

ORDINANCE NO. 20-05-21-16

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CORINTH, TEXAS, AMENDING CHAPTER 152, "FLOODPLAIN DAMAGE PREVENTION", OF TITLE XV, "LAND USAGE", OF THE CODE OF ORDINANCES OF THE CITY OF CORINTH AND READOPTING CHAPTER 152 IN ITS ENTIRETY; ADOPTING NEW FLOOD MAPS RELEASED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; PROVIDING FOR THE INCORPORATION OF PREMISES; PROVIDING FOR AN AMENDMENT; PROVIDING A CUMULATIVE REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY CLAUSE; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Section 16.315 of the Texas Water Code delegates the responsibility to local governments to adopt regulations designed to minimize flood losses within the jurisdiction of said local governments resulting from storm waters; and

WHEREAS, the City Council finds that flood hazard areas of the City of Corinth are subject to periodic inundation which has in the past resulted 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; and

WHEREAS, such flood losses are caused by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities and by land uses that are situated in flood hazard areas and that are vulnerable to floods as a result of inadequate elevation or floodproofing measures; and

WHEREAS, in order for owners of property located within the City of Corinth, which is subject to periodic inundation to obtain flood damage insurance through the National Flood Insurance Program, the United States government, by statute and through regulations promulgated by the Federal Emergency Management Agency, ("FEMA"), requires that the City of Corinth enact floodplain regulations designed to reduce the amount of potential flood losses; and

WHEREAS, FEMA has completed a new flood insurance study and developed new flood maps for Denton County, Texas, which will go into effect on June 19, 2020; and

WHEREAS, the City of Corinth has previously adopted various ordinances establishing regulations related to the prevention of flood damages; and

WHEREAS, based on the findings set forth above, the City Council of the City of Corinth finds it is in the public interest and a benefit to the general health, safety, and welfare of the residents of the City to adopt an ordinance revising and amending the City's flood damage prevention regulations.

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

SECTION 1
INCORPORATION OF PREMISES

The above and foregoing recitals are found to be true and correct and are incorporated into the body of this Ordinance for all purposes.

SECTION 2
AMENDMENTS

That Chapter 152 of Title VX the Code of Ordinances of the City of Corinth, Texas is hereby amended and shall be readopted in its entirety as follows:

CHAPTER 152: - FLOODPLAIN DAMAGE PREVENTION

GENERAL PROVISIONS

§ 152.01 – STATUTORY AUTHORIZATION.

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 governmental units to adopt regulations designed to minimize flood losses.

§ 152.02 – FINDINGS OF FACT.

- (A) The designated special flood hazard areas of the City are subject to periodic inundation, which may result 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 may be 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. The effect of floodplain obstructions can also be hazardous to other lands where existing habitable structures are inadequately elevated, flood proofed or otherwise protected from flood damage.

§ 152.03 – STATEMENT OF PURPOSE; METHODS OF REDUCING FLOOD LOSSES.

- (A) It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
 - (1) Protect human life and health;

- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and public and private utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- (6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
- (7) Ensure that potential buyers are notified that property is in a flood area.

(B) In order to accomplish its purposes, this chapter includes the following methods of regulations:

- (1) Restriction or prohibition of uses that may be dangerous to health, safety or property in times of flood, or may cause excessive increases in flood heights or velocities;
- (2) Requirements that uses vulnerable to floods, including emergency facilities and facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control of the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
- (4) Control of filling, grading, dredging and other development which may increase flood damage; and
- (5) Prevention and/or regulation of the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

§ 152.04 - DEFINITIONS.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted to give them the meaning they have in common usage and to give this chapter its most reasonable application.

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 deposition; and unpredictable flow paths.

APPEAL BOARD. The City Council or such commission or board as the City Council by resolution may appoint.

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.

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 land development conditions hydrology.

AREA OF SHALLOW FLOODING. A designated AO, AH, AR/AO, AR/AH, or VO zone on the City'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 the 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 on the flood hazard boundary map (FHBM). After detailed rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE or V.

BASE FLOOD. The flood having a 1% chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION (BFE). The elevation shown on the flood insurance rate map (FIRM) and found in the accompanying flood insurance study (FIS) for Zones A, AE, AH, A1-A30, AR, 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.

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

DEVELOPMENT. Any man-made change to improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or 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 purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. EXISTING CONSTRUCTION may also be referred to as "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 the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

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

FENCE. A fence shall have the meaning as defined in Chapter 150 of the City Code of Ordinances, as amended.

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

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

FLOOD ELEVATION STUDY or **FLOOD INSURANCE 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). An official map of the City, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the City.

FLOOD INSURANCE STUDY (FIS). See **FLOOD ELEVATION STUDY.**

FLOODPLAIN OR FLOOD-PRONE AREA. Any land area susceptible to being inundated by water from any source for a specified storm with a specific percentage chance of being equaled or exceeded (see **FLOODING**).

FLOODPLAIN ADMINISTRATOR. The Mayor of Corinth or the Mayor's designated representative.

FLOODPLAIN DEVELOPMENT PERMIT. A permit required for construction, use or alteration of a structure within an area of special flood hazard.

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 development and 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 area within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

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

FLOODWAY. Has the same meaning as **REGULATORY FLOODWAY.**

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.

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

HISTORIC STRUCTURE. Any structure that is:

- (A) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (B) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (C) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (D) Individually listed on a local inventory or historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior or;
 - (2) Directly by the Secretary of the Interior in states without approved programs.

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

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). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 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 (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

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 or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, NEW CONSTRUCTION means structures for which the "start of construction" commenced on or after April 20, 1987 and includes any subsequent improvements to such structures.

NEW MANUFACTURED HOME PARK or SUBDIVISION. A manufactured home park or subdivision, as defined above, 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 April 20, 1987.

NON-RESIDENTIAL STRUCTURE. Any structure other than a residential structure.

RECREATIONAL VEHICLE. A vehicle which is:

- (A) Built on a single chassis;
- (B) Four hundred square feet or less when measured at the largest horizontal projections;
- (C) Designed to be self-propelled or permanently towable by a light duty truck; and

- (D) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOODWAY or **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 one foot.

RESIDENTIAL STRUCTURE. A structure intended for use as a single-family or two-family dwelling.

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

SPECIAL FLOOD HAZARD AREA. See **AREA OF SPECIAL FLOOD HAZARD**.

START OF CONSTRUCTION. For other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of 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 part of the main structure. For a substantial improvement, the actual START OF CONSTRUCTION means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE. A walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home, a fence, pathway, trailer, or an oil or gas well.

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% 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:

- (A) 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 City's code

enforcement official and which are the minimum necessary to assure safe living conditions;
or

- (B) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

VARIANCE. A grant of relief from the terms of a floodplain management regulation, the requirements for which are contained in this chapter and in Section 60.3 of the National Flood Insurance Program Regulations.

VIOLATION. The failure of a structure or other development to be fully compliant with the requirements of this chapter. A structure or other development within the Special Flood Hazard Area without an elevation certificate, other certifications, or other evidence of compliance required by this chapter or in Section 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 North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

§ 152.05 - INTERPRETATION.

In the interpretation and application of this chapter, all provisions shall be considered as minimum requirements, liberally construed in favor of the governing body, and deemed neither to limit nor repeal any other powers granted under state statutes.

§ 152.06 - APPLICATION; JURISDICTION.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the City.

§ 152.07 - COMPLIANCE.

A person commits an offense if the person locates, alters, or changes the use of a structure or land situated within the areas of special flood hazard without full compliance with the terms of this chapter and other applicable regulations.

§ 152.08 - BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD.

The areas of special flood hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Denton County, Texas and Incorporated Areas", dated June 19, 2020, with Flood Insurance Rate Map (FIRM), dated June 19, 2020; and any revisions thereto are hereby adopted by reference and declared to be a part of this chapter.

§ 152.09 – WARNING AND DISCLAIMER OR LIABILITY.

The degree of flood protection required by this chapter 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 man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. The provisions of this chapter shall not create liability on the part of the City or any official or employee thereof for any flood damages that result from reliance on the provisions of this chapter or any administrative decision lawfully made hereunder.

§ 152.10 - ABROGATION AND GREATER RESTRICTIONS.

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

PERMITS

§ 152.20 - FLOODPLAIN DEVELOPMENT PERMIT.

- (A) A floodplain development permit shall be required for development within the areas of special flood hazard to ensure conformance with the provisions of this chapter.
- (B) Permit procedures.
 - (1) Application for a floodplain development permit shall be presented to the Floodplain Administrator on forms furnished by him or her and shall include, but not be limited to the following:
 - (a) Plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, in relation to special flood hazard areas.
 - (b) Existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard.
 - (c) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures.
 - (d) Elevation in relation to mean sea level, NAVD 1988, to which any nonresidential structure shall be floodproofed.
 - (e) A certificate from a registered professional engineer or architect that each nonresidential structure meets the floodproofing criteria of § 152.31(B).
 - (f) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
 - (g) An exhibit, drawn to scale showing the horizontal limits and vertical elevations for any change within a special flood hazard area.

- (h) Calculations confirming no net change in volume below the 1% annual base flood elevation.
 - (i) Calculations confirming no rise (0.00') in the 1% annual base flood elevation.
 - (j) If required by the Floodplain Administrator, a hydraulic analysis of the watercourse and floodplain demonstrating the impact of any proposed change within the City's designated special flood hazard area.
- (2) The Floodplain Administrator shall approve or deny a floodplain development permit based on a determination that all of the provisions of this chapter have been satisfied and the following relevant factors:
- (a) The danger to life and property due to flooding or erosion damage;
 - (b) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (c) The danger that materials may be swept onto other lands to the injury of others;
 - (d) The compatibility of the proposed use with existing and anticipated development;
 - (e) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (f) 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;
 - (g) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;
 - (h) The necessity to the facility of a waterfront location, where applicable;
 - (i) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.
- (C) The Floodplain Administrator shall maintain a record of all such information in accordance with § 152.45(A).

§ 152.21 - VARIANCE PROCEDURES.

- (A) The Floodplain Administrator shall hear and render judgment on requests for variances from the requirements of this chapter.
- (B) The Appeal Board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this chapter.
- (C) Any person or persons aggrieved by the decision of the Appeal Board may appeal such decision in the courts of competent jurisdiction.

- (D) The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (E) The Appeal Board may approve a variance 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 chapter.
- (F) The Appeal Board may approve a variance 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 § 152.20(B)(2) have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
- (G) Upon consideration of the factors noted in this chapter, the Appeal Board may attach such conditions to the granting of a variance as it deems necessary to further the purpose and objectives of this chapter.
- (H) Variances shall not be issued for improvements within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (I) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (J) Prerequisites for granting variances:
 - (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief for a functionally dependent use.
 - (2) Variances shall 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; and
 - (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. This determination shall be based upon calculations performed and submitted by a professional engineer, licensed in the state of Texas, on behalf of the applicant.

- (3) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. Flood insurance rates are determined by insurance carriers and are not subject to the jurisdiction of the city.

- (K) The Appeal Board may issue a variance 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 divisions (A) through (J) of this section 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.

FLOOD HAZARD REDUCTION

§ 152.30 - GENERAL STANDARDS.

In all areas of special flood hazards, the following requirements apply for all new construction and substantial improvements:

- (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 by 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 and/or located 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) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and
- (G) On-site waste disposal systems shall be located to avoid impairment to them or contamination of flood waters from them during flooding.

§ 152.31 - SPECIFIC STANDARDS.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in §§ 152.08, 152.32(C), and 152.45(H) the following requirements apply:

(A) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to a minimum of two feet above the base flood elevation. (A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the requirements of § 152.20(B)(1)(a) are satisfied.) Upon construction of foundation forms, a survey shall be provided to the city confirming that construction meets the requirements of this section. Upon completion of construction, a Federal Emergency Management Agency Elevation Certificate shall be provided to the Floodplain Administrator.

(B) *Nonresidential construction.*

(1) New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall comply with the following:

(a) Have the lowest floor (including basement) elevated to a minimum of two feet above the base flood level; or

(b) 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.

(c) Upon construction of foundation forms, a survey shall be provided to the city confirming that construction meets the requirements of this section. Upon completion of construction, a Federal Emergency Management Agency Elevation Certificate shall be provided to the Floodplain Administrator.

(2) 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 and shall furnish a certification stating that the elevation requirements are met or that the below the base flood level requirements of division (B)(1) of this section are met. The professional engineer shall also provide a statement that the proposed structure is reasonably safe from flooding.

(3) The Floodplain Administrator shall maintain a record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed.

(C) *Enclosures.*

- (1) 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.
- (2) Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - (a) A minimum of two openings 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.
 - (b) The bottom of all openings shall be no higher than one foot above grade.
 - (c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(D) *Manufactured homes.*

- (1) All manufactured homes to be placed within a Special Flood Hazard Area, as reflected on the City's FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- (2) A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this section and § 152.20(B) are satisfied.
- (3) Manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the City's FIRM on sites outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to a minimum of two feet above the base flood elevation and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- (4) Manufactured homes placed or substantially improved on sites in an existing manufactured home park or subdivision within areas designated as Zones A1-30, AH and AE on the City's FIRM that are not subject to the provisions of this division (D) be elevated as follows:

- (a) The lowest floor of the manufactured home is at minimum of two feet above the base flood elevation; or
- (b) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and is securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement., designed by a registered professional engineer

(E) *Recreational vehicles.*

- (1) A person commits an offense if the person parks or maintains a recreational vehicle on sites within areas designated as Zones A1-30, AH, and AE on the City's FIRM for more than 180 consecutive days.
- (2) It is a defense to prosecution for a violation of division (E)(1) of this section that the recreational vehicle is fully licensed and ready for highway use, or the permit requirements of § 152.20(B)(1)(a), and the elevation and anchoring requirements for "manufactured homes" in division (D) of this section are satisfied.
- (3) 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.

§ 152.32 - STANDARDS FOR SUBDIVISION PROPOSALS.

- (A) All applications for approval of a plat, replat, or site plan, including the placement of manufactured home parks and subdivisions, shall be consistent with §§ 152.01, 152.02 and 152.03.
- (B) All applications for approval of a plat, replat, or site plan, including the placement of manufactured home parks and subdivisions, shall meet floodplain development permit requirements of § 152.20, the requirements of §§ 152.30, 152.31, 152.32, 152.33, and other applicable provisions of this chapter.
- (C) Base flood elevation data shall be generated for applications for plat approval and other proposed development applications, including the placement of manufactured home parks and subdivisions, which are greater than 50 lots or five acres, whichever is less, if not otherwise provided pursuant to §§ 152.08 or 152.45(H).
- (D) Base flood elevation data, with the establishment of a floodway, shall be generated by a detailed engineering study, prepared by a registered professional engineer for development within all Zone A areas, within 100 feet of the boundary lines of Zone A areas, and other streams not mapped by Federal Emergency Management Agency, as indicated on the City's FIRM.

- (E) All proposed subdivisions and developments, including the placement of manufactured home parks and subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.
- (F) All proposed subdivisions and developments, including the placement of manufactured home parks and subdivisions, shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

§ 152.33 - STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES).

Located within the areas of special flood hazard are areas designated as shallow flooding. These areas have special flood hazards associated with flood depths 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. Development within AO Zones and AH Zones must meet the following requirements:

- (A) All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated to a minimum of two feet above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the City's FIRM (at least two feet if no depth number is specified). Upon construction of foundation forms, a survey shall be provided to the City confirming that construction meets the requirements of this section. Upon completion of construction, a Federal Emergency Management Agency Elevation Certificate shall be provided to the Floodplain Administrator.
- (B) All new construction and substantial improvements of non-residential structures must meet the following requirements:
 - (1) The lowest floor (including basement) shall be elevated to at least two feet above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the City's FIRM (at least two feet if no depth number is specified); or
 - (2) Together with attendant utility and sanitary facilities, be designed so that below the base specified flood depth in an AO Zone, or below the base flood elevation in an AH Zone, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy, as further described in Section 152.31(C).
- (C) A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this section are satisfied. Upon construction of foundation forms, a survey shall be provided to the City confirming that construction meets the requirements of this section. Upon completion of construction, a Federal Emergency

Management Agency Elevation Certificate shall be provided to the Floodplain Administrator.

- (D) In AO and AH zones, adequate drainage paths around structures on slopes shall be provided, to guide flood waters around and away from proposed structures.

§ 152.34 - FLOODWAYS.

Located within areas of special flood hazard established in § 152.08 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

- (A) Encroachments, including fill, new construction, substantial improvements and other development are prohibited within the adopted regulatory floodway unless:
 - (1) It has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the City during the occurrence of the base flood discharge; and
 - (2) Approval of the Floodplain Administrator is obtained.
 - (3) The applicant provides confirmation that a Conditional Letter of Map Revision has been submitted to Federal Emergency Management Agency.
 - (4) Within 180 days of completion of construction, a Letter of Map Revision is submitted to Federal Emergency Management Agency.
- (B) If the requirements of division (A) of this section are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of §§ 152.30, 152.31, 152.32, 152.33, and other requirements of this chapter.
- (C) Under the provisions of 44 C.F.R. Chapter 1, Section 65.12, of the National Flood Insurance Program Regulations, the City may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the City first completes all of the provisions required by Section 65.12.

ADMINISTRATION

§ 152.44 - DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR.

The Mayor or the Mayor's designated representative is hereby appointed the Floodplain Administrator to administer and implement the provisions of this chapter and other appropriate sections of 44 C.F.R. (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

§ 152.45 - DUTIES AND RESPONSIBILITIES OF FLOODPLAIN ADMINISTRATOR.

- (A) Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:
- (1) Maintain and hold open for public inspection all records pertaining to the provisions of this chapter;
 - (2) Review development permit applications to determine whether the proposed building site project, including the placement of manufactured homes, appears to be reasonably safe from flooding;
 - (3) Review, approve or deny all applications for development permits required by adoption of this chapter; and
 - (4) Review permits for proposed development to ensure that all necessary permits have been obtained from those federal, state or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
- (B) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.
- (C) The Floodplain Administrator shall notify, in riverine situations, adjacent communities and the state coordinating agency which is 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.
- (D) The Floodplain Administrator shall confirm that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (E) When base flood elevation data has not been provided in accordance with § 152.08, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of §§ 152.30, 152.31, 152.32, 152.33, and other applicable provisions of this chapter.
- (F) When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within zones designated as A1-30 and AE on the City'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 City.

- (G) Provided that the City first completes all of the provisions required by 44 C.F.R. Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, the Floodplain Administrator may approve certain development in areas designated as Zones A1-30, AE, AH, on the City's FIRM which increases the water surface elevation of the base flood by more than one foot.

§ 152.46 – PENALTY.

Violations of the provisions of this Ordinance 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 ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$500 for each violation, and in addition shall pay all costs and expenses involved in the case. Each day that a violation is permitted to exist shall constitute a separate offense. Nothing herein contained shall prevent the City of Corinth from taking such other lawful action as is necessary to prevent or remedy any violation.

SECTION 3
CUMULATIVE REPEALER

This Ordinance shall be cumulative of all other Ordinances of the City of Corinth and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance or where expressly repealed hereby. Ordinances or parts thereof in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance.

SECTION 4
SEVERABILITY

If any section, subsection, clause, phrase, or provision of this Ordinance, or the application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void, or unconstitutional, the remaining sections, subsections, clauses, phrases, and provisions of this Ordinance, or the application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

SECTION 5

SAVINGS/CONFLICT

In the event of a conflict between the provisions of this Ordinance and any other regulation or rule prescribed by charter, another ordinance, resolution or other authorization of the City, the provisions of this ordinance shall control. Notwithstanding the foregoing, all rights and remedies of the City are expressly saved as to any and all complaints, actions, claims, or lawsuits, which have been initiated or have arisen under or pursuant to such conflicting Ordinance, or portion thereof, on the date of adoption of this Ordinance shall continue to be governed by the provisions of that Ordinance and for that purpose the conflicting Ordinance shall remain in full force and effect.

SECTION 6
PENALTY

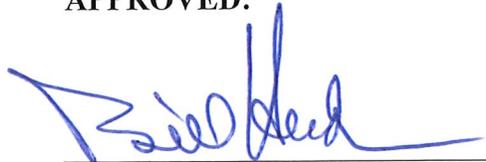
Any person, firm or corporation who violates any provision of this Ordinance or the Code of Ordinances, as amended hereby, shall be subject to a fine not to exceed the sum of five hundred dollars (\$500.00) for each offense, and each and every day any such offense shall continue shall be deemed to constitute a separate offense, provided, however, that in all cases involving an intentional, knowing, reckless or criminally negligent violation of any provision of this ordinance or Code of Ordinances, as amended hereby, governing public health shall be subject to a fine not to exceed the sum of two thousand dollars (\$2,000.00) for each offense, and each and every day any such offense shall continue shall be deemed to constitute a separate offense.

SECTION 7
PUBLICATION/EFFECTIVE DATE

This Ordinance shall take effect upon its publication as required by law. The City Secretary is directed to publish the caption and penalty of this Ordinance as required by the City Charter and state law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF CORINTH, TEXAS on this the 21st day of May 2020.

APPROVED:



Bill Heidemann, Mayor
City of Corinth, Texas

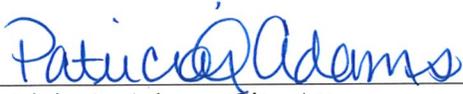


ATTEST:

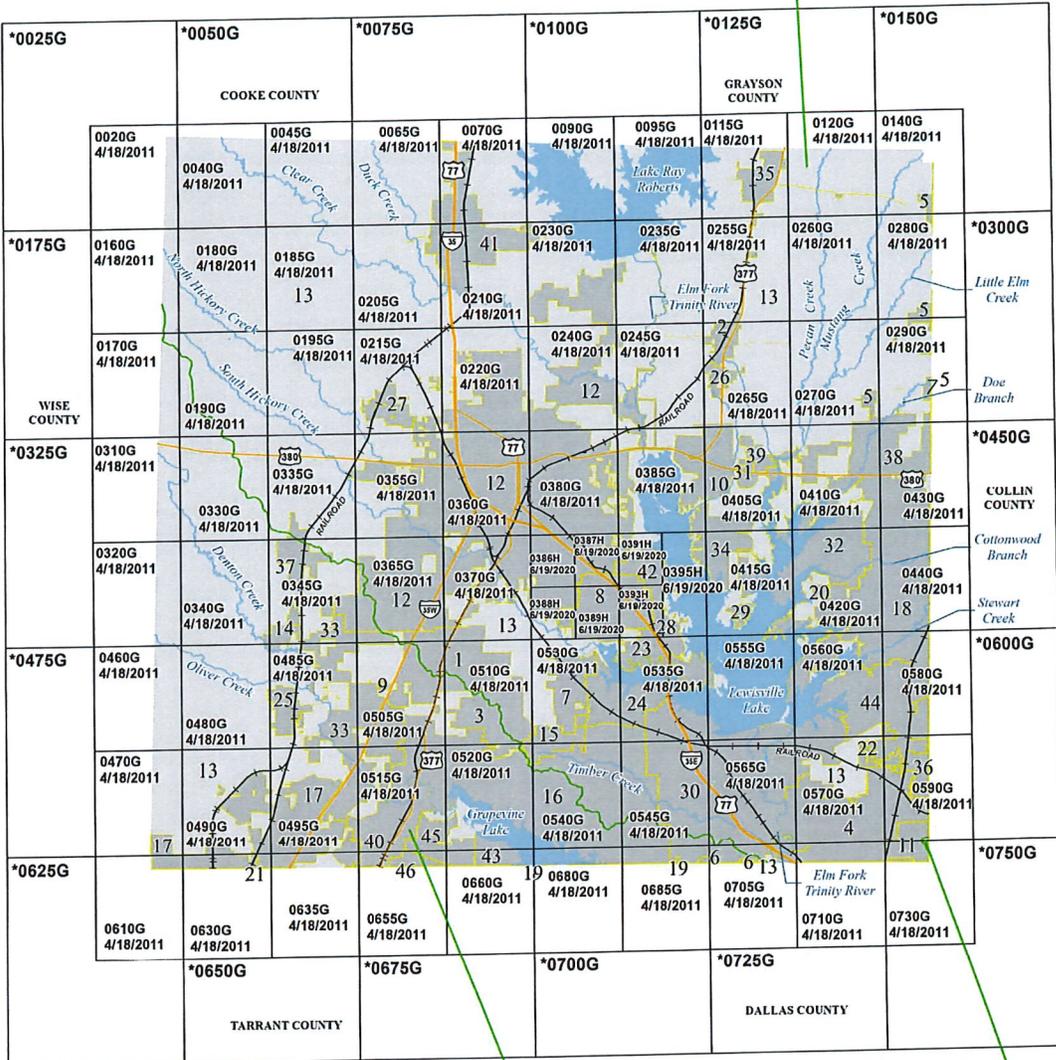


Lana Wylie, Interim City Secretary
City of Corinth, Texas

APPROVED AS TO FORM AND LEGALITY:



Patricia A. Adams, City Attorney



HUC8 12030103
Elm Fork Trinity

HUC8 12030104
Denton

HUC8 12030105
Upper Trinity

KEY TO COMMUNITY NAMES AND CID					
KEY NUMBER	COMMUNITY NAME	CID	KEY NUMBER	COMMUNITY NAME	CID
1	ARGYLE, TOWN OF	480775	26	KRUGERVILLE, CITY OF	481661
2	AUBREY, CITY OF	480776	27	KRUM, CITY OF	480779
3	BARTONVILLE, TOWN OF	481501	28	LAKE DALLAS, CITY OF	480780
4	CARROLLTON, CITY OF	480167	29	LAKEWOOD VILLAGE, TOWN OF	481663
5	CELINA, CITY OF	480133	30	LEWISVILLE, CITY OF	480195
6	COPELL, CITY OF	480170	31	LINCOLN PARK, TOWN OF	480781
7	COPPER CANYON, TOWN OF	481508	32	LITTLE ELM, TOWN OF	481152
8	CORINTH, CITY OF	481143	33	NORTHLAKE, TOWN OF	480782
9	CORRAL CITY, TOWN OF	480244	34	OAK POINT, CITY OF	481639
10	CROSS ROADS, TOWN OF	481513	35	PILOT POINT, CITY OF	480783
11	DALLAS, CITY OF	480171	36	PLANO, CITY OF	480140
12	DENTON, CITY OF	480194	37	PONDER, TOWN OF	480784
13	DENTON COUNTY, UNINCORPORATED AREAS	480774	38	PROSPER, TOWN OF	480141
14	DISH, TOWN OF	480229	39	PROVIDENCE VILLAGE, TOWN OF	480803
15	DOUBLE OAK, TOWN OF	481516	40	ROANOKE, CITY OF	480785
16	FLOWER MOUND, TOWN OF	480777	41	SANGER, CITY OF	480786
17	FORT WORTH, CITY OF	480595	42	SHADY SHORES, TOWN OF	481135
18	FRISCO, CITY OF	480134	43	SOUTHSLAKE, CITY OF	480612
19	GRAPEVINE, CITY OF	480598	44	THE COLONY, CITY OF	481581
20	HACKBERRY, CITY OF	481607	45	TROPHY CLUB, TOWN OF	481006
21	HASLET, CITY OF	480000	46	WESTLAKE, TOWN OF	480614
22	HEBRON, CITY OF	481495			
23	HICKORY CREEK, TOWN OF	481550			
24	HIGHLAND VILLAGE, CITY OF	481105			
25	JUSTIN, CITY OF	480778			

ATTENTION: The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before June 19, 2020.

1 inch = 27,000 feet
0 7,500 15,000 30,000 45,000 60,000 Feet
Map Projection:
State Plane Texas North Central FIPS Zone 4202;
North American Datum 1983

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT
[HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - AREA OUTSIDE COUNTY BOUNDARY



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX
DENTON COUNTY, TEXAS and Incorporated Areas

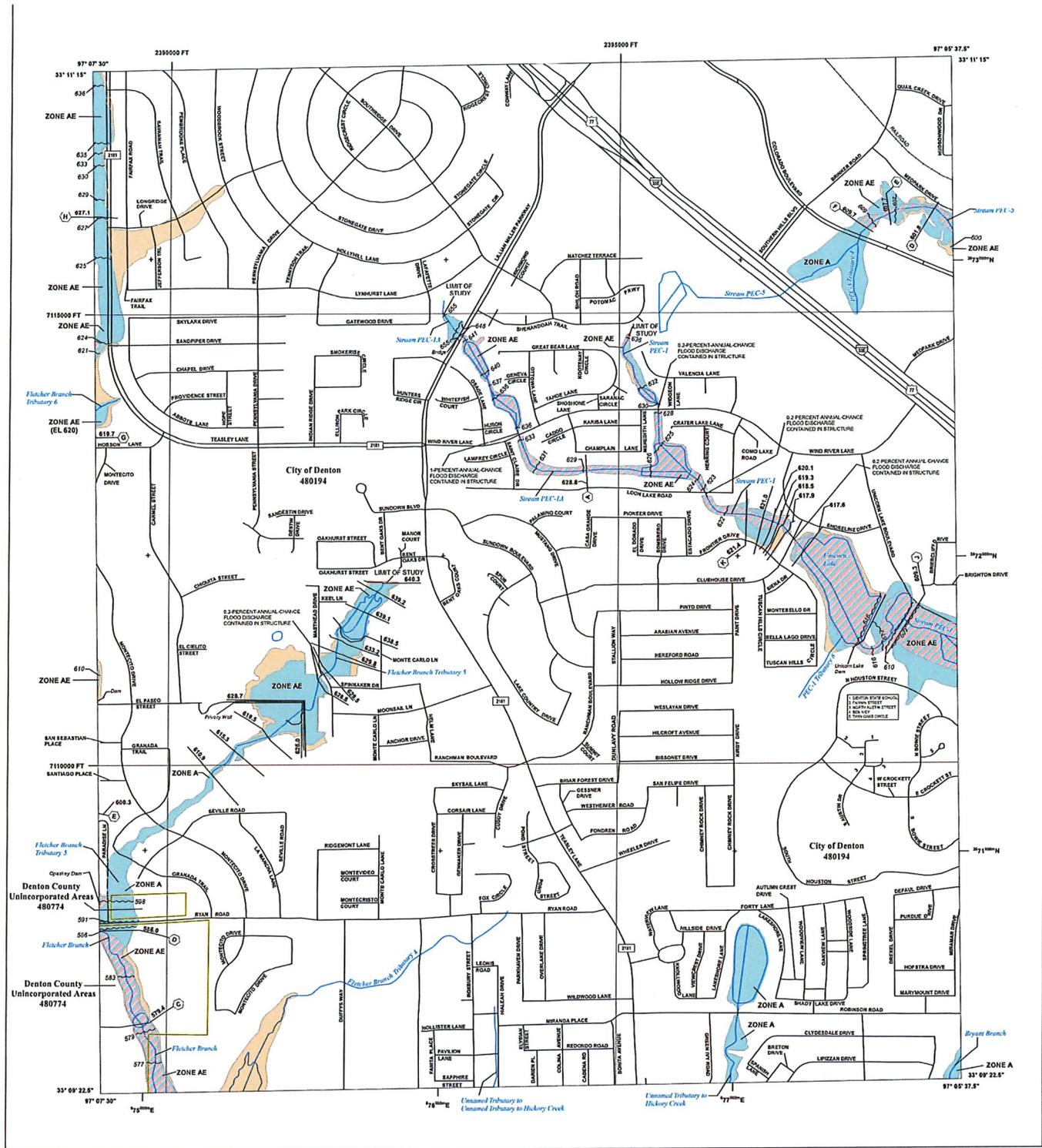
PANELS PRINTED:

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FEMA

MAP NUMBER
48121CIN00C
MAP REVISED
JUNE 19, 2020



FLOOD HAZARD INFORMATION

SEE THIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LOCATOR
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone X, X500
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
 - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee See Notes, Zone X
- OTHER AREAS OF FLOOD HAZARD**
 - Area with Flood Risk due to Levee Zone D
 - Area of Minimal Flood Hazard Zone X
 - Area of Undetermined Flood Hazard Zone D
- OTHER AREAS**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- GENERAL STRUCTURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transport
 - Coastal Transport Baseline
 - Profile Baseline
 - Hydrographic Feature
 - Base Flood Elevation Line (BFE)
- OTHER FEATURES**
 - Limit of Study
 - Jurisdiction Boundary

NOTES TO USERS

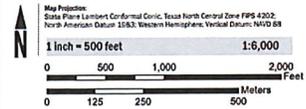
For information and questions about the Flood Insurance Rate Map (FIRM), available products associated with the FIRM, including historic versions of the current map data for each FIRM panel, please contact the FEMA Map Service Center at 1487755A/MAP (1-877-335-2675) or visit the FEMA Flood Map Service Center website at <https://www.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of the map data of these products can be ordered or obtained directly from the website.

Communities availing themselves to adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be ordered directly from the Map Service Center at the number listed above.

For community and corporate map data used in the Flood Insurance Study report for this product, to determine if flood insurance is available in the community, contact your insurance agent or the National Flood Insurance Program at 1-800-833-6255.

Base map information shown on this FIRM was derived from multiple sources. The FEMA National Flood Hazard Layer (NFHL) data provided basic transportation and city level information. The Texas Natural Resources Information System (TRNIS) provided the Texas Department of Transportation (TxDOT) community boundaries and transportation system data. Base map data was also provided by North Texas Texas Council of Governments (NTCOG) and local municipalities. 2014.

SCALE



PANEL LOCATOR

Denton County		0240	0245
		0380	0385
0355	0360	0366	0387
0365	0370	0388	0389
0395		0391	0395
0505	0510	0530	0535

NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP

DENTON COUNTY, TEXAS
 and Incorporated Areas

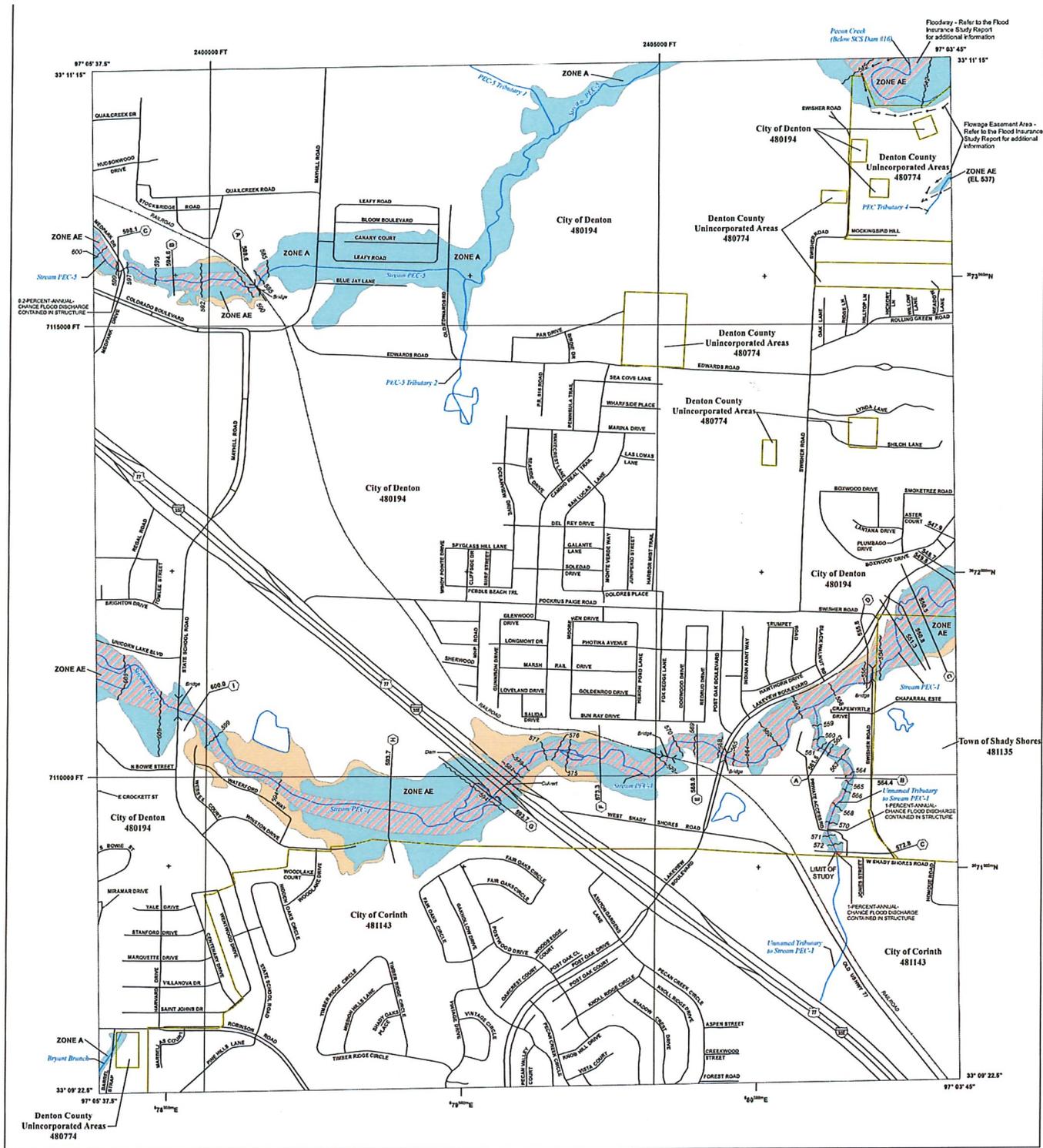
PANEL 386 OF 750

FEMA
 National Flood Insurance Program

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
DENTON, CITY OF	480194	0386	H
DENTON COUNTY	480774	0386	H

VERSION NUMBER: 2.4.3.5
 MAP NUMBER: 48121C0386H
 MAP REVISED: JUNE 19, 2020



FLOOD HAZARD INFORMATION

SEE FIRM REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPicted ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone X, AE, AO, AH, VE, AR
 - Regulatory Floodway
 - 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with average depth less than one foot or with drainage areas of less than one square mile
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee See Notes, Zone X
- OTHER AREAS OF FLOOD HAZARD**
 - Area with Flood Risk due to Levee Zone D
 - Area of Minimal Flood Hazard Zone C
 - Area of Undetermined Flood Hazard Zone D
- OTHER AREAS**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- GENERAL STRUCTURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transsect
 - Profile Baseline
 - Hydrographic Feature
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary

NOTES TO USERS

For information and questions about the Flood Insurance Rate Map (FIRM), available products associated with the FIRM, including historic versions, the current rate for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information Assistance at 1-877-FEMA-1345 or visit the FEMA Flood Map Service Center website at <https://www.fema.gov/flood-maps>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of the map. Many of these products can be ordered or obtained directly from the website.

Communities receiving funds on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be ordered directly from the Map Service Center at the number listed above.

For community and contractor map data, refer to the Flood Insurance Study report for map products.

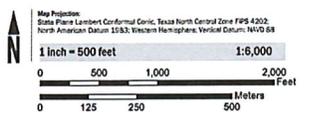
To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-433-6253.

Base map information shown on this FIRM was derived from multiple sources. The FEMA National Flood Hazard Layer (NFHL) data provided basic transportation data information, 2011. The Texas National Flood Insurance Information System (TNFIS) provided the Texas Department of Transportation (TxDOT) community boundaries and transportation system data as of 2015. Base map data was also provided by North Central Texas Council of Governments (NCTCOG) and local communities, 2014.

FLOODWAY EASEMENT AREA: Floodway easement area boundaries were provided by United States Army Corps of Engineers (USACE) Fort Worth District. For information about date acquisition dates or the duration of easement areas in this Flood Risk Project, refer to Section 2.2 of the Flood Insurance Study Report for the jurisdiction or contact USACE Fort Worth District at (817) 556-1000.

→ Floodway Easement Area

SCALE



PANEL LOCATOR

Denton County	0240	0245	0265
	0300	0305	0405
	0360		
	0385	0387	0391
	0370	0368	0395
	0370	0368	0369
	0510	0530	0535
		0555	

FEMA National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP

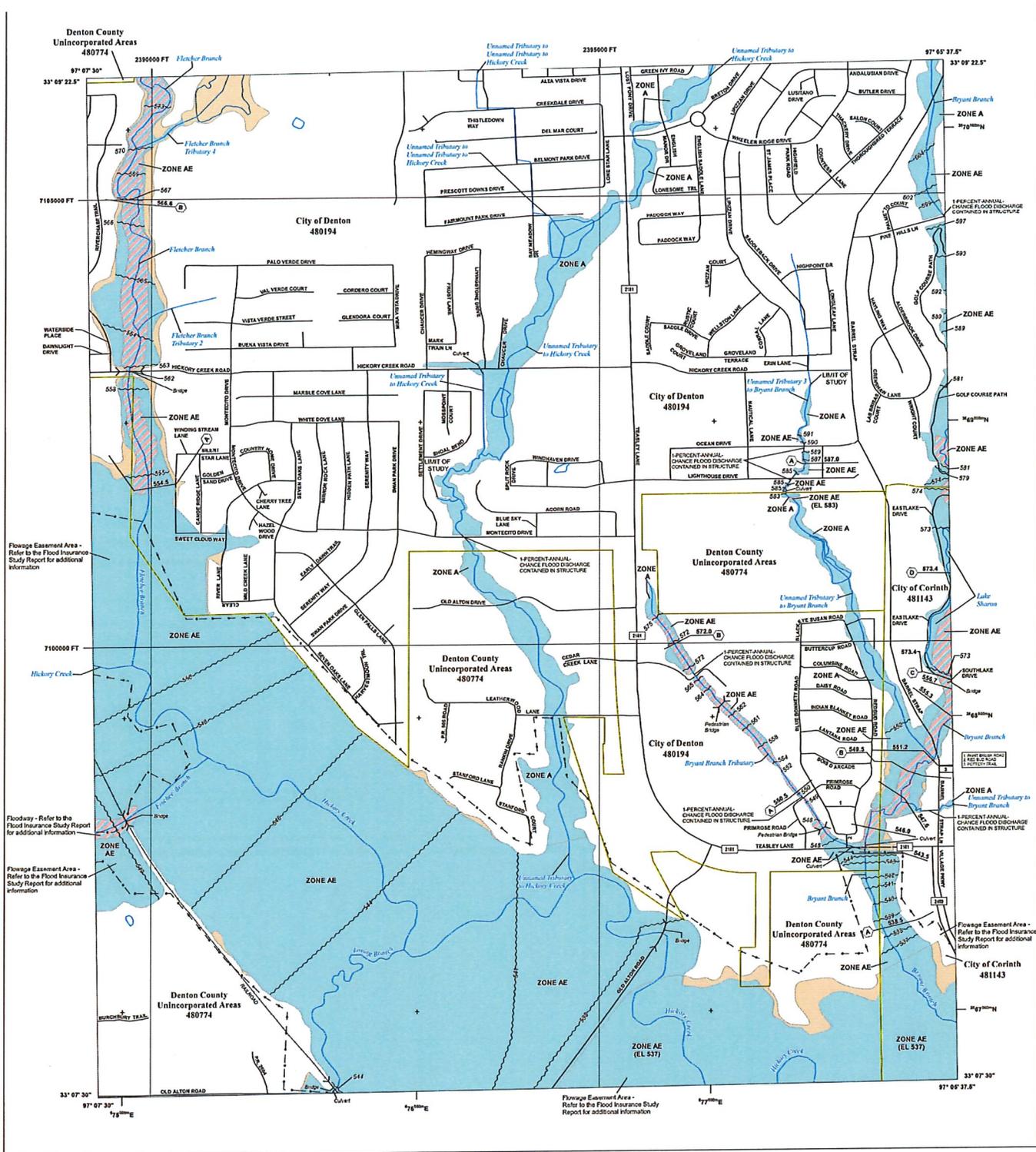
DENTON COUNTY, TEXAS and Incorporated Areas

PANEL 387 of 750

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORINTH, CITY OF	481143	0387	H
DENTON, CITY OF	480194	0387	H
DENTON COUNTY	480774	0387	H
SHADY SHOES, TOWN OF	481135	0387	H

VERSION NUMBER: 2.4.3.5
 MAP NUMBER: 48121C0387H
 MAP REVISED: HINF 19 2020



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
 DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

- Without Base Flood Elevation (BFE) Zone AE, A9
- With BFE or Depth Zone AE, A9, AH, VE, A9
- Regulatory Floodway
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes, Zone X
- Area with Flood Risk due to Levee Zone D
- [NO SCREEN] Area of Minimal Flood Hazard Zone X
- Area of Undetermined Flood Hazard Zone D
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall
- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Baseline
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

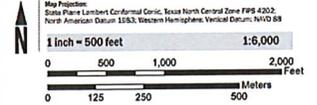
For information and questions about the Flood Insurance Rate Map (FIRM) products associated with the FIS, including future releases, the current map data for each FIS panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information Hotline at 1-877-FEMA-1345 (1-877-369-7273) or visit the FEMA Flood Map Service Center website at <http://www.floodmaps.com>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of the map story of these products can be ordered or obtained directly from the website.

Communities awaiting final or updated FIS panels must obtain a current copy of the adjacent panel as well as the current FIS data. These may be ordered directly from the Map Service Center at the number listed above. For community and countywide map data refer to the Flood Insurance Study report for the jurisdiction.

Base map information shown on this FIS was derived from multiple sources. The FEMA National Flood Hazard Layer (NFHL) data provided base information and city information, 2011. The Texas Natural Resource Information System (TNRIS) provided the Texas Department of Transportation (TxDOT) community boundaries and transportation system dated 2011. Base map data was also provided by North Central Texas Council of Governments (NCTCOG) and local communities, 2011.

FLOODWAY EASEMENT AREA: Floodway easement area boundaries were provided by United States Army Corps of Engineers (USACE) Fort Worth District. For information about data acquisition dates or the delineation of floodway easement areas in the Flood Risk Project, refer to Section 2.3 of the Flood Insurance Study Report for the jurisdiction or contact USACE Fort Worth District at (817) 600-1000.

SCALE



PANEL LOCATOR

Denton County		0380	0385
0385	0370	0386	0387
		0388	0389
		0391	0393
0395	0370	0396	0395
0505	0510	0530	0535
0515	0520	0540	0545

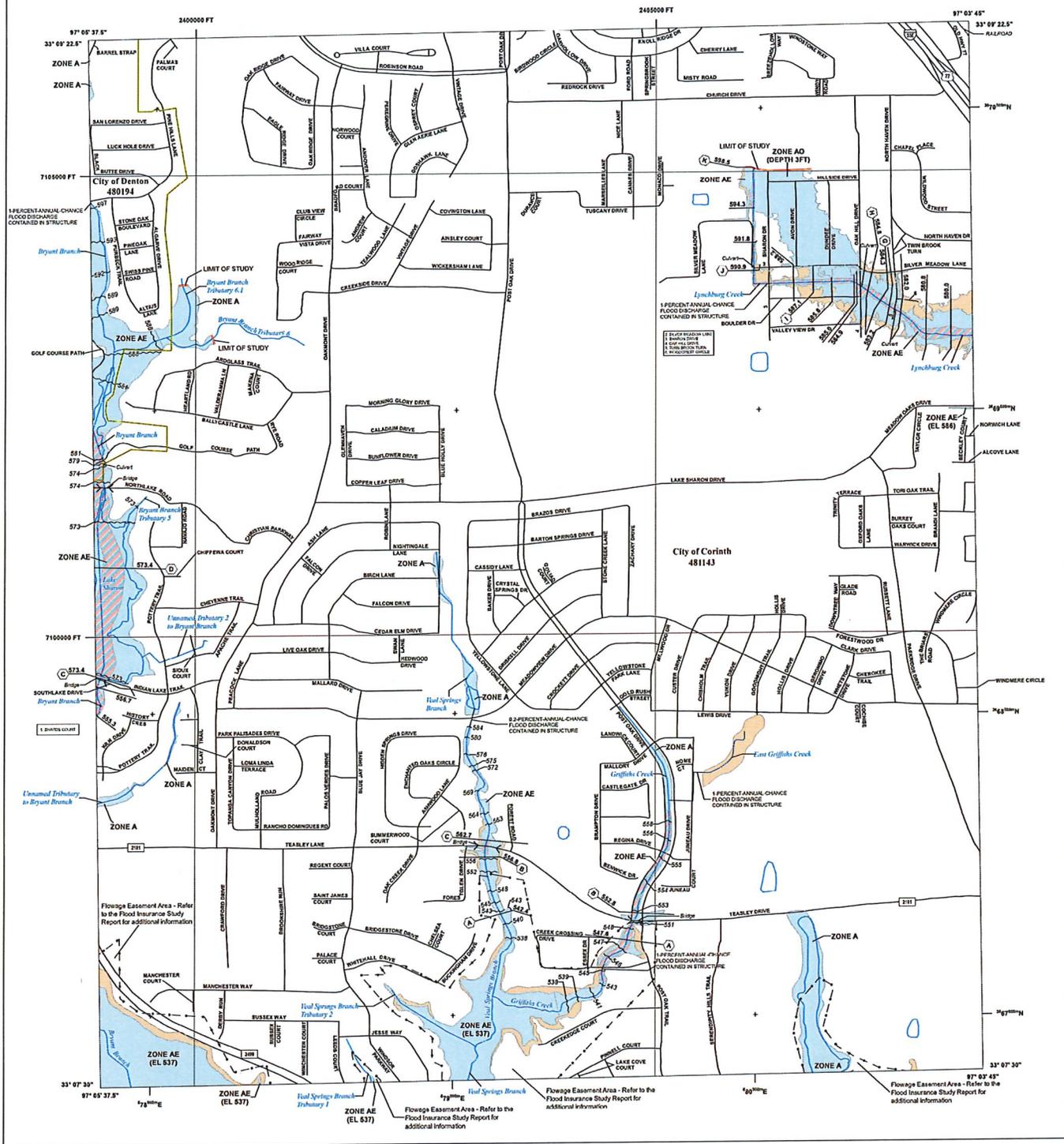


NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP
 DENTON COUNTY, TEXAS
 and Incorporated Areas
 PANEL 388 OF 750

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
CITY OF DENTON	48143	0388	H
CITY OF DENTON	480194	0388	H
CITY OF DENTON	480774	0388	H

VERSION NUMBER
 2.4.3.5
 MAP NUMBER
 4812100388H
 MAP REVISION
 HINF 19, 2020



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT. THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, AE
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway
- 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with average depth less than one foot with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee See Notes, Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS OF FLOOD HAZARD

- NO GREEN Area of Minimal Flood Hazard Zone X
- Area of Undetermined Flood Hazard Zone D

OTHER AREAS

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

GENERAL STRUCTURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Profile
- Base Flood Elevation Line (BFE)

OTHER FEATURES

- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about the Flood Insurance Rate Map (FIRM), available products associated with the FIRM, including hazard severity, the current map data for each FIRM should be used to order products, or the National Flood Insurance Program (NFIP) in general should be used to order information. For more information, visit www.fema.gov or call the FEMA Flood Map Service Center at 1-800-358-6234. For more information, visit www.fema.gov or call the FEMA Flood Map Service Center at 1-800-358-6234.

Community numbering and adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be ordered directly from the Map Service Center at the number listed above.

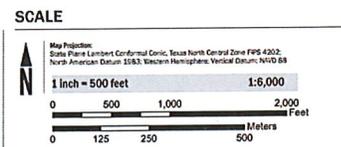
For community and countywide maps data refer to the Flood Insurance Study report for the jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or the National Flood Insurance Program at 1-800-358-6234.

Base map information shown on this FIRM was derived from multiple sources. The FEMA National Flood Hazard Layer (NFHL) data provided base topographic and city level information. The Texas Natural Resources Information System (TNRIS) provided the Texas Department of Transportation (TxDOT) roadway boundaries and transportation data used in 2015. Base map data was also provided by North Central Texas Council of Governments (NCTCOG) and local municipalities, 2014.

Flowage easement areas shown on this FIRM were provided by United States Army Corps of Engineers (USACE) Fort Worth District. For information about data acquisition dates or the derivation of flowage easement areas in the Flood Risk Project, refer to Section 2.2 of the Flood Insurance Study Report for the jurisdiction or contact USACE Fort Worth District at (817) 600-1900.

Flowage Easement Area



PANEL LOCATOR

Denton County	0360	0365	0405
	0386	0387	0391
	0388	0389	0393
	0510	0530	0535
	0520	0540	0545
	0530	0535	0555

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

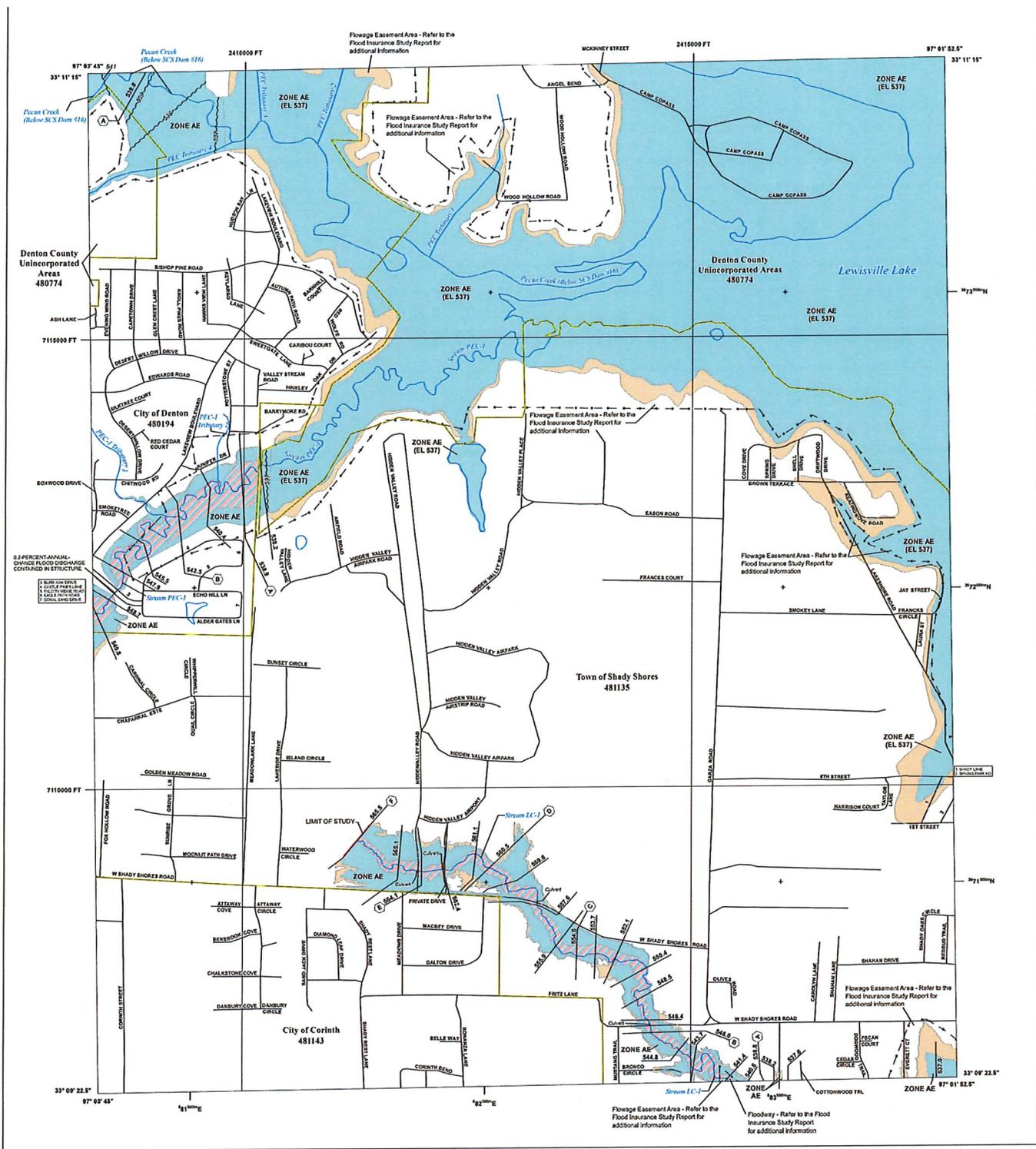
DENTON COUNTY, TEXAS
 and Incorporated Areas

PANEL 389 of 750

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORNYTH CITY OF	481143	0389	H
DENTON CITY OF	480194	0389	H

VERSION NUMBER: 2.4.3.5
 MAP NUMBER: 4812100389H
 MAP REVISED: 11/19/2020



FLOOD HAZARD INFORMATION

SEE THIS REPORT FOR DETAILED LEGENDS AND HOW TO USE FROM PANEL LAYOUT. THE INFORMATION SHOWN ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone X A/B/C
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
 - 0.2% Annual Chance Flood Hazard, Areas of 1% Annual Chance Flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee See Notes, Zone X
 - Area with Flood Risk due to Levee Zone D
 - NO SCREEN Area of Minimal Flood Hazard Zone X
 - Area of Undetermined Flood Hazard Zone D
- OTHER AREAS OF FLOOD HAZARD**
- OTHER AREAS**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
- GENERAL STRUCTURES**
- OTHER FEATURES**

NOTES TO USERS

For information and questions about the Flood Insurance Rate Map (FIRM) available products associated with this FIRM, including historic versions of the current map data for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information Exchange at 1-877-FEMA4MAP (1-877-365-2627) or visit the FEMA Flood Map Service Center website at <http://www.fema.gov>. Available products may include previously issued Editions of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

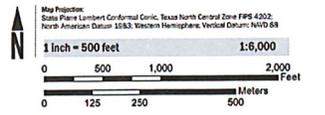
Communities receiving land use adjustment FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM data. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map data refer to the Flood Insurance Study report for the jurisdiction. To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6025.

Base map information shown on this FIRM was derived from multiple sources. The FEMA National Flood Hazard Information System (NFHIS) data provided base topographic and only base information (BFI). The Texas National Flood Hazard Information System (TNFIS) provided the Texas Department of Transportation (TxDOT) community boundaries and transportation system added (2015). Base map data were also provided by North Central Texas Council of Governments (NCTCOG) and local communities, 2016.

FLOODING ASSESSMENT AREA: Flowage assessment area boundaries were provided by United States Army Corps of Engineers (USACE) Fort Worth District. For information about data acquisition dates or the determination of flowage assessment areas in the Flood Risk Project, refer to Section 2.2 of the Flood Insurance Study Report for the jurisdiction or contact USACE Fort Worth District at 817-600-1000.

SCALE



PANEL LOCATOR

Denton County		0245	0255
0360	0370	0385	0405
0370	0380	0395	0415
0380	0390	0405	0415
0610	0530	0535	0555



NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP

DENTON COUNTY, TEXAS and Incorporated Areas
 PANEL 391 of 750

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORINTH CITY OF	481143	0391	H
DENTON CITY OF	480194	0391	H
DENTON COUNTY	480774	0391	H
SHADY SHORES, TOWN OF	481135	0391	H