec. 7-374 FAILURE TO VOLUNTARILY ABATE A VIOLATION.

If a violation is not properly abated within the period established under the provisions of Sec. 7-371, the city council shall hold a public hearing to determine if the violation should be abated under the police powers of the city.

Sec. 7-375 NOTICE OF PUBLIC HEARING.

A written notice of the public hearing before the city council shall be served on the property owner at least ten days prior to the date set for the public hearing. Service shall be made upon the owner by personal service, or by certified or registered mail. If made by certified mail, services shall be effective on the date the notice is deposited in the United States mail. If there is no known address for the owner, the notice of the hearing shall be published in a newspaper of general circulation in the city at least ten calendar days before the hearing. The failure of any person to receive such notice shall not affect the validity of the proceedings.

Sec. 7-376 HEARING BY THE CITY COUNCIL.

At the public hearing, the city council shall hear and consider all relevant evidence, objections or protests and shall receive testimony from owners, witnesses, city personnel and interested persons relative to such alleged violation and to proposed abatement measures. The hearing may be continued from time to time.

Sec. 7-377 DECISION OF THE CITY COUNCIL.

Following the public hearing, the city council shall consider all evidence and determine whether the property, or any part thereof, constitutes a violation of this article as alleged. If the council finds that a violation does exist and that there is sufficient cause to abate the violation, the city council shall make a written order setting forth the findings and ordering the owner or other person having charge or control of the property to abate the violation by repair or removal in the manner and by the means specifically set forth in that order. The order shall set forth the time within which the abatement shall be completed.

Sec. 7-378 LIMITATION ON FILING JUDICIAL ACTIONS.

Any owner or other person with a vested interest who is aggrieved by the decision of the city council ordering the abatement of any violation under the provisions of this article may contest such decision by filing a petition in court within ten days of the date of the decision of the city council. Otherwise, the decision of the city council shall be deemed final and conclusive, and all objections to such decision shall be deemed waived.

Sec. 7-379 SERVICE OF ABATEMENT ORDER.

Within five days following the decision of the city council, the property owner and/or the person having charge or control of the premises shall be served with a copy of the written order in the manner provided in § 7-375.

Sec. 7-380 ABATEMENT BY PROPERTY OWNER.

The property owner, or person having charge or control of the property, may at his or her own expense abate the violation as prescribed by the order of the city council prior to the expiration of the abatement period set forth in order. If the violation has been inspected by a representative of the transportation and public works department and has been abated in accordance with the order, the proceedings shall be terminated.

Sec. 7-381 ABATEMENT BY CITY.

If a violation is not completely abated within the time prescribed in the city council order, the floodplain administrator, or other designated city official, is authorized and directed to cause the violation to be abated by city forces or private contract. In furtherance of this section, the floodplain administrator or duly authorized agents, employees, contractors, subcontractors or other representatives of the City of Fort Worth are expressly authorized to enter upon the property to abate the violation.

Sec. 7-382 RECORD OF ABATEMENT COSTS.

(a) The floodplain administrator, or such other city official as the administrator may designate, shall keep an account of the costs (including incidental expenses) of abating the violation on each separate lot or parcel of land where the work is done and shall render an itemized report in writing to the city council showing the cost of abatement of said, violation including any salvage value relating thereto; provided that before said report is submitted to the city council a copy of the same shall be served on the property owner in the manner provided in § 7-375, together with a notice of the time when said report shall be heard by the city council for confirmation.

(b) The city council shall set the matter for hearing to determine the correctness and reasonableness of the abatement costs.

(c) Written proof of the service of such report shall be made under oath and filed with the city secretary.

(d) The term INCIDENTAL EXPENSES shall include, but not be limited to, the actual expenses and costs of the city in the preparation of notices, specifications and contracts, inspection of work (including survey if necessary), and costs of printing, mailing and publication required hereunder.

Sec. 7-383 REPORT; HEARING AND PROCEEDINGS.

The city council shall hear and pass upon the report of the abatement costs, together with any objections or protests. Thereupon, the city council may make such revision, correction or modification in the report, as it may deem just, after which, the report, as submitted or as revised, corrected or modified, shall be confirmed by the council. The decision of the city council on the correctness and reasonableness of abatement costs shall be final and conclusive.

Sec. 7-384 ASSESSMENT OF COSTS AGAINST PROPERTY; LIEN.

(a) The total cost of abating such violation, as confirmed by the city council, shall constitute a special assessment against the respective lot or parcel of land to which it relates, and, upon recordation in the office of the county clerk of a notice of lien, as so made and confirmed, shall constitute a lien on said property for the amount of such assessment.

(b) After such confirmation and recordation, a copy of the notice of lien may be turned over to the city tax department, whereupon it shall be the duty of the tax collector to add the amounts of the respective assessments to the next regular city tax bills for said respective lots and parcels of land, and thereafter said amounts shall be collected at the same time and in the same manner as ad valorem taxes are collected and shall be subject to the same penalties and the same procedure under foreclosure and sale as in the case of delinquent ad valorem taxes.

(c) At any time after recordation, such lien may be foreclosed by judicial or other sale in the manner and means provided by law.

(d) The foregoing remedy shall not preclude a suit against any person violating this article who may be held personally liable for the cost incurred by the City of Fort Worth in connection with such abatement procedures. The costs of abating any such violation shall constitute a personal liability of the person causing such abatement procedures to be necessary. In addition, the foregoing remedy shall not constitute the exclusive remedy available to the City of Fort Worth to abate a violation of or otherwise enforce the provisions of this article, and the City of Fort Worth may elect any other legal remedy or remedies available to it to obtain compliance with this article. The abatement provisions set forth above shall operate as an enlargement and not a limitation of the power of the City of Fort Worth, and such provisions shall not prevent said city from using any means legally available to it, with or without notice to the landowner, in the event of an emergency or other situation posing a serious threat to the public health, safety or welfare.

DIVISION 6: DEVELOPMENT WITHIN THE TRINITY RIVER CORRIDOR

Sec. 7-385 STATEMENT OF PURPOSE.

The City of Fort Worth participates in the Trinity River Corridor Development Certificate (CDC) process that is coordinated through the North Central Texas Council of Governments (NCTCOG) to stabilize flood risk along the Trinity River. The CDC process allows for development within the Trinity River Corridor while ensuring that the development does not raise flood water levels

or reduce flood storage capacity. The City of Fort Worth retains ultimate control over floodplain permitting decisions within our jurisdiction while allowing our neighboring communities and agencies the opportunity to review and comment on projects along the Trinity River Corridor.

Sec. 7-386 DEFINITIONS.

For the purpose of this division, the following words, phrases and terms shall have these meanings:

CDC MODEL. The official CDC HEC-RAS computer model of the Upper Trinity River study area. The CDC Model includes constructed projects and several projects that are permitted but no constructed.

CORRIDOR DEVELOPMENT CERTIFICATE (CDC). Permission for development activity within the Regulatory Zone of the Trinity River Corridor. The CDC is issued by the city as part of the floodplain permitting process prior to development.

CORRIDOR DEVELOPMENT CERTIFICATE MANUAL (CDC MANUAL). The document published by NCTCOG that provides information on the CDC process, including the CDC application.

DEVELOPMENT. Any human-made change to improved or unimproved real estate, including but not limited to, the construction or alteration of buildings or other structures, mining, dredging, filling, grading, clearing, paving, excavation, drilling operations or storage of equipment or materials. This also includes any levee or other improvement defined by the Texas Commission on Environmental Quality (TCEQ).

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG). Voluntary association of, by and for local governments, established to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development.

CDC REGULATORY ZONE. The area where the CDC Process and requirements apply. This area is FEMA 100-year floodplain (also known as the special flood hazard area) minus areas of Specific Prior Development.

STANDARD PROJECT FLOOD (SPF). The flood that may be expected from the most severe combination of meteorological and hydrologic conditions that are considered to be reasonably characteristic of the geographical region involved, excluding extremely rare combinations. In practical terms, a SPF usually has a 0.30 to 0.08 percent probability of being equaled or exceeded in any given year, and is usually between 40 and 60 percent of the Probably Maximum Flood (PMF). The SPF represents a “standard” against which the degree of protection selected for a project may be judged and compared with protection provided for similar projects in other localities. In general terms, the SPF for the Trinity River Corridor is commonly equated to an 800-year storm frequency.

TRINITY RIVER CORRIDOR. Within the City of Fort Worth, the Trinity River Corridor is defined as the bed and banks of the Trinity River from the dams of Lake Worth and Benbrook Lake, downstream to the eastern corporate limit, and all of the adjacent land area and all watercourses within the boundaries of the river floodplain within the Fort Worth city limits.

Sec. 7-387 CORRIDOR DEVELOPMENT CERTIFICATE MANUAL ADOPTED STANDARDS.

The current edition of the Corridor Development Certificate Manual, and all subsequent amendments and revisions thereto are hereby adopted as the standard for development within the Trinity River Corridor and is incorporated herein by reference. The current manual and application can be downloaded from the NCTCOG website.

Sec. 7-388 CDC ENFORCEMENT.

(a) Violations. A person commits a violation by commencing development within the Trinity River Corridor without first submitting a CDC application and obtaining documentation from the City granting a Corridor Development Certificate unless an exemption has been obtained in accordance with subsection 7-391.

(b) Penalties. A person who commits a violation of any provision of the CDC process shall be required to return the property to its previous or original condition or to go through the CDC process and make any required accommodations that result from the CDC process.

(c) Enforcement. Any code compliance officer, the floodplain administrator or designee shall have the authority to enforce the provisions of this division.

Sec. 7-389 CDC APPLICATION.

The owner or representative of any proposed public or private development located in the vicinity of the CDC Regulatory Zone must contact the floodplain administrator to determine if a Corridor Development Certificate is required. If required, the owner or representative must follow the CDC process as described in the CDC Manual. The current manual and application can be downloaded from the NCTCOG website. The City will not approve and development activity in the floodplain until the CDC and FDP applications have been reviewed and signed by the City.

Sec. 7-390 REVIEW OF APPLICATION; APPROVAL; DENIAL OF APPROVAL.

The floodplain administrator shall deny any application for a Corridor Development Certificate, unless it complies with the standards contained in the CDC Manual or unless an exemption from or variance of those standards is obtained. The process for the review of the CDC application and the subsequent approval or denial of approval can be found in the CDC Manual.

Sec. 7-391 CDC EXEMPTIONS AND VARIANCES.

A property owner may request an exemption or variance to the CDC process as described in the CDC Manual. The process for the review of the exemption or variance and the subsequent approval or denial of approval can be found in the CDC Manual. Exemptions and variances are still reviewed by the CDC participating communities.

Sec. 7-392 ADDITIONAL STANDARDS FOR DEVELOPMENT.

Sections 7-331 through 7-334 are made a part of this Division 6.

SECTION 2.

That this ordinance shall be cumulative of all other ordinances of the City of Fort Worth, Texas, and shall not repeal any of the provisions of such ordinances, except in those instances where provisions of such ordinances are in direct conflict with the provisions of this ordinance.

SECTION 3.

That all rights or remedies of the City of Fort Worth, Texas, are expressly saved as to any and all violations of the City Code, or any amendments thereto that have accrued at the time of the effective date of this ordinance; and as to such accrued violations, and all pending litigation, both civil and criminal, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

SECTION 4.

That it is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared void, ineffective or unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such voidness, ineffectiveness or unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of this ordinance, since the same would have been enacted by the City Council without the incorporation herein of any such void, ineffective or unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 5.

That the City Secretary of the City of Fort Worth, Texas, is hereby directed to publish this ordinance for two (2) days in the official newspaper of the City of Fort Worth, Texas, as authorized by the V.T.C.A. Local Government Code Subsection 52.013.

SECTION 6.

This ordinance shall take effect after adoption and publication as required by law.

APPROVED AS TO FORM AND LEGALITY:

By: _____
Melinda Ramos, Sr. Assistant City Attorney Jannette S. Goodall, City Secretary

Adopted: _____

Effective: _____