

ORDINANCE NO. 20191114-064

AN ORDINANCE AMENDING CITY CODE CHAPTERS 25-2, 25-7, 25-8, 25-12, 30-4 AND 30-5 RELATING TO REGULATION OF DEVELOPMENT WITHIN THE 25-YEAR AND 100-YEAR FLOODPLAINS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. Section 2.2 (*Building Height*) of City Code Chapter 25-2, Subchapter F, is amended to read as follows:

§ 2.2. BUILDING HEIGHT.

Except where these regulations are superseded, the maximum building height for development subject to this Subchapter is:

- A. 32 feet for development located outside the 100-year floodplain;
and
- B. 35 feet for development located in the 100-year floodplain. [~~32 feet.~~]

Section 25-2-531 (*Height Limit Exceptions*) does not apply to development subject to this Subchapter, except for a chimney, vent, antenna, or energy conservation or production equipment or feature not designed for occupancy. Building height shall be measured under the requirements defined in Section 3.4.

PART 2. Subsection 3.4.2 of City Code Chapter 25-2, Subchapter F, Section 3.4 (*Height*) is amended to read as follows:

3.4.2. The grade used in the measurement of height for a building or setback plane shall be the lower of natural grade or finished grade, except height shall be measured from natural [~~finished~~] grade if the site is located in the 100-year floodplain. [~~∴~~

- A. ~~— The site's grade is modified to elevate it out of the 100-year floodplain; or~~
- B. ~~— The site is located on the approximately 698.7 acres of land known as the Mueller Planned Unit Development, which was zoned as a planned unit development (PUD) district by Ordinance Number 040826-61.]~~

PART 3. City Code Section 25-7-2 (*Definitions*) is amended to add a definition of “Atlas 14” and to renumber the other definitions in this section accordingly:

- (2) ATLAS 14 means the National Oceanic and Atmospheric Administration’s Precipitation-Frequency Atlas 14 of the United States, Volume 11, Version 2.0: Texas.

PART 4. City Code Section 25-7-2 (*Definitions*) is amended to change the definitions of “100-Year Floodplain” and “25-Year Floodplain” to read as follows:

- (10) 100-YEAR FLOODPLAIN means an area within a floodplain subject to a one percent or greater chance of flooding in any year as calculated in accordance with Section 25-7-6 (*Determination of the 100-Year Floodplain*) [~~the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~].
- (11) 25-YEAR FLOODPLAIN means an area within a floodplain subject to a four percent or greater chance of flooding in any year as calculated in accordance with Section 25-7-7 (*Determination of the 25-Year Floodplain*) [~~the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~].

PART 5. City Code Section 25-7-6 (*Computation of Stormwater Runoff*) is amended to read as follows:

§ 25-7-8[6] COMPUTATION OF STORMWATER RUNOFF.

(A) Except as provided in Subsection (B), stormwater [~~Stormwater~~] runoff shall be computed on the basis of a fully developed contributing drainage area or watershed as determined under the Drainage Criteria Manual.

(B) When determining the runoff generated from the 500-year flood for the purpose of determining the 100-year floodplain under Subsection (B) of Section 25-7-6 (*Determination of the 100-Year Floodplain*), stormwater runoff shall be computed on the basis of an existing developed contributing drainage area or watershed.

PART 6. City Code Chapter 25-7 (*Drainage*) is amended to add a new Section 25-7-6 and Section 25-7-7 to read as follows:

§ 25-7-6 DETERMINATION OF THE 100-YEAR FLOODPLAIN.

For purposes of this chapter, the 100-year floodplain shall be:

- (A) For areas amended to incorporate Atlas 14 data, the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
- (B) For areas not yet amended to incorporate Atlas 14 data, the 500-year floodplain either as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
- (C) For the Colorado River, the 100-year floodplain as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, as subsequently revised.

§ 25-7-7 DETERMINATION OF THE 25-YEAR FLOODPLAIN.

For purposes of this chapter, the 25-year floodplain shall be:

- (A) For areas amended to incorporate Atlas 14 data, the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
- (B) For areas not yet amended to consider Atlas 14 data, the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
- (C) For the Colorado River, the 25-year floodplain as calculated under exiting conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14.

PART 7. City Code Section 25-7-93 (*General Exceptions*) is amended to read as follows:

§ 25-7-93 GENERAL EXCEPTIONS.

- (A) A development application [~~site plan~~] with a proposed building or parking area that encroaches on the 100-year floodplain may be approved if the encroachment is:
- (1) a parking area that is smaller than 5,000 square feet or an unoccupied structure that has an area of less than 1,000 square feet, and the director determines that the proposed development:
 - (a) will not have an adverse effect on the 100-year floodplain or surrounding properties; and
 - (b) otherwise complies with the requirements of this title;
 - (2) a new building for residential use that replaces an existing legally constructed building for residential use on the same property and that does not increase the number of legal dwelling units on the property; [~~a single family or duplex residential structure in a subdivision;~~
 - (a) ~~recorded before September 25, 1983; and~~
 - (b) ~~in which only one residential structure is built on a single lot;~~]
 - (3) a building authorized by a waterway development permit issued under Chapter 9-10 before September 25, 1983; or
 - (4) a building in the 100-year floodplain of:
 - (a) Lady Bird Lake; [~~or~~]
 - (b) the Colorado River downstream from Longhorn Dam;
 - (c) Lake Austin; or
 - (d) Lake Travis.
- (B) To be approved under this section, [A] development [~~application that may be approved under this section~~] must:

- (1) be no lower than two feet above the 100-year floodplain, as measured from the lowest floor elevation of any proposed building [comply with the flood proofing requirements of Chapter 25-12, Article 1 (*Building Code*); and];
- (2) comply with the requirements in Chapter 25-12, Article 1, Section 25-12-3 Appendix G (*Flood Resistant Construction*) and Section 1612 (*Flood Loads*);
- (3) compensate for the floodplain volume displaced by the development; and
- (4) result in no additional adverse flooding impact on other properties, as determined by the director.

PART 8. City Code Section 25-7-95 (*Requirements for Parking Areas*) is amended to read as follows:

§ 25-7-95 REQUIREMENTS FOR PARKING AREAS.

- (A) This section establishes requirements that apply to the development of a parking area.
- (B) A development application with a proposed parking area that encroaches on the 100-year floodplain may be approved if:
 - (1) the level of water detention or waterflow in the parking area during the 100-year storm does not exceed:
 - (a) an average depth of eight inches; or
 - (b) a maximum depth of 12 inches at any point; and
 - (2) appropriate signs, approved by the director, are posted to notify persons that the water detention or waterflow in the parking lot may exceed a depth of eight inches.
- (C) Notwithstanding the requirements of Subsection (B), a development application with a proposed parking area that encroaches on the 25-year floodplain or the 100-year floodplain may be approved if the parking area

is[;] accessory to a building approved under 25-7-93 (*General Exceptions*) or 25-7-96 (*Requirements in the 25-Year Floodplain*).

~~[(1) accessory to a single family or duplex residential structure on a lot in a subdivision recorded before September 25, 1983;~~

~~(2) authorized by a waterway development permit issued under Chapter 9-10 before September 25, 1983; or~~

~~(3) in the 100-year floodplain of:~~

~~(a) Lady Bird Lake; or~~

~~(b) the Colorado River downstream from Longhorn Dam.]~~

PART 9. City Code Section 25-7-96 (*Requirements in the 25-Year Floodplain*) is amended to read as follows:

§ 25-7-96 REQUIREMENTS IN THE 25-YEAR FLOODPLAIN.

(A) This section establishes requirements that apply to development in the 25-year floodplain.

(B) A development application with a proposed building or parking area that is located on parkland, a golf course, or other public or recreational land and that encroaches on the 25-year floodplain may be approved if:

~~[(1) the building or parking area is located on parkland, a golf course, or other public or recreational land;]~~

(1)[(2)] the building, if any, is:

(a)[(i)] a restroom or bath facility, concession stand, tool shed, or pump house, with an area of less than 1,000 square feet; or

(b)[(ii)] a dock that is located in the 25-year floodplain of Lady Bird Lake, Lake Walter E. Long, or Lake Austin and constructed, or proposed to be constructed, in compliance with the regulations of this title; and

(2)[(3)] the parking area, if any, is smaller than 5,000 square feet.[;]

~~[(4) the director determines that the proposed development:~~

~~(a) will not result in additional adverse flooding impact on other properties; and~~

~~(b) otherwise complies with the requirements of this title.]~~

(C) A development application for a proposed new building for residential use that replaces an existing legally constructed building for residential use may be approved if the building is:

(1) on the same property; and

(2) not increasing the number of legal dwelling units on the property.

~~(D)[(C)] To be approved under this section, [A] development [application approved under this section] must:~~

~~(1) be no lower than two feet above the 100-year floodplain, as measured from the lowest floor elevation of any proposed building;~~

~~(2) comply with the requirements in Chapter 25-12, Article 1, Section 25-12-3 Appendix G (*Flood Resistant Construction*) and Section 1612 (*Flood Loads*);~~

~~(3) compensate for the floodplain volume displaced by the development;~~

~~(4) result in no additional adverse flooding impact on other properties, as determined by the director; and~~

~~(5) otherwise comply with the requirements of this title, as determined by the director.~~

~~[comply with the flood proofing requirements of Chapter 25-12, Article 1 (*Building Code*).]~~

PART 10. City Code Section 25-8-1 (*Definitions*) is amended to change the definition of “floodplain modification” to read as follows:

- (10) FLOODPLAIN MODIFICATION means development that results in any vertical or horizontal change in the cross section of the 100-year floodplain as determined under Section 25-7-6 (Determination of the 100-Year Floodplain) [~~calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~].

PART 11. Subsections (A), (C), and (F) of City Code Section 25-8-92 (*Critical Water Quality Zones Established*) are amended to read as follows:

- (A) In the water supply rural watersheds, water supply suburban watersheds, and Barton Springs Zone, a critical water quality zone is established along each waterway classified under Section 25-8-91 (*Waterway Classifications*).
- (1) The boundaries of a critical water quality zone coincide with the boundaries of the 100-year floodplain as determined under Section 25-7-6 (Determination of the 100-Year Floodplain), [~~calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~] except:
- (a) for a minor waterway, the boundaries of the critical water quality zone are located not less than 50 feet and not more than 100 feet from the centerline of the waterway;
 - (b) for an intermediate waterway, the boundaries of the critical water quality zone are located not less than 100 feet and not more than 200 feet from the centerline of the waterway;
 - (c) for a major waterway, the boundaries of the critical water quality zone are located not less than 200 feet and not more than 400 feet from the centerline of the waterway; and
 - (d) for the main channel of Barton Creek, the boundaries of the critical water quality zone are located 400 feet from the centerline of the creek.
- (2) Notwithstanding the provisions of Subsections (A)(1)(a), (b), and (c), a critical water quality zone does not apply to a previously modified drainage feature serving a railroad or public roadway right-of-way

that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition, as prescribed in the Environmental Criteria Manual.

- (C) In an urban watershed, a critical water quality zone is established along each waterway with a drainage area of at least 64 acres. This does not apply in the area bounded by IH-35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.
 - (1) The boundaries of the critical water quality zone coincide with the boundaries of the 100-year floodplain as determined under Section 25-7-6 (Determination of the 100-Year Floodplain), [~~calculated under fully developed conditions as prescribed by the Drainage Criteria Manual;~~] provided that the boundary is not less than 50 feet and not more than 400 feet from the centerline of the waterway.
 - (2) Notwithstanding the provisions of Subsection (C)(1), a critical water quality zone does not apply to a previously modified drainage feature serving a railroad or public roadway right-of-way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition.

- (F) Critical water quality zones are established along and parallel to the shorelines of the Colorado River downstream of Lady Bird Lake.
 - (1) The shoreline boundary of a critical water quality zone coincides with the river's ordinary high water mark, as defined by Code of Federal Regulations Title 33, Section 328.3 (*Definitions*).
 - (2) The inland boundary of a critical water quality zone coincides with the boundary of the 100-year floodplain as determined under Section 25-7-6 (Determination of the 100-Year Floodplain) [~~delineated by the Federal Emergency Management Agency~~], except that the width of the critical water quality zone, measured horizontally inland, is not less than 200 feet and not more than 400 feet.

PART 12. Subsection (A) of City Code Section 25-8-121 (*Environmental Resource Inventory Requirement*) is amended to read as follows:

- (A) An applicant shall file an environmental resource inventory with the director for proposed development located on a tract:

- (1) within the Edwards Aquifer recharge or contributing zone;
- (2) within the Drinking Water Protection Zone;
- (3) containing a water quality transition zone;
- (4) containing a critical water quality zone; or
- (5) [~~containing a floodplain; or~~
- (6)] with a gradient of more than 15 percent.

PART 13. Subsection 202.1 (*Amended Definitions*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*) is amended to delete and replace the definitions of “base flood”, “design flood”, “flood hazard area”, and “floodway” with new definitions to read as follows:

BASE FLOOD. A flood that has the following characteristics:

1. For areas amended to incorporate Atlas 14 data, a flood that has a one percent chance of being equaled or exceeded in any given year (100-year flood) calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
2. For areas not yet amended to incorporate Atlas 14 data, a flood that has a 0.2 percent chance of being equaled or exceeded in any given year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
3. For the Colorado River, a flood that has a one percent chance of being equaled or exceeded in any given year (100-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

DESIGN FLOOD. A flood that has the following characteristics:

1. For areas amended to incorporate Atlas 14 data, a flood associated with an area of a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) based on projected full

development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;

2. For areas not yet amended to incorporate Atlas 14 data, a flood associated with an area of a floodplain subject to a 0.2 percent or greater chance of being flooded in any year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
3. For the Colorado River, a flood associated with an area of a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

FLOOD HAZARD AREA. An area that has the following characteristics:

1. For areas amended to incorporate Atlas 14 data, an area within a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) based on projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;
2. For areas not yet amended to incorporate Atlas 14 data, an area of a floodplain subject to a 0.2 percent or greater chance of being flooded in any year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
3. For the Colorado River, an area within a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

FLOODWAY. The channel of the river, creek, 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. An area that has the following characteristics:

1. For the Colorado River, an area with a floodplain subject to a four percent or greater chance of flooding in any year (25-year flood) based on existing developed conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
2. For all other rivers, creeks, and watercourses in areas amended to incorporate Atlas 14 data, an area with a four percent or greater chance of flooding in any year (25-year flood) based on a projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data.
3. For all other rivers, creeks, and watercourses in areas not yet amended to incorporate Atlas 14 data, an area with a one percent or greater chance of flooding in any year (100-year flood) based on a projected full development in accordance with the City of Austin Drainage Criteria Manual using data predating Atlas 14.

PART 14. Subsection 1612.3 (*Establishment of Flood Hazard Areas*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*) is amended to read as follows:

1612.3 Establishment of flood hazard areas. Flood hazard areas are:

1. the areas of special flood hazard areas identified by the Federal Emergency Management Agency in the current [a] scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Williamson County, Texas and Incorporated Areas" dated December 20, 2019, with accompanying Flood Insurance Rate Maps (FIRM) dated December 20, 2019, the current scientific and engineering report entitled "The Flood Insurance Study for Travis County, Texas and Incorporated Areas" dated January 6, 2016, with accompanying Flood Insurance Rate Maps dated January 6, 2016,

and any [~~"The Flood Insurance Study for Austin, Texas," dated January 6, 2016, with accompanying Flood Insurance Rate Maps and Flood Boundary Floodway Maps (FIRM and FBFM) and related supporting data, along with any amendments or~~] revisions [~~thereto,~~] are [~~hereby~~] adopted by reference and declared to be a part of this section; and

2. the 100-year and 25-year floodplains as defined [~~based on projected full development as specified~~] in the Austin City Code and Drainage Criteria Manual are adopted by reference and declared to be part of this section.

PART 15. Subsection 1612.4.1 (*Freeboard*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*) is amended to read as follows:

1612.4.1 Freeboard. A minimum freeboard of two feet [~~one foot~~] shall be added where the design flood elevation or other elevation requirements are specified, unless otherwise specified in Title 25 (*Land Development*).

PART 16. Subsection 1612.4.2 (*Provisions of safe refuge*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*) is amended to read as follows:

1612.4.2 Provisions of safe refuge.

1. Buildings or structures constructed in the flood hazard area where the ground surface is below the design flood elevation, or where flood water velocities at the building may exceed five feet per second, shall be provided with an enclosed refuge space two feet [~~one foot~~] or more above the design flood elevation, and of sufficient area to provide for the occupancy load with a minimum of 12 square feet per person. The refuge space shall be provided to an exterior platform and stairway not less than three feet wide.
2. Existing buildings and structures in flood hazard areas which are enlarged, extended, or altered, or where a change of use or occupancy is made, shall conform to the requirements of Subsection 1.
3. No floor level or portion of a building or structure that is lower than one foot above the design flood elevation, regardless of the structure

or space classification, shall be used residentially, or for storage of any property, materials, or equipment that might constitute a safety hazard when contacted by flood waters.

PART 17. Subsection G103.3 (*Determination of Design Flood Elevations*) of Appendix G (*Flood Resistant Construction*) of City Code Section 25-12-3 (*Local Amendments to the Building Code*) is amended to read as follows:

G103.3 Determination of design flood elevations. If design flood elevations are not specified, the building official is authorized to require the applicant to:

1. Obtain, review and reasonably utilize data available from a federal, state or other source; or
2. Determine the design flood elevation in accordance with the 100-year floodplain as defined in the Austin City Code [~~based on projected full development in accordance with the City of Austin Drainage Criteria Manual~~]. Such analyses shall be performed and sealed by a Professional Engineer licensed by the State of Texas. Studies, analyses and computations shall be submitted in sufficient detail to allow review and approval by the building official. The accuracy of data submitted for such determination shall be the responsibility of the applicant.

PART 18. Subsection 320.2 (*Establishment of Flood Hazard Areas*) of City Code Section 25-12-133 (*Local Amendments to the 2015 Uniform Mechanical Code*) is amended to read as follows:

320.2 Establishment of flood hazard areas. A flood hazard area is:

1. the areas of special flood hazard areas identified by the Federal Emergency Management Agency in the current [a] scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Williamson County, Texas and Incorporated Areas" dated December 20, 2019, with accompanying Flood Insurance Rate Maps (FIRM) dated December 20, 2019, the current scientific and engineering report entitled "The Flood Insurance Study for Travis County, Texas and Incorporated Areas" dated January 6, 2016, with accompanying Flood Insurance Rate Maps dated January 6, 2016, and any ["The

~~Flood Insurance Study for Austin, Texas," dated January 6, 2016, with accompanying Flood Insurance Rate Maps and Flood Boundary Floodway Maps (FIRM and FBFM) and related supporting data, along with any amendments or] revisions [thereto,] are [hereby] adopted by reference and declared to be a part of this section; or~~

2. a 100-year or 25-year floodplain as defined ~~[based on projected full development as specified]~~ in the Austin City Code ~~[and Drainage Criteria Manual]~~.

PART 19. Subsection 321.8 (*Establishment of Flood Hazard Areas*) of City Code Section 25-12-153 (*Local Amendments to the Uniform Plumbing Code*) is amended to read as follows:

321.8 Establishment of flood hazard areas. The City establishes a flood hazard area that includes the following:

1. Areas of special flood ~~[flood]~~ hazard areas identified by the Federal Emergency Management Agency in the current [a] scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Williamson County, Texas and Incorporated Areas" dated December 20, 2019, with accompanying Flood Insurance Rate Maps (FIRM) dated December 20, 2019, the current scientific and engineering report entitled "The Flood Insurance Study for Travis County, Texas and Incorporated Areas" dated January 6, 2016, with accompanying Flood Insurance Rate Maps dated January 6, 2016, and any ~~["The Flood Insurance Study for Austin, Texas," dated January 6, 2016, with accompanying Flood Insurance Rate Maps and Flood Boundary Floodway Maps (FIRM and FBFM) and related supporting data, along with any amendments or]~~ revisions [thereto,] are [hereby] adopted by reference and declared to be a part of this section; and
2. The 100-year and 25-year floodplains as defined in the Austin City Code ~~[based on projected full developments as specified in the City Code and Drainage Criteria Manual]~~ are adopted by reference and declared to be part of this section.

PART 20. Subsection R202 (*Definitions*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to delete and replace the

definitions of “25-year flood plain”, “base flood”, “design flood”, “flood hazard area”, and “floodway” to read as follows:

25-YEAR FLOODPLAIN means an area that has the following characteristics:

- (A) For areas amended to incorporate Atlas 14 data, the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
- (B) For areas not yet amended to consider Atlas 14 data, the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
- (C) For the Colorado River, the 25-year floodplain as calculated under exiting conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14.

BASE FLOOD means a flood that has the following characteristics:

1. For areas amended to incorporate Atlas 14 data, a flood that has a one percent chance of being equaled or exceeded in any given year (100-year flood) calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
2. For areas not yet amended to incorporate Atlas 14 data, a flood that has a 0.2 percent chance of being equaled or exceeded in any given year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
3. For the Colorado River, a flood that has a one percent chance of being equaled or exceeded in any given year (100-year flood) calculated under the conditions underlying the FEMA Flood

Insurance Rate Map dated January 6, 2016, or as subsequently revised.

DESIGN FLOOD means a flood that has the following characteristics:

1. For areas amended to incorporate Atlas 14 data, the flood associated with an area of a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) based on projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;
2. For areas not yet amended to incorporate Atlas 14 data, the flood associated with an area of a floodplain subject to a 0.2 percent or greater chance of being flooded in any year (500-year flood) calculated under the conditions underlying the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
3. For the Colorado River, the flood associated with an area of a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

FLOOD HAZARD AREA means an area that has the following characteristics:

1. For areas amended to incorporate Atlas 14 data, an area within a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) based on projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;
2. For areas not yet amended to incorporate Atlas 14 data, an area within a floodplain subject to the 500-year floodplain either as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing

conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or

3. For the Colorado River, an area within a floodplain subject to a one percent or greater chance of being flooded in any year (100-year flood) as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

FLOODWAY means the channel of the river, creek, 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. An area that has the following characteristics:

1. For the Colorado River, an area with a floodplain subject to a four percent or greater chance of flooding in any year (25-year flood) based on existing developed conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14;
2. For all other rivers, creeks, and watercourses in areas amended to incorporate Atlas 14 data, an area with a four percent or greater chance of flooding in any year (25-year flood) based on a projected full development in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data; or
3. For all other rivers, creeks, and watercourses in areas not yet amended to incorporate Atlas 14 data, an area with a one percent or greater chance of flooding in any year (100-year flood) based on a projected full development in accordance with the City of Austin Drainage Criteria Manual using data predating Atlas 14.

PART 21. Subsection R202 (*Definitions*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to add a new definition of “100-year flood plain” to read as follows:

100-YEAR FLOOD PLAIN means an area that has the following characteristics:

- (A) For areas amended to incorporate Atlas 14 data, the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
- (B) For areas not yet amended to incorporate Atlas 14 data, the 500-year floodplain either as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
- (C) For the Colorado River, the 100-year floodplain as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

PART 22. Subsection R322.1.4 (*Establishing the Design Flood Elevation*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to read as follows:

R322.1.4 Establishing the design flood elevation. The design flood elevation defines areas prone to flooding and describes, at a minimum, the base flood elevation at the depth of peak elevation of flooding based upon: [~~with the ultimate development of the watershed, which has a one percent (100-year flood) or greater chance of being equaled or exceeded in any given year.~~]

1. For areas amended to incorporate Atlas 14 data, the 100-year floodplain calculated under fully developed conditions in accordance with the City of Austin Drainage Criteria Manual as amended to incorporate Atlas 14 data;
2. For areas not yet amended to incorporate Atlas 14 data, the 500-year floodplain either as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
3. For the Colorado River, the 100-year floodplain as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

PART 23. Subsection R322.2 (*Establishment of Flood Hazard Areas [Including A Zones]*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to read as follows:

R322.2 Establishment of flood hazard areas (including A Zones). A flood hazard area is:

1. the areas of special flood hazard areas identified by the Federal Emergency Management Agency in the current [a] scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Williamson County, Texas and Incorporated Areas" dated December 20, 2019, with accompanying Flood Insurance Rate Maps (FIRM) dated December 20, 2019, the current scientific and engineering report entitled "The Flood Insurance Study for Travis County, Texas and Incorporated Areas" dated January 6, 2016, with accompanying Flood Insurance Rate Maps dated January 6, 2016, and any ["The Flood Insurance Study for Austin, Texas," dated January 6, 2016, with accompanying Flood Insurance Rate Maps and Flood Boundary Floodway Maps (FIRM and FBFM) and related supporting data, along with any amendments or] revisions [thereto,] are [hereby] adopted by reference and declared to be a part of this section; or
2. a 100-year or 25-year floodplain as defined [~~based on projected full development as specified~~] in the Austin City Code [~~and Drainage Criteria Manual~~].

PART 24. Subsection R322.2.1 (*Elevation requirements*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to read as follows:

R322.2.1 Elevation requirements.

1. Unless otherwise specified in the Land Development Code, the lowest floor of a building or structure must be elevated a minimum of two feet [~~one foot~~] above the design flood elevation.

2. Where the design flood elevation or other elevation requirement specifies, a minimum freeboard of two feet [~~one foot~~] shall be added.
3. In areas of shallow flooding (AO Zones), the lowest floor (including a basement) of a building or structure must be elevated higher than the highest adjacent grade as the depth number specified in feet (mm) on the FIRM plus two feet [~~one foot~~], or at least three feet (915 mm) [~~two feet (610 mm)~~] if a depth number is not specified.
4. A basement floor that is below grade on all sides must be elevated at least two feet [~~one foot~~] above the design flood elevation.

Exception: An enclosed area, including a basement, which is below the design flood elevation but not below grade on all sides must meet the requirements in Section R322.2.2 (*Enclosed area below design flood elevation*).

PART 25. Subsection R322.2.5 (*Provisions of safe refuge*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to read as follows:

R322.2.5 Provisions of safe refuge.

1. A building or structure constructed in a flood hazard area where the ground surface is below the design flood elevation or where flood water velocities at the building may exceed five feet per second shall provide an enclosed refuge space two feet [~~one foot~~] or more above the design flood elevation with sufficient area to allow an occupancy load of a minimum of 12 square feet per person. The refuge space shall be provided to an exterior platform and stairway not less than three feet wide.
2. An existing building or structure in a flood hazard area that is substantially improved [~~enlarged, extended, or altered~~] or where a change of use or occupancy is made must comply with the requirements in Subsection 1.

3. Regardless of the structure or space classification, a floor level or portion of a building or structure that is lower than one foot above the design flood elevation shall not be used for a residential use or for storage of property, material, or equipment that may constitute a safety hazard when contacted by flood waters.

PART 26. Subsection R322.2.6 (*Means of egress*) of City Code Section 25-12-243 (*Local Amendments to the International Residential Code*) is amended to read as follows:

R322.2.6 Means of egress.

1. Unless otherwise approved by the building official, normal access to the building shall be by direct connection with an area that is a minimum of one foot above the design flood elevation.
2. For a building that is part of a single-family condo regime residential building permit application and part of a site plan that was approved between December 1, 2017, and November 25, 2019, compliance with this section shall be determined at the time of site plan approval.
3. For a building that is part of a single-family building permit application and part of (a) a preliminary plan that was submitted for approval between December 1, 2014, and November 25, 2019, or (b) a final plat that was approved between December 1, 2017, and November 25, 2019, compliance with this section shall be determined at the time of preliminary plan or final plat approval, respectively.
4. For all other buildings, compliance with this section shall be determined at the time of building permit application.

Exception: This section does not apply to an addition or alteration to an existing building or structure that is not a substantial improvement as defined in Section R202 (*Definitions*).

PART 27. City Code Section 30-4-1 (*Definitions*) is amended to add a definition of “Atlas 14” and to renumber the other definitions in this section accordingly:

- (9) ATLAS 14 means the National Oceanic and Atmospheric Administration's Precipitation-Frequency Atlas 14 of the United States, Volume 11, Version 2.0: Texas.

PART 28. City Code Section 30-4-1 (*Definitions*) is amended to change the definitions of "100-Year Floodplain" and "25-Year Floodplain" to read as follows:

- (10) 100-YEAR FLOODPLAIN means an area within a floodplain subject to a one percent or greater chance of flooding in any year as calculated in accordance with Section 30-4-5 (*Determination of the 100-Year Floodplain*) [~~the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~].
- (11) 25-YEAR FLOODPLAIN means an area within a floodplain subject to a four percent or greater chance of flooding in any year as calculated in accordance with Section 30-4-6 (*Determination of the 25-Year Floodplain*) [~~the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~].

PART 29. City Code Section 30-4-5 (*Computation of Stormwater Runoff*) is amended to read as follows:

§ 30-4-7[5] COMPUTATION OF STORMWATER RUNOFF.

- (A) Except as provided in Subsection (B), stormwater [~~Stormwater~~] runoff shall be computed on the basis of a fully developed contributing drainage area or watershed as determined under the Drainage Criteria Manual.
- (B) When determining the runoff generated from the 500-year flood for the purpose of determining the 100-year floodplain under Subsection (B) of Section 30-4-5 (*Determination of the 100-Year Floodplain*), stormwater runoff shall be computed on the basis of an existing developed contributing drainage area or watershed.

PART 30. City Code Chapter 30-4 (*Drainage*) is amended to add a new Section 30-4-5 and 30-4-6 to read as follows:

§ 30-4-5 DETERMINATION OF THE 100-YEAR FLOODPLAIN.

For purposes of this chapter, the 100-year floodplain shall be:

- (A) For areas amended to incorporate Atlas 14 data, the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
- (B) For areas not yet amended to incorporate Atlas 14 data, the 500-year floodplain either as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, or as calculated under existing conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
- (C) For the Colorado River, the 100-year floodplain as depicted on the FEMA Flood Insurance Rate Map dated January 6, 2016, or as subsequently revised.

§ 30-4-6 DETERMINATION OF THE 25-YEAR FLOODPLAIN.

For purposes of this chapter, the 25-year floodplain shall be:

- (A) For areas amended to incorporate Atlas 14 data, the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual as amended to incorporate Atlas 14 data;
- (B) For areas not yet amended to consider Atlas 14 data, the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14; or
- (C) For the Colorado River, the 25-year floodplain as calculated under exiting conditions as prescribed by the Drainage Criteria Manual using data predating Atlas 14.

PART 31. City Code Section 30-5-1 (*Definitions*) is amended to change the definition of “floodplain modification” to read as follows:

- (10) FLOODPLAIN MODIFICATION means development that results in any vertical or horizontal change in the cross section of the 100-year floodplain as determined under Section 30-4-5 (*Determination of the 100-*

Year Floodplain) [~~calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~].

PART 32. Subsections (A), (C), and (F) of City Code Section 30-5-92 (*Critical Water Quality Zones Established*) are amended to read as follows:

- (A) In the water supply rural watersheds, water supply suburban watersheds, and Barton Springs Zone, a critical water quality zone is established along each waterway classified under Section 30-5-91 (*Waterway Classifications*).
- (1) The boundaries of a critical water quality zone coincide with the boundaries of the 100-year floodplain as determined under Section 30-4-5 (*Determination of the 100-Year Floodplain*), [~~calculated under fully developed conditions as prescribed by the Drainage Criteria Manual~~] except:
- (a) for a minor waterway, the boundaries of the critical water quality zone are located not less than 50 feet and not more than 100 feet from the centerline of the waterway;
 - (b) for an intermediate waterway, the boundaries of the critical water quality zone are located not less than 100 feet and not more than 200 feet from the centerline of the waterway;
 - (c) for a major waterway, the boundaries of the critical water quality zone are located not less than 200 feet and not more than 400 feet from the centerline of the waterway; and
 - (d) for the main channel of Barton Creek, the boundaries of the critical water quality zone are located 400 feet from the centerline of the creek.
- (2) Notwithstanding the provisions of Subsections (A)(1)(a), (b), and (c), a critical water quality zone does not apply to a previously modified drainage feature serving a railroad or public roadway right-of-way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition, as prescribed in the Environmental Criteria Manual.

- (C) In an urban watershed, a critical water quality zone is established along each waterway with a drainage area of at least 64 acres. This does not apply in the area bounded by IH-35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.
- (1) The boundaries of the critical water quality zone coincide with the boundaries of the 100-year floodplain as determined under Section 30-4-5 (Determination of the 100-Year Floodplain), [~~calculated under fully developed conditions as prescribed by the Drainage Criteria Manual;~~] provided that the boundary is not less than 50 feet and not more than 400 feet from the centerline of the waterway.
 - (2) Notwithstanding the provisions of Subsection (C)(1), a critical water quality zone does not apply to a previously modified drainage feature serving a railroad or public roadway right-of-way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition.
- (F) Critical water quality zones are established along and parallel to the shorelines of the Colorado River downstream of Lady Bird Lake.
- (1) The shoreline boundary of a critical water quality zone coincides with the river's ordinary high water mark, as defined by Code of Federal Regulations Title 33, Section 328.3 (*Definitions*).
 - (2) The inland boundary of a critical water quality zone coincides with the boundary of the 100-year floodplain as determined under Section 30-4-5 (Determination of the 100-Year Floodplain) [~~delineated by the Federal Emergency Management Agency~~], except that the width of the critical water quality zone, measured horizontally inland, is not less than 200 feet and not more than 400 feet.

PART 33. Subsection (A) of City Code Section 30-5-121 (*Environmental Resource Inventory Requirement*) is amended to read as follows:

- (A) An applicant shall file an environmental resource inventory with the director for proposed development located on a tract:
- (1) within the Edwards Aquifer recharge or contributing zone;
 - (2) within the Drinking Water Protection Zone;
 - (3) containing a water quality transition zone;

- (4) containing a critical water quality zone; or
- (5) [~~containing a floodplain; or~~
- (6)] with a gradient of more than 15 percent.

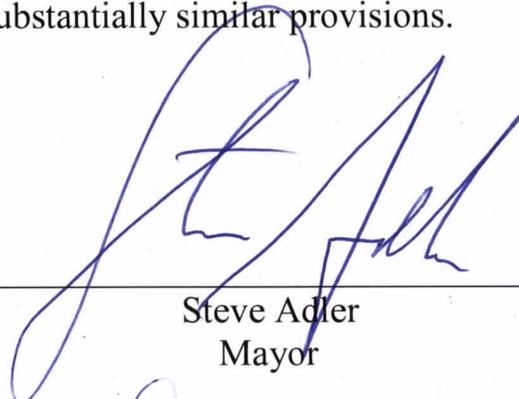
PART 34. For the purposes of this ordinance, references to the 500-year floodplain as depicted on the FEMA Flood Insurance Rate Map as of January 6, 2016, as subsequently revised, will include revisions already in process for the South Brushy Creek watershed, to be dated December 20, 2019, and for the Onion Creek watershed, to be dated January 22, 2020.

PART 35. Parts 1 through 26 and Part 34 of this ordinance take effect on November 25, 2019. Parts 27 through 33 of this ordinance take effect on the effective date of a Travis County ordinance enacting the same or substantially similar provisions.

PASSED AND APPROVED

_____ November 14 _____, 2019

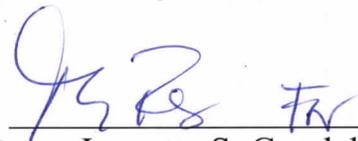
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Steve Adler
Mayor

APPROVED: _____

Anne L. Morgan
City Attorney

ATTEST: _____

Jannette S. Goodall
City Clerk